Campbell, Foss and Buchanan, Inc.
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.
* 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 ongoing 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.
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 Asphalitic 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
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 Sardinia Organization) — Geology and Technology Training Programs and Seminars.

India

Tanzania

World — UNDP (United Nations Development Program) — Ground Water Programs — For Review and Recommendations for Worldwide Programs
Principals

Michael D. Campbell, M.A.

Michael D. Campbell, age 42, is President of C,F,B and a Certified Professional Geological Scientist (#3350). 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 Keppler 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-ignite, 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 (#3633). 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 Spacorcraft 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
Kaneco Services
Lawrence Livermore Laboratories
Millican Oil Company
Minnol Services Pty., Ltd.
New Jersey Zinc
Norse Petroleum (U.S.), Incorporated
Ohio National Bank — BancOhio
Omega Energy Corporation
Oxco 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)
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
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.