

**COMPUTERIZED CALCULATION AND CHARACTERIZATION
OF LIGNITE RESOURCES IN TEXAS**

W. R. Kaiser, Principal Investigator

Status Report

**Prepared for
U. S. Geological Survey, Branch of Coal Resources
Cooperative Agreement No. 14-08-0001-A0399
Contract Period: 01/21/86 - 01/20/87**

**Prepared by
Bureau of Economic Geology
The University of Texas at Austin
Austin, Texas 78713**

COMPUTERIZED CALCULATION AND CHARACTERIZATION
OF LIGNITE RESOURCES IN TEXAS

W. R. Kaiser, Principal Investigator

Status Report

This project was to complete the calculation of lignite resources in Texas according to USGS Circular 891 and begin providing petrographic data on Texas lignite. To date no resource calculations have been done; however, considerable petrographic data have been collected.

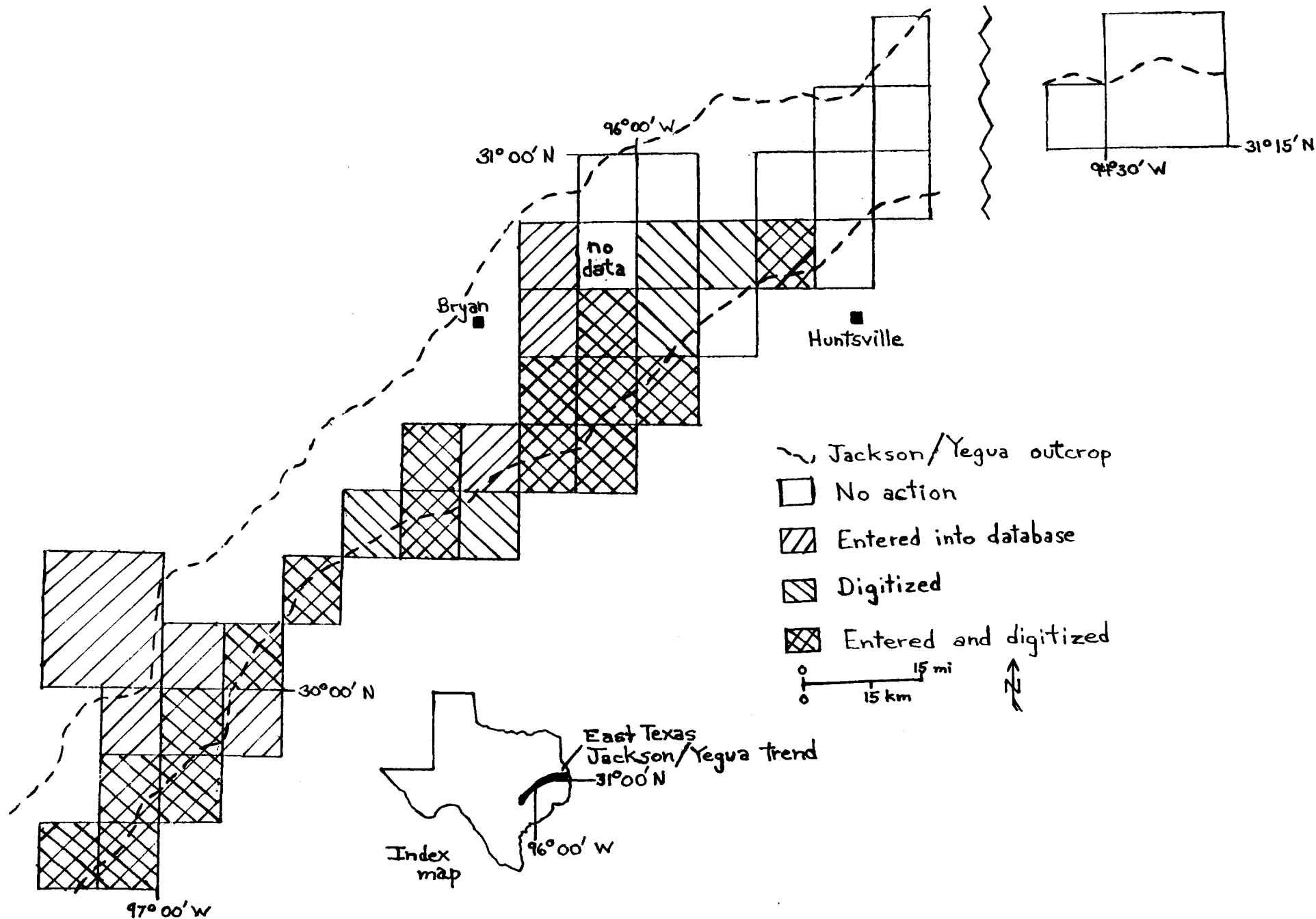
There is no progress to report on the calculation of resources in the East Texas Jackson/Yegua trend because we are awaiting completion of data entry and digitization by the USGS. In July 1984 resource and lithologic data and geographical locations for data points in the East Texas Jackson/Yegua trend were submitted to the USGS, who is responsible for entering these data into the PR1ME computer data base (TXSTRAT) and digitizing the geographical locations. At present, data have been entered for 23 of the 40 quadrangles submitted to the USGS (see attached figure). This represents 45 percent of the approximately 6,137 points submitted. Twenty-one of the 40 quadrangles have been digitized, representing 53 percent of the approximately 1,102 geographic locations submitted. Upon completion of data entry and digitization, we can begin calculation of resources as outlined in our October 1985 proposal.

Resource and lithologic data for the South Texas Jackson trend (eight quadrangles) have been coded in preparation for digitizing by the BEG. South Texas Wilcox data, about 3 percent of our statewide data base, remain to be coded and digitized.

Detailed petrography, incident-light examination with white and blue light under oil immersion and mean reflectance on huminite, liptinite, and inertinite, has been completed for 28 channel samples from 11 localities (see attached list). We expect to complete an additional 15 channel and lithotypic samples by year's end. Compilation and synthesis of these data has begun for correlation of petrographic and geologic parameters. The petrographic data are consistent with our regional depositional models.

In March 1986 we sent 25 lignite samples to Geochemical Testing, Somerset, Pennsylvania for chemical analysis. No results have been received to date.

3



Status of East Texas Jackson/Yegua data entry and digitization

List of completed petrography channel samples

Wilcox Group	Big Brown mine
Winfield South mine	08100201
22500101 ^a	08100301
22500301	08100401
Martin Lake mine	Sadow mine
18300701	16600901
18300801	16600902
18300802	Elgin-Butler clay pit
18300901	01100201
18300902	Jackson Group
18301001	Gibbons Creek mine
18301002	09300104
18301201	Lake Sommerville spillway
Darco mine	23900105
10200101	San Miguel mine
10200102	00700201
South Hallsville mine	00700202
10200201	00700203
10200301	00700204
	00700205
	Cummins Creek deposit
	07500305

^aFirst three digits = state county code
 Second three digits = locality in that county
 Last two digits = sequential number assigned at the respective locality.

**COMPUTERIZED CALCULATION AND CHARACTERIZATION
OF LIGNITE RESOURCES IN TEXAS**

W. R. Kaiser, Principal Investigator

Status Report

Copy

**Prepared for
U. S. Geological Survey, Branch of Coal Resources
Cooperative Agreement No. 14-08-0001-A0399
Contract Period: 01/21/86 - 01/20/87**

**Prepared by
Bureau of Economic Geology
The University of Texas at Austin
Austin, Texas 78713**

COMPUTERIZED CALCULATION AND CHARACTERIZATION
OF LIGNITE RESOURCES IN TEXAS

W. R. Kaiser, Principal Investigator

Status Report

This project was to complete the calculation of lignite resources in Texas according to USGS Circular 891 and begin providing petrographic data on Texas lignite. To date no resource calculations have been done; however, considerable petrographic data have been collected.

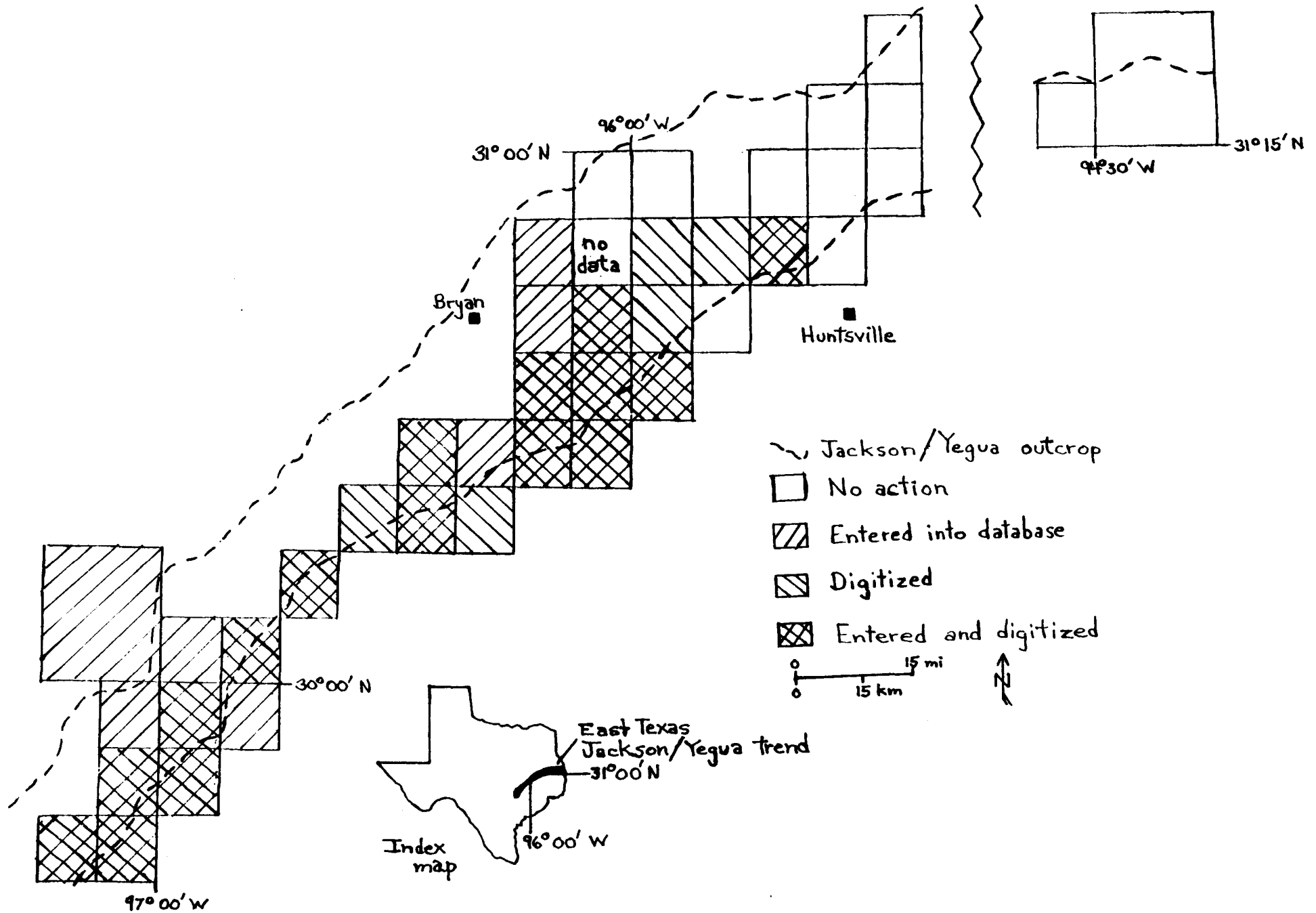
There is no progress to report on the calculation of resources in the East Texas Jackson/Yegua trend because we are awaiting completion of data entry and digitization by the USGS. In July 1984 resource and lithologic data and geographical locations for data points in the East Texas Jackson/Yegua trend were submitted to the USGS, who is responsible for entering these data into the PR1ME computer data base (TXSTRAT) and digitizing the geographical locations. At present, data have been entered for 23 of the 40 quadrangles submitted to the USGS (see attached figure). This represents 45 percent of the approximately 6,137 points submitted. Twenty-one of the 40 quadrangles have been digitized, representing 53 percent of the approximately 1,102 geographic locations submitted. Upon completion of data entry and digitization, we can begin calculation of resources as outlined in our October 1985 proposal.

Resource and lithologic data for the South Texas Jackson trend (eight quadrangles) have been coded in preparation for digitizing by the BEG. South Texas Wilcox data, about 3 percent of our statewide data base, remain to be coded and digitized.

Detailed petrography, incident-light examination with white and blue light under oil immersion and mean reflectance on huminite, liptinite, and inertinite, has been completed for 28 channel samples from 11 localities (see attached list). We expect to complete an additional 15 channel and lithotypic samples by year's end. Compilation and synthesis of these data has begun for correlation of petrographic and geologic parameters. The petrographic data are consistent with our regional depositional models.

In March 1986 we sent 25 lignite samples to Geochemical Testing, Somerset, Pennsylvania for chemical analysis. No results have been received to date.

3



Status of East Texas Jackson/Yegua data entry and digitization

List of completed petrography channel samples

Wilcox Group	Big Brown mine
Winfield South mine	08100201
22500101 ^a	08100301
22500301	08100401
Martin Lake mine	Sandow mine
18300701	16600901
18300801	16600902
18300802	Elgin-Butler clay pit
18300901	01100201
18300902	Jackson Group
18301001	Gibbons Creek mine
18301002	09300104
18301201	Lake Sommerville spillway
Darco mine	23900105
10200101	San Miguel mine
10200102	00700201
South Hallsville mine	00700202
10200201	00700203
10200301	00700204
	00700205
	Cummins Creek deposit
	07500305

^aFirst three digits = state county code
 Second three digits = locality in that county
 Last two digits = sequential number assigned at the respective locality.