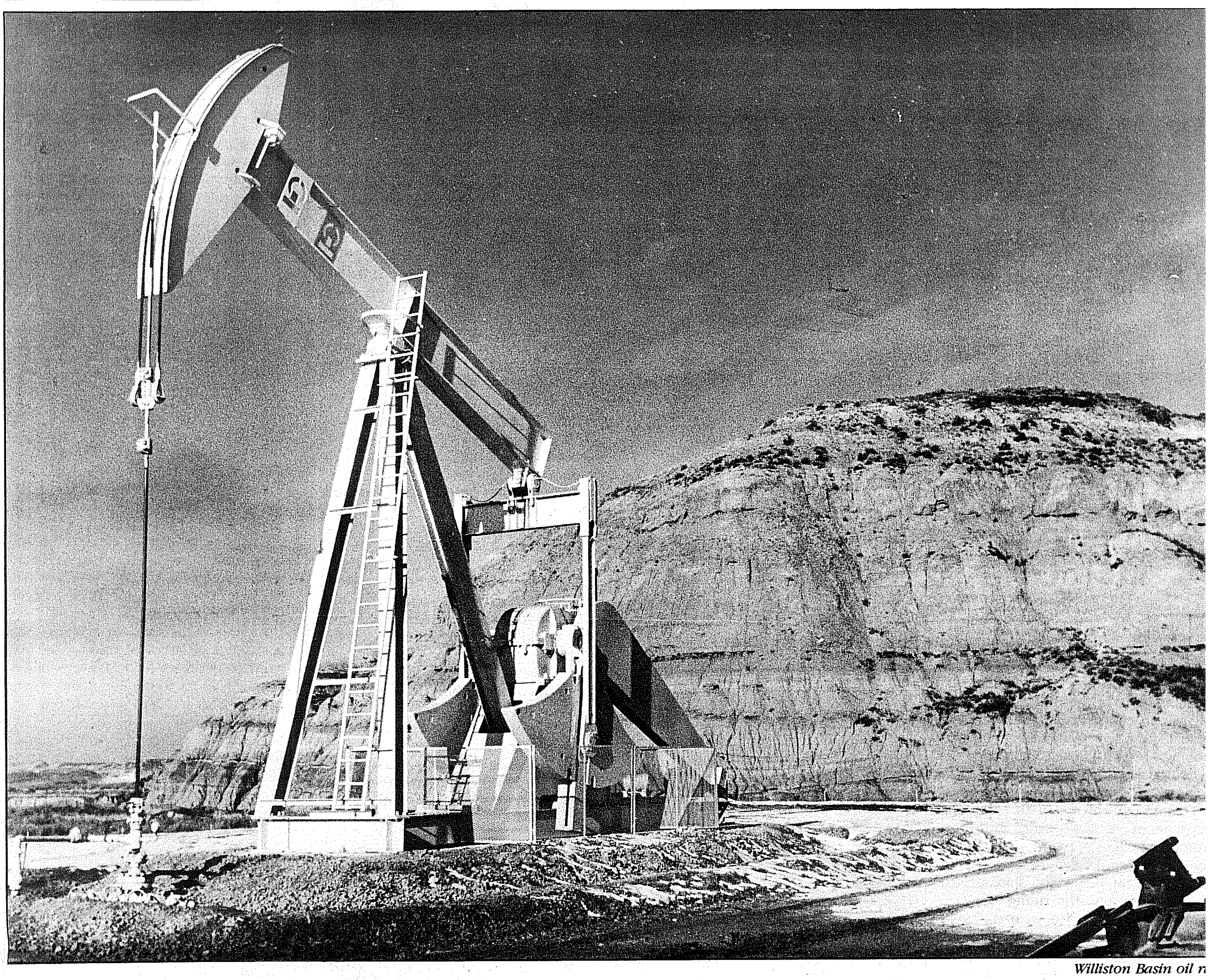

Williston Basin oil r

North Dakota: The oil boom is on

by Randy Bradbury

Billings County, N.D. — There is a quiet in the badlands of North Dakota, a pervading quiet that draws one in, that is a part of its spirit.

A few years ago much of this country was nominated for inclusion in the nation's wilderness system. But now, roads push out into many once-inaccessible areas, and the prospect is for more industry, not more wilderness.

The oil boom is on.

In a land where erosion is the law and justice is meted swiftly, drilling platform pads quickly become gullied where they are carved into the steep butte and valley walls. Roads seem to run up every major drainage, and across the buttes and plateaus.

Workers flood Dickinson and Williston, the two largest towns in western North Dakota. Although construction continues at a record pace — despite high interest and the national building slump — new arrivals reportedly have offered rewards in efforts to find places to live.

The entire western half of the state has been affected to various degrees by the renewed interest in oil, but the most intensive development has centered in Stark, Dunn, Billings, Golden Valley, McKenzie and Williams Counties.

There are no official population figures available for the boom period, but regional planners have made estimates of the growth. Rod Landblom of the Roosevelt Custer Regional Council, a planning agency covering the state's eight southwestern counties, estimated a 26 percent increase in population in those counties between 1970 and 1982. He believes the population has grown from 43,000 in 1970 to 54,000 today.

"We're seeing alot of centralization" of people, services and the problems that come with growth, Landblom said. That's evidenced by the growth in Dickinson which, according to Landblom's estimates, has grown from a farm trading center of 12,500 in 1975 to a bustling boomtown of 18,500 today — nearly a 50 percent jump in seven years.

In the early 1970s, North Dakotans worried about reports of tremendous coal development in the west. And while the mining of coal has increased and is increasing, the less-heralded oil boom has had far greater impact.

This is the state's second boom. Prior to the 1950s, there had been little exploration and no petroleum production. Once oil was discovered, there was a period of intensive exploration, followed by steadily increasing production that peaked in 1966 at 27 million barrels.

Production then fell off yearly until 1974, and hovered around 20 million barrels a year through 1978.

By then, the cogs were in place for this latest surge.

The North Dakota Geological Survey said the new boom stems from two events of the early 70s. The first was the discovery of a new field in McKenzie County in 1972, spurring a new rush for mineral lease holdings. Second was the 1973 OPEC embargo, followed by increased prices and controlled production.

As the survey put it in a 1980 review of North Dakota oil and gas exploration and development, "Exploration for oil again became a profitable venture. Prior to the price increase, many companies found that exploration-risk money provided a better return in a regular bank savings account than in actual wildcat drilling...exploratory drilling picked up."

Production jumped to an estimated 40.3 million barrels in 1980, and another increase was expected in 1981, although production is now tapering off. Since residents of the state use only 20 million-plus barrels a year, the state exports oil. North Dakota oil production accounts for about one percent of the nation's oil consumption, or enough to fuel the United States for about four days a year, according to geological survey estimates.

The oil in North Dakota, like all oil, is the mineral legacy of millions of years ago. According to the scenario constructed by geologists, what is now North Dakota was once the edge of the ocean, an outwash plain where the sediments of the eroding mountains were deposited. In the more recent geologic past, only a few million years ago, bayou-like swamps formed widespread coal beds just beneath the state's surface. These are also the subject of intensive development efforts.

Oil lies much deeper, often two or three miles below the surface. Generally, it is contained within a large, bowl-shaped geologic feature known as t[illegible] Williston Basin, which covers most [illegible] North Dakota and extends into Sou[illegible] Dakota, Wyoming, Montana and Ca[illegible]ada. The bowl's center, its deepest pa[illegible] and the site of most of the oil discove[illegible]ies, is beneath western North Dakota.

Much of the semi-arid surface of th[illegible] country is controlled by the U.S. Fore[illegible] Service through its national grasslan[illegible] program. Because early attempts [illegible] homestead and farm the land we[illegible] doomed by the hot, dry summers a[illegible] clay soils, the government and the gra[illegible]ing associations have attempted to he[illegible] the fragile land recover from the abus[illegible] of farming and overgrazing.

The ill-fated homesteading efforts l[illegible] not only a patchwork of private and fe[illegible]eral surface ownership, but an ev[illegible] crazier quilt of mineral holdings.

In the early 70s, when it looked [illegible] though oil development was on a pe[illegible]manent decline in the state, the U[illegible] Forest Service was still signing 10 ye[illegible] leases on land it controlled. In 197[illegible] according to the Forest Service's Jo[illegible] Gibson, of Billings, Montana, 13 are[illegible] totalling 243,000 acres were identifi[illegible] as essential roadless areas under t[illegible] Forest Service's Management Plan.

To preserve their roadless characte[illegible] the Forest Service began stipulating th[illegible] mineral developers could not occu[illegible] the land surface, but decided to hon[illegible] the existing leases. Leases in the vario[illegible] areas expired over a span of time ran[illegible]ing from December 31, 1980, to Augu[illegible] 31 of this year. The Forest Service al[illegible] said that if oil is discovered on a leas[illegible] development may continue outwa[illegible] from that point until the wells no longer strike oil.

When the RARE II (Roadless Area Review and Evaluation) program began, all such Forest Service roadless areas were automatically included, Gibson said. That meant the 13 North Dakota areas were studied for potential wilderness designation.

Meanwhile, the boom hit, and suddenly there was interest in developing the leases in the roadless areas. One area, the Ash Coulee, now has about 70 miles of road; two others, the Bennie Peer and Magpie, have 50 and 30 miles of road, respectively, according to Forest Service estimates.

Only three areas escaped development before the old leases expired.

In the North Dakota portion of the Williston Basin, the number of drilling rigs peaked at 146 last fall, according to Wes Norton, chief enforcement officer of the Industrial Commission's Oil and Gas Division, the agency that now polices the industry. In 1978, the number of rigs in operation averaged between 30 and 40, he said. That same year, a total of 340 wells were drilled. Nearly 850 were drilled in 1981, according to Norton.

Evidence of the increase was readily apparent to anyone who frequented the winding, dusty roads of the badlands interior, but the outward signs were fewer, more subtle. Sales of state mineral leases began to set records time after time. The sparsely populated western counties began to grow. Oil and gas taxes began to account for a major share of the state's budget.

According to the state, oil companies paid a total of $294,000 in bonuses for state-owned mineral rights in 1970; by 1978, the total was nearly $20 million; in 1980, the last quarter sale alone raised $30 million.

North Dakota state government owns a total of about 2.5 million acres of mineral rights, according to Otto Bervik, who handles mineral leases for the state land department. The state rents tracts on five year leases at $1 per acre annually, but developers must bid and pay extra for the privilege of leasing state-owned minerals. The average bonus bid in 1976 was only $3.75 per acre, Bervik said. Last August developers paid an average of $230 per acre in bonuses.

One of the reasons for those high prices is the relatively high success ratio for wells in the Williston Basin.

Norton of the state's oil and gas division estimates that between one in three and one in four wildcat wells in the North Dakota fields becomes a producer, compared to the national averge of one in fifteen to twenty.

The North Dakota Petroleum Council said there were 48 seismic crews at work in the state this fall, literally on land, water and air. There has been dialogue between the operators of Theodore Roosevelt National Park in the badlands and the oil industry to minimize the number of low-flying helicopters and airplanes that had multiplied to the point of detracting from the park's wild quality. And barge trains float the waters of Lake Sakakawea in western North Dakota, discharging large air bubbles to make seismic charts of the mineral layers beneath the lake's surface.

Oil has brought greater wealth to the state.

For years, since the first boom of the 50s, the state levied a five percent tax on oil and gas production. Efforts by legislators to raise the tax were easily and consistently defeated. Two years ago, the state's residents, pinched by the property taxes used to fund education and local government, and becoming aware of the magnitude of the oil boom, approved by a substantial margin another 6.5 percent tax on oil production. The result was a windfall for state government. Only a few years ago, the total from lease sales, royalties and production tax revenues amounted to less than $50 million; that total may have risen to as much as $200 million last year, and now accounts for a quarter of the state's general fund budget.

The boom has also brought wealth to many of the citizens and businesses of Western North Dakota. Subdivisions sprout on the hillsides like mushrooms after a spring rain; four-wheel drives and gas-guzzling sports cars multiply as though there were no such thing as $1.25 gasoline.

Oil also has brought environmental and social costs.

In a series of articles the *Grand Forks Herald* observed that sons and daughters of second- and third-generation ranchers and farmers now mine and blast and build roads through their family's land.

The close-knit and homogeneous ranching and farming communities, settled in blocks by immigrants of common background, are now being strained or breaking down as they are overrun by a new brand of itinerant immigrant — the oil field worker who follows the rigs from place to place and, as a rule, feels little allegiance to the places he or she calls temporary home.

Before 1981, the state had no program to deal with the impact of oil development, but the 1981 legislature appropriated $10 million to be billed out during the 1981-1983 biennial for impact assistance.

The funds go to support the "whole range of basic services" according to Jim Luptak, deputy director of the state's energy development impact office. That includes such things as road, sewer and water projects, policing and school programs, he said. The funds do not go for so-called soft programs, such as social services.

There is no organized or outspoken opposition to the oil development, but rancher-farmer organizations in most of the western counties have raised questions about specific oil industry practices. Although independent, the organizations belong to a central coordinating structure, known as the Dakota Resource Council (DRC).

Originally an outgrowth of organizations formed by farmers and ranchers opposed to coal development, the DRC has grown to encompass organizations in the oil producing counties. The Billings County Surface Interest Association is one such group.

Harold Oderman, a Belfield, North Dakota rancher, is chairman of the association. "At no point have we ever said, 'Hey, we don't want this development,'" he said. "However, let's do this developing with a minimum of danger to our environment, to our farms and to our ranches."

Environmental costs, in addition to the aesthetic damage in the ruggedly beautiful badlands, include such things as air pollution and the rotten egg smell from hydrogen sulfide; the salinization of tracts of land around drill sites; and the concern of some farmers and ranchers that seismic blasts are contaminating groundwater supplies.

The Petroleum Council said it believes the industry has done a good job of meeting the environmental problems. There have been no major disasters reported.

The ranchers seem to believe that the state's laws and regulations are adequate, but they say there are too few enforcement personnel to keep tabs on all the activities.

Wes Norton of the Industrial Commission, admits there have been problems in the past, but he says the division's 27 positions, including 13 field inspectors, are fully staffed now, and "I think there is a much better job being done now than a year or two ago. It's something you don't get in line overnight."

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Randy Bradbury is a freelance writer living in La Moure, North Dakota. This article was paid for by the HCN Research Fund.

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PUBLIC NOTICE OF ENVIRONMENTAL ASSESSMENTS, PLANS, PROJECTS AND SPECIAL STUDIES CURRENTLY UNDER PREPARATION BY THE US FOREST SERVICE —
Bridger-Teton National Forest

To assist public participation and awareness of the Bridger-Teton National Forest program of work, the forest has prepared a listing of environmental impact statements, environmental assessments, preliminary scoping statements, special studies and other plans being considered for 1982.

Because of costs, this list is not printed here in entirety, but a copy is available upon request from the Forest Supervisor's Headquarters in Jackson, P.O. Box 1888, Jackson, Wyoming 83001; or the Ranger District Offices in Jackson, Kemmerer, Big Piney, Afton, Moran, and Pinedale, Wyoming.

EXECUTIVE DIRECTOR for the Montana Environmental Information Center in Helena, Mt. Duties include administration of a 1,200 member non-profit lobbying and research organization, fundraising and financial management, and coordination of a 5-member staff. Skills and experience should include non-profit organizational work, public and media relations, grantwriting and grassroots fundraising, and public speaking. Background in conservation issues, communications skills and proven ability to focus and motivate volunteers is required. Minimum salary, $14,400. Can negotiate, depending on experience. Send letter, resume, references and writing sample to: Robin Tawney c/o MEIC, Box 1184, Helena, Mt. 59624. Deadline is April 1. Job starts immediately.

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BEFORE THE WYOMING INDUSTRIAL SITING COUNCIL

NOTICE OF CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY AND WESTERN RAILROAD PROPERTIES, INC. APPLICATION FOR A PERMIT TO CONSTRUCT RAILROAD FACILITIES IN CONVERSE, NIOBRARA, AND GOSHEN COUNTIES, WYOMING

DOCKET NO. WISA-81-7

Pursuant to provisions of the Wyoming Industrial Development Information and Siting Act (W.S. 35-12-101 through 35-12-121: Wyo. Stat. Anno., 1977), NOTICE IS HEREBY GIVEN THAT CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY AND WESTERN RAILROAD PROPERTIES, INC. HAVE FILED AN APPLICATION WITH THE INDUSTRIAL SITING COUNCIL FOR A PERMIT AUTHORIZING CONSTRUCTION OF RAILROAD FACILITIES IN CONVERSE, NIOBRARA, AND GOSHEN COUNTIES, WYOMING. The complete application was filed with the Office of Industrial Siting Administration on February 24, 1982. The Applicants propose to construct a line of railroad in Niobrara and Goshen counties, Wyoming between Crandall (Van Tassell) and the Wyoming/Nebraska state line, a distance of 42.3 miles in Wyoming; to rehabilitate and upgrade a 45-mile portion of existing line in Converse and Niobrara Counties between Shawnee and Crandall, Wyoming; to construct a Wye track of 6.1 miles in length in Converse County, Wyoming between Shawnee and a connection with the existing Burlington Northern/C&NW joint line; to construct certain yard and railroad support facilities near Bill in Converse County, Wyoming; and to construct a microwave communication system for the project lines. These facilities will be constructed to enable the Applicants to transport low sulfur coal produced at Eastern Powder River Basin mines in Campbell and Converse counties, Wyoming by rail to a connection with the Union Pacific Railroad at Joyce, Nebraska.

The estimated cost of the proposed facilities exceeds the approximate $88,000,000 (1982 dollars) cost criterion under W.S. 35-12-101(a)(iii)(B), thereby requiring that a permit application be filed.

Construction of the facilities is proposed to commence during 1982 and will be basically completed by October, 1983. Additional construction of passing tracks, signals and buildings will continue in subsequent years with final completion scheduled in 1987. Construction employment will peak in September-October, 1982 with a peak construction employment of 746. Construction employment will decline during the winter months and then increase to a second peak of 414 in May-June, 1982. The number of unit coal trains moving over the project lines will be one loaded and one empty train daily beginning when basic construction is completed in 1983. The number of trains will increase gradually as coal traffic volume builds. By 1992, 13 loaded and 13 empty coal trains will move over the project lines daily. The total number of persons required to operate the Wyoming portion of the project will be approximately 66 maintenance and operating personnel based at Bill, 5 maintenance personnel based at Shawnee, 31 maintenance personnel based at Lusk, 6 maintenance personnel based at Van Tassell, and 2 maintenance personnel based at Douglas and Node. A total of 85 supervisory, operating and maintenance personnel will be based at South Morrill, Nebraska.

Copies of the application have been filed with the County Clerks of Converse, Niobrara, and Goshen Counties. Copies have also been forwarded to the Converse County Public Library, 3000 Walnut, Douglas; the Niobrara County Library, 476 South Main, Lusk; and the Goshen County Public Library, 2001 East A, Torrington, and are available for public inspection.

Persons desiring to become parties to the permit proceeding may do so pursuant to W.S. 35-12-112, by notifying the Office of Industrial Siting Administration in writing of their intent to become a party.

Limited appearance statements will be received in the matter in accordance with provisions at W.S. 35-12-112(c). These should be mailed to the Director, Office of Industrial Siting Administration, Suite 500 Boyd Building, Cheyenne, Wyoming 82002.

Dated this 17th day of March, 1982.

Office of Industrial Siting Administration
Suite 500 Boyd Building
Cheyenne, Wyoming 82002
(307) 777-7368