SOUTH JORDAN EVAPORATION PONDS SITE
POND SEDIMENTS REMOVAL PROJECT

POST REMOVAL SAMPLING AND ANALYSIS REPORT

Prepared by:
North American Mines Services
For:
Kennecott Land Company

April 5, 2007

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To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Russell Sanford, Vice President Land Development and Construction, Kennecott Land Company

EXECUTIVE SUMMARY

The South Jordan Evaporation Ponds site (the Site) is located seven miles east of the Bingham Canyon Mine in Sections 18 and 19 in Township 3 South, Range 1 West and Sections 13 and 24 in Township 3 South, Range 2 West of the Salt Lake Base and Meridian (SLBM).

The site was remediated in 1994 and 1995 by Kennecott Utah Copper (Kennecott) under an Administrative Order on Consent with the Region VIII, USEPA. The remediation included consolidating the ponds into approximately 217 acres. The materials that were present at the consolidated site included untreated sediments, mixed sediments and soil, capped with 3-4 feet clean cap soil and topsoil. The Topsoil and Cap Soil units were removed and stockpiled prior to the beginning of the removal work. The Mixed Soils and Undisturbed Sludge were loaded on trucks and removed to the Copper Notch Repository.

Kennecott Land Company (KL) is planning to develop this property. Prior to development, KL has opted to remove the mixed soil and sludge (pond sediment) and some native soil beneath the sludge to a repository located at the base of the Bingham Canyon Mine waste rock piles (Copper Notch Repository) in order to achieve target soil cleanup concentrations of less than or equal to 50 ppm arsenic and 500 ppm lead.

Approximately 3.9 million cubic yards of pond sediments and soils were removed from the 214 acres site to a repository located at the base of the Bingham Canyon Mine waste rock piles (Copper Notch Repository). Post removal samples were collected from the native soil to confirm that the entire post removal surface is within the target clean-up concentrations for lead and arsenic.

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SOUTH JORDAN EVAPORATION PONDS
POST REMOVAL SAMPLING AND ANALYSIS REPORT

1.0 INTRODUCTION

The South Jordan Evaporation Ponds site (the site) is located seven miles east of the Bingham Canyon Mine in Sections 18 and 19 in Township 3 South, Range 1 West and Sections 13 and 24 in Township 3 South, Range 2 West of the Salt Lake Base and Meridian (SLBM) (Figure1). Kennecott Land Company (KL) is planning to develop this property. Prior to development, KL has opted to remove the mixed soil and sludge (pond sediment) and
some native soil beneath the sludge. Approximately 3.9 million cubic yards of pond sediments and soils were removed from the 214 acres site to a repository located at the base of the Bingham Canyon Mine waste rock piles (Copper Notch Repository) to achieve target soil cleanup concentrations of less than or equal to 50 ppm arsenic and 500 ppm lead.

After the removal of the pond sediments, post removal samples were collected to document the concentrations of total arsenic and lead, total sulfate and water soluble sulfate, along with paste pH and soil conductivity of the post-removal surface. This report documents the sampling and analytical data of the post removal sampling at the South Jordan Evaporation Ponds site.

2.0 SITE DESCRIPTION

The site was remediated in 1994 and 1995 by Kennecott Utah Copper (Kennecott) under an Administrative Order on Consent with the Region VIII, USEPA. The remediation consisted of the following activities:

- Removal of waste rock used as dike material to the mine waste rock dumps;
- Removal of sludge contaminated with lead and arsenic to the Bluewater 1 repository;
- Consolidation of the site footprint from 620 acres to 217 acres by haulage of the remaining non-contaminated sludge to a central location; and
- Capping the site with 3 feet of clean soil and re-vegetating.

The consolidated site covered approximately 217 acres in an area that is roughly rectangular; approximately 2200 feet east to west and 6000 feet north to south (Figure 1). The materials that were present at the consolidated site are listed below in the order in which they occur from the surface down to the native soil (thickness in parenthesis).

- Topsoil (6-18 inches)
- Cap Soil (3 feet)

- Mixed sludge and soil (2-13 feet)
- Undisturbed sludge (2-8 feet)
- Native soil

The thickness of each unit varies across the site. The depth to the bottom of the pond sediments varies from 12 to 20 feet. Sludge thickness changes between the different ponds and where pond boundaries are located. The underlying native soil varies in texture.

The Topsoil and Cap Soil units were removed and stockpiled prior to the beginning of the removal work. The Mixed Soils and Undisturbed Sludge were loaded on trucks and removed to a site located at the base of the Bingham Canyon Mine waste rock piles (Copper Notch Repository).

3.0 PREVIOUS WORK

Three characterization sampling projects were conducted in 2001-2003 to determine the volume and characteristics of the soils and sediments in the consolidated footprint. These samples were collected from open trenches and with earth penetrating Geoprobe. Some of the Geoprobe samples that were collected from the native soil at the bottom of the ponds indicated that some removal of the native soils would be required to achieve the target soil cleanup levels of less than or equal to 50 ppm arsenic and 500 ppm lead. The conclusions from these sampling activities were described in the South Jordan Evaporation Ponds Site Pond Sediment Removal Work Plan submitted to EPA on July 15, 2002 and revised December 2006.

4.0 SAMPLING PROCEDURES

All sampling procedures were consistent with the approved sampling and analysis plan. Post-removal samples were collected to document the arsenic, lead, total sulfate and water soluble sulfate concentrations, along with paste pH and soil conductivity of the post-removal surface. After the sludge and/or contaminated native soils were removed, the post removal footprint was sampled. Composite samples were collected as the excavation of the pond sediments proceeded and an open footprint became available for sampling. Sample coverage averaged one composite sample per acre. Samples were collected from the native soil from the 0 to 3 inches interval using disposable plastic spoons and cups and placed into sealing plastic bags.

The samples were assigned the identification numbers EPX-1 through EPX-245 (Figure 2). Repeat sampling was conducted following additional removal in areas where the analytical results exceeded the 50 ppm arsenic and/or 500 ppm lead benchmark. Repeat samples were assigned the same identification number as the first sample followed by a letter (e.g., sample EPX-121 represents the first sample collected after removal, sample

EPX-121A represents a second sample after additional removal; and EPX-121B represents a third sample after another additional removal).[1]

Additional characterization and confirmation sampling was conducted throughout the sediment removal project to determine the extent of the required removal of native soils at the bottom of the ponds (Figure 2). Characterization samples were collected in vertical trenches and with ground penetrating Geoprobe. Confirmation Samples were collected in the same manner as the post-removal samples.

All pertinent information about each sample site was logged in a field notebook and is included in this report. Sample locations were recorded and mapped using the Global Positioning System (GPS). Photographs of sample locations and materials were taken and are also included in this report.

5.0 ANALYSIS

All samples were analyzed at Kennecott Environmental laboratory (KEL) for total arsenic, lead, total sulfate and water soluble sulfate concentrations, paste pH, and soil conductivity. Total metal concentrations were analyzed using the Environmental Protection Agency (EPA) SW-846 Methods 3050 (preparation) and 6010 (analytical/ICP). The samples were also analyzed for pH using EPA method 9035 (paste pH) and the conductivity of the paste pH solution. Total sulfate were analyzed with LECO furnace and water soluble sulfate by EPA method 9036. The analytical results of post removal samples are listed in Table 1. Analytical results of the characterization/confirmation samples of the native soil collected in depth are listed in Table 2.
Samples were split as part of the QA/QC procedures. The split samples were dried and crushed to <65 standard sieve sizes after the initial analysis (as described above) was completed. The splits samples were analyzed by KEL and American West Analytical Laboratories (AWAL) using the same analytical methods (SW-846 3050/6010). The results from both laboratories were compared by calculating the relative percent difference (RPD). The results of the split sample analysis were used for QA/QC purposes only, and the original "unprepared" sample analysis is considered the reportable results. The results of the split samples analyses are listed in Table 3.

5.1 Total Metals Analytical Results

A total of 242 post removal samples were collected from the Site (Figure 2). The results of the post removal sample analyses are reported in Table 1.[2] Table 1A summarizes the

[1] The one exception to this rule is sample EPX-116, for which the sample collected after additional removal was conducted, was given the number EPX-120
[2] Samples EPX-13, 23, 28 were collected from a soil layer that was removed to a temporary stockpile. Additional post removal samples from the current surface were collected. Only samples that represent the current surface are reported in Table 1.

median, average and minimum and maximum analytical results of total metal concentrations for samples that represent the current surface. Results in Table 1A are in parts per million from a total 242 samples.

Table 1A: Summary of Post Removal Analytical Data

	Arsenic	Lead	Soluble Sulfate	Total Sulfate
Median concentration	17	61	2005	7500
Average concentration	21	85	2196	10150
Min. concentration	4	21	174	300
Max. concentration	50	427	6600	90100

5.2 Native Soil Characterization/Confirmation Sampling Results

A total of 157 characterization samples and 24 confirmation samples were collected from the native soils (Table 2). Approximately 36,000 cubic yards of native soil were removed to the Copper Notch Repository.[3]

6.0 QUALITY ASSURANCE/QUALITY CONTROL

KEL is a State certified lab and as such follows QA/QC procedures consistent with USEPA standards. Laboratory QA/QC samples include method blanks, matrix spikes, duplicates and matrix duplicates, and calibration and calibration check samples. QA statements for all samples are included with this report. Twenty two samples were split as part of QA/QC procedures and analyzed KEL and AWAL. The results of the analysis from the two laboratories were compared by calculating the relative percent difference (RPD).[4] Three of the RPD that were calculated exceeded the data quality objective of 35%. The results of the split samples analysis with the RPD calculated are listed in Table 3.

7.0 SITE STATUS

All of the pond sediments and the mixed soil units as well as all native soils from the site that had higher than 50 ppm arsenic and/or 500 ppm lead were removed to the Copper Notch Repository.

[3] The 36,000 cubic yards of native soil is part of the total 3.9 million cubic yards removed in the project.
[4] RPD was only calculated when analytical results for both samples were ten times greater than the method detection limits.

8.0 DOCUMENTATION

Sample locations were recorded and mapped using the Global Positioning System (GPS) (see Figure 2 and Figure 3).
Table 4 lists all photos taken as part of the documentation of the post removal sampling events.
Also included with this report are the following appendices:

- Appendix A: Field Notes
- Appendix B: Chain-of-Custody Forms
- Appendix C: Laboratory Analytical Certificates and QA Statements
- Appendix D: Photographs

TAB[illegible]: SAMPLING AND ANALYTICAL DATA FOR POST REMOVA[illegible]MPLES COLLECTED FROM THE SOUTH JORDAN EVAPORA[illegible]N PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-1	12-Sep-03	AL22978	AL25178	2-POINT COMPOSITE	LIGHT T MEDIUM GRAY SANDY GRAVEL	15	64	7.52	3180	2040	7500
EPX-2	12-Sep-03	AL22979	AL25178	3-POINT COMPOSITE	DARK SANDY GRAVEL, MED GRAY SILTY SAND	16	51	7.56	3960	2180	3600
EPX-3	12-Sep-03	AL22980	AL25178	3-POINT COMPOSITE	MEDIUM GRAY SANDY GRAVEL, SILTY SAND	15	66	7.66	3170	1780	1200
EPX-4	12-Sep-03	AL22981	AL25178	2-POINT COMPOSITE	BLACK SANDY GRAVEL	8	49	7.77	1820	414	900
EPX-5	12-Sep-03	AL22982	AL25178	4-POINT COMPOSITE	MEDIUM GRAY SILTY SAND	20	66	7.43	3100	2080	7800
EPX-6	9-Oct-03	AL25174	AL25178	5-POINT COMPOSITE	SANDY GRAVEL, SILTY SAND	30	61	7.59	3000	2250	6300
EPX-7	9-Oct-03	AL25175	AL25178	5-POINT COMPOSITE	SANDY GRAVEL, SILTY SAND	23	56	7.64	3120	2340	5100
EPX-8	9-Oct-03	AL25176	AL25178	5-POINT COMPOSITE	SANDY GRAVEL, SILTY SAND	23	44	7.45	2880	2470	3000
EPX-9	9-Oct-03	AL25177	AL25178	2-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	16	48	7.54	4790	2020	2400
EPX-10	9-Oct-03	AL25178	AL25178	4-POINT COMPOSITE	LIGHT TO MEDIUM GRAY SILTY SAND	19	54	7.65	3670	2420	10800
EPX-11	5-Nov-03	AL26991	AL26993	5-POINT COMPOSITE	GRAY TO BLACK GRAVEL, SILTY SAND	18	51	7.5	2510	2110	7800
EPX-12	5-Nov-03	AL26992	AL26993	3-POINT COMPOSITE	MEDIUM GRAY SILTY SAND	16	50	7.73	2350	1890	<100
EPX-14	7-Nov-03	AL27244	AL27245	5-POINT COMPOSITE	GRAY SILT, WET; GRAY TO BLACK GRAVEL	11	44	7.82	2510	1980	3600
EPX-15	7-Nov-03	AL27245	AL27245	5-POINT COMPOSITE	GRAY SILT, WET; GRAY TO BLACK GRAVEL	15	48	7.79	2670	2050	2400
EPX-16	11-Nov-03	AL27883	AL28194	2-POINT COMPOSITE	BLACK GRAVEL, GRAY SANDY SILT	13	39	7.25	2280	1770	1800
EPX-17	12-Nov-03	AL27884	AL28194	2-POINT COMPOSITE	BLACK SANDY GRAVEL	8	29	7.34	1970	860	300
EPX-18	12-Nov-03	AL27885	AL28194	4-POINT COMPOSITE	BLACK SANDY GRAVEL	9	27	7.54	1000	1010	1800
EPX-19	21-Nov-03	AL27885	AL28591	5-POINT COMPOSITE	BLACK SANDY GRAVEL, GRAY SILT	12	49	8.17	3490	3050	14400
EPX-20	21-Nov-03	AL27885	AL28591	4-POINT COMPOSITE	BLACK SANDY GRAVEL, GRAY SILT	17	43	7.9	2420	1770	1800
EPX-21	1-Dec-03	AL27885	AL29401	4-POINT COMPOSITE	BLACK SANDY GRAVEL, GRAY SILT	21	47	7.83	2710	2190	2700
EPX-22	2-Dec-03	AL27885	AL29401	4-POINT COMPOSITE	BLACK SANDY GRAVEL, GRAY SILT	17	55	7.75	2610	2030	1200
EPX-24	4-Dec-03	AL27885	AL29401	4-POINT COMPOSITE	BLACK SANDY GRAVEL	14	36	7.81	1540	1140	1500
EPX-25	18-Dec-03	AL27885	AM00170	4-POINT COMPOSITE	LIGHT GRAY TO BLACK SANDY GRAVEL	10	72	7.63	850	272	1200
EPX-26	24-Dec-03	AL27885	AM00170	5-POINT COMPOSITE	BLACK SANDY GRAVEL	4	49	7.68	1880	1190	1500
EPX-27	9-Jan-04	AM02726	AM02124	5-POINT COMPOSITE	BLACK GRAVEL	9.4	45	7.8	2740	2340	2700
EPX-29	14-Jan-04	AM01069	AM01069	5-POINT COMPOSITE	GRAY SANDY GRAVEL	24	94	7.84	2430	2020	2100
EPX-30	28-Jan-04	AM01860	AM01858	4-POINT COMPOSITE	BLACK SANDY GRAVEL, GRAY SANDY SILT	10	52	7.75	2420	1980	1800
EPX-31	18-Feb-04	AM03360	AM03359	4-POINT COMPOSITE	GRAY SANDY GRAVEL	7.7	43	7.6	2090	1440	630
EPX-32	10-Feb-04	AM02884	AM02887	5-POINT COMPOSITE	YELLOWISH GRAY GRAVEL	10	30	7.76	2070	1700	6600
EPX-33	10-Feb-04	AM02885	AM02887	5-POINT COMPOSITE	GRAY SANDY GRAVEL. SOME YELLOW DISCOLORATION IN SOME SUB SITES	10	47	7.56	2170	1830	8400

TAB[illegible]: SAMPLING AND ANALYTICAL DATA FOR POST REMOVA[illegible]MPLES COLLECTED FROM THE SOUTH JORDAN EVAPORAT[illegible]N PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-34	10-Feb-04	AM02886	AM02887	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	17	38	7.61	2070	1760	6300
EPX-35	10-Feb-04	AM02887	AM02887	3-POINT COMPOSITE	LIGHT GRAY GRAVEL, SOME YELLOWISH GRAY GRAVEL	13	45	7.72	2330	2000	18000
EPX-36	18-Feb-04	AM03357	AM03359	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	9.9	47	7.69	2420	1630	3000
EPX-37	18-Feb-04	AM03358	AM03359	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	13	50	7.72	1310	688	900
EPX-38	18-Feb-04	AM03359	AM03359	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL, SOME YELLOW-ORANGE DISCOLORATION	17	52	7.56	2330	1660	800
EPX-39	25-Feb-04	AM03923	AM03921	5-POINT COMPOSITE	GRAY SANDY GRAVEL. SOME YELLOW DISCOLORATION IN SOME SUB SITES	17	26	7.58	2410	1620	40500
EPX-40	10-Mar-04	AM05105	AM05108	5-POINT COMPOSITE	LIGHT GRAY TO BLACK GRAVEL, SANDY GRAVEL	32	39	7.49	2190	1600	16800
EPX-41	12-Mar-04	AM05106	AM05108	5-POINT COMPOSITE	GRAY SANDY GRAVEL. SOME YELLOW DISCOLORATION IN SOME SUB SITES	16	43	7.62	2850	2000	7500
EPX-42	13-Apr-04	AM07651	AM07654	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	16	42	8.11	2500	1920	10500
EPX-43	13-Apr-04	AM07652	AM07654	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	14	36	8.01	2410	1920	11700
EPX-44	13-Apr-04	AM07653	AM07654	5-POINT COMPOSITE	GRAY SANDY GRAVEL. SOME ORANGE DISCOLORATION IN SOME SUB SITES	12	42	8.09	2170	1780	5700
EPX-45	13-Apr-04	AM07654	AM07654	5-POINT COMPOSITE	GRAY SANDY GRAVEL. SOME YELLOWISH ORANGE DISCOLORATION	20	64	7.97	2220	1780	16800
EPX-46	22-Apr-04	AM08602	AM08500	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	13	49	6.11	2720	1880	45000
EPX-47	6-May-04	AM09246	AM09282	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	13	43	6.4	2990	2010	18600
EPX-48	6-May-04	AM09247	AM09282	3-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	16	38	6.58	2420	1720	5700
EPX-49	6-May-04	AM09248	AM09282	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	17	38	6.57	2910	1890	29100
EPX-50	6-May-04	AM09249	AM09282	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	16	36	6.72	2520	1790	6300
EPX-51	6-May-04	AM09250	AM09282	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	17	44	6.67	2790	1930	25800
EPX-52	6-May-04	AM09251	AM09282	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	13	36	6.79	2510	1810	7200
EPX-53	14-May-04	AM09937	AM10252	5-POINT COMPOSITE	BLACK SANDY GRAVEL. SOME GRAY SILT	17	30	7.75	2680	1600	9000
EPX-54	14-May-04	AM09938	AM10252	5-POINT COMPOSITE	BLACK SANDY GRAVEL. SOME GRAY SILT	12	31	7.71	2670	1840	17700
EPX-55	26-May-04	AM11087	AM11091	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	15	42	5.41	2750	1760	7200
EPX-56	26-May-04	AM11088	AM11091	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	13	45	6.17	500	174	810
EPX-57	26-May-04	AM11089	AM11091	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	10	31	6.13	2700	1060	7800
EPX-58	26-May-04	AM11090	AM11091	4-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	14	42	6.21	3500	2230	7200
EPX-59	26-May-04	AM11091	AM11091	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	11	33	6.8	2220	1920	4500
EPX-60	7-Jun-04	AM11779	AM11779	4-POINT COMPOSITE	GRAY SILT	25	42	6.6	2570	2290	27600
EPX-61	7-Jun-04	AM11780	AM11779	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	21	86	6.55	2530	2160	35100
EPX-62	16-Jun-04	AM12859	AM12932	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	7	48	7.75	1520	1690	3600
EPX-63	29-Jul-04	AM16097	AM16107	4-POINT COMPOSITE	MEDIUM TO LIGHT GRAY SANDY GRAVEL	13	33	7.34	2210	1510	9600

TABLE SAMPLING AND ANALYTICAL DATA FOR POST REMOVAL SAMPLES COLLECTED FROM THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-64	29-Jul-04	AM16098	AM16107	5-POINT COMPOSITE	BLACK SANDY GRAVEL	22	37	7.02	2650	1870	4200
EPX-65	29-Jul-04	AM16099	AM16107	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	15	72	6.76	3250	2130	10800
EPX-66	4-Aug-04	AM16379	AM16387	5-POINT COMPOSITE	BLACK SANDY GRAVEL	12	39	8.53	2500	1820	2940
EPX-67	4-Aug-04	AM16380	AM16387	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	36	8.67	440	230	510
EPX-68	4-Aug-04	AM16381	AM16387	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	34	8.47	710	365	1200
EPX-69	26-Aug-04	AM17548	AM17557	3-POINT COMPOSITE	BLACK SANDY GRAVEL	22	82	7.48	3630	1830	31100
EPX-70	26-Aug-04	AM17549	AM17557	2-POINT COMPOSITE	BLACK SANDY GRAVEL	8	80	8.3	2580	1710	24000
EPX-71	26-Aug-04	AM17550	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	12	47	7.91	3450	1820	8400
EPX-72	26-Aug-04	AM17551	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	12	48	7.83	3020	1770	10800
EPX-73	26-Aug-04	AM17552	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	44	7.73	2500	1600	11300
EPX-74	26-Aug-04	AM17553	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	51	7.2	1630	847	2880
EPX-75	26-Aug-04	AM17554	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	15	63	7.66	3260	2220	18900
EPX-76	26-Aug-04	AM17555	AM17557	5-POINT COMPOSITE	BLACK SANDY GRAVEL	13	55	7.71	2740	1830	16500
EPX-77	20-Sep-04	AM18859	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	70	7.37	3030	1930	10200
EPX-78	20-Sep-04	AM18860	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	8	63	6.54	2840	1900	7500
EPX-79	20-Sep-04	AM18861	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	7	44	5.18	3450	2270	5700
EPX-80	20-Sep-04	AM18862	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	9	50	6.15	3270	2220	5400
EPX-81	20-Sep-04	AM18863	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	12	59	5.98	2800	1870	6900
EPX-82	20-Sep-04	AM18864	AM18861	5-POINT COMPOSITE	BLACK SANDY GRAVEL	11	50	7.1	2860	1900	5700
EPX-83	28-Sep-04	AM19458	AM19453	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL. SOME YELLOW DISCOLORATION	12	41	7.35	2310	1630	15600
EPX-84	14-Oct-04	AM20313	AM20306	5-POINT COMPOSITE	GRAY SILT, BLACK SANDY GRAVEL	11	47	7.61	2970	1980	2100
EPX-85	14-Oct-04	AM20314	AM20306	5-POINT COMPOSITE	BLACK SANDY GRAVEL	13	47	7.71	3500	2000	2010
EPX-86	14-Oct-04	AM20315	AM20306	5-POINT COMPOSITE	GRAY SILT, BLACK SANDY GRAVEL	38	67	5.68	2500	931	1290
EPX-87	14-Oct-04	AM20316	AM20306	5-POINT COMPOSITE	BLACK SANDY GRAVEL	14	49	7.11	2780	2030	2050
EPX-88	14-Oct-04	AM20317	AM20306	2-POINT COMPOSITE	BLACK SANDY GRAVEL	16	54	7.48	2980	2440	2600
EPX-89A	15-Nov-04	AM21791	AM21791	GRAB	SAMPLE COLLECTED AS CHECK SAMPLE (EP111504-2) AFTER ADDITIONAL REMOVAL CONDUCTED IN AREA OF EPX-89. SAMPLE IS SANDY GRAVEL, STRONG FeOx DISCOLORATION	14	36	1.26	2220	6600	1780
EPX-90	14-Oct-04	AM20311	AM20306	3-POINT COMPOSITE	MEDIUM GRAY SILTY GRAVEL. SOME YELLOWISH GRAY SILT	22	38	5.37	2630	1840	4600
EPX-91C	15-Dec-04	AM23455	AM23451	5-POINT COMPOSITE	SANDY GRAVEL, MED FeOx	19	26	5.31	1930	1630	13500

TAB[illegible] SAMPLING AND ANALYTICAL DATA FOR POST REMOVAL [illegible]MPLES COLLECTED FROM THE SOUTH JORDAN EVAPORAT[illegible]N PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB Q/C	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-92	18-Nov-04	AM22135	AM22297	5-POINT COMPOSITE	BLACK SANDY GRAVEL	10	58	7.84	2510	1920	9300
EPX-93	18-Nov-04	AM22136	AM22297	5-POINT COMPOSITE	BLACK SANDY GRAVEL	13	56	7.64	2600	2010	43500
EPX-94A	22-Dec-04	AM23745	AM23746	4-POINT COMPOSITE	SANDY GRAVEL, MED TO STRONG FeOx	49	91	6.09	2380	2130	19200
EPX-95	23-Nov-04	AM22353	AM22357	3-POINT COMPOSITE	BLACK SANDY GRAVEL AND YELLOWISH GRAY G	5	21	7.42	2850	2310	5400
EPX-96	23-Nov-04	AM22354	AM22357	3-POINT COMPOSITE	GRAY SANDY GRAVEL, MINOR FeOx	26	63	7.26	2890	2420	12300
EPX-97	23-Nov-04	AM22355	AM22357	3-POINT COMPOSITE	BLACK SANDY GRAVEL, SOME GRAY SILT	17	51	na	na	na	na
EPX-98C	22-Dec-04	AM23746	AM23746	5-POINT COMPOSITE	SILTY SANDY GRAVEL, MEDIUM TO STRONG FeOx	28	37	5.38	2160	1890	23100
EPX-99	6-Dec-04	AM22902	AM22902	3-POINT COMPOSITE	BLACK TO GRAY SILTY SANDY GRAVEL (SAMPLE	12	65	7.47	2740	2210	3300
EPX-100	15-Dec-04	AM23451	AM23451	5-POINT COMPOSITE	BLACK SANDY GRAVEL	16	92	7.74	2360	1900	8400
EPX-101	15-Dec-04	AM23452	AM23451	5-POINT COMPOSITE	BLACK SANDY GRAVEL	13	81	7.81	2250	1890	7200
EPX-102	15-Dec-04	AM23453	AM23451	5-POINT COMPOSITE	BLACK SANDY GRAVEL	18	86	7.19	2630	2280	17400
EPX-103	15-Dec-04	AM23454	AM23451	5-POINT COMPOSITE	SANDY GRAVEL, MED TO STRONG FeOx	25	38	4.02	2200	1840	18000
EPX-104	22-Dec-04	AM23747	AM23746	2-POINT COMPOSITE	BLACK SANDY GRAVEL	17	86	7.48	3180	2570	600
EPX-105	22-Dec-04	AM23748	AM23746	5-POINT COMPOSITE	BLACK SANDY GRAVEL	15	107	7.26	2550	2090	14400
EPX-106	18-Jan-05	AN01052	AN01054	5-POINT COMPOSITE	BLACK SANDY SILTY GRAVEL	19	83	7.97	2600	2050	6000
EPX-107	18-Jan-05	AN01053	AN01054	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL	18	103	7.98	2910	1890	16000
EPX-108	18-Jan-05	AN01054	AN01054	5-POINT COMPOSITE	LIGHT GRAY SANDY GRAVEL	18	29	7.23	1260	754	5700
EPX-109	28-Jan-05	AN01531	AN01533	5-POINT COMPOSITE	LIGHT TO MEDIUM GRAY SANDY GRAVEL	10	40	7.72	1660	1360	4500
EPX-110	28-Jan-05	AN01532	AN01533	3-POINT COMPOSITE	GRAY SANDY GRAVEL. SPOTS OF STRONG FeOx	9.6	54	7.01	1720	1530	7800
EPX-111	28-Jan-05	AN01533	AN01533	3-POINT COMPOSITE	GRAY SANDY GRAVEL. SPOTS OF STRONG FeOx	8.3	32	7.69	1890	1660	3900
EPX-112	10-Feb-05	AN02138	AN02127	5-POINT COMPOSITE	GRAY-BROWN SILTY SANDY GRAVEL	24	97	4.69	2810	2790	7800
EPX-113	2-Mar-05	AN03406	AN03419	5-POINT COMPOSITE	BLACK SANDY GRAVEL	24	152	5.51	2450	2290	9000
EPX-114	2-Mar-05	AN03407	AN03419	5-POINT COMPOSITE	MEDIUM GRAY SANDY GRAVEL, MEDIUM FeOx	50	153	5.98	2770	2840	36600
EPX-115	2-Mar-05	AN03408	AN03419	4-POINT COMPOSITE	BLACK SANDY GRAVEL	18	101	6.62	2220	2130	3800
EPX-117	3-Mar-05	AN03410	AN03419	2-POINT COMPOSITE	LIGHT GRAY SANDY GRAVEL	7.7	40	7.87	2070	1980	8100
EPX-118	8-Mar-05	AN03808	AN03419	5-POINT COMPOSITE	SANDY GRAVEL, MED FeOx	31	169	6.93	2860	2970	90100
EPX-119	8-Mar-05	AN03809	AN03419	4-POINT COMPOSITE	SILTY SANDY GRAVEL	38	118	4.84	2640	2780	13900
EPX-120	14-Mar-05	AN03948	AN03950	4-POINT COMPOSITE	BLACK SANDY GRAVEL, SOME FeOx	41	139	5.03	2410	2280	15000
EPX-121B	18-May-05	AN08301	AN07419	2-POINT COMPOSITE	STRONG FeOx SANDY GRAVEL	44	80	3.93	2510	1960	19800
EPX-122	17-Mar-05	AN04225	AN04225	5-POINT COMPOSITE	YELLOW SANDY GRAVEL AND BLACK SANDY GRA	34	169	4.99	2640	2740	23700
EPX-123	30-Mar-05	AN04904	AN04906	5-POINT COMPOSITE	YELLOW SANDY GRAVEL AND BLACK SANDY GRA	46	122	6.49	2940	2840	30300

TABLE SAMPLING AND ANALYTICAL DATA FOR POST REMOVAL SAMPLES COLLECTED FROM THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-124A	6-Apr-05	AN05294	AN05061	5-POINT COMPOSITE	YELLOWISH ORANGE SILTY GRAVEL	10	59	4.42	2290	1780	26400
EPX-125 A	6-Apr-05	AN05295	AN05061	3-POINT COMPOSITE	YELLOWISH GRAY SILTY GRAVEL	9	59	4.7	na	na	na
EPX-126	29-Apr-05	AN06871	AN006872	5-POINT COMPOSITE	GRAY TO BLACK SANDY GRAVEL AND ORANGE SA	20	50	7.51	1770	1430	<500
EPX-127	5-May-05	AN07415	AN07416	5-POINT COMPOSITE	LIGHT GRAY SANDY GRAVEL	15	51	7.35	2590	2150	3600
EPX-128	5-May-05	AN07416	AN07416	5-POINT COMPOSITE	LIGHT GRAY SANDY GRAVEL	22	53	7.53	2680	2700	8400
EPX-129	18-May-05	AN08302	AN07419	5-POINT COMPOSITE	GRAY SANDY GRAVEL, SOME FeOx	12	111	5.14	2980	2500	8700
EPX-130	18-May-05	AN08303	AN07419	5-POINT COMPOSITE	GRAY SANDY GRAVEL AND SANDY SILT, SOME Fe	12	53	7.5	2540	2170	30000
EPX-131	2-Jun-05	AN08912	AN08916	5-POINT COMPOSITE	GRAY SANDY GRAVEL, SOME FeOx	21	213	4.94	3300	3200	34200
EPX-132	30-Jun-05	AN11055	AN11055	5-POINT COMPOSITE	GRAY SILTY GRAVEL, SOME FeOx	23	94	6.51	3150	3210	9300
EPX-133	30-Jun-05	AN11056	AN11056	5-POINT COMPOSITE	GRAY SILTY GRAVEL AT WEST SUB SITES, MEDIUM	15	159	5.56	3390	3440	27300
EPX-134	30-Jun-05	AN11057	AN11057	5-POINT COMPOSITE	MED TO DARK BROWN-GRAY SILT, MED TO STRONG FeOx	19	165	5.1	3310	3570	27900
EPX-135A	20-Jul-05	AN12253	AN12251	5-POINT COMPOSITE	SANDY GRAVEL AND GRAY SILT. STRONG FeOx	14	146	4.62	na	2500	17700
EPX-136	30-Jun-05	AN11059	AN11060	5-POINT COMPOSITE	DARK BROWN SILT. SOME FeOx	38	169	5.48	3950	4420	32100
EPX-137	30-Jun-05	AN11060	AN11061	5-POINT COMPOSITE	MED GRAY SILT. SOME FeOx	23	128	6	3160	3420	17400
EPX-138	30-Jun-05	AN11061	AN11061	5-POINT COMPOSITE	DARK RED SANDY GRAVEL AT WEST SUB SITES, GRAY SILT AT EAST SUB SITES	26	76	5.39	2440	2290	10800
EPX-139A	20-Sep-05	AN16061	AN16068	5-POINT COMPOSITE	GRAY SILT, FeOx	49	74	3.97	980	594	13800
EPX-140A	20-Sep-05	AN16062	AN16068	5-POINT COMPOSITE	SANDY GRAVEL, STRONG FeOx	27	61	4.23	1240	785	7200
EPX-141	9-Aug-05	AN13484	AN13348	5-POINT COMPOSITE	SANDY GRAVEL, STRONG FeOx	26	86	4.84	1880	1480	8100
EPX-142	22-Aug-05	AN14359	AN134367	5-POINT COMPOSITE	GRAY GRAVEL ,FeOx	28	94	na	2280	1830	12900
EPX-143	22-Aug-05	AN14360	AN134367	5-POINT COMPOSITE	GRAY GRAVEL ,FeOx	16	60	na	2210	2290	20100
EPX-144A	19-Sep-05	AN16063	AN16068	5-POINT COMPOSITE	SANDY GRAVEL. GRAY SILT IN NORTH SUB SITES	12	40	4.55	1820	1300	16800
EPX-145	19-Sep-05	AN16064	AN16068	3-POINT COMPOSITE	GRAY TO REDDISH SILT SANDY GRAVEL	14	59	6.87	2000	1540	11700
EPX-146	19-Sep-05	AN16065	AN16068	5-POINT COMPOSITE	GRAY TO REDDISH SILT SANDY GRAVEL	12	61	5.16	2670	2050	18600
EPX-147	19-Sep-05	AN16066	AN16068	5-POINT COMPOSITE	GRAY SILTY GRAVEL	13	64	5.25	2810	2100	15600
EPX-148	19-Sep-05	AN16067	AN16068	5-POINT COMPOSITE	GRAY GRAVEL, FeOx	17	51	4.48	2040	1420	7800
EPX-149	26-Sep-05	AN16583	AN16589	3-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	16	65	5.14	2320	1640	29400
EPX-150	26-Sep-05	AN16584	AN16589	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	9	66	4.2	2360	1800	8100
EPX-151	26-Sep-05	AN16585	AN16589	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	9	55	3.72	870	466	450
EPX-152	26-Sep-05	AN16586	AN16589	3-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	15	51	4.87	2210	1660	15900
EPX-153	30-Sep-05	AN16890	AN16589	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	11	77	5.73	2780	2610	5100
EPX-154	30-Sep-05	AN16891	AN16589	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	13	67	4.24	2380	1730	10800

TABLE SAMPLING AND ANALYTICAL DATA FOR POST REMOVAL SAMPLES COLLECTED FROM THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-155	30-Sep-05	AN16892	AN16589	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	17	77	3.67	970	560	7200
EPX-156	12-Oct-05	AN17526	AN17529	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	13	49	3.94	2050	1560	1100
EPX-157	12-Oct-05	AN17527	AN17529	3-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	18	68	4.79	2050	1680	15900
EPX-158	25-Oct-05	AN18465	AN18284	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM TO STRONG FeOx	24	100	3.46	1710	1150	6900
EPX-159B	21-Nov-05	AN20045	AN19405	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	39	53	3.06	2550	2140	12000
EPX-160	25-Oct-05	AN18467	AN18284	5-POINT COMPOSITE	SANDY GRAVEL , SOME SILTY GRAVEL, MEDIUM FeOx	22	91	5.49	2820	2450	33000
EPX-161A	2-Nov-05	AN18949	AN18143	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	46	85	na	na	1530	12900
EPX-162A	17-Nov-05	AN19875	AN19901	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	24	49	4.03	1840	1340	10800
EPX-163	1-Nov-05	AN18951	AN18143	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	27	62	na	na	659	5100
EPX-164	1-Nov-05	AN18952	AN18143	5-POINT COMPOSITE	GRAY SANDY GRAVEL, SOME FeOx	12	64	na	na	1830	10200
EPX-165	1-Nov-05	AN18953	AN18143	4-POINT COMPOSITE	GRAY SANDY GRAVEL, SOME FeOx	15	69	na	na	485	4200
EPX-166	3-Nov-05	AN18943	AN18143	4-POINT COMPOSITE	GRAY SANDY GRAVEL, SOME FeOx	22	88	na	na	327	4200
EPX-167	3-Nov-05	AN18944	AN18143	5-POINT COMPOSITE	FINE GRAVELY SAND, SOME FeOx	29	58	na	na	619	7800
EPX-168	17-Nov-05	AN19876	AN19901	5-POINT COMPOSITE	FINE SANDY GRAVEL, MEDIUM FeOx	18	45	4.84	2400	1980	9300
EPX-169	17-Nov-05	AN19877	AN19901	5-POINT COMPOSITE	GRAVELY SAND, MEDIUM FeOx	11	48	3.54	2310	1940	9300
EPX-170	17-Nov-05	AN19878	AN19901	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	29	61	4.29	2270	1840	6600
EPX-171	17-Nov-05	AN19879	AN19901	3-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	22	57	4.29	2160	1770	10200
EPX-172	17-Nov-05	AN19880	AN19901	4-POINT COMPOSITE	GRAY SANDY GRAVEL SOME FeOx	26	60	4.55	2300	1890	13500
EPX-173	22-Dec-05	AN21762	AN21766	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	16	83	3.98	2360	1760	15000
EPX-174	22-Dec-05	AN21763	AN21766	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	17	79	6.18	2360	1860	6000
EPX-175	22-Dec-05	AN21764	AN21766	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	26	92	5.07	2620	2100	13200
EPX-176	22-Dec-05	AN21765	AN21766	5-POINT COMPOSITE	SILTY SANDY GRAVEL ,MEDIUM FeOx	39	49	4.47	2590	2220	900
EPX-177	22-Dec-05	AN21766	AN21766	5-POINT COMPOSITE	SILTY SANDY GRAVEL ,MEDIUM FeOx	24	111	3.75	2440	1870	15900
EPX-178	6-Jan-06	AO00301	AO00305	4-POINT COMPOSITE	LIGHT TO MED GRAY SANDY GRAVEL SOME FeOx	9	53	7.4	2320	1880	<500
EPX-179	24-Jan-06	AO01243	AO01255	5-POINT COMPOSITE	SILTY GRAVEL ,MEDIUM FeOx	15	28	4.78	2330	2220	3900
EPX-180A	3-Feb-06	AO02838	AO02838	5-POINT COMPOSITE	SANDY GRAVEL ,MEDIUM FeOx	22	48	4.15	2590	1140	1800
EPX-181	3-Feb-06	AO02839	AO02838	5-POINT COMPOSITE	SANDY GRAVEL AND SILTY SAND, MEDIUM FeOx	14	53	5.85	2400	2230	4200
EPX-182	3-Feb-06	AO02840	AO02838	5-POINT COMPOSITE	SANDY GRAVEL AND SILTY SAND, MEDIUM FeOx	32	136	5.98	2620	2400	8700
EPX-183	3-Feb-06	AO02841	AO02838	4-POINT COMPOSITE	SANDY GRAVEL AND SILTY SAND, MEDIUM FeOx. HARD COMPACTED FINE GRAVEL IN SOUTH SUB SITE	12	48	5.06	1920	1960	6600
EPX-184	13-Feb-06	AO03330	AO03334	5-POINT COMPOSITE	BROWN SILTY SAND. SILTY GRAVEL AT SW SUB SITE	29	115	4.06	2800	2400	4800

TABLE SAMPLING AND ANALYTICAL DATA FOR POST REMOVAL SAMPLES COLLECTED FROM THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID NO.	DATE	LAB ID	LAB QC	SAMPLE TYPE	DESCRIPTION	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	pH	EC	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPX-185A	23-Mar-06	AO05680	AO05692	5-POINT COMPOSITE	LIGHT BROWN SILT, MEDIUM FeOx	29	215	3.68	990	na	na
EPX-186A	23-Feb-06	AO03995	AO03998	5-POINT COMPOSITE	BROWN SILTY SAND	26	212	3.8	2920	2820	10200
EPX-187	23-Feb-06	AO03996	AO03998	4-POINT COMPOSITE	BROWN SILTY SAND, SOME GRAY SILT	40	243	3.92	3900	2050	11100
EPX-188	23-Feb-06	AO03997	AO03998	5-POINT COMPOSITE	BROWN SILTY SAND, SOME GRAVELY SAND AT EAST SUB SITES	47	376	4.76	3730	3690	10500
EPX-189	23-Feb-06	AO03998	AO03998	5-POINT COMPOSITE	BROWN SILTY SAND	43	217	6.18	3690	4120	12000
EPX-190A	11-Apr-06	AO06630	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, LOCALLY STRONG FeOx	20	70	3.99	2450	1780	9600
EPX-191	16-Mar-06	AO05385	AO05386	5-POINT COMPOSITE	LIGHT SILTY SAND, SOME FeOx AT WEST SUB SITES	30	90	3.87	3590	3480	6000
EPX-192	16-Mar-06	AO05386	AO05386	5-POINT COMPOSITE	LIGHT SILTY SAND AT WEST SUB SITES. SANDY GRAVEL AT EAST	24	78	3.97	3640	2860	5400
EPX-193	3-Apr-06	AO06491	AO06631	5-POINT COMPOSITE	SANDY SILTY GRAVEL, SOME FeOx	19	64	7.4	2410	1850	4200
EPX-194	3-Apr-06	AO06492	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, SOME FeOx	9	39	6.81	2270	1680	4500
EPX-195	3-Apr-06	AO06493	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, SOME FeOx	21	57	6.99	2480	1940	4800
EPX-196	3-Apr-06	AO06494	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, SOME FeOx	12	55	7.28	3120	2490	3300
EPX-197	3-Apr-06	AO06495	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, SOME FeOx	10	73	5.99	3510	3130	5100
EPX-198	3-Apr-06	AO06496	AO06631	5-POINT COMPOSITE	SANDY GRAVEL, SOME FeOx	8	39	5.27	3220	2830	3900
EPX-199	11-Apr-06	AO06631	AO06631	5-POINT COMPOSITE	SANDY SILT, SOME FeOx	38	164	5.26	3550	3070	6300
EPX-200	3-May-06	AO07880	AO07883	5-POINT COMPOSITE	SILTY SAND, MEDIUM FeOx	35	180	5.33	3720	3260	9000
EPX-201	3-May-06	AO07881	AO07883	5-POINT COMPOSITE	SILTY SAND, AND GRAVELY SAND	25	99	5.21	3590	3000	8100
EPX-202	3-May-06	AO07882	AO07883	5-POINT COMPOSITE	SILTY SAND. FINE GRAVELY SAND IN NORTH SUB SITES	32	172	5.31	4160	3690	9000
EPX-203	3-May-06	AO07883	AO07883	5-POINT COMPOSITE	SILTY SAND, MEDIUM FeOx	59	163	5.01	3990	3340	81000
EPX-203A	24-May-06	AO09014	AO09017	5-POINT COMPOSITE	BROWN SANDY SILT, SOME FeOx	33	127	5.37	4550	3630	6600
EPX-204	24-May-06	AO09015	AO09017	5-POINT COMPOSITE	BROWN SANDY SILT	23	212	5.18	5140	4180	8100
EPX-205	24-May-06	AO09016	AO09017	5-POINT COMPOSITE	BROWN SANDY SILT	48	273	5.31	5120	4410	9900
EPX-206	24-May-06	AO09017	AO09017	5-POINT COMPOSITE	BROWN SANDY SILT	48	210	6.23	6220	6040	7800
EPX-207A	14-Jun-06	AO10358	AO10362	5-POINT COMPOSITE	BROWN SILTY SAND	38	172	4.87	4690	3920	10500
EPX-208	7-Jun-06	AO09925	AO09922	5-POINT COMPOSITE	BROWN SANDY SILT	16	176	6.5	4610	5000	8100
EPX-209	14-Jun-06	AO10359	AO10362	4-POINT COMPOSITE	BROWN TO GRAY SILTY SAND AND GRAVELY SAND	50	427	7.39	4270	3500	600
EPX-210	14-Jun-06	AO10360	AO10362	5-POINT COMPOSITE	BROWN SILTY SAND AND GRAVELY SAND	45	239	6.84	5080	4790	<500
EPX-211	14-Jun-06	AO10361	AO10362	5-POINT COMPOSITE	BROWN SILTY SAND	21	154	5.26	4620	3650	<500
EPX-212	14-Jun-06	AO10362	AO10362	4-POINT COMPOSITE	BROWN SILTY SAND AND GRAVELY SAND	11	154	4.66	4150	3720	6300

TABLE 2: SAMPLING AND ANALYTICAL DATA FOR CHARACTERIZATION/CONFIRMATION SOIL SAMPLES COLLECTED FROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EPT1-1	27-Sep-04	AM19446	AM19453	CHARACTERIZATION	8.09	4790	25	85	5	360
EPT1-2	27-Sep-04	AM19447	AM19453	CHARACTERIZATION	9.14	170	13	64	5	600
EPT1-3	27-Sep-04	AM19448	AM19453	CHARACTERIZATION	8.73	200	18	88	25	630
EPT1-4	27-Sep-04	AM19449	AM19453	CHARACTERIZATION	8.98	260	12	49	33	1120
EPT1-5	27-Sep-04	AM19450	AM19453	CHARACTERIZATION	8.91	520	15	67	117	930
EPT2-1	27-Sep-04	AM19451	AM19453	CHARACTERIZATION	8.98	210	12	74	22	870
EPT2-2	27-Sep-04	AM19452	AM19453	CHARACTERIZATION	9.01	750	16	45	210	690
EPT2-3	27-Sep-04	AM19453	AM19453	CHARACTERIZATION	8.8	740	16	66	202	570
EPT2-4	27-Sep-04	AM19454	AM19453	CHARACTERIZATION	8	580	11	46	150	1120
EPT2-5	27-Sep-04	AM19455	AM19453	CHARACTERIZATION	6.56	1030	14	32	553	4200
EPT2-6	27-Sep-04	AM19456	AM19453	CHARACTERIZATION	6.9	2070	12	65	1380	9000
EPT2-7	27-Sep-04	AM19457	AM19453	CHARACTERIZATION	6.69	1430	8	43	814	10200
EP0329-1-1	29-Mar-05	AN04628	AN04628	CHARACTERIZATION	4.17	NA	5.3	19.2	NA	NA
EP0329-1-2	29-Mar-05	AN04629	AN04628	CHARACTERIZATION	4.17	NA	3.7	18.5	NA	NA
EP0329-1-3	29-Mar-05	AN04630	AN04628	CHARACTERIZATION	4.04	NA	2.9	20	NA	NA
EP0329-1-4	29-Mar-05	AN04631	AN04628	CHARACTERIZATION	3.94	NA	2.6	15.5	NA	NA
EP0329-1-5	29-Mar-05	AN04632	AN04628	CHARACTERIZATION	4.44	NA	4.4	42.8	NA	NA
EP0329-2-1	29-Mar-05	AN04633	AN04628	CHARACTERIZATION	4.41	NA	3.2	31.4	NA	NA
EP0329-2-2	29-Mar-05	AN04634	AN04628	CHARACTERIZATION	4.21	NA	3.1	33.9	NA	NA
EP0329-2-3	29-Mar-05	AN04635	AN04628	CHARACTERIZATION	4.13	NA	2.5	29	NA	NA
EP0329-2-4	29-Mar-05	AN04636	AN04628	CHARACTERIZATION	3.85	NA	7.6	56.9	NA	NA

TABLE 2: SAMPLING AND ANALYTICAL DATA FOR CHARACTERIZATION/CONFIRMATION SOIL SAMPLES COLLECTED FROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EP0329-3-1	29-Mar-05	AN04637	AN04628	CHARACTERIZATION	4.71	NA	67.6	112	NA	NA
EP0329-3-2	29-Mar-05	AN04638	AN04628	CHARACTERIZATION	5.7	NA	26.5	83.6	NA	NA
EP0329-3-3	29-Mar-05	AN04639	AN04628	CHARACTERIZATION	4.53	NA	12.5	56.7	NA	NA
EP0329-3-4	29-Mar-05	AN04640	AN04628	CHARACTERIZATION	4.66	NA	6.8	57.9	NA	NA
EP0329-3-5	29-Mar-05	AN04641	AN04628	CHARACTERIZATION	4.49	NA	2.4	24.1	NA	NA
EP0329-4-1	29-Mar-05	AN04642	AN04628	CHARACTERIZATION	4.54	NA	67.9	99.6	NA	NA
EP0329-4-2	29-Mar-05	AN04643	AN04628	CHARACTERIZATION	4.45	NA	76.8	160	NA	NA
EP0329-4-3	29-Mar-05	AN04644	AN04628	CHARACTERIZATION	4.44	NA	26.9	99.8	NA	NA
EP0329-4-4	29-Mar-05	AN04645	AN04628	CHARACTERIZATION	4.35	NA	3.4	30.7	NA	NA
EP0329-5-1	29-Mar-05	AN04646	AN04628	CHARACTERIZATION	4.97	NA	11.6	61.3	NA	NA
EP0329-5-2	29-Mar-05	AN04647	AN04628	CHARACTERIZATION	4.35	NA	7.6	102	NA	NA
EP0329-5-3	29-Mar-05	AN04648	AN04628	CHARACTERIZATION	4.61	NA	2.6	22	NA	NA
EP0329-5-4	29-Mar-05	AN04649	AN04628	CHARACTERIZATION	4.48	NA	2	19.1	NA	NA
EP30-11.1	6-Apr-05	AN05283	AN05061	CHARACTERIZATION	4.75	NA	30	90	NA	NA
EP30-11.2	6-Apr-05	AN05284	AN05061	CHARACTERIZATION	4.62	NA	49	92	NA	NA
EP30-11.3	6-Apr-05	AN05285	AN05061	CHARACTERIZATION	4.51	NA	55	169	NA	NA
EP30-11.4	6-Apr-05	AN05286	AN05061	CHARACTERIZATION	4.41	NA	29	190	NA	NA
EP30-11.5	6-Apr-05	AN05287	AN05061	CHARACTERIZATION	4.4	NA	14	111	NA	NA
EP30-12.1	6-Apr-05	AN05288	AN05061	CHARACTERIZATION	4.44	NA	66	174	NA	NA
EP30-12.2	6-Apr-05	AN05289	AN05061	CHARACTERIZATION	4.31	NA	58	143	NA	NA

TAB[illegible]: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ZATION/CONFIRMATION SOIL SAMPLES COLLECTED [illegible]OM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EP30-12.3	6-Apr-05	AN05290	AN05061	CHARACTERIZATION	4.35	NA	38	100	NA	NA
EP30-12.4	6-Apr-05	AN05291	AN05061	CHARACTERIZATION	4.26	NA	25	85	NA	NA
EP30-13.1	6-Apr-05	AN05292	AN05061	CHARACTERIZATION	4.27	NA	10	49	NA	NA
EP30-13.2	6-Apr-05	AN05293	AN05061	CHARACTERIZATION	4.21	NA	22	85	NA	NA
EP30-13.3	6-Apr-05	AN05273	AN05061	CHARACTERIZATION	4.13	NA	42	181	NA	NA
EP30-13.4	6-Apr-05	AN05274	AN05061	CHARACTERIZATION	3.99	NA	16	45	NA	NA
EP-30-14.1	6-Apr-05	AN05275	AN05061	CHARACTERIZATION	4.46	NA	62	64	NA	NA
EP-30-14.2	6-Apr-05	AN05276	AN05061	CHARACTERIZATION	4.41	NA	123	72	NA	NA
EP-30-14.3	6-Apr-05	AN05277	AN05061	CHARACTERIZATION	4.34	NA	64	53	NA	NA
EP-30-14.4	6-Apr-05	AN05278	AN05061	CHARACTERIZATION	4.28	NA	64	184	NA	NA
EP-30-14.5	6-Apr-05	AN05279	AN05061	CHARACTERIZATION	4.16	NA	68	92	NA	NA
EP30-X1	6-Apr-05	AN05280	AN05061	CONFIRMATION	4.99	NA	17	52	NA	NA
EP30-X2	6-Apr-05	AN05281	AN05061	CONFIRMATION	4.26	NA	13	81	NA	NA
EP30-X3	6-Apr-05	AN05282	AN05061	CONFIRMATION	3.88	NA	18	80	NA	NA
EP30-15.1	21-Apr-05	AN06203	AN06008	CHARACTERIZATION	6.58	NA	23	50	NA	NA
EP30-15.2	21-Apr-05	AN06204	AN06008	CHARACTERIZATION	6.11	NA	11	35	NA	NA
EP30-15.3	21-Apr-05	AN06205	AN06008	CHARACTERIZATION	4.27	NA	11	61	NA	NA
EP30-16.1	21-Apr-05	AN06206	AN06008	CHARACTERIZATION	4.31	NA	27	70	NA	NA
EP30-16.2	21-Apr-05	AN06207	AN06008	CHARACTERIZATION	4.24	NA	13	44	NA	NA
EP30-16.3	21-Apr-05	AN06208	AN06008	CHARACTERIZATION	4.14	NA	9	53	NA	NA

TAB[illegible]: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ATION/CONFIRMATION SOIL SAMPLES COLLECTE[illegible]OM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EP30-17.1	21-Apr-05	AN06209	AN06008	CHARACTERIZATION	3.89	NA	6	53	NA	NA
EP30-17.2	21-Apr-05	AN06210	AN06008	CHARACTERIZATION	3.94	NA	9	37	NA	NA
EP30-17.3	21-Apr-05	AN06211	AN06008	CHARACTERIZATION	3.8	NA	11	23	2320	3900
EP30-17.4	21-Apr-05	AN06212	AN06008	CHARACTERIZATION	4.05	NA	35	67	1160	1800
EP30-X4	21-Apr-05	AN06201	AN06008	CONFIRMATION	4.76	NA	10	77	NA	NA
EP30-X5	21-Apr-05	AN06202	AN06008	CONFIRMATION	4.23	NA	11	94	NA	NA
EP30-18.1	25-Apr-05	AN06411	AN06416	CHARACTERIZATION	4.12	NA	15	92	NA	NA
EP30-18.2	25-Apr-05	AN06412	AN06416	CHARACTERIZATION	4.19	NA	12	40	NA	NA
EP26.1	20-Jul-05	AN12242	AN12251	CHARACTERIZATION	4.24	NA	34	339	NA	NA
EP26.2	20-Jul-05	AN12243	AN12251	CHARACTERIZATION	4.1	NA	19	320	NA	NA
EP26.3	20-Jul-05	AN12244	AN12251	CHARACTERIZATION	4.01	NA	20	50	NA	NA
EP26 E1	20-Jul-05	AN12251	AN12251	CHARACTERIZATION	4.21	NA	70	320	NA	NA
EP26 E2	20-Jul-05	AN12252	AN12251	CHARACTERIZATION	4.23	NA	20	319	NA	NA
EP26 N1	20-Jul-05	AN12245	AN12251	CHARACTERIZATION	4.2	NA	13	310	NA	NA
EP26 N2	20-Jul-05	AN12246	AN12251	CHARACTERIZATION	6.93	NA	62	202	NA	NA
EP26 N3	20-Jul-05	AN12247	AN12251	CHARACTERIZATION	4.73	NA	75	67	NA	NA
EP26 S1	20-Jul-05	AN12248	AN12251	CHARACTERIZATION	4.95	NA	52	349	NA	NA
EP26 S2	20-Jul-05	AN12249	AN12251	CHARACTERIZATION	6.93	NA	54	177	NA	NA
EP26 S3	20-Jul-05	AN12250	AN12251	CHARACTERIZATION	3.96	NA	56	96	NA	NA
EP26 W1	20-Jul-05	AN12239	AN12251	CHARACTERIZATION	3.94	NA	75	199	NA	NA

TAB[illegible]2: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ZATION/CONFIRMATION SOIL SAMPLES COLLECTE[illegible]ROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
EP26 W2	20-Jul-05	AN12240	AN12251	CHARACTERIZATION	3.85	NA	15	161	NA	NA
EP26 W3	20-Jul-05	AN12241	AN12251	CHARACTERIZATION	3.83	NA	81	89	NA	NA
EP25.1	27-Jul-05	AN12754	AN12610	CHARACTERIZATION	4.33	NA	27	344	NA	NA
EP25.2	27-Jul-05	AN12755	AN12610	CHARACTERIZATION	4.26	NA	21	331	NA	NA
EP25.3	27-Jul-05	AN12756	AN12610	CHARACTERIZATION	4.41	NA	49	99	NA	NA
EP25.4	27-Jul-05	AN12757	AN12610	CHARACTERIZATION	4.27	NA	22	38	1490	2700
EP25.5	27-Jul-05	AN12758	AN12610	CHARACTERIZATION	4.18	NA	21	39	2030	11700
EP26E2.1	27-Jul-05	AN12746	AN12610	CHARACTERIZATION	4.17	NA	56	232	NA	NA
EP26E2.2	27-Jul-05	AN12747	AN12610	CHARACTERIZATION	4.14	NA	9	268	NA	NA
EP26E2.3	27-Jul-05	AN12748	AN12610	CHARACTERIZATION	4.12	NA	161	520	NA	NA
EP26E2.4	27-Jul-05	AN12749	AN12610	CHARACTERIZATION	3.9	NA	20	63	NA	NA
EP26E2.5	27-Jul-05	AN12750	AN12610	CHARACTERIZATION	4	NA	7	22	304	5100
EP26N2.1	27-Jul-05	AN12742	AN12610	CHARACTERIZATION	4.49	NA	37	288	NA	NA
EP26N2.2	27-Jul-05	AN12743	AN12610	CHARACTERIZATION	4.24	NA	14	335	NA	NA
EP26N2.3	27-Jul-05	AN12744	AN12610	CHARACTERIZATION	7.48	NA	98	114	NA	NA
EP26N2.4	27-Jul-05	AN12745	AN12610	CHARACTERIZATION	3.93	NA	73	95	474	1800
EP26W2.1	27-Jul-05	AN12751	AN12610	CHARACTERIZATION	4.14	NA	26	46	NA	NA
EP26W2.2	27-Jul-05	AN12752	AN12610	CHARACTERIZATION	3.74	NA	13	110	2400	12600
EP26W2.3	27-Jul-05	AN12753	AN12610	CHARACTERIZATION	3.86	NA	14	139	2460	57600
GP20X 1.1	27-Sep-05	AN16587	AN16589	CHARACTERIZATION	3.47	880	32	216	435	16500

TABLE 2: SAMPLING AND ANALYTICAL DATA FOR CHARACTERIZATION/CONFIRMATION SOIL SAMPLES COLLECTED FROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
GP20X 1.2	27-Sep-05	AN16588	AN16589	CHARACTERIZATION	3.43	3370	56	536	2480	38100
GP20X 1.3	27-Sep-05	AN16589	AN16589	CHARACTERIZATION	3.73	1430	15	58	832	1800
GP20X 1.4	27-Sep-05	AN16590	AN16589	CHARACTERIZATION	3.95	2120	12	35	1500	7200
EPCS-GP13.1	12-Oct-05	AN17528	AN17529	CHARACTERIZATION	NA	NA	415	83	NA	NA
EPCS-GP13.2	12-Oct-05	AN17529	AN17529	CHARACTERIZATION	NA	NA	544	107	NA	NA
EPCS-GP13.3	12-Oct-05	AN17530	AN17529	CHARACTERIZATION	NA	NA	39	116	NA	NA
EPCS-GP20.1	17-Oct-05	AN17836	AN18284	CONFIRMATION	NA	NA	37	135	209	4200
EPCS-GP20.2	17-Oct-05	AN17837	AN18284	CONFIRMATION	NA	NA	78	329	1050	32400
EPCS-GP20.3	17-Oct-05	AN17838	AN18284	CONFIRMATION	NA	NA	13	37	1380	2700
GP20X 2.1	26-Oct-05	AN18461	AN18284	CONFIRMATION	NA	NA	14	109	NA	NA
GP20X 2.2	26-Oct-05	AN18462	AN18284	CONFIRMATION	NA	NA	29	104	NA	NA
GP20X 2.3	26-Oct-05	AN18463	AN18284	CONFIRMATION	NA	NA	28	59	NA	NA
GP20X 2.4	26-Oct-05	AN18464	AN18284	CONFIRMATION	NA	NA	12	414	NA	NA
GP12-1.1	22-Nov-05	AN20046	AN19405	CHARACTERIZATION	3.58	NA	26	149	NA	NA
GP12-1.2	22-Nov-05	AN20047	AN19405	CHARACTERIZATION	3.55	NA	13	50	NA	NA
GP12-1.3	22-Nov-05	AN20048	AN19405	CHARACTERIZATION	3.45	NA	18	40	NA	NA
GP3A.1	21-Jun-06	AO10939	AO10758	CHARACTERIZATION	6.65	2840	60	864	2190	5100
GP3A.2	21-Jun-06	AO10940	AO10758	CHARACTERIZATION	7.06	3450	40	126	3040	10500
GP7A.1	21-Jun-06	AO10941	AO10758	CHARACTERIZATION	3.95	4050	41	100	3670	3900

TAB[illegible]2: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ZATION/CONFIRMATION SOIL SAMPLES COLLECTE[illegible]ROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
GP7A.2	21-Jun-06	AO10942	AO10758	CHARACTERIZATION	3.91	2780	36	74	2040	4200
GP7A.3	21-Jun-06	AO10943	AO10758	CHARACTERIZATION	4.02	1430	15	49	946	1500
GP7A.4	21-Jun-06	AO10944	AO10758	CHARACTERIZATION	4.21	790	11	92	460	1200
GP7A.5	21-Jun-06	AO10945	AO10758	CHARACTERIZATION	4.26	1240	15	62	692	1200
GP7A.6	21-Jun-06	AO10946	AO10758	CHARACTERIZATION	3.98	2170	30	150	1470	2700
GP7A.7	21-Jun-06	AO10947	AO10964	CHARACTERIZATION	4.27	1210	28	78	683	1500
GP7B.1	21-Jun-06	AO10948	AO10964	CHARACTERIZATION	3.93	3280	32	177	2340	8100
GP7B.2	21-Jun-06	AO10949	AO10964	CHARACTERIZATION	3.86	4650	32	159	4040	12300
GP7B.3	21-Jun-06	AO10950	AO10964	CHARACTERIZATION	5.15	3800	20	134	2720	6000
GP7B.4	21-Jun-06	AO10951	AO10964	CHARACTERIZATION	3.82	5150	24	82	4400	5400
GP7B.5	21-Jun-06	AO10952	AO10964	CHARACTERIZATION	3.74	5380	27	125	5000	5100
GP7B.6	21-Jun-06	AO10953	AO10964	CHARACTERIZATION	3.74	5300	24	86	4490	3300
GP7B.7	21-Jun-06	AO10954	AO10964	CHARACTERIZATION	3.81	4830	30	152	4010	4500
GP7B.8	21-Jun-06	AO10955	AO10964	CHARACTERIZATION	3.61	5240	134	319	4530	12900
GP7B.9	21-Jun-06	AO10956	AO10964	CHARACTERIZATION	3.72	2140	53	116	1330	4800
GP7B.10	21-Jun-06	AO10957	AO10964	CHARACTERIZATION	3.9	1340	15	122	728	4500
GP7C.1	29-Jun-06	AO11654	AO10108	CHARACTERIZATION	3.81	4080	41	173	2970	9300
GP7C.2	29-Jun-06	AO11655	AO10108	CHARACTERIZATION	3.89	3420	19	64	2580	9000
GP7C.3	29-Jun-06	AO11656	AO10108	CHARACTERIZATION	3.74	3900	37	135	2910	5700
GP7C.4	29-Jun-06	AO11657	AO10108	CHARACTERIZATION	3.64	4360	39	103	3300	3300

TAB[illegible]2: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ZATION/CONFIRMATION SOIL SAMPLES COLLECTE[illegible]OM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
GP7C.5	29-Jun-06	AO11658	AO10108	CHARACTERIZATION	3.64	4340	26	131	3270	3300
GP7C.6	29-Jun-06	AO11659	AO10108	CHARACTERIZATION	3.71	3500	6	24	2610	2100
GP7C.7	29-Jun-06	AO11660	AO10108	CHARACTERIZATION	3.67	3700	17	97	2860	2400
GP7C.8	29-Jun-06	AO11661	AO10108	CHARACTERIZATION	3.77	1540	45	131	795	2100
GP7C.9	29-Jun-06	AO11662	AO10108	CHARACTERIZATION	3.89	940	8	59	439	1200
GP7C.10	29-Jun-06	AO11663	AO10108	CHARACTERIZATION	3.63	3720	15	241	3100	4500
GP7C.11	6-Jul-06	AO12281	AO11124	CHARACTERIZATION	3.96	2310	30	147	1460	4500
GP7D.1	21-Jul-06	AO12860	AO12856	CHARACTERIZATION	3.88	3370	62	329	2980	14400
GP7D.2	21-Jul-06	AO12861	AO12856	CHARACTERIZATION	3.98	1430	10	65	856	4500
GP7D.3	21-Jul-06	AO12862	AO12856	CHARACTERIZATION	3.89	3520	13	104	2820	5700
GP7D.4	21-Jul-06	AO12863	AO12856	CHARACTERIZATION	3.64	4800	38	139	4020	3300
GP7D.5	21-Jul-06	AO12864	AO12874	CHARACTERIZATION	3.65	4690	17	80	3710	1800
GP7D.6	21-Jul-06	AO12865	AO12874	CHARACTERIZATION	3.76	2250	19	185	1340	1500
GP7D.7	21-Jul-06	AO12989	AO13150	CHARACTERIZATION	3.66	na	14	312	na	na
GP7D.8	21-Jul-06	AO12867	AO12874	CHARACTERIZATION	3.55	5480	14	80	4490	2700
GP7D.9	21-Jul-06	AO12868	AO12874	CHARACTERIZATION	3.57	4710	92	438	3870	15900
GP7D.10	21-Jul-06	AO12869	AO12874	CHARACTERIZATION	3.61	2870	44	88	2100	9600
GP7D.11	21-Jul-06	AO12870	AO12874	CHARACTERIZATION	3.76	1690	16	82	873	2700
GP7D.12	21-Jul-06	AO12871	AO12874	CHARACTERIZATION	3.95	1260	13	46	643	900
GP7E.1	2-Aug-06	AO13510	AO13326	CHARACTERIZATION	4.07	3850	34	110	3080	3600

TAB[illegible]2: SAMPLING AND ANALYTICAL DATA FOR CHARCT[illegible]ZATION/CONFIRMATION SOIL SAMPLES COLLECTE[illegible]ROM THE NATIVE SOIL UNDER THE SOUTH JORDAN EVAPORATION PONDS SITE

SAMPLE ID	DATE	LAB ID	LAB QC	SAMPLE TYPE	pH	EC	TOTAL As (mg/kg)	TOTAL Pb (mg/kg)	SOLUBLE S (mg/kg)	TOTAL S (mg/kg)
GP7E.2	2-Aug-06	AO13511	AO13326	CHARACTERIZATION	4.08	3700	10	59	49	2100
GP7E.3	2-Aug-06	AO13512	AO13326	CHARACTERIZATION	4.03	3780	21	80	3230	3600
GP7E.4	2-Aug-06	AO13513	AO13326	CHARACTERIZATION	3.96	4360	18	91	3340	2600
GP7E.5	2-Aug-06	AO13514	AO13326	CHARACTERIZATION	3.98	4290	11	63	3260	1200
GP7E.6	2-Aug-06	AO13515	AO13326	CHARACTERIZATION	4.08	1600	9	158	809	1500
GP7E.7	2-Aug-06	AO13516	AO13326	CHARACTERIZATION	3.85	4770	8	84	3760	1200
GP7E.8	2-Aug-06	AO13517	AO13326	CHARACTERIZATION	4	1980	33	469	1110	9300
GP7E.9	2-Aug-06	AO13518	AO13326	CHARACTERIZATION	4.11	1180	16	545	530	1800
GP7B1.1	2-Aug-06	AO13519	AO13326	CONFIRMATION	3.73	2590	14	287	1610	3300
GP7B1.2	2-Aug-06	AO13520	AO13326	CONFIRMATION	3.74	3170	46	103	2320	14700
GP7B2.1	2-Aug-06	AO13521	AO13326	CONFIRMATION	3.88	3800	17	48	2670	1200
GP7B2.2	2-Aug-06	AO13522	AO13326	CONFIRMATION	3.84	4070	123	236	2920	12000
GP7B3.1	2-Aug-06	AO13523	AO13529	CONFIRMATION	4.21	1460	22	64	807	300
GP7B3.2	2-Aug-06	AO13524	AO13529	CONFIRMATION	3.98	2580	50	91	1660	2400
GP7B4.1	2-Aug-06	AO13525	AO13529	CONFIRMATION	3.75	4440	20	136	3350	1500
GP7B4.2	2-Aug-06	AO13526	AO13529	CONFIRMATION	3.75	3300	240	92	2360	12000
GP7B5	21-Sep-06	AO16214	AO16210	CONFIRMATION	3.97	2700	13	128	2040	2700
GP7B6	21-Sep-06	AO16215	AO16210	CONFIRMATION	4.03	1980	10	42	1290	2400
GP7B7	21-Sep-06	AO16216	AO16210	CONFIRMATION	3.99	1250	3	78	627	2400
GP7B8	21-Sep-06	AO16217	AO16210	CONFIRMATION	3.91	4190	21	135	3370	9300

TABLE 3: QUALITY ASSURANCE/QUALITY CONTROL SPLIT SAMPLE ANALYTICAL DATA AND RELATIVE PERCENT DIFFERENCE (RPD)

SAMPLE ID NUMBER	DATE COLLECTED	SITE	LAB	LAB ID NO.	TOTAL As (ppm)	TOTAL Pb (ppm)
EPX-13	15-Nov-03	EVAP PONDS	KEL	AL29400	15	51
			AWAL	L58652-01A	12	48
RPD %					22.22	6.06
EPX-19	21-Nov-03	EVAP PONDS	KEL	AL29401	12	49
			AWAL	L58652-02A	12	53
RPD %					0.00	-7.84
EPX-45	13-Apr-04	EVAP PONDS	KEL	AM08500	18	46
			AWAL	L60353-01A	15	46
RPD %					18.18	0.00
EPX-46	22-Apr-04	EVAP PONDS	KEL	AM09282	16	50
			AWAL	L60353-02A	11	45
RPD %					37.04	10.53
EPX-114	5-Apr-05	EVAP PONDS	KEL	AN05061	25	78
			AWAL	L60353-02A	24	68
RPD %					4.08	13.70
EPX-116	5-Apr-05	EVAP PONDS	KEL	AN05062	40	97
			AWAL	L60353-02A	46	81
RPD %					-13.95	17.98
EPX-159A	2-Nov-05	EVAP PONDS	KEL	AO01254	42	43
			AWAL	L60353-02A	42	44
RPD %					0.00	-2.30
EPX-161A	2-Nov-05	EVAP PONDS	KEL	AO01255	29	50
			AWAL	L60353-02A	29	55
RPD %					0.00	-9.52
EPX-216B	29-Aug-06	EVAP PONDS	KEL	AO20246	53	126
			AWAL	L61812-01A	63	140
RPD %					-17.24	-10.53
EPX-220	8-Aug-06	EVAP PONDS	KEL	AO20245	96	205
			AWAL	L61812-02A	120	230
RPD %					-22.22	-11.49
EPX-239	2-Nov-06	EVAP PONDS	KEL	AO20254	75	547
			AWAL	L60353-02A	87	600
RPD %					-14.81	-9.24
EPX-245	10-Nov-06	EVAP PONDS	KEL	AO20247	35	159
			AWAL	L60353-02A	40	170
RPD %					-13.33	-6.69
EP30-11.3	6-Apr-05	EVAP PONDS	KEL	AN05662	20	65
			AWAL	L61812-02A	19	60

RPD(%) = 100 x[A1-A2]/[(A1+A2)/2]

TABLE 3: QUALITY ASSURANCE/QUALITY CONTROL SPLIT SAMPLE ANALYTICAL DATA AND RELATIVE PERCENT DIFFERENCE (RPD)

SAMPLE ID NUMBER	DATE COLLECTED	SITE	LAB	LAB ID NO.	TOTAL As (ppm)	TOTAL Pb (ppm)
RPD %					5.13	8.00
EP30-14.1	6-Apr-05	EVAP PONDS	KEL	AN05660	37	44
			AWAL	L61812-02A	35	36
RPD %					5.56	20.00
EP30-14.2	6-Apr-05	EVAP PONDS	KEL	AN05661	29	26
			AWAL	L61812-02A	26	24
RPD %					10.91	8.00
GP-7B.7	21-Jun-06	EVAP PONDS	KEL	AO13697	34	157
			AWAL		26	140
RPD %					26.67	11.45
GP-7B.8	21-Jun-06	EVAP PONDS	KEL	AO12991	108	266
			AWAL	L75003-01A	93	250
RPD %					14.93	6.20
GP-7B.9	21-Jun-06	EVAP PONDS	KEL	AO12992	38	96
			AWAL	L75003-02A	30	90
RPD %					23.53	6.45
GP-7D.7	21-Jun-06	EVAP PONDS	KEL	AO12993	18	270
			AWAL	L75003-03A	12	280
RPD %					40.00	-3.64
GP-7D.9	21-Jun-06	EVAP PONDS	KEL	AO12994	104	531
			AWAL	L75003-04A	82	510
RPD %					23.66	4.03
GP-7C.8	29-Jun-06	EVAP PONDS	KEL	AO13712	94	141
			AWAL	L73692-03A	83	120
RPD %					12.43	16.09
GP-7B2.2	2-Aug-06	EVAP PONDS	KEL	AO20244	51	99
			AWAL	L75606-08A	58	110
RPD %					-12.84	-10.53

RPD(%) = 100 x[A1-A2]/[(A1+A2)/2]

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
PHOTOS OF POST REMOVAL SAMPLING				
1-Dec-03	EPX-21	EPX21UP	CLOSE UP	TYPICAL SURFACE AT SITE OF SAMPLES EPX-21,22
2-Dec-03	EPX-22	120203	WEST	BACKFILL OVER POST REMOVAL SURFACE AFTER SAMPLE COLLECTED
4-Dec-03	EPX-24	EPX24UP	CLOSE UP	SUB SITE OF EPX-24, TYPICAL
18-Dec-03	EPX-25	EPX25NW	NORTH WEST	SITE OF SAMPLE EPX-25
24-Dec-03	EPX-26	EPX26NW	NORTH WEST	SITE OF SAMPLE EPX-26
24-Dec-03	EPX-26	EPX26UP	CLOSE UP	SUB SITE OF SAMPLE EPX-26
24-Dec-03	EPX-26	EPX26UP2	CLOSE UP	SUB SITE OF SAMPLE EPX-26
9-Jan-04	EPX-27	EPX27W	WEST	SITE OF SAMPLE EPX-27
9-Jan-04	EPX-27	EPX27UP	CLOSE UP	SUB SITE OF SAMPLE EPX-27
9-Jan-04	EPX-27	EPX27UP2	CLOSE UP	SUB SITE OF SAMPLE EPX-27
14-Jan-04	EPX-28	011404-1	CLOSE UP	REMOVAL OF SILT TO STOCKPILE
14-Jan-04	EPX-28	011404-2	CLOSE UP	REMOVAL OF SILT TO STOCKPILE
14-Jan-04	EPX-28	011404-3	CLOSE UP	REMOVAL OF SILT TO STOCKPILE
14-Jan-04	EPX-28	011404-4	CLOSE UP	REMOVAL OF SILT TO STOCKPILE
14-Jan-04	EPX-28	011404-5	CLOSE UP	REMOVAL OF SILT TO STOCKPILE
14-Jan-04	EPX-29	EPX29NW	NORTH WEST	SITE OF SAMPLE EPX-29
14-Jan-04	EPX-29	EPX29N	NORTH	SITE OF SAMPLE EPX-29 AND EPX-27
28-Jan-04	EPX-30	EPX30W	WEST	SITE OF SAMPLE EPX-30
28-Jan-04	EPX-30	EPX30UP	CLOSE UP	SUB SITE OF SAMPLE EPX-30
10-Feb-04	EPX-31	EPX31S	SOUTH	SITE OF SAMPLE EPX-31
10-Feb-04	EPX-32	EPX32W	WEST	SITE OF SAMPLE EPX-32
10-Feb-04	EPX-32	EPX32UP	CLOSE UP	SUB SITE OF SAMPLE EPX-32

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
10-Feb-04	EPX-33	EPX33E	EAST	SITE OF SAMPLES EPX-33-35
10-Feb-04	EPX-34	EPX34NE	NORTH EAST	SITE OF SAMPLES EPX-32-34
10-Feb-04	EPX-34	EPX34UP	CLOSE UP	SUB SITE OF SAMPLES EPX-34
18-Feb-04	EPX-37	EPX37NW	NORTH WEST	SITE OF SAMPLES EPX-37-38
13-Apr-04	EPX-42	EPX42W	WEST	SITE OF SAMPLES EPX-42-45
22-Apr-04	EPX-46	EPX46W	WEST	SITE OF SAMPLE EPX-46
6-May-04	EPX-47	EPX47W	WEST	SITE OF SAMPLE EPX-47
6-May-04	EPX-48	EPX48NW	NORTH WEST	SITE OF SAMPLES EPX-48,49
6-May-04	EPX-52	EPX52NE	NORTH EAST	SITE OF SAMPLES EPX-51,52
6-May-04	EPX-52	EPX52UP	CLOSE UP	TYPICAL SURFACE AT SITE OF SAMPLES EPX-47-52
26-May-04	EPX-55	EPX55UP	CLOSE UP	TYPICAL SURFACE AT SITE OF SAMPLES EPX-55-59
26-May-04	EPX-56	EPX56NW	NORTH WEST	SITE OF SAMPLES EPX-56,58
26-May-04	EPX-57	EPX57NE	NORTH EAST	SITE OF SAMPLE EPX-57
7-Jun-06	EPX-60	EPX60UP	CLOSE UP	SUB SITE OF SAMPLE EPX-60
7-Jun-06	EPX-60	EPX60SW	SOUTH WEST	SITE OF SAMPLE EPX-60
26-Aug-04	EPX-70	EPX70W	WEST	SITE OF SAMPLES EPX-70-71
20-Sep-04	EPX-77	EPX77NE	NORTH EAST	SITE OF SAMPLES EPX-77-79
20-Sep-04	EPX-78	EPX78UP	CLOSE UP	TYPICAL SURFACE AT SITE OF SAMPLES EPX-77-79
20-Sep-04	EPX-79	EPX79E	EAST	SITE OF SAMPLE EPX-79
28-Jan-05	EPX-109	EPX109W	WEST	SITE OF SAMPLES EPX-109,111
2-Mar-05	EPX-114	EPX114N	NORTH	SITE OF SAMPLE EPX-114
2-Mar-05	EPX-116	EPX116UP	CLOSE UP	SUB SITE OF SAMPLE EPX-116
2-Mar-05	EPX-116	EPX116E	NORTH	SITE OF SAMPLE EPX-116

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
3-Mar-05	EPX-117	EPX117S	SOUTH	SITE OF SAMPLE EPX-117
8-Mar-05	EPX-118	EPX118N	NORTH	SITE OF SAMPLES EPX-118,119
14-Mar-05	EPX-120	EPX120E	EAST	SITE OF SAMPLES EPX-120,121
14-Mar-05	EPX-121	EPX121UP	CLOSE UP	SUB SITE OF SAMPLE EPX-121
17-Mar-05	EPX-122	EPX122E	EAST	SITE OF SAMPLE EPX-122
30-Mar-05	EPX-123	EPX123E	EAST	SITE OF SAMPLES EPX-123,124
30-Mar-05	EPX-124	EPX124UP	CLOSE UP	SUB SITE OF SAMPLE EPX-124
30-Mar-05	EPX-125	EPX125W	EAST	SITE OF SAMPLES EPX-124,125
29-Apr-05	EPX-126	EPX126W	WEST	SITE OF SAMPLE EPX-126. SAMPLES EPX-124A,125A IN BG
18-May-05	EPX-130	EPX130E	EAST	SITE OF SAMPLE EPX-130
18-May-05	EPX-130	EPX130UP	CLOSE UP	SUB SITE OF SAMPLE EPX-130
30-Jun-05	EPX-132	EPX132NW	NORTH WEST	SITE OF SAMPLE EPX-132
30-Jun-05	EPX-133	EPX133NE	NORTH EAST	SITE OF SAMPLE EPX-133
30-Jun-05	EPX-134	EPX134UP	CLOSE UP	SUB SITE OF SAMPLE EPX-134
30-Jun-05	EPX-134	EPX134E	EAST	SITE OF SAMPLES EPX-134-135
9-Aug-05	EPX-139	EPX139NE	NORTH EAST	SITE OF SAMPLES EPX-139,141
9-Aug-05	EPX-140	EPX140E	EAST	SITE OF SAMPLE EPX-140
19-Sep-05	EPX-148	EPX148SW	SOUTH WEST	SITE OF SAMPLES EPX-148,144
26-Sep-05	EPX-152	EPX152S	SOUTH	SITE OF SAMPLE EPX-152. SAMPLES EPX-145,149 IN BG
30-Sep-05	EPX-153	EPX153NW	NORTH WEST	SITE OF SAMPLE EPX-153-155
30-Sep-05	EPX-153	EPX153UP	CLOSE UP	SUB SITE OF SAMPLE EPX-153
12-Oct-05	EPX-156	EPX156W	WEST	SITE OF SAMPLES EPX-155,156
25-Oct-05	EPX-159	EPX159UP	CLOSE UP	SUB SITE OF SAMPLE EPX-159
25-Oct-05	EPX-161	EPX161N	NORTH	SITE OF SAMPLES EPX-159,161

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
2-Nov-05	EPX-161A	EPX161ASW	SOUTH WEST	SITE OF SAMPLES EPX-159A, 161A
1-Nov-05	EPX-162	EPX162W	WEST	SITE OF SAMPLES EPX-162,163
17-Nov-05	EPX-162A	EPX162ANW	NORTH WEST	SITE OF SAMPLE EPX-162A
17-Nov-05	EPX-162A	EPX162AUP	CLOSE UP	SUB SITE OF SAMPLE EPX-162A
3-Nov-05	EPX-166	EPX166S	SOUTH	SITE OF SAMPLES EPX-165,166
3-Nov-05	EPX-167	EPX167W	WEST	SITE OF SAMPLE EPX-167
17-Nov-05	EPX-168	EPX168N	NORTH	SITE OF SAMPLES EPX-168,169
17-Nov-05	EPX-171	EPX171NW	NORTH WEST	SITE OF SAMPLES EPX-170,171
22-Dec-05	EPX-173	EPX173S	SOUTH	SITE OF SAMPLES EPX-173-175
22-Dec-05	EPX-176	EPX176N	NORTH	SITE OF SAMPLES EPX-176,177
6-Jan-06	EPX-178	EPX178S	SOUTH	SITE OF SAMPLE EPX-178
24-Jan-06	EPX-179	EPX179NW	NORTH WEST	SITE OF SAMPLES EPX-179,180
24-Jan-06	EPX-180	EPX181UP	CLOSE UP	SUB SITE OF SAMPLE EPX-181
3-Feb-06	EPX-183	EPX183N	NORTH	SITE OF SAMPLES EPX-180A,181-183
13-Feb-06	EPX-184	EPX184N	NORTH	SITE OF SAMPLE EPX-184
14-Feb-06	EPX-185	EPX185W	WEST	SITE OF SAMPLE EPX-185
14-Feb-06	EPX-186	EPX186SW	SOUTH WEST	SITE OF SAMPLE EPX-186
23-Feb-06	EPX-186A	EPX186AW	WEST	SITE OF SAMPLE EPX-186A
23-Feb-06	EPX-187	EPX187SW	SOUTH WEST	SITE OF SAMPLES EPX-187-189
16-Mar-06	EPX-190	EPX190NW	NORTH WEST	SITE OF SAMPLE EPX-190
11-Apr-06	EPX-190A	EPX190AW	WEST	SITE OF SAMPLE EPX-190A
16-Mar-06	EPX-191	EPX191SW	SOUTH WEST	SITE OF SAMPLES EPX-191-192
3-Apr-06	EPX-193	EPX193S	SOUTH	SITE OF SAMPLES EPX-193-196
3-Apr-06	EPX-197	EPX197N	NORTH	SITE OF SAMPLES EPX-197,198

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
11-Apr-06	EPX-199	EPX199N	NORTH	SITE OF SAMPLES EPX-197,198
3-May-06	EPX-200	EPX200S	SOUTH	SITE OF SAMPLES EPX-200,201
3-May-06	EPX-202	EPX202W	WEST	SITE OF SAMPLES EPX-202,203
24-May-06	EPX-203A	EPX203AW	WEST	SITE OF SAMPLE EPX-203A
24-May-06	EPX-204	EPX204SE	SOUTH EAST	SITE OF SAMPLE EPX-204
24-May-06	EPX-206	EPX206SE	SOUTH EAST	SITE OF SAMPLES EPX-205,206
7-Jun-06	EPX-207	EPX207NW	NORTH WEST	SITE OF SAMPLES EPX-207,208
14-Jun-06	EPX-209	EPX209E	EAST	SITE OF SAMPLE EPX-209
14-Jun-06	EPX-210	EPX210E	EAST	SITE OF SAMPLES EPX-210-212
21-Jul-06	EPX-213	EPX213SW	SOUTH WEST	SITE OF SAMPLES EPX-213-215
8-Aug-06	EPX-213A	EPX213AN	NORTH	SITE OF SAMPLE EPX-213A
17-Aug-06	EPX-213B	EPX213BNW	NORTH WEST	SITE OF SAMPLES EPX-213B, 220A,216A
29-Aug-06	EPX-213C	EPX213CNW	NORTH WEST	SITE OF SAMPLES EPX-213C, 220B,216B
21-Sep-06	EPX-216D (1)	EPX216DS	SOUTH	SITE OF SAMPLES EPX-216D(1), (2)
2-Aug-06	EPX-217	EPX217N	NORTH	SITE OF SAMPLES EPX-216,217
2-Aug-06	EPX-218	EPX218SW	SOUTH WEST	SITE OF SAMPLE EPX-218
8-Aug-06	EPX-219	EPX219E	EAST	SITE OF SAMPLES EPX-219,220
10-Aug-06	EPX-221	EPX221E	EAST	SITE OF SAMPLE EPX-221
14-Aug-06	EPX-222	EPX222W	WEST	SITE OF SAMPLES EPX-222,223
25-Aug-06	EPX-224	EPX224SW	SOUTH WEST	SITE OF SAMPLE EPX-224
25-Aug-06	EPX-225	EPX225E	EAST	SITE OF SAMPLES EPX-225-227
7-Sep-06	EPX-228	EPX228E	EAST	SITE OF SAMPLES EPX-228,229
21-Sep-06	EPX-230	EPX230SW	SOUTH WEST	SITE OF SAMPLE EPX-230
5-Oct-06	EPX-232	EPX232E	EAST	SITE OF SAMPLES EPX-232,233

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
20-Oct-06	EPX-234	EPX234W	WEST	SITE OF SAMPLE EPX-234
20-Oct-06	EPX-235	EPX235E	EAST	SITE OF SAMPLE EPX-235
20-Oct-06	EPX-236	EPX236S	SOUTH	SITE OF SAMPLE EPX-236
2-Nov-06	EPX-237	EPX237SW	SOUTH WEST	SITE OF SAMPLE EPX-237
2-Nov-06	EPX-238	EPX238W	WEST	SITE OF SAMPLE EPX-238,239
10-Nov-06	EPX-239A	EPX239ANE	NORTH EAST	SITE OF SAMPLE EPX-239A
10-Nov-06	EPX-240	EPX240NE	NORTH EAST	SITE OF SAMPLE EPX-240
10-Nov-06	EPX-241	EPX241NE	NORTH EAST	SITE OF SAMPLE EPX-241
10-Nov-06	EPX-242	EPX242SW	SOUTH WEST	SITE OF SAMPLE EPX-242,243
10-Nov-06	EPX-244	EPX244NW	NORTH WEST	SITE OF SAMPLE EPX-244,245

Note: Photos of sampling during October 2004 through January 2005 were lost as a result of a theft of digital cameras and computers at Kennecott Land field office in January 2005

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
PHOTOS OF CHARACTERIZATION/CONFIRMATION SAMPLING				
27-Sep-04	EPT1	EPT11	CLOSE UP	OPEN TRENCH, 0-4'
27-Sep-04	EPT1	EPT12	CLOSE UP	OPEN TRENCH, 0-2'
27-Sep-04	EPT1	EPT13	CLOSE UP	OPEN TRENCH, 1-6'
27-Sep-04	EPT2	EPT21	CLOSE UP	OPEN TRENCH, 0-4'
27-Sep-04	EPT2	EPT22	CLOSE UP	OPEN TRENCH, 1-4'
27-Sep-04	EPT2	EPT23	CLOSE UP	OPEN TRENCH, 1-5'
27-Sep-04	EPT2	EPT24	CLOSE UP	OPEN TRENCH, 1-5'
27-Sep-04	EPT2	EPT25	CLOSE UP	OPEN TRENCH, 0-8'
27-Sep-04	EPT2	EPT26	CLOSE UP	SAMPLE MATERIAL
29-Mar-05	EP0329-1	EP0329	EAST	SAMPLING AREA
29-Mar-05	EP0329-1	EP0329-1	EAST	OPEN TRENCH, 0-4'
29-Mar-05	EP0329-2	EP0329-2	CLOSE UP	OPEN TRENCH, 0-4'
29-Mar-05	EP0329-3	EP0329-3	CLOSE UP	OPEN TRENCH, 0-4'
29-Mar-05	EP0329-4	EP0329-4	CLOSE UP	OPEN TRENCH, 0-4'
29-Mar-05	EP0329-5	EP0329-5	CLOSE UP	OPEN TRENCH, 0-4'
29-Mar-05	EP0329-5	EP0329-5UP	CLOSE UP	OPEN TRENCH, CLOSE UP 2-3'
6-Apr-05	EP30-12.1	EP30UP12	CLOSE UP	SITE OF VERTICAL SURFACE SAMPLES EP30.12
6-Apr-05	EP30-13.1	EP30UP13	CLOSE UP	SITE OF VERTICAL SURFACE SAMPLES EP30.13
6-Apr-05	EP30X.1	EP30X1W	WEST	SITE OF SAMPLE EP30X.1,2
6-Apr-05	EP30X.3	EP30X3E	EAST	SITE OF SAMPLE EP30X.3
21-Apr-05	EP30-15.1	EP30UP15	CLOSE UP	SITE OF VERTICAL SURFACE SAMPLES EP30.15
21-Apr-05	EP30-16.1	EP30UP16	CLOSE UP	SITE OF VERTICAL SURFACE SAMPLES EP30.16
21-Apr-05	EP30X.4	EP30X4NW	NORTH WEST	SITE OF SAMPLE EP30X.4

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

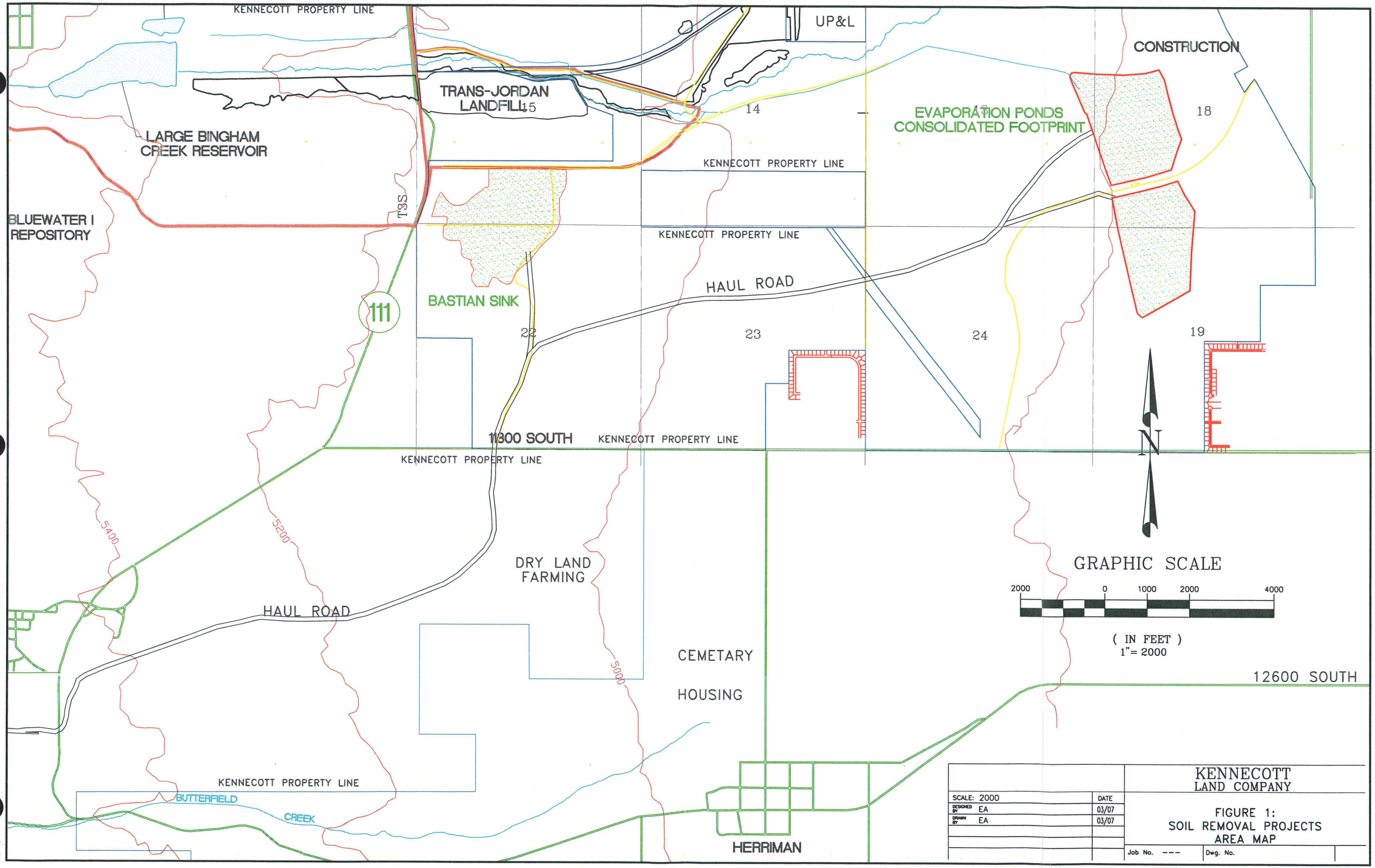
DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
21-Apr-05	EP30X.5	EP30X5N	NORTH	SITE OF SAMPLE EP30X.5
20-Jul-05	EP26W	EP26W	CLOSE UP	OPEN TRENCH, 0-4'
20-Jul-05	EP26	EP26	CLOSE UP	OPEN TRENCH, 0-4'
20-Jul-05	EP26S	EP26S	CLOSE UP	OPEN TRENCH, 0-2'
27-Sep-05	GP20X1	GP20X1N	NORTH	OPEN TRENCH, SITE OF SAMPLES GP20X1.1-4
27-Sep-05	GP20X1	GP20X1UP	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP20X1.1-4
17-Oct-05	EPCS-GP20.1	GP201NE	NORTH EAST	SITE OF SAMPLES EPCS-GP20.1-3
17-Oct-05	EPCS-GP20.2	GP202UP	CLOSE UP	SITE OF SAMPLES EPCS-GP20.2-3
26-Oct-05	GP20X2.3	GP20X2N	NORTH	SITE OF SAMPLES GP20X2.3,4
26-Oct-05	GP20X2.2	GP20X2UP	CLOSE UP	SITE OF SAMPLE GP20X2.2
22-Nov-05	GP12.1	GP121	CLOSE UP	SITE OF SAMPLES GP12.1-1,2,3
22-Nov-05	GP12.1	GP121UP	CLOSE UP	SITE OF SAMPLES GP12.1-1,2,3
29-Jun-06	GP7C	GP7C1	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
29-Jun-06	GP7C	GP7C2	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
29-Jun-06	GP7C	GP7C3	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
29-Jun-06	GP7C	GP7C4	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
29-Jun-06	GP7C	GP7C5	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
29-Jun-06	GP7C	GP7C6	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7C.1-10
21-Jul-06	GP7D	GP7D1	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7D.1-12
21-Jul-06	GP7D	GP7D2	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7D.1-12
21-Jul-06	GP7D	GP7D3	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7D.1-12
21-Jul-06	GP7D	GP7D4	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7D.1-12
2-Aug-06	GP7E	GP7E1	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7E.1-9
2-Aug-06	GP7E	GP7E2	CLOSE UP	OPEN TRENCH, SITE OF SAMPLES GP7E.1-9

TABLE 4: PHOTOS OF POST REMOVAL AND CHARACTERIZATION/CONFIRMATION SAMPLING SITES

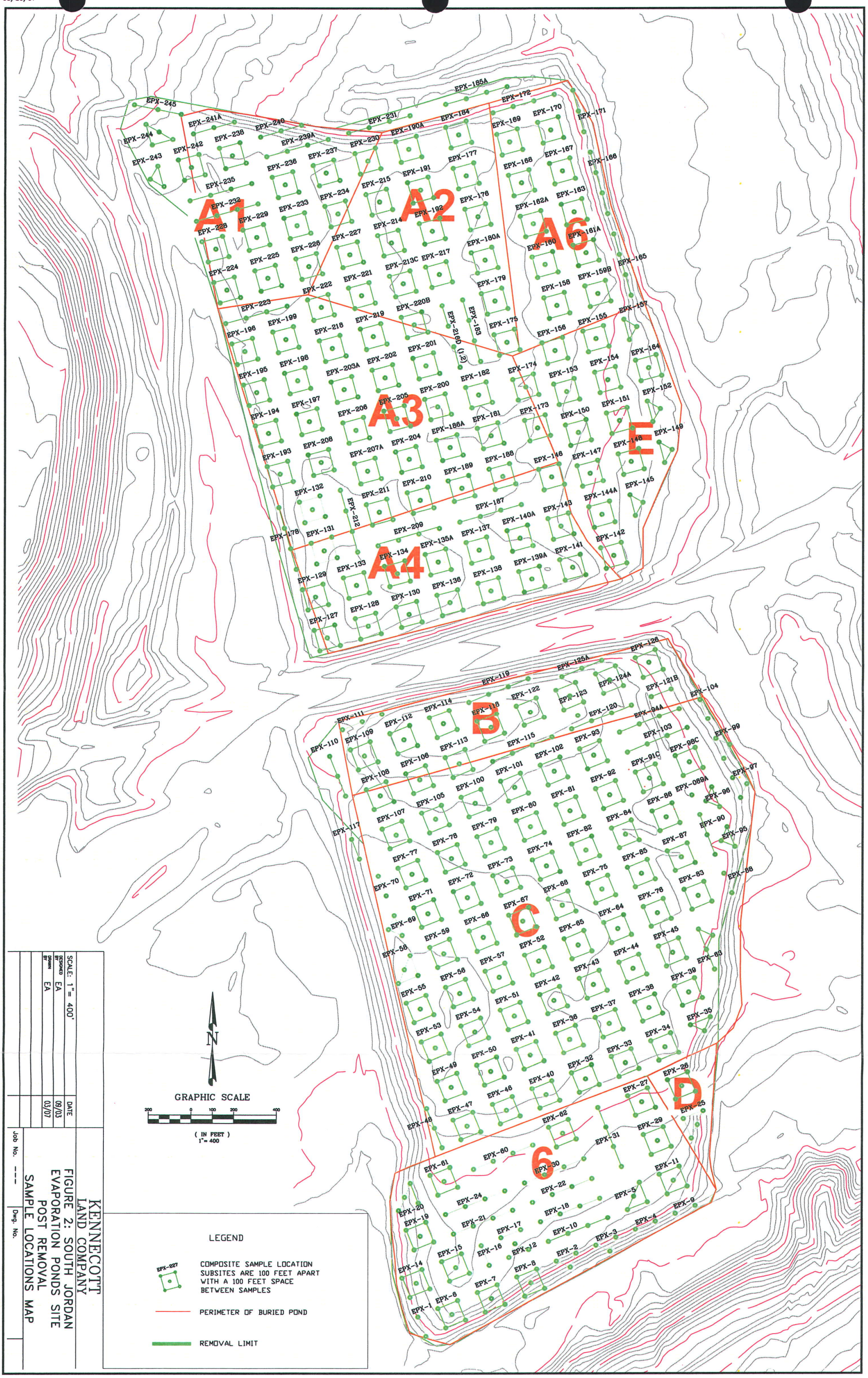
DESCRIPTIONS FOR PHOTOS ON THE ATTACHED CD

DATE	SAMPLE ID	PHOTO	ORIENTATION	DESCRIPTION
2-Aug-06	GP7B1	GP7B1	EAST	SITE OF SAMPLES GP7B1.1-2
2-Aug-06	GP7B2	GP7B2	SOUTH EAST	SITE OF SAMPLES GP7B2.1-2
2-Aug-06	GP7B3	GP7B3	NORTH EAST	SITE OF SAMPLES GP7B3.1-2
21-Sep-06	GP7BX5	GP7BX5SW	SOUTH WEST	SITE OF SAMPLES GP7BX5,6
21-Sep-06	GP7BX7	GP7BX7S	SOUTH	SITE OF SAMPLES GP7BX6,7


KENNECOTT PROPERTY LINE
UP&L
CONSTRUCTION
TRANS-JORDAN LANDFILL
15
14
13
18
EVAPORATION PONDS CONSOLIDATED FOOTPRINT
LARGE BINGHAM CREEK RESERVOIR
KENNECOTT PROPERTY LINE
T3S
BLUEWATER I REPOSITORY
KENNECOTT PROPERTY LINE
HAUL ROAD
111
BASTIAN SINK
22
23
24
19
12300 SOUTH
KENNECOTT PROPERTY LINE
KENNECOTT PROPERTY LINE
N
5400
5200
DRY LAND FARMING
GRAPHIC SCALE
2000
0
1000
2000
4000
(IN FEET)
1"= 2000
HAUL ROAD
5000
CEMETARY
HOUSING
12600 SOUTH
KENNECOTT PROPERTY LINE
BUTTERFIELD
CREEK
HERRIMAN
SCALE: 2000
DATE
DESIGNED BY EA 03/07
DRAWN BY EA 03/07
KENNECOTT
LAND COMPANY
FIGURE 1:
SOIL REMOVAL PROJECTS
AREA MAP
Job No. ---
Dwg. No.

03/21/07

03/20/07



KENNECOTT
LAND COMPANY

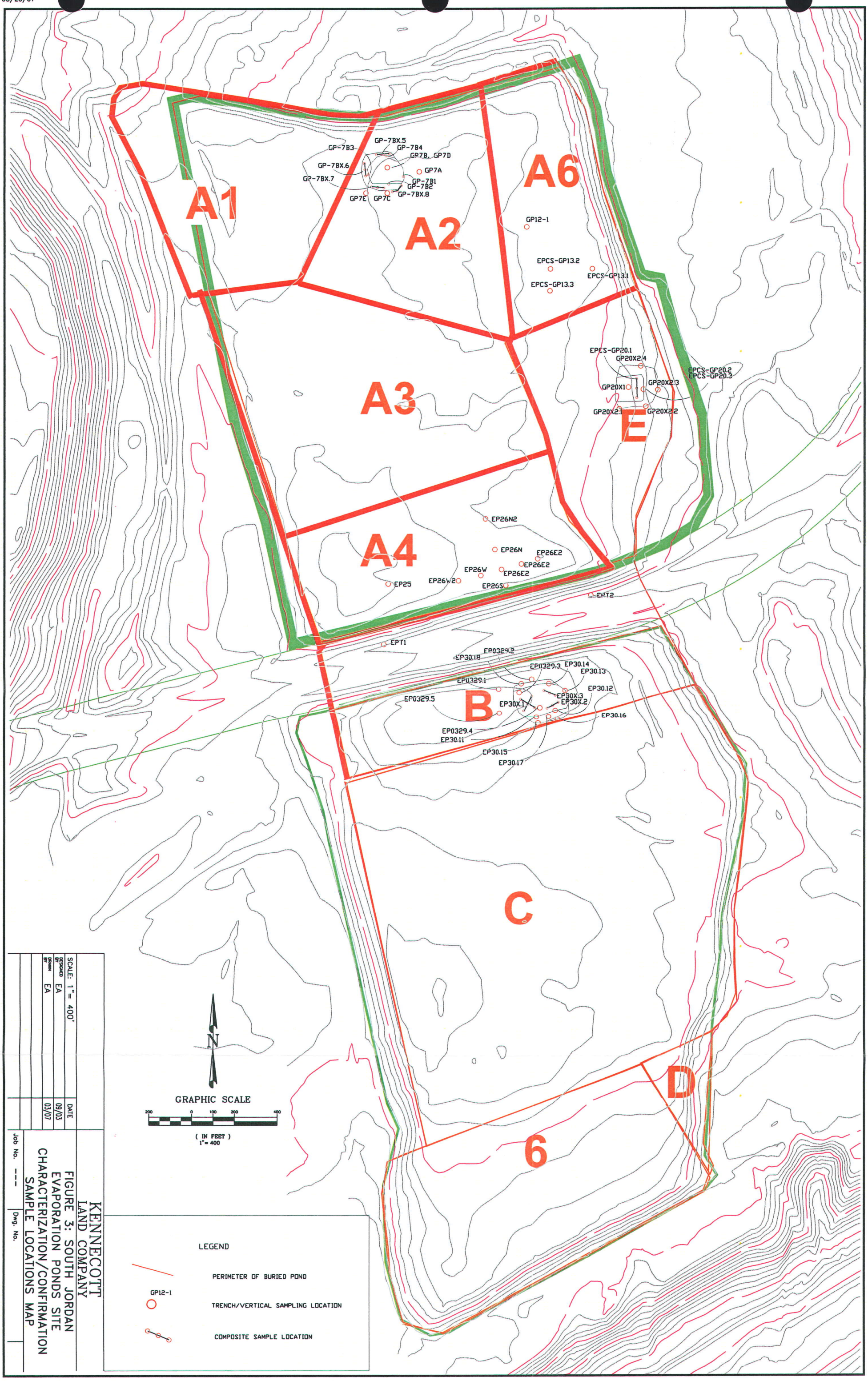
FIGURE 2: SOUTH JORDAN
EVAPORATION PONDS SITE
POST REMOVAL
SAMPLE LOCATIONS MAP

SCALE: 1" = 400'	
DESIGNED BY EA	DATE 09/03
DRAWN BY EA	03/07

Job No. ---

Dwg. No.

03/20/07


A1
A2
A3
A4
A6
B
C
D
E
6
GP-7BX.5
GP-7B3
GP-7B4
GP7B, GP7D
GP-7BX.6
GP7A
GP-7BX.7
GP-7B1
GP-7B2
GP7E
GP7C
GP-7BX.8
GP12-1
EPCS-GP13.2
EPCS-GP13.1
EPCS-GP13.3
EPCS-GP20.1
GP20X2.4
EPCS-GP20.2
EPCS-GP20.3
GP20X2.3
GP20X1
GP20X2.1
GP20X2.2
EP26N2
EP26N
EP26E2
EP26E2
EP26W
EP26E2
EP25
EP26W2
EP26S
EPT2
EPT1
EP0329.2
EP30.18
EP0329.3
EP30.14
EP30.13
EP0329.1
EP30.12
EP30X.3
EP0329.5
EP30X.1
EP30X.2
EP30.16
EP0329.4
EP30.11
EP30.15
EP30.17
N
GRAPHIC SCALE
200 0 100 200 400
(IN FEET)
1" = 400
LEGEND
PERIMETER OF BURIED POND
GP12-1
TRENCH/VERTICAL SAMPLING LOCATION
COMPOSITE SAMPLE LOCATION
KENNECOTT
LAND COMPANY
FIGURE 3: SOUTH JORDAN
EVAPORATION PONDS SITE
CHARACTERIZATION/CONFIRMATION
SAMPLE LOCATIONS MAP
SCALE: 1" = 400'
DESIGNED BY EA
DRAWN BY EA
DATE
09/03
03/07
Job No. ---
Dwg. No.

Field Notes for
Post Removal Samples.

Evap Ponds
9/03 – 8/06

Peninsular

FIELD BOOK

FB 802

CONTENTS

PAGE NO.	REFERENCE	DATE

9/12/2003

Evap Ponds

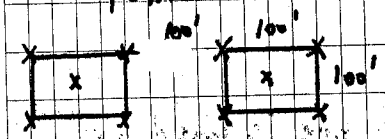
Post Removal Sampling.

Removal of sludge and mixed soils has begun at the South Jordan Evaporation Ponds site. The removal work started at the South end of the South Pond.

Post Removal samples will be collected to verify that all contaminated soils were removed from the site.

The sampling plan is designed so that one composite sample is collected per acre.

Each sample is collected from 2-5 subsites, arranged in 100x100 + 1 center point.



At each subsite, the sample is taken from 0-3" interval, of the post removal surface

Samples will be analyzed @ KEL for Total metal concentration of As, Pb and for pH.

samples:

EPX-1 (11:55) 2 pt composite
lgt to med gray sandy gravel.

EPX-2 (12:12) 3 pt composite
Drk gray sandy gravel, med gray silty sand.

EPX-3 (12:20) 3 pt composite
med gray sandy gravel, silty sand

EPX-4 (12:29) (2 pt)
blk sandy gravel

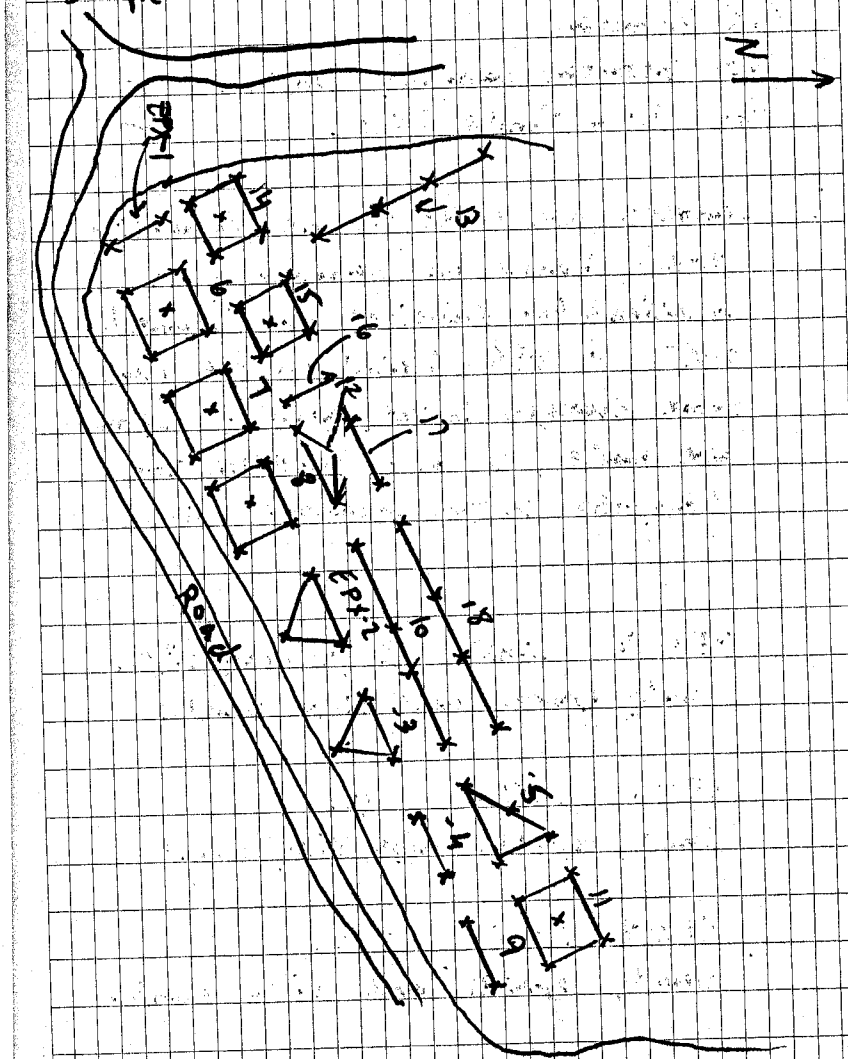
EPX-5 (12:49) (4 pt)
med gray silty sand.

sample locations ~~is~~ are "staked out" with GPS based on sampling plan.

Photos of samples were not taken and will be taken at later time.

C.O.C: 4246

sample locations



10/9/03

Evap Ponds

Post Removal

Post Removal sampling continues at the Evap Ponds Site.

Samples are collected as composite (2-5), based on sampling plan. locations for subsites are "staked out" w/ GPS based on the plan. Some changes in the layout of samples are made, to accommodate the progress in the removal work.

EPX-6 (11:45) 5 pt composite.
sandy gravel and silty sand.

EPX-7 (11:55) 5 pt.
sandy gravel and silty sand.

EPX-8 (12:05) 5 pt.
sandy gravel and silty sand.

EPX-9 (12:10) 2 pt.
gray to blk sandy gravel.

EPX-10 (12:15) 4 pt.
lgt to med gray silty sand.

Photos: 1. Looking north at area of sample EPX-10 (including also site of samples EPX-3 thru 5 (9/12/03)
2. Looking NE @ site of EPX-6, EPX-7

Sample locations - see pg. 3

C.O.C: (14EL/not numbered)
Analysis: As, Pb - Total, pH

11/5/03

Evap Ponds

Post Removal - continue

Sample are collected in a modified layout from the sampling design to allow progress of construction work.

EPX-11 (10:15) 5 pt composite.
gray to blk gravel, silty sand.

EPX-12 (10:22) 3 pt
med gray silty sand

EPX-13 (10:30) 4 pt
gray sandy silt. wet.

Photos:
Looking North at site of EPX-13

Analysis @ KEL; Total As, Pb, pH
C.o.c: 41266

Sample locations - see pg. 3

11/7/03

Evap Ponds

Post Removal - continue

EPX-14 (9:20) 5 pt composite.
gray silt, gray to blk gravel. wet.

EPX-15 (9:30)
gray silt, gray to blk gravel

Photo: close up at subsite of EPX-14
(Typical surface at samples EPX-14, 15)

Analysis: KEL, As, Pb - Total, pH.
C.o.c: KEL (no number)

Sample locations: see pg. 3

11/11/03

Evap Ponds

Post Removal - continue

- EPX-16 (12:00) ~~blk~~ 2 pt composite
  blk gravel, gray sandy silt.

sampling continue on 11/12/03 to allow final clean-up of surface.

EPX-17 (9:20) 2 pt composite
blk sandy gravel

EPX-18 (9:30) 4 pt
blk sandy gravel.

Photos:
1. Looking NE at working area
2. close up on subsite of EPX-18 (Typical to EPX-17, 18)

Analysis: KEL; Total As, Pb, pH
C.O.C: #4139

Sample locations: see pg. 3

11/21/03

9

Evap Ponds

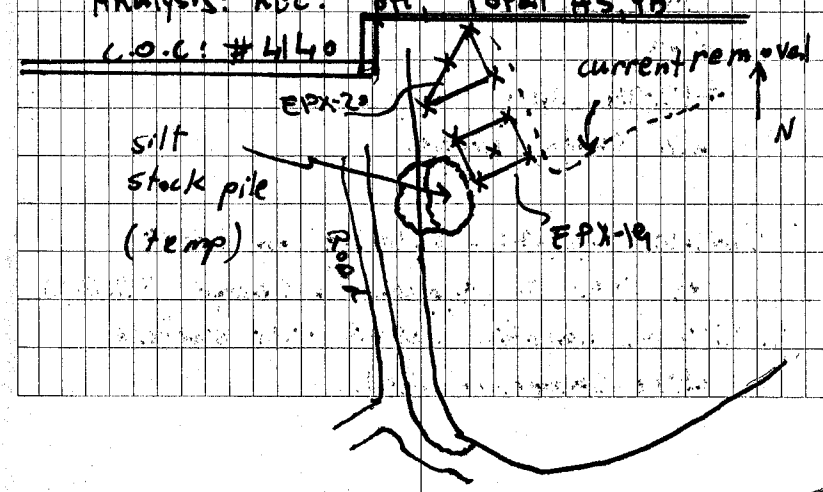
Post Removal - continue

EPX-19 (12:00) 5 pt composite
This is additional sampling in area of sample EPX-13 (11/5/03), after the removal of wet sandy silt layer.
This sample is blk sandy gravel, some gray silt.

EPX-20 (12:10) 4 pts.
blk sandy gravel, gray silt.

Photos: Looking North at site of samples EPX-19, 20

Analysis: KEL: pH, Total As, Pb
C.O.C: #4140



12/1/03

Evap Ponds

Post Removal - continue.
samples collected in linear manner to follow removal work closly and allow for back fill over wet areas.

EPX-21 (11:30) 4 pt
gray silt, blk sandy gravel.

- Sampling continue in the next day(s)

12/2/03
EPX-22 (14:30) 4 pts
gray silt, blk sandy gravel.

12/3/03
EPX-23 (15:00) 4 pts composite
gray silt.

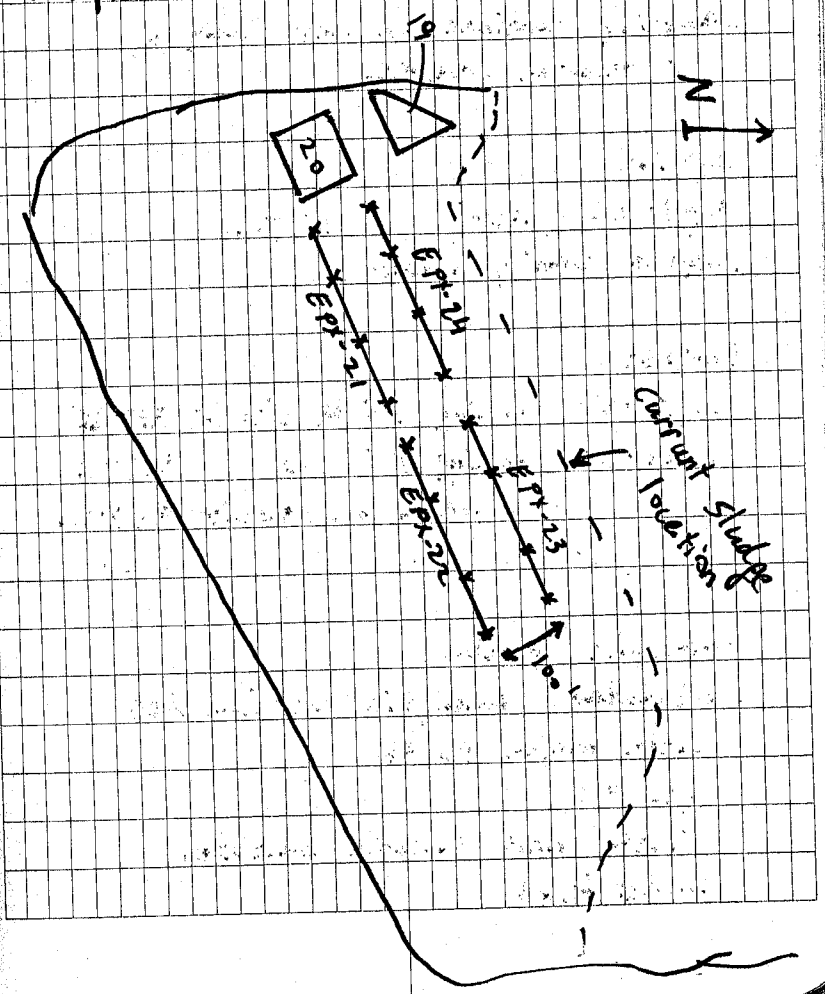
12/4/03
EPX-24 (14:00) 4 pts
blk sandy gravel

Photos: 12/2/03: 1. close up on subsite of EPX-22 (typical to samples EPX-22, 21
2. view of backfill pushed over surface after samples collected.

- 12/4/03 close up on subsite of EPX-24

Analysis: KEL Total metals- As, Pb, pH
C.o.C.: #4141

sample locations.



12/18/03

Evap Ponds

Post Removal - continue.

EPX-25 (13:00) 4 5 pt composite
lgt gray to blk sandy gravel.

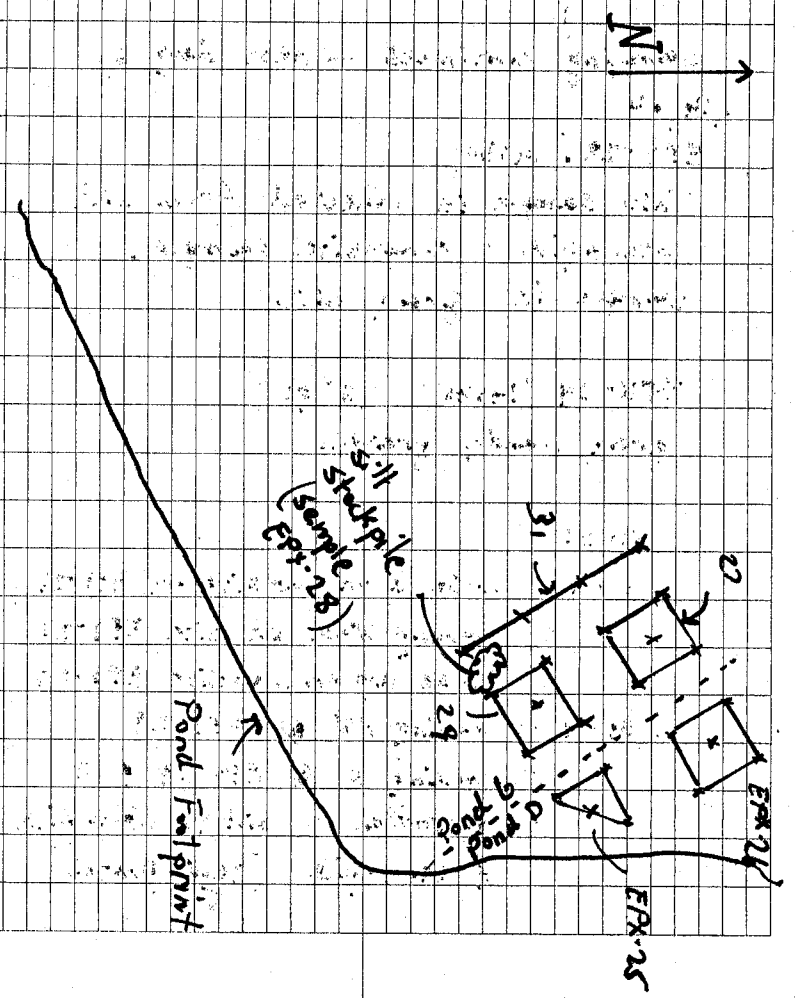
sampling continue on next day(s)
(w/ removal progress)

12/24/03
EPX-26 (11:50) 5 pt.
gray/blk sandy gravel

Photos:
12/18/03 - Looking NW at site of EPX-25
12/24/03 - Looking NW -"- EPX-26
- closeup on subsite EPX-26
- -"- -"-

Analysis: @ HEC.
Standard analysis now includes
Total metal As, Pb
pH, EC
Total and Soluble Sulfate.
C.O.C # 4143

Sample locations:



1|9|04

Evap Ponds
Post Removal - continue.

EPX-27 (12:00) 5 pt composite
gray|blk silty gravel.

Sampling continues on next day(s)
1|14|04
EPX-28 (14:30)
This sample is collected from silt stockpile - composite sample.
sample is gray silt.

EPX-29 (14:45) (5 pt)
gray sandy gravel.

Photos:
1|9|04 - close up on subsite of EPX-27
- Looking west at site EPX-27
- Close up on subsite EPX-27
1|14|04 - Looking NW @ EPX-29
- Looking N @ EPX 29 & 27
- Removal of silt to stock pile & stock pile (~~few~~ 5 photos)

analysis: KEL, pH, EC, Total As, Pb
Total & Soluble Sulfate.
C.O.C: KEC (no number)

sample location: see page 13.

1|28|04

EPX-30 (12:30) 4 pt.
sample collected from site of sample EPX-23 after removal of silt.
sample is blk gravel & gray silt.

Photos: - Looking West @ site of EPX-30
- close up on subsite.

sample location - see pg 11 - sample EPX-23

Analysis: KEL, As, Pb, pH, EC Tot|Sol Sulfate.
C.O.C # 4146.

2/10/04

Evap Ponds - continue

EPX-31 (13:45) 3 pt.
grey fine gravel.

EPX-32 (13:50) 5 pt
Yellowish-grey sandy gravel

EPX-33 (14:00) grey 5 pt.
grey gravel. west subsites are yellowish grey gravel

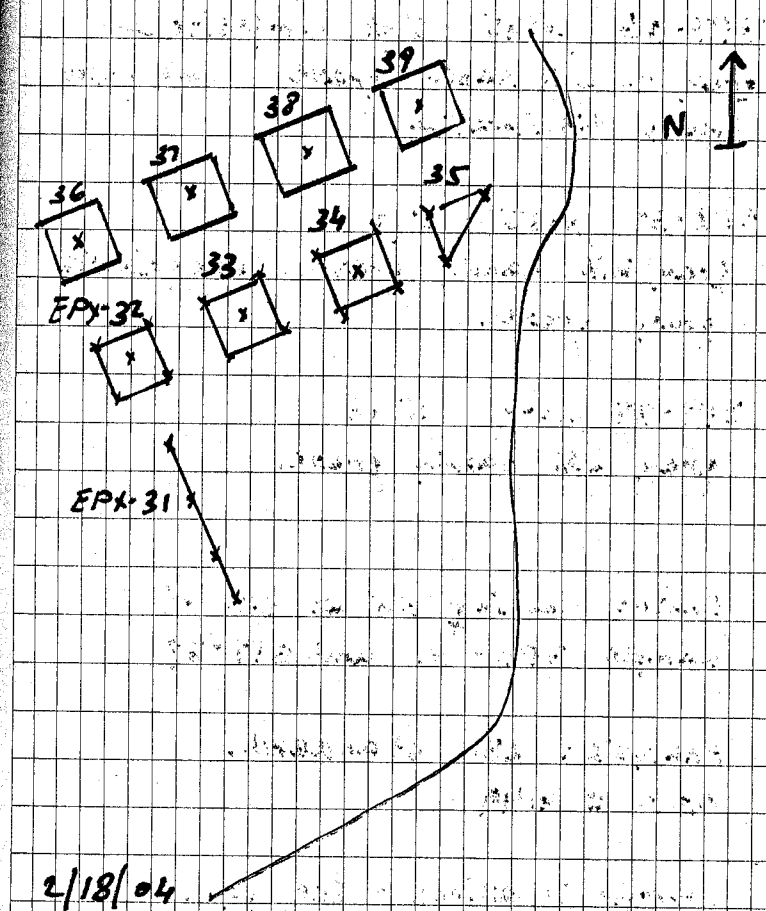
EPX-34 (14:10) 5 pt
gray/blk sandy gravel.

EPX-35 (14:30) 3 pt
grey gravel, yellowish-grey gravel.

Photos: - Looking South at site of EPX-31
- Looking West -"- EPX-32
- close up at subsite of EPX-32
- Looking East at EPX-33-35
- Looking NE EPX 32-34
- Close up on subsite of 34

Analysis: KEL: pH, EC, Total-As, Pb
Tot/sol sulfate.

c.o.c #4142



2/18/04
sample EPX-31 re-collected at same site material at 1st sampling was didn't have enough fines for analysis.

c.o.c # 4148

2/18/04

Evap Ponds
Post Removal - continue

EPX-36 (10:45) 5 pt composite
gray to blk sandy gravel, some yellow orange discoloration

EPX-37 (10:55) 5 pt
gray/blk sandy gravel. some yellowish gray gravel.

EPX-38 (11:00) 5 pt
gray/blk sandy gravel

Photo: Looking NW at site of sample EPX-37 and EPX-38

Analysis: KEL, standard.
c.o.c # 4149

Sample locations - see pg 17

2/25/04

Evap Ponds
Post Removal - continue

EPX-39 (12:30) 5 pt composite
gray sandy gravel, some yellowish discolor.

standard analysis, KEL
c.o.c #

sample location - see pg. 17

3/10/04

Evap Ponds

Post Removal - continue

EPX-40 (12:30) 5 pt.

blk to lgt gray gravel, sandy gravel

Sampling continue next day(s)

3/12/04

EPX-41 (13:00) 5 pt

gray sandy gravel, some yellowish discoloration.

Photos:- 3/12/04 - Looking South EPX-40, 41

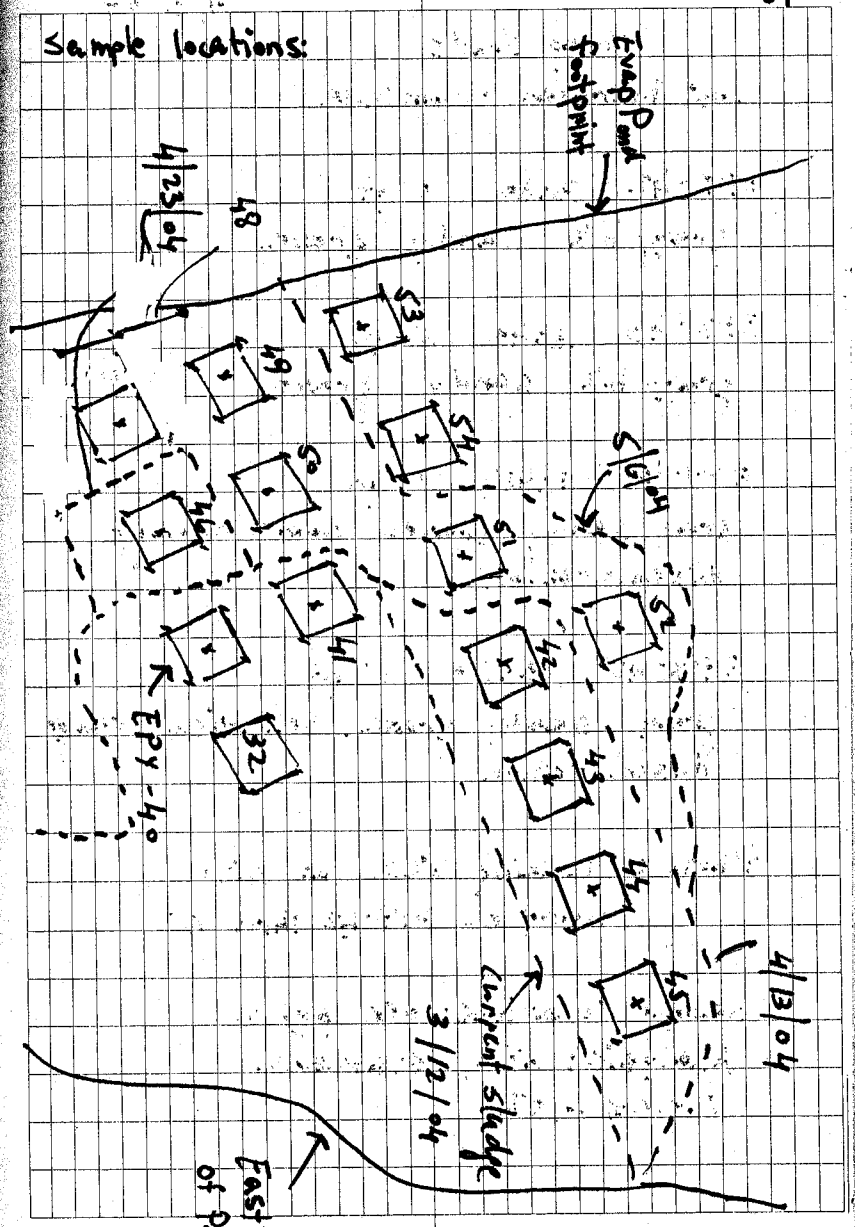
- close up @ subsite.

Analysis: KEL, Standard.

C.O.C # 4151

~~Sample~~

Sample locations:



4/13/04

Evap Ponds

Post Removal - continue

EPX-42 (13:30) 5 pt
gray-blk sandy gravel

EPX-43 (13:40) 5 pt
gray-blk sandy gravel

EPX-44 (13:45) 5 pt
gray sandy gravel. some orange discoloration

EPX-45 (13:50) 5 pt
gray sandy gravel. yellowish-orange discoloration

Photo: Looking west at site samples EPX-42 thru 45

Sample locations: see pg. 21
Analysis: KEL, standard.
C.O.C # 4154

4/22/04

Evap Ponds

Post Removal - continued:

EPX-46 (14:30) 5 pt.
gray-blk sandy gravel.

Photo: Looking west at site of sample.
Sample location - see pg. 21

C.O.C # 4156.

~~#5~~

5/6/04

Evap Ponds
Post Removal

EPX-47 (11:00) 5 pt
grey to blk sandy gravel

EPX-48 (11:10) 3 pt
~~5~~ grey to blk sandy gravel

EPX-49 (11:15) 5 pt
grey to blk sandy gravel

EPX-50 (11:20) 5 pt
grey to blk sandy gravel

EPX-51 (11:25) 5 pt
grey to blk sandy gravel

EPX-52 (11:30) 5 pt
grey to blk sandy gravel

Photos: - Looking west @ sample EPX47
- " NW @ EPX-48-49
- " NE @ EPX-51-52
- close up subsite. Typical

Sample location - see pg. 21
Analysis: KEL, Total As, Pb
pH, EC, Total/soluble ~~S~~ Sulfate

C.o.c # 4157

5/14/04

- EPX-53 (11:05) 5 pt
blk sandy gravel. some lgt gray silt

EPX-54 (11:15) 5 pt
blk sandy gravel.

Sample locations: see pg. 21

Analysis: standard analysis, KEL
c.o.c # 4267

5/26/04

Evap Ponds
Post Removal

EPX-55 (12:05) 5pt composite
gray/blk sandy gravel

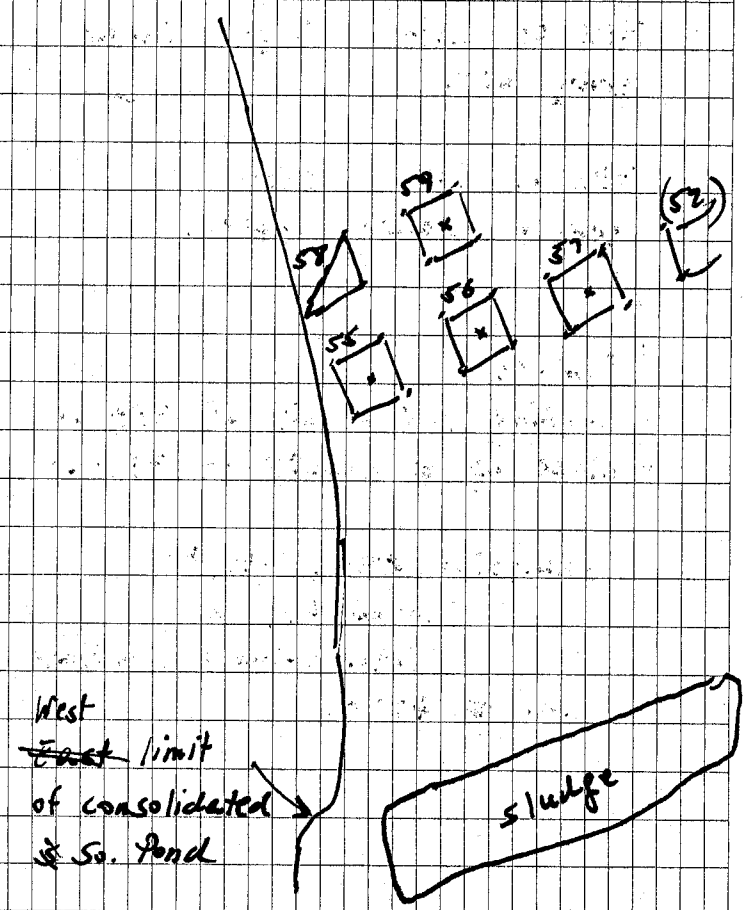
EPX-56 12:15 5pt
EPX-57 12:25 -"-
EPX-58 12:30 4~~5~~ pt
EPX-59 12:35 5 pt

Samples material is gray to blk
sandy gravel.

Photo:
- Looking NW, samples EPX-56, 58
- Looking NE, sample EPX-57
- close up @ cut, Typical soil
  in area.

Analysis: standard. IEL
C.O.C # 4269

sample locations.



6/7/04

Evap Ponds
Post Removal - continue

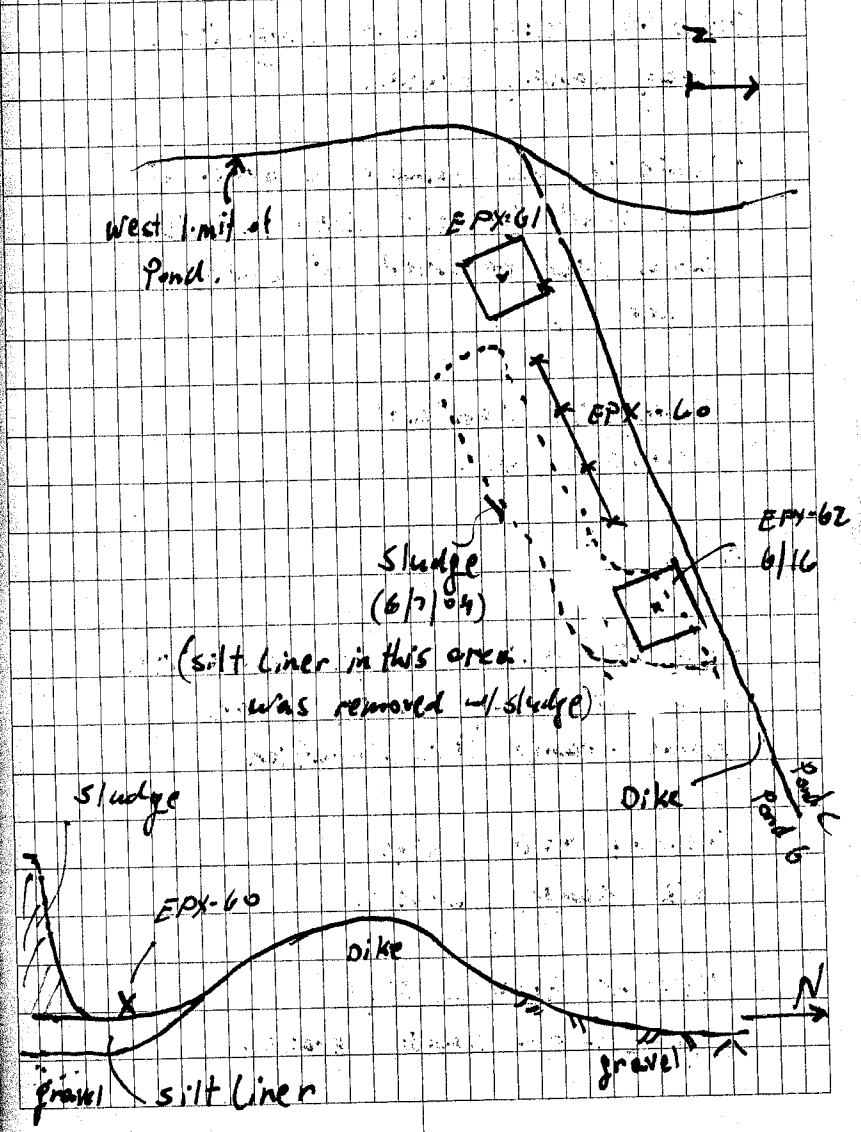
EPX-60 (11:00) 4 pt. Linear.
gray silt.

EPX-61 (11:10) 5 pt
gray/blk sandy gravel.

Photos:
- Looking SW @ site of EPX-60
- Close up @ subsite of EPX-60

Analysis: REC; pH, EC.
Total As, Pb.
Total/Soluble Sulfate
C.O.C# 4270.

Sample locations



6/16/04

Evap Ponds

Post Removal - continue

EPX-62 (12:30) 5 pt composite.
gray sandy gravel.

- This is last sample in area of old Pond 6. silt Liner in this area was removed w/ sludge
(see pg. 29)

Analysis: standard
c.o.c# 4271

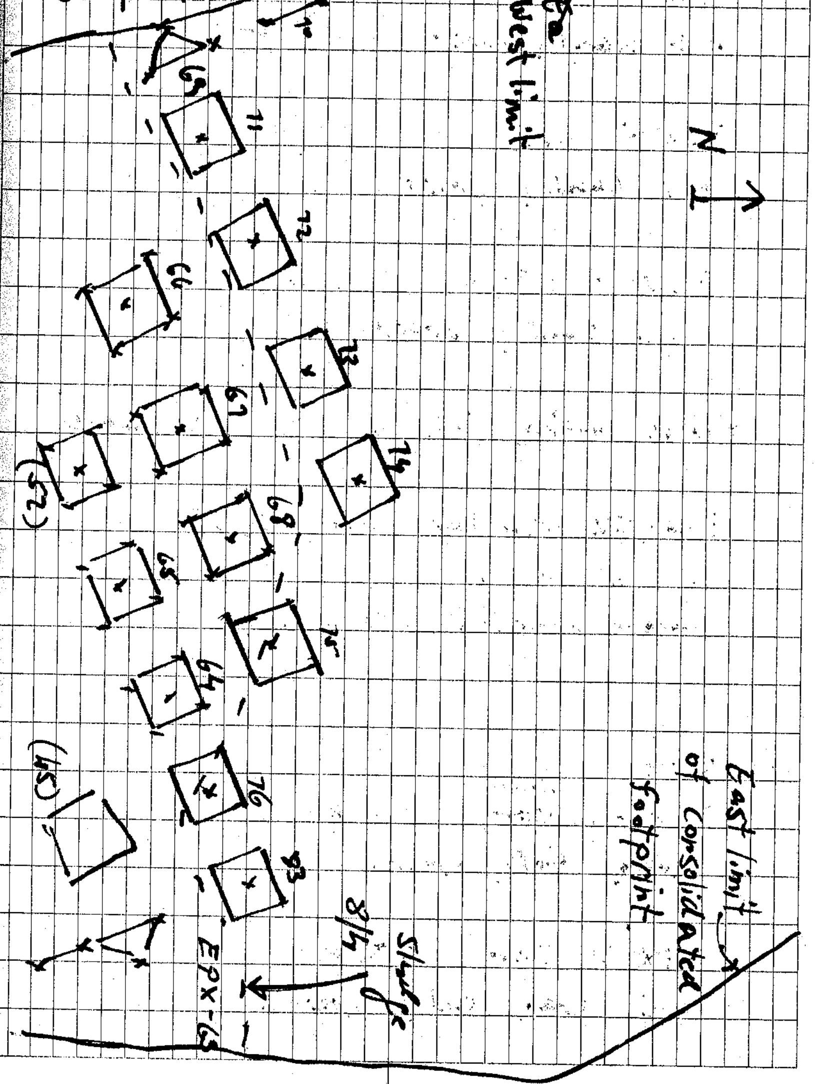
7/29/04

EPX-63 (9:30) 4 pt composite.
med - lgt gray sandy gravel
some orange discoloration

EPX-64 (9:40) 5 pt
blk sandy gravel

EPX-65 (9:50) 5 pt
gray to blk sandy gravel.

Analysis: KEL
c.o.c# 4275
sample locations:



8/4/04

Post Removal - continue

EPX-66 (9:00) 5 pt composite
blk sandy gravel

EPX-67 (9:10) 5 pt
blk sandy gravel

EPX-68 (9:20) 5 pt
blk sandy gravel

Photo: Looking West at site of samples

Analysis: standard analysis, KEL
C.O.C # 4276
Sample location: see pg. 31

8/26/04
EPX-69 (~~12:00~~ 11:50) 3 pt
gray sandy gravel.

EPX-70 (12:00) 2 ~~3~~ pt
lgt gray sandy gravel.

EPX-71 (12:10) 5 pt
gray/blk sandy gravel

EPX-72 (12:20) 5 pt
blk sandy gravel

EPX-73 (12:30)
blk sandy gravel. gray silty sand

EPX-74 (12:50)
blk sandy gravel

EPX-75 (13:00)
blk sandy gravel, some gray silty sand

EPX-76 (13:10)
blk to gray sandy gravel, some yellow discoloration in East subsites.

Photos: Looking West at site of EPX-71, 70

Sample location: see pg. 31
Analysis: KEL, standard
C.O.C # 4277

9/24/04

Evap Ponds
Post Removal - continue

EPX-77 (13:00) 5 pt.
blk sandy gravel

EPX-78 (13:07) 5 pt
blk sandy gravel

EPX-79 (13:15) 5 pt
blk sandy gravel

EPX-80 (13:23) 5 pt
blk sandy gravel

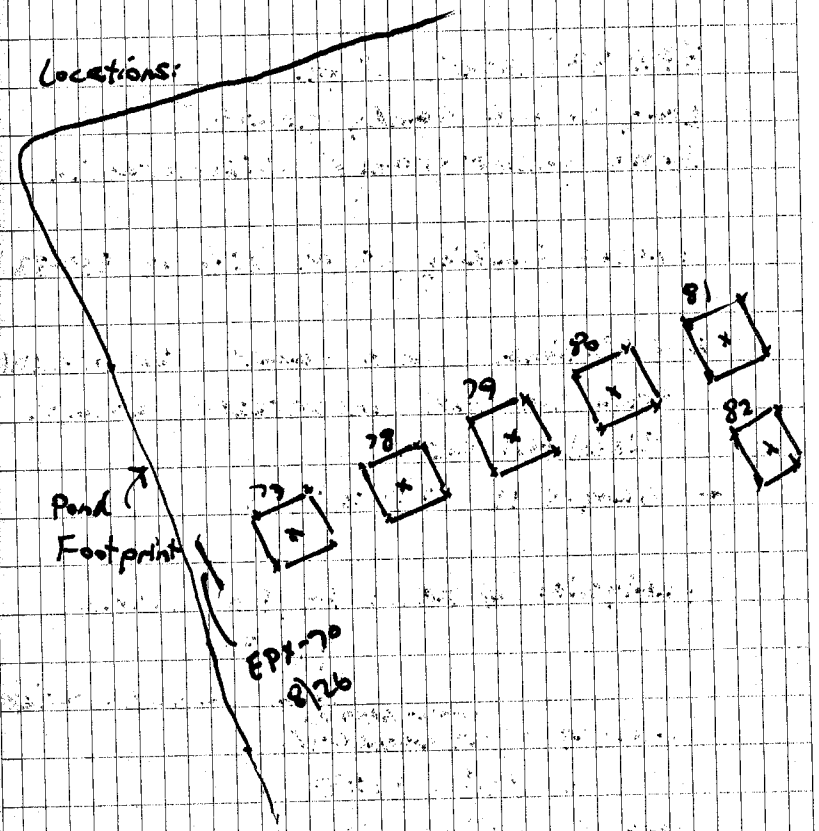
EPX-81 (13:30) 5 pt
blk sandy gravel

EPX-82 (13:35) 5 pt
blk. sandy gravel

Photos:
- Looking NE at site of EPX-77
- Looking East, EPX-77 thru 79
- close up on subsite of EPX-80 (Typical)

Analysis @ KEL, standard.
c.o.c # 4279

Locations:



9/28/04

Evap. Ponds
Post Removal

EPX-83 (13:45) 5 pt.
gray to blk sandy gravel
some yellow-orange discoloration

Photo: Looking SE at site of EPX-83

* Additional check sample was collected from the most concentrated area of discolored soil.
- Sample ID EPCS0928

Analysis: @ KEL: As, Pb Totals
pH, EC
Total/soluble Sulfate

C.O.C # (check sample not numbered)
4282 (EPX-83)

Sample location - see pg. 31.

Post Removal - continue

EPX-84 (15:10) 5 pt
gray silt, blk sandy gravel.

EPX-85 (15:15) 5 pt
blk sandy gravel

EPX-86 (15:20) 5 pt
blk sandy gravel

EPX-87 (15:25) 5 pt
blk sandy gravel. some gray silt

EPX-88 (15:30) 2 pt
blk sandy gravel.
(sample is from dike of old Pond C)

EPX-89 (~~15:35~~ 15:40) 3 pt
Sandy gravel, mod FeO x discoloration.
sludge removal in this place is 2' bellow native contact.

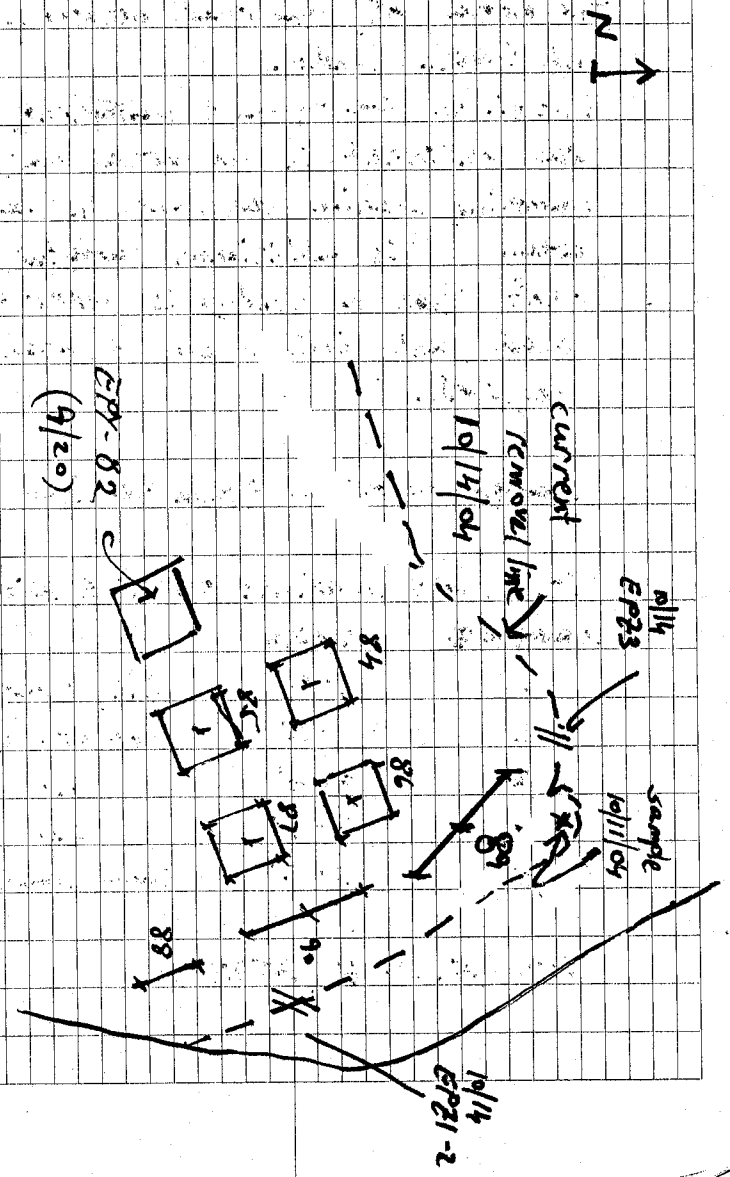
~~EPX-~~

EPX-90 (15:35) 3 pt.
med gray silty gravel, some yellowish gray silt.

Photos: - Looking west at site of EPX-86, 87
- Looking west -"- EPX-87, 85
- Looking North " EPX-88
- Looking SE EPX-89, 90

Analysis @ KEL: As, Pb, pH, EC
Total | soluble sulfate
C.O.C # 4284
4285 (for EPX-90)

sample locations:
note: sample EPX-89 was collected out of the grid of sampling plan due to progress in removal work.



11/15/04

Evap Ponds

Post Removal - continue

Additional removal conducted in area of EPX-91 (13:50) 5 pt. EPX-89.

mod to strong FeOx discoloration, silty gravel.

- heavy discoloration in south sub sites

Additional check samples:

EP111504.1 (14:00) grab
mod FeOx discoloration, gravel

EP111504.2 (14:10) grab
(Sub site of sample EPX-89)
mod FeOx discoloration, gravel.

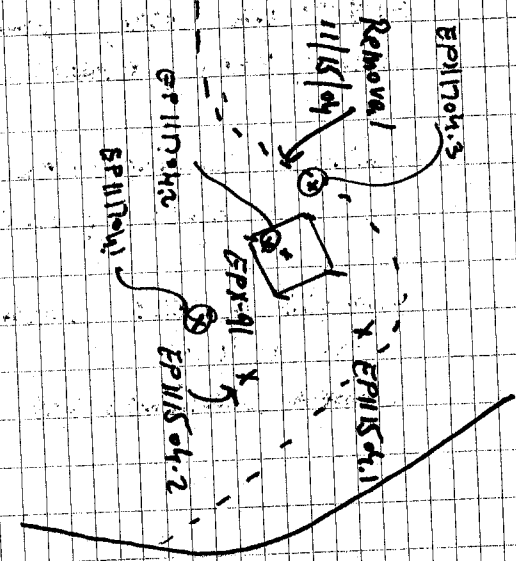
Photos:

Looking SE at site of EPX-91

Analysis: KEL: As, Pb Totals, pH, EC
Total/Soluble Sulfate

C.O.C # 4286

Sample locations:



11/18/04

Evap Ponds
Post Removal - continue

EPX-91A (15:00) 5 pt composite
additional removal was conducted in this area.
sample is sandy gravel and silty gravel

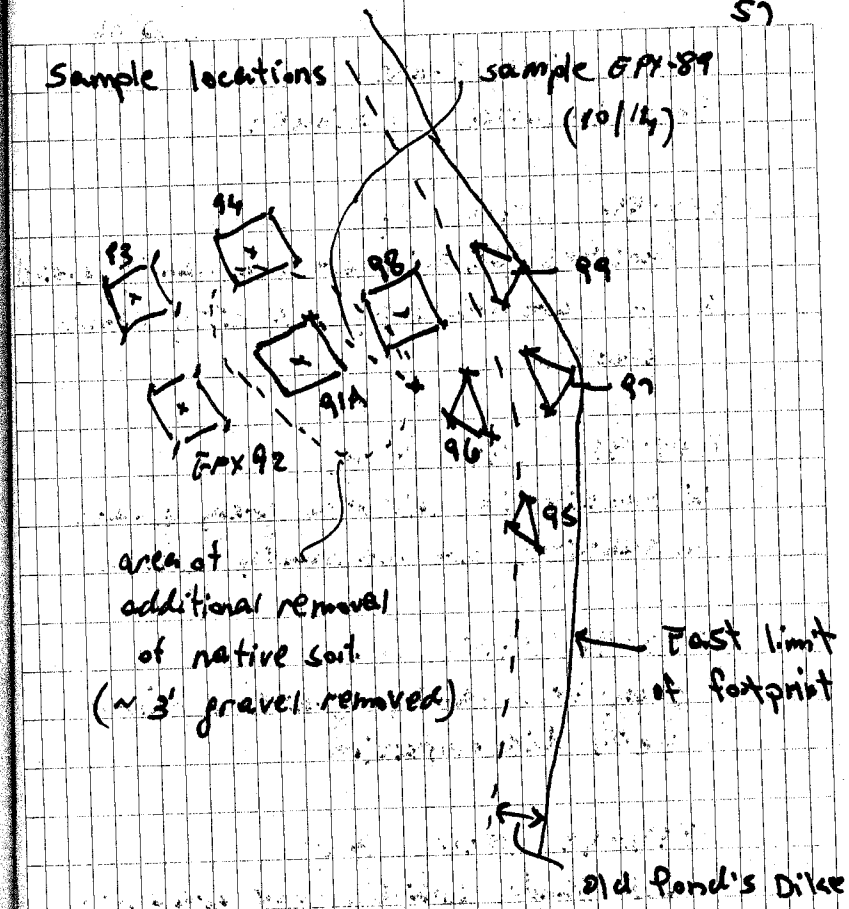
EPX-92 (15:10) 5 pt
blk sandy gravel

EPX-93 (15:20) 5 pt
blk sandy gravel.

Photos:
- Looking SW at site of EPX-91A
- close up on sub site of 91A
- Looking West at EPX-92, 93

Analysis @ KEL: Total As, Pb
Total/soluble Sulfate, pH, EC
C.O.C # 4288

Sample locations



11/23/04

Evap Ponds

Post Removal - continue:

EPX-94 (15:00) 5 pt
2 subsites (SE, SW) are brn sandy gravel
3 " are dark gray-blk silty sandy gravel.

EPX-95 (15:10) 3 pt
W subsite is yellowish grey gravel.
2 subsites are blk sandy gravel

EPX-96 (15:15) 3 pt
gray-brn sandy gravel. minor FeOx discoloration

EPX-97 (15:20) 3 pt
blk sandy gravel, some grey silt.

Photos: - Looking North at EPX-95 - 97
- Looking NE at EPX-94

Analysis: KEL, standard.
C.O.C# 4289
Sample locations see pg. 57

11/30/04

Evap Ponds

Post Removal

EPX-91BS (15:00) 3 pt.
Silty sandy gravel. med FeOx discoloration

EPX-91BN (15:05) 2 pt
Silty sandy gravel. med FeOx discoloration

EPX-98 (15:15) 5 pt
sandy gravel. med FeOx discoloration

Additional check sample was collected at site of EPX-98, NW subsite.
EP113004.1

Photo: Looking North at site of EPX-98
Analysis: KEL, standard
C.O.C# 4290

Sample locations: see pg. 57
EPX-91BS, EPX-91BN are in same location of EPX-91A after additional removal.

Evap Ponds

EPX-99 (15:00) 3 pt composite
blk-gray silty sandy gravel
sample is on East dike.

Additional check samples were collected in site of sample EPX-98 after additional removal was conducted.

EP120604.1 (14:40) grab
site of EP113004.1 (NW of EPX-98)

EP120604.2 (14:50) grab
center subsite of EPX-98

EP120604.3 (14:55) grab
sample at EPX-91BN.

Photos: - Looking North at EPX-99
Analysis: standard
C.O.C# 4291

Sample locations: see pg. 57.

Evap Ponds

Post Removal - continue

EPX-100 (12:15) 5 pt
blk sandy gravel

EPX-101 (12:25) 5 pt
blk sandy gravel

EPX-102 (12:35) 5 pt
blk sandy gravel

EPX-103 (12:50) 4 pt
sandy gravel, med to strong FeOx discoloration.
(Sample includes re-sampling of 2 South subsites of EPX-94 after additional removal was conducted.

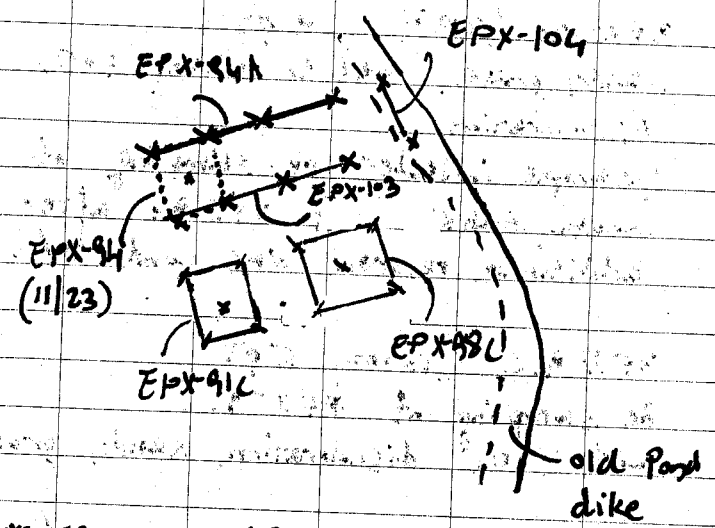
EPX-91C (13:00) 5 pt
Re sampling of EPX-91
med FeOx discoloration, sandy gravel

/...

12/15/04 - continue
Photos:
- Looking West at site of EPX-100 thru 102
- Looking East at EPX-103
- Looking South-East at EPX-91C

Analysis: @ KEL, As, Pb, pH, EC
Total & Soluble Sulfate
C.O.C # 4292

Sample locations:



* see page 65 for locations 100-102

Post Removal - continue

EPX-94A (15:10) 4 pt
sandy gravel. med-strong FeOx
(sample includes re-sampling of 2 N
sub sites of EPX 94

EPX-98 C (15:20) 5 pt
silty-sandy gravel med FeOx discolor.
re-sampling of sample EPX-98
after additional removal was conducted

EPX-104 (15:30) 2.5 pt
blk sandy gravel

EPX-105 (15:40) 5 pt
blk sandy gravel

Photos:
- Looking west at EPX-105
- Looking East at EPX-94A, 104
- Looking SE at EPX-98C

Analysis @ KEL, COC # 4293
sample locations see pg. 62, 65

1/18/05

Evap Ponds
Post Removal

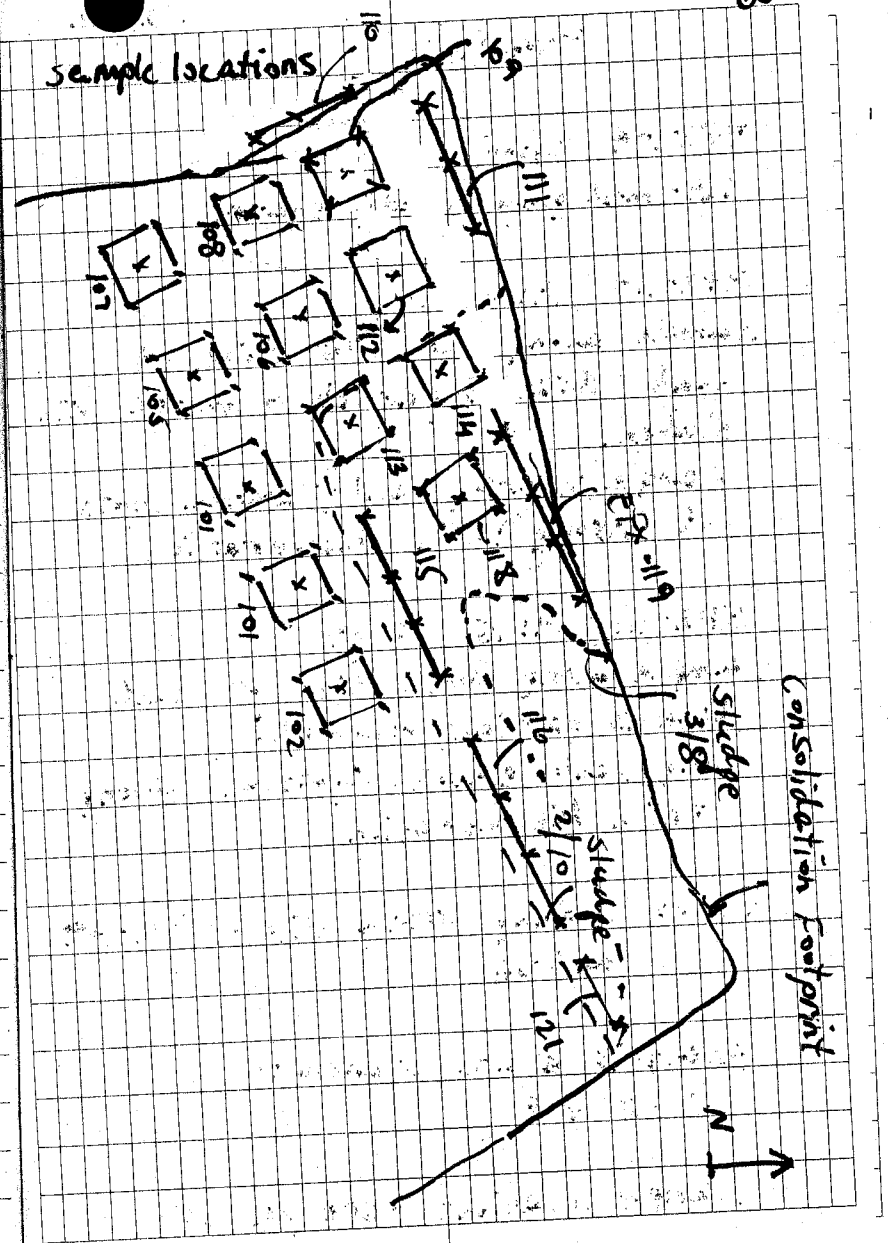
EPX-106 (13:00) .5 pt.
blk sandy-silty gravel

EPX-107 (13:10) 5 pt
gray to blk sandy gravel

EPX-108 (14:00) 5 pt
lgt gray sandy gravel, minor
FeOx discoloration.

Photos:
Looking ~~S~~ East at EPX-106
Looking NW at EPX-107, 108

Analysis @ KEL, standard
C.O.C (KEL - No Number)



1/28/04

Evap Ponds

EPX-109 (14:00) 5 pt
lgt-med gray sandy gravel

EPX-110 (14:05) 3 pt
sample along the west dike of Pond (dike is partialy removed with sludge.
sample is gray sandy gravel. spots of strong FeOx discoloration

EPX-111 (14:15) 3 pt
sample along north dike of Pond (dike is partially removed.)
gray sandy gravel. spots of strong FeOx discoloration

Photo: Looking west @ site of EPX-109 and -111

Analysis @ KEL, standard
C.o.C # 4294

Sample locations - see pg. 65

2/10/05

Evap Ponds

EPX-112 (16:00) 5 pt
gray-brn silty-sandy gravel
C.o.C #4295

Post Removal - continue:
3/2/05

EPX-113 (13:50) 5 pt
blk sandy gravel

EPX-114 (14:00) 5 pt
med gray sandy gravel. med FeOx

EPX-115 (14:10) ~~5~~ 4 pt
blk coarse sandy gravel

EPX-116 (14:20) 4 pt
sandy gravel. west subsites are blk sandy gravel. subsites are med FeOx discoloration.

Photos: - Looking North @ EPX-114
- Looking East @ EPX-116
- close up @ subsite of 116

3/2 - continue:
Analysis @ KEL - standard
C.O.C # 4296

sample locations see pg. 65

Post Removal sampling continue next day(s)

3/3/05
Post Removal - continue:
EPX-117 (12:00) 2 pt
lgt grey sandy gravel

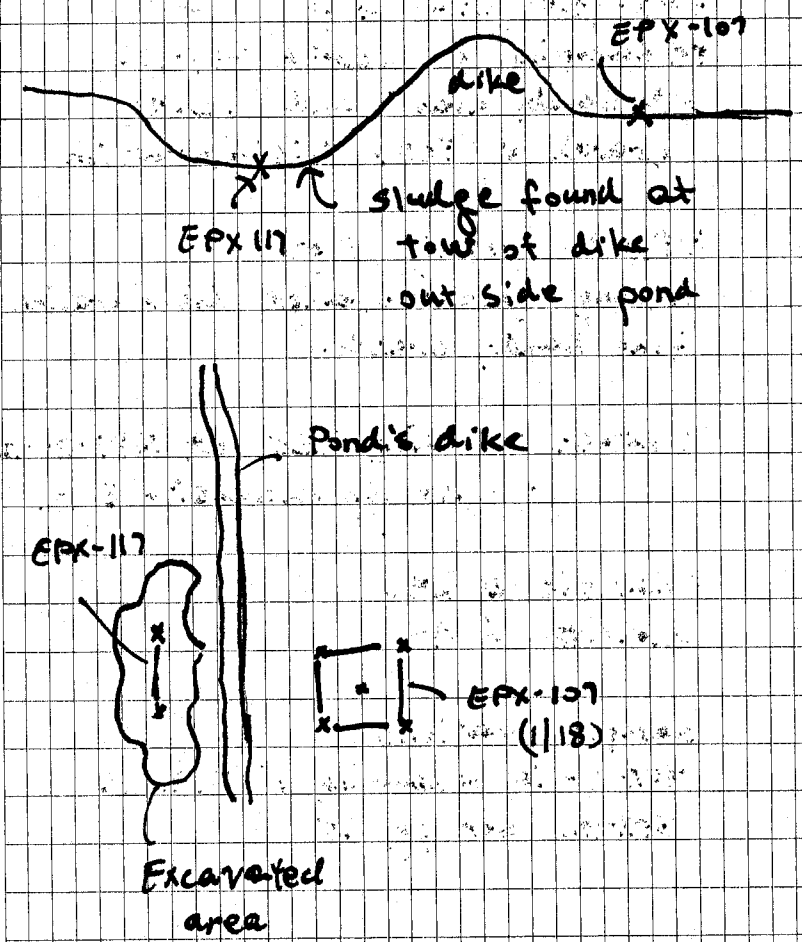
3/8/05
EPX-118 (12:20) 5 pt
sandy gravel med FeOx

EPX-119 (12:30) ≤4 pt
silty sandy gravel

Photo
3/3 - Looking South @ EPX-117
3/8 - Looking North @ 118 - 119

Analysis @ KEL As, Pb, pH, EC
Total & Soluble Sulfate
C.O.C # 4297, 4298

Sample locations



* see also pg. 65

3/14/05

Evap Ponds

Post Removal

EPX-120 (12:10) 4 pt
re sampling of sample EPX-116
blk sandy gravel and sandy
gravel w/ FeOx discoloration

EPX-121 (12:15) 2 pt
strong yellow-orange discoloration
fine sandy gravel.

Photos: - Looking East at EPX-120-121
- close up on subsite @ 121

Analysis @ KEL
c.o.c # 4299

sample locations:
EPX-120 is resampling of EPX-116
EPX-121 see pg 65

3/17/05

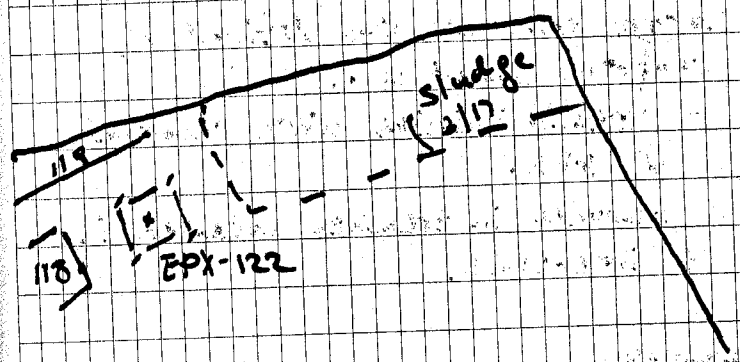
Evap Ponds

Post Removal

EPX-122 (15:00) 5 pt composite
sample is yellow sandy gravel, blk
sandy gravel.

Photo Looking East at site of EPX-122
Analysis @ KEL
c.o.c # 4300

sample location



3/30/05

Evap Ponds

Post Removal

EPX-123 (14:20) 5 pt
blk sandy gravel, yellowish gray sandy gravel

EPX-124 (14:30) 5 pt
yellowish gray sandy gravel. drk brn silty gravel in north sub sites.

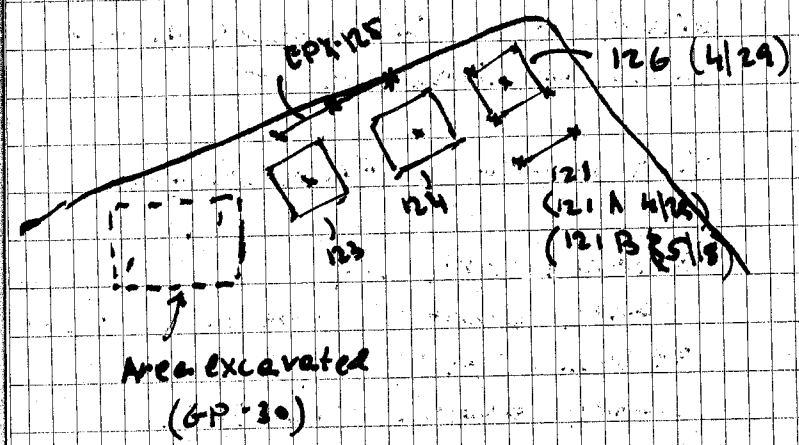
EPX-125 (14:40) 3 pt
drk brn silty gravel.

Photos:
Looking East at Site of EPX-123, 124
Looking West at EPX-124, 125
close up on subsite of EPX-124

Analysis @ KEL: Total As, Pb
Total/Soluble Sulfate, pH, EC

C.O.C #4302

sample locations



4/6/05
Additional Removal conducted in area of EPX-124, 125

EPX-124A (10:30) 5 pt
yellowish orange sandy gravel

EPX-125A (~~125A~~ 16:40) 3 pt
yellowish gray sandy gravel.

C.O.C # 4308

Evap Ponds

Post Removal

Additional Removal was conducted in area of EPX-121. Removal of the South consolidated Pond is complete

EPX-121A (15:00) (2 pt)
sandy gravel, FeOx discoloration

EPX-126 (15:10) (5 pt)
blk-grey sandy gravel and FeOx discolored sandy gravel.

Analysis: Total As, Pb; pH EC
Total/Soluble Sulfate
c.o.c # 4308

Photo: Looking West at site of EPX-126

sample locations: see pg 81

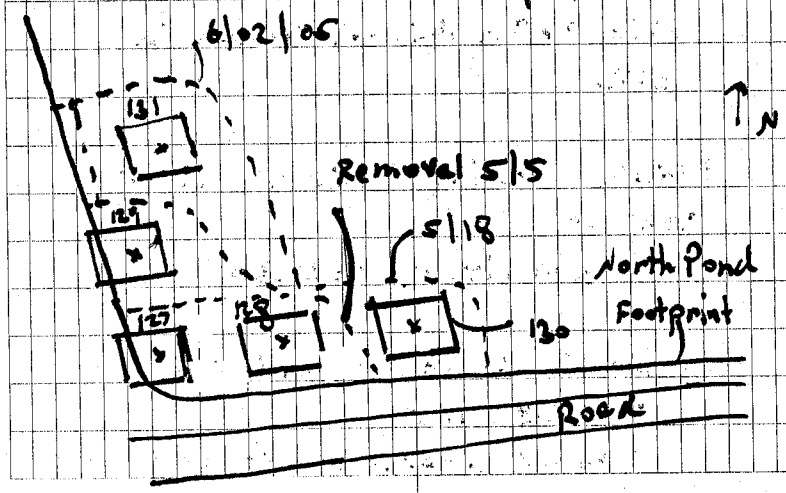
Evap Ponds

Removal Now continues in the North Pond. Sampling continues by sampling plan 2-5 pt composite, ~1 sample per acre. (see pg 1).

EPX-127 (15:30) 5 pt
lgt gray sandy gravel
EPX-128 (15:35) 5 pt
lgt gray sandy gravel.

c.o.c # 4309
Analysis @ KEL: Total As, Pb pH, EC
Total/Soluble Sulfate

6/02/05



 5/18/05

Evap. Ponds:

Post Removal - continue

EPX-121B (15:00) (2 pt)
additional Removal was conducted in area of EPX-121A
sample is sandy gravel. strong $Fe^{0}x$ discoloration

EPX-129 (15:10) 5 pt
gray sandy gravel. some $Fe^{0}x$ discoloration

EPX-130 (15:20) 5 pt
sandy gravel and sandy silt. $Fe^{0}x$ discoloration in silt.

Photos: - Looking East at site of EPX-130
- subsite of EPX-130

Analysis @ KEL, standard
C.O.C # 4316
sample locations - see pg 87

6/2/05

Evap Ponds
Post Removal

EPX-131 (12:30) 5 pt composite
gray sandy gravel. Some FeOx discoloration.

Analysis @ KEL. pH, EC Total As, Pb
Total \ soluble Sulfate
c.o.c # 4315

Sample locations see pg. 87.

6/30/05
Post Removal - continue:

EPX-132 (10:15) 5 pt
gray sandy gravel

EPX-133 (10:20) 5 pt
gray silty gravel @ ~~ea~~ West Subsites
med-drk gray silt, mod FeOx @ East Subsites

6/30/05.

EPX-134 (10:25) 5 pt
med-drk brn-gray silt, med-heavy FeOx

EPX-135 (10:30) 5 pt
med-drk brn-gray silt, med-heavy FeOx

EPX-136 (10:35) 5 pt
drk brn silt, some FeOx

EPX-137 (10:40) 5 pt
med gray silt, some FeOx

EPX-138 (10:45) 5 pt
West subsites: sandy gravel, strong red discoloration
East subsites: gray silt, some FeOx

~~Photos:~~

Analysis: @ KEL, Total As, Pb
pH, EC
Total \ soluble Sulfate

c.o.c # 4316

6/30/05

Photos:

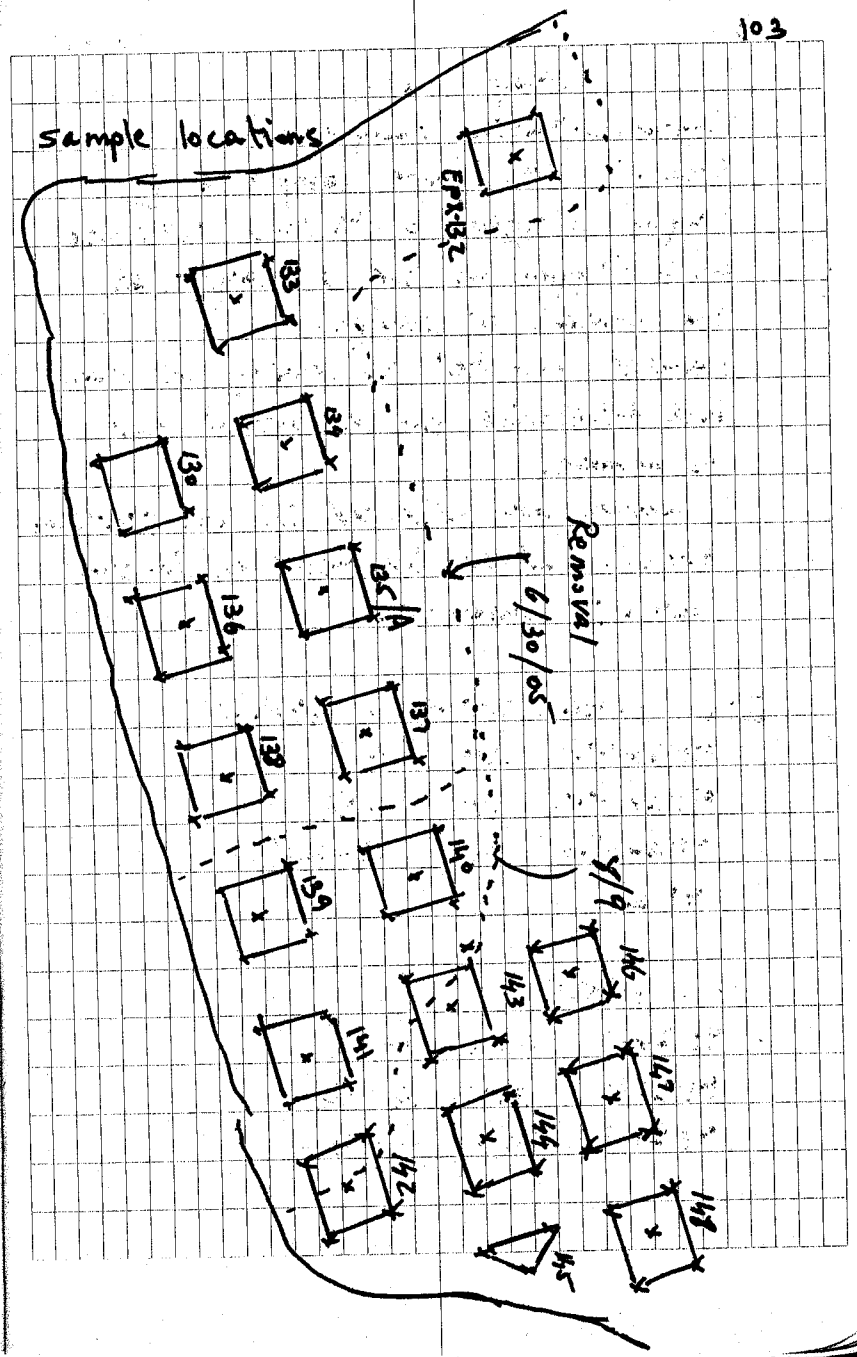
- Looking East at samples EPX-134 - 135
- Close up on subsite of EPX-134
- Looking NE at site of EPX-133
- Looking NW " -"- EPX-132

7/20/05

Post Removal - continue:

EPX-135A (12:45) (5 pts.)
site of EPX-135, after additional removal.
gray silt, sandy gravel, strong FeOx.

Analysis: KEL, standard.
C.O.C # 4129.



8/9/05

Evap Ponds
Post Removal

EPX-139 (12:00) 5 pt
brn-gray silt. FeOx in various degrees in different sub sites.

EPX-140 (12:05) 5 pt
gray silt. FeOx and blk discoloration (blk @ NE sub site)

EPX-141 (12:10) 5 pt.
gray silt @ 2" in West subsites.
Sandy gravel, heavy FeOx

Photos:
- Looking NE at EPX-139, 141
- Looking East at EPX-140

Analysis: KEL:
c.o.c # 4130

sample locations: see pg. 103

8/22/05

Evap Ponds
Post Removal - Continue

EPX-142 (15:00) 5 pt.
gravel. FeOx

EPX-143 (15:05) 5 pt
gravel. FeOx

EPX-144 (15:10) 5 pt
silty sandy gravel. some blk silt @ NE sub-site.

Analysis: KEL
c.o.c # 4320

sample locations - see pg. 103

9/19/05

Post Removal - continue
sample EPX-144A
site of sample EPX-144 after additional Removal.
sample is sandy gravel. FeOx, some gray silt in N subsites

Evap Ponds

Post Removal - continue:

EPX-145 (15:25) 3 pt
gray to redish silty sandy gravel

EPX-146 (15:30) 5 pt
redish sandy gravel & gravel

EPX-147 (15:35) 5 pt
gray silty gravel.

EPX-148 (15:40) 5 pt
gravel. FeO_x

Analysis : KEL :
C.o.C # (see 9/20)

* Photo: (see sampling 9/26)

Check sample:
EPCS 144N - (15:45) 2 pt composite sample of gray silt in North subsites of sample EPX-144A.

Sample locations: see pg. 103.

Post Removal

* Additional Removal conducted in site of samples EPX-139-140

EPX-139A (12:00) 5 pt site of EPX-139.
sandy gravel. strong FeO_x

EPX-140A (12:05). 5 pt site of EPX-140
sandy gravel. Strong FeO_x

C.o.C # 4322
Analysis: KEL:

Sample locations : see pg 103

9/26/05

Evap Ponds

Post Removal.

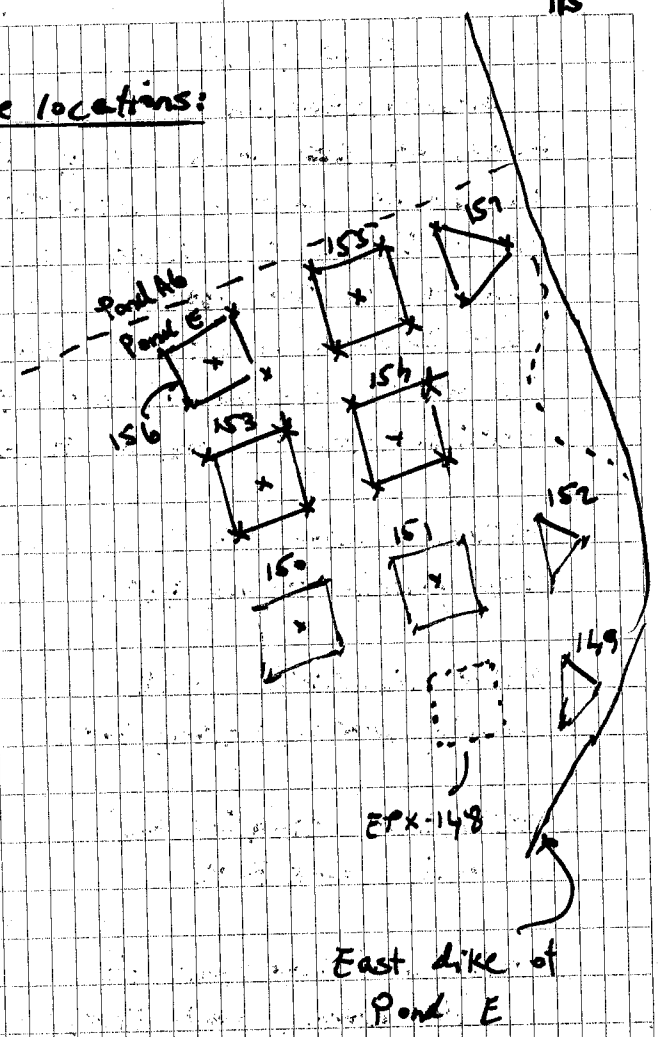
EPX-149 (12:15) 3 pt
sandy gravel. some FeOx discoloration
EPX-150 (12:20) 5 pt
sandy gravel. med. FeOx
EPX-151 (12:25) 5 pt
sandy gravel med. FeOx
EPX-152 (12:30) 3 pt
sandy gravel. med FeOx

Photos:
- Looking South at site of EPX-152, 149, 145
- Looking SW at EPX-144, 148
-

Analysis @ KEL Total RCRA 8 (-Hg)
L.O.C # 4325 Total/Soluble Sulfate
pH, EC

9/26/05

sample locations:



Evap Ponds
Post Removal

EPX-153 (14:50)
Sandy gravel. med FeOx

EPX-154 (14:55)
Sandy gravel. med FeOx

EPX-155 (15:00)
Sandy gravel med FeOx

Photos:
- Looking NW at site of samples EPX-153 - 155
- close up on subsite of 153 (typical)

Analysis: KEL: Total RCRA 8 (-Hg)
Total \ Soluble Sulfate
pH, EC
c.o.c # 4326.

Sample locations see pg. 115

Post Removal - continue:

EPX-156 (13:45) - 5 pt
sandy gravel. med FeOx

EPX-157 (13:50) 3 pt
sandy gravel. med FeOx

Photo: Looking West at site of EPX-155 and 156.

Analysis @ KEL. Standard analysis, RCRA 8
c.o.c: 4327

Sample locations: see pg. 115

10/25/05

Evap Ponds
Rost Removal - continue:

EPX-158 (15:10) 5 pt. composite
sandy gravel. med to strong FeOx

EPX-159 (15:15) 5 pt
sandy gravel. med to strong FeOx

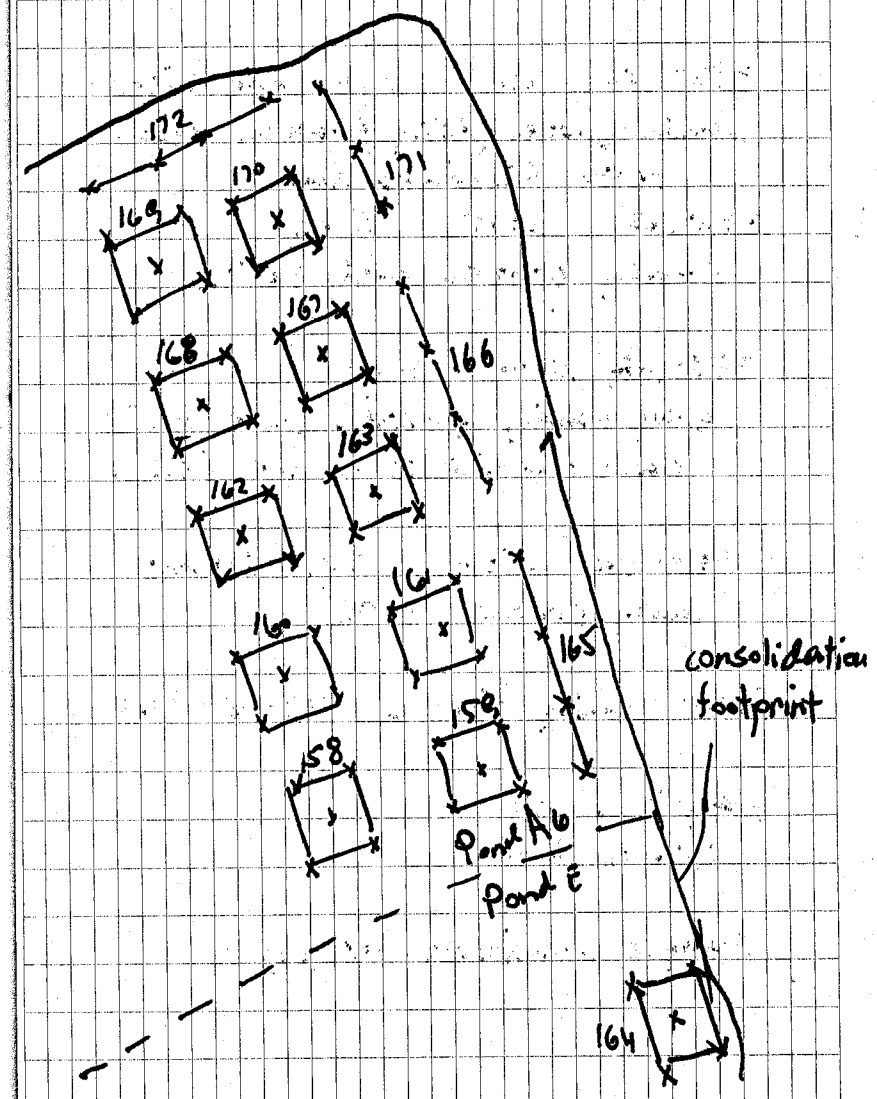
EPX-160 (15:20) 5 pt
sandy gravel. some silty gravel.
med FeOx

EPX-161 (15:25) 5 pt
sandy gravel. med FeOx

Photos: Looking North @ site of
EPX-159, 161
- close up @ subsite of 159
typical.

Analysis @ KEL
C.O.C # 4328

Sample locations:



Evap Ponds

Post Removal.

EPX-162 (12:00) 5 pt composite
sandy gravel, silty gravel. med
FeOx discoloration.

EPX-163 (12:05) 5 pt
sandy gravel. med FeOx

EPX-164 (15:00) 5 pt
gray sandy gravel some FeOx
east subsite is on the dike.

EPX-165 (15:10) 4 pt, linear
sandy gravel FeOx

Photo: looking West at EPX-162-163

Analysis @ KEL
c.o.c # 4330.

Sample locations: see pg. 127

Evap Ponds

Post Removal

Additional Removal was conducted in site of samples EPX-159, EPX-161 ~1' soil was removed.

samples collected from same locations:

EPX-159A (15:40) 5 pt
sandy gravel FeOx

EPX-161A (15:45) 5 pt
sandy gravel. FeOx

Photo: looking SE at site of EPX-161A, 159A

Analysis: KEL - Total metals RCRA 8 (Hg)
Total/Soluble Sulfate
pH, EC

c.o.c # 4330

Sample locations: see pg. 127
(EPX-159, EPX-161)

11/3/05

Evap Ponds

Post Removal - continue:

EPX-166 (11:00) 4 pt composite
Sandy gravel. gray w/some FeOx discolor.

EPX-167 (11:05)
fine gravely sand. med FeOx

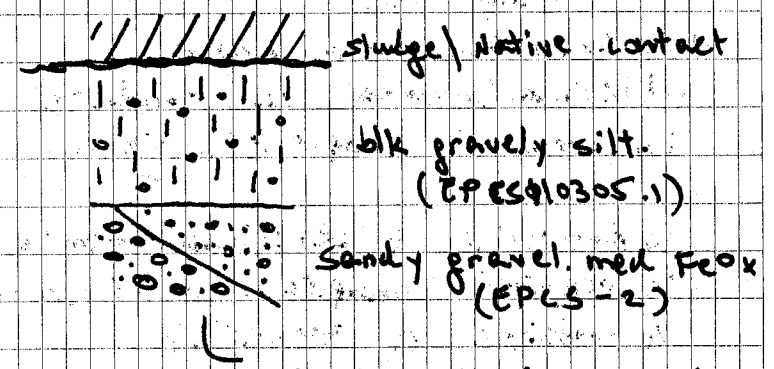
Photos: - Looking S at site of EPX-166, 165
- Looking W @ EPX-167.

Analysis: KEL, RCRA 8 (-Hg), pH, EC
Total & Soluble sulfate
C.O.C # 4332.

Sample locations: see pg. 127

Additional Check Samples were collected to verify the required depth of removal ~~under~~ below the sludge/native contact.

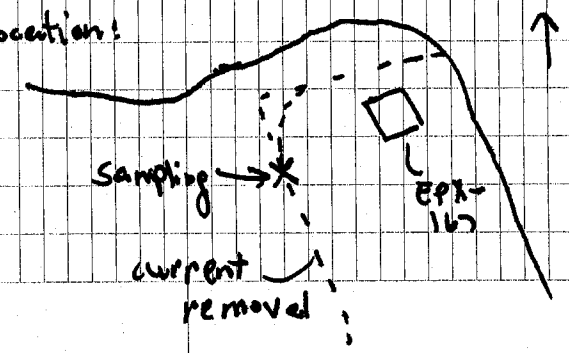
EPCS 110305.1 (11:20) 0-1.5'
EPCS 110305.2 (11:22) 1.5-3'
EPCS 110305.3 (11:24) 1.5-3



Photos: - Looking West at site of samples
- close up on samples 1, 2
- Close up on sample #3

Analysis @ KEL, Total As, Pb
C.O.C # 4332.

Sample location:



11/7/05

Evap Ponds

~~Post Removal~~ check samples

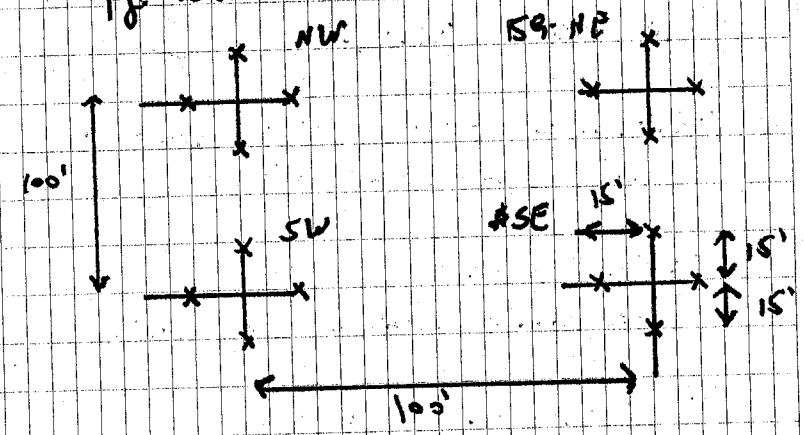
Additional Removal was conducted in area of sample EPX-159A.

to determine if additional removal is required samples collected from 4 subsites of EPX-159A. composite samples collected at each location.

EPX-159SE (14:00)
EPX-159SW (14:05)
EPX-159NW (14:10)
EPX-159NE (14:05)

Samples analysed @ KGL: As, Pb
C.O.C # 4331

Sample locations:
General location see EPX-159 on pg 132.



11/17/05

Evap Ponds

Post Removal - continue.
additional removal was conducted at site of EPX-162.

EPX-162 A (10:00) 5 pt composite.
sandy gravel. med FeOx

EPX-168 (10:05) 5 pt
fine sandy gravel. med FeOx

EPX-169 (10:10) 5 pt
gravely sand. med FeOx

EPX-170 (16:00) 5 pt
sandy gravel. med FeOx

EPX-171 (16:10) 3 pt linear
sandy gravel. med FeOx

EPX-172 (16:15) 4 pt linear
North edge of Pond.
gray sandy gravel. some FeOx discoloration.

11/17/05

Photos:
- close up on subsite of EPX-162A
- Looking NW @ site of 162A
- Looking North @ EPX-168, 169
- Looking NW @ EPX-171, 170
- Looking SW @ EPX-172

Analysis @ KEC: Total RCRA 8 (-Hg)
Total/soluble Sulfate
pH, EC

C.O.C# 4333

Sample locations see pg 127.

11/21/05
Post Removal - continue.
EPX-159 B (15:00)
Additional Removal was conducted at site of EPX-159 SE.

C.O.C # 4335
(same analysis)

Evap Ponds

Post Removal.

EPX-173 (15:30) 5 pt
Sandy gravel. med FeOx discoloration

EPX-174 (15:35) 5 pt
Sandy gravel. med FeOx

EPX-175 (15:40) 5 pt
sandy gravel. med FeOx

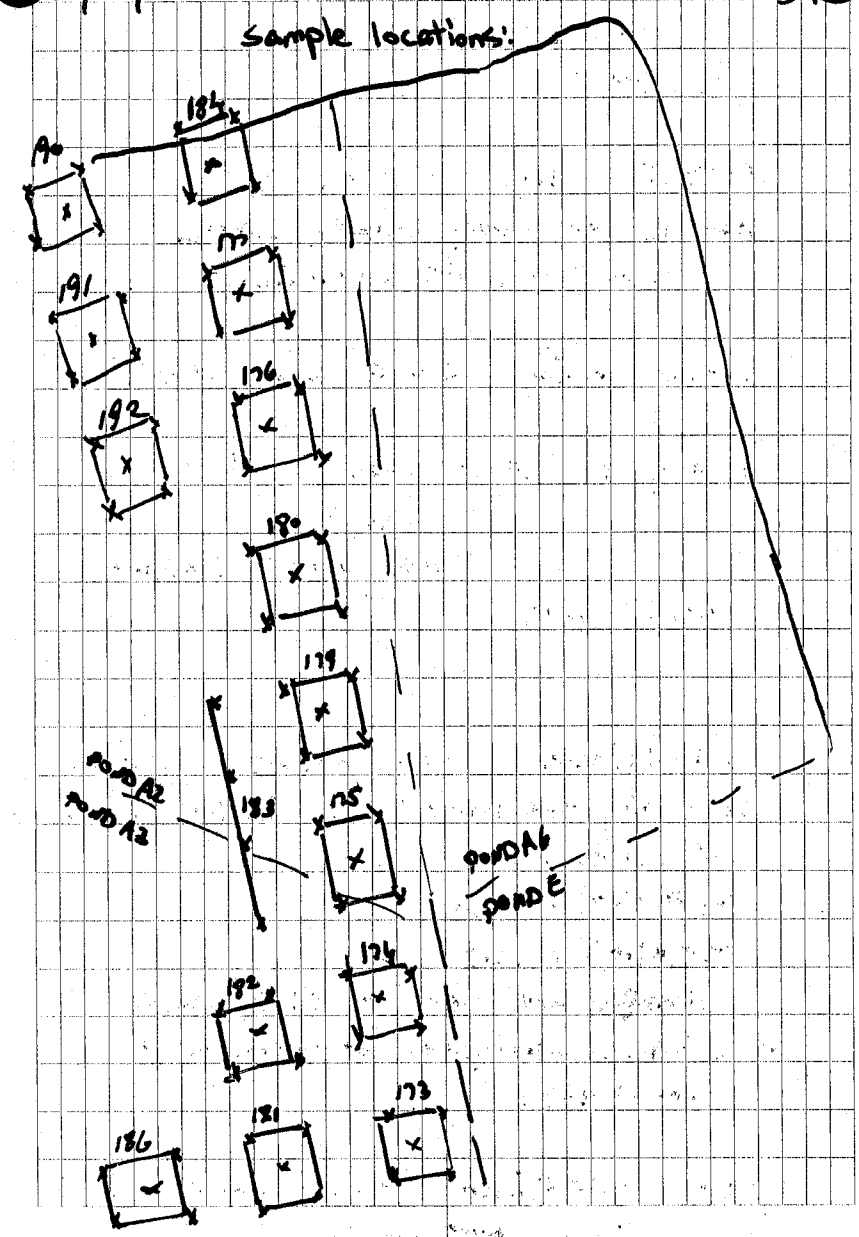
EPX-176 (15:45) 5 pt
silty sandy gravel. med FeOx

EPX-177 (15:50) 5 pt
silty sandy gravel med FeOx

Photos:
- Looking South @ EPX-175 thru 173
- Looking North @ EPX-176-177

Analysis: KEL - Total metal RCRA8 (-Hg)
pH, EC, Total/sol Sulfate.
C.O.C # 4336

Sample locations:



01/6/06

Evap Ponds
Post Removal

EPX-178 (14:00) 4 pts.
~~sa~~ light-med gray sandy gravel
some FeO_x discoloration.

Photo: Looking South @ sample EPX-178

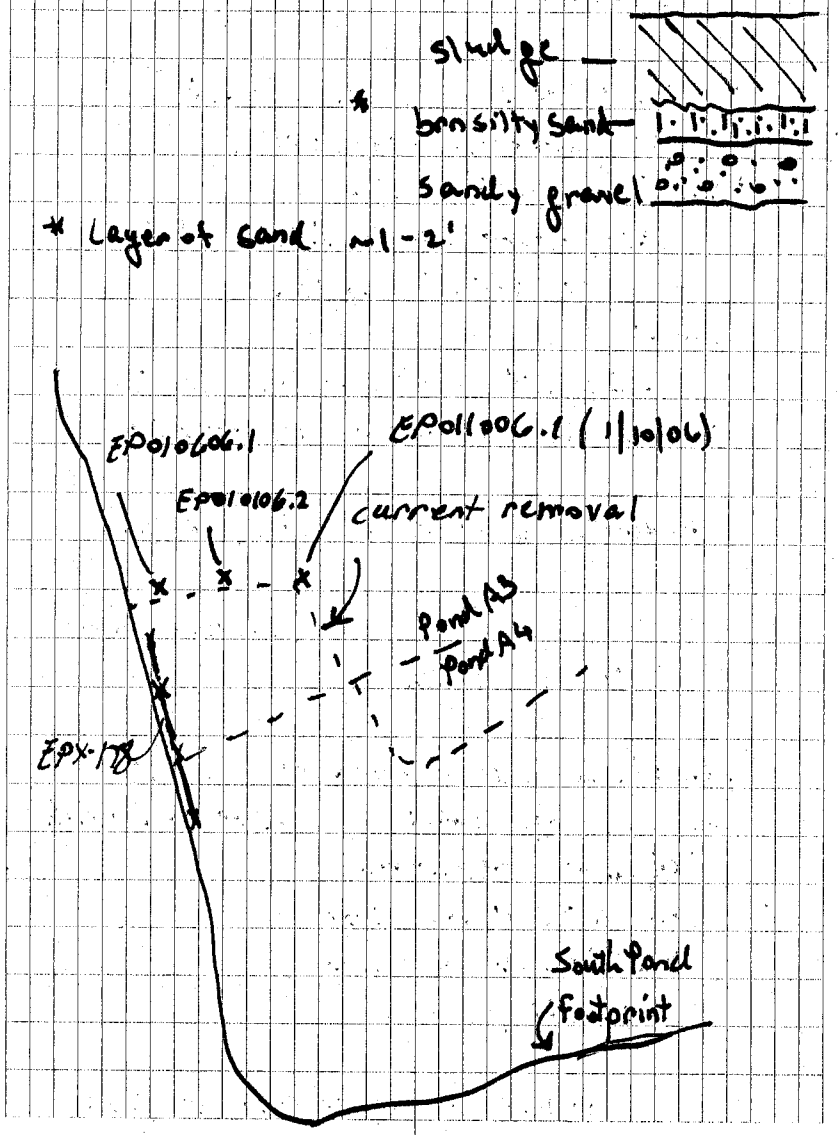
Analysis: KEL - Total As, Cd, Pb
pH, EC
Total/soluble Sulfate

C.O.C # 4337

Additional check samples collected to verify the native soil in the content w/ sludge:
EP010606.1 (14:05)
EP010606.2 (14:10)
samples are med brn silty sand.
- samples analysed for total As, Pb
- C.O.C: 4337.

1/10/06- Additional check sample collected from same layer
C.O.C 4338

sample locations:



1/24/06

Evap Ponds
Post Removal

EPX-179 (14:45) 5 pt composite
silty gravel. med FeO_x
EPX-180 (14:50) 5 pt
silty gravel and silt. med FeO_x
lrg FeO_x in spots.

Photos
- Looking NW @ site of EPX-179, 180
- close up on sub site of EPX-180

analysis @ KEL: Total As, Cd, Pb
pH, EC
Total/soluble Sulfate

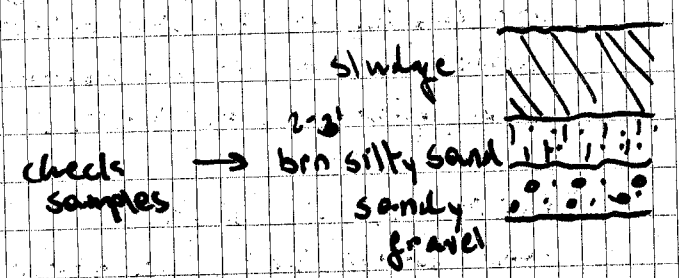
C.o.c # 4239.

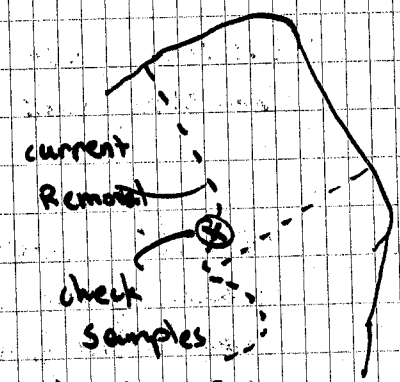
Additional check samples collected at sludge/native contact to verify depth of removal.
- EPCS012406.1 (15:00)
- EPCS012406.2 (15:05)
brn silty sand

samples analysed for As, Pb.

1/24/06
sample locations.

Post Removal Samples - see pg. 139





Photos : - Looking west at site of samples
- close up on sludge/native soil contact.

Evap Ponds
Post Removal - continue

EPX-180A (13:00) 5 pt.
re-sampling of EPX-180 after additional removal. sample is sandy gravel, med FeOx.

EPX-181 (13:45) 5 pt
sandy gravel, FeOx discoloration and silty sand.

EPX-182 (13:50) 5 pt
brn silty sand and sandy gravel. some FeOx

EPX-183 (13:55) 4 pt, linear.
sandy gravel and silty gravel, hard fine gravel, compacted, in South Subsite.

Photos: Looking North at site of samples

Analysis @ KEL, C.O.C# 4342
sample location - see pg 139

Post Removal - contine

EPX-184 (14:30) 5 pt.
brn silty sand, silty gravel @ SW subsite some FeOx discoloration

Photo: Looking North @ site of sample.
C.O.C 4343
sample location - See pg 139.

2/14/06
continue:
EPX-185 (14:00) 4 pt Linear, North edge of Pond.
reddish brn silty sand.

EPX-186 (14:10) 5 pt
brn gravely sand.

Photos: - Looking west @ site of 185
- Looking South-West @ 186.

Analysis @ KEL: As, Cd, Pb - Totals
pH, EC Tot/sol Sulfate
C.O.C # 4341
sample locations: see pg 139.

2/23/06

Evap Ponds

Post Removal

EPX-186A (16:00) 5 pt.
site of EPX-186. Additional Removal was conducted.
Sample is brn silty sand. some FeOx discoloration.

EPX-187 (16:05) 4 pt
brn silty sand. Some grey silt.

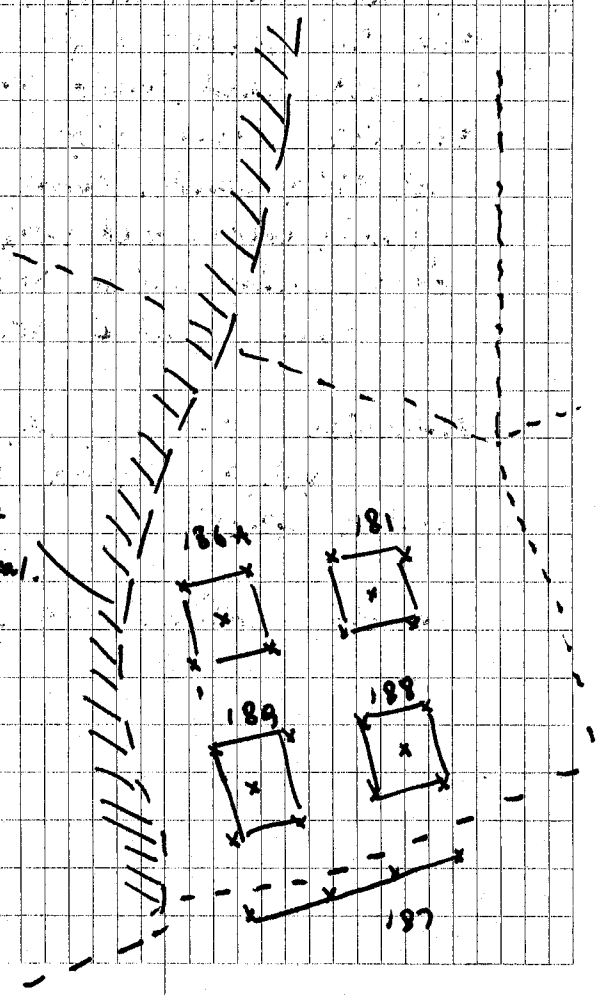
EPX-188 (16:10) 5 pt.
brn silty sand. some gravely sand in East subsites.

EPX-189 (16:15) 5 pt.
brn silty sand.

Photos: - Looking West at EPX-186A
- Looking South at EPX-187 - 189.

Analysis @ KEL: Total As, Pb, Cd
Total / Soluble Sulfate, pH, EC
C.O.C # 4344

Sample locations:



3/17/06

Evap Ponds

Post Removal - continue

EPX-190 (15:50) 5 pt
Lgt sandy gravel, strong FeOx
EPX-191 (15:55) 5 pt
Lgt silty sand, some FeOx in West sub-sites
EPX-192 (16:00) 5 pt
Lgt silty sand, some FeOx in West
Sandy gravel, med FeOx in East subsites
Photos: - Looking NW @ EPX-190
- " - SW @ EPX-191 -192

Analysis: Total As, Cd, Pb,
pH, EC Total & Soluble Sulfur
L.O.C # 4345

sample location: see pg. 139

3/23/06

Evap Ponds

check samples collected on West side and North side of Pond - to verify the vertical extent of required Removal

EP032306-1 Lgt brn silt, Some FeOx
EP032306-2 Lgt brn silt, some FeOx

Photos of samples: EP032306-1 - general location & close up.

Analysis: Total As, Pb, Cd.

L.O.C # 4346

sample locations:
EP032306-1 - area of Pond A3, @ current removal
EP032306-2 - site of sample EPX-185

4/3/06

Evap Ponds

Root Removal - continue.

EPX-193 (14:00) 5 pt composite
sandy, silty gravel. Some FeOx

EPX-194 (14:05) 5 pt
sandy gravel

EPX-195 (14:10) 5 pt
sandy gravel, some FeOx

EPX-196 (14:15) 5 pt
sandy gravel. some FeOx

EPX-197 (14:20) 5 pt
sandy silt, some FeOx

EPX-198 (14:25) 5 pt
sandy silt, some FeOx

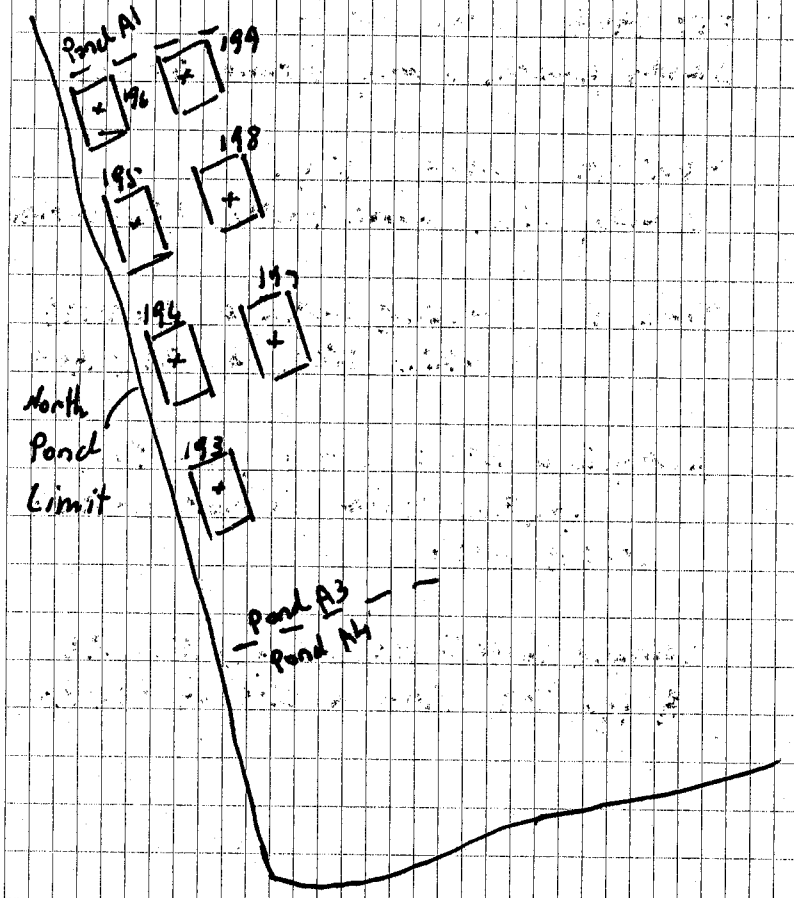
Photos: - Looking South @ EPX-193-196
- Looking North @ 197-198

C.O.C # 4348

Analysis- KEL: pH, EC, Tot metals, Sulfate

4/3/06

Sample locations:



4/11/06

Evap Ponds

Post Removal - continue.

Additional Removal (6") was conduted at site of EPX-190.

EPX-190A (11:20) 5 pt
sandy gravel, localy strong FeOx

EPX-199 (11:30) 5 pt
sandy silt, some FeOx discoloration

Photos: - Looking North @ EPX-199
- Looking West @ EPX-190A

Analysis @ KEL: Tot As, Cd, Pb, pH, EC, Total/Soluble Sulfate
C.O.C # 4350

Sample locations: see pg. 151 (199) & pg. 139 (190A @ site of EPX-190)

Evap Ponds

Post Removal - continue

EPX-200 (15:00) 5 pt composite
silty sand med FeOx discoloration

EPX-201 (15:05) 5 pt
silty sand, and gravely sand in East subsites.

EPX-202 (15:10) 5 pt
silty sand fine gravely sand in N subsites. med FeOx.

EPX-203 (15:15) 5 pt
silty sand, med FeOx

Photos:
- Looking South at EPX-200, 201
- Looking West at EPX-202, 203

Analysis @ KEL: Total As, Cd, Pb, pH, EC, Total & Soluble Sulfate.
C.O.C. # 4352

5/24/06

Evap Ponds

Post Removal - continue

EPX-203A (15:00) 5 pt composite.
Re sample of EPX-203
sample is brn sandy silt, some FeO x

EPX-204 (15:05) 5 pt
brn sandy silt.

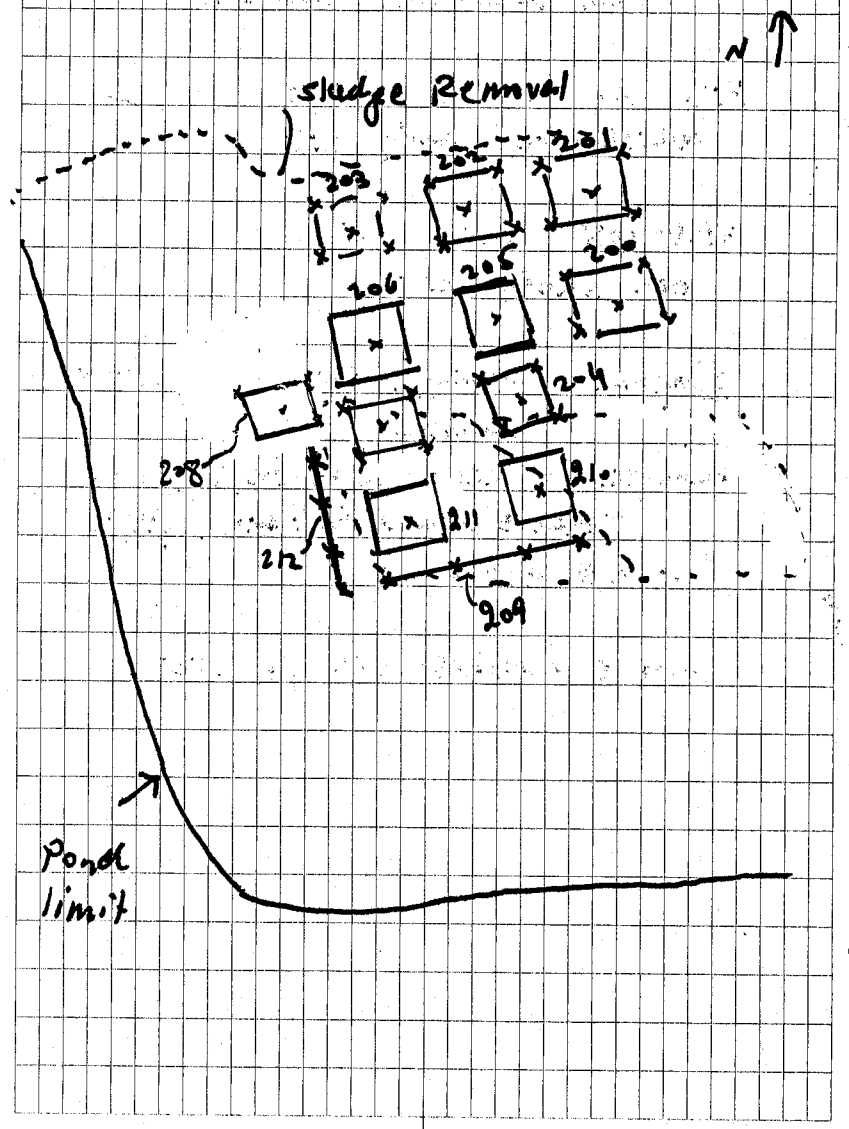
EPX-205 (15:10) 5 pt
brn sandy silt

EPX-206 (15:15) 5 pt
brn sandy silt

Photos: - Looking West @ EPX-203A
- Looking SE @ EPX-204
-"- SE @ 205, 206

Analysis @ KEL: As, Pb, Cd,
pH, Total/Soluble Sulfat
C.O.C. (KEL)

sample location



Evap Ponds
Post Removal continue

EPX-207 (7:00) 5 pt
reddish-brn sandy silt

EPX-208 (7:05) 5 pt
brn sandy silt.

Photos: Looking North-West at site of samples

Analysis @ KEL: Total As, Pb, Cd
Total & Soluble Sulfate, pH, EC

C.o.C # 4356

sample locations: see pg 155

Evap Ponds
Post Removal - continue

EPX-207A (14:10) 5 pt composite
sample collected after additional Removal was conducted.
sample is brn silty sand

EPX-208 (14:15) 4 ~~5~~ pt linear composite
brn to gray silty sand & gravely sand

EPX-210 (14:20) 5 pt
brn gravely sand in East subsites
to brn silty sand in west subsites

EPX-211 (14:25) 5 pt
brn silty sand

EPX-212 (14:30) 4 5 pt linear composite
brn silty sand, some gravelly sand.

Photos: - Looking East @ area of EPX-210 - 212
- -"- -"- EPX-209

Analysis @ KEL.
C.o.C #. 4359

Evap Ponds

Post Removal - continue:

EPX-213 (7:20) 5 pt composite
brn silty sand. some FeOx discolor.
EPX-214 (7:25) 5 pt
brn silty sand. some FeOx
EPX-215 (7:30) 5 pt
brn silty sand. some FeOx

Photos: Looking South West @ EPX-213-215

Analysis @ KEL - standard analysis
C.o.C: 4383

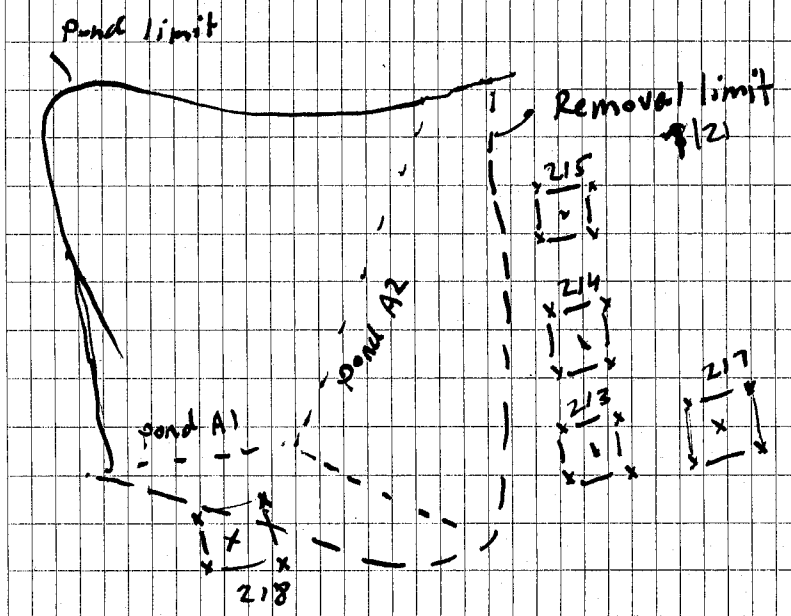
8/2/06 continue:

EPX-216 (12:25) 4 pt linear composite.
sandy gravel. mod-strong FeOx
EPX-217 (12:27) 5 pt
brn silty sand & sandy gravel
EPX-218 (12:29) 5 pt
brn silty sand.
Photos: - Looking SW @ 218
- -"- north @ 216-217

~~Photos~~

C.o.C: 4388
Analysis: @ KEL: Total As, Pb.
Total & Soluble Sulfate
pH & EC.

Sample locations:



- Evap Ponds

- Pond AO & Canals

Peninsular

FIELD BOOK

FB 802

Evap Ponds

Post Removal.

samples:

EPX-213A (9:20) 5 pt composite.
site of EPX-213.
sample is brn silty sand.

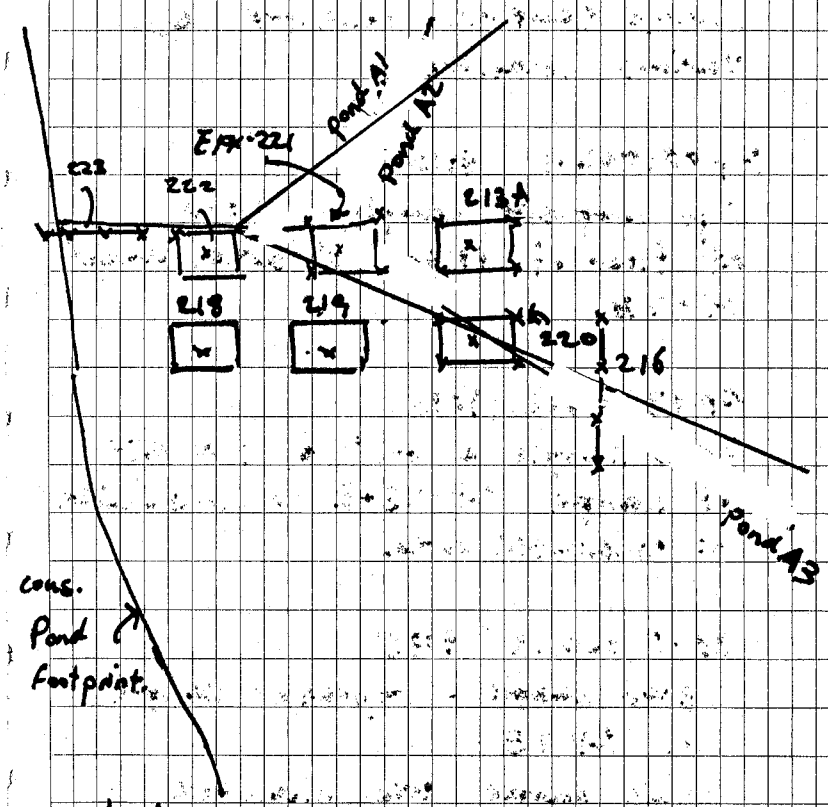
EPX-219 (9:25) 5 pt composite.
sandy gravel. mod FeOx discoloration, and silty sand.

EPX-220 (9:30) 5 pt.
brn silty sand. weak mod FeOx

Photos: - looking north @ 213A
- Looking East @ 219-220.

Analysis @ KGL.
C.O.C: 4390.

sample locations:



8/10/06

EPX-221 (9:00) 5 pt composite
brn silty sand.
Analysis @ KGL. C.O.C # 4391.
Photo: Looking East at site of sample.

Evap Ponds

Post Removal.

EPx-222 (8:15) 5 pt composite
brn silty sand

EPx-223 (8:20) 4 pt linear composite

Photo: Looking West at site of samples.
Analysis @ KBC: Total As, Pb
Total & Soluble Sulfate, pH, EC.
C.O.C: 4393.

Sample locations: see pg. 27.

8/17/06

Evap Ponds.

Post Removal
Additional removal conducted at area of samples EPX-213A, 216, & 220. these samples collected after the additional removal:

- EPX-213B (12:15) 5 pt. redish brn silty sand.
- EPX-216A (12:20) 4 pt tiner FeOx discoloration sandy gravel.
- EPX-220A (12:25) 5 pt. redish brn silty sand.

Photos:
- Looking north (west) @ EPX-213B,
- ~~Looking East @~~ EPX-220A, 216A

Analysis @ KEL: Total As, Pb
Total & Soluble Sulfate, pH, EC
C.O.C # 4394

Sample locations: see pg 27.

Evap Ponds
Post Removal - continue:

- EPX-224 (8:50) 5 pt composite Redish brn silty sand, grey sandy gravel in SW sub site
- EPX-225 (8:55) 5 pt redish brn silty sand.
- EPX-226 (9:00) 5 pt Redish brn silty sand. grey silty sand in NW sub site.
- EPX-227 (9:05) 5 pt grey brn silty sand.

Photos:
- Looking SW @ site of EPX-224
- Looking East @ EPX-225-227

Analysis @ KEL: pH, EC, Total As, Pb
Total & Soluble Sulfate.
C.O.C: 4395:

Sample locations: see pg. 45

8/29/06

Evap Ponds

Post Removal - Continue:

Additional sampling collected following additional Removal that was conducted at sites of samples EPX-113B, -116A, -220A

- EPX-213C (11:00) 5 pt
  brn silty sand
- EPX-216B (11:05) 4 ~~5~~ pt
  Reddish-brn silty sand
- EPX-220B (11:10) 5 pt
  reddish-brn silty sand.

Photo: Looking NW at site of Samples.

Analysis @ KEL Total As, Pb, ~~Pb~~
C.O.C. 4399

Sample locations - see pg 27.

Evap Ponds

Post Removal - continue

- EPX-228 (9:00) 5 pt composite
  gray silty sand & Reddish-brn silty sand.

- EPX-229 (12:05) 5 pt.
  silty sand. soil color varies in sub sites gray - brn - reddish-brn.

Photo: Looking East @ site of Sample

Analysis @ KEL
C.O.C # 4400

Sample locations see pg. 45

9/8/06
Continue:

EPX-216C (13:00) 4 pt
Additional sample @ site of EPX-216 after additional ~~sa~~ removal.
C.O.C 4400

9/21/06

Evap Ponds
Post Removal - continue

EPX-230 (14:00) 5 pt
gray gravelly sand
EPX-231 (14:05) 4 pt
gray gravelly sand & gravel, FeOx

Photos: Looking SW @ EPX-230

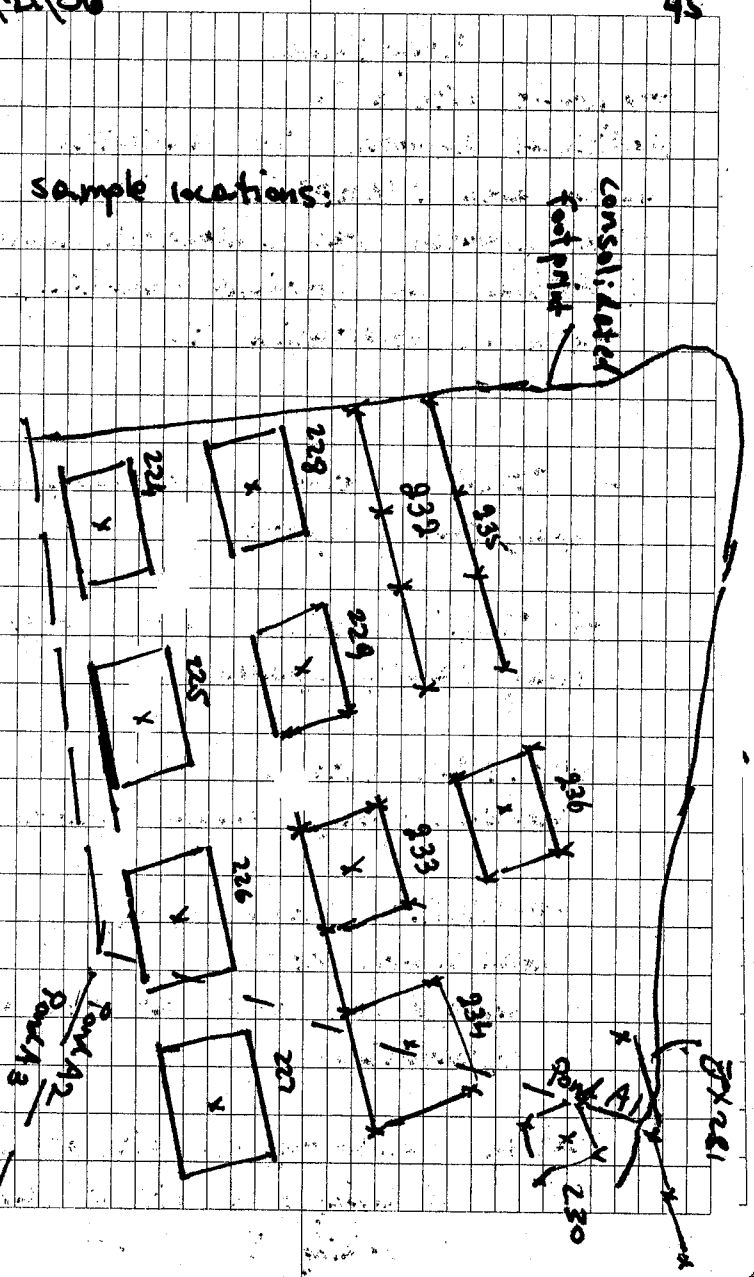
Additional samples were collected at subsites of samples EPX-116C after additional removal was conducted.

- EP092106.1 - South subsites of 116C (13:45) (2 pt)
  Brown silty sand
- EP092106.2 (13:50) North subsites (13:50) (2 pt)
  brown silty sand

Photos: Looking S @ site of samples

Analysis @ KEL. C.O.C # 4401

sample locations:



Evap Ponds

Post Removal Samples

EPX-232 (16:00) 4 pt
silty sand & sandy gravel - mod FeO_x
EPX-233 (16:05) 5 pt
silty sand - mod to strong FeO_x

Additional check sample collected from soil @ contact of sludge/native soil from vertical surface.
EP100506 (16:15)

Photos:
Looking East at site of Samples

Analysis @ KEL: Total As, Pb, Total & Soluble Sulfate, pH, EC
C.O.C. 4404

Sample locations: see pg 45

Evap Ponds

Post Removal

EPX-234 (14:05) 5 pt
yellowish gray and gray sand

EPX-235 (14:10) 4 pt
reddish brn silty sand & gray sand

EPX-236 (14:15) 5 pt
strong FeO_x silty sand

Photos:
- Looking West @ site of EPX-234
- Looking East @ -"- 235
- Looking South @ -"- 236

Analysis @ KEL
C.O.C 4409

Sample locations: see pg 45

11/2/06

Evap Ponds
Post Removal

EPX-237 (12:30) 5 pt composite
reddish brn silty sand

EPX-238 (12:35) 5 pt
strong FeOx silty sand

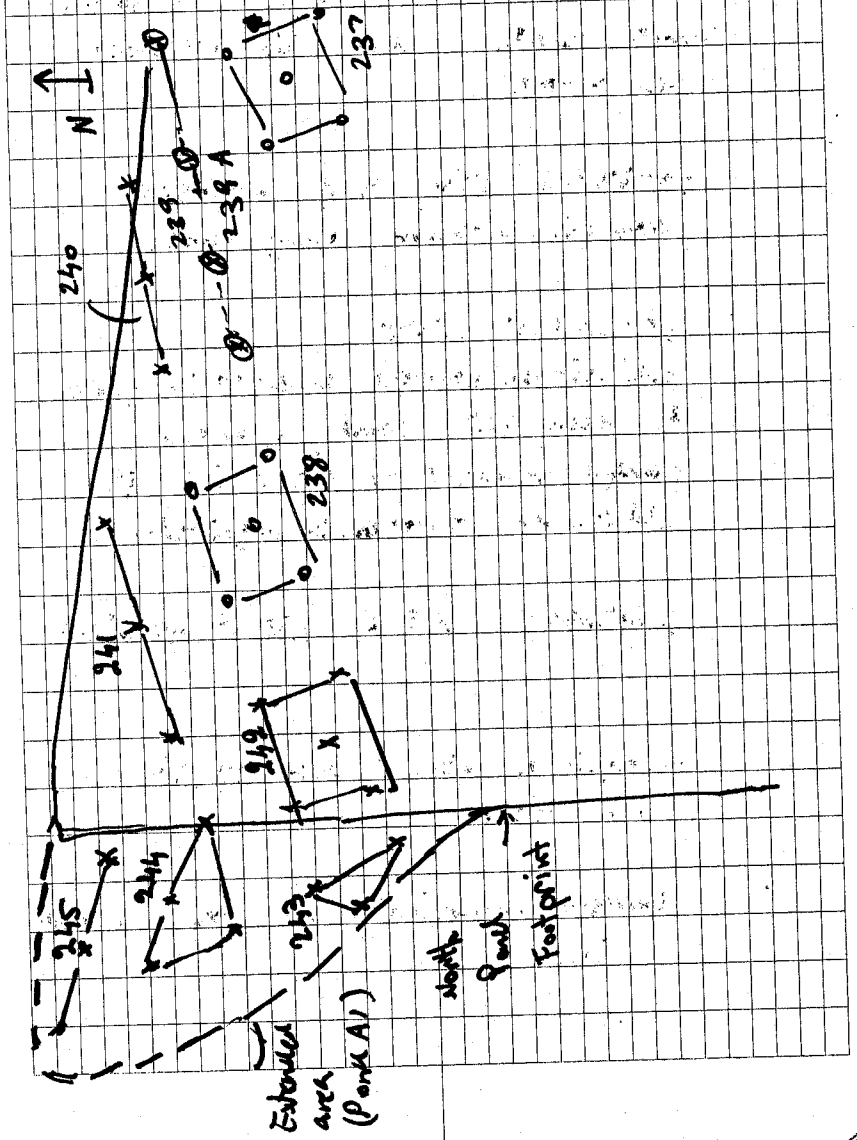
EPX-239 (12:40) 4 pt linear
silty sand & silty gravel.
FeOx discolor.

Photos:
- Looking SW @ EPX-237
- -"- W @ EPX-238, 239.

Analysis @ KEL: Total As, Pb. Total & Soluble Sulfate, pH, EC.
C.o.C: 4412

11/2/06

Sample locations:



Evap Ponds.

Post Removal.

Removal of sediments from the South Jordan Evap Ponds is complete.

- EPX-239A (13:00) 4 pt
  re-sample @ site of EPX-239.
  redish grey silty sand.

- EPX-240 (13:05) 3 pt
  yellowish grey and grey silty sand & sandy gravel.
  (sample is from dike of Pond)

- EPX-241 (13:10) 3 pt
  yellowish-orange discoloration sand, gravel.

- EPX-242 (13:15) 5 pt
  grey gravely sand.

- EPX-243 (13:20) 3 pt.
  sand & gravely sand: yellowish orange discolor.

- EPX-244 (13:25) 4 pt
  grey silty sand & gravelly sand.

- EPX-245 (13:30) 3 pt
  strong FeOx discolored sand.
  sample @ North edge of Pond.

Photos:

- Looking NE @ EPX-239A
- NE @ EPX-240
- NE @ EPX-241
- SW @ EPX-242, 243
- NW @ EPX-244, 245

Analysis @ IKEL: Total As, Pb, Total & Soluble Sulfate, EC, pH
C.O.C.: 4415.

Sample locations: see pg (67)

11/27/06

Evap Ponds

Post Removal

EPX-241A (15:00) 3 pt composite
Additional Removal was conducted
in area of Sample EPX-241
sample was collected after the
additional Removal.
Sample is sandy gravel, some
FeOx discoloration.

Analysis @ KEL for Total As, Pb
Total & Soluble Selfuite, pH, EC
C.O.C. 4417

Sample location - see sample
EPX-241 on pg 67.

Field Notes

Characterization/Confirmation Sampling

— Field Notes for
Characterization/Confirmation
samples

Evap Ponds
9\03 — 8\06

Peninsular

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9/27/04

Evap Ponds.

Characterization samples collected from the area of the road between North and South Ponds.

Previous Geo-Probe sampling that was conducted in the area, only one sampling location was done in that area. This additional sampling will verify that no sludge is under the road, and whether any removal is required.

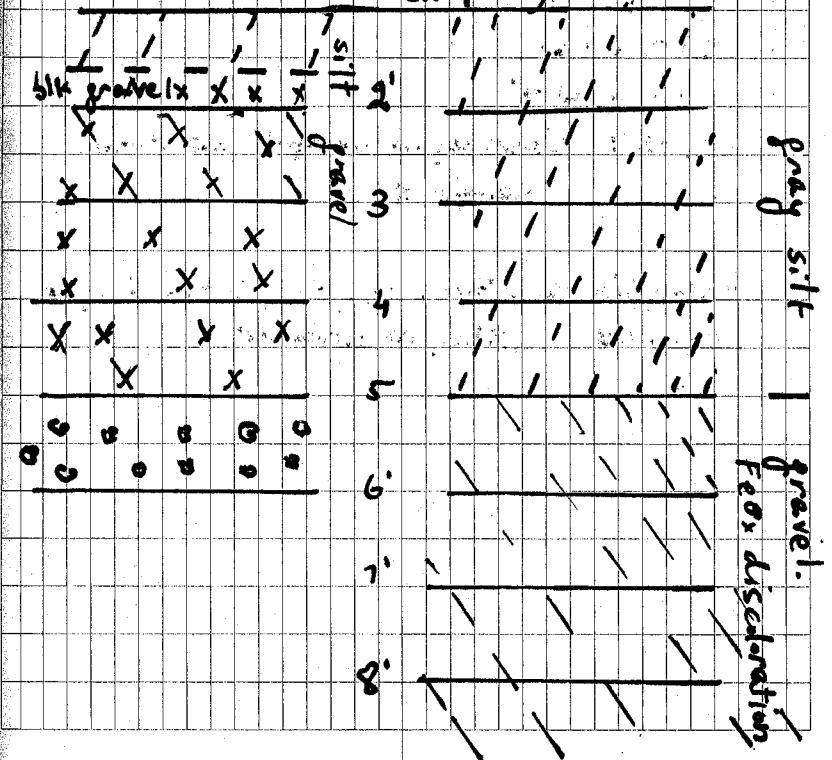
Sample collected from vertical trench

T-1 (GPS location: 50750E, 35050N)

sample #	Depth	
1	1-2'	silt, gravel
2	2-3'	dark brn gravel
3	3-4'	-"-
4	4-5'	-"-
5	5-6'	Rocky sandy silt

T-2 (51720 E, 35280 N)

Sample	Depth	#	Depth
1	0-1'	6	7-8'
2	1-2.5'	7	8-9'
3	2.5-4		
4	5-5.5'		
5	5.5'-6.5'		



9/27 - continue:

Photos:

- T-1: 0-4'
- T-1: close up on 0-2'
- T-1: 1-6'

- T-2: 0-4'
- T-2: close up on 1-4'
- T-2: 1-5'
- T-2: -"-
- T-2: @ 8'
- T-2: close up on sample material (sample # 5)

Analysis @ KEL: pH, EC, Total As, Pb
C.O.C # (KEL, no number)

3/29/05

Evap Ponds.

Characterization samples collected at site of Geoprobe #30. Analytical results for this samples indicated: As >50 ppm in the soil approx. 6'-7' bellow the sludge/gravel contact.

In an area of 15' x 15' around GP-30 soil was excavated 5' bellow the Post Removal surface. Vertical trenches were then dug w/ backhoe for sampling.

notes: - soil excavation was done to target elevation of 4801', 2' above the target zone as was defined by Geoprobe sample #30.

- trench locations were recorded w/ GPS.
- samples in trenches collected in 1' intervals.

Samples:

T-1

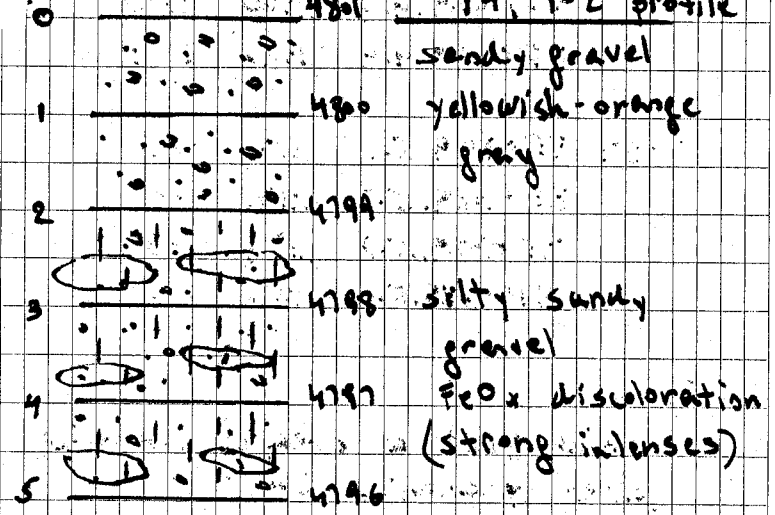
EP0329.1.1 (11:00) 0-1'
sandy gravel. yellow-orange discoloration

3/29/05

EP0329.1.2 (11:02) 1-2'
sandy gravel, yellow-orange discoloration

EP0329.1.3 (11:04) 2-3'
gray silty sandy gravel lenses of strong FeOx discoloration

EP0329.1.4 (11:06) 3-4'
EP0329.1.5 (11:08) 4-5'



T-2: EP0329.2.1 (11:14) 0-1'
EP0329.2.2 (11:16) 1-2'
EP0329.2.3 (11:18) 2-3'
EP0329.2.4 (11:20) 3-4'

continue:

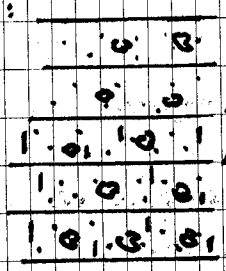
T-3: EP0329.3.1 (11:28) 0-1'
EP0329.3.2 (11:30) 1-2'
EP0329.3.3 (11:32) 2-3'
EP0329.3.4 (11:34) 3-4'
EP0329.3.5 (11:36) 4-5'

T-4: EP0329.4.1 (11:40) 0-1'
EP0329.4.2 (11:42) 1-2'
EP0329.4.3 (11:44) 2-3'
EP0329.4.4 (11:46) 3-4'

T-5: EP0329.5.1 (11:50) 0-1'
EP0329.5.2 (11:52) 1-2'
EP0329.5.3 (11:54) 2-3'
EP0329.5.4 (11:56) 3-4'

Photos:
- Looking East at area of sampling (after excavation of ~5')
- Trench #1 (0-4')
- -"- #2 (0-4')
- -"- #3 (0-4')
- -"- #4 (0-4')
- -"- #5 (0-4')
- close up on sample @ #5 (2-3')

T-3:

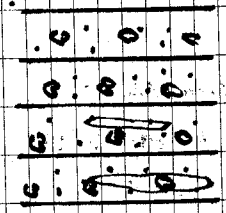


4800
4799 Yellowish-gray sandy gravel
4798 -"-
4797 Yellow-gray silty sandy gravel
4796 -"-
4795 -"-

T-4:

4799.5
Reddish gray sandy gravel & coarse gravel
lft yellowish gray sandy gravel
4795.5

T-5:



4800.5
yellowish gray sandy gravel
-"-
-"-, lenses of strong FeO,
4796.5 -"-, -"-

- Analysis: @ KEL, pH, Total As, Pb
c.o.c # 4301 + KEL

Sample locations: see p. 77 for trench locations map

4/6/05

Evap Ponds.

Area of GP-30

Post Removal / characterization

In previous sampling, samples at T-3, T-4 were > 50 ppm As. soil were removed to repository and the excavation was expanded to East and South.

Sample are collected from surface and from the sides of excavation to determine whether additional Removal is required.

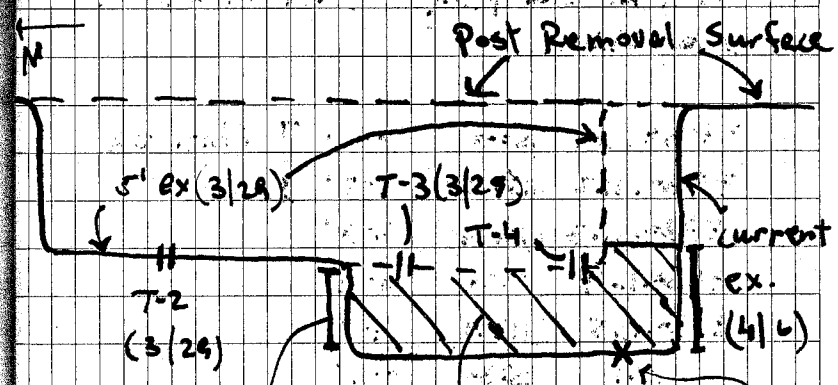
Post Removal (surface) samples:

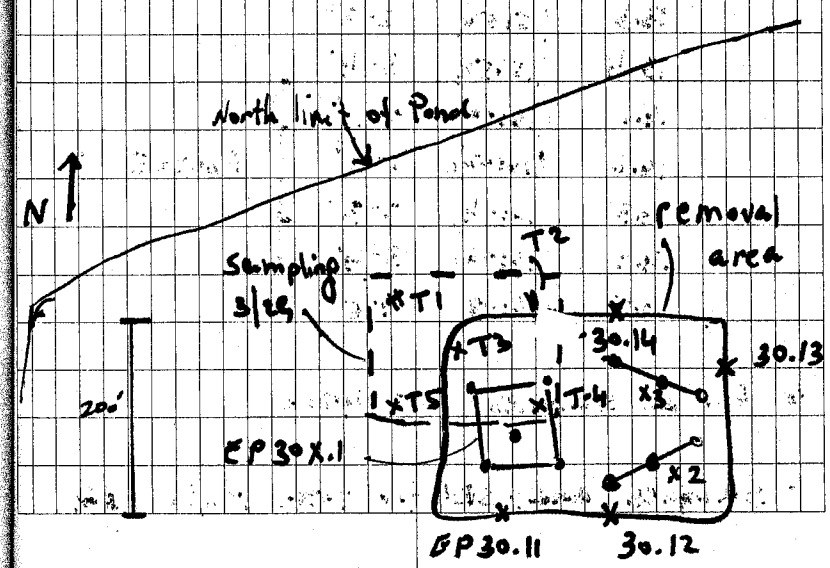
EP30X.1 (15:00) 5pt composite yellowish gray sandy gravel

EP30X.2 (15:05) 3pt yellowish gray sandy gravel.

EP30X.3 (15:10) 3pt yellowish gray sandy gravel and Redish gray coarse sandy gravel.

Photos: - Looking west at EP30X.1, X.2
- Looking East EP30X.3





4/6/05

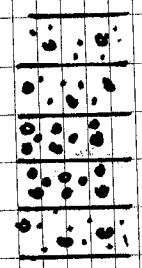
vertical sampling (from sides of excavation:

EP30.11.1	(15:20)	0-1'	Photo #3
EP30.11.2	(15:22)	1-2'	
EP30.11.3	(15:24)	2-3'	
EP30.11.4	(15:26)	3-4'	
EP30.11.5	(15:28)	4-5'	
12.1	(15:30)	0-1'	
12.2	(15:32)	1-2'	
12.3	(15:34)	2-3'	
12.4	(15:36)	3-4'	
13.1	(15:46)	0-1'	Photo #4
13.2	(15:48)	1-2'	
13.3	(15:50)	2-3'	
13.4	(15:52)	3-4'	
14.1	(16:00)	0-1'	Photo #5
14.2	(16:02)	1-2'	
14.3	(16:04)	2-3'	
14.4	(16:06)	3-4'	
14.5	(16:08)	4-5'	

* for all samples 0 = 4800

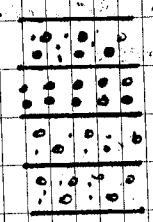
- samples analysed for total As, Pb, pH

30.11



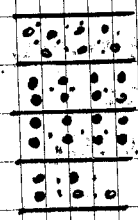
grey sandy gravel
-"-
well sorted gravel, little fines
-"-
sandy gravel

30.12



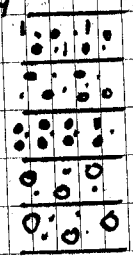
grey sandy gravel
well sorted gravel, little fines
sandy gravel
-"-

30.13



grey sandy gravel
gravel, little fines FeOx discoloration
sandy gravel

30.14



silty sandy gravel
gravel, little fines FeOx discolor
-"-
sandy gravel, coarse gravel
-"- -"-

4/21/05

Evap Ponds

Area of GP-30

Excavation and removal of soils around site of GP-30 was extended to the south and North East

Post Removal (surface) samples

GP30X.4 (10:00) 3 pt
sandy gravel. some FeOx discolor.
GP30X.5 (10:05) 3 pt.
sandy gravel. some FeOx

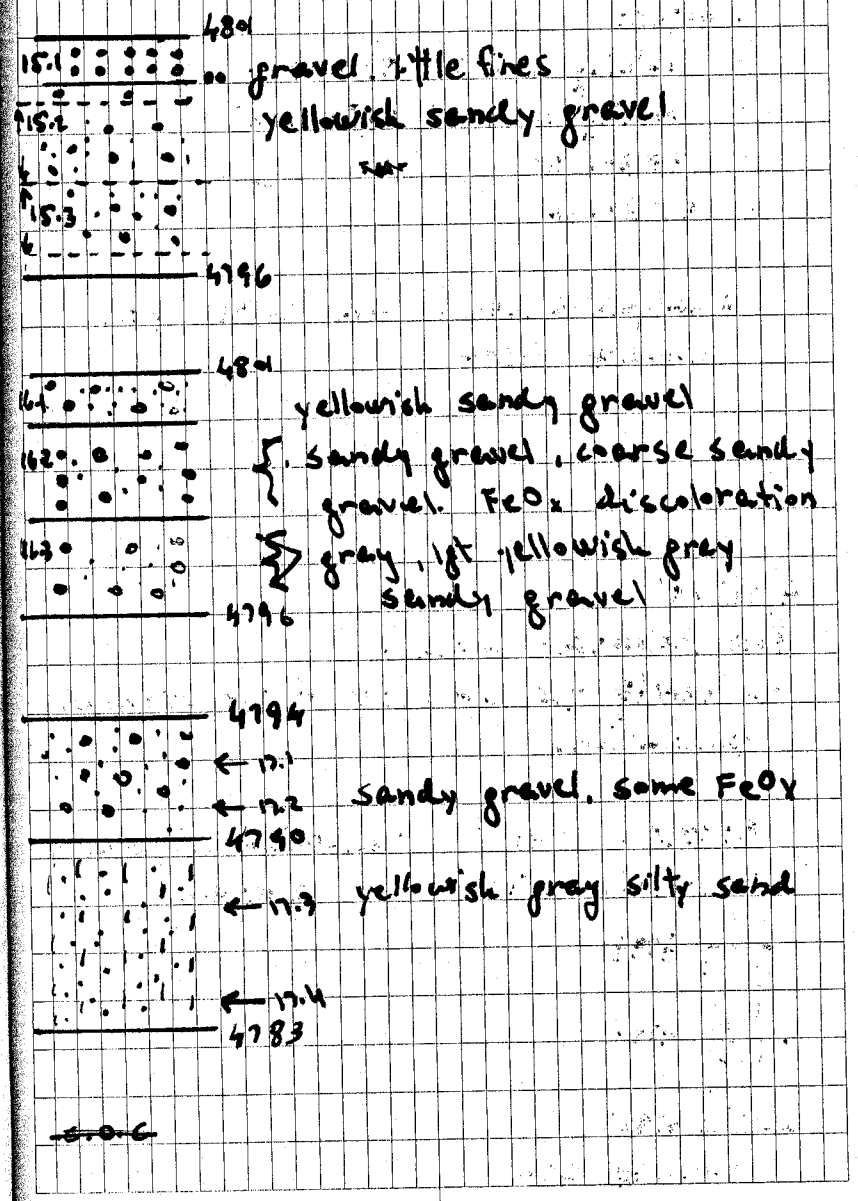
vertical sampling:

EP30.15.1	(10:10)	4800 - 4801	
-30.15.2	(10:12)	4798 - 4799.5	
-30.15.3	(10:16)	4796.5 - 4798	
16.1	(10:20)	4800 - 4801	
16.2	(10:22)	4798 - 4799.5	
16.3	(10:24)	4796 - 4798	

vertical trench to deeper soil

(4792.8)	EP30.17.1	(10:26)	see pg. for elevations
(4791.8)	17.2	(10:28)	
(4789.6)	17.3	(10:32)	
(4783.5)	17.4	(10:34)	

4/21/04



~~S.O.C~~

Photos:
- Looking NW @ EP30x.4
- Looking North @ EP30x.5
- EP30.15
- EP30.16

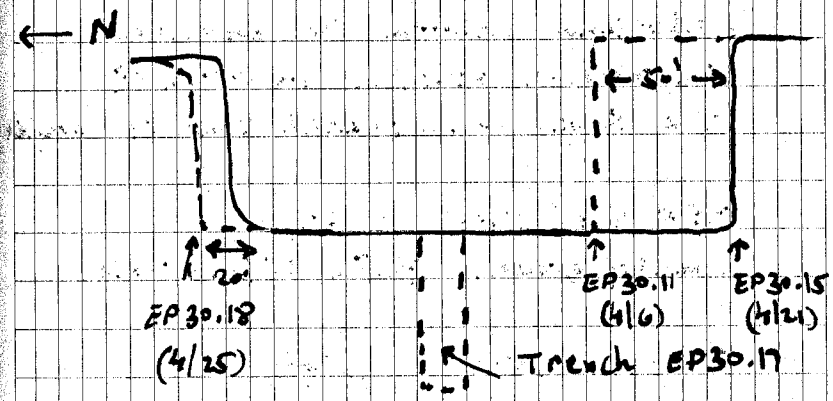
Analysis @ KEL: Total Pb, As pH.
C.O.C # 4306

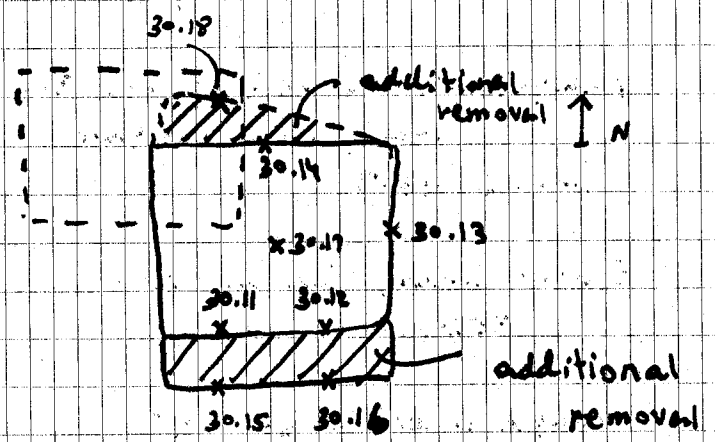
4/25/05
Post Removal - continue to verify the north side of the extended excavation.

EP30.18.1 (14:50) yellowish silty sandy
EP30.18.2 (15:00) gravel.

C.O.C # 4307

Sample location





Evap Ponds

Characterization Samples.

Area of Geo probe sample #26.

Samples collected @ GP-26 indicated As > 50 ppm at the silt layer at the contact w/ sludge.

Samples collected to verify GP data and determine the extent of soils to remove.

(Samples are collected in open vertical trench after the removal in that area is complete.

T-1 Surface elevation 4806.5

EP26W.1 (13:00) 0-1'

EP26W.2 (13:04) 1-2½

EP26W.3 (13:06) 2½-3½'

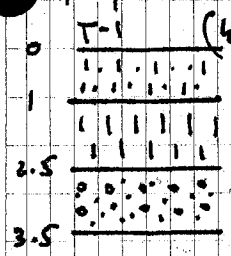
~~EP26~~

T-2 (4805.5)

EP26.1 (13:14) 0-1½'

EP26.2 (13:15) 1½-3½

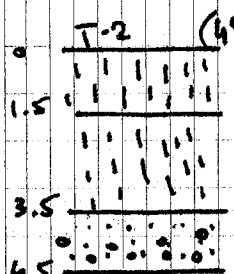
EP26.3 (13:16) 3½-4½



sandy silt, red FeOx

gray silt

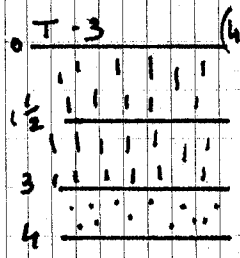
sandy gravel, strong FeOx



gray silt

gray silt, some FeOx

fine sandy gravel, strong FeOx



gray silt

gray silt, some FeOx

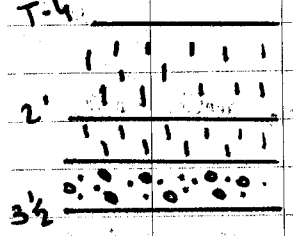
fine sandy gravel, FeOx

EP26N.1 (13:25) 0-1½

EP26N.2 (13:27) 1½-3

EP26N.3 (13:28) 3-4

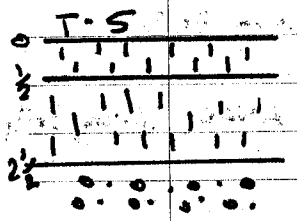
T-4



gray silt
gray silt, FeOx
fine sandy gravel

EP26S.1 (13:30) 0-2'
EP26S.2 (13:31) 2-33"
EP26S.3 (13:32) 33"-3½'

T-5



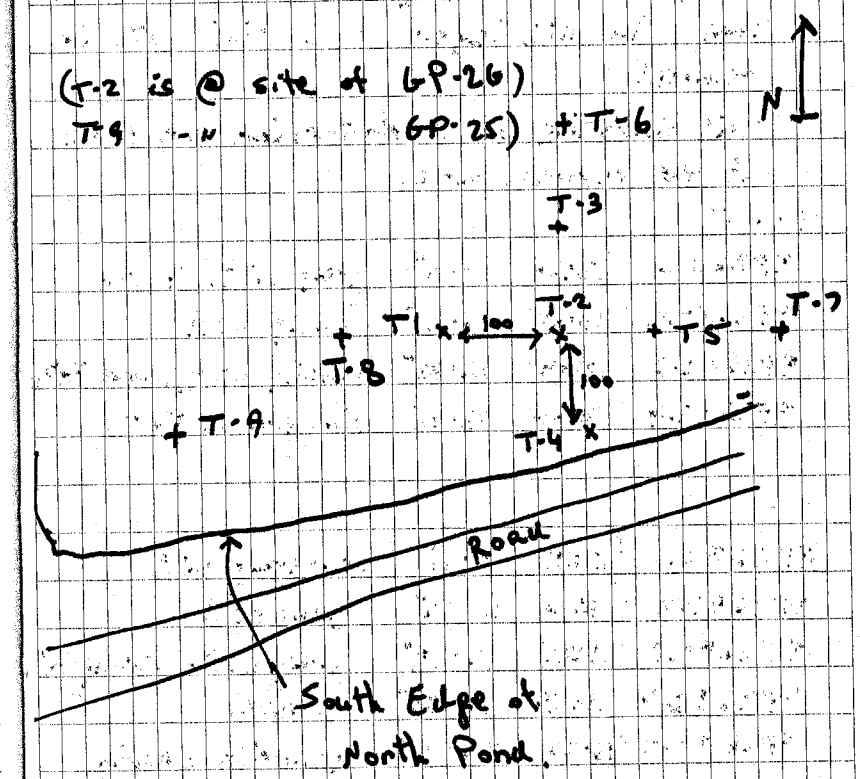
brn-grey silt, some FeO;
grey silt
sandy gravel

EP26E.1 (13:37) 0-½
EP26E.2 (13:38) ½-2½

Photos:
- T-1, 0-4'
- T-2, 0-4'
- T-4, 0-2'

Analysis @ KGL: Total As, Pb; ptt
c.o.c # 4317

7/20/05
sample locations



(T-6 thru T-9 - 7/27)

7/27/05

Evap Ponds.

Area of GP-26 continue.

In previous sampling, it was determind that the silt layer (~ 2-2½') will be removed.

this sampling is to determine the extent of the removal area.

T-6 ※

EP26N2.1 (13:00) 0-6" gray silt. FeOx
EP26N2.2 (13:02) 6-24" gray silt
EP26N2.3 (13:04) 24-33" sandy silt, some FeOx
EP26N2.4 (13:06) 33-42" fine gravel, FeOx

T-7

EP26E2.1 (13:18) 0-11" brn-gray silt
EP26E2.2 (13:20) 11-16" gray silt
EP26E2.3 (13:22) 16-19" gray silt. strong FeOx
EP26E2.4 (13:24) 19-36" gravel.
EP26E2.5 (13:26) 36-42" yellowish sandy gravel

T-8

EP26W2.1 (13:30) 0-18" fine sandy gravel
EP26W2.2 (13:32) 18-36" } fine-coarse sandy
EP26W2.3 (13:34) 36-42" } gravel

T-9 (@ site of Geo Probe sample #25)

EP25.1 (13:42) 0-1'
EP25.2 (13:44) 1-2'
EP25.3 (13:46) 2-3'
EP25.4 (13:48) 3-4'
EP25.5 (13:50) 4-5'

Analysis: @ KCL. Total As, Pb, Cd, plt
(for gravel samples - Total / Soluble Sulfate)
C.o.C #4318-4319)

Sample locations - See pg. 107

9/27/05

Evap Ponds

Characterization

Area of ~~Se~~ Geo probe #20

Geo probe samples indicated As >50 ppm at ~6' bellow contact of sludge/native (~4800-4802)

Post Removal surface in this area is 4803. Sample collected from vertical trench dug w/ Track-hoe.

GP20X1.1 (12:00) 0-1'
silty gravel. strong $Fe^{o}x$

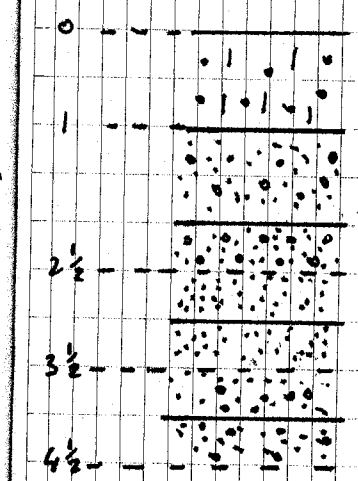
GP20X1.2 (12:02) 1-2½'
Sandy gravel, strong $Fe^{o}x$

GP20 X 1.3 (12:04) 2½-3½'
Sand, some $Fe^{o}x$

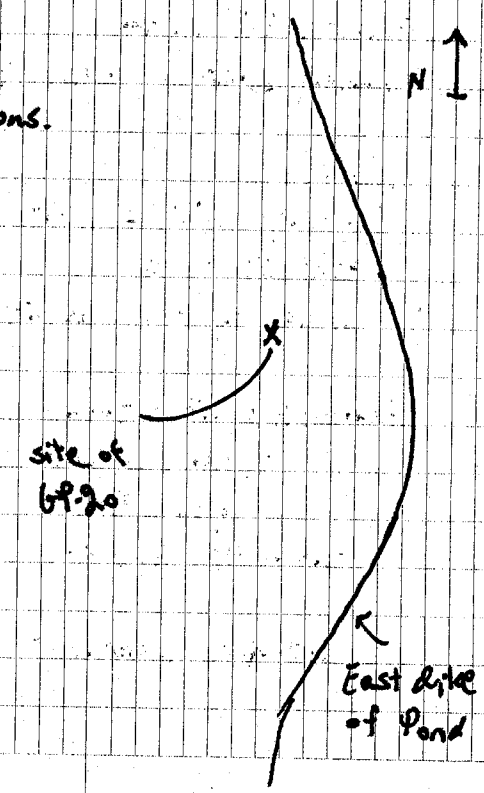
GP20X1.4 (12:06) 3½-4½'
Sandy gravel, mod $Fe^{o}x$

Photos: Trench, close up on vertical side of trench.

Analysis: KEL. C.O.C # 4324



Sample locations.



10/12/05

Evap Ponds
Characterizations
Samples from area of GP-13.
samples that were collected with Geo-probe indicated 2' of soil w/ As>50 bellow the contact with the sludge.
Today
~~these~~ samples collected from surface, after sludge is removed.

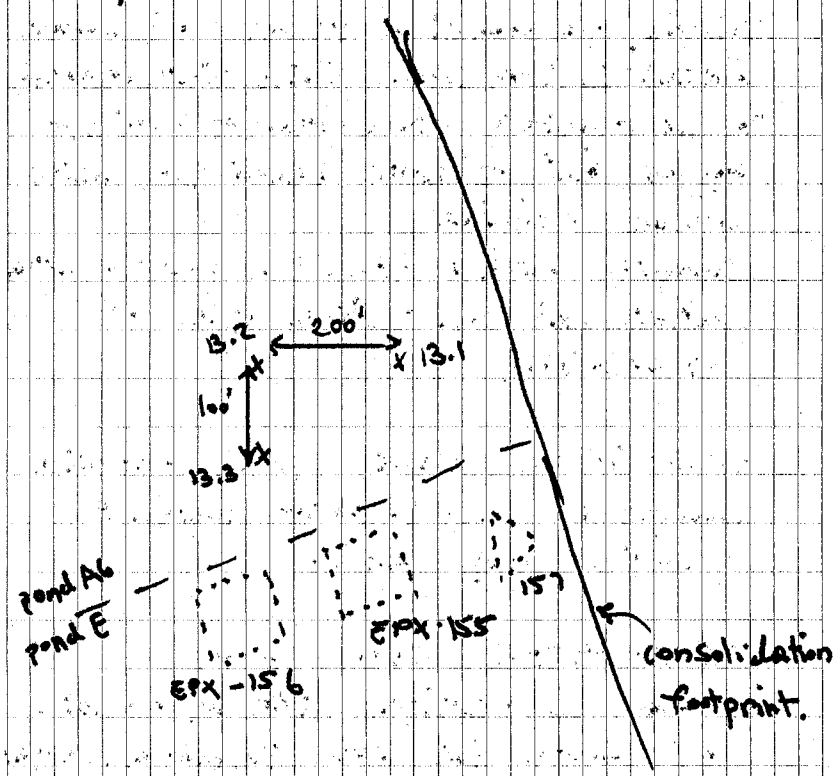
- EPCS - GP13.1 (14:00) (grab)
  dark reddish gray sandy gravel. hard compaction.

- EPCS - GP13.2 (14:05) (grab)
  Sandy gravel, strong FeOx

- EPCS - GP13.3 (14:10) (grab)
  blk gravely silt.

Analysis: KEL: Total As, ~~Pb~~ Pb.
C.O.C # 4327.

Sample locations



* sample GP13.1 is @ site of Geoprobe #13.

10/17/05

Evap Ponds

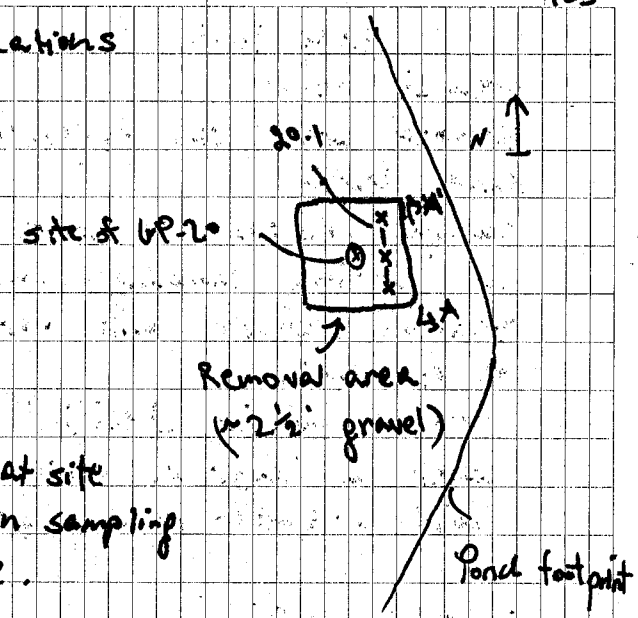
- Confirmation @ site of GP-20 following the analytical results of samples collected in that area, soils were removed to the repository from area of ~100' x 100' approx. 2.5' of gravel bellow the native contact w/sludge.
samples collected from the post-Removal Surface and from vertical sides of excavation.

EPCS-GP20.1 (15:25) (3 pt composite) sample @ Post Removal surface yellowish gray sand.

EPCS-GP20.2 (15:30) 3 pt sample @ vertical side of excav. ~1' above the post Removal Surface. Sample is dark redish gravel.
EPCS-GP20.3 (15:35) 3 pt sample @ vertical side. 2' above sandy gravel. med FeO_x

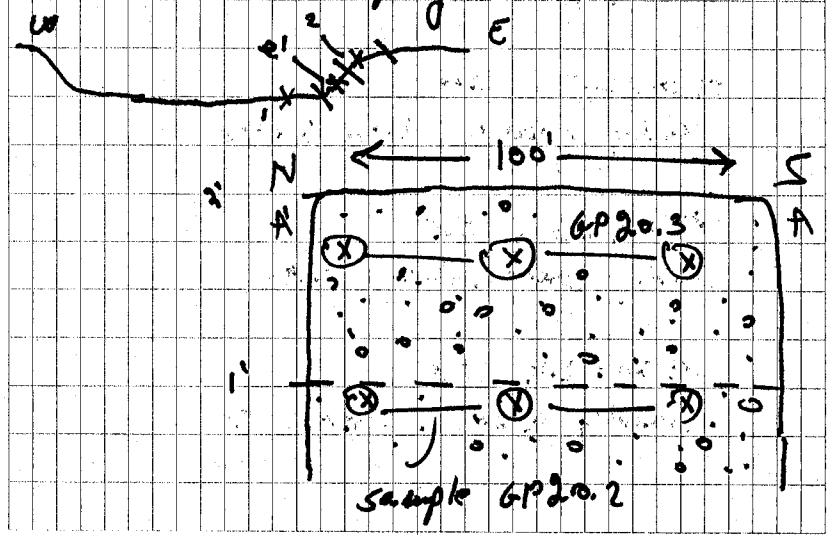
- Samples analysed for Total As, Pb
C.o.C # (KEL-NA)

Sample locations



Photos:
- Looking NE at site
- close up on sampling surface.

Schematic Sampling Zones:



10/26/05

Evap Pond

Area of GP-20

Removal area was expended to same depth

Samples collected in same manner as previous sampling - from post removal surface and vertical sides of excavation.

Previous sampling idetified the target layer as layer of heavy FeOx hard compacted sandy gravel.

GP20X2.1 (11:55)
sandy gravel. dark FeOx

GP20X2.2 (12:00)
sandy gravel. dark FeOx

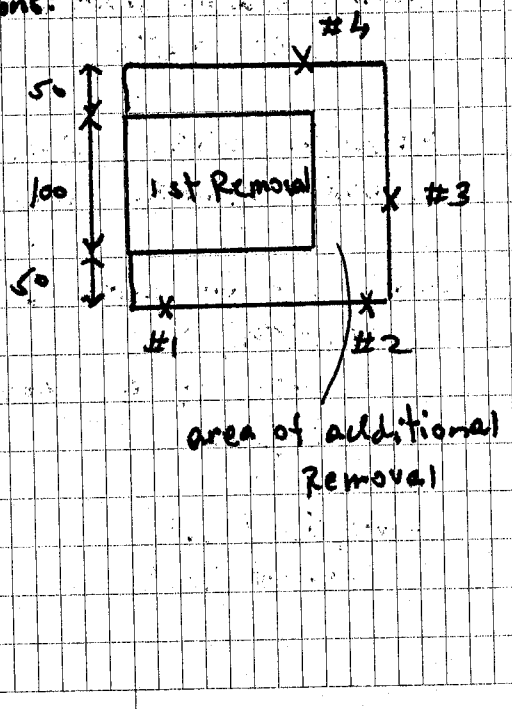
GP20X2.3 (12:05)
sandy gravel. dark FeOx

GP20X2.4 (12:10)
sandy gravel. dark FeOx

Photos:
- Looking North at site of samples GP20X2.3 & X2.4
- close up on site of GP20X2.2 (Typical)

Analysis @ KEL. Total As, Pb.
C.O.C# 4239

Sample locations:
(see pg. 123



11/22/05

Evap Ponds
Characterization
site of Geo Probe #12.
Geoprobe sampling indicated As > 50ppm at the interval of 4806-4807. current post Removal surface is @ 4810.

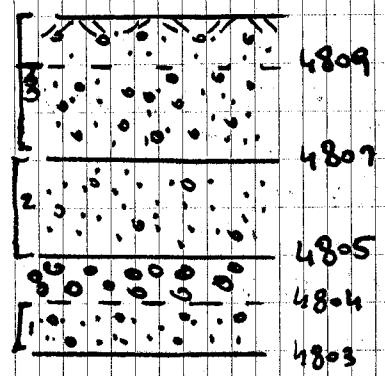
Samples collected from open trench.

GP12.1.1 6-7' (14:30)
GP12.1.2. 3-5' (14:32)
GP12.1.3 1-3' (14:34)

Photos: view of trench
- close up on sampling surface.

Analysis @ KEL. Total As, Pb & pH
C.O.C # 4335

cross section of trench



Sandy gravel. FeOx discoloration
4805 - gravely sand. FeOx
4804 - coarse gravel
4803 - gravely sand.

- Evap Ponds

- Pond A03 Canals

"Peninsula"

FIELD BOOK

FB 802

6/21/06

Evap Ponds

Previous Geoprobe sampling in the EP site (2003) indicated potential high (>50 ppm) As in the subgrade of the North Pond in site #3 (4' bellow contact of sludge & native soil) and in site #7 (11' ~~to~~ bellow contact). the high As was found is some of the samples.

this sampling is at the area is close proximity to these location to get additional data about the soil in depth.

- site 3A is 100' East of GP #3.
  - contact of native is @ 7' 4"
  - 5" greenish-brn silty sand. not sampled
  - samples:

GP-3A.1 (11:30) 7' 9" - 8' ~~[illegible]~~

GP-3A.2 (11:32) 8 - 9'

(see log page for descriptions)

- sludge and mixed soils were removed in the area of site #7 and to the East.

GP-7A (12:00) 150' E, 100' N of GP #7

GP-7B (12:30) 120' N of GP #7

see log pages for descriptions.

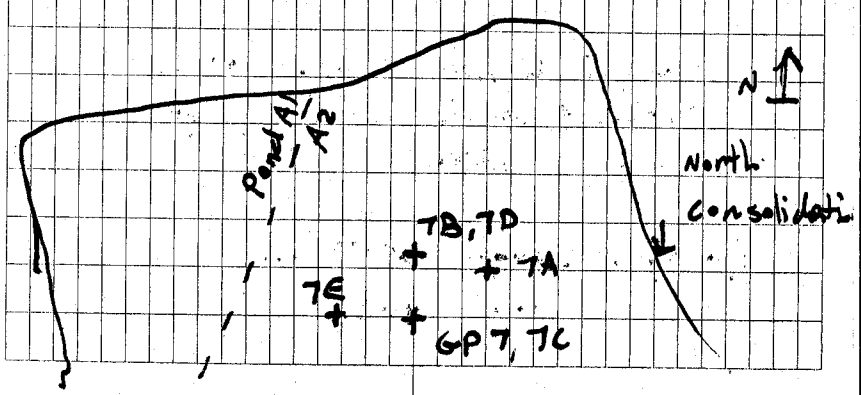
GP-7A : 8' TD, 7 samples.

GP-7B : 11½ TD, 10 samples.

Analysis @ KCL : Total As, Pb, pH, EC, Total & Soluble Sulfate

C.o.c # 4378-4379.

sample locations:



HOLE ID NO. GP-3A LOGGED BY: EMMD ARDON Date/Time 6/21/06 (11:30)

LOCATION: N _____ E 100' East of GP-3 PAGE 1 OF ___

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
1.0				Contact of Sludge\Native soil is @ 7'4". another 5" of greenish-brn silty sand.
2.0				
3.0				
4.0				
5.0				
6.0				
7.0	7'9"-8'	GP-3A.1		dark redish brn silty sand.
8.0	8'-9	GP-3A.2		redish brn silty sand
9.0				
10.0				
11.0				
12.0				

HOLE ID NO. GP-7A LOGGED BY: EMILD ARDON Date/Time 6/21/06 (12:00)

LOCATION: N _____ E 15' E, 100' N of GP-7 PAGE 1 OF ___

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
1.0	0-1	GP-7A.1		brn-grey silt, sand mod FeOx
2.0	1-2	7A.2		grey silt, mod FeOx
3.0	2-2½	7A.3		gray sand, mod FeOx
4.0	2½-4	7A.4		gravely, coarse sand, some FeOx
5.0				
6.0	5-5'10"	7A.5		fine gravel
7.0	5'10"-6'10"	7A.6		gray silt, minor FeOx
8.0	6'10"-8	7A.7		Rocky sandy gravel.
9.0				
10.0				
11.0				
12.0				

HOLE ID NO. GP-7B LOGGED BY: EHUD ARDON Date/Time 6/21/06 (12:30)

LOCATION: N _____ E 120' N of GP 7 PAGE 1 OF ___

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
1.0	0-1	GP-7B1		brn silty sand
2.0	1-2	7B.2		redish-brn silty sand
3.0	2-3½	7B.3		redish-brn gravely silty sand
4.0	3½-5	7B.4		gray silty sand, FeOx discoloration
5.0				
6.0	5-6½	7B.5		— " —
7.0	6½-8	7B.6		— " —
8.0				
9.0	8-9	7B.7		— " —
10.0	9-9½	[redacted]		sandy silt, heavy FeOx discoloration
	9½-10½	[redacted]		sandy gravel, mod-heavy FeOx
11.0	10½-11½	7B.10		sandy gravel, mod FeOx
12.0				

6/29/06

Evap Ponds

area of Geoprobe # 7 - additional sampling.

samples collected from open trench at site of Geoprobe #7.

- Excavation depth 11½'
- Elevation at surface 4811.6
- samples collected:
  GP-7C.1 thru GP-7C.10

- see seperate logs for sample & trench descriptions.

Photos: Photos of trench show sampling intervals.

Analysis @ KEL: Total metals, Total & Soluble sulfate, pH, EC
C.O.C: 4380

7/6/06: sample GP-7C.11
C.O.C 4381

7/21/06

Evap Ponds

Area of GP-7 continue:
open trench Samples collected at site of GP-7B (6/21/06)

Elevation at surface 4812.8
Depth of Excavation 11'
samples: GP-7D.1 thru GP-7D.12
see logs for trench & samples descrip.
Photos: Photos of trench show sampling intervals.

Analysis @ KEL
C.O.C: 4382

HOLE ID NO. GP-7C LOGGED BY: EHUD ARDON Date/Time 6/29/06 (8:15)

LOCATION: N _____ E site of GP #7 11', open trench PAGE 1 OF ___

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
	0 - 1	GP-7C.1		orange-bro-silty sand
1.0	1 - 1' 3"	7C.2		sandy gravel. FeOx discoloration
2.0	1'3" - 2½	7C.3		lgt orange silty sand
3.0	2½ - 4	7C.4		gray sandy clay localy strong FeOx
4.0	4 - 4½	7C.5		gray clay
5.0	4½ - 5	7C.6		yellowish-gray sand
	5 - 6'3"	7C.7		gray clay
6.0	6'3" - 6½	7C.8		gray sand, strong FeOx in lenses
7.0	6½ - 7½	7C.9		yellowish-gray sand
8.0	7½ - 8½	N/S		sandy rocky gravel. strong FeOx
9.0	8½ - 11	N/S		gray sandy gravel.
10.0				
11.0	11 - 11½	7C.10		gray sandy silt
12.0				

HOLE ID NO. GP-7D LOGGED BY: EMMD ARDON DATE/TIME 7/21/06 (7:45) PAGE 1 OF ___

LOCATION: N E 0 @ 4812.8 open trench site of GP-7B

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
1.0	0 - 1	GP-7D.1		yellowish silt
2.0	1 - 2	GP-7D.2		fine gravel. mod FeOx
3.0	2 - 3	7D.3		yellowish-orange silt
4.0	3 - 4'4"	7D.4		gray sandy clay. localy strong FeOx
5.0	4'4" - 5'8"	7D.5		-11-
6.0	5'8" - 6	7D.6		yellowish gray sand
7.0	6 - 7'8"	7D.7		gray sandy clay
8.0	7'8" - 8	7D.8		-11-
9.0	8' - 8'4"	7D.9		heavy FeOx silty sandy grevel
	8'4" - 9	7D.10		fine sandy gravel mod-strong FeOx
10.0	9 - 10	7D.11		sandy gravel some FeOx
	10 - 11	7D.12		yellowish-gray sandy gravel

 8/2/06

Evap Ponds.

Area of Geoprobe #7.
Open trench samples. site is 50'N 100'W of GP-7.
Total Depth 10'.
samples collected: GP7E.1 thru 9
see log for trench & sample descriptions

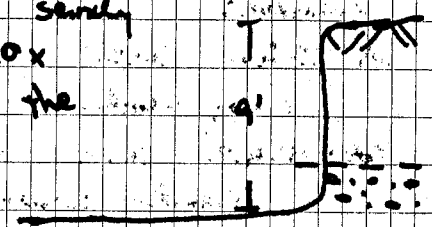
Photos show trench & sample intervals.

- soil was removed 50' all around area of GP-7B. depth of soil excavated for removal is ~9'. soil removed to the repository w/ pond sediments.

samples collected from vertical sides of excavation to determine if further removal is required.

Photos: - Looking NE at excavation
- " East "
- SE "

A visible layer of sandy gravel, strong FeOx discoloration is the removal target.



samples collected from this layer where present, and from the layer above.

GP7B1.1 (13'.00) grey sandy clay. locally strong FeOx

GP7B1.2 (13'.02) strong FeOx sandy gravel.

GP7B2.1 (13'.04) grey sandy clay locally strong FeOx

GP7B2.2 (13'.06) coarse sandy gravel. minor fines. strong FeOx.

GP7B3.1 (13'.08) weak to mod FeOx grey sand.

GP7B3.2 (13'.10) strong FeOx gravel. minor fines.

HOLE ID NO. GP-7E LOGGED BY: EHUD ARDON Date/Time 8/2/06 (12:45)

LOCATION: N _____ E _____ TD 10' PAGE 1 OF ___

DEPTH (FT)	SAMPLE INTERVAL	SAMPLE ID NO.	GRAPHIC LOG	DESCRIPTION
1.0	0-1	GP-7E.1		yellowish orange silt
2.0	1-2	7E.2		yellowish grey silty sand
3.0	2-3	7E.3		yellowish grey silty sand. locely strong FeOx
4.0	3-4	7E4		grey sandy clay
5.0	4-5	7E.5		-"-
6.0	5-6½	7E.6		yellowish grey sand
7.0	6½-7'3"	7E.7		grey sandy clay
8.0	7'3"-8½	7E.8		sandy gravel. mod FeOx
9.0	8½-9½	7E.9		yellowish grey sandy gravel.
10.0				
11.0				
12.0				

8/2/06

Continue:

GP-7B4.1 (13:12) weak to mod FeO_x grey sand.

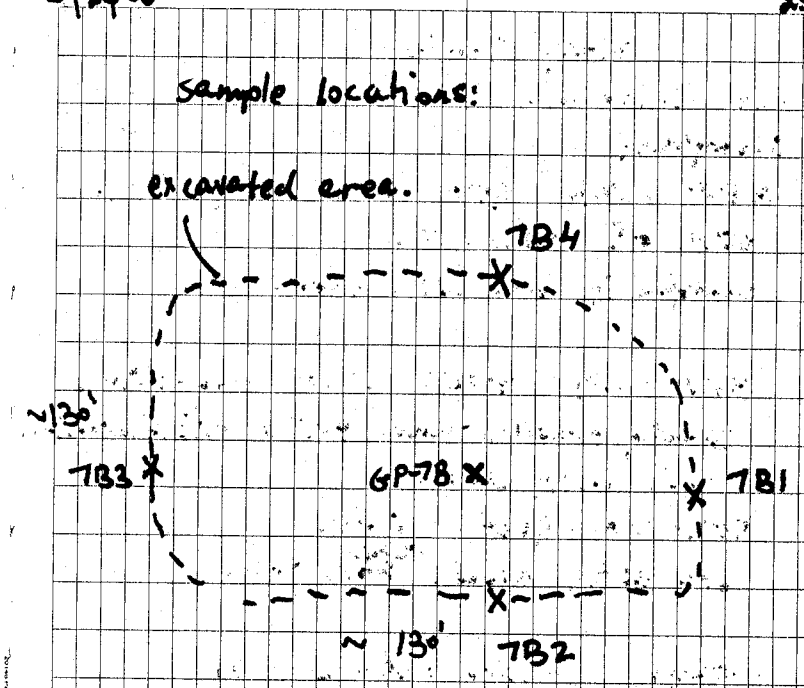
GP-7B4.2 (13:14) mod to strong FeO_x sandy gravel.

Analysis @ KEL: Total As, Pb
pH, EC, Total & Soluble Sulfate

C.O.C: 4389.

8/2/06

sample locations:



Evap Pond.

Geoprobe site #7.

Additional Removal was conducted in the area identified as 7B. The Removal was conducted based ~~Additional~~ on previous sampling. depth of excavation 9'.

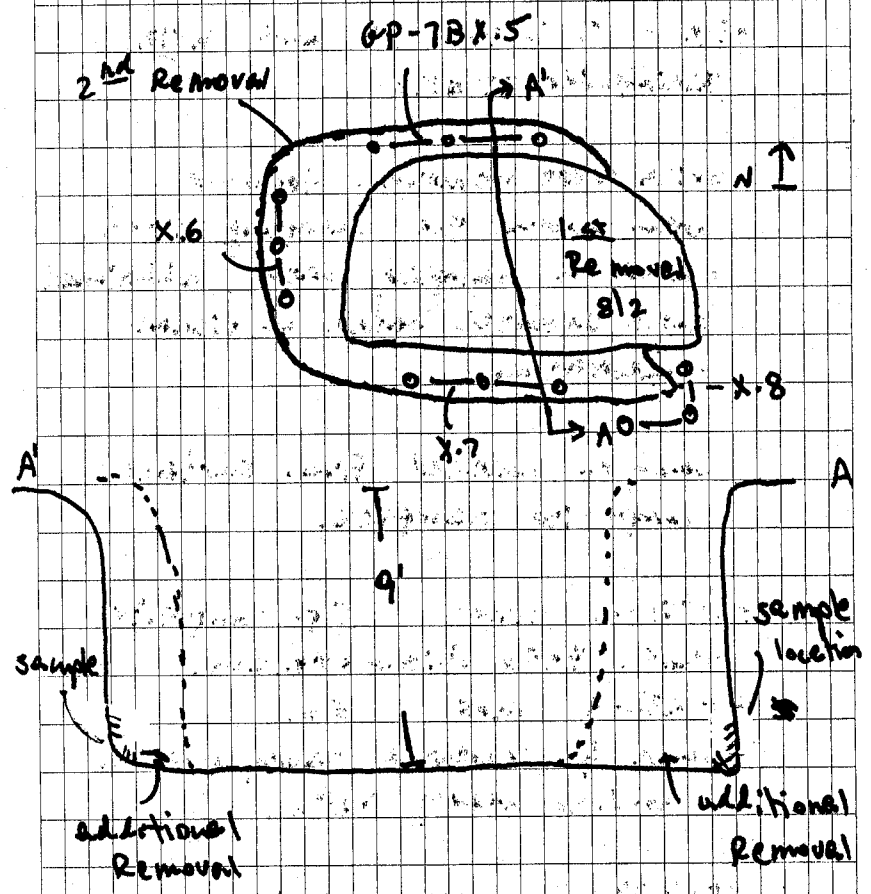
GP-7BX.5 (14:30) 3pt composite gray sandy gravel

GP-7BX.6 (14:32) 3pt composite gray sandy gravel

GP-7BX.7 (14:34) 3pt Redish grey sandy gravel

GP-7BX.8 (14:36) 3pt Redish brn silt. sample at 0-1' at top of excavation.

Photos: - ~~close up on site of 7BX.5~~
- Looking S @ site of samples
- Looking SE -"-



Analysis @ AEL: As, Pb, pH, EC, Sulfate
C.o.C: 4401

Photo EP10NW: looking north –west at site of samples EPX -10 (EPX-3 through 5 in background). 10/9/03

Photo EP6NE: looking north –east at site of samples EPX -6 and EPX-7. 10/9/03

Photo EP13N: Looking north at site of sample EPX -13. 11/5/03

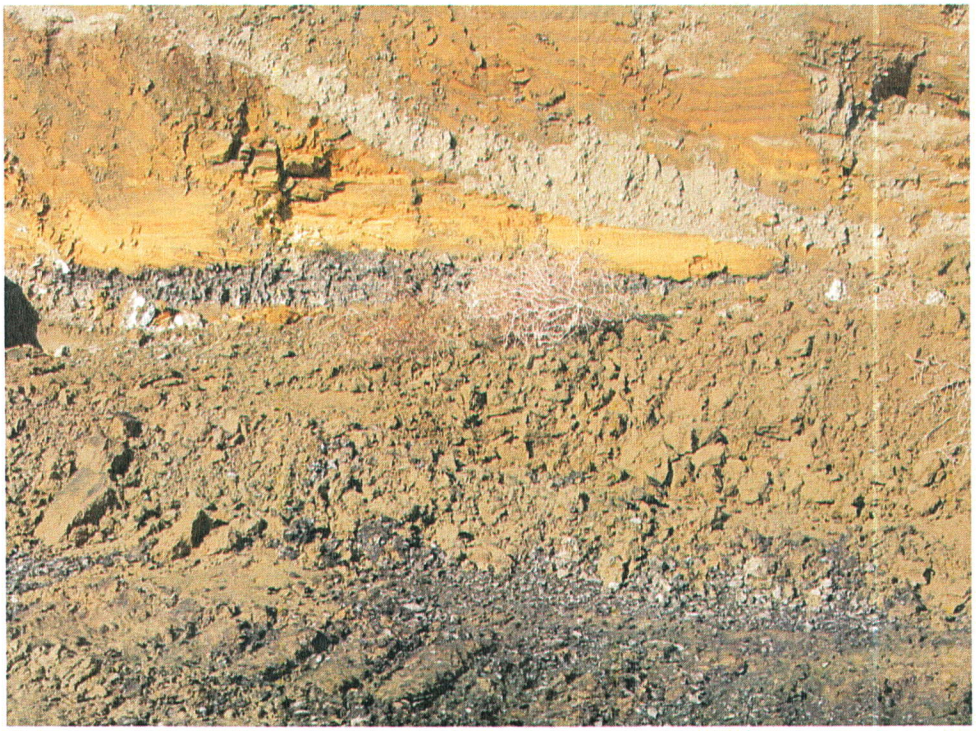


Photo EP14UP: Close up at sub-site of sample EPX -14: Typical surface at samples EPX-14, 15—wet sandy silt and black sandy gravel. 11/7/03

Photo EP18UP: Close up at sub-site of sample EPX -18; Typical surface at samples EPX-17, 18—black sandy gravel. 11/12/03

Photo EP19N: Looking north at site of sample EPX -19 and EPX-20. 11/21/03