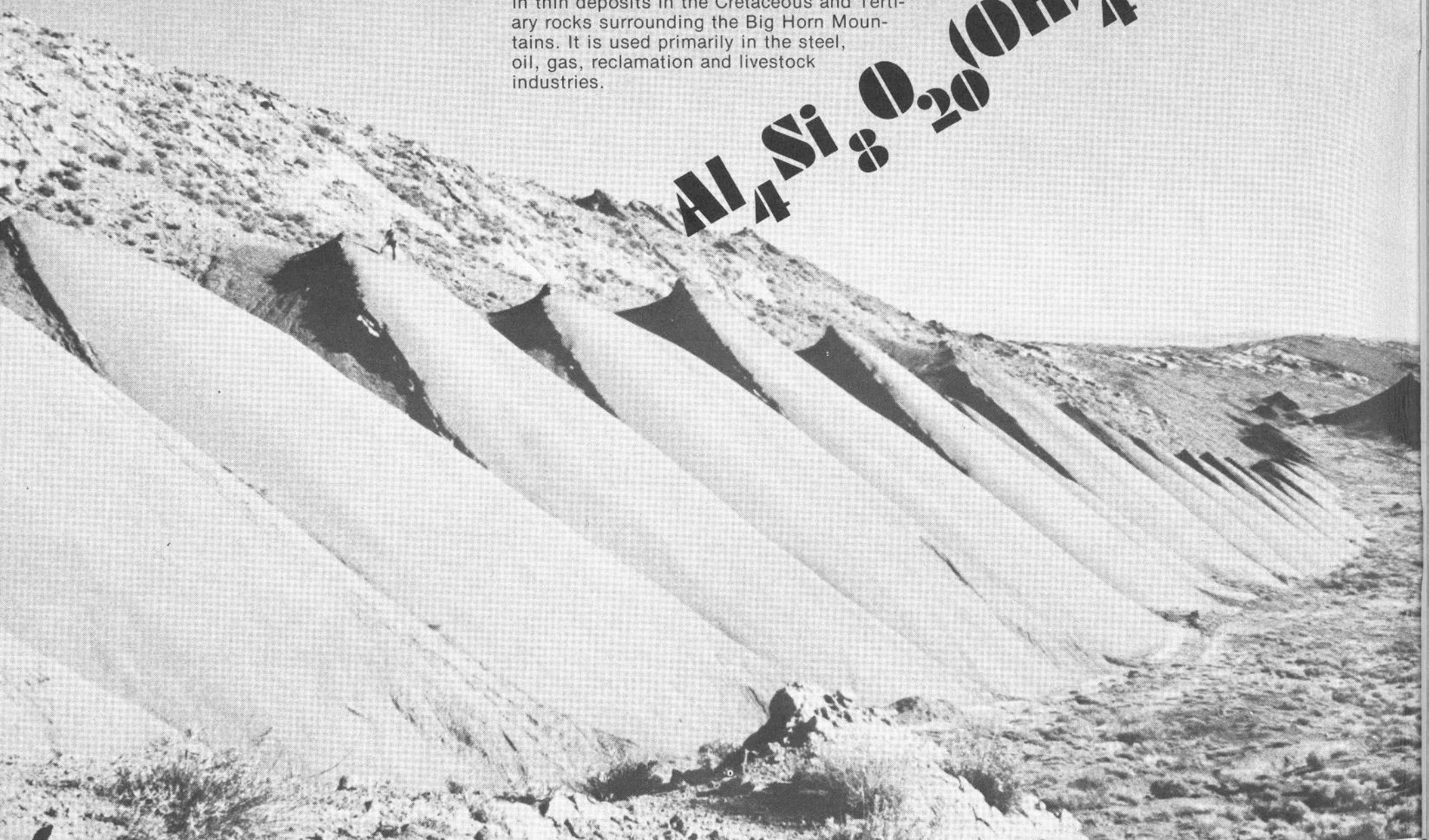
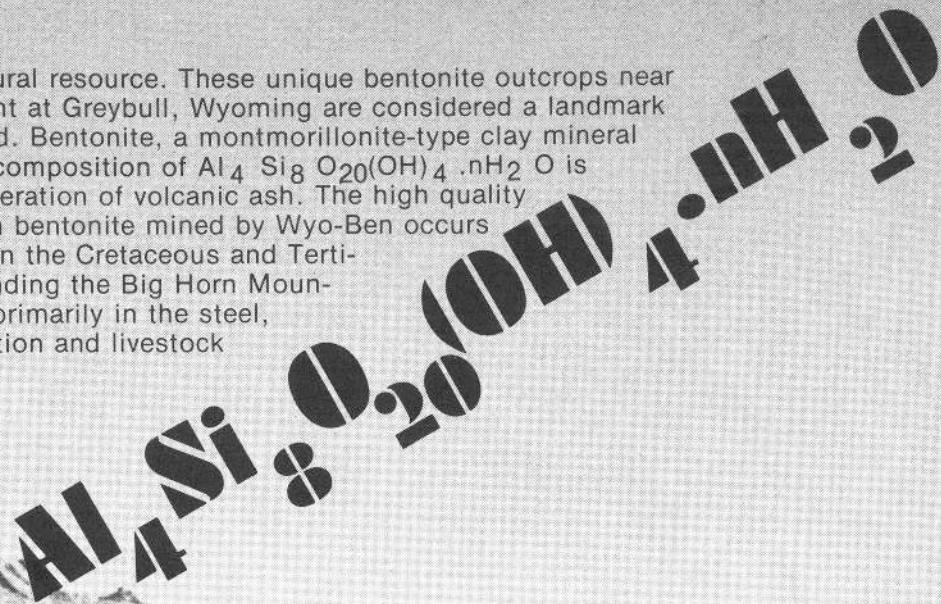




Bentonite: a natural resource. These unique bentonite outcrops near the Wyo-Ben plant at Greybull, Wyoming are considered a landmark never to be mined. Bentonite, a montmorillonite-type clay mineral with a chemical composition of $\text{Al}_4 \text{Si}_8 \text{O}_{20}(\text{OH})_4 \cdot n\text{H}_2\text{O}$ is formed by the alteration of volcanic ash. The high quality Wyoming sodium bentonite mined by Wyo-Ben occurs in thin deposits in the Cretaceous and Tertiary rocks surrounding the Big Horn Mountains. It is used primarily in the steel, oil, gas, reclamation and livestock industries.



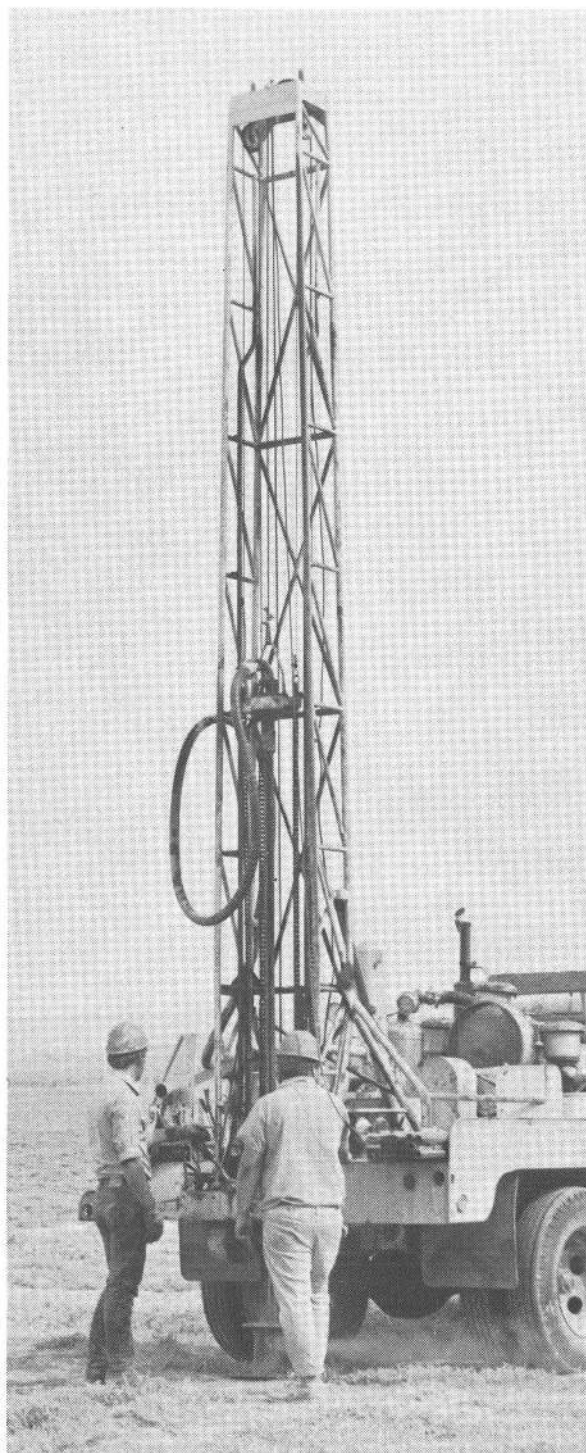
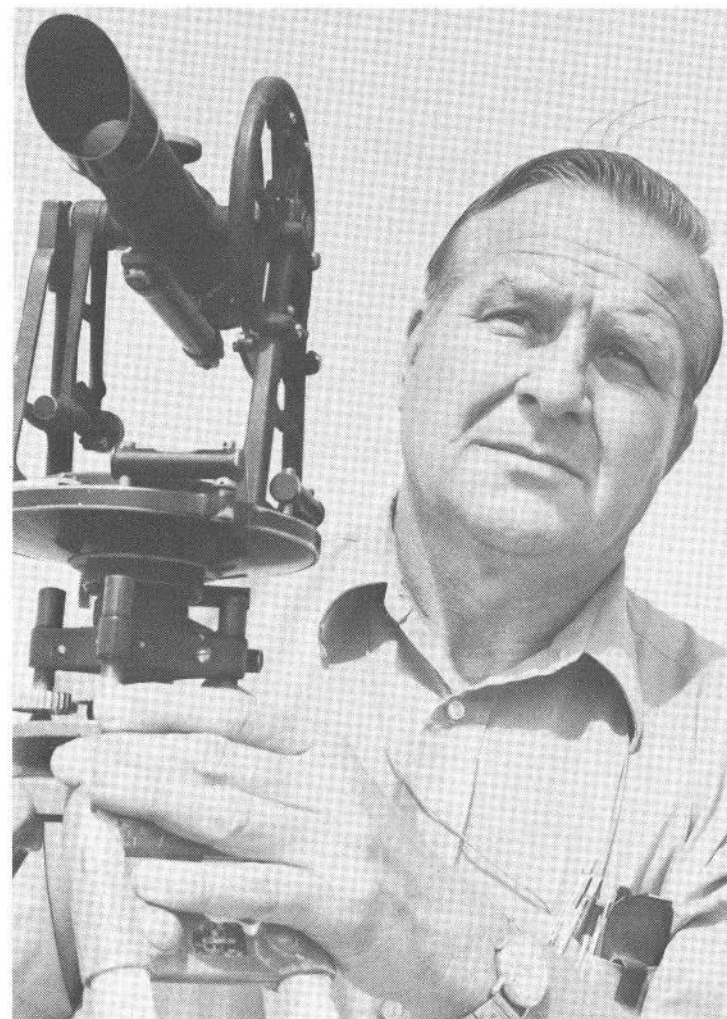
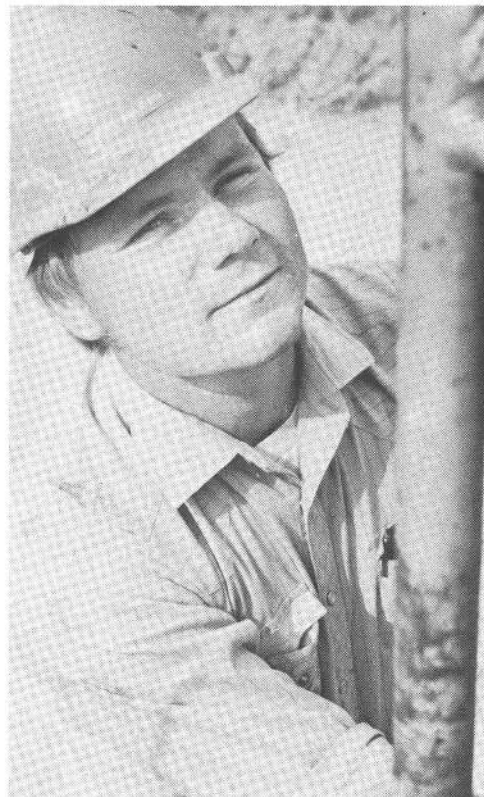
Exploration & Reclamation

Quality control begins even before mining starts. First, the effect of mining on the ecology and the future use of an area is studied.

Reclamation plans are considered carefully in order to return the land to equal or better use. Then, Wyo-Ben performs exploratory drilling and takes samples for thorough laboratory analysis to determine the quality and eventual use of the bentonite.

Exploration drilling rig with Gene Gravning

Lawrence "Wee" Collingwood, mining and exploration manager



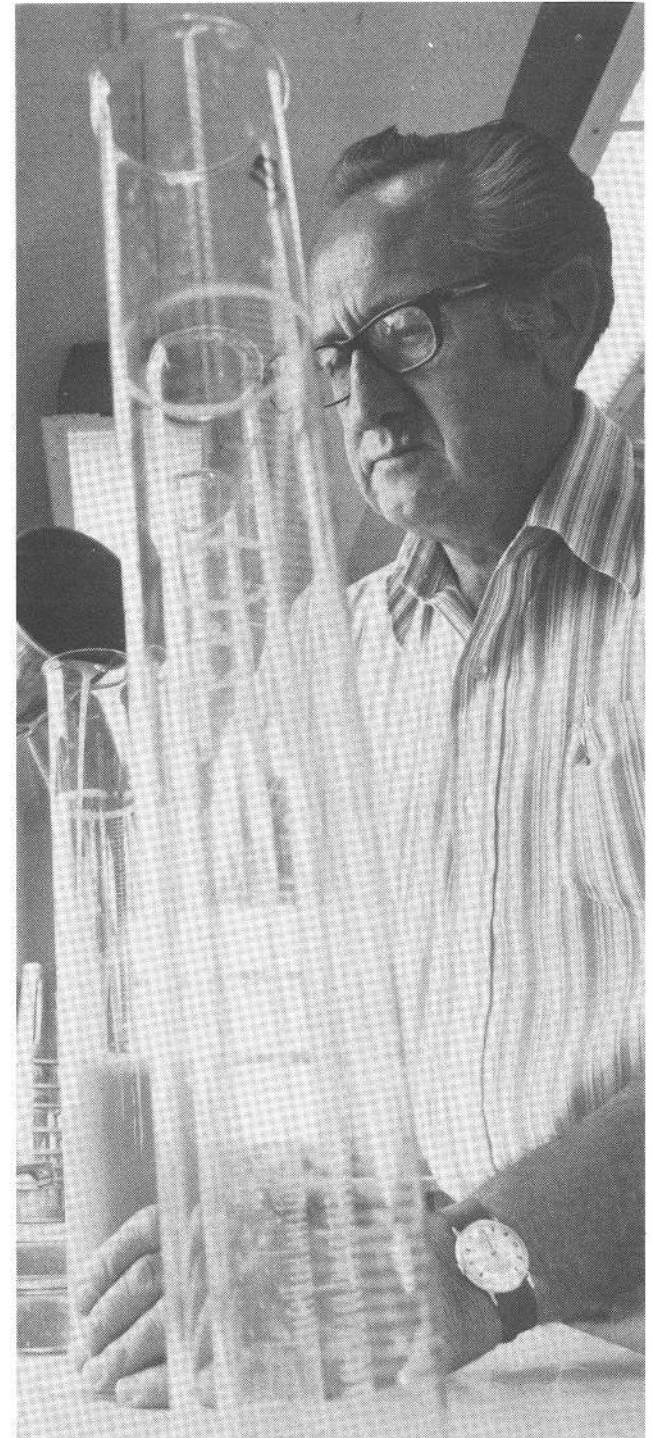
Quality Control

Samples of bentonite are tested at every step of mining and processing at Wyo-Ben. The modern, well-equipped laboratory maintains separate quality control tests for each intended use of bentonite. For example, a complete batch ball analysis of each bentonite shipment to the taconite pelletizing industry is made by using the individual customer's own specific concentrate. Samples and laboratory tests are available to any prospective customer. Laboratory personnel have complete control of the various blends of bentonite required to meet a customer's specifications.

Bill Clifton, quality control manager



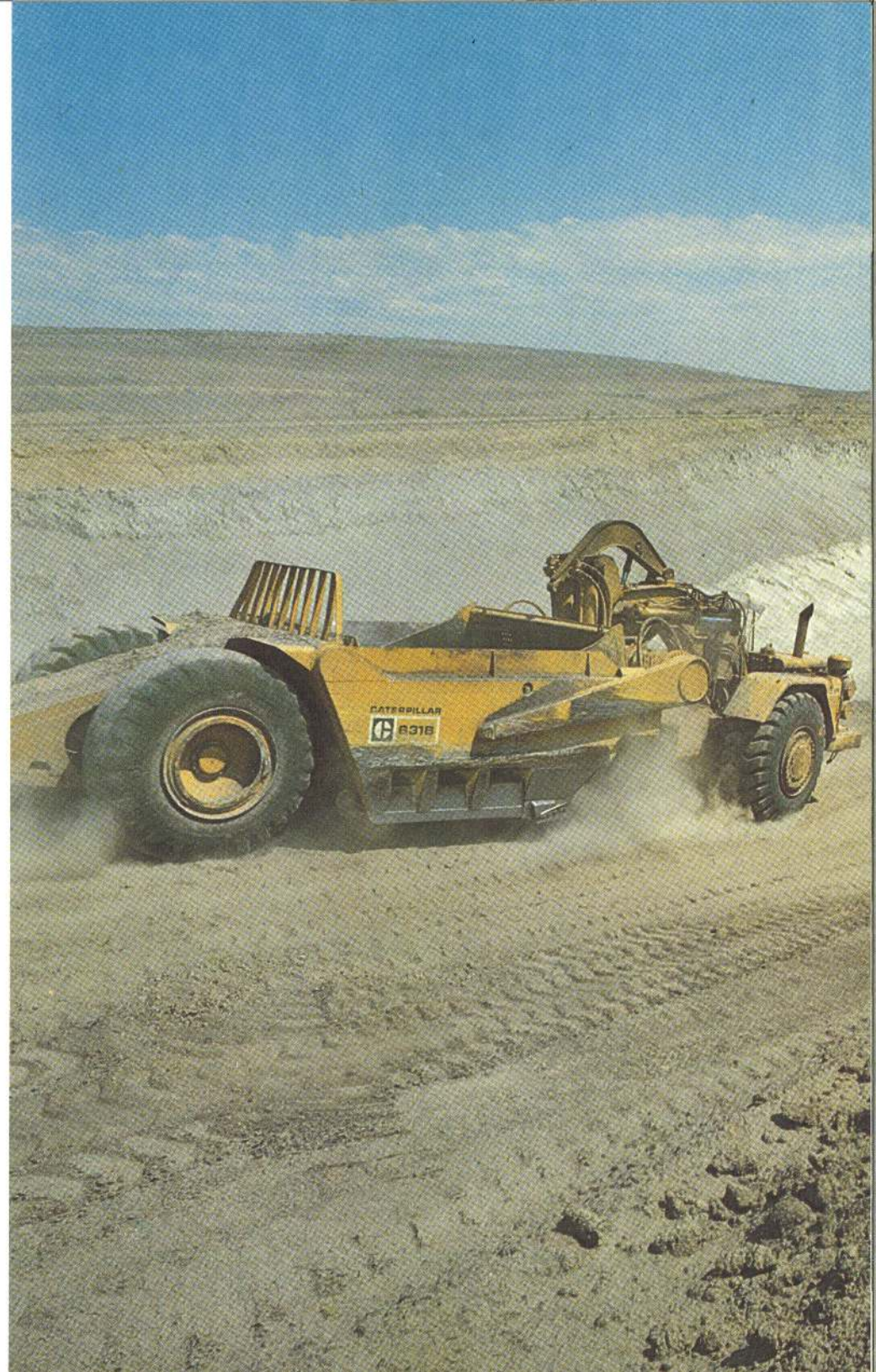
Darrel Hanson at the Greybull laboratory.



Mining

Mining begins by removing overburden from the mineral body. It's an art to separate the overburden from the mineral contact point to prevent contamination and to conserve the most bentonite possible. Topsoil is removed with large wheel-type scrapers and crawler tractors and set aside for later reclamation. Bentonite is taken out with front-end loaders or draglines and transported to mills by trucks on Wyo-Ben-owned and-maintained roadways.

When all the bentonite is removed from a pit, reclamation begins in accordance with plans previously approved by Wyoming's Environmental Protection Council. This normally requires that surfaces be returned to equal or better use. Topography, plant life, animal life and other environmental considerations are reviewed. Typical bentonite soils rarely support much more than a sparse amount of salt sage. We think it's important to preserve the stark beauty of the area by not introducing non-native vegetation. Our field persons have an informal organization to protect native wildlife that is in danger of extinction: prairie dogs and their towns, coyotes, antelope, chukars and even rattlesnakes.





Processing!

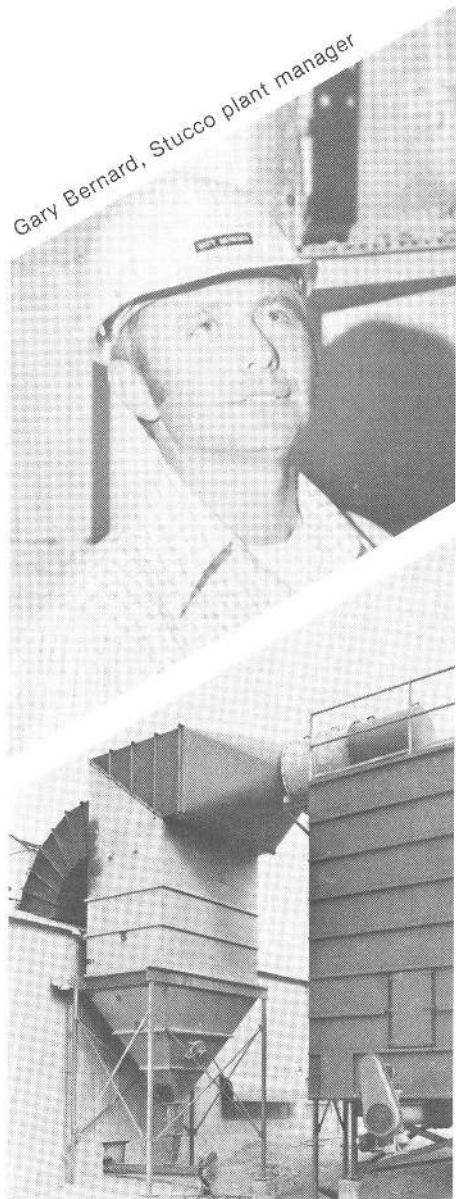
Bentonite from each pit is tested and stockpiled by grade and quality to accommodate proper blending for customer use. Processing bentonite involves removing excess moisture with natural gas-fired rotary dryers. Bentonite is then blended, ground and sized to meet specifications.

Our Stucco Plant near Greybull, Wyoming specializes in a finished product, milled to customers' requirements and shipped in bulk or bags by rail or truck. Each order is custom-processed and generally shipped the day after receipt of order.

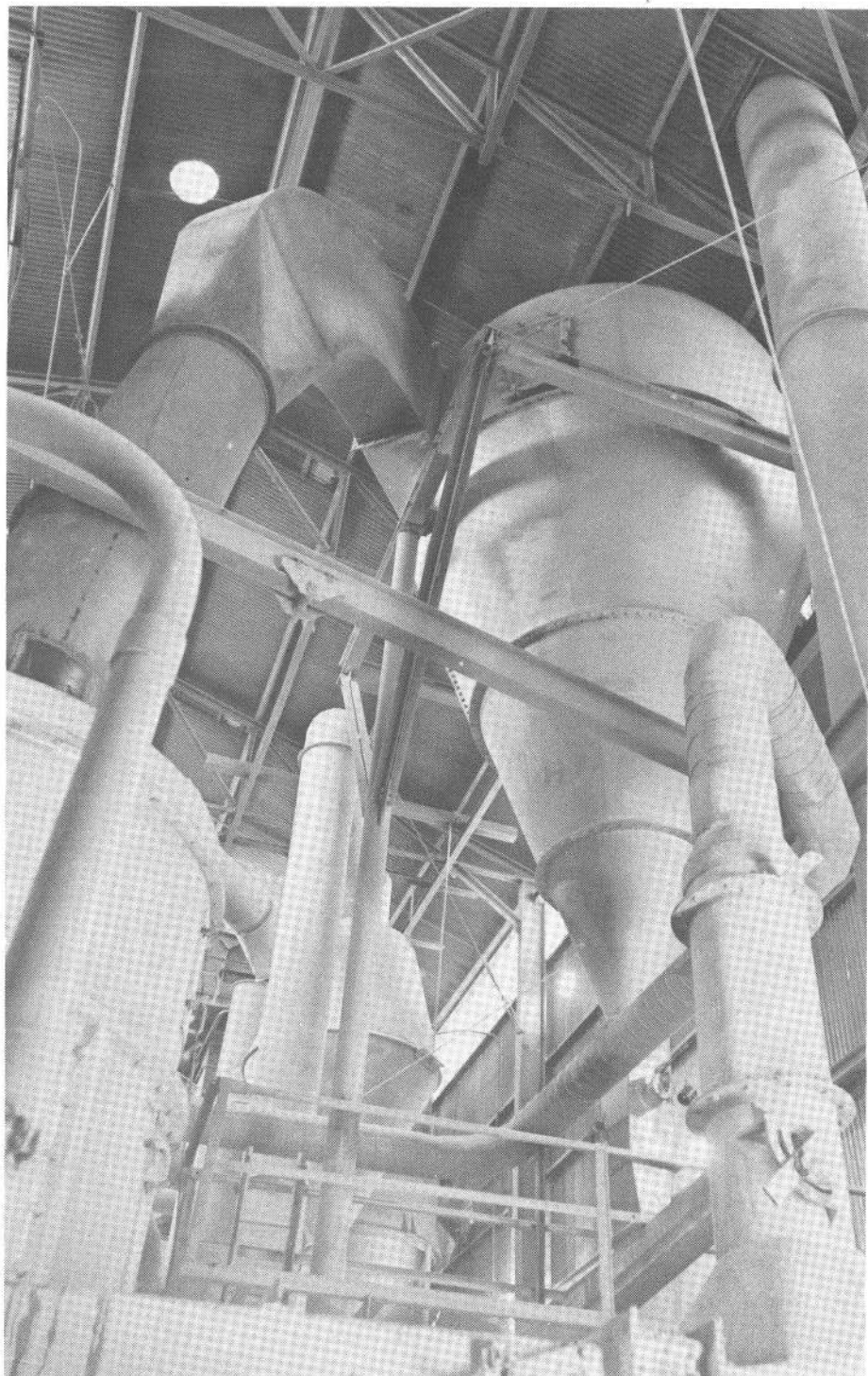
Wyo-Ben's Sage Creek Plant near Lovell, Wyoming prepares a partially-finished product, sized and dried to specifications for final finishing at destination. This is shipped usually in open-top 100-ton hopper cars, each of which can be loaded and weighed at plant site in seven minutes. Sage Creek prepares various sizes of granular bentonite for sealing ponds; livestock feed supplements; foundry industry uses. All products prepared here are dust free.

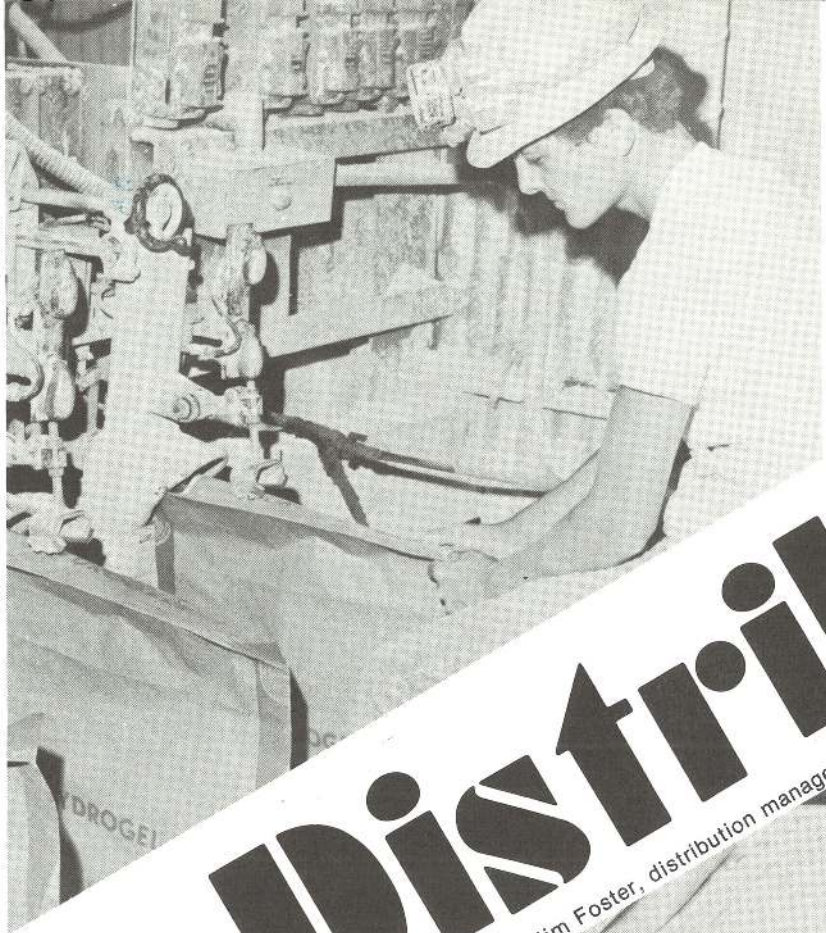
Dust control at both plants is handled by multiclones and bag-type dust collectors that more than meet all federal and state standards.

Gary Bernard, Stucco plant manager



Chris Paustian, vice president—production



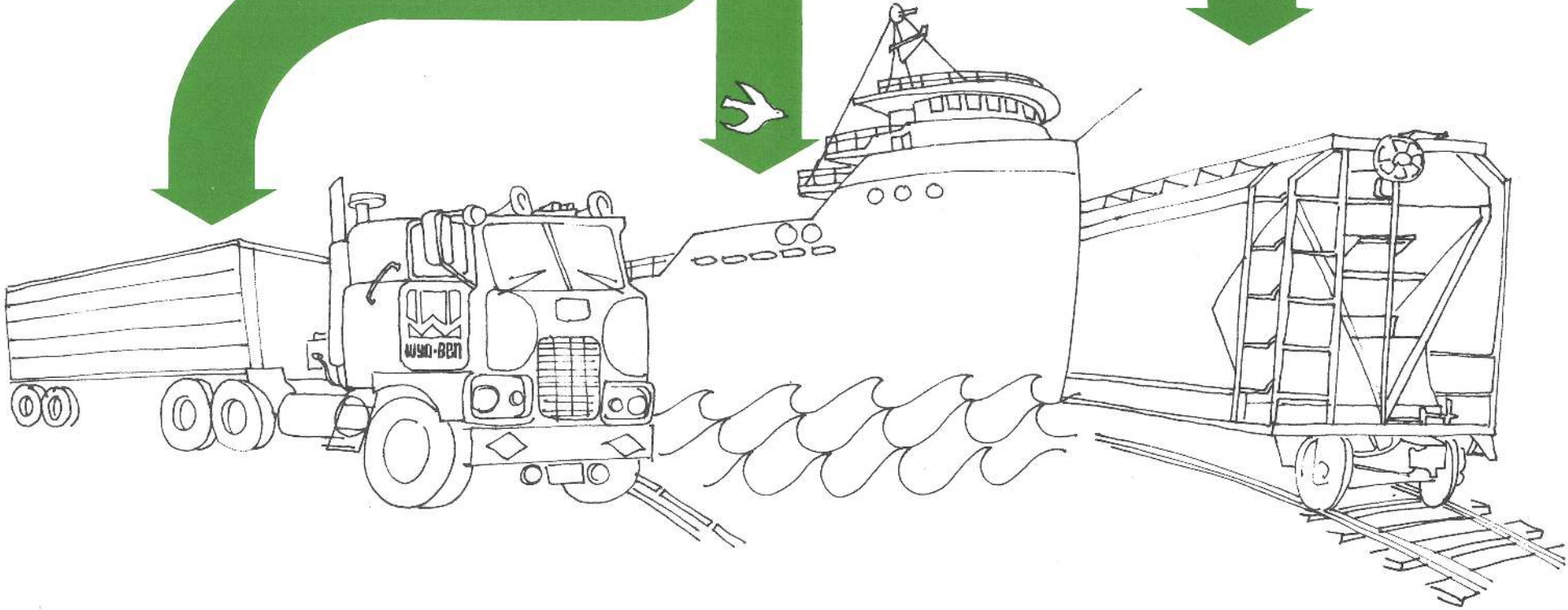
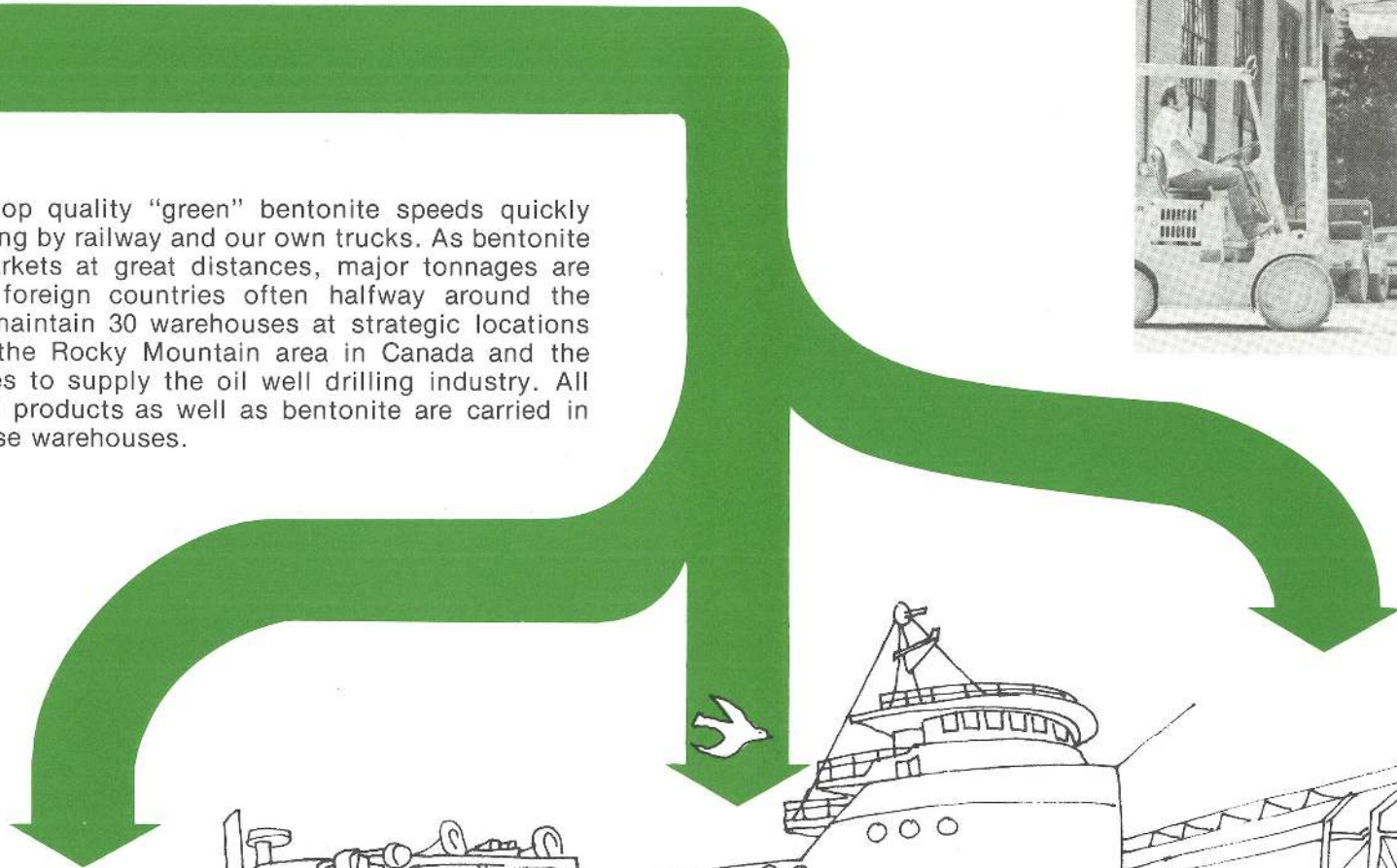


Distribution

Jim Foster, distribution manager.

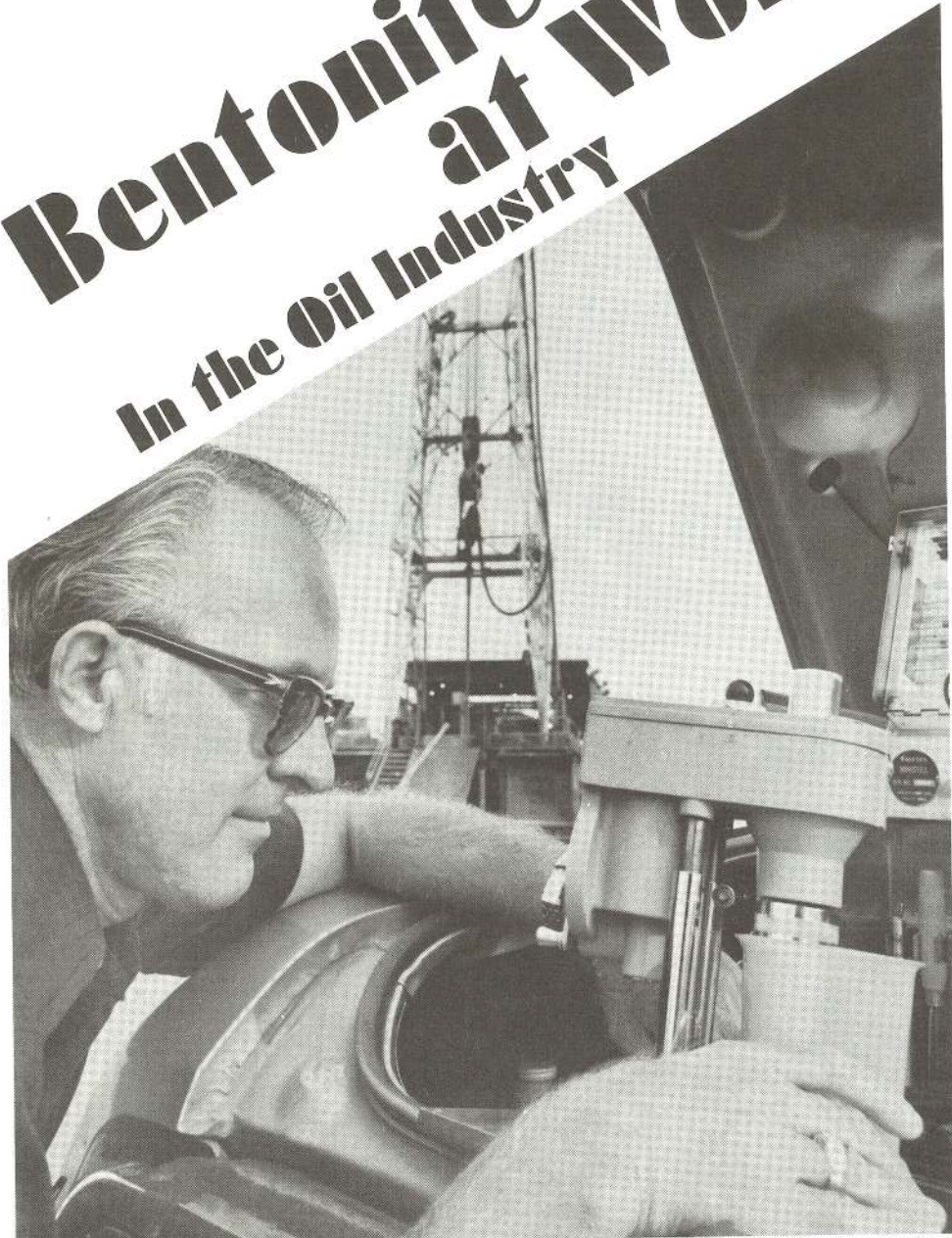


Wyo-Ben's top quality "green" bentonite speeds quickly from Wyoming by railway and our own trucks. As bentonite finds its markets at great distances, major tonnages are shipped to foreign countries often halfway around the world. We maintain 30 warehouses at strategic locations throughout the Rocky Mountain area in Canada and the United States to supply the oil well drilling industry. All drilling mud products as well as bentonite are carried in stock in these warehouses.



Bentonite at Work

In the Oil Industry



At drilling site, Don Jackson, engineer, tests mud in portable laboratory.





Our mud men prepare and operate the most sophisticated mud systems for the oil well drilling industry. United Engineering Division of Wyo-Ben Products, Inc. sends out experienced and well-trained drilling mud engineers to the entire Rocky Mountain area. With office headquarters in Billings, Montana, our mud men are out in the fields taking samples, inspecting and regulating drilling muds, or in the office developing new mud programs for customers. This division has access to over \$1 million of drilling mud products in our warehouses as well as the use of Wyo-Ben's truck fleet.

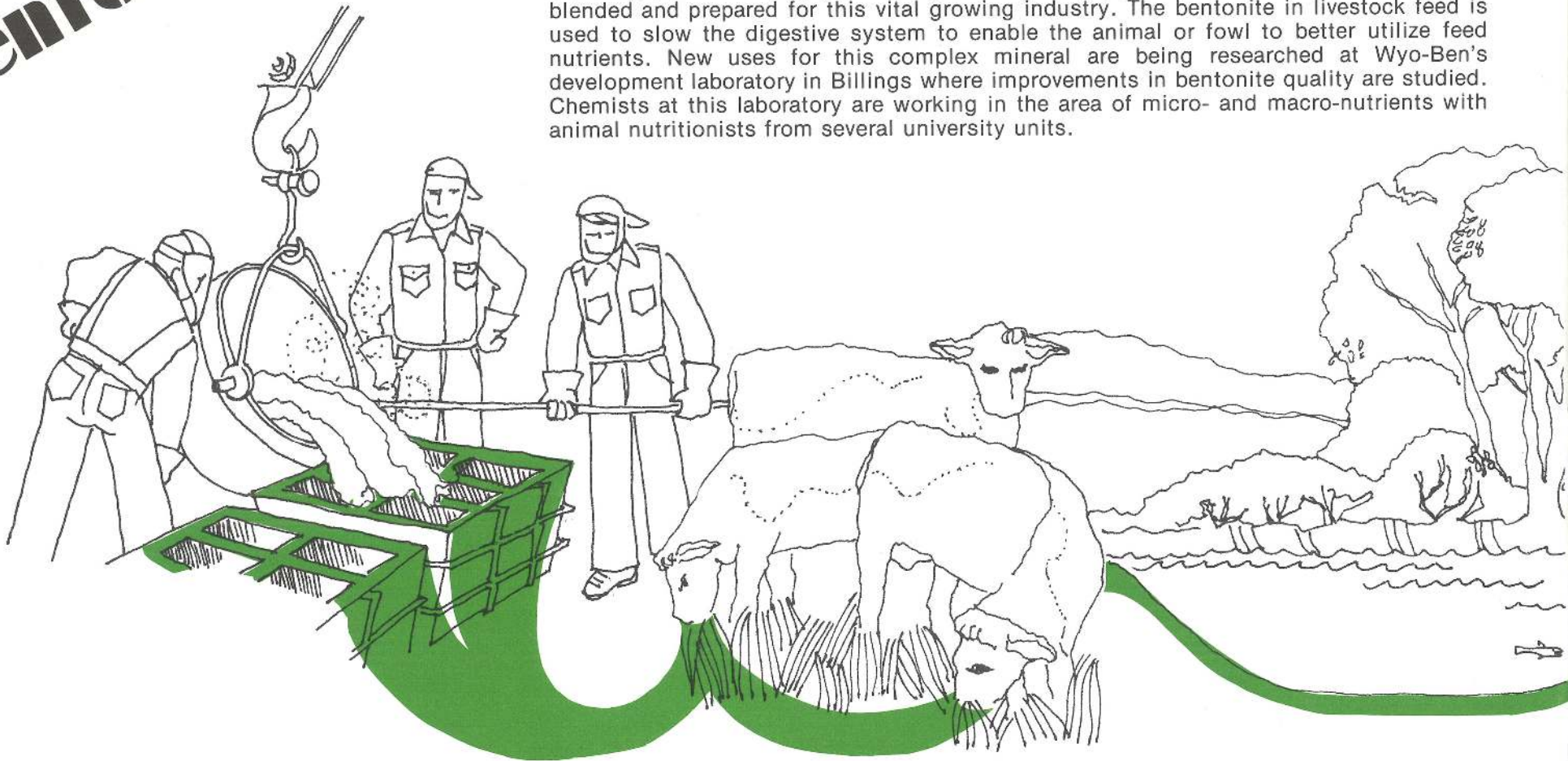
**United Engineering
Division**



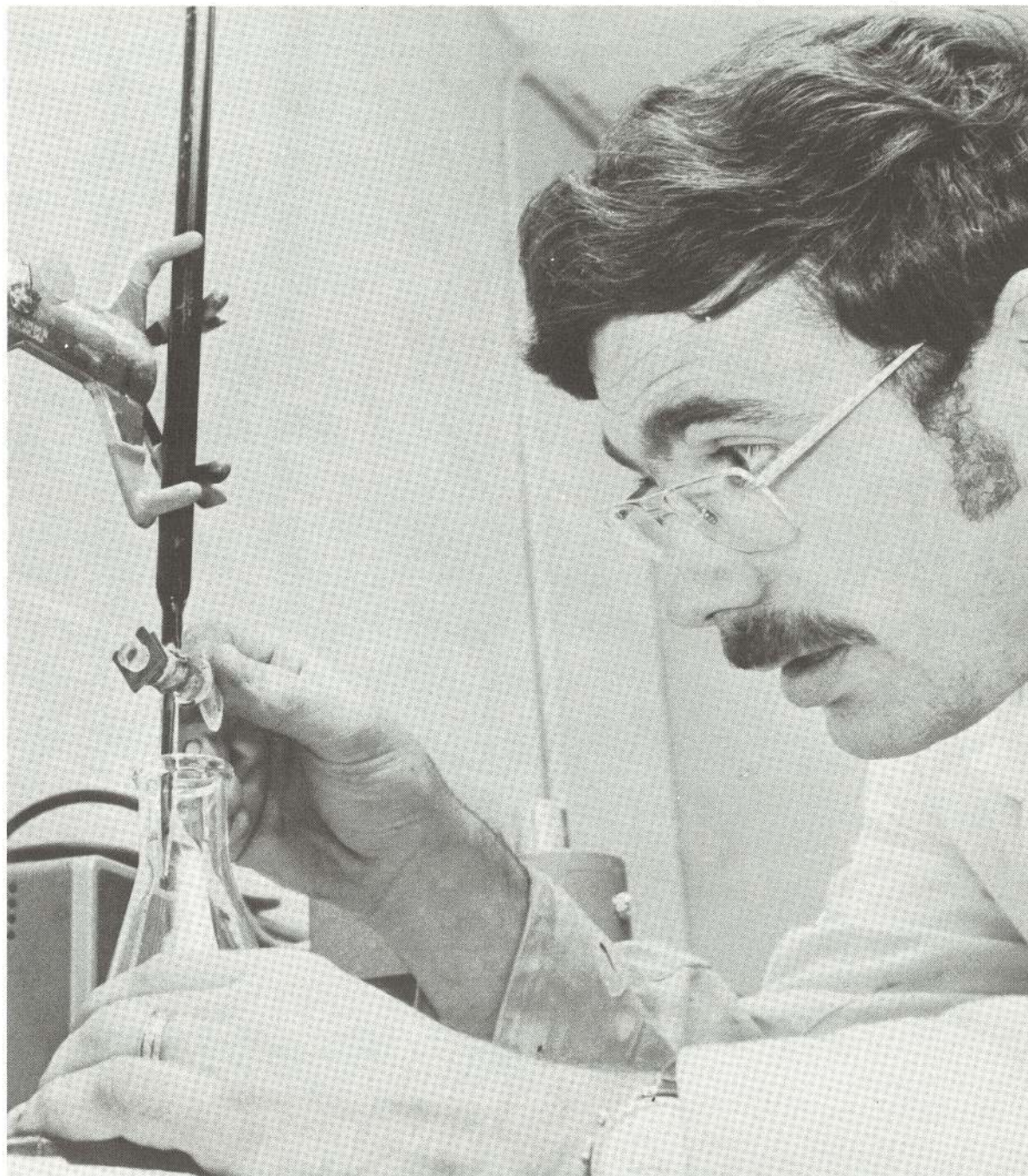
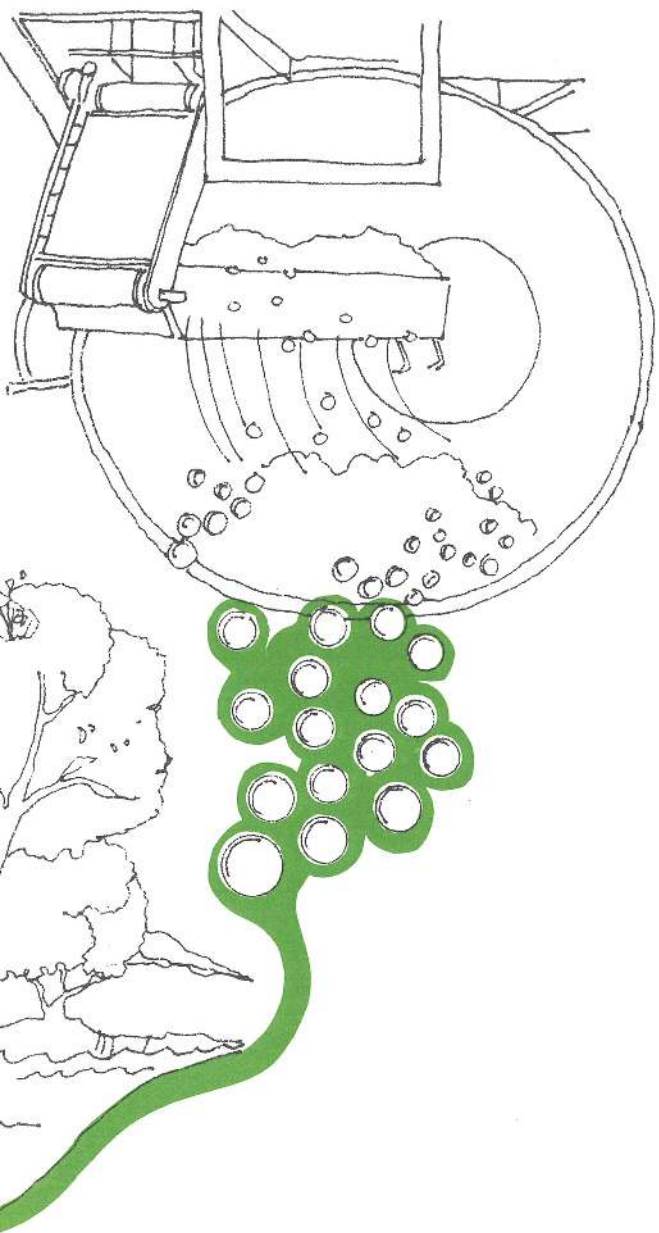
Louis Schrupf, assistant vice president of Wyo-Ben and manager of United Engineering Division.

Bentonite at Work

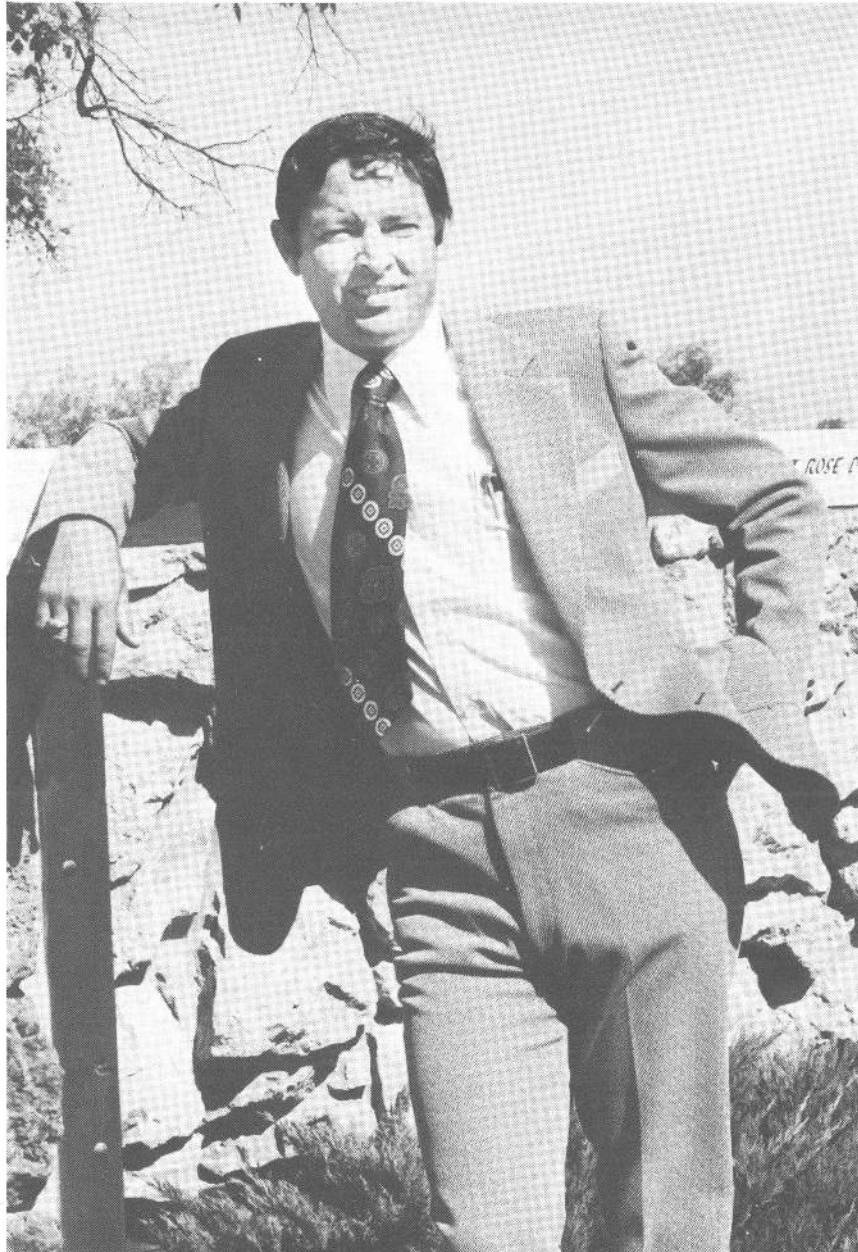
Wyo-Ben's versatile bentonite finds its way into a variety of industries and products. It is used daily as a binder for pelletizing taconite-type iron ore concentrate in the iron and steel industry. It is essential for moulding foundry sands. Our bentonite is in demand as a drilling fluid additive for oil and gas exploration. With the growth of reclamation and ecological programs, bentonite is used to seal ponds and sewage lagoons. Large quantities of bentonite are used in the slurry trench cut-off method of preparing impervious curtain walls below ground to prevent migration of water in many construction projects from dams to skyscrapers. Wyo-Ben serves the livestock industry with a new blending plant in Billings, Montana, where feed supplements containing bentonite are blended and prepared for this vital growing industry. The bentonite in livestock feed is used to slow the digestive system to enable the animal or fowl to better utilize feed nutrients. New uses for this complex mineral are being researched at Wyo-Ben's development laboratory in Billings where improvements in bentonite quality are studied. Chemists at this laboratory are working in the area of micro- and macro-nutrients with animal nutritionists from several university units.



Dick Thayer, product development chemist.

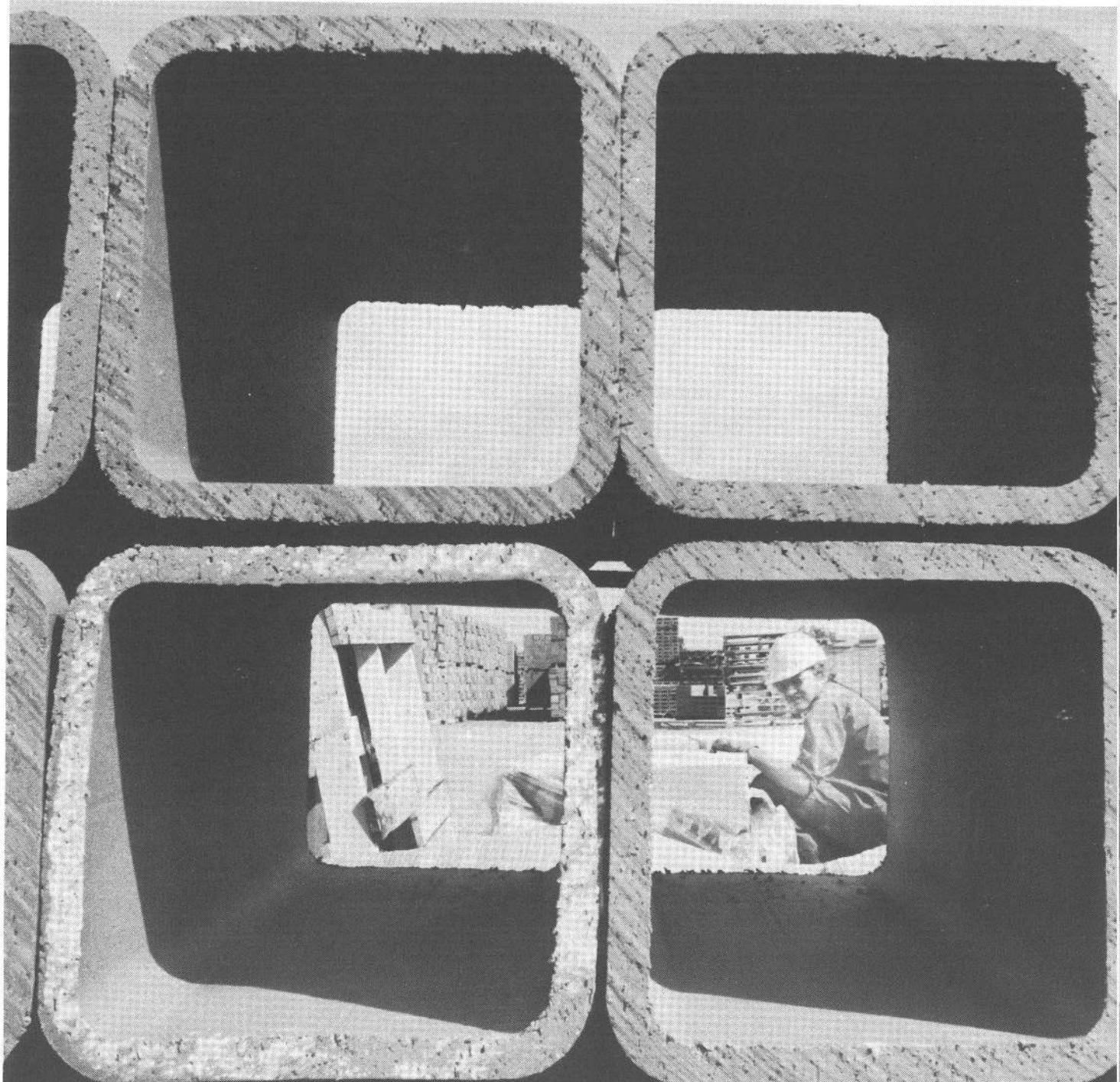


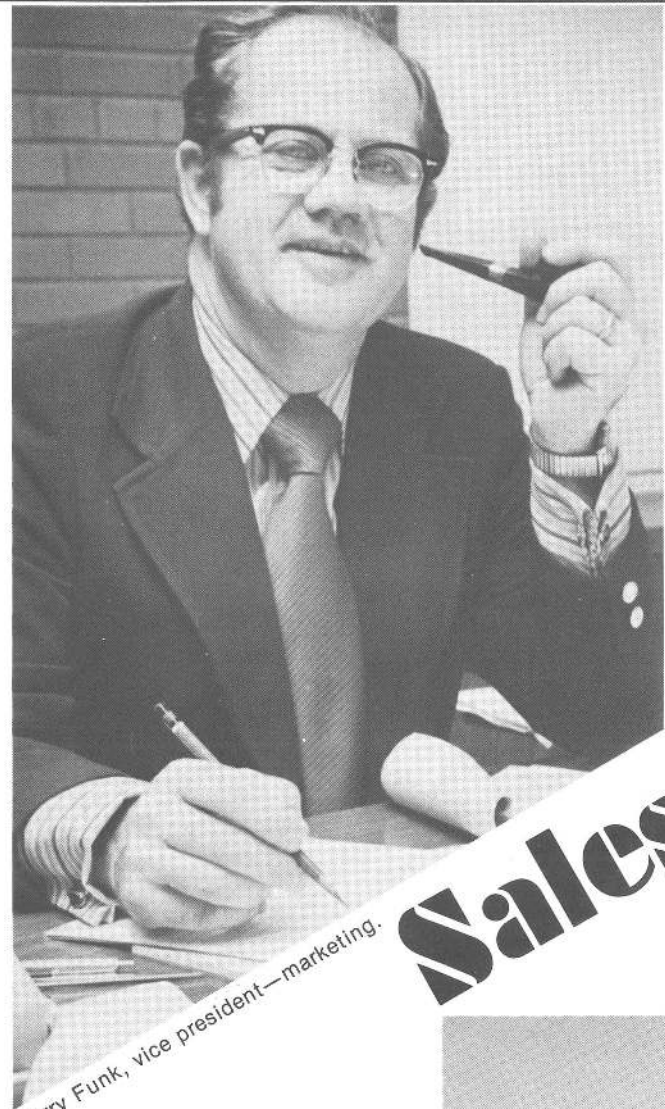
Jack Wandler, manager, Materials Supply Division.



Materials Supply Division of Wyo-Ben Products, Inc. in Billings serves the masonry, building and general construction industries in Montana and Wyoming by selling and distributing over 1200 products from block, brick, stone, cement, and lime to fireplace equipment. Materials Supply also sells industrial chemicals, such as those used by city water departments, mining and manufacturing chemicals, and livestock feed supplements.

Materials Supply Division





Harry Funk, vice president—marketing.

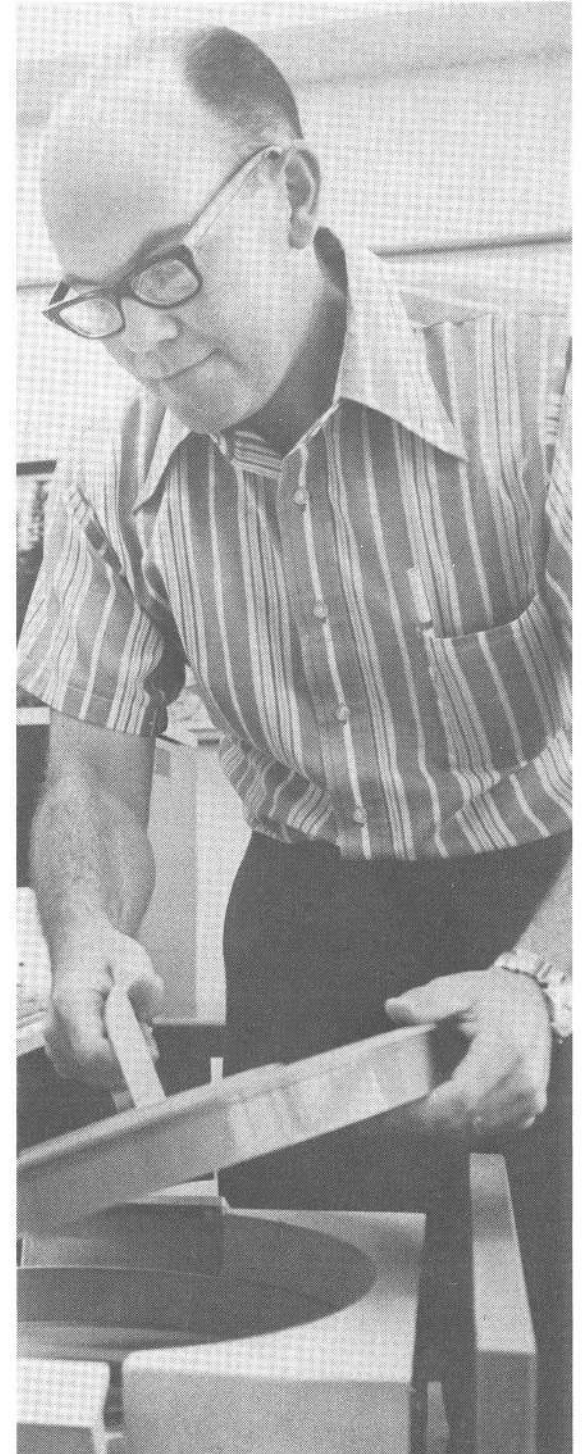
Away from the test tubes and tractors, our marketing and customer services department headquarters at the Billings, Montana general offices. Our people here are geared to process and handle customer orders promptly and efficiently. They advise customers on available inventory and the status of existing orders with the aid of our computer services, one of IBM's most modern units.

Sales & Service

Joyce Hayden, customer service, at the order desk.



Bill Barrett, systems analyst.



Keith Brown, president.

David L. Auer, executive vice president.



Management

Wyo-Ben Products, Inc. has been a successful producer and distributor of high quality Wyoming sodium bentonite since its founding in 1950. A closely-held corporation with headquarters in Billings, Montana, Wyo-Ben has gained wide acceptance of its Hydrogel and Big Horn Bentonite. In 1962 we pioneered the shipment of semi-crude bentonite (bentonite partially ground and dried) so that it can be shipped in open-top hopper cars to ocean or lake ports where transfer to bulk cargo vessels is accomplished by bulk handling systems. This makes it economically feasible for the customer to install the necessary equipment for final processing at the destination. This technique has opened many new markets for offshore shipments to eastern Canada, Australia, Tasmania, Europe and Japan.

Wyo-Ben is growing rapidly, but the personal touch always is available to our present and prospective customers. A phone call or letter to Keith Brown, president; David L. Auer, executive vice president; Harry Funk, vice president-marketing; Chris Paustian, vice president-production; Louis Schrupf, assistant vice president-United Engineering Division; Ben Helgeson, treasurer; Rockwood Brown, corporate secretary and legal counsel; Jack Wandler, manager of Materials Supply Division; Jim Foster, distribution manager, will be welcomed and receive the personal attention it deserves.

When you call WYO BEN . . .

Wyo-Ben plans to keep growing and expanding to serve vital and basic industries. Our emphasis is on supplying bentonite and related products to assist the energy industry in finding new sources of fuel and in developing unknown sources.

Another exciting expansion plan deals with the ecological problem of conserving water by using bentonite as a sealer in the most economical and convenient way. Wyo-Ben is continuing to work vigorously with the livestock producers and construction industry for new products and better results.

Binding together the varied divisions and interests of Wyo-Ben is a core of hard-working, well-trained persons whose main goal is to serve you. Please give us a call.

We Answer





General Office 1242 N. 28th Street P. O. Box 1979 Billings, Montana 59103
(406) 252-6351 TELEX 31-9430