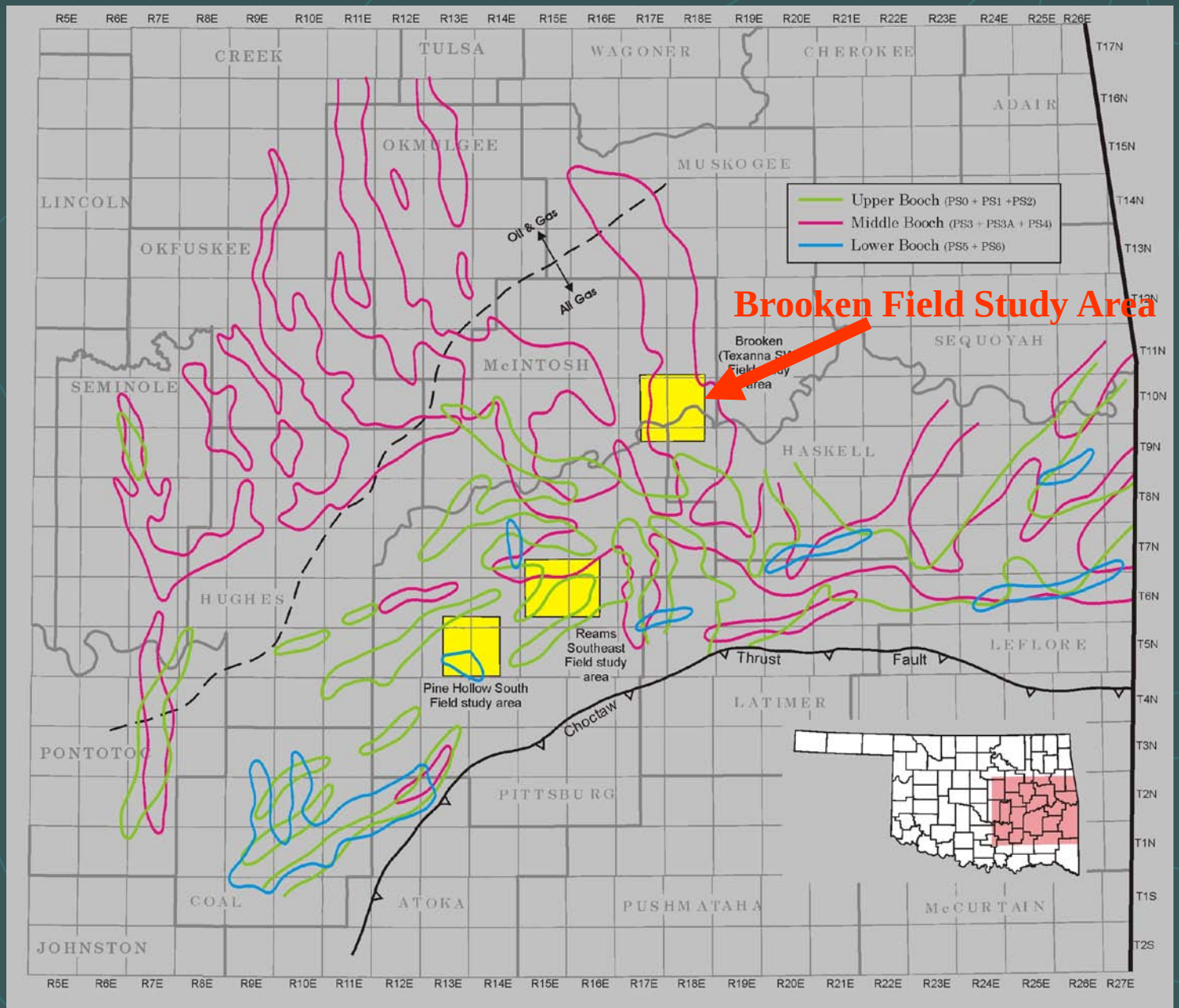
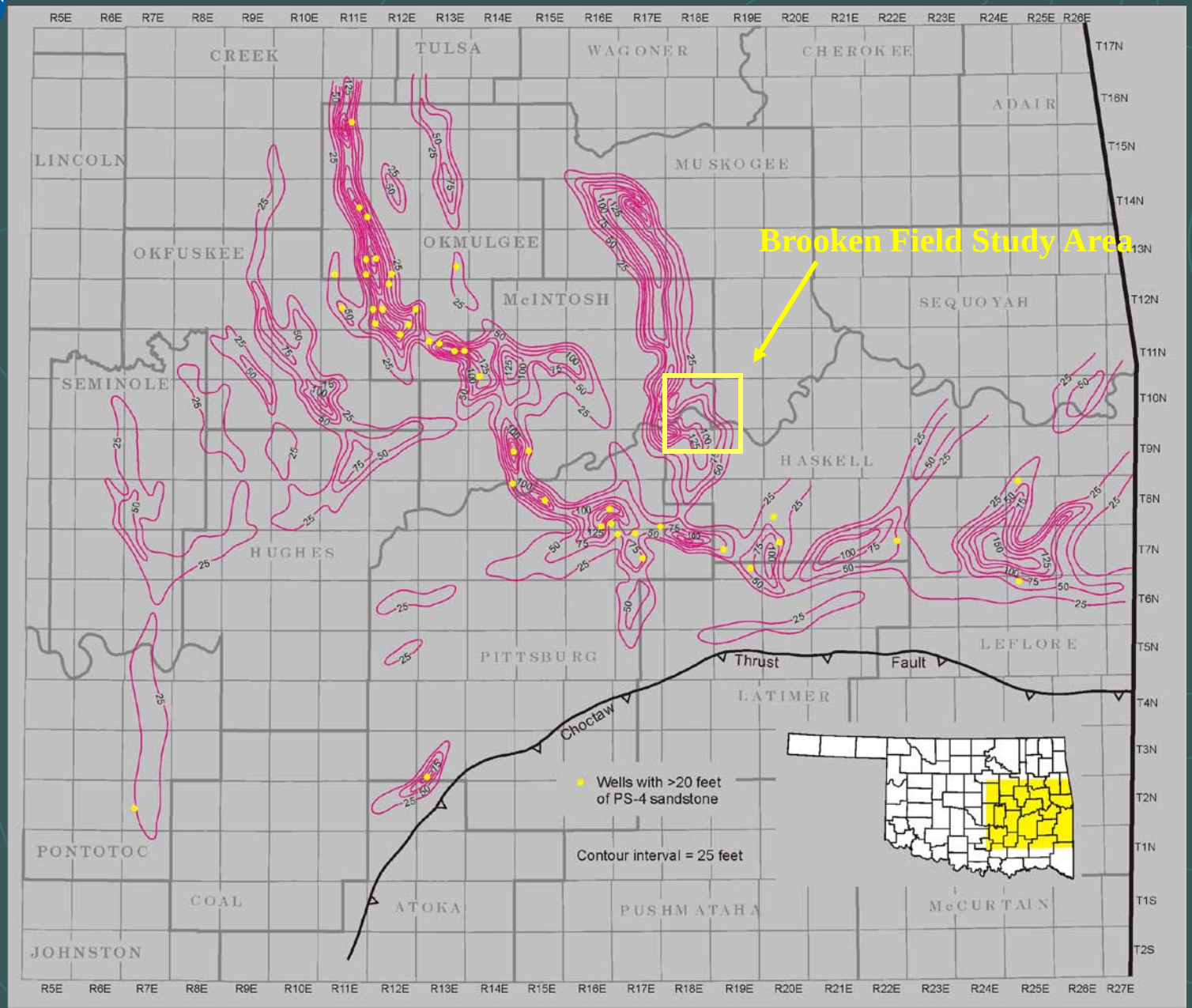
Brooken (Texanna SW) Field Study

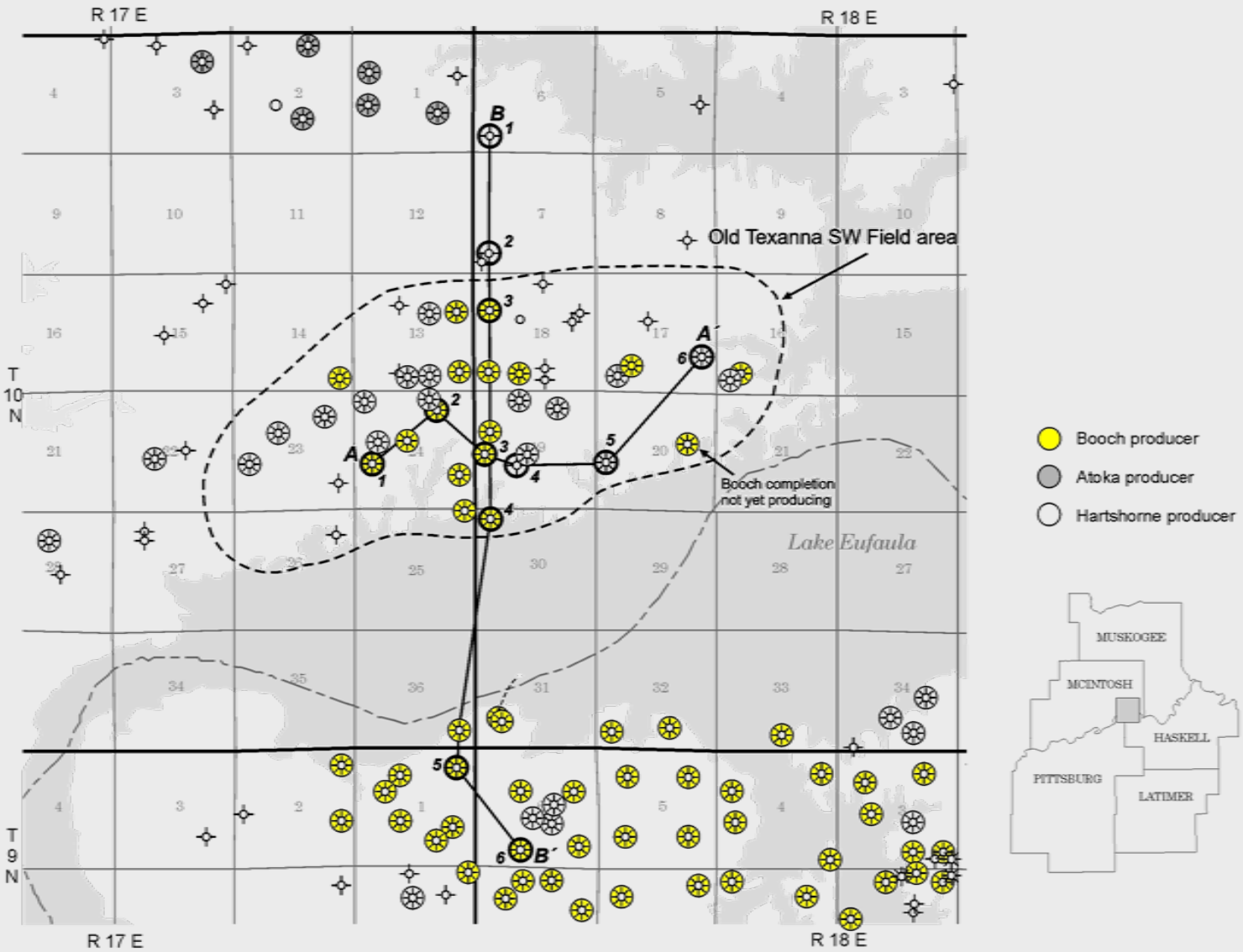
Booch Gross Sand Regional Isopach



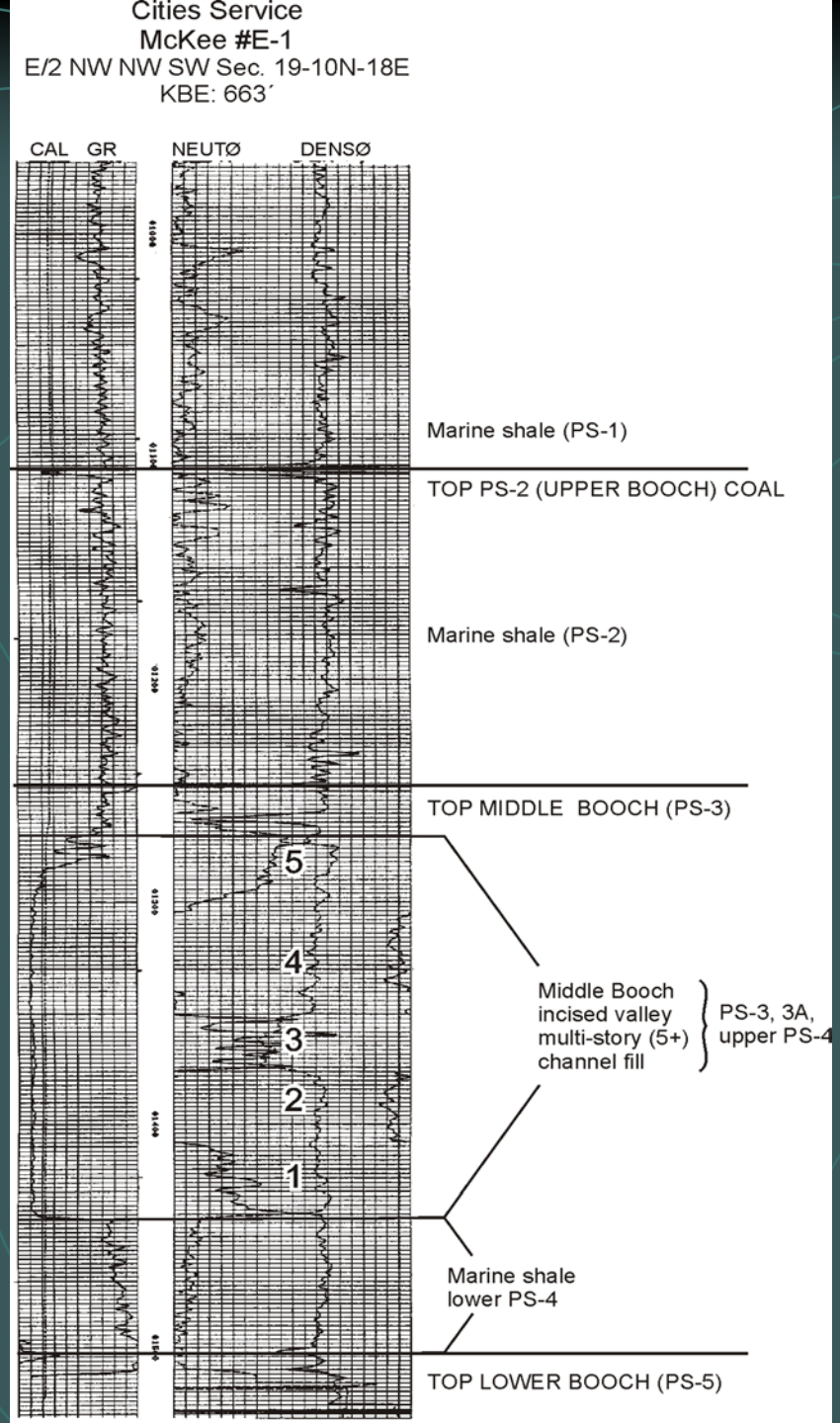
Middle Booch Gross Sand Isopach



Brooken (Texanna SW) Field Study Area

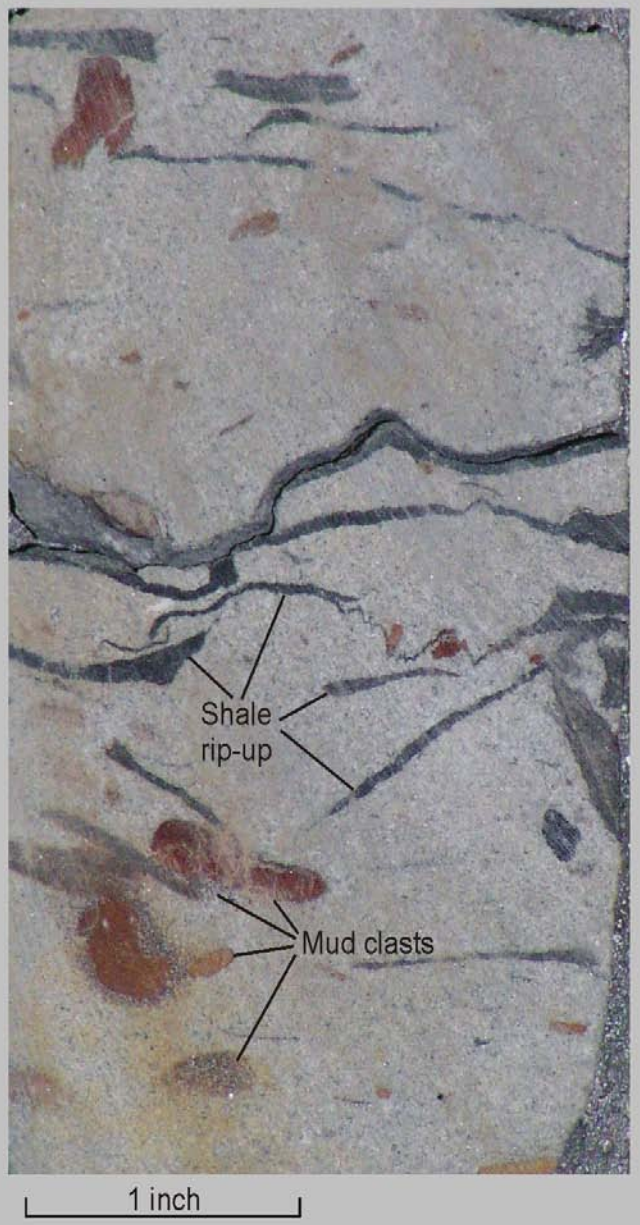


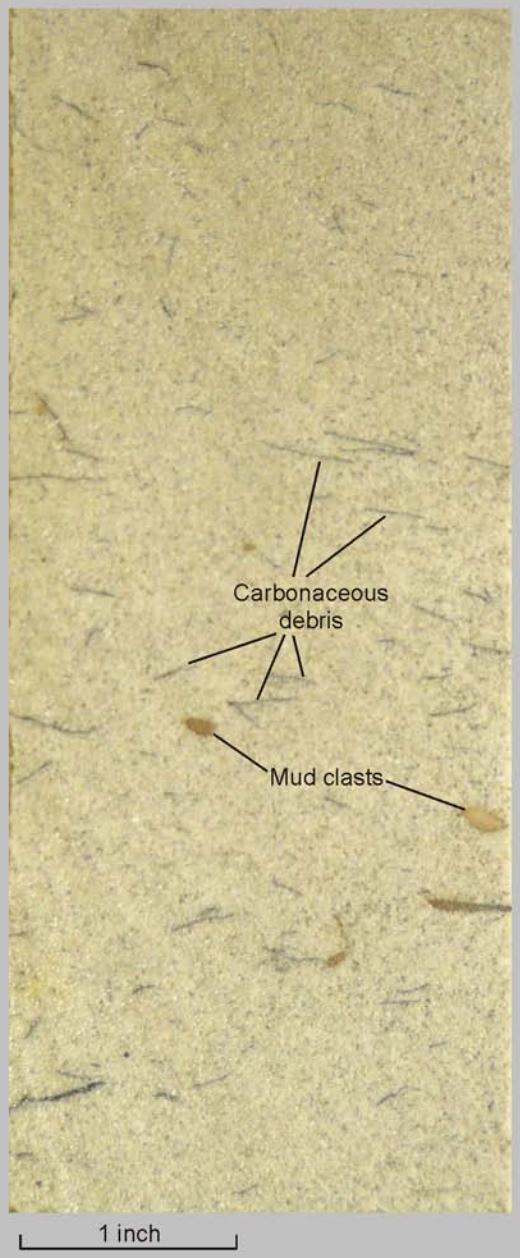
Brooken (Texanna SW) Field Study
Booch Type Log



Brooken Field
Booch Core

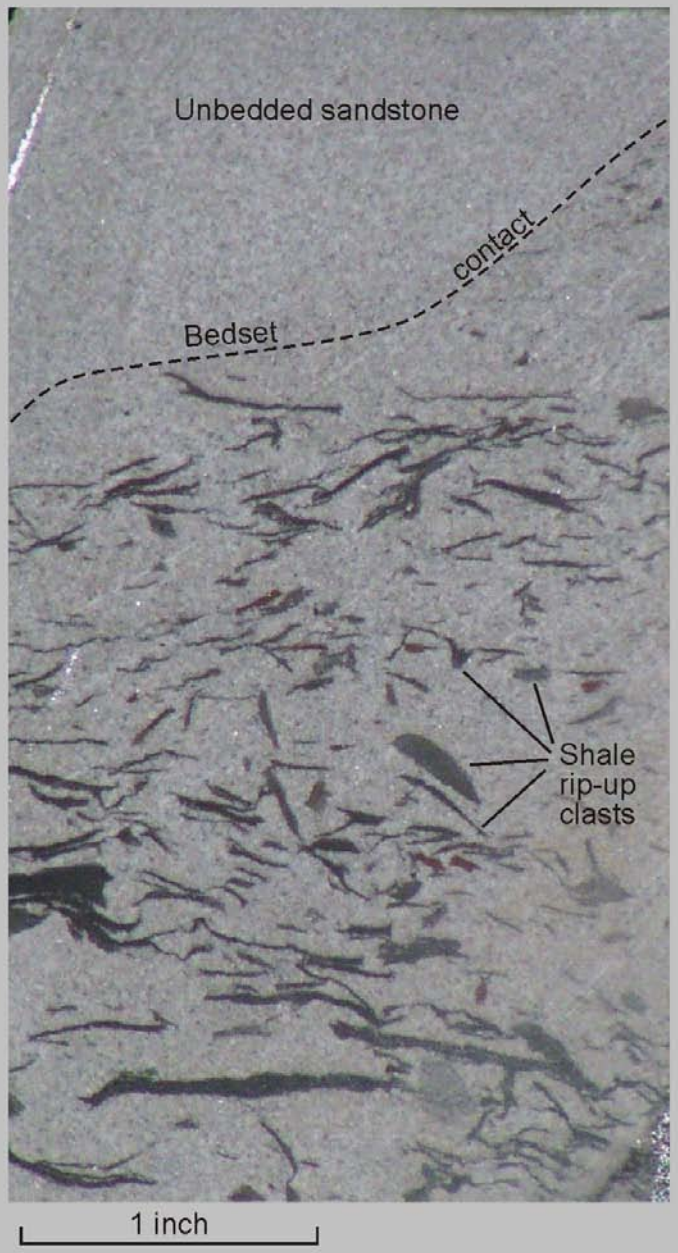
Mason #A-1
1,477'




Mason #A-1
1,457'
Carbonaceous debris
Mud clasts
1 inch

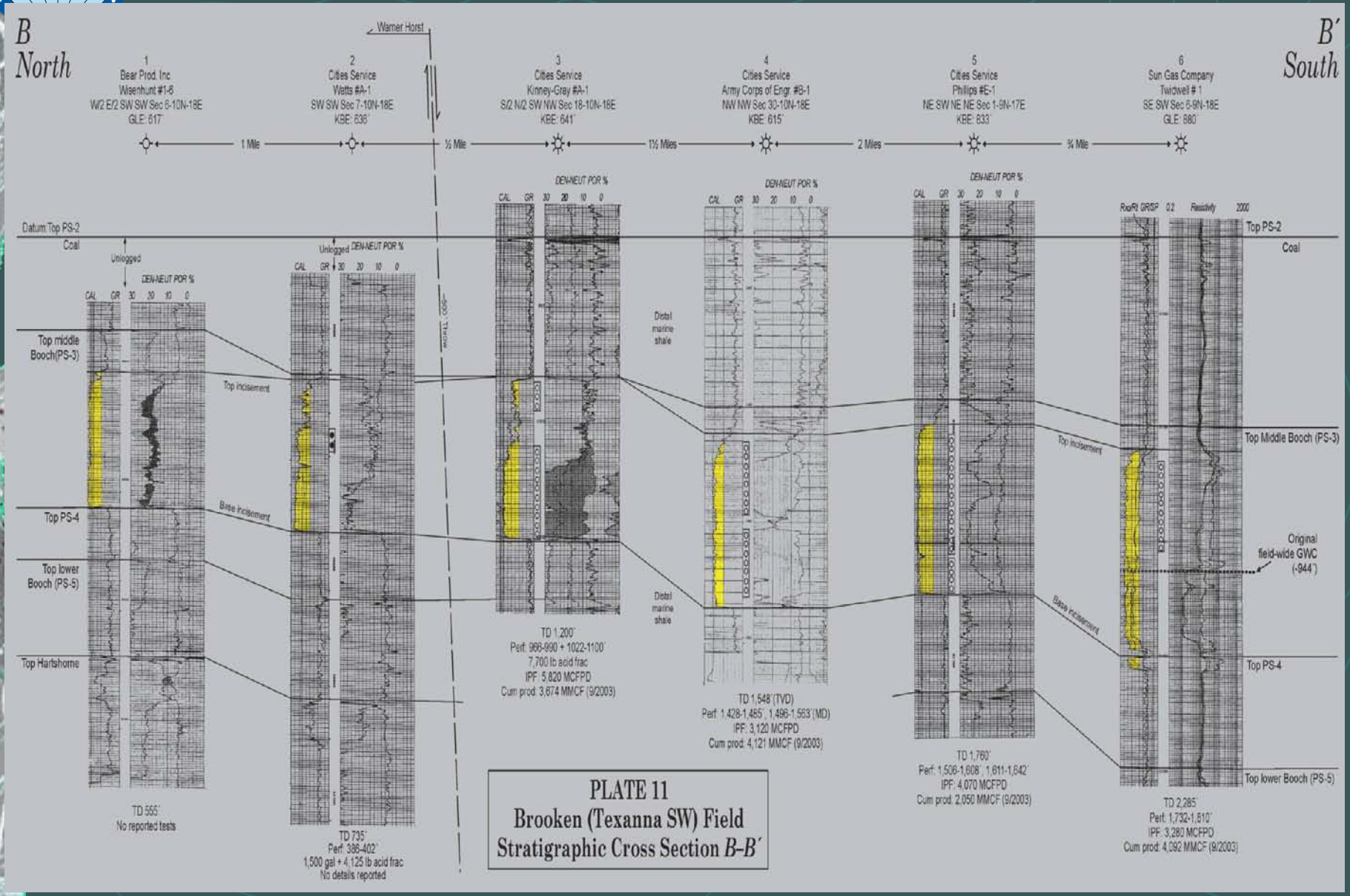
Mason #A-1
1,367'

Mason #A-1
1,356'

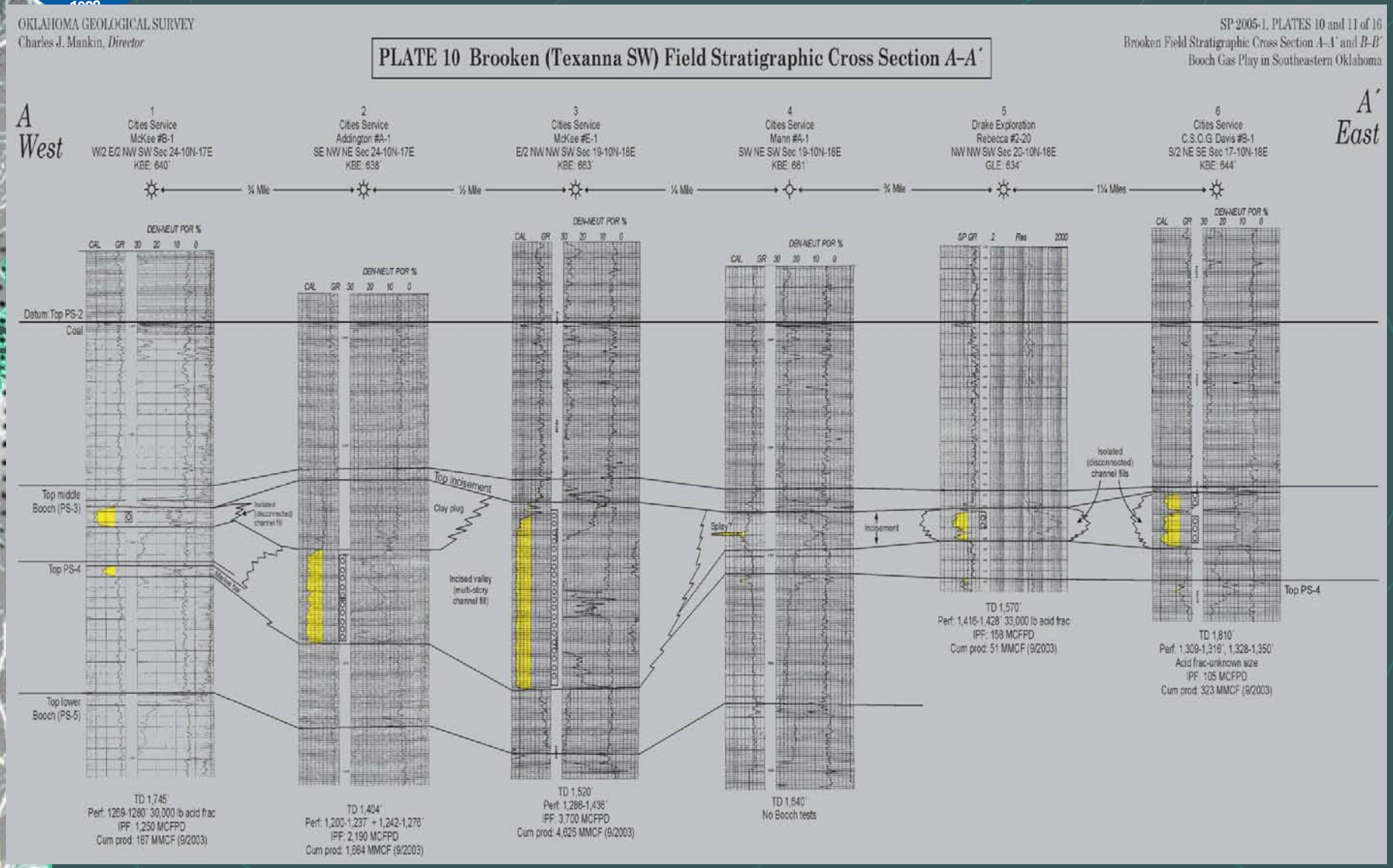


Mason #A-1
1,355'

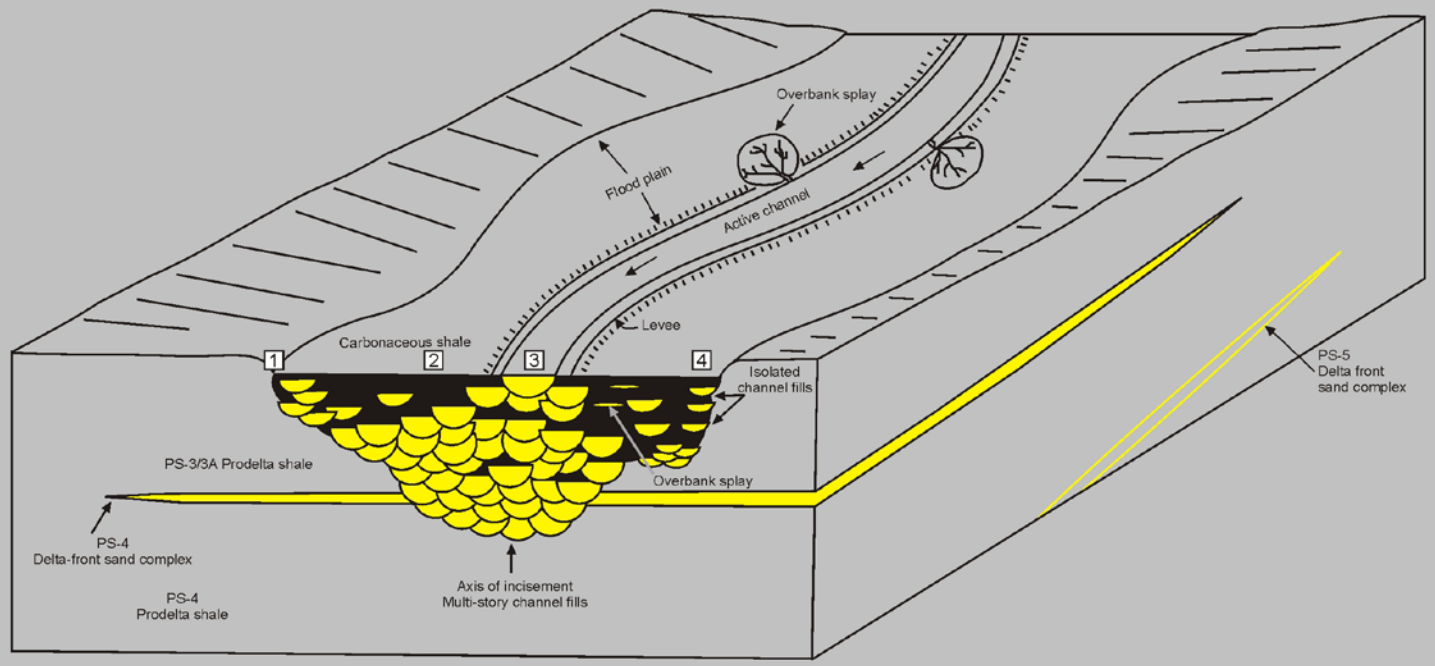
Brooken Field Stratigraphic Cross-Section B-B'



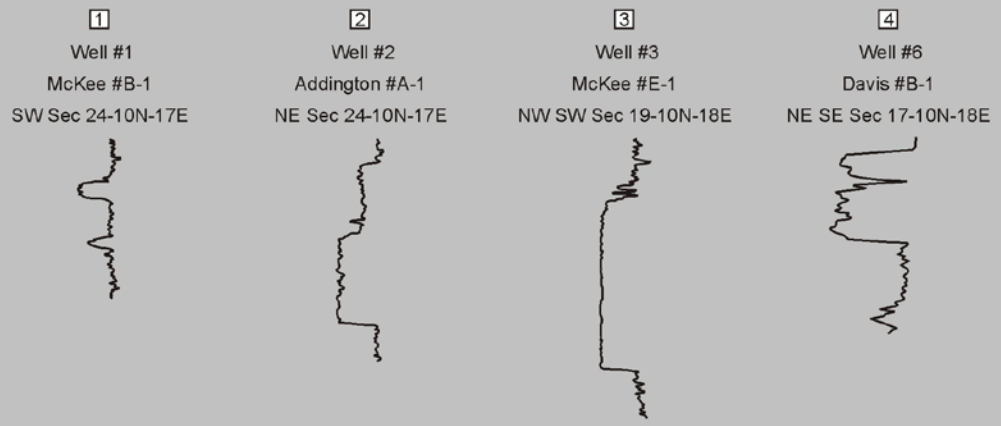
Brooken Field Stratigraphic Cross-Section A-A'



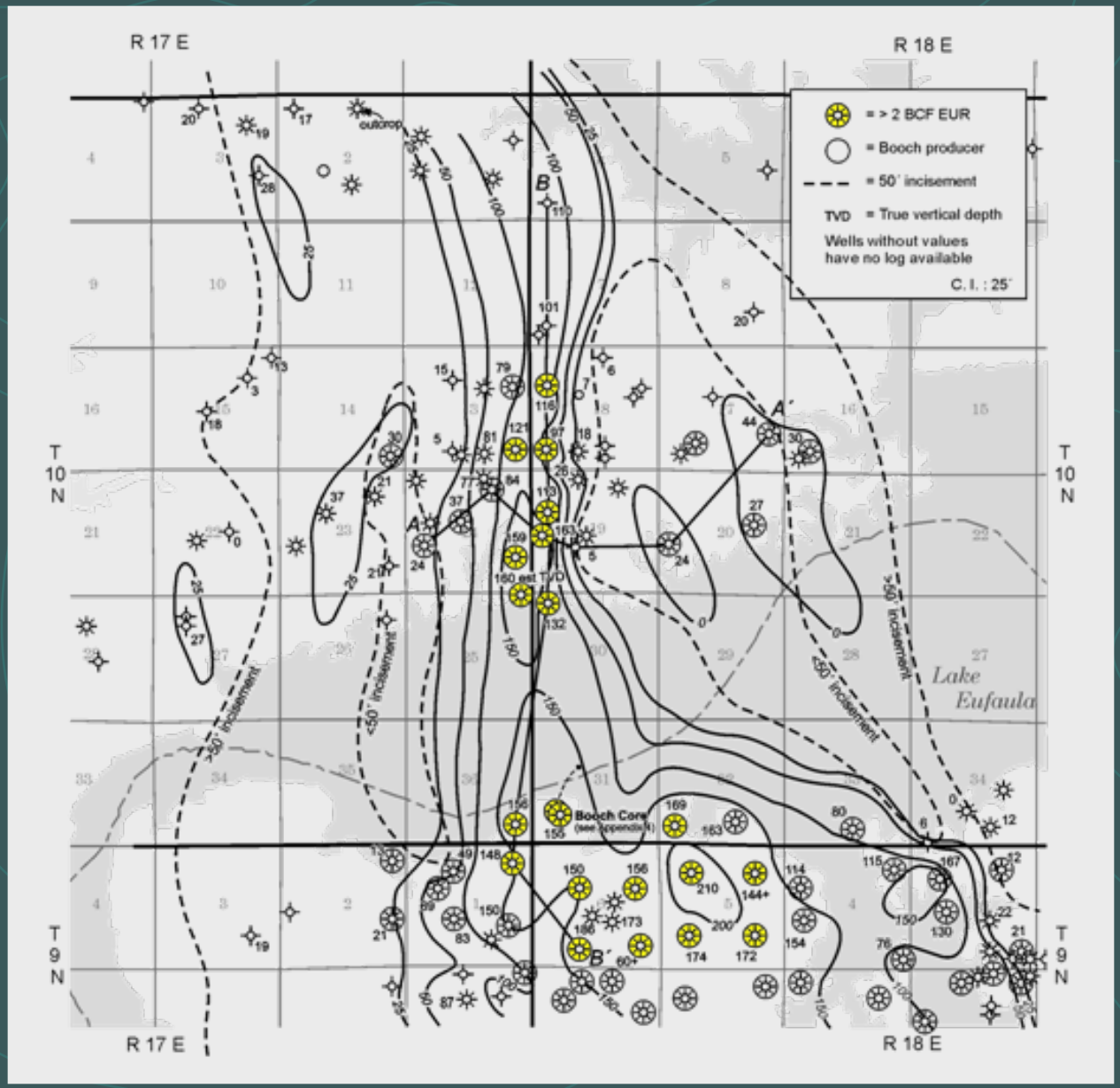
Incised Valley Block Diagram



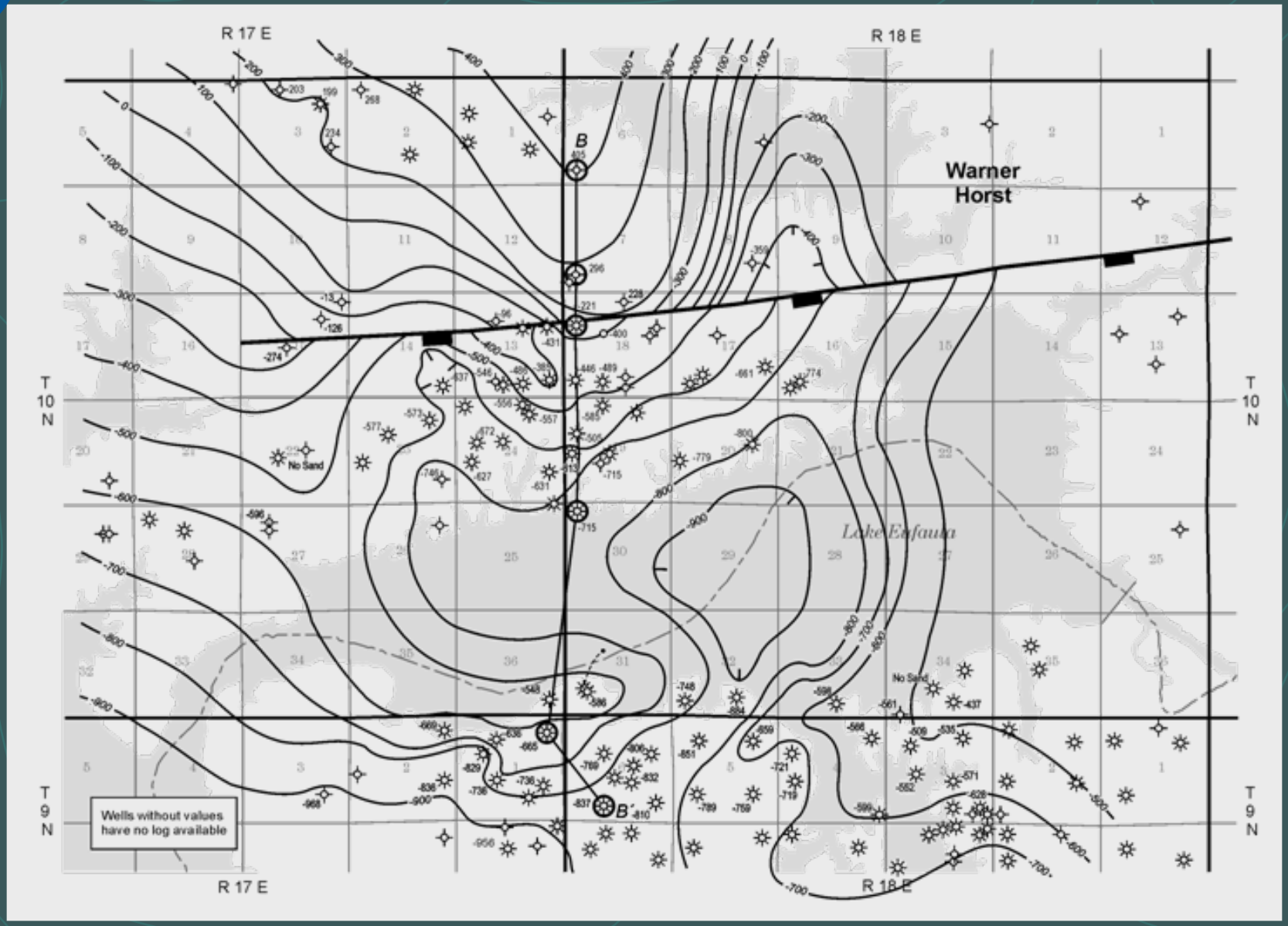
Log signatures from cross section *A-A´* (Plate 10)



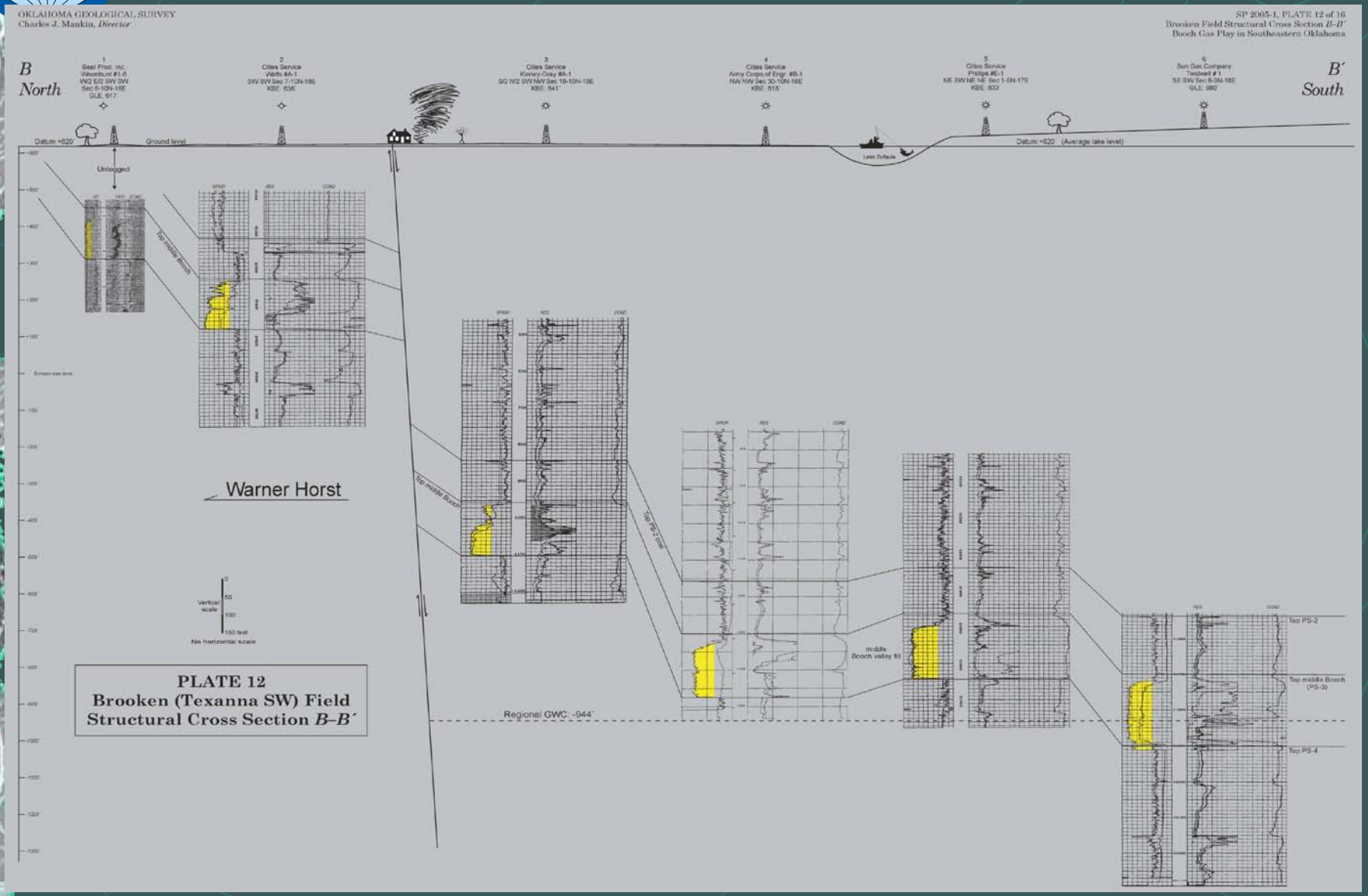
Brooken Field Study
Middle Booch Net Sand Isopach & Incisement Depth



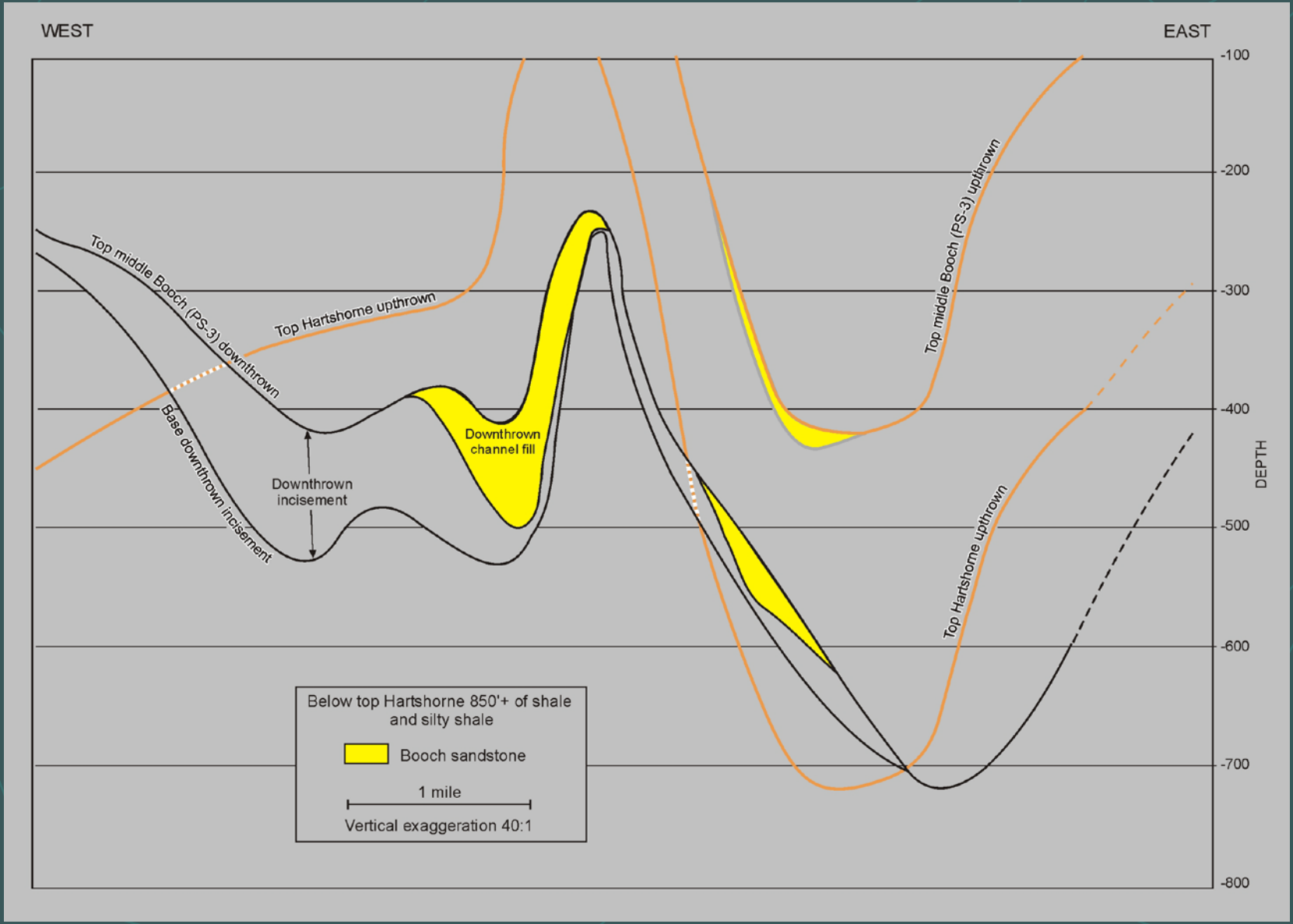
Brooken Field Study
Structure: Top Middle Booch Sandstone



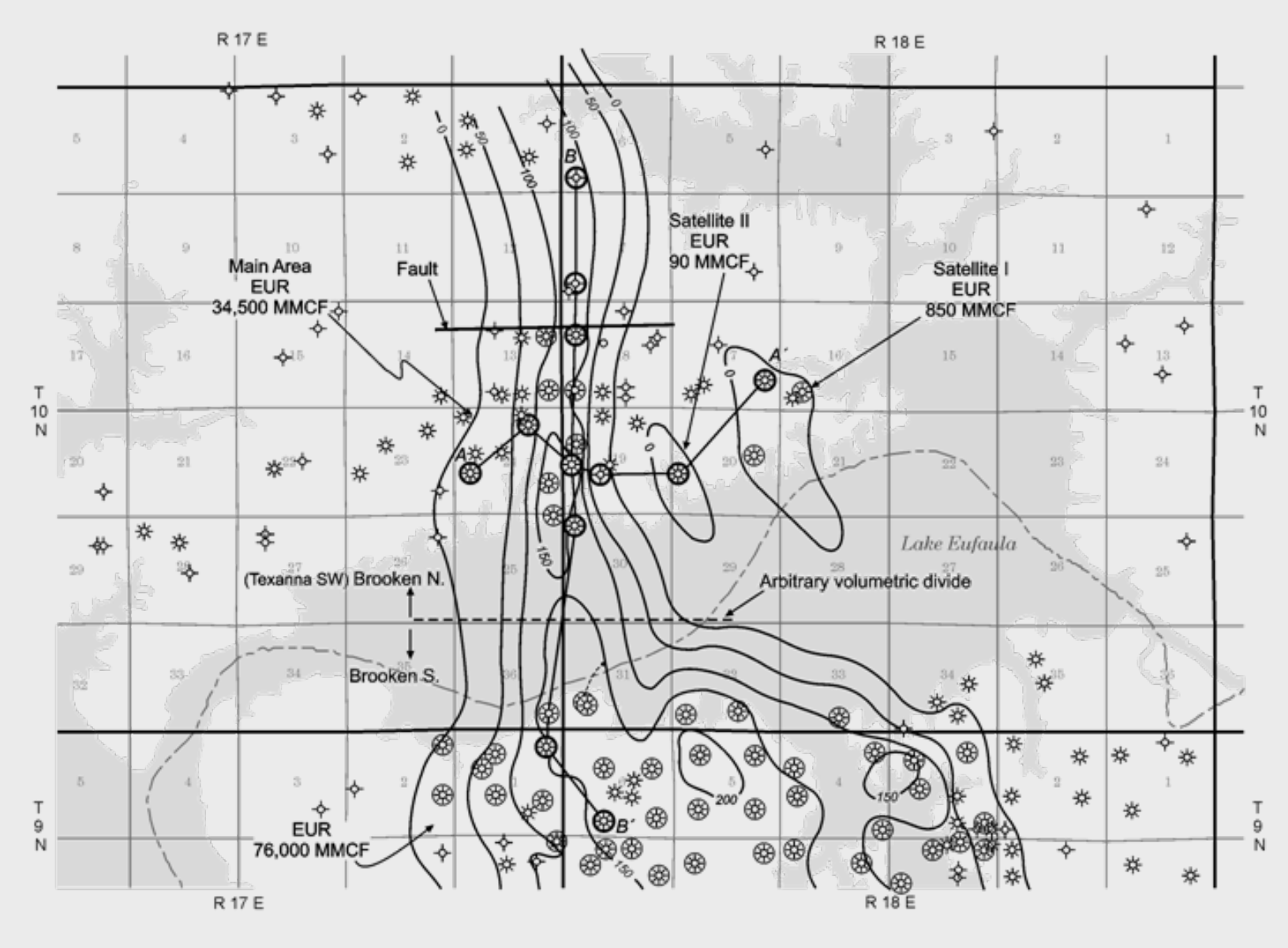
Brooken Field Study Structural Cross-Section



Brooken Field Study
Trapping Fault Plane Section



Brooken Field Study
Volumetrics – Net Sand Isopach



Brooken (Texanna SW) Field Production

TABLE 1. — Booch Gas Production from Brooken North (Texanna SW) Field

Lease name	Well no.	Operator name	Location	Cum. (MCF)	Latest mo. (MCF)	First prod. date
Pinney A	1	GM Properties & Investments Inc.	sec. 13, T10N, R17E C SE SE	3,178,025	470	1984/12
Grosclos	1	Kerr-McGee Corporation	sec. 13, T10N, R17E SE NW SE NE	1,035,746		1984/12
Addington A	1	GM Properties & Investments Inc.	sec. 24, T10N, R17E SE NW NE	1,664,449	251	1984/12
McKee B	1	GM Properties & Investments Inc.	sec. 24, T10N, R17E W E NW SW	186,662	348	1984/12
Nixon A	1	GM Properties & Investments Inc.	sec. 24, T10N, R17E S S NE SE	3,931,078	1,632	1984/12
McKee C	1	GM Properties & Investments Inc.	sec. 24, T10N, R17E SE SE NW	123,162	1,196	1984/12
Army Corps of Eng. A	1	GM Properties & Investments Inc.	sec. 25, T10N, R17E NW NE NE NE	3,811,129	1,778	1984/12
Kinney-Gray A	1	GM Properties & Investments Inc.	sec. 18, T10N, R18E S N SW NW	3,674,033	699	1984/12
Brinsfield A	1	GM Properties & Investments Inc.	sec. 18, T10N, R18E C SW SW	3,437,319	913	1984/12
McKee E	1	GM Properties & Investments Inc.	sec. 19, T10N, R18E E NW NW SW	4,625,130	2,038	1984/12
McKee D	1	GM Properties & Investments Inc.	sec. 19, T10N, R18E C SW NW	3,966,978	1,070	1984/12
Army Corps of Eng. B	1	GM Properties & Investments Inc.	sec. 30, T10N, R18E C NW NW	4,121,345	1,262	1984/12
Total for main Brooken North		12 wells avg. 2.9 BCF and 35 MCFPD/well, 9/03 EUR: ~34,500 MMCF		33,755,056	11,657	
Isolated Brooken North Channels						
Haskett A	1	GM Properties & Investments Inc.	sec. 16, T10N, R18E NE SW SW	392,020	1,245	1984/12
Davis B	1	GM Properties & Investments Inc.	sec. 17, T10N, R18E S NE SE	322,869	1,152	1984/12
		EUR: ~850 MMCF		714,889	2,397	
Rebecca	2	Drake Exploration Incorporated EUR: ~90 MMCF	sec. 20, T10N, R18E NW NW SW	50,845	660	1998/04
Total for remainder of Brooken Booch Brooken (proper) — south of the lake		54 wells @ 1.36 BCF/well, 33 MCFPD/well, 9/03 EUR: ~76,000 MMCF		73,500,000	38,500	

NOTE: Data from IHS Energy (through September 2003). EUR estimated ultimate recovery.

Brooken (Texanna SW) Field Study Volumetric Input

Main Area:

Net Sand	Avg. Net Sd	Area (ac)	Avg. Por	Avg. Sg	Pore Vol (Ac. Ft.)
0-50’	15’	1223	10%	70%	1,284
50-100’	75’	667	18%	80%	7,204
100-150’	125’	670	21%	85%	14,949
>150’	160’	287	24%	90%	9,919
TOTAL					33,356

Satellite I Area:

Avg. Net Sd	Area (ac)	Avg. Por	Avg. Sg	Pore Vol (Ac. Ft.)
37’	480	10%	70%	1,243

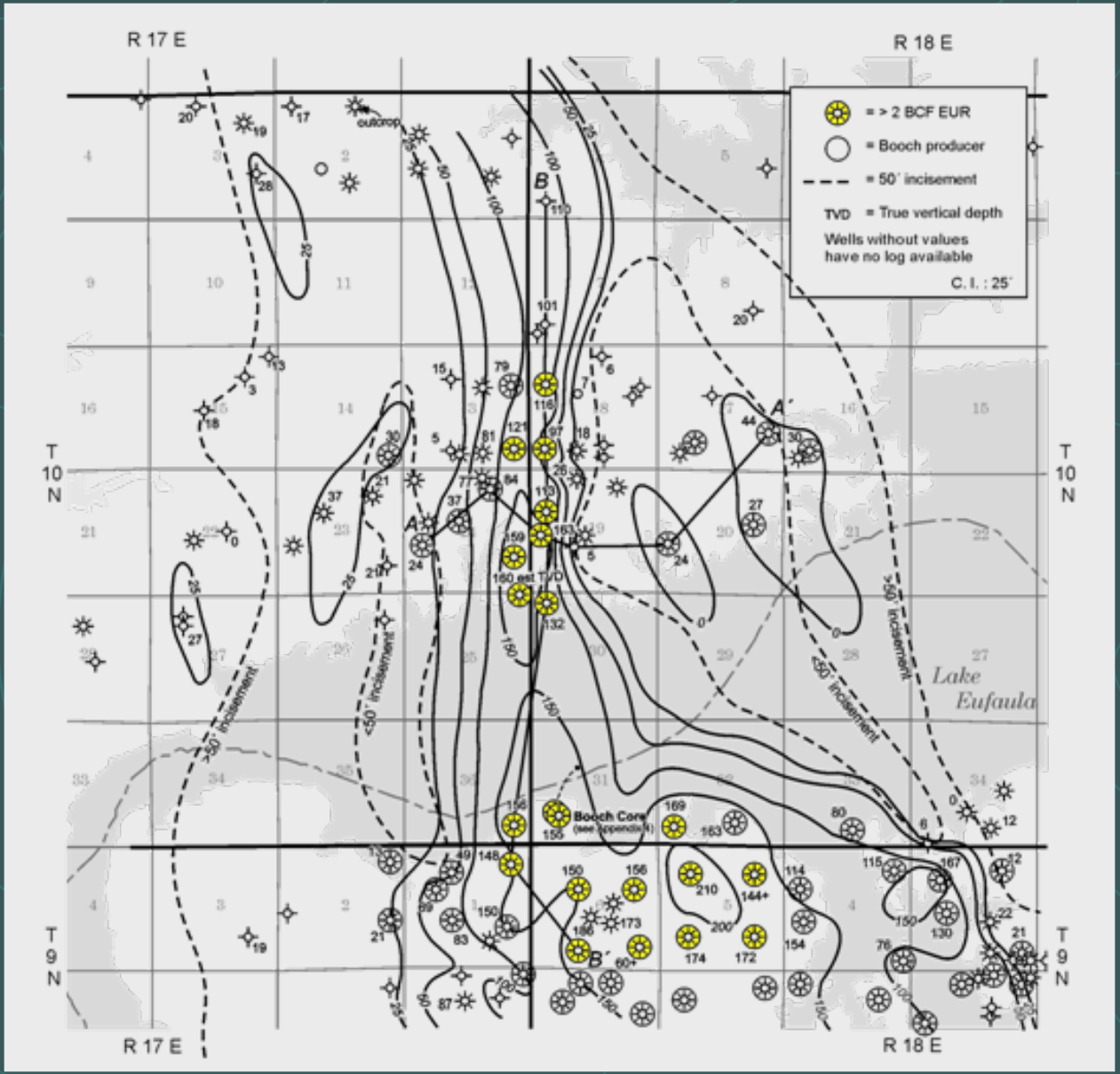
Satellite II Area:

Avg. Net Sd	Area (ac)	Avg. Por	Avg. Sg	Pore Vol (Ac. Ft.)
18’	229	8%	60%	198

Brooken (Texanna SW) Field Study Gas Volumes

Interval	Gas IIP	Cum Prod	E.U.R.	Proj R.F.
Main Area	40.684	33.76	34.50	85%
Satellite I	1.516	0.72	0.850	56%
Satellite II	0.241	0.05	0.090	37%

Brooken Field Study
Middle Booch Net Sand Isopach & Incisement Depth



Brooken (Texanna SW) Field Study Middle Booch Net Sand Isopach & Incisement Depth