Campbell, Foss & Buchanan, Inc.
is an established
independent natural resources
management consulting firm
specializing in the fields of:

- Hydrogeological Investigations
- Real Estate Environmental Audits
- Hazardous Waste Investigations
- Ground Water Supply Projects
- Surface & Borehole Geophysical Investigations
- Geological Investigations
- Mine Dewatering & Depressurizing Projects
- Minerals Exploration, Valuation & Mine Development

Technical Qualifications

C,F&B offers the full scope of geological and hydrogeological services. A Senior Partner of Campbell, Foss & Buchanan, Inc. was a pioneer in the early efforts to control hazardous waste disposal and to develop detection practices in the early to mid 1970's. He was involved in the development of the initial EPA ground water regulations and related implementation. C,F&B has company-wide expertise in investigating a wide variety of subsurface contaminants and in their detection and removal, if feasible.

C,F&B has selected experienced laboratories to conduct the necessary analyses on soil and underground water, including asbestos and storage tank tightness testing. Special procedures are employed to ensure sample integrity and the appropriate chain of sample custody. C,F&B investigations are supervised and directed by Certified Professional Hydrogeologists and Geologists familiar with the local conditions and history. Client-consultant confidentiality is maintained according to the highest of ethical standards.

Personnel

Michael D. Campbell, President and Senior Hydrogeologist/Geologist of C,F&B, is widely known by industry and government for his work in hydrogeology on topics ranging from water supply development through hazardous waste characterization and remediation to vadose flow in heap-leach mining in the past few years. In the early 1970's, and in cooperation with Dr. Jay H. Lehr, Mr. Campbell was the founder and first Director of Research of the National Water Well Association, Technical Division's Research Facility in Columbus, Ohio. The Facility was subsequently moved to Rice University in Houston, Texas. Mr. Campbell has produced more than 120 major reports and publications over the past 22 years including the popular texts: Water Well Technology (by McGraw-Hill: 1973), and Geology of Alternate Energy Resources (by Houston Geological Society: 1977). He is a graduate of The Ohio State University (1966) and Rice University (1976) with degrees in geology/hydrogeology. Mr. Campbell is a Certified Professional Hydrogeologist (#480) and a Certified Professional Geologist (#3330) and has served on numerous technical committees. He has presented many technical short-courses on a variety of topics and is a member of numerous technical societies.

Ted H. Foss, Chairman and Senior Geologist, is also widely known throughout industry and government for his work in astronaut training, resource exploration, management and development. In the mid 1960's, Dr. Foss served as Chief, Geology and Geochemistry Branch of NASA and personally supervised the astronaut training program in preparation for the numerous moon landings and subsequent sampling programs conducted during the period. In the 70's and 80's, he served as a senior consultant to domestic and international minerals and mining companies. Recently he was the executive officer for a heap-leach mining operation in Nevada. Dr. Foss has produced more than 50 major reports and publications over the past 30 years. He is a graduate of The University of Illinois (1956 and 1958) and of Rice University (1964) with degrees in geology/geochemistry. Dr. Foss is a Certified Professional Geologist (#6393) and is a member of many professional societies.

Other senior and intermediate independent personnel join the C,F&B team as merited by the project. Dr. H. C. Clark, Rice University, provides input on geophysical projects. Mr. Kelly Sommers, consultant, provides input on flow systems. Mr. Robert N. Arrington, ex-Texas Eastern executive, provides assistance on site assessment projects. When the need arises, other specialized consultants are engaged for input on physical and chemical engineering, groundwater modeling, regulatory matters and other subjects on the frontier of development.

Project Qualification

C,F&B personnel are involved in projects in a number of possible ways:

1) To provide overall project management in terms of project formulation, design, implementation, subcontracting, accounting and report presentation,

2) To provide a source of research and input for a larger project to evaluate special problems, and

3) To provide quality control/quality assurance for projects at various stages of development.

Projects range from a small, isolated spill assessment to retrofitting an existing inappropriate remediation system installed in a major refinery, to eliminating loose language in a client report of investigations. Matching appropriate technology with existing conditions is a necessity if a remediation system is to operate efficiently and reliably over the design life. Selecting the appropriate sampling and storing methods is often overlooked during project operations. Probably the most underrated activity is pump selection, both type and configuration, not to mention the type of associated wiring or fittings.

Definitions In Hydrogeochemistry

In other projects we have noticed that two types of chemical analyses of ground water are often intermixed indiscriminately. The most common type is the analysis made to establish the character of the water as it will be used. These are water-quality analyses. The other type is rather rare for it strives to reveal the chemical character of the water in the subsurface. These are hydrogeochemical analyses.

If the water sample represents only a small portion of the underground flow system, and if the sample did not age significantly before it was analyzed, it can be considered a hydrogeochemical analysis. Some water-quality analyses meet these criteria but uncertainty would still prevail. We can predict the chemical character of the water as it will be used, if we know the chemical character of the water as it exists underground.

The inverse is not necessarily true. We can use hydrogeochemical data, coupled with ground-water age determinations obtained by isotope methods, to interpret ground-water flow patterns because the ambient water chemistry in a particular part of the flow system depends on such factors as:

1) the antecedent ground-water chemistry,
2) residence time of the ground water,
3) the chemical composition of the ground-water system,
4) the temperature-pressure relationships in the continuum that control water-rock reactions, and
5) sampling procedures.

Because ground-water flow systems are three dimensional and flow may be across bedding or stratigraphic units, as well as parallel to them, the chemical character of water in a formation does not necessarily reflect chemical changes due exclusively to flow through that formation. Conversely, local, intermediate, and regional flow systems can in some places be identified by their chemical characteristics, even though all flow may be essentially horizontal.

Analyzing Ground-Water Flow Systems

For investigation purposes, we assume that the ground-water flow systems of any drainage basin were in dynamic equilibrium before man's modifying activities began. We assume this for two reasons: 1) the storage-mining concept is in many respects simply a special case of the dynamic equilibrium concept; that is, it is the case where natural recharge/discharge is negligible; and 2) when our concern is with the potential flow paths that a pollutant might travel if it were to enter the flow system, the storage-mining concept is inadequate.

From the discussion of the ground-water flow system concepts, the factors we often need to quantitatively describe the ground-water flow systems of any region reduce to the following: 1) the spatial distribution of the hydraulic properties of the rocks (the flow continuum); 2) the shape and configuration of the water table and its temporal variations; 3) the spatial and temporal distribution of head; 4) the definition of recharge and discharge areas (both natural and those due to man's activities); and 5) the spatial and temporal distribution of the properties of the fluid (water). Only with these data can we develop hydrologic budgets, describe the consequences of changes in the systems, predict the yields of recovery wells, and otherwise deal with problems that relate to quantities. The integrity of these data in many projects today are not acceptable.

To deal with those questions that relate rock-water chemical reactions and the direct impact of pollutants or contaminants on the flow system, the

list must be extended to include: 6) the spatial distribution of the mineralogy and petrography of the rocks, and the reactions that potentially could take place between the rocks and the moving solution; 7) the spatial and temporal characteristics of the solution; and 8) the spatial distribution of any special properties of the rocks not normally encountered. This eight-item list forms the basis for developing a preliminary model of the flow systems.

In our experience in projects, most hydrogeologic investigations deal almost exclusively with only the first five items. However, the following questions must also be addressed and incorporated into the project from initiation through completion:

1) is the number of measurements sufficient?
2) were the properties measured at an appropriate scale?
3) do the measurements actually reflect conditions in the flow system?
4) How do existing measurements differ from the data ideally required?

Ground-Water Monitoring

For most project purposes, monitoring means the routine, rigorous, and systematic measurement of some property of a ground-water flow system, either physical or chemical. Two types of monitoring programs exist.

The most common program involves measurements made:

1) at regular intervals,
2) at the same point,
3) in the same way,
4) to the same precision, and
5) with an accuracy sufficient to detect significant differences.

Programs adequate for one project may be inadequate for others. For example, an agency of the federal government measures quarterly the tritium concentration of precipitation samples collected at selected locations in the United States. The purpose of the program is to compare ambient concentrations with human-health hazard levels so measurements to the nearest 100 picoCuries per liter are adequate. But for ground-water programs, we need two significant figures' precision with an accuracy of about 5.0 picoCuries per liter. Clearly, data collected to establish the human-health hazard are often unsatisfactory for regional ground-water purposes. The reverse is also true and the needs of the sampling and analysis programs are project specific.

The second type of monitoring program involves taking periodic measurements of some parameters at random points and then drawing contours to depict the parameters' distribution. The data can be handled statistically, spatial-temporal relations can be expressed, and future relationships predicted. Periodic random-point measurements show patterns and identify the extent of some on-going change. They serve to state the case, but for a variety of reasons they often obscure the details.

Classification of Ground-Water Monitoring System

Ground-water monitoring systems are required because someone somewhere wants to know something for some reason. We must therefore classify ground water according to:

1) who wants to know,
2) why they want to know,
3) what they want to know,
4) what they expect to find out, and
5) what political or engineering consideration motivated the initiation of the monitoring program.

We may also classify ground-water monitoring systems according to stress and the expected response to that stress. Stresses may be classified as: (a) direct or indirect, (b) simple, compound, or complex, and (c) short term, intermittent, or continuous.

Stress of Environment

Stress is any activity that forces a change or response in the environment (i.e., the ground-water system). Pumping wells are the most common stress. Other common stresses include mines, feed lots, sanitary-waste disposal facilities, reservoirs, septic tanks and tile fields, salt water disposal ponds, and irrigation.

Virtually every change in land use generates a stress on the ground-water flow system. The stresses may be unique, generating specific, expected and easily measured changes. Or, as is the case in many areas, so many stresses occur that the discrimination of individual responses becomes difficult and may even be impossible to define.

Computer Modeling

Computer modeling is of growing importance to many types of ground-water projects. Large, expensive main-frame computers are no longer required to

effectively model a dynamic project. A comprehensive understanding of the numerous models available, and their disadvantages, is of paramount importance.

A ground-water model is the conceptualization of an underground-water flow region, i.e. where the water flows from and to. We derive our conceptualization of the ground-water flow system from appropriate hydrologic and geologic data.

A mathematical model in hydrogeology includes a flow equation and boundary conditions. Typical limitations of boundary conditions are: no flow across the boundary, constant head (water-level) at the boundary, or constant flow across the boundary. An infrequent boundary condition is a variable flow rate across the boundary.

The mathematical model describes the conceptual ground-water model in mathematical terms. With mathematical expressions for the ground-water model we can predict water-level responses in the flow domain because of the effects of pumping wells.

Typically, we can use three methods to predict water-level response: analytical, numeric, and resistance-inductance-capacitance (RLC) analog. With the widespread availability of high-speed computers the RLC analog method is rarely used now. The analytical techniques derive an equation that predicts water levels anywhere in the model domain. The numerical methods predict water levels at isolated points in the flow domain. The differences between analytical and numerical models are described below.

Both methods are based on solving the ground-water flow equations with boundary conditions. The analytical method yields a formula from which predictions are made, while the numerical method makes predictions for particular problems. For most cases the flow-domain parameters (hydraulic conductivity and storage) and the boundary conditions are too complex to yield an analytical solution. In a few simplified cases though, the flow domain and the boundary conditions are simple enough that we can obtain an analytical solution. The numerical method approximates the flow domain and flow equation at specific locations. When given flow-domain parameters and boundary conditions we apply a numerical technique and can predict changes in water levels.

We prefer to use an analytical solution if our conceptual ground-water model justifies it. We can justify an analytical method in only a few cases and hence we use numerical methods for most regional ground-water models. The numerical mode can be used when the ground-water system has different regions of hydraulic conductivity or storage, or where the boundaries of a system are irregular. In general we use a numerical model for most ground-water systems only for the simple cases. For quick, preliminary calculations we resort to analytical methods, but the choice depends on the project.

A number of numerical techniques exist for solving ground-water flow problems to predict water level by computer. Four common techniques are: finite difference method (FDM), integrated finite difference method (IFDM), finite element method (FEM), & boundary element method (BEM). The difference between these techniques lies in the way the flow equation is discretized. For the most part one method is no better than any other method; however, the IFDM, FEM, and BEM usually take into account more of the surrounding points than the FDM. For very complicated flow systems the IFDM and FEM are used almost exclusively. The BEM is relatively new to hydrogeology and has not yet gained as widespread acceptance as the other methods.

The quality of the prediction we get from a numerical model depends on the integrity of the data available for analysis. With good data and a calibrated model (a calibrated model is one that mimics past water levels given the pumping rates in the past), the prediction is useful for about twice the length of the water-level history of an area. With bad input data all you get from the model are incorrect results.

Pledge of Diligence, Integrity and Confidentiality

We give you our solemn pledge that we will commit our best efforts in any project we undertake on your behalf. We also pledge that we will retain our professional objectivity on your project by giving you our unrestricted opinions, conclusions and recommendations concerning the assigned tasks. By applying good science and technology with effective management, we will provide you with the best possible information upon which prudent decisions can be made.

Campbell, Foss and Buchanan, Inc.

NATURAL RESOURCE MANAGEMENT


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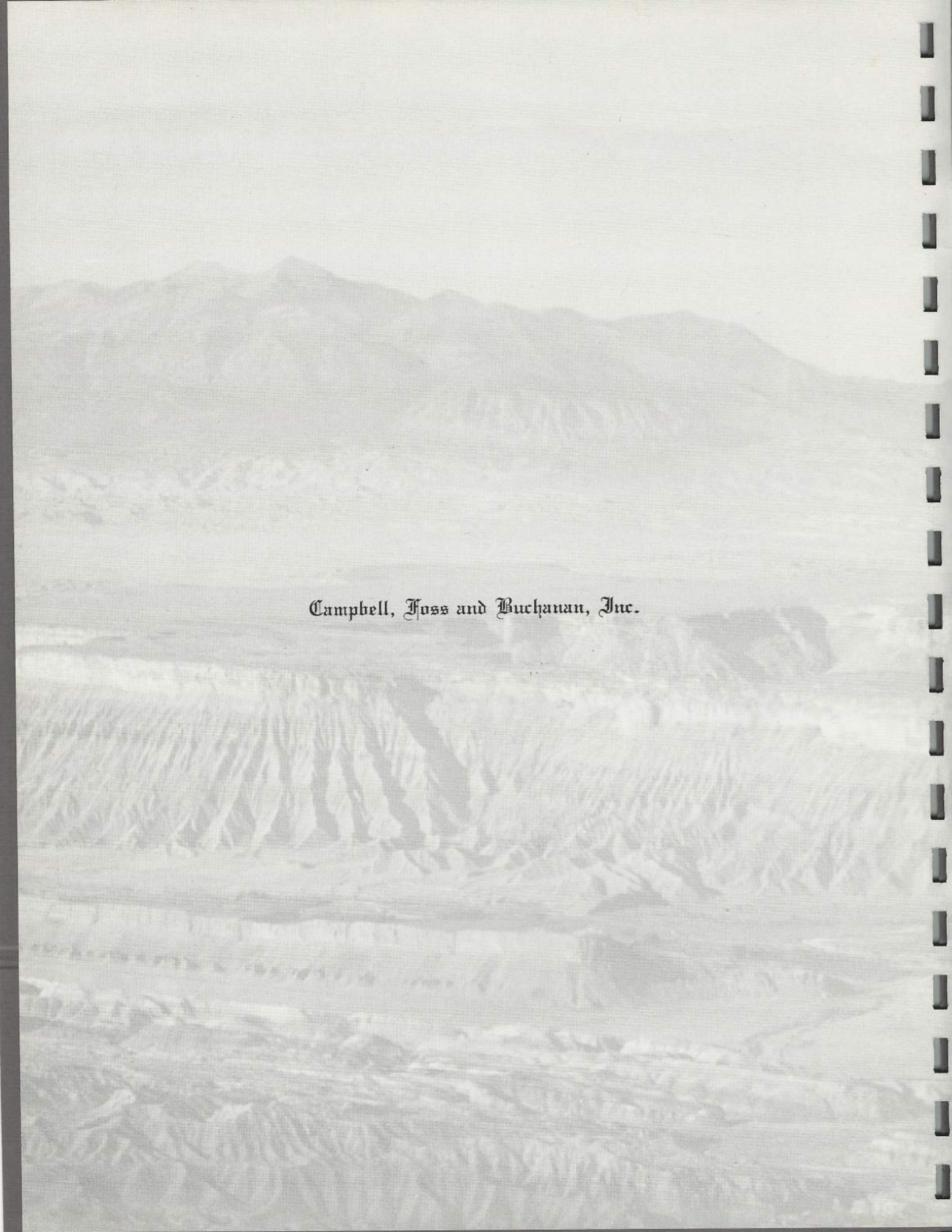
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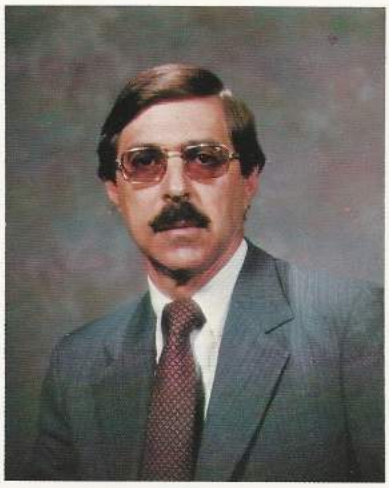


Michael D. Campbell
President

Ted H. Foss
Chairman of The Board

Kelvin J. Buchanan
Vice President

Campbell, Foss and Buchanan, Inc. is an independent natural resource management company. C,F&B serves the special requirements of the domestic and international mining, industrial, investment and banking communities. Professional opinions rendered by C,F&B provide economically sound and often innovative solutions to complex interdisciplinary projects and assignments.

C,F&B is fully qualified to conduct exploration projects, land acquisition programs, feasibility studies and development programs, as well as associated economic and environmental assessments, analyses, appraisals, and specialized geotechnical investigations. C,F&B personnel have successfully completed projects and investigations for industry and government worldwide. These projects have involved non-metallic, metallic, energy minerals, geothermal energy and ground water as well as training and management services.

Senior associates, operating under the direction of C,F&B, offer an extended scope of technical expertise while maintaining the highest professional standards and reputation. The C,F&B team has over 300 years of collective professional experience.

The latest technology and information-gathering facilities assist in presenting clients the optimum solutions for even the most difficult assignments.

The C,F&B team has extensive experience, proven integrity, and demonstrated resourcefulness.

Services Provided

* Aerial and Ground Geophysical Surveys — Planning, field implementation and interpretation of gravity, magnetic, seismic, EM, VLF and other geophysical surveys.

* Commodity Market Analysis — Assessment and appraisal of national and world supply and demand relationships.

* Design and Implementation of National Resource Programs — Domestic and international project development, budgeting, management and technical staffing, legal and accounting services.

* Drilling Program Management — Evaluation and logging of samples and cores, borehole geophysical logging and geologic integration.

* Exploration Program Management — Precious, strategic and base metals and industrial commodities including coal and lignite, geothermal, uranium and petroleum.

* Farm In/Farm Out Negotiations — Creation/implementation of strategy, background development, client representation.

* Geologic Reconnaissance — Field examinations, mapping and analysis of relative mineral potential.

* Hydrogeological Investigations — Environmental, mine de-watering, water-supply development and geothermal programs.

* Land Acquisition — Negotiations, leasing agreements, claim staking.

* Limited Partnership Formation and Management — Program conception and implementation, investment counseling, property screening, selection and representation.

* Metallurgical Investigations and Studies — Analyses, inter-company coordination and management, and specialized investigations.

* Mining Property Analysis — Field examinations, sampling and appraisal.

* Preliminary and Detailed Feasibility Studies — Economic evaluation and mine plan development for surface, underground and solution mining applications.

* Project Economic Evaluations — Cash-flow analyses, sensitivity and risk assessment for potential and on going operations.

* Project Feasibility Review — Review of feasibility studies and project proposals on behalf of investment and financial institutions.

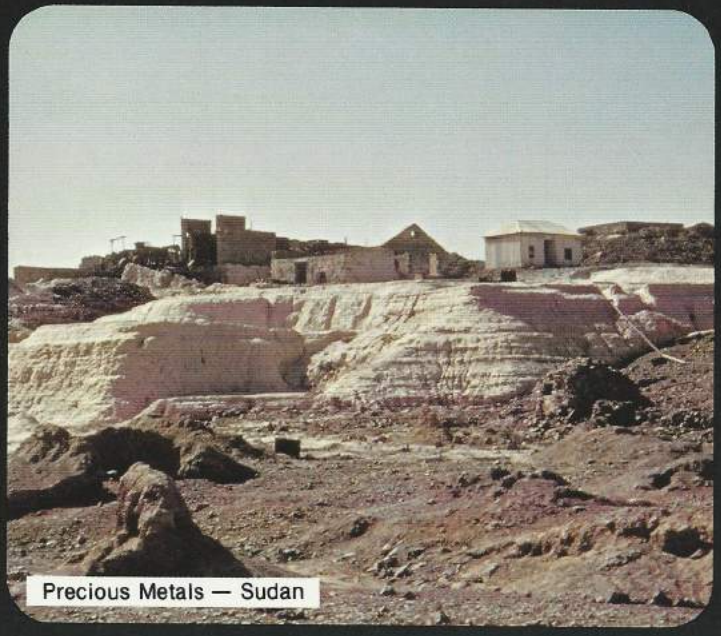
* Project Management Investigation, Evaluation and Analysis — Independent assessment of existing management and staff effectiveness.

* Regional and Detailed Geochemical Surveys — Planning, field implementation and interpretation.

* Reserve Analysis — For precious, strategic and base metals, and industrial commodities including coal, uranium and geothermal projects.

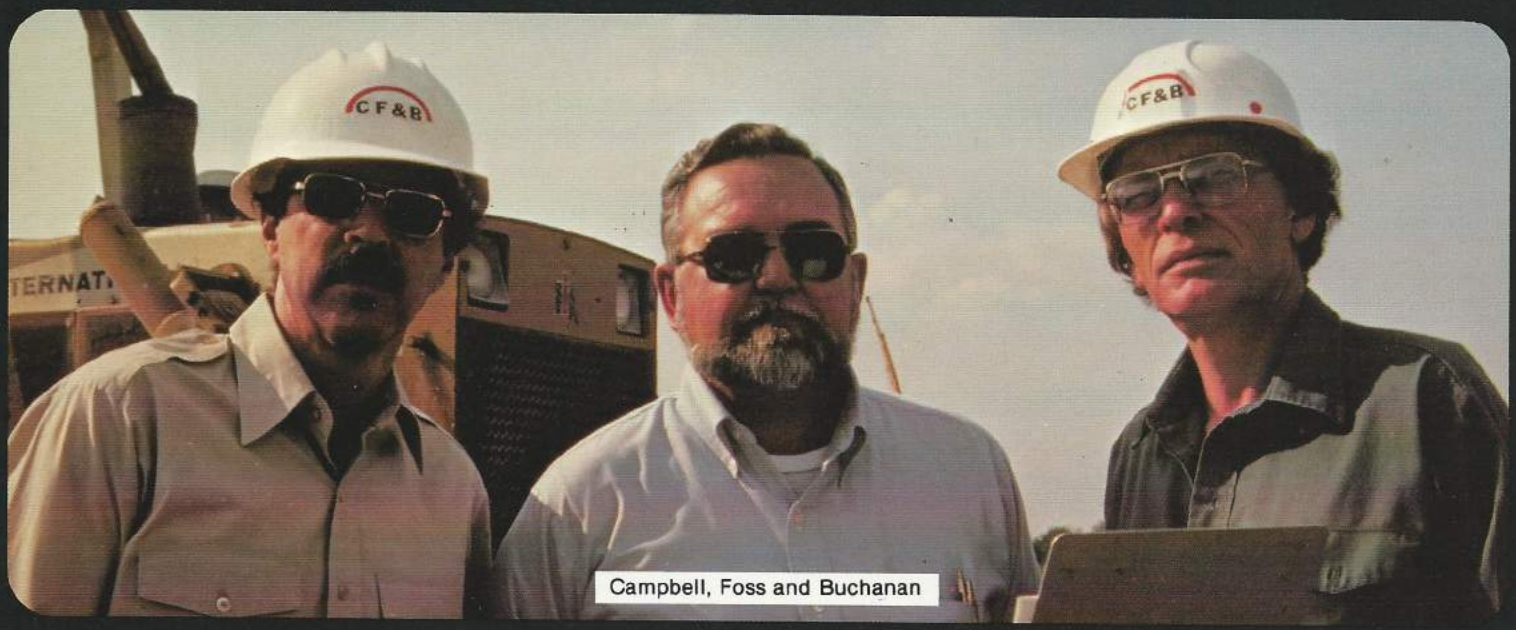
* Training Programs — Presentation of seminars and workshops on a variety of topical subjects of interest to the mining, investment and banking communities.

Industrial Minerals — South Pacific



Precious Metals — Sudan

International



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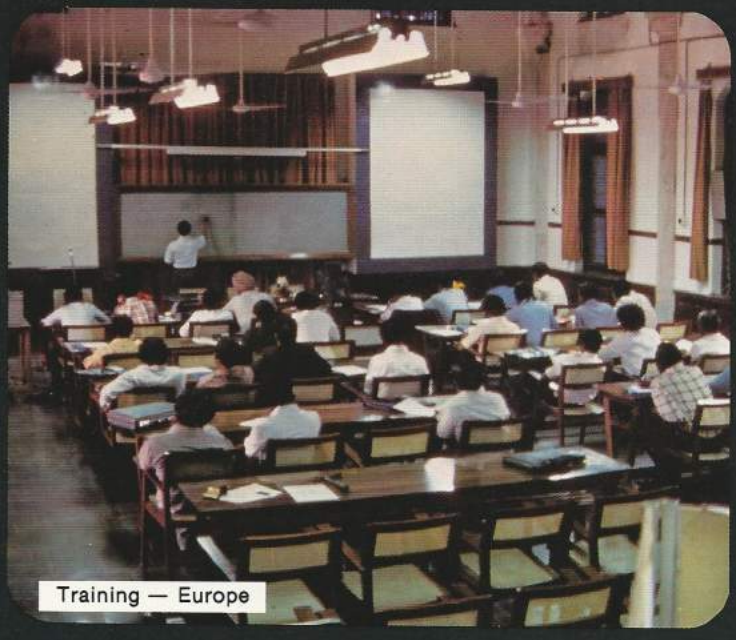

Training — Europe

Base Metals — B. C. Canada

Selected Domestic Projects

The following is a brief summary of some of the major domestic projects that have been supervised by C,F&B principals (detailed descriptions of projects are available upon request). Some of these projects were client-generated programs that were implemented by C,F&B personnel and some were conceived and implemented by C,F&B personnel.

- Alaska — Development of Massive Sulfide Deposit — Feasibility and Metallurgical Investigations
  - — Land Agreement Negotiations — Five Native Corporations
  - — Precious and Base Metal Exploration — Conceived and Implemented Project
  - — Precious and Base Metal Exploration — Reconnaissance, Geophysics, Geochemistry and Appraisal
- Arizona — Silver Property Evaluation — Ore Controls, Mapping, Metallurgical and Economic Analysis
  - — Precious Metal Property Appraisal — Independent Assessment of Project
- Arkansas — Lignite Exploration Programs — Drilling, Geophysics and Reserve Analysis
- Colorado-Utah — Uranium Mining & Stockpiling — Feasibility, Ore Reserves and Economic Assessment
- Georgia — Heavy Minerals — Exploration, Land Negotiations
- Idaho — Precious Metals — Placer Reserve Analysis and Negotiations
- Louisiana — Brine Injection Operations — Appraisal, Investigations and Recommendations
- Nevada — Precious Metals — Property Screening, Feasibility, Economics
  - — Precious Metals — Evaluations of Producing Gold Property
  - — Precious and Base Metals — Conceived & Implemented Exploration Program
  - — Geothermal Energy — Investigations of Potential, Involving Geological, Geochemical and Hydrochemical Evaluations
- New Hampshire — Ground Water Development Program — Review of Exploration of Igneous and Metamorphic Rocks

Selected Domestic Projects

- New Mexico — Tar Sand Exploration — Exploration Drilling and Preliminary Field Studies
  - — Precious Metal Property Evaluation — Past Production Analysis, Geologic Appraisal and Preliminary Feasibility Study
- North Carolina — Ground Water Development — Exploration, Geophysics & Drilling in Igneous and Metamorphic Rocks
- Ohio — Sand and Gravel Operations — Reserve Analysis, Preliminary Feasibility Study and Market Analysis
  - — Petroleum Development Program — Geology, Hydrogeology & Production Analysis
- Pennsylvania — Coal Operations Appraisal — Equipment Inventory Analysis, Preliminary Reserve Assessment
- South-Central U.S.A. — Oil Shale, Tar Sands and Asphaltic Limestone Exploration — Field Reconnaissance, Drilling, Sampling and Geologic Analysis
- Texas — Ground Water Development Program — Analysis of Expansion Plans for Municipal System
  - — Precious, Base, Industrial Minerals Exploration — Reconnaissance & Appraisal
  - — Strategic Petroleum Reserve Analysis — Investigations of Cavern Stability
- U.S.A. — Training Programs — for U.S. EPA and Private Industry
- Utah — Coal Project — Analysis of Reserves, Mine Plan and Economics
  - — Uranium Project — Exploration Program, Drilling, Geophysics and Land Acquisition
- Western U.S.A. — Geothermal Property Appraisal — Assessment for SEC Offering
  - — Geothermal Property Appraisal — Assessment for Private Stock Offering
  - — Strategic Minerals — Conceived and Implemented Programs, Property Screening, Exploration, and Economic Assessment

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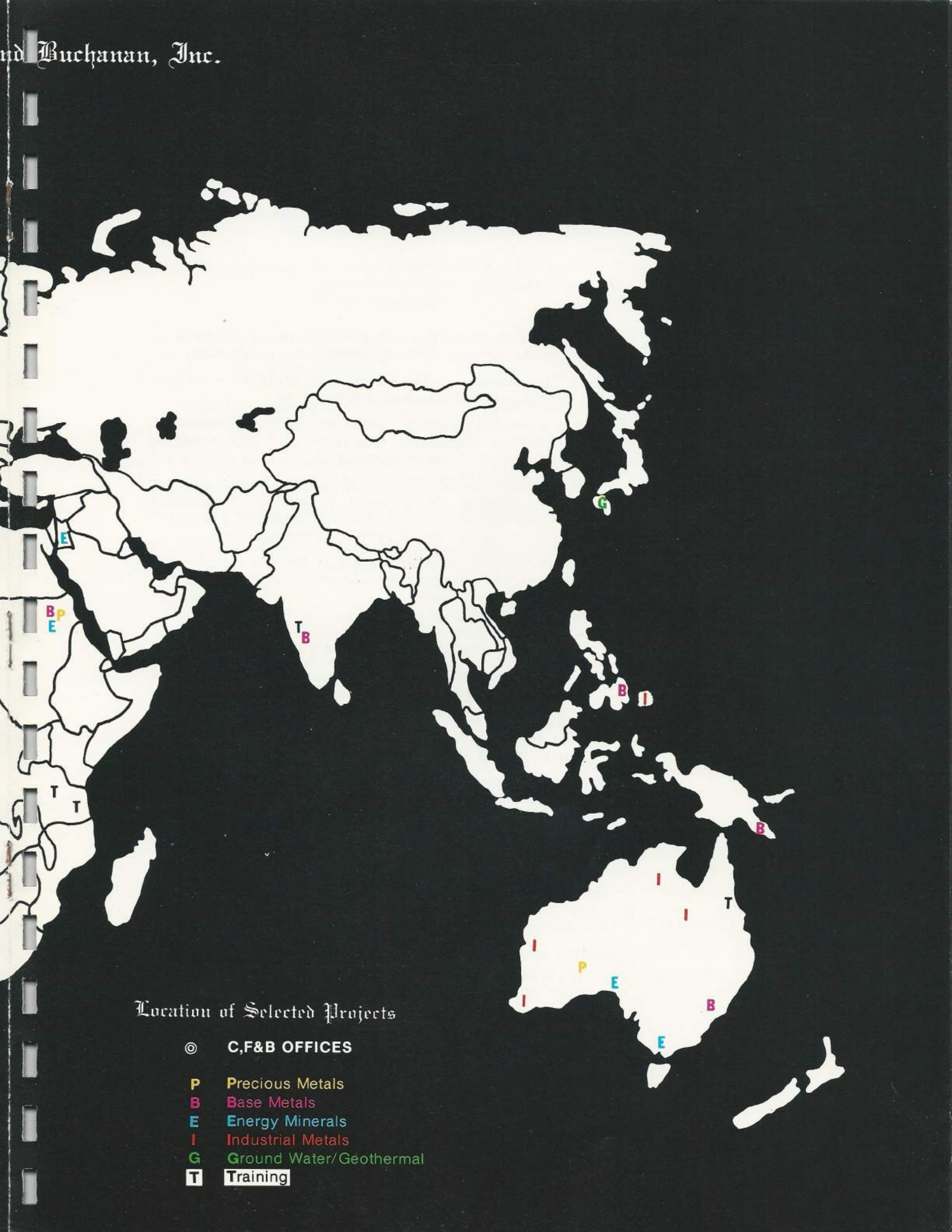


Location of Selected Projects

◎ C,F&B OFFICES

P Precious Metals
B Base Metals
E Energy Minerals
I Industrial Metals
G Ground Water/Geothermal
T Training

Selected International Projects

The following is a brief summary of some of the major international projects that have been supervised by C,F&B principals (detailed descriptions of projects are available upon request). Some of these projects were client-generated programs that were implemented by C,F&B personnel and some were conceived and implemented by C,F&B personnel.

⚒ Australia — Queensland & Northern Territories — Phosphate Exploration — Drilling, Mapping, Geophysical and Economic Analysis

— South Australia — Uranium Exploration — Field Reconnaissance Mapping and Sampling

— Western Australia, Northern Territories, Papua — Review of Exploration Program — Appraisal of Effectiveness of Precious and Strategic Minerals, Exploration Activities

— Western Australia — Multi-Company Limited Partnership for Heavy Mineral Development Project — Exploration Through Preliminary Feasibility Studies and Corporate Negotiations for Sale of Property Royalties

— Western Australia — Potash Exploration Drilling, Geophysical Logging and Assessment of Mineralization for Possible In Situ Solution Mining

⚒ Canada (British Columbia) — Coal Property Appraisal — Mining Analysis, Reserve Assessment and Economic Analysis

— Joint Venture with Major Oil Companies on Porphyry Copper Project — Regional Geochemical Exploration Program and Air-Photo Interpretation

— Precious Metal Exploration and Development, Drilling and Underground Drift Development and Sampling

(Northwest Territories (Alberta)) — Petroleum Exploration — Field Reconnaissance and Geophysics

— Tungsten Exploration and Development, Drilling, Geologic Mapping and Surveying

(New Brunswick) — Copper Property Appraisal — Geological Analysis, Negotiations, Delineation of Mineralization

(Ontario) — Base Metal Exploration — Geophysics, Mapping and Drilling Program

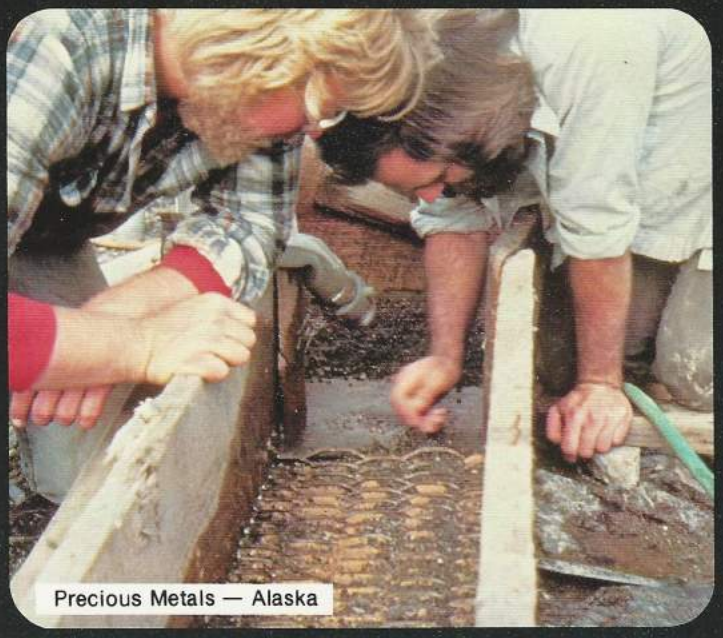
(Yukon) — Joint Venture with Major Oil Companies for Lead-Zinc — Exploration Drilling, Surface Geophysical Surveys and Economic Analysis

(Saskatchewan) — Uranium Exploration, Drilling and Shaft Construction, Bore Hole Geophysics and Underground Mapping

Selected International Projects

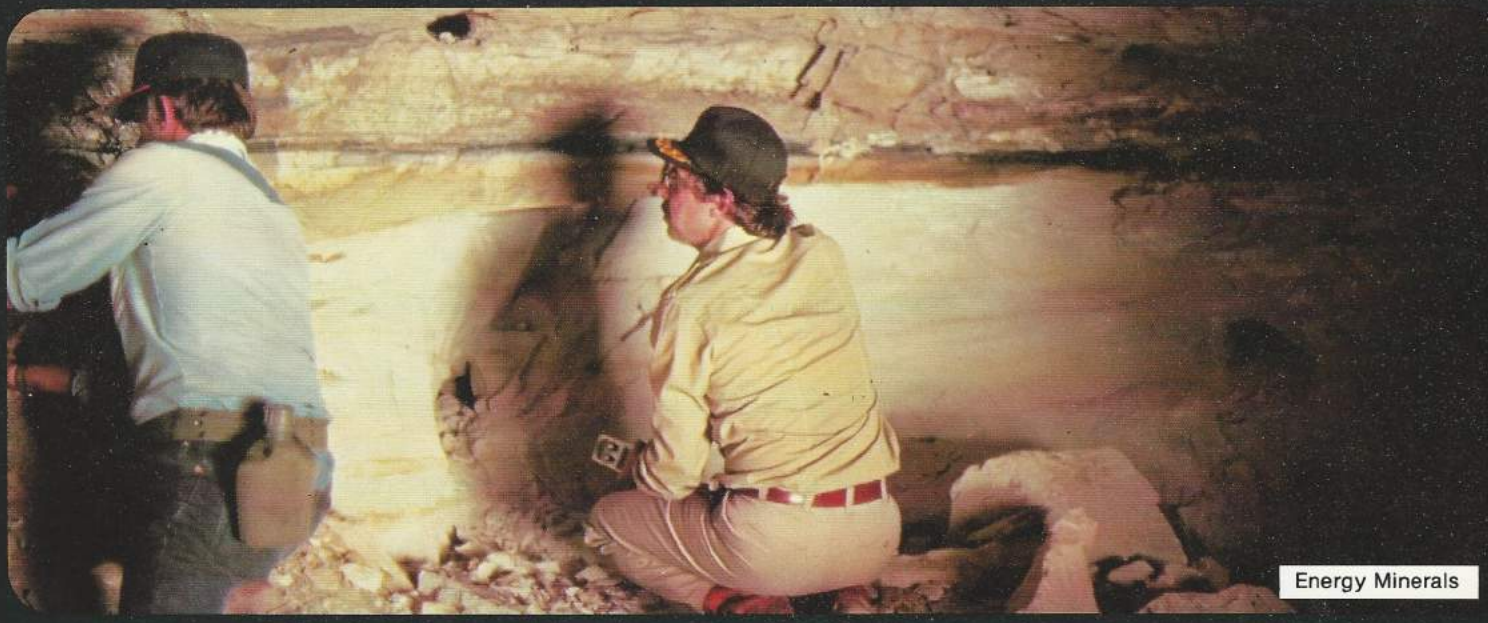
- Caroline Islands — (Palau Islands) — Phosphate Exploration — Shallow Offshore Areas, Drilling and Sampling
- Chile — Barite Property Evaluation — Field Reconnaissance and Development Potential Assessment, Mining Law and Taxes, Infrastructure
- England (Cornwall District) — Underground Mapping, Sampling and Inspection of Industrial Safety Devices in Tin Project Mines
- Iceland — Geological Training Program — for NASA Manned Space Center on Recent Volcanic Features
- Jamaica — Precious and Base Metal Exploration — Regional Geology and Geochemistry, Geophysics and Drilling
- Jordan — Oil Shale — Appraisal for World Bank
- Liberia — Precious Metals Property Appraisal of Geologic, Geochemical and Mining Production Data for Possible Acquisition of Property for Client
- Mexico — Precious Metal Property Appraisal — Sampling, Mining Methods and Reserve Definition
  - — Geological Training Program — for Pemex, S.A. — Exploration Techniques for Iron Ore, Coal, Uranium, Precious Metals and Sulfur
  - — Tin Property Appraisal — Review of Program and Recommendations
  - — Geological Training Program — for NASA (Houston Manned Space Center) — On Phreatic Explosion Craters
- Niger — Precious and Strategic Metals — Conceived and Implemented Program, Field Reconnaissance
- South Africa — Evaluation and Appraisal of Heavy Mineral Mining Project for Possible Acquisition and/or Investment by Client
- Sudan — Precious & Base Metals Exploration — Field Reconnaissance, Program Expansion
- Sweden — UNESCO (United Nations Educational Scientific Cultural Organization) — Geology and Technology Training Programs and Seminars.
  Sardinia
  India
  Tanzania
- World — UNDP (United Nations Development Program) — Ground Water Programs — For Review and Recommendations for World-wide Programs

Energy Minerals — New Mexico



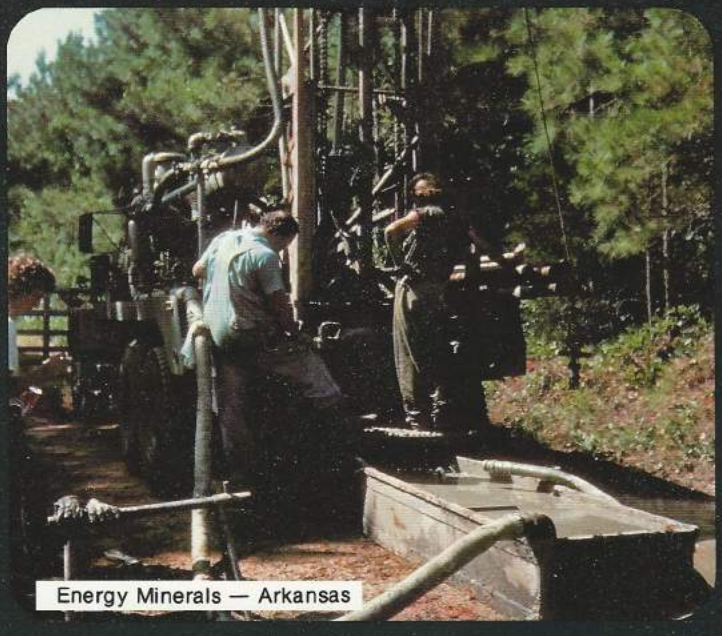
Precious Metals — Alaska

Domestic



Energy Minerals

Base Metals — Alaska



Energy Minerals — Arkansas

Principals

Michael D. Campbell, M.A.

Michael D. Campbell, age 42, is President of C,F&B and a Certified Professional Geological Scientist (#3330). He obtained a Bachelor's Degree in Geology from The Ohio State University in 1966 and a Master's Degree in Geology from Rice University in 1976, during which time he conducted courses on economic geology and provided consulting services to the federal government and industry. Mr. Campbell was employed by a major international petroleum and mineral exploration company for four years in Australia and by a major mining company in the U.S. in 1971. Prior to forming C,F&B he was employed by Keplinger and Associates, Inc. for seven years as Director, Alternate Energy, Minerals and Environmental Programs, and subsequently was appointed as Manager of Geology. Mr. Campbell has been involved in numerous geologic, economic and environmental investigations on a wide range of natural resource commodities involving domestic and international exploration and development programs on precious, strategic and base metals, coal-lignite, geothermal energy, tar sands and carbonates, oil mining, industrial minerals and ground-water related projects. He has contributed 40 publications on a variety of topics concerning natural resource exploration and development (two of which are texts, one published by McGraw-Hill and one by the Houston Geological Society). He is a member of the American Institute of Professional Geologists, Society of Economic Geologists and other U.S. and international professional societies. Mr. Campbell is listed in American Men and Women of Science, Who's Who in Technology, Who's Who in the Southwest and in Who's Who International (London).

Ted H. Foss, Ph.D.

Ted H. Foss, age 48, is Chairman of the Board, Vice President of C,F&B and is a Certified Professional Geological Scientist (#6393). He obtained Bachelor's and Master's Degrees from the University of Illinois in 1956 and 1958, respectively. In 1964 he received a Ph.D. degree in Geology and Geochemistry from Rice University. Prior to 1970 Dr. Foss was employed by the Illinois Geological Survey, the U.S. Geological Survey and a major international petroleum company. He was Assistant Professor of Geology for three years and was Chief, Geology and Geochemistry Branch for NASA at the Manned Spacecraft Center in Houston for seven years. Since 1970 Dr. Foss was Manager of Mineral Exploration for General Crude Oil Company for eight years and prior to forming C,F&B he served as President, Watts, Griffis and McQuat, Inc. (USA) for four years. While with WGM, he was engaged in consulting to all facets of the mining industry on a worldwide basis. He has managed numerous projects involving exploration and economic analysis of mineral properties. Dr. Foss has contributed 18 publications on the geology and geochemistry of intrusive and volcanic rocks, astronaut training in geologic exploration, lunar geology and Alaska mineral law. He is a Fellow, Geological Society of America, a member of the Society of Economic Geologists, American Institute of Professional Geologists and other professional societies.

Kelvin J. Buchanan, M.B.A.

Kelvin J Buchanan, age 41, is Vice President of C,F&B and a Certified Professional Geological Scientist (#6058). He obtained a Bachelor's Degree in Geology from the University of British Columbia in 1971 and an MBA from Pepperdine University in 1981. Mr. Buchanan has held management positions with a variety of exploration companies in Canada involving copper, gold, tungsten, asbestos and industrial minerals. In the U.S. since 1974, he was Exploration Manager for Bethex Corporation in Reno where he directed precious and base metal exploration programs in the western U.S. resulting in the acquisition of the Buckhorn Gold Mine in Central Nevada. Prior to forming C,F&B, Mr. Buchanan was Vice President, Watts, Griffis and McQuat, Inc. (USA) and directed exploration and development projects in the U.S. and Mexico for a variety of clients, including a multi-year program on tantalum-niobium and a feasibility study for a major U.S. gold mining operation. He is a Fellow, Geological Society of Canada, a member of the American Institute of Professional Geologists and other professional societies.

Senior Associates

Robert N. Arrington — B.S., M.S. (University of Texas); age 55; Geologist, domestic and international mineral and petroleum exploration, development and economic analysis.

H.C. Clark — B.S., M.S., Ph.D. (University of Oklahoma and Stanford University); age 46; Geophysicist, mineral and petroleum exploration.

R. Grasso — B.S., M.S. (University of Adelaide); age 52; Geologist, international mineral and petroleum exploration and economic analysis.

M.C. Haase — B.S., Juris Doctor (Northwestern University and University of Illinois); age 41; domestic natural resource law and litigation.

S.J. Poythress — B.S. (Louisiana State University); age 64; Petroleum Engineer/Geologist, domestic and international geotechnical and petroleum exploration and development.

R.I. Rackley — B.S., M.S. (University of Tennessee); age 57; Geologist, domestic and international mineral exploration and development.

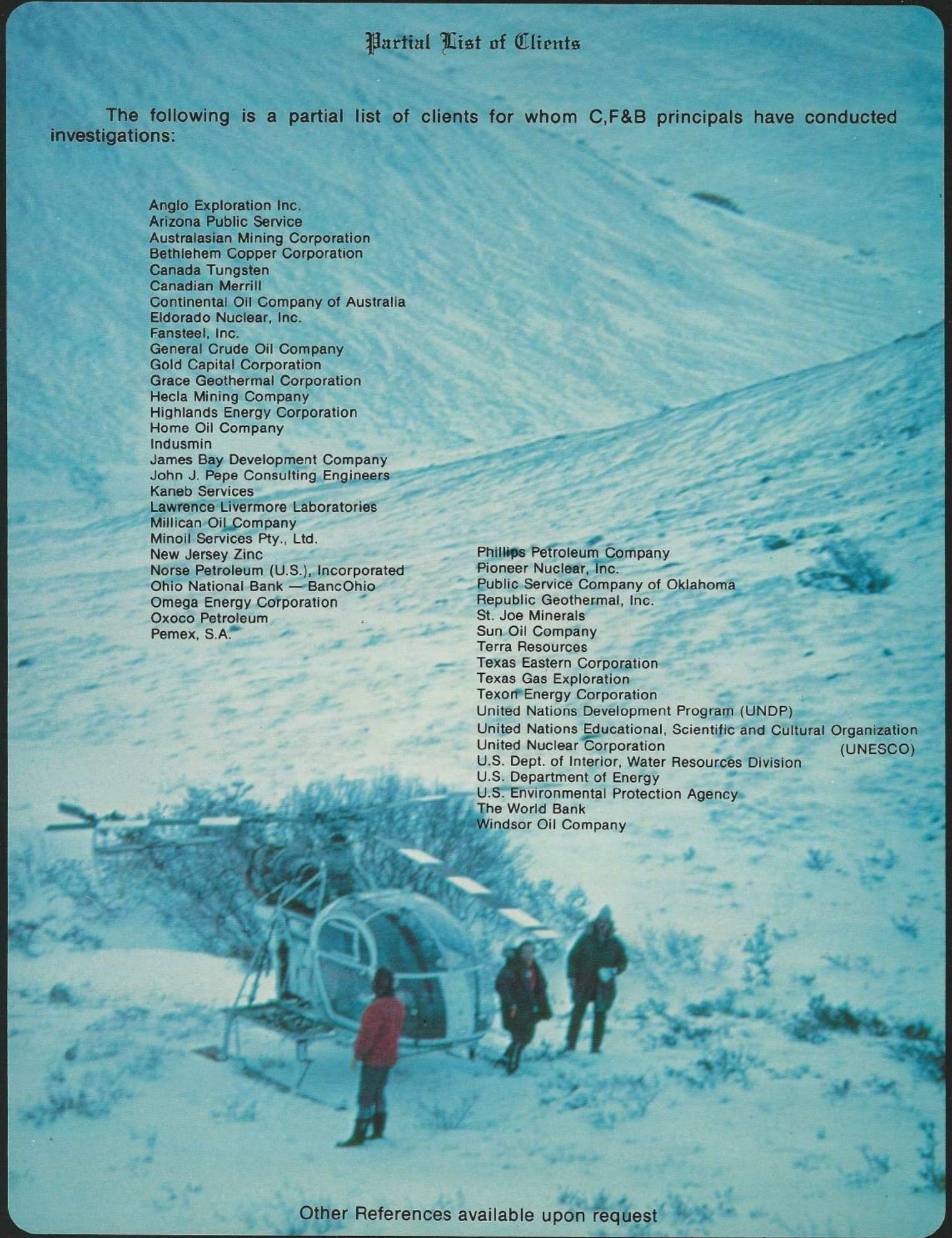
W. K. Summers — B.S., M.S. (Indiana University); age 54; Geologist-Hydrogeologist, domestic and international ground water and mineral exploration and development.

Other C,F&B Senior Associates are ready to meet your project's specific needs. Specialized disciplines include, but are not limited to, Geology, Geochemistry, Geophysics, Mining and Metallurgical Engineering, Economics, and Finance.

Partial List of Clients

The following is a partial list of clients for whom C,F&B principals have conducted investigations:

Anglo Exploration Inc.
Arizona Public Service
Australasian Mining Corporation
Bethlehem Copper Corporation
Canada Tungsten
Canadian Merrill
Continental Oil Company of Australia
Eldorado Nuclear, Inc.
Fansteel, Inc.
General Crude Oil Company
Gold Capital Corporation
Grace Geothermal Corporation
Hecla Mining Company
Highlands Energy Corporation
Home Oil Company
Indusmin
James Bay Development Company
John J. Pepe Consulting Engineers
Kaneb Services
Lawrence Livermore Laboratories
Millican Oil Company
Minoil Services Pty., Ltd.
New Jersey Zinc
Norse Petroleum (U.S.), Incorporated
Ohio National Bank — BancOhio
Omega Energy Corporation
Oxoco Petroleum
Pemex, S.A.
Phillips Petroleum Company
Pioneer Nuclear, Inc.
Public Service Company of Oklahoma
Republic Geothermal, Inc.
St. Joe Minerals
Sun Oil Company
Terra Resources
Texas Eastern Corporation
Texas Gas Exploration
Texon Energy Corporation
United Nations Development Program (UNDP)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nuclear Corporation
U.S. Dept. of Interior, Water Resources Division
U.S. Department of Energy
U.S. Environmental Protection Agency
The World Bank
Windsor Oil Company



Other References available upon request

Pledge
of
Diligence, Integrity and Confidentiality

We give you our solemn pledge that we will commit our best efforts in any project we undertake on your behalf. We also pledge that we will retain our professional objectivity on your project by giving you our unrestricted opinions, conclusions and recommendations concerning the assigned tasks. By applying good science and technology coupled with effective management, we will provide you with the necessary information to serve as a foundation upon which prudent decisions can be made. Our goal is to reduce your project's inherent risk whenever possible, while optimizing your project's potential benefits.

Respectfully submitted,

Campbell, Foss and Buchanan, Inc.

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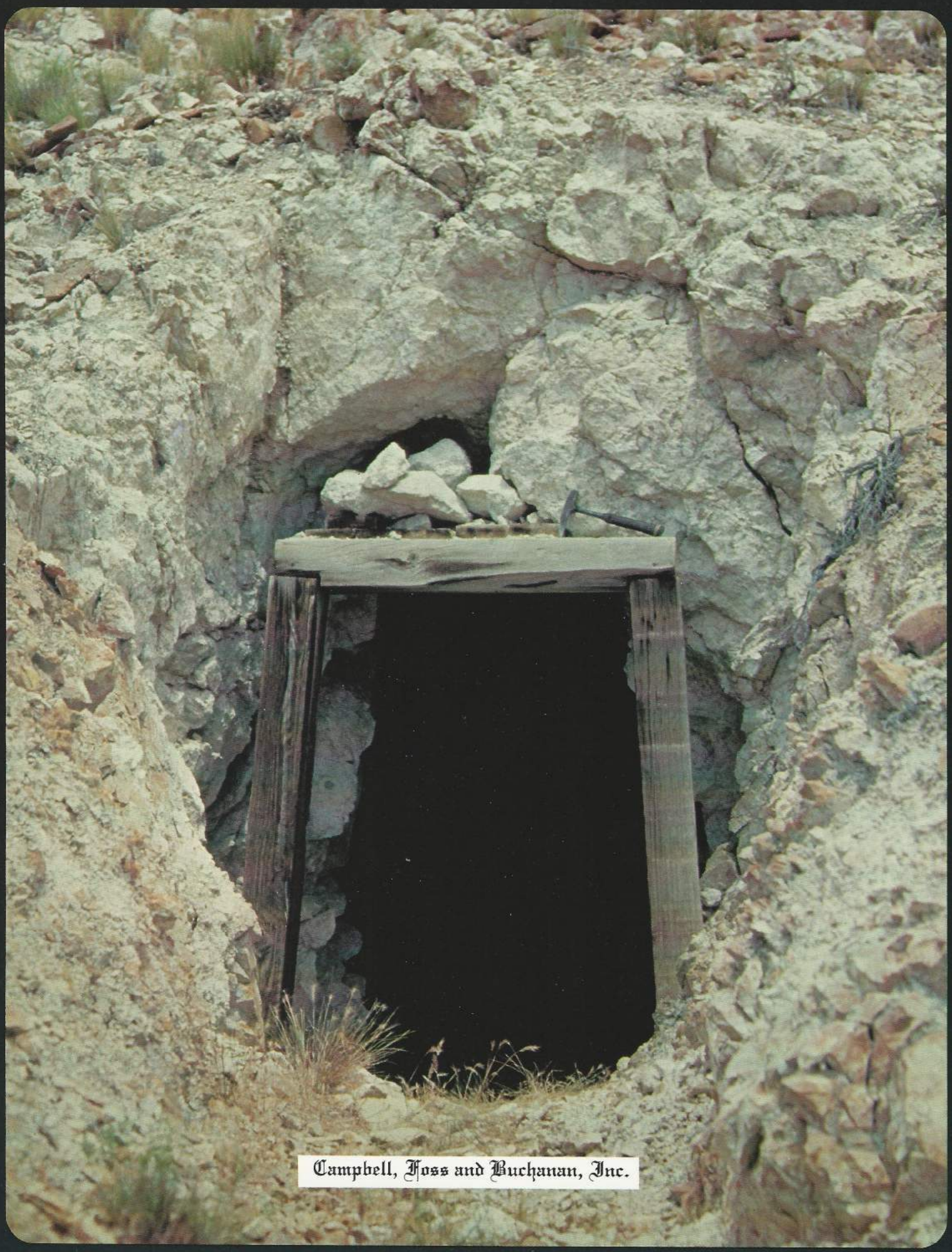
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