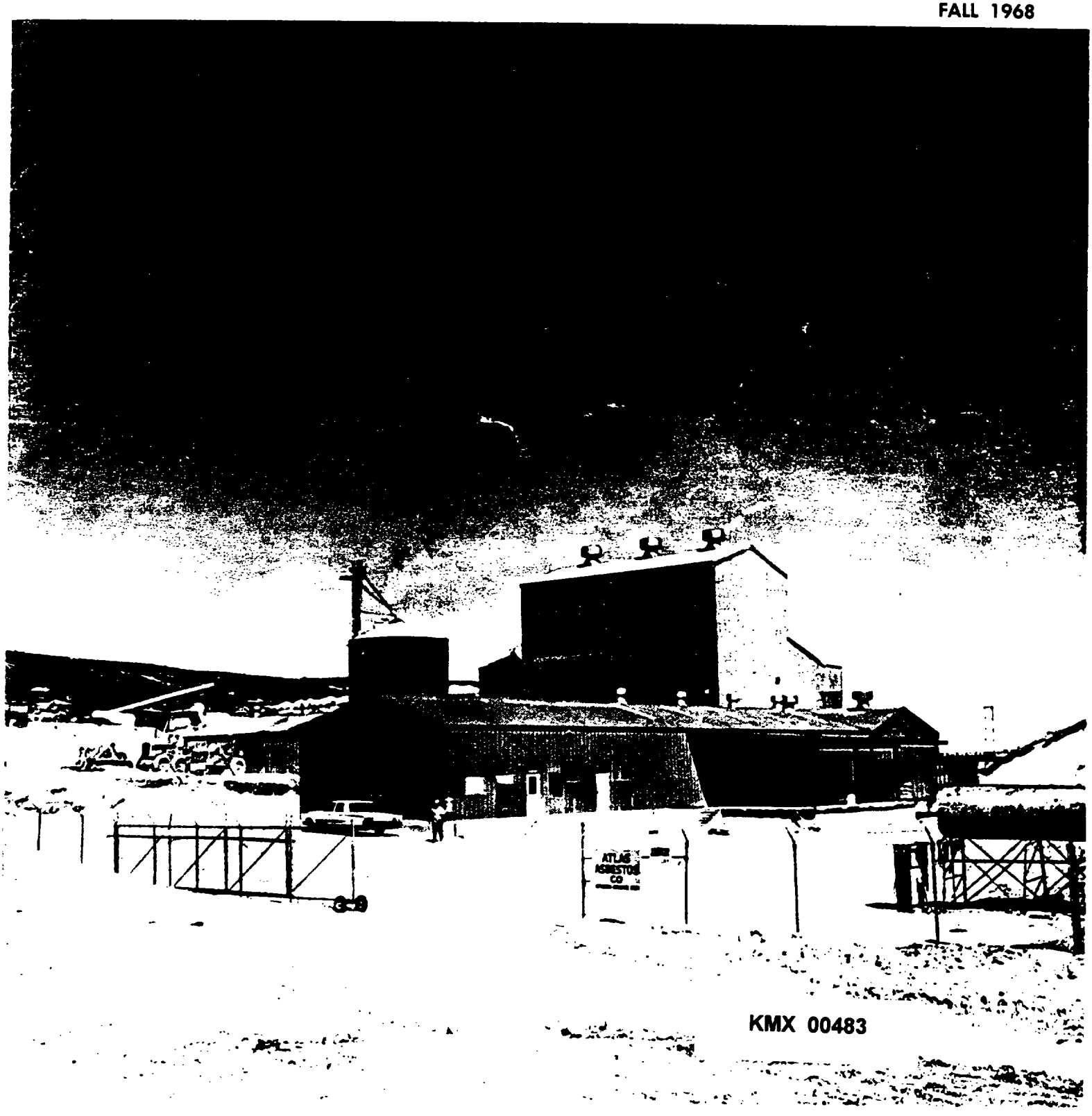
VINNELL

FALL 1968



Minerals In the Past

Throughout history minerals have played an important role in human affairs.

Past civilizations have flourished and nations have gained tremendous economic, political and military power because of their possession of mineral deposits, when combined with the knowledge of how to exploit the wealth of the earth's crust.

That a relationship between mineral deposits and national power exists has been an undisputed fact since ancient times.

Gold and silver for example have contributed greatly to the civilization of the eastern part of the world.

Between 3000 and 4000 B.C., the prosperity of organized communities in the valley of the Nile, in Mesopotamia, in the Indus River Valley of India, and in the Yellow River Valley of China, had a direct relation to the mineral deposits in those areas.

For her power and glory in the 5th century B.C. Athens was much in debt to the mines of Greece. One of the reasons the Greeks were able to turn back the Persian invaders was that the Greek soldiers were armed with bronze swords and shields, while most of their enemies still used leather shields and stone weapons.

In more recent times, Great Britain offers a good example of the relationship between mineral deposits and national power and prosperity.

Britain was able to maintain the "Pax Britannica" in the 19th century because of her industrial, economic and military supremacy. This supremacy owed its existence to the fact that Great Britain was, at one time or another during the past century, the world's largest producer of iron, coal, lead and tin.

As an outcome of this production not only did British domestic markets and foreign trade flourish and bring wealth such as no other country in history enjoyed, but the favorable trade balance also enabled her to control Malayan tin, Spanish iron, and many of the mines and oil fields of Mexico, Chile, Iran, Australia, Burma, etc.

In addition, with the defeat of the Boers in South Africa (1899-1902), the British investments were heavy enough to control more than half the world's production of new gold as well as large deposits of chromite, copper, diamonds, asbestos and manganese.

The implication of the lack of mineral deposits for any country, ancient or modern, is obvious. Such lack would undoubtedly be reflected in the nation's economic, political and military position in world affairs.

MORE THAN THIRTY

1933 —

Vinnell has been engaged in mining for more than thirty-five years.

Though A. S. Vinnell's interest in mining goes back to the 1920's, when he was involved in various small but rewarding operations in the minerals field, the actual year that the organization began its mining activities was 1933. During that year A. S. Vinnell Co. undertook a very significant project at the Cave Canyon (Baxter) iron deposit, located east of Barstow, California, near the Union Pacific Railroad.

At the time that A. S. Vinnell started the Cave Canyon operation, the use of iron ore as an ingredient for special low-heat cement had created a new market and Vinnell Co. shipped large quantities of iron ore to California Portland Cement at Colton, California. This company used

DURING "THE YEARS OF EXPLORATION AND DISCOVERY" — Clair Dunton (left) and A. S. Vinnell on one of their early trips. Picture was taken in 1932 and the background shows a gypsum deposit area in southern Nevada.

The Belvedere Hills pit was one of the various small during the 1920's and early 1930's. The old Marion piece of equipment to Vinnell in those days.

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FIVE YEARS IN MINING

— 1968

it in the manufacture of cement for the construction of Boulder Dam in Nevada. After the Boulder Dam construction was completed, operation of the Cave Canyon deposit continued to supply iron ore to California Portland Cement.

The encouraging outcome of the Cave Canyon operation, as well as the expansion and diversification of Vinnell's many activities in the following years, led to the formation of an organization which would specialize in the growing mining operations and concentrate its efforts to that end. Thus, the Mineral Materials Co., a partnership between A. S. Vinnell and Clair Dunton, was set up in 1937, with Clair Dunton as General Manager, a position that he has held for more than thirty years.

(Continued on page 4)

Minerals At The Present

The Industrial Revolution in the 18th century was marked by two important events: the discovery, by Abraham Darby, of the use of coke for smelting iron; and the invention of the steam engine, by James Watt.

Both these discoveries were made possible through the use of minerals, and since then, man has discovered many other uses for these constituents of the earth's crust.

Today's industry is almost totally dependent on these naturally occurring, ready-made, homogeneous substances which have definite chemical and physical characteristics and are called minerals.

Rock and soil are aggregates of minerals. But the fact that rocks and soil are all about us doesn't mean that minerals are evenly distributed over the earth's crust. Only a few geological environments favor the formation of mineral deposits. And these environments are confined to small areas of the world.

Of the more than two thousand minerals that have been recognized and described by geologists, only about twenty are found in abundance on the earth, and these are unevenly distributed in various geological areas. The distribution of minerals and their commercial values makes the difference between geological areas being rich or poor in mineral resources.

Fortunately, the United States has a well-balanced supply of mineral resources. These resources have enabled this country to develop the greatest industrial power in the world.

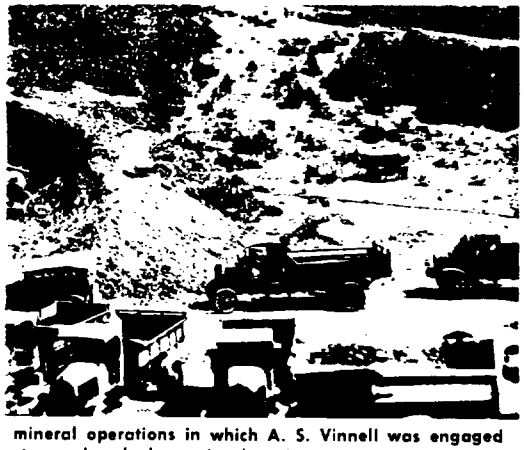
Today, because of the many uses to which they can be put, minerals are even more important than they were in the past. It has been estimated that more metal has been mined since 1920 than was mined in all preceding history.

Thus, the mining industry is becoming more and more important to almost every aspect of life. To this ever growing industry, the Vinnell Mining and Minerals Corporation, with its modern equipment and well-qualified personnel, offers its services.

ON THE COVER

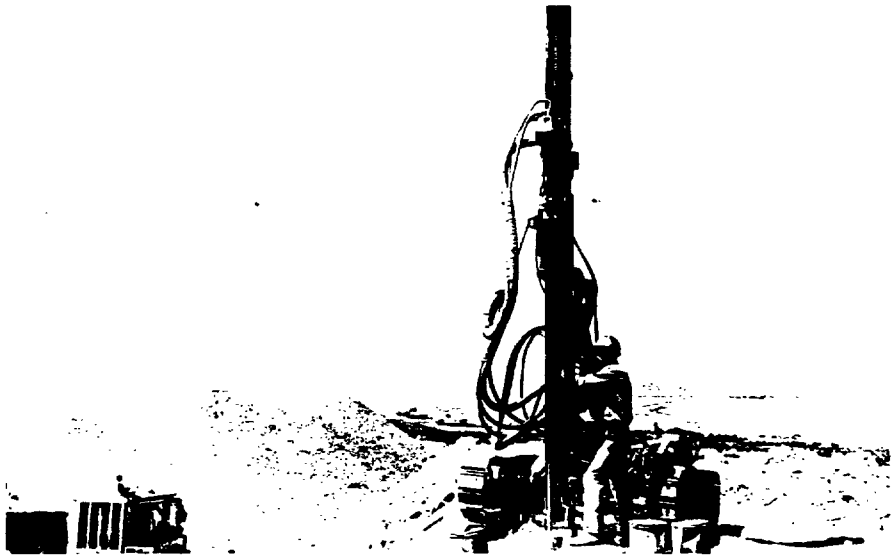
Asbestos plant at Coalinga, California, owned by Atlas Asbestos Co., a joint venture of Vinnell Mining & Minerals Corp. and California Minerals Corp.

(Picture by Chas. Eaton)



mineral operations in which A. S. Vinnell was engaged steam shovel shown in the picture was an important

The Cave Canyon (Baxter) iron deposit, east of Barstow, California, was the first significant mining project undertaken by the A. S. Vinnell Co. Begun in 1933, this operation marked the entrance of the Vinnell organization into the mining field.



A Gardner-Denver air-trac drill drilling holes at the Oro Grande mine. Explosives will be placed into the holes in order to facilitate the mining of silica quartz.

A Northwest shovel loading silica quartz on a Euclid truck which will transfer the material to the primary crusher.

THE YEARS OF EXPLORATION AND DISCOVERY

At this point it should be mentioned that Clair Dunton worked with A. S. Vinnell during his early mining and construction activities. He assisted Vinnell and participated many times in trips of the early 1930's, when Vinnell was very much interested in exploring the mineral areas of California, Nevada and Arizona for potentially valuable industrial minerals and ores. Clair was with Vinnell during most of *"the years of exploration and discovery"* when Vinnell's party was climbing up mountains and going down into gullies looking for and examining the variety of rocks and soils, and trying from the color, composition, density and other physical characteristics of the rocks to recognize the minerals therein and to determine their economic value.

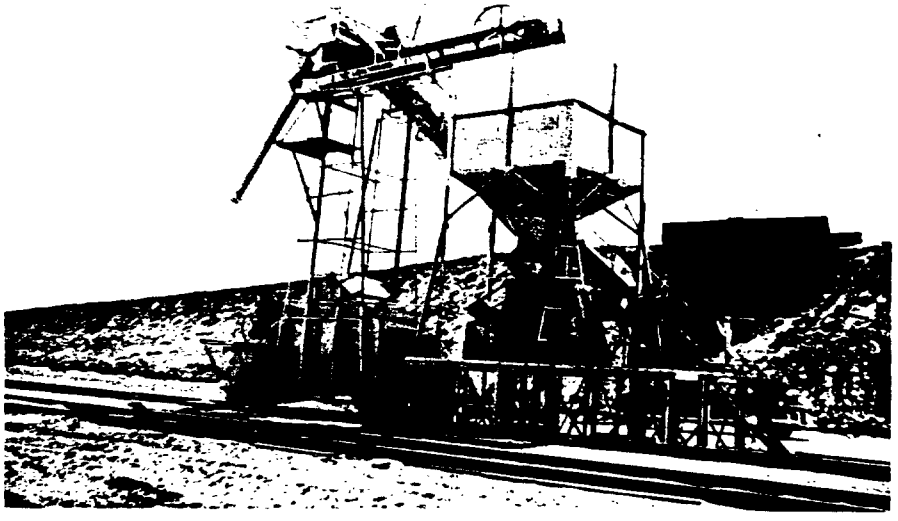
These early trips were very rewarding, in many aspects, for the participants. Besides gaining valuable experience, they located a number of properties which subsequently were put into production. It is interesting to note that some of these deposits were later extensively developed and successfully operated.

A year after the Mineral Materials Co. was formed, a contract was signed between that organization and the Riverside Cement Co. (presently owned by American Cement Co.) to furnish silica from Oro Grande in San Bernardino County to the California Portland Cement Company's plant at Colton, California. It was during this time that the Mineral Materials Co. began quarrying and producing silica for delivery to refractory silica, brick and cement manufacturers. The further exploration and evaluation of test cores that followed revealed that the deposits contained several million tons of desirable and recoverable quartzite.

View of the primary jaw crusher and cone crusher complete with screening unit and stockpiling conveyor at Oro Grande silica mine. Behind the stockpile, at left, is a 350 ton bin used for loading trucks.

CLAIR DUNTON

Co-partner and General Manager of Mineral Materials Co. for the past thirty years, Clair Dunton has been the dynamic force behind the growth and success of this organization. His business foresight, imagination, managerial ability, hard work and integrity have contributed greatly to the respect and high regard that Mineral Materials Co. has achieved.



The White Eagle gypsum mine was discovered by A. S. Vinnell and Clair Dunton during their Nevada trips in the early 1930's. Exploitation of the property started late in 1938 and continued through 1941.

Subsequently, Mineral Materials Co. undertook a contract to quarry and deliver all the limestone needed by Riverside's Oro Grande cement plant.

Today, after almost thirty years of operation by the Mineral Materials Co., the production of silica continues from the same deposits by the Vinnell Mining and Minerals Co., formed in 1967 as a wholly-owned subsidiary of the Vinnell Corporation.

After the formation of Vinnell Mining and Minerals Co., a new plant was erected and went into production for the first time last March. This plant has a design capacity of about 200 tons per hour of finished product, crushed to 3/8ths of an inch.

During World War II, the Three Kids Mine, located about five miles east of Henderson, Nevada, was a prominent producer of manganese, a mineral urgently needed for war materials.

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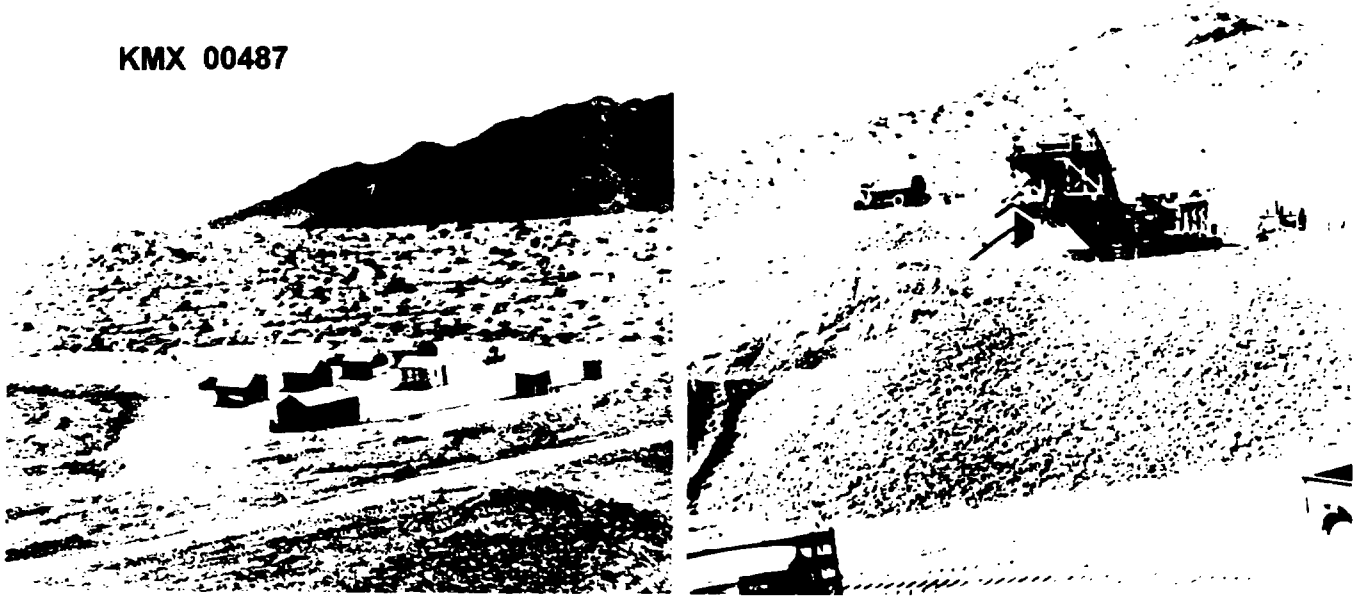


First mining camp set up by Mineral Materials Co. in the early 1940's at the now famous Eagle Mountain mine near Desert Center in southern California. On the left, picture shows the mess building; at right, the first pit. Crushing and screening facilities shown in the picture were put into operation five days after crew and equipment moved into the area — quite a fast start.

A closeup of the magnetic separating plant at Buena Vista mine in Nevada. At the top level of the plant is the primary magnetic separating equipment. Below are the secondary and tertiary crushers. The plant was constructed and operated by Minerals Materials Co. prior to its being sold to U.S. Steel in 1958.

The silica rock is a quartzite and ranges from white to light buff in color. Drilling and blasting are necessary for its recovery and mining is by open pit method, on twenty-five foot benches.

Present output of the mine and plant is about 1,600 tons per shift. Besides the cement industry market, Vinnell sells considerable tonnage of silica to the Pulverized Sand Co. of California, which has a grinding plant near Crestmore, California.

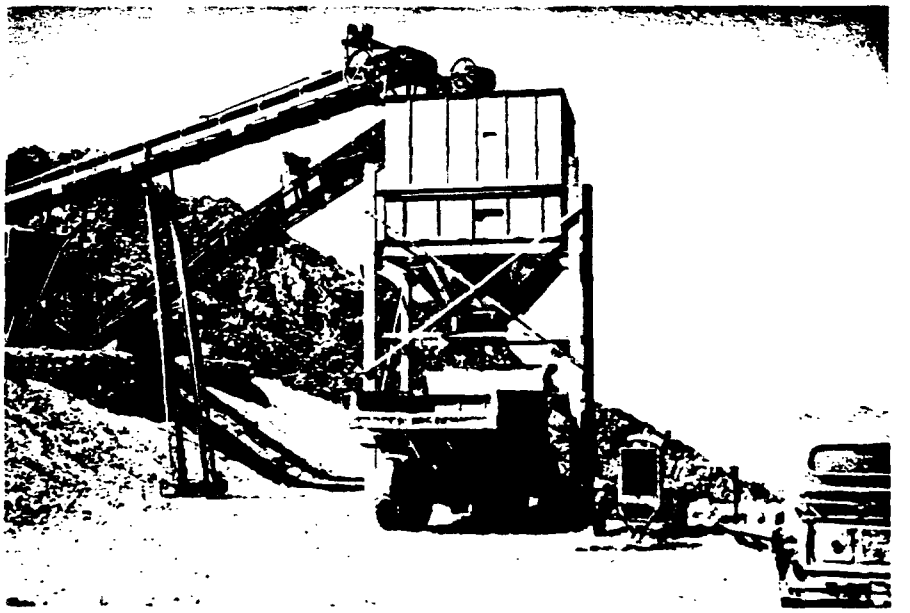
An important property with high grade limestone deposits that attracted the attention of Mineral Materials Co. during the early years of its operations is the one known as the Cushenbery property, in the Lucerne Valley area of California. Geological studies, test drillings and all the exploratory work convinced the prospective buyers that the property would become very valuable and in the late 1930's it was acquired by Mineral Materials. Good business foresight required that the company plan not only for current but also for future production. Thus, more land was located and purchased and the possibility of a cement plant being built there was envisioned.

In the meantime, operations began and the first limestone produced was sold to Kennedy Minerals Co. and later to Kaiser Steel Corporation. In 1956, the property was sold to Kaiser Steel, which purchased the huge deposit to supply raw limestone to its affiliate, Permanente Cement Company, now Kaiser Gypsum & Cement Co. Permanente erected one of the nation's major modern cement plants, with a production capacity of about 2.5 million barrels of cement a year. This property also supplies the large tonnage of limestone needed by Kaiser Steel's Fontana plant.

Before World War II, a manganese property located approximately five miles east of Henderson, Nevada aroused considerable interest on the part of the Mineral Materials Co. This property, known as the Three Kids Mine, was then owned by Major General Walter P. Story and Ray Boggs and Associates. Mineral Ma-

The Buena Vista plant during construction (shown in the background). Also pictured is the shovel and mining equipment. Finish material is hauled by truck to the railhead 24 miles distant for shipment to the customers.

CHARLES W. LEE
President, Vinnell Mining and Minerals Corporation

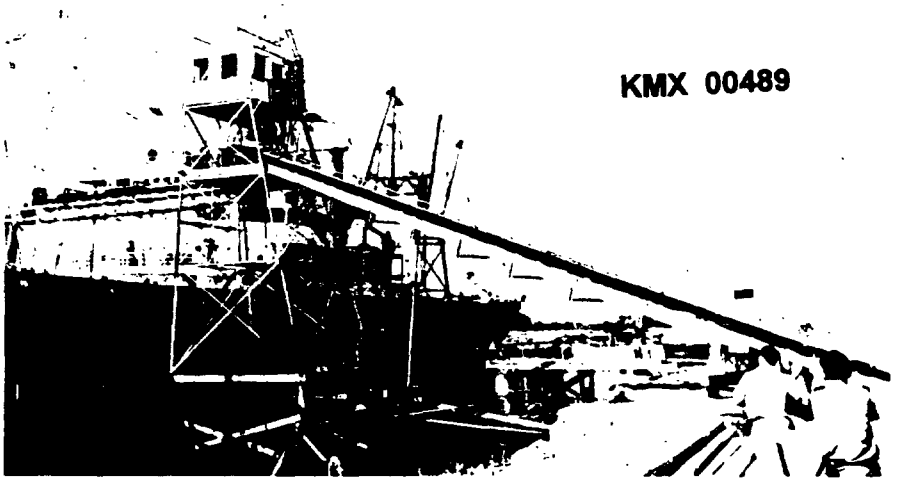


The Iron Hat property, leased and operated by Mineral Materials, produced an open hearth grade iron ore sold to Kaiser Steel and a cement grade sold to Riverside Cement Co.

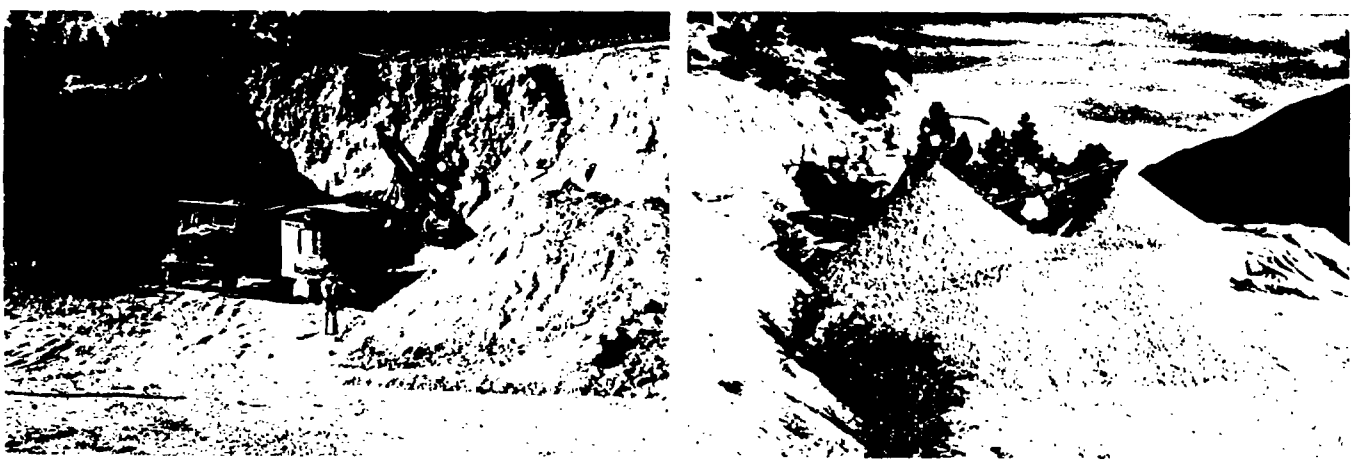
terials Co. signed a contract with the owners and the U. S. government to mine and supply ore to the large pilot plant at Boulder City, Nevada. When all studies of the mine had been completed, the conclusion was that the Three Kids would be an important operation, and that's just what happened. During the war years the mine became a prominent producer of manganese, a mineral urgently needed for the war effort in both the South Pacific and in Europe.

One of the major mining operations undertaken by Mineral Materials was the Buena Vista iron mine, twenty-six miles east of Lovelock, Nevada. The land was patented at the turn of the century and was acquired by Mineral Materials Co. in 1940. First studies indicated a limited tonnage of iron ore reserves but later extensive exploratory work convinced Mineral Materials that the iron deposit there was not only of major proportions but also that the grade of iron was of high quality.

In the following years, the property was developed and in 1951 was put into



Iron ore from the Buena Vista mine in Nevada is loaded on a cargo ship at Port Stockton, California for shipment to Japan.



Another good example of Mineral Materials Co. exploratory ability is the Tecuya-Lebec property near Frazier Park, California. After thorough exploration and geological tests, it was found to have a substantial tonnage of limestone of good quality which is always in demand. Today the Tecuya-Lebec property is considered to be one of the major limestone reserves in southern California. Pictured is a NW6 shovel loading rock to be hauled from the pit to the mill where it is crushed for roofing granules.

production. The ore mined during the first years was shipped directly to the steel mills just as mined, without upgrading. It was loaded at the Colada siding of the Southern Pacific Railroad, some twenty-six miles from the Buena Vista mine.

Late in 1957, the first unit of a magnetic separating plant was completed and went into operation with a capacity of approximtely 300 tons an hour. The main plant consisted of a large primary crusher to reduce the size of the ore before it reached the mill, where it was further crushed and screened to various sizes then passed over a series of magnetic separators which sorted the waste material from the magnetic iron ore.

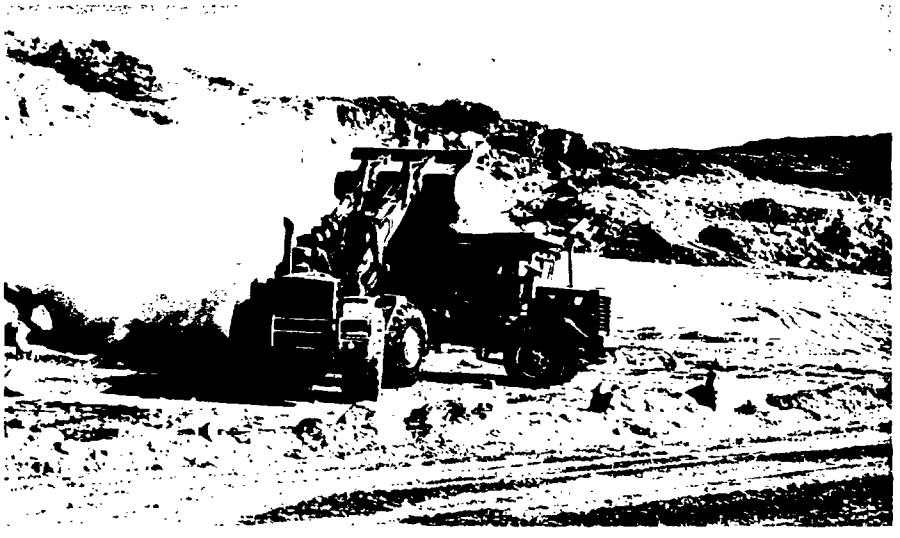
The magnetic concentrate was sold to Japanese steel mills; to Kaiser Steel's Fontana plant; to U. S. Steel's plants at Geneva, Utah; to the Los Angeles foundaries; to the U. S. Navy, and also to the U. S. Atomic Energy Commission which uses selected high grade magnetite for shielding against atomic radiation in the construction of nuclear reactors. This property was sold in 1961 to the U. S. Steel Corporation.

MARSHALL PRICE
Operational Superintendent, Coalinga Plant

H. A. KRAMER
Superintendent of Mines for Vinnell Mining and Project Manager, Coalinga Plant Atlas Asbestos Co.

R. J. DESCHER
Supervisor, Silica Operation at Oro Grande, Calif.

ELMER LEE
Office Manager Coalinga Plant

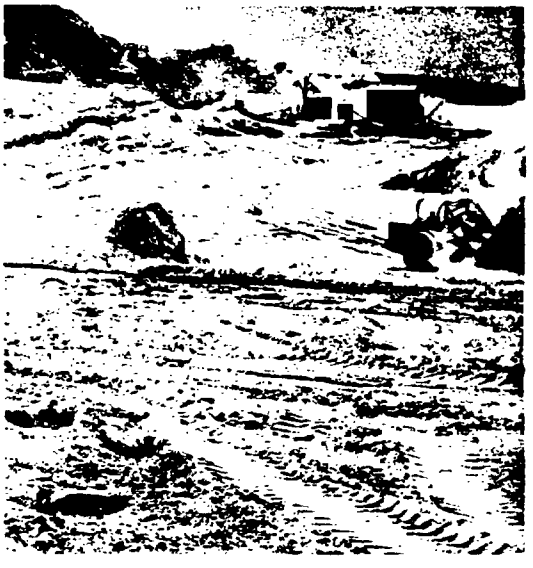


Caterpillar front end loader, loading tuff ore into rock truck at California Portland Cement Co.'s quarry, near Tehachapi, California.

The White Eagle gypsum mine, which is about six miles north of Henderson, Nevada is one of the mines that Vinnell and Dunton discovered during their early years of exploration. Begun late in the 1930's, exploration of the mine was carried on through the early 1940's. The property was opened for production in 1947 and in 1949 was sold to the Flintkote Company.

The famous Eagle Mountain mine near Desert Center in southern California, now operated by Kaiser Steel, was first put into production by Mineral Materials Co. in 1944. The property was acquired on a lease option by Harlan Bradt and Edward Foley from the Southern Pacific Railroad Co. and was leased and operated by Mineral Materials Co. until 1947 when their interest was purchased by Kaiser Steel. After sale of the mine to Kaiser, Mineral Materials Co. contracted to mine and supply the first blast furnace ore used at Kaiser's Fontana, California mill.

Conveyor system stockpiling products from the crushers at California Portland Cement Co.'s quarry. The finished material is loaded on trucks and hauled to their cement plant 14 miles away.



Allis-Chalmers self-loading scraper is used in delivering background) at Coalinga, California.

M. W. (MEL) REDHEAD

Vice-President of Vinnell Mining and Minerals Corporation.

Mel has been with Mineral Materials Co. since 1952 and, through the years, he has worked closely with Clair Dunton to achieve the present growth and status of the company.

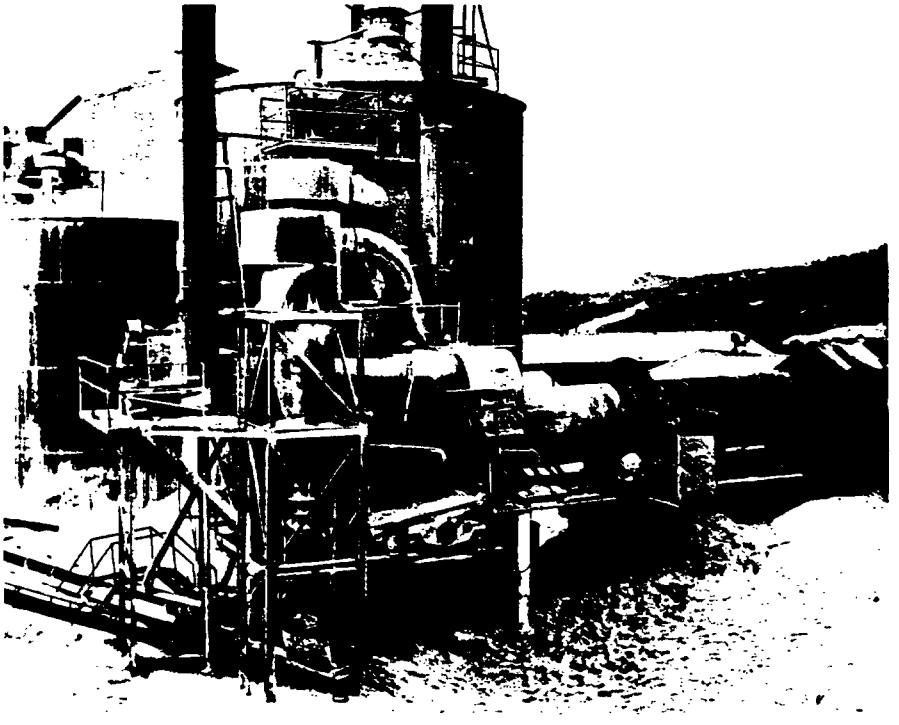
A good illustration of Mineral Materials' exploratory ability is the Tecuya-Lebec property near Frazier Park. This property is considered to be one of the major limestone reserves in southern California and was acquired by Mineral Materials in the early 1950's. Preliminary geological work indicated that there was a substantial tonnage of limestone of good quality, which is always in demand for cement and other lime products, and Mineral Materials went into a program to develop the property. Access roads were built and a primary crushing plant was set up to reduce the limestone to various marketable sizes. After primary crushing, the product was further crushed for white roofing granules at a nearby installation operated by the Industrial Mining and Milling Co. Because of its proximity to the market as well as to the center of the burgeoning southern California population, this mine is still one of Mineral Materials' most valuable properties.

ABILITY TO EXPLORE AND DEVELOP NEW DEPOSITS

The ability of Mineral Materials to explore and develop virgin deposits is well demonstrated in the case of the Mt. Raymond mine, located approximately sixty miles northeast of Fresno, California. The property was acquired by Mineral Materials in 1958 and by the early 1960's a well-planned exploratory program was underway. All the preliminary studies have been encouraging and market feasibility studies as well as metallurgical tests are being planned.

Also in the 1950's, Mineral Materials Co. contracted with Kaiser Steel for the mining operation of the Silver Lake iron deposits north of Baker, California where the company mined a specialized type of ore for the production of special steels. A crushing plant was installed and kept busy supplying a fleet of forty-five 22 ton trucks working around the clock to deliver ore to a stockpile fifty miles away at Dunn siding, west of Baker, California.

One of the richest tungsten mines in the United States was the well-known Star Bright, near Barstow, California. This property was acquired by Mineral Materials Co. in 1951. At first it was believed to be only a good prospect but further studies proved it a valuable tungsten reserve. The mine was operated at the start by open pit mining methods and later developed by underground shafts and drifts. When the Government's program of purchasing tungsten tapered off, the operation was discontinued and in



The dryer at the Atlas Asbestos Co.'s plant at Coalinga, California.

asbestos ore from the pit to the plant (shown in the

Trucks loaded with asbestos material from the Atlas Asbestos Co.'s Coalinga plant about to leave for the Los Angeles area. The building behind the warehouse contains fiberizing and other processing equipment.

KMX 00491

1953 the property was sold.

In mid 1956, Mineral Materials purchased 180 acres of property located north of the city of Boron, California. This property is adjacent to the U. S. Borax and Chemical Corporation mine and thorough exploration by core drilling in the following years proved it to be a good deposit of colemanite, used in the manufacture of solid rocket fuel.

For the last sixteen years, Mineral Materials has been operating a pyrophyllite deposit located about fourteen miles east of Victorville, California. The property was purchased in 1950 and after the exploratory work was completed two years later, the mine was put into operation. Since then, thousands of tons of this talc-like material have been produced and sold as a mineral filler as well as for other uses. It has been estimated that the remaining pyrophyllite constitutes one of the largest known reserves in the western United States.

Although Mineral Materials Co. has now discontinued quarrying and active mining operations, it continues to own active mining properties, as well as claims and leases on other properties. At present, the company's activities are confined to the investigation and exploration of new deposits for possible future development and exploration.

Formation of New Company

In order to meet the steady expansion in mining and mineral operations, the new Vinnell Mining and Minerals Corporation, a wholly owned subsidiary of Vinnell Corporation, was set up late in 1967.

Soon after, the new company formed a joint venture with California Minerals Corporation of San Diego, and in January of 1968, the joint venture, known as Atlas Asbestos Co., purchased a plant and began asbestos operations in Coalinga, California.

The asbestos in the Coalinga deposit is of a very high grade, and is unique in its degree of whiteness and its high absorption quality.

Although Atlas Asbestos supplies the floor tile manufacturers in the southern California area (such as Armstrong Cork Company, Inc., Kentile Inc.) and Lunday Thaggard Oil Company, a large part of the shipments are made to the East Coast. Also, some of the products are being exported and it is hoped that this market will expand.

Among the other products made from the Coalinga deposit is Drilbestos, an admixture used for drilling mud in deep well oil drilling. Studies have recently been conducted to determine changes to be made in the plant in order to increase production and broaden the range of products offered for sale to other users of asbestos.

In early 1968, Vinnell Mining and Minerals Corporation signed a contract to mine and crush 250,000 tons of tuff ore (pozzolan) for California Portland Cement Company's plant at Mojave, California. The mining and crushing operation, located at Tehachapi, California, started last April.

The above brief outline of operations performed does not cover all of the activities of the organization. It does, however, illustrate experience and capabilities which have contributed valuable services not only to the mining industry but also to the *economic growth and power of America* in the past thirty-five years.

Successful Program in Niger, Comment by U.S., Other Officials

KMX 00492

For the last two years Vinnell's Technical Services Division has been working closely with the U. S. Agency for International Development (AID) in order to advance the technical knowledge of citizens of the West Africa Republic of Niger. And the training program started there by Vinnell in 1966 is now on its way to complete success.

On this occasion, it is interesting to recall that when this program began some serious difficulties were encountered with regard to the general background of the trainees. Students who had been employed by the Government of the West Africa Republic of Niger for the purpose of receiving the training had very little formal education and in most cases they lacked any technical experience. This was a major impediment to communication for both trainers and trainees.

On the other hand there were certain encouraging aspects such as the determination of the Government of Niger to go ahead with the program, the importance that the U. S. AID African Bureau placed on its mission there, and above all the strong desire of the young trainees to learn.

These important facts were recognized by our personnel in Niger and with the combined effort of all concerned, the difficulties were soon overcome and the situation began to improve.

Official Recognition of Results

In his initial inspection of the project which took place last year, the Assistant Administrator of the U.S. AID—African Bureau in Washington, D.C., Mr. R. Peter Straus, expressed his satisfaction with the progress that the Nigerian students were making.

Our personnel in Niger have also been praised for their outstanding work there by the U. S. Ambassador to Niger, Mr. Robert J. Ryan; the Nigerian Minister of Agriculture and Rural Economy, Mr. Maiden Mamoudou; and other governmental officials of both countries.

Members of the Vinnell team in Niger are: Jack C. Gunther, Jr., team leader and project manager; Bernard LeTourneau, fleet operations and maintenance specialist; Alfred A. Brooks, diesel engine specialist; Jack W. Doane and James L. Mizzelle, equipment specialists; Raymond J. Ornelas, automotive specialist; and Arthur H. Auvil, spare parts specialist.

From l. to r., Jim Mizzelle, Vinnell's heavy equipment specialist; R. Peter Straus, Assistant Administrator, AID African Bureau (Washington, D.C.); and M. Abdoulaye Hamee, equipment repair group leader, during the initial inspection of the project by Mr. Straus. In ths picture, at right, is Ray Ornelas, Vinnell's automotive specialist in Niger, explaining the engine analyzer to a group of eager young Nigerian trainees.

W. B. Hester Joins Vinnell

WALTER B. HESTER

Another step towards the expansion of Vinnell's diversified activities has been taken with the appointment of Walter B. Hester as Vice President of Vinnell Corporation.

Walt, a well-known personality in the mining field in the United States and abroad, is in charge of Vinnell's International Mining Division, responsible for business development in the areas of exploration, stripping, and mining of mineral deposits.

A U. S. C. graduate with a B.S. degree in mining engineering, Walt brings to the Vinnell organization thirty-four years of experience in all aspects of mining.

Prior to his present appointment, Walt was Chief Engineer for Cerro de Pasco Corporation in Peru; Director of Engineering at Stearns Roger corporation, Denver, Colorado; and most recently, Executive Engineer for Bechtel Corporation's International Division in San Francisco, California.

QUITE A RECORD

Key personnel of the Amistad Dam project are shown celebrating the day the crew finished placing 100,000 cubic yards of cement in a single month on the Mexican side of the dam.

This was quite a record for Mexico, because it was the first time that such an impressive amount of concrete had been placed in a month's time on any job in that country. For this outstanding achievement, the crew received congratulations from the Mexican Government.

From l. to r. are: Fernando Cortes, engineer-chief superintendent; Charles (Chuck) Romano, general superintendent; Oskar Gonzales, resident engineer; and John J. Feira, engineer, project manager. The construction of the Mexican side of the dam, undertaken by "La Victoria y Asociados S.A.," an associated company of Vinnell Corporation in Mexico City, has been completed. The American side of the project, which is being constructed by the joint venture of Perini (sponsor)-Vinnell-Jones-Leavell, is expected to be completed early in 1969.

HOUSING UNITS, HIGHWAY AMONG NEW PROJECTS

At the end of May, the California Division of Highways awarded to Vinnell's Highway Division of Phoenix, Arizona a contract for the construction of an eight lane freeway near Cajon Pass, San Bernardino County, California. The contract calls for grading and surfacing the roadway with Portland Cement concrete on a cement treated base as well as for the construction of three bridges between Highway 138 (north of Cajon) and Highway 395 (south of San Bernardino).

The project started in July and is scheduled for completion next summer.

Another project undertaken this summer by the Highway Division is the Toll House Road near Huntington Lake, California. Owner of the project is the U. S. Bureau of Public Roads.

Projects in the Philippine Islands.

A project for the construction of a total of 440 units of family housing for the U. S. Department of the Navy was undertaken this summer by Vinnell's Philippine Division. The contract calls for the construction of one and two story units at the U. S. Naval Station, Langley Point, and at Clark Air Force Base.

The buildings will be both single and duplex housing units of similar type construction, with concrete masonry exterior walls supported on reinforced concrete foundations. There will be reinforced roof beams with asphalt shingle roofing over plywood sheathing. Interior walls and partitions will be concrete masonry and gypsum wallboard, with wooden doors and aluminum, awning type windows.

In addition, the contract calls for electrical distribution in the housing areas, with street lighting, sewer and water lines, roads, drainage systems and erosion control.

Another project undertaken by this division consists of the construction of an approach pier and drydock mooring at the U. S. Naval Base's Ship Repair Facility at Subic Bay. The project is underway and is expected to be completed by the end of the year.

Also, Vinnell's Philippine Division was awarded a U. S. Naval contract for improvements of the Receiver Building at Zimbales, San Miguel, on the Philippine Islands. This project should be completed by April, 1969.

New Warehouse for United Motor Service

A. J. Huber, Operations Manager, announced that the Building Division received a contract last July from the United Motor Service, a division of General Motors Corporation, for the construction of a large new warehouse and office building in La Habra, California. Work on this project started in August, 1968.

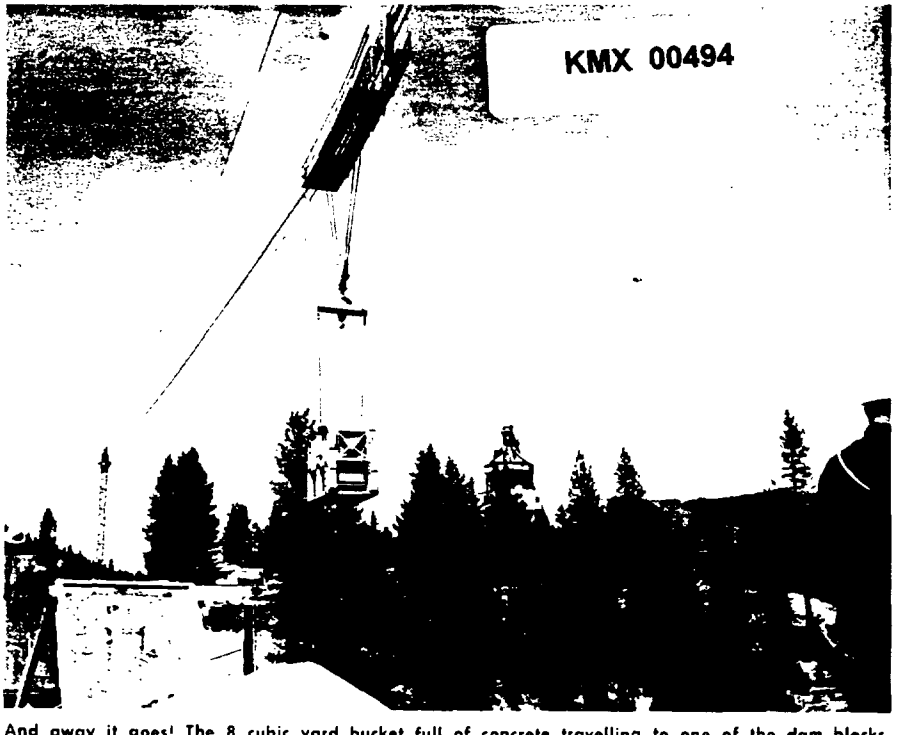
Box Canyon Dam Area

Concrete bucket dock at the Box Canyon Dam project. The electric "goose car" is dumping three inch mass concrete into an 8 cubic yard bucket which travels by cableway to one of the main blocks in the dam. In the background is the concrete mixing plant.

The construction of the Box Canyon Dam and its surrounding recreational facilities is progressing on schedule and the project is expected to be complete early next year.

As of August, 1968 fifty percent of the concrete items had been finished, as well as most of the work in the recreational area. It is estimated that overall progress is about sixty-five percent.

The project, which is located in the beautiful Siskiyou County in northern California about two miles southwest of the town of Mt. Shasta, consists of the construction of a concrete gravity type dam, with an earth abutment section on the Sacramento River. It also includes the development and enhancement of the recreational and fishing facilities in the surrounding area.



And away it goes! The 8 cubic yard bucket full of concrete travelling to one of the dam blocks. Mt. Shasta is viewed in the background.

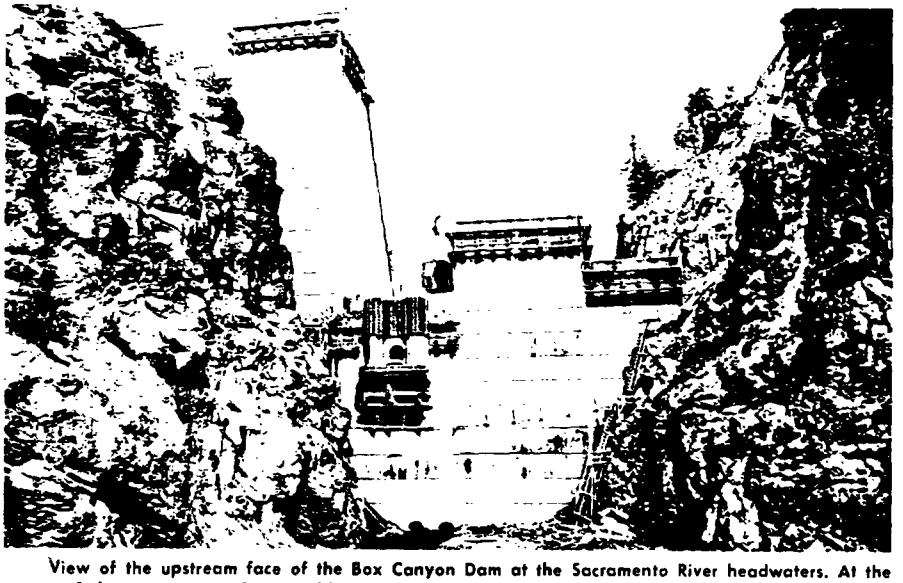
GENERAL VIEW OF THE BOX CANYON DAM PROJECT. height of the dam when completed. The traveling tower the earth embankment section of the dam that ties into

Becomes Vacation Spot

The reservoir covers a total of 430 acres, with a maximum depth of 200 feet. Length of the dam is 1,100 feet and the spillway crest is 141 feet long. The elevation at the top of the dam is 3,204 feet and that at the crest of the spillway 3,187 feet.

The project started on August 1, 1967 and the first 404 cubic yards of concrete were poured on May 7th of this year. It is estimated that a total of 130,000 cubic yards of concrete will go into the completed structure.

Compared with Vinnell's other current heavy construction projects, such as John Day Dam, Little Goose Dam, etc., the Box Canyon Dam job is of a lesser magnitude. Regardless of its size, however, the job — as is the case with any job — has had its problems and headaches.



View of the upstream face of the Box Canyon Dam at the Sacramento River headwaters. At the center of the pictures, an 8 c.y. cableway concrete bucket is placing concrete. At the bottom of the structure are the two diversion pipes through which the river is flowing.

At center, a cableway lowering an 8 cubic yard bucket of concrete to the pour in progress. At right a completed section of the structure shows the eventual of cableway is visible at the far right. At the far left are the concrete batch plant, aggregate storage and shop areas. Trench at the left center will contain the concrete retaining wall being constructed at the left of the concrete dam.

Among them was the time needed for the preparation of the irregular and weathered foundation rock to receive the first concrete pours. This process was a very slow one and caused a great deal of anxiety among Vinnell personnel, who were eager to keep the job going. Another delaying factor was the high river water which prevented an early start on the work on the river bottom.

Size not indicative of the problem.

"Though Box Canyon is considered a small dam project, its size is certainly not indicative of the many problems one must solve", said Dean Lodmell, Vinnell's project engineer. And Lou Mace, Sr., general superintendent, concurred. "This project is interesting to build but a little tough", he said.

In any case, the personnel on the job try to solve the problems one by one as they come along, and the project is progressing according to schedule.

The construction of the recreational area includes the following: entrance station building, concession building, comfort stations, access and service roads, family and camping units, beach area and dressing rooms, boat and parking areas, and water and sewer systems.

It is expected that the recreational area will be open to the public in the spring of next year, allowing overnight campers as well as vacationers to enjoy the scenic beauty and relaxing atmosphere of the Mt. Shasta country.

A beautiful spot for a vacation.

The Siskiyou County, with its cool, clean mountain air, is an ideal place for year-round vacationers and offers pleasure and relaxation vitally needed. At an elevation of 3,500 feet, the summer days are warm, with an average daily temperature of sixty degrees, and nights are cool enough to be enjoyable. Mt. Shasta, the glacier-covered extinct volcano, rises to an altitude of 14,162 feet and is a picture of scenic beauty, particularly in winter time when covered by snow. It provides the finest and largest skiing area in the whole western region. Shasta country is a year-round playground and the completion of the Box Canyon recreational dam will be an additional asset to the area.

According to the owner's representatives, McCreary-Koretsky-Engineers of San Francisco, the Box Canyon project is the first of a series of recreational dams to be built in the State of California.

Vinnell personnel at the Box Canyon Dam project include, from l. to r.: Bruce Merriman, purchasing agent; Lowell Whitley, engineering aide; Don LeLange, accountant; Cal Carpenter, office manager; (now enroute to Korean projects); Bill Lofland, equipment superintendent; Phil Barnes, field engineer; Whitey Condaux, carpenter superintendent. Back row, l. to r.: Bernie Moore, payroll-costs; Jim Bell, excavation superintendent; Bob Jenks, project manager; Dorothy Osborne, secretary; Jim Fox, concrete superintendent; Dean Lodmell, project engineer; and Lou Mace, Sr., general superintendent.

PROJECTS COMPLETED BY VINNELL DIVISIONS

This summer, Vinnell's Highway Division of Phoenix, Arizona, completed two of its projects in Utah and California.

The project in Utah, a 14.049 mile highway in Emery County, is a part of the Interstate Highway 70 system. It will provide a more direct route between Denver, Colorado and Los Angeles, California. Owner of the project is the State Road Commissioner of Utah.

The other completed project is located 25 miles north of Coalinga, California and is a 28 mile divided highway on Interstate 5. Owner of the project is the State of California Division of Highways.

Also, Vinnell's Building Division finished two of its projects in southern California.

Bridges for Standard Oil Co.

The first project, consisting of the installation of free standing heavy duty steel supports and bridges for a major pipeline at El Segundo, California, is owned by the Standard Oil Co. of California, Western Operations, Inc. Most of the job had to be built over existing pipe fields, which created a problem regarding installation of the large concrete foundations. In some areas, the excavations for these foundations were ten feet deep and ten feet wide, with the only access between existing pipe that lay on the ground, *allowing only twenty inches of crawl space* to get into the holes and remove the dirt. In some locations the pipes were red hot steam lines making the job even more difficult.

However, the job was completed on time because, as Pete McAlpine points out, "We try to anticipate the difficulties to be encountered on each project, and find solutions ahead of time." Vinnell representatives on the job were: Paul Maag, job superintendent: Dave Powell, project engineer; and John Schalliga, owner's field representative.

Office and warehouse

The second project, owned by the Big Three Industrial Gas & Equipment Co. of California, consists of the construction of one prefab metal building approximately 4,800 square feet, with installation of offices, including all finish cabinets, paneling carpentry and suspended ceilings.

The Big Three office and warehouse project is located at 5901 Paramount Blvd., North Long Beach, California. Owner's chief engineer was Cyril Adams, with Bob Houston as field representative. Vinnell's field foreman was Elmer Hansen.

Both projects were under the direct supervision of Pete McAlpine, manager of the Southwest Section of Vinnell's Building Division.

CONTRACT SIGNED FOR NEW PIPELINE

Harold Pope, Vice President and General Manager of Vinnell's Underground Division, announced in August, 1968 that his division had been awarded a contract from the Metropolitan Water District of Southern California to construct a 9.81 mile pipeline, from a point near Temecula, west of Highway 395 in Riverside County, to Fallbrook in San Diego County.

The project is the second pipeline to be constructed on the second San Diego Aqueduct. The job includes the laying of 52,655 lineal feet of 88 inch diameter, rubber gasket, concrete lined and steel coated pipe.

It is anticipated that pipelaying will begin early next year with completion of the project scheduled for the summer of 1970.

FORMER EMPLOYEE GOODWILL AMBASSADOR

Wallace Dunton, who in 1946 succeeded Al Kirkland as project manager on Vinnell's first Asian project in the Marianna Islands of the Pacific, left at the end of August for a three week good will trip to Europe. He is with a group of eighteen United States citizens who are participating in a People to People tour in France, Hungary, Italy, Spain, Romania and the Soviet Union.

Good luck on your mission, Wallace.

Our People and Their Work

It has been the policy of Vinnell Corporation, through the years, to offer equal opportunity employment to all qualified persons without regard to race, creed, color, sex or national origin. This basic policy has been extended to all aspects of employment including, but not limited to, placement, upgrading, transfer, layoff or termination, etc.

JOHN NELSON
Vinnell Project Manager
in Vietnam

CHIRAPHAN CHULAKASEM
Typist at Vinnell office
in Thailand

ALEXANDER POWERS
Vinnell Project Manager
in Thailand

RUDY L. ZEGARAC
Deputy Project Manager - Operations
Cam Ranh Bay, Vietnam

ROBERT E. AMES
Asst. Project Manager, Marine
Operations, Cam Ranh Bay

Dean Lodmell, Vinnell project engineer on the Box Canyon Dam, won the annual Mt. Shasta Golf Tournament at the Weed golf course last August.

Phil Barnes, field engineer on the same project, placed third in the same event.

Congratulations, Dean and Phil.

NEW FACILITIES FOR EXPANDING OPERATIONS AT HOME OFFICE

To provide space for additional administrative officers and staff members, a 120 foot long modular building was installed by Vinnell's Steel Division. The building was comprised of 12 prefabricated ten foot modules which took two weeks for installation. The building houses the accounting staff and the employees lounge. It provides an accounting area, a reception room and five individual offices for W. J. Breer, fiscal manager; H. H. Uyeda, controller; Ralph Dickenson, George Coats and Donald Stapleton, administrative accountants.

Vinnell Steel has built this type of structure since 1964. Used primarily for public schools, there are in excess of one thousand of these pre-built classrooms in California alone. The buildings are prefabricated in the Oakland Plant and trucked to the jobsite on specially designed trailers. They are then installed and are ready for use within three days to two weeks. The buildings are generally less expensive and much faster to build than on-site construction, and can easily be relocated should the need arise.

The Executive Building

The Vinnell Corporation's executive building on Westminster Avenue, where the accounting personnel has been housed for the past fifteen years, has been remodeled to provide additional office space for M. L. Brockmeyer, assistant vice-president, administration; Lynn Carlson, assistant vice president, finance; and Byron Thompson, manager-contract administration.

HOME OFFICE BOWLING LEAGUE

Early in August, Vinnell employees at the Alhambra office formed a thirty-eight player league to participate in inter-organizational bowling games.

The league consists of six teams of five players each. President of the league is Gary L. Farris; vice-president is Marie Zurbriggen; and secretary-treasurer is Russell F. Vatcher. All are from the accounting department.

Vinnell Corporation has sponsored the league, and has provided shirts and winner's trophies.

HOW TO PREVENT A RIOT

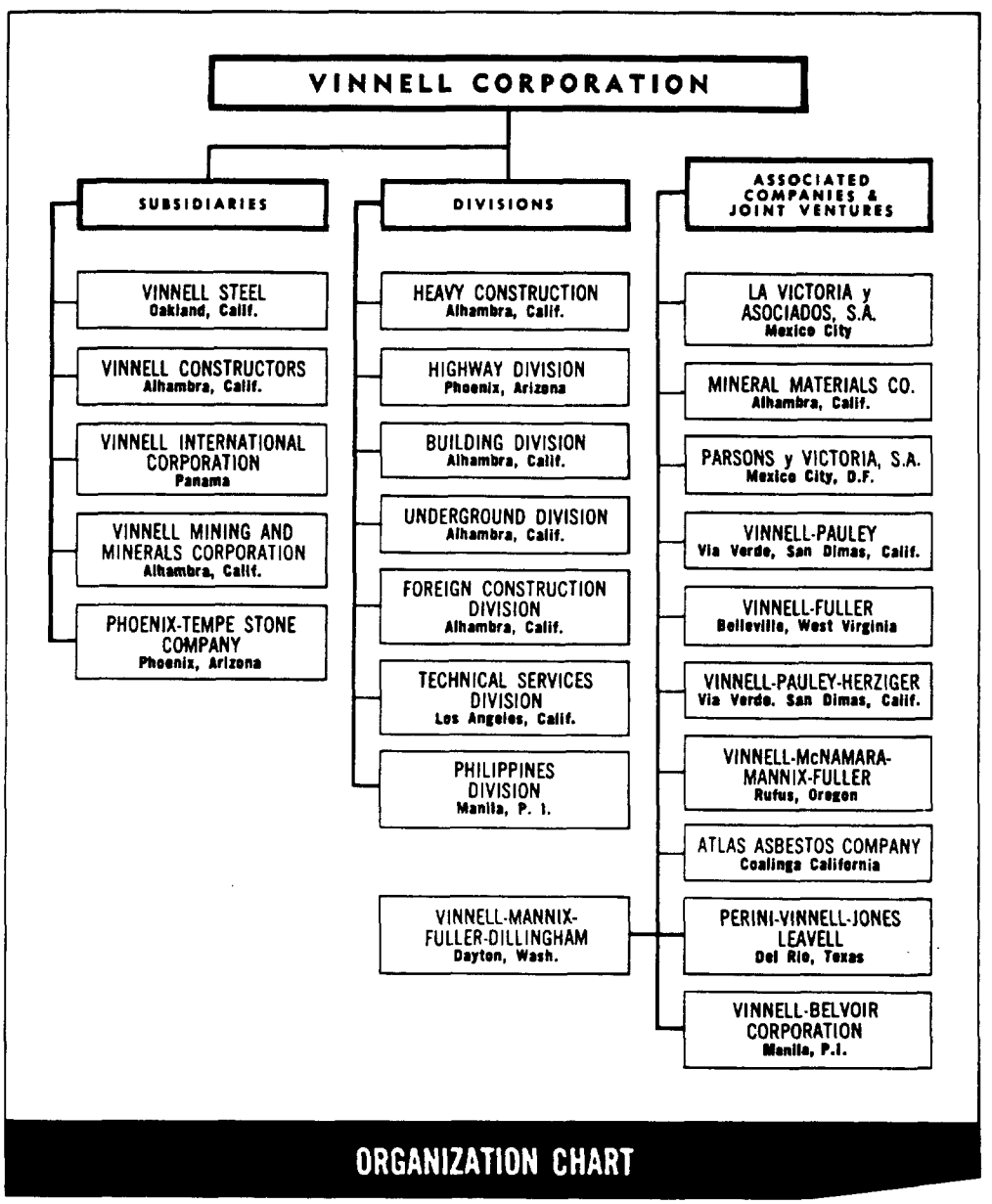
As you may know, it gets rather hot in Pomeroy, Washington during the summer and with the town's only public swimming pool needing repairs in order to become operational, Willis Woomack, the pool chairman, was faced with a problem. The town treasury lacked the necessary funds for the repairs, which meant that the pool would have to remain closed during the summer. He feared "civic discontent"—particularly on the part of the children.

Warren Cassens, an employee of Vinnell's Little Goose Dam project, and a resident of Pomeroy, heard all about the problem and discussed it with John Heckart, project manager. In a move to "preserve the peace" Heckart offered the use of a sandblasting machine. Other Vinnell employees headed by Bob Plumb and Kenneth Slaybaugh offered their labor to assist the town crew, and Robert Shacher, a painter at the dam, applied two coats of paint over the entire pool for a modest sum.

Pomeroy enjoyed a long, cool summer and peace and order were maintained.

VINNELL CORPORATION

1145 Westminster Ave., Alhambra, Calif. 91802



ORGANIZATION CHART

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