A FEASIBILITY STUDY FOR

MAPPING ABANDONED COAL MINING AREAS

IN YOUNG COUNTY, TEXAS

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prepared for the

Texas Railroad Commission
Surface Mining and Reclamation Division

June, 1979

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ABSTRACT

A total of 276 sites of possible bituminous coal mining were located within Young County, Texas, using black-and-white aerial photography at a scale of 1:20,000. More than 80 percent of these sites are less than 10 acres in size; 14 sites are 40 acres or more in size. Lack of vegetation, disturbed land surfaces, and evidence of active erosion characterize these sites. Forty-five sites are either directly adjacent to natural streams or show distinct runoff channels entering natural streams. Historical mining records were utilized where available, but no field confirmation of sites was included as part of the feasibility study.

INTRODUCTION

The objective of this feasibility study was to evaluate the use of photography or imagery to locate and determine the condition of abandoned coal mining lands in Young County, Texas. The study included determination of the type and scale of suitable data, categorization of disturbed areas as to size and general characteristics, and compilation of results in a tabular format and on U.S. Geological Survey 7.5-minute quadrangle maps. No field checking was to be included in the study. A limited amount of historic records were available that provided insight into mining methods and the location of a number of shaft mines.

Historical Background

The Pennsylvanian-age bituminous coal in North-Central Texas provided most of the coal produced during the period of development of this

resource from the mid-1880's to 1943 (Evans, 1974). Utilization of these thin (<3 feet), high-sulfur (>2%) and high-ash (∿15%) coals decreased markedly from 1920 to the 1940's in the face of competition from oil and gas and decreased demand by railroads and industry. In Young County around 1910, development was concentrated on the Newcastle Coal that was mined into the early 1920's by the Belknap Coal Company (Evans, 1974). The Newcastle 7.5-minute quadrangle map shows the location of five Belknap shaft mines around the town of Newcastle. Cummins (1891) lists the locations of nine other shaft mines in Young County.

General Geological Setting

Coals in North-Central Texas occur within the Strawn, Canyon, and Cisco Groups in deltaic deposits of the middle and late Pennsylvanian (Brown and others, 1973). The Harpersville Formation of the Cisco Group is the coal-bearing unit in Young County and contains the Newcastle Coal (51 to 127 cm thick in old mine areas) and the Saddle Creek Coal. The latter is an impure coal occurring locally (Lee and others, 1938). The depositional environments of coals in the Cisco Group are summarized by Evans (1974):

> Numerous fluvial-deltaic progradations fed by eastern source areas in the Ouachita foldbelt mark Cisco Group strata (Virgil and Wolfcamp Series). Sites of organic accumulation were mainly interdeltaic embayments lateral to main delta trends. During periods of progradation, delta-flank embayments moved basinward due to strike-fed mudflat and strandplain accretion. Brackish-bay mudstones and limestones and thin coal beds accumulated shoreward of these mudstones and sandstones. Organic accumulation took place both as in situ marsh or swamp deposition in shallow portions of delta-flank embayments and as detrital accumulations in deeper portions of lagoons or lakes behind the strike-fed barriers. Upon delta abandonment, marine processes reworked portions of the interdeltaic embayment sediments with eventual marine limestone deposition onlapping former sites of delta-flank deposition (Brown and others, 1973).

The outcrop belt of the Harpersville Formation runs north from Cisco in Eastland County, through Stephens County, and turns northeast through Young County (fig. 1) into Jack County. The vertical relationships of members or informal units within the Harpersville Formation show the coals within the upper part of the unit (fig. 2). The Harpersville Formation from the top of the Breckenridge limestone member to the top of the Saddle Creek limestone member is reported to be 233 ft (71 m) thick (Lee and others, 1938). Rocks of the Cisco Group are undeformed except for some minor faulting in the northern part of the outcrop belt, and regional dips average ½ to 1½ degrees to the west and northwest (Galloway and Brown, 1972).

METHODS OF INVESTIGATION

An initial evaluation of disturbed areas possibly related to coal mining was made using 1:60,000-scale black-and-white aerial photography. High reflectance, nonvegetated areas were sought and indeed found, but the resolution of the photography was inadequate to describe the site further. Locations of buildings, drilling sites, and stock ponds all of which appear in barren areas are easily confused with possible mining locations. The use of larger scale data was indicated, hence 1:20,000 black-and-white photographs were acquired (table 1).

To evaluate a potentially more informative film type (color infrared) available for selected areas, but at a 1:120,000 scale, two frames of infrared photography (NASA-JSC Mission 310 RL31, frames 011 and 012) were studied. Although barren areas could be delineated on

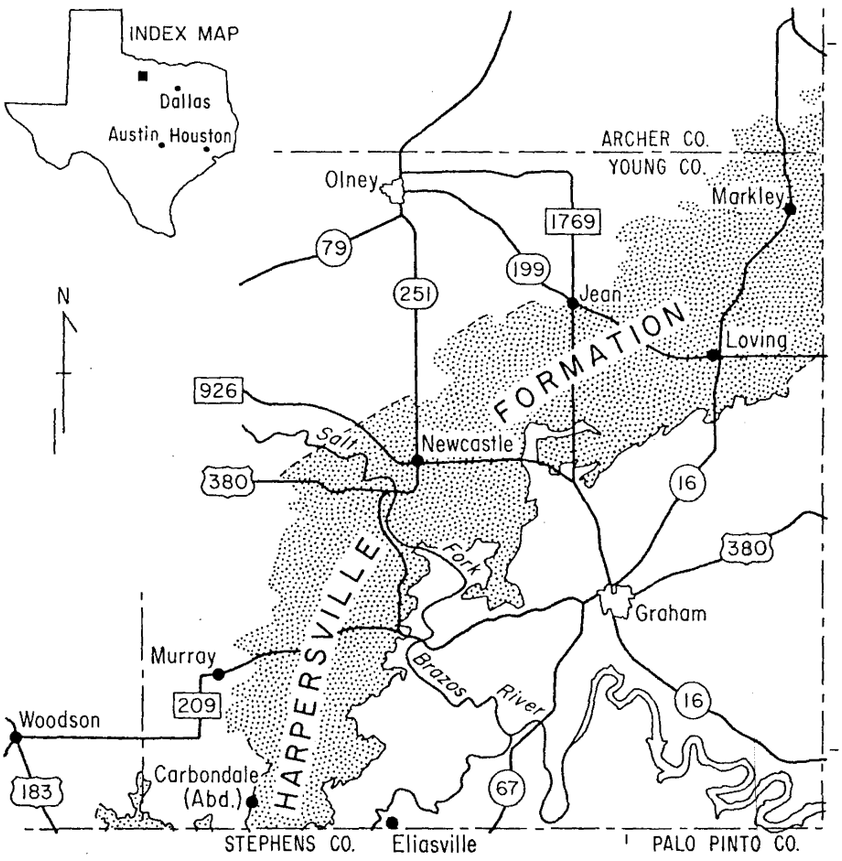

Figure 1. Young County location map (after Evans, 1974).

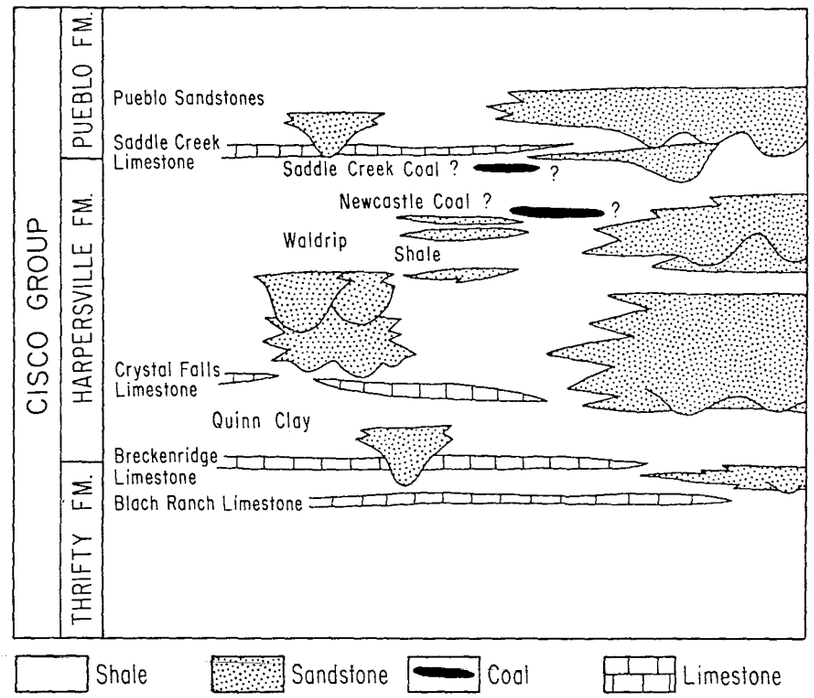

Figure 2. Schematic cross section of Cisco group (after Galloway and Brown, 1973 with coal beds added from Evans, 1974).

Table 1. Data source for Young County.

FILM TYPE:	Black-and-white
ORIGINAL SCALE:	1:20,000
FORM:	Paper prints, 9 inch
DATES FLOWN:	June and July, 1941
SOURCE AGENCY:	Texas Highway Department, Highway Planning Survey
HOLDING AGENCY:	Texas Natural Resources Information System
PROJECT DESIGNATION:	CUW

these photographs, the resolution compared to 1:20,000 data was not adequate. The scale of the photography remained the most important factor in determining its utility; hence any smaller-scale data, such as Landsat imagery, in which barren areas would still have to be further characterized by other means, cannot delineate small (mainly $\leq$ 10 acres) mined areas.

The outcrop belt of the Harpersville Formation was transferred from a map by Evans (1974) to the county highway map (scale 1 in=2 mi) as an aid in selecting flightlines to be examined. Stereo pairs of photographs were examined using an Abrams Model CG-1 pocket stereoscope with two- and four-power magnification. Individual frames of photography could be examined monoscopically but at greater magnification using a Bausch and Lomb Zoom Transfer Scope.

As disturbed areas possibly corresponding to abandoned mining sites were located, they were noted on the photographs using a china marker and entered on a tabulation sheet. The tabulation sheet included the photo numbers for the stereo pair, the single photo number on which the site was located, a grid location number, the estimated size of the site, and a site description. A location grid of 9 x 5 one-inch squares was placed on the north edge of the photograph and the site located within one of the 45 grid squares. The side of each square corresponds to a distance of 1,666 ft (508 m) at a scale of 1:20,000. Size estimates were made using a template with 1, 2.5, 5, 10, and 40 acre units denoted at the scale of the photography.

DELINEATION OF DISTURBED AREAS

Available literature (Cummins, 1891, and Criswell, 1942) indicates that three types of mining operations occurred in North-Central Texas: (1) shaft mines, which are likely to have minimum surface expression, (2) "coal slope" mining, which requires the use of an inclined opening to tap the coal seam, and (3) "coal slip" mining in which coal was taken from near-surface areas having very little overlying material to be removed. Confirmation on the aerial photographs of 14 mining locations listed by these authors was successful; 5 of the 14 (the Belknap mines) were shown on the Newcastle 7.5-minute quadrangle map. In some instances a mine site could only be narrowed down to two or more barren, generally high-reflectance areas that had been disturbed. Numerous disturbed areas, probably caused by mining of outcrops or near surface deposits, are common in the mining area near Eliasville (fig. 1) where four shaft and two tunnel mines are known.

Site Criteria

The amount of surface disturbance at each site was evaluated in terms of seven generalized criteria:

1. Sink holes or collapse structures
2. Waste material on surface
3. Barren ground surface
4. Poor vegetative cover
5. Evidence of active erosion
6. Sedimentation of streams
7. Evidence of instability and slides

The most obvious characteristic of the potential mine sites is a barren area or an area of poor vegetative cover. Physical modification of the site is evidenced by leveled areas, piles of waste material, small pits or depressions, notched hill slopes, or complete removal of narrow ridge crests. Often multiple-disturbed areas are located near and along contours, suggesting removal of material from a single stratigraphic unit.

Translation of the above generalized criteria into site characteristics used during study of the Young County photography led to the following criteria and modifiers:

1. Description of extent of vegetation
    a. barren
    b. slightly vegetated
    c. moderately vegetated
2. Accessibility by ground route
    a. easy and direct
    b. limited
    c. no access
3. Surface condition
    a. presence of pits, leveled areas, and similar characteristics
4. Presence of vehicle tracks (ruts) as an indicator of past activity
5. Presence of structures or possibly abandoned equipment

6. Qualitative degree of erosion evident
   a. severe
   b. moderate
   c. slight or minor
7. Type of erosional alteration of site
   a. single prominent gully
   b. multiple gullies
   c. likely area of sheetwash
8. Effect on nearby stream
   a. site activity altered stream course directly
   b. nearby site delivered sediment to stream
9. Distance runoff travels from site to nearby stream
   a. distance estimated from photograph
   b. site is immediately adjacent to stream and input of runoff is immediate

In addition to these criteria the size of a disturbed site was noted and particular attention given those sites greater than five acres in size. Indications of subsidence and collapse (drainage anomalies, closed depressions) have not been noted near the known locations of shaft mines. Very little evidence of slope instability and landsliding has been seen on the photographs.

Possible Mining Sites in Young County

A total of 276 possible coal mining sites were located in Young County (table 2), 149 of which are 5 acres or less in size and 14 of which

Table 2. Size distribution of possible abandoned coal mining sites in Young County, Texas.

UNDER 40 ACRES		OVER 40 ACRES		
		Location		
No. of Sites	Area (acres)	Photo	Grid	Area (acres)
18	1 - 2	115	1, 2, 6, 7	100
50	2 - 3	143	29, 34	80
33	3 - 4	172	7, 8	50
9	4	173	4, 5, 9	80
39	5	174	23, 24, 28, 29	80
6	6	196	16, 21	40
11	7	220	39, 44	60
12	8	249	6, 7, 11	70
6	9	282	24	80
40	10	339	22, 27, 23	70
1	11	343	27, 22	50
7	12	401	16, 17, 21	70
3	13	401	24, 29	70
8	15	438	13, 14	60
2	16			
2	17			
1	19	TOTAL OF 14 SITES		
5	20			
1	23			
3	25			
3	30			
2	35			

TOTAL: 262

are 40 acres or more in size (fig. 3). Approximately 81 percent of the possible mining localities are 10 acres or less in size. Of the total number of sites, 130 are considered to have somewhat greater likelihood of being abandoned mine sites; 122 of these are less than 40 acres in size and 9 are among the 14 sites that are 40 acres or greater in area. A tabulation of site data is included as Appendix A.

Forty-five possible mining sites exhibited gullying and/or slopes likely to be undergoing sheetwash. A qualitative evaluation of this group indicates 13 cases of severe erosion, 14 cases of moderate erosion, and 18 cases of slight erosion; some of the most significant erosion is concentrated at the larger sites (table 3). Where runoff was carried in gullies from a site to an adjacent stream, the average distance traversed was 835 ft (255 m). In at least one instance, runoff from a possible mine site had coalesced to form a significant local channel (photo 411, grid cell 21) leading to an adjacent stream. A separate summary of site characteristics where site runoff is reaching an adjacent stream is included as Appendix B.

Extraction of Other Non-Hydrocarbon Resources

It is likely that some of the possible surface coal mining sites delineated in this study were actually used for extraction of other resources. Minimizing this confusion will depend on future field checking and acquisition of data available within Young County, such as local historical information. A synopsis of other mineral resources by Criswell (1942) indicates than thin-bedded sandstones have been used for building

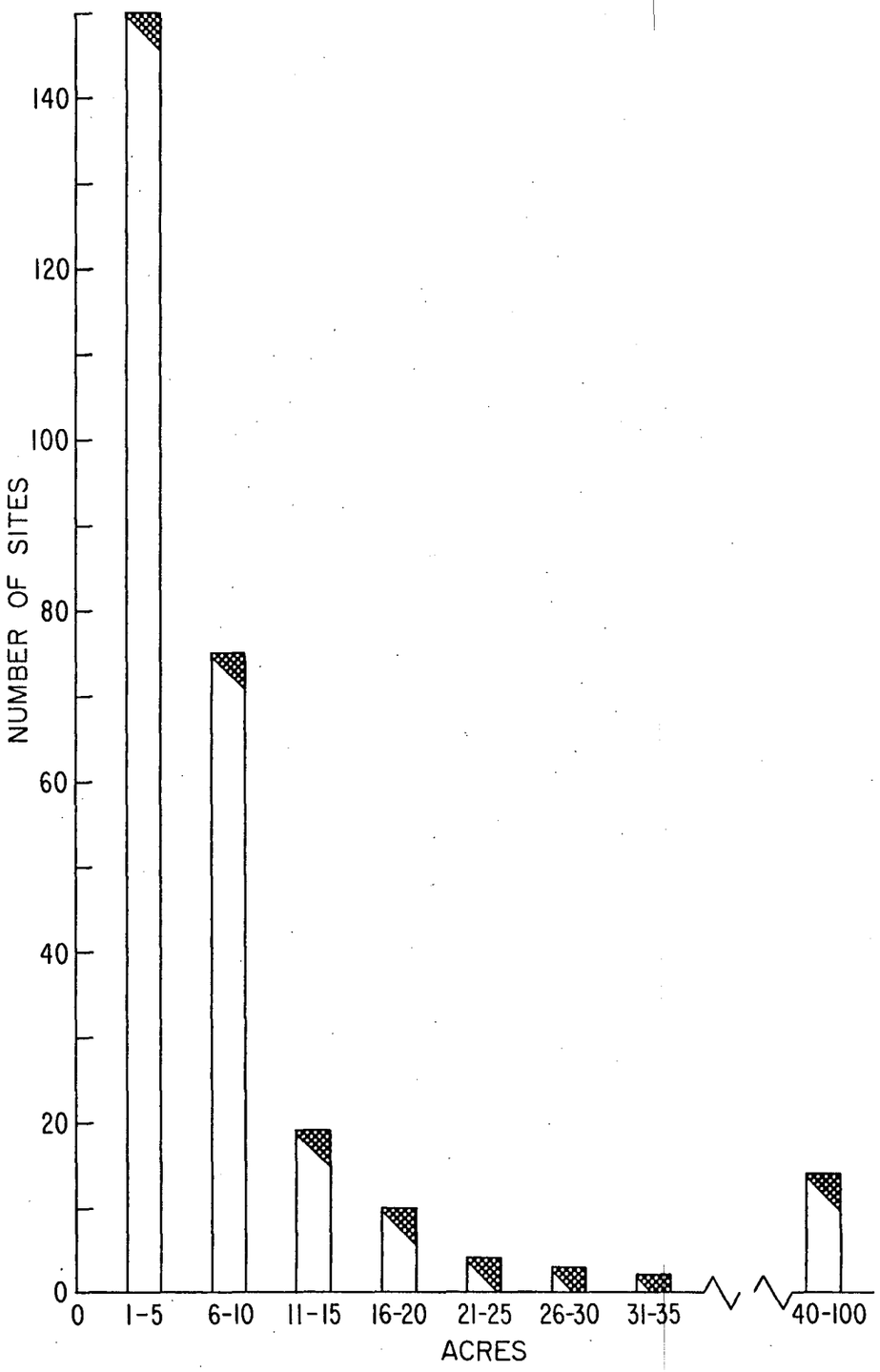

Figure 3. Size distribution of possible mining sites.

Table 3. Size distribution of possible abandoned coal mining sites in Young County, Texas, for which erosion is most evident.

Size	No. of Sites	Degree of erosion
5	2	moderate
5	6	slight
7	3	slight
8	1	severe
8	3	moderate
9	1	moderate
10	3	severe
10	2	moderate
10	5	slight
11	1	moderate
11	1	slight
12	2	moderate
12	1	slight
13	1	slight
15	1	moderate
23	1	moderate
30	1	slight
35	1	severe
35	1	moderate
50	2	severe
70	3	severe
80	2	severe
100	1	severe
	Total: 45	

purposes, and that some limestone has been extracted for highway construction. Limestone has not been used for buildings because it weathers into unsuitable angular fragments.

Sand and gravel resources are concentrated along the Brazos River in Young County, especially in older stream terraces. Caliche deposits are infrequent in the county and those associated with the Harpersville Formation are generally "very thin and impure" (Criswell, 1942).

Methods of Site Confirmation

As part of a larger study of abandoned coal mining sites in North-Central Texas, field work will be undertaken which will help to confirm (1) the distribution of sites that were actually mined for coal, and (2) changes in the condition of mine sites since the 1941 photographs were taken. All sites are presumed to be on private land, and many are not readily accessible. Some sites may be close enough to public roads that ground observations would be helpful, but low-altitude observation from an aircraft would probably be the most efficient means of adding to the narrative on each site. Contact with landowners concerning the larger sites would be worthwhile to obtain background information on groups of sites within a particular locale.

Although low-altitude observations would include use of 35-mm hand-held cameras with color and color-infrared films, vertical 9-inch (229 mm) photography at large scales would be of assistance in evaluating major sites. A test flight over Young County has shown that color and color-infrared photographs at scales of 1:5,000 and 1:12,000, particularly the larger scale, are useful in detailed site evaluation. Where an

assessment of vegetation is desired, the color-infrared film is preferred. These data were obtained using an aircraft owned by the Texas General Land Office through the cooperation of the Texas Natural Resources Information System.

CONCLUSIONS

The following conclusions can be reached on the basis of this feasibility study:

1. Sites of land disturbance probably caused by mining activity can be delineated on 1:20,000-scale black-and-white photography.

2. Data at smaller scales, even though on color or color-infrared film types, are not as useful due to lower resolution, and Landsat data are least useful.

3. The 1:20,000-scale data used are adequate for initial screening of sites based on size, amount of vegetative cover, presence of waste material, type of land disturbance and evidence of erosion, and for noting possible alteration of, or likely addition of sediment to, nearby streams.

4. Many sites are 2 to 3 acres or less in size and may represent very limited extraction of coal for local use, extraction of other materials, or a shaft entrance.

5. Shaft mines have minimal surface expression and, compared with surface mines, are least likely to be located without historical data.

6. Field checking from low-altitude aircraft and on the ground and collection of local information may assist in the confirmation of sites, especially where groups of sites are found along contour within the outcrop belt.

ACKNOWLEDGMENTS

This project was conducted by the Bureau of Economic Geology (BEG), The University of Texas at Austin, with the cooperation of the Texas Natural Resources Information System (TNRIS). Assistance in initial phases of the project was provided by R. W. Baumgardner, Jr. (BEG). C. Palmer (TNRIS) was responsible for locating available photography and for site transfer to 7.5-minute quadrangle maps.

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APPENDIX A

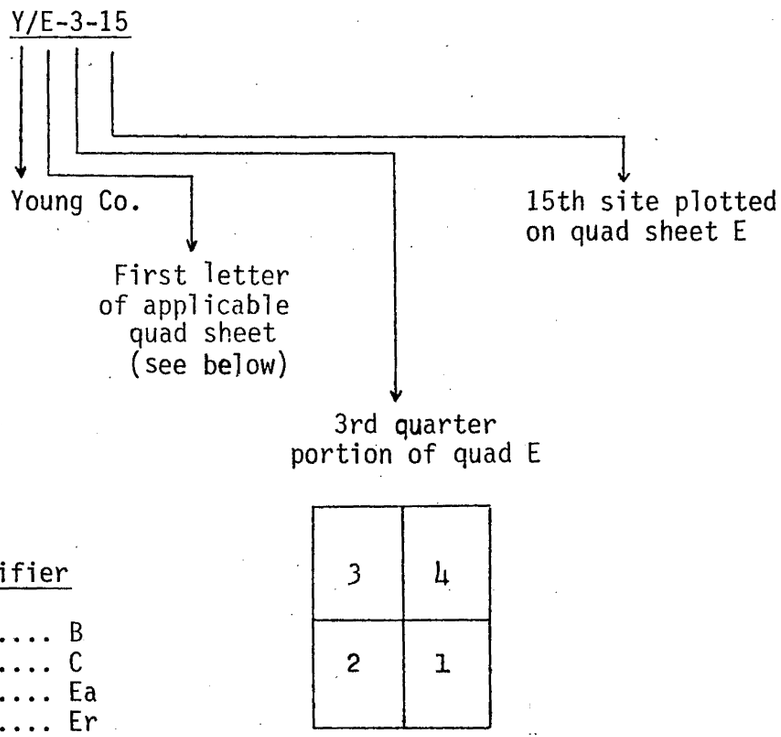
List of Possible Bituminous Coal Mining Sites in Young County, Texas

Size is given in acres.

Likelihood coding gives interpreter's overall judgment on whether or not site is an abandoned coal mine.

ABANDONED COAL MINE NUMBERING SYSTEM

Example:



Counties/Identifier

Brown	B
Coleman	C
Eastland	Ea
Erath	Er
Jack	J
Palo Pinto	PP
Parker	P
Stephens	S
Wise	W
Young	Y

Young County
7.5-minute quadrangle identification

ID	Quad
B	Bryson
DB	Darnell Branch
E	Eliasville
L	Loving
LE	Lake Eddleman
M	Markley
N	Newcastle
P	Proffitt
PP	Prickly Pear Ranch
T	True
TM	Tacket Mountain

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/P-2-2	107-108	108	9	10.0	P			Barren-partially vegetated (fringe areas). Accessible with visible routes to site. Apparent activity or vehicle tracks. Abandoned structures or equipment visible. Moderate erosion.
Y/P-2-1	"	"	20	2.5	P			Small barren disturbed site with partially vegetated fringe area. Visible route to site. Vehicle or activity tracks. No debris within site. Slight erosion.
Y/P-2-3	108-109	109	6	2.0	P			Barren. Accessible by visible route. Apparent vehicle tracks. Possible debris. Minor erosion.
Y/P-2-4	"	"	17	10.0	P			Extremely barren. Accessible by well-defined route. Trace of vehicle tracks. Moderate erosion.
Y/P-2-5	"	"	26	2.0	Q			Sparsely vegetated site. Easily accessible by direct route. Vehicle tracks outside of the site. No debris in or near site. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-3-1 Y/TM-3-2 Y/TM-3-3	109-110	110	8/9	3 sites 8.0 ac.	P			Three sparsely vegetated to barren (adjacent) sites. Easily accessible with well-defined route to sites. Possible vehicle tracks and structural debris. Minor erosion.
Y/TM-3-4	"	"	18	8.0	P			Sparsely vegetated site. Accessible by well-defined routes to site. Residual vehicle tracks but no debris. Slight erosion.
Y/TM-3-5 Y/TM-3-6	"	"	17/22	2 sites 8.0 ac.	P			Very barren depression-like sites. Accessible with poorly defined route to sites. Poorly defined vehicle tracks, no debris seen. Very slight erosion.
Y/TM-3-7	110-111	111	3	15.0	Q			Very disturbed barren-sparsely vegetated site. Poor accessibility, no tracks or debris. No access route to site. Considerable erosion.
Y-TM-3-8	"	"	28	7.0	Q			Very sparse ground cover. Poor accessibility, possible trail to site. No debris or vehicle tracks. Moderate erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-3-9	110-111	111	20	2.0	P			Extremely barren site. Easily accessible with direct routes to site. Evident vehicle tracks, no debris. Considerable decline of vegetation due to vehicle (?) traffic. Minor erosion.
Y/TM-3-10	111-112	112	8	2.5	Q			Sparsely vegetated undisturbed condition. Easily accessible by direct route. Slightly visible vehicle tracks, no debris, no erosion.
Y/TM-3-11	"	"	27	2.5	Q			No vegetation, accessible, nearby travel routes. No vehicle or activity tracks, many ravines. No debris, moderate erosion.
Y/TM-3-12	"	"	37	1.5	Q		Possible shaft opening.	Small partially vegetated site. Access difficult. Possible trail but no tracks or debris. Moderate erosion.
Y/TM-3-13	112-113	113	3	20.0	P			Barren to sparsely vegetated condition. Accessible but no direct route to site. No vehicle tracks or debris. Very slight erosion.

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Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-3-14	112-113	113	42	5.0	Q			Sparsely vegetated site, easily accessible with close transportation route. No vehicle tracks within site. No debris. Minor erosion.
Y/TM-2-15	113-114	114	13	8.0	P		Unusual corridor to hill base.	Barren to sparsely vegetated condition. Accessible with direct route to site. Possible activity tracks (not vehicle tracks). No debris. Minor erosion.
Y/TM-2-16	"	"	23	1.5	P			Very small excavation at barren ridge base. Easily accessible, definite access route and vehicle tracks. No debris. Minor erosion.
Y/TM-2-17 Y/TM-2-18 Y/TM-2-19	"	"	32/33	3 sites 7.0	P			Very barren excavated sites. Easily accessible with direct routes leading to sites. No debris, many activity tracks. Moderate erosion. Thinly vegetated fringe areas.
Y/TM-2-20	114-115	115	1/2/6/7	100.0	P			Large site. Barren to sparsely vegetated areas. Accessible with numerous routes to site. Considerable vehicle and activity tracks. Structural debris and considerable erosion. Very disturbed area.

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D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-2-21	114-115	115	16	10.0	P			Barren to thinly vegetated. Access difficult, with abandoned trails to site. No debris apparent, minor erosion.
Y/TM-2-22	"	"	33	13.0	P			Barren to sparsely vegetated. Accessible with clearly marked routes. No debris, many vehicle tracks. No erosion.
Y/TM-2-23	"	"	14	20.0	P			Barren to sparsely vegetated. Easily accessible with many vehicle tracks. Direct route to site. Hill base excavation. Thinly vegetated fringe area with minor erosion.
Y/TM-2-24	115-116	116	6/11/7	5.0	P			Barren. Accessible. Evidence of abandoned direct route. Possible vehicle tracks, no debris. Moderate erosion.
Y/TM-2-25	"	"	37/42	11.0	P			Barren to sparse vegetation. Accessible with indirect route to site. Depression-like excavation. No debris, moderate erosion.
Y/E-3-1	116-117	117	17/18	17.0	P			Barren. Accessible. Traces of abandoned road, no obvious tracks or debris. Semi-depression with moderate erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/E-3-2	116-117	117	9/10	10.0	P		Many vehicle tracks.	Flat barren site. Accessible by many routes and vehicle tracks. No debris, slight runoff.
Y/E-3-3	117-118	118	3	2.5	Q			Barren with scattered tree cover. Accessible, with traces of roads. Possible vehicle tracks, no debris.
Y/E-3-4	"	"	7/8	3.0	Q			Barren to thinly vegetated condition. Access possible by abandoned routes. No active (vehicle) tracks or debris. Considerable slopewash erosion.
Y/E-3-5	"	"	39	3.0	P			Barren to thinly vegetated. Easily accessible by well-marked route. No debris or residual vehicle tracks. Moderate erosion within and adjacent to site.
Y/E-3-6	118-119	119	1	2.0	Q			Barren to thinly-vegetated. Accessible. No direct route. No vehicle tracks or debris. No erosion.

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D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/E-3-7	118-119	119	4	13.0	P		Abandoned oil producing site.	Mostly barren with thinly vegetated areas. Accessible with possible route to site. No clear vehicle tracks or debris. High erosion potential. Oil well derrick located north part of site.
Y/E-3-8	"	"	9/10/ 14/15	20.0	P		Possible spoil mounds.	Sparsely vegetated to barren condition. Accessible with direct route to site. No debris or vehicle tracks. High mounds of soil. Slight erosion.
Y/E-3-9	"	"	23	2.0	Q			Barren. Access difficult. No direct route. No vehicle tracks or structural debris. Minor erosion.
Y/E-3-10 Y/E-3-11	"	"	31/26	2 sites 7.0	P			Barren to sparsely vegetated. Access difficult, but definite direct route. No vehicle tracks or debris. Excavation and strip-mined sites (2). Moderate erosion.
Y/E-3-12	"	"	37	2.5	Q			Small very barren site. Minimal surface disturbance. Accessible with direct route to site. Vehicle tracks slightly visible, no debris apparent. Slight erosion to nearby creek.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/E-3-13	118-119	119	44	10.0	P			Barren to sparsely vegetated. Difficult accessibility with trail leading to site. No vehicle tracks or debris. Moderate erosion adjacent to site.
Y/E-3-14 Y/E-3-15	119-120	120	32	2 sites 5.0 ac.	P			Barren. Difficult access. Trail into site. No vehicle tracks or debris. Moderate erosion within and adjacent to site.
Y/E-3-16	"	"	33	5.0	P			Total absence of vegetation, slight surface disturbance. Accessible with direct route, no vehicle tracks or debris. Moderate erosion.
Y/E-3-17	"	"	37/42	5.0	P			Barren to sparsely vegetated. Difficult access by trail(?) to site. No vehicle tracks or debris. Moderate slopewash.
Y/E-3-18	"	"	42/43	10.0	P			Barren site, thin vegetation fringe area. Difficult accessibility. Trail to site. No activity tracks, very disturbed surface (hillside excavation).

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/P-3-6	134-135	135	27	2.5	P			Sparsely vegetated. Difficult accessibility but near river. Trails to site. No activity tracks or debris. Slight erosion.
Y/P-1-7	135-137	137	3/4	30.0	Q			Sparsely vegetated disturbed site. Accessible with clear routes to site, numerous activity tracks. No debris, considerable gullying. Bluff-base excavation.
Y/P-1-8	"	"	14	10.0	Q			Barren-slightly vegetated. Accessible with many routes to site. Activity tracks, no debris, slight erosion.
Y/P-2-9	"	"	32	2.5	P			Small barren depression. Easily accessible with route to site. Activity tracks, no mining debris. Excavated depression, slight erosion.
Y/P-2-10	"	"	39	10.0	P			Barren to thinly-vegetated. Moderately accessible. Visible routes to site. Activity tracks. No structural debris. Evident erosion. Bluff-base excavation.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/P-2-11	137-138	138	3/4	10.0	P			Barren excavated site; sparsely vegetated fringe area. Accessible with several routes to site. Numerous activity tracks. No debris. Very apparent erosion.
Y/P-1-12	"	"	7/8	10.0	P			Barren to sparsely vegetated. Easily accessible with adjoining road. Activity tracks. No debris. Very disturbed surface with erosion throughout site.
Y/P-1-13	"	"	21	10.0	Q			Sparsely vegetated site. Accessible with routes to site. Vehicle tracks, and equipment (?) debris, slight erosion.
Y/P-2-14	"	"	31	2.0	P			Small, barren excavated site. Accessible but no visible route, tracks or debris, considerable erosion.
Y/P-2-15	"	"	38	10.0	P			Extremely barren condition, no excavation evident, easily accessible with routes to site. Vehicle tracks, no debris, slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/P-1-16	138-139	139	12	3.0	Q			Barren. Difficult access. Routes leading to site, possible vehicle tracks. No debris. Slightly disturbed surface slight erosion.
Y/TM-3-26	139-140	140	9	2.0	Q			Sparsely vegetated to barren condition. Access very difficult, with trail to site and activity tracks. Possible structural debris. Slight erosion.
Y/TM-4-27	"	"	33	9.0	Q			Very barren site with thinly vegetated fringe area. Access very difficult. No road, no activity tracks or debris. Slight erosion.
Y/TM-4-28	140-141	141	22	3.0	Q			Extremely barren interior, sparsely vegetated fringe area. Access difficult with routes to site, some tracks. No debris. Slightly disturbed surface, slight erosion.
Y/TM-4-29	"	"	25	10.0	P			Barren to sparsely vegetated. Accessible with route to site. Possible activity tracks, no debris, adjacent to excavated areas. Moderate erosion adjacent to site.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-4-30	140-141	141	28	10.0	P			Very barren site. Accessible with route to site, vehicle tracks. No visible debris. Minor runoff erosion. Adjacent to other sites.
Y/TM-4-31	141-142	142	22/23	8.0	P			Barren. Low-lying site, visible route and accessible. No debris. Slight erosion. Some vehicle tracks.
Y/TM-4-32	142-143	143	22	10.0	Q			Sparsely vegetated to barren. Accessible with route to site. Possible vehicle tracks. No debris. Moderate erosion.
Y/TM-4-33 Y/TM-4-34	"	"	28	2 sites 8.0	U		Adjacent to oil well field.	Extremely barren. Easily accessible with direct route to sites from major road. Vehicle tracks, no debris. Erosion evident. Possible oil pumping related site.
Y/TM-4-35	"	"	29/34	80.0	U		Adjacent to oil well field.	Extremely barren but some shrubbery. Very disturbed depression-like site. Easily accessible with direct route. No debris. Evident erosion. Vehicle tracks. Close to oil producing site.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-1-36	143-144	144	3/4/8/9	12.0	P			Barren interior, nearly barren fringe area. Inaccessible, but trace of route to site. No tracks or debris. Considerable erosion.
Y/TM-1-37	"	"	18	3.0	P			Inaccessible, barren depression. No route, debris or activity tracks. Erosion. Three adjacent possible sites.
Y/TM-1-38	"	"	33	2.5	Q			Barren to sparsely vegetated condition. Inaccessible, route to site, no vehicle tracks or debris. Minor erosion.
Y/TM-1-39	144-145	145	27	5.0	Q			Barren. Access to site difficult. No activity tracks or debris. Erosion.
Y/TM-1-40	145-146	146	24	1.5	Q			Barren. Difficult access. No clear route, activity tracks or debris. Ridge-pass type site. Slight erosion.
Y/TM-1-41	"	"	32	4.0	Q			Sparsely vegetated. Accessible with no direct route, vehicle tracks, or debris. Hillside excavation, no erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-1-42	145-146	146	37	3.0	Q			Barren. Accessible but no direct route. No tracks, debris or severe erosion.
Y/TM-1-43	146-147	147	14	3.0	Q		Ridge-top site.	Barren. Access difficult. No vehicle tracks, debris, or direct route.
Y/TM-1-44	"	"	19/24	2.5	Q			Barren. Accessible but no direct route. No activity tracks or debris. No erosion.
Y/TM-1-45	"	"	39	2.5	Q			Barren. Accessible with direct route. No activity tracks or debris. Erosion.
Y/TM-1-46	"	"	29	15.0	Q			Barren to sparsely vegetated. Accessible, no route, debris, or tracks.
Y/TM-1-47	147-148	148	1	2.0	Q			Sparsely vegetated site. Inaccessible with no direct route, debris, or activity tracks.
Y/E-4-19	"	"	22	9.0	Q			Sparsely vegetated. Access difficult, no direct route, activity tracks, or debris.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/E-4-20	147-148	148	25	2.5	Q			Barren. Access difficult. Possible route to site, vehicle tracks, no debris.
Y/E-4-21	148-149	149	20	10.0	P			Barren to sparsely vegetated. Easily accessible, adjacent to improved road. Vehicle tracks, no debris.
Y/E-4-22	"	"	24	8.0	Q			Barren to thin vegetation. Accessible but no direct route. No activity tracks or debris. Considerable erosion.
Y/E-4-23	"	"	25	8.0	P			Barren. Easily accessible, clear route to site, vehicle tracks. No debris. Depression.
Y/P-1-17	162-163	163	32	5.0	P			Sparsely vegetated site. Difficult access. No route to site. Nearby vehicle tracks, no debris or activity tracks. Minor erosion.
Y/P-1-18	163-164	164	7	5.0	P			Sparsely vegetated to barren condition. Accessible with direct route. Man-made structure, vehicle tracks.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/P-1-19	163-164	164	17	5.0	P			Sparsely vegetated. Accessible no visible direct route or vehicle tracks. No debris.
Y/P-1-20 Y/P-1-21	169-170	170	22/27	2 sites 5.0 ac.	Q			Barren, accessible, no direct route. No activity tracks or debris. Marked erosion.
Y/P-1-22	"	"	28	2.5	Q			Barren, accessible (no direct route) no vehicle tracks or debris. Disturbed surface.
Y/P-1-23 Y/P-1-24	"	"	29/34	2 sites 15.0	P			Sparsely vegetated to barren condition. Accessible with direct route. Activity tracks and man-made structures. Very disturbed. Erosion.
Y/TM-4-48	171-172	172	7	5.0	P			Very barren pit. Accessible, no route or vehicle tracks. No debris.
Y/TM-4-49	"	"	8	5.0	P			Barren pit. Accessible, possible route. No activity tracks or debris. Considerable erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-4-50	171-172	172	7/8	50.0	P			Barren to sparsely vegetated. Easily accessible. Direct route, vehicle tracks. No debris. Considerable sheetwash erosion.
Y/TM-4-51	173-174	174	4/5/9	80.0	P			Sparsely vegetated to barren. Accessible, direct route, vehicle tracks. No debris. Considerable erosion.
Y/TM-4-52	"	"	23/24 28/29	80.0	P			Sparsely vegetated to barren. Accessible. No direct route, vehicle tracks, or debris. Depression. Considerable erosion.
Y/TM-4-53	"	"	27	2.0	Q			Barren. Accessible. No clear route, activity tracks, or debris.
Y/TM-4-54	"	"	32	20.0	Q			Sparsely vegetated to barren. Accessible, no direct route to site. No activity tracks or debris. Erosion.
Y/TM-1-55	175-176	176	26	5.0	Q			Barren. Accessible with direct route. No vehicle tracks, or debris.
Y/TM-1-56	176-177	177	1	10.0	Q			Sparsely vegetated to barren. Accessible, no direct route. No vehicle tracks or debris. Erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/TM-1-57	176-177	177	12/13	8.0	Q			Sparsely vegetated. Easily accessible (adjacent improved road). No debris. Moderate erosion.
Y/TM-1-58	177-178	178	18	2.5	P			Sparsely vegetated to barren. Easily accessible. Direct routes to site. Many vehicle tracks. No debris.
Y/E-4-24	178-179	179	16/17	10.0	P			Sparsely vegetated site. Accessible with trace of route to site. No vehicle tracks (activity) or debris. Evident erosion.
Y/N-3-1	195-196	196	16	3.0	D		Newcastle area.	Barren. Accessible with direct route. Activity tracks, structural debris.
Y/N-3-2	"	"	4/9	4.0	P		Newcastle area.	Sparsely to moderately vegetated. Accessible, no visible direct route. No activity tracks or debris. Vehicle tracks(?)
Y/N-3-3	"	"	26	2.0	P		Newcastle area.	Moderate vegetation. Accessible with direct route to site. Vehicle tracks, structural debris.
Y/N-3-4	"	"	16/21	40.0	P		Newcastle area.	Moderately vegetated. Accessible, direct route to site. Numerous vehicle tracks. No debris. Slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/N-3-5	196-197	197	16/21	5.0	D		Visible mine opening.	Sparsely vegetated condition. Accessible with direct route. Vehicle tracks. Newcastle area mine.
Y/N-3-6	"	"	22	1.0	D		Newcastle area.	Vegetated, very minor excavation. Accessible with tracks. Newcastle area site. Old mine shaft.
Y/N-3-7	"	"	27	1.0	P		Newcastle area.	Vegetated, accessible with direct route, activity tracks. No debris or erosion.
Y/T-3-1	217-218	218	21/22	6.0	P			Low ground cover throughout site. Accessible, direct route, many vehicle tracks. No debris. Undisturbed site.
Y/T-1-2	218-219	219	4/9	5.0	P			Moderately vegetated. Easily accessible with direct route to site. Vehicle tracks, no debris. Minor erosion.
Y/T-1-3	"	"	9/14	5.0	P			Sparsely vegetated to barren condition. Easily accessible with route. No debris, slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/T-1-4	218-219	219	16/17	25.0	P			Sparsely vegetated to barren condition. Accessible with route to site. Tracks within site. Moderate erosion.
Y/T-2-5	"	"	39	8.0	P			Sparse to moderate vegetation. Accessible, with a direct route to site. Numerous tracks, no debris. Minor erosion.
Y/T-1-6	219-220	220	2/3	10.0	Q			Sparsely vegetated to barren. Easily accessible, with direct route to site. Considerable erosion.
Y/T-1-7	"	"	4	5.0	P			Sparsely vegetated to barren condition. Accessible, direct route. Vehicle/ activity tracks. No debris or erosion.
Y/T-1-8 Y/T-1-9	"	"	8	2 sites 8.0	Q			North site sparsely vegetated, south site barren. Both easily accessible by direct routes. Vehicle tracks, no debris. Moderate erosion.
Y/T-2-10	"	"	39/44	60.0	P			Sparsely vegetated condition. Easily accessible, direct route, many activity or vehicle tracks. No debris. Very slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/T-1-11	220-221	221	4/9	7.0	P			Barren to sparsely vegetated depression. Accessible, with direct route. Vehicle and activity tracks. No debris. Erosion.
Y/T-1-12	"	"	13	10.0	P			Sparsely vegetated site. Accessible with direct route. Heavy excavation, no tracks or debris. Much erosion.
Y/T-1-14	"	"	16/17	10.0	P			Barren to sparsely vegetated. Accessible with direct route. Activity tracks, no debris. Minor erosion.
Y/N-4-8	"	"	19	3.0	Q			Barren site. Accessible, very deep depression. Accessible with direct route to site. No activity tracks or debris. No erosion.
Y/T-1-15	"	"	24	5.0	P			Barren to sparsely vegetated. Accessible, and direct route to site. No debris or erosion. Activity tracks.
Y/T-2-15	"	"	33/34 38/39	30.0	P			Sparsely to moderately vegetated site. Easily accessible, direct routes. No debris. Slope erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/N-3-9 Y/N-3-10	220-221	221	35	2 sites 10.0	Q			Barren to sparsely vegetated. Accessible by direct route. No vehicle tracks or debris.
Y/N-4-11	"	"	20	2.5	P			Barren. Site is accessible with direct route. Some excavacation. No activity tracks or debris. No erosion. Sparsely vegetated fringe.
Y/N-4-12 Y/N-4-13	221-222	222	5 4/9	2 sites 2.0	P P			Sparsely vegetated to barren condition. Accessible, direct route. Vehicle/activity tracks. No debris or erosion. Barren. Accessible with direct route. Vehicle tracks, structural debris. No erosion.
Y/N-4-14	"	"	34/39	10.0	P			Barren. Accessible. No direct route, activity tracks or debris. No erosion.
Y/N-4-15	223-224	224	1	3.5	P			Barren. Accessible with direct route. Vehicle tracks. No debris or erosion.
Y/N-4-16	224-225	225	2/3	4.0	Q			Extremely barren, difficult access. Direct route, no activity tracks or debris. Slight slopewash.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/N-4-17	224-225	225	4/9	3.5	P			Barren site, deep depression. Accessible with direct route. Vehicle tracks, no debris. No erosion.
Y/N-3-18	"	"	29	2.5	Q			Barren to sparse vegetation. Deep depression. Easily accessible, possible activity or vehicle tracks.
Y/T-4-14	246-247	247	28	11.0	P			Barren, depression-type site. Accessible direct route, numerous activity tracks. No debris. Considerable erosion.
Y/T-1-15	248-249	249	6/7/11	70.0	P			Extremely barren. Easily accessible with direct route. Numerous vehicle and activity tracks. No debris. Extremely severe erosion throughout site and surrounding area.
Y/T-1-16	249-250	250	7	7.0	P			Barren to sparsely vegetated condition. Easily accessible with direct route. Activity tracks. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional site (minor)
Photo 225, grid 22/32, size 1.0 acre

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/T-1-17	249-250	250	28	5.5	P			Barren to sparsely vegetated. Accessible with route to site. No vehicle tracks or debris. Depression site, no erosion.
Y/N-4-19	251-252	252	2	4.0	Q			Barren site. Accessible with direct route. Activity or vehicle tracks. No debris, slight erosion.
Y/N-4-20	252-253	253	24	2.0	Q			Barren. Accessible, direct route. No debris or activity tracks. Depression no erosion.
Y/N-4-21	253-254	254	16/17	7.0	Q			Barren. Accessible route to site. Vehicle tracks. Man-made structure. Slight erosion.
Y/N-1-22	255-256	256	3	10.0	P			Sparse to moderate vegetation. Accessible with direct route. Vehicle tracks. No debris. Very slight erosion.
Y/N-1-23	"	"	17	7.0	Q			Barren. Accessible, direct route. Tracks(?), no debris. Depression, no erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional Sites (Minor)
Photo 249, grid 30/35, size 1.0 acre
Photo 247, grid 21, size 0.5 acre
Photo 255, grid 33, size 1.0 acre
grid 14, size 2.0 acres

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/N-1-24	255-256	256	18/23	5.0	P			Barren to sparsely vegetated. Accessible with vehicle tracks. Depression type site, no erosion.
Y/N-1-25	256-257	257	7	5.0	Q			Barren. Accessible with direct route to site. Possible tracks. No debris, very slight erosion.
Y/N-1-26	257-258	258	6	9.0	Q			Barren to sparsely vegetated. Accessible with direct route. Possible tracks. No debris. Minor erosion.
Y/N-1-27	"	"	18/19/23/24	5.0	Q			Barren to moderate vegetation. Accessible with direct route. Vehicle tracks. No debris, very slight erosion.
Y/N-1-28	"	"	22	10.0	P			Barren to sparsely vegetated. Accessible with direct route. Vehicle tracks. Disturbed surface, moderate erosion.
Y/N-1-29	"	"	24	10.0	P			Barren to sparsely vegetated. Accessible direct route. Clear vehicle tracks. Slightly disturbed surface. Slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/T-1-18	280-281	281	13/14	2.5	Q			Sparsely vegetated site. Accessible, direct route. Possible tracks. No debris, slight erosion.
Y/T-1-19	"	"	23	10.0	P			Sparsely vegetated. Accessible with direct route. Vehicle tracks. No debris. Slight erosion.
Y/L-2-10	281-282	282	10	5.0	P		Possible mine shaft.	Sparsely vegetated to barren condition. Accessible with direct route. Vehicle tracks. Possible structural debris (mine shaft). No erosion.
Y/T-1-20	"	"	24	80.0	P			Very barren site. Accessible, direct route. Vehicle tracks. No debris, slight erosion.
Y/L-2-12	282-283	283	9	20.0	P			Sparsely vegetated to barren. Accessible, route to site. Tracks visible. No debris. Very slight erosion.
Y/T-1-21	"	"	14	3.0	Q			Barren. Accessible. Clearly-marked route to site. Vehicle tracks. No debris. Very slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/LE-3-1	284-285	285	7/12	8.0	Q			Sparsely vegetated to barren. Accessible with route to site. No vehicle tracks or debris. Considerable erosion into stream.
Y/LE-3-2	"	"	8	15.0	P			Sparsely vegetated to barren condition. Accessible, direct route. Possible vehicle tracks. No debris. Very minor erosion.
Y/N-4-30	"	"	24	2 sites 4.5	P			Sparsely vegetated to barren. Easily accessible direct route. Vehicle tracks. No debris.
Y/N-4-31	"	"	32/37	10.0	P			Barren site. Accessible with direct route. Vehicle tracks. No debris. Very slight erosion.
Y/N-4-32	"	"	34	23.0	Q			Sparsely vegetated to barren condition. Accessible with direct route. Possible tracks. No debris, considerable runoff into stream.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional site (minor)
Photo 281, grid 9/14, size 1.5 acre

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/N-4-33	285-286	286	17	2.5	Q			Sparsely vegetated to barren. Accessible. Vehicle tracks evident. Nearby building. No erosion.
Y/N-4-34	286-287	287	25	2.5	Q			Barren excavated site; thinly-vegetated fringe area. Accessible with direct route. Activity tracks visible. No debris. Slight erosion.
Y/N-1-35	289-290	290	27/28	7.0	Q			No ground cover. Accessible with definite route to site. Defined activity tracks. No debris. Considerable erosion into earthen tank.
Y/N-1-36	"	"	34	2.0	P			No ground cover. Accessible with route to site. Considerable vehicle tracks. No debris. Minor erosion.
Y/L-3-1	310-311	311	29/30	10.0	P			Barren to sparsely vegetated. Accessible, possible route to site. No activity tracks or debris.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-3-2	310-311	311	8	8.0	Q			Barren to sparsely vegetated. Accessible with possible route to site. Few tracks visible. No debris. Slight erosion.
Y/L-2-3	312-313	313	33	3.0	Q			Barren to sparsely vegetated. Easily accessible with direct route. Possible vehicle tracks, no debris. Slight erosion.
Y/LE-3-3	314-315	315	18/23	10.0	P			Barren. Accessible with direct route to site. Possible tracks. No debris. Moderate erosion.
Y/LE-3-4	315-316	316	12	2.0	P			Extremely barren. Accessible, definite direct route. Definite activity tracks no debris. Slight erosion.
Y/LE-3-5	"	"	22/27	15.0	P			Barren to sparse vegetation. Accessible with direct route to site. Possible vehicle tracks. No debris. Slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional sites (minor)
Photo 289, grid 14, size 1.5 acres.
Photo 312, grid 6/11, size 0.5 acres.

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-4-4	338-339	339	13	7.0	P			Barren to sparsely vegetated. Accessible. Definite route and tracks. No debris. Minor erosion.
Y/L-4-5	"	"	14	10.0	P			Barren excavation, thinly vegetated fringe area. Accessible with direct route. No tracks or debris. Considerable erosion.
Y/L-3-6	"	"	22/27/23	70.0	P			Large site with barren and thinly vegetated areas. Accessible with direct routes to site. Adjacent vehicle tracks. No debris.
Y/L-3-7	"	"	31/32	13.0	P			Barren. Access difficult by direct route. Vehicle tracks. No debris. Considerable excavation work at adjacent sites.
Y/L-3-8	"	"	27	2.5	P			Very barren and much excavation. Difficult access with routes to site. Some activity tracks. No debris. Very slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional sites (minor)
Photo 316, grid 24, size 0.5 acre.
Photo 339, grid 19, size 1.5 acre.
grid 21/26, size 2.0 acre.

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-3-9	338-339	339	28	35.0	P			Very barren, much excavation. Ridge-pass type site. Access difficult, but located between two other sites. Possible tracks. No debris. Significant erosion.
Y/L-3-11	"	"	29	3.0	P			No ground cover. Access difficult by direct route. Vehicle tracks. No debris. Slight erosion but erodibility high.
Y/L-3-13	"	"	32/33	5.0	P			No vegetation, excavated site. Difficult access, but direct route to site. No debris. No vehicle tracks. Very minor erosion.
Y/L-3-14	"	"	34	5.0	P			Thin ground cover. Steep wall excavation site. Easily accessible, many vehicle tracks. Structural(?) debris. Moderate erosion.
Y/L-3-15	339-340	340	5/10	3.0	P			Barren to sparsely vegetated. Accessible with direct route (adjacent improved road). Numerous tracks, no debris. No erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-3-16	339-340	340	28	3.0	P			Barren depression site. Accessible with trace of direct route. No tracks or debris. Slight erosion.
Y/L-3-17	342-343	343	27/22	50.0	P			Barren to sparsely vegetated. Easily accessible with direct route to site. Vehicle tracks. No debris. Severe erosion within and adjacent to site.
Y/L-3-18	344-345	345	14	2.0	Q			Sparse to moderate vegetation. Accessible with direct route from nearby improved road. Vehicle tracks. No erosion or debris.
Y/L-2-19	345-346	346	33	2.5	Q			Sparsely vegetated excavation site, barren fringe area. Difficult accessibility, no direct route, vehicle tracks or debris. Slight erosion.
Y/L-2-20	"	"	24	2.5	P			Very barren excavated site, thinly vegetated fringe area. Accessible, numerous vehicle tracks. No debris. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-4-21	370-371	371	12/17	10.0	P			Very barren depression. Accessible, no direct route. No vehicle tracks or debris. Moderate erosion within and adjacent to site.
Y/L-4-22	"	"	17/18	5.0	P			Sparsely vegetated. Easily accessible with direct routes to site. Vehicle tracks. No debris. Minor erosion.
Y/PP-1-1	"	"	22	3.0	Q			Barren to sparsely vegetated site. Difficult access. Trace of direct route. No debris. Trace of vehicle, activity tracks. Slight erosion.
Y/L-4-23	"	"	27	3.0	P			Small excavated site. Sparsely vegetated. Accessible with direct route to site. Numerous vehicle tracks. No debris. Minor erosion.
Y/L-4-24	"	"	32	3.0	Q			No ground cover. Hillside excavation. Accessible with route. Vehicle tracks. No debris. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional sites (minor)
Photo 350, grid 29, size 2.0 acres
Photo 348, grid 12/13, size 1.5 acres
grid 30, size 2.0 acres
Photo 352, grid 38, size 3.0 acres

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/PP-1-2	370-371	371	37	12.0	P			Barren depression. Accessible with direct route to site. Vehicle tracks visible. No debris. Considerable erosion.
Y/PP-1-3	"	"	42	3.0	P			Depression with no vegetation. Accessible with direct route. Activity/vehicle tracks. Moderate erosion.
Y/L-4-25	371-372	372	29	6.0	P			Very barren, stripped surface site. Accessible with direct route and vehicle tracks. No debris. Very minor erosion. Small adjacent site.
Y/L-4-26	"	"	37	10.0	P			Barren hill base excavation. Accessible, no direct route or vehicle (activity) tracks. No debris. Slight external erosion.
Y/L-4-27	374-375	375	27	3.0	P			Thinly vegetated depression type site. Accessible with direct route. Vehicle tracks. No debris.
Y/L-1-28	"	"	33	3.0	Q			Small, thinly vegetated site. Accessible with direct route and activity tracks. No debris. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-1-29	375-376	376	39	12.0	Q			Sparsely vegetated depression. Considerable excavation. Accessible but no visible route or vehicle tracks. No debris. Moderate internal erosion.
Y/L-1-30	376-377	377	23	4.0	P			Thinly vegetated condition. Accessible with direct access route. Vehicle tracks, no debris. Slight erosion.
Y/L-1-31	377-378	378	29	2.5	Q			Thinly vegetated condition. Accessible but no defined route. No vehicle tracks or debris. Moderate erosion.
Y/LE-4-6	379-380	380	26	3.0	P		Adjacent possible sites.	Barren. Accessible with possible route to site. No vehicle or activity tracks. No debris. Additional sites (2) nearby at same elevation.
Y/DB-2-1 Y/DB-2-2 Y/DB-2-3	399-400	400	12	3 sites 4.0	P		Contour line excavations.	Three small barren excavated sites at same elevation. Access very difficult but direct route to site. Numerous vehicle tracks. No debris. Minor erosion adjacent to site.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/PP-1-4	399-400	400	32	3.0	P			Barren excavated site. Near improved road, easy access. Definite vehicle tracks within site. No debris and very little erosion.
Y/DB-2-4	400-401	401	6/11	2.0	P			Older excavated site (barren to sparsely vegetated condition). Very difficult access by one trail. No activity or vehicle tracks. Severe erosion within and near site.
Y/PP-1-5	"	"	16/17/21	70.0	P			Barren (few shrubs) rectangular depression. Difficult access but direct routes to site. Definite vehicle tracks. Visible structure or debris. Considerable erosion.
Y/PP-1-6 Y/PP-1-7	"	"	21/26	2 sites 35.0	P		Two large adjacent sites.	Two large adjacent sites. Appear to be older sites due to erosion and vegetative condition. (Barren with few shrubs). Access difficult but direct route. Vehicle tracks, no debris. Significant erosion.
Y/PP-1-8	"	"	17/22	5.0	P			Sparsely to moderately vegetated. Difficult access but direct route to site. No debris. Significant erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/PP-1-9	400-401	401	24/29	70.0	Q			Very barren. Deep depression type site. Access difficult, but direct routes to site. Many vehicle tracks. No debris. Considerable erosion.
Y/M-3-1	402-403	403	6/11	3.5	P			Barren to sparsely vegetated condition. Easy accessibility with direct route to site. Visible activity tracks. No debris or significant erosion.
Y/M-3-2	403-404	404	9	5.0	Q			Very thin ground cover. Accessible but no route to site. No vehicle or activity tracks. No debris. Minor site erosion.
Y/M-3-3	406-407	407	7	4.0	Q			Barren depression type site. Easily accessible with adjacent improved road. No activity or vehicle tracks. No debris. Moderate site erosion.
Y/M-3-4 Y/M-3-5	"	"	9	2 sites 12.0	Q			Two adjacent sites with thin vegetation cover. Difficult access with no visible route to site. No debris or activity tracks. Slight erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/L-1-32	408-409	409	28/29/33/34	12.0	P			Barren excavation sites with sparsely vegetated fringe areas. Accessible but no marked route to site. No vehicle or activity tracks. No debris. Significant erosion within and adjacent to site.
Y/B-3-1	410-411	411	17/18	4.0	Q			Very sparse ground cover. Easily accessible with adjacent improved road. No vehicle tracks or debris. Significant erosion.
Y/M-2-6	"	"	21	10.0	Q			Barren with some low brush. Accessible with adjacent route. No apparent vehicle or activity tracks. No debris. Moderate erosion.
Y/DB-2-5	430-431	431	26	10.0	Q			Barren excavation with sparsely vegetated fringe area (brush). Very accessible with direct route to site. Considerable activity/vehicle tracks. Possible structural debris. Moderate erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional sites (minor)
Photo 406, grid 21, size 2.5 acres
Photo 409, grid 23, size 1.0 acre
grid 28, size 1.0 acre

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/DB-2-6 Y/DB-2-7 Y/DB-2-8	430-431	431	33/34/ 38/39/ 43	3 sites 23.0	P			Three small sites. Sparsely to moderately vegetated. Accessible with direct route to each site (connecting route). Some activity tracks. No debris. Slight erosion.
Y/DB-2-9	431-432	432	19	6.0	P			Barren to sparsely vegetated (grasses?) Accessible with direct route. No debris or significant erosion.
Y/DB-2-10	"	"	31/32	19.0	Q			Very barren site. Difficult accessibility. Possible route to site and vehicle tracks (trace). No debris. Considerable internal erosion.
Y/M-3-7	432-433	433	17	15.0	P			Barren to partially vegetated (low cover). Easily accessible with direct route. Visible vehicle tracks. No debris. Moderate erosion throughout.
Y/M-3-8	"	"	27/32	7.0	Q			Sparsely vegetated with grassy cover(?). Very disturbed. Difficult accessibility and no route or activity tracks visible. No debris. Moderate erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-3-9	433-434	434	13	3.0	Q			Thinly vegetated. Easy accessibility with direct access. No vehicle tracks, no debris. Moderate erosion into local creek.
Y/M-3-10	434-435	435	34	5.0	Q			Very barren site. Easily accessible and adjacent to improved road. Evident vehicle/activity tracks. No debris. Moderate site erosion.
Y/M-3-11	"	"	43	10.0	P			Vegetation cover may include short grass. Considerable excavation or disturbance evident. Easily accessible (adjacent to improved road). No vehicle tracks or debris present.
Y/M-3-12	435-436	436	24	5.0	Q			Barren to sparsely vegetated. Very difficult accessibility. No route to site, vehicle tracks or debris. Moderate internal erosion.
Y/M-3-13	"	"	23/28	30.0	Q			Hill/depression site. Barren to sparsely vegetated condition. Difficult accessibility. Trace of direct route with possible activity tracks. No debris. Considerable erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-3-14	435-436	436	34	6.0	P			Barren to sparsely vegetated. Difficult accessibility with direct route to site. Trace of activity tracks. No debris. Slight erosion.
Y/M-2-15	436-437	437	28	9.0	P			Barren excavated areas. Sparse to woody vegetated fringe areas. Accessible with direct route to site. Evident activity tracks. No debris. Moderate erosion.
Y/M-2-16	437-438	438	13/14	60.0	P			Barren excavated areas, vegetated (low bushes and grass) fringe areas. Difficult accessibility but route evident. Evident vehicle tracks. No debris. Very slight erosion. Various types of excavation. Depression, girdled hill, stripped surface.
Y/M-2-17 Y/M-2-18	439-440	440	28	2 sites 5.5	P			Both sites barren to sparsely vegetated. Accessible with direct route. Activity tracks visible. No debris. Only one area exhibits erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional site (minor)
Photo 437, grid 31, size 1.5 acre

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-2-19	439-440	440	33/34	3.0	Q			Small moderately vegetated (grass and shrubs) depression. Accessible but no direct route visible. Possible activity tracks. No debris. Moderate site erosion.
Y/DB-1-11	460-A-461	461	6/7/11	15.0	P			No vegetation. Depression-type site. Difficult accessibility, with path to site. Activity tracks outside site. No debris. Moderate erosion.
Y/DB-1-12	"	"	22/23/27/28	10.0	P			No ground cover. Difficult accessibility but visible path to site. No vehicle or activity tracks. No debris. Slight erosion.
Y/DB-1-13	"	"	32/37	16.0	P			Site lacks vegetative ground cover. Easily accessible with direct routes to site. Numerous vehicle and activity tracks. Some debris(?). Minor erosion.
Y/M-4-20	461-462	462	19	9.0	P			Thin ground cover. Depression-type site with considerable excavation. Accessible with direct route to site. No activity tracks. No debris. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/DB-1-14	461-462	462	21/26/27	35.0	P			Very thin ground cover (barren/scattered shrubbery). Difficult access, but direct route to site. No activity tracks within site. Considerably disturbed surface. No debris. Moderate erosion.
Y/DB-2-15	"	"	31	10.0	P			Very thin ground cover. Difficult accessibility with no evident route to site. No activity or vehicle tracks. No debris. Minor erosion.
Y/DB-2-16	"	"	33	3.0	Q			Small thinly vegetated depression. Accessible with route to site. Evident vehicle tracks. No debris within site. Minor site erosion.
Y/DB-2-17	"	"	36/37	15.0	Q			Sparse to moderate ground cover (grass and shrubs). Highly disturbed surface. Depression type site. Accessible with direct route (path) to site. No evident activity tracks or debris within the site. Considerable erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-4-21	462-463	463	2/7	35.0	Q			Mixed surface and excavation conditions. Very thin ground cover throughout. Accessible but no direct route to site. No activity or vehicle tracks. No debris within site. Very severe erosion throughout.
Y/M-4-22	"	"	17	6.0	P			Barren depression. Accessible with a direct path to site. Adjacent vehicle tracks. No debris. Minor erosion.
Y/M-4-23	"	"	18	5.0	Q			Grassy site. Depression-type site. Accessible with adjacent improved road. No debris. No erosion.
Y/M-4-24	"	"	23	5.0	P			Depression-type site with thin ground cover. Easily accessible with adjacent improved road. Activity tracks outside site (?). No debris. Minor erosion.
Y/M-4-25 Y/M-4-26	"	"	28	2 sites 9.0	Q		Adjacent to oil field	Thin ground cover. Easily accessible with adjacent improved road. Numerous vehicle tracks. Site is adjacent to oil field (mine site possibly related).

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-4-27	463-464	464	16	16.0	P			Thin ground cover. Very difficult accessibility with no evident route to site. Depression with considerable disturbed surface. No activity tracks or debris. Moderate site erosion.
Y/M-4-28	"	"	22	25.0	P			Extremely sparse ground cover. Deep depression-type site. Difficult accessibility with trace of access route. Possible activity/vehicle tracks. No debris. Considerable erosion.
Y/M-4-29	464-465	465	13	12.0	P			Barren to thin ground cover. Easily accessible with improved road running through site. Vehicle and activity tracks. Possible equipment, structural debris. Moderate to heavy erosion.
Y/M-4-30	"	"	38/43	3.0	P			Total lack of ground cover. Difficult accessibility. No evident route to site. No activity or vehicle tracks. No debris. Minor erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks:

NORTH-CENTRAL TEXAS ABANDONED COAL MINE SURVEY

Young County — Photo Date: June thru August 1941

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Likelihood Office	Likelihood Field	Notable Feature	Description
Y/M-4-31	465-466	466	6/7/11/12	5.0	U			Depression. Barren. Difficult accessibility. Direct routes to site. Evident vehicle tracks. Subtle feature identified as water impoundment structure during second review.
Y/M-2-32	465-466	466	38	5.0	P			Thin ground cover. Deep depression site. Difficult accessibility with non-direct route. No activity or vehicle tracks. No debris. Moderate erosion.
Y/M-1-33	467-468	468	21	2.5	P			Small barren excavated site (base of hill). Very difficult accessibility, definite trace of route to site. Possible vehicle or activity tracks. No debris. Considerable erosion.
Y/M-1-34	"	"	27	3.0	P			Very barren site. Difficult accessibility. Route adjacent to site but not direct. No apparent vehicle or activity tracks. No debris within site. Considerable erosion.

*Likelihood Coding
D-Definite
P-Probable
Q-Questionable
U-Unlikely

Remarks: Additional site (minor)
Photo 469, grid 31, size 1.5 acre

APPENDIX B

List of Possible Mine Sites in Young County, Texas Exhibiting Significant Erosion

Size is given in acres.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/P-2-2	107-108	108	9	10.0	Slight sheetwash erosion. Sediment transported approximately 400 ft (120 m) to stream channel. Distributary drainage accompanies deposition in channel.
Y/P-2-4	108-109	109	17	10.0	Slight sheetwash erosion. Runoff transported by single wide channel to earthen tank approximately 1200 ft (365 m) from source. Deposition occurs where channel enters tank.
Y/TM-3-8	110-111	111	28	7.0	Moderate sheetwash and gully erosion. Sediment transported approximately 700 ft (215 m) to junction with stream. Small distributary channels form at the junction.
Y/TM-2-20	114-115	115	1/2/6/7	100.0	Considerable sheetwash and gully erosion throughout entire site. Runoff immediately enters adjacent streams. Channel thalwegs are diverted by deposition of sediment in stream channels.
Y/TM-2-25	115-116	116	37/42	11.0	Slight erosion downslope. Sheetwash is collected by a single channel. Sediment is transported approximately 300 ft (90 m) to stream. No significant deposition or disturbance at junction with stream.
Y/E-3-10 Y/E-3-11	118-119	119	26/31	2 sites 5.0	Moderate erosion downslope. Runoff via wide, deep channel to stream. Sediment is transported approximately 900 ft (275 m) to stream. Disturbed bank and gullying at entry point.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/P-2-10	135-137	137	39	10.0	Slight gully erosion. Single channel transports sediment approximately 600 ft (180 m) to stream. Sheetwash occurs at junction with stream.
Y/P-1-13	137-138	138	21	10.0	Slight erosion downslope. Sheetwash with some gully erosion. Direct runoff into adjacent stream. Slight deposition at confluence has caused minor diversion of channel.
Y/TM-1-39	144-145	145	27	5.0	Slight erosion within site area. Two channels transport runoff approximately 600 ft (180 m) to stream. Deposited material from one channel has caused a stream course change.
Y/E-4-22	148-149	149	24	8.0	Considerable erosion. Several gullies transport sediment approximately 1000 ft (300 m) to stream. Some sheetwash. Stream channel modified at junction. Thalweg displaced owing to deposition.
Y/TM-4-48	171-172	172	7	5.0	Minor sheetwash erosion. Single channel carries runoff to stream. Dissected stream bank at junction with stream.
Y/TM-4-50	"	"	7/8	50.0	Considerable erosion. Primarily sheetwash with slight gully erosion. Runoff is directly introduced into streams or transported approximately 1000 ft (300 m) to stream. Distributary drainage and deposition at confluence.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/TM-4-48	171-172	172	7	5.0	Slight erosion. Single channel transports sediment 200 ft (60 m) from site to stream. No significant disturbance at confluence.
Y/TM-4-51	173-174	173	4/5/9	80.0	Considerable erosion within site. Many gullies and substantial sheetwash erosion. Runoff is carried directly to streams and is also transported approximately 1200 ft (365 m) to earthen dam. Earthen dam located between site and nearest stream. Visible deposition at tank entry point.
Y/TM-4-52	"	174	23/24/28/29	80.0	Considerable erosion by sheetwash. Gullies convey runoff to nearest stream. Slight deposition occurs where gullies join streams.
Y/TM-1-56	176-177	177	1	10.0	Considerable erosion within site. Two large channels convey runoff to adjacent streams. Deposition of sediment at one junction of channels has diverted the stream channel.
Y/TM-1-57	"	"	12/13	8.0	Moderate sheetwash erosion carries sediment to stream. No gully erosion or displacement of channel thalweg is apparent.
Y/T-1-6	219-220	220	2/3	10.0	Considerable erosion. Gully formation with runoff directly entering stream as severe sheetwash. Highly disturbed stream junction with considerable deposition.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/T-1-8 Y/T-1-9	219-220	220	8	2 sites 8.0	Moderate sheetwash and gully erosion. Runoff flows directly into nearby stream and also flows overland about 2700 ft (820 m). Two stream junctions exemplify (1) a stream course changed by deposition and (2) an unaffected stream.
Y/T-1-11 Y/T-1-12	220-221	221	4/9	2 sites 7.0	Slight to moderate sheetwash and gully erosion. Overland flow travels two directions: (1) approximately 1200 ft (365 m) and (2) 600 ft (180 m). Confluence conditions cannot be determined.
Y/T-4-14	246-247	247	28	11.0	Considerable sheetwash with slight gully erosion at stream junction. Runoff flows overland approximately 1200 ft (365 m). Junction of stream and gullies may be disturbed.
Y/T-1-16	248-249	249	6/7/11	70.0	Extensive gully and sheetwash erosion. Runoff flows overland about 3900 ft (1190 m) and 1500 ft (460 m). Some deposition has occurred at junction with stream.
Y/LE-3-1	284-285	285	7/12	8.0	Moderate gully and sheetwash erosion. Sediment is transported approximately 1000 ft (300 m) to stream. Very slight modification of stream channel by deposition.
Y/N-4-32	"	"	34	23.0	Moderate sheetwash and gully erosion. Runoff flows directly into stream, depositing sediment.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/L-4-4	338-339	339	13	7.0	Slight erosion with single channel carrying runoff to stream. Runoff flows overland approximately 1000 ft (300 m). Insignificant deposition at junction with the stream.
Y/L-4-5	"	"	14	10.0	Considerable sheetwash and slight gully erosion. Runoff flows directly into stream with little overland flow. Deposition in stream channel may have altered stream's course.
Y/L-3-6	"	"	22/23/27	35.0	Moderate to heavy sheetwash and gully erosion. Distance from stream to source is 825 ft (250 m). Slight deposition at junction with stream. Gullies present.
Y/L-3-7	"	"	31/32	13.0	Slight sheetwash and gully erosion. Sediment transported approximately 1000 ft (300 m) to stream. Deposition of sediment has occurred at junction with stream.
Y/L-3-9	"	"	28	35.0	Significant sheetwash erosion. Runoff flows directly into stream. Slight deposition at junction with stream.
Y/L-3-13	"	"	32/33	5.0	Slight gully erosion. Runoff flows approximately 825 ft (250 m) to stream. Slightly disturbed junction with stream.
Y/L-3-14	"	"	34	5.0	Moderate gully erosion. Runoff is transported 825 ft (250 m) to stream. Minor deposition.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/L-3-17	342-343	343	27/22	50.0	Extensive sheetwash erosion with minor gully erosion. Sediment transported approximately 1850 ft (565 m) to stream. Deposition in stream.
Y/L-4-21	370-371	371	12/17	10.0	Moderate sheetwash and gully erosion. Gully terminates at large earthen dam. Distance is approximately 1850 ft (565 m). Deposition may have occurred there.
Y/L-4-22	"	"	17/18	5.0	Minor sheetwash and gully erosion. Sediment transported approximately 1450 ft (440 m) to stream. No apparent disturbance or deposition at confluence.
Y/PP-1-2	"	"	37	12.0	Moderate erosion within site, with considerable gully erosion between site and stream. Sediment transported approximately 825 ft (250 m) to earthen dam. Deposition has occurred.
Y/L-1-29	375-376	376	39	12.0	Slight gully erosion. Runoff transported approximately 2700 ft (820 m) to stream. Stream channel not affected here (owing to transport distance?).
Y/PP-1-5	400-401	401	16/17/21	70.0	Considerable gully formation and erosion by sheetwash at site, but little export of sediment from this low-lying area.
Y/L-1-32	408-409	409	28/29/33/34	12.0	Moderate sheetwash erosion with direct transport of sediment into nearby stream. Complex, poorly defined junction with stream due to gentle local slope.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/M-2-6	410-411	411	21	10.0	Moderate sheetwash and gully erosion. Runoff exits site via complex gully system and enters anastamosing channels of stream.
Y/M-3-7	432-433	433	17	15.0	Moderate erosion. Small gully carries runoff to small stream. Sediment is transported approximately 1000 ft (300 m) to stream.
Y/M-3-11	434-435	435	43	10.0	Slight erosion at site with transport of sediment extending 400 ft (120 m) from source to stream.
Y/M-3-12	435-436	436	24	5.0	Minor sheet erosion with runoff flowing directly into stream. No apparent disturbance at junction with stream.
Y/M-3-13	"	"	23/28	30.0	Minor sheetwash and gully erosion. Sediment transported approximately 1650 ft (500 m) to stream. No significant disturbance of stream channel.
Y/M-2-15	436-437	437	28	9.0	Moderate sheetwash and gully erosion. Runoff flows directly into earthen tank. Sediment transported approximately 1000 ft (300 m) to tank.
Y/DB-1-11	460-A-461	461	6/7/11	15.0	Moderate sheetwash and gully erosion. Runoff forms stream approximately 1450 ft (440 m) from excavation site.
Y/DB-1-12	"	"	22/23/27/28	10.0	Very slight erosion downslope from site. Sediment transported approximately 825 ft (250 m) to stream. Minor deposition in stream channel.

Site I.D.	Photo Pair	Photo No.	Grid No.	Size	Description
Y/DB-1-14	461-462	462	21/26/27	35.0	Slight to moderate sheetwash and gully erosion. Sediment is transported to stream via two channels. Runoff travels 1237 ft (381 m) and 300 ft (90 m). Minor deposition at junction with stream.
Y/M-4-29	464-465	465	13	12.0	Moderate sheetwash and gully erosion. Runoff flows directly into stream. Deposition has altered the position of the channel thalweg.