US EPA RECORDS CENTER REGION 5
466352

K7
8/17/98

Mrkvicka, Steven

From: Ruf, Jennifer L.
To: Mrkvicka, Steven
Cc: Carolan, Patrick T. 001
Subject: RE: American Chemical Services Site
Date: Monday, August 17, 1998 5:05PM
Priority: High

Attached are three screen captures of the analysis Pat and I performed today using the provided data and the Voxel Analyst software. You should be able to view these files by double-clicking on the images or by using paintbrush or something equivalent to view a BITMAP file.

View1 is a plan view of the site with a color coded contour showing the highest contamination level.
View2 is an isometric view with the site and two cross sections cut through the area with the highest contamination level.
View3 is View2 with an iso-solid developed from samples equal to and greater than 100 MG/KG.

<<File Attachment: VIEW1.BMP>><<File Attachment: VIEW2.BMP>><<File Attachment: VIEW3.BMP>>

Look at these and give either Pat or me a call and we can discuss what you think or what you might changed.

Jennifer

-----Original Message-----
From: Mrkvicka, Steven
Sent: Monday, August 17, 1998 10:36 AM
To: Carolan, Patrick T.
Cc: Ruf, Jennifer L.; Filardi Jr., Raul E.
Subject: RE: American Chemical Services Site

Please proceed. I was out last Thursday and Friday but I had understood that work was proceeding. I am still under the gun to get something to EPA this week. I have asked Mark to send the files directly to Jennifer so she can get going.

From: Carolan, Patrick T.
To: Mrkvicka, Steven
Cc: Ruf, Jennifer L.; Filardi Jr., Raul E.
Subject: American Chemical Services Site
Date: Wednesday, August 12, 1998 10:50AM

I have talked to Jennifer Ruf about this and here is what we think we can get you by mid next week:

1) An exhibit showing two crossing planes with the benzene plume displayed.
2) 3D Visualization of the plume in 3D. The visual effect of this depends on the coverage of the data.
3) A 2D contour map showing benzene levels on the site.

We can get started on Friday. If you would like us to do this, we will need the database and drawings as soon as possible.

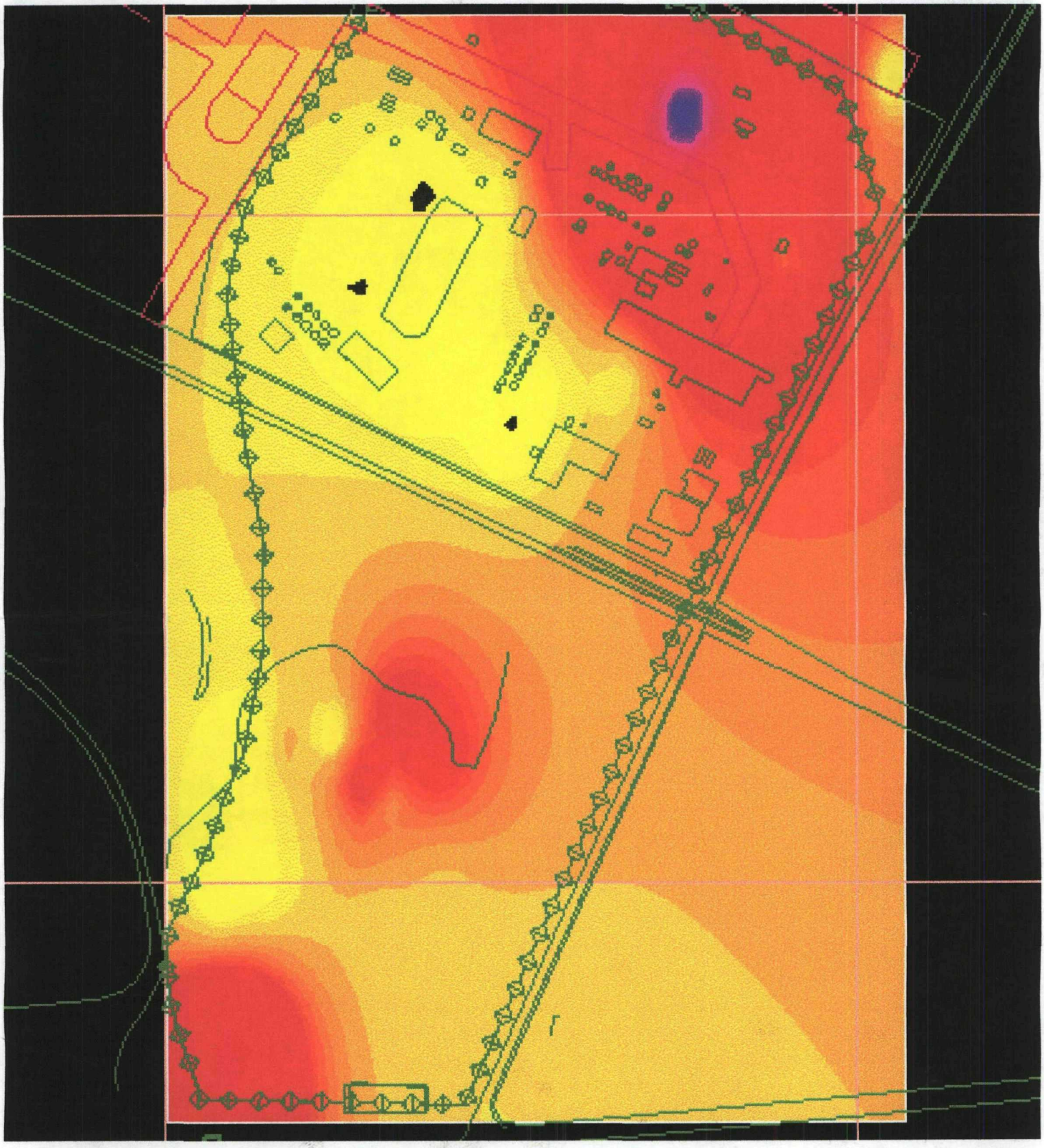
A little background: Jennifer is a civil engineer in the Water Resources group of the Advanced Environmental Technologies Division (AETD) in the Infrastructure Business Unit. She has worked with GIS and modeling for

several years. The software application she will be using is called Voxel Analyst. It is from Intergraph and was developed for this type of application. If your site map is in AutoCad format, we will translate it to Microstation for use. This should not be a problem.

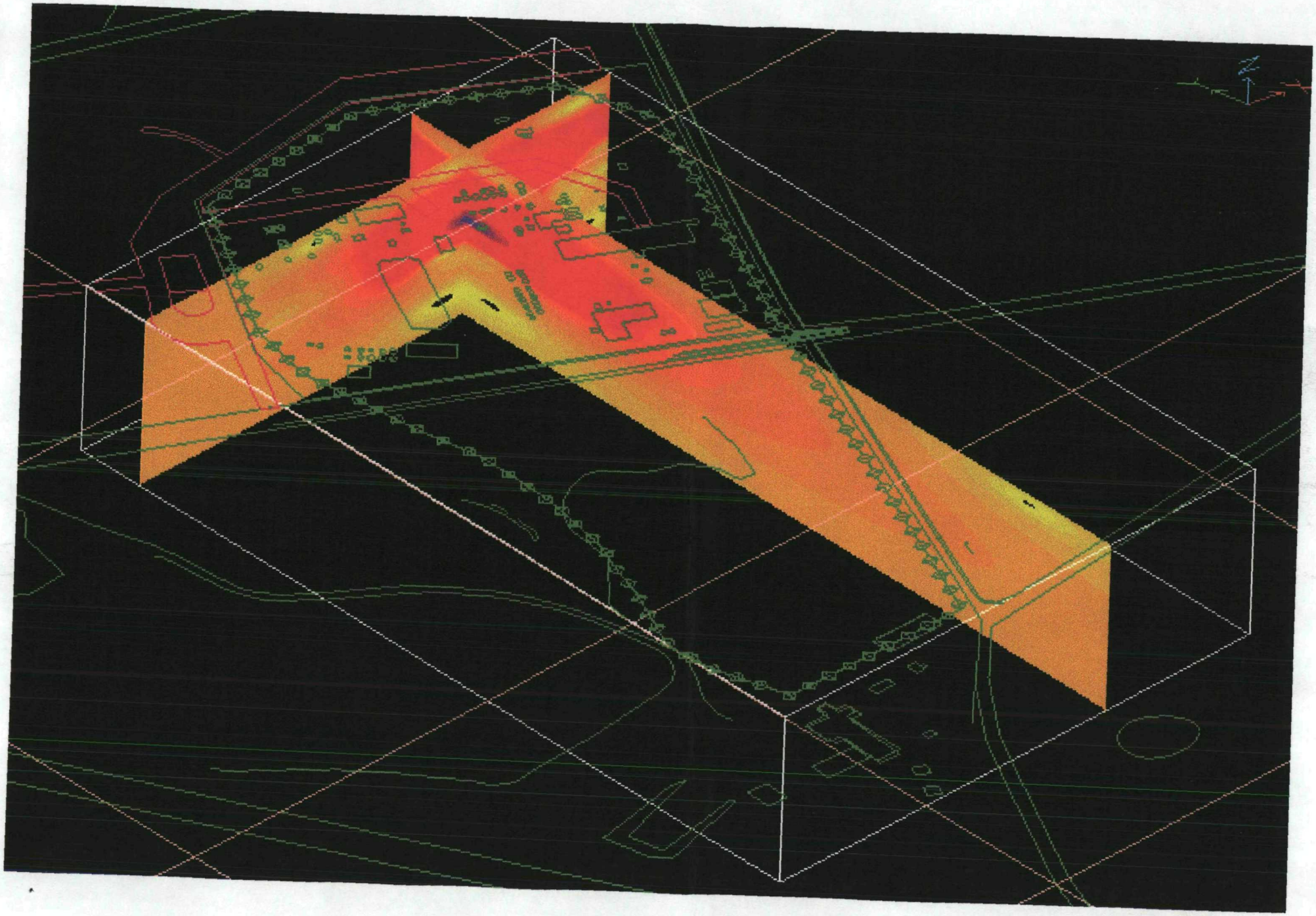
I'm an electrical engineer in BVSPC. I have worked with GIS and mapping for many years. I have done a lot of software development and database design. Jennifer and I have worked on many projects together.

If there are any questions I can answer please let me know. Otherwise, we will wait to hear from you. I would like to get the drawings and database ASAP so I can start any pre-modelling work that needs to be done. I'm unfortunately going to be in CPR/First Aid training tomorrow, but will be checking messages and e-mail.

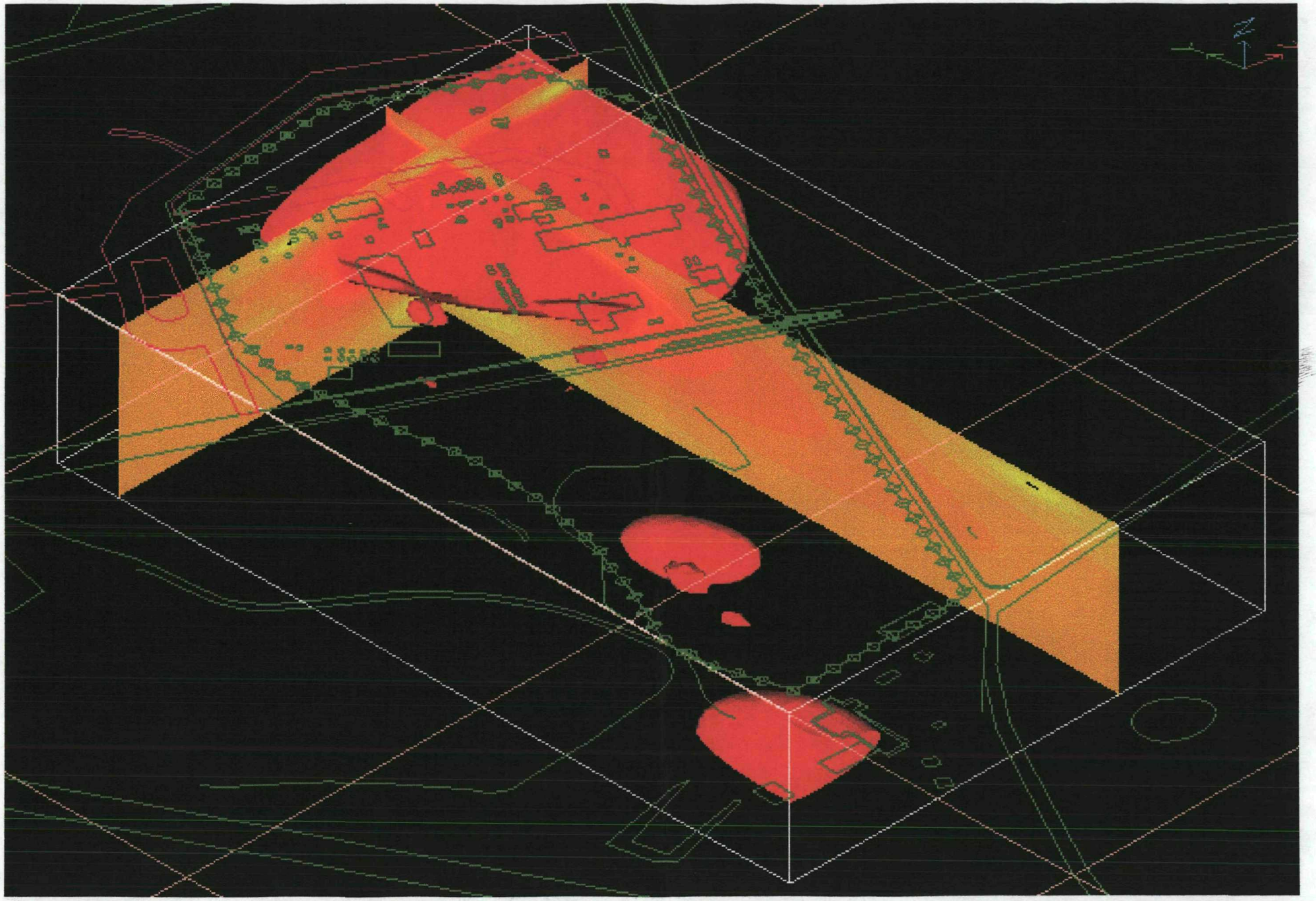
Later....



VIEW1



VIEW2



VIEW3

ESRI

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
D-01-S	D01-S-IEA	VOC	Benzene		MG/KG	3.6	U	5135.8	5998.9	643	0.25	0.25
D-02-S	D02-S-IEA	VOC	Benzene		MG/KG	1.4	U	5322.9	5913.2	647	0.25	0.25
FIRE POND	SS01-AVG	VOC	Benzene		MG/KG	0.011	U	5380	7030	639	3	3
FIRE POND	SS02	VOC	Benzene		MG/KG	36	UR	5380	7030	639	3	3
KP-01-S	KP01-S-IEA	VOC	Benzene		MG/KG	1.5	U	5249.4	5668.9	650	0.25	0.25
SA-01	ACS-SA01-03	VOC	Benzene	0.32	MG/KG	0.005		5220	5720	649	0.5	1.5
SA-01-S	SA01-S-IEA-01	VOC	Benzene		MG/KG	35	U	5240.5	6049	648.5	0.25	0.25
SA-01-S	SA01-S-IEA-02	VOC	Benzene		MG/KG	3.3	U	5240.5	6049	648.5	0.25	0.25
SA-02	ACS-SA02-03	VOC	Benzene	3.2	MG/KG	0.005		5300	5770	649	0.5	1.5
SA-02-S	SA02-S-IEA	VOC	Benzene		MG/KG	42	U	5309.3	5977	646	0.25	0.25
SA-03	ACS-SA03-03	VOC	Benzene		MG/KG	0.7	U	5850	6835	645	0.5	1.5
SA-04-S	SA04-S-IEA	VOC	Benzene	45	MG/KG			5352.9	6259.4	647	0.25	0.25
SB-001	ACS-SB01-09	VOC	Benzene		MG/KG	0.005	U	5273.16	5710.15	651.8	9	9
SB-001	ACS-SB01-03	VOC	Benzene		MG/KG	0.65	U	5273.16	5710.15	651.8	3	3
SB-002	ACS-SB02-05.5	VOC	Benzene		MG/KG	6	U	5322.28	5808.58	649.8	5.5	5.5
SB-002	ACS-SB02-08.5	VOC	Benzene		MG/KG	0.005	U	5322.28	5808.58	649.8	8.5	8.5
SB-003	ACS-SB03-12	VOC	Benzene	9.1	MG/KG	0.005		5242.55	6229.09	647.8	12	12
SB-003	ACS-SB03-17	VOC	Benzene	93	MG/KG	0.005		5242.55	6229.09	647.8	17	17
SB-003	ACS-SB03-20	VOC	Benzene		MG/KG	0.025	U	5242.55	6229.09	647.8	20	20
SB-004	ACS-SB04-05	VOC	Benzene	3.3	MG/KG	0.005		5221.47	6099.18	648.7	5	5
SB-004A	ACS-SB04A-19	VOC	Benzene		MG/KG	3.75	U	5212.68	6083.44	648.5	19	19
SB-005	ACS-SB05-17	VOC	Benzene		MG/KG	0.7	U	5282.44	6039.4	648.3	17	17
SB-005	ACS-SB05-14	VOC	Benzene	140	MG/KG	0.005		5282.44	6039.4	648.3	14	14
SB-006	ACS-SB06-11.5	VOC	Benzene	63	MG/KG	0.005		5325.93	6119.44	647.3	11.5	11.5
SB-006	ACS-SB06-15	VOC	Benzene	30	MG/KG	0.005		5325.93	6119.44	647.3	15	15
SB-007	ACS-SB07-14	VOC	Benzene	640	MG/KG	0.005		5366.43	6229.86	647.5	14	14
SB-007	ACS-SB07-19	VOC	Benzene	150	MG/KG	0.005		5366.43	6229.86	647.5	19	19
SB-008	ACS-SB08-06	VOC	Benzene		MG/KG	0.005	U	5710.14	7097.9	639.1	6	6
SB-008	ACS-SB08-10	VOC	Benzene	0.71	MG/KG	0.005		5710.14	7097.9	639.1	10	10
SB-009	ACS-SB09-06	VOC	Benzene		MG/KG	0.005	U	5711.48	7213.82	638.0	6	6
SB-009	ACS-SB09-10	VOC	Benzene	0.006	MG/KG	0.005		5711.48	7213.82	638.0	10	10
SB-010	ACS-SB10-05	VOC	Benzene	0.55	MG/KG	0.005		5773.44	7158.54	638.2	5	5
SB-010	ACS-SB10-10	VOC	Benzene	0.43	MG/KG	0.005		5773.44	7158.54	638.2	10	10
SB-011	ACS-SB11-10	VOC	Benzene	1.4	MG/KG	0.005		5883.13	7040.59	638.5	10	10
SB-011	ACS-SB11-05	VOC	Benzene		MG/KG	0.005	U	5883.13	7040.59	638.5	5	5
SB-012	ACS-SB12-05	VOC	Benzene		MG/KG	0.75	U	5962.12	7188.71	637.6	5	5

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
SB-012	ACS-SB12-10	VOC	Benzene	1.2	MG/KG	0.005		5962.12	7188.71	637.6	10	10
SB-013	ACS-SB13-05	VOC	Benzene	0.01	MG/KG	0.005		6015.53	7065.97	638.8	5	5
SB-013	ACS-SB13-10	VOC	Benzene	0.32	MG/KG	0.005		6015.53	7065.97	638.8	10	10
SB-014	ACS-SB14-11	VOC	Benzene		MG/KG	0.75	U	5429.87	6817.52	641.5	11	11
SB-015	ACS-SB15-13	VOC	Benzene	40	MG/KG	0.005	J	5462.63	6865.45	641.5	13	13
SB-016	ACS-SB16-06	VOC	Benzene		MG/KG	74	UJ	5468.79	6948.32	641.5	6	6
SB-017	ACS-SB17-06.5	VOC	Benzene		MG/KG	73	UJ	5534.22	6747.9	641.0	6.5	6.5
SB-018	ACS-SB18-07	VOC	Benzene		MG/KG	76	UJ	5575.58	6822.4	640.8	7	7
SB-020	ACS-SB20-07	VOC	Benzene		MG/KG	0.795	U	5322.66	6942.54	639.0	7	7
SB-021	ACS-SB21-12	VOC	Benzene	0.64	MG/KG	0.005		5553.73	6950.64	639.4	12	12
SB-021	ACS-SB21-07	VOC	Benzene	0.009	MG/KG	0.005		5553.73	6950.64	639.4	7	7
SB-022	ACS-SB22-12	VOC	Benzene	64	MG/KG	0.005		5550.34	6780.1	640.9	12	12
SB-023	ACS-SB23-12	VOC	Benzene	1.8	MG/KG	0.005		5556.59	6698.85	638.6	12	12
SB-024R	ACS-SB24-12	VOC	Benzene	190	MG/KG	0.005		5318.2	6267.85	646.6	12	12
SB-024R	ACS-SB24-21	VOC	Benzene	1.1	MG/KG	0.005		5318.2	6267.85	646.6	21	21
SB-024R	ACS-SB24R-26	VOC	Benzene	4	MG/KG	0.005		5318.2	6267.85	646.6	26	26
SB-025R	ACS-SB25-11	VOC	Benzene	210	MG/KG	0.005		5395.52	6182.29	645.6	11	11
SB-025R	ACS-SB25-21	VOC	Benzene	0.097	MG/KG	0.005		5395.52	6182.29	645.6	21	21
SB-025R	ACS-SB25R-29	VOC	Benzene	0.005	MG/KG	0.005		5395.52	6182.29	645.6	29	29
SB-026R	ACS-SB26-11	VOC	Benzene	200	MG/KG	0.005		5289.38	6151.73	647.2	11	11
SB-026R	ACS-SB26-21	VOC	Benzene	0.21	MG/KG	0.005		5289.38	6151.73	647.2	21	21
SB-026R	ACS-SB26R-26	VOC	Benzene	4.8	MG/KG	0.005		5289.38	6151.73	647.2	26	26
SB-027R	ACS-SB27-11	VOC	Benzene	65	MG/KG	0.005		5343.42	6068.63	644.5	11	11
SB-027R	ACS-SB27-21	VOC	Benzene	0.69	MG/KG	0.005		5343.42	6068.63	644.5	21	21
SB-027RR	ACS-SB27RR-24	VOC	Benzene	8.6	MG/KG	0.005		5346.91	6078.06	644.3	24	24
SB-028	ACS-SB28-08	VOC	Benzene		MG/KG	49.6	U	5146.05	5901.21	645.9	8	8
SB-029	ACS-SB29-08	VOC	Benzene	0.81	MG/KG	0.005		5204.43	5831.57	647.3	8	8
SB-030	ACS-SB30-10	VOC	Benzene	1500	MG/KG	0.005		5096.61	5745.08	646.3	10	10
SB-036	ACS-SB36-17	VOC	Benzene	2.3	MG/KG	0.005		5299.96	5986.36	647.1	17	17
SB-036	ACS-SB36-23.5	VOC	Benzene	0.77	MG/KG	0.005		5299.96	5986.36	647.1	23.5	23.5
SB-036	ACS-SB36-10	VOC	Benzene	0.022	MG/KG	0.005		5299.96	5986.36	647.1	10	10
SB-037	ACS-SB37-17	VOC	Benzene	57	MG/KG	0.005		5237.15	6051.48	6448.6	17	17
SB-037	ACS-SB37-23.5	VOC	Benzene	0.02	MG/KG	0.005		5237.15	6051.48	6448.6	23.5	23.5
SB-037	ACS-SB37-10	VOC	Benzene		MG/KG	3.65	U	5237.15	6051.48	6448.6	10	10
SB-038	ACS-SB38-23.5	VOC	Benzene	0.24	MG/KG	0.005		5261.78	6275.34	647.0	23.5	23.5
SB-038	ACS-SB38-10	VOC	Benzene	30	MG/KG	0.005		5261.78	6275.34	647.0	10	10

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
SB-038	ACS-SB38-20	VOC	Benzene		MG/KG	1.45	U	5261.78	6275.34	647.0	20	20
SB-039	ACS-SB39-17	VOC	Benzene	1.6	MG/KG	0.005		5173	6207.38	644.9	17	17
SB-039	ACS-SB39-23.5	VOC	Benzene	0.65	MG/KG	0.005		5173	6207.38	644.9	23.5	23.5
SB-039	ACS-SB39-10	VOC	Benzene	96	MG/KG	0.005		5173	6207.38	644.9	10	10
SB-040	ACS-SB40-10	VOC	Benzene	1.1	MG/KG	0.005		5072.57	5914.79	644.2	10	10
SB-041	ACS-SB41-23.5	VOC	Benzene	0.042	MG/KG	0.005		5016.05	5796.61	644.9	23.5	23.5
SB-041	ACS-SB41-05.5	VOC	Benzene		MG/KG	0.005	U	5016.05	5796.61	644.9	5.5	5.5
SB-042	ACS-SB42-20	VOC	Benzene	0.087	MG/KG	0.005		5102.9	6104.72	641.5	20	20
SB-042	ACS-SB42-05.5	VOC	Benzene	0.01	MG/KG	0.005		5102.9	6104.72	641.5	5.5	5.5
SB-043	ACS-SB43-04.5	VOC	Benzene		MG/KG	0.005	U	5365.56	5728.5	650.2	4.5	4.5
SB-044	ACS-SB44-04.5	VOC	Benzene		MG/KG	48.5	U	5352.84	5793.67	649.1	4.5	4.5
SB-045	ACS-SB45-04.5	VOC	Benzene		MG/KG	0.7	U	5289.43	5738.93	650.5	4.5	4.5
SB-046	ACS-SB46-04.5	VOC	Benzene	1.7	MG/KG	0.005		5279.87	5801.45	648.2	4.5	4.5
SB-047	ACS-SB47-04.5	VOC	Benzene	0.15	MG/KG	0.005		5205.95	5814.14	647.3	4.5	4.5
SB-048	ACS-SB48-04.5	VOC	Benzene		MG/KG	1.6	U	5235.04	5720.95	650.6	4.5	4.5
SB-049	ACS-SB49-04.5	VOC	Benzene		MG/KG	0.005	U	5160.75	5726.03	648.6	4.5	4.5
SB-050	ACS-SB50-04.5	VOC	Benzene	0.002	MG/KG	0.005		5145.95	5821.15	645.4	4.5	4.5
SB-051	ACS-SB51-04.5	VOC	Benzene	23	MG/KG	0.005		5094.15	5721.8	646.8	4.5	4.5
SB-052	ACS-SB52-04.5	VOC	Benzene	0.002	MG/KG	0.005		5076.06	5832.98	644.8	4.5	4.5
SB-053	ACS-SB53-04.5	VOC	Benzene		MG/KG	0.005	U	5005.94	5823.79	645.0	4.5	4.5
SB-054	ACS-SB54-04.5	VOC	Benzene		MG/KG	0.01	U	5022.58	5723.33	646.5	4.5	4.5
SB-055	ACS-SB55-16	VOC	Benzene	0.81	MG/KG	0.005		6019.55	7153.9	637.4	16	16
SB-055	ACS-SB55-07	VOC	Benzene	12	MG/KG	0.005		6019.55	7153.9	637.4	7	7
SB-056	ACS-SB56-07	VOC	Benzene	0.005	MG/KG	0.005		6070.11	7125.39	637.9	7	7
SB-056	ACS-SB56-16	VOC	Benzene	0.15	MG/KG	0.005		6070.11	7125.39	637.9	16	16
SB-057	ACS-SB57-07	VOC	Benzene	0.007	MG/KG	0.005		5962.42	7112.87	637.6	7	7
SB-057	ACS-SB57-16	VOC	Benzene	3.1	MG/KG	0.005		5962.42	7112.87	637.6	16	16
SB-058	ACS-SB58-16	VOC	Benzene	1.7	MG/KG	0.005		5898.2	7138.92	637.0	16	16
SB-058	ACS-SB58-07	VOC	Benzene	0.84	MG/KG	0.005		5898.2	7138.92	637.0	7	7
SB-059	ACS-SB59-16	VOC	Benzene	7.5	MG/KG	0.005		5999.77	6972.31	638.4	16	16
SB-059	ACS-SB59-07	VOC	Benzene	4	MG/KG	0.005	J	5999.77	6972.31	638.4	7	7
SB-060	ACS-SB60-16	VOC	Benzene	1.1	MG/KG	0.005		5939.78	6998.6	638.0	16	16
SB-060	ACS-SB60-07	VOC	Benzene		MG/KG	3	U	5939.78	6998.6	638.0	7	7
SB-061	ACS-SB61-16	VOC	Benzene	2.1	MG/KG	0.005		5833.58	7166.41	636.8	16	16
SB-061	ACS-SB61-07	VOC	Benzene	0.35	MG/KG	0.005		5833.58	7166.41	636.8	7	7
SB-062	ACS-SB62-07	VOC	Benzene	0.09	MG/KG	0.005		5776.77	7189.46	637.1	7	7

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
SB-062	ACS-SB62-16	VOC	Benzene	0.067	MG/KG	0.005		5776.77	7189.46	637.1	16	16
SB-063	ACS-SB63-15.5	VOC	Benzene	0.017	MG/KG	0.005		5720.65	7216.62	637.1	15.5	15.5
SB-063	ACS-SB63-07	VOC	Benzene	0.001	MG/KG	0.005		5720.65	7216.62	637.1	7	7
SB-064	ACS-SB64-16	VOC	Benzene	0.12	MG/KG	0.005		5694.86	7165.94	637.4	16	16
SB-064	ACS-SB64-07	VOC	Benzene	0.035	MG/KG	0.005		5694.86	7165.94	637.4	7	7
SB-065	ACS-SB65-16	VOC	Benzene	0.51	MG/KG	0.005		5677.2	7120.68	637.7	16	16
SB-065	ACS-SB65-07	VOC	Benzene		MG/KG	0.75	U	5677.2	7120.68	637.7	7	7
SB-066	ACS-SB66-16	VOC	Benzene	0.026	MG/KG	0.005		5731.43	7098.46	637.8	16	16
SB-066	ACS-SB66-07	VOC	Benzene		MG/KG	0.005	U	5731.43	7098.46	637.8	7	7
SB-067	ACS-SB67-16	VOC	Benzene	0.007	MG/KG	0.005		5790.56	7073.14	637.4	16	16
SB-067	ACS-SB67-07	VOC	Benzene	0.011	MG/KG	0.005		5790.56	7073.14	637.4	7	7
SB-068	ACS-SB68-16	VOC	Benzene	0.018	MG/KG	0.005		5815	7130.27	637.0	16	16
SB-068	ACS-SB68-07	VOC	Benzene	0.002	MG/KG	0.005		5815	7130.27	637.0	7	7
SB-069	ACS-SB69-21.5	VOC	Benzene	0.079	MG/KG	0.005		5545.1	6726.27	638.3	21.5	21.5
SB-069	ACS-SB69-08	VOC	Benzene	76	MG/KG	0.005	J	5545.1	6726.27	638.3	8	8
SB-070	ACS-SB70-20.5	VOC	Benzene	0.37	MG/KG	0.005		5582.86	6719.7	638.8	20.5	20.5
SB-070	ACS-SB70-08	VOC	Benzene	120	MG/KG	0.005		5582.86	6719.7	638.8	8	8
SB-071	ACS-SB71-20.5	VOC	Benzene		MG/KG	0.75	U	5620.11	6813.77	638.7	20.5	20.5
SB-071	ACS-SB71-08	VOC	Benzene	20	MG/KG	0.005		5620.11	6813.77	638.7	8	8
SB-072	ACS-SB72-20.5	VOC	Benzene	7.3	MG/KG	0.005		5599.25	6873.15	638.4	20.5	20.5
SB-072	ACS-SB72-08	VOC	Benzene		MG/KG	0.75	U	5599.25	6873.15	638.4	8	8
SB-073	ACS-SB73-19	VOC	Benzene	2.7	MG/KG	1.05		5429.86	6834.07	641.7	19	19
SB-073	ACS-SB73-05	VOC	Benzene		MG/KG	6	U	5429.86	6834.07	641.7	5	5
SB-074	ACS-SB74-19	VOC	Benzene	1	MG/KG	3.05		5449.01	6877.5	641.6	19	19
SB-074	ACS-SB74-05	VOC	Benzene		MG/KG	0.75	U	5449.01	6877.5	641.6	5	5
SB-075	ACS-SB75-15	VOC	Benzene	120	MG/KG	49.5		5486.98	6937.64	641.5	15	15
SB-077	SB77-07-FT	VOC	Benzene		MG/KG	0.008	U	5083.44	5991.82	644.0	7	7
SB-077	SB77-09-FT	VOC	Benzene	0.014	MG/KG	0.005		5083.44	5991.82	644.0	9	9
SB-078	SB78-07-FT	VOC	Benzene		MG/KG	0.0083	U	5137.96	5996.39	644.5	7	7
SB-078	SB78-10-FT	VOC	Benzene	0.15	MG/KG	0.005		5137.96	5996.39	644.5	10	10
SB-079	SB79-06-FT	VOC	Benzene	0.012	MG/KG	0.005		5183.88	6101.94	646.5	6	6
SB-079	SB79-08-FT	VOC	Benzene	0.01	MG/KG	0.005		5183.88	6101.94	646.5	8	8
SB-080	SB80-06-FT	VOC	Benzene		MG/KG	0.0058	U	5126.02	6209.15	643.2	6	6
SB-080	SB80-08-FT	VOC	Benzene	0.014	MG/KG	0.005		5126.02	6209.15	643.2	8	8
SB-081	SB81-04-FT	VOC	Benzene		MG/KG	0.0062	U	5268.26	6343.38	637.3	4	4
SB-081	SB81-06-FT	VOC	Benzene		MG/KG	0.0079	U	5268.26	6343.38	637.3	6	6

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
SB-082	SB82-04.5-FT	VOC	Benzene		MG/KG	0.0061	U	5413.34	6280.41	637.0	4.5	4.5
SB-082	SB82-06.5-FT	VOC	Benzene	0.13	MG/KG	0.005		5413.34	6280.41	637.0	6.5	6.5
SB-083	SB83-10.5-FT	VOC	Benzene	8	MG/KG	0.005		5394.79	6030.23	644.5	10.5	10.5
SB-083	SB-083-AVG	VOC	Benzene		MG/KG	0.00575	U	5394.79	6030.23	644.5	6.5	6.5
SB-084	SB84-05-FT	VOC	Benzene		MG/KG	0.3	U	5305.16	5867	647.5	5	5
SB-085	SB85-05-FT	VOC	Benzene		MG/KG	0.0054	U	5411.88	5793.81	650.0	5	5
SB-086	SB86-03-FT	VOC	Benzene		MG/KG	0.0053	U	5277.42	5641.32	652.5	3	3
SB-087	SB87-11-FT	VOC	Benzene		MG/KG	0.0058	U	5317.73	5771.86	650.6	11	11
SB-087	SB87-07-FT	VOC	Benzene		MG/KG	0.0061	U	5317.73	5771.86	650.6	7	7
SB-088	SB88-10.5-FT	VOC	Benzene		MG/KG	0.0055	U	5138.92	5717.77	649.5	10.5	10.5
SB-088	SB88-07.5-FT	VOC	Benzene	0.15	MG/KG	0.005		5138.92	5717.77	649.5	7.5	7.5
SB-089	SB-089-AVG	VOC	Benzene	0.064	MG/KG			5482.5	7035.2	639.8	5	5
SB-089	SB89-03-FT	VOC	Benzene	0.36	MG/KG	0.005		5482.5	7035.2	639.8	3	3
SB-090	SB90-03-FT	VOC	Benzene	0.75	MG/KG	0.005		5354.84	7009.19	639.5	3	3
SB-090	SB-090-AVG	VOC	Benzene	0.215	MG/KG			5354.84	7009.19	639.5	5	5
SB-091	SB91-03-FT	VOC	Benzene		MG/KG	0.56	U	5280.09	6889.12	639.0	3	3
SB-091	SB91-05-FT	VOC	Benzene		MG/KG	1.3	U	5280.09	6889.12	639.0	5	5
SB-092	SB92-03-FT	VOC	Benzene	12	MG/KG	0.005		5367.35	6780.47	639.2	3	3
SB-092	SB92-05-FT	VOC	Benzene		MG/KG	0.062	U	5367.35	6780.47	639.2	5	5
SB-093	SB93-03-FT	VOC	Benzene		MG/KG	57	U	5499.68	6685.66	638.8	3	3
SB-093	SB93-05-FT	VOC	Benzene		MG/KG	62	U	5499.68	6685.66	638.8	5	5
SB-094	SB94-03-FT	VOC	Benzene		MG/KG	5.8	U	5661.57	6753.61	639.8	3	3
SB-094	SB94-05-FT	VOC	Benzene		MG/KG	5.8	U	5661.57	6753.61	639.8	5	5
SB-095	SB95-03-FT	VOC	Benzene		MG/KG	0.0059	U	5891.56	6948.69	639.5	3	3
SB-096	SB96-03-FT	VOC	Benzene		MG/KG	0.006	U	6055.93	7204.16	638.3	3	3
SB-110	ACS-SB110-SS4	VOC	Benzene	150	MG/KG	560	J	5660.5	6751.9	638.8	7	9
SB-118	ACS-SB118-SS3	VOC	Benzene		MG/KG	280	U	5620.5	6721.5	639.100	6	8
SB-119	ACS-SB119-SS3	VOC	Benzene	41	MG/KG	140	J	5567.4	6708.8	638.800	6	8
SP-01-S	SP01-S-IEA	VOC	Benzene		MG/KG	75	U	5131.9	5816	646	0.25	0.25
SP-02-S	SP02-S-IEA	VOC	Benzene		MG/KG	76	U	5129.5	5725.9	647	0.25	0.25
SS01	ACS-SS01-AVG	VOC	Benzene		MG/KG	0.011	U	5580	5880	649	0.25	0.25
SS02	ACS-SS02-001	VOC	Benzene		MG/KG	0.012	U	5720	5835	648	0.25	0.25
SS101	ACS-SS101	VOC	Benzene		MG/KG	1.2	U	5638	6707		0	0.5
SS102	ACS-SS102	VOC	Benzene		MG/KG	0.01	U	5370	6707		0	0.5
SS103	SS103-AVG	VOC	Benzene		MG/KG	0.011	U	5171	6988		0	0.5
SS104	ACS-SS104	VOC	Benzene		MG/KG	0.011	U	5390	7183		0	0.5

LOCATION	FIELDID	TESTVER	ANALYTE	RESULT	UNITS	DETEC	DLQUA	EAST_	NORTH	ELEVAT	Depth top	Depth bot
SS105	ACS-SS105	VOC	Benzene		MG/KG	0.01	U	5577	7061		0	0.5
SS106	ACS-SS106	VOC	Benzene		MG/KG	0.011	U	5464	7297		0	0.5
SS107	ACS-SS107	VOC	Benzene		MG/KG	0.01	U	5700	7203		0	0.5
SS108	ACS-SS108	VOC	Benzene		MG/KG	0.011	U	5935	7093		0	0.5
SS109	ACS-SS109	VOC	Benzene		MG/KG	0.013	U	5451	6833		0	0.5
SS110	ACS-SS110	VOC	Benzene		MG/KG	0.011	U	5378	6789		0	0.5
SS111	ACS-SS111	VOC	Benzene		MG/KG	0.011	U	5710	7105		0	0.5
SS112	ACS-SS112	VOC	Benzene		MG/KG	0.011	U	5252	7008		0	0.5
SS113	ACS-SS113	VOC	Benzene		MG/KG	0.013	U	5996	7138		0	0.5
T-12-S	T12-S-IEA	VOC	Benzene		MG/KG	0.027	U	5400	6150	644	0.25	0.25
TP-01	ACS-TP01-03.5	VOC	Benzene		MG/KG	370	UJ	5225	5750	651	3.5	3.5
TP-01	ACS-TP01-06	VOC	Benzene		MG/KG	0.005	U	5225	5750	651	6	6
TP-02	ACS-TP02-03	VOC	Benzene	7100	MG/KG	0.005	J	5755.33	7147.48	638.5	3	3
TP-02	ACS-TP02-05	VOC	Benzene	48	MG/KG	0.005	J	5755.33	7147.48	638.5	5	5
TP-03	ACS-TP03-09	VOC	Benzene	34	MG/KG	0.005	J	5402.4	6826.16	641	9	9
TP-04	ACS-TP04-08	VOC	Benzene	1.6	MG/KG	0.005		5426.56	6889.23	641	8	8
TP-05	ACS-TP05-03	VOC	Benzene	170	MG/KG	0.005	J	5496.76	6955.22	641	3	3
TP-06	ACS-TP06-04	VOC	Benzene		MG/KG	320	UJ	5558.39	6761.24	641	4	4
TP-07	ACS-TP07-03	VOC	Benzene		MG/KG	40	UJ	5545.19	6813.93	641	3	3