CHARLES C. BOUDREAUX, P.E.

Contact: cboudreaux15@yahoo.com

EDUCATION:

B.S. Chemical Engineering - 1966Louisiana State University

EXPERIENCE:

2008 - Present **Independent Consultant** 1999 - 2008 Baker & O'Brien, Inc. Consultant 1986 - 1999 Paramount Petroleum Corp. **Executive Vice President** Vice President of Crude, Supply, Asphalt, and Fuel Oil Sales Manager of Specialty Asphalt Sales **Director of Special Projects** 1979 - 1988 **EME Associates, Infrared Scanning Services** Founder and Owner 1977 - 1978 **Basin Petroleum President and Chief Operating Officer** 1983 - 1985 **Kern Oil & Refining** and Refinery Manager 1973 - 1975 Vice President, Solvent Sales 1975 - 1976 Charter International Oil Co. and **Process Engineer** 1966 - 1972 **Unit Supervisor Planning Manager** Manager of Supply Manager of Corporate Planning

PROFESSIONAL ORGANIZATIONS:

Professional Engineer - Texas (#30882)

Area Superintendent

Process Engineering Supervisor

SUMMARY OF EXPERIENCE:

Following graduation, Charles joined Charter International Oil Company ("Charter," formerly Signal Oil & Gas) as a Process Engineer in Charter's Houston, Texas, refinery. Initially, he was assigned to the alkylation unit area as a Unit Supervisor. He later served as Process Engineering Supervisor and Area Superintendent in the gasoline reforming and aromatics extraction areas, respectively.

In 1973, Charles accepted the position as Refinery Manager for Kern Oil & Refining Co. (Kern), a small refinery located in Bakersfield, California. He had full responsibility for all refinery operations, including expense and capital budgeting and refinery labor negotiations. During his tenure at Kern, the refinery capacity was increased from 10,000 barrels per day (B/D) to 18,000 B/D.

Charles rejoined Charter in 1975 as Manager of Corporate Planning based in Charter's Jacksonville, Florida, office. One of his primary duties was the restructuring of a contract for expansion of the Houston refinery's catalytic cracking unit. The project management team was reorganized and the original "cost plus" contract was replaced with a fixed price contract for completion. In 1976, Charles was named Manager of Supply for the Charter Chemical group based in Houston. He was responsible for all outside purchases of aromatic solvents and the arrangements for transportation of solvents from the Houston refinery to outlying Charter terminals.

Charles left Charter in 1977 to accept a position as President and Chief Operating Officer of Basin Petroleum (Basin). Basin was having financial difficulties at the time, and Charles reorganized the management team and negotiated new bank financing which permitted Basin to restructure financially, retire higher cost debt, and pay down significant outstanding trade payables.

In 1979, Charles founded EME Associates/Infrared Scanning Services, Inc. (EME) in Houston. EME was formed to provide infrared inspection and consulting services to the refining and petrochemical industries. Consulting services included project management, "bottom-of-the-barrel" studies, refinery evaluation, and specialty product marketing studies. Infrared techniques were developed and applied to tube metal temperature measurements enhancing furnace operations and steam-air decoking. In the early 1980s, Charles developed and managed a capital-intensive project for Kern to produce aliphatic solvents on the United States West Coast.

In 1983, he accepted a temporary assignment as Vice President of Solvent Sales for Kern in order to secure the customer base and project development.

In 1986, Charles accepted a position as Executive Vice President for Paramount Petroleum Corporation (Paramount), a small West Coast specialty refiner. At the time, Paramount was in bankruptcy, and Charles reported to the bankruptcy court-appointed trustee. He held full responsibility for all refinery operations, accounting, expense and capital budgets, community relations, and human resources. He successfully dealt with environmental problems and complaints and helped defeat a city proposal to tax the refinery's daily crude charge rate. Paramount emerged from bankruptcy in 1988 but was forced into bankruptcy again less than two years later. During this period, Charles held the position of Vice President of Crude, Supply, Asphalt, and Fuel Oil Sales. Paramount was successfully reorganized again under new owners through the development of a refinery processing agreement with Enron Oil Trading and Transportation (EOTT). Charles worked directly for EOTT for nine months before returning to Paramount as Manager of Specialty Asphalt Sales. In this position, he successfully introduced paving asphalt binders modified with crumb rubber derived from used automobile tires. His final position with Paramount was as Director of Special

Projects. One key project on which he worked was to find a buyer for the refining assets of Fletcher Oil & Refining Company, a shutdown 32,000 B/D crude refinery in Carson, California. After the sale of a process unit and compressor, the balance of the equipment was scheduled for demolition. Prior to removal of the remaining physical/hardware assets, Charles completed an owner's due diligence to confirm that the demolition contractor was an approved asbestos abatement contractor compliant with Cal/OSHA requirements for the removal and proper disposal of the asbestos materials from the Fletcher refinery.

In 1999, Charles joined Baker & O'Brien, Inc., in the firm's Houston office as a Consultant. Consulting assignments at Baker & O'Brien have included preparation of expert reports for use in conjunction with litigation and arbitration, both domestic and international. Charles has testified in several depositions and trial, including: 1) an evaluation of an asphalt refinery on the USEC; 2) an evaluation of an asphalt refinery on the USGC; and 3) PDVSA crude oil contract dispute with USGC refiner. Charles has prepared expert reports, including: 1) ICC arbitration of a refinery construction dispute in Mexico; 2) ICC arbitration of a billion dollar revamp construction cost overrun of an offshore platform in Mexico; 3) an arbitration of a USGC chemical plant construction contract dispute involving both a fixed price and start-up date; 4) an arbitration of a contract dispute on refinery best practices during the 1960's, 70's, and 80's involving underground pipelines; and 5) litigation matters on refinery best practices during the 1960's, 70's, 80's dealing with asbestos/mesothelioma related claims against defendants, such as equipment suppliers/outside maintenance contractors/refinery owners.

REPRESENTATIVE MAJOR AREAS OF EXPERIENCE:

Asphalt and Specialty Products Marketing

Worked on the development of new higher-margin refinery products and expansion of markets for traditional "bottom-of-the-barrel" products to enhance small refinery profitability. Responsibilities included obtaining approvals from government agencies for the new products and commercial marketplace acceptance based on performance.

Refinery Maintenance

Developed infrared scanning and inspection techniques for measuring tube metal temperatures and condition to enhance refinery furnace operations and maintenance de-coking activities.

ICC Refinery and Pipeline Construction Arbitration

Analyzed numerous construction and design defect issues, on behalf of the E&C contractor involved, in a lump sum \$1.6 billion refinery and pipeline project in Mexico. Assessed numerous additional work order claims with reference to the contractual documents and normal industry practice. Prepared expert reports detailing the basis of opinions and findings.

Asphalt Market Study

Provided a financial institution with an assessment of the market for paving asphalt in California. Study focused on current and short-term future markets and included the results of interviews with California paving grade asphalt producers, contractors, and buyers.

Heater Explosion

Investigated the cause of a mild heater explosion during unit start-up. Based on physical damage to the heater, Baker & O'Brien assessed the potential for injuries claimed by contractor nearby.

Refinery Evaluation

Provided an evaluation of an asphalt refinery operation, on behalf of a major lending institution.

Refinery Business Interruption

Prepared detailed analyses of property damage, business interruption, and demurrage claims resulting from client's product ship colliding into a dock at a refinery. Results of the analyses were instrumental in client reaching a successful financial settlement with the refinery owner.

Acid Gas Release

Provided accident investigation on a heat exchanger leak and litigation support for trial.

Asphalt Refinery Evaluation

Determined market value of an asphalt refinery and provided expert witness testimony at trial.

Offshore Oil Rig

Investigated the cause of a fire onboard an oil rig and provided litigation support for

Asphalt Refinery Evaluation

Determined the fair market value of an asphalt refinery and provided testimony in depositions and litigation for trial.

ICC Gas Processing Plant Arbitration

Provided expert reports on construction and operation issues, on behalf of the contractor involved with gas processing and compression offshore platforms.

Gas Processing Plant

Investigated the cause of corrosion in a natural gas processing plant using amine solvents and provided litigation support.

Asbestos Litigation

Provided expert input and litigation support for trial preparation on industry standards for pump gaskets and best practices for refinery/chemical plant maintenance procedures.

Asphalt Refinery Evaluation

Provided fair market value of an asphalt refinery in California, on behalf of an investment banker.

Chemical Plant EPC Arbitration

Prepared expert report on engineering design and failed mechanical completion issues, on behalf of the Owner. The EPC contract was lump sum price and guaranteed

completion date. Provided expert report detailing our findings and opinions.

Contract Dispute Arbitration

Provided an expert report and assistance during an arbitration hearing on industry standards and good engineering practices in the 1970's and 1980's regarding underground process piping.

Asbestos Litigation

Provided expert opinions on asbestos litigation matters for pumps/valves equipment suppliers and EPC/outside maintenance contractors dealing with asbestos demolition, based on my crude oil/chemical refining career. My opinions focused on industry standards/practices/standards of care and approved engineering practices during the 1960's, 1970's, and 1980's dealing with the handling of asbestos materials.

Asbestos Litigation

Provided expert opinions on asbestos litigation matters dealing with the importance A insulation for piping and equipment for the infrastructure supplied by EPC/outside maintenance contractors. My opinion was focused on industry practices, standards of care and accepted process engineering practices during 1960's and 1970's dealing with the handling of asbestos materials in refineries and chemical plants.

Asbestos Litigation

Testified at deposition on asbestos litigation matter dealing with sequencing of work performed during construction of a new refinery, including the likelihood of whether the insulator crafts would have been working in the vicinity of other crafts during the 1960's and 1970's.

Asbestos Litigation

Provided expert opinions on the subject matter dealing with statue of repose for insulation installed on piping/equipment during new construction of crude oil refinery. My opinions focused on industry practices and accepted process engineering during 1960-1970's.