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Accoutning and Reporting for Oil and Gas Producing Companies

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CHAPTER I

INTRODUCTION

Background

Various factors have shaped financial accounting in the petroleum industry.

The petroleum industry has large capital requirements. Many experts agree that the industry is the most capital intensive of all industries.[1]

Because of the substantial investments that are required before the production of a drop of oil, many successful companies in the industry have entered into arrangements that spread the risks of production. Some of these arrangements raise special accounting problems. The Financial Accounting Standards Board Discussion Memorandum on the extractive industries states:

> Rights to mineral reserves that have not been produced are frequently conveyed to others. . . . Accounting questions often are raised for both parties to such transactions and usually involve the measurement of cost, the determination of the amount of revenue, the timing of revenue and expense recognition, and the

[1] Randall W. Reed, "Petroleum Industry Accounting in Perspective," The Financial Executive 38 (April 1970) : 67.

presentation of the results in the financial statements. As a result of differences of opinion about the answers to those questions alternative methods of accounting for mineral property conveyances have evolved.[2]

The petroleum-producing industry has a high risk element. Large amounts of money are spent and many years pass before the revenue from exploration is realized. A substantial portion of the expenditures turn out to be nonproductive dry holes. For example, in 1976 the Interior Department sold oil leases covering 400,000 acres in the Gulf of Alaska for more than $500,000,000. Purchasers of these properties drilled only dry holes.[3]

The odds of completing a successful exploratory well in the United States has decreased over the years, and the search for oil and gas has led entrepreneurs to such remote places as the north slope of Alaska.

Political turmoil in countries in which gas and oil are produced is another risk inherent in the industry. Oil properties in numerous contries have been expropriated either directly or through exorbitant taxation. Even in the United States, companies are faced with a bewildering array of Federal income tax, state income tax, property tax, and severance tax laws, plus a myriad of governmental regulations that are subject to frequent change.

In Alaska the state legislature in June of 1978 passed its

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[2]Discussion Memorandum, "Financial Accounting and Reporting in the Extractive Industries," Financial Accounting Standards Board, December 1976, par. 771 & 772.

[3]"The Great Alaskan Oil Freeze," Business Week, 26 February 1979, p. 85.

13th change in taxes on oil companies in the past 10 years.[4] These changes have increased oil company taxes by 900% in the last decade. The Alaskan legislature has also passed some 35 nontax regulations on oil and gas companies in the last 10 years. Today oil companies must attempt to take into account potential political as well as geological risks.

Accountants have been arguing for years over the proper way to present financial accounting and reporting practices of oil and gas producing companies. Traditionally, the debate has pivoted around the question of which method of financial reporting, "full cost" or "successful efforts", presents more clearly the results of operations of oil and gas producers.

The full cost method capitalizes all costs incurred in searching for oil and gas reserves, regardless of the results of the search. These costs are then amortized against income on the basis of a large cost center, usually a country or a continent.[5] The full cost method of capitalization and subsequent amortization of oil prospecting expenses defers the recognition of costs, boosts current reported earnings, and has a smoothing effect on reported net income.[6]

The full cost method of accounting is the one favored by

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[4]Ibid., p. 75.

[5]David W. Lay, "Petroleum Industry Accounting Reform on the Way," C A Magazine, December 1977, p. 32.

[6]Bernard Shakin, "Fight Like Wildcats, Oil Independents Mount a Drive Against Accounting Change," Baron's, 10 July 1978, p. 11.

many of the smaller producing companies. The full cost methods popularity with the smaller companies is probably due in part to the fact it reports higher earnings. Many smaller companies may feel that this is necessary to attract investment capital.

Successful efforts calls for the expensing of all unsuccessful exploration costs, such as leases and dry holes. Only the costs associated with successful wells, together with the initial acquisition costs of mineral interests, are capitalized.[7]

Firms following the successful efforts method report lower earnings, assuming development continues to be offset by new exploration, than firms that follow the full cost method of reporting.[8]

The successful efforts method is the one most favored by large oil companies. One possible reason why most large established integrated oil companies prefer reporting under the successful efforts method may be due to its conservative effect on reported earnings. The successful efforts method of reporting income might be thought of as one way of minimizing potential political risks.

The Financial Accounting Standards Board attempted to resolve the full cost versus successful efforts controversy with the issuance of Financial Accounting Standard No. 19.

Subsequent to the adoption of Financial Accounting Standard

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[7]Stephen M. Flory and Stephen D. Grossman, "New Oil and Gas Accounting Requirements," The CPA Journal 48 (May 1978) : 39.

[8]Shakin, "Fight Like Wildcats," p. 11.

No. 19 by the Financial Accounting Standards Board, the Securities and Exchange Commission has, in effect, overruled the determinations of the Financial Accounting Standards Board. The Securities and Exchange Commission has expressed its dissatifaction with both historical methods of reporting because neither of them show oil and gas reserves as assets in the primary financial statements.[9]

Oil and gas reserves are considered to be the most significant asset of many oil and gas producers by several individuals who are knowledgeable in the field. According to Dr. M.B. Oien: "One of the most, if not the most, significant asset that a petroleum company has, is its interest in and its right to the removal of underground hydrocarbon reserves."[10]

The Securities and Exchange Commission elected to allow oil and gas producers to continue to report financial statements on either basis until such time as the new method of accounting, dubed "Reserve Recognition Accounting" by the Securities and Exchange Commission, is developed.

The purpose of this study is to review the development of financial accounting and reporting requirements of the oil and gas producing industry. Financial statements of oil and gas producers have, and continue to be, controversial. The methodology utilized by

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[9]Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40691.

[10]M. Burton Oien, A Comparison of Cost and Market Based Accounting Models for a Major Petroleum Company. (Unpublished Ph.D. dissertation, the University of Oklahoma, 1976), p. 1.

this study was the review of accounting and other literature for relevant information.

Organization of the Study

Chapter II of this study traces the history of the development of oil and gas producing companies financial reporting requirements from 1964 to the present.

Chapter III reviews the reasons for the different conclusions reached by the Securities and Exchange Commission, and the Financial Accounting Standards Board on desirable reporting requirements for oil and gas producing companies.

Chapter IV discusses the concept of Reserve Recognition Accounting as envisioned by the Securities and Exchange Commission and notes some of the problems that may be expected to impede the development of an accounting system based on Reserve Recognition.

Chapter V contains the summary and conclusions of this study.

The financial reporting requirements of oil and gas producing companies are the result of many forces and events. This study will now review the history of the development of financial reporting requirements in the oil and gas producing industry.

CHAPTER II

HISTORY OF OIL AND GAS

REPORTING REQUIREMENTS

Events Prior to the Formation of the Financial Accounting Standards Board

For many years the Securities and Exchange Commission had been concerned about diverse accounting practices and the lack of relevant information for investors of registrants that were engaged in oil and gas production. As early as 1964, the Securities and Exchange Commission staff had urged the oil industry and the accounting profession to address the lack of comparability in reporting by petroleum companies.[11]

In 1964 the Accounting Principles Board sponsored a study by Robert E. Field on financial reporting in the extractive industry. According to the author the purpose of his study was:

> . . . to evaluate financial reporting practices in the extractive industries by considering the distinctive elements of extractive operations, the investors need for information, and the applicable concepts of general accounting theory and to select and recommend appropriate accounting and reporting practices. The recommendations are intended to lead to an improvement of financial reporting to investors in the extractive industries by encouraging adoption of better methods of reporting and the narrowing of alternative accounting practices to those

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[11]Securities Act Release No. 33-5877, Federal Register 42, No. 212, 3 November 1977, p. 57663.

that reflect differences in operating circumstances.[12]

The results of his study were not available until December of 1969 with the publication of Accounting Research Study #11. His recommendations in that study supported the successful efforts method of accounting.

In 1965 the American Petroleum Institute published the results of its inventory of petroleum accounting practices. Its title was Report of Certain Petroleum Industry Accounting Practices, 1965. The survey was ordered in 1962 in response to the financial community complaint that the variety of accounting practices in the oil industry was confusing investors. The survey showed what accounting practices were being followed by companies in the oil industry, and it gave the reasons for those practices. The survey spotlighted a substantial number of differences in accounting. Some of them were significant.

In 1967 the American Petroleum Institute performed a follow-up study. The pattern of oil company accounting practices had not notably changed from the earlier study. In an article in the Financial Executive, it was noted that the 1967 report encouraged descriptions of accounting policies. In the forward to the report, the Division's Corporate Accounting Committee stated:

> The published annual reports of petroleum companies would be enhanced if they contained explicit narrative descriptions of accounting practices. Accordingly, petroleum companies are encouraged on a voluntary basis, to make narrative disclosure of the accounting practice

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[12] Robert E. Field, Financial Reporting in the Extractive Industries, Accounting Research Study No. 11 (New York: American Institute of Certified Public Accountants, Inc., 1969), p. 2.

> followed. . . whether or not the practice is the one most often used.[13]

According to Price Waterhouse and Company in A Survey of Financial Reporting and Accounting Developments in the Petroleum Industry Based on 1968 Reporting, only eight companies described in summary form the accounting practices they followed in the preparation of their financial statements.[14]

Full disclosure of accounting policies came about in the oil and gas industry, as it did with all other industries, with the issuance of APB Opinion 22 on Disclosure of Accounting Policies. During the 1960's, investors in most oil companies had little or no idea what type of accounting policies their investees followed.

In 1970 the Accounting Principles Board Committee on Extractive Industries studied the recommendations of Robert E. Field's Accounting Research Study No. 11. After studying his recommendations, in the fall of 1971 the Committee published a paper entitled Accounting and Reporting Practices in the Extractive Industry. The full Accounting Principles Board decided to schedule a public hearing for November 1971, with the Committee's paper to serve as a basis for discussion at the hearing.

The hearing was held on November 22 and 23 in New York City at the Waldorf Astoria Hotel. At the hearing the Committee paper was

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[13] Reed, "Petroleum Accounting Perspective," p. 69.

[14] Ibid.

vigorously opposed by the full cost supporters. In addition to this, some of the successful efforts supporters did not fully subscribe to all of the various aspects of the Committee's proposals. After the hearing, the Accounting Principles Board Committee continued to work on a model opinion for oil and gas producers, but the APB was unable to resolve this issue.

After the Accounting Principles Board was unable to resolve the issue of full cost versus successful efforts, the Securities and Exchange Commission sought to alleviate the problem through a requirement of supplemental disclosure.

In December of 1972, the Securities and Exchange Commission proposed regulations which would have required that companies disclose the impact on their financial statements of their use of accounting principles which were not in prevailing use within their industry. This proposal would have required registrants that followed the full cost method to disclose an alternatively computed net income based on successful efforts. A large number of comments were received in opposition to the adoption of these rules, primarily because of the manner in which disclosure was to be required, the lack of specific guidelines and other practical problems of implementation. Consequently, this proposal was scrapped.

Governmental Actions Subsequent to the Dissolution of the Accounting Principles Board, but Prior to the Issuance Of the Exposure Draft of Financial Accounting Standard No. 19

In October of 1973, the Securities and Exchange Commission issued proposals which would have provided two different approaches concerning information on the impact of using alternative accounting policies:

> (1) Disclosure of the accounting policies followed and presentation of substantial additional data reflecting the impact of principles used but no comparison with alternative accounting principles. This approach is used in situations where the factual circumstances vary widely between companies and the distinction between differences in accounting method and differences in economic fact is particularly difficult to draw, such as accounting for fixed assets, depreciation and extractive industries. (2) Disclosure of accounting principles followed and the impact on net income of these principles when compared to an alternative principle. This approach is used in situations where alternative accounting principles are available to describe the same economic phenomena and where it appears that the differences in reported results between companies using alternative principles are more related to the accounting methods selected that the business realities involved such as accounting for inventories, and research and development cost.[15]

Again, after many comments were received describing definitional problems in implementing the proposed rules, and after evaluating the comments, the Securities and Exchange Commission decided to scrap this proposal.

In 1973 the OPEC countries quadrupled the global crude oil price. This sparked in Congress a desire to investigate oil and gas accounting rules. Stanley Porter, vice chairman of the accounting firm of Arthur Young & Co., and one of the leading authorities on oil accounting in the nation stated: "Legislators found that when they come to D.C. they

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[15]Securities Act Release No. 33-5427, Federal Register 38, No. 201, 18 October 1973, p. 28949.

could not compare companies. They also learned that the proper way to account for oil had been an irreconcilable issue in the accounting profession for decades."[16]

In particular, Congressman Frank Moss of California objected to the use of multiple accounting systems on the basis that they were confusing to legislators, as well as investors.

In 1975 Congressman Moss introduced an amendment to the Energy Policy and Conservation Act of 1975 that would have required the General Accounting Office to audit the major oil firms.[17] This amendment to the Energy Policy and Conservation Act of 1975 was not passed.

The Energy Policy and Conservation Act in its final form was passed in December of 1975. The Act charged the Securities and Exchange Commission with the responsibility of assuming a more active role in the standard setting process in oil and gas accounting.

The law states:

Sec. 503

> (a) For purposes of developing a reliable energy data base related to the production of crude oil and natural gas the SEC shall take such steps as may be necessary to assure the development and observance of accounting practices to be followed in the preparation of accounts by persons engaged in whole or in part, in the production of crude oil or gas in the United States. . . (b) In carrying out its responsibilities under subsection(a) the Securities and Exchange Commission shall: (1). . . (2) Have authority to prescribe rules applicable to persons engaged in the production of crude oil or natural gas, or make effective by recognition, or by

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[16]Shakin, "Fight Like Wildcats," p. 18.

[17]Ibid.

> other appropriate means indicating a determination to rely on accounting practices developed by the FASB, if the SEC is assured that such practice will be observed by persons engaged in the production of crude oil or natural gas to the same extent as would result if the SEC had prescribed such practices by rule.[18]

The Act further provided that any decision made by the Securities and Exchange Commission, with respect to accounting policies to be developed, should be the result of consultation between the Securities and Exchange Commission, Federal Energy Administration, General Accounting Office and Federal Power Commission. The Act also provided that the Securities and Exchange Commission assure the development of financial reporting and disclosure that would facilitate the development of a national energy data base. According to this law:

Sec. 503

> (c) The SEC shall assure that accounting practices developed pursuant to this section, to the greatest extent practicable, permit the compilation, treating domestic and foreign operations as separate categories, of an energy data base consisting of: (1) The separate calculation of capital, revenue, and operating cost information pertaining to--(A) prospecting, (B) acquisition, (C) exploration, (D) development, and (E) production, including geological and geophysical costs, carrying costs, unsuccessful exploratory drilling costs, intangible drilling and development costs on productive wells, the cost of unsuccessful development wells, and the cost of acquiring oil and gas reserves by means other than development. Any such calculation shall take into account disposition of capitalized costs, contractual arrangements involving special conveyance of rights and joint operations, differences between book and tax income, and prices used in the transfer of products or other assets from one person to any other person, including a person controlled by controlling or under

[18] U.S., Congress, Public Law 94-163, The Energy Policy and Conservation Act of 1975, (42 U.S. Code, Sec. 6383), Title V, Section 503.

> common control with such person. (2) The full presentation of the financial information of persons engaged in the production of crude oil or natural gas, including-- (A) disclosure of reserves and operating activities, both domestic and foreign, to facilitate evaluation of financial effort and result; and (B) classification of financial information by function to facilitate correlation with reserve and operating statistics, both domestic and foreign. (3) Such other information, projections, and relationships of collected data as shall be necessary to facilitate the compilation of such data base.[19]

On March 23, 1976 the Securities and Exchange Commission adopted Accounting Series Release No. 190. It required certain large, non-financial registrants to disclose in their financial statements information about the replacement costs of their inventories and fixed assets.

This release granted a one year exemption to registrants whose assets were directly related to and which derived value from mineral reserves. During this exemption period, an independent research study was sponsored by the American Petroleum Institute to consider alternative approaches in applying the replacement cost concept to mineral resource assets in the oil and gas industry.

In June of 1977 the American Petroleum Institute submitted to the Securities and Exchange Commission the report by Professors Glen A. Welsh and Edward B. Deakin, of the University of Texas at Austin.

These quotations from their study were taken from Securities Act Release No. 33-5878 as reported in the Federal Register:

> Ideally the current cost of an asset should be equal to the exchange price of an identical asset

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[19] Ibid.

determined by the operation of an exchange market that is broad, extensive and open. The market should be (a) broad in the sense that there is widespread market availability, (b) extensive in that a large number of transactions take place over any given period of time, and (c) open in that the relevant economic details of any given exchange transaction are available to all persons desiring such information. The assets exchanged should be essentially identical or subject to translation into identical units to those held by means of some logical conversion standard. In such a situation determination of current cost involves cataloging existing assets using the available market exchange data. As each of the three conditions for ideal current cost determination is relaxed, significant problems arise in the implementation of a current cost method. Oil and gas reserves are not identical in all fields. There are few exchanges of reserves in place. The price paid in an exchange transaction and other details of the transaction--such as plans for future development of the properties exchanged--are generally not disclosed in sufficient detail to allow computation of a per barrel price for the reserves sold. Moreover, purchases may be made for many reasons that do not relate to the production of oil and gas for ultimate sale. For these reasons, it is not necessary to develop a surrogate for current cost that will meet the objectives of the disclosures required by ASR 190.[20]

According to Securities Act Release No. 33-5878, the Welsh Deakin Study concluded:

> The term "replacement cost" is not relevant for oil and gas reserves because: By definition oil and gas reserves are not replaceable; oil and gas reserves are not being replaced and a shortfall has developed that is widening with respect to domestic reserves; and those reserves that are being discovered differ from existing reserves because new reserves are located in different environments subject to different price constraints, and differ in qualitative characteristics.[21]

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[20]Securities Act Release No. 33-5878, The Federal Register 42, No. 212, 3 November 1977, p. 57653.

[21]Ibid.

According to a letter to the Securities and Exchange Commission from the American Petroleum Institute, the Welsh-Deakin study had two fundamental conclusions:

> (1) The replacement cost concept is not relevant to oil and gas reserves; and (2) the preferred substitute for replacement cost disclosure would be a present value method which it referred to as Equivalent Purchase Cost.[22]

Financial Accounting Standards Board Actions Prior To the Issuance of Accounting Series Release No. 253

The Financial Accounting Standards Board succeeded the Accounting Principles Board in 1973. The Accounting Principles Board Committee on Extractive Industries prepared for the FASB a report entitled Accounting and Reporting Practices in the Oil and Gas Industry.

In October of 1975, prior to the passage of the Energy Policy and Conservation Act, the Financial Accounting Standards Board added to its technical agenda a project entitled "Financial Accounting and Reporting in the Extractive Industries." The Financial Accounting Standards Board appointed a task force to assist it in the preparation of a Discussion Memorandum, a neutral document which was issued in December of 1976 to provide a basis for the solicitation of comments on the issues that were under consideration.

Public hearings were held by the Financial Accounting Standards Board on March 30 and 31 and April 1 and 4, 1977. Written submissions and oral presentations were received by the Financial

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[22] Ibid., p. 57658.

Accounting Standards Board at these public hearings. Controversy prevailed at the hearings over the two methods of accounting for costs incurred in the findings and developing of oil and gas reserves. At the hearings, major oil company representatives argued for the adoption of the successful efforts method. The smaller oil companies called for the adoption of the full cost method.[23]

On July 15 of 1977, the Financial Accounting Standards Board solicited public comment on an exposure draft of a proposed statement of "Financial Accounting and Reporting by Oil and Gas Producing Companies." In this draft, the successful efforts method of accounting was proposed for oil and gas producing companies.

After this exposure draft was issued, the Financial Accounting Standards Board sponsored a study of the effect of the issuance of the exposure draft on the share price of common stock issued by both full cost and successful efforts companies.

According to the Financial Accounting Standards Board:

> The study did not find statistically significant evidence that the issuance of the exposure draft affected the market prices of the 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 preceeding 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. . .. Both Professor Dyckman and the Board recognize that the statistical testing may not be conclusive.[24]

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[23] "News Report," The Journal of Accountancy 143 (May 1977) : 26.

[24] Statement of Financial Accounting Standard No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies," Financial Accounting Standards Board, December 1977, par. 93.

On December 5, 1977 the Financial Accounting Standards Board issued Financial Accounting Standard No. 19, "Financial Accounting and Reporting by Oil and Gas Producing Companies." This statement reaffirmed the FASB's tenative conclusion, announced in its July 15, 1977 exposure draft, that oil and gas producing companies should follow a form of the successful efforts method of accounting for costs incurred in exploring for and developing oil and gas reserves. Standard No. 19 was scheduled to have become effective for financial statements for fiscal years beginning after December 15, 1978.

Tables 1 and 2 show the effects that Financial Accounting Standard No. 19 would have had on certain oil and gas producers with revenues of less than one billion dollars.[25]

In light of the effects that Financial Accounting Standard No. 19 would have had on the financial statements of certain small oil and gas producers that were using the full cost method, it is a small wonder that many small producers were so vehemently opposed to the Financial Accounting Standard No. 19 requirement that they switch to the successful efforts method. They were afraid that the adverse effects of reporting earnings under the successful effort method would have a negative impact on their ability to raise capital, and possibly their ability to exist.

According to Financial Accounting Standard No. 19, this possibility was considered by the Financial Accounting Standards Board:

[25]Shakin, "Fight Like Wildcats," p. 12.

TABLE I

EFFECTS OF FASB-19 ON 1977 NET INCOME

COMPANY	HISTORICAL*	FASB-19*	PERCENT CHANGE (DECREASE)
Adobe Oil & Gas	6,064	4,964	(18)
Apache	8,222	5,272	(36)
Arkansas Western Gas	5,505	5,383	(2)
Ashland Oil Canada	22,398	23,294	4
Belco Petroleum	42,155	40,655	(4)
Buttes Gas & Oil	3,217	(4,098)	(227)
C & K Petroleum	2,225	(3,200)	(224)
Canadian Occidental	17,311	14,213	(18)
Consolidated Oil & Gas	4,806	2,884	(40)
Damson Oil	2,889	2,671	(8)
Dome Petroleum	104,285	88,642	(15)
Entex	31,706	31,706	-0-
Falcon Seaboard	17,052	16,416	(4)
Florida Gas	25,258	24,158	(4)
Forest Oil	13,846	3,346	(76)
General Exploration	(986)	(1,118)	(13)
Hamilton Brothers	14,320	12,820	(10)
Houston Oil & Minerals	65,891	42,891	(35)
Husky Oil	12,537	11,283	(10)
Inexco Oil	13,489	2,488	(82)
Juniper Petroleum	971	(1,121)	(215)
K.R.M. Petroleum	214	(133)	(162)
Louisiana Land Offshore	4,048	2,548	(37)
McColloch Oil	7,026	6,551	(7)
Mesa Petroleum	41,299	20,650	(50)
North Canadian Oils	6,623	5,096	(23)
Pacific Petroleums	85,511	68,409	(20)
Panhandle Eastern Pipeline	106,426	101,626	(5)
Shenandoah Oil	26,036	26,750	(3)
Supron Energy	11,145	8,145	(27)
Texas International	6,611	4,061	(39)
Texas Oil & Gas	66,662	59,996	(10)
Total Petroleum	14,964	8,464	(43)
Universal Resources	4,945	4,375	(12)
Weatherford International	5,258	3,858	(27)
Westcoast Petroleum	6,618	3,971	(40)
Wilshire Oil	2,877	2,870	-0-
TOTAL	763,380	601,195	(21)

*Figures in thousands of dollars

SOURCE: Bernard Shakin, "Fight Like Wildcats, Oil Independents Mount a Drive Against Accounting Change," Baron's, 10 July 1978, p.12.

TABLE II

EFFECTS OF FASB-19 ON 1977 RETAINED EARNINGS

COMPANY	HISTORICAL*	FASB-19*	PERCENT CHANGE (DECREASE)
Adobe Oil & Gas	24,278	17,999	(26)
Apache	65,845	61,445	(7)
Arkansas Western Gas	17,448	9,287	(47)
Ashland Oil Canada	94,899	75,919	(20)
Belco Petroleum	183,200	138,200	(25)
Buttes Gas & Oil	62,267	6,095	(90)
C & K Petroleum	12,483	3,517	(128)
Canadian Occidental	61,252	34,992	(43)
Consolidated Oil & Gas	29,669	1,389	(95)
Damson Oil	6,886	4,992	(28)
Dome Petroleum	296,160	251,736	(15)
Entex	57,842	57,842	---
Falcon Seaboard	46,819	45,673	(2)
Florida Gas	106,443	97,443	(8)
Forest Oil	78,793	(31,207)	(140)
General Exploration	(1,570)	(5,495)	(250)
Hamilton Brothers	49,425	141,225	(71)
Houston Oil & Minerals	99,501	35,501	(64)
Husky Oil	81,874	72,868	(11)
Inexco Oil	46,025	5,736	(80)
Juniper Petroleum	5,020	2,923	(158)
K.R.M. Petroleum	284	(1,166)	(511)
Louisiana Land Offshore	5,233	19,767	(478)
McColloch Oil	33,504	65,255	(95)
Mesa Petroleum	141,180	(61,154)	(143)
North Canadian Oils	29,284	23,471	(20)
Pacific Petroleums	238,955	167,269	(30)
Panhandle Eastern Pipeline	510,616	442,616	(13)
Shenandoah Oil	(7,819)	(44,819)	(473)
Supron Energy	49,911	23,911	(52)
Texas International	37,596	10,596	(72)
Texas Oil & Gas	214,437	128,631	(40)
Total Petroleum	47,196	2,196	(95)
Universal Resources	13,469	4,569	(66)
Weatherford International	17,547	13,847	(21)
Westcoast Petroleum	20,774	(9,348)	(145)
Wilshire Oil	19,517	12,000	(39)
TOTAL	2,752,259	1,518,311	(45)

*Figures in thousands of dollars

SOURCE: Bernard Shakin, "Fight Like Wildcats, Oil Independents Mount a Drive Against Accounting Change," Baron's, 10 July 1978, p. 12.

> The Board acknowledges that not all empirical evidence supports the view that the securities markets are able to take into account the differences in accounting methods used by different companies. The studies referred to in paragraph 169 provides evidence only with respect to the securities markets as a whole; those researchers readily admit (and other research substantiates) the likelihood that decisions of individual investors in individual securities can be affected by accounting differences. As noted in paragraph 170 a Board-sponsored study found that the oil and gas Exposure Draft may have affected the prices of full cost companies securities during the two weeks surrounding its issuance, though the effect was of brief duration. That finding supports the conclusions of other researchers that investors are sometimes unable to properly evaluate the impact of alternative accounting methods. Further, in situations in which accounting changes may have had a long term effect on securities prices (as opposed to a temporary disruption). That result might well be viewed as an equitable adjustment of the cost of capital.[26]

<u>The Securities and Exchange Commissions' Review and Oversight of the FASB's Deliberations on Financial Accounting Standard No. 19</u>

After the Financial Accounting Standards Board Exposure Draft was published in July of 1977, the Securities and Exchange Commission published for public comment proposed rules relating to financial accounting standards and related disclosure standards. The proposed accounting measurement standards were published in Accounting Series Release No. 33-5861. The related disclosure standards proposals were published in Securities Act Release No. 33-5877. These proposed rules reflected in substance the Exposure Draft of the Financial Accounting Standards Board.

After the issuance of Financial Accounting Standard No. 19

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[26] <u>Statement of Financial Accounting Standard No. 19</u>, Financial Accounting Standards Board, par. 171.

by the Financial Accounting Standards Board in December of 1977, the Securities and Exchange Commission issued Securities Act Release No. 33-5892. In it the Securities and Exchange Commission made a request for public comment on whether or not it should rely on the determinations of the Financial Accounting Standards Board in accordance with its responsibilities under the Energy Policy and Conservation Act.

The Securities and Exchange Commission decided to hold public hearings on the issue in March of 1978. Securities Act Release No. 33-5966, otherwise known as Accounting Series Release No. 253, states:

> The commissions proceeding was marked by intense interest and extensive participation by advocates of particular points of view relating to oil and gas accounting standards. The commission has received a large number of written submissions, including many comprehensive analyses of issues under consideration. It has also included in public file (S7-715) for this proceeding the public record developed by the FASB during its proceeding leading to Financial Accounting Standard No. 19, the public record submitted by the Department of Energy in connection with its inquiry into this matter and the public files of previous proceedings on oil and gas accounting of the Commission, the Accounting Principles Board of the American Institute of Certified Public Accountants, and the Federal Power Commission. Members of the Commission and its staff heard testimony from 97 witnesses, compiling over 2,700 pages of transcript, during twelve days of the public hearing which was conducted in Washington, D.C. and Houston, Texas. Included among those participating in the proceeding were managers of oil and gas producing companies, academics, research consultants, representatives of the investment community, public accountants, and the Financial Accounting Standards Board.[27]

Regardless of whether or not one would agree with the Securities and

[27] Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40690.

Exchange Commission's decision on oil and gas accounting, it would be difficult to argue that it was not the result of a thorough process of deliberation.

On August 31, 1978 in Securities Act Release No. 33-5966, the Securities and Exchange Commission arrived at the following conclusions:

> (1) Traditional accounting methods fail to provide sufficient information on financial position and operating results of oil and gas producers; (2) Information supplemental to primary financial statements is required to permit assessment of the financial position and operating results of a company and to permit comparison of companies engaged in oil and gas producing activities; (3) Development of an accounting method based on a valuation of proved oil and gas reserves would provide significant useful information, and steps should be taken to develop such a method; and (4) In these circumstances, requiring either successful efforts or full cost as a uniform method of accounting is unwarranted.[28]

Concurrent with this release, the Securities and Exchange commission also released proposed rules for full cost companies to follow in filings with the agency. The reason for this was that in practice there were several variations of the way in which full cost accounting was being applied to financial statements prepared on a full cost basis.

<u>Events Subsequent to the Issuance of Accounting Series Release No. 253</u>

Subsequent to the Securities and Exchange Commission's adoption of Securities Act Release No. 33-5966 (Accounting Series

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[28] Ibid., p. 40688.

Release No. 253), the Financial Accounting Standards Board voted to suspend the December 15, 1978 effective date of Financial Accounting Standard No. 19. Recently, Financial Accounting Standards Board Chairman, Donald J. Kirk, said that he was reluctant to impose manditory standards or even alternatives on nonregistered companies.[29] Had the effective date not have been suspended, nonregistered full cost oil and gas companies would have been required to comply with Financial Accounting Standard No. 19, while their registered full cost competitors woul have been exempted.

Oil and gas producing companies that report on the basis of successful efforts accounting will be required to follow the provisions of Financial Accounting Standard No. 19.

In December of 1978, the Securities and Exchange Commission issued Securities Act Release No. 33-5966. These amendments as enacted:

> (1) increase the conformity of rules relating to the successful efforts method of accounting to the provisions of Standard No. 19 of the FASB; (2) revise certain definitions to correspond to those adopted by the Department of Energy for its Financial Reporting System; (3) provide an exemption from the disclosure requirements for diversified companies to meet specified criteria; and (4) clarify the application of the rules to cost-of-service regulated companies.[30]

In December of 1978 the Securities and Exchange Commission also released two other Securities Act Releases that pertained to oil and gas accounting. In Securities Act Release No. 33-6007, the

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[29]"News Report," The Journal of Accountancy 146 (November 1978) : 7.

[30]Securities Act Release No. 33-6006, SEC Docket, Volume 16, No. 8, 2 January 1979, p. 478.

Securities and Exchange Commission adopted final rules that established uniform requirements for financial accounting and reporting practices of oil and gas producers following the full cost method of accounting. In Securities Act Release 33-6008, the Securities and Exchange Commission adopted final rules that were intended to improve disclosure. The final rules incorporated requirements for disclosure of:

> (1) the present value of future net revenues from estimated production of proved oil and gas reserves; (2) any favorable or adverse event since the end of the most recent fiscal year which is believed to have caused a significant change in the proved reserves; (3) the average sales price and average production cost per unit of oil and gas produced; and (4) historical information concerning the number of productive and dry wells drilled.[31]

The final chapter has not been written in the history of the development of financial accounting and reporting requirements for oil and gas producing companies. Securities and Exchange Commission Chairman, Harold M. Williams, is quoted in a recent publication:

> This is only the beginning of providing more relevant and comparable financial information on oil and gas producers. There will, however, be many questions with respect to the implementation of these disclosure requirements. Attention must be given during the next few months to the supplemental earnings summary which is proposed for the 1979 financial statements. Finally, cost-effective standards for estimating proved reserves must be developed, and the best means of communicating reserve information to financial statement users also must be determined. These are just a few of the difficult issues that the Commission, with the assistance of the advisory committee, will be addressing.[32]

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[31]Securities Act Release No. 33-6008, SEC Docket, Volume 16, No. 8, 2 January 1979, p. 499.

[32]Deloitte Haskins & Sells, The Week in Review, 2 February 1979, p. 2.

The period of assessing the feasibility of Reserve Recognition Accounting, if indeed it proves to be feasible, will require at least three years and possibly longer.

Recent history is marked by the different opinions of the Securities and Exchange Commission and the Financial Accounting Standards Board over the future of financial reporting requirements for oil and gas producers. The reasons for these different opinions will be reviewed in the next chapter of this study.

CHAPTER III

DIFFERENT OPINIONS

The Securities and Exchange Commission and the Financial Accounting Standards Board both performed a very thorough examination of the issues. In spite of this, they each arrived at different conclusions. These different conclusions are contrary to what one might expect. One would expect that two competent groups of individuals with a thorough grasp of the issues involved, after a thorough process of deliberation, would arrive at the same conclusion.

Insight into this discrepancy is provided by comparing the basis of conclusions of Accounting Series Release No. 253 issued by the Securities and Exchange Commission with the basis for conclusions of Financial Accounting Standard No. 19 issued by the Financial Accounting Standards Board.

Basis for Conclusions of Financial Accounting Standard No. 19

Discovery Value Accounting is a method of accounting which is similar to Reserve Recognition Accounting. Discovery Value Accounting would incorporate the value of the oil and gas reserves into the financial statements at the time of their initial discovery. Reserve Recognition Accounting, as envisioned by the Securities and

Exchange Commission, would also record these initial values but, in addition, it would record subsequent increments in the value of these reserves.

Paragraphs 133 through 138 of Financial Accounting Standard No. 19 deal with the reasons that the Financial Accounting Standards Board decided to reject Discovery Value Accounting. The Financial Accounting Standards Board stated:

> The board concluded that financial statements of an oil and gas producing company should not be prepared on a discovery value basis for a number of reasons. One group of reasons relates to problems in measuring the value of reserves with reasonable accuracy at the point of discovery. Measurements of discovery value require estimates of (a) the quantity of reserves, (b) the amount and timing of costs to develop the reserves, (c) the timing of the production of the reserves, (d) the production costs and income taxes, (e) selling prices, and (f) (for some valuation methods) appropriate discount rates that reflect both an interest element and a risk factor. Those estimates, in turn, might be based on predictions of changes in government regulations and restrictions (both domestic and foreign), technological changes (including not only the technology involved in oil and gas producing activities but also the technology of transportation, refining, and marketing of oil and gas products), and domestic and international economic conditions; or current regulations, technology, and conditions might be assumed to continue indefinitely. The uncertainties inherent in those estimates and predictions tend to make estimates of reserve values highly speculative and relatively unreliable for the purpose of providing a basis on which to prepare financial statements.[33]

Another major reason that the Financial Accounting Standards Board decided to reject Discovery Value Accounting was their belief that to do so would be to recognize revenue before the earning process

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[33] Statement of Financial Accounting Standard No. 19, Financial Accounting Standards Board, par. 133.

was complete. According to the Financial Accounting Standards Board:

> Under generally accepted accounting principles followed by companies in nearly all industries, revenue is normally recognized only when the earning process is complete or virtually complete and, then only after an exchange has taken place. . .. The exchange transaction is the specific point at which the earning process is normally regarded as sufficiently complete to justify accounting recognition of revenue. . .. Discovery is certainly a critical event in the search for and extraction of oil and gas, but there are many uncertainties standing between discovery of reserves and the ultimate realization of related revenues. . .. Exceptions to the general rule for revenue recognition are found in practice today. APB Statement No. 4, "Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises," paragraph 152, states:
>
> > Sometimes revenue is recognized at the completion of production and before a sale is made. Examples include certain precious metals and farm products with assured sales prices. The assured price, the difficulty in some situations of determining costs of products on hand, and the characteristic of unit interchangeability are reasons given to support this exception.
>
> As noted earlier reserves are often discovered many years before they are produced and many dollars often are spent for development and production costs before the oil and gas reserves are extracted. Moreover, while oil and gas may to some extent be regarded as fungible, sales prices, particularly in the present domestic and international economic and regulatory environments are anything but assured.[34]

The Financial Accounting Standards Board decided that the reasons that support the special revenue recognition exemption for precious metals and farm products did not apply to oil and gas producing activities. The Board concluded that:

> Estimated discovery values do not provide a satisfactory basis of accounting for oil and gas producing

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[34] Ibid., par. 134-137.

activities for the reasons that (a) values that were current when initially recorded quickly become out-of-date and (b) the mixture of values of minerals measured at different dates of discovery lacks both the verifyability of historical costs and the relevance of current values.[35]

Basis for Conclusion of Accounting Series Release No. 253

Insight into the why of the Securities and Exchange Commission's conclusions are provided in Securities Act Release No. 33-5966. They cited many reasons why they chose to allow companies to continue to prepare financial statements on both a full cost or a successful efforts basis until the feasibility of the proposed Reserve Recognition Accounting method is fully developed as a workable primary method of reporting the results of operations of oil and gas producers.

The Securities and Exchange Commission was troubled by the fact that traditional accounting methods did not provide for the recognition of the discovery of oil and gas reserves as a recording of assets or earnings in a companies financial statements. They were of the opinion that proved oil and gas reserves constitute the most important asset for most companies in the oil and gas producing industry.

The Financial Accounting Standards Board Financial Accounting Concepts Statement No. 1, "Objectives of Financial Reporting by Business Enterprises," states: "The primary focus of financial reporting is information about an enterprise's performance provided

[35]Ibid., par. 138.

by measures of earnings and its components."[36] This view was shared by the Securities and Exchange Commission. They state in Securities Act Release No. 33-5966 that:

> Meaningful presentation of earnings is a primary goal of financial reporting.
>
> Several adverse consequences occur if reported earnings are not regarded as meaningful. In the first place, the confidence of investors and government policymakers in the information conveyed by financial reporting is eroded to the extent that reported earnings are regarded as not relevant. This may affect confidence in the securities markets and the willingness of investors to hold or acquire equity securities. Government policymakers may seek to require needed information through more burdensome reporting requirements.[37]

The Securities and Exchange Commission took a position contrary to that of the Financial Accounting Standards Board on the question of whether or not discovery of oil and gas reserves should be recognized as revenue before their sale.

According to Accounting Principles Board Statement No. 4, revenue is recognized when both of the following conditions are met:

> (1) The earning process is complete or virtually complete, and (2) an exchange has taken place.[38]

The Securities and Exchange Commission was of the opinion that the earning process of oil and gas producers differed significantly

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[36] Statement of Financial Accounting Concepts No. 1, "Objectives of Financial Reporting by Business Enterprises," Financial Accounting Standards Board, November 1978, par. 43.

[37] Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40691.

[38] Accounting Principles Board Statement No. 4, "Basic Concepts and Accounting Principles" (New York, N.Y.: American Institute of Certified Public Accountants, Inc., 1971), Chapter 6, par. 14.

from that of most other industries. They felt that the earning process should be recognized prior to an actual sale (this exception to the general recognition principle is granted for certain precious metals and farm products). The Securities and Exchange Commission stated that:

> The marketability of oil and gas at prices above a minimum level appears reasonably assured for the present, and absent a radical technological innovation, for the foreseeable future. As commodities, oil and gas are each relatively homogenous and the supply of each, while unknown, is limited. These two factors are likely to continue to cause upward pressure on prices (again, as long as no developments reduce demand significantly.) Thus, because (1) the earning process in this industry has discrete movements, based on information gained at the point of discovery of reserves attributable to a particular property. . ., and (2) the marketability of oil and gas appears relatively assured under existing economic conditions. The Commission believes that an exception to the principle of recognizing revenue only upon realization is justified and, moreover, is required to achieve meaningful reporting of assets and earnings.[39]

The Securities and Exchange Commission stated further that:

> Financial statements of oil and gas producing companies prepared under any of the traditional methods fail to provide investors and government policymakers sufficient relevant information to make informed decisions. . .. Relevance, one of the critical qualitative characteristics of financial reporting, is clearly lacking in the presentation of assets and net income in financial statements of companies engaged in oil and gas exploration.[40]

The Securities and Exchange Commission concluded that little benefit in terms of disclosure of useful information would have been

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[39] Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40692.

[40] Ibid., p. 40693.

achieved by requiring all companies to uniformly adopt a particular traditional method of accounting. They felt that meaningful comparisons of companies would have been based almost entirely on data other than what was reported in the four traditional primary financial statements, regardless of whether the same or different methods of accounting were used.

The Securities and Exchange Commission had taken into consideration the conerns of the small producers, the Department of Justice, the Department of Energy, and the Federal Trade Commission. These parties were all concerned that the adoption of Financial Accounting Standard No. 19 would reduce competition in the oil and gas industry. In the Securities and Exchange Commission's "Basis of Conclusions" for Accounting Series Release No. 253, the Commission stated:

> The Commission believes that the potential competitive impact of adopting a uniform method of accounting for the petroleum industry is not likely to be so substantial as to preclude its mandating a uniform method, if uniformity would enhance the ability of investors and policymakers to understand the financial results of a company and to compare companies. On balance, however, the Commission has concluded that selecting one of the traditional methods of accounting as a uniform method for the oil and gas producing industry is not appropriate. . .. The Commission has concluded that there would be little, if any, benefit from uniformity in this case, as discussed previously.[41]

Thus, at least from appearance, it would seem that the Securities and Exchange Commission did not think that the effects on small producers

[41] Ibid., p. 40694.

would have been significant enough to preclude the adoption of Financial Accounting Standard No. 19.

Effects on the Development of Accounting Principles

The decision of the Securities and Exchange Commission to allow companies to continue to report under both the full cost and the successful efforts method of accounting until the new Reserve Recognition Accounting method is fully developed, was unusual in many respects. It marked the first time the Securities and Exchange Commission had decided against adoption of one of the FASB's Financial Accounting Statements. Securities Act Release No. 33-5966 also put the Securities and Exchange Commission in the awkward position of advocating two methods of financial reporting. The Securities and Exchange Commission has long been of the belief that financial information would be enhanced if companies would follow uniform accounting methods for similar economic events and accounting transactions.

Richard C. Adkerson was director of a Securities and Exchange Commission study group on oil accounting that was formed to make recommendations to the Securities and Exchange Commission. Mr. Adkerson stated:

> The Commission is in a no-win position. If the Commission backs the FASB, there will be claims it is rubberstamping their decision and not responsive to the concerns of the independents. If it disagrees with the FASB, the Commission will be charged with giving in to lobbying and with damaging the private sector's ability to regulate itself.[42]

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[42]"A Puzzle for the SEC on Oil Accounting Rules," <u>Business Week</u>, 7 August 1978, p. 29.

The Securities and Exchange Commission clearly indicated that it viewed its negation of Financial Accounting Standard No. 19 as a special situation. They stated:

> The Commissions' conclusions in this proceeding, therefore, should not be considered as an expression of dissatisfaction with the FASB's standard-setting procedures or with its deliberations on this subject. Even though the Commission's judgment differs from that of the FASB in certain respects, in this instance the Commission views neither the proceeding it undertook involving oil and gas accounting nor the outcome as evidencing any change in the Commissions basic policy of looking to the FASB for the initiative in establishing and improving accounting standards. . .. The Commission intends to maintain its support of the activities of the FASB and encourages it to continue the aggressive pursuit and resolution of complex financial accounting and reporting issues.[43]

The Securities and Exchange Commission did, however, leave no doubt who will have the final say, with regards to financial reporting requirements of companies that are required to register with the agency. They stated:

> The Commission's policy recognizes that the FASB operates to establish accounting standards, but it does not involve a delegation of the Commission's substantive rulemaking authority to the FASB. While the Commission recognizes that, in general, it is most desirable for the private sector rather than the government to develop accounting standards, the Commission retains the final authority under the Federal securities laws to promulgate rules, including financial accounting standards, that govern the preparation and presentation of financial statements issued by publicly owned companies, regardless of the FASB's determinations.[44]

The conclusions reached by the Securities and Exchange Commission

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[43] Securities Act Release No. 33-5966, <u>Federal Register</u> 43, No. 177, 12 September 1978, p. 40691.

[44] Ibid., p. 40690.

in Securities Act Release No. 33-5966 provides insight into what the Securities and Exchange Commission views at the top of its list of qualitative characteristics for financial statements. The Securities and Exchange Commission stated:

> Not withstanding the limited nature of its conclusions, the Commission has been keenly aware that its deliberations in this proceeding have involved broader issues of financial reporting, many of which, such as judging the merits of particular accounting methods on the basis of relevance and reliability of the information they provide to investors, are presently under study by the FASB in connection with the conceptual framework project. Its conclusions accordingly reflect its views on fundamental matters of significance to the conceptual framework of financial reporting.[45]

Thus, it would appear that if the Securities and Exchange Commission were to make a list of qualitative characteristics desirable for financial statements, relevance and reliability to investors would be placed at the top of its list.

Few people would dispute the relevance of data which provides information on an oil producers oil and gas reserves. Whether or not such information is regarded as reliable is subject to dispute in the accounting profession.

Joseph E. Connor, the senior partner who now heads Price Waterhouse's United States firms, wrote an article on Discovery Value Accounting in 1975.[46] Reserve Recognition Accounting is a variant of the Discovery Value method of accounting proposed by Mr. Connor in his article. He was then of the opinion that more serious consideration

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[45]Ibid., p. 40695.

[46]Joseph E. Conner, "Discovery Value--The Oil Industry's Untried Method," <u>The Journal of Accountancy</u> 139 (May 1975) : 54-63.

should be given to Discovery Value Accounting, as a supplement to historical cost information. He was quoted in a recent issue of the Price Waterhouse Review as saying: "For the Securities and Exchange Commission to prejudge the usefulness of this radical new approach strikes me as an insensitive use of its regulatory power."[47]

The vote by the Financial Accounting Standards Board to adopt Financial Accounting Standard No. 19 was 4 to 3 in favor of adoption. Of the three members of the Financial Standards Accounting Board that dissented, two of them were of the opinion that mineral reserves should be accounted for at fair value, rather than historical cost. This position would be similar to that of the Securities and Exchange Commission. The 4 to 3 vote in favor of adoption was a scant majority. The Securities and Exchange Commissions' rejection of the Financial Accounting Standards Board Standard No. 19 does not seem as extreme, in light of the fact that the voteof the Financial Accounting Standards Board was so nearly divided on such a controversial issue.

Some individuals are of the opinion that the Securities and Exchange Commissions' reversal of the Financial Accounting Standards Board Standard No. 19 has damaged the credibility and future of the Financial Accounting Standards Board. They reason that those who oppose future Financial Accounting Standard Board decisions can be expected to mount a major campaign on every controversial position in order to attempt to have the Securities and Exchange Commission

[47]"The New Senior Partner," Price Waterhouse Review, Volume 23, No. 4, (1978): 2.

change its determination. Whether or not his argument is based on valid assumptions remains to be seen.

Kerry Cooper, Stephen M. Flory and Stephen Grossman are authors of a recent article on oil and gas accounting. In their article they noted some of the similarities between the current oil and gas accounting situation faced by the Financial Accounting Standards Board and the situation involving investment tax credit faced by the Accounting Principles Board back in the early 1960's. In their article they noted that:

> Whatever the impact of the SEC's action, FASB may take comfort from recalling that its predecessor, the Accounting Principles Board, experienced a similar series of events in its early years. These events involved the SEC's opposition to APB Opinion No. 2 concerning the accounting treatment of the investment tax credit (ITC). This opinion rejected the "flow through" approach to the ITC in favor of the "deferred method." The SEC, in ASR 96, ruled that it would accept either method. The SEC's stance resulted in Opinion No. 4 which negated Opinion No. 2. The APB survived that encounter, and few would regard the ITC controversy as an important factor in its subsequent activity.[48]

The validity of the fears of some individuals that the Securities and Exchange Commission reversal of the Financial Accounting Standards Board decision has damaged the private sector's ability to regulate itself, remains to be determined. It is a question which can perhaps be answered only by the passage of time.

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[48] Kerry Cooper, Stephen M. Flory, and Stephen D. Grossman, "New Ballgame for Oil and Gas Accounting," The CPA Journal 49, No. 1 (January 1979) : 17.

CHAPTER IV

RESERVE RECOGNITION ACCOUNTING

It is important to note that the Securities and Exchange Commission does not now require financial statements prepared on the basis of Reserve Recognition Accounting as primary financial statements. The reason for this is the lack of uniform standards, or experience, in developing valuations of oil and gas reserves for financial accounting purposes.[49]

As envisioned by the Securities and Exchange Commission, the development of Reserve Recognition Accounting will involve a step by step approach which will allow the Securities and Exchange Commission to assess the feasibility of the new method. They anticipate that the process of assessing the feasibility of Reserve Recognition Accounting will continue for at least three years. They have hopes that in its final form, Reserve Recognition Accounting will provide oil and gas companies with an accounting method that reflects:

> (1) proved oil and gas reserves as assets in the balance sheet; (2) additions to proved reserves and changes in valuations of proved reserves in the income statement; and (3) all costs associated with finding and developing additions to proved oil and gas reserves, together with all costs determined to be nonproducing

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[49] Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40688.

during the current period, in the income statement.[50]

As a first step in the development of Reserve Recognition Accounting, the Securities and Exchange Commission has adopted rules that require disclosure of the following information as data supplemental to financial statements:

> (a) quantities and annual changes in quantities of proved oil ad gas reserves, (b) costs incurred in exploration, development, and production activities; (c) capitalized costs relating to oil and gas producing activities; (d) historical information or cash flow and value of transfers from producing oil and gas; (e) cash flow and value of transfers ("net revenue") from estimated future production of proved oil and gas reserves, calculated on the basis of current economic conditions; and (f) present value of net revenue from estimated future production of proved oil and gas reserves using a ten percent discount rate.[51]

The Securities and Exchange Commission is of the belief that the second step in the development of Reserve Recognition Accounting should be a supplemental earnings summary of oil and gas producing activities prepared on that basis. They have proposed a form of this summary in Securities Act Release No. 5969 that would be required for filings with the Securities and Exchange Commission for fiscal years that end after December 25, 1979.[52]

An example of this presentation of supplemental earnings as proposed by the Commission appears in Figure 1 on page 41.

As envisioned by the Securities and Exchange Commission,

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[50] Ibid.

[51] Ibid.

[52] Securities Act Release No. 33-5969, <u>SEC Docket</u>, Volume 15, No. 12, Part III, 12 September 1978, p. 992.

FIGURE I

SUPPLEMENTAL EARNINGS SUMMARY OF
OIL AND GAS PRODUCING ACTIVITIES
YEAR ENDED DECEMBER 31, 19XX

Revenues from oil and gas:		
Sales to outsiders	$XXXX	
Transfers	XXXX	$XXXX
Costs of production:		
Lifting costs	$XXXX	
Amortization of proved properties	XXXX	(XXXX)
Income from producing activities		XXXX
Current additions to proved properties		XXXX
Costs of additions to proved properties:		
Exploration costs	$XXXX	
Development costs	XXXX	(XXXX)
Income from current exploration and development activities		XXXX
Revisions to previous additions to proved properties:		
Changes in estimated quantities of proved reserves		XXXX
Changes in rate of production		XXXX
Changes to reflect current prices and costs		XXXX
Holding gains from passage of time		XXXX
Total revisions		XXXX
Profit contribution from oil and gas producing activities before income taxes		XXXX
Provision for income taxes		(XXXX)
Profit contribution from oil and gas producing activities after income taxes		$XXXX

SOURCE: Securities Act Release No. 33-5969, SEC Docket, Vol. 15, No. 12, Part III, 12 September 1978, p. 992.

the Reserve Recognition Accounting supplemental earnings summary would present the results of oil and gas producing activities as three elements. These three elements are: results of current production activities, results of current exploration and development activities, and revisions to valuations. They would reflect:

> (a) Results of current production activities would reflect the proceeds of current sales and the value of transfers of oil and gas less current lifting costs and amortization on a unit of production basis of the aggregate valuation of proved oil and gas reserves.
> (b) Results of current exploration and development activities would reflect the valuation of proved oil and gas reserves added during the current period as a result of exploration, development, and improved recovery programs less the exploration and development costs associated with the proved reserves added or determined to be nonproductive during the current period.
> (c) Revisions to valuations would include changes in valuations of proved oil and gas reserves added in previous periods as a result of revisions in estimated quantities and production rates, revisions to reflect changes in the prices of oil and gas and in the costs of development and production, and increases in the valuations resulting from the passage of time as a result of applying the discounted cash flow method of valuation.[53]

It should be noted that Reserve Recognition Accounting as currently envisioned by the Securities and Exchange Commission is not equivalent to full "current value" accounting. In the supplemental earnings summary proposed in Securities Act Release No. 33-5969 oil company liabilities and assets, other than proven oil and gas reserves, would still be based on the historical cost basis followed by current generally accepted accounting principles.

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[53] Securities Act Release No. 33-5966, Federal Register 43, No. 177, 12 September 1978, p. 40693.

It is not yet certain that the supplemental Reserve Recognition Accounting earnings summary will be adopted by the Securities and Exchange Commission in its proposed form. To assist the Securities and Exchange Commission in evaluating information regarding the reserve data, an advisory committee consisting of representatives of oil and gas producing companies, independent petroleum engineering firms, the investment community, academics, and public accounting firms has been appointed. Their evaluation of the issues will likely have great impact on the ultimate form of oil and gas accounting. The Securities and Exchange Commission has also encouraged the Financial Accounting Standards Board to participate in the evaluation of the issues.

Problems in Implementation

Some of the problems that will be raised by the proposed supplemental earnings have been acknowledged by the Securities and Exchange Commission. One issue on which the Securities and Exchange Commission has encouraged comments involves the consideration of income taxes in the supplemental Reserve Recognition Accounting earnings summary. It was noted by the Securities and Exchange Commission that:

> Under generally accepted accounting principles, income tax expense is determined on the basis of comprehensive interperiod tax allocation by the deferred method, as specified by Accounting Principles Board Opinion No. 11, "Accounting for Income Taxes." Comprehensive interperiod allocation of income taxes by the deferred method was adopted for oil and gas producing activities in ASR No. 253 and in FASB Standard No. 19. The deferred income tax method, however, appears inconsistent with the basis of accounting for the proposed supplemental earnings summary, in that it does not provide

> for adjustment in income tax provisions for changes in tax rates or for the imposition of new taxes subsequent to the origination of a timing difference. For instance, if the deferred method were applied in the supplemental RRA earnings summary, the valuation of proved reserves would not be affected by a significant increase in income taxes imposed subsequent to their discovery.[54]

The Securities and Exchange Commission has requested comments on this and other potential measurement and reporting problems that might be involved with the implementation of the supplemental Reserve Recognition Accounting earnings summary in its proposed form.

The requirements that auditors must observe physical inventories has been a generally accepted auditing standard since 1939. The adoption of Statements on Auditing Standard No. 1 by the American Institute of Certified Public Accountants relaxed somewhat the requirements for issuing an unqualified opinion in cases where observation of the physical inventory is impracticable or impossible. Continued recognition of the importance of physical contact with items of inventory is stressed by Statements on Auditing Standard No. 1:

> . . .it will always be necessary for the auditor to make, or observe, some physical counts of the inventory and apply appropriate tests of intervening transactions. . ..[55]

If oil and gas reserves are finally incorporated into the primary financial statements, auditors will probably have to rethink this requirement. Oil and gas reserves cannot be measured or observed

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[54] Securities Act Release No. 33-5969, <u>SEC Docket</u>, Volume 15, No. 12, Part III, 12 September 1978, p. 993.

[55] <u>Statements on Auditing Standards No. 1</u>, "Evidential Matter for Receivables and Inventories," American Institute of Certified Public Accountants, par. 12.

in a direct manner for obvious reasons. Measurement of the inventory of oil and gas reserves would have to be performed by a specialist.

The final form Reserve Recognition Accounting takes is indeterminate at this time. Many difficult questions need to be resolved between now and such time as when Reserve Recognition Accounting is required as primary financial statements for oil and gas producing companies. Unitl these problems are overcome, the future course of accounting for oil and gas producers shall remain uncertain.

CHAPTER V

SUMMARY AND CONCLUSIONS

Many factors have shaped financial accounting in the petroleum industry. The petroleum industry has large capital requirements and a high risk element. Large amounts of money are spent and many years pass before the revenue from exploration is realized. Political turmoil in countries in which oil and gas are produced is a risk inherent in the industry. Oil properties of many companies have been expropriated either directly or through exorbitant taxation. Today oil companies must attempt to take into account potential political as well as geological risks when planning future operations.

Accounting for oil and gas producing operations has been a topic of controversy for years in the accounting profession. W.A. Bachman, in an article written in 1966, stated that:

> Why oil has complex accounting problems is easy to comprehend. The industry combines all of the extremes of size, variety of transactions, international involvement, taxation, and regulation. The differences in availability of capital in financial structure and stability, in the degree of development and degree of risk has provided the environment for differing accounting judgments.[56]

In 1967 the American Petroleum Institute suggested that oil companies disclose the accounting methods they were using. Many oil producing

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[56] W.A. Bachman, "Oil Industry Warned: Clear Out Accounting Jungle," The Oil and Gas Journal 64 (July 1966) : 71.

companies refused voluntary compliance. Back in the 1960's investors did not know what kind of accounting most oil companies were using. As late as 1968 only eight oil companies described in summary form the accounting practices that they followed.

Recently, controversy in oil and gas accounting has revolved around the question of which method of accounting, full cost or successful efforts, was better at presenting information about the operations of oil and gas producing companies.

The successful efforts method of financial reporting is the one favored by most large established integrated oil companies.[57]

Most of the smaller independent oil and gas producers prefer the full cost method of financial reporting.[58]

The Financial Accounting Standards Board attempted to eliminate the full cost versus successful efforts controversy by choosing successful efforts as the method which was preferable. They did this with the issuance of Financial Accounting Standard No. 19.

Subsequently, the Securities and Exchange Commission, in effect, overruled the Financial Accounting Standards Board decision by requiring reserve recognition disclosures for companies which are required to register with the Securities and Exchange Commission in accordance with the securities laws of the United States. All of the details of the new reserve recognition method of reporting oil and gas producing activities have not been worked out by the Securities and Exchange

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[57] Lay, "Petroleum Accounting Reform," p. 32.

[58] Ibid.

Commission, but in the interim period between now and such time as all technical problems are resolved, the agency will accept financial statements which are prepared on either a full cost or successful efforts basis.

In light of the Securities and Exchange Commission's actions, with regard to oil and gas accounting, the Financial Accounting Standards Board suspended the effective date of Financial Accounting Standard No. 19. The reason was the inequity which would have resulted if only nonpublic corporations would have been required to conform to Financial Accounting Standard No. 19, while public corporations would have been allowed to use either the full cost method or the successful efforts method in financial statements filed with the Securities and Exchange Commission.

Whether in fact the effectiveness of the Financial Accounting Standards Board has been damaged by the Securities and Exchange Commission's decision, is indeterminable at this time.

Given the energy problems of this country, it is likely that governmental agencies will continue to keep a close watch on all accounting developments that involve oil and gas producers.

The Securities and Exchange Commission has taken steps to foster the development of Reserve Recognition Accounting for the oil and gas producing industry. In its final form, they hope that the method would show as assets in the balance sheet the reserves of a producing company, and as revenue in the income statement changes in the values of a company's reserves. The concept is a simple one, yet the problems of implementation may prove to be overwhelming.

Oil and gas reserves can not be measured in a direct manner for obvious reasons. Oil and gas reserves are capable of only reasonable estimates. In many cases such estimates are imprecise.

Investors have the right to expect financial statements that are both relevant and reliable. Few people would dispute the relevance of data pertaining to an oil producers oil and gas reserves. Few public disclosures have been made of estimated valuations of proven oil and gas reserves for specific companies. Whether or not information based on these reserve estimates will prove to be sufficiently reliable to form a basis for primary financial statements for the oil and gas producing industry is a question which will hopefully be resolved sometime in the not too distant future.

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