

Case 8224

Zaman

Exhibits

1 thru 13

April 3, 1985

RESUME'
Masud Uz Zaman

OBJECTIVE: Hydrogeologist in the field of Ground Water Research, Development and/or Water Management

EDUCATION:

1. University of the Punjab, Lahore, Pakistan
M.S., Geology
2. University of the Peshawar, Pakistan
B.Sc. (Hons.), Geology

**ADDITIONAL
EDUCATION:**

1. Brooklyn Polytec. Institute of New York, U.S.A.
Foundation Engineering I (Spring 1975, 3 credit hrs.)

Foundation Engineering II (Fall 1978, 3 credit hrs.)

Hydrology (Fall 1978, 3 credit hrs.)
2. College of Ganado, Arizona
Statistics (May, 1979, 3 credit hrs.)
3. Oil and Gas International, Inc., Tulsa, Oklahoma
Mineral Logging (February, 1980)
4. National Water Well Association, San Diego, California
Ground Water Modeling (October, 1984)

EXPERIENCE: Nineteen (19) years of diversified administrative and field experience in the United States of America and abroad in all aspects of Geology, Hydrogeology, Engineering Geology, and Geotechnical Engineering, Experience gained on dams, tunnels, sea ports, water wells, irrigation systems, on-shore and off-shore construction, quarry management, ground water and salinity control, exploratory drilling, foundation construction, project management and report writing. The agencies worked with are as follows:

Hydrogeologist (Director)
October 31, 1983 to Present

Department of Water Management
Division of Water Resources
The Navajo Tribe
Window Rock, Arizona 86515
Telephone Number: 602/729-5281

Duties and Responsibilities:

Provide technical support in all phases of research, development and management of ground and surface water resources of the Navajo (Navaho) Indian Reservation with an area of 26,000 square miles covering portions of Arizona, New Mexico and Utah States.

Doing many of the same duties as previously with U.S. Public Health Service (see item #2 below) plus administrative and supervisory.

Expert in well construction technics (production, monitoring and relief wells) well design, pumping test and the analyses of pumping test data. Have a strong writing and communication skill.

Currently supervising a technical staff of 15 personnel which includes the following:

One Surface Water Hydrologist, one Meteorologist, one Ground Water Geologist, one Sanitarian, three Computer Programmers, two Computer Analysts, one Planner, three Engineering Technicians and two Clerical staff.

Accomplishments:

1. Helped produce the Navajo Tribal Water Code and now in the process of implementing the Water Code to manage the Tribal water resources.
2. Generating a computerized historic ground/surface water quantity and quality data base with the ultimate goal to model the water resources.
3. Researching ways to artificially recharge the shallow ground water aquifers (one project completed).

Hydrogeologist: (GS-12-4)
January, 1979 to October 30, 1983

U.S. Public Health Service
Office of the Environmental Health & Engineering
(Branch of DHEW)
Window Rock, Arizona 86515
Telephone Number: 602/871-5851

Duties and Responsibilities:

As head of Geohydrology Section, responsibilities included the development of potable ground water resources to support the communities domestic water supply systems throughout the Navajo Indian Reservation and the Checkerboard Area. During this period conducted about sixty (60) ground water feasibility studies and formulated subsequent reports (two reports published), directed, managed and supervised the drilling operation and construction of about sixty (60) deep wells (depth ranging from 400 to 3000 feet) and about twenty (20) shallow alluvium wells. All these wells were designed to obtain maximum quantity and the best possible quality water to meet the EPA's safe drinking water standards. Also conducted analysis on pumping test data to obtain aquifer characteristics.

Consultant and advisor to the Navajo Tribe Water Commission, Water and Sanitation Department and the Navajo Tribal Utility Authority (NTUA) on all matters concerning ground water resources. Also a member of the Navajo Tribe, Technical Review Panel.

Provide consultations and recommendations to other PHS Offices outside Navajo Reservation, coordinated with United States Geological Survey Water Resource Division and the United States Bureau of Indian Affairs on all matters related to ground water resources.

Provide technical advise to PHS Field Offices on foundation problems and pollution control.

Engineering Geologist
September, 1976 to December, 1978

Leonard Yie Associates
4 Park Side Drive
Parsippany, New Jersey
Telephone Number: 201/887-3013

Duties and Responsibilities:

With Leonard Yie Associates supervised exploratory drilling operations for foundation analysis and subsequent designing. Also directed, supervised and managed the actual foundation construction on several large projects. The most important projects were the Isomerization and Naphtah Splinter Plants within the Exxon Refinery, Linden, New Jersey. Also, supervised the construction of several roads within the refinery.

Staff Engineering Geologist
January, 1973 to December, 1973

Woodward Clyde Consultant (Engineers and Geologist)
1425 Board Street
Cliffton, New Jersey 07012
Telephone Number: 201/471-2000

Duties and Responsibilities:

Supervision of exploratory drilling and site investigation work for the foundation design of dams, nuclear power stations, oil refinery, port facility, shopping centers and sky scrapers.

Investigation work involved preparation of bore-hole logs and geologic cross sections, bore-holes permeability test and collection of geohydrologic data, study of slopes, recommendations for foundation construction. Some of the projects are as follows:

Amos Fly Ash Dam, Charleston, West Virginia
Crown Fuel Oil Refinery & Port Facility, Glen Berney,
Baltimore, Maryland
Long Island Nuclear Power Station, New York
Ten Eyke Complex, Albany, New York
Arlen Shopping Centers at several locations in New Jersey,
New York, Pennsylvania and Ohio

Engineering Geologist
April, 1969 to May, 1972

Indus Valley Construction Company, LTD
16G-Gulberg-3
Lahore, Pakistan

Duties and Responsibilities:

Worked in the capacity of project manager, administered an office staff of fifteen (15) that included one staff geologist, three diploma engineers, nine engineering technicians, one accountant, one storekeeper and two clerks.

During this period directed extensive drilling program for domestic and municipal water wells, relief wells for dams, waterwells for logging and salinity control and irrigation, drilling for dam site and foundation investigation, pile foundations, tunnels blasting and for pressure grouting operations. Some of the major projects were:

Mangla Dam, Tarbela Dam, Marala and Taunsa Surface Water Reservoirs (Indus Basin Link Canals), Karachi Port Facility, Defence Projects, Thermal Power Station and the Lahore City Water Development Project

Geologist (part time)
June, 1966 to October, 1968

Fine Industrial Mineral Company
Lahore, Pakistan

Duties and Responsibilities:

Directed core drilling operation to estimate bauxite mineral deposit, and provided recommendations for shoring, dewatering and strip mining operation.

Field Inspector
April, 1957 to February, 1961

H.G. Acres and Company
Consulting Engineers (from Niagra Falls - Ontario, Canada)
Warsak Dam Project
Peshawar, Pakistan

Duties and Responsibilities:

As an inspector supervised extensive diamond drilling operation on main dam, power tunnel for pressure grouting operation. Also supervised drilling, blasting, excavation and pressure grouting operation in the 3.5 miles long irrigation tunnel upstream of the dam at Warsak.

TECHNICAL
MEMBERSHIPS:

1. National Water Well Association
2. New Mexico Water Well Association
3. Ground Water Research Institute
4. Technical adviser to New Mexico State Hydrology Task Force on Cumulative Hydrologic Impact Assessment (CHIA), proposed regulations for coal development in San Juan Basin, Northwestern New Mexico
5. Member New Mexico State Energy and Mineral Department's Study Group to formulate regulations for the control of surface disposal of oil and gas wells produced water to protect shallow ground water in vulnerable aquifers in Northwestern New Mexico

PUBLICATIONS:

Feasibility Report, Well Drilling, West Thoreau Water System, (McKinley County), New Mexico, 1982

Future Crownpoint Water Supply from Proposed Little Water Well Field, (McKinley County), New Mexico, 1982

PERSONAL DATA:

Date of Birth: January 01, 1938
Resident Status: U.S. Citizen
Marital Status: Married
Address: P.O. Box 1374
Window Rock, Arizona 86515
Telephone Number: Home - 602/871-2136
Office - 602/729-5281

LANGUAGES:

English: read, write and speak
Urdu: read, write and speak
Arabic: reading only

February 25, 1985

FROM : The Hogback Chapter
 c/o Paul George, Council Delegate
 P.O. Box#1268
 Shiprock, New Mexico 87420

TO : The Navajo Tribe
 Division of Resources c/o Dan Vicenti
 P.O. Box#308
 Window Rock, Arizona 86515

RE : Oil Companies Damage To Farm and Grazing Areas

Dear Mr. Vicenti:

Enclosed for your documentation and review is a Resolution from Hogback Chapter and additional pertinent information regarding soil surface damage done by oil field construction and existing wells.

The Hogback Chapter and community is very concerned in cases of frozen broken well lines, and damage of prime farm areas along the San Juan River.

Two examples herein stated are:

- a) Chischilly Benally
 6 miles north of Chapter called Horseshoe Canyon
- b) David Devore
 Farm area Plot# 7, Hogback Irrigation Project.

These residents lost livestock, difficulty of farming, oil/water spillage. In addition to other hazardous problems created by wells.

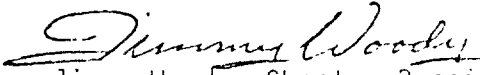
Other examples will be forthcoming and these residents have brought these problems through Community Development Committee (C.D.C.), the local Chapter meeting, and Grazing Committee meetings.

Therefore this Resolution is requesting your expediant action on problems as these and will be awaiting your reply.

Thank you for your cooperation in this manner.

Sincerely,


 Paul J. George, Council Delegate


 Jimmy Woody, Chapter President

c.c. The Navajo Tribe/Environmental
 Protection Service
 c/o Arlene Luther
 P.O.Box#308
 Window Rock, Arizona 86515

RESOLUTION OF
HOGBACK CHAPTER

REQUESTING THE NAVAJO TRIBE TO INVESTIGATE THE OIL AND GAS COMPANIES DAMAGING SOIL (surface) TO PRIME FARM LANDS ALONG THE SAN JUAN RIVER.

WHEREAS:

- A. The Hogback Chapter is a certified Navajo Nation Chapter (Navajo Tribal Council Resolution CA-36-78) located within Shiprock Agency (District 12), AND
- B. The Hogback Chapter advocates and represents its community people in instances of:
 - 1. No prior notification of new drilling activities
 - 2. Unnecessary spillage of oil, water on farmland
 - 3. Overhead power line poles of farmland making it difficult to plow, irrigate, farm and soil.
 - 4. Underground conduits, oil pipe snagging on tractor plows
 - 5. Large storage tanks with open waste pits causing environment health problems for residents and livestock of the area.
 - 6. No compensation for farmers, ranchers or consolidation as payment or road maintenance and repair from these oil companies or the Navajo Tribe in return for drilling or pump maintenance damage.
 - 7. Some pumps are too close to residential areas creating a fire and safety hazard of nearby homes and villages. AND
- C. The Hogback Chapter acknowledges these belated problems at prior chapter meeting and no action ever taken by the Navajo Tribe with local oil companies.
- D. Documentations are attached hereto.

NOW THEREFORE BE IT RESOLVED:

- 1. The Hogback Chapter diligently and respectfully request the Navajo Tribe to uphold its responsibilities to resolve the present problem experiencing by the area Navajo farmers and ranchers of the oil and gas companies damaging the Navajo farmlands and rangelands.
- 2. The Hogback Chapter respectfully request the Navajo Tribe to review and renegotiate all the oil and gas leases in effort to resolve and relieve the farmland permittees of any/all damages by the oil and gas companies.

C E R T I F I C A T I O N

We, hereby that the foregoing resolution was duly considered and discussed at a regularly called chapter meeting at the Hogback Chapter, New Mexico (Navajo Nation), and at which a quorum was present and the passed by a vote of 34 in favor and 0 opposed on this 21 day of December, 1984, upon motion by Virginia Devore and seconded by Betty Jim.

Jimmy Woody
Jimmy Woody, Chapter President

Alice Funston
Alice Funston, Chapter Secretary

Daisy Johnson
Daisy Johnson, Vice President

Paul J. George
Paul J. George, Council Delegate