

Using ArcGIS to Manage Final Bond Release Data

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ND PSC

Microsoft Excel - 1979 Law Bond Release Summary.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

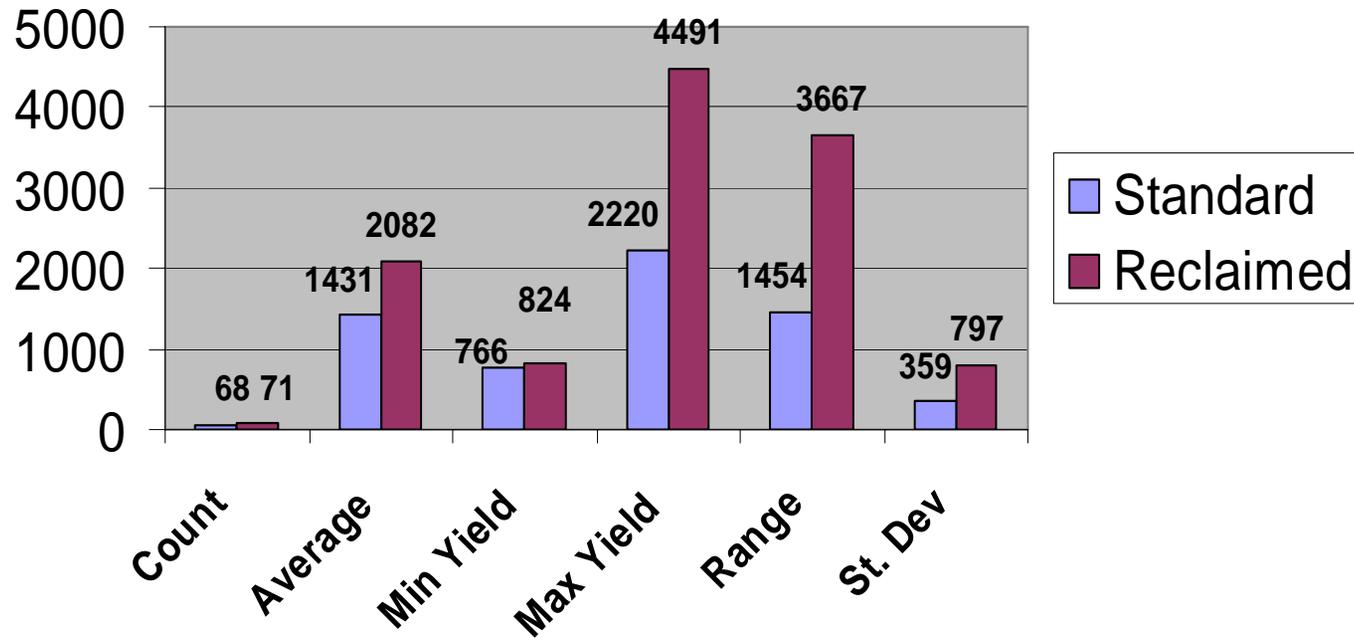
100% Arial 10 B

Reply with Changes... End Review...

	A	B	C	D	E	F	G	H	I	J	K
1	Mine	Permit	Bond Rel Number	Tract	Bond Rel Date	Acres	Year Planted	Year Sampled *	Yield: lbs/acre		Seed Mixture/Management During Liability Period
2								Standard	Reclaimed		
3	Glenharold	51	4	1A	2/9/2001	26.8	1981	1997	2008	2742	Seeded with Intermediate wheatgrass, tall wheatgrass, alfalfa and sweetclover (13 lbs/ac). Initially clipped then periodically hayed during liability period. Idle half of the time.
4								1998	2279	3196	
5								1999	4169	4720	
6				2B	2/9/2001	8.75	1981	1997	1341	1529	
7								1998	1522	1965	
8								1999	2787	4037	
9				3A	2/9/2001	55.32	1981	1997	1886	1903	
10								1998	2141	2179	
11								1999	3914	4510	
12											
13	Indian Head	7905 & 8001	5	3 & 2B	9/15/1998	46.1	1985 - 1991	1995	2880	3720	Seeded to Crested wheat, smooth brome, alfalfa & sweetclover (21.0 lbs/acre)
14								1996	2480	2300	
15											
16	Indian Head	8001	6	2B	2003	7.8	1990	1999	3000	3420	Tract was seeded to crested wht, smooth brome, and sweet clover (21 lbs/ac). Hayed annually - yield estimated at 1.5 t/ac 9 of 12 yrs, 1.25 2 of 12 yrs 1.75 one yr. Standard derived from County Average
17								2000	2000	2640	
18								2001	2760	3240	
19											
20	Indian Head	8504	4	2	2004	7.55	1993 & 1995	2001	3000	3680	Seeded to Intermediat, Tall & Pubescent Whtgras alfafa (17.5lbs). Hayed 1993-2003. Reseeded in 1995
21								2002	1560	1960	
22				6A	2004	14.827	1995	2001	2560	3960	
23								2002	1340	2440	
24								2001	2940	4360	
25	8A	2004	7.98	1995	2002	1540	2680				
26					2001	2940	4360				
27	Indian Head	8103	9	9	Dec-03	1.7	1993	2000	3360	3260	1975-law. Used to support 79-law minir
28								2001	3200	3060	
29											
30											
31									Standard	Reclaimed	
32								Total Acres	Count	22	22
33								176.827	Average Yield	2485	3068
34									Min Yield	1340	1529
35									Max Yield	4169	4720
36									Range	2829	3191

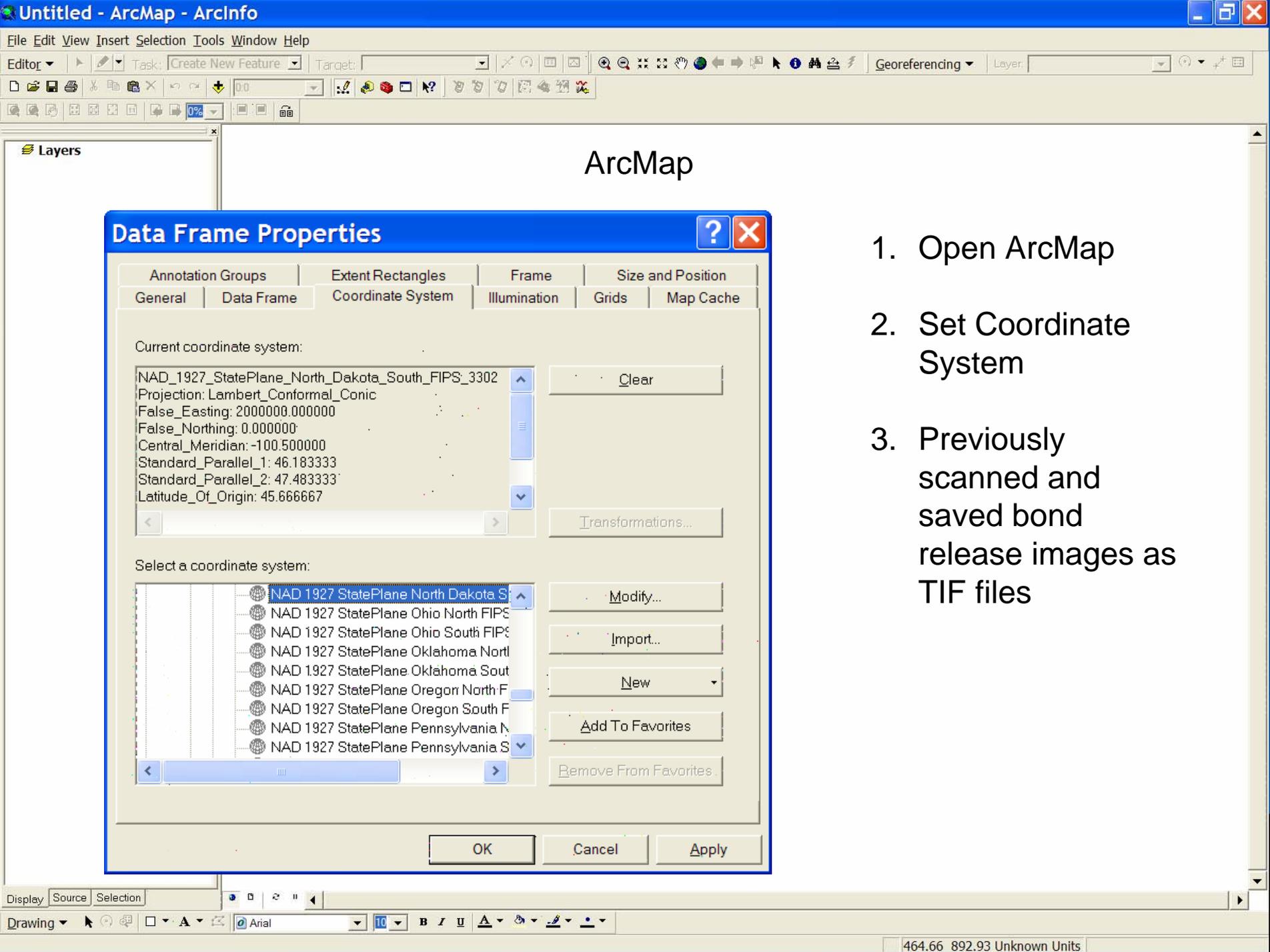
Excel Chart

Post 1979-law Native Grassland Yield Comparison



Bond Releases 1-10 for Permit NAIH-8103





ArcMap

1. Open ArcMap
2. Set Coordinate System
3. Previously scanned and saved bond release images as TIF files

Data Frame Properties

Annotation Groups Extent Rectangles Frame Size and Position
General Data Frame Coordinate System Illumination Grids Map Cache

Current coordinate system:

NAD_1927_StatePlane_North_Dakota_South_FIPS_3302 Clear
Projection: Lambert_Conformal_Conic
False_Easting: 2000000.000000
False_Northing: 0.000000
Central_Meridian: -100.500000
Standard_Parallel_1: 46.183333
Standard_Parallel_2: 47.483333
Latitude_Of_Origin: 45.666667
Transformations...

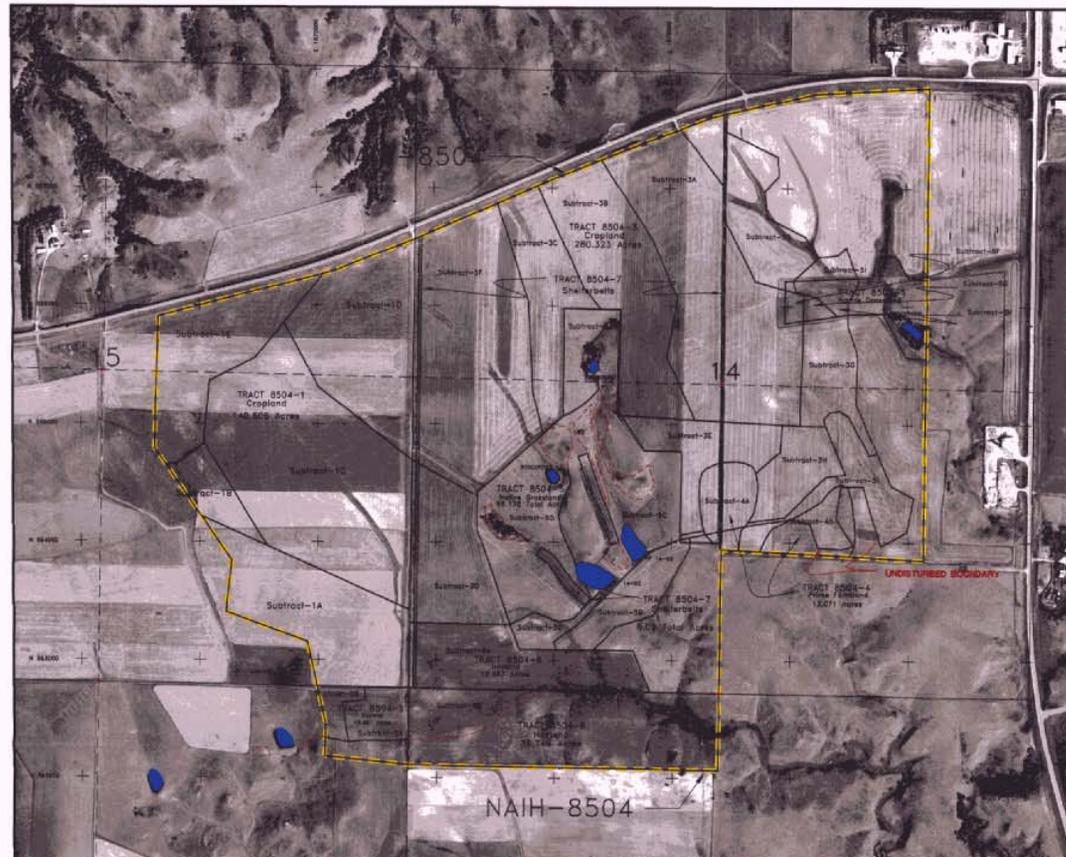
Select a coordinate system:

NAD 1927 StatePlane North Dakota S
NAD 1927 StatePlane Ohio North FIPS
NAD 1927 StatePlane Ohio South FIPS
NAD 1927 StatePlane Oklahoma Nort
NAD 1927 StatePlane Oklahoma Sout
NAD 1927 StatePlane Oregon North F
NAD 1927 StatePlane Oregon South F
NAD 1927 StatePlane Pennsylvania N
NAD 1927 StatePlane Pennsylvania S
Modify...
Import...
New
Add To Favorites
Remove From Favorites

OK

Cancel

Apply



Tract	Topsoil	Subsoil	Resprout Completed	Seeding Date	Tract	Topsoil	Subsoil	Completed	Date
TRACT 8306-1					TRACT 8306-4				
Subtract 1A:	13"	32"	Oct. 1988	Nov. 1988	Subtract 4A:	13"	48"	Oct. 1992	Nov. 1992
Subtract 1B:	12"	24"	Nov. 1989	Nov. 1989	Subtract 4B:	12"	48"	May 1995	Nov. 1992
Subtract 1C:	11"	16"	Sept. 1991	May 1992	TRACT 8303-5				
Subtract 1D:	9"	N/A	Oct. 1992	Oct. 1992	Subtract 5A:	12"	12"	July 1992	Sept. 1992
Subtract 1E:	10"	N/A	March 1993	May 1993	Subtract 5B:	12"	24"	July 1992	Sept. 1992
					Subtract 5C:	12"	12"	May 1993	May 1993
TRACT 8506-2					Subtract 5D:	10"	14"	March 1993	May 1993
Subtract 2A:	9"	34"	May 1993	May 1993	Subtract 5E:	8"	24"	May 1995	May 1995
Subtract 2B:	8"	28"	May 1995	May 1995	Subtract 5F:	11"	28"	Oct. 1990	Oct. 1990
					Subtract 5G:	12"	N/A	Oct. 1992	Oct. 1992
TRACT 8503-3					Subtract 5H:	6"	24"	May 1995	May 1995
Subtract 3A:	11"	34"	Oct. 1988	Nov. 1988	TRACT 8303-6				
Subtract 3B:	11.5"	32"	Nov. 1989	Nov. 1989	Subtract 6A:	8"	24"	May 1995	May 1995
Subtract 3C:	12"	33"	May 1990	June 1990	TRACT 8303-6				
Subtract 3D:	12"	20.5"	March 1993	May 1993	Subtract 6B:	8"	24"	May 1995	May 1995
Subtract 3E:	11.8"	22.3"	Oct. 1992	Oct. 1992	TRACT 8303-6				
Subtract 3F:	11-13"	23.2"	March 1993	May 1993	Subtract 6A:	8"	24"	May 1995	May 1995
Subtract 3G:	11.3"	N/A	Oct. 1992	May 1993					
Subtract 3H:	11.3"	N/A	Oct. 1992	Oct. 1992					
Subtract 3I:	8-8"	24-40"	May 1995	May 1995					

- LEGEND**
- PERMIT BOUNDARY
 - - - SECTION LINES
 - - - QUARTER LINES
 - - - ORIGINAL STONE
 - IRON PIN FOUND OR SET

Scale 1" = 400 ft

BELLAIRE CORPORATION INDIAN HEAD MINE
BELLVALE, ND 58523

ATTACHMENT V

AERIAL PHOTO MAP

0 100 200 300 400 500 600 700 800 900 1000

DATE: 7/27/03

SCALE: 1" = 400'

PROJECT: NAIH-8504 BOND RELEASE NO. 1



GeoReference TIF Image

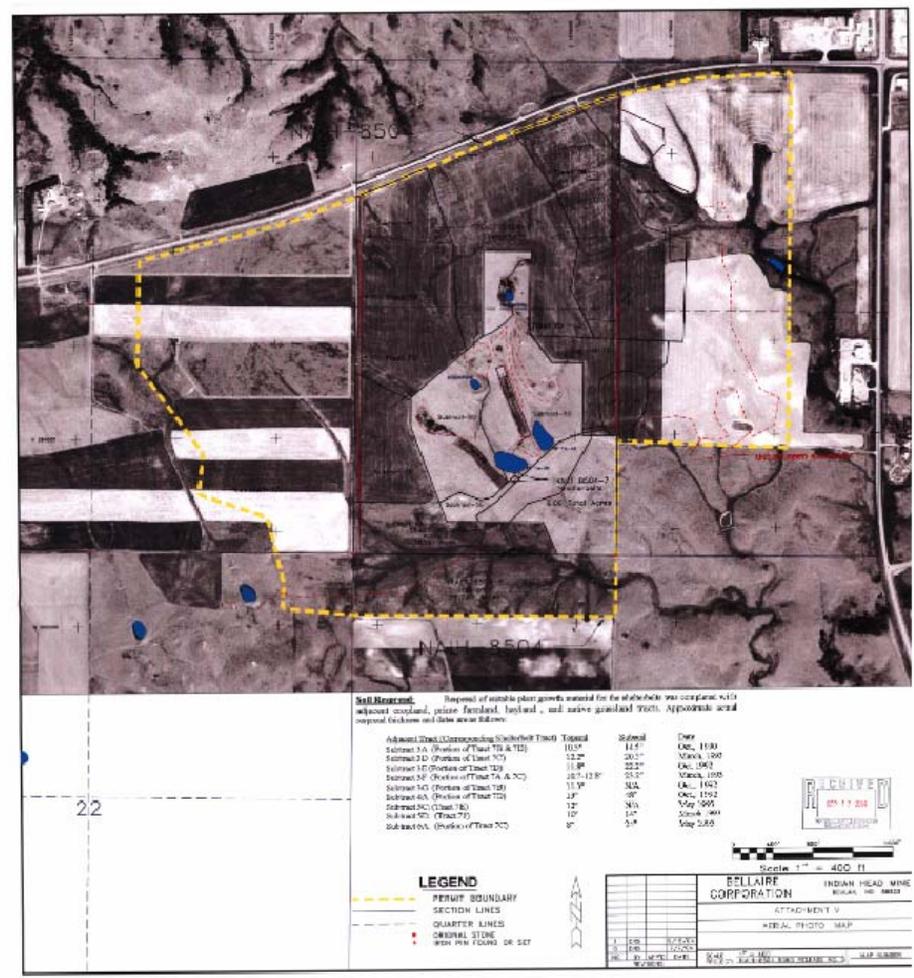
- Add County section line data to ArcMap or any other properly Geo-Referenced map or data
- Window over the area where map belongs
- Fit the Tif image to the display area
- Alter the display transparency of the image
- Add Control Points – Move photo to known points – i.e. DOT section corners
- Rectify image

Editor Task: Create New Feature Target: Target Layer

1:54 0%

Layers

- Airphoto.tif
 - RGB
 - Red: Band_1
 - Green: Band_2
 - Blue: Band_3

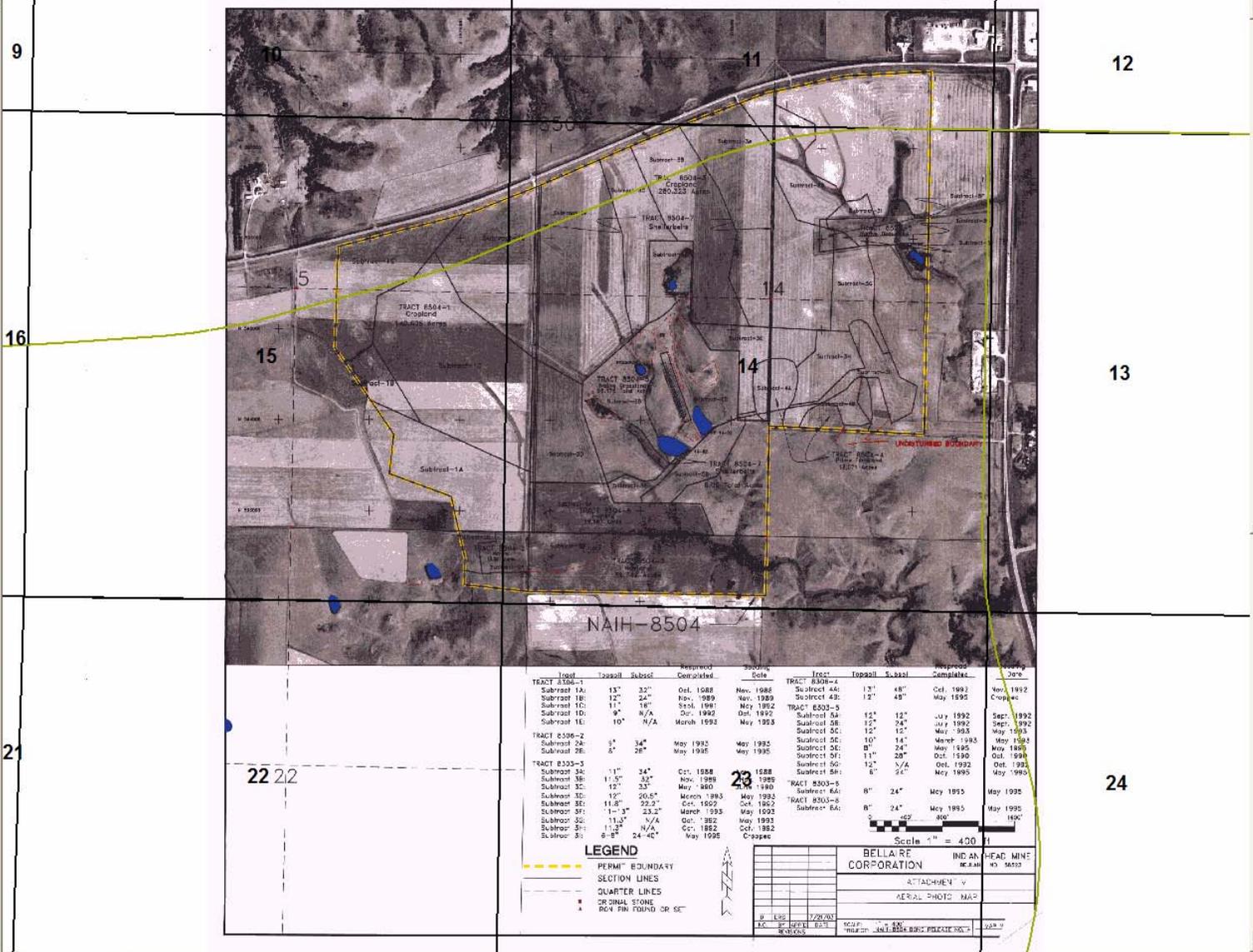


Display Source Selection

Drawing Arial 10 B I U

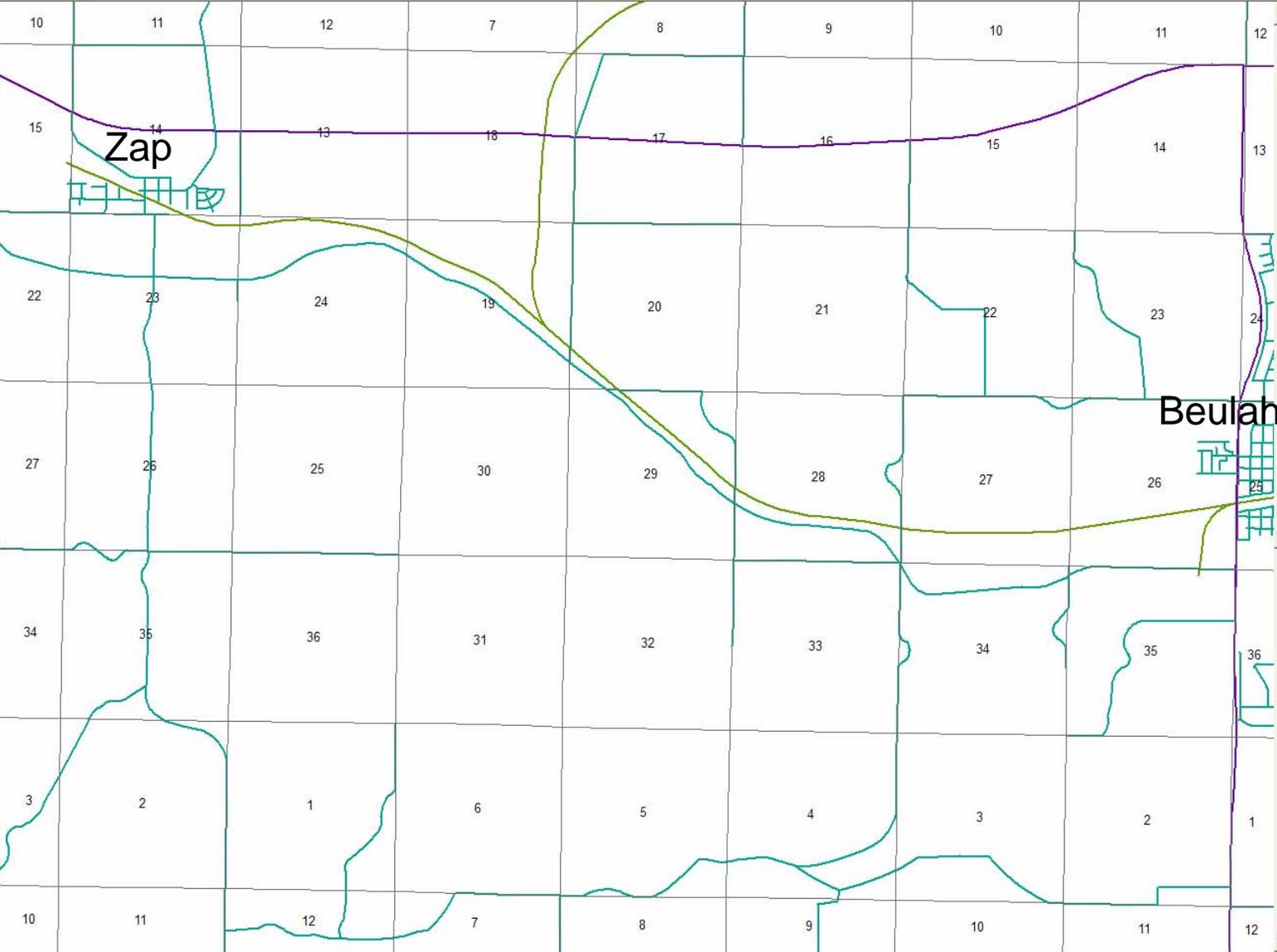
Layers

- nd_city arc
- rd_state arc
- Mercer County
- BondRel4map.tif



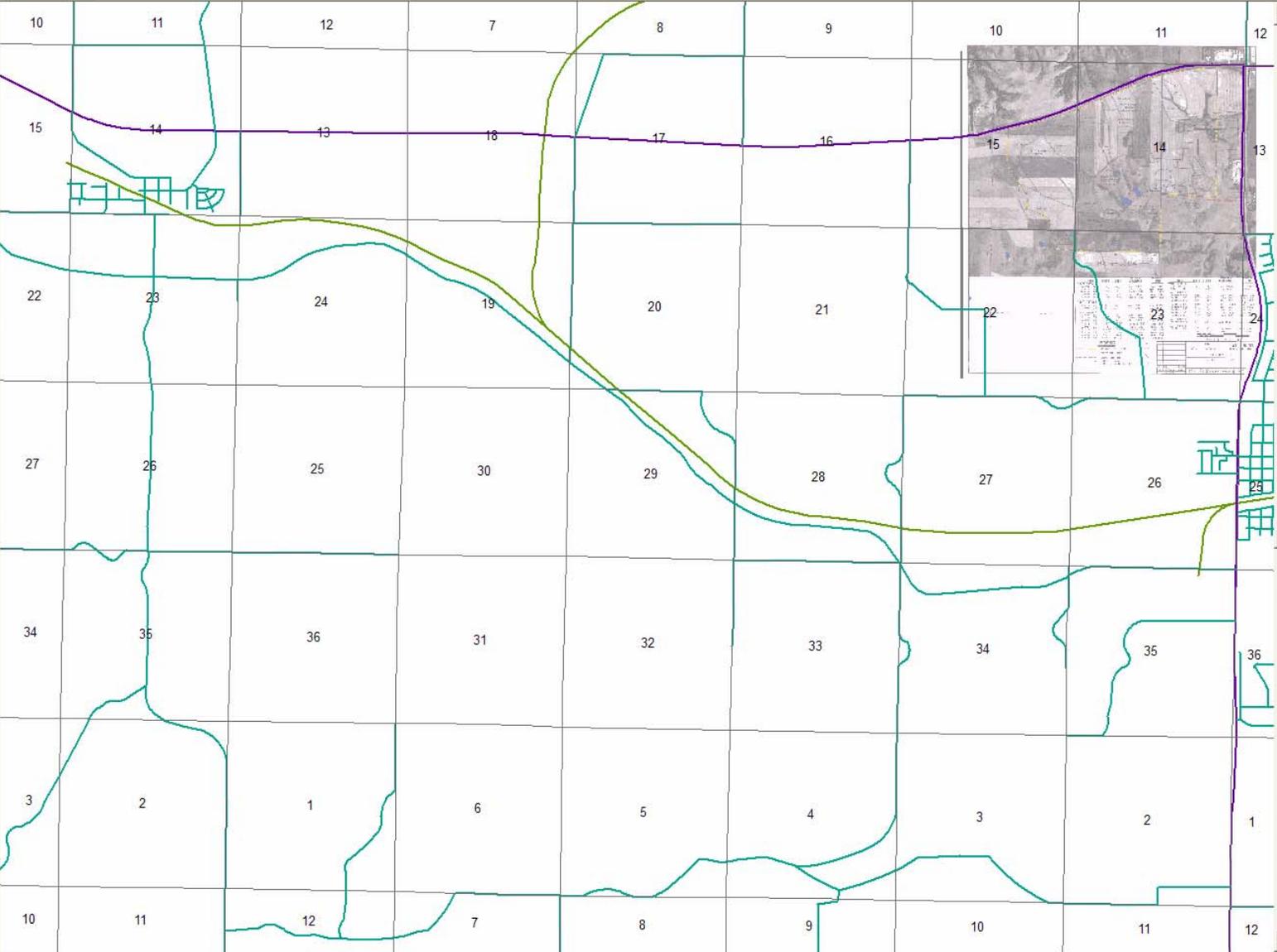
Layers

- Mercer County
- County Roads
- State Roads
- railroad arc
- Air Photos
 - BR5_7901Airphoto.tif
 - BR4_8001map.tif
 - BR8_8103airphoto.tif
 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif
 - NAIH_BR_ALL**



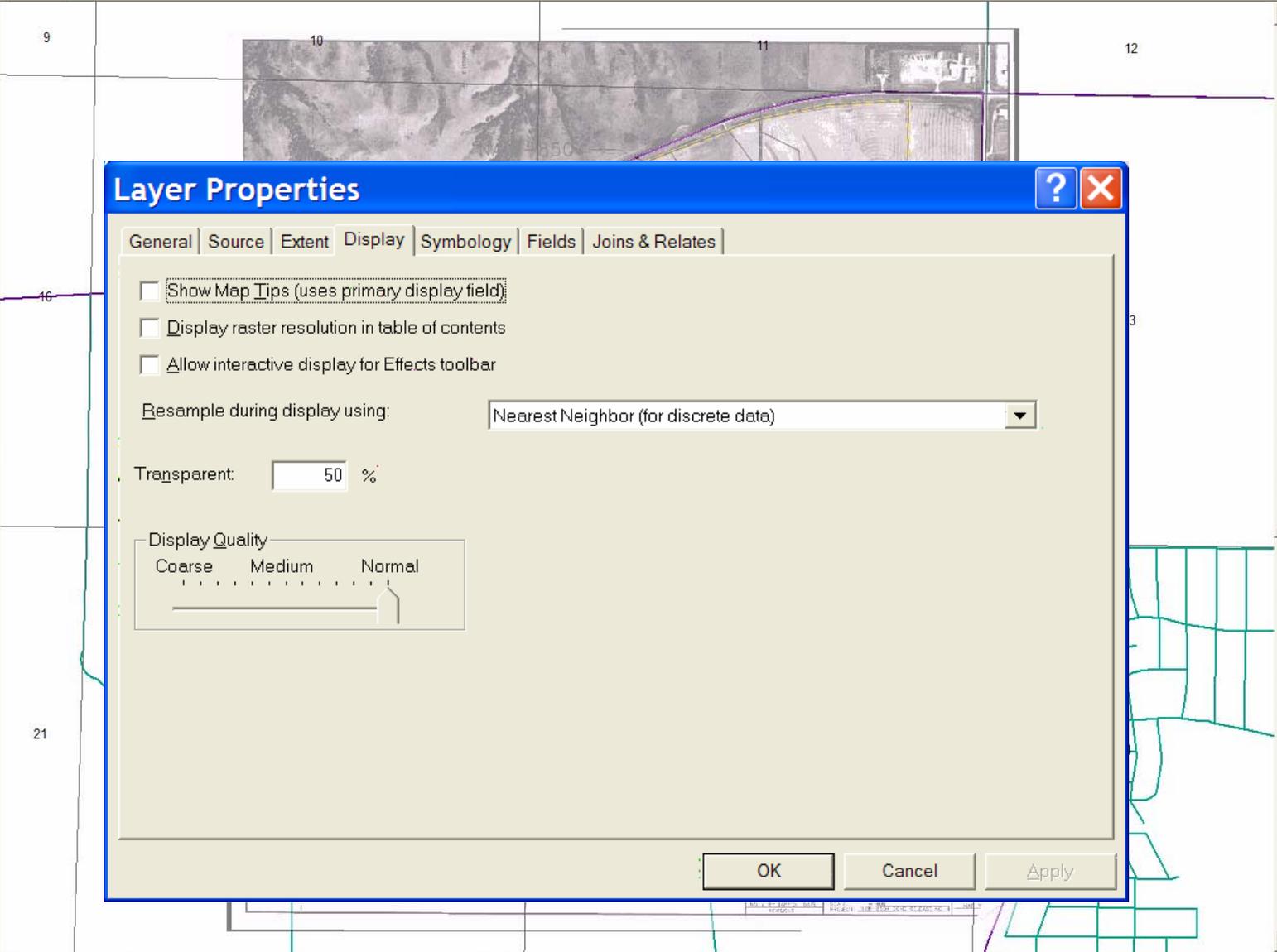
Layers

- Mercer County
- County Roads
- State Roads
- railroad arc
- Air Photos
 - BR5_7901Airphoto.tif
 - BR4_8001map.tif
 - BR8_8103airphoto.tif
 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif
 - NAIH_BR_ALL



Layers

- ✓ Mercer County
- NAIH_BR_ALL
- ✓ Air Photos
 - BR5_7901Airphoto.tif
 - BR4_8001map.tif
 - BR8_8103airphoto.tif
 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphot.tif
 - BR6_8306Airphot.tif
 - ✓ BR4_8504map.tif
- ✓ County Roads
- ✓ State Roads
- ✓ railroad arc



Layer Properties

General | Source | Extent | Display | Symbology | Fields | Joins & Relates

Show Map Tips (uses primary display field)

Display raster resolution in table of contents

Allow interactive display for Effects toolbar

Resample during display using: Nearest Neighbor (for discrete data)

Transparent: 50 %

Display Quality

Coarse Medium Normal

OK Cancel Apply

Rectify the TIF image

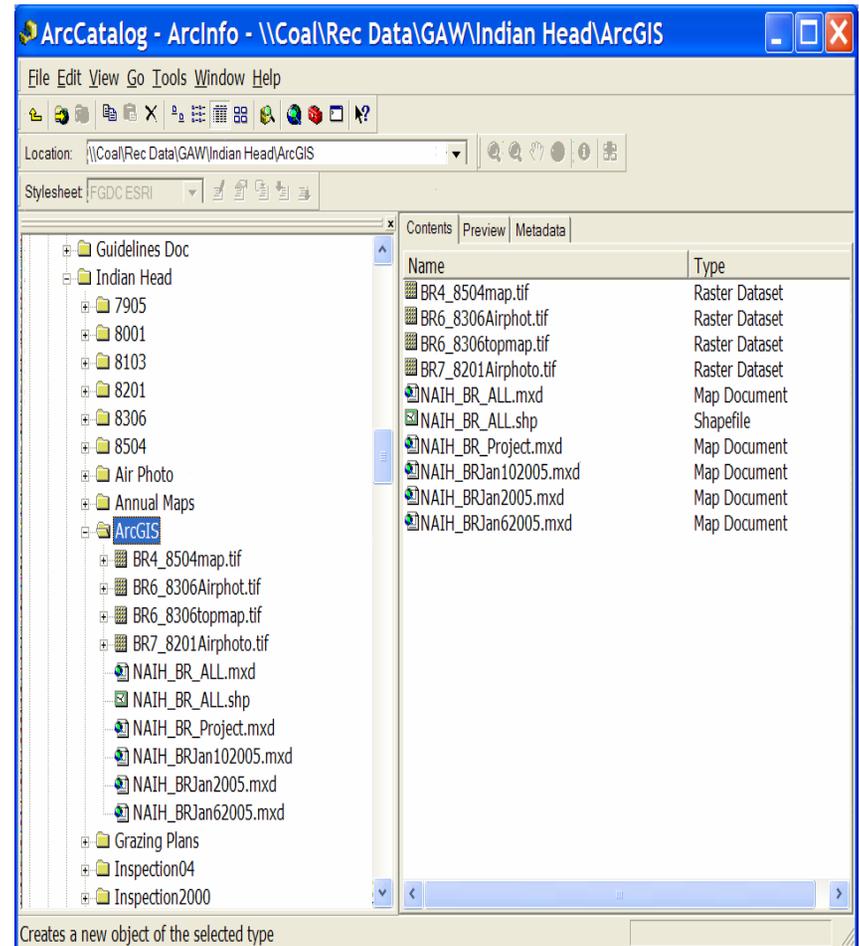
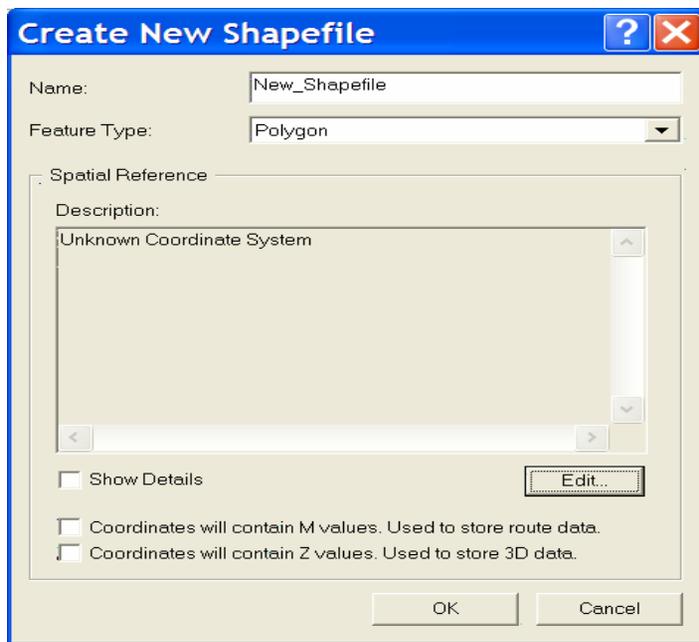
Will created 4 files:

- A. Tif file
- B. Aux file
- C. Tfw file
- D. rrd.file

Add GeoReferenced Tif file to ArcMap and remove the old file that was not GeoReferenced.

Create New Shape File

- Open ArcCatalog
- Create New Shape file
- Feature type: Polygon
- Set Coordinate System



FID	Shape*	Id	Acres	BR No	Permit No	Land Use	Tract Id	BR Date	Law Period	YldStd Yr1	YldStd Yr2	YldStd Yr3	Cover Yr1	CovStd Yr1
0	Polygon	0	140.48	4	8504	Cropland	Tract 1	4/19/2004	1979	30.1	23.2	0	0	
1	Polygon	0	7.3	4	8504	Hayland	Tract 2	4/19/2004	1979	3000	1560	0	0	
2	Polygon	0	2.75	4	8504	Undisturbed	Tract 2	4/19/2004	N/A	0	0	0	0	
3	Polygon	0	7.97	4	8504	Hayland	Tract 8	4/19/2004	1979	2040	1540	0	0	
4	Polygon	0	11.61	4	8504	Undisturbed	Tract 8	4/19/2004	N/A	0	0	0	0	
5	Polygon	0	14.78	4	8504	Hayland	Tract 6	4/19/2004	1979	2560	1180	0	0	
6	Polygon	0	4.78	4	8504	Undisturbed	Tract 6	4/19/2004	N/A	0	0	0	0	
7	Polygon	0	2.98	5	8504	F. Wildlife	Tract 5	12/2/2004	1979	0	0	0	0	
8	Polygon	0	0.4		8504			4/19/2004		0	0	0	0	
9	Polygon	0	8.18	4	8504	P. Cropland	Tract 4	4/19/2004	1979	28.4	25.7	20.6	0	
10	Polygon	0	63.11	4	8504	Cropland	Tract 3	4/19/2004	1979	29.1	22.3	0	0	
11	Polygon	0	71.65	4	8504	Undisturbed	Tract 3	4/19/2004	N/A	0	0	0	0	
12	Polygon	0	10.47	4	8504	Undisturbed	Tract 5	4/19/2004	N/A	0	0	0	0	
13	Polygon	0	2.6	5	8504	Shelterbelt	Tract 7B	4/19/2004	1979	0	0	0	0	
14	Polygon	0	0.86	4	8504	Stockpond	SP 14-03							
15	Polygon	0	115.4		8504	Stockpond	SP 14-02							
16	Polygon	0	151.23		8504	Stockpond	SP							
17	Polygon	0	56.7		8504	N. Grassland	Tract 5A							
18	Polygon	0	149.6	4	8504	Cropland	Tract 3							
19	Polygon	0	174.4	6	8306	Cropland	Tract 4							
20	Polygon	0	74.4	6	8306	N. Grassland	Tract 3							
21	Polygon	0	0.67	5	8306	Stockpond	Tract 3							
22	Polygon	0	4.46	6	8306	P. Cropland	Tract 8							
23	Polygon	0	6.98	6	8306	N. Grassland	Tract 7							
24	Polygon	0	0.51	6	8306	Stockpond	SP 22-04							
25	Polygon	0	0.89	6	8306	Undisturbed	Tract 7							
26	Polygon	0	52.77	6	8306	Cropland	Tract 6							
27	Polygon	0	1.42	6	8306	Stockpond	SP 22-02							
28	Polygon	0	1.24	6	8306	Stockpond	SP 22-05							
29	Polygon	0	98.64	6	8306	N. Grassland	Tract 5							
30	Polygon	0	0.5	6	8306	Stockpond	SP 22-03							
31	Polygon	0	41.1	6	8306	Undisturbed	Tract 2							
32	Polygon	0	1.17	6	8306	Stockpond	SP 21-02							
33	Polygon	0	44.5	6	8306	N. Grassland	Tract 2							
34	Polygon	0	4.11	5	8306	Undisturbed	Tract 1							
35	Polygon	0	90.97	5	8306	N. Grassland	Tract 1							
36	Polygon	0	0.81	5	8306	Undisturbed	Tract 3							
37	Polygon	0	2.64	6	8306	Undisturbed	Tract 5							
38	Polygon	0	43.61	6	8201	Undisturbed	Tract 3							
39	Polygon	0	154.25	6	8201	N. Grassland	Tract 3							
40	Polygon	0	33.39	7	8201	Undisturbed	Tract 5							
41	Polygon	0	20.15	7	8201	N. Grassland	Tract 5							
42	Polygon	0	14.74	7	8201	Undisturbed	Tract 4							
43	Polygon	0	59.62	7	8201	N. Grassland	Tract 4							
44	Polygon	0	15.94	7	8201	Undisturbed	Tract 1							
45	Polygon	0	2.01	7	8201	Stockpond	SP 20-01							
46	Polygon	0	45.86	7	8201	N. Grassland	Tract 1							
47	Polygon	0	91.06	8	8201	Cropland	Tract 2							
48	Polygon	0	12.63	10	8103	Cropland	Tract 2							
49	Polygon	0	7.66	10	8103	Undisturbed	Tract 2							
50	Polygon	0	6.81	10	8103	T. Pasture	Tract 3B							
51	Polygon	0	16.5	10	8103	Undisturbed	Tract 3							
52	Polygon	0	40.19	10	8103	T. Pasture	Tract 4A							
53	Polygon	0	96.06	10	8103	Undisturbed	Tract 4							
54	Polygon	0	6.72	10	8103	N. Grassland	Tract 6B							
55	Polygon	0	5.52	5	8103	Industrial	Tract 5A							
56	Polygon	0	8.48	5	8103	Undisturbed	Tract 5							
57	Polygon	0	105.56	5	8103	Industrial	Tract 6A							
58	Polygon	0	110.77	?	8103	Undisturbed								
59	Polygon	0	4.97	9	8103	Hayland	Tract 7A							
60	Polygon	0	14.78	9	8103	Hayland	Tract 7							
61	Polygon	0	1.2	9	8103	Cropland	Tract 7							
62	Polygon	0	2.04	9	8103	Industrial	Tract 7							
63	Polygon	0	40.9		8103	N. Grassland	Tract 7A	1/20/2004	Pre-1969	0	0	0	97	
64	Polygon	0	4.75	9	8103	N. Grassland	Tract 7B	1/20/2004	1973	0	0	0	86.8	
65	Polygon	0	1.76	9	8103	Hayland	Tract 9	1/20/2004	1975	3260	3060	0	0	
66	Polygon	0	23.3	8	8103	N. Grassland	Tract 8D	7/7/2003	1973	0	0	0	91.7	

Shape File Attribute Table

- Add fields to the shape files Attribute Table

Add Field
?
X

Name:

Type:

Field Properties

Precision

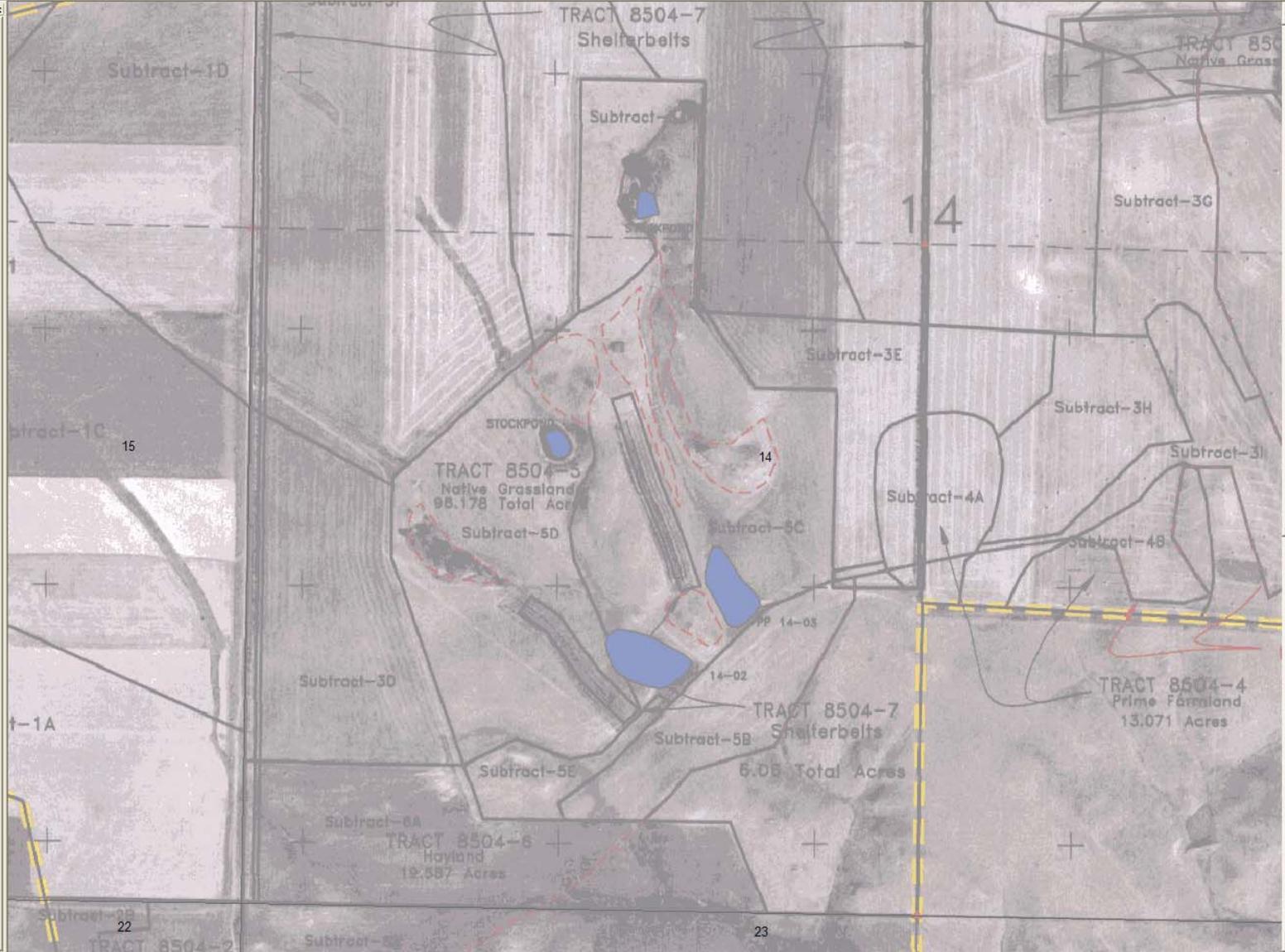
Start Editor

Create New Feature

Use the sketch tool to draw polygons of bond release tracts. The tracts are shown on the map that was GeoReferenced.

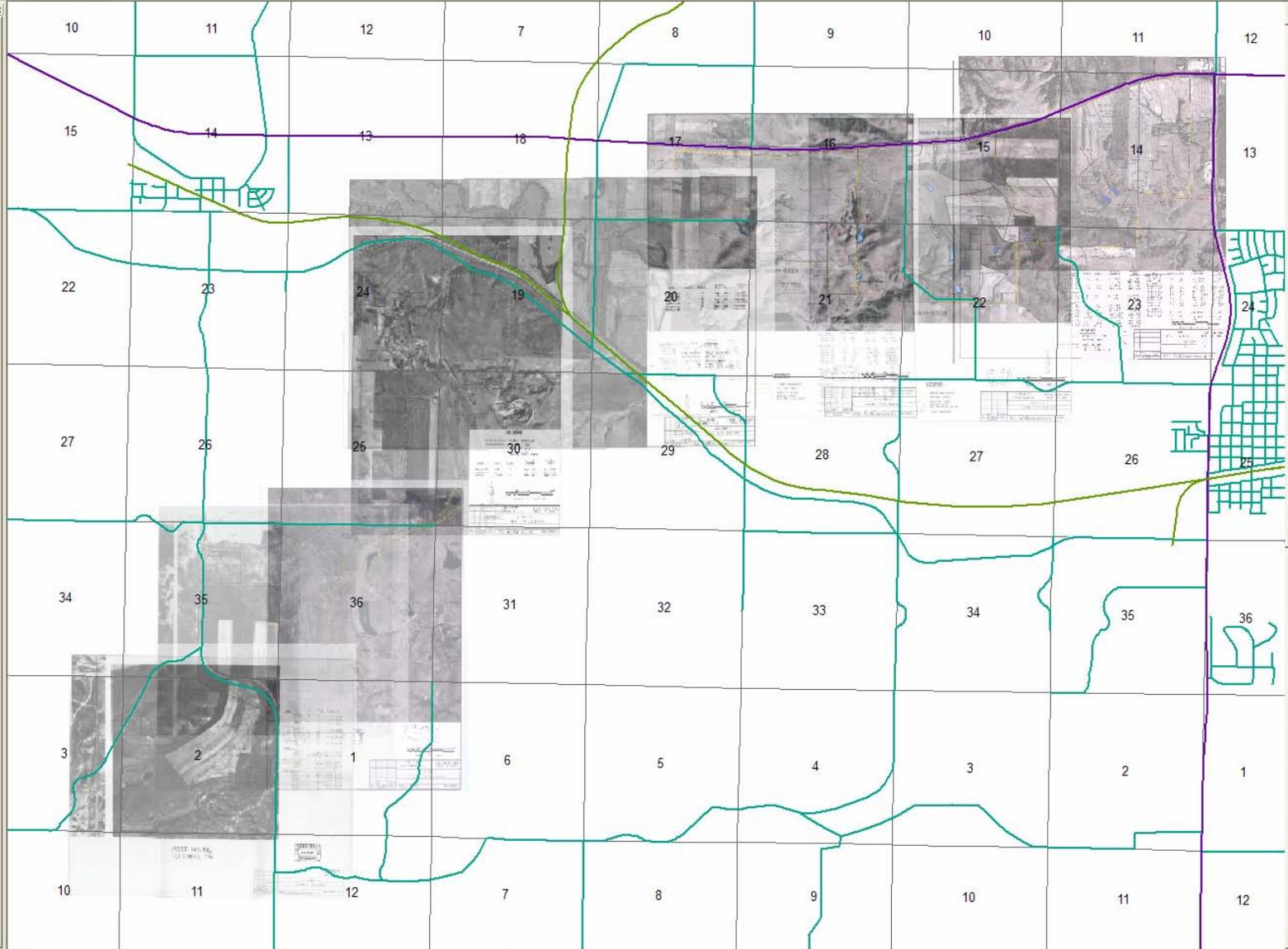
Fill in the data for the fields that were added to the attribute table.

- Layers
- railroad arc
- State Roads
- County Roads
- Mercer County
- NAIH_BR_ALL
- Air Photos
 - BR5_7901Airphoto.tif
 - BR4_8001map.tif
 - BR8_8103airphoto.tif
 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif



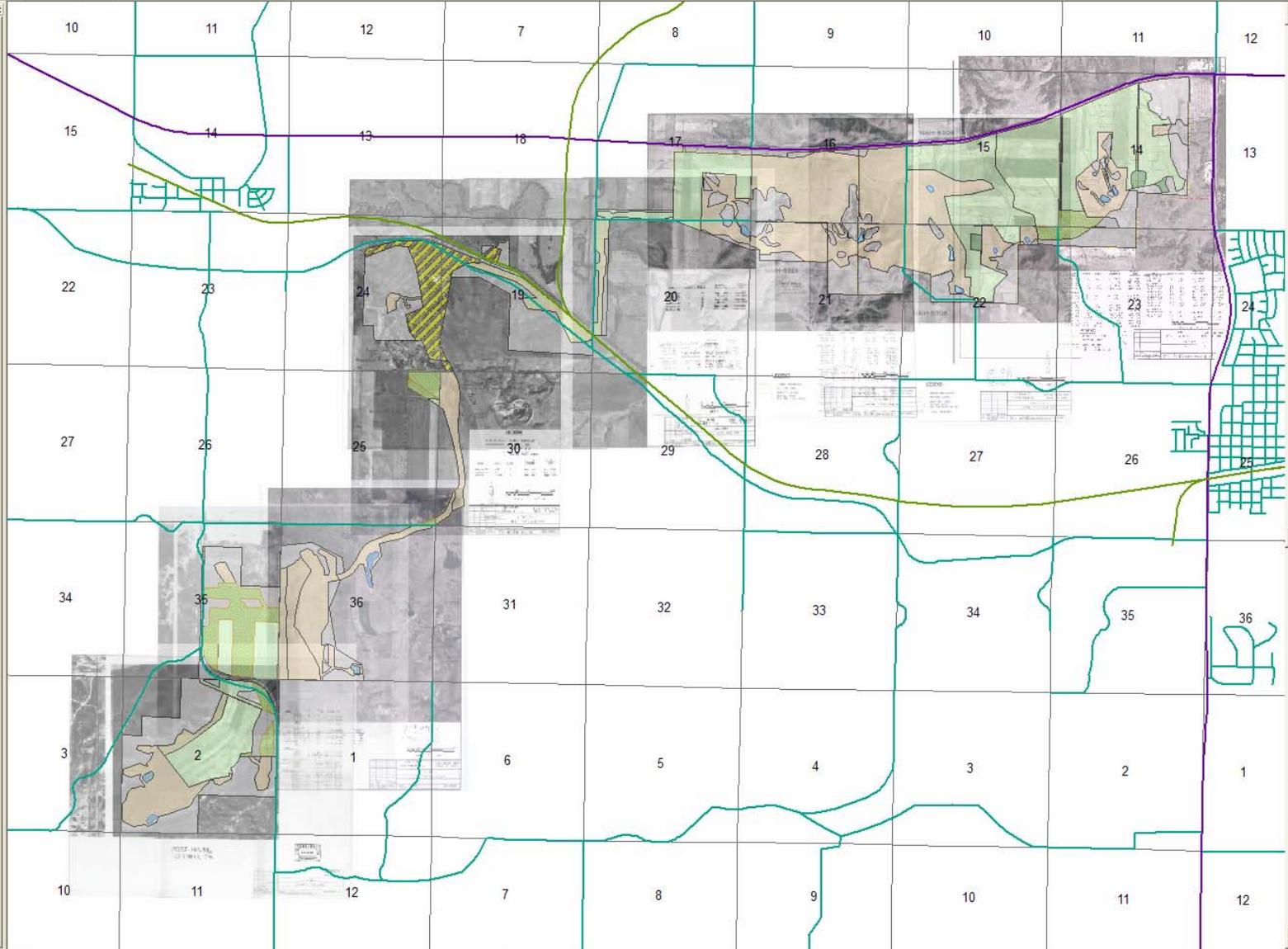
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 - BR6_8306Airphot.tif
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Layers

- railroad arc
- State Roads
- County Roads
- Mercer County
- NAIH_BR_ALL
 - <all other values>
 - Land_Use
 - Cropland
 - F. Windbreak
 - Hayland
 - Industrial
 - N. Grassland
 - P. Cropland
 - Road
 - Shelterbelt
 - Stockpond
 - T. Pasture
 - Undisturbed
- Air Photos
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 - BR4_8001map.tif
 - BR8_8103airphoto.tif
 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif

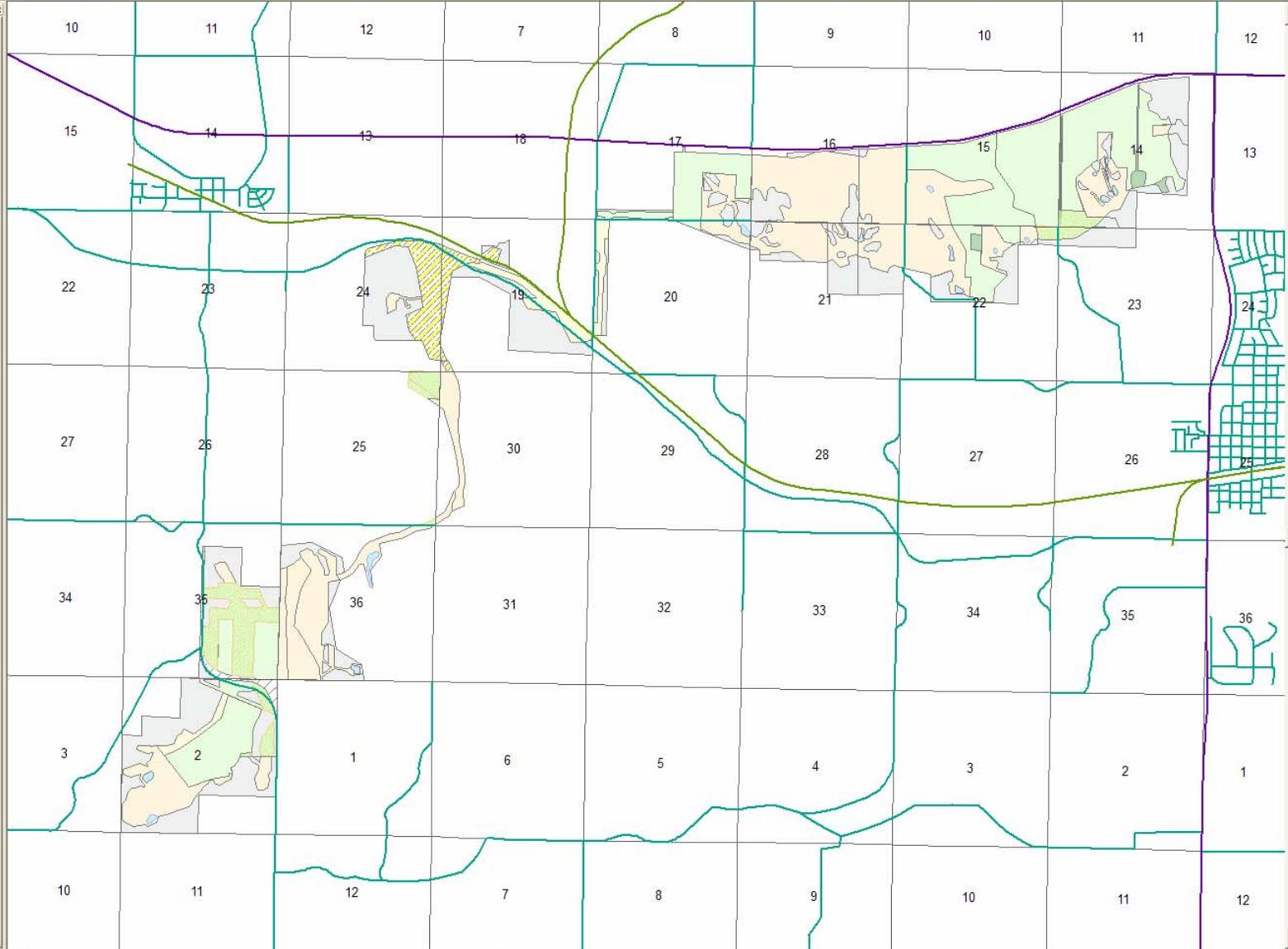


Indian Head Mine



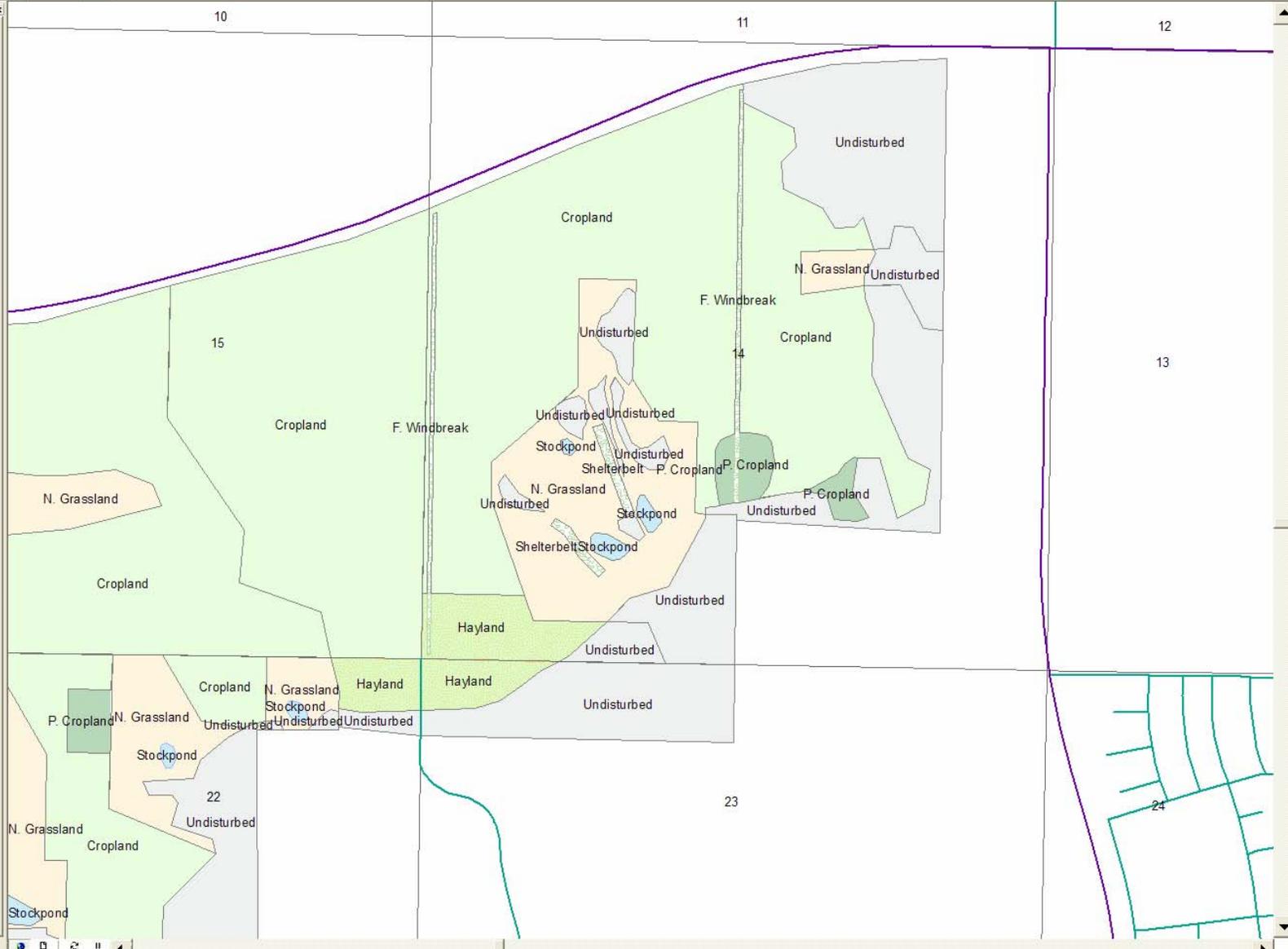
Layers

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- NAIH_BR_ALL
 - <all other values>
 - Land_Use
 - Cropland
 - F. Windbreak
 - Hayland
 - Industrial
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 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif



Layers

- railroad arc
- State Roads
- County Roads
- Mercer County
- NAIH_BR_ALL**
 - <all other values>
 - Land_Use
 - Cropland
 - F. Windbreak
 - Hayland
 - Industrial
 - N. Grassland
 - P. Cropland
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 - BR9_8103airphoto.tif
 - BR10_8103airphoto.tif
 - BR7_8201Airphoto.tif
 - BR6_8306Airphot.tif
 - BR4_8504map.tif



Symbology

The screenshot shows the 'Layer Properties' dialog box with the 'Symbology' tab selected. The 'Draw categories using unique values combining up to 3 fields.' option is chosen. The 'Value Fields' section has 'Land_Use' selected. The 'Color Ramp' is set to a multi-color sequential ramp. A table below lists the symbology categories and their corresponding colors and labels.

Draw categories using unique values combining up to 3 fields. Import...

Value Fields: Land_Use, <None>, <None>

Color Ramp: [Multi-color ramp]

Sym...	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	
	<Heading>	Land_Use	
[Yellow]			?
[Light Green]	Cropland	Cropland	?
[Patterned Green]	F. Windbreak	F. Windbreak	?
[Patterned Yellow]	Hayland	Hayland	?
[Patterned Orange]	Industrial	Industrial	?
[Light Orange]	N. Grassland	N. Grassland	?
[Dark Green]	P. Cropland	P. Cropland	?
[Patterned Brown]	Road	Road	?

Buttons: Add All Values, Add Values..., Remove, Remove All, Advanced

Bottom Buttons: OK, Cancel, Apply

Crystal Report

ESRI Crystal Report Wizard

What do you want to do?

View an existing report

Create a report using these layers or tables:

- railroad arc
- State Roads
- County Roads
- Mercer County
- NAIH_BR_ALL

Use only the selected features in these layers

The data for your report will be saved into this personal GeoDatabase:

C:\Documents and Settings\Guy\My Documents\ESRI Crystal Reports\NAIH_BR_ALL.m 

Use this report as a template:



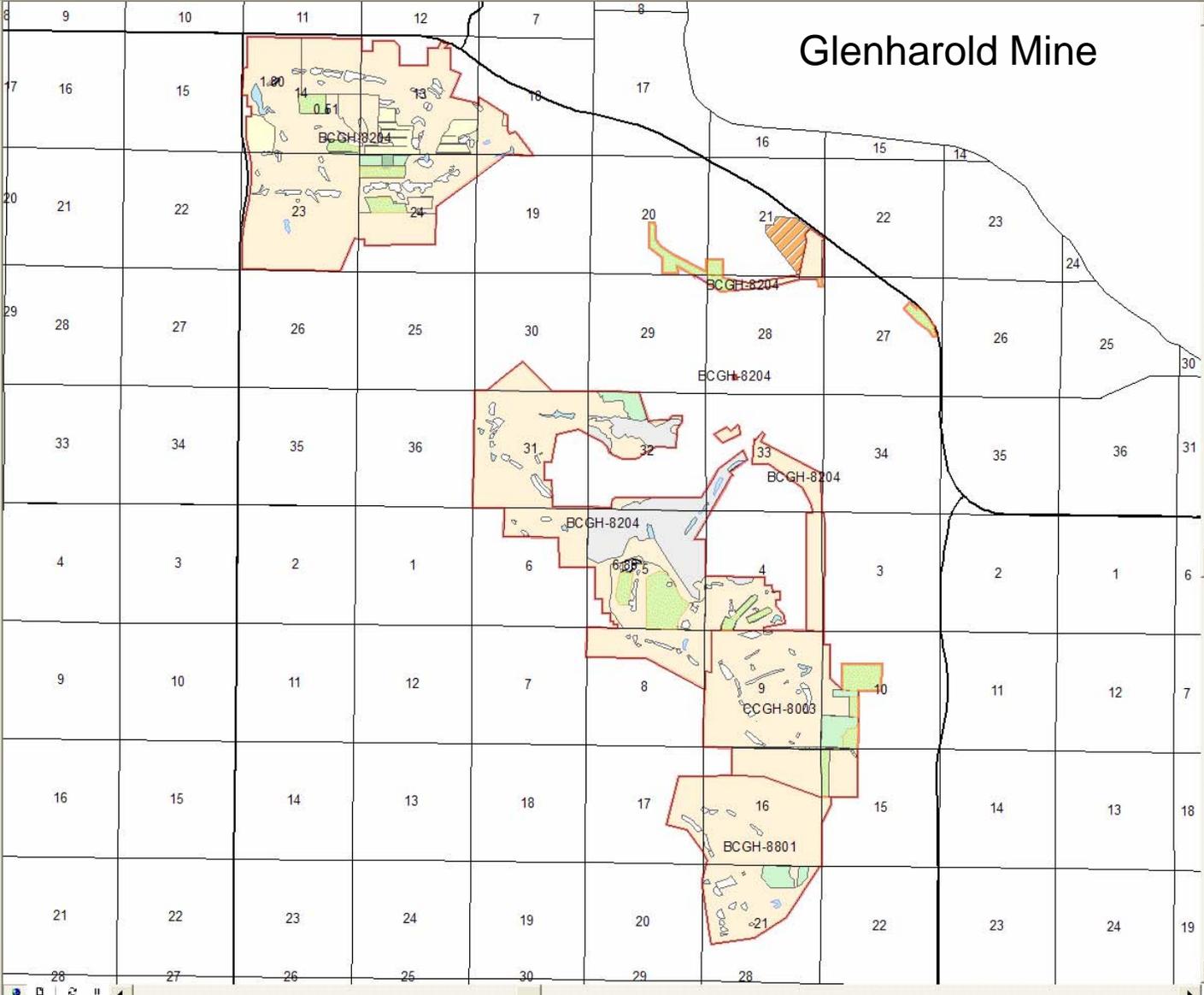
- 7905
- 8001
- + Cropland
- + Hayland
- + N. Grassla
- + Road
- + Undisturb
- 8103
- 8201
- 8306
- 8504

4/18/2006	Permit_No	Land_Use	Acres
			1.29
			<u>17.08</u>
7905		Undisturbed	17.08
		Undisturbed	
	<u>7905</u>	<u>Undisturbed</u>	<u>267.24</u>
	8001		
		Cropland	
			<u>2.86</u>
8001		Cropland	2.86
			2.86
			<u>58.06</u>
8001		Cropland	58.06
			58.06
		Cropland	
		Hayland	
			<u>8.17</u>
8001		Hayland	8.17
			8.17
			<u>94.96</u>
8001		Hayland	94.96
			94.96
		Hayland	
		N. Grassland	
			<u>7.12</u>
8001		N. Grassland	7.12
			7.12
		N. Grassland	
		Road	
			<u>4.02</u>
8001		Road	4.02
			4.02

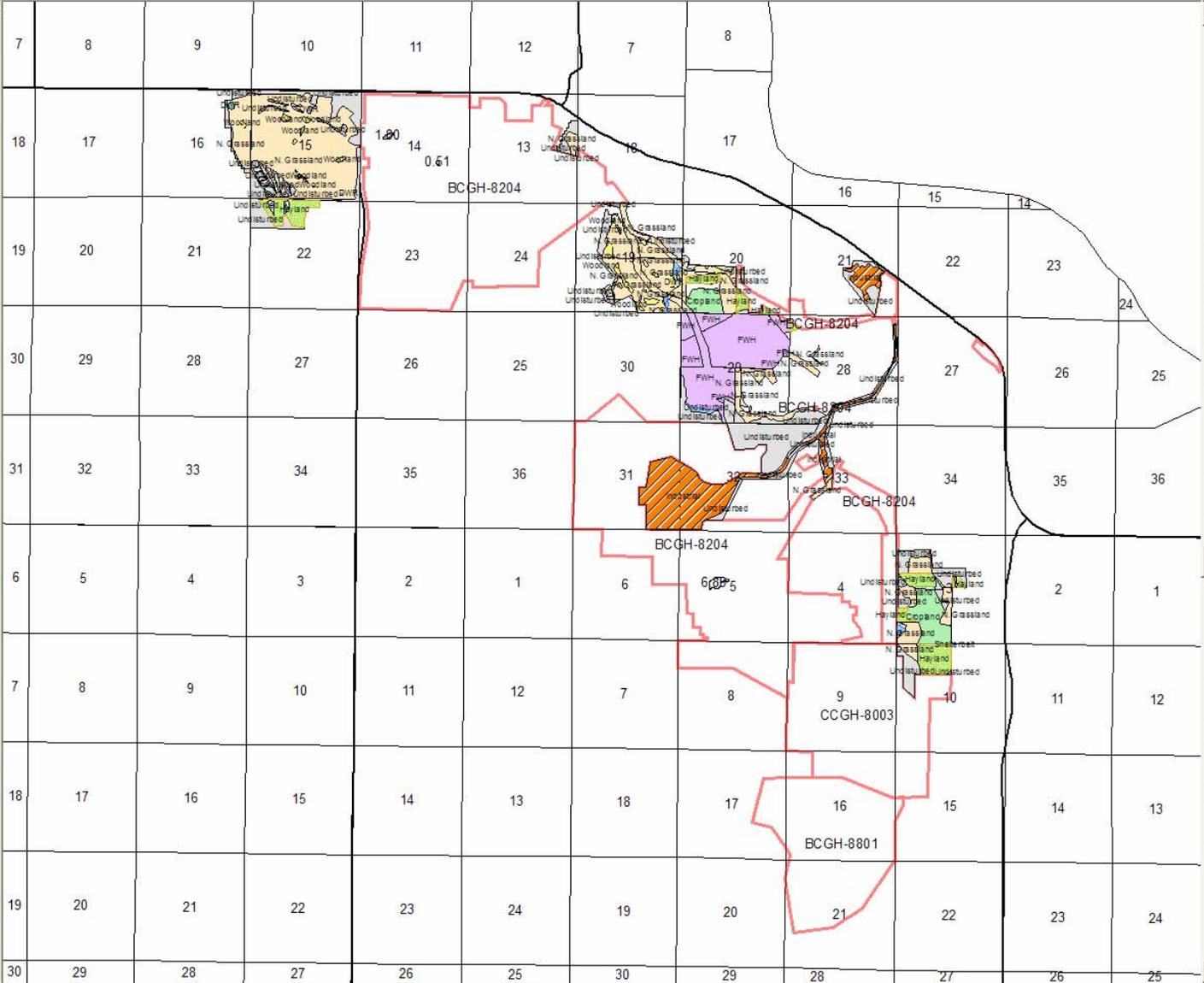
Glenharold Mine



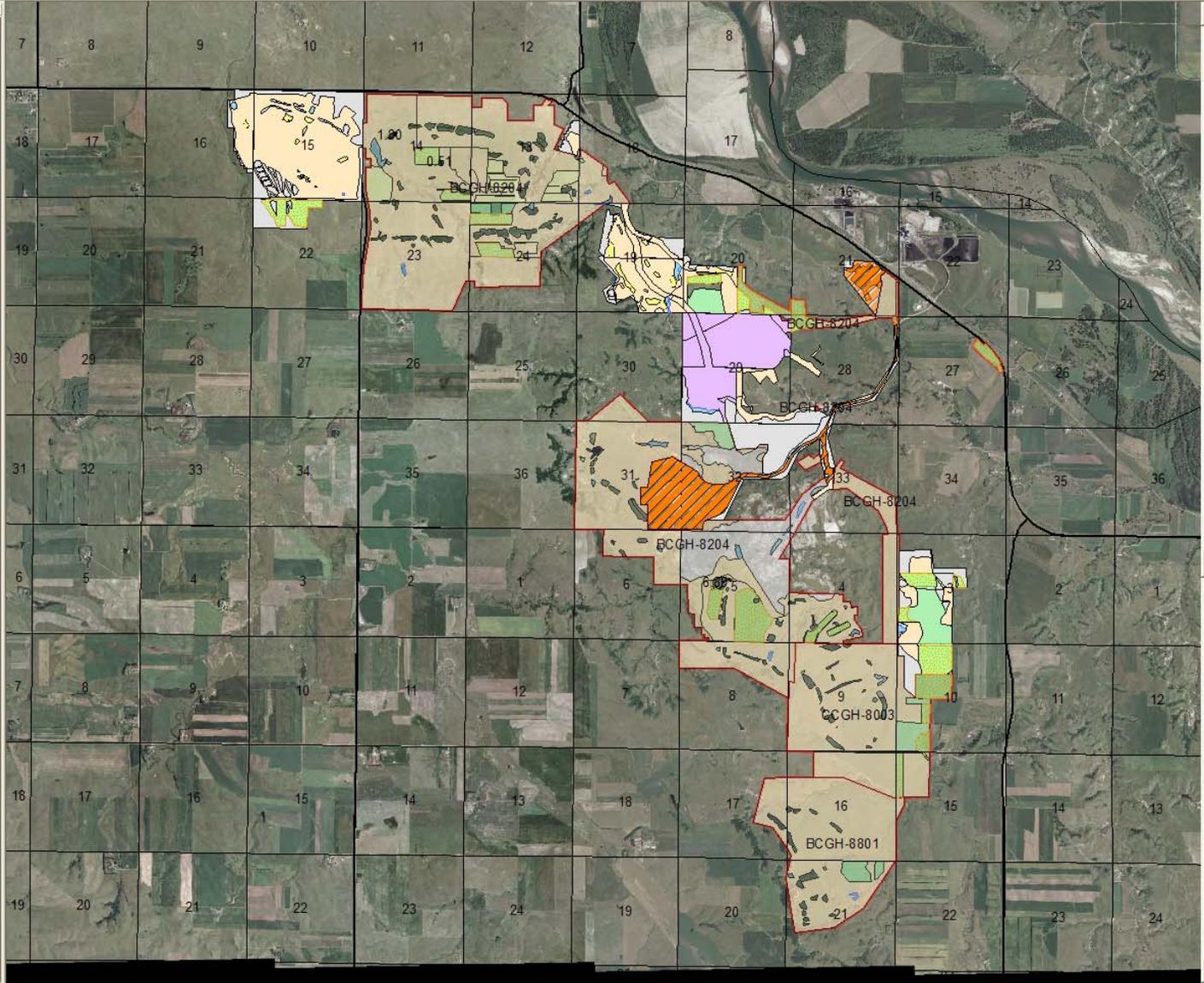
- Layers
 - Field Inspections
 - TrackLog1_3232006
 - GH_REC_LANDUSE
 - WD_Acreage_Check
 - BCGH_BR_All
 - BCGH_PB_All
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OW_N_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV.tif
 - BCGH_8204_SO_AreaII.tif
 - BCGH_8204_SO_AreaI.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - BR Maps
 - BR3_8204airphoto.tif
 - BR4_P51Landuse.tif



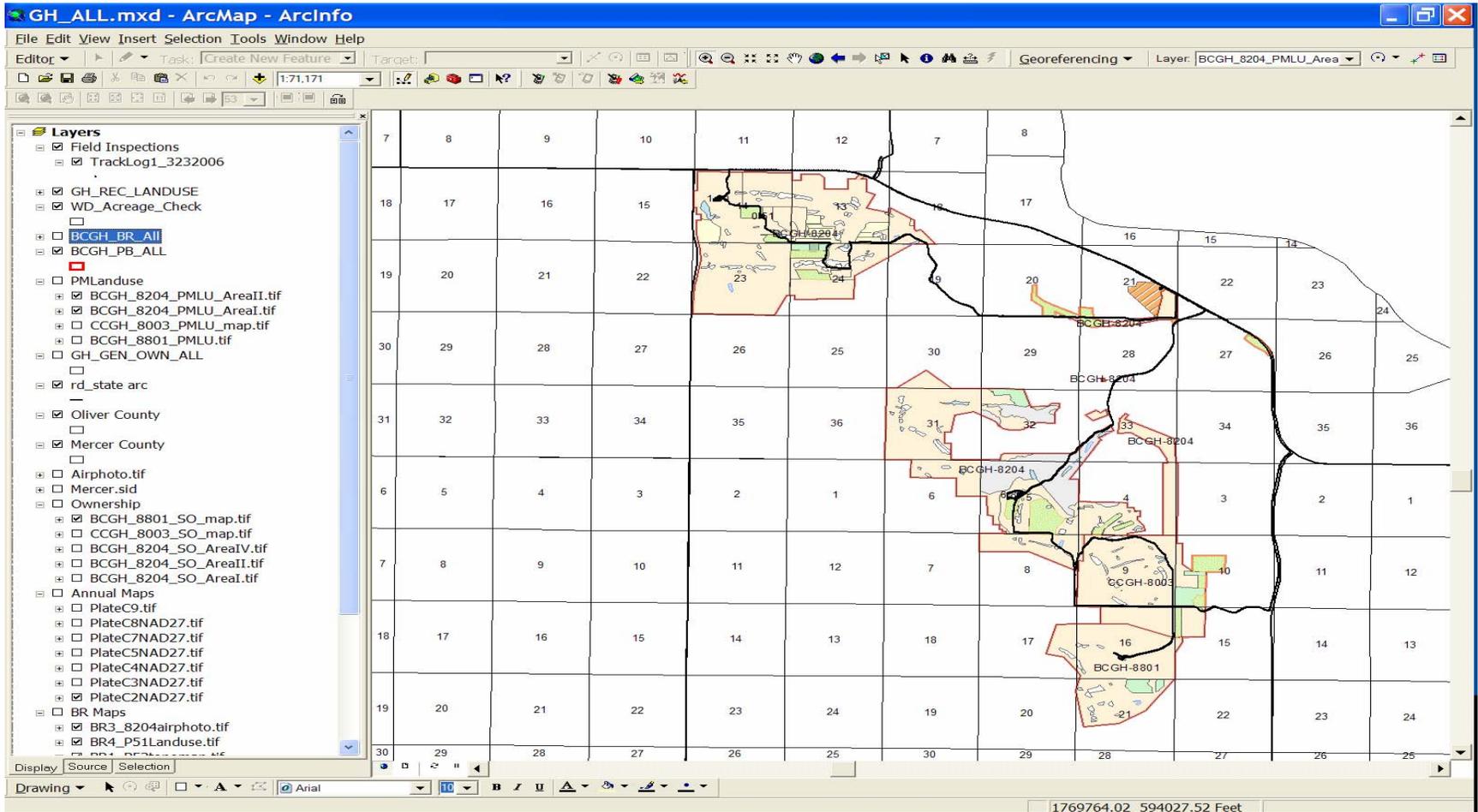
- Layers
 - Field Inspections
 - TrackLog1_3232006
 - GH_REC_LANDUSE
 - WD_Acreage_Check
 - BCGH_BR_All
 - BCGH_PB_All
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV.tif
 - BCGH_8204_SO_AreaII.tif
 - BCGH_8204_SO_AreaI.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - BR Maps
 - BR3_8204airphoto.tif
 - BR4_P51Landuse.tif



- Layers**
- Field Inspections
 - TrackLog1_3232006
 - GH_REC_LANDUSE
 - WD_Acreage_Check
 - BCGH_BR_All
 - BCGH_PB_All
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV.tif
 - BCGH_8204_SO_AreaII.tif
 - BCGH_8204_SO_AreaI.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - BR Maps
 - BR3_8204airphoto.tif
 - BR4_P51Landuse.tif



ArcPAD Track log



- ND State Plane NAD27 South US
 - WD_Acreage_Check
 - Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
 - BCGH_PB_ALL
 - GH_REC_LANDUSE
 - BCGH_BR_All
 - USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif





- Layers
 - Field Inspections
 - TrackLog1_3232006
 - GH_REC_LANDUSE
 - WD_Acreage_Check
 - BCGH_BR_ALL
 - BCGH_PB_ALL
 - PMLanduse
 - BCGH_8204_PMLU_Area
 - BCGH_8204_PMLU_Area
 - CCGH_8003_PMLU_map
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV
 - BCGH_8204_SO_AreaII
 - BCGH_8204_SO_AreaI.t
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - BR Maps
 - BR3_8204airphoto.tif
 - BR4_P51Landuse.tif

Identify Results

Layers: <Top-most layer>

- GH_REC_LANDUSE
 - Woodland

Location: (1771688.646468)

Field	Value
FID	161
Shape	Polygon
Id	0
Land_Use	Woodland
Comment	BCS
Acres	1.64
Id_Number	WD 14-2-92
Permit_No	BCGH-8204
Section_No	14

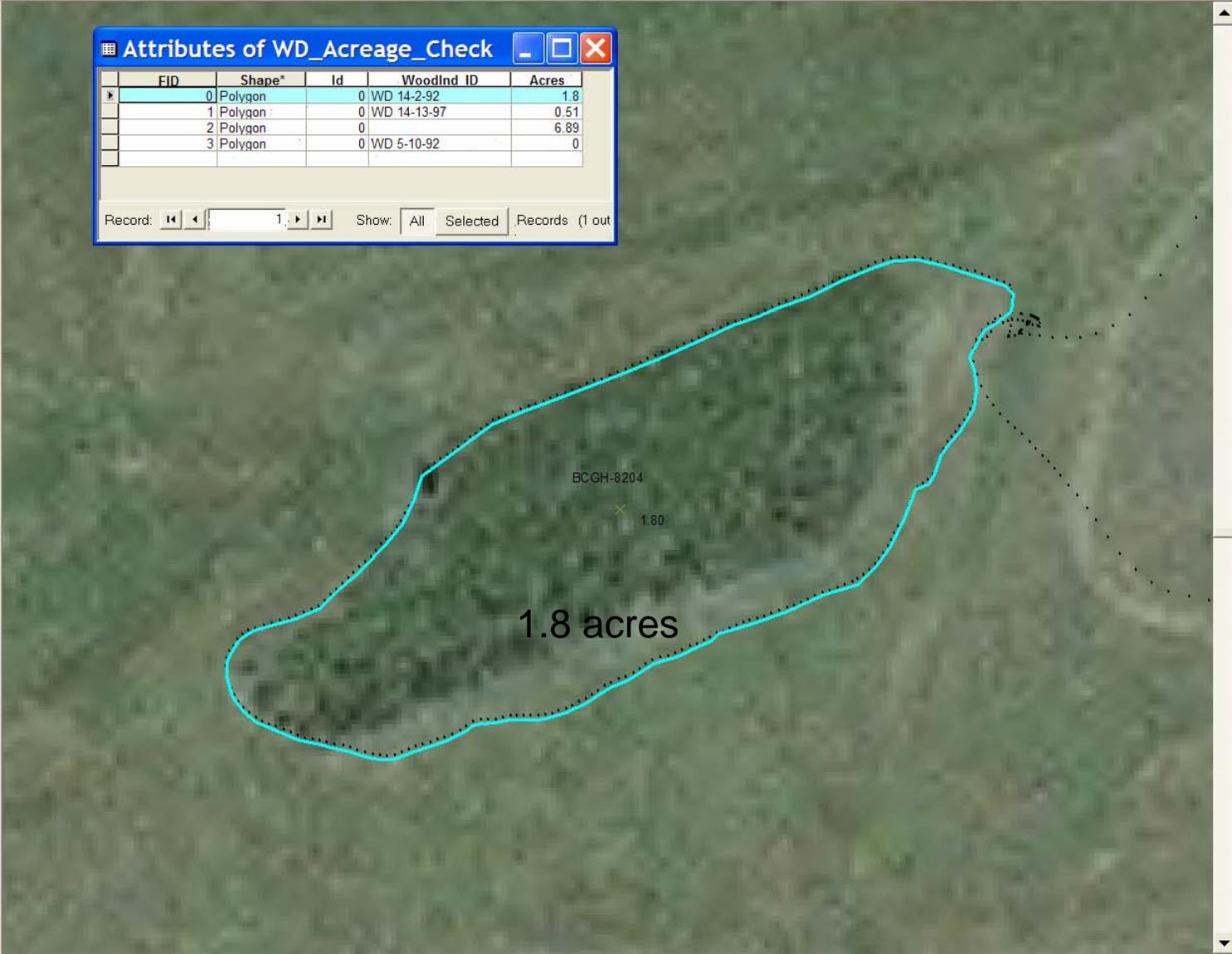


- ND State Plane NAD27 South US
 - WD_Acreage_Check
 - Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
 - BCGH_PB_ALL
 - GH_REC_LANDUSE
 - BCGH_BR_All
 - USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif

Attributes of WD_Acreage_Check

FID	Shape*	Id	WoodInd ID	Acres
0	Polygon	0	WD 14-2-92	1.8
1	Polygon	0	WD 14-13-97	0.51
2	Polygon	0		6.89
3	Polygon	0	WD 5-10-92	0

Record: 1 Show: All Selected Records (1 out)

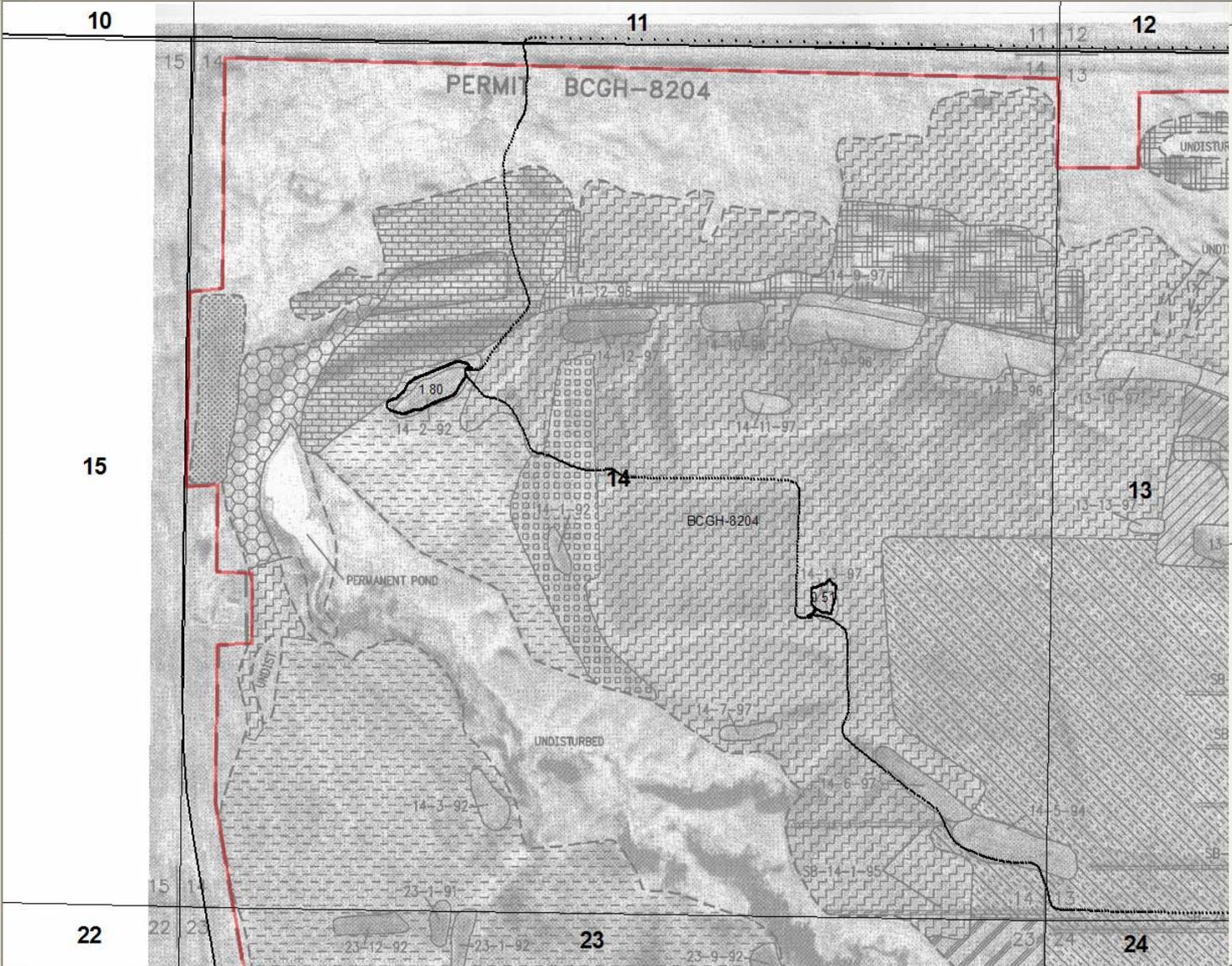


Reclaimed woodland 14-02-92

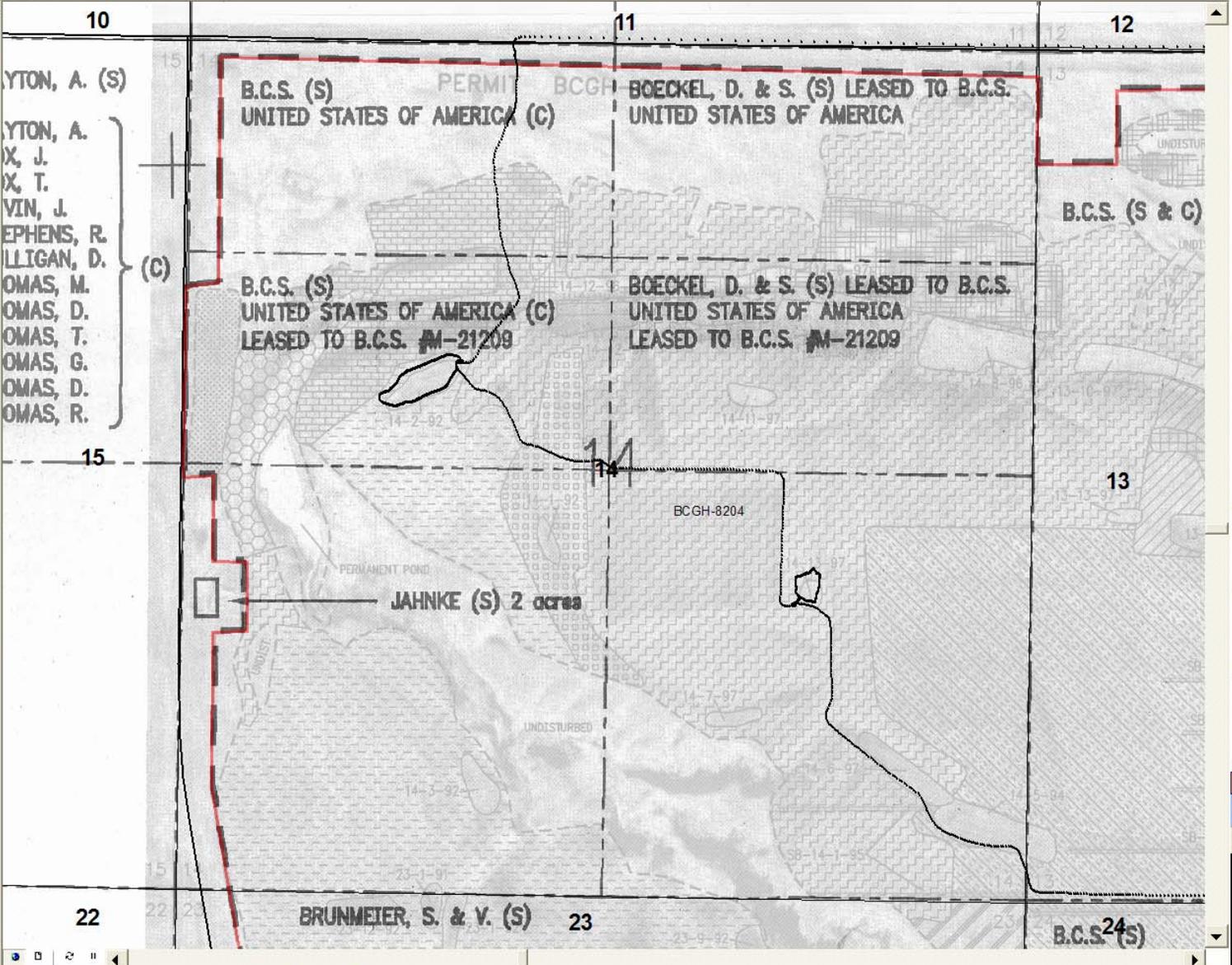
Silverberry expanding



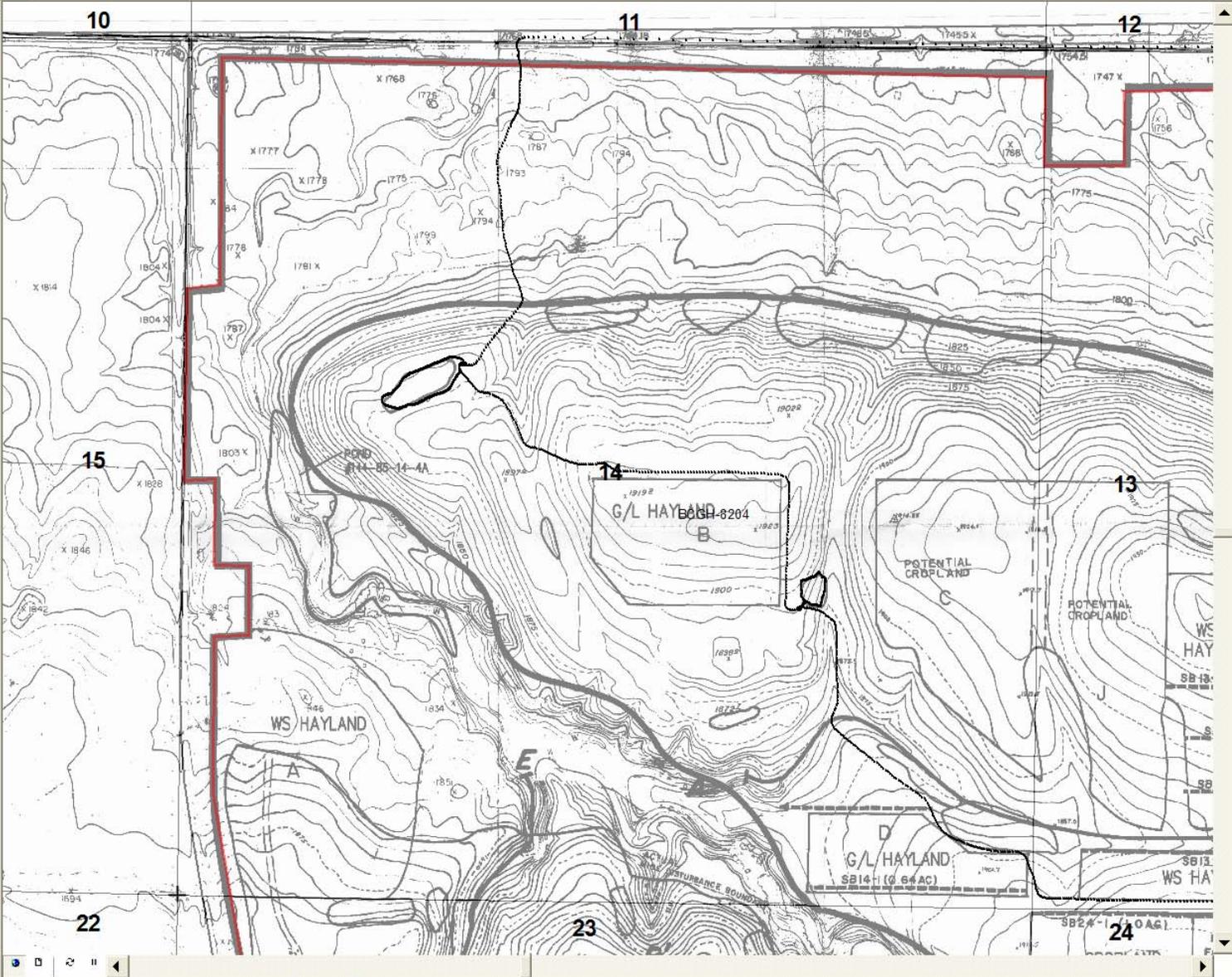
- ND State Plane NAD27 South US
 - WD_Acreage_Check
 - Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
 - BCGH_PB_ALL
 - GH_REC_LANDUSE
 - BCGH_BR_All
 - USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County
 - Mercer County
 - Airphoto.tif
 - Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif
 - PlateC3NAD27.tif
 - PlateC2NAD27.tif
 - Mercer.sid
 - Ownership
 - BCGH_8801_SO_map.tif



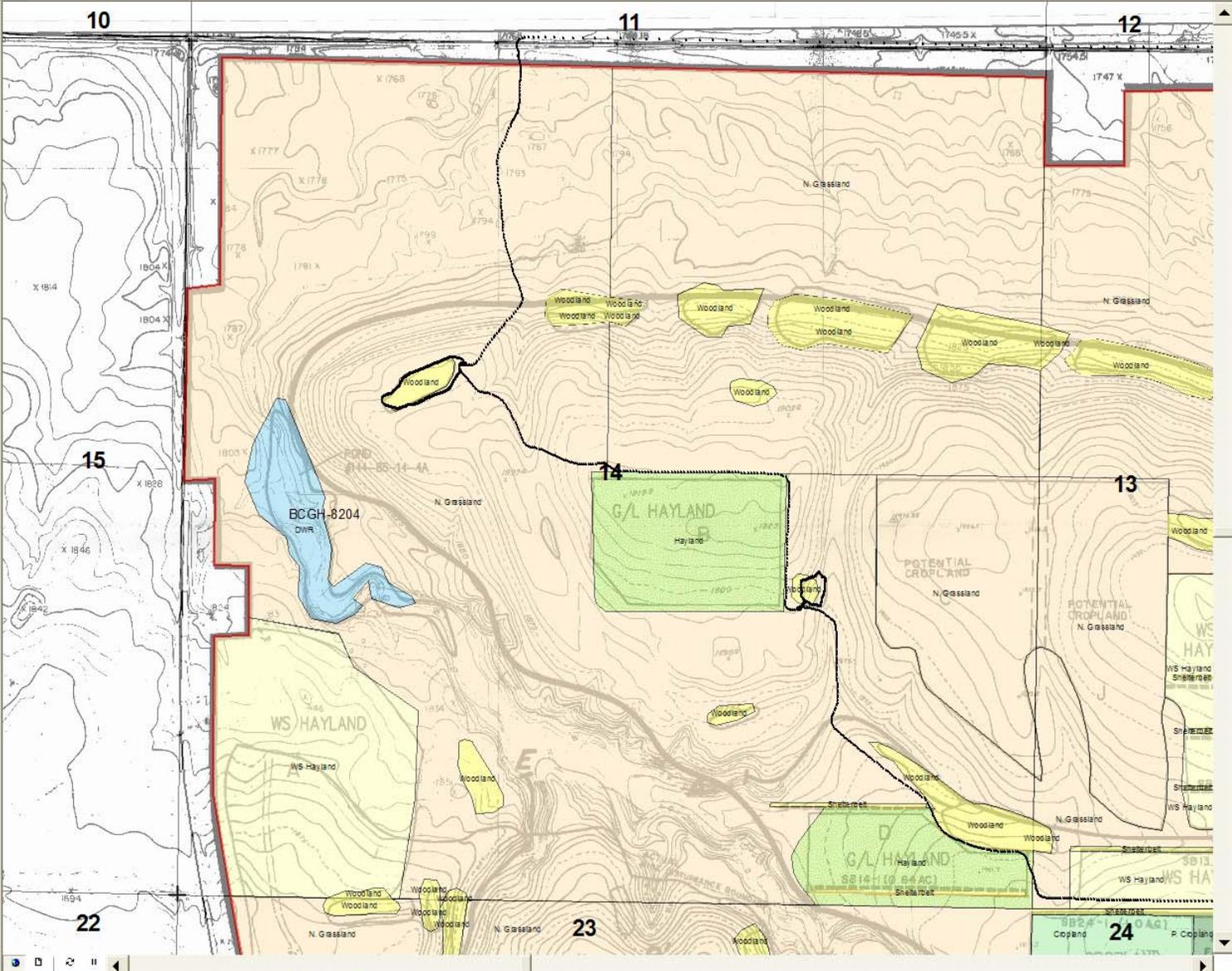
- WD_Acreage_Check
- Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
- BCGH_PB_ALL
- GH_REC_LANDUSE
- BCGH_BR_All
- USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
- PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
- GH_GEN_OWN_ALL
- rd_state arc
- Oliver County
- Mercer County
- Airphoto.tif
- Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV.tif
 - BCGH_8204_SO_AreaII.tif
 - BCGH_8204_SO_AreaI.tif
- Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif



- WD_Acreage_Check
- Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
- BCGH_PB_ALL
- GH_REC_LANDUSE
- BCGH_BR_All
- USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
- PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
- GH_GEN_OWN_ALL
- rd_state arc
- Oliver County
- Mercer County
- Airphoto.tif
- Ownership
 - BCGH_8801_SO_map.tif
 - CCGH_8003_SO_map.tif
 - BCGH_8204_SO_AreaIV.tif
 - BCGH_8204_SO_AreaII.tif
 - BCGH_8204_SO_AreaI.tif
- Annual Maps
 - PlateC9.tif
 - PlateC8NAD27.tif
 - PlateC7NAD27.tif
 - PlateC5NAD27.tif
 - PlateC4NAD27.tif

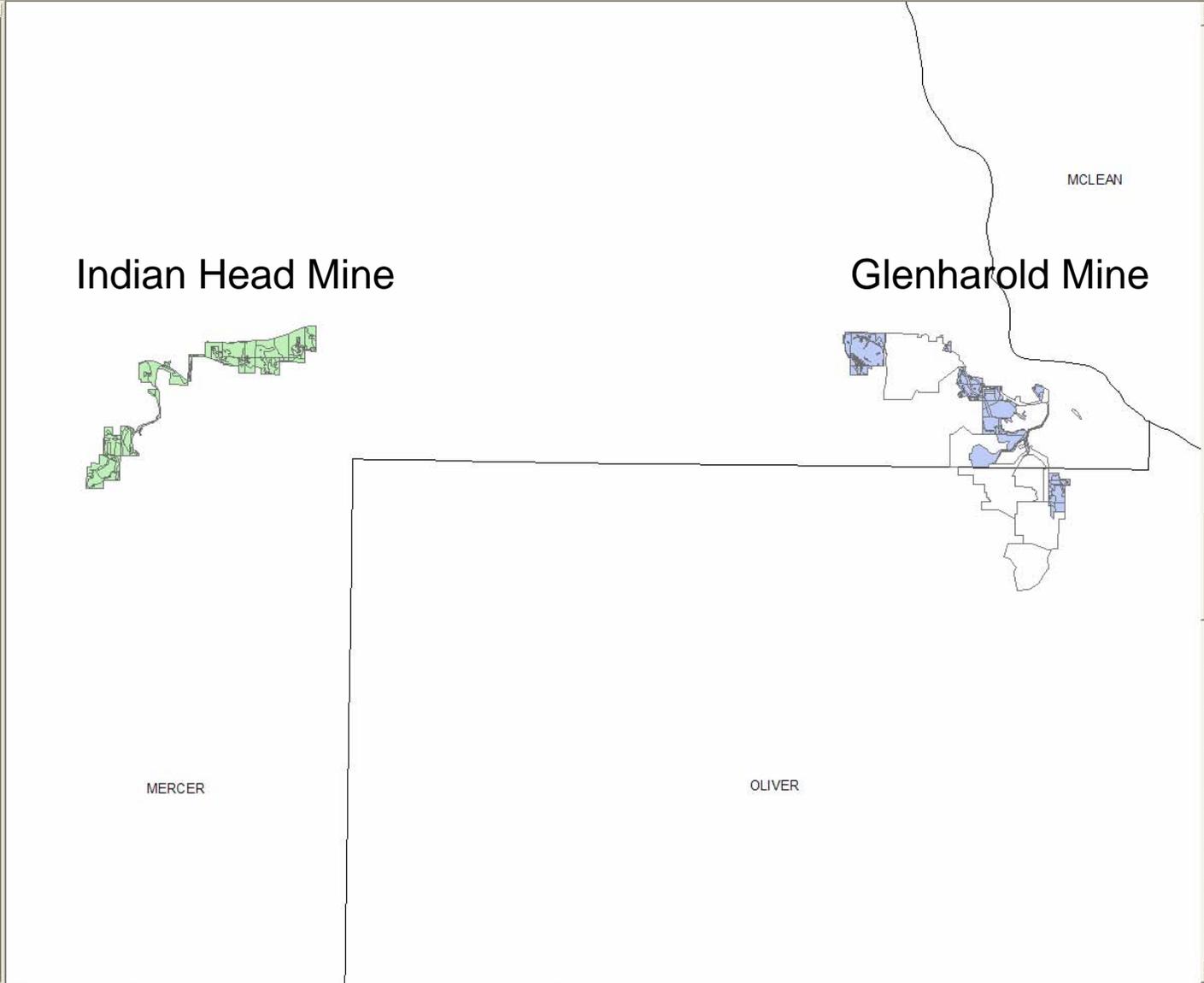


- ND State Plane NAD27 South US
 - WD_Acreage_Check
 - Field Inspections
 - TrackLog1_3232006
 - TrackLog_5172006
 - BCGH_PB_ALL
 - GH_REC_LANDUSE
 - <all other values>
 - Land_Use, Land_Use
 - Co. Road, Co. Road
 - Cropland, Cropland
 - DWR, DWR
 - FWH, FWH
 - Hayland, Hayland
 - Industrial, Industrial
 - N. Grassland, N. Grassland
 - Orphan Spoil, Orphan Spoil
 - P. Cropland, P. Cropland
 - R. Shelterbelt, R. Shelterbelt
 - R. Wetland, R. Wetland
 - R. Woodland, R. Woodland
 - WS Hayland, WS Hayland
 - BCGH_BR_All
 - USGS_Topo_Maps
 - Hannover_NE.TIF
 - Stanton.TIF
 - Stanton_SE.TIF
 - PMLanduse
 - BCGH_8204_PMLU_AreaII.tif
 - BCGH_8204_PMLU_AreaI.tif
 - CCGH_8003_PMLU_map.tif
 - BCGH_8801_PMLU.tif
 - GH_GEN_OWN_ALL
 - rd_state arc
 - Oliver County



Layers

- rd_state arc
- BCGH_PB_ALL
 -
- cnty_bnd polygon
 -
- BCGH_BR_All
 -
- CCVV_BR_8107_ALL
 -
- NAIH_BR_ALL
 -



Notes:

Geo-Referenced maps are not completely accurate:

ND DOT County Section line data may not be completely accurate

Acreage summaries may not match actual Permitted acreage

Scans may be distorted

ESRI HELP is not real useful

ArcMAP Reports not user friendly

Need to learn how to link/import vegetation sampling data in excel to ArcMap.