

Kennesaw State University
DigitalCommons@Kennesaw State University

Faculty Publications

2008

Oil and Gas Financial Reporting Using the USGAAP XBRL Taxonomy

Tim Mahon
Kennesaw State University

Ernest Capozzoli
Kennesaw State University, ecapozzo@kennesaw.edu

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/facpubs>

 Part of the [Accounting Commons](#), [Corporate Finance Commons](#), [Finance and Financial Management Commons](#), and the [Taxation Commons](#)

Recommended Citation

Capozzoli, E., Mahon, T. (2008). Oil and Gas Financial Reporting Using the USGAAP XBRL Taxonomy. *Oil Information Technology Journal*.

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Faculty Publications by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.



Oil and Gas Financial Reporting Using the USGAAP XBRL Taxonomy

Tim Mahon

Ernest Capozzoli

Kennesaw State University

Oil IT Journal contributed paper

www.oilit.com

info@oilit.com

Oil and Gas Financial Reporting Using the USGAAP XBRL Taxonomy

ABSTRACT

The Oil and Gas industry has very unique requirements in reporting oil and gas producing activities. Because of these unique requirements, it has been difficult to compare Oil and Gas companies over the years. The current XBRL US taxonomy includes standardized Oil and Gas disclosures. This paper will introduce the requirements Oil and Gas companies are to follow when reporting their financial information. Also, an analysis of the U. S. GAAP taxonomy was done by tagging Anadarko's 2006 financial statements¹. The analysis was to determine if the taxonomy includes elements for each of these requirements. Finally, conclusions of the analysis and disclosures will be presented.

Introduction

Financial reporting has undergone many changes recently. One change has been the completion of a US GAAP financial reporting taxonomy and recommendations that it be used for filings with the SEC. The new taxonomy will transform the process of financial reporting. Another change is the convergence of International Financial Reporting Standards (IFRS) and United States Generally Accepted Accounting Principles (U.S. GAAP). This convergence will most likely soon become a reality in the not too distant future.

Of immediate importance to the Oil and Gas Industry is the recommendation to adopt XBRL for SEC filings (CIFR, 2008). The adoption plan is phased:

- The largest organizations, with a market capitalization in excess of \$5 billion, must file their XBRL-formatted financial statements for periods ending on or after 15 December 2008.
- All other publicly traded companies that file with the SEC using U.S. GAAP will have to adopt XBRL by 2009 through 2010.

¹ This study was performed from publicly available information. No support was requested from or provided by Anadarko Petroleum.

- All remaining international companies that file in the U.S. using International Financial Reporting Standards will need to disclose using XBRL by the end of 2010.

XBRL has been presented as a tool that will “vastly improve the timeliness, accuracy and flexibility of data in financial statements and other business reports” (Cunningham, 2005).

However, the scope and impact of XBRL on financial reporting is largely unknown. To determine the extent to which O&G disclosures are covered in the XBRL taxonomy and assess the amount of effort necessary to create properly tagged disclosures Anadarko Petroleum Corporation (Anadarko) disclosures for 2006 were tagged.

This paper will concentrate on financial reporting in the Oil and Gas industry and specifically Anadarko Petroleum Corporation (Anadarko). First, the paper will begin with a brief introduction to XBRL, including when XBRL was developed, how it works and issues affecting XBRL implementation. Second, will be an explanation of the disclosures which are to be used when presenting an Oil and Gas company’s financial information. Third, the findings and analysis of a tagging project, using XBRL to tag Anadarko’s Oil and Gas disclosures, will be presented.

What is XBRL?

XBRL is a specific form of eXtensible Markup Language (XML), using “the best of XML – structural focus, separation of format from content – to provide financial information to a wide audience in a format capable of satisfying many different business needs” (Manning, 2004). XBRL allows individual line items in a company’s financial information to be tagged, similar to a candy bar or a gallon of milk’s Universal Product Code (UPC) in a grocery store. These items

are tagged with elements and are defined by a taxonomy, which “defines a set of data elements in a given business reporting context, such as U.S. GAAP or international accounting standards. It’s a controlled set of tags and relationships that provides standard descriptions for the data elements used in business reporting” (Hannon, 2005). An instance document can be created after all financial information is tagged with an element. An instance document is “an XML file that contains links to the taxonomies used, the financial data described and the context in which they can be found, as well as links to supplemental reference, presentation, calculation, label and definition information” (Hannon, 2005).

Over the last ten years, there have been a number of reasons slowing the implementation of a requirement for public companies in the United States to file their financial information using XBRL. One reason is the lack of software companies producing XBRL applications. Many software companies would not create these applications until they were positive there would be a market for the applications. Another issue has been the slow development of U.S. GAAP taxonomies. With the release of the U. S. GAAP taxonomy in December 2007 and an updated U. S. GAAP taxonomy in May 2008, the development process may soon no longer be an issue. The taxonomy, which will be discussed in greater detail with regards to Oil and Gas Disclosures later in this paper, was in a comment period which ended April, 4 2008 (xbrl.us, n.d.).

Another issue slowing implementation is that five years ago the United States Securities and Exchange Commission (SEC) basically ignored the idea of XBRL. With the appointment and confirmation of Chairman Christopher Cox in 2005, XBRL’s position among regulators in the U. S. was changed immediately. Chairman Cox is one of the most outspoken proponents of XBRL in the United States. Most recently, his commitment to XBRL was the main reason for

the development of the new U. S. GAAP taxonomy. More proof of the SEC's and Chairman Cox's dedication to XBRL is the implementation of the Voluntary Filing program, "to allow filings that include tagged financial information using extensible business reporting language (XBRL) – in addition to the required HTML or ASCII format filings – to its Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system". (Swartz, 2005) The Voluntary Filing program has also helped in the development of XBRL applications. Many of the programs participants, including major corporations such as General Electric, PepsiCo, and Microsoft, are using their own resources in the development of software. By pledging over \$50 million and devoting a large percentage of his speaking engagements to XBRL, Chairman Cox remains committed to establishing a requirement for all public companies to file the financial information using XBRL.

Statement of Financial Accounting Standard No. 69

Disclosures are a very important part of the financial reporting process. They are designed to have companies report details behind the numbers presented in the balance sheet, income statement, statement of cash flows, etc. Many industries have similar financial reporting requirements with regards to disclosures. However, the Oil and Gas industry, arguably, has the most unique financial reporting requirements. The Financial Accounting Standards Board (FASB) established FASB Statement (SFAS) No. 69, *Disclosures about Oil and Gas Producing Activities*, as an amendment to previously issued SFASs 19, 25, 33, and 39, in November 1982.

As mentioned earlier, the Oil and Gas industry has very unique financial reporting requirements which are outlined in SFASs 19, 25 and 69. The first pronouncement was SFAS No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, which was released in December 1977. SFAS No. 19 was issued for the primary reason of establishing a

clear and comprehensive set of standards for financial reporting and accounting in the Oil and Gas producing industry. The oil and gas producing activities covered by SFAS No. 19 include acquisition of mineral interest, exploration, development, and production of crude oil, condensate, natural gas and natural gas liquids. Since SFAS No. 69 was the first statement to address the oil and gas industry, the statement had to define many terms associated with oil and gas producing activities, including proved reserves, proved developed reserves, proved undeveloped reserves, field, reservoir, exploratory well, development well, service well, stratigraphic test well and proved area.

Financial reporting issues associated with the transportation, refining and marketing of oil and gas are not included in this statement. The statement addresses costs of acquiring, developing and exploring resources and account for these costs using the successful method of accounting. Successful method of accounting for the oil and gas industry means that companies will defer the expenses of successful projects and the unsuccessful efforts are expensed immediately. The successful effort method was chosen in SFAS No. 19 because FASB felt this method was consistent with the current accounting framework of an asset providing future benefits and thus not allowed to be capitalized. This statement also addresses how the capitalized costs for successful projects should be amortized. Oil and Gas producing companies were required to disclose the reserve quantities and incurred costs. Finally, SFAS No. 19 describes the allocation of income taxes for oil and gas companies, which superseded SFAS No. 9, *Accounting for Income Taxes: Oil and Gas Producing Companies*, which was issued in October 1975 as an amendment of Accounting Principles Board (APB) Opinions No. 11 and 23 (www.fasb.org, 1977).

In February 1979, SFAS No. 25, *Suspension of Certain Accounting Requirements for Oil and Gas Producing Companies*, was released as an amendment to SFAS No. 19. SFAS No. 25 addresses a few very significant changes to SFAS No. 19. First, the accounting method which SFAS No. 19 required, the successful effort method, was changed from a requirement to one of two ways to account for costs associated with oil and gas producing activities. The full cost method, which is primarily the capitalization of all costs whether the project is successful or unsuccessful, was allowed by SFAS No. 25. A new disclosure that Oil and Gas producing companies are required to make known, mainly because of the addition of the full cost method, was the accounting method, full cost or successful effort, used to capitalize costs related to the activities of producing oil and gas. The reserve quantities disclosures are allowed to be in supplementary data to the financial statements or in the financial statements. Finally, SFAS No. 25 requires companies to use the definitions developed by the Department of Energy and adopted by the SEC for reserves. The main purpose of SFAS No. 25 is to provide consistency between SFAS No. 19 and SEC regulations (www.fasb.org, 1979).

In 1979, FASB issued the SFAS No. 33, *Financial Reporting and Changing Prices*, which was not specific to the Oil and Gas Industry. This statement only applied to companies with net assets of over \$1 billion or more than \$125 million net property, plant and equipment or inventories. This statement has since been superseded by many other statements (www.fasb.org, 1979). In 1980, a supplement to SFAS No. 33 was issued to provide more detail about financial reporting and changing prices in the Oil and Gas Industry. The statement, SFAS No. 39, *Financial Reporting and Changing Prices: Specialized Assets – Mining and Oil and Gas*, pertains to sections of SFAS No. 33 about current costs associated with mining and oil and gas

entities and disclosures about selling prices of oil and gas reserves. This statement was superseded by SFAS No. 69 (www.fasb.org, 1980).

As mentioned earlier SFAS No. 69, which was issued in 1982, is the most current pronouncement involving disclosures in the Oil and Gas producing activities, and amended SFASs No. 19, 25, 33 and 39. SFAS No. 69 requires Oil and Gas producing companies to disclose, in a supplement to their financial statements, the following information:

- **Accounting Method**, Full Cost or Successful Efforts used for Oil and Gas Producing Activities.
- **Capitalized Costs related to Oil and Gas Producing Activities**. A separate disclosure for capitalized costs relating to unproved properties should be included if the amounts are significant. Also, a section disclosing any equity investments and minority interests should be included.
- **Costs Incurred in the Acquisition, Exploration, and Development of Oil and Gas Property**. The amounts of acquisition, exploration and development costs must be presented in aggregate, by type and geographic location. A separate disclosure is included for unproved properties if significant. Equity investments and minority interests should be disclosed as well in this section.
- **Results of Oil and Gas Producing Activities**. This information must be presented by geographic region and in aggregate amounts, and includes revenues, production costs, exploration expenses, depreciation, depletion, and amortization, and income tax expenses. Any equity investments and minority interests should be disclosed in this section.
- **Proved Oil and Gas reserve Quantities**. The net quantities of proved developed and proved reserves are presented by type, geographic area and in aggregate amounts. Information included in this disclosure includes revisions of previous estimates, improved recovery, purchases of minerals in place, extensions and discoveries, production, and sales of minerals in place. Reserves purchased or received under agreements during a year are to be presented in the same manner. Finally, minority interests and equity investments should be disclosed.
- **Standardized Measure of Discounted Net Cash Flows**. Information disclosed includes future cash inflows, future development and production costs, future income taxes, future net cash flows, and discount, which allows the calculation for a standardized measure of discounted net cash flows. Included in a separate disclosure are changes, in aggregate, in the standardized measure of discounted net cash flows during the year. All equity investments and minority interests should be disclosed.

SFAS No. 69 is a requirement for all publicly traded Oil and Gas companies. This statement eliminates the requirement, from SFAS No. 19, for Oil and Gas companies which are not publicly traded to disclose capitalized costs, costs incurred and reserve quantities (www.fasb.org, 1982).

Over the past twenty five years, there have been many articles discussing SFAS No. 69 and its relevancy. In 1993, an article studied the inclusion of changes in standardized measure of discounted cash flow. The authors believe the purpose of this disclosure is “to provide additional information to the statement users and does so” (Alciatore, 1993). A second article concentrated on the reserve disclosure section of SFAS No. 69. In this article, the authors concluded that the “reserve disclosures are not incrementally informative”, which in turn “questions the usefulness of required SFAS No. 69 disclosures, particularly given the central importance of proved reserve quantities in generating much of the mandated supplementary information” (Clinch, 1992).

More recently, the SEC recognized “there have been significant changes in the energy industry as well as marked advances in recovery technology since the SEC adopted the current reserve-disclosure rules in 1978 and 1982” (Reardon, 2008). Based on this acknowledgement, the SEC feels that their rules may need to be changed. In December 2007, a concept release was issued by the SEC to encourage public comments on fifteen questions related to the possible updating of the current oil and gas disclosures. The comment period for this concept release ended on February 19, 2008 (Reardon, 2008). Lately, there have been important changes in financial reporting, and with advances in technology and the ever changing landscape of the global business community, more changes seem to be on the horizon, possibly even changes to the oil and gas disclosures.

Using XBRL to tag Oil and Gas Disclosures

The primary purpose of XBRL is “to improve the business report product” (Manning, 2004) therefore allowing “for greater transparency and ease of use of the information contained within financial reports” (Roberts, 2004). To achieve this purpose, XBRL US, with a contract from the SEC, set out “to build out the dictionary of U.S. GAAP terms that are used when companies create XBRL documents” (Devonish-Mills, 2007). XBRL US released a new U. S. GAAP taxonomy in December 2007. In May 2008, an updated taxonomy was released with no expected changes until early 2009.

For the purpose of this paper, the U. S. GAAP taxonomy used was released on February 11, 2008 and subsequently updated using the latest release of the taxonomy. The software used to tag the disclosures was Dragon Tag, an XBRL enabler add-in to Excel. Rivet Software, Inc. developed this XBRL application, which is used by nearly forty percent of the companies participating in the SEC’s Voluntary filing program (Phillips, 2008).

As mentioned earlier, this paper focuses on the Oil and Gas Disclosures in the new U. S. GAAP taxonomy. Anadarko’s oil and gas disclosures were tagged and the results of this exercise are presented below. The process of tagging Anadarko’s disclosure took approximately three to four hours in total. The results will include primarily missing elements and the use of scenarios to tag as much information as possible, without extending the taxonomy. Scenarios were used for this project to enable sharing of the XL spreadsheet between the researchers. However, individual disclosures were also created using the newly created functionality within XBRL called "dimensions." Dimensions and scenarios can be used to represent table type data. XBRL US discourages the use of scenarios and has indicated that at some point in the future scenario functionality will not be supported.

Anadarko provides the financial statement user with their accounting method, which is the Full Cost method, in Note One of the Notes to the Consolidate Financial Statements, Summary of Significant Accounting Policies.

The table below reflects Anadarko's 2006 costs excluded that are associated with unproved properties and major development projects related to continuing operations:

Costs Excluded						
Costs associated with unproved properties and major development projects related to continuing operations of \$14.7 billion and \$1.2 billion as of December 31, 2006 and 2005, respectively, are excluded from amounts subject to amortization. The majority of the evaluation activities are expected to be completed within three to ten years.						
Costs Excluded by Year Incurred						
<i>millions</i>	Prior Years	2004	2005	2006	Dec. 31, 2006	
Property acquisition	\$ 498	\$ 51	\$ 152	\$ 437	\$ 1,138	
Exploration	26	24	39	13,318	13,407	
Capitalized interest	61	10	17	50	138	
Total	\$ 585	\$ 85	\$ 208	\$ 13,805	\$ 14,683	
<i>millions</i>	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
Costs Excluded by Country at December 31, 2006						
Property acquisition	\$ 1,132	\$ —	\$ 6	\$ 1,138	—	\$ 1,138
Exploration	11,862	15	1,530	13,407	—	13,407
Capitalized interest	112	1	25	138	—	138
Total	\$ 13,106	\$ 16	\$ 1,561	\$ 14,683	—	\$ 14,683

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

As previously mentioned, only Anadarko's 2006 data was tagged, thus leaving prior years, 2004 and 2005 are not tagged. The only element that is missing from the newest U. S. GAAP taxonomy is Capitalized Interest, which is highlighted in yellow, in the above table. Scenarios have been used to distinguish between the United States, Algeria, Other International, Total Continuing Operations, Discontinued Operations and Total. This was done to avoid extending the current taxonomy.

The next section in Anadarko's 2006 supplemental oil and gas information is the Capitalized Costs related to Oil and Gas Producing Activities. Because Anadarko has a significant amount

of unproved properties, the amounts for unproved and proved properties have been disclosed separately. The following table shows Anadarko's 2006 capitalized costs:

Capitalized Costs Related to Oil and Gas Activities						
	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
2006						
Capitalized						
Unproved properties	\$ 13,106	\$ 16	\$ 1,561	\$ 14,683	\$ —	\$ 14,683
Proved properties	34,514	1,337	1,029	36,880	—	36,880
	47,620	1,353	2,590	51,563	—	51,563
Accumulated DD&A	7,900	553	308	8,761	—	8,761
Net capitalized costs	\$ 39,720	\$ 800	\$ 2,282	\$ 42,802	\$ —	\$ 42,802

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

As the table shows, Anadarko's disclosure was fully represented in the U. S. GAAP taxonomy. Scenarios were again used to differentiate between each of the countries, continuing operations, discontinued operations and total aggregate, as well as to avoid extending the taxonomy used in this exercise.

Costs Incurred in Oil and Gas Producing Activities is the section presented next in Anadarko's 2006 oil and gas supplemental information. In this section, Anadarko presents the acquisition; development and exploration costs incurred, with unproved, because significant, and proved properties separately. This table represents the Cost Incurred section:

Costs Incurred in Oil and Gas Activities						
	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
<i>millions</i>						
2006						
Property acquisition						
Unproved	\$ 11,974	\$ —	\$ 1,405	\$ 13,379	\$ 54	\$ 13,433
Proved	13,893	3	600	14,496	1	14,497
Exploration	769	23	111	903	106	1,009
Development ⁽¹⁾	2,965	58	56	3,079	414	3,493
Total Costs Incurred	\$ 29,601	\$ 84	\$ 2,172	\$ 31,857	\$ 575	\$ 32,432

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

The U. S. GAAP taxonomy did not have all of the elements related to capitalized costs.

Surprisingly, the one element missing is the total costs incurred. As with the other sections,

scenarios were used to make a distinction between countries, total continuing operations, discontinued operations and total aggregate. The U. S. GAAP taxonomy had no elements which seem to match the items included in the table reflecting the development costs incurred.

Anadarko's supplemental data continues by disclosing Results of Operations for Producing Activities. The subsequent table reflects Anadarko's 2006 oils and gas results disclosure:

Results of Operations for Producing Activities							
The following schedule includes only the revenues from the production and sale of gas, oil, condensate and NGLs. The income tax expense is calculated by applying the current statutory tax rates to the revenues after deducting costs, which include DD&A allowances, after giving effect to permanent differences. The results of operations exclude general office overhead and interest expense attributable to oil and gas activities.							
millions	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total	
2006							
Net revenues from production							
Third-party sales	\$ 4,712	\$ 518	\$ 247	\$ 5,477	\$ 515	\$ 5,992	
Sales to consolidated affiliates	2,779	1,008	121	3,908	180	4,088	
	7,491	1,526	368	9,385	695	10,080	
Production costs							
Oil and gas operating	690	42	67	799	109	908	
Oil and gas transportation and other	317	23	1	341	—	341	
Production related general and administrative expenses	60	1	2	63	44	107	
Other taxes	420	103	2	525	11	536	
	1,487	169	72	1,728	164	1,892	
Depreciation, depletion and amortization	1,599	119	118	1,836	139	1,975	
Impairments related to oil and gas properties	—	—	249	249	4	253	
	4,405	1,238	(71)	5,572	388	5,960	
Income tax expense	1,578	510	(45)	2,043	146	2,189	
Results of operations	\$ 2,827	\$ 728	\$ (26)	\$ 3,529	\$ 242	\$ 3,771	
DD&A rate per net equivalent barrel	\$ 11	\$ 5	\$ 16	\$ 10	\$ 8	\$ 10	

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

Scenarios were again used to tag individual countries, total continuing operations, discontinued operations, and total aggregate. The only element not represented in the U. S. GAAP taxonomy is Depreciation, Depletion & Amortization (DD&A) rate per net equivalent barrel.

The section reflecting Anadarko's Oil and Gas Reserves is the largest and most detailed section of their oil and gas disclosures. In this section, all information related to the company's oil reserves is disclosed, by type, location, and aggregate total. A text block was tagged explaining in detail Anadarko's Oil and Gas Reserves, including information about two major

acquisitions which were made and increased the reserve quantities reported. Anadarko also includes tables including information about the Company's Proved Undeveloped Reserves (PUDs) vintage, geographic location and percentage of total proved reserves and another which illustrates the Company's effectiveness of converting proved undeveloped reserves into developed reserves. In the U. S. GAAP taxonomy there are no elements or text blocks to tag this data. The following tables are examples from Anadarko's 2006 financial information and represent the Company's proved reserves, proved developed reserves, and proved undeveloped reserves (the numbers for 2003, 2004 and 2005 have been removed, because only 2006 numbers and information were tagged):

Natural GAS (Bcf) Table

Oil and Gas Reserves (Continued)					
	Natural Gas (Bcf)				
	United States	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
Proved Reserves					
December 31, 2005	6,578	—	6,578	1,332	7,910
Revisions of prior estimates					
Performance	(474)	—	(474)	—	(474)
Price-related	(477)	—	(477)	(14)	(491)
Extensions, discoveries and other additions	1,151	—	1,151	31	1,182
Improved recovery	11	—	11	—	11
Purchases in place	4,256	—	4,256	—	4,256
Sales in place	(1)	—	(1)	(1,263)	(1,264)
Production	(558)	—	(558)	(86)	(644)
December 31, 2006	10,486	—	10,486	—	10,486
Proved Developed Reserves					
December 31, 2006	7,618	—	7,618	—	7,618
Proved Undeveloped Reserves					
December 31, 2006	2,868	—	2,868	—	2,868

Oil, Condensate, and NGLs (MMBbls)

Oil and Gas Reserves (Continued)	Oil, Condensate and NGLs (MMBbls)			Total Continuing Operations	Discontinued Operations	Total
	United States	Algeria	Other Int'l			
Proved Reserves						
December 31, 2005	708	324	58	1,090	40	1,130
Revisions of prior estimates						
Performance	(36)	(20)	(1)	(57)	—	(57)
Price-related	(17)	(1)	2	(16)	—	(16)
Extensions, discoveries and other additions	18	6	—	24	—	24
Improved recovery	25	—	—	25	—	25
Purchases in place	281	—	40	321	—	321
Sales in place	—	—	(39)	(39)	(38)	(77)
Production	(54)	(22)	(8)	(84)	(2)	(86)
December 31, 2006	925	287	52	1,264	—	1,264
Proved Developed Reserves						
December 31, 2006	505	176	38	719	—	719
Proved Undeveloped Reserves						
December 31, 2006	420	111	14	545	—	545

Total (MMBOE)

Oil and Gas Reserves (Continued)	Total (MMBOE)			Total Continuing Operations	Discontinued Operations	Total
	United States	Algeria	Other Int'l			
Proved Reserves						
December 31, 2005	1,805	324	58	2,187	262	2,449
Revisions of prior estimates						
Performance	(115)	(20)	(1)	(136)	—	(136)
Price-related	(98)	(1)	2	(97)	(2)	(99)
Extensions, discoveries and other additions	210	6	—	216	5	221
Improved recovery	27	—	—	27	—	27
Purchases in place	990	—	40	1,030	—	1,030
Sales in place	—	—	(39)	(39)	(248)	(287)
Production	(147)	(22)	(8)	(177)	(17)	(194)
December 31, 2006	2,672	287	52	3,011	—	3,011
Proved Developed Reserves						
December 31, 2006	1,775	176	38	1,989	—	1,989
Proved Undeveloped Reserves						
December 31, 2006	897	111	14	1,022	—	1,022

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

The final disclosure presented in Anadarko's 2006 oil and gas supplemental information is the Standardized Measure of Discounted Net Cash Flows, including a table on reflecting the changes in this measure. First, there is a text block describing the information included in this section and how the estimates were made. Next, a table reflecting the expected future development costs to develop reserves of the next three years was presented; however there are no elements in the

new taxonomy to tag these items. The following table represents the standardized measure for 2006:

Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves						
	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
<i>millions</i>						
2006						
Future cash inflows	\$ 98,537	\$ 18,301	\$ 2,425	\$ 119,263	\$ —	\$ 119,263
Future production costs	26,407	3,858	814	31,079	—	31,079
Future development costs	10,142	983	83	11,208	—	11,208
Future income tax expenses	20,891	5,592	365	26,848	—	26,848
Future net cash flows	41,097	7,868	1,163	50,128	—	50,128
10% annual discount for estimated timing of cash flows	19,743	4,356	396	24,495	—	24,495
Standardized measure of discounted future net cash flows	\$ 21,354	\$ 3,512	\$ 767	\$ 25,633	\$ —	\$ 25,633

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

Scenarios were used to avoid extending the taxonomy and be able to tag by country, total aggregate, total continuing operations and discontinued operations. The final table reflects the changes in standardized measure of discounted net cash flows for Anadarko in 2006:

Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves						
	United States	Algeria	Other Int'l	Total Continuing Operations	Discontinued Operations	Total
<i>millions</i>						
2006						
Beginning of year	\$ 19,756	\$ 5,738	\$ 809	\$ 26,303	\$ 2,989	\$ 29,292
Sales and transfers of oil and gas produced, net of production costs	(6,004)	(1,357)	(296)	(7,657)	(531)	(8,188)
Net changes in prices and production costs	(10,974)	(1,441)	5	(12,410)	48	(12,362)
Changes in estimated future development costs	(266)	(520)	154	(632)	420	(212)
Extensions, discoveries, additions and improved recovery, less related costs	410	113	—	523	—	523
Development costs incurred during the period	1,021	66	12	1,099	191	1,290
Revisions of previous quantity estimates	(2,708)	(267)	(22)	(2,997)	(13)	(3,010)
Purchases of minerals in place	16,390	—	850	17,240	38	17,278
Sales of minerals in place	—	—	(1,073)	(1,073)	(4,638)	(5,711)
Accretion of discount	3,016	915	126	4,057	408	4,465
Net change in income taxes	27	403	195	625	1,088	1,713
Other	686	(138)	7	555	—	555
End of year	\$ 21,354	\$ 3,512	\$ 767	\$ 25,633	\$ —	\$ 25,633

(www.sec.gov, Anadarko Petroleum Corporation 10-K, 2006)

In this section, only one element, entitled other, was missing. Again, scenarios were used to avoid extending the taxonomy.

Conclusions

The purpose of this paper was to discuss XBRL, disclosures unique to the Oil and Gas industry, and primarily analyze the new U. S. GAAP taxonomy and how the unique oil and gas disclosures are represented in this taxonomy by tagging Anadarko's 2006 financial information. The U. S. GAAP taxonomy does cover the majority of the information required by SFAS No. 69. In fact, the taxonomy has additional elements that were not presented in Anadarko's supplemental information, such as productive wells and acreage, delivery commitments and contracts, net productive and dry wells drilled, and suspended wells to name a few. Anadarko may not have anything to disclose in these areas, which may be why nothing is presented in the supplemental data. With regards to tagging the data, Anadarko's supplemental information was relatively easy to tag and was presented in the same general format as the taxonomy.

Overall, XBRL is still improving, but as John White, Director of the Division of Corporation Finance at the SEC, stated in a 2007 speech to the AAPG/SPE International Multidisciplinary Reserves Conference, XBRL will allow end users "to drill down into the information" in XBRL filed documents, and companies "to produce and quickly analyze their disclosures" (White, 2007). Finally, XBRL has made great strides recently, and with the support of the SEC and release of a new U. S. GAAP taxonomy may soon be the required filing standard for public companies.

References

- Alciatore, M. L. (1993, July). New evidence on SFAS No. 69 and the components of the change in reserve value. *The Accounting Review*, 68(3), 639. Retrieved April 16, 2008, from Research Library database. (Document ID: 86366).
- CIFR, (2008, January 11). Advisory Committee on Improvements to Financial Reporting Draft Decision Memo, January 11, 2008. <http://www.sec.gov/about/offices/oca/acifr/acifr-ddm-011108.pdf>
- Clinch, G. & Magliolo, J. (1992, October). Market Perceptions of Reserve Disclosures Under SFAS No. 69. *The Accounting Review*, 67(4), 843. Retrieved April 16, 2008, from Research Library database. (Document ID: 86252).
- Cunningham, C. S. (2005, April). XBRL: A Multitalented Tool. *Journal of Accountancy*, Volume 199(4), Page 70. Retrieved 3/14/08 from <http://www.aicpa.org/pubs/jofa/apr2005/cunning.htm>
- Devonish-Mills, L. (2007, October 1). XBRL – US market outreach workinggroup. *Strategic Finance*. 4 paragraphs. Retrieved 3/18/08 from <http://www.allbusiness.com/technology/software-services-applications-markup/6200767-1.html>
- FASB Website. (1977, December). Statement of Financial Accounting Standard No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*. Retrieved 3/28/08 from <http://www.fasb.org/pdf/fas19.pdf>
- FASB Website. (1979, February). Statement of Financial Accounting Standard No. 25, *Suspension of Certain Accounting Requirements for Oil and Gas Producing Companies – an amendment of FASB Statement No. 19*. Retrieved 4/10/08 from <http://www.fasb.org/pdf/fas25.pdf>
- FASB Website. (1979, September). Statement of Financial Accounting Standard No. 33, *Financial Reporting and Changing Prices*. Retrieved 4/14/08 from <http://www.fasb.org/pdf/fas33.pdf>
- FASB Website. (1980, October). Statement of Financial Accounting Standard No. 39, *Financial Reporting and Changing Prices: Specialized Assets – Mining and Oil and Gas – a supplement to FASB Statement No. 33*. Retrieved 4/15/08 from <http://www.fasb.org/pdf/fas39.pdf>

- FASB Website. (1982, November). Statement of Financial Accounting Standard No. 69, *Disclosures about Oil and Gas Producing Activities – an amendment to FASB Statements No. 19, 25, 33, and 39*. Retrieved 3/28/08 from <http://www.fasb.org/pdf/fas69.pdf>
- Hannon, N. J. & Gold, R. J. (2005, February). XBRL Revisited. *Journal of Accountancy*, Volume 199(2), Page 64. Retrieved 4/12/2008 from <http://www.aicpa.org/pubs/jofa/feb2005/hannon.htm>
- Manning, S. (September, 2004) XBRL(eXtensible Business Reporting Language). *The Rockley Report*, Volume 1, Issue, Page 12. Retrieved from <http://www.rockley.com/TheRockleyReport/V1I3/Tools%20and%20Technology.htm>
- Phillips, M. E., Bahmanziari, T. E., and Colvard, R. G. (2008, February). Six Steps to XBRL. *The Journal of Accountancy*, Volume 205, (2). Retrieved 3/14/06 from http://www.aicpa.org/pubs/jofa/feb2008/six_steps.htm
- Reardon, P. (2008, March 1). Reserves Disclosure. *Oil and Gas Investor This Week*, Volume 2008, (3). Retrieved 4/15/08 from <http://proxy.kennesaw.edu:2057/pqdweb?did=1455097421&sid=4&Fmt=3&clientId=16627&RQT=309&VName=PQD>
- Roberts, Daniel. (May, 2004) What's in it for me? XBRL revolutionizing business reporting. *California CPA*. Retrieved 4/15/2008 from http://findarticles.com/p/articles/mi_m0ICC/is_9_72/ai_n6153002
- SEC website. (n.d.). Anadarko Petroleum Corporation, 2006 10-K. Retrieved 1/15/08 from <http://www.sec.gov/Archives/edgar/data/773910/000119312507042294/d10k.htm>
- Swartz, N. (2005, January/February) SEC Proposes Evaluation of XBRL Use. *Information Management Journal*. Retrieved 3/16/08 from http://findarticles.com/p/articles/mi_qa3937/is_200501/ai_n9474023
- White, J. W. (2007, June 25). Speech by SEC Staff: "Drilling for Disclosure: The Powerful Tool of Interactive Data". AAPG/SPE International Multidisciplinary Reserves Conference. Washington, D.C. June 25, 2007. Retrieved 3/11/08 from <http://www.sec.gov/news/speech/2007/spch062507jww.htm>
- XBRL US website. (n.d.). Retrieved 4/14/08 from <http://www.xbrl.us/USGAAPreview/Pages/default.aspx>