## FINANCIAL ACCOUNTING AND REPORTING BY OIL AND GAS PRODUCING COMPANIES

FINANCIAL ACCOUNTING STANDARDS BOARD
Filings With
SECURITIES AND EXCHANGE COMMISSION
and
DEPARTMENT OF ENERGY



Financial Accounting Standards Board

HIGH RIDGE PARK, STAMFORD, CONNECTICUT 06905

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#### FINANCIAL ACCOUNTING STANDARDS BOARD FILINGS

#### CONTENTS

#### SECURITIES AND EXCHANGE COMMISSION

- I. Response of the Financial Accounting Standards Board to the request (SEC Release No. 33-5892) for comments from interested persons by the Securities and Exchange Commission on "Accounting Practices -- Oil and Gas Producers."
  - Appendix A "Department of Energy Hearing, Oral Comments of Donald J. Kirk (as delivered). February 21, 1978" (See filings with the Department of Energy included herein for copy of contents of this appendix.)
  - Appendix B "Report 3, On the Effect of Statement 19, Financial Accounting and Reporting by Oil and Gas Producing Companies, On the Returns of Oil and Gas Company Securities," prepared by Thomas R. Dyckman with the cooperation and assistance of Abbie J. Smith.

#### DEPARTMENT OF ENERGY

- I. Department of Energy Hearing, Oral Comments of Donald J. Kirk, Chairman of the Financial Accounting Standards Board (FASB), February 21, 1978
- II. Response of the Financial Accounting Standards Board to the Department of Energy's Request for Comments on FASB Statement No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies", February 23, 1978
- III. Prepared "Testimony of Donald J. Kirk, Chairman, Financial Accounting Standards Board", as submitted to the Department of Energy on February 17, 1978 in respect to the "Public Hearings of Department of Energy", held on February 21 and 22, 1978 "To Consider FASB Statement No. 19, 'Financial Accounting and Reporting by Oil and Gas Producing Companies'."

#### FINANCIAL ACCOUNTING STANDARDS BOARD

#### SECURITIES AND EXCHANGE COMMISSION

ACCOUNTING PRACTICES -- OIL AND GAS PRODUCERS

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#### Financial Accounting Standards Board

HIGH RIDGE PARK, STAMFORD, CONNECTICUT 06905 | 203 - 329 - 8401



DONALD J. KIRK Chairman of the Board

February 24, 1978

Mr. George A. Fitzsimmons Secretary Securities and Exchange Commission 500 North Capitol Street Washington, D. C. 20549

#### SEC File No. S7-715

Enclosed herewith are three copies of the response of the Financial Accounting Standards Board to the request for comments from interested persons by the Securities and Exchange Commission on Accounting Practices -- Oil and Gas Producers. That request is set forth in SEC Release No. 33-5892.

Also in response to the request in Release No. 33-5892, the Board has sent to you, under separate cover, a copy of its response dated February 23, 1978 to a request for comments by the Department of Energy on financial accounting standards for oil and gas producers.

Sincerely,

Donald J. Kirk

DJK:kjp Enclosures



# RESPONSE OF THE FINANCIAL ACCOUNTING STANDARDS BOARD TO THE REQUEST FOR COMMENTS FROM INTERESTED PERSONS BY THE SECURITIES AND EXCHANGE COMMISSION ON ACCOUNTING PRACTICES -- OIL AND GAS PRODUCERS

SEC FILE NO. S7-715 FEBRUARY 24, 1978

The Financial Accounting Standards Board is pleased to respond to the Securities and Exchange Commission's request for comments from interested persons on "Accounting Practices -- Oil and Gas Producers." That request is set forth in SEC Release No. 33-5892. The Commission's notice of the related public hearing is contained in Release No. 33-5905, and the Financial Accounting Standards Board intends to request to make an oral presentation at the hearing.

The Commission is soliciting comment on two separate though related questions:

1. Whether the financial accounting and reporting standards set forth in FASB Statement No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies," are appropriate for the preparation of financial statements to be included in filings with the Commission under federal securities laws.

2. Whether those standards are appropriate for the purpose of reporting information to the Department of Energy pursuant to the Energy Policy and Conservation Act of 1975 (EPCA).

With regard to the first question, it is the position of the Financial Accounting Standards Board that the accounting and reporting standards set forth in FASB Statement No. 19 are appropriate for the preparation of financial statements to be included in filings with the Commission. The principal objective of the federal securities laws that require those filings is to make available to the public information on which informed securities investment decisions can be made; likewise, the principal focus of the Board in its deliberations on Statement No. 19 that led it to adopt the successful efforts method and reject full costing was the information needs of investors and creditors (see especially paragraphs 149-154 of the Statement). In the Board's judgment, investors and creditors will be served well by financial statements prepared in conformity with the accounting standards set forth in FASB Statement No. 19, including the detailed disclosures of capitalized costs, of costs incurred in oil and gas producing activities, and of reserve quantities and changes in them, as required by that Statement -- plus, for companies whose securities are registered with the SEC, disclosure of information based on the present value of future net revenues from estimated production of proved oil and gas reserves, which the Commission has proposed in Release No. 33-5878 (October 26, 1977). The Board recommends, therefore,

The Board's views on the objectives of general purpose external financial reporting by business enterprises are more fully set forth in its December 29, 1977 exposure draft of a Proposed Statement of Financial Accounting Concepts on "Objectives of Financial Reporting and Elements of Financial Statements of Business Enterprises."

that consistent with the Commission's long-standing administrative policy of relying on financial accounting and reporting standards established in the private sector and as authorized by EPCA, it should rely on the determinations of the Financial Accounting Standards Board in Statement No. 19 -- which is essentially what the Commission has proposed to do in Releases Nos. 33-5861 (August 31, 1977) and 33-5877 (October 26, 1977).

With regard to the second question, the Board believes that determination of whether the accounting and reporting standards in Statement No. 19 are appropriate for the purpose of reporting information to the Department of Energy pursuant to EPCA must be made by the Commission, after consulting with the Department of Energy and the other federal government agencies identified in Section 503 of EPCA. In the judgment of the FASB, Statement No. 19 provides a sound framework within which a national energy data base can be developed by the Department of Energy and provides the Commission with accounting practices on which it may reasonably rely in meeting its obligations under Section 503 of EPCA. In fact, in Release No. 33-5877 referred to above, the Commission stated that it viewed its proposed accounting and disclosure rules, which are essentially those contained in the FASB Exposure Draft that preceded Statement No. 19, as being consistent with the oil and gas production reporting requirements proposed by the Department of Energy in its Financial Reporting System. In that Release, also, the Commission stated that since the basis of reporting to DOE is essentially the same as reporting to investors (revenue and cost recognition, disposition of capitalized costs, and accounting for contractual arrangements involving special conveyances of rights and joint operations) and since uniformity

DOE reporting and investor reporting to be practicable or consistent with the Commission's statutory responsibilities.

#### Broader Issues

The two foregoing questions, which are clearly the ones of most direct concern to the SEC, bring to the fore the whole of the successful efforts versus full costing controversy. All of the arguments and evidence considered by the Board in reaching its decisions in Statement No. 19 are likely to be put before the SEC in the written responses to Release No. 33-5892 and in the oral testimony at the SEC's public hearing, with some respondents undoubtedly reaching different conclusions from those reached by the Board. In the Board's judgment, the SEC's request for comments and public hearing involve both directly and indirectly a number of issues that are far broader than the accounting issues addressed in Statement No. 19 and inherent in the foregoing two questions. Those issues include:

- Availability of adequate supplies of energy.
- Viability of competition among oil and gas producing companies.
- The availability of capital to oil and gas producing companies at a price commensurate with the risks involved.
- The availability of reliable information on which those who supply capital can make informed capital allocation and pricing decisions.
- Acceptance by the business and financial community and by government agencies of determinations by the Financial Accounting Standards Board on technical accounting matters.

The Board's views on the two specific questions and on the broader issues will be elaborated on in the balance of this submission, in the Board's submission to the Department of Energy described in the next paragraph, and in the Board's testimony at the public hearing to be conducted by the Commission beginning March 29, 1978.

On February 23, 1978 the Financial Accounting Standards Board submitted to the Department of Energy a written response to a request for comments to assist the DOE in commenting to the SEC on whether the Commission should adopt the provisions of FASB Statement No. 19 as the uniform accounting practices that EPCA requires the SEC to develop. Mr. Donald J. Kirk, Chairman of the FASB, also testified at a related public hearing conducted by the DOE on February 21, 1978. Because the FASB's response to the DOE addresses issues that are germane to the SEC's request for comments, reference should be made to that response, which has been filed with the SEC under separate cover as part of the Board's response to Release No. 33-5892. Reference should also be made to Mr. Kirk's oral comments at the DOE public hearing, which are attached hereto as Appendix A.

#### Successful Efforts Is Preferable to Full Costing

In Statement No. 19, the Board has prescribed a single accounting method for all companies engaged in oil and gas producing activities by requiring a form of successful efforts accounting to be adopted retroactively for costs incurred in exploring for and developing oil and gas reserves.

A seventy-page "Basis for Conclusions" appendix to the Statement discusses the factors deemed significant by members of the Board in reaching the conclusions in the Statement, including alternatives considered and

reasons for accepting some and rejecting others. The Board's reasons for accepting successful efforts accounting and for rejecting full costing are stated in paragraphs 142 to 188 of that appendix. Briefly summarized, the reasons why the Board accepted successful efforts and rejected full costing are:

- Successful efforts accounting is consistent with the present accounting framework, under which costs that do not relate directly to specific assets having identifiable future benefits normally are not capitalized no matter how vital those costs may be to the ongoing operations of the enterprise.
- Financial statements should reflect, and not obscure, risk and unsuccessful results, and the successful efforts method enables investors and lenders to observe the impact of the risks inherent in oil and gas producing activities on a company's results of operations from period to period.
- The successful efforts method has not impeded the ability of oil and gas producing companies (particularly, as some have alleged, small independent producers) to raise capital to finance their exploration activities. The Board found that many independent oil and gas producers using the successful efforts method have competed successfully and have conducted effective exploration and production programs that they are able to finance through a variety of capital sources -- and have done so for years, long before the use of full costing became popular in the late 1960s.

- The "cover" concept inherent in the full costing method is inconsistent with the present accounting framework. Indeed, even though three of the FASB's seven members dissented for various reasons to the issuance of Statement No. 19, none of the assenting or dissenting members of the Board considered it appropriate to capitalize costs of exploration efforts in a geological area in which no reserves are found simply because the company previously discovered or purchased valuable reserves in an unrelated geological area.
- Successful efforts accounting is widely followed in mining and extractive industries other than the oil and gas industry. Requiring it for oil and gas producing companies is likely to bring about greater financial statement comparability of companies in all extractive industries.
- The successful efforts method conforms to the "immediate recognition" principle of the "matching concept," by which costs are associated with the current period as expenses if they provide no discernible future benefits when incurred or, if previously capitalized, they no longer provide discernible future benefits.
- Contrary to the contention of some, full costing does not approximate
   current value on the balance sheet. Both full costing and successful
   efforts costing measure costs incurred, not the values of reserves
   discovered.

- The ability to manage earnings, by accelerating or delaying the incurrence of costs or the determination of whether a project is a success or a failure, is not unique to successful efforts accounting; it is inherent in the transaction-oriented accounting framework used by all companies in all industries. Indeed, full costing itself may be viewed as a method for averaging reported earnings over long periods of time. Even if accounting results were to influence some managers' decisions, it does not follow that accounting standards should be designed to accomplish or prevent an action by management. That type of accounting standard would require a judgment by the Board as to which potential actions are desirable and which are undesirable. Accounting should even-handedly report economic actions taken, regardless of motivation. Accounting should not obscure the effect of actions and events in order to prevent what some believe to be "uneconomic" actions.
- The successful efforts method as the single, uniform method adopted in Statement No. 19 will foster fair and effective competition in the capital markets (1) by providing investors, lenders, and other suppliers of capital with comparable financial data prepared objectively and even-handedly and permitting consistent analysis of risks and rewards; (2) by relieving the capital markets of the anticompetitive burdens of unreliable, noncomparable, inconsistent, and subjective financial data; and (3) by eliminating inequities affecting allocation of capital resources to and among oil and gas producers resulting from inadequate and misunderstood financial data.

#### Energy Supply and Competition Issues

In the course of its deliberations that led to Statement No. 19, the FASB assessed possible economic consequences, including possible adverse effects on aspects of energy supply and competition. Because energy supply and competition were the two primary matters toward which the Department of Energy directed its recent inquiry, the FASB's response to the DOE in connection with that inquiry (filed separately with the SEC in response to Release No. 33-5892) discusses aspects of the energy supply and competition issues at length. To summarize what is stated there, the weight of the evidence before the Board was that independent oil and gas producing companies using successful efforts accounting can and do compete successfully and conduct effective exploration and production programs that they are able to finance through a variety of capital sources. The accounting change to successful efforts prescribed by Statement No. 19 has no effect on, and in no way alters, any company's cash flows; the value of its oil and gas reserves; its aggregate costs of exploration, development, or production; oil and gas pricing or other marketplace characteristics; the prospects of finding commercially recoverable quantities of reserves when a well is drilled or the success or failure of other exploratory and development activities; or the amount of the company's income tax payments. Thus it is questionable whether a change from the full cost method to the successful efforts method will have the severe effects that some have predicted and, indeed, the Board believes that by providing for uniform, reliable financial information on which investors and lenders can make informed decisions Statement No. 19 will facilitate competition

in the nation's capital markets. Further, as noted in the Board's response to the DOE, while the 1975 Amendments to the Securities Acts require the SEC to consider the impact of its rulemaking on competition, they do not require — as some have asserted — that in all cases the Commission must identify and adopt the least anti-competitive rule. Congress expressly rejected a "least anti-competitive" standard for Commission rulemaking.

#### Capital Availability Issues.

Many questions were raised, during the course of the Board's work on Statement No. 19, as to whether a prohibition of the full cost method would have an effect on the availability of capital to finance oil and gas exploration and development activities, particularly with respect to small and newly formed exploration companies. The Board focused on those questions at great length, not only relying on the information presented to the Board in the letters of comment on the FASB Discussion Memorandum, the testimony at the public hearing, the written comments on the Exposure Draft, and research studies and other data published by others, but also sponsoring three research projects dealing directly with capital availability to oil and gas companies to confirm information otherwise made available to the Board in connection with the project. Briefly summarized, the results of the three studies are:

a) Interviews with 24 bank loan officers, bank trust officers, securities underwriters, security analysts, and a bond rating officer, all of whom had long experience in the oil and gas industry, revealed that the method of accounting would not affect the majority of interviewees' investment and credit decisions regarding oil and gas producing companies.

- b) A study of the effect of the Board's Exposure Draft on the market prices of common stock issued by both full cost and successful efforts companies did not find statistically significant evidence that issuance of the Exposure Draft affected the market prices of securities issued by the full cost companies as compared to those of the successful efforts companies, except for some possible effect on the full cost companies during the week preceding and the week of issuance of the Exposure Draft, but the market soon adjusted, and evidence of a permanent or lingering effect was not found.
- relatively small and medium sized, publicly traded, successful efforts companies, most of which had raised capital externally during the past 10 years from public issues of equity or debt securities, private placements, borrowings, and other sources, found that none of the executive officers surveyed felt that the company's use of successful efforts accounting had hindered its ability to raise capital.

The Directorate of Economic and Policy Research of the Securities and Exchange Commission undertook a study of the effect of the FASB Exposure Draft on stock prices, similar in nature to the FASB study described in (b) above and with virtually identical findings -- an initial adverse impact of the Exposure Draft on full cost companies, with a subsequent relative price recovery. The SEC study concluded that

"the evidence is weak in support of the alternative statement that FC companies suffered a permanent impairment of their capital raising ability as a result of [issuing the Exposure Draft]." The FASB has sponsored similar research related to the impact of its final Statement No. 19 on stock prices. The results of that research are consistent with the earlier findings with respect to the Exposure Draft. A copy of the research report is attached hereto as Appendix B.

Not only do the research studies all indicate that use of the successful efforts method will not prevent or inhibit small oil and gas exploration companies from raising capital, the fact is that a large majority of small, independent exploration companies already use a form of the successful efforts method, have done so for years, and have been able to raise the capital they needed to finance their exploration and production activities:

Fact: A great many of the estimated 10,000 privately owned exploration companies in the U.S. prepare their financial statements (which are often given to bankers, knowledgeable individual investors, and other sources of capital) by the same accounting practices used to determine taxable income for federal income tax purposes -- and income tax accounting is a variation of successful efforts accounting, indeed a relatively strict form of that method.

Fact: Many of the several hundred small publicly owned oil and gas exploration companies follow the successful efforts method. Surveys indicate that successful efforts companies are around 40 percent of the small public

exploration companies. Apparently those small successful efforts companies can and do compete Viably in the nation's public capital markets.

Fact: Full costing began to be adopted by a sizable number of companies only during the late 1960s. A study sponsored by a group of full costing petroleum companies identified only one instance of its use prior to 1960. Before the full cost method was conceived, all oil and gas companies raised capital with financial statements prepared on the successful efforts method.

Use of the successful efforts method is unlikely to present a barrier to entry of new companies into the oil and gas exploration industry for two reasons: First, research conducted by the Board and by the U.S.

Department of Commerce shows that those who supply capital to companies in the development or start-up stage fully understand the special circumstances of those companies, and their investment decisions are not affected by the possibilities that the companies' financial statements will report operating losses and cumulative deficits. Second, if a reserve value ceiling on capitalized costs is an essential condition for use of full costing, as nearly all of its proponents indicate, except for those new companies lucky enough to find large quantities of proved reserves in their initial exploration efforts or that purchase "covering" interests in proved properties, it seems likely that many new exploration companies will report losses and deficits under full costing as well as under successful efforts costing.

Several non-oil-and-gas parent companies that have oil and gas exploration subsidiaries or divisions said, in their responses to the Board's requests for comment, that investors do not regard their company as an oil and gas company and thus would not understand the fluctuations of reported earnings or losses that might result from successful efforts accounting. Those companies therefore urged retention of full costing for their oil and gas subsidiaries or divisions. In the Board's view, however, financial statements must provide information about risks, not obscure them. By having chosen to seek the rewards of exploring for oil and gas, these companies have assumed the associated risks. Investors seek a return on their capital commensurate with the risks involved, and those who supply capital for a high-risk activity such as oil and gas exploration likely demand a higher return than for capital invested in a less risky activity. If, as some advocates of full costing assert, use of that method allows companies to raise capital at a cost lower than the cost to their successful efforts competitors, then to portray an absence of risk when in fact it exists would result in financial statements that misinform investors.

Oil and gas companies must compete for capital in the nation's capital markets with companies operating in other industries. Companies seeking capital offer varying degrees of risk and opportunity to those supplying capital. Although individual investors and lenders differ among themselves with regard to the risks they are willing to accept, all demand a higher expected return for accepting higher risk.

Those with capital to supply look to financial statements as an important source of information about companies' risks and returns. That is why, in the Board's judgment, financial statements must provide information that helps

investors assess risks and returns. If a company's operations are subject to economic influences that are manifested in fluctuating earnings, financial statements should report those fluctuations and not obscure them. Similarly, if the economic influences that affect a company's operations are manifested in only minor fluctuations, that too should be portrayed. If financial statements obscure differences in risk or create the appearance of differences where none exist, it may contribute to channeling capital into companies whose expected returns are not commensurate with the risks involved -- in effect subsidizing the cost of capital to some companies at the expense of other companies.

In the Board's judgment, a principal defect of the full cost method is that it tends to obscure risks and failures by capitalizing the costs of unsuccessful property acquisitions and unsuccessful exploratory activities as part of the costs of successful acquisitions and activities that occurred in earlier years in other parts of the world. Successful efforts, on the other hand, highlights those failures and risks inherent in oil and gas exploration by charging currently to expense acquisition and exploration costs known not to have resulted in reserve discoveries. Financial statements prepared in conformity with the provisions of Statement No. 19, including detailed disclosures required by the Statement of capitalized costs and costs incurred in oil and gas producing activities (to provide an indication of effort) and of reserve quantities and changes in them (to provide an indication of accomplishment) will give investors important information about success as well as failure and risk.

In short, the weight of evidence before the Board indicates that the method of accounting prescribed by FASB Statement No. 19 will not prevent or inhibit the ability of small oil and gas exploration and production companies to raise capital and will not prevent new companies from entering the field. Quite to the contrary, the single, uniform method of accounting prescribed by Statement No. 19 will foster fair and effective competition in the capital markets (1) by providing investors, lenders, and other suppliers of capital with comparable financial data prepared objectively and even-handedly and permitting consistent analysis of risks and rewards; (2) by relieving the capital markets of the anti-competitive burdens of unreliable, noncomparable, inconsistent, and subjective financial data; and (3) by eliminating inequities affecting allocation of capital resources to and among oil and gas companies.

Those who urge retention of full costing because of a perceived benefit in terms of lower cost of capital or other more favorable terms under which capital is supplied are not arguing accounting issues; rather, they would use financial accounting as a means of providing an economic subsidy to a certain class of companies. Even if this perceived benefit were a reality, accounting is not an efficient or appropriate means of pursuing national economic or policy goals. To the extent that increased exploration for oil and gas reserves and the availability of increased capital resources to finance oil and gas exploration and production are perceived as national goals, the likelihood of their achievement will be substantially increased if they are acted on directly by national economic planners and policymakers, not by the possible indirect or residual effect of financial reporting to

investors and creditors. In the Board's judgment, investors and creditors are not well served, and an untenable burden is placed on the nation's capital markets, if even-handedness is abandoned as a fundamental tenet of financial accounting and reporting.

#### The Commission Should Accept the Determinations of the FASB in Statement No. 19

The successful efforts versus full costing controversy has been debated by the accounting profession and by business and government for nearly fourteen years. Many research studies have been undertaken, much data gathered, and all of the arguments stated and restated. The FASB's efforts leading to issuance of Statement No. 19 were impartial and extensive; much Board attention was devoted to economic consequences, including possible effects on aspects of competition, energy supply, and the nation's capital markets; interested parties were given ample opportunities to comment, to submit data, and otherwise to participate in the standard-setting process, and hundreds took advantage of those opportunities; appropriate government agencies were kept informed —and their input was solicited — at every step along the way.

A final determination has now been reached by the Board.

The FASB has fully met its responsibilities under its By-Laws and Rules of Procedure, under the Energy Policy and Conservation Act of 1975, and under the SEC's long-standing administrative policy of looking

to the private sector for establishment of financial accounting and reporting standards. The burden of those seeking to reject the conclusions of Statement No. 19 is a substantial one.

The FASB is confident that the Securities and Exchange Commission, on review of its record in File No. S7-715, will conclude that it may rely on Statement No. 19 in meeting its obligations under the Energy Policy and Conservation Act and under the Federal Securities Laws.

RESPECTFULLY SUBMITTED,
FINANCIAL ACCOUNTING STANDARDS BOARD

#### DEPARTMENT OF ENERGY HEARING

APPENDIX A

ORAL COMMENTS OF DONALD J. KIRK (AS DELIVERED) FEBRUARY 21, 1978

See filings with the Department of Energy included herein for a copy of contents of this appendix.

# REPORT 3 ON THE EFFECT OF STATEMENT 19

# FINANCIAL ACCOUNTING AND REPORTING BY OIL AND GAS PRODUCING COMPANIES

ON:

THE RETURNS OF OIL AND GAS COMPANY SECURITIES

Prepared by
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With the Cooperation and Assistance of Abbie J. Smith
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- 1.1 <u>Objective</u>: This study was designed to provide data on the information effect, if any, related to the issuance of FASB Statement 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies." The information effect is examined by focusing on the market returns (price change plus dividends) for firms in the oil and gas industry.
- 1.2 <u>Research Method</u>: Firms are initially separated by their financial reporting method prior to the issuance of FASB Statement 19. Two categories of firm-reporting methods are used. They are full costing (FC firms) and successful efforts (SE firms).

We begin by fitting a simple, one independent variable, regression model to the returns for each security in the sample for the period October 8, 1976 to October 7, 1977. This period is called the estimation period. The regression equation for the estimation period yields each security's estimated return as a function of the market return. The difference between the estimated return and the actual return is called the residual. This residual is due to factors other than the market return and to measurement errors. Theory tells us that these residuals will average out to zero.

We then use the regression equation for each stock as determined for the estimation period to estimate each security's returns for the weeks ending October 14, 1977 to February 3, 1978. This 17-week period is called the test period. The predicted returns for each security in each week of the test period are used together with the actual returns to compute the residuals for the test period weeks.

If there has been no change in the return behavior of the securities from the estimation to the test period, the test period residuals should also average zero. If there has been a change, we can compare the behavior of the residuals for the FC firms with those of the SE firms to establish whether there was a selective effect. Such a selective effect would be evidence of an information effect attributable to the issuance of Statement 19.

- 1.3 <u>Research Conclusions</u>: The tests we conducted do not show a significant information effect from the issuance of FASB Statement 19 over the 17-week test period. Statistical significance is measured at the .05 probability level.
- 1.4 <u>Limitations to the Research</u>: The limitations to the conclusions in this report are discussed in Section 5.

1.5	Outline of Report:	<u>Page</u>
	1. Summary	1
	2. Sample Selection	3
	3. Description of Research Method	4
	4. Results	9
	5. Limitations	16
	Exhibit A: Samples	19

#### 2. SAMPLE SELECTION

2.1 The sample selection for this report began with the firms used for Part 2 of the report <u>Financial Accounting and Reporting by Oil and Gas Producing Companies: Report on the Effect of the Exposure Draft on the Returns of Oil and Gas Company Securities.</u> The sample selection process is thoroughly discussed in Part Three of that report and will not be repeated here.

However, due to the change in the estimation period, each firm in the original list potentially available for study was examined to check for data availability level of revenues, and any change in reporting method during the study period. This analysis produced the following two samples consistent with those used in Part 2 of the previous report.

- Sample A: 56 Companies: (34 Full Costing; 22 Successful Efforts)

  These firms are those initially identified as heavily engaged in exploration and production activities (EP firms).
- Sample B: 119 Companies: (76 Full Costing; 43 Successful Efforts)

  These firms need not be engaged primarily in EP activities but must not have revenues greater than one-billion dollars during the last completed annual reporting period for which information was available. Sample B includes all firms in Sample A.

The firms in each sample, and with their reporting-method classification indicated, are given in Exhibit A.

2.2 Statement 19 deals with exploration and production activities of oil and gas firms. The returns of these firms should be related to their production-investment and/or financing decisions. An information effect of the Board's pronouncements on financial reporting for oil and gas producing companies might, therefore, be expected to have its greatest impact on these firms. For this reason we have identified firms heavily involved in exploration and production activities. These firms are included in Sample A.

#### DESCRIPTION OF RESEARCH METHOD

- 3.1 The research method used here assumes that capital markets are efficient in the semi-strong form. This means that these markets reflect publicly available information quickly and unbiasedly. The issue we address is whether or not the issuance of FASB Statement 19 provided information to the market. In particular, we are concerned with a differential effect of any information signal on the returns for FC versus SE firms.
- 3.2 This study will not offer any insights to the position that the impact of a required reporting change will only become evident when the income effects become public, with the issuance of the annual reports. This is the case even if we are unable to establish a permanent effect on returns due to the announcement of financial reporting changes contained in the Statement. However, under an efficient market such an effect would be expected at or around the time the Statement was issued rather than at a later time.

Two qualifications to the above comments on timing effects are in order. First, the effect of the information on reporting changes may have been assimilated into the market when the Exposure Draft, which was the first formal statement of the Board's position, was published. Our previous work reported in the study cited in Section 2.1 did not find statistically significant evidence of an effect at that time. It is possible, however, the effect took place even earlier. This issue is discussed, but not resolved, in the earlier study. (See the limitations section of the earlier study.)

Second, Statement 19 provides for new disclosures in financial statements. These disclosures, if they provide information not presently available to the market from other sources, could be reflected in returns when future reports are issued. Indeed the reporting requirement may cause the production of this information, to the extent it is not presently available, on a more timely basis from other private sources.

- 3.3 The research method used in this study is discussed in detail in Patell,

  James, "Corporate Forecasts of Earnings per Share and Stock Price Behavior:

  Empirical Tests," Journal of Accounting Research (Autumn 1976), pp. 246-276.
- 3.4 Two time periods are used in this analysis. They are:
  - (1) 10-8-76 to 10-7-77, the estimation period which provides one year of weekly return data ending with the week prior to the test period.

- (2) 10-14-77 to 2-3-78, the test period including the issue week and the eight-week period before and after the issue week. The eight-week period prior to the issue week was included to allow for any leakage of information to the market before the Statement was formally issued.
- 3.5 The research procedure can be summarized by the steps described below for either of the two samples.
  - 3.5.1 Based on the weekly return data for each stock during the estimation period, the ordinary least-squares regression equation is estimated as a function of the market return.

$$R_{it} = a_i + b_i R_{mt} + e_{it}$$
 (1)

where R<sub>it</sub> is the return on stock i in week t,

 $R_{mt}$  is the return on the market in week t,

eit is the error or residual term, and

 $\mathbf{a_i}$  and  $\mathbf{b_i}$  are the regression coefficients specific to stock i.

The return measure used in this study is the natural logarithm:

$$R_{it} = In [(P_{it} + D_{it}) + P_{it-i}]$$

where  $P_{it}$  is the price of stock i in period t, and

 $\ensuremath{\text{D}_{\text{it}}}$  is the dividend on stock i in period t.

The natural logarithm is used since it gives the continuously compounded rate of return.  $R_{\text{mt}}$  is defined in an analogous way.

3.5.2 The values of the regression coefficients ( $a_i$  and  $b_i$ ) found in step 3.5.1 are used together with estimates of the market return ( $R_{mt}$ ) during the test period to forecast returns for the test period. These forecasted returns are then compared with the actual returns during the test period to calculate prediction

errors. Formally, the prediction error, u<sub>it</sub>, for each firm in each week of the test period is given by:

$$u_{it} = R_{it}' - (a_i + b_i R_{mt}')$$
 (2)

where  $R_{it}^{i}$  is the actual return on stock i in week t,

 $R_{mt}^{'}$  is the return on the market in week t of the test period,  $a_i$  and  $b_i$  are based on the calculations in equation (1) for the estimation period, and

 $(a_i + b_i R_{mt}^{'})$  is, therefore, the forecast return.

- 3.5.3 The residuals from the estimation period (the eit's) have, by construction, an expected value of zero. The variance of these residuals can also be calculated for each firm over the estimation period. If there were no change in the level and variability of returns in the test period relative to the estimation period, then the distribution of the residuals estimated for the test period, the uit's, should show no significant change from the distribution of the eit's.
- 3.5.4 The change in the distribution of residuals, if any, of the FC and SE firms from the estimation period to the test period is tested for significance. If there is no change in the distribution of either set of residuals, we would conclude that there has been no information released to the market (including any from issuance of Statement 19) which altered the return behavior of these firms' securities.

On the other hand, a difference in the return distribution between the estimation and test periods indicates that one or more events occurred which impacted on the securities of the firms involved. We then must test for a differential effect between the change, if any, in the distrubution of returns for the FC firms and the change, if any, in the distrubution of returns for the SE firms. Any difference in response of the FC firms relative to that for the SE firms would presumably be due to the differentiating factor affecting only the FC firms, namely the information relating to the proposed accounting change. For example, we might observe a decline in the mean return for FC and for SE firms. The issue of concern would be whether the decline for the FC firms is significantly larger than that for SE firms.

- 3.5.5 Statistical tests are run for each week of the test period on the mean and variance of the standardized residuals. A cumulative test is also run on the mean value over the total test period, the eight weeks before the Statement was issued, and the nine following weeks including the issue week. If a change in the distribution of returns for FC and SE firms is found, the difference between the two sets of firms must be tested.
- 3.5.6 In determining the regression equation for the estimation period, the five weeks of returns surrounding the annual earnings announcement are omitted. In an efficient market, security returns will respond to the information content of the annual earnings announcement. Failure to allow for this effect would result in a larger value for the variance of the residuals and this would in turn bias our tests toward finding no information effect attributable to the

issuance of the Statement. The five weeks of returns surrounding an annual earnings announcement were also deleted from the test period.

#### 4. RESULTS

4.1 The mean values of the test-period residual are presented in Tables 1 and 2 for each of the samples over the test period. Each mean value in the Tables is the average for the week over all firms with the indicated reporting method. The individual values comprising these means have been standardized so that their expected value is zero and their variance is one if there has been no change in the return distribution from the estimation to the test period. The probability of obtaining a value as extreme as the one obtained purely by chance from a population with a zero mean is given in the adjoining column. A zero mean is consistent with no change in the behavior of the average residual returns between the estimation and the test period.

Also in each Table we have included the value of the aggregate average standardized residual. This value cumulates the effect across firms and weeks.

4.2 <u>Sample A</u>: The more important figures in Table 1 are the final ones (the aggregate values) which indicate the cumulative effect over the indicated segments of the test period. In particular the aggregate value for the total seventeen-week period is of primary interest. These numbers are negative suggesting that both sets of firms did worse, relative to the market, in the test period than in the estimation period. However, only the FC value is significant. We also note that the aggregate value is not significant for either subsegment of the test period, although again all values are negative.

#### TABLE 1 TESTS FOR A CHANGE IN THE MEAN VALUE OF RETURNS SAMPLE A

	F. C. Firms		S. E. Firms	
	Average Probability		Average Probability	
	Standardized	of more	Standardizęd	of more
Week	Residuals	Extreme Value <sup>2</sup>	Residuals	Extreme Value <sup>2</sup>
1	4775	.008	4253	.056
2	3104	.077	2124	.342
3	1706	.337	3049	.162
4	0621	.726	+.0535	.803
5	+.4734	.008	+.3808	.080
6	+.1478	.407	2514	.250
7	2275	.201	+.3559	.110
8	+.0949	.596	+.1696	. 447
9	+.1425	.424	0186	.936
10	1913	.285	+.0787	.726
11	0719	.689	3235	.156
12	2409	. 184	0452	.841
13	5576	<.001	6675	.004
14	1096	.535	0601	.795
15	+.1372	. 447	+.1881	.435
16	0575	.764	1808	.441
17	+.0345	.857	+.1145	.631
Aggregate <sup>3</sup> 10/14/77- 12/2/77	1826	. 298	0798	.711
12/9/77- 2/3/78	3109	.077	2976	.171
10/14/77- 2/3/78	3530	.044	2657	.222

<sup>1.</sup> The Average Standardized Residuals correspond to  $\tilde{V}_{\mbox{\scriptsize t}}$  in Patell's paper. 2. Two-Tail Test

(no. weeks in test period) 1/2

<sup>3.</sup> Aggregate Ave. Std. Residual = (Sum of weekly ave. std. residuals) +

TABLE 2 TESTS FOR A CHANGE IN THE MEAN VALUE OF RETURNS SAMPLE B

( T	F	C Firms	S E Finns		
	Average	F. C. Firms Average   Probability		S. E. Firms Average   Probability	
	Standardized	of more	Standardized	of more	
Week	Residuals	Extreme Value <sup>2</sup>	Residuals	Extreme Value <sup>2</sup>	
1	3119	.011	2427	.124	
2	1946	.107	2077	.187	
3	2012	.097	4204	.007	
4	0618	.610	0015	.992	
5	+.3459	.005	+.4189	.008	
6	+.0644	. 596	0753	.638	
7	0003	.998	+.2811	.085	
8	+.5367	<.001	+.3640	.029	
9 '	+.2335	.050	0667	.682	
10	2389	.043	0771	.638	
11	1965	.097	2955	.075	
12	1179	.322	0435	.795	
13	5997	<.001	3754	.022	
14	1051	.373	2140	.197	
15	+.2373	.049	0339	.841	
16	0701	.569	+.0574	.741	
17	+.0360	.779	+.2572	.162	
Aggregate <sup>3</sup> 10/14/77- 12/2/77	+.0919	. 435	+.0260	.865	
12/9/77 <b>-</b> 2/3/78	2885	.014	2642	.091	
10/14/77 <b>-</b> 2/3/78	1615	.168	1692	.276	

<sup>1.</sup> The Average Standardized Residuals correspond to  $\bar{V}_{\mbox{t}}$  in Patell's paper. 2. Two-Tail Test

(no. weeks in test period) 1/2

<sup>3.</sup> Aggregate Ave. Std. Residual = (Sum of weekly ave. std. residuals) ÷

Given the significance of the drop in mean return for the FC portfolio, we tested for a significant differential effect on FC firms as compared to SE firms for the total seventeen-week test period. We tested the difference between -.3530 and -.2657 for statistical significance. This test did not produce a significant result. Thus we do not find any basis to conclude that the issuance of Statement 19 had a differential effect on the returns of FC versus SE firms.

4.3 <u>Sample B</u>: The more important figures in Table 2 are also the final aggregate figures which test for changes in the mean returns of the two respective portfolios over the entire test period and two subperiods. The aggregate values are again negative for both portfolios for the total seventeen-week test period and for the subperiod beginning with the issuance of the Statement. These values are consistent with both sets of firms doing somewhat worse, relative to the market, in the test period compared to the estimation period. However, only the performance for the FC firms during the subperiod subsequent to Statement issue is significant.

Since the decline in mean return for the FC portfolio was significant for the subperiod beginning with the issuance of the Statement, we tested for a differential effect between the FC and SE portfolios. We tested the difference between -.2885 and -.2642 for statistical significance. The test was negative.

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Based on the aggregate mean return behavior over the test period, neither sample supports a differential effect of Statement 19 on the mean returns of FC versus SE securities. There is some evidence that the returns of FC firms were lower in the test period than in the estimation period, after allowing for market movements, but the observed lower returns on SE firms during the same period are such that our statistical tests do not support a finding of a differential effect.

An examination of the individual weeks indicates occasional weeks when significant return changes took place. The significant changes were generally negative, which is no surprise given the negative signs of the aggregate values. The only statistically significant positive change took place for Sample B in week 8, the week preceding issuance of Statement 19. Further, the positive change was significant for both portfolios in Sample B for this week. The other statistically significant changes show no clear relation to the issue week. Our results are consistent with a generally poorer performance of oil and gas mean security returns, relative to the market, during the test period as compared to the estimation period. But we are unable to support a differential effect when comparing the mean returns of FC versus SE security returns.

4.4 Tables 3 and 4 provide measures based on the average standardized squared residual by portfolio and by week. These values can be used to test for a change in the variance of returns. However, the test is valid as a direct test of increased variance only for those weeks where the test results in Table 1 (for Table 3) and Table 2 (for Table 4) are not significant. (See Patell page 258.)

Our data indicates four weeks of significant variance change for the FC portfolio in Sample A and none for the SE portfolio. However, three of these four cases represented decreases in the variance. For Sample B, there were again four weeks of significant variance changes for the FC portfolio and one for the SE portfolio. For this sample all of these changes represented decreases. Furthermore, none of the significant changes took place in or adjacent to the issue week. (For week 8 and Sample B, we can make no statement concerning the variance since the mean tests in Table 2 were significant.) We conclude, then, that the evidence here does not support a finding of an increase in variance of returns in the test period as compared

TABLE 3 TESTS FOR A CHANGE IN THE VARIABILITY OF RETURNS SAMPLE A

	F. C. Firms		S. E. Firms	
Week	Average Standardized Squared Residual	Probability of more Extreme Value <sup>2</sup>	Average Standardized Squared Residual <sup>1</sup>	Probability of more Extreme Value <sup>2</sup>
1	1.0900	.726 +	.5178	.131 -
2	1.0792	.749 +	.6014	.211 -
3	.6702	.197 -	.9173	.787 -
4	.3769	.014 -	. 7634	.447 -
5	1.1447	.569 +	.6386	.246 -
6	1.6605	.010 +	.6185	.222 -
7	. 4846	.043 -	.6840	.322 -
8	. 8505	.555 -	1.1667	.603 +
9	1.0642	.803 +	. 5532	.162 -
10	.9960	.984 -	.8362	.610 -
דו	1.1691	.509 +	.9418	.857 -
12	.8063	.453 -	. 7923	.529 -
13	1.2705	.289 +	1.9305	.005 <sup>3</sup> +
14	- 4659	.036 -	1.1865	.569 +
15	.7290	.294 -	. 3859	.075 -
16	1.0189	.944 +	1.0475	.889 +
17	.5326	.091 -	. 3621	.064 -

The Average Adjusted Standardized Squared Residuals correspond to the Ut values in Patell's paper.
 Two-Tail Test. The sign indicates increase or decrease.
 Means test significant in Table 1. No implications for the variance of

returns can be made for this week.

TABLE 4 TESTS FOR A CHANGE IN THE VARIABILITY OF RETURNS SAMPLE B

	F. C. Firms		S. E. Firms	
Week	Average Standardized Squared Residuall	Probability of more Extreme Value <sup>2</sup>	Average Standardized Squared Residual	Probability of more Extreme Value <sup>2</sup>
1	.9366	.719 -	.6136	.087 -
2	1.1162	.503 +	.5910	.070 -
3	.6896	.074 -	1.4584	.040 <sup>3</sup> +
4	. 4318	<.001 -	1.0084	.968 +
5	1.0646	.711 +	. 9898	.960 -
6	1.2943	.091 +	. 6600	.142 -
7	.6365	.035 -	.7283	.246 -
8 /	1.5129	.003 <sup>3</sup> +	1.4947	.038 <sup>3</sup> +
9	1.0429	.803 +	.7220	.234 -
10	.7720	.177 -	.7000	.208 -
11	.9609	.818 -	.9560	.849 -
12	.7406	.129 -	.9506	.834 -
13	1.2668	.114 +	2.0360	<.001 <sup>3</sup> +
14	7039	- 080	.8868	.631 -
15	.6727	.057 -	.4192	.019 -
16	.6445	.046 -	1.0116	.960 +
17	.5340	.011 -	.8903	.674 -

The Average Adjusted Standardized Squared Residuals correspond to the Ut values in Patell's paper.
 Two-Tail Test. The sign indicates increase or decrease.
 Means test significant in Table 2. No implications for the variance of

returns can be made for this week.

to the estimation period. If anything, our data suggest a tendency for the variability to be smaller, but the changes are not sufficiently numerous to be convincing. An attempt to test for a differential effect on the variance of FC versus SE firms is not called for.

4.5 The test period used was determined by the time when this report was needed. The symmetric period gives a nine-week period from the issuance of the Statement which is the same number of weeks used in the previous test of the Exposure Draft.

#### 5. LIMITATIONS

- 5.1 Given the specifications for inclusion in our samples, neither of those samples is exhaustive of all oil and gas firms. Hence the extrapolation of the conclusions of this study must be based on a belief that a sufficiently large segment of the universe of oil and gas producing firms is included and that the test results are sufficiently strong to overcome the potential effects of firms omitted from the analysis because of the procedures used to obtain the sample.
- 5.2 We examined Sample A because of the importance of EP activities in relation to the reporting issue addressed by Statement 19. Our definition of companies with a significant commitment to EP activity is arbitrary though we believe reasonable.
- 5.3 The accounting method in place was selected by the company rather than assigned randomly as would be the case in a true experiment. This may introduce a selection bias into the results that is related to some other variable which differentiates the FC firms from the SE firms. Size or diversification is one possibility. We have examined this issue previously in earlier phases of this

total project. The reader is referred to Section 6.4 of Part 1 and Section 5.3 of Part 2 of the study referred to in Section 2.1 of this study. We shall also not comment further in this report concerning the exclusion of dividends from the market term. (See Section 5.6 of Part 2). We believe this to be a relatively minor point.

- 5.4 This research relies on the efficiency of capital markets. To date, the studies supporting market efficiency have been based on the NYSE and ASE. Our samples include a number of firms whose stocks are traded OTC. Relatively few studies of market efficiency in the OTC market are presently available. Professor Foster, in his study involving the securities of insurance firms, 90% of which are traded in the OTC market, found his his data to be consistent with market efficiency. (G. Foster, "Earnings and Stock Prices of Insurance Companies," The Accounting Review, October 1975.)
- 5.5 Failure to find an information effect does not mean that an effect may not have taken place earlier. The previous parts of this study were unable to find an effect due to issuance of the ED.

The most likely time for an earlier response would seem to be the issuance of the APB Committee on Extractive Industries' memorandum in the Fall of 1971, which for the first time explicitly put a committee of an authoritative accounting standards-setting body on

record as supporting the successful-efforts method. Whether there was information in this event has been examined in two studies which reached opposite conclusions.

Release of information at an earlier date could explain the failure of the market to react to information in more recent Board announcements. If so, there is no reason to expect a further reaction. On the other hand, the failure of the market to respond to the APB's memorandum would be consistent with the failure of that announcement to convey information to the market. In neither case are the results from these other studies inconsistent with our recent findings.

We also note that if the market did respond to the APB memorandum, it might have reversed that response (by treating the securities of full cost firms favorably relative to SE firms) if the Board had elected to reverse the APB memorandum position by permitting full-cost reporting.

5.6 In the case of some firms in our sample, earnings announcement dates could be expected within a three-week period following the ending date for this study. In such cases one or more weeks in the test period would be omitted. We assumed firms that had not reported by February 10 would report on the same date as in the previous year. While the actual announcements will produce minor alterations for this reason, the effect will be minimal and will not change our conclusions.

Patz, D., and J. Boatsman, "Accounting Principle Formulation in an Efficient Markets Environment," <u>Journal of Accounting Research</u> (Autumn 1972), pp. 392-403; and O'Connor and Collins, "Full Cost vs. Successful Efforts Accounting in the Oil and Gas Industries: A Closer Look at the Potential Market Consequences," forthcoming in The Accounting Review.

#### EXHIBIT A

#### SAMPLES\*

## NYSE Companies

Full-Cost

Apache Corp.

Belco Petro.

Burns, R. L.

Buttes G & O

Entex Inc.

Falcon Seaboard Inc.

Florida Gas Co.

Inexco Oil\*

Mesa Petro.\*

Natomas Co.\*

Pacific Petro.

Panhandle Eastern Pipeline

Patrick Petro.

Texas Int'l.

Texas 0 & G

Wilshire Oil Texas

Successful Efforts

APCO Oil

Clark Oil & Refining

Gen. Amer. Oil-Texas\*

Helmerich & Payne

LA Land & Expl.\*

Mountain Fuel Supply

Quaker State 0 & Ref.

Sabine\*

Southern Natural Res.

Southland Roy.\*

Superior Oil\*

Texas Gas Transmission

Woods Petro.\*

\*An asterisk after the company name indicates that the firm is also included in Sample A. All firms listed in this Appendix belong to Sample B.

#### EXHIBIT A continued

## ASE Companies

Full-Cost

Adobe 0 & G

Aguitaine Co.--Canada\*

Asamera Oil

Ashland Oil Canada

Austral Oil\*

Barnwell Industries\*

Bow Valley Ind.

Canadian Homestead Oils\*

Canadian Merrill\*

Canadian Occidental

C & K Petro.\*

Consolidated 0 & G\*

Damson Oil\*

Delhi Int. Oil

Dome Petro.

Flying Diamond Oil

General Exploration Co.

Great Basins Petro.

Home Oil\*

Houston 0 & M\*

Husky 0il

Juniper Petro.\*

McCulloch Oil Corp.

Mitchell Energy & Deve.\*

North Amer. Royalties

Successful Efforts

Baruch Foster\*

Canadian Superior Oil\*

Crown Central Petro.

Crystal Oil

Felmont Oil\*

Hudson's Bay 0 & G\*

## EXHIBIT A continued

# ASE Companies cont.

# Full-Cost

Successful Efforts

North Canadian Oils

Numac 0 & G

Petro-Lewis\*

Prairie Oil Roy.

Scurry-Rainbow 0il

Shenandoah 0i1\*

Total Petro. (N.A.)

Universal Res.\*

Wainoco Oil\*

#### EXHIBIT A continued

## OTC Companies

Full-Cost Successful Efforts

Amarex\* Altex Oil

American Pacific Int.\* Beard 0il\*

Argonaut Energy\* Discovery Oil\*

ARGO Petro.\* Echo Oil\*

Arkansas Western Gas Energy Res. Group\*

Brock Expl. Equity 0il\*

Callon Petro. Flynn Energy

Dorchester Gas\* Gulf Energy & Devel.

Dyco Petroleum\* Intercont. Energy

Forest 0il\* Maynard 0il

Galaxy Oil\* May Petro.\*

Hamilton Bros. Petro.\* MGF Oil

Invent Inc. Noble Affiliates

KRM Petro.\* Ocean Drilling & Exploration

Lear Petroleum Ocean O & G\*

LA Land Offshore Expl.\* Oxoco\*

McFarland Energy\* Pauley Petro.

McMoRan Explor. Petrol Ind.\*

Pogo Producing\* Premier Res.\*

Southern Union Prod. (Supron)\* Sunlite 0il\*

Summit Energy Texas American Oil

Triton O & G\* Tom Brown

Weatherford Int'l. Inc. Tomlinson Oil

Webb Resources Wiser Oil\*

Western Oil Shale Corp.

Westcoast Petro.

#### FINANCIAL ACCOUNTING STANDARDS BOARD

#### DEPARTMENT OF ENERGY

# FINANCIAL ACCOUNTING STANDARDS

FOR OIL AND GAS PRODUCERS

- Department of Energy Hearing, Oral Comments of Donald J. Kirk, Chairman of the Financial Accounting Standards Board (FASB), February 21, 1978
- II. Response of the Financial Accounting Standards
  Board to the Department of Energy's Request for
  Comments on FASB Statement No. 19, "Financial
  Accounting and Reporting by Oil and Gas Producing
  Companies", February 23, 1978
- III. Prepared "Testimony of Donald J. Kirk, Chairman, Financial Accounting Standards Board", as submitted to the Department of Energy on February 17, 1978 in respect to the "Public Hearings of Department of Energy", held on February 21 and 22, 1978 "To Consider FASB Statement No. 19, 'Financial Accounting and Reporting by Oil and Gas Producing Companies'."

# Financial Accounting Standards Board

HIGH RIDGE PARK, STAMFORD, CONNECTICUT 06905 | 203-329-8401



DONALD J. KIRK Chairman of the Board

February 23, 1978

Office of Regulations Management Box RF, Room 2214 Department of Energy 2000 M Street, N.W. Washington, D.C. 20461

Re: Financial Accounting Standards for

Oil and Gas Producers

Dear Sirs:

I am pleased to submit, on behalf of the Financial Accounting Standards Board, fifteen copies of the FASB's Response to the Department of Energy's Request for Comments on the FASB's Statement No. 19, "Financial Accounting and Reporting by Oil and Gas Producers".

My prepared testimony and oral remarks at the hearings on February 21, and the FASB's Response to the DOE's Request for Comments, are in that spirit of continuing liaison and cooperation that has marked the activities of the FASB, the Department of Energy, the Securities and Exchange Commission, and other regulatory and governmental bodies over the past two years. I wish to assure you that the Board is available to provide such further assistance as it can.

Despite the Notice of Inquiry's intent that the Department's hearing generate information and data in an atmosphere of inquiry and not as a judicial or evidentiary proceeding, I note that at least one person appearing in opposition to Statement No. 19 has viewed the inquiry as an adversary proceeding. Converting inquiries into adversary proceedings does not advance what I have regarded as basically a cooperative effort by all, including producers, to assist the DOE and the Commission in meeting their regulatory responsibilities.

Consistent with that viewpoint, neither the FASB nor its counsel submitted any questions to the presiding officer to be asked of any person testifying. Also, consistent with that viewpoint, I did not make any oral rebuttals nor do we intend to submit written rebuttals to the testimony or position papers submitted by others unless we think it appropriate after being specifically asked to do so by the Department.

The FASB completed its project on "Financial Accounting and Reporting by Oil and Gas Producing Companies" in December 1977 thereby fulfilling its various responsibilities. We hope that the Department will be supportive of Statement

No. 19 in any position that it might take in commenting to the Securities and Exchange Commission.

In my letter of January 9, 1978 to Mr. O'Leary, I stated the following:

"As we work together, I am sure we can assist the DOE in identifying issues about which it should be concerned. competitive and energy supply issues that you mention are very complicated even without considering financial reporting as a means of controlling or directing economic behavior. As a beginning point you probably will need to consider whether adjusting financial reporting to investors is an efficient means of controlling or directing economic behavior and secondly whether investor reporting standards should be designed for that purpose. Those are very fundamental issues and may be more important in the resolution of this matter than differences of opinion on the technical accounting questions."

The attached Response discusses aspects of the Board's work that should be helpful in your consideration of those fundamental issues.

Very truly yours,

Donald J. Kirk

(Enclosures)

#### DEPARTMENT OF ENERGY HEARING

ORAL COMMENTS OF DONALD J. KIRK, CHAIRMAN OF THE FINANCIAL ACCOUNTING STANDARDS BOARD (FASB)

FEBRUARY 21, 1978

From years of experience in hearing and, in some cases, giving testimony, I have learned that brevity subjects the testifier to the great risk of difficult questions. However, recognizing that this hearing is for your benefit, not mine, I am prepared to summarize briefly the position of the FASB and to take that risk -- assuming that you will insert my prepared testimony that was filed on February 17 into the transcript of this hearing.

In summarizing the two years of FASB effort that followed at least 12 years of effort by others, and to assist the DOE in determining the position it should take with the SEC, I would like to make the following 10 points:

POINT 1. The DOE Notice of Inquiry identifies three issues - competition, energy supply and information needs of the DOE. I believe you will find today and tomorrow that they all merge into a single, paramount question: Should there be a single method or alternative methods in the financial reporting of oil and gas producing companies? I encourage you to find out exactly where every testifier stands on that issue.

POINT 2. The FASB is independent. It has heard the arguments on all sides via extensive due process procedures and made a decision in favor of a single method for financial reporting purposes.

POINT 3. The FASB has consistently concluded that different accounting for the same facts and circumstances impedes comparability and consistency of financial statements and significantly detracts from their usefulness. In Statement No. 19 the Board concluded that the facts and circumstances surrounding the search for, development of, and production of oil and gas are essentially the same regardless of the size of a company or whether its securities are publicly traded. The Board further concluded that, far from being anti-competitive, mandating one accounting method will eliminate the burdens of inconsistency, noncomparability, and misunderstanding in the capital markets. By doing that, Statement No. 19 will foster competition in capital allocation by having all oil and gas producers reporting comparable data and therefore reflecting the risks inherent in exploration as objectively and evenhandedly as possible.

POINT 4. The decision of the FASB favoring successful efforts and requiring reserve quantity disclosures was not unanimous. But rejection of full cost accounting as it is practiced today, using either the world or the North American continent, for example, as cost centers, was unanimously rejected by the Board. Being the Board's most frequent dissenter, I would not dare attempt to paraphrase the dissenters' views and, therefore, suggest you read them in their entirety.

POINT 5. The effects of the accounting change on retained earnings and net income of a particular company are not, per se,

economic consequences. They are, however, a vivid demonstration of the results of having accounting alternatives.

POINT 6. The FASB has acknowledged many times the importance of earnings in investment decisions, particularly fluctuating earnings. (I refer you in particular to para. 153 of Statement No. 19.) The real issue is: What should earnings communicate? The FASB has consistently taken the position that to be useful, earnings should reflect differences in risk, not obscure them. Accounting standards should not be designed to take the peaks and valleys out of the periodic earnings of a high risk business or to facilitate the public offering of securities. In concrete terms, accounting standards should not be designed to make the earnings pattern of an oil and gas exploration company look like a public utility. Or, on the other hand, when a public utility gets into the oil and gas exploration industry, its financial statements should show the greater risks of that industry, not obscure them.

POINT 7. The conclusions in Statement No. 19 are based upon the entire record described in the Appendixes of that Statement. They are not dependent upon the findings of any particular research study. We encouraged Professor Dyckman to testify today, but not because his study was pivotal in our decision - because it was not. His presence was encouraged because his work is of the type referred to by the DOE in its Notice of Inquiry.

POINT 8. Research continues; I urge you to study it all.

In particular I recommend your careful study of the disclosures

that have and will result from compliance with the SEC's Staff
Accounting Bulletin No. 16 and those contained in other shareholder communications. Those disclosures about Statement No. 19
will help you assess the economic effect as distinct from the
accounting effect.

The Board has considered, and rejected at this time, value accounting for oil and gas reserves. The Board's recent hearings in its conceptual framework project have indicated that a great deal of work must be done, including experimentation, before current value accounting could, if ever, replace the historical cost system, whether in general or in specific industries. Further, the recent SEC proposal that contemplates supplementary disclosure of the present value of cash flow from future production of proved reserves can be viewed as a means of providing to shareholders value-oriented information. For those who object to the fluctuations in earnings caused by the successful efforts method, I can assure them, those fluctuations will be minor compared to those resulting from a value system. Also, as I understand the value proposals, they will require the recognition of unsuccessful costs as losses - in the same way as the successful efforts method does. It is only the full cost method that considers unsuccessful exploratory costs as assets.

POINT 10. Based on years of experience, hearings on a specific proposal result in an outpouring of the views opposed to that proposal. Those supportive often remain silent. However, in this case, the long record of the FPC, APB, FASB and now the DOE and SEC, when considered in their totality, assure you of information

on all sides of the issues. It is important that you consider all the information in those records.

In closing I want you to know that if anybody understands the difficulty of your position, it is the FASB. We have been there. But we did reach a conclusion, based on all the information we could gather, that there is a need for a single accounting method. We believe that the method and disclosures adopted by the Board, will, by fostering competition for capital, be in the public interest and be a starting point for your energy data base requirements.

As we have for two years since the enactment of EPCA, we continue to offer our assistance to you. In that respect, we will file a detailed position paper with the DOE on February 23rd. The remainder of my allotted time is for your questions.

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RESPONSE OF THE FINANCIAL ACCOUNTING STANDARDS BOARD
TO THE DEPARTMENT OF ENERGY'S REQUEST FOR COMMENTS ON
FASB STATEMENT NO. 19, "FINANCIAL ACCOUNTING AND
REPORTING BY OIL AND GAS PRODUCING COMPANIES"
February 23, 1978

The Financial Accounting Standards Board is pleased to respond to the Department of Energy's request for comments in connection with its public hearings, and to assist the Department in commenting to the Securities and Exchange Commission in respect of the FASB's Statement of Financial Accounting Standards No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies."

In its Notice of Inquiry, the Department of Energy stated that its comments to the Commission would be directed to the impact of adoption of Statement No. 19 on:

- 1. Competition in the oil and gas production sector;
- Oil and gas exploration, development, and production -- i.e., energy supply; and
- 3. The Financial Reporting System being developed.

The FASB considered and addressed these and other issues in Statement No. 19, and reached conclusions on the basis of extensive and comprehensive information and data. For the reasons included in the Statement and as discussed in this response, the FASB respectfully urges the Department of Energy to be supportive of Statement No. 19 in any position it might take in commenting to the Securities and Exchange Commission.

#### I. AN OVERVIEW IN PERSPECTIVE

Following two years of extensive study and evaluation, on December 5, 1977 the Financial Accounting Standards Board (FASB or Board) issued its Statement of Financial Accounting Standards No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies," effective for financial reports beginning in 1979. The Board issued Statement No. 19 under its authority to establish and improve financial accounting and reporting standards, and also to assist the Securities and Exchange Commission (Commission) in carrying out its obligations as contemplated by Congress under the Energy Policy and Conservation Act of 1975 (EPCA) and under the Federal Securities Laws.

method for all companies engaged in oil and gas producing activities by requiring a form of "successful efforts" accounting to be adopted retroactively for costs incurred in exploring for and developing oil and gas reserves. Specifically, Statement No. 19 requires, among other things, that exploration costs that do not result in discovery of commercial quantities of oil and gas reserves shall be charged to expense. Statement No. 19 thus proscribes the myriad of "free choice" accounting alternatives, including the many variations of both the "full cost" and "successful efforts" methods presently

found in practice, that have undermined the reliability, comparability, and utility -- and thus credibility -- of financial and data reporting by oil and gas producers for years.

Three of the FASB's seven members dissented for various technical reasons to the issuance of Statement No.

19. However, all of the FASB's members, including those dissenting, rejected the "full cost" method — that is, capitalizing the costs of exploration efforts in geological areas where no reserves are found, simply because the reporting entity previously discovered valuable reserves in some other, unrelated geological area.

The Board concluded that a principal defect of the full cost method is that it tends to obscure risk and failure of unsuccessful exploratory activities.\* Successful efforts, on the other hand, highlights those failures and the risks inherent in oil and gas exploration, by charging currently to expense exploration costs known not to have resulted in the discovery of reserves. By contrast, the full cost method considers "unsuccessful costs" to be assets.

<sup>\*</sup> The Board's many reasons for accepting successful efforts and rejecting full cost are summarized in paragraphs 128-132 and 142-188 of Statement No. 19. The Board's reasons for rejecting "discovery value" and "current value" accounting are summarized in paragraphs 133-141.

In Statement No. 19 the Board viewed discovery of oil and gas reserves as the critical event for determining a producer's success or failure, and for investors, lenders and other capital suppliers in assessing risks and rewards in their investment and credit decisions.

The Board recognized that neither full cost nor successful efforts reflects success at the time of discovery, since as a consequence of historical cost accounting both methods report success when production is sold. Therefore, to provide information about success as well as failure, Statement No. 19 requires disclosure of capitalized costs and costs incurred in oil and gas producing activities (to provide an indication of effort) and of reserve quantities and changes in reserves (to provide an indication of accomplishment).\*

In prescribing successful efforts as the single accounting method for oil and gas producers, the FASB assessed the information and data made available to and obtained by it and reached conclusions on possible economic consequences, including possible adverse effects on aspects of energy supply and competition. In brief, the Board did not find information

<sup>\*</sup> In Securities Act Release No. 5878 (October 26, 1977) the Commission issued a rule-making proposal that information filed with it also contain information on the present value of estimated cash flows from future production of proved oil and gas reserves.

persuasive as to claimed possible adverse effects, either generally or for small, independent producers, including those in the start-up or development stages. To the contrary, the weight of the evidence before the Board was that independent oil and gas producing companies using the successful efforts method compete successfully and conduct effective exploration and production programs that they are able to finance through a variety of capital sources -- and they have done so for many years, long before the use of full costing became popular in the late 1960's.

The Board further concluded that Statement No. 19 would foster fair and effective competition in the capital markets by (1) providing investors, lenders, and other suppliers of capital with comparable financial data prepared objectively and even-handedly and permitting consistent analysis of risks and rewards; (2) relieving the capital markets of the anticompetitive burdens of unreliable, non-comparable, inconsistent and subjective financial data; and (3) eliminating the possibility of inequities affecting allocation of capital resources to and among oil and gas producers — principally the independent producers — resulting from inadequate and misunderstood financial data.

As discussed fully below, the FASB issued Statement No. 19 only after:

- (1) the Board and its technical staff devoted two years to considering the issues and gathering, reviewing, and evaluating relevant information and data made available or obtained;
- (2) extensive "due process", far exceeding the requirements of the Administrative Procedures Act, permitting all who wished to participate to do so, at the Board's four days of public hearings, by written comments or otherwise; and
- (3) consultation and continuing liaison with observers and representatives of the Federal Energy Administration and Department of Energy, Federal Power Commission (now FERC), Securities and Exchange Commission, United States General Accounting Office, House Subcommittee on Oversight and Investigations of the Committee on Interstate and Foreign Commerce, and the Cost Accounting Standards Board.

In the judgment of the FASB, Statement No. 19 provides a sound framework within which a national energy data base can be developed by the Department of Energy (DOE), and provides the Commission with accounting practices that it may reasonably rely on in meeting its obligations under Section 503 of EPCA and under the Federal Securities Laws.