



Public Service Commission
State of North Dakota

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October 6, 2011

Mr. Dave Nilson
Reclamation Specialist
Basin Cooperative Services
1717 East Interstate Avenue
Bismarck, ND 58501

Dear Mr. Nilson:

This letter is in follow-up to our field inspection of pending bond release applications No. 7 and 8 to Permit BCGH-8204. We noted several features that will need to be repaired prior to this office recommending final bond release approval. These features are identified on Figures 1 and 2. As previously discussed, repair of the subsidence feature(s) over the Teuber Mine will not be necessary. In addition, the leafy spurge and Canada thistle located on the hayland in the NE 1/4 of Section 27 must be sprayed with an effective herbicide prior to final bond release approval. During the inspection it was recommended that the feature ponding water on the reclaimed cropland in Section 32 be reshaped to provide positive drainage.

Please also refer to Mr. Bill Gunnerson's soil probing inspection report dated September 29 through October 15, 2010 (copy attached). Mr. Gunnerson identified several features that needed to be stabilized in this report.

Please let us know when the repair and weed control work has been completed so that it can be inspected. If you have any questions, please contact this office.

Sincerely,

James R. Deutsch
Director
Reclamation Division

Enclosures:

Minedata/Glenharold/Permits/BCGH-8204/BondRelease/BondRelease7&8/BR7BR8_field_insp_itr_10-6-11.docx

Figure 2

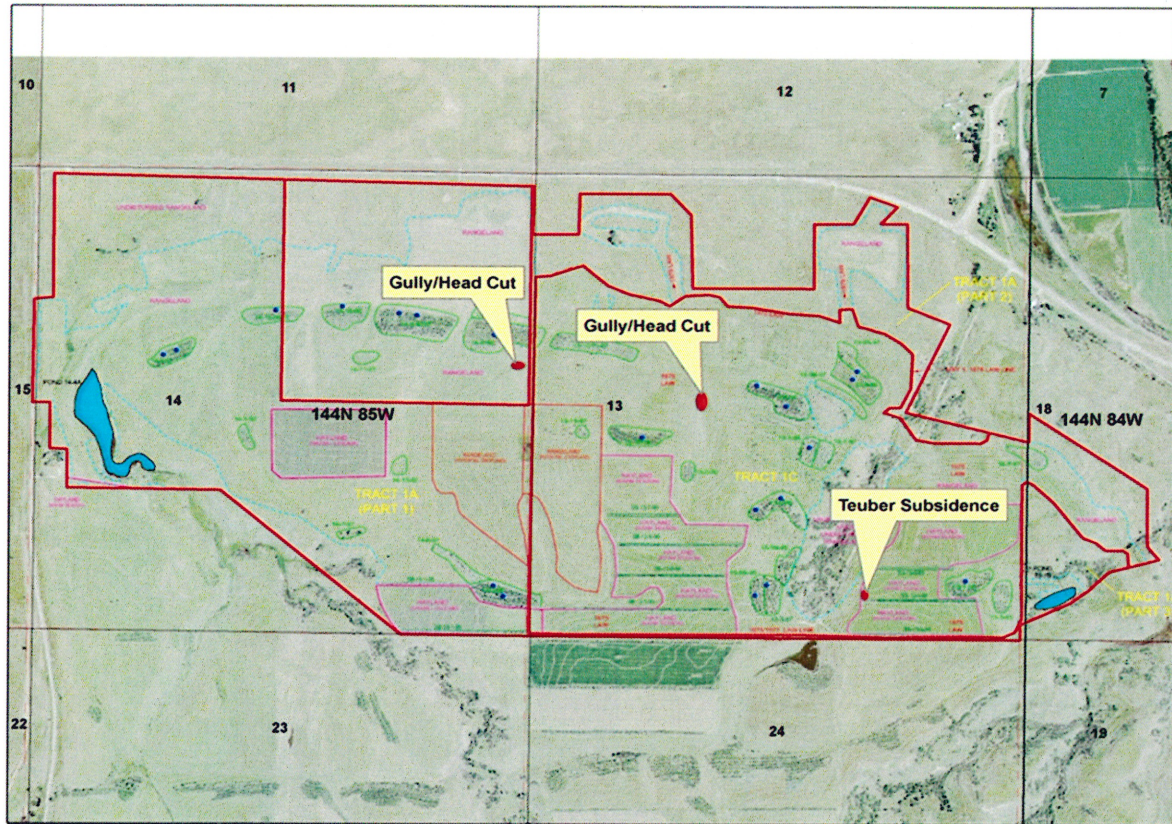
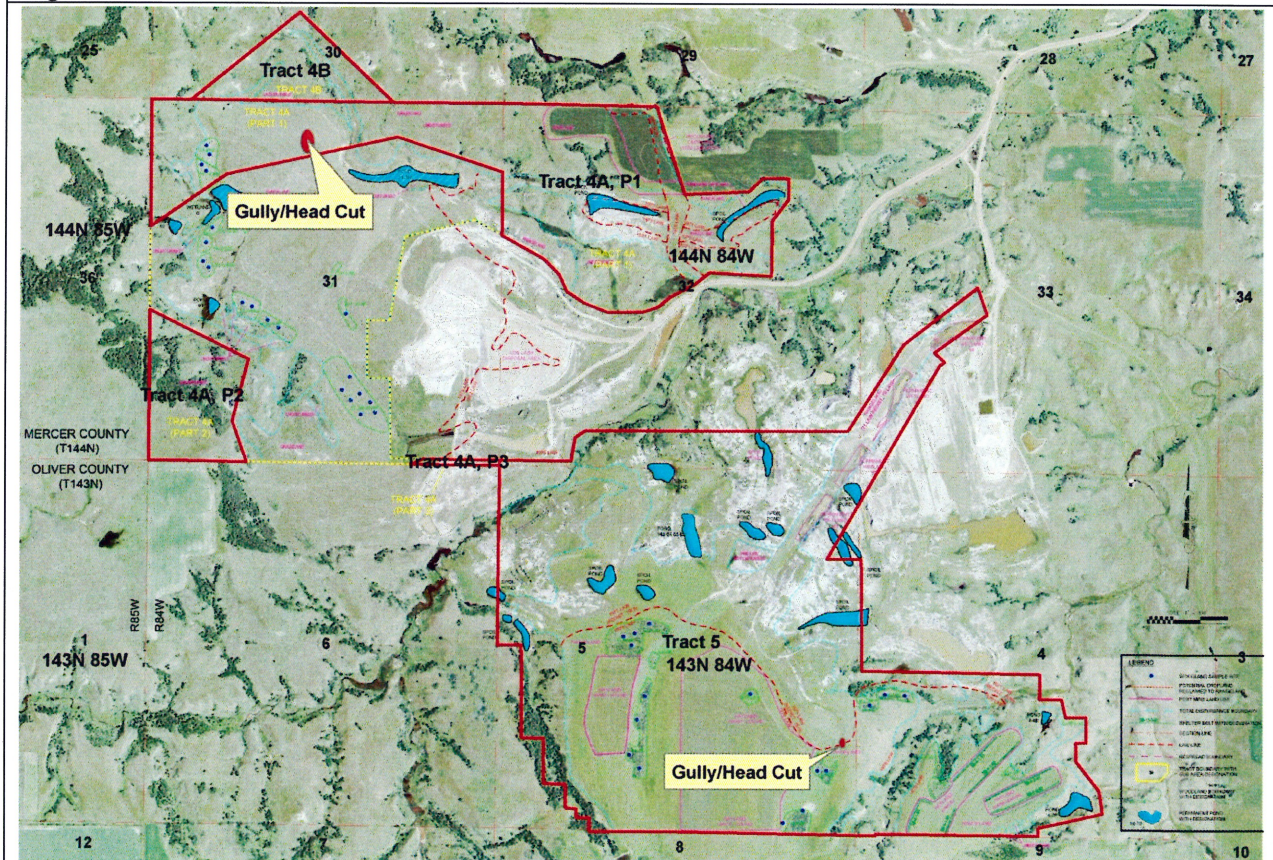


Figure 3





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INSPECTION REPORT

DATES OF INSPECTIONS: September 29, October 6, 7, 8, 14, and 15, 2010

TYPE OF INSPECTIONS: Partial inspections that were conducted for assessing suitable plant growth material respread thickness on reclaimed land in Permit BCGH-8204.

PERMITTEE - MINE: Basin Cooperative Services - Glenharold Mine

PERMIT INSPECTED: BCGH-8204

PERSONS ACCOMPANYING INSPECTOR: None

INSPECTION CONDITIONS: The inspections were conducted at various times between 9:30 a.m. and 5:30 p.m. CDT on the dates listed above. Weather conditions varied, but there was no measurable precipitation on the dates listed above and daytime highs ranged from the low 70's to the low 80's° F. Access was unrestricted.

SUITABLE PLANT GROWTH MATERIAL REMOVAL/RESPREAD

The soil probing for assessing suitable plant growth material (SPGM) respread thickness in Permit BCGH-8204 began on September 29 and was completed for the 2010 season on October 15, 2010. Soil probing on the remaining 1,050 acres in Sections 13, 14, 21, and 27 of the permit will be completed in 2011. The soil probing was conducted in anticipation of Basin submitting the final bond release for the remaining acres in Permit BCGH-8204.


Access to all of the tracts was unrestricted because surface conditions were dry during the period. The topsoil and subsoil were moist on rangeland and hayland, but the subsoil was generally somewhat drier on hayland compared to rangeland. The NDAWN weather station two miles west of Hazen recorded 6.09 inches of rain from August 29 to September 23, 2010. The topsoil and subsoil materials consisted primarily of loam, clay loam, and silt loam textures, and the subsoil was easily distinguishable from the underlying graded spoil.

Attached Figures 1 and 2 show the locations and numbers for 85 of the 88 soil probes in relation to Tracts 4A, 4C, and 5 on a georeferenced Attachment IXC of the proposed bond release application. Figure 3 shows all 88 soil probe locations on a 2010 aerial photograph in relation to the permit boundaries.

Several erosion or instability features were observed during the inspections. These features should be inspected by Basin Cooperative Services and repaired as necessary in 2011. Repair of some of these features may not be necessary depending on their location, for example if they are located on pre-law or early law areas and the SPGM respread requirements for the particular area. They are described as follows in relation to section, tract, or soil probe numbers:

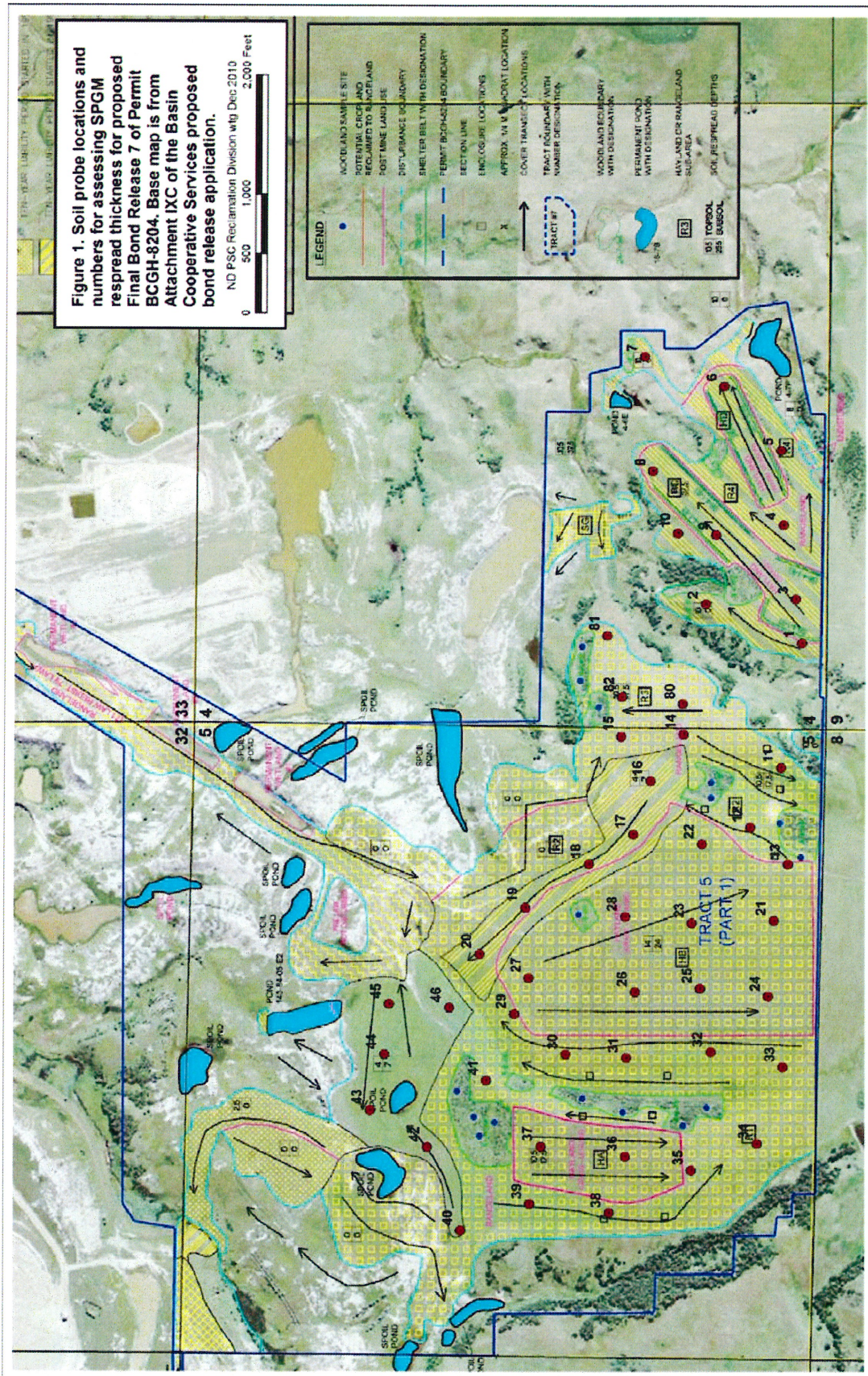
1. Erosion in a drainageway in the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 5 (Tract 5) about midway between soil probe numbers 15 and 16 as pictured in Figure 4;
2. Erosion south of the fence line near the center of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 5 (Tract 5) about 450 feet northeast of soil probe number 17 as pictured in Figure 5;
3. Erosion and piping near the permit boundary in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ and the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 31 (Tract 4C) south-southeast of soil probe number 51 as pictured in Figure 6;
4. Erosion and piping west of Pond 1 in the N $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 31 (Tract 4C) south of soil probe number 55 as pictured in Figure 7;
5. Piping between woodland sites 31-6-87 and 31-14-86 and possible erosion in woodland 31-6-87 in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 31 (Tract 4A) west of soil probe numbers 58 and 59 (no photograph);
6. Erosion in a drainageway to Pond 31-3H in the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 31 (Tract 4C) - rock was placed in the drainageway but it appears that more rock may be necessary to control erosion (no photograph);
7. Erosion on the hillside in the in the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 31 (Tract 4C) west of Pond 31-3H near soil probe number 64 as pictured in Figure 8;
8. Minor erosion in several drainageways near the center of Section 31 (Tract 4C) near soil probe numbers 69 and 72 as outlined on Figure 9;
9. Erosion and piping in the W $\frac{1}{2}$ of the E $\frac{1}{2}$ of Section 31 (Tract 4C) about midway between soil probe numbers 73 and 74 and also nearby and southeast of soil probe number 74 (no photographs); and,
10. Erosion in a drainageway in the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 18 (Tract 1C) at the mine disturbance boundary about 200 feet northeast of soil probe number 88 as pictured in Figure 10.

Attached is a table of the soil probe data collected to date. The data will be expanded in 2011, and a statistical analysis of the soil probe data will be completed separately for the bond release application file. Please note that some of the required SPGM respread depths listed in the table may be speculative because the respread boundaries and labels on Attachment IXC may require clarification in the bond release application. The statistical analysis of the soil probe data completed for the bond release application file may therefore contain data that differs from that in the attached table.



Bill Gunnerson
Environmental Scientist

cc: Dave Nilson
Mike Murray
OSM Casper Field Office
Mercer County Auditor
Oliver County Auditor



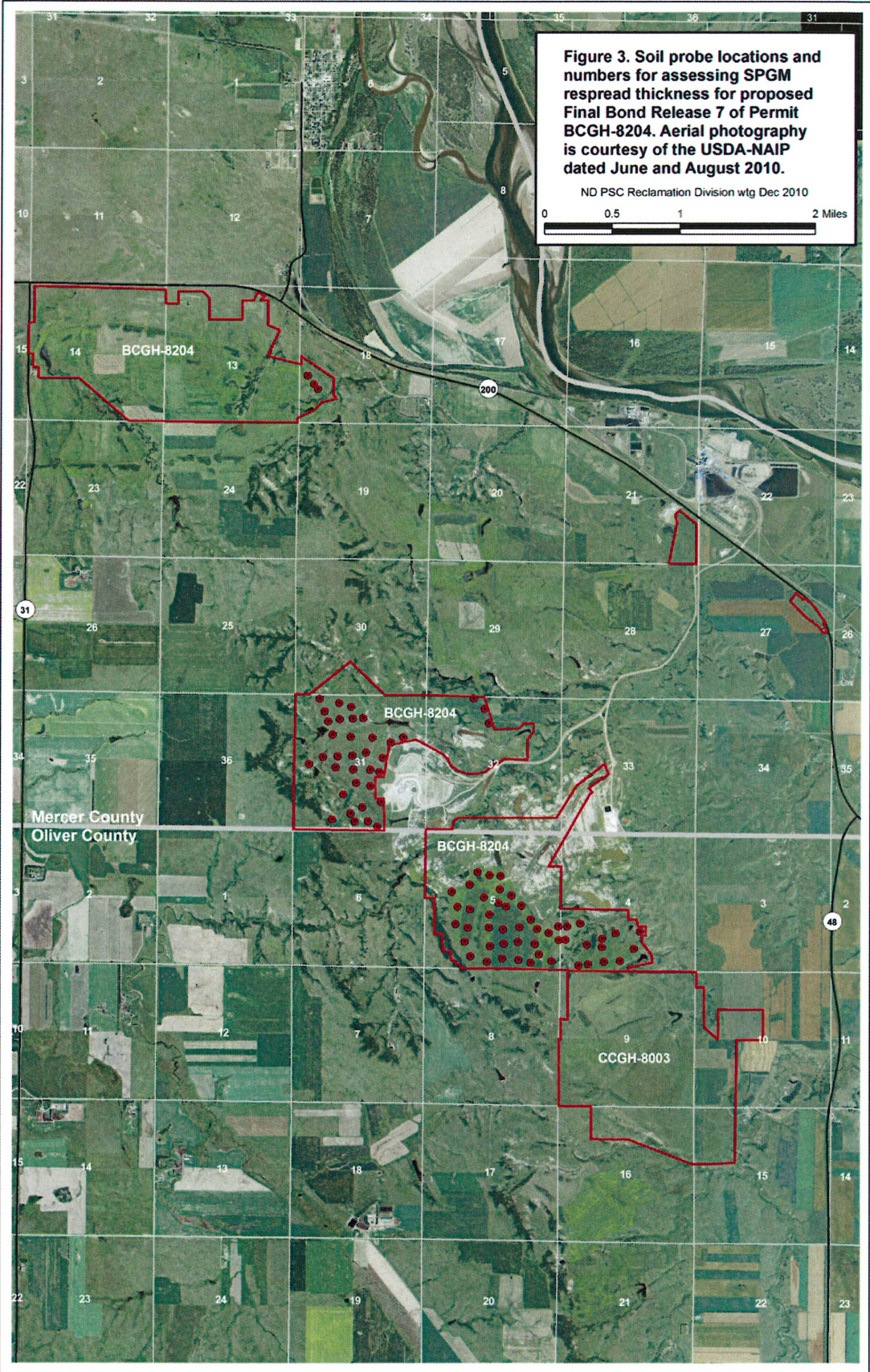




Figure 4. Erosion in a drainageway in the SE¹/₄ of the NE¹/₄ of Section 5 (Tract 5) about midway between soil probe numbers 15 and 16.



Figure 5. Erosion south of the fence line near the center of the NE¼ of Section 5 (Tract 5) about 450 feet northeast of soil probe number 17.



Figure 6. Erosion and piping near the permit boundary in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ and the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 31 (Tract 4C) south-southeast of soil probe number 51.



Figure 7. Erosion and piping west of Pond 1 in the N $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 31 (Tract 4C) south of soil probe number 55.



Figure 8. Erosion on the hillside in the in the SW¹/₄ of the NW¹/₄ of Section 31 (Tract 4C) west of Pond 31-3H near soil probe number 64.

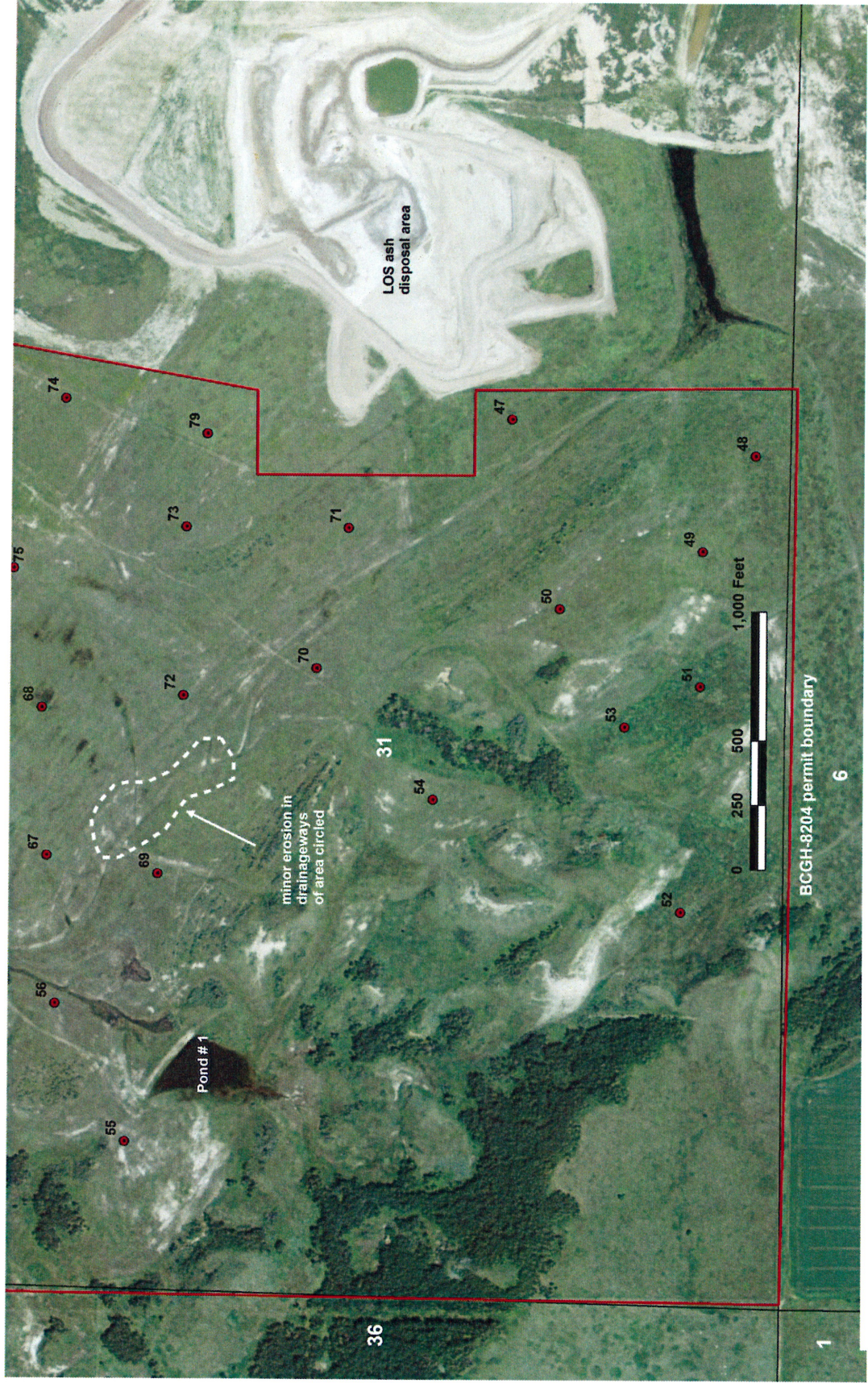


Figure 9. Minor erosion in several drainageways near the center of Section 31 (Tract 4C) near soil probe numbers 69 and 72.



Figure 10. Erosion in a drainageway in the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 18 (Tract 1C) at the mine disturbance boundary about 200 feet northeast of soil probe number 88.

Permit Number	Bond Release Number	Tract	Probe	Date	Required Topsoil Respread (inches)	Required Subsoil Respread (inches)	Total Required SPGM Respread (inches)	Observed Topsoil (inches)	Observed Subsoil (inches)	Total Observed SPGM (inches)
BCGH-8204	7	TRACT 5	1	9/29/2010	10.0	0.0	10.0	12	0	12
BCGH-8204	7	TRACT 5	2	9/29/2010	10.0	0.0	10.0	9	0	9
BCGH-8204	7	TRACT 5	3	9/29/2010	10.5	37.5	48.0	9	39	48
BCGH-8204	7	TRACT 5	4	9/29/2010	10.5	37.5	48.0	10	32	42
BCGH-8204	7	TRACT 5	5	10/6/2010	10.5	37.5	48.0	9	37	46
BCGH-8204	7	TRACT 5	6	10/6/2010	10.5	37.5	48.0	11	35	46
BCGH-8204	7	TRACT 5	7	10/6/2010	10.0	0.0	10.0	19	0	19
BCGH-8204	7	TRACT 5	8	10/6/2010	10.5	37.5	48.0	9	39	48
BCGH-8204	7	TRACT 5	9	10/6/2010	10.5	37.5	48.0	9	39	48
BCGH-8204	7	TRACT 5	10	10/6/2010	10.5	37.5	48.0	10	26	36
BCGH-8204	7	TRACT 5	11	10/6/2010	10.5	17.5	28.0	8	17	25
BCGH-8204	7	TRACT 5	12	10/6/2010	10.5	17.5	28.0	5	11	16
BCGH-8204	7	TRACT 5	13	10/6/2010	10.5	17.5	28.0	9	11	20
BCGH-8204	7	TRACT 5	14	10/6/2010	10.5	17.5	28.0	8	16	24
BCGH-8204	7	TRACT 5	15	10/6/2010	4.0	7.0	11.0	5	5	10
BCGH-8204	7	TRACT 5	16	10/6/2010	4.0	7.0	11.0	9	9	18
BCGH-8204	7	TRACT 5	17	10/6/2010	4.0	7.0	11.0	4	10	14
BCGH-8204	7	TRACT 5	18	10/6/2010	4.0	7.0	11.0	4	8	12
BCGH-8204	7	TRACT 5	19	10/6/2010	4.0	7.0	11.0	7	8	15
BCGH-8204	7	TRACT 5	20	10/6/2010	4.0	7.0	11.0	8	12	20
BCGH-8204	7	TRACT 5	21	10/7/2010	14.0	24.0	38.0	13	17	30
BCGH-8204	7	TRACT 5	22	10/7/2010	14.0	24.0	38.0	11	16	27
BCGH-8204	7	TRACT 5	23	10/7/2010	14.0	24.0	38.0	14	34	48
BCGH-8204	7	TRACT 5	24	10/7/2010	14.0	24.0	38.0	14	26	40
BCGH-8204	7	TRACT 5	25	10/7/2010	14.0	24.0	38.0	14	24	38
BCGH-8204	7	TRACT 5	26	10/7/2010	14.0	24.0	38.0	11	19	30

Permit Number	Bond Release Number	Tract	Probe	Date	Required Topsoil Respread (inches)	Required Subsoil Respread (inches)	Total Required SPGM Respread (inches)	Observed Topsoil (inches)	Observed Subsoil (inches)	Total Observed SPGM (inches)
BCGH-8204	7	TRACT 5	27	10/7/2010	14.0	24.0	38.0	9	24	33
BCGH-8204	7	TRACT 5	28	10/7/2010	14.0	24.0	38.0	15	15	30
BCGH-8204	7	TRACT 5	29	10/7/2010	10.5	17.5	28.0	7	9	16
BCGH-8204	7	TRACT 5	30	10/7/2010	10.5	17.5	28.0	7	15	22
BCGH-8204	7	TRACT 5	31	10/7/2010	10.5	17.5	28.0	6	15	21
BCGH-8204	7	TRACT 5	32	10/7/2010	10.5	17.5	28.0	7	19	26
BCGH-8204	7	TRACT 5	33	10/7/2010	10.5	17.5	28.0	7	16	23
BCGH-8204	7	TRACT 5	34	10/7/2010	10.5	17.5	28.0	9	15	24
BCGH-8204	7	TRACT 5	35	10/7/2010	10.5	17.5	28.0	10	10	20
BCGH-8204	7	TRACT 5	36	10/7/2010	10.5	17.5	28.0	10	18	28
BCGH-8204	7	TRACT 5	37	10/7/2010	10.5	17.5	28.0	9	13	22
BCGH-8204	7	TRACT 5	38	10/7/2010	10.5	17.5	28.0	9	9	18
BCGH-8204	7	TRACT 5	39	10/7/2010	10.5	17.5	28.0	12	15	27
BCGH-8204	7	TRACT 5	40	10/7/2010	4.0	7.0	11.0	4	13	17
BCGH-8204	7	TRACT 5	41	10/7/2010	10.5	17.5	28.0	6	15	21
BCGH-8204	7	TRACT 5	42	10/7/2010	4.0	7.0	11.0	7	17	24
BCGH-8204	7	TRACT 5	43	10/7/2010	4.0	7.0	11.0	8	16	24
BCGH-8204	7	TRACT 5	44	10/7/2010	4.0	7.0	11.0	6	5	11
BCGH-8204	7	TRACT 5	45	10/7/2010	4.0	7.0	11.0	6	5	11
BCGH-8204	7	TRACT 5	46	10/7/2010	4.0	7.0	11.0	7	13	20
BCGH-8204	7	TRACT 4C	47	10/8/2010	4.0	7.0	11.0	7	3	10
BCGH-8204	7	TRACT 4C	48	10/8/2010	4.0	7.0	11.0	6	4	10
BCGH-8204	7	TRACT 4C	49	10/8/2010	4.0	7.0	11.0	7	5	12
BCGH-8204	7	TRACT 4C	50	10/8/2010	4.0	7.0	11.0	6	4	10
BCGH-8204	7	TRACT 4C	51	10/8/2010	6.0	0.0	6.0	8	0	8
BCGH-8204	7	TRACT 4C	52	10/8/2010	6.0	0.0	6.0	6	0	6
BCGH-8204	7	TRACT 4C	53	10/8/2010	6.0	0.0	6.0	6	0	6

Permit Number	Bond Release Number	Tract	Probe	Date	Required Topsoil Respread (inches)	Required Subsoil Respread (inches)	Total Required SPGM Respread (inches)	Observed Topsoil (inches)	Observed Subsoil (inches)	Total Observed SPGM (inches)
BCGH-8204	7	TRACT 4C	54	10/8/2010	4.0	7.0	11.0	3	21	24
BCGH-8204	7	TRACT 4C	55	10/8/2010	4.0	7.0	11.0	4	7	11
BCGH-8204	7	TRACT 4C	56	10/8/2010	4.0	7.0	11.0	5	5	10
BCGH-8204	7	TRACT 4C	57	10/8/2010	4.0	7.0	11.0	3	6	9
BCGH-8204	7	TRACT 4A	58	10/8/2010	4.0	7.0	11.0	4	11	15
BCGH-8204	7	TRACT 4A	59	10/8/2010	4.0	7.0	11.0	2	11	13
BCGH-8204	7	TRACT 4A	60	10/8/2010	3.2	10.4	13.6	3	12	15
BCGH-8204	7	TRACT 4A	61	10/8/2010	3.2	10.4	13.6	3	7	10
BCGH-8204	7	TRACT 4A	62	10/8/2010	3.2	10.4	13.6	4	10	14
BCGH-8204	7	TRACT 4A	63	10/14/2010	4.0	7.0	11.0	3	11	14
BCGH-8204	7	TRACT 4C	64	10/14/2010	3.2	10.4	13.6	1	11	12
BCGH-8204	7	TRACT 4C	65	10/14/2010	3.2	10.4	13.6	3	11	14
BCGH-8204	7	TRACT 4C	66	10/14/2010	3.2	10.4	13.6	2	11	13
BCGH-8204	7	TRACT 4C	67	10/14/2010	4.0	7.0	11.0	4	7	11
BCGH-8204	7	TRACT 4C	68	10/14/2010	4.0	7.0	11.0	4	9	13
BCGH-8204	7	TRACT 4C	69	10/14/2010	4.0	7.0	11.0	3	8	11
BCGH-8204	7	TRACT 4C	70	10/14/2010	4.0	7.0	11.0	2	3	5
BCGH-8204	7	TRACT 4C	71	10/14/2010	4.0	7.0	11.0	4	6	10
BCGH-8204	7	TRACT 4C	72	10/14/2010	4.0	7.0	11.0	5	7	12
BCGH-8204	7	TRACT 4C	73	10/14/2010	4.0	7.0	11.0	3	5	8
BCGH-8204	7	TRACT 4C	74	10/14/2010	3.2	10.4	13.6	3	7	10
BCGH-8204	7	TRACT 4C	75	10/14/2010	4.0	7.0	11.0	4	8	12
BCHG-8204	7	TRACT 4C	76	10/14/2010	3.2	10.4	13.6	3	7	10
BCGH-8204	7	TRACT 4C	77	10/14/2010	3.2	10.4	13.6	8	9	17
BCGH-8204	7	TRACT 4C	78	10/14/2010	3.2	8.0	11.2	3	21	24
BCGH-8204	7	TRACT 4C	79	10/14/2010	4.0	7.0	11.0	4	7	11
BCGH-8204	7	TRACT 5	80	10/15/2010	10.5	17.5	28.0	7	14	21

Permit Number	Bond Release Number	Tract	Probe	Date	Required Topsoil Respread (inches)	Required Subsoil Respread (inches)	Total Required SPGM Respread (inches)	Observed Topsoil (inches)	Observed Subsoil (inches)	Total Observed SPGM (inches)
BCGH-8204	7	TRACT 5	81	10/15/2010	10.5	17.5	28.0	7	18	25
BCGH-8204	7	TRACT 5	82	10/15/2010	10.5	17.5	28.0	7	19	26
BCGH-8204	7	TRACT 4A	83	10/15/2010	15.0	0.0	15.0	17	0	17
BCGH-8204	7	TRACT 4A	84	10/15/2010	15.0	21.0	36.0	11	22	33
BCGH-8204	7	TRACT 4A	85	10/15/2010	15.0	21.0	36.0	15	17	32
BCGH-8204	7	TRACT 1C	86	10/15/2010	5.5	0.0	5.5	6	0	6
BCGH-8204	7	TRACT 1C	87	10/15/2010	5.5	0.0	5.5	7	0	7
BCGH-8204	7	TRACT 1C	88	10/15/2010	5.5	0.0	5.5	9	0	9