

KAUFMAN CENTRAL APPRAISAL  
DISTRICT  
RE-APPRAISAL PLAN  
FOR  
TAX YEARS 2021 & 2022  
AS ADOPTED BY THE BOARD OF  
DIRECTORS  
August 20, 2020

DIRECTORS

Robert Dobbs, Chairman  
Bruce Bynum, Vice Chairman  
Ann McDonald, Secretary  
Rusty Freeman  
Karen Jones  
Brenda Samples  
Mike Woods  
John Zaby

KAUFMAN CENTRAL APPRAISAL DISTRICT  
RESOLUTION TO ADOPT  
2021 and 2022 REAPPRAISAL PLAN

Whereas, according to Section 6.05(i) of the *Texas Property Tax Code*, the Board of Directors of an Appraisal District *shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and Section 6.05(i) shall hold a public hearing to consider the proposed plan.*

*Whereas, the District Board of Directors has notified the presiding officer of the governing body of each taxing unit participating in the District a written notice of the time, date, and place of the public hearing, and*

*Whereas, the District Board of Directors has held a public hearing to consider any amendments to the written plan, and*

*Now therefore, be it resolved that the District Board of Directors adopts the written reappraisal plan.*

*Resolved further, that the Chief Appraiser of the District is authorized and directed to deliver copies of the approved written reappraisal plan in compliance with the remainder of Section 6.05(i) to the presiding officer of the governing body of each taxing unit participating in the District and to the state comptroller of public accounts within 60 days of the approval date.*

Read, passed and approved this the 20th day of August, 2020.

Robert E. Dobbs Robert Dobbs, Chairman

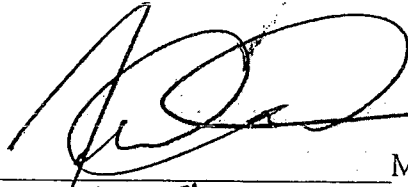
Bruce Bynum Bruce Bynum, Vice Chairman

Ann McDonald Ann McDonald, Secretary

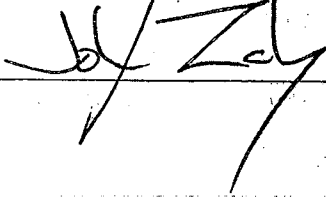
Absent Rusty Freeman, Member

Karen Jones Karen Jones, Member

Brenda Samples Brenda Samples, Member



Mike Wood, Member



John Zaby, Member

*[Faint handwritten notes or scribbles]*

## ADOPTED 6/18/2020

2021

Budget	ACCOUNT
\$ 1,381,567	5000-Salaries and Wages
\$ 88,180	5110-Social Security
\$ 26,400	5120-TEC Payroll Taxes <i>preparing for increase due to COVID-19</i>
\$ 296,640	5130-Insurance Employee
\$ 121,854	5160-Retirement
\$ 170,200	5200, 6000-Travel Expense-Education, Schools, Seminars, Vehicle 5 <i>new appraisers</i>
\$ 20,000	5310, 5330-Utilities Electric, Water
\$ 30,000	5320, 5321-Telephone/Mobile
\$ 43,000	5340,5350-Building and Grounds Maintenance
\$ 9,500	5360-Insurance (Property, Real-PP, WC)
\$ -	5360- Includes this line item
\$ 30,000	5400-Office Supplies <i>additional staff and printers</i>
\$ 6,000	5430-Mapping Services
\$ -	5500 below Includes this line
\$ 24,500	5500-Office Equipment
\$ 41,000	5600-Dues, Membership & Tuition <i>five new appraisers</i>
\$ 80,000	5700-Postage <i>additional notices of value and SB2 mailings</i>
\$ 10,000	5800-Board of Directors
\$ 80,000	5900-Appraisal Review Board <i>increased number of hearings</i>
\$ 176,000	6100-Data Processing TA, BIS, Computer
\$ 46,500	6200-Contracted Services CAGI
\$ 111,500	5025 5026-Contract Fee/data collector
\$ 8,100	6220-Audit
\$ 40,000	6230-Legal Services
\$ 56,000	6240-System/Pictometry Upgrade
\$ 80,000	6400-Reserve Fund
\$ 2,976,941	Total Expenses

## INTRODUCTION

### **Scope of Responsibility**

The Kaufman Central Appraisal District has prepared and published this appraisal plan to provide our Board of Directors, citizens and taxpayers with a better understanding of the District's responsibilities and activities. This report has several parts; a general introduction and sections describing the appraisal effort by the appraisal district.

The Kaufman Central Appraisal District (CAD) is a political subdivision of the state of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A Board of Directors, appointed by the taxing units within the boundaries of Kaufman Central Appraisal District, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for the local property tax appraisal and exemption administration for 59 jurisdictions or taxing units in the district. Not every entity levies a tax at this time. Each taxing unit, such as the county, cities, school districts, utility districts, water districts, community college and emergency service districts, sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals and estimated values by the appraisal district allocate the year's tax burden on the basis of each taxable property's market value. We also determine eligibility for various types of property tax exemptions such as those for homeowners, the elderly and disabled, disabled veterans, charitable or religious organizations and agricultural and timber productivity valuation.

Except as otherwise provided by the Property Tax Code, all taxable property is appraised at its "market value" as of January first. Under the tax code, "market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- Exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- Both the seller and the buyer know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and;
- Both the seller and the buyer seek to maximize their gains and neither is in a position to take advantage of the needs of the other.

The Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec 23.230), productivity (Sec 23.41), real property inventory (Sec 23.12), dealer inventory (Sec. 23.121, 23.124 and 23.127), nominal (Sec 23.18), or restricted use properties (Sec 23.83) and allocation of interstate property (Sec 23.03). The owner of personal property inventory may elect to have the inventory appraised at its market value as of September 1<sup>st</sup> of the year pre-ceding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1<sup>st</sup>.

The Texas Property Tax Code, under Sec 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The district's current policy is to conduct a general re-inspection of taxable property every three years. Appraised values are reviewed annually and are subject to change. Business personal properties, minerals and utility properties are appraised every year.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted mass appraisal programs, and recognized appraisal methods and techniques, we compare that information with the data for similar properties, and with recent cost and market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable.

### **Personnel Resources**

The office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The administration department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The appraisal department is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, business personal, mineral, utilities and industrial. The district's appraisers are subject to the provisions of the Property Taxation Professional Examiners. Support functions including records maintenance, information and assistance to property owners, and coordination of review hearings.

The appraisal district staff consists of 24 employees with the following classifications:

- 1 – Official/Administrator – Chief Appraiser
- 1 – Deputy Chief Appraiser
- 1 – Chief Appraiser Assistant
- 10 -- Residential supervisor, appraisers and assistant
- 3 – Commercial supervisor, appraisers and assistant (commercial, industrial, BPP)

- 2 – Mapping Supervisor and assistant (mapping and deeds)
- 6 – Administrative Support supervisor and support staff (customer service, clerical, exemptions and ARB coordinator)

### **Staff Education and Training**

All personnel that are performing appraisal work are registered with the Texas Department of Licensing and Regulation and are required to take appraisal courses to achieve the status of Registered Professional Appraiser within five years of employment as an appraiser. After they are awarded their license, they must receive additional training of a minimum of 30 hours continuing education units every two years. Failure to meet these minimum standards results in the termination or demotion of the employee.

Additionally, all appraisal personnel receive extensive training in data gathering processes including statistical analysis of all types of property to ensure equality and uniformity of appraisal of all types of property. On-the-job training will be delivered by the senior appraisal staff. There will be regular meetings to introduce new procedures and monitor appraisal activity to ensure that standardized appraisal procedures are being followed by all personnel.

### **Data**

The district is responsible for establishing and maintaining approximately 76,400 real and personal property accounts covering 807 square miles within Kaufman County. This data includes property characteristics, ownership, and exemption information. Property characteristics data on new construction is updated through an annual field review effort; existing property data is maintained through a field review. General trends in interest rates, new construction trends and cost and market data are acquired through various sources, including internally generated questionnaires to buyer and sellers, and market data centers and vendors.

The district has a geographic information system (GIS) that maintains cadastral maps and various layers of data and aerial photography as well as Eagleview, (formerly Pictometry).

Information on certified values and property characteristics data is available on the district's software vendor's website, [www.trueautomation.com](http://www.trueautomation.com).

### **Shared Appraisal District Boundaries**

In 2008, the Legislature adopted HB1010 which cut appraisal district lines at county lines. There are no more shared property issues.

### **Information systems**

Essential to the process and goals of the appraisal program, is reliable, consistent and competent data processing support. It is for this reason that the Kaufman CAD Board of Directors foresaw

the need to purchase new computer software for implementation in 2005. It is critical that the utmost level of computer support and response time be maintained for a timely completion and a successful reappraisal.

The district operates from a SQL server database. The mainframe hardware system is Dell Power Edge T620 database server with dual Intel Xeon E5-2609 processors and the Windows Server 2008 R2 SPI Standard Edition operating system. The user base is networked through the mainframe using Windows SQL Server 2012 software. True Automation provides software services for appraisal application.

**REVALUATION DECISION**

The Kaufman Central Appraisal District, by policy adopted by the Board of Directors, re-inspects approximately one third of all properties each year. Each year is a complete reappraisal/re-inspection of the designated area. One year the properties within the boundaries of Kaufman, Kemp, Mabank, Rockwall, Quinlan and Wills Point School Districts (Region B, 23,564 real parcels). One year the properties within Crandall and Terrell School Districts will be inspected and reappraised (Region C, 24,058 real parcels). The third year of the cycle Forney and Scurry-Rosser School Districts (Region A, 26,412 real parcels) will be field inspected and reappraised. Our goal is to inspect and update all commercial properties in the same year. For the districts that are not being field inspected and appraised, the year is used to pick up new construction, adjust for changes in property characteristics that affect value, and adjust previous year values for building cost updates and land schedule changes based on market sales.

**TAX YEAR 2021 Region B**

Tax year 2021 is a reappraisal/re-inspection year for properties in Kaufman, Kemp, Mabank, Rockwall, Quinlan and Wills Point ISD’s. **23,564 real property parcels**

The re-inspection timelines for each appraiser’s market areas are as follows:

Start – September 1, 2020 ---- End – February, 2021

The Region B neighborhood market areas are-

20-2278	22-0460	22-2905	23-001	24-010	28-010
21-003	22-0590	22-3054	23-002	24-020	28-2452
21-003R	22-0632	22-3062	23-010	24-0390	28-3136
21-004	22-0704	22-3111	23-020	24-0700	29-001
21-030	22-1043	22-3324	23-021	24-0949	29-002
22-001	22-1045	22-3370	23-022	24-1013	29-010
22-002	22-1148	22-3597	23-0385	24-1610	29-015
22-0022	22-1468	22-3751	23-0934	24-2685	29-020



22-003	22-1472	22-3755	23-1379	24-3753	29-0329
22-004	22-1960	22-3756	23-2402	24-3757	29-0560
22-005	22-2135	22-3765	23-2772	25-001	29-3355
22-006	22-2152	22-3907	23-3152	25-010	COMM
22-008	22-2176	22-3913	23-3592	26-001	COMMON
22-010	22-2391	22-4052	23-3640	26-1428	EXEMPTPROP
22-020	22-2444	22-4132	24-001	26-3828	TEMP
22-021	22-2455	22-CKOT	24-002	28-001	TNYHMS

Maintenance Schedule (re-checks, new structures, gate hangers, removed structures and taxpayer requests outside of planned re-inspection area)  
January 2, 2021 to March 15, 2021

**TAX YEAR 2022 Region C**

Tax year 2022 is a reappraisal/re-inspection year for properties in Crandall and Terrell ISDs.  
**24,058 real property parcels**

The re-inspection timelines for each appraiser’s market areas are as follows:

Start – September 1, 2021 ---- End – February, 2022

The Region C neighborhood market areas are-

20-001	20-3056	28-005	28-1350	28-NFAV/GD
20-002	20-3117	28-006	28-1470	28-NFLC/FR
20-003	20-3141	28-007	28-1487	28-NFVG/EX
20-004	20-3143	28-0070	28-1650	28-NVAV/GD
20-005	20-3149	28-008	28-1810	28-NVLC/FR
20-006	20-3156	28-009	28-1920	28-NVVG/EX
20-007	20-3157	28-010	28-1934	28-RFAV/GD
20-008	20-3245	28-011	28-2070	28-RFEX/VG
20-009	20-3307	28-013	28-2396	28-RFFR/LC
20-010	20-3340	28-014	28-2430	28-RFGD/AV
20-0213	20-3795	28-015	28-2443	28-RFLC/FR
20-0262	20-3935	28-0220	28-2452	28-RFVG/EX
20-0312	20-4095	28-0260	28-2752	28-RVAV/GD
20-0412	20-4095R	28-0280	28-2940	28-RVEX/VG
20-0730	20-4135	28-0314	28-3108	28-RVFR/LC
20-0820	20-4150	28-0640	28-3160	28-RVGD/AV
20-1204	22-010	28-0693	28-3201	28-RVLC/FR
20-1484	28-001	28-0781	28-3222	COMM
20-1709	28-002	28-1060	28-3594	COMMON
20-1825	28-002N	28-1132	28-3697	EXEMPTPROP

20-2120	28-003	28-1242	28-3845	SUB/HOA
20-2432	28-004	28-1290	28-3921	TEMP
				TEMP-D-E

Maintenance Schedule for 2022 Start Date: Jan 2, 2022 End Date: March 15, 2022

Maintenance Schedule (re-checks new structures, gate hangers, removed structures and taxpayer requests outside of planned re-inspection area)

**TAX YEAR 2023 Region A**

Tax year 2023 is a reappraisal/re-inspection year for properties in Forney and Scurry-Rosser ISDs. **26,412 real property parcels**

The re-inspection timelines for each appraiser’s market areas are as follows:

Start – September 1, 2022 ---- End – February, 2023

The Region A neighborhood market areas are-

21-001	21-017	21-040	21-060	21-2832
21-001S	21-0177	21-041	21-0830	21-3118
21-002	21-018	21-042	21-0942	21-3601
21-0028	21-019	21-043	21-1362	21-3605
21-003	21-020	21-045	21-1474	21-3831
21-003R	21-022	21-046	21-1600	21-3922
21-004	21-023	21-047	21-1700	27-001
21-005	21-024	21-048	21-1712	27-002
21-005N	21-0242	21-049	21-1735	27-010
21-006	21-026	21-050	21-2136	27-0130
21-007	21-028	21-051	21-2157	27-0600
21-008	21-029	21-052	21-2170	27-0911
21-009	21-0292	21-053	21-2201	27-3106
21-010	21-030	21-054	21-2253	COMM
21-011	21-031	21-055	21-2288	COMMON
21-012	21-033	21-056	21-2360	EXEMPTPROP
21-013	21-035	21-057	21-2440	SFS3904
21-014	21-037	21-0570	21-2520	SUB/HOA
21-015	21-038	21-058	21-2620	TEMP
21-016	21-039	21-059	21-2633	TEMPSKW

## PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for each major work area. This calendar identifies all key events for appraisal, clerical, and information systems.

### **2021 and 2022 General Calendar of Events**

#### August

- Start new year reappraisal and re-inspection process
- Collect data, permits, mechanic liens, deeds, etc. all month
- Load property data onto field devices as needed

#### September

- Begin field inspections
- Collect data, permits, mechanic liens, deeds, etc. all month
- September 1 – Current year's taxable values of inventories may be determined as of this date, at property owner's written option (Sec.23.12)
- September 15 – Last day for CAD board to adopt CAD budget , unless district has changed its fiscal year (Sec. 6.06) and reappraisal plan in even year

#### October

- Continue field inspections
- Collect data, permits, mechanic liens, deeds, etc. all month

#### November

- Continue field inspections
- Collect data, permits, mechanic liens, deeds, etc. all month

#### December

- Conclude primary field inspections
- Collect data, permits, mechanic liens, deeds, etc. all month
- December 28 – January 15 Prepare and mail personal property renditions

#### January

- Begin maintenance field inspections (new construction, demolition and remodeling)
- Collect data, permits, mechanic liens, deeds, etc. all month
- Mail special-use applications for new owners and property possibly not eligible for current year after December deed work completed
- Mail Exemption applications for new owners after December deed work completed
- January 1 – Date renditions period begins; continues through April 15 for those property owners not requesting a filing extension (Sec. 22.23)
- January 1 – Date that half of appraisal review board (ARB) members begin 2-year term (Sec. 6.41)
- January 31 – Last day for chief appraiser to deliver applications for special appraisal and exemptions requiring annual applications (Secs. 11.44, 23.43)

- January 31 – Last day for motor vehicle, boats, and outboard motors, heavy equipment and manufactured housing dealers to file dealer’s inventory declarations (Secs. 23.121, 23.124, 23.1241, 12.127)
- Begin updating Cost Manuals

#### February

- Continue maintenance field inspections (new construction, demolition and remodeling)
- Collect data, permits, mechanic liens, deeds, etc. all month
- Value analysis, ratio studies, schedule building, testing and adjusting begins

#### March

- Complete maintenance field inspections (new construction, demolition and remodeling)
- Collect data, permits, mechanic liens, deeds, etc. all month
- Final test all residential schedules with sales ratios for accuracy, run parcel edit, correct errors and check homestead ceilings

#### April

- Collect data, permits, mechanic liens, deeds, etc. all month
- April 15 – Mail first round of appraisal notices
- April 15 – Last day for property owners to file renditions and property information reports unless they requested a filing extension in writing (Sec. 22.23)
- April 15 – May 15 Mail remaining property and BPP appraisal notices
- Give preliminary values to entities

#### May

- May 1 – Time that chief appraiser must publish notice about taxpayer protest procedures in the newspaper (Secs. 41.41, 41.70)
- May 1 – Last day for property owners to file these applications or reports with the CAD
  - Some exemption applications (Sec. 11.43)
  - Notice to chief appraiser that property is no longer entitled to an exemption not requiring annual application (Sec. 11.43)
  - Application for special appraisal or notices to chief appraiser that property no longer qualifies for 1-d and 1-d-1 agricultural land, timberland, restricted-use timberland, recreational-park-scenic land and public access airport property (Secs. 23.43, 23.54, 23.75, 23.84, 23.94, 23.9804)
  - Requests for separate listing of separately owned land and improvements (Sec. 25.08)
  - Requests for proportionate taxing of a planned unit development property (Sec. 25.09)
  - Requests for separate listing of separately owned standing timber and land (Sec. 25.10)
  - Requests for separate listing of undivided interests (Sec. 25.11)
  - Requests for joint taxation of separately owned mineral interests (Sec. 25.11)

- May 15 – Last day for property owners to file renditions and property information reports if they requested, in writing, an extension. For good cause, chief appraiser may extend this deadline another 15 days (Sec. 22.23)
- May 15 – Mail personal property/mineral appraisal notices
- May 31 – Last day for property owners to file protest with ARB (or by 30<sup>th</sup> day after notice of appraised value is delivered, whichever is later) (Sec. 41.44)
- May 31 – Last day for taxing units to file challenges with ARB (or within 15 days after ARB receives appraisal records, whichever is later) (Sec. 41.04)
- May 31 – Last day for religious organizations to amend charters and file new applications for Sec. 11.20 exemption (or within 60 days of exemption denial, whichever is later) (Sec. 11.421)

#### June

- Give estimate of value to taxing entities
- June 15 – Last day for chief appraiser to submit next year’s budget recommendation to CAD board and taxing units (unless taxing units have changed CAD’s fiscal year) (Sec. 6.06)
- Hearings begin- May if possible
- June 30 – last day for taxing units to adopt local option percentage homestead exemptions (Sec. 11.13)
- June 30 – Last day for private schools to amend charters and file new applications for Sec. 11.21 exemption (or within 60 days of exemption denial, whichever is later) (Sec. 11.422)
- June 30 – Last day for CADs to report formation of reinvestment zones and tax abatement agreements to the Texas Comptroller (Sec. 312.005)

#### July

- July 20 – ARB must approve records, but may not do so if more than 5 percent of total appraised value remains under protest (Sec. 41.12)
- July 25 – Last day for chief appraiser to certify appraisal roll to each taxing unit or give certified estimate. (Sec. 26.01)

### **MASS APPRAISAL SYSTEM**

#### **Real Property Valuation**

Revisions to cost models, income models, and market models are specified, updated and tested each year.

Cost schedules are tested with market data (sales) to ensure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables are tested for accuracy and uniformity using ratio study tools and compared with cost data from recognized industry leaders, such as *Marshall & Swift*.

Land tables are updated using current market data (sales) and then tested with ratio study tools. Value modifiers are developed for property categories by market area and tested on a pilot basis with ratio study tools.

### **Personal Property Valuation**

Density schedules are updated using *Marshall and Swift Valuation Guide* and local renditions to update costs. Valuation procedures are reviewed and modified as needed and tested.

### **Notice Processing**

25.19 – Appraisal notice forms are reviewed and edited for updates. Updates include the latest copy of *Property Taxpayer Remedies* in English and Spanish. Kaufman CAD will mail notices between April 1 and May 31.

### **Hearing Process**

Protest hearing scheduling for informal and formal Appraisal Review Board hearing is reviewed and updated as required. Standards of documentation are reviewed and amended as required. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process. Production of documentation is tested and compliance with HB 201 is insured. Kaufman CAD utilizes the automated formal hearing schedule software within PACS and appeals begin with the mailing of notices in April and will continue until all appeals are heard.

### **The Appraisal Process**

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a comprehensive physical description of personal property, and land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types located within the boundaries of Kaufman Central and the jurisdictions of this appraisal district. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system. The goal is to field inspect residential, commercial, and new personal property accounts in the district every three years. Included in this document is a parcel count breakdown and inspection schedule for a three-year period. This will separate approximately 74,000 parcels into counts between 24,000 and 26,400 parcels for each appraisal year.

Properties will be identified through physical inspection, or other reliable means including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches. Characteristics of each property will be updated in the appraisal records.

Market areas will be defined by:

- Location and economic attributes
- Physical attributes of properties such as size, age, and condition
- Easements, covenants, leases, special assessments, ordinances, or legal restrictions

The appraisal activities are conducted by ten in-house appraisers. The data used by the field appraisers includes the existing property characteristic information contained in the Computer Assisted Mass Appraisal system (CAMA). The data is stored in the server and moved to electronic field devices, printed on property cards or personal property data sheets. Other data includes maps, sales data, fire and damage reports, building permits, photos and actual cost and market information.

For tax year 2021, the appraisal district will do a re-inspection and reappraisal of all real and personal properties in Region B. Each property will be physically examined with appraisers driving or walking in front of each improvement. Appraisers will note condition of property and changes that might have occurred since the last on-site check. Exterior pictures will be taken or updated as necessary. Every subdivision will be statistically analyzed to ensure equity and uniformity based on sales during the previous year.

Commercial properties will be inspected for depreciation and change. Photos will be taken. Construction replacement costs and depreciation will be reviewed based on *Marshall and Swift Valuation Guides*. We will work towards re-classing our commercial property classes to better coincide with *Marshall and Swift* classification guides. The income approach to value is also utilized to appraise income producing properties such as shopping centers, apartment complexes, motels, mini-warehouses and other types of property that typically sell based on net operating income.

New business personal properties will be visited and quality and density observations noted. Renditions will be mailed to each business. New businesses will be discovered using permits, sales taxpayer numbers issued by the Comptroller's office, vehicle registration information supplied by *Just Texas*, newspaper ads and visual inspections. Businesses are categorized using SIC codes. Rendition laws provide additional information on which to base values of all BPP accounts.

Attached is the re-appraisal plan issued by Capital Appraisal Group Inc (CAGI) outlining their efforts to reappraise minerals, utilities, pipelines and industrial properties.

## PRELIMINARY ANALYSIS

### **Data Collection/Validation**

Data collection of real property involves maintaining data characteristics of the property on a CAMA (Computer Assisted Mass Appraisal) system. The information contained in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square foot of living area, year built, quality of construction and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The approaches to value are structured and calibrated based on this coding system and property description and characteristics. The field appraisers use property classification references during their initial training and as a guide in the field inspection of properties. The type of information contained in the BPP file includes personal property such as business inventory, furniture and fixtures, machinery and equipment, with details such as cost and location. The field appraisers conducting on-site inspections use a personal property classification system during their initial training and as a guide to correctly list all personal property that is taxable.

### **Sources of Data**

The sources of data collection are through property inspection, new construction field effort, data mailer questionnaires, hearings, sales validation efforts, newspapers and publications, and property owner correspondence. A principal source of data comes from taxing jurisdictions that require property owners to take out a building permit. We also use septic system inspection forms obtained from Kaufman County. Data surveys of property owners requesting market information and property description information is also valuable data. Various income and rental surveys will be sent to determine operating income and expenses for investment and income producing property.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently the property owner provides reliable data to allow correction of records without having to send an appraiser on-site.

Accuracy and validity in property description and characteristics data is the highest goal and is stressed throughout the appraisal process from year to year. Appraisal opinion quality and validity relies on data accuracy as its foundation.

The field appraiser is responsible for the data entry of his/her fieldwork into the computer file. This responsibility includes not only data entry but also quality assurance. The majority of the data collected in the field is input by the computer staff with supervision by the field appraiser.



## **PERFORMANCE ANALYSIS**

In each year, 2021 and 2022, the previous year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and by market area within state property reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies from the International Association of Assessing Officers. Mean, median, and weighted mean ratios are calculated for properties in each reporting category to measure the level of appraisal (appraisal accuracy). The mean ratio is calculated in each market area to indicate the level of appraisal accuracy by property reporting category. In the reappraisal year this analysis is used to develop the starting point for establishing the level of accuracy of appraisal performance. In the no-appraisal year this analysis is used to indicate the uniformity or equity of existing principals.

## **ANALYSIS OF AVAILABLE RESOURCES**

Staffing and budget requirements for tax year 2021 are detailed in the 2020 appraisal district budget, as adopted by the board of directors and attached to the written biennial plan for reference. This reappraisal plan is adjusted to reflect the available staffing in tax year 2021 and the anticipated staffing for tax year 2022. Staffing will impact the cycle of real property re-inspection and personal property on site review that can be accomplished in the 2021-2022 time period.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified. Information systems support is detailed with year specific functions identified and system upgrades scheduled. Computer generated forms are reviewed for revisions based on year and reappraisal status. Legislative changes are scheduled for completion and testing. Existing maps and data requirements are specified and updates scheduled.

## **RESIDENTIAL VALUATION PROCESS**

Residential appraisers are responsible for estimating equal and uniform market values for residential improved and vacant property. An individualized set of data characteristics for each residential dwelling and multiple family units in this district are collected in the field and data entered into the computer. The property characteristic data drives the application of computer assisted mass appraisal under the cost, market, and income approaches to property valuation.

### **Land Analysis**

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the

market price of land located in the neighborhood. A computerized land table file stores the land information required to consistently value individual parcels within neighborhoods given known land characteristics. Specific land influences are considered where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size and topography. The appraisers use abstraction and allocation methods to insure that estimated land values best reflect the contributory market value of the land to the overall property value.

### **Area Analysis**

Data on regional economic forces such as demographic patterns, regional location factors, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and cost are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and sources such as continuing education in the form of IAAO and TDLR required classes.

### **Neighborhood and Market Analysis**

Neighborhood analysis involves the examination of how physical, economic, governmental, and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as Independent School Districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal. Cost and market approaches to estimate value are the basic techniques utilized to interpret these sales. For multiple family properties the income approach value is also utilized to estimate an opinion of value for investment level residential property.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A “neighborhood” for analysis purposes is defined as the largest geographic grouping of properties where the property’s physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood with similar characteristics has been identified, the next step is to define its boundaries. This process is known as delineation. Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwellings, quality of construction and condition of dwellings, square footage of living area and story height. Delineation can involve the physical drawing of

neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a state of growth, stability or decline. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce a population shift from older homes to newer homes. In the period of stability, the forces of supply and demand are about equal. Generally, in the stage of stability, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further delineation is warranted. Whereas neighborhoods involve similar properties in the same location, a neighborhood group is simply defined as similar neighborhoods in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhood, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis.

### **Highest and Best Use Analysis**

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real

estate market require reassessment of the highest and best use of a select population of properties. Highest and best use rule does not apply to homestead property.

### **Cost Schedules**

All residential parcels in the district are valued with a replacement cost estimated from identical cost schedules based on the improvement classification system using a comparative unit method. The district's residential cost schedules are estimated from *Marshall & Swift*, a nationally recognized cost estimator service. These cost estimates are compared with sales of new improvements and evaluated from year to year and indexed to reflect the local residential building and labor market. Costs may also be indexed for neighborhood factors and influences that affect the total replacement cost of the improvements in a smaller market are based on evidence taken from a sample of the market sales. The cost schedules are reviewed regularly as a result of recent state legislation requiring that the appraisal district cost schedules be within range of plus or minus 10% from nationally recognized cost schedules.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction are considered. Appraisal district replacement costs are compared against *Marshall & Swift*, a nationally recognized cost estimator, and indicated replacement cost abstracted from these market sales of comparably improved structures. The results of this comparison are analyzed using statistical measures, including stratification by quality and reviewing of estimated building costs plus land to sale prices. As a result of this analysis, a new regional multiplier or economic index factor and indications of neighborhood economic factors are developed for use in the district's cost process. This new economic index is estimated and used to adjust the district's cost schedule to be in compliance with local building costs as reflected by the local market.

### **Sales Information**

Residential improved and vacant land sales, along with commercial improved and vacant land sales, are maintained in a sales information system. Residential improved and vacant sales are collected from a variety of sources, including: MLS, district questionnaires sent to buyer and seller, field discovery, protest hearings, builders, and realtors. A system of type, source, validity and verification codes has been established to define facts related to a property's purchase or transfer and to help determine relevant market sale prices. Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Monthly time adjustments are estimated based on comparative analysis using paired comparison of sold property. Sales of the same property were considered and analyzed for an indication of price change attributed to a time change of influence. Property characteristics, financing, and condition of sales were compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

### **Statistical Analysis**

Kaufman Central Appraisal District performs statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the residential neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy – level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised values is determined by the weighted mean ratio for sales of individual properties within a neighborhood, and a comparison of neighborhood weighted mean reflects the general level of appraised value between comparable neighborhoods.

The district, through the sales ratio analysis process, reviews every neighborhood annually. The first phase involves neighborhood ratios studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the district an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser makes a preliminary decision as to whether the value level in a neighborhood needs to be updated or whether the level of market value in a neighborhood is at an acceptable level.

### **Market and Cost Reconciliation and Valuation**

Neighborhood analysis of market sales to achieve an acceptable sales ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not particularly specified in a purely cost model.

The following equation denotes the hybrid model used:

$$MV = LV + (RCN - AD)$$

Whereas, in accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less accrued depreciation (AD). As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of

the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These market or location adjustments may be abstracted and applied uniformly within neighborhood to account for location variances between market areas or across a jurisdiction. Whereas, in accordance with the market approach, the estimated market value of the property equals the basic unit of property, under comparison, times the market price range per unit for sales of comparable property. For residential property, the unit of comparison is typically the price per square foot of living area or the price indicated for the improvement contribution. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, indicates the depreciated value of the improvement component, in effect, measuring changes in accrued depreciation, a cost factor. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure depreciation affecting the amount of loss attributed to the improvements as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. The evaluation of this market and cost information is the basis of reconciliation and indication of property valuation under this hybrid model.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time adjusted sales prices indicates the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 96% to 100%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, then adjustments to the neighborhood are made.

If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the apparent effects of time, by market abstraction of property components. This abstraction of property components allows the appraiser to focus on the rate of change for the improvement contribution to the property by providing a basis for calculating accrued depreciation attributed to the improvement component. This impact on value is usually the most significant factor affecting property value and the most important unknown to determine by market analysis. Abstraction of the improvement component from the adjusted sale price for a property indicates the effect of overall market suggested influences and factors on the price of improvements that were a part of this property, recently sold. Comparing this indicated price or value allocation for the improvement with the estimated replacement cost new of the improvement indicates any loss in value due to accrued forms of physical, functional, or economic obsolescence. This is a market driven measure of accrued depreciation and results in a

true and relevant measure of improvement marketability, particularly when based on multiple sales that indicate the trending of this rate of change over certain classes of improvements within certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for given improvement descriptions considering age and observed condition. After an acceptable level of appraisal is achieved within the sale sample, the entire neighborhood of property is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values and when combined with any other site improvements and land value, brings the estimated property value through the cost approach closer to actual market prices as evidenced by recent sales prices within a given neighborhood.

### **COMMERCIAL PROPERTY VALUATION PROCESS**

In addition to the processes listed above for residential property valuation, each commercial property will be subjected to:

- The income approach to value
- Appraised value comparison for same class of occupancy code
- Sales comparison

The income approach to value is applied to those real properties which are typically viewed by market participants as “income producing”, and for which the income methodology is considered a leading value indicator. This is calculated using like properties’ typical:

- potential gross rent
- minus vacancy and collection loss allowance
- plus, secondary income such as parking, vending, laundry, reimbursements or miscellaneous income
- minus allowable expenses based on prudent management
- divided by a capitalization rate that includes return rates, income multipliers and discount rates

Capitalization analysis is used in the income approach models to form an indication of value. This methodology involves the direct capitalization of net operating income as an indication of market value for a specific property. Sales of improved properties from which an actual income and expense data are obtained provide a very good indication of property return expectations a specific market participant is requiring from an investment at a specific point in time.

### **BUSINESS PERSONAL PROPERTY VALUATION PROCESS**

Business personal Property is classified and utilizes a four-digit numeric code, called Standard Industrial Classification (SIC) codes that were developed by the federal government to describe

property. These classifications will be used by Kaufman CAD to classify personal property by business type.

The district's property characteristic data will be collected through a field data collection effort coordinated by the district and from property owner renditions. Each year reevaluation activities will permit district appraisers to collect new data via an annual field inspection. This project will result in the discovery of new business, changes in ownership, relocation of businesses and closures of businesses not revealed through other sources. Tax assessors, local newspapers, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

### **Vehicles**

An outside vendor provides Kaufman CAD with a listing of vehicles within the jurisdiction. The vendor develops the listing from the Texas Department of Transportation Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

Kaufman Central Appraisal District's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is either developed from property owner reported historical cost or from CAD developed valuation models. The trending factors used by the CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by the CAD are also based on published valuation guides.

### **THE MASS APPRAISAL REPORT**

Each tax year, the tax code required Mass Appraisal Report is prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar. The Mass Appraisal Report is completed in compliance with the STANDARD RULE 6 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6-3 of *USPAP*. The written appraisal plan is attached to the Mass Appraisal Report by reference.



## Document 1

# Value Defense Procedures for Informal Meetings and Formal Hearings

## Industrial Real Property

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and capitalization data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

## Utilities

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and unit appraisal data (when applicable) are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

## Oil and Gas Property

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Mineral operators and third party agents with the proper fiduciary in place may also view the parameters used in the appraisal of their oil and gas properties on Capitol's web site at [www.cagi.com](http://www.cagi.com). Other taxpayers with an interest in a mineral lease may request a copy of their appraisals at the same web site. Appraisers may present recent production data and sales prices to compare with the actual income received by the taxpayer in defense of our values. Income, expense and capital expense data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. Since oil and gas leases have multiple owners, all owners who pursue a formal protest on the same property will be scheduled at the same time for a hearing. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Capitol uses its MINARB procedure to generate copies of the appraisal reports and product pricing data for the current and prior tax years. These reports are also included in this packet.

### **Industrial Personal Property**

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present general data specific to the property in defense of our values. Renditions other than that of the subject property will not be released. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Capitol provides copies of appraisal reports generated by its Industrial Personal Property System for inclusion in the packet. As previously stated, no confidential renditions of competing properties will be provided as evidence.

### **Client Plan**

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

# **Value Defense Procedures for ARB Hearings**

## **Industrial Real Property**

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

## **Utilities**

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

## **Oil and Gas Property**

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. Since oil and gas leases have multiple owners, all owners who pursue a formal protest on the same property will be scheduled at the same time for a hearing. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Capitol uses its MINARB procedure to generate copies of the appraisal reports and product pricing data for the current and prior tax years. These reports are also included in this packet.

## **Industrial Personal Property**

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Capitol provides copies of appraisal reports generated by its Industrial Personal Property System for inclusion in the packet. As previously stated, no confidential renditions of competing properties will be provided as evidence.

## **Client Plan**

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

Capitol Appraisal Group, LLC  
Formal and Informal Procedures

It is the Capitol Appraisal policy to follow the formal and informal procedures as established by each individual client. Those policies will supersede the below referenced general practices used by this company if there is a conflict.

**Informal**

Informal meetings with agents or taxpayers/owners on utility properties occur either on the telephone or in the offices of Capitol Appraisal if requested by the agent or owner. This procedure may also take place upon filing of a protest and is useful to finalize issues such as allocations and ownership.

**Formal Meetings**

Formal meetings with agents or taxpayers/owners take place at the physical location as directed by the appraisal district. Discussions with the agents or taxpayer/owners may take place prior to the scheduled meeting time with the Appraisal Review Board. A deadline for timely action is dictated by the appraisal district. Prior to the deadline and in the absence of the agent or taxpayer/owner being physically present there may be telephone conversations to discuss the protested issues. Failure to resolve the protested issue(s) and no representation by the agent or taxpayer/owner will result in the recommendation to affirm the noticed value and "no show" the agent or taxpayer/owner.

Affidavits used for evidence are presented to the Appraisal Review Board as scheduled by the appraisal district.

## Document 3A

2021-2022

### CAD Plan for Periodic Reappraisal of Industrial Real Property

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of selected industrial property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through the inspection process. Confidential rendition, assets lists and other confidential data also provide additional information. Subject property data is verified through previously existing records and through published reports.
  - (3) Defining market areas in the district: Market areas for industrial properties tend to be regional, national and sometimes international. Published information such as prices, financial analysis and investor services reports are used to help define market area.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: Among the three approaches to value (cost, income and market), industrial properties are most commonly appraised using replacement/reproduction cost new less depreciation models because of readily available cost information. If sufficient income or market data are available, those appraisal models may also be used.
  - (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property and that are based on the most reliable data when multiple models are used. Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

## Document 3B

2021-2022

### CAD Plan for Periodic Reappraisal of Industrial Personal Property

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all industrial personal property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Through inspection the appraiser identifies personal property to be appraised. The appraiser begins with properties from the previous tax year and identifies new properties from visual identification and/or publications, newspaper articles, or information obtained through the interview of property owners. The appraiser may also refer to other documents, both public and also confidential, to assist in identification of these properties. Such documents might include but are not limited to the previous year's appraisal roll, vehicle listing services and private directories.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: Data identifying and updating relevant characteristics of the subject properties are collected as part of the inspection process through directories and listing services as well as through later submissions by the property owner, sometimes including confidential rendition. These data are verified through previously existing records and through public reports.
  - (3) Defining market areas in the district: Market areas for industrial personal property are generally either regional or national in scope. Published price sources are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics. Personal property is appraised using replacement/reproduction cost new less depreciation models. Income approach models are used when economic and/or subject property income is available, and a market data model is used when appropriate market sales information is available.
  - (5) Comparison and Review: The appraiser reconciles multiple models by considering the model that best addresses the individual characteristics of the subject property. Year-to year property value changes for the

subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.



Document 3C

2021-2022

**CAD Plan for Periodic Reappraisal of  
Utility, Railroad and Pipeline Property**

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all utility, railroad and pipeline property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual. New permitting documents on record with the Railroad Commission of Texas provide a source to identify potential new pipeline projects but does not provide indication if the project was actually started, completed, or a distinct location of the proposed project. Every effort is made to discover new utility, railroad, and pipeline properties through personal observation combined with permitting documents.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through data collected as part of the inspection process and through later submissions by the property owner, sometimes including confidential rendition. Additional data are obtained through public sources, regulatory reports and through analysis of comparable properties.
  - (3) Defining market areas in the district: Market areas for utility, railroad and pipeline property tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: For all three types of property, the appraiser must first form an opinion of highest and best use. Among the three approaches to value (cost, income and market), pipeline value is calculated using a replacement/reproduction cost new less depreciation

model [RCNLD]. In addition to the RCNLD indicator, a unit value model may also be used if appropriate data are available. Utility and railroad property are appraised in a manner similar to pipeline except that the RCNLD model is not used.

- (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property when multiple models are used. Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.

## Document 3D

2021-2022

### CAD Plan for Periodic Reappraisal of Oil and Gas Property

In accordance with Section 25.18 of the Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property as approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all oil and gas property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identification of new property and its situs. As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAGL obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as CAGL's in-house map resources.
  - (2) Identifying and updating relevant characteristics of all oil and gas properties to be appraised. Relevant characteristics necessary to estimate value of remaining oil or gas reserves are production volume and pattern, product prices, expenses borne by the operator of the property, and the rate at which the anticipated future income should be discounted to incorporate future risk. CAGL obtains information to update these characteristics annually from regulatory agencies such as the RRC, the Comptroller of Public Accounts, submissions from property owners and operators, as well as from published investment reports, licensed data services, service for fee organizations and through comparable properties, when available.
  - (3) Defining market areas in the district and identifying property characteristics that affect property value in each market area. Oil and gas markets are regional, national and international. Therefore they respond to market forces beyond defined market boundaries as observed among more typical real properties.
  - (4) Developing an appraisal approach that best reflects the relationship among property characteristics affecting value and best determines the contribution of individual property characteristics. Among the three approaches to value (cost, income and market), the income approach to value is most commonly used in the oil and gas industry. Through use of the discounted cash flow technique in particular, the appraiser is able to bring together relevant characteristics of production volume and pattern, product prices, operating expenses and discount rate to determine an estimate of appraised value of an oil or gas property.

- (5) Comparison and Review. Use of the income approach is the first step in determining an estimate of market value. After that the appraiser reviews the estimated market value compared to its previous certified value and also compares it to industry expected payouts and income indicators. The appraiser examines the model's value with its previous year's actual income, expecting value to typically vary within in a range of 2-5 times actual annual income, provided all appropriate income factors have been correctly identified. Finally, periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser further expand the review process.

## Document 5

### CAD Procedure for Identifying New Utility Properties and Producing Wells

Appraisal of industrial properties is limited to those properties indicated in the contract with the appraisal district unless the appraisal district requests the appraisal of other properties. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal.

#### Utility, Railroad and Pipeline Property

Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties.

#### Oil and Gas Property

As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAG uses the following procedure:

1. Obtain a list from the Texas Railroad Commission of all leases currently producing or permitted in the CAD. Obtain permit plat for leases contained within the county.
2. Obtain a list of leases currently producing or permitted in neighboring counties with common borders and map relative location of leases to county's border. Obtain permit plat to determine if leases may have lease boundaries extending into county.
3. Using plats of leases with partial or all lease boundaries within the county, create a list of potential additional property to be added to the appraisal roll.
4. Compare list of potential leases with all currently producing leases in the CAD on January 1<sup>st</sup> of current tax year to determine any lease duplication.
5. Check to see if the lease was completed prior to January 1<sup>st</sup> or producing before January 1<sup>st</sup> of current tax year.
6. If lease has not previously been added to the CAD's appraisal roll, do so and obtain ownership.

## Document 6A

### Industrial Real Property Mass Appraisal Procedure and Timeline

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

## **Document 6B**

### **Industrial Personal Property Mass Appraisal Procedure and Timeline**

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

## Document 6C

### Utility, Railroad and Pipeline Property Mass Appraisal Procedure and Timeline

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Research and capitalization rate development. For properties valued via the income approach data is obtained and analyzed for calculation of a capitalization rate appropriate to a specific property type.

#### **October to December**

Submission of appraisals to the Property Tax Assistance Division (PTAD) of the Comptroller's office and preparation of value defense for any properties included in their ratio study. Defense documentation and appraisal analysis of the PTAD appraisal is prepared and submitted to the appraisal district or the representative of the taxing jurisdictions whichever is appropriate.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out notice of value are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.



## Document 6D

### Oil and Gas Mass Appraisal Procedures and Timeline

Capitol Appraisal Group, LLC (CAGL) contracts with Appraisal Districts and other governmental entities to appraise all oil and gas subsurface, producing, mineral interests within the purview of the law.

#### **October-December:**

##### **SEC 10(k) data gathered for use in discount rate study.**

A base discount rate is developed using the Securities and Exchange Commission (SEC) 10k Standard Measure of Value, before Federal Income Tax (BFIT), for a grouping of Exploration and Production (E&P) companies, and then matching their 10k Standard Measure of Value (BFIT), reserves and costs, through a discounted cash flow (DCF) technique. This reserve and cost match is used with Section 23.175 pricing directives to determine a discount rate necessary to equal the stock and debt value of the companies, as of January 1 for a given tax year. This analysis is calibrated with a WACC for the same companies that are used in the stock and debt analysis. Management determines an appropriate base discount rate to be used.

#### **January:**

##### **Discount rate study finalized**

#### **November-March:**

**The appraiser commences the annual appraisal cycle with identification of new property and determination of situs.**

"Minerals in place" and an estate or interest in the same, are classified by the state of Texas as real property. They cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these minerals in place and estates or interests in the same. CAGL obtains monthly oil and gas lease production information from the Railroad Commission of Texas [RRC] and compares it to existing oil and gas properties already identified and appraised. New properties are identified in this process by comparing existing data to new information obtained from the RRC.

The appraiser determines the validity of new properties and then determines the situs of these new properties by obtaining plats, W-2/G-1 records obtained from the RRC, and using in-house mapping resources.

**January-March:**

**Appraisers begin entering detailed new property information.**

Along with RRC lease specific information, the appraiser enters the lease's legal description, its situs, and detailed lease information obtained from the RRC. This process of discovery and entry into the appraisal system continues year round to identify assessable properties that are obtained because of delays in the RRC reporting system.

**February:**

**Comptroller's 23.175 pricing data and market condition factors are obtained and incorporated into the appraisal system.**

**February-April:**

**Properties are appraised and values are posted on the CAG web site for clients, operators and agents to review and submit information.**

Appraiser(s) access production declines for leases to be appraised. Based on the appraiser's decline rate analysis and review of previous year's appraisal parameters and current Comptroller pricing data, the estimated value for the current appraisal year is determined.

Preliminary appraised values are available from the CAG web site [www.cagi.com](http://www.cagi.com) following appraiser and supervisor review.

**April-May:**

**Preliminary appraisals reviewed.**

Appraisers review operating expenses, product prices, new or revised information about production submitted by operators and agents before Notifications of Value are mailed to taxpayers.

**May-July:**

**Notified values formally & informally reviewed.**

Appraisers work with taxpayers following Notification of Value and continue to review information submitted by royalty owners, operators and agents. The ARB process is part of this review

## 6 Contractor's procedures for identifying new property

### *Industrial Real Property*

Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.

### *Industrial Personal Property*

Through inspection the appraiser identifies personal property to be appraised. The appraiser begins with properties from the previous tax year and identifies new properties from visual identification and/or publications, newspaper articles, or information obtained through the interview of property owners. The appraiser may also refer to other documents, both public and confidential, to assist in identification of these properties. Such documents might include, but are not limited to, the previous year's appraisal roll, vehicle listing services and private directories.

### *Utility, Railroad and Pipeline Property*

Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and confidential, to assist in the identification of these properties.

### *Oil and Gas Property*

As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAG obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as CAG's in-house map resources.

**Procedure for Evaluating Results  
of Contractor's Property Discovery for all property other than Oil and Gas**

1. Review renditions and compare to appraisal roll.
2. Review local news articles.
3. Have chief appraiser or another appraiser ride with contract personnel during inspection process.
4. Meet with contract personnel and go over any discrepancies.
5. Stay aware of what is going on in the area and meet with contractor about new projects.
6. Review contractor's appraisal roll and discuss any discrepancies.

**Procedure for Evaluating Results  
of Contractor's Oil and Gas Property Discovery**

1. Obtain a list from the Texas Railroad Commission of all new leases currently producing in the CAD.
2. Choose a sample of leases or if time permits list all new leases producing on January 1<sup>st</sup>. of current tax year.
3. Check to see if the lease was completed prior to January 1<sup>st</sup> or producing before January 1<sup>st</sup> of current tax year.
4. Compare to list of new leases currently producing or completed prior to January 1<sup>st</sup> of current tax year. If discrepancies exist contact contractor to discover why lease may be left off tax rolls. Some reasons may include but are not limited to: incorrect RRC reporting data, lease being listed under its permit number on current tax roll, or lease being currently listed under a prior RRC lease number.
5. If contractor has accounted for all new production and leases, the CAD has complied with the MAP requirement.

Document 8

Procedure for CAD Verification of Services  
Provided by Appraisal Contractor

1. Verify lists of properties provided by the contractor agree with CAD's lists.
2. Verify appropriate methods of appraisal are used for each type of property [market, cost, income].
  - a. Inquire if there has been any change in agreed appraisal methodology or application.
  - b. Any variations from USPAP guidelines shall be documented and reviewed the following year.
3. Verify that complete and correct data resources, including market data, are used appropriately for each type of property.
  - a. Inquire if there are added or deleted sources.
  - b. If so, document reason for change and track affected properties.
4. Verify that contractor follows laws and statues applicable for all properties being appraised, including rendition compliance.
  - a. Verify that Property Tax Code [P. T. C.] 1.04 (7) is met for all relevant properties such that both the appraisal approach and its conclusions meet the definition of fair market value.
  - b. For minerals verify compliance with P. T. C 23.175 for mineral properties:
    - Use of Comptroller's Manual for Discounting Oil and Gas Income
    - Use of average product prices for the year prior to Jan 1
5. Verify agreed scheduling of:
  - a. Preliminary appraisal report summarizing progress in completing the year's appraisals.
  - b. Mail dates:
    - Notices of Appraisal
    - Last date to file a protest
    - ARB meeting dates
  - c. Compilation of Certified Estimate of Value in accordance with P. T. C. 26.01 (e)
  - d. copies of all appraisal and supporting data in agreed format

6. Verify timely receipt and correct format of following information:

a. Value

- preliminary appraised value
- preliminary appraisal roll
- certified roll including all documentation

b. Reports

- new property listing
- list of renditions
- protests and waives of protest
- pending protest list
- value change report

## Documents 9A-J

### Contractor's Appraisal Documentation Delivered to the CAD

Note: Appraisal formats subject to change

#### Industrial

Unit Pipeline	9A
Investor-owned Electric	9B
Investor-owned telephone8	9C
Electric Coop	9D
Telephone Coop	9E
Plant Summary	9F

#### Oil and Gas

Oil lease #1	9G
Oil lease #2	9H
Gas Property #1	9I
Gas Property #2	9J



2010

DOCUMENT 9A

SAMPLE PIPELINE COMPANY

UNIT APPRAISAL

10/5/2010

## INCOME APPROACH

YEAR	AFTER TAX NOI	NET PLANT IN SERVICE		NOI / AVG of prev yr and current yr NPIS
2004	18,111,707	84,791,838		
2005	18,726,411	497,538,026		0.0643
2006	56,177,093	535,687,803		0.1087
2007	66,740,951	851,292,542		0.0962
2008	84,283,848	1,236,732,019		0.0807
2009	146,430,277	1,820,553,365	1.472067786	0.0958

## PROJECTIONS OF NOI

MOST RECENT YEAR				146,430,277
FIVE YEAR AVERAGE				74,471,716
FIVE YEAR WEIGHTED AVERAGE				93,372,682
TREND ON 3 YR RETURN ON NPIS			0.0907	165,117,335
LINEAR REGRESSION ON NOI		CORR. COEFF. =	0.96	159,526,062
LIN. REGRESS. ON NOI/NPIS		CORR. COEFF. =	0.98	200,947,084
PROJECTED TYPICAL NET OPERATING INCOME				120,000,000
NET INCOME ATTRIBUTABLE TO CWIP (SEE P. 3)				24,277,319
TOTAL NET INCOME TO CAPITALIZE				144,277,319
CAPITALIZATION RATE				0.1085
VALUE INDICATED BY INCOME APPROACH				1,329,202,314

NET INCOME ATTRIBUTABLE TO  
CONSTRUCTION WORK IN PROGRESS  
NOT IN THE RATE BASE

TOTAL CONSTRUCTION WORK IN PROGRESS				364,645,300
CONSTRUCTION WORK IN PROGRESS IN RATE BASE				0
CONSTRUCTION WORK IN PROGRESS NOT IN RATE BASE				364,645,300
DISCOUNTED FOR	3	YEAR(S) AT A RATE OF :	0.1085	267,677,257
PROJECTED NET INCOME FROM CWIP				24,277,319

## COST APPROACH

UTILITY PLANT	1,904,925,695
CONSTRUCTION WORK IN PROGRESS	364,645,300
TOTAL UTILITY PLANT	2,269,570,995
ACCUMULATED DEPRECIATION AND AMORTIZATION	93,270,899
NET UTILITY PLANT	2,176,300,096
GAS STORED - BASE GAS	0
SYSTEM BALANCING GAS	0
GAS STORED UNDERGROUND - NON-CURRENT	0
GAS STORED - SYSTEM GAS	0
GAS STORED - CURRENT	7,453,749
PLANT MATERIAL AND OPERATING SUPPLIES & STORES EXPENSE UNDISTRIBUTED	1,444,820
NET BOOK VALUE	2,185,198,664
ECONOMIC OBSOLESCENCE (SEE BELOW)	874,079,466
VALUE INDICATED BY COST APPROACH	1,311,119,199

## CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0907
CURRENT DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCEMENT	0.8356
MOST RECENT RATE OF RETURN	0.0958
CURRENT DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCEMENT	0.8825
PROJECTED RATE OF RETURN	0.0659
CURRENT DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCEMENT	0.6073
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCEMENT	0.6000
FRACTION OBSOLETE	0.4000
ECONOMIC OBSOLESCENCE	874,079,466

CORRELATION

INCOME INDICATOR OF VALUE	1,329,202,314
COST INDICATOR OF VALUE	1,311,119,199
CORRELATED UNIT VALUE	1,315,000,000
MARKET VALUE /ORIGINAL COST	0.5771
MARKET VALUE/NET BOOK VALUE	0.6018
REPLACEMENT COST NEW OF SOFTWARE	0
MARKET VALUE OF SOFTWARE	0
MARKET VALUE TO ALLOCATE	1,315,000,000
MARKET VALUE /ORIGINAL COST (EXCLUDING SOFTWARE)	0.5771
MARKET VALUE/NET BOOK VALUE (EXCLUDING SOFTWARE)	0.6018

## ALLOCATION

## PLANT IN SERVICE

NET PLANT IN SERVICE	1,811,654,796
NET BOOK VALUE	2,185,198,664
PERCENT TO PLANT IN SERVICE	0.8291

CORRELATED UNIT VALUE	1,315,000,000
PERCENT TO NET UTILITY PLANT	0.8291
UNIT VALUE OF PLANT IN SERVICE	1,090,210,284

## TEXAS PLANT IN SERVICE

	TEXAS	TOTAL CO.	% TO TEXAS
NET PLT IN SRVC	1,811,654,796	1,811,654,796	1.0000
GRS PLT IN SRVC	1,904,925,695	1,904,925,695	1.0000
CONCLUSION			1.0000
UNIT VALUE OF PLANT IN SERVICE			1,090,210,284
PERCENT TO TEXAS			1.0000
UNIT VALUE OF TEXAS PLANT IN SERVICE			1,090,210,284

## TEXAS GATHERING &amp; TRANSMISSION PIPE

	TEXAS PIPE	TEXAS PLANT IN SERVICE	% TO PIPE
NET INVESTMENT	1,343,744,175	1,811,654,796	0.7417
GROSS INVESTMENT	1,397,895,771	1,904,925,695	0.7338
CONCLUSION			0.7378
UNIT VALUE OF TEXAS PLANT IN SERVICE			1,090,210,284
% TO PIPE			0.7378
UNIT VALUE OF TEXAS PIPE			804,332,157
REPLACEMENT COST NEW LESS DEPRECIATION OF TEXAS PIPE			970,647,820
CORRELATED MARKET VALUE OF TEXAS PIPE			800,000,000
PTD's SCHEDULE 1 VALUE OF TEXAS PIPE			640,872,407
RATIO OF CORRELATED VALUE TO SCHEDULE VALUE (ENS)			1.2483

CAPITOL APPRAISAL GROUP, LLC

2010

DOCUMENT 9B

SAMPLE ELECTRIC IOU COMPANY

UNIT APPRAISAL

*Appraiser*

CAPITOL APPRAISAL GROUP, LLC

INCOME APPROACH

YEAR	NET OPERATING INCOME*	NET PLANT IN SERVICE*		NOI/NPIS OF PRV. YR. & CURRENT YR.
2004	68,027,209	685,658,796		
2005	61,265,796	706,760,852	1.030776	0.0894
2006	56,814,104	685,850,642	0.970414	0.0804
2007	32,745,832	732,197,728	1.067576	0.0477
2008	50,477,347	749,480,314	1.023604	0.0689
2009	46,565,398	824,721,310	1.100391	0.0621

\*INCLUDES M&S AND STORED GAS.

PROJECTIONS OF NOI

MOST RECENT YEAR			46,565,398
THREE YEAR AVERAGE			43,262,859
FIVE YEAR AVERAGE			49,573,695
THREE YEAR WEIGHTED AVERAGE			45,566,120
FIVE YEAR WEIGHTED AVERAGE			47,191,192
FIVE YR. AVG. RETURN ON NPIS		0.0697	57,492,045
LINEAR REGRESSION ON NOI	CORR. COEFF. =	(0.71)	38,852,429
LIN. REGRESS. ON NOI/NPIS	CORR. COEFF. =	(0.00)	49,560,383
PROJECTED TYPICAL NET OPERATING INCOME			48,000,000
NET INCOME ATTRIBUTABLE TO CWIP (SEE P. 3)			2,258,138
TOTAL NET INCOME TO CAPITALIZE			50,258,138
CAPITALIZATION RATE			0.0994
VALUE INDICATED BY INCOME APPROACH			505,450,487



CAPITOL APPRAISAL GROUP, LLC

NET INCOME ATTRIBUTABLE TO  
CONSTRUCTION WORK IN  
PROGRESS  
NOT IN THE RATE BASE

TOTAL CONSTRUCTION WORK IN PROGRESS		82,283,128		
CONSTRUCTION WORK IN PROGRESS - MAINTENANCE		46,669,321		
CONSTRUCTION WORK IN PROGRESS NOT IN RATE BASE		35,613,807		
DISCOUNTED FOR	1	YEAR(S) AT A RATE OF :	0.0994	32,392,904
PROJECTED NET INCOME FROM CWIP				2,258,138



CAPITOL APPRAISAL GROUP, LLC

COST APPROACH

UTILITY PLANT	1,357,257,700
CONSTRUCTION WORK IN PROGRESS	82,283,128
TOTAL UTILITY PLANT	1,439,540,828
NET NUCLEAR FUEL	0
ACCUMULATED DEPRECIATION AND AMORTIZATION	552,521,228
NET UTILITY PLANT	887,019,600
MERCHANDISE	0
FUEL STOCK	9,645,377
PLANT MATERIAL AND OPERATING SUPPLIES	10,339,461
LIQUIFIED NATURAL GAS HELD FOR PROCESSING	0
NET BOOK VALUE	907,004,438
ECONOMIC OBSOLESCENCE (SEE BELOW)	380,941,864
VALUE INDICATED BY COST APPROACH	526,062,574



CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0697
CURRENT DESIRED RATE OF RETURN	0.0994
INDICATED FRACTION NON-OBSOLESCE	0.7011
MOST RECENT RATE OF RETURN	0.0621
CURRENT DESIRED RATE OF RETURN	0.0994
INDICATED FRACTION NON-OBSOLESCE	0.6248
PROJECTED RATE OF RETURN	0.0582
CURRENT DESIRED RATE OF RETURN	0.0994
INDICATED FRACTION NON-OBSOLESCE	0.5853
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCE	0.5800
FRACTION OBSOLETE	0.4200
ECONOMIC OBSOLESCENCE	380,941,864

CAPITOL APPRAISAL GROUP, LLC

STOCK AND DEBT APPROACH

EQUITY	
NO. SHARES	403,554,634
\$ / SHARE	30.26
EQUITY VALUE	12,211,563,225
PERCENT TO COMPANY	0.0816
ALLOCATED EQUITY VALUE	995,860,423
LONG -TERM DEBT	368,964,682
TOTAL STOCK AND DEBT VALUE	1,364,825,105

CAPITOL APPRAISAL GROUP, LLC

CORRELATION

INCOME INDICATOR OF VALUE	505,450,487
COST INDICATOR OF VALUE	526,062,574
STOCK & DEBT INDICATOR OF VALUE	1,364,825,105
DISCOUNTED CASH FLOW INDICATOR OF VALUE	591,713,506
APPRAISER'S OPINION OF MARKET VALUE	510,000,000
MARKET VALUE /ORIGINAL COST	0.3494
MARKET VALUE/NET BOOK VALUE	0.5623
TOTAL VALUE OF TRANSMISSION AND DISTRIBUTION	343,397,389

CAPITOL APPRAISAL GROUP, LLC

ALLOCATION

ORIGINAL COST OF DIST. SYSTEM INCL. INVEST IN GENERAL PLANT	624,524,151
ORIGINAL COST OF TRANSMISSION SYSTEM	411,838,471
ORIGINAL COST OF PRODUCTION PLANT	295,065,069
ORIGINAL COST OF INTANGIBLE PLANT	22,895,904
TOTAL ORIGINAL COST	1,354,323,595

DISTRIBUTION PLANT

ORIGINAL COST OF DIST. SYSTEM INCL. INVEST IN GENERAL PLANT	624,524,151
ORIG. COST OF LAND AND LAND RIGHTS	1,103,824
ORIG. COST OF STRUCTURES AND IMPROVEMENTS	111,337
ORIG. COST OF STATION EQUIPMENT	74,929,157
ORIG. COST OF LAND AND LAND RIGHTS IN GENERAL PLANT	1,876,687
ORIG. COST OF STRUCTURES AND IMPROVEMENTS IN GENERAL PLANT	24,144,259
ORIGINAL COST OF INTANGIBLES	387,073
DIST. PLANT EXCL. SUBSTATIONS AND LAND	521,971,814
MARKET VALUE/ ORIGINAL COST	0.3494
MARKET VALUE OF DIST. EXCL. SUBSTATIONS AND LAND	182,391,876
TOTAL METERS	192,937
MARKET VALUE PER METER	945



CAPITOL APPRAISAL GROUP, LLC

TRANSMISSION PLANT

ORIGINAL COST OF TRANSMISSION SYSTEM	411,838,471
ORIG. COST OF LAND AND LAND RIGHTS	11,235,765
ORIG. OF STRUCTURES AND IMPROVEMENTS	1,365,537
ORIG. COST OF STATION EQUIPMENT	189,158,884
ORIG. COST OF LAND AND LAND RIGHTS IN GENERAL PLANT	570,685
ORIG. COST OF STRUCTURES AND IMPROVEMENTS IN GENERAL PLANT	7,342,067
ORIGINAL COST OF INTANGIBLES	6,962,453
TRANS. PLANT EXCL. SUBSTATIONS AND LAND	195,203,080
MARKET VALUE/ ORIGINAL COST	0.3494
MARKET VALUE OF TRANS. EXCL. SUBSTATIONS AND LAND	68,209,538

	LINE TYPE	ORIG. COST	M.V./O.C.	MARKET VALUE	NO. MILES	MKT. VAL. PER MILE
	69 KV	73,552,521	0.3494	25,701,354	2,619.35	9,812
	138 KV	81,868,172	0.3494	28,607,080	1,458.78	19,610
	345 KV	39,801,908	0.3494	13,907,925	222.53	62,499
	115 KV	0	0.3494	0	0.00	0
	161 KV	0	0.3494	0	0.00	0
TOTALS		195,222,601		68,216,359	4,300.66	

CAPITOL APPRAISAL GROUP, LLC

SUBSTATIONS

ORIGINAL COST DIST. SUBSTATIONS	75,040,494
ORIGINAL COST TRANS. SUBSTATIONS	190,524,421
TOTAL ORIGINAL COST OF SUBSTATIONS	265,564,915
MARKET VALUE/ ORIGINAL COST	0.3494
MARKET VALUE OF SUBSTATIONS	92,795,975
TOTAL SUBSTATION KVA CAPACITY	9,279,606
VALUE PER KVA	10.00
Total T & D Value	343,397,389

\* ACKNOWLEDGEMENT OF NEW VALUE FOR AD VREM TAXATION \*  
THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY TAP PRASER FOR THE DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THEXPAYER AS 2008 VALUES. THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVTHE RIGHT TO FURTHER NOTIFICATION OF VALUES.

TO BE VALID THIS SIGN-OFF MUST BE EXECUTED AND RRNED TO CAPITOL BY MIDNIGHT PRIOR TO YOUR ARB HEARING.

DISTRICT	CAPITOL	TAXPAYER/AGENT	BRA
Date	Date	Date	Date



## APPENDIX A

DISCOUNTED CASH  
FLOW  
2010

ASSUMPTIONS:	NOI	46,565,398
FIT RATE : 0.35000	Income Taxes - Federal (409.1)	10,992,511
DISC RATE: 0.09943	EBFIT (NOI + INCOME TAXES)	57,557,909
GROWTH RA 0.04355	Interest on Long-Term Debt (427)	19,501,675
	Depreciation Expense (403)	42,404,799
	UTILITY PLANT	1,357,257,700
	Capital Expenditures %	3.00%
	Capital Expenditures	40,717,731

(000'S)

	2009	2010	2011
EBFIT (LESS DEPREC)	57,558	60,064	62,680
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	38,056	40,563	43,179
FED INC TAX	(13,320)	(14,197)	(15,112)
NET INC AFTER FIT	24,737	26,366	28,066
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	45,925	47,555	49,255
DISC FACT	0.95371	0.86746	0.78900
P.W.	43,799	41,251	38,862
	2012	2013	2014
EBFIT (LESS DEPREC)	65,410	68,258	71,231
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	45,908	48,757	51,729
FED INC TAX	(16,068)	(17,065)	(18,105)
NET INC AFTER FIT	29,840	31,692	33,624
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	51,029	52,881	54,813
DISC FACT	0.71765	0.65274	0.59371
P.W.	36,621	34,517	32,543

CAPITOL APPRAISAL GROUP, LLC

	2015	2016	2017
EBFIT (LESS DEPREC)	74,333	77,570	80,948
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	54,831	58,068	61,447
FED INC TAX	(19,191)	(20,324)	(21,506)
NET INC AFTER FIT	35,640	37,745	39,940
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	56,829	58,933	61,129
DISC FACT	0.54001	0.49117	0.44675
P.W.	30,689	28,947	27,310

2018

EARN. BF. TAX	84,473
INTEREST	19,502
EARN. BF. TAX	64,972
FED INC TAX	(22,740)
NET INC AFTER FIT	42,232
INTEREST	(19,502)
DEPREC	42,405
CAP EXP	(40,718)
CASH FLOW	63,420
DISC FACT	0.40635
P.W.	25,771

	RVRSN	TOTAL PW
EBFIT (LESS DEPREC)		
INTEREST		
EARN. BF. TAX		
FED INC TAX		
NET INC AFTER FIT		
INTEREST		
DEPREC		
CAP EXP		
CASH FLOW	618,690	
DISC FACT	0.40635	
P.W.	251,404	\$ 591,714

SAMPLE TELEPHONE COMPANY  
DOCUMENT 9C  
1/1/10 APPRAISAL

Appraiser  
CAPITOL APPRAISAL GROUP, LLC

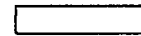
INCOME APPROACH

	ADJUSTED NOI excludes Pension Gains & Equip Sales		NPIS		NOI/NPIS
2004	27,609,661		213,294,189		0.129444
2005	31,403,708	114%	198,144,756		0.158489
2006	31,663,733	101%	181,767,566	92%	0.174199
2007	30,279,656	96%	166,977,937	92%	0.181339
2008	34,468,837	114%	152,788,425	92%	0.225598
2009	40,010,863	118%	136,460,682	89%	0.293204
		144.92%			
1. Prior Year			40,010,863		40,010,863
2. Simple 3 Year Average			34,919,785		34,919,785 31,777,005
3. Weighted 3 Year Average			219,249,919 34,007,885		36,541,653
4. Adjusted Weighted 3 Year Average			34,047,670 34,053,193		34,391,486
5. Linear Regression on NOI				0.81	39,571,184
6. Linear Regression on NOI/NPIS				(0.81)	37,606,141
7. Typical Return on Plant					39,582,694
8. Linear regression on NOI vs. Access Lines				(0.85)	38,158,859
PROJECTION less allowance for equipment sales:					35,000,000
INCOME ATTRIBUTED TO CWIP					0
Total Income to be Capitalized					35,000,000

INCOME APPROACH

SUBSCRIBER  
ACCESS LINES

20043	167,000	
2005	162,000	97%
2006	156,489	97%
2007	151,717	97%
2008	147,248	97%
2009	139,353	95%
		83.44%



Market Value Estimate – Income Approach

	Projection		Cap. Rate	=	Market Value	
Tangible NOI	27,465,176	/	0.1146	=	<u>239,718,500</u>	-
Less V. S.	5,706,117	/	0.1146	=	49,803,501	0.16
Less DSL	1,828,707	/	0.1146	=	15,961,115	
System NOI	35,000,000	/	0.1146	=	305,483,115	



COST APPROACH

Plant in Service	\$566,897,345
Construction WIP	2,998,765
Non-Op Plant	
Subtotal	569,896,110
Miscellaneous Physical Property	0
Materials and Supplies	643,038
Total Operating Property	570,539,148
Less Depreciation Reserve:	
Depreciation & Amortization Reserve	430,436,663
Amortization Reserve	0
Depreciation Reserve	0
Total Depreciation Reserves & Plant Adjustments	430,436,663
NET BOOK	140,102,485
LESS: Software @ Net	0
INDICATED OBSOLESCENCE	150,000,000
COST APPROACH INDICATOR (INCLUDING INTANGIBLES)	290,102,485
Other Intangibles (trade name from D&T Appraisal)	9,300,000
Work Force	5,000,000
Buildings	24,099,934
COST APPROACH (EXCLUDING INTANGIBLES)	251,702,551

FINAL VALUE ESTIMATE

Income Approach Estimate (Excluding Intangibles)	\$239,718,500
Cost Approach Estimate (Excluding Intangibles)	251,702,551
AUS RCNLD STUDY	\$240,679,972
Income Approach System (Include Intangibles)	\$305,483,115
Cost Approach (Including Intangibles)	290,102,485

After careful consideration of this information, the total system value of SAMPLE COMPANY A excluding intangibles is as follows:

FINAL VALUE ESTIMATE	\$240,000,000
FINAL VALUE ESTIMATE SYSTEM (Including Intangibles)	\$305,483,115
MARKET VALUE TO COST	42.07%
MARKET VALUE TO NB	171.30%

\* ACKNOWLEDGEMENT OF NEW VALUE FOR AD VALO  
 THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY THE DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THE  
 THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVES  
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REM TAXATION \*  
 APPRAISER FOR THE  
 PAYER AS 2010 VALUES.  
 THE RIGHT TO FURTHER

District	Capitol	Taxpayer/Agent	ARB
Date	Date	Date	Date

ALLOCATION

(A)	Total System Value		<b>\$240,000,000</b>
(B)	Texas Utility Plant in Service	\$566,897,345	
(C)	System Gross Utility Plant	\$566,897,345	
(D)	Texas Apportionment Factor (B)/(C)		<b>100.00%</b>
(E)	Texas Net Utility Plant	\$140,102,485	
(F)	System Net Utility Plant	\$140,102,485	
(G)	Texas Apportionment Factor (E)/(F)		<b>100.00%</b>
(H)	Average Apportionment Factor [(D)+(G)]/2		<b>100.00%</b>
(I)	Texas Value (H) * Total Market Value		<b>\$240,000,000</b>
(J)			
(K)	Buildings & Land		\$24,099,934
(L)	Total Land and Buildings (J)+(K)		<b>\$24,099,934</b>
(M)	Original Cost		\$570,539,148
(N)	Percentage Attributable to Land and Buildings (L)/(M)		<b>4.22%</b>
	Other Intangibles (trade name from D&T Appraisal)		9,300,000
	Work Force		5,000,000
	Value to Allocate [(I)-(I*N)]		<b>\$215,562,248</b>
	Total Rendered Value		<b>171,000,000</b>
	ratio of Value to Allocate to Rendered Value		1.2606
	Ratio of Value to Allocate to Original cost		0.3782

NET OPERATING INCOME ATTRIBUTED TO CONSTRUCTION WORK IN PROGRESS

(A) Total Construction work in progress	\$2,998,765
Less:	
(B) Short term plant in rate base	\$0
(C) Modernization - Long term plant replacing plant in rate base	\$2,998,765
(D) Construction Work in Progress not in rate base	\$0
(E) Capitalization Rate	11.46%
(F) Present value of (D) discounted for one period at capitalization rate	\$0
(G) Net operating income attributed to construction work in progress adjusted for 80% market penetration	\$0

COST APPROACH OBSOLESCENCE

(A)	Total Net Plant In Service	\$136,460,682
(B)	Required Rate of Return	11.46%
(C)	Prior 3 Year's Net Operating Income - Avg.	34,919,785
(D)	Required Net Operating Income (A)*(B)	\$15,634,657
(E)	Income Shortfall (D)-(C)	(\$19,285,128)
(F)	Capitalization Rate	11.46%
(G)	Indicated Obsolescence	(\$168,322,312)

Method 2

(A)	Projected Net Operating Income	35,000,000
(B)	Total Net Plant In Service	\$136,460,682
(C)	Rate of Return (A) / (B)	25.65%
(D)	Expected Rate of Return (Capitalization Rate)	11.46%
(E)	Percent Good (C)/(D)	223.86%
(F)	Percent Obsolescence Equals (100.00%) - (E)	-123.86%
(G)	Total Economic Obsolescence (B)*(F)	(\$169,022,433)

SAY (150,000,000)

Allocation of Capital Charge

Capital Charge - the annual return required on all corporate assets used in the production of the economic income associated with the subject intangible asset.

	Net Plant In Service 144,624,554	Cost of Capital 11.46% =	Required Return \$16,570,014
Vertical Svces Revenue (VS NOI / co. exp ratio) 14,428,016		Total Operating Revenues 172,550,486	Percent of VS Revenue 8.36%
Allocated Capital Charge on Supporting Assets			\$1,385,522
Estimated Vertical Services NOI			7,091,639
Vertical Services NOI Less Capital Charge			\$5,706,117

Capitol Appraisal Group, LLC

2010

DOCUMENT 9D

SAMPLE ELECTRIC COOP COMPANY

UNIT APPRAISAL

Unit # 000

*Appraiser*

Capitol Appraisal Group, LLC

DATA YEAR: 2010

INCOME APPROACH

YEAR	NET OPERATING INCOME	NOI GROWTH	NET PLANT IN SERVICE	NPIS GROWTH	NOI/NPIS NOI - CURR YR NPIS - PRV YR
2004	4,625,201		81,787,622		
2005	5,661,681	0.2241	85,798,675	0.0490	0.0692
2006	4,748,314	-0.1613	92,154,509	0.0741	0.0553
2007	4,460,508	-0.0606	100,759,381	0.0934	0.0484
2008	4,928,287	0.1049	109,974,664	0.0915	0.0489
2009	4,458,440	-0.0953	115,898,957	0.0539	0.0405
MOST RECENT YEAR					4,458,440
THREE YEAR AVERAGE					4,615,745
FIVE YEAR AVERAGE					4,851,446
THREE YEAR WEIGHTED AVERAGE					4,615,400
FIVE YEAR WEIGHTED AVERAGE					4,703,012
FIVE YR. AVG. RETURN ON NPIS				0.0525	6,082,869
LIN. REGRESS. ON NOI		CORR. COEFF. =		(0.39)	4,183,493
LIN. REGRESS. ON NOI/NPIS		CORR. COEFF. =		(0.62)	4,261,525
PROJECTED TYPICAL NET OPERATING INCOME					3,700,000
NET INCOME ATTRIBUTABLE TO CWIP (SEE BELOW)					0
TOTAL NET INCOME TO CAPITALIZE					3,700,000
CAPITALIZATION RATE					0.1398
VALUE INDICATED BY INCOME APPROACH					26,460,653

INCOME ATTRIBUTABLE TO CONSTRUCTION WORK IN PROGRESS

CONSTRUCTION WORK IN PROGRESS			2009	0
DISCOUNTED AT:	0.1398	FOR	1 YEAR(S)	0
PROJECTED NET INCOME FROM CWIP				0



COST APPROACH

TOTAL UTILITY PLANT IN SERVICE (C1)	146,384,363
CONSTRUCTION WORK IN PROGRESS (C2)	0
TOTAL UTILITY PLANT	146,384,363
DEPRECIATION (C4)	30,485,407
NET UTILITY PLANT	115,898,957
MATERIALS & SUPPLIES (C21)	179,002
NET INVESTMENT	115,719,955
ECONOMIC OBSOLESCENCE (SEE BELOW)	89,821,691
COST APPROACH INDICATOR OF VALUE	25,898,263

CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0525
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCEMENT	0.3753
MOST RECENT RATE OF RETURN	0.0405
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCEMENT	0.2899
PROJECTED RATE OF RETURN	0.0319
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCEMENT	0.2283
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCEMENT	0.2250
FRACTION OBSOLETE	0.7750
ECONOMIC OBSOLESCENCE	89,821,691

Capitol Appraisal Group, LLC

CORRELATION

INCOME APPROACH INDICATOR OF VALUE	\$26,460,653
COST APPROACH INDICATOR OF VALUE	\$25,898,263
APPRAISER'S OPINION OF MARKET VALUE	\$26,000,000
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE/ NET BOOK VALUE	0.2243

\* ACKNOWLEDGEMENT OF NEW VALUE FOR AD VALOREM TAXATION \*\*\*  
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DISTRICT	CAPITOL	TAXPAYER/AGENT	ARB
DATE	DATE	DATE	DATE

Capitol Appraisal Group, LLC

ALLOCATION

DISTRIBUTION PLANT

ORIGINAL COST OF DISTRIBUTION SYSTEM (E14E)	122,565,286
ORIGINAL COST OF LAND AND LAND RIGHTS (E1E)	123,409
ORIGINAL COST OF STRUCTURES AND IMPROVEMENTS (E2E)	916,416
ORIGINAL COST OF STATION EQUIPMENT (E3E)	11,720,471
DIST. PLANT EXCL. SUBSTATIONS AND LAND	109,804,991
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF DIST. EXCL. SUBSTATIONS AND LAND	19,502,969

TYPE	MARKET VALUE	NO. UNITS		MKT VAL/UNIT
METERS	19,502,969	31,056	(R10L)	\$628
MI. OF LINE	19,502,969	4,217	(B6B+B7B)	\$4,625

TRANSMISSION PLANT

ORIGINAL COST OF TRANSMISSION SYSTEM (E33E)	11,818,671
ORIGINAL COST OF LAND & LAND RIGHTS (E26E)	16,336
ORIGINAL COST OF STRUCTURES AND IMPROVEMENTS (E27E)	170,820
ORIGINAL COST OF STATION EQUIPMENT (E28E)	4,458,909
TRANS. PLANT EXCL. SUBSTATIONS AND LAND	7,172,606
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF TRANS. EXCL. SUBSTATIONS AND LAND	1,273,960
MILES OF TRANSMISSION LINE (B5B)	104
MARKET VALUE PER MILE OF LINE	\$12,281

SUBSTATIONS

ORIGINAL COST OF SUBSTATIONS - DIST.	12,636,887
ORIGINAL COST OF SUBSTATIONS - TRANS.	4,629,729
ORIGINAL COST OF SUBSTATIONS - TOTAL	17,266,616
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF SUBSTATIONS	3,066,803
TOTAL SUBSTATION KVA CAPACITY	269,025
MARKET VALUE PER KVA	\$11

Capitol Appraisal Group, LLC

CAP RATE

<b>COST OF EQUITY</b>		
<b>MODIFIED DCF - DIVIDEND YIELD</b>	$Ke = (Div/P) + G$	0.1630
DIVIDEN / PRICE = ((CASH PATRONAGE + REDEMPTIONS) / TOTAL PATRONAGE CAPITAL)		0.1571
GROWTH RATE = [1 - (CASH PATRONAGE / NET INCOME)] * (NET INCOME / PATRONAGE CAPITAL)		-0.0570
GROWTH RATE - GROWTH OF NPIS		0.0724
GROWTH RATE - GROWTH OF NOI		0.0023
CALCULATED GROWTH RATE		0.0059
CASH PATRONAGE		7,000,090
REDEMPTIONS		0
TOTAL PATRONAGE CAPITAL		44,570,184
NET INCOME		4,458,440
<b>MODIFIED DCF - EARNINGS</b>	$Ke = (E/P) + G$	0.1059
NET INCOME		4,458,440
TOTAL PATRONAGE CAPITAL		44,570,184
CALCULATED GROWTH RATE		0.0059
<b>BUILD UP METHOD</b>		$Ke = Rf + Rp + \text{SIZE PREMIUM}$
RISK FREE RATE (TREASURY)		0.0400
EQUITY RISK PREMIUM (PRATT / WASATA)		0.0550
SIZE PREMIUM (IBBITSONS)		0.0620
<b>MODIFIED CAPM</b>	$Ke = Rf + (b * ERP)$	0.1391
RISK FREE RATE (TREASURY)		0.0400
EQUITY RISK PREMIUM (PRATT / WASATA)		0.0550
BETA (SEE BELOW)		1.8024
<b>BETA</b>		
RETURN ON ASSETS		0.0525
S & P AVERAGE RETURN ON ASSETS		0.0946
CALCULATED BETA		1.8024
AVERAGE COST OF EQUITY		0.1413
OPINION OF COST OF EQUITY		0.1413
<b>COST OF DEBT</b>		
ELECTRIC UTILITY BOND		0.0818
COST OF DEBT		0.0818
<b>CAPITAL STRUCTURE</b>		
TOTAL DEBT		61,388,492
TOTAL ASSETS		133,029,617
PERCENT DEBT		0.4615
PERCENT EQUITY		0.5385

WEIGHTED COST OF CAPITAL

	CAPITAL STRUCTURE	COST	WEIGHTED COST	FLOTATION COST	ALL WEIGHTED COST
EQUITY	0.5385	0.1413	0.0761	0.0360	0.0789
DEBT	0.4615	0.0818	0.0377	0.0150	0.0383
					0.1173

2010  
DOCUMENT 9E  
SAMPLE TELEPHONE COOP COMPANY

APPRAISAL

UNIT # 000

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*Appraiser*

CAPITOL APPRAISAL GROUP

DATA YEAR: 2010

INCOME APPROACH

NOI PROJECTION NO. 1		
NET OPERATING REVENUES (B7B)	2009	\$3,585,327
NET OPERATING REVENUES (B7B)	2008	\$3,606,611
NET OPERATING REVENUES (B7B)	2007	\$3,263,882
PROJECTED NET OPERATING REVENUES		
		\$3,485,267
TYPICAL INVESTOR-OWNED TELEPHONE CO. EXPENSE RATIO		
		0.8100
PROJECTED EXPENSES		
		\$2,823,066
PROJECTED NOI BASED ON TYPICAL INVESTOR-OWNED EXP. RATIO		
		\$662,201
NOI PROJECTION NO. 2		
NET PLANT IN SERVICE	2010	\$7,324,320
TYPICAL INVESTOR-OWNED TEL. CO. RETURN RATE ON NPIS		
		0.1010
PROJECTED NOI BASED ON INVESTOR-OWNED RETURN RATE		
		\$739,756
NOI PROJECTION NO. 3		
NET OPERATING REVENUES (B7B)	2010	\$3,585,327
TOTAL OPERATION & MAINTENANCE EXPENSE (B14B)		\$2,873,408
TOTAL OPERATING TAXES (B20B)		\$74,428
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2010	\$637,491
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2009	\$981,211
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2008	\$1,848,531
PROJECTED NOI BEFORE FEDERAL INCOME TAXES		
		\$1,354,871
PROJECTED EFFECTIVE FEDERAL INCOME TAX RATE		
		0.00
PROJECTED NOI AFTER FEDERAL INCOME TAXES		
		\$1,354,871
INCOME PROJECTIONS		
NOI PROJECTION NO. 1		\$739,756
NOI PROJECTION NO. 2		\$739,756
NOI PROJECTION NO. 3		\$1,354,871
APPRAISER'S OPINION		
		\$900,000
INCOME ATTRIBUTABLE TO CWP (SEE BELOW)		
		\$0
TOTAL INCOME TO CAPITALIZE		
		\$900,000
CAPITALIZATION RATE		
		0.1322
INCOME APPROACH INDICATOR OF VALUE		
		\$6,807,893

CAPITOL APPRAISAL GROUP

INCOME ATTRIBUTABLE TO CONSTRUCTION WORK IN PROGRESS

CONSTRUCTION WORK IN PROGRESS		2010	\$0
DISCOUNTED AT:	0.1322	FOR 1	YEAR(S) \$0
TYPICAL INVESTOR-OWNED ELECTRIC CO. RETURN RATE ON NPIS			0.1010
PROJECTED NET INCOME FROM CWP			\$0



CAPITOL APPRAISAL GROUP

COST APPROACH

TELECOMMUNICATIONS PLANT-IN-SERVICE (A20)	\$12,539,923
PROPERTY HELD FOR FUTURE USE (A21)	\$0
CONSTRUCTION WORK IN PROGRESS (A22)	\$0
TOTAL UTILITY PLANT	\$12,539,923
DEPRECIATION (A24)	\$5,215,603
NET UTILITY PLANT	\$7,324,320
MATERIALS AND SUPPLIES (A7+A8)	\$200,601
NET INVESTMENT	\$7,524,921
PERCENT NON-OBSOLETE (SEE BELOW)	0.9000
COST APPROACH INDICATOR OF VALUE	\$6,772,429

CALCULATION OF ECONOMIC OBSOLESCENCE

RETURN RATE BASED ON NOI PROJECTION NO. 1	0.1010
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.7640
RETURN RATE BASED ON NOI PROJECTION NO. 2	0.1010
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.7640
RETURN RATE BASED ON NOI PROJECTION NO. 3	0.1850
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	1.3993
RETURN RATE BASED ON PROJECTED NOI	0.1229
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.9295
CO-OP'S NET PLANT / ORIG COST	0.5841
TYPICAL I.O.U. NET PLANT / ORIG COST	0.6230
CO-OP'S IOU-ADJUSTED NET PLANT / ORIG COST	0.9375
TYPICAL I.O.U. NET PLANT / MARKET VALUE	0.8250
CO-OP'S I.O.U.-ADJUSTED FRACTION NON-OBSOLETE	0.7735
TYPICAL INVESTOR-OWNED ELECTRIC PERCENT NON-OBSOLETE	0.8250
COMPTROLLER'S PERCENT NON-OBSOLETE PRIOR YEAR	1.1375
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCENT	0.9000

CAPITOL APPRAISAL GROUP

CORRELATION

INCOME APPROACH INDICATOR OF VALUE	\$6,807,893
COST APPROACH INDICATOR OF VALUE	\$6,772,429
APPRAISER'S OPINION OF MARKET VALUE	\$6,800,000
MARKET VALUE/ ORIGINAL COST	0.5337
MARKET VALUE/ NET BOOK VALUE	0.9037



CAPITOL APPRAISAL GROUP

ALLOCATION

CENTRAL OFFICE EQUIPMENT

ORIGINAL COST OF CENTRAL OFFICE SWITCHING (D2E)	\$1,193,274
ORIG. COST OF OPERATOR SYSTEMS (D3E)	\$0
ORIG. COST OF CENTRAL OFFICE TRANSMISSION (D4E)	\$683,810
ORIGINAL COST OF CENTRAL OFFICE EQUIPMENT	\$1,877,084
ALLOCATED CWP	\$0
TOTAL ORIGINAL COST	\$1,877,084
MARKET VALUE/ ORIGINAL COST	0.5337
MARKET VALUE OF CENTRAL OFFICE EQUIPMENT	\$1,001,856
NO. CENTRAL OFFICE EQUIPMENT ACCESS LINES (GET+GFT)	2,907
VALUE PER COE ACCESS LINE	\$345

MAIN STATIONS

ORIGINAL COST OF INFOR ORIG/TERM ASSETS (D5E)	\$0
ORIG. COST OF CABLE & WMRE FACILITIES (D6E)	\$10,380,881
ORIGINAL COST OF OTHER TANGIBLE ASSETS (D7E)	\$0
TOTAL OUTSIDE PLANT ORIGINAL COST	\$10,380,881
ALLOCATED CWP	\$0
TOTAL ORIGINAL COST	\$10,380,881
MARKET VALUE/ ORIGINAL COST	0.5337
MARKET VALUE OF OUTSIDE PLANT	\$5,540,588
TOTAL NO. MAIN STATIONS (C4C)	2,907
MARKET VALUE PER MAIN STATION	\$1,906

Document 9F

V A L U A T I O N O P I N I O N

2010 PRELIMINARY REPORT

OF

FACILITIES AT

ABC LARGE INDUSTRIY COMPANY

V A L U A T I O N S U M M A R Y

REALTY IMPROVEMENTS	17,389,600
PERSONAL PROPERTY	17,623,800
	=====
TOTAL PRESENT WORTH, EXCLUDING LAND	35,013,400

CERTIFICATION: THIS APPRAISAL IS INTENDED TO REFLECT THE FAIR MARKET VALUE OF THE REALTY IMPROVEMENTS AND PERSONAL PROPERTY FOR SUBJECT PROPERTY, EXCLUDING LAND, AS OF JANUARY 1, 2010. THIS OPINION IS TO BE USED BY OUR CLIENT, TEXAS APPRAISAL DISTRICT, ITS CHIEF APPRAISER AND A.R.B., IN THEIR CONSIDERATIONS OF MARKET VALUE FOR PURPOSES OF AD VALOREM TAXATION. OWNERSHIP AND SITUS ARE NOT ASSURED.

APPRAISED BY:

APPRAISER, ENGR.  
CAPITOL APPRAISAL GROUP, LLC

PRINTED: 10/08/10 12:04:10

ABC LARGE INDUSTRIY COMPANY  
2010 PRELIMINARY REPORT

REALTY IMPROVEMENTS VALUATION SUMMARY

CATEGORY	REPLACEMENT COST	VALUATION FACTOR	PRESENT WORTH
1. PROCESS GROUP	49,590,000	.194	9,598,100
2. UTILITIES	19,340,100	.183	3,539,500
3. RECEIVING, SHIPPING, AND STORAGE	6,942,600	.182	1,261,400
4. SERVICE FACILITIES.	11,681,200	.184	2,144,400
5. GENERAL BUILDINGS	4,408,000	.192	846,200
6. OFF SITE FACILITIES			
7. RESEARCH AND DEVELOPMENT			
	-----		-----
SUB-TOTAL	91,961,900		17,389,600
8. CONSTR. IN PROGRESS			
9. OUT OF SERVICE	22,040,000	.000	
10. NEW UNITS			
	-----		-----
SUB-TOTAL	22,040,000		
	=====		=====
IMPROVEMENTS TOTAL	114,001,900		17,389,600

ABC LARGE INDUSTRIY COMPANY  
2010 PRELIMINARY REPORT

PERSONAL PROPERTY VALUATION SUMMARY

CATEGORY	REPLACEMENT COST	VALUATION FACTOR	PRESENT WORTH
1. AUTOS & TRUCKS	2,360,000	.430	1,014,800
2. FF&E	250,000	.485	121,300
3. COMPUTERS	150,000	.143	21,500
4. SUPPLIES & PARTS	1,026,000	.750	769,500
5. MOB MACH/TOOLS	327,800	.600	196,700
6. INVENTORY	15,500,000	1.000	15,500,000
	=====		=====
PERSONAL PROPERTY	19,613,800		17,623,800

ABC LARGE INDUSTRIY COMPANY  
2010 PRELIMINARY REPORT

THE OPERABLE FACILITY HAS A SERVICE LIFE OF 27.8 YEARS  
AND THE DOLLAR AVERAGE REMAINING LIFE IS 1.1 YEARS THE  
ESTIMATED INTEREST RATE FOR AN INVESTMENT IN THIS TYPE OF  
PLANT IS 8.6%. NORMALLY, A PLANT IN THIS RANGE OF INVEST-  
MENT WOULD BE LOCATED ON A SITE VALUED AT \$ 8,110,000.

TYPE VALUE	VALUATION SUMMARY	
	VALUE	CONSIDERATION
REPLACEMENT	114,001,900	
PHYSICAL	39,900,600	74,101,300
FUNCTIONAL	21,733,500	18,167,100
LOC & EXT OBSO	17,389,600	4,343,900

THE PERSONAL PROPERTY INDEXES FOR THIS PLANT ARE:

CLASSIFICATION	I	B	F
1. AUTOS & TRUCKS	2.3600	1,000.0000	.4300
2. FF&E	.2500	1,000.0000	.4850
3. COMPUTERS	.1500	1,000.0000	.1430
4. SUPPLIES & PARTS	1.2000	.7500	.7500
5. MOB MACH/TOOLS	1.1500	.2500	.6000
6. INVENTORY	15.5000	1,000.0000	1.0000
PROCESS UNITS	20.0000	20.0000	.0000
OVERALL PLANT FACTORS 123-999		1.0000	1.1020
			.8000



DOCUMENT 8G

OIL LSE Sample #1-Smaller

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10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DMCF TECHNIQUE

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST      RMC: 99-777011 WELLS:      PRIMARY PRODUCT: OIL      APPRAISAL AS OF: 10/01/01  
FIELD (P&S): 99999 999      COUNTY: 777  
IND OPERATOR: 999999 MONITORING NOT REQUIRED / 999 3  
LEASE NAME: A E SMITH      COMMENT: SINGLE OIL LSE #1-SML      MODIFICATION USER: CMAA

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 01/10/01

		RAILROAD CONCESSION PRODUCTION				
DATE	OIL (BBL)	GAS (MCF)	WATER (LI-B/D)	SPC-FY	FLOW	LIFT WELLS
PROR	1123021	162				
1999	16133				6	6
2000	14603				6	6
2001	13669				6	6
2002	10141				6	6
2003	9016				5	5
2004	7720				5	5
2005	6882				5	5
2006	5071				5	5
2007	11892				5	5
2008	13024				5	5
JAN	949				5	5
FEB	673				5	5
MAR	1115				5	5
APR	1063				5	5
MAY	1003				5	5
JUN	836				5	5
JUL	841				6	6
AUG	677				6	6
SEP	781				6	6
OCT	924				7	7
NOV	823				7	7
DEC	1400				7	7
2009	11127				7	7
TOTAL	1248159	162				

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01      LIMIT DATE: 00/00/00  
ANNUAL OIL PRODUCTION: 11127      OIL RESERVE LIMIT:  
ANNUAL GAS PRODUCTION:      GAS RESERVE LIMIT:  
NUMBER OF PRODUCING WELLS: 7      NUMBER OF INJECTION WELLS: 1

DECLINE PARAMETERS:

CALCULATED PARAMETERS		APPRAISER PARAMETERS	
	OIL	GAS	F START-RATE DECL-D E-FACT HOS
DATE:	07/07/01	07/07/01	0 45.0 25.00 .12
DAILY-A:	36.5		8 15.00
DECL-41	35.53	35.53	
K-FACT:			

SECONDARY PRODUCT RATIO:      SECONDARY PRODUCT RATIO:

MAR111  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH; DDCF TECHNIQUE

PAGE 2

CLIENT: 777 SAMPLE COUNTY APPR DIST      ACR: 99 777011 WELL:      PRIMARY PRODUCT: OIL      APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 HGINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: A E SMITH      COMMENT: SAMPLE OIL LSE #1-SML      MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:		PRODUCING WELLS:	7	BASE DISCOUNT RATE:	1.1300
OIL PRICE:	94.09	INJECTION WELLS:	1	AD VALOREM TAX BURDEN:	2.00
OIL GRAVITY:	28.0	DEPTH:	2600	ECONOMIC LIFE:	19
OIL GRAVITY ADJUSTMENT:		OPERATING COST (\$/WELL):	6378	P-TO-I (7/8-1/8):	4.7 4.8
GAS PRICE:	10.04	*** SECTION 22.27 RESTRICTION ***		PAYOUT (7/8-1/8):	4.7 4.8
GAS PRICE PARIY:	1.00	EQUIPMENT COST (\$/WELL):	8269	R/E RATIO (OIL-GAS):	6.0

CASH FLOW ANALYSIS:

START DATE	---PRODUCTION---	---PRODUCT PRICES---	-7/8 REVENUE(M\$)-	---OP COST(M\$)---	---UNDISC INCOME---	---DISCOUNTED INCOME---
	OIL (BBL) GAS (MCF)	OIL NET GAS NET	OIL GAS	DIRECT CAP EXP	7/8 (M\$) 1/8 (M\$)	7/8 (\$) 1/8 (\$)
10/01/01	14275	35.19 33.57 6.06 5.61	419	45	375 60	349376 55858
11/01/01	11372	40.69 38.82 6.61 6.11	386	42	344 55	278830 44746
12/01/01	9669	50.59 48.26 7.49 6.93	409	42	366 58	257988 41128
13/01/01	8239	65.98 62.94 8.26 7.64	454	45	409 65	250900 39744
14/01/01	6984	74.78 71.34 9.36 8.66	436	46	390 62	207900 33205
15/01/01	5938	83.57 79.73 10.46 9.68	414	47	367 59	170153 27437
16/01/01	5045	92.37 88.12 10.94 10.12	389	48	340 56	137204 22403
17/01/01	4301	101.61 96.94 11.24 10.40	365	50	315 52	110322 18270
18/01/01	3645	105.67 100.81 11.53 10.67	322	52	270 46	82274 14002
19/01/01	3097	108.84 103.83 11.81 10.92	281	53	228 40	60487 10655
20/01/01	2635	111.56 106.43 12.09 11.18	245	55	191 35	43937 8080
21/01/01	2245	113.79 108.56 12.36 11.43	213	56	157 30	31436 6106
22/01/01	1902	114.93 109.64 12.62 11.67	182	58	124 26	21675 4543
23/01/01	1617	116.08 110.74 12.87 11.90	157	60	97 22	14676 3392
24/01/01	1374	117.24 111.85 13.11 12.13	134	62	73 19	9598 2532
25/01/01	1173	118.41 112.96 13.34 12.34	116	63	52 17	6019 1898
26/01/01	993	119.59 114.09 13.56 12.54	99	65	34 14	3361 1411
27/01/01	844	120.79 115.23 13.77 12.74	85	67	18 12	1537 1053
28/01/01	718	122.00 116.39 13.97 12.92	73	69	4 10	282 787
86066		<----- SUB-TOTAL ----->	5180	1027	4153 740	2038026 337250
86066		<----- TOTAL ----->	5180	1027	4153 740	2038026 337250
				EQUIPMENT ADJUSTMENT:		3793
				VALUE AT BASE DISCOUNT RATE:		2041819
				VALUE AT MAF ADJUSTMENT:	94/90	1919309
				SECTION 23.175 VALUE:		1764393
				TOTAL APPRAISED VALUE:		1764393
				AVERAGE ANNUAL ROR:	20 20	
				DIVISION ORDER TOTAL WORKING INTEREST & VALUE:	.825000	1648900
				*** SECTION 22.27 RESTRICTION ***		

	IN PLACE	DAILY AVG		
7/8 \$/BBL:	23.43	44810		
7/8 \$/MCF:				
7/8 \$/BOE:	23.43	44810		

JURISDICTIONS:	SAMPLE COUNTY	1.0000		
	SAMPLE ISD	1.0000		

CLIENT: 777 SABLE COUNTY APPR DIST

ARC: 99 777011 WELL:

PRIMARY PRODUCT: OIL

APPRAISAL AS OF: 10/01/01

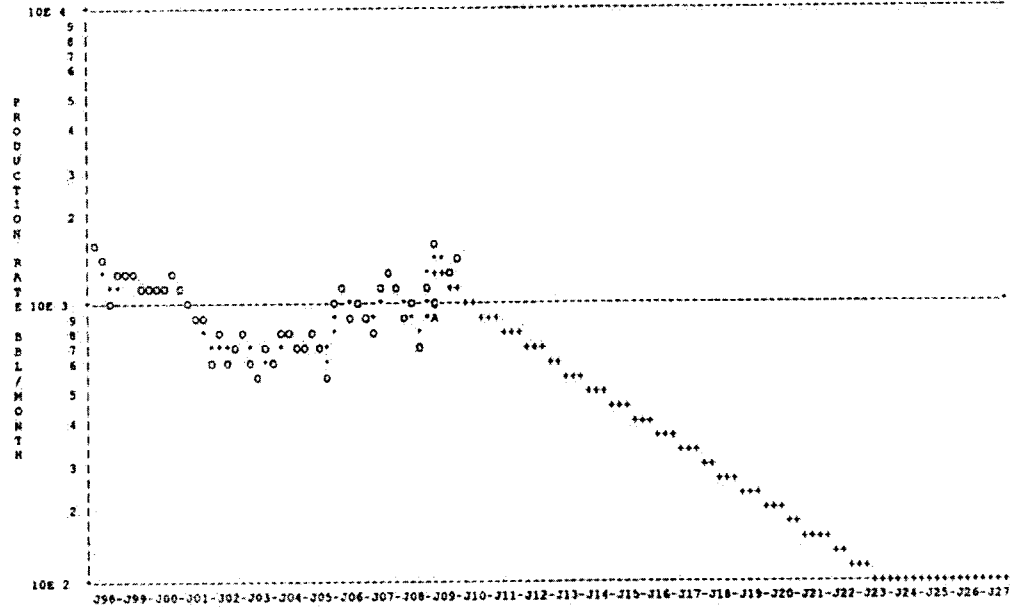
FIELD (RES): 99999 999  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3  
LEASE NAME: A E SMITH

COUNTY: 777

MODIFICATION DATE:  
MODIFICATION TIME:  
MODIFICATION USER: CHAR

COMMENT: SABLE OIL LSE 01-3ML

DATE	OIL(BBL)	GAS(MCF)	WLS	2009 MONTHLY PRODUCTION	CALC DECLINE:	OIL	GAS	2010 MONTHLY PRODUCTION
PRIOR	1123421	162		MON OIL(BBL)	DATE:	07/07/01	07/07/01	MON OIL(BBL)
1955	16133		6	JAN 949	DAILY-A:	30.5		JAN 1544
2000	14603		6	FEB 673	DECL-B:	35.53	35.53	FEB 1478
2001	13668		6	MAR 1115	N-FACT:			MAR 1296
2002	10161		6	APR 1063	APPRaiser DECLINE			APR 1326
2003	9016		5	MAY 1003	F START-RATE	45.0	21.00	MAY 1227
2004	7720		5	JUN 936	B	15.00	12	JUN 1267
2005	8922		5	JUL 841				JUL 1268
2006	9071		5	AUG 577				AUG 1352
2007	11892		5	SEP 791				SEP 1440
2008	13024		5	OCT 924				OCT
2009	11127		7	NOV 855				NOV
2010	13682			DEC 1400				DEC



MAP111  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DNCF TECHNIQUE

PAGE 4

CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777011    WELL:      PRIMARY PRODUCT: OIL      APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: A E SMITH      COMMENT: SAMPLE OIL LSE #1-SHL      MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	MON	2009 MONTHLY PRODUCTION	OIL	GAS	MON	2010 MONTHLY PRODUCTION
PRIOR	1123821	162							
1999	16133		6	JAN	949			JAN	1544
2000	14603		6	FEB	673			FEB	1404
2001	13668		6	MAR	1115			MAR	1470
2002	10161		6	APR	1063			APR	1296
2003	9016		5	MAY	1003			MAY	1326
2004	7720		5	JUN	936			JUN	1227
2005	4922		5	JUL	841			JUL	1267
2006	9071		5	AUG	577			AUG	1266
2007	11892		5	SEP	791			SEP	1352
2008	13024		5	OCT	924			OCT	1440
2009	11127		7	NOV	855			NOV	
2010	13682			DEC	1400			DEC	

DATE	OIL(BBL)	GAS(MCF)	WLS	MON	2009 MONTHLY PRODUCTION	OIL	GAS	MON	2010 MONTHLY PRODUCTION
PRIOR	1123821	162							
1999	16133		6	JAN	949			JAN	1544
2000	14603		6	FEB	673			FEB	1404
2001	13668		6	MAR	1115			MAR	1470
2002	10161		6	APR	1063			APR	1296
2003	9016		5	MAY	1003			MAY	1326
2004	7720		5	JUN	936			JUN	1227
2005	4922		5	JUL	841			JUL	1267
2006	9071		5	AUG	577			AUG	1266
2007	11892		5	SEP	791			SEP	1352
2008	13024		5	OCT	924			OCT	1440
2009	11127		7	NOV	855			NOV	
2010	13682			DEC	1400			DEC	

DOCUMENT 9H

OIL LSE Sample #2-Larger

MAP111  
10/06/10 13:55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DNET TECHNIQUE

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST      PRC: 99 777002      WELL:      PRIMARY PRODUCT: OIL  
FIELD (RES): 99999 999      COUNTY: 777  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / EWR 1      COMMENT: OIL SAMPLE #2 --LG  
LEASE NAME: HUGH KELKER

APPRAISAL AS OF: 10/01/01

MODIFICATION DATE:  
MODIFICATION TIME:  
MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 48/06/01

RAILROAD COMMISSION PRODUCTION						
DATE	OIL (BBL)	GAS (MCF)	WATER (E)-B/D (MC-WT)	FLOW	LIST	WELLS
PRIOR	16008540	3403197				
1989	46797	24076	94965	67	1	4 5
2000	32829	12793	77798	70	1	5 6
2001	31256	13091	33668	52	1	5 6
2002	29777	12535	31046	52	1	5 6
2003	26339	12354	24472	48	1	5 6
2004	27390	13510	31046	53	1	5 6
2005	28852	13754	33238	54	1	5 6
2006	29559	12400	23741	45	1	5 6
2007	20790	11571	1461	7	1	5 6
2008	22477	11550	2557	10	1	5 6
JAN	1694	969			1	5 6
FEB	1541	861			1	5 6
MAR	1566	909			1	5 6
APR	1504	931			1	5 6
MAY	2439	1565			1	5 6
JUN	1875	1169	3	1	1	5 6
JUL	1815	972	6	1	1	5 6
AUG	1992	1214			1	5 6
SEP	1999	740	69	2	1	5 6
OCT	2133	668	13	1	1	5 6
NOV	2446	1210			1	5 6
DEC	3162	1751			1	5 6
2009	24104	12759	33948	58	1	5 6
TOTAL	16327912	3953590				

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01      LIMIT DATE: 00/00/00  
ANNUAL OIL PRODUCTION: 24106      OIL RESERVE LIMIT:  
ANNUAL GAS PRODUCTION: 12759      GAS RESERVE LIMIT:  
NUMBER OF PRODUCING WELLS: 6      NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

CALCULATED PARAMETERS		APPRAISER PARAMETERS	
DATE	OIL      GAS	F	STAMP-RATE DECL-N FACT NOS
DATE:	98/01/01    98/01/01	0	75.0    6.06
DAILY-A:	66.0      34.9		
DECL-N:	6.06      6.06		
N-FACT:			

SECONDARY PRODUCT RATIO: 529      SECONDARY PRODUCT RATIO:

CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777002      WELL:      PRIMARY PRODUCT: OIL      APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: HUGH KELKER      COMMENT: OIL SAMPLE #2 --LG      MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:      PRODUCING WELLS:      6      BASE DISCOUNT RATE:      1.1300  
OIL PRICE:      94.09      INJECTION WELLS:           AD VALOREM TAX BURDEN:      2.00  
OIL GRAVITY:      43.0      DEPTH:      8545      ECONOMIC LIFE:      42  
OIL GRAVITY ADJUSTMENT:      OPERATING COST (\$/WELL):      15076      F-T0-1 (7/8-1/8):      8.0      7.8  
GAS PRICE:      10.04      \*\*\* SECTION 22.27 RESTRICTION \*\*\*      PAYOUT (7/8-1/8):      5.0      5.8  
GAS PRICE PARITY:      1.00      EQUIPMENT COST (\$/WELL):      14095      R/P RATIO (OIL-GAS):      15.4      15.3

CASH FLOW ANALYSIS:

START DATE	---PRODUCTION---	---	---PRODUCT PRICES---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
	OIL (BBL)	GAS (MCF)	OIL	NET	GAS	NET	OIL	GAS	DIRECT	CAP EXP	7/8 (M\$)	1/8 (M\$)	7/8 (\$)	1/8 (\$)						
10/01/01	26546	12349	35.19	33.57	6.06	5.61	780	61	90		750	120	699302	111950						
11/01/01	24954	11601	40.69	38.82	6.61	6.11	848	62	86		824	130	667928	105372						
12/01/01	23458	10898	50.59	48.26	7.49	6.93	921	66	86		971	151	684464	106436						
13/01/01	22210	10266	65.98	62.94	8.26	7.64	1218	69	90		1196	184	733343	112666						
14/01/01	20726	9617	74.78	71.34	9.36	8.66	1294	73	93		1274	195	879092	104091						
15/01/01	19484	9032	83.57	79.73	10.46	9.68	1359	77	96		1340	205	621275	95094						
16/01/01	18316	8487	92.37	88.12	10.94	10.12	1412	75	99		1389	212	559896	85663						
17/01/01	17263	7995	101.61	96.94	11.24	10.40	1464	73	102		1435	220	503230	76976						
18/01/01	16181	7489	105.67	100.81	11.53	10.67	1427	70	105		1393	214	424524	65202						
19/01/01	15213	7037	108.84	103.83	11.81	10.92	1382	67	108		1342	207	356631	54884						
20/01/01	14299	6610	111.56	106.43	12.09	11.18	1332	65	111		1285	199	296263	45977						
21/01/01	13477	6226	113.79	108.56	12.36	11.43	1280	62	114		1228	192	246164	38439						
22/01/01	12694	5831	114.93	109.64	12.62	11.67	1212	60	118		1154	182	201108	31661						
23/01/01	11877	5479	116.08	110.74	12.87	11.90	1151	57	121		1087	173	164689	26152						
24/01/01	11165	5148	117.24	111.85	13.11	12.13	1093	55	125		1022	164	134748	21601						
25/01/01	10522	4848	118.41	112.96	13.34	12.34	1040	52	129		964	156	110439	17883						
26/01/01	9863	4543	119.59	114.09	13.56	12.54	985	50	133		902	148	89881	14727						
27/01/01	9272	4267	120.79	115.23	13.77	12.74	935	48	136		846	140	73304	12162						
28/01/01	8716	4009	122.00	116.39	13.97	12.92	888	45	141		792	133	59707	10043						
29/01/01	8215	3775	123.22	117.55	14.16	13.10	845	43	145		743	127	48712	8314						
	314291	145507	<-----	SUB-TOTAL	----->		22934	1226	2226		21937	3452	7353700	1145293						
	95511	43638	<-----	REMAINING	----->		10773	553	4554		6772	1618	196637	38699						
	409802	189145	<-----	TOTAL	----->		33707	1782	6780		28709	5070	7550337	1183991						
							EQUIPMENT ADJUSTMENT:				.85			7550560	1183991					
							VALUE AT BASE DISCOUNT RATE:						7550560	1183991						
							VALUE AT NAF ADJUSTMENT:				00/00			7550560	1183991					
							SECTION 23.175 VALUE:						6026555	940986						
							TOTAL APPRAISED VALUE:						6026555	940986						
							AVERAGE ANNUAL ROR:				20	20								
							DIVISION ORDER TOTAL WORKING INTEREST & VALUE:				.825000	5650160								

JURISDICTIONS:	SAMPLE COUNTY	1.0000
	SAMPLE ISD	1.0000

\*\*\* SECTION 22.27 RESTRICTION \*\*\*

MAP111  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DNCF TECHNIQUE

PAGE 3

CLIENT: 777 SAMPLE COUNTY APPR DIST

PRC: 99 777002 WELL:

PRIMARY PRODUCT: OIL

APPRAISAL AS OF: 10/01/01

FIELD (RES): 59999 999

COUNTY: 777

MODIFICATION DATE:

IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3

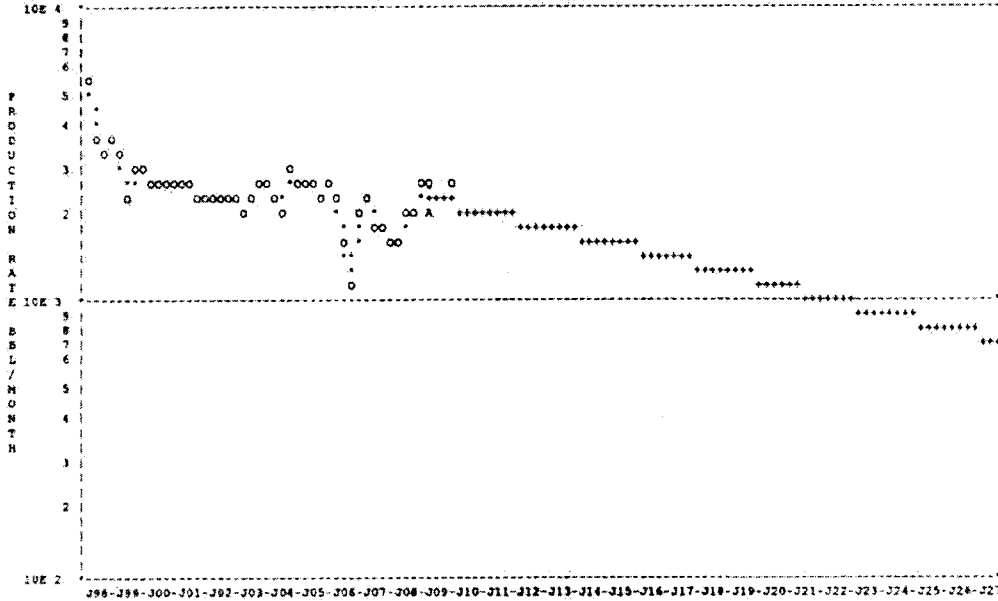
MODIFICATION TIME:

LEASE NAME: HUGH KELNER

COMMENT: OIL SAMPLE 82 --LG

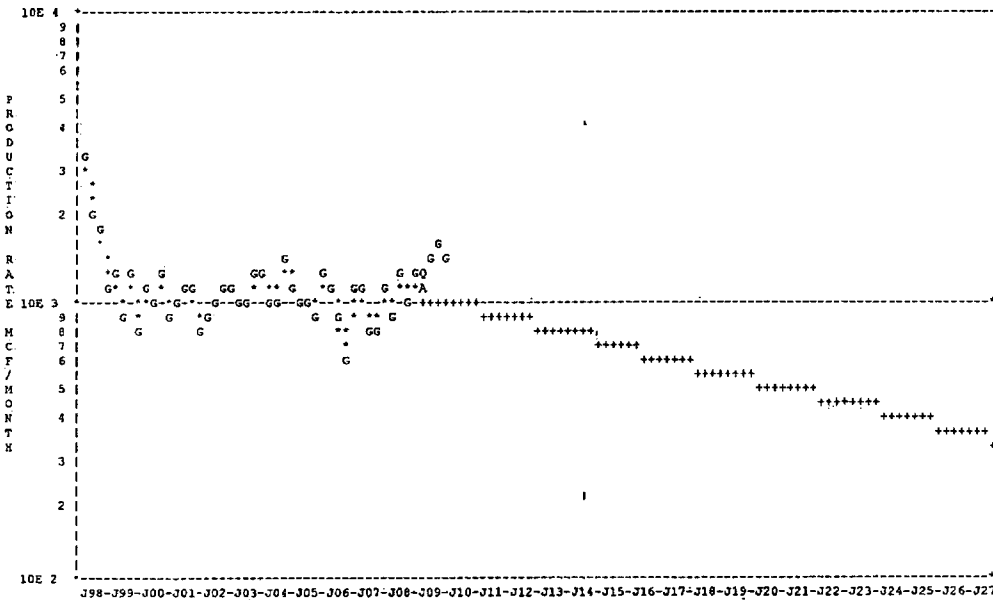
MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	MLS	MON	2009 MONTHLY PRODUCTION	WLS	CALC DECLINE:	OIL	GAS	MON	2010 MONTHLY PRODUCTION	WLS
PRIOR	16008540	3803197					DATE:	98/01/01	98/01/01			
1999	46797	24076	5	JAN	1694	869	DAILY-A:	66.0	34.9	JAN	2829	1653
2000	32629	12793	6	FEB	1541	861	DECL-1:	6.06	6.06	FEB	2189	1328
2001	31256	13091	6	MAR	1566	809	H-FACT:			MAR	2309	787
2002	28777	12535	6	APR	1594	831	APPRaiser DECLINE			APR	2623	1438
2003	26339	12334	6	MAY	2459	1565	START-RATE DECL-H-FACT NOS			MAY	2364	1359
2004	27390	13510	6	JUN	1875	1169	O	75.0	6.00	JUN	2114	1269
2005	28852	13754	6	JUL	1815	972				JUL	2271	1723
2006	29559	12400	6	AUG	1932	1214				AUG	2336	1439
2007	20790	11571	6	SEP	1999	740				SEP	2120	1495
2008	22477	11550	6	OCT	2133	668				OCT	2539	1403
2009	24106	12759	6	NOV	2446	1210				NOV		
2010	23654	13896		DEC	3162	1751				DEC		



CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777002 WELL:      PRIMARY PRODUCT: OIL      APPRAISAL AS OF: 10/01/01  
FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: HUGH KELKER      COMMENT: OIL SAMPLE #2 --LG      MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	MON	OIL(BBL)	GAS(MCF)	WLS	DATE	OIL	GAS	MON	OIL(BBL)	GAS(MCF)	WLS
1999	46797	24076	5	JAN	1694	869	6	DAILY-A:	66.0	34.9	JAN	2829	1655	6
2000	32629	12793	6	FEB	1541	861	6	DECL-1:	6.06	6.06	FEB	2189	1328	6
2001	31256	13091	6	MAR	1566	909	6	N-FACT:			MAR	2309	787	6
2002	28777	12535	6	APR	1504	931	6	APPRaiser DECLINE			APR	2623	1438	6
2003	26339	12354	6	MAY	2439	1565	6	START-RATE DECL-1 N-FACT MOS			MAY	2364	1359	6
2004	27390	13510	6	JUN	1875	1159	6	O	75.0	6.00	JUN	2114	1269	6
2005	28852	13754	6	JUL	1835	972	6				JUL	2271	1723	6
2006	29559	12400	6	AUG	1932	1214	6				AUG	2336	1439	6
2007	20790	11571	6	SEP	1999	740	6				SEP	2120	1495	6
2008	22477	11550	6	OCT	2133	668	6				OCT	2539	1403	6
2009	24106	12759	6	NOV	2446	1210	6				NOV			
2010	23694	13896		DEC	3162	1751	6				DEC			





DOCUMENT 91

GAS LSE Sample #1-Smaller

MP111  
10/06/10 13.53

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DRCP TECHNIQUE

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST

RRC: 99 777004

WELL:

PRIMARY PRODUCT: GAS

APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999

COUNTY: 777

IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 1

LEASE NAME: LAY LINDA

COMMENT: SAMPLE GAS LSE-SML

MODIFICATION DATE:

MODIFICATION TIME:

MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 04/12/01

RAILROAD COMMISSION PRODUCTION						
DATE	OIL (BBL)	GAS (MCF)	WATER (B/D)	FFP	FLOW	LIFT WELLS
PRIOR	98202	14147992				
1999	1476	574102	12	900	1	1
2000	6717	1139201	30	950	1	1
2001	6618	2216282	30	550	1	1
2002	6478	2136126	40	380	1	1
2003	5675	935663	29	232	1	1
2004	4269	795303	51	240	1	1
2005	2876	401597	40	250	1	1
2006	2231	598200	56	100	1	1
2007	1345	477221		140	1	1
2008	1223	472078	37	60	1	1
JAN	22	29304			1	1
FEB	197	36788			1	1
MAR	156	38189			1	1
APR	292	38689			1	1
MAY	84	40934			1	1
JUN	167	36859			1	1
JUL	162	42031			1	1
AUG	134	29926			1	1
SEP	90	10870			1	1
OCT						
NOV	63	12018	13	60	1	1
DEC	228	47049			1	1
2009	1595	383776	13	60	1	1
TOTAL	138909	22266151				

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01      LIMIT DATE: 09/00/00  
 ANNUAL OIL PRODUCTION: 1595      OIL RESERVE LIMIT:  
 ANNUAL GAS PRODUCTION: 343776      GAS RESERVE LIMIT: 1750000  
 NUMBER OF PRODUCING WELLS: 1      NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

CALCULATED PARAMETERS		APPRAISER PARAMETERS	
OIL	GAS	F	START-RATE DECL-S N-FACT NGR
DATE: 00/01/01	00/01/01	C	1250.0 15.00
DAILY-A: 4.4	1086.5		
DECL-S: 14.97	14.97		
N-FACT:			

SECONDARY PRODUCT RATIO: 4      SECONDARY PRODUCT RATIO:

MAP111  
10/06/10 13.53

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DNET TECHNIQUE

PAGE 2

CLIENT: 777 SAMPLE COUNTY APPR DIST      ACR: 99 777004 WELL:      PRIMARY PRODUCT: GAS      APPRAISAL AS OF: 10/01/01  
FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: LAZY LINDA      COMMENT: SAMPLE GAS LSE-SML      MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:      PRODUCING WELLS: 1      BASE DISCOUNT RATE: 1.1300  
OIL PRICE: 106.29      INJECTION WELLS:      AD VALOREM TAX BURDEN: 2.00  
OIL GRAVITY: 51.0      DEPTH: 11000      ECONOMIC LIFE: 7  
OIL GRAVITY ADJUSTMENT:      OPERATING COST (\$/WELL): 20285      P-TO-1 (7/8-1/8): 3.5 3.5  
GAS PRICE: 10.00      \*\*\* SECTION 22.27 RESTRICTION \*\*\*      PAYOUT (7/8-1/8): 3.8 3.8  
GAS PRICE PARITY: 1.00      EQUIPMENT COST (\$/WELL): 7882      R/P RATIO (OIL-GAS): 4.7 4.5

CASH FLOW ANALYSIS:

START DATE	PRODUCTION (BBL)	GAS (MCF)	OIL NET	GAS NET	7/8 REVENUE (M\$)	OP COST (M\$)	UNDISC INCOME (M\$)	DISCOUNTED INCOME (M\$)					
10/01/01	1625	421127	39.75	37.92	6.04	5.59	54	2060	20	2093	302	1952171	281584
11/01/01	1396	357998	45.97	43.86	6.59	6.10	54	1911	19	1945	281	1577245	227553
12/01/01	1200	304332	57.16	54.53	7.47	6.91	57	1840	19	1878	271	1324229	191118
13/01/01	1035	259364	74.55	71.12	8.24	7.62	64	1729	20	1773	256	1087387	157113
14/01/01	880	219831	84.49	80.60	9.34	8.64	63	1662	21	1704	246	908352	131352
15/01/01	762	186877	94.43	90.09	10.44	9.66	60	1580	21	1618	234	750219	108596
16/01/01	656	158864	104.37	99.57	10.92	10.10	57	1404	22	1439	209	580130	84150

7562	1908393	<----- SUB-TOTAL ----->			409	12185	143	12451	1799	8179733	1181466
7562	1908393	<----- TOTAL ----->			409	12185	143	12451	1799	8179733	1181466
EQUIPMENT ADJUSTMENT: 8											
VALUE AT BASE DISCOUNT RATE: 8182496											
VALUE AT MAF ADJUSTMENT: 90/90 7364247											
SECTION 23.175 VALUE: 7424498											
TOTAL APPRAISED VALUE: 7364247											
AVERAGE ANNUAL AOR: 20 20											

	IN PLACE	DAILY AVG
7/8 \$/BBL:	34.69	54658
7/8 \$/MCF:	4.27	6523
7/8 \$/BOE:	26.37	43340

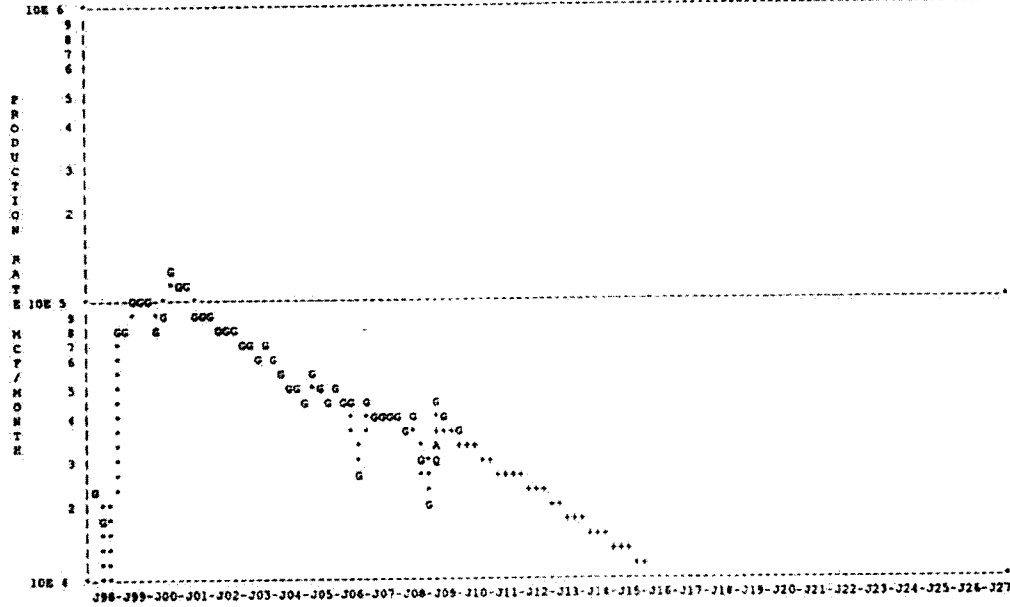
DIVISION ORDER TOTAL WORKING INTEREST & VALUE: .825000 6938920  
\*\*\* SECTION 22.27 RESTRICTION \*\*\*

JURISDICTIONS: SAMPLE COUNTY 1.0000  
SAMPLE ISD 1.0000

CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777004      WELL:      PRIMARY PRODUCT: GAS      APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
 IND OPERATOR: 9999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
 LEASE NAME: LAY LINDA      COMMENT: SAMPLE GAS LSE-SML      MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	2009 MONTHLY PRODUCTION	CALC DECLINE:	OIL	GAS	2010 MONTHLY PRODUCTION			
PRIOR			MON	OIL(BBL)	GAS(MCF)	WLS	DATE:	MON	OIL(BBL)	GAS(MCF)	WLS
1999	1476	378102	1	JAN	22	29304	1	DAILY-A			
2000	4717	1139201	1	FEB	197	36798	1	DECL-A:	4.8	1086.5	
2001	6618	1218292	1	MAR	156	38186	1	M-FACT:	14.07	14.07	
2002	6678	1138126	1	APR	292	39489	1	----- APPRAISER DECLINE -----			
2003	3675	935463	1	MAY	84	40934	1	F	START-RATE DECL-A	M-FACT	MOB
2004	4269	795303	1	JUN	167	36569	1	G	1250.0	15.00	
2005	2876	601587	1	JUL	162	42031	1				
2006	2231	598280	1	AUG	134	39926	1				
2007	1349	472221	1	SEP	90	10870	1				
2008	1223	472878	1	OCT							
2009	1595	363776	1	NOV	63	12018	1				
2010	1285	393435	1	DEC	228	47049	1				



MAP111  
10/06/10 13.53

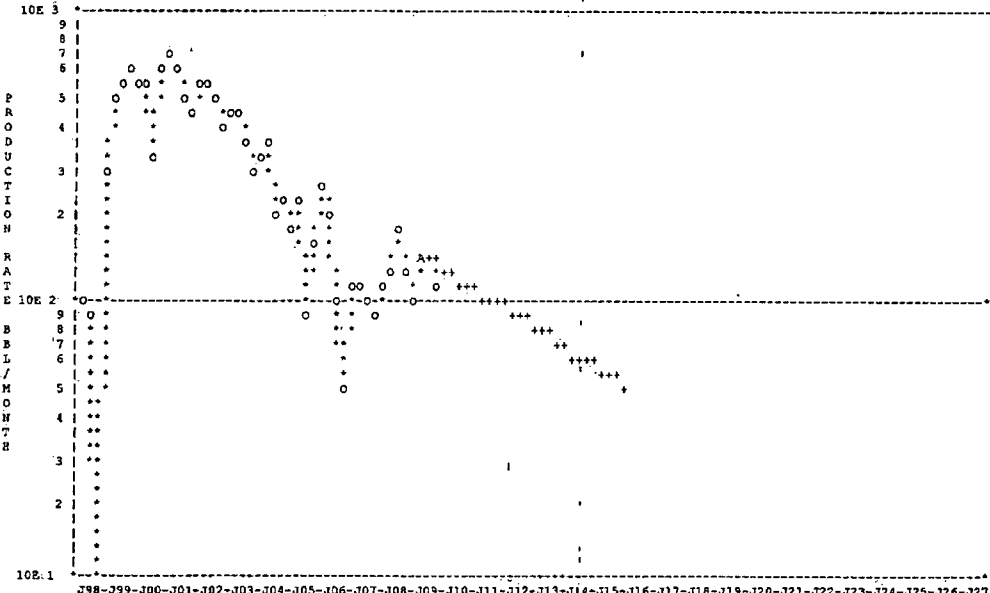
CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DMCF TECHNIQUE

PAGE 4

CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777004      WELL:      PRIMARY PRODUCT: GAS      APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: LAZY LINDA      COMMENT: SAMPLE GAS LSE-SML      MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	-- 2009 MONTHLY PRODUCTION --	CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --		
PRIOR	98202	14147992	1	MON OIL(BBL)	DATE:	00/01/01	00/01/01	MON OIL(BBL)	GAS(MCF)	WLS
1999	1476	378102	1	JAN 22	DAILY-A:	4.8	1086.5	JAN 227	46713	1
2000	6717	1139201	1	FEB 197	DECL-B:	14.07	14.07	FEB 145	39738	1
2001	6618	1218292	1	MAR 156	N-FACT:			MAR -32	42709	1
2002	6678	1138126	1	APR 292	APPRaiser DECLINE			APR 167	40399	1
2003	5675	935663	1	MAY 84	P START-RATE DECL-B N-FACT MOS			MAY 76	37741	1
2004	4269	795303	1	JUN 167	G 1250.0	15.00		JUN 159	40099	1
2005	2876	601597	1	JUL 162				JUL 83	37813	1
2006	2231	598200	1	AUG 134				AUG 141	37367	1
2007	1349	477221	1	SEP 90				SEP 98	35619	1
2008	1223	472678	1	OCT 63				OCT 125	35437	1
2009	1595	363776	1	NOV 63				NOV		
2010	1255	393635	1	DEC 228				DEC		



DOCUMENT 9J

GAS LSE Sample #2-Larger

MAP11  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: MCF TECHNIQUE

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELL: PRIMARY PRODUCT: GAS  
FIELD (RES): 99999 999 COUNTY: 777  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 COMMENT: SAMPLE GAS LSE --LG  
LEASE NAME: FLYING ARROW

APPRAISAL AS OF: 10/01/01

MODIFICATION DATE:  
MODIFICATION TIME:  
MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 06/06/01

-----RAILROAD COMMISSION PRODUCTION-----						
DATE	OIL (BBL)	GAS (MCF)	WATER (B/D)	FTP	FLOW	LIFT WELLS
PRIOR	253	33236764				
1999		1599264	23	322	1	1
2000	2	1380913	28	288	1	1
2001		1201564	39	306	1	1
2002		758541	14	283	1	1
2003		823634	14	300	1	1
2004	4	591383	11	300	1	1
2005		280666	2	300	1	1
2006		192861	2	300	1	1
2007		183898	3	300	1	1
2008		177500	1	320	1	1
JAN		14132			1	1
FEB		15285			1	1
MAR		14972			1	1
APR		15605			1	1
MAY		12575	3	830	1	1
JUN		11876			1	1
JUL		12207			1	1
AUG		12153			1	1
SEP		10424			1	1
OCT		12252			1	1
NOV		11985			1	1
DEC		11254			1	1
2009		154720	3	830	1	1
TOTAL	259	40581808				

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE: 00/00/00  
ANNUAL OIL PRODUCTION: ANNUAL GAS PRODUCTION: 154720  
NUMBER OF PRODUCING WELLS: 1 NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

-----CALCULATED PARAMETERS-----		-----APPRaiser PARAMETERS-----	
	OIL	GAS	P START-RATE DECL-M-FACT NOS
DATE:	98/01/01	98/01/01	G 400.0 15.00
DAILY-A:		423.6	
DECL-M:	23.39	23.39	
M-FACT:			

SECONDARY PRODUCT RATIO:

SECONDARY PRODUCT RATIO:

MAP111  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DHC TECHNIQUE

PAGE 2

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELL: PRIMARY PRODUCT: GAS APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999 COUNTY: 777 MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:  
LEASE NAME: FLYING ARROW COMMENT: SAMPLE GAS LSE --LG MODIFICATION USER: CHAR

ECONOMIC PARAMETERS: PRODUCING WELLS: 1 BASE DISCOUNT RATE: 1.1300  
OIL PRICE: 96.27 INJECTION WELLS: AD VALOREM TAX BURDEN: 2.00  
OIL GRAVITY: 40.0 DEPTH: 15200 ECONOMIC LIFE: 24  
OIL GRAVITY ADJUSTMENT: OPERATING COST (\$/WELL): 13082 P-TO-I (7/8-1/8): 4.1 4.1  
GAS PRICE: 7.10 \*\*\* SECTION 22.27 RESTRICTION \*\*\* PAYOUT (7/8-1/8): 4.5 4.6  
GAS PRICE PARITY: 1.00 EQUIPMENT COST (\$/WELL): 6547 R/P RATIO (OIL-GAS): 6.5

CASH FLOW ANALYSIS:

START DATE	PRODUCTION OIL (BBL)	PRODUCTION GAS (MCF)	PRODUCT PRICES		-7/8 REVENUE(M\$)		---OP COST(M\$)---		---UNDISC INCOME--	--DISCOUNTED INCOME--	
			OIL NET	GAS NET	OIL	GAS	DIRECT CAP EXP	7/8(M\$)	1/8(M\$)	7/8(\$)	1/8(\$)
10/01/01	134761	36.00	34.34	4.29	3.97	468	13	455	67	424331	62361
11/01/01	114559	41.63	39.72	4.68	4.33	434	12	422	62	341870	50278
12/01/01	97385	51.76	49.38	5.30	4.90	418	12	405	60	285646	42058
13/01/01	82996	67.51	64.40	5.85	5.41	393	13	380	56	232890	34411
14/01/01	70346	76.51	72.99	6.63	6.13	377	13	364	54	194006	28739
15/01/01	59802	85.51	81.58	7.41	6.85	358	14	343	51	159761	23740
16/01/01	50836	94.51	90.16	7.75	7.17	319	14	305	46	122829	18388
17/01/01	43324	103.96	99.18	7.96	7.36	279	15	264	40	92661	13973
18/01/01	36721	108.12	103.15	8.17	7.56	243	15	228	35	69436	10578
19/01/01	31217	111.36	106.24	8.37	7.74	211	16	196	30	51911	8006
20/01/01	26537	114.14	108.89	8.57	7.93	184	16	168	26	38744	6063
21/01/01	22614	116.42	111.06	8.76	8.10	160	17	144	23	28812	4589
22/01/01	19169	117.58	112.17	8.94	8.27	139	17	122	20	21209	3454
23/01/01	16296	118.76	113.30	9.12	8.44	120	18	103	17	15582	2606
24/01/01	13852	119.95	114.43	9.29	8.59	104	18	86	15	11341	1960
25/01/01	11805	121.15	115.58	9.45	8.74	90	19	72	13	8214	1478
26/01/01	10006	122.36	116.73	9.61	8.89	78	19	59	11	5947	1108
27/01/01	8505	123.58	117.90	9.76	9.03	67	20	47	10	4113	832
28/01/01	7232	124.82	119.08	9.90	9.16	58	20	38	8	2836	624
29/01/01	6163	126.07	120.27	10.04	9.29	50	21	29	7	1911	469
				864126 <----- SUB-TOTAL ----->		4552	322	4230	650	2113950	315697
				16657 <----- REMAINING ----->		139	90	49	20	2487	955
				880783 <----- TOTAL ----->		4691	412	4279	670	2116437	316652
						EQUIPMENT ADJUSTMENT:				213	
						VALUE AT BASE DISCOUNT RATE:				2116650 316652	
						VALUE AT MAP ADJUSTMENT:		90/97		2053151 307152	
						SECTION 23.175 VALUE:				1846443 275009	
						TOTAL APPRAISED VALUE:				1846443 275009	
						AVERAGE ANNUAL ROR:		19 19			

DIVISION ORDER TOTAL WORKING INTEREST & VALUE: .825000 1736440  
\*\*\* SECTION 22.27 RESTRICTION \*\*\*  
JURISDICTIONS: SAMPLE COUNTY 1.0000 |  
SAMPLE ISD 1.0000 |

MAP11:  
10/06/10 13:55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DMCF TECHNIQUE

PAGE 3

CLIENT: 777 SAMPLE COUNTY APPR DIST

ARC: 99 777003 WELL:

PRIMARY PRODUCT: GAS

APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999

COUNTY: 777

MODIFICATION DATE:

IND OPERATOR: 999999 INDICATOR NOT REQUIRED / INR 1

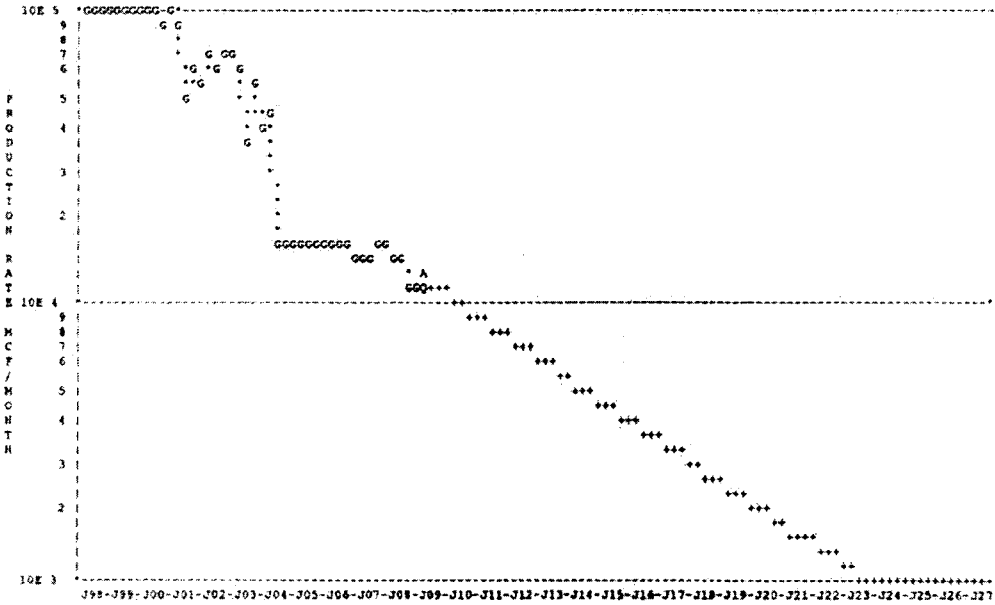
MODIFICATION TIME:

LEASE NAME: FLYING ARROW

COMMENT: SAMPLE GAS LSE --LG

MODIFICATION USER: CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	2009 MONTHLY PRODUCTION	CALC DECLINE	OIL	GAS	2010 MONTHLY PRODUCTION		
PRIOR	253	33236764	1	MON OIL (BBL)	GAS (MCF)	WLS	DATE: 99/01/01	MON OIL (BBL)	GAS (MCF)	WLS
1999		1599264	1	JAN	14132	1	DATE-A: 423.6	JAN	11602	1
2000	2	1380913	1	FEB	15285	1	DECL-B: 23.39	FEB	10651	1
2001		1201564	1	MAR	14972	1	M-FACT:	MAR	11644	1
2002		759541	1	APR	15605	1	----- APPRAISER DECLINE -----	APR	10865	1
2003		823634	1	MAY	12575	1	P-START-RATE DECL-1 M-FACT MOD	MAY	11379	1
2004	4	591383	1	JUN	11878	1	G 409.0 15.00	JUN	11029	1
2005		260886	1	JUL	12207	1		JUL	11516	1
2006		192861	1	AUG	12153	1		AUG	10856	1
2007		183998	1	SEP	10424	1		SEP	11283	1
2008		177500	1	OCT	12252	1		OCT	11193	1
2009		154720	1	NOV	11985	1		NOV		
2010		112017	1	DEC	11254	1		DEC		



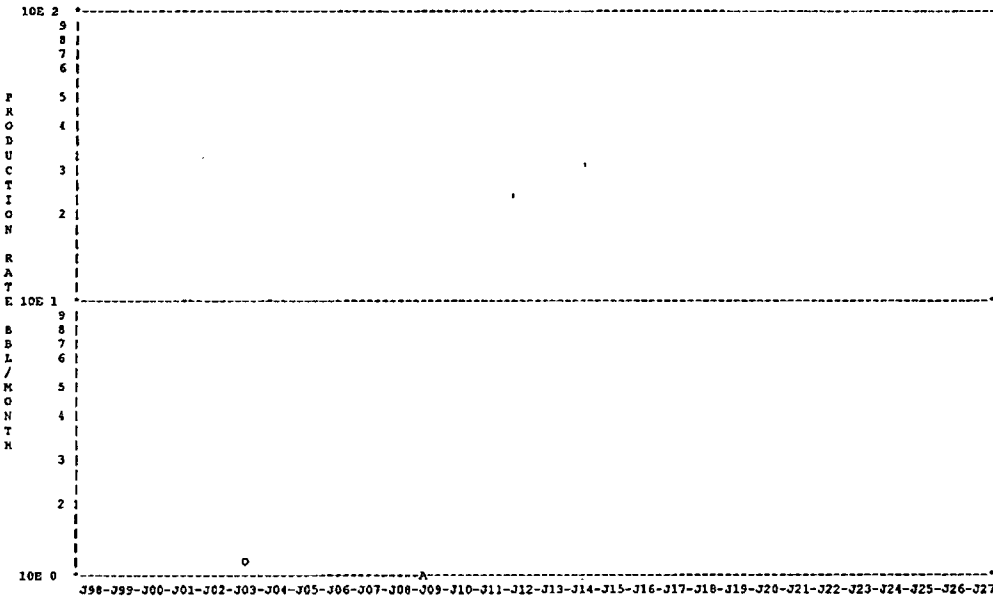
HAP111  
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.  
DETAILED MINERAL APPRAISAL  
INCOME APPROACH: DDCF TECHNIQUE

PAGE 4

CLIENT: 777 SAMPLE COUNTY APPR DIST      RRC: 99 777003      WELL:      PRIMARY PRODUCT: GAS      APPRAISAL AS OF: 10/01/01  
FIELD (RES): 99999 999      COUNTY: 777      MODIFICATION DATE:  
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3      MODIFICATION TIME:  
LEASE NAME: FLYING ARROW      COMMENT: SAMPLE GAS LSE --LG      MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	MON	2009 MONTHLY PRODUCTION	OIL(BBL)	GAS(MCF)	WLS	CALC DECLINE:	OIL	GAS	MON	2010 MONTHLY PRODUCTION
PRIOR	253	33236764		MON					DATE:	99/01/01	99/01/01	MON	
1999		1599264	1	JAN	14132	1	DAILY-A:			423.6		JAN	11602
2000	2	1380913	1	FEB	15285	1	DECL-4:		23.39	23.39		FEB	10651
2001		1201564	1	MAR	14972	1	N-FACT:					MAR	11644
2002		758541	1	APR	15605	1	APPRaiser DECLINE	-----				APR	10845
2003		823634	1	MAY	12575	1	P START-RATE DECL-4	N-FACT NOS				MAY	11379
2004	4	591383	1	JUN	11876	1	G	400.0	15.00			JUN	11028
2005		280666	1	JUL	12207	1						JUL	11516
2006		192861	1	AUG	12153	1						AUG	10856
2007		183598	1	SEP	10424	1						SEP	11203
2008		177500	1	OCT	12252	1						OCT	11193
2009		154720	1	NOV	11985	1						NOV	
2010		112017	1	DEC	11254	1						DEC	





## Calibration Models

### BUSINESS PERSONAL PROPERTY

#### APPRAISED BY CAPITOL APPRAISAL GROUP

##### Review and Testing

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance and are used when possible. However sales for some types of personal property are very infrequent. Furthermore, many market transactions occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures for real and personal property are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as appraisal-to-sale ratios and comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed. Commercial personal property appraised by Capitol Appraisal Group, LLC is not subject to a methods and procedures review however it is included in the Property Tax Division's annual ratio study with satisfactory results.

## Calibration Models

### INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

#### Review and Testing

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed.

**Calibration Models**  
**OIL AND GAS RESERVES**  
**CAPITOL APPRAISAL GROUP**

**Review and Testing**

Each year we review the estimated market value for each mineral property appraised according to its year-to-year value change and also to industry expected payouts and income indicators. We also examine income projected to be received with the previous year's income and test that income against the lease's appraised value. Market value for income producing properties is a multiple of its monthly or annual income. Our experience through the years indicates that values typically vary within in a range of 2-5 times income, provided all appropriate income factors have been appropriately identified. Periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser also contribute to the review process.

Application of appraisal-to-sales ratios is another method for measuring performance. However, single property sales or sales of interest(s) within a property remain difficult to obtain due Texas' disclosure laws. Furthermore many market transactions are normally for multiple properties in multiple areas and include both real and personal property, tangible and intangible. We access licensed databases providing statistical data for company and property sales to compare our efforts. We also measure our performance through comparison of valid single-property market transactions, if any, that are submitted for staff review. Lastly, Capitol Appraisal's mineral appraisal values are subject to review each year in the Property Value Study conducted by the Property Tax Division of the Texas Comptroller of Public Accounts. The Property Tax Division's review as well as comparisons to industry transactions and to single-property market value sales (when available), indicate the validity of the models, techniques and assumptions used.

## Calibration Models

### UTILITY, RAILROAD, AND PIPELINE PROPERTIES

APPRAISED BY CAPITOL APPRAISAL GROUP

#### Review and Testing

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal to sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Appraisal results are tested annually by the Property Tax Division of the Texas Comptroller's Office. The Comptroller's review as well as comparisons with single-property appraisals indicate the validity of the models as well as the calibration techniques employed.