

**2019-2020
REAPPRAISAL PLAN
CAPITOL APPRAISAL GROUP**

**ADOPTED BY CAMP CENTRAL APPRAISAL DISTRICT BOARD OF
DIRECTORS AUGUST 23, 2018**

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

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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. 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.

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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

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**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.

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	0.0958
		1.472067786	

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-OBSOLESCE	0.8356
MOST RECENT RATE OF RETURN	0.0958
CURRENT DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCE	0.8825
PROJECTED RATE OF RETURN	0.0659
CURRENT DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCE	0.6073
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCE	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

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
LINEAR REGRESSION ON NOI	CORR. COEFF. =	(0.71)
LIN. REGRESS. ON NOI/NPIS	CORR. COEFF. =	(0.00)
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

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

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

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	

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		NPIS		NOI/NPIS
	excludes Pension Gains & Equip Sales				
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	116%	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
3. Weighted 3 Year Average			219,249,919		36,541,653
			34,007,885		
4. Adjusted Weighted 3 Year Average			34,047,670		34,391,486
			34,053,193		
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 THEXTA THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVÉS
 REM TAXATION * APPRAISER FOR THE PAYER AS 2010 VALUES. THE RIGHT TO FURTHER
 NOTIFICATION OF VALUES.
 TO BE VALID THIS SIGN-OFF MUST BE EXECUTED AND RETU RNNED TO CAPITOL
 BY MIDNIGHT PRIOR TO YOUR ARB HEARING.

District	Capitol	Taxpayer/Agent	ARB
Date	Date	Date	Date

ALLOCATION

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

Capitol Appraisal Group, LLC

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-OBSOLESCE	0.3753
MOST RECENT RATE OF RETURN	0.0405
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCE	0.2899
PROJECTED RATE OF RETURN	0.0319
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCE	0.2283
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCE	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 ***
THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY THE APPRAISER FOR THE DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THE TAXPAYER AS 2010 VALUES. THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAVES THE RIGHT TO FURTHER NOTIFICATION OF VALUES.

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

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

COST OF EQUITY

MODIFIED DCF - DIVIDEND YIELD $Ke = (Div/P) + G$ 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

MODIFIED DCF - EARNINGS $Ke = (E/P) + G$ 0.1059

NET INCOME 4,458,440

TOTAL PATRONAGE CAPITAL 44,570,184

CALCULATED GROWTH RATE 0.0059

BUILD UP METHOD $Ke = Rf + Rp + SIZE PREMIUM$ 0.1570

RISK FREE RATE (TREASURY) 0.0400

EQUITY RISK PREMIUM (PRATT / WASATA) 0.0550

SIZE PREMIUM (IBBITSONS) 0.0620

MODIFIED CAPM $Ke = Rf + (b * ERP)$ 0.1391

RISK FREE RATE (TREASURY) 0.0400

EQUITY RISK PREMIUM (PRATT / WASATA) 0.0550

BETA (SEE BELOW) 1.8024

BETA

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

COST OF DEBT

ELECTRIC UTILITY BOND 0.0818

COST OF DEBT 0.0818

CAPITAL STRUCTURE

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	ADJ 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

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	\$3,263,862

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	\$861,211
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

INCOME ATTRIBUTABLE TO CWIP (SEE BELOW)	\$900,000
TOTAL INCOME TO CAPITALIZE	\$0
CAPITALIZATION RATE	\$900,000
INCOME APPROACH INDICATOR OF VALUE	0.1322
	\$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	\$0
TYPICAL INVESTOR-OWNED ELECTRIC CO. RETURN RATE ON NPIS		YEAR(S)	0.1010
PROJECTED NET INCOME FROM CWIP			\$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
COMPTRROLLER'S PERCENT NON-OBSOLETE PRIOR YEAR	1.1375
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCEMENT	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 CWIP	\$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 & WIRE FACILITIES (D6E)	\$10,380,881
ORIGINAL COST OF OTHER TANGIBLE ASSETS (D7E)	\$0
TOTAL OUTSIDE PLANT ORIGINAL COST	\$10,380,881
ALLOCATED CWIP	\$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.

VALUATION SUMMARY

TYPE VALUE	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 9G

OIL LSE Sample #1-Smaller

MAP111
10/06/10 13.55

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

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777011 WELL: PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01
FIELD (RES): 99999 999 IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 COUNTY: 777
LEASE NAME: A E SMITH COMMENT: SAMPLE OIL LSE #1-SML MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 41/10/01

RAILROAD COMMISSION PRODUCTION						
DATE	OIL (BBL)	GAS (MCF)	WATER(E)-B/D	SWC-WT	FLOW	LIFT WELLS
PRIOR	1123821			162		
1999	16133					6 6
2000	14603					6 6
2001	13668					6 6
2002	10161					6 6
2003	9016					5 5
2004	7720					5 5
2005	8922					5 5
2006	9071					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	936					5 5
JUL	841					6 6
AUG	577					6 6
SEP	791					6 6
OCT	924					7 7
NOV	855					7 7
DEC	1400					7 7
2009	11127					7 7
TOTAL	1249158			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	P	START-RATE	DECL-%	N-FACT
DATE:	07/07/01	07/07/01	O	45.0	25.00	12
DAILY-A:	30.5		B		15.00	
DECL-%:	35.53	35.53				
N-FACT:						

SECONDARY PRODUCT RATIO: SECONDARY PRODUCT RATIO:

MAP111
10/06/10 13.55

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

PAGE 2

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-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 PARITY:	1.00	EQUIPMENT COST (\$/WELL):	8269	R/P RATIO (OIL-GAS):	6.0

CASH FLOW ANALYSIS:

START DATE	---PRODUCTION---		---PRODUCT PRICES---				-7/8 REVENUE(M\$)-		---OF 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	408		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	207980	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		49		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	6010	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: 58
VALUE AT BASE DISCOUNT RATE: 2041819 337250

VALUE AT MAP ADJUSTMENT: 94/90 1919309 317015

IN PLACE DAILY AVG SECTION 23.175 VALUE: 1764393 288734

7/8 \$/BBL: 23.43 44810 TOTAL APPRAISED VALUE: 1764393 288734

7/8 \$/MCF: 7/8 \$/BOE: 23.43 44810 AVERAGE ANNUAL ROR: 20 20

DIVISION ORDER TOTAL WORKING INTEREST & VALUE: .825000 1648900

*** SECTION 22.27 RESTRICTION ***

JURISDICTIONS:	SAMPLE COUNTY	1.0000			
	SAMPLE ISD	1.0000			

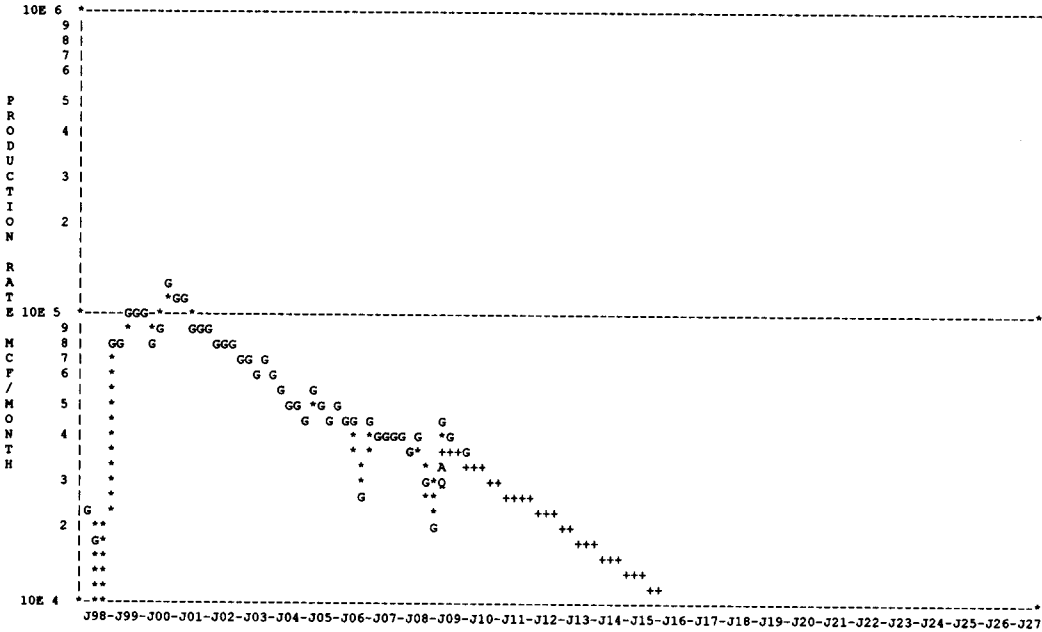
MAP111
10/06/10 13.53

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

PAGE 3

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	MON	OIL(BBL)	GAS(MCF)	WLS	DATE:	00/01/01	00/01/01	MON	OIL(BBL)	GAS(MCF)	WLS	
1999	1476	378102	1	JAN	22	29304	1	DAILY-A:	4.8	1086.5	JAN	227	46713	1
2000	6717	1139201	1	FEB	197	36798	1	DECL-%:	14.07	14.07	FEB	145	39738	1
2001	6618	1218292	1	MAR	156	38188	1	N-FACT:			MAR	32	42709	1
2002	6678	1138126	1	APR	292	39689	1	----- APPRAISER DECLINE -----			APR	167	40399	1
2003	5675	935663	1	MAY	84	40934	1	P START-RATE DECL-% N-FACT MOS			MAY	78	37741	1
2004	4269	795303	1	JUN	167	36969	1	G	1250.0	15.00	JUN	159	40099	1
2005	2876	601597	1	JUL	162	42031	1				JUL	83	37813	1
2006	2231	598200	1	AUG	134	29926	1				AUG	141	37367	1
2007	1349	477221	1	SEP	90	10870	1				SEP	98	35619	1
2008	1223	472678	1	OCT							OCT	125	35437	1
2009	1595	363776	1	NOV	63	12018	1				NOV			
2010	1255	393635	1	DEC	228	47049	1				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: 9999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: A E SMITH COMMENT: SAMPLE OIL LSE #1-SML MODIFICATION USER: CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --	CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --
PRIOR	1123821	162		MON OIL (BBL) GAS (MCF) WLS	DATE:	07/07/01	07/07/01	MON OIL (BBL) GAS (MCF) WLS
1999	16133		6	JAN 949	DAILY-A:	30.5		JAN 1544
2000	14603		6	FEB 673	DECL-#:	35.53	35.53	FEB 1484
2001	13668		6	MAR 1115	N-FACT:			MAR 1478
2002	10161		6	APR 1063	----- APPRAISER DECLINE -----			APR 1296
2003	9016		5	MAY 1003	P START-RATE DECL-# N-FACT MOS			MAY 1326
2004	7720		5	JUN 936	O 45.0 25.00 12			JUN 1227
2005	8922		5	JUL 841	B 15.00			JUL 1267
2006	9071		5	AUG 577				AUG 1268
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

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DOCUMENT 9G

OIL LSE Sample #1-Smaller

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

PAGE 1

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
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3
LEASE NAME: A E SMITH COMMENT: SAMPLE OIL LSE #1-SML MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 41/10/01

RAILROAD COMMISSION PRODUCTION						
DATE	OIL (BBL)	GAS (MCF)	WATER(E)-B/D	%WC-WT	FLOW	LIFT WELLS
PRIOR	1123821	162				
1999	16133				6	6
2000	14603				6	6
2001	13668				6	6
2002	10161				6	6
2003	9016				5	5
2004	7720				5	5
2005	8922				5	5
2006	9071				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	936				5	5
JUL	841				6	6
AUG	577				6	6
SEP	791				6	6
OCT	924				7	7
NOV	855				7	7
DEC	1400				7	7
2009	11127				7	7
TOTAL	1249158	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-% N-FACT MOS
DATE:	07/07/01 07/07/01	O	45.0 25.00 12
DAILY-A:	30.5	B	15.00
DECL-%:	35.53 35.53		
N-FACT:			

SECONDARY PRODUCT RATIO: SECONDARY PRODUCT RATIO:

MAP111
10/06/10 13.55

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

PAGE 2

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-SML MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:
OIL PRICE: 94.09 PRODUCING WELLS: 7 BASE DISCOUNT RATE: 1.1300
OIL GRAVITY: 28.0 INJECTION WELLS: 1 AD VALOREM TAX BURDEN: 2.00
OIL GRAVITY ADJUSTMENT: OPERATING COST (\$/WELL): 6378 ECONOMIC LIFE: 19
GAS PRICE: 10.04 *** SECTION 22.27 RESTRICTION *** P-TO-I (7/8-1/8): 4.7 4.8
GAS PRICE PARITY: 1.00 EQUIPMENT COST (\$/WELL): 8269 R/P 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	375 60	349376 55858
11/01/01	11372	40.69 38.82	6.61 6.11	386	344 55	278830 44746
12/01/01	9669	50.59 48.26	7.49 6.93	408	366 58	257988 41128
13/01/01	8239	65.98 62.94	8.26 7.64	454	409 65	250900 39744
14/01/01	6984	74.78 71.34	9.36 8.66	436	390 62	207980 33205
15/01/01	5938	83.57 79.73	10.46 9.68	414	367 59	170153 27437
16/01/01	5045	92.37 88.12	10.94 10.12	389	340 56	137204 22403
17/01/01	4301	101.61 96.94	11.24 10.40	365	315 52	110322 18270
18/01/01	3645	105.67 100.81	11.53 10.67	322	270 46	82274 14002
19/01/01	3097	108.84 103.83	11.81 10.92	281	228 40	60487 10655
20/01/01	2635	111.56 106.43	12.09 11.18	245	191 35	43937 8080
21/01/01	2245	113.79 108.56	12.36 11.43	213	157 30	31436 6106
22/01/01	1902	114.93 109.64	12.62 11.67	182	124 26	21675 4543
23/01/01	1617	116.08 110.74	12.87 11.90	157	97 22	14676 3392
24/01/01	1374	117.24 111.85	13.11 12.13	134	73 19	9598 2532
25/01/01	1173	118.41 112.96	13.34 12.34	116	52 17	6010 1898
26/01/01	993	119.59 114.09	13.56 12.54	99	34 14	3361 1411
27/01/01	844	120.79 115.23	13.77 12.74	85	18 12	1537 1053
28/01/01	718	122.00 116.39	13.97 12.92	73	69 10	282 787

86066 <----- SUB-TOTAL -----> 5180 1027 4153 740 2038026 337250
86066 <----- TOTAL -----> 5180 1027 4153 740 2038026 337250

EQUIPMENT ADJUSTMENT: 58
VALUE AT BASE DISCOUNT RATE: 2041819 337250

VALUE AT MAF ADJUSTMENT: 94/90 1919309 317015

IN PLACE DAILY AVG SECTION 23.175 VALUE: 1764393 288734

7/8 \$/BBL: 23.43 44810 TOTAL APPRAISED VALUE: 1764393 288734

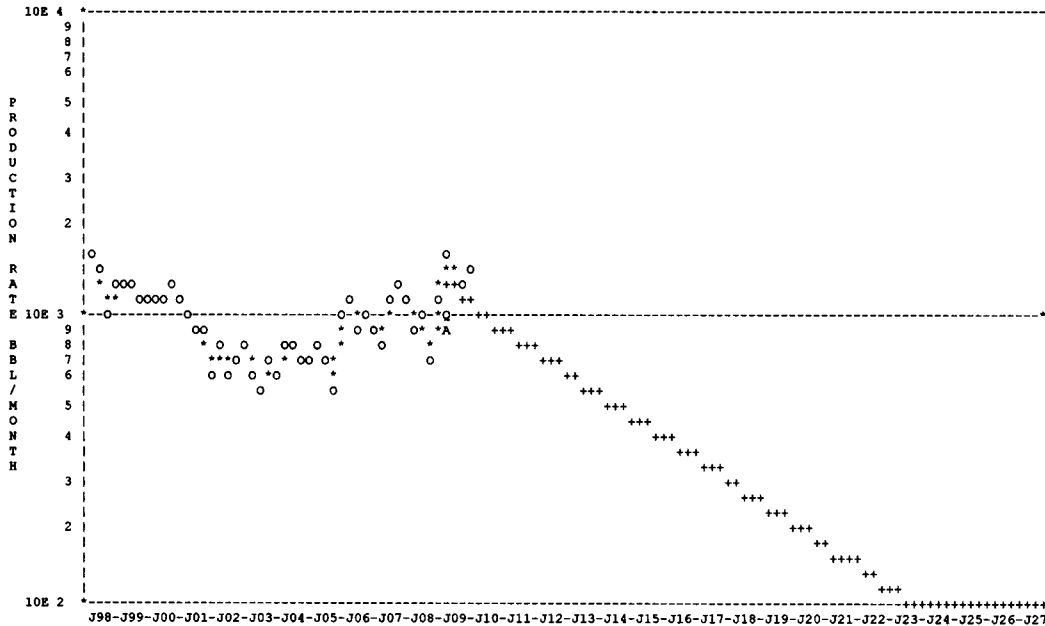
7/8 \$/MCF: 1173
7/8 \$/BOE: 23.43 44810 AVERAGE ANNUAL ROR: 20 20

DIVISION ORDER TOTAL WORKING INTEREST & VALUE: .825000 1648900
*** SECTION 22.27 RESTRICTION ***

JURISDICTIONS: SAMPLE COUNTY 1.00001
SAMPLE ISD 1.00001

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-SML MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	-- 2009 MONTHLY PRODUCTION --	CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --
PRIOR	1123821	162		MON OIL(BBL)	DATE:	07/07/01	07/07/01	MON OIL(BBL)
1999	16133		6	JAN 949	DAILY-A:	30.5		JAN 1544
2000	14603		6	FEB 673	DECL-%:	35.53	35.53	FEB 1484
2001	13668		6	MAR 1115	N-FACT:			MAR 1478
2002	10161		6	APR 1063	----- APPRAISER DECLINE -----			APR 1296
2003	9016		5	MAY 1003	P START-RATE DECL-% N-FACT MOS			MAY 1326
2004	7720		5	JUN 936	O 45.0 25.00 12			JUN 1227
2005	8922		5	JUL 841	B 15.00			JUL 1267
2006	9071		5	AUG 577				AUG 1268
2007	11892		5	SEP 791				SEP 1352
2008	13024		5	OCT 924				OCT 1440
2009	11127		7	NOV 855				NOV
2010	13682		7	DEC 1400				DEC



MAP111
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 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-SML

MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	-- 2009 MONTHLY PRODUCTION --	CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --		
PRIOR	1123821	162		MON OIL(BBL)	DATE:	07/07/01	07/07/01	MON OIL(BBL)	GAS(MCF)	WLS
1999	16133		6	JAN 949	DAILY-A:	30.5		JAN 1544		7
2000	14603		6	FEB 673	DECL-%:	35.53	35.53	FEB 1484		7
2001	13668		6	MAR 1115	N-FACT:			MAR 1478		7
2002	10161		6	APR 1063	----- APPRAISER DECLINE -----			APR 1296		7
2003	9016		5	MAY 1003	P START-RATE DECL-% N-FACT MOS			MAY 1326		7
2004	7720		5	JUN 936	O 45.0 25.00 12			JUN 1227		7
2005	8922		5	JUL 841	B 15.00			JUL 1267		7
2006	9071		5	AUG 577				AUG 1268		7
2007	11892		5	SEP 791				SEP 1352		7
2008	13024		5	OCT 924				OCT 1440		7
2009	11127		7	NOV 855				NOV		7
2010	13682			DEC 1400				DEC		7

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DOCUMENT 9H

OIL LSE Sample #2-Larger

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

PAGE 1

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777002 WELL: PRIMARY PRODUCT: OIL
FIELD (RES): 99999 999 COUNTY: 777
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 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	%WC-WT	FLOW	LIFT	WELLS
PRIOR	16008540	3803197					
1999	46797	24076	94965	67	1	4	5
2000	32629	12793	77798	70	1	5	6
2001	31256	13091	33968	52	1	5	6
2002	28777	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	869			1	5	6
FEB	1541	861			1	5	6
MAR	1566	809			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	8	1	1	5	6
AUG	1932	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	24106	12759	33968	58	1	5	6
TOTAL	16327512	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-----
OIL GAS P START-RATE DECL- $\frac{1}{2}$ N-FACT MOS
DATE: 98/01/01 98/01/01 O 75.0 6.00
DAILY-A: 66.0 34.9
DECL- $\frac{1}{2}$: 6.06 6.06
N-FACT:

SECONDARY PRODUCT RATIO: 529 SECONDARY PRODUCT RATIO:

MAP111
10/06/10 13.53

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

PAGE 2

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: LARY LINDA COMMENT: SAMPLE GAS LSE-SML MODIFICATION USER: CHAR

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

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	1625	421127	39.75	37.92	6.04	5.58	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	888	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 2763

VALUE AT BASE DISCOUNT RATE: 8182496 1181466

VALUE AT MAF ADJUSTMENT: 90/90 7364247 1063319

IN PLACE DAILY AVG SECTION 23.175 VALUE: 7424498 1071908

7/8 \$/BBL: 34.69 54658 TOTAL APPRAISED VALUE: 7364247 1063319

7/8 \$/MCF: 4.27 6523

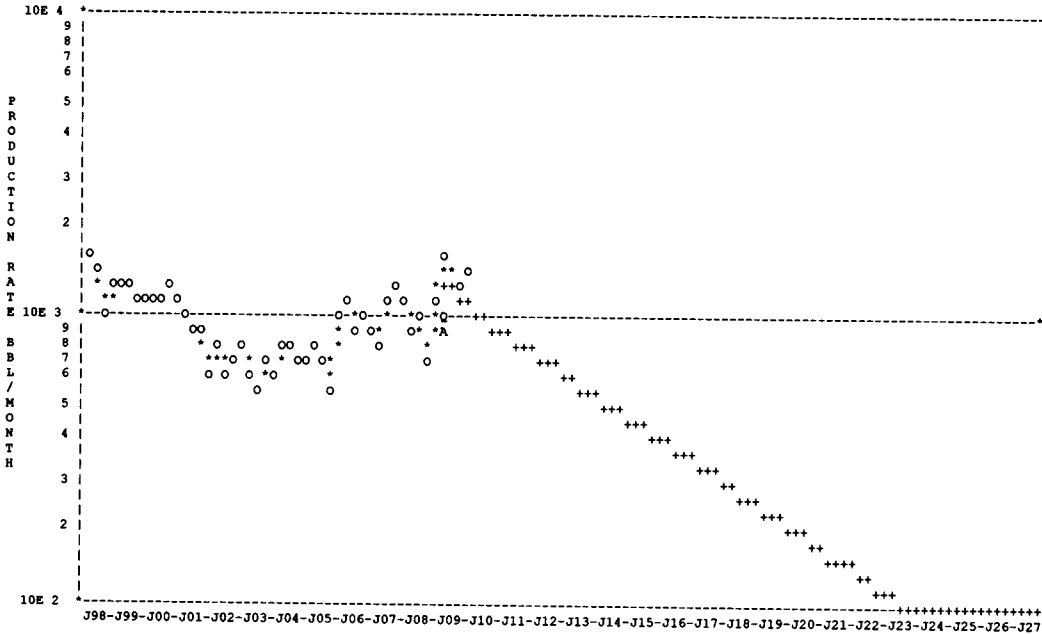
7/8 \$/BOE: 28.37 43340 AVERAGE ANNUAL ROR: 20 20

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 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-SML MODIFICATION USER: CHAR

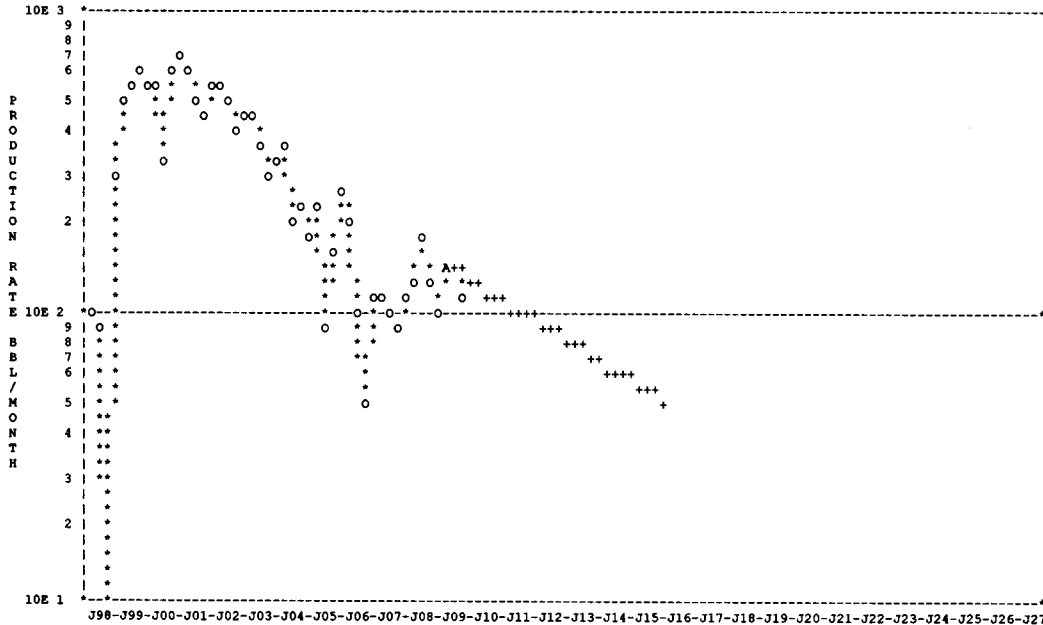
DATE	OIL (BBL)	GAS (MCF)	WLS	MON	2009 MONTHLY PRODUCTION	CALC DECLINE:	OIL	GAS	MON	2010 MONTHLY PRODUCTION	
PRIOR	1123821	162				DATE:	07/07/01	07/07/01			
1999	16133		6	JAN	949	DAILY-A:	30.5		JAN	1544	
2000	14603		6	FEB	673	DECL-%:	35.53	35.53	FEB	1484	
2001	13668		6	MAR	1115	N-FACT:			MAR	1478	
2002	10161		6	APR	1063	----- APPRAISER DECLINE -----				APR	1296
2003	9016		5	MAY	1003	P START-RATE DECL-% N-FACT MOS			MAY	1326	
2004	7720		5	JUN	936	O	45.0	25.00	12	JUN	1227
2005	8922		5	JUL	841	B	15.00		JUL	1267	
2006	9071		5	AUG	577				AUG	1268	
2007	11892		5	SEP	791				SEP	1352	
2008	13024		5	OCT	924				OCT	1440	
2009	11127		7	NOV	855				NOV		
2010	13682		7	DEC	1400				DEC		



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 3 MODIFICATION DATE:
LEASE NAME: LAZY LINDA COMMENT: SAMPLE GAS LSE-SML MODIFICATION TIME:
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) GAS(MCF) WLS	DATE:	00/01/01	00/01/01	MON OIL(BBL) GAS(MCF) WLS
1999	1476	378102	1	JAN 22 29304 1	DAILY-A:	4.8	1086.5	JAN 227 46713 1
2000	6717	1139201	1	FEB 197 36798 1	DECL-%:	14.07	14.07	FEB 145 39738 1
2001	6618	1218292	1	MAR 156 38188 1	N-FACT:			MAR 32 42709 1
2002	6678	1138126	1	APR 292 39689 1	APPRaiser DECLINE	-----		APR 167 40399 1
2003	5675	935663	1	MAY 84 40934 1	P START-RATE DECL-% N-FACT	MOS		MAY 78 37741 1
2004	4269	795303	1	JUN 167 36969 1	G	1250.0	15.00	JUN 159 40099 1
2005	2876	601597	1	JUL 162 42031 1				JUL 83 37813 1
2006	2231	598200	1	AUG 134 29926 1				AUG 141 37367 1
2007	1349	477221	1	SEP 90 10870 1				SEP 98 35619 1
2008	1223	472678	1	OCT				OCT 125 35437 1
2009	1595	363776	1	NOV 63 12018 1				NOV
2010	1255	393635	1	DEC 228 47049 1				DEC



DOCUMENT 9I

GAS LSE Sample #1-Smaller

MAP111
10/06/10 13.53

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

MODIFICATION DATE:

IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3

COMMENT: SAMPLE GAS LSE-SML

MODIFICATION TIME:

LEASE NAME: LAZY LINDA

MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 86/12/01

DATE	RAILROAD COMMISSION PRODUCTION						
	OIL (BBL)	GAS (MCF)	WATER (B/D)	FTP	FLOW	LIFT	WELLS
PRIOR	98202	14147992					
1999	1476	378102	12	900	1		1
2000	6717	1139201	30	950	1		1
2001	6618	1218292	30	550	1		1
2002	6678	1138126	40	380	1		1
2003	5675	935663	29	252	1		1
2004	4269	795303	51	240	1		1
2005	2876	601597	40	250	1		1
2006	2231	598200	56	100	1		1
2007	1349	477221		140	1		1
2008	1223	472678	37	80	1		1
JAN	22	29304			1		1
FEB	197	36798			1		1
MAR	156	38188			1		1
APR	292	39689			1		1
MAY	84	40934			1		1
JUN	167	36969			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	363776	13	60	1		1
TOTAL	138909	22266151					

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE: 00/00/00
 ANNUAL OIL PRODUCTION: 1595 OIL RESERVE LIMIT:
 ANNUAL GAS PRODUCTION: 363776 GAS RESERVE LIMIT: 1750000
 NUMBER OF PRODUCING WELLS: 1 NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

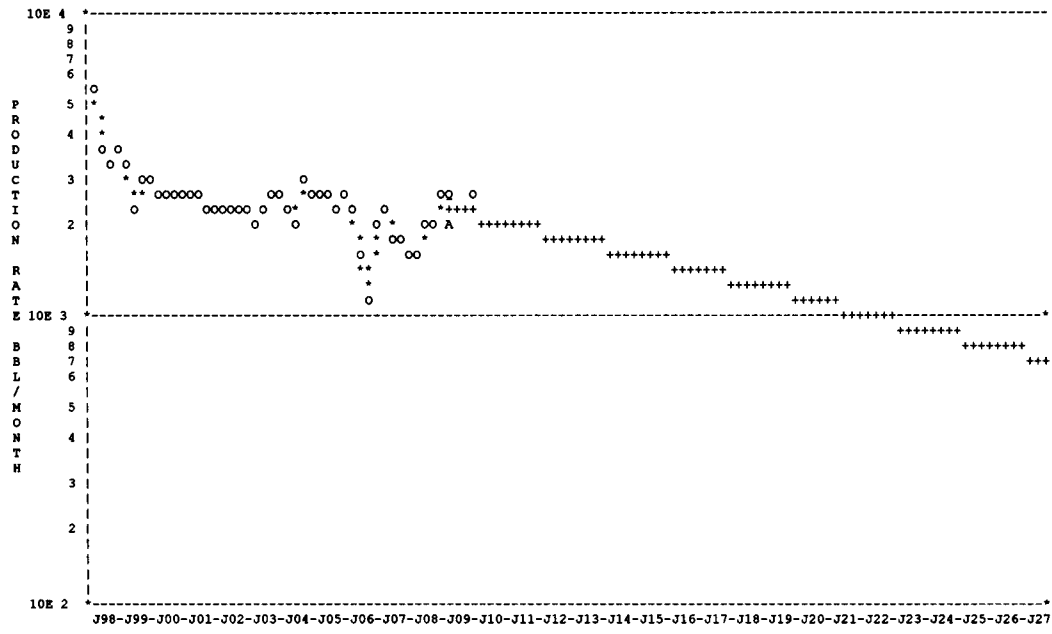
-----CALCULATED PARAMETERS-----		-----APPRAISER PARAMETERS-----	
	OIL GAS	P	START-RATE DECL-8 N-FACT MOS
DATE:	00/01/01 00/01/01	G	1250.0 15.00
DAILY-A:	4.8 1086.5		
DECL-8:	14.07 14.07		
N-FACT:			

SECONDARY PRODUCT RATIO: 4 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: 9999999 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	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE: OIL GAS			-- 2010 MONTHLY PRODUCTION --				
PRIOR	16008540	3803197		MON	OIL(BBL)	GAS(MCF)	WLS	DATE:	98/01/01	98/01/01	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-%:	6.06	6.06	FEB	2189	1328	6
2001	31256	13091	6	MAR	1566	809	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	P START-RATE DECL-% N-FACT MOS			MAY	2364	1359	6
2004	27390	13510	6	JUN	1875	1169	6	O 75.0 6.00			JUN	2114	1269	6
2005	28852	13754	6	JUL	1815	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			



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

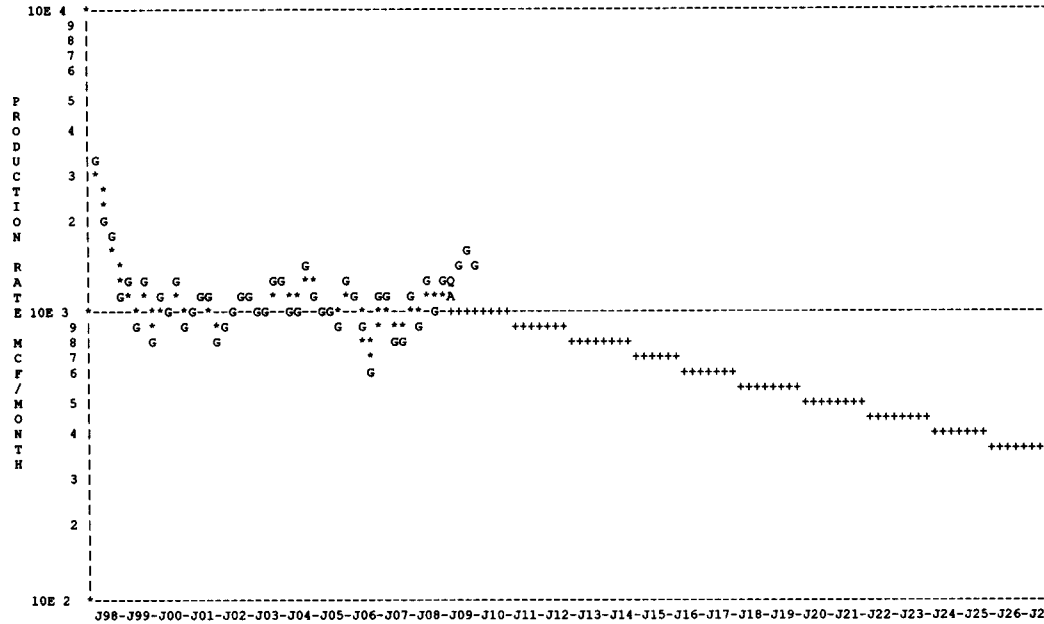
MODIFICATION DATE:

IND OPERATOR: 9999999 NOMINATOR NOT REQUIRED / SWR 3
LEASE NAME: HUGH KELKER

COMMENT: OIL SAMPLE #2 --LG

MODIFICATION TIME:
MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE: OIL GAS			-- 2010 MONTHLY PRODUCTION --				
PRIOR	16008540	3803197		MON	OIL(BBL)	GAS(MCF)	WLS	DATE:	98/01/01	98/01/01	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-%:	6.06	6.06	FEB	2189	1328	6
2001	31256	13091	6	MAR	1566	809	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	P START-RATE DECL-% N-FACT MOS			MAY	2364	1359	6
2004	27390	13510	6	JUN	1875	1169	6	O 75.0 6.00			JUN	2114	1269	6
2005	28852	13754	6	JUL	1815	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 9J

GAS LSE Sample #2-Larger

MAP111
10/06/10 13.55

CAPITOL APPRAISAL GROUP, INC.
DETAILED MINERAL APPRAISAL
INCOME APPROACH: DNCF 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
LEASE NAME: FLYING ARROW COMMENT: SAMPLE GAS LSE --LG

APPRAISAL AS OF: 10/01/01

MODIFICATION DATE:
MODIFICATION TIME:
MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 86/06/01

-----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	263	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		183998	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: OIL RESERVE LIMIT:
ANNUAL GAS PRODUCTION: 154720 GAS RESERVE LIMIT:
NUMBER OF PRODUCING WELLS: 1 NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

-----CALCULATED PARAMETERS-----			-----APPRAISER PARAMETERS-----	
	OIL	GAS	P	START-RATE DECL-% N-FACT MOS
DATE:	98/01/01	98/01/01	G	400.0 15.00
DAILY-A:		423.6		
DECL-%:	23.39	23.39		
N-FACT:				

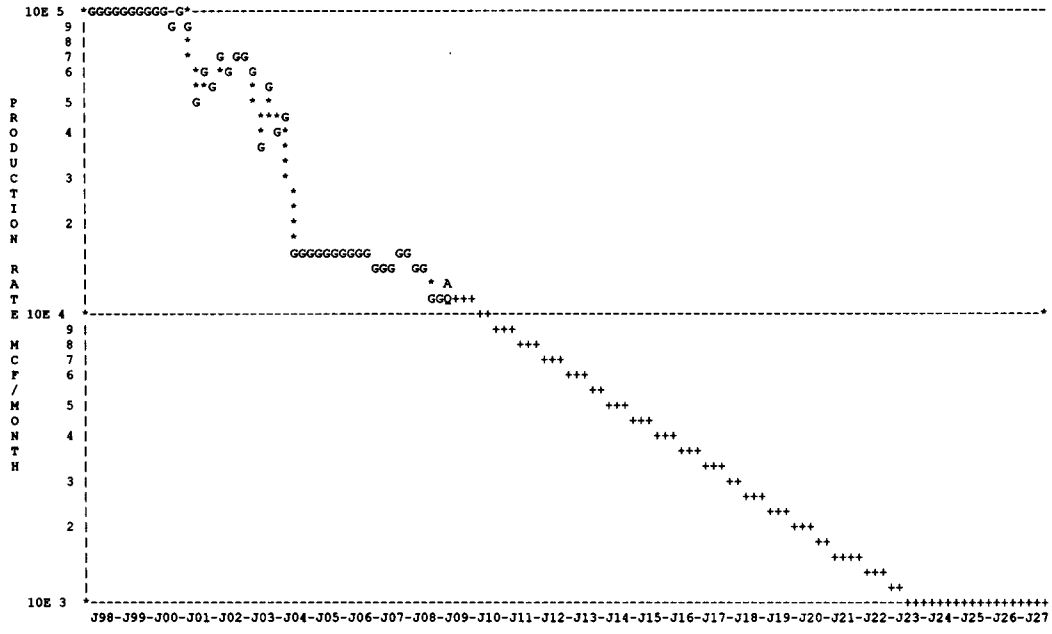
SECONDARY PRODUCT RATIO:

SECONDARY PRODUCT RATIO:

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	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE: OIL GAS			-- 2010 MONTHLY PRODUCTION --		
PRIOR	253	33236764	1	MON OIL(BBL)	GAS(MCF)	WLS	DATE:	98/01/01	98/01/01	MON OIL(BBL)	GAS(MCF)	WLS
1999		1599264	1	JAN	14132	1	DAILY-A:		423.6	JAN		11602
2000	2	1380913	1	FEB	15285	1	DECL-%:	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		10865
2003		823634	1	MAY	12575	1	P START-RATE DECL-% N-FACT MOS			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		183998	1	SEP	10424	1				SEP		11283
2008		177500	1	OCT	12252	1				OCT		11193
2009		154720	1	NOV	11985	1				NOV		
2010		112017	1	DEC	11254	1				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 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

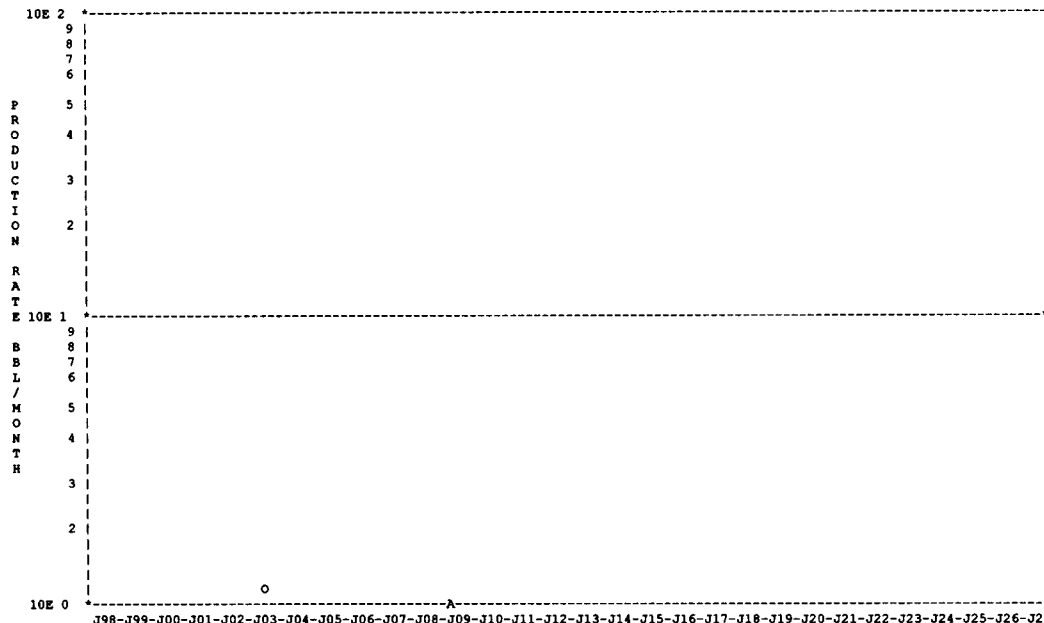
MODIFICATION TIME:

LEASE NAME: FLYING ARROW

COMMENT: SAMPLE GAS LSE --LG

MODIFICATION USER: CHAR

DATE	OIL(BBL)	GAS(MCF)	WLS	-- 2009 MONTHLY PRODUCTION --	CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --
PRIOR	253	33236764	1	MON OIL(BBL)	DATE:	98/01/01	98/01/01	MON OIL(BBL)
1999		1599264	1	JAN	DAILY-A:		423.6	JAN
2000	2	1380913	1	FEB	DECL-%:	23.39	23.39	FEB
2001		1201564	1	MAR	N-FACT:			MAR
2002		758541	1	APR	----- APPRAISER DECLINE -----			APR
2003		823634	1	MAY	P START-RATE DECL-% N-FACT MOS			MAY
2004	4	591383	1	JUN	G	400.0	15.00	JUN
2005		280666	1	JUL				JUL
2006		192861	1	AUG				AUG
2007		183998	1	SEP				SEP
2008		177500	1	OCT				OCT
2009		154720	1	NOV				NOV
2010		112017	1	DEC				DEC



3 Copy of Reappraisal Plan Provided by Contractor

See four files in Operating Procedures folder
Reappraisal Plan subfolder

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

5 Contractor's procedures for appraising oil and gas property

See in Appraisal Standards folder

Property Appraisal Manuals subfolder

Procs for appraisal of Oil&Gas file

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 1st. of current tax year.
3. Check to see if the lease was completed prior to January 1st or producing before January 1st of current tax year.
4. Compare to list of new leases currently producing or completed prior to January 1st 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 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 1st of current tax year to determine any lease duplication.
5. Check to see if the lease was completed prior to January 1st or producing before January 1st of current tax year.
6. If lease has not previously been added to the CAD's appraisal roll, do so and obtain ownership.

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 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 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 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

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 3B

2020-2021

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 3A

2020-2021

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 3D

2020-2021

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 3C

2020-2021

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.

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.

Document 7B

MASS APPRAISAL REPORT

BUSINESS PERSONAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

This type of property consists of tangible personal property owned by a business or individual for the purpose of producing an income. The Uniform Standards of Professional Appraisal practice define personal property as "identifiable portable and tangible objects which are considered by the general public as being "personal," e.g. furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all property that is not classified as real estate." The Texas Property Tax Code (Sec. 1.04(5)) defines tangible personal property as "...personal property that can be seen, weighed, measured, felt, or otherwise perceived by the senses but does not include a document or other perceptible object that constitutes evidence of a valuable interest, claim, or right and has negligible or no intrinsic value." The Texas Property Tax Code (Sec. 1.04(4)) defines personal property as "...property that is not real property."

Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

A separate definition of the value of inventory is found in the Texas Property Tax Code (Sec. 23.12(a)), "...the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business." Additionally, some inventories may qualify for appraisal as of September 1 in accordance with the provisions of Texas Property Tax Code Section 23.12(f).

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. A listing of the personal property appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Personal property is normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property tax Code; asset lists and other confidential data supplied by the owner or agent; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's personal property appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Personal property appraisal staff stays abreast of current trends affecting personal property through review of published materials, attendance at conferences, course work, and continuing education. All personal property appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.

Data Collection and Validation

Data on the subject properties are collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the multitude of personal property types there is no standard data collection form or manual.

Valuation Approach and Analysis

Personal property is appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such.

Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A value estimate derived from an income approach model in which the operating income of a business was capitalized must be reduced by the value of any real property in order to arrive at the value of the operating personal property. A market data model based on typical selling prices per item or unit of capacity is also used when appropriate market sales information is available. In the case of some personal property types, such as licensed vehicles, market data from published pricing guides is used to construct a market value model. In other cases, models are based on sales information available through published sources or through private sources.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & \underline{-\text{EO}} \\ & =\text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & \underline{-\text{VE}} \\ & \text{NOI} \end{aligned}$$

NOI/R = Income Indicator of Value

Where:

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses

R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI
NOI for year n x DF for year n = PW of year n NOI
Net Reversion x DF for year n = PW of Reversion
Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

NOI = Net Operating Income
DF = Discount Factor
PW = Present Worth
n = Last year of holding period

Market Data Approach

ASPCP/U = PU
PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property
U = Unit of comparison
ASPU = Adjusted Sales Price per Unit of comparison
SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Highest and best use analysis of personal property is based on the likelihood of the continued use of the personal property in its current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

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.

Document 7A

MASS APPRAISAL REPORT

INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

This type of property consists of processing facilities and related personal property. Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 © Comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the industrial properties appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Industrial properties are normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property Tax Code; asset lists and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's industrial appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Industrial appraisal staff stays abreast

of current trends affecting industrial properties through review of published materials, attendance at conferences, course work, and continuing education. All industrial appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

Data Collection and Validation

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties, if any. Due to the unique nature of many industrial properties there is no standard data collection form or manual.

Valuation Approach and Analysis

Industrial properties are appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\underline{\text{EO}} \\ & =\text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & -\underline{\text{VE}} \\ & \text{NOI} \end{aligned}$$

$$\text{NOI/R} = \text{Income Indicator of Value}$$

Where:

NOI = Net Operating Income

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses

R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI

NOI for year n x DF for year n = PW of year n NOI

Net Reversion x DF for year n = PW of Reversion

Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

DF = Discount Factor
PW = Present Worth
n = Last year of holding period

Market Data Approach

ASPCP/U = PU
PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property
U = Unit of comparison
PU = Price per Unit of comparison
ASPU = Adjusted Sales Price per Unit of comparison
SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for industrial properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

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.

Document 7D

MASS APPRAISAL REPORT OIL AND GAS RESERVES CAPITOL APPRAISAL GROUP

2020-2021

Overview

Capitol Appraisal Group, LLC (CAGL) contracts with Appraisal Districts and other governmental entities to appraise all oil & gas subsurface, producing, mineral interests within the purview of the entity. The contractual purpose is to estimate market value as defined in Section 1.04 of the Texas Property Tax Code as of January 1 of each year and report these values to the entity. The results of our work are used as part of the tax base upon which property taxes are levied. Each mineral interest is listed on the appraisal roll separately from other interests in the minerals-in-place in conformance with the Texas Property Tax Code Sec. 25.12. Subsurface mineral rights are not susceptible to physical inspection. This condition creates the need to invoke the **Departure Provision** as Requested by the 2003 edition of the Uniform Standards of Professional Appraisal Practice Standards Rule 6-7 (f). However, the inability to physically examine the subsurface mineral rights does not appreciably affect the appraisal process or the quality of the results.

Assumptions and Limiting Factors

All appraisals are subject to the following:

1. Title to the property is assumed to be good and marketable and the ownership interest and legal description is assumed to be correct.
2. No responsibility for legal matters is assumed. Properties are appraised as if free and clear of any encumbrance and operated under responsible ownership and competent management.
3. Not every property is inspected every year.
4. All information in the appraisal documents has been obtained by Capitol Appraisal Group's employees or through other reliable sources.
5. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.

Data Collection

Data on the properties appraised are collected from regulatory agencies, such as the Texas Railroad Commission and the Texas Comptroller of Public Accounts, from submissions by the property operator or owner(s), or from other sources. **Submitted data from operators, taxpayers and/or their agents on the appraised properties are considered "rendition statements" and, as such, are confidential data, subject to Sec. 22.27 of the Texas Property Tax Code.** Additional data are obtained through published sources, regulatory reports, public investment reports, licensed data services, service for fee organizations and through comparable properties, if any. The state of Texas is a non-disclosure state and thus many forms of information, pertinent to the value of the properties, are not available to the appraiser.

Valuation and Analysis

The Income Method of Appraisal, as described in Section 23.012 of the Texas Property Tax Code, is the principal appraisal method used. The Market Data Comparison Method of Appraisal (section 23.013) and the Cost Method of Appraisal (section 23.011) are considered. Industry averages of reserve replacement cost and acquisition cost are used for comparative purposes. The non-disclosure nature of the laws of Texas makes market data comparison unreliable. However, if within the scope of Capitol's work assignment market sales disclosures on interests are available, then those data is considered. The nearly exclusive reliance on the income approach, using the discounted cash flow (DCF) technique adjusted for specific property risk and market conditions, is typical of the oil and gas industry. Fee for service organizations are used for survey data with respect to price expectations and discount rates, and licensed data services are used for Industry indicators detailing costs, income, acquisitions costs in dollars per barrel of oil equivalent (\$/BOE), finding and development costs (\$/BOE) and reserve replacement costs (\$/BOE) for over 100 E&P companies.

Due to the demands of Section 23.175 of the Texas Property Tax Code and the Texas Constitution, Capitol Appraisal Group, LLC takes great care to not appraise properties in excess of their fair market value. We analyze a segment of the Petroleum Producing E&P market, determining the impact on their stock and debt value of the pricing requirements of Sec. 23.175 and also the pricing that could be reasonably anticipated from the market. Capitol Appraisal Group LLC's opinion of oil and gas prices is guided by the market's anticipation of those prices through the futures market, oil and gas stock prices and oil and gas industry indexes. 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 20 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 Capitol's developed pricing scenario and 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.

The Weighted Average Cost of Capital (WACC) technique is also performed for a subset of these companies grouped according to the Petroleum Producing Industry Exploration and Production companies used in the *The Valueline Investment Survey*. These separate pricing scenarios and the resulting discount rates derived from using the aforementioned stock and debt techniques are applied to the universe of oil and gas properties we appraise. In seeking to avoid appraising any oil and gas property **above** its fair cash market value, Capitol Appraisal employs a market adjustment factor (MAF) to its base discount rate in order to apply property specific risk(s). These factors, which create a wide range of discount rates for the properties that Capitol appraises, are necessary to equitably evaluate disparate leases with respect to remaining reserves, price and costs. By performing two DCF income approach appraisals on each property, Capitol Appraisal provides clients with our opinion of market value, while always endeavoring to guard against appraising a mineral lease at greater than its fair cash market value. [A **jurisdictional exception** to the Discounted Cash Flow technique, as this process is described in the Statement on Appraisal Standards #2, 2003 edition of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175(a) of the Texas Property Tax Code both specifies the directives concerning oil and gas pricing that appraisal districts in Texas must follow and also that each appraisal district must adhere to procedure and methodology contained in manuals developed by the Property Tax Division (PTD) of the Texas Comptroller of Public Accounts. Because adherence to this Property Tax Code directive, without discretion, can result in values greater than fair cash market value, we must express caution.]

The resulting oil and gas lease value is then allocated to each owner on the lease based upon his fractional mineral ownership interest. Royalty and working interests have different impacts on their respective values, since only working interests bear the costs of lease operation. Therefore royalty mineral interest owner's values are allocated from 100% of the appraised royalty value of the lease, according to their fractional royalty interest, while the working interest owner's value(s) are allocated from 100% of the determined working interest value of the lease, according to their fractional working interest.

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.

Document 7C

MASS APPRAISAL REPORT

UTILITY, RAILROAD, AND PIPELINE PROPERTIES

APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

This type of property consists of operating property, excluding land, owned by utility, railroad, and pipeline companies, and related personal property and improvements. Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to Standards Rule 6-5 (c) comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the utility, railroad, and pipeline properties appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Such utility, railroad, and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings, and power plants) are normally re-inspected at least every three years.

Capitol's utility, railroad, and pipeline appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. The appraisal staff stays abreast of current trends affecting utility, railroad, and pipeline properties through review of published materials, attendance at conferences, course work, and continuing education. All appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

Data Collection and Validation

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual.

Valuation Approach and Analysis

For all pipelines a value is calculated using a Replacement Cost New Less Depreciation (RCNLD) model. This involves first calculating the cost of building a new pipeline of equal utility using current prices. The Replacement Cost New (RCN) is a function of location, length, diameter, and composition. Depreciation is then subtracted from RCN to produce the final value estimate. Depreciation is defined as the loss of value resulting from any cause. The three common forms of depreciation are physical, functional, and economic. Physical depreciation is accounted for on the basis of the age of the subject pipeline. Functional and economic obsolescence (depreciation) can be estimated through the use of survivor curves or other normative techniques. Specific calculations to estimate abnormal functional and/or economic obsolescence can be made on the basis of the typical utilization of the subject pipeline.

After deductions from RCN have been made for all three forms of depreciation the remainder is the RCNLD or cost approach model indicator of value.

In addition to the RCNLD indicator, a unit value model may also be used for those pipelines for which appropriate income statements and balance sheets are also available. Generally, this model is used for those pipelines that by regulation are considered to be common carriers. The unit value model must be calculated for the entire pipeline system.

The unit value model typically involves an income approach to value and a rate base cost approach. The income approach is based on a projection of expected future typical net operating income (NOI). The projected NOI is discounted to a present worth using a current cost of capital that is both typical of the industry and reflective of the risks inherent in the subject property. The unit value model cost approach is typically an estimation of the current rate base of the subject pipeline (total investment less book depreciation allowed under the current form of regulation). An additional calculation is made to detect and estimate economic obsolescence. Any economic obsolescence is deducted from the rate base cost less book depreciation to achieve a final cost indicator. The unit value model may also include a stock and debt approach in lieu of a market data approach. The stock and debt approach involves finding the total value of the owner's liabilities (equity and debt) and assuming that they are equal to the value of the assets. The two (or three, if the stock and debt approach is included) unit value indicators are then reconciled into a final unit appraisal model indicator of value. The unit value must then be reconciled with the RCNLD model indicator of value for the entire pipeline system being appraised. The final correlated value of the system can then be allocated among the various components of the system to determine the tax roll value for each pipeline segment.

Utility and railroad properties are appraised in a manner similar to pipeline except the RCNLD model is not used. For all three types of property (utility, railroad, and pipeline) the appraiser must first form an opinion of highest and best use. If the highest and best use of the operating property is the current use under current regulation, the unit value model is considered highly appropriate. If the highest and best use is something different, then the RCNLD model may be more appropriate.

Compressor stations, pump stations, improvements, and related facilities are appraised using a replacement cost new less depreciation model.

Model calibration in the RCNLD model involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Model calibration in the unit value cost approach involves the selection of the appropriate items to include in the rate base calculation and selection of the best measure of obsolescence, if any. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the stock and debt approach involves allocating sales prices of debt and equity to reflect the contribution to value of the operating property of the subject company.

The mathematical form of each model is described below.

RCNLD Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\underline{\text{EO}} \\ & =\text{RCNLD Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New
PD = Physical Depreciation
FO = Functional Obsolescence
EO = Economic Obsolescence

Unit Cost Approach

$$\begin{array}{r} \text{OC} \\ -\text{AD} \\ \hline -\text{EO} \\ \hline \end{array} = \text{Unit Cost Approach Indicator of Value}$$

Where:

OC = Original Cost
AD = Allowed Depreciation
EO = Economic Obsolescence

Unit Income Approach

$$\begin{array}{r} \text{PGR} \\ -\text{VCL} \\ -\text{FE} \\ \hline -\text{VE} \\ \hline \end{array} \text{NOI}$$

NOI/R = Income Indicator of Value

Where:

PGR = Potential Gross Rent
VCL = Vacancy and Collection Loss
FE = Fixed Expenses
VE = Variable Expenses
R = Discount Rate or Cost of Capital

A variation of the income model is:

$$\begin{array}{l} \text{NOI for year 1} \times \text{DF for year 1} = \text{PW of year 1 NOI} \\ \text{NOI for year n} \times \text{DF for year n} = \text{PW of year n NOI} \\ \text{Net Reversion} \times \text{DF for year n} = \text{PW of Reversion} \\ \text{Sum of PW's for all years 1 - n} = \text{Income Indicator of Value} \end{array}$$

Where:

NOI = Net Operating Income
DF = Discount Factor
PW = Present Worth
n = Last year of holding period

Stock and Debt Approach

$$\begin{array}{r} \text{MVE} \\ +\text{MVD} \\ \hline \end{array} = \text{Market Value of Assets}$$

Where:

MVE = Market value of Equity
MVD = Market value of Debt

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for utility and pipeline properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. Railroad corridor land is included in the appraisal of the operating property. The highest and best use of railroad corridor land is presumed to be as operating property. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

The rate-base cost approach, stock and debt approach, and income approach models must be reduced by the value of the land in order to arrive at a value of improvements, personal property, and other operating property.

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.

MASS APPRAISAL REPORT
OIL AND GAS RESERVES
APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

Capitol Appraisal Group, Inc. (CAGI) contracts with Appraisal Districts and other governmental entities to appraise all oil & gas subsurface, producing, mineral interests within the purview of the entity. The contractual purpose is to estimate market value as defined in Section 1.04 of the Texas Property Tax Code as of January 1 of each year and report these values to the entity. The results of our work are used as part of the tax base upon which property taxes are levied. Each mineral interest is listed on the appraisal roll separately from other interests in the minerals-in-place in conformance with the Texas Property Tax Code Sec. 25.12. Subsurface mineral rights are not susceptible to physical inspection. This provision requires a jurisdictional exception to Standards Rules 5-2 (c) of the Uniform Standards of Professional Appraisal Practice 2018-2019. However, the inability to physically examine the sub-surface mineral rights does not appreciably affect the appraisal process or the quality of the results.

Assumptions and Limiting Factors

All appraisals are subject to the following:

1. Title to the property is assumed to be good and marketable and the ownership interest and legal description is assumed to be correct.
2. No responsibility for legal matters is assumed. Properties are appraised as if free and clear of any encumbrance and operated under responsible ownership and competent management.
3. Not every property is inspected every year.
4. All information in the appraisal documents has been obtained by Capitol Appraisal Group's employees or through other reliable sources.
5. The appraisals were prepared exclusively for ad valorem tax purposes

Data Collection

Data on the properties appraised are collected from regulatory agencies, such as the Texas Railroad Commission and the Texas Comptroller of Public Accounts, from submissions by the property operator or owner(s), or from other sources. **Submitted data from operators, taxpayers and/or their agents on the appraised properties are considered "rendition statements" and, as such, are confidential data, subject to Sec. 22.27 of the Texas Property Tax Code.** Additional data are obtained through published sources, regulatory reports, public investment reports, licensed data services, service for fee organizations and through comparable properties, if any. The state of Texas is a non-disclosure state and thus many forms of information, pertinent to the value of the properties, are not available to the appraiser.

Valuation and Analysis

The Income Method of Appraisal, as described in Section 23.012 of the Texas Property Tax Code, is the principal appraisal method used. The Market Data Comparison Method of Appraisal (section 23.013) and the Cost Method of Appraisal (section 23.011) are considered. Industry averages of reserve replacement cost and acquisition cost are used for comparative purposes. The non-disclosure nature of the laws of Texas makes market data comparison unreliable. However, if within the scope of Capitol's work assignment market sales disclosures on interests are available, then those data is considered. The nearly exclusive reliance on the income approach, using the discounted cash flow (DCF) technique adjusted for specific property risk and market conditions, is typical of the oil and gas industry. Fee for service organizations are used for survey data with respect to price expectations and discount rates, and licensed data services are used for Industry indicators detailing costs, income, acquisitions costs in dollars per barrel of oil equivalent (\$/BOE), finding and development costs (\$/BOE) and reserve replacement costs (\$/BOE) for over 100 E&P companies.

Due to the demands of Section 23.175 of the Texas Property Tax Code and the Texas Constitution, Capitol Appraisal Group, Inc. takes great care to not appraise properties in excess of their fair market value. We analyze a segment of the Petroleum Producing E&P market, determining the impact on their stock and debt value of the pricing requirements of Sec. 23.175 and also the pricing that could be reasonably anticipated from the market. Capitol Appraisal Group Inc.'s opinion of oil and gas prices is guided by the market's anticipation of those prices through the futures market, oil and gas stock prices and oil and gas industry indexes. 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 20 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 Capitol's developed pricing scenario and 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.

The Weighted Average Cost of Capital (WACC) technique is also performed for a subset of these companies grouped according to the Petroleum Producing Industry Exploration and Production companies used in the *The Valueline Investment Survey*. These separate pricing scenarios and the resulting discount rates derived from using the aforementioned stock and debt techniques are applied to the universe of oil and gas properties we appraise. In seeking to avoid appraising any oil and gas property **above** its fair cash market value, Capitol Appraisal employs a market adjustment factor (MAF) to its base discount rate in order to apply property specific risk(s). These factors, which create a wide range of discount rates for the properties that Capitol appraises, are necessary to equitably evaluate disparate leases with respect to remaining reserves, price and costs. By performing two DCF income approach appraisals on each property, Capitol Appraisal provides clients with our opinion of market value, while always endeavoring to guard against appraising a mineral lease at greater than its fair cash market value. [A **jurisdictional exception** to the Discounted Cash Flow technique, as this process is described in the Statement on Appraisal Standards #5, 2018-2019 edition of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175(a) of the Texas Property Tax Code both specifies the directives concerning oil and gas pricing that appraisal districts in Texas must follow and also that each appraisal district must adhere to procedure and methodology contained in manuals developed by the Property Tax Division (PTD) of the Texas Comptroller of Public Accounts. Because adherence to this Property Tax Code directive, without discretion, can result in values greater than fair cash market value, we must express caution.]

The resulting oil and gas lease value is then allocated to each owner on the lease based upon his fractional mineral ownership interest. Royalty and working interests have different impacts on their respective values, since only working interests bear the costs of lease operation. Therefore royalty mineral interest owner's values are allocated from 100% of the appraised royalty value of

the lease, according to their fractional royalty interest, while the working interest owner's value(s) are allocated from 100% of the determined working interest value of the lease, according to their fractional working interest.

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.

MASS APPRAISAL REPORT
BUSINESS PERSONAL PROPERTY
APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

This type of property consists of tangible personal property owned by a business or individual for the purpose of producing an income. The Uniform Standards of Professional Appraisal practice define personal property as "identifiable portable and tangible objects which are considered by the general public as being "personal," e.g. furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all property that is not classified as real estate." The Texas Property Tax Code (Sec. 1.04(5)) defines tangible personal property as "...personal property that can be seen, weighed, measured, felt, or otherwise perceived by the senses but does not include a document or other perceptible object that constitutes evidence of a valuable interest, claim, or right and has negligible or no intrinsic value." The Texas Property Tax Code (Sec. 1.04(4)) defines personal property as "...property that is not real property."

Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

A separate definition of the value of inventory is found in the Texas Property Tax Code (Sec. 23.12(a)), "...the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business." Additionally, some inventories may qualify for appraisal as of September 1 in accordance with the provisions of Texas Property Tax Code Section 23.12(f).

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. A listing of the personal property appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Personal property is normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property tax Code; asset lists and other confidential data supplied by the owner or agent; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's personal property appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Personal property appraisal staff stays abreast of current trends affecting personal property through review of published materials, attendance at conferences, course work, and continuing education. All personal property appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.

Data Collection and Validation

Data on the subject properties are collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the multitude of personal property types there is no standard data collection form or manual.

Valuation Approach and Analysis

Personal property is appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A value estimate derived from an income approach model in which the operating income of a business was capitalized must be reduced by the value of any real property in order to arrive at the value of the operating personal property. A market data model based on typical selling prices per item or unit of capacity is also used when appropriate market sales information is available. In the case

of some personal property types, such as licensed vehicles, market data from published pricing guides is used to construct a market value model. In other cases, models are based on sales information available through published sources or through private sources.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & \underline{-\text{EO}} \\ & =\text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New
PD = Physical Depreciation
FO = Functional Obsolescence
EO = Economic Obsolescence

Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & \underline{-\text{VE}} \\ & \text{NOI} \end{aligned}$$
$$\text{NOI/R} = \text{Income Indicator of Value}$$

Where:

PGR = Potential Gross Rent
VCL = Vacancy and Collection Loss
FE = Fixed Expenses
VE = Variable Expenses
R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI
NOI for year n x DF for year n = PW of year n NOI
Net Reversion x DF for year n = PW of Reversion

Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

NOI = Net Operating Income

DF = Discount Factor

PW = Present Worth

n = Last year of holding period

Market Data Approach

ASPCP/U = PU

PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property

U = Unit of comparison

ASPU = Adjusted Sales Price per Unit of comparison

SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Highest and best use analysis of personal property is based on the likelihood of the continued use of the personal property in its current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

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, Inc. 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.

MASS APPRAISAL REPORT

INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2020-2021

Overview

This type of property consists of processing facilities and related personal property. Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 © Comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the industrial properties appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Industrial properties are normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property Tax Code; asset lists and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's industrial appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Industrial appraisal staff stays abreast of current trends affecting industrial properties through review of published materials, attendance

at conferences, course work, and continuing education. All industrial appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

Data Collection and Validation

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties, if any. Due to the unique nature of many industrial properties there is no standard data collection form or manual.

Valuation Approach and Analysis

Industrial properties are appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to

be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & \underline{-\text{EO}} \\ & =\text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New
PD = Physical Depreciation
FO = Functional Obsolescence
EO = Economic Obsolescence

Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & \underline{-\text{VE}} \\ & \text{NOI} \end{aligned}$$

$$\text{NOI/R} = \text{Income Indicator of Value}$$

Where:

NOI = Net Operating Income
PGR = Potential Gross Rent
VCL = Vacancy and Collection Loss
FE = Fixed Expenses
VE = Variable Expenses
R = Discount Rate or Cost of Capital

A variation of the income model is:

$$\begin{aligned} & \text{NOI for year 1} \times \text{DF for year 1} = \text{PW of year 1 NOI} \\ & \text{NOI for year n} \times \text{DF for year n} = \text{PW of year n NOI} \\ & \text{Net Reversion} \times \text{DF for year n} = \text{PW of Reversion} \\ & \text{Sum of PW's for all years 1 - n} = \text{Income Indicator of Value} \end{aligned}$$

Where:

DF = Discount Factor
PW = Present Worth
n = Last year of holding period

Market Data Approach

ASPCP/U = PU

PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property

U = Unit of comparison

PU = Price per Unit of comparison

ASPU = Adjusted Sales Price per Unit of comparison

SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for industrial properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

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.

MASS APPRAISAL REPORT
UTILITY, RAILROAD, AND PIPELINE PROPERTIES
APPRAISED BY CAPITOL APPRAISAL GROUP, INC.

2020-2021

Overview

This type of property consists of operating property, excluding land, owned by utility, railroad, and pipeline companies, and related personal property and improvements. Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- B. both the seller and the purchaser 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
- C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to Standards Rule 6-5 (c) comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the utility, railroad, and pipeline properties appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Such utility, railroad, and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings, and power plants) are normally re-inspected at least every three years.

Capitol's utility, railroad, and pipeline appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. The appraisal staff stays abreast of current trends affecting utility, railroad, and pipeline properties through review of published materials, attendance at conferences, course work, and continuing education. All appraisers are registered with the Texas Board of Tax Professional Examiners.

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

Data Collection and Validation

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual.

Valuation Approach and Analysis

For all pipelines a value is calculated using a Replacement Cost New Less Depreciation (RCNLD) model. This involves first calculating the cost of building a new pipeline of equal utility using current prices. The Replacement Cost New (RCN) is a function of location, length, diameter, and composition. Depreciation is then subtracted from RCN to produce the final value estimate. Depreciation is defined as the loss of value resulting from any cause. The three common forms of depreciation are physical, functional, and economic. Physical depreciation is accounted for on the basis of the age of the subject pipeline. Functional and economic obsolescence (depreciation) can be estimated through the use of survivor curves or other normative techniques. Specific calculations to estimate abnormal functional and/or economic obsolescence can be made on the basis of the typical utilization of the subject pipeline.

After deductions from RCN have been made for all three forms of depreciation the remainder is the RCNLD or cost approach model indicator of value.

In addition to the RCNLD indicator, a unit value model may also be used for those pipelines for which appropriate income statements and balance sheets are also available. Generally, this model is used for those pipelines that by regulation are considered to be common carriers. The unit value model must be calculated for the entire pipeline system.

The unit value model typically involves an income approach to value and a rate base cost approach. The income approach is based on a projection of expected future typical net operating income (NOI). The projected NOI is discounted to a present worth using a current cost of capital that is both typical of the industry and reflective of the risks inherent in the subject property. The unit value model cost approach is typically an estimation of the current rate base of the subject pipeline (total investment less book depreciation allowed under the current form of regulation). An additional calculation is made to detect and estimate economic obsolescence. Any economic obsolescence is deducted from the rate base cost less book depreciation to achieve a final cost indicator. The unit value model may also include a stock and debt approach in lieu of a market data approach. The stock and debt approach involves finding the total value of the owner's liabilities (equity and debt) and assuming that they are equal to the value of the assets. The two (or three, if the stock and debt approach is included) unit value indicators are then reconciled into a final unit appraisal model indicator of value. The unit value must then be reconciled with the RCNLD model indicator of value for the entire pipeline system being appraised. The final correlated value of the system can then be allocated among the various components of the system to determine the tax roll value for each pipeline segment.

Utility and railroad properties are appraised in a manner similar to pipeline except the RCNLD model is not used. For all three types of property (utility, railroad, and pipeline) the appraiser must first form an opinion of highest and best use. If the highest and best use of the operating property is the current use under current regulation, the unit value model is considered highly appropriate. If the highest and best use is something different, then the RCNLD model may be more appropriate.

Compressor stations, pump stations, improvements, and related facilities are appraised using a replacement cost new less depreciation model.

Model calibration in the RCNLD model involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Model calibration in the unit value cost approach involves the selection of the appropriate items to include in the rate base calculation and selection of the best measure of obsolescence, if any. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the stock and debt approach involves allocating sales prices of debt and equity to reflect the contribution to value of the operating property of the subject company.

The mathematical form of each model is described below.

RCNLD Approach

$$\begin{array}{r} \text{RCN} \\ -\text{PD} \\ -\text{FO} \\ \underline{-\text{EO}} \\ =\text{RCNLD Indicator of Value} \end{array}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

Unit Cost Approach

$$\begin{array}{r} \text{OC} \\ -\text{AD} \\ \hline -\text{EO} \\ \hline \end{array} = \text{Unit Cost Approach Indicator of Value}$$

Where:

OC = Original Cost
AD = Allowed Depreciation
EO = Economic Obsolescence

Unit Income Approach

$$\begin{array}{r} \text{PGR} \\ -\text{VCL} \\ -\text{FE} \\ \hline -\text{VE} \\ \hline \end{array} \text{NOI}$$

$$\text{NOI/R} = \text{Income Indicator of Value}$$

Where:

PGR = Potential Gross Rent
VCL = Vacancy and Collection Loss
FE = Fixed Expenses
VE = Variable Expenses
R = Discount Rate or Cost of Capital

A variation of the income model is:

$$\begin{array}{l} \text{NOI for year 1} \times \text{DF for year 1} = \text{PW of year 1 NOI} \\ \text{NOI for year n} \times \text{DF for year n} = \text{PW of year n NOI} \\ \text{Net Reversion} \times \text{DF for year n} = \text{PW of Reversion} \\ \text{Sum of PW's for all years 1 - n} = \text{Income Indicator of Value} \end{array}$$

Where:

NOI = Net Operating Income
DF = Discount Factor
PW = Present Worth
n = Last year of holding period

Stock and Debt Approach

$$\begin{array}{r} \text{MVE} \\ +\text{MVD} \\ \hline \end{array} = \text{Market Value of Assets}$$

Where:

MVE = Market value of Equity
MVD = Market value of Debt

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for utility and pipeline properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. Railroad corridor land is included in the appraisal of the operating property. The highest and best use of railroad corridor land is presumed to be as operating property. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

The rate-base cost approach, stock and debt approach, and income approach models must be reduced by the value of the land in order to arrive at a value of improvements, personal property, and other operating property.

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.