

Chapter 2

THE RAILROAD AT LAGO

One of the most important dates in Aruban history is August 14, 1924, the date of the arrival of Captain Robert Rodgers on Aruba. Rodgers, a Scot by birth, was the agent of the *Lago Petroleum Company* (later Lago Oil & Transport Co.), and was seeking a harbor for the transshipment of Lago crude oil from the Maracaibo field.

Rodgers was shown the harbor at San Nicolas, where the wharf and railway of the Aruba Phosphate Co. lay rusting in the sun. Rodgers ordered surveys of the harbor, especially the reef, with a view to deepening the harbor and enlarging the entrance through the reef. After an intensive study of the San Nicolas area Rodgers decided that a transshipment station could be built at the site. Soon work was underway enlarging the harbor, and by November, 1924, construction was underway on the oil depot.

The little A.P.C. dock was used to off-load construction materials, and little gasoline-powered Milwaukee locomotives were imported to re-activate the railway. Flatcars, of 10-ton capacity and fitted with bogie trucks for flexibility, were also brought in to handle the cargoes of cement, lumber, sheet steel and pipe necessary to construct the transshipment station. Meanwhile transshipment of oil was taking place from tankers anchored off Oranjestad. Crude oil, brought from Venezuela by shallow-draft tankers, was transferred to larger ships for transportation to refineries elsewhere.

At this time the Lake Maracaibo field was one of the most important oil producing areas of the world. To remove the oil from the lake, however, was a major problem. Lake Maracaibo, actually a bay, is connected to the sea by a narrow inlet with many sandbars, restricting the draft of vessels entering the oil-producing areas. Thus the crude oil was shipped from Maracaibo in shallow-draft tankers, called lake tankers or lakers, and then transferred to larger vessels or taken directly to the refinery at Curaçao (See Chapter 6).

Meanwhile the Lago Petroleum Co. was undergoing corporate changes, and emerged as the Lago Oil & Transport Co., Ltd., of Canada. Management soon decided that it would be much more efficient to refine the Venezuelan oil near to the production areas, and a decision was made to build a refinery at San Nicolas. The location was ideal, being close to the production site, and having a stable political climate, a good harbor, and plenty of available land. In July, 1927, the first surveys were made toward the construction of a refinery at San Nicolas, and on February 24, 1928, the first construction crews arrived.

Freighters began off-loading construction materials at the old phosphate wharf. First priority was housing, and large shipments of lumber and cement were loaded aboard the flatcars and hauled to the construction sites over newly-laid rails. Using the rails which remained from the phosphate operations, construction crews began extending the tracks into the area along the beach, which was to be the site of the housing area for the American workers and their families.

One problem became apparent immediately – the steep grade up the hill from the wharf. The San Nicolas area is a coral shelf, some 20 feet or more above the water-line, and to reach this shelf from the pier involved a considerable pull for the little locomotives. This had been no problem at the phosphate dock, since loads went

LAGO'S FIRST PHOTOGRAPH

EERSTE FOTO VAN LAGO



This photograph was taken about the year 1928, and shows the first stage of construction in the refinery area. The main road, leading off to the right background, was the original road from San Nicolas to the Aruba Phosphate operations. The APC railroad ran along this road, and as late as the middle 1930's the cross-ties could be felt by drivers. Much of the track in the foreground is the original phosphate railway. The APC pier was directly below the foreground. To the left can be seen some of the three-rail track built by Lago to accommodate the standard-gauge cars used during the construction phase. In the right background is the 'Lago Colony,' built to house American workers and their families. (Photo courtesy Lago Oil & Transport Co., Ltd.).

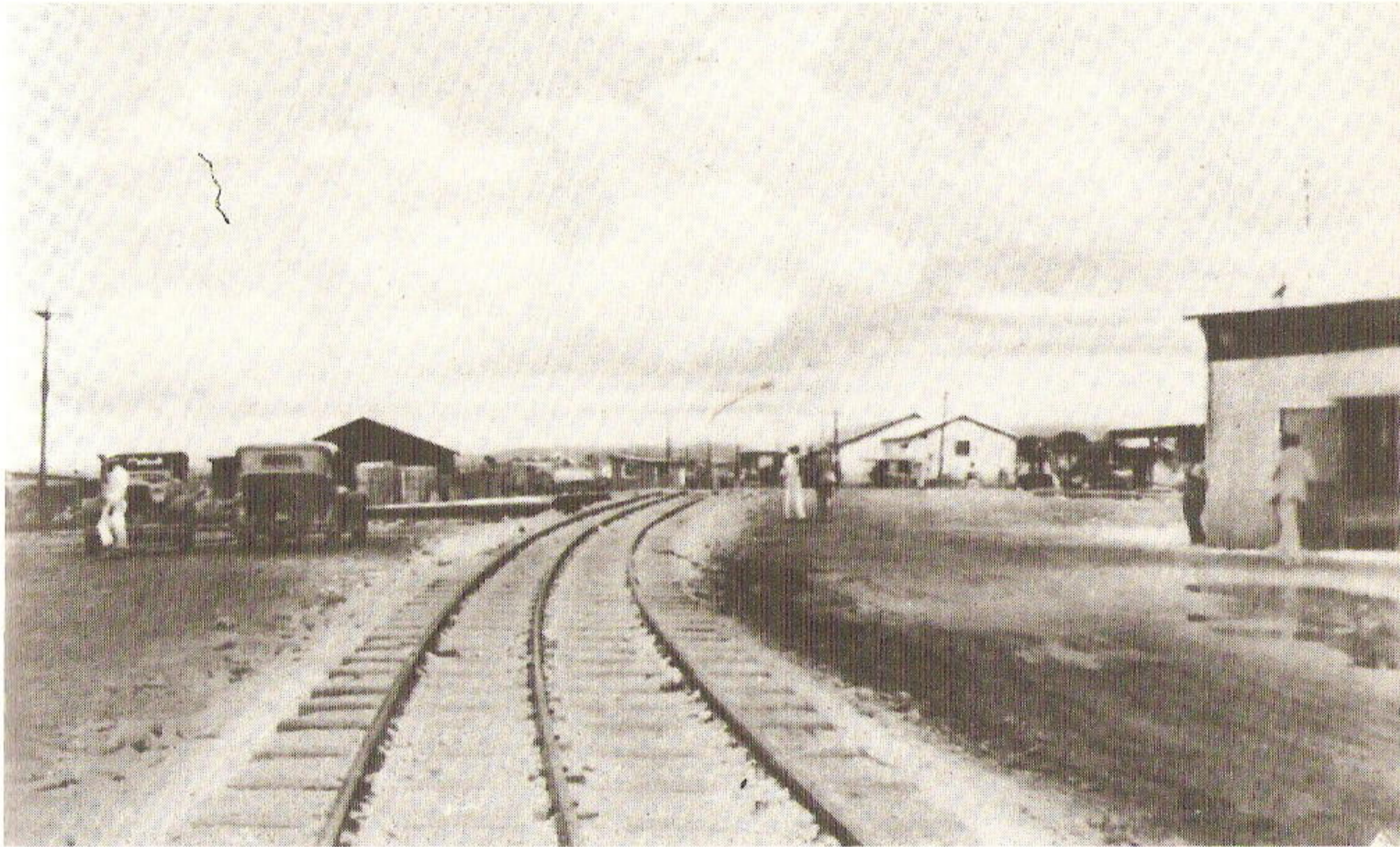
Deze foto werd genomen rond het jaar 1928 en laat het eerste stadium van de aanleg op het terrein van de raffinaderij zien.

De verharde weg, die naar de achtergrond rechts leidt, was de oorspronkelijke weg van San Nicolas naar de Aruba fosfaat-industrie. De spoorlijn van de APC liep langs deze weg en nog tot in de tweede helft van de jaren dertig konden automobilisten de dwarsliggers voelen.

Een groot gedeelte van de rails op de voorgrond is van de oorspronkelijke fosfaatspoorlijn. De aanlegsteiger van de APC lag rechts vóór de foto. Links kan men iets zien van het drie-railig spoor, door Lago gebouwd om plaatsruimte te bieden aan de normaalspoor-wagons tijdens de aanlegperiode. Op de achtergrond rechts ziet u de 'Lago Kolonie', gebouwd om Amerikaanse werkers en hun gezinnen te huisvesten. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.).

THREE RAIL TRACK AT LAGO

DRIE-RAILIG SPOOR TE LAGO



Hauling heavy refinery units was too great a task for the 10-ton flatcars at Lago, so standard-gauge (100 ton) cars were brought in from the United States, and a dual-gauge rail line was constructed. This line led from the 'T' dock, where the refinery units were unloaded, to the main refinery area, where the huge stills and towers were erected. The big flatcars were pulled by narrow-gauge locomotives. Often two engines would be coupled together in front, with another locomotive pushing in back, and a winch truck helping to haul the heavy train up from the pier to the main level. Following initial construction the outside rail was removed, and all Lago operations were by the 30-inch gauge cars. (Photo courtesy Lago Oil & Transport Co., Ltd.).

Het vervoer van zware raffinaderijonderdelen was een te grote taak voor de 10-tons platte wagons van Lago. Dus werden er normaalspoor-wagons (100 ton) aangevoerd vanuit de Verenigde Staten en legde men drierailig spoor aan. Deze rails liepen van het 'T'-dok, waar de raffinaderijonderdelen werden gelost, naar het belangrijkste raffinaderijterrein, waar de enorme distillatieketels en torens werden opgericht.

De grote platte wagons werden door smalspoorlocomotieven getrokken. Dikwijls koppelde men twee locomotieven aan de voorkant, terwijl bovendien een derde locomotief aan de achterkant duwde en een wagen met liertruck hielp bij het omhoogtrekken van de zware trein van de pier naar het terrein. Later, na de beginfase van de bouw, verwijderde men de buitenste rail en werd alle transport van Lago verricht met de smalspoorwagens. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.).

downhill to the wharf, but at Lago the loads all had to go uphill. Locomotives were double-coupled in an effort to drag the heavily-loaded cars up the grade, and workmen were stationed along the tracks with shovels to keep the rails well sanded. Eventually a steam winch was installed at the top of the hill to assist the locomotives in reaching the level surface above the pier.

As soon as housing was provided for the construction crews and auxiliary facilities such as mess halls and an electrical plant completed, work began on the refinery. It became obvious that the 10-ton cars would be inadequate to haul the heavy materials needed for the construction of the type of refinery Lago had in mind, so the first decision was to enlarge the railroad. An entirely new track was laid down, consisting of 30-inch gauge track in the peripheral areas, and three-rail track from the main dock to the refinery construction site. The third rail was laid to standard gauge (4'8½'), and eight standard gauge flatcars from the United States were brought in to handle the bubble towers and other heavy equipment too large and bulky for the smaller cars.

The couplers were modified on the large cars so they could be pulled by the narrow-gauge engines. Thus it was possible for the diminutive locomotives to pull huge pieces of refinery apparatus into place, looking like a tiny ant dragging a large leaf. The third rail track remained in use through much of the early construction phase of the refinery, being removed only after the plant went 'on stream' in 1929. Eventually one of the standard-gauge flatcars, minus its trucks, was used as a bridge for a road through the Pitch Pile area.

Shining rails spread out from the original dock to all parts of the refinery site. Cargoes were moved to wherever they were needed – lumber and building materials to the office buildings, bakery, commissary, mess hall, and other sites; refinery equipment to erection areas, and tons of pipe to storage yards and line installations. By the time the refinery went into production in 1929 the railroad had hauled eight topping stills ashore plus the original equipment in the No. 1 powerhouse.

Huge curved steel tank plates were off-loaded onto the flatcars for transportation to the 'tank farm' area, where countless tanks were built to hold crude oil and refined petroleum products. These tanks were built on concrete bases, and rails were laid close to the tank foundations so that the heavy plates would be handled as little as possible. A portable crane was used to unload the tank plates, and small caterpillar tractors dragged the plates into position for lifting into the tank foundations.

Naturally when handling heavy cargoes, accidents were possible, and crews were constantly alert for trouble.

Luciano Wever, a retired Lago employee, recalled some of the problems encountered by the tank crews.

'We were taking off sheet steel from the flatcars one day,' he related, 'when we almost had real trouble.'

The cars were moved from place to place within the tank farm either by tractors or by manpower. A carload of sheet steel was moved by mistake onto a section of track with a slight downhill grade. 'The cars didn't have brakes,' Wever related, 'and when it started rolling downhill there was nothing we could do except chase it.'

Wever looked up and saw, coming up the hill, a heavy train of tank plates hauled by two locomotives.

'I started running along the road after that car,' he went on, 'waving automobiles out of the way as I ran.' Just in time he reached a switch and threw it, derailing the car. 'That

THE HEART OF THE LAGO RAILROAD

HET HART VAN DE LAGO-SPOORWEG



The busiest part of the Lago railway was where the tracks from finger pier 1 joined the main line through the refinery. Here is where goods of all kinds were unloaded from ships, and transferred by railroad to their final destinations. Here, too, was one of the biggest challenges for the locomotives, like this 6-ton Brookville. Note the grade from the pier surface in the background to the main refinery level in the foreground. This was the most difficult grade on the Lago railway, both because of the loads carried, but because the locomotives could not 'run' at the hill, having to begin the climb immediately after picking up their loaded cars. Note the excellent trackwork. (Photo courtesy Lago Oil & Transport Co., Ltd.).

Het drukste gedeelte van de spoorlijn van Lago was het punt waar de sporen van strekdam no. 1 zich samenvoegden met de hoofdlijn die door de raffinaderij liep. Hier werden velerlei soorten goederen gelost uit de schepen en per spoor naar hun uiteindelijke plaats van bestemming gebracht. Hier lag ook een van de grootste uitdagingen voor de locomotieven, zoals voor deze 6-tons Brookville. Let u eens op de steile helling vanaf de bovenkant van de pier op de achtergrond naar het plateau van de raffinaderij op de voorgrond. Dit was de zwaarste helling op de spoorlijn van Lago, zowel vanwege de ladingen die vervoerd werden als ook omdat de locomotieven bij de heuvel geen vaart konden zetten, omdat ze direct na het oppikken van hun beladen wagens de klim moesten beginnen. Let op de voortreffelijke ligging van de baan. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.).

car tore up about 30 feet of track, but it was better than wrecking two locomotives and a whole train,' Wever concluded.

At this time there were few automobiles or motor trucks at Lago, so the railroad carried everything that was needed for the construction and operation of the refinery. Fordson and Caterpillar tractors were able to operate on the sharp coral rock, but until good roads could be built it was impractical to use rubber-tired vehicles.

Consequently the railway hauled many unusual cargoes. Several cars were covered with a canvas roof to deflect the sun's rays, and were used for hauling ice, which was brought by ship from Curaçao. Flatcars hauled frozen meat directly from ships to the cold storage rooms at the commissary, and fresh vegetables and fruits were likewise brought quickly into the food storage areas.

Gregorio 'Dodo' Willems was in charge of the commissary trains for many years, especially after 1936 when Lago purchased a Plymouth locomotive. This was a low-slung engine, designed for use in mines and other low-clearance areas, and was able to operate within the commissary building. Special tracks were laid within the commissary and cold storage plant, so that the Plymouth, with Willems at the controls, could bring his loaded cars into the building. Tracks went even into the meat storage rooms, and a small 4-wheeled car was used to haul meat into the freezer areas.

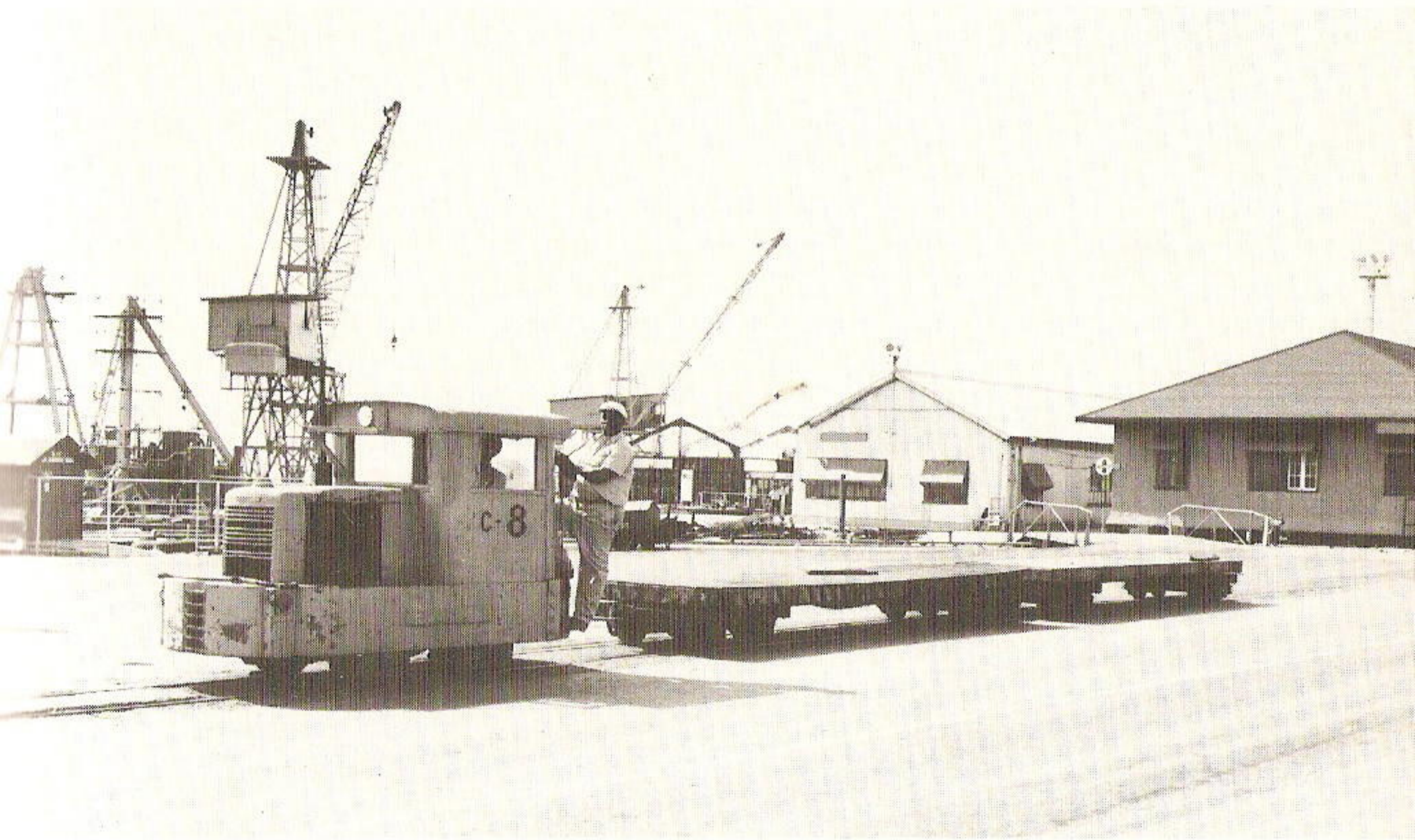
'I loved that little locomotive,' Willems recalled. 'The Company only bought the one Plymouth and I was put in charge. It was faster than the old Milwaukeees but not as powerful, but it could pull 8 loaded cars on a level track. It was used for the ice, grocery, and flour service. Since it seldom rained in Aruba, it was possible to haul flatcars of flour to the bakery, park them on a siding, and let the bakery workers unload them as they were needed. Of course we had to move pretty quickly with the ice and frozen goods cars, but the little Plymouth could do the job.'

Another service which the railroad performed was the 'lunch-train.' Each day at noon a special train would set out from the acid plant, at the far end of the refinery, pulling four crew cars. These cars were equipped with benches and railings for hauling passengers. The locomotive would move the train along slowly, blowing its whistle, and the men would board for a free ride to the mess hall for the noon meal. After the meal the train would retrace its route and the men would disembark at their job sites again. During the early days in the refinery the railroad operated around the clock. Train crews consisted of an engineer and one or two brakemen, who were responsible for handling coupling and switching chores and guarding road crossings. Throughout the decade of the 1930's and through the war years the railroad was on a 24-hour work schedule. Very early it became apparent that the old phosphate dock would be inadequate for handling all of the mass of material required for the new refinery, and construction was begun on the first finger pier. This facility was built to handle both petroleum and dry cargo, and was equipped with railroad tracks on both sides to give full ship-side rail service. The new pier was equipped with 45 pounds per yard Carnegie steel rail, much heavier than the old phosphate railroad's track, and soon all of the Lago railway was laid with this heavy steel, which had a rated load capacity of 18 tons on a 4-wheel bogey truck with crossties on 30 inch centers.

To further modernize the railway Lago also began shopping for new locomotives. The Plymouth, it was decided, was too light and not sufficiently powerful to meet the demands of the grades at Lago. A more powerful locomotive was needed. Finally the nod went to the Brookville Locomotive Works, and orders were placed for the first of what would eventually become a fleet of 11 Brookville model BFA six-ton locomotives.

6-TON BROOKVILLE AT LAGO

6-TONS BROOKVILLE VAN LAGO



One of Lago's fleet of 11 6-ton Brookville locomotives on the 'main line' along the main refinery road. All of Lago's locomotives were numbered with the prefix 'C' to designate them as locomotives. The flatcars have 4 × 12 ft. decks, and 12-inch cast steel wheels, made by the Gregg Cast Metal Co. The cars were coupled with link and pin couplers, the coupler bolsters swiveling with the trucks to give greater turning capacity.

The locomotives were equipped with high-capacity sandboxes located above the wheels on each side, with extra-heavy sand tubes feeding sand to the rail for extra traction. On dry level track such as this the 6-tonners could work with great efficiency. (Photo courtesy Lago Oil & Transport Co., Ltd.).

Eén van Lago's 11 6-tons Brookville locomotieven op de 'hoofdlijn' naast de belangrijkste weg door de raffinaderij. Alle locomotieven werden genummerd met het voorvoegsel 'C' om ze aan te duiden als locomotieven. De platte wagons hebben een bodemoppervlak van 4 × 12 ft. ($\pm 1 \times 3,06$ m) en gietstalen wielen met een doorsnee van 12 inch (± 30 cm), gebouwd door Gregg Cast Metal Co. De wagons waren gekoppeld met schalm- en penkoppelingen, waarbij de verbindingsstukken met de goederenwagons meedraiden om deze zodoende beter in staat te stellen scherpe bogen te doorlopen.

De locomotieven werden uitgerust met grote zandkisten aan iedere kant boven de wielen, met extra zware pijpen die het zand naar de spoorstaaf voerden voor extra adhesie. Op droog horizontaal spoor zoals dit konden de 6-tonners met grote doeltreffendheid werken. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.).

These locomotives were equipped with Ford truck engines, and burned gasoline. Both axles were powered, with chain drive to both axles from a four-speed transmission. Top speed was 15 miles per hour. They were rated at a 3 000 lb. drawbar pull, and could move a load of 200 tons on level track without sand. The first of these new locomotives arrived in 1938, and the old Milwaukeees were retired.

The first four 6-ton Brookvilles, serial numbers 2301 through 2304, were shipped from the factory in Pennsylvania in January, 1938. Powerful units, the locomotives featured a special type of reversing transmission, featuring spiral bevel gears, constantly in mesh, turning on roller bearings in an oil bath. The transmission, standard since 1930 on Brookville units, permitted full power in both directions. Steel tires, offering '25 per cent more traction than an ordinary chilled face drive wheel', were another selling point of the new units.

The Brookvilles were immediately put to work on the most difficult job in the refinery, working the acid plant. This involved handling 14-ton cars of sulphur from ship-side to storage bins, where the yellow mineral was stockpiled to make sulphuric acid, used in the production of high-test aviation gasoline.

To make alkylates, used in raising octane levels in gasoline, gasses such as butylene and isobutane are taken from the normal cracking process and brought together in the presence of a very strong sulphuric acid, which serves as a catalyst, bringing the molecules of the other two substances together.

Acid is also used in the purification of petroleum products. After gasoline, kerosene, naphtha, and other 'fractions' are removed from crude oil, lubricating oil is drawn off. It is too impure for automotive use, so the oil is combined with sulphuric acid which draws off the impurities as muddy-looking sludge.

Acid consumption was high at Lago, rising to more than 12 000 tons per year during the World War II era, which meant that the locomotives on the sulphur run were kept busy. Truck winches were used to aid the locomotives in the pull up from the dry cargo pier to the main line.

At the sulphur pile cars were hauled by steam winch to the top of a high dumping ramp, from which the sulphur was poured onto the storage piles. The locomotives were used for spotting cars at the foot of the ramp incline, and for switching empties as they came back down off the ramp. When a sulphur ship was in port locomotives, cars, and crews were kept busy until the cargo was unloaded.

The Brookvilles also proved reliable for general hauling jobs, tackling the grades at Lago with ease, and able to handle the multitude of tasks required. Management was sufficiently impressed that they ordered two more of the little machines, numbers 2315 and 2316, for delivery in March, 1938, and another two, 2323 and 2324, for shipment in July. Two more, 2415 and 2416, were shipped in July, 1939, and the last of the 6-tonners, 2549, was loaded on board ship in October, 1940, bound for Aruba.

The railroad became critically important for the Allied cause during the years of World War II. The Lago refinery was the largest producer of aviation fuel in the free world, ultimately turning out one of every 16 gallons of aviation gasoline used by the victorious powers. The Brookvilles worked night and day hauling the sulphur, brought in through the U-boat blockade, as well as the other vital supplies to keep the refinery at work. The importance of Lago's war effort was demonstrated by the fact that the Germans made it the first target of a concerted submarine assault on the oil industry. At 1:30 a.m. on the morning of 16 February, 1942, the submarine U-156, Lt. Commander Werner Hartenstein, began an attack which, the German high command hoped, would take

Aruba out of the war. Hartenstein quickly torpedoed two lake tankers at anchor off the harbor entrance, then attempted to shell the refinery and tank farm area with the 10.5 cm. bow cannon on his Type IXc U-boat.

Fortunately for Lago, one of the German gunnery crew momentarily forgot his duties in the excitement of the moment and failed to remove the muzzle plug from the cannon. The result was that the first shell fired exploded in the muzzle, disabling the gun, killing one sailor, and seriously wounding the artillery officer. Hartenstein, in frustration, ordered a few rounds fired from the smaller aft cannon, but by this time the main refinery switch had been thrown, and his target was shrouded in darkness.

When the U-boats returned the next night Lago and the allied military forces on Aruba were waiting, and constant vigilance was maintained for the remainder of the war. The rails were kept shining with the constant flow of goods onto Lago's docks, as the capacity of the high-octane units was increased. The railroad proved its value in other ways, too, especially in the fact that it provided efficient transportation without using tires, a particularly scarce item during the wartime period.

By war's end the 6-tonners were tired. They had worked continuously, three shifts per day, doing their part for the war effort, and they needed to be replaced. Orders were sent to the Brookville works for four new 10-ton locomotives. These units, powered by Caterpillar Diesel engines, were shipped from the factory in July, 1947. They were BCL-10 models, and carried the shop numbers 3242, 3243, 3244, and 3248. These locomotives became the largest engines to ever operate in the Netherlands Antilles, and had a rated drawbar pull of 5 000 pounds. Their 98 horsepower engines and 24 inch wheels gave them a top speed of 1.9 mph in first gear, 3.9 in second, 10.7 in third, and 13.9 mph in fourth gear.

The larger locomotives could make short work of the heavy jobs, including working the sulphur cars, but their working schedule was cut to only one shift per day. Changes were taking place in the refinery. Modern rubber-tired vehicles were taking over many of the carrying chores at Lago. Specialized haulers such as Ross Carriers, which could lift bundles of pipe or other cargo and deposit their loads where needed, and Dempster Dumpsters, which could haul bulk cargoes quickly and easily, took over many of the jobs formerly done by the railroad. Further, the wheeled vehicles could go anywhere, and required only a driver, while the railroad needed larger crews.

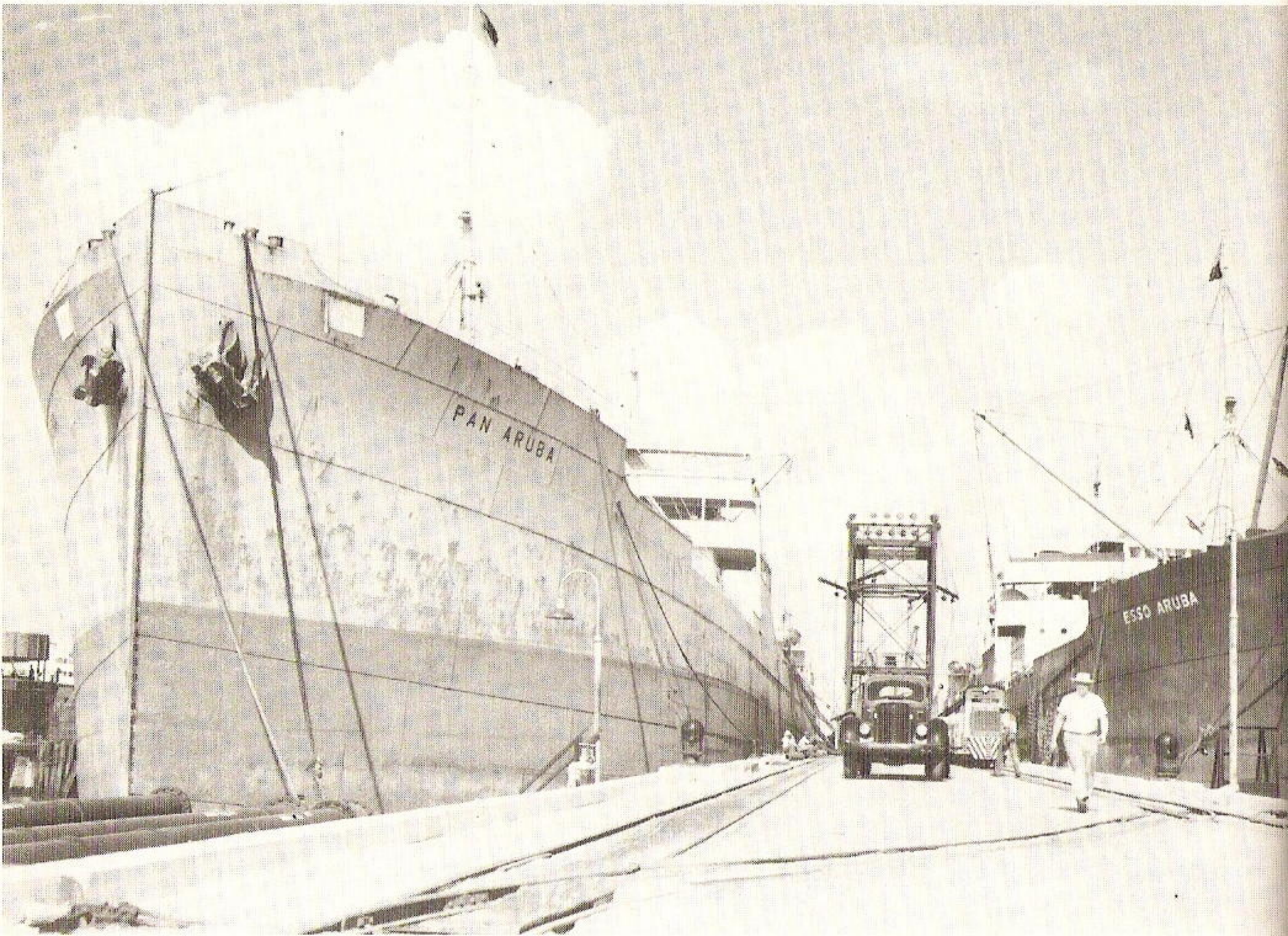
In the early 1950's work was begun on large de-sulphurization plant, which would remove sulphur from crude oil. The sulphur thus recovered could then be used for acid-making, freeing Lago from dependence upon imported sulphur. The plant was ready for operation late in 1956, and with Lago's new self-sufficiency in sulphur, the last major need for the railway was gone. The decision was made to abandon the rail system, and on November 1, 1955, the last train movement at Lago occurred.

For several years the rails remained, but in 1961 much of the railroad was removed to make way for new road construction. Still, in the refinery area, traces of the rail line can be seen, running along the main refinery road, along the right-of-way first laid down by the phosphate company a century ago. On finger pier no. 1 the tracks are still in place, and in the shop yard of the Dutch Machine Shop at San Nicolas a large number of the flatcars are stored, awaiting some use.

The railway, first begun to haul phosphate to sailing vessels and which had continued

TANKERS AT LAGO FINGER PIER

TANKERS LANGS DE LAGO STREKDAM



Aruba's own tankers, the **Pan Aruba** and the **Esso Aruba** both at finger pier 1. This rare photograph shows one of the Brookville 10-tonners working along the right side of the pier, probably switching flatcars beneath the cargo crane in the distance. Note the crossover track in the foreground, and the construction of the track, so that it would not interfere with vehicle operation.

Despite the appearance of the truck on the wharf, most cargo was still handled by rail when this photo was taken, about 1949, as demonstrated by the heavily-laden flatcars just visible behind the locomotive. The rails on this pier are still in place, having survived the dismantling process which eliminated so much of Lago's trackage in the early 1960's. (Photo courtesy Lago Oil & Transport Co., Ltd.).

Aruba's eigen tankers, de **Pan Aruba** en de **Esso Aruba**, beide aan strekdam nr. 1. Deze zeldzame foto laat een van de Brookville 10-tonners zien die aan de rechterzijde van de pier aan het werk zijn. Deze is waarschijnlijk bezig platte wagons op een ander spoor onder de hijskraan in de verte te rangeren. Let op het verbindingsspoor op de voorgrond en de bouwwijze van het spoor, die er op gericht is het wegverkeer niet te belemmeren.

on in modified form into the era of the jet airplane and the supertanker, finally was gone. Progress had made it obsolete. Yet the stretches of rail that remain, and the flatcars waiting patiently for some unknown fate stand as mute memorials to a great age in railroading on Aruba, as monuments to the tremendous changes which have taken place in the last hundred years.

DE SPOORLIJN BIJ LAGO

Eén van de belangrijkste data in de geschiedenis van Aruba is 14 augustus 1924, de datum waarop kapitein Robert Rodgers aankwam op Aruba. Rodgers, een Schot van geboorte, was de vertegenwoordiger van de Lago Petroleum Maatschappij (later: Lago Oil & Transport Co.). Hij zocht een haven om de ruwe Lago-olie vanuit het Maracaibogebied te verschepen.

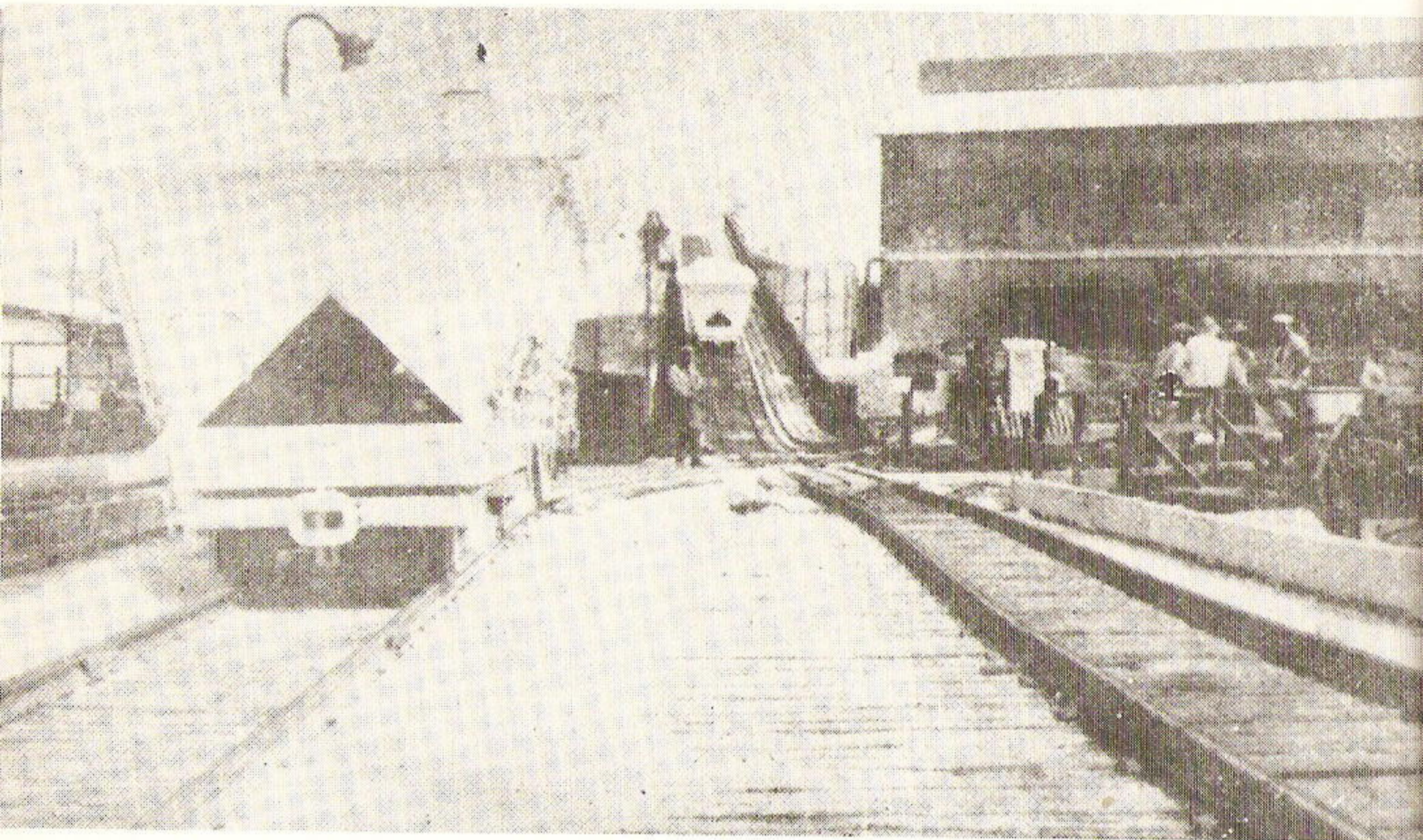
Men toonde Rodgers de haven van Sint Nicolaas, waar de kade en de spoorbaan van de Fosfaat Maatschappij Aruba lagen te roesten in de zon. Rodgers gaf opdracht tot inspectie van de haven, in het bijzonder van het rif, met de gedachte de haven uit te diepen en de toegang door het rif te verwijden. Na een intensieve bestudering van het gebied in en om Sint Nicolaas besloot Rodgers dat er op het terrein een overslagplaats kon worden gebouwd. Al gauw waren er werkzaamheden aan de gang om de haven te vergroten en tegen november 1924 was men met de bouw van de olieopslagplaats bezig.

Het kleine A.F.M.-dok werd gebruikt om bouwmaterialen uit te laden en men importeerde kleine, op benzine lopende Milwaukee locomotiefjes om de spoorlijn opnieuw in werking te stellen. Er werden ook platte wagons met een draagvermogen van 10 ton, uitgerust met draaibare onderstellen voor het makkelijk doorlopen van bogen, aangevoerd om de ladingen cement, timmerhout, plaatstaal en buizen te vervoeren, die nodig waren voor de aanleg van de overslagplaats. Intussen vond de overslag van olie plaats vanaf tankschepen die in de buurt van Oranjestad voor anker lagen. Ruwe olie, die door tankschepen met geringe diepgang uit Venezuela was gebracht werd naar

Ondanks de aanwezigheid van de vrachtauto op de kade werden de meeste goederenladingen nog per spoor vervoerd in de tijd dat deze foto werd genomen (omstreeks 1949), zoals de zwaarbeladen wagons, die net zichtbaar zijn achter de locomotief, laten zien. De rails op deze pier liggen nog op hun plaats, dank zij het feit dat ze de ontmanteling, die zo'n groot deel van Lago's railmateriaal uitschakelde in het begin van de zestiger jaren, overleefd hebben. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.).

SULPHUR CARS AT LAGO

ZWAVEL WAGONS VAN LAGO



The sulphur storage area was the scene of much railroad activity at Lago. Hopper cars of the yellow mineral were brought from shipside to the acid plant area by locomotives, such as the one in the right distance. Then the cars were winched to the top of the ramp in the center distance, where the sulphur was dumped to await conversion to sulphuric acid.

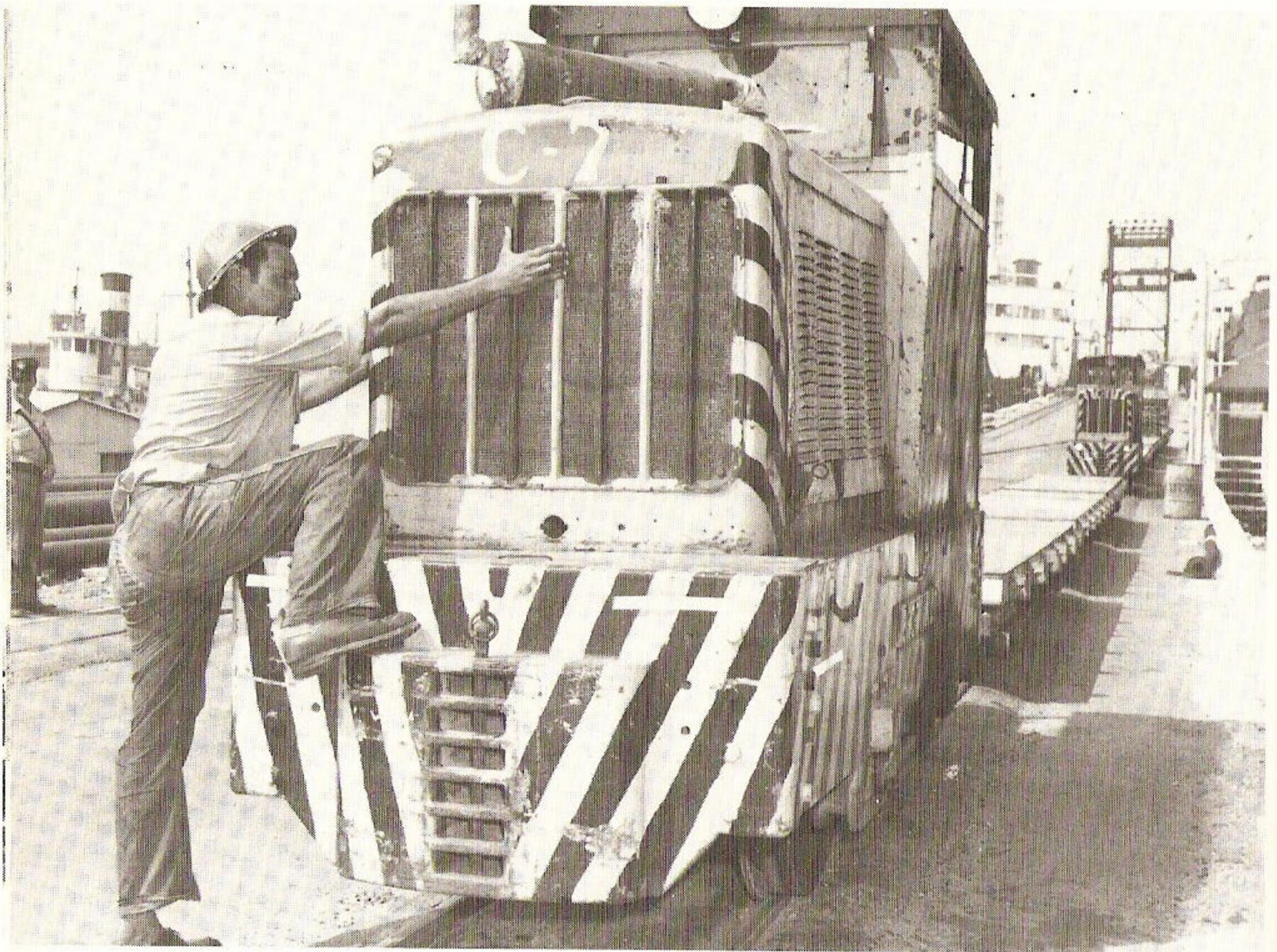
Locomotives were kept busy switching loaded cars onto the main line leaving the ramp, (at right), and moving empty cars to sidings (at left) where they were then returned to the harbor for another load. The mineral was brought to Lago by freighter in lots of 4,000 tons or more. (Photo courtesy Lago Oil & Transport Co., Ltd.)

Op de zwavelopslagplaats heerste bij Lago grote spoorbedrijvigheid. Onderlossers met de gele delfstof werden van het schip naar het terrein van de zwavelzuurfabriek gebracht door locomotieven, zoals deze rechts op de achtergrond. Daarna werden de wagens omhoog gesleept naar de top van de helling (in het midden van de foto), waar de zwavel werd gelost totdat deze omgezet zou worden in zwavelzuur.

Voortdurend waren locomotieven bezig met het overbrengen van de beladen wagens naar de hoofdlijn die tegen de helling opvoerde en met het op het zijspoor zetten van lege wagens (links), vanwaar ze dan teruggestuurd werden naar de haven voor een volgende vracht. De delfstof werd naar Lago gebracht per vrachtschip in hoeveelheden van 4000 ton of meer. (Foto welwillend beschikbaar gesteld door Lago Oil & Transport Co., Ltd.)

BROOKVILLE DIESELS AT LAGO

BROOKVILLE DIESELLOCOMOTIEVEN VAN LAGO



A pair of Brookville 10-ton Diesel locomotives at Finger Pier 1, about 1949. General cargo was unloaded from freighters at this pier, then hauled by rail to its final, destination in the refinery area, the tank farm, or the pipe storage yards. The 10-ton locomotives, acquired in 1947, gave the Lago railroaders the capability of hauling much greater loads than the older gasoline-powered 6-ton engines. These Diesels provided the main motive power for Lago during the last years of the railroad's operation. All of since been scrapped. Note the protective striping on the locomotives – a safety measure to make them more visible to traffic, as there were no crossing signs at Lago. (Photo courtesy Lago Oil & Transport Co., Ltd.

Twee Brookville 10-tons diesellocomotieven bij strekdam no. 1, omstreeks 1949.

De lading stukgoederen werd uit de vrachtschepen gelost bij deze pier, daarna per spoor vervoerd naar de uiteindelijke plaats van bestemming op het raffinaderijterrein, bij het tankpark of op de opslagplaatsen voor buizen.

Deze 10-tons locomotieven, aangeschaft in 1947, gaven de spoorwegmensen van Lago de

Locomotive Roster – Lago
Lijst van locomotieven

Road No.	Weight	Builder	Date	Builder's No.
Dienst nr.	Gewicht	Fabriek	Datum	Fabrieksnr.
?	6-ton	Brookville	1/38	2301
?	6-ton	Brookville	1/38	2302
?	6-ton	Brookville	1/38	2303
?	6-ton	Brookville	1/38	2304
?	6-ton	Brookville	3/38	2315
?	6-ton	Brookville	3/38	2316
?	6-ton	Brookville	7/38	2323
?	6-ton	Brookville	7/38	2324
?	6-ton	Brookville	7/39	2415
?	6-ton	Brookville	7/39	2416
?	6-ton	Brookville	10/40	2549
?	10-ton	Brookville	7/47	3242
?	10-ton	Brookville	7/47	3243
?	10-ton	Brookville	7/47	3244
?	10-ton	Brookville	7/47	3248

All 6-ton locomotives were equipped with Ford gasoline engines.

All 10-ton locomotives were equipped with Caterpillar diesel engines.

Alle 6-tons locomotieven waren voorzien van Ford benzinemotoren.

Alle 10-tons locomotieven waren voorzien van Caterpillar dieselmotoren.

Note: The Plymouth Locomotive Co. furnished one locomotive to Lago for use in Aruba. Company records show the purchase, by Standard Oil Co. of three locomotives 'for export'. One of these was undoubtedly the Lago locomotive.

Opmerking: De Plymouth Locomotive Co. leverde één locomotief aan Lago voor gebruik in Aruba. Maatschappijlijsten tonen aan dat Standard Oil Co. drie locomotieven kocht 'voor export'. Een van deze was ongetwijfeld de Lago-locomotief.

?	6-ton	Plymouth	3/34	3762
?	5-ton	Plymouth	6/37	3921
?	5-ton	Plymouth	6/37	3922

gen opgegeven aan de Brookville fabriek voor vier nieuwe 10-tons locomotieven. Deze locomotieven, met Caterpillar dieselmotoren, werden in juli 1947 van de fabriek verzonden. Ze hadden het model BCL-10 en droegen de fabrieksnummers 3242, 3243, 3244 en 3248. Deze locomotieven waren de grootste die ooit op de Nederlandse Antillen werkzaam zouden zijn en hadden naar schatting een trekkracht van 5000 pond (2268 kg). Hun motoren van 98 pk en hun wielen van 24 inch (60 cm) doorsnee gaven hun een maximum snelheid van 1,9 mijl per uur in de eerste versnelling, 3,9 in

