

December 23, 2009

Mr. Scott Miller  
U.S. Environmental Protection Agency, Region IV  
4WD-SRTMB  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-3104

**VIA EMAIL**

Subject: November 2009 Monthly Progress Report

Dear Mr. Miller:

On behalf of Beazer East, Inc. (Beazer), attached is the November 2009 Monthly Progress Report for the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida, as required by 1991 Unilateral Administrative Order (UAO) and the 1994 UAO Amendment. If you have any questions or comments, please contact me.

Sincerely,



Gregory W. Council, P.E.  
Principal Engineer

cc: Kelsey Helton, Florida DEP  
John Mousa, Alachua County EPD  
Rick Hutton, Gainesville Regional Utilities  
John Herbert, Jones Edmunds  
Penny Salisbury, Koppers  
Linda Paul, Koppers  
Joyce Fankulewski, Koppers  
Mitchell Brouman, Beazer  
Mike Slenska, Beazer  
Donna Kopach, Beazer  
Jim Erickson, GeoTrans  
Guy Roemer, GeoTrans

**November 2009**  
**MONTHLY PROGRESS REPORT**  
**Cabot Carbon/Koppers Superfund Site**  
**Gainesville, Florida**

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**1. Description of actions taken to comply with the Unilateral Administrative Order (March 1991) and estimate of the percentage of the RD/RA completed:**

- Beazer's Operation and Maintenance (O&M) Contractor performed routine treatment plant operation and maintenance services for the ground water remedial system.
- Actions related to the Second (2006) Five-Year Review recommendations are being performed through 2009.

**2. Summary of results of sampling and tests and all other data during the month:**

- Instantaneous flow rates and totalizer volumes were measured in each extraction well.
- Passive NAPL recovery continues: 6.9 gallons of NAPL were bailed from Upper Hawthorn wells during the past month (2 recovery events). A total of 363.16 gallons have been bailed since the start of the NAPL recovery program on June 19, 2004. The two-week recovery schedule was started October 25, 2005. The attached table provides details of the NAPL recovery volumes by well and date.
- A total of 1,917,567 gallons of ground water were recovered by the Surficial Aquifer drains and extraction well system during the past month (system run time of 723 hours). The South Lagoon drain, the Process Area drain, and EW-16 recovered 453,397 gallons. The North Lagoon and Drip Track drains recovered 720,069 gallons. The perimeter extraction wells recovered 598,912 gallons. The Upper Floridan Interim Remedial Measure (IRM) wells FW-6 and FW-21B extracted 49,104 and 96,085 gallons, respectively. The water was treated and discharged to Gainesville Regional Utilities (GRU). The average recovery rate for the month was approximately 44.2 gallons per minute (gpm).

**3. Summary of all plans, reports, deliverables and procedures completed:**

- Completed monthly maintenance check.
- Inspected piezometers, extraction wells, piping, valves, treatment plant vessels and controls, buildings and grounds.
- Conducted Upper Floridan IRM sampling.
- Conducted Surficial Aquifer, Hawthorn, and Upper Floridan Groundwater sampling per the CGMSAP.
- Replaced flow meter components at EW-2, EW-5, and EW-10 and repair piping at EW-2.
- Cleaned pump, replaced 2 flowmeters due to silt, and installed ventilation fan at FW-6.
- Submitted *Upper Hawthorn DNAPL Recovery Pilot Study Report*

**4. Projected work for the next month (December 2009) with schedule considerations:**

- Please see the attached draft schedule. Note that this is a working schedule and is likely to

change.

- Measure instantaneous flow rates and totalizer volumes for each extraction well.
- Continue NAPL removal from Hawthorn Group wells on a two-week schedule.
- Continue Upper Floridan Aquifer IRM monitoring.
- Conduct additional on-Site and off-Site surface soil sampling.

**5. Summary of problems or potential problems and actual or anticipated delays encountered during the month:**

- None this reporting period.

**6. Actions being taken to rectify problems or delays:**

- None this reporting period.

**7. Supplemental information:**

- Please see the attached draft schedule. Note that this is a working schedule and is likely to change.

**8. Changes in personnel during this month:**

- None this reporting period.

Hawthorn Group Passive NAPL Recovery (Page 1 of 4)

Well Date	HG-9S		HG-10S		HG-10D		HG-11S		HG-12S		HG-12D		HG-15S		HG-16S		HG-16D		FW-6		Total Vol. removed (gal)
	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	
6/19/2004	0.25		2.42		0.17		2.74		1.04		1.13		NM		1.08		NM		NM		-
7/7/2004	0.4		3.25		Stain		2.44		Stain		Stain		ND		0.75		ND		ND		-
7/20/2004	NM	0.1	3.24	0.8	ND	0	3.08	0.8	1.74	0.2	NM	Trace	NM	NM	1.74	0.1	NM	NM	NM	NM	2
8/3/2004	ND	0	3.29	0.3	ND	0	2.78	0.3	2.39	Trace	ND	0	ND	0	1.38	0.65	ND	0	ND	0	1.25
8/10/2004	ND	Trace	1.2	0.3	ND	0	2.69	0.4	2.25	0.5	NM	0	ND	0	0.5	0.2	ND	0	ND	0	1.4
8/17/2004	NM	0	3.03	0.7	NM	0	3.16	0.8	2.37	0.6	NM	0	ND	0	1.4	0.6	ND	0	ND	0	2.7
8/24/2004	NM	0	3.01	0.6	NM	Trace	1.27	0.4	0.39	0.3	NM	Trace	ND	0	1.24	0.3	ND	0	ND	0	1.6
8/31/2004	ND	0	2.87	0.2	ND	0	1.36	0.1	1.32	0.1	ND	0	ND	0	NM	0.1	ND	0	ND	0	0.5
9/8/2004	NM	0	2.09	0.6	NM	0	2.03	0.5	1.38	0.5	NM	0	ND	0	NM	0	ND	0	ND	0	1.6
9/14/2004	ND	0	3.21	0.5	NM	0	0.61	0.1	2.49	0.4	MN	0	1.94	0.3	1.9	0.3	ND	0	ND	0	1.6
9/21/2004	NM	0	2.76	0.6	NM	0	0.5	0.1	0.68	0.1	ND	0	NM	0	2.24	0.1	ND	0	ND	0	0.9
9/28/2004	ND	0	2.64	0.5	ND	0	1.88	0.2	1.15	0.2	NM	0	0.82	0.1	NM	0	ND	0	ND	0	1
10/5/2004	ND	0	4.85	0.8	Stain	0	1.3	0.25	1.6	0.3	ND	0	0.37	0.06	2.09	0.3	ND	0	ND	0	1.71
10/12/2004	ND	0	3.46	0.4	ND	0	3.12	0.4	1.88	0.3	ND	0	1.97	0.1	Stain	0.1	ND	0	ND	0	1.3
10/20/2004	ND	0	2.33	0.4	ND	0	2.58	0.4	1.27	0.2	ND	0	1.4	0.2	Stain	0.1	ND	0	ND	0	1.3
10/26/2004	ND	0	3.65	0.6	ND	0	3.94	0.6	1.89	0.3	ND	0	2.37	0.4	3.48	0.6	ND	0	ND	0	2.5
11/2/2004	ND	0	2.8	0.5	ND	0	3	0.5	2.4	0.4	ND	0	1.07	0.2	2.15	0.3	ND	0	ND	0	1.9
11/9/2004	ND	0	2.74	0.5	ND	0	2.16	0.4	2.51	0.4	ND	0	1.69	0.3	1.26	0.2	ND	0	ND	0	1.8
11/16/2004	ND	0	2.57	0.4	ND	0	2.38	0.4	1.37	0.2	ND	0	0.5	0.1	1.11	0.2	ND	0	ND	0	1.3
11/23/2004	Stain	0	3.16	0.5	Slit. Stain	0	3.23	0.5	1.86	0.3	ND	0	1.4	0.2	1.85	0.3	ND	0	ND	0	1.8
11/30/2004	ND	0	2.21	0.4	ND	0	3.77	0.6	2.2	0.4	ND	0	1.74	0.3	2.35	0.4	ND	0	ND	0	2.1
12/8/2004	ND	0	3.08	0.5	ND	0	3.24	0.5	1.8	0.3	ND	0	1.23	0.2	1.84	0.3	ND	0	ND	0	1.8
12/14/2004	ND	0	3.34	0.5	ND	0	3.92	0.6	2.16	0.3	ND	0	1.48	0.2	2.33	0.4	ND	0	ND	0	2
1/5/2005	ND	0	3.57	0.6	ND	0	5.51	0.9	2.8	0.4	ND	0	2.37	0.4	3.59	0.6	ND	0	ND	0	2.9
1/11/2005	ND	0	2.68	0.4	ND	0	3.41	0.6	1.82	0.3	ND	0	1.77	0.3	1.89	0.3	ND	0	ND	0	1.9
1/20/2005	ND	0	2.82	0.5	ND	0	3.03	0.5	1.63	0.3	ND	0	1.46	0.2	1.62	0.2	ND	0	ND	0	1.7
1/27/2005	ND	0	3.14	0.5	ND	0	3.73	0.6	2.04	0.3	ND	0	1.9	0.3	2.12	0.4	ND	0	ND	0	2.1
2/8/2005	ND	0	3.44	0.5	ND	0	4.77	0.8	2.57	0.4	ND	0	2.35	0.4	3.42	0.6	ND	0	ND	0	2.7
2/15/2005	ND	0	3.5	0.6	ND	0	5.38	0.9	2.85	0.5	ND	0	2.56	0.4	3.21	0.5	ND	0	ND	0	2.9
2/22/2005	ND	0	2.67	0.4	ND	0	3.69	0.6	2.05	0.3	ND	0	1.8	0.3	1.49	0.2	ND	0	ND	0	1.8
3/1/2005	ND	0	3.12	0.5	ND	0	4.43	0.7	2.45	0.4	ND	0	2.16	0.3	2.69	0.4	ND	0	ND	0	2.3
3/11/2005	ND	0	2.67	0.4	ND	0	3.48	0.6	1.9	0.3	ND	0	1.5	0.2	1.95	0.3	ND	0	ND	0	1.8
3/15/2005	ND	0	2.6	0.4	ND	0	3.57	0.6	1.87	0.3	ND	0	1.39	0.2	1.82	0.3	ND	0	ND	0	1.8
3/22/2005	ND	0	2.26	0.4	ND	0	3.5	0.6	2.06	0.3	ND	0	2.05	0.3	1.29	0.2	ND	0	ND	0	1.8
3/29/2005	ND	0	2	0.3	ND	0	2.38	0.4	2.1	0.3	ND	0	2.33	0.4	2.91	0.5	ND	0	ND	0	1.9
4/6/2005	ND	0	2.61	0.4	ND	0	2.74	0.4	1.4	0.2	ND	0	1.92	0.3	1.38	0.2	ND	0	ND	0	1.5
4/14/2005	ND	0	3.24	0.5	ND	0	3.29	0.5	1.37	0.2	ND	0	1.92	0.3	1.33	0.2	ND	0	ND	0	1.7
4/19/2005	ND	0	2.64	0.4	ND	0	3.34	0.5	1.75	0.3	ND	0	1.66	0.3	1.84	0.3	ND	0	ND	0	1.8
4/27/2005	ND	0	1.76	0.3	ND	0	1.98	0.3	1.59	0.3	ND	0	2.13	0.4	1.42	0.2	ND	0	ND	0	1.5
5/3/2005	ND	0	2.3	0.4	ND	0	2.77	0.4	1.32	0.2	ND	0	1.69	0.3	1.04	0.2	ND	0	ND	0	1.5
5/12/2005	ND	0	2.61	0.4	ND	0	3.22	0.5	1.86	0.3	ND	0	1.71	0.3	1.85	0.3	ND	0	ND	0	1.8
5/17/2005	ND	0	2.3	0.4	ND	0	2.75	0.4	1.61	0.3	ND	0	0.83	0.1	1.63	0.3	ND	0	ND	0	1.5
5/24/2005	ND	0	2.15	0.4	ND	0	1.58	0.3	2.33	0.4	ND	0	1.34	0.2	1.89	0.3	ND	0	ND	0	1.6
6/1/2005	ND	0	2.62	0.4	ND	0	2.36	0.4	1.04	0.2	ND	0	1.91	0.3	1.02	0.2	ND	0	ND	0	1.5
6/9/2005	ND	0	1.6	0.3	ND	0	1.97	0.3	1.11	0.2	ND	0	1.31	0.2	1.43	0.2	ND	0	ND	0	1.2
6/15/2005	ND	0	1.3	0.2	ND	0	1.57	0.3	1.17	0.2	ND	0	1.54	0.2	1.42	0.2	ND	0	ND	0	1.1
6/22/2005	ND	0	1.81	0.3	ND	0	1.62	0.3	1.65	0.3	ND	0	1.64	0.3	1.6	0.3	ND	0	ND	0	1.5
6/28/2005	ND	0	3.01	0.5	ND	0	3.21	0.5	1.12	0.2	ND	0	1.93	0.3	1.33	0.2	ND	0	ND	0	1.7
7/7/2005	ND	0	3.06	0.5	ND	0	0.87	0.1	2	0.3	ND	0	1.73	0.3	1.63	0.3	ND	0	ND	0	1.5
7/13/2005	ND	0	2.37	0.4	ND	0	1.98	0.3	1.2	0.2	ND	0	0.79	0.1	1.3	0.2	ND	0	ND	0	1.2
7/19/2005	ND	0	2.12	0.3	ND	0	1.71	0.3	1.02	0.2	ND	0	0.64	0.1	1.02	0.2	ND	0	ND	0	1.1
7/26/2005	ND	0	1.43	0.2	ND	0	0.87	0.1	0.76	0.1	ND	0	1.84	0.3	1.23	0.2	ND	0	ND	0	0.9
8/2/2005	ND	0	1.37	0.2	ND	0	0.76	0.1	0.62	0.1	ND	0	1.85	0.3	1.2	0.2	ND	0	ND	0	0.9

Hawthorn Group Passive NAPL Recovery (Page 2 of 4)

Well Date	HG-9S		HG-10S		HG-10D		HG-11S		HG-12S		HG-12D		HG-15S		HG-16S		HG-16D		FW-6		Total Vol. removed (gal)
	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	
8/9/2005	ND	0	1.52	0.2	ND	0	0.65	0.1	0.98	0.2	ND	0	1.9	0.3	1.59	0.3	ND	0	ND	0	1.1
8/16/2005	ND	0	1.55	0.2	ND	0	0.62	0.1	0.86	0.1	ND	0	2.04	0.3	1.46	0.2	ND	0	ND	0	0.9
8/23/2005	ND	0	1.57	0.3	ND	0	0.83	0.1	1.06	0.2	ND	0	2.14	0.4	1.68	0.3	ND	0	ND	0	1.3
8/30/2005	ND	0	1.71	0.3	ND	0	1.17	0.2	1.11	0.2	ND	0	1.83	0.3	1.93	0.3	ND	0	ND	0	1.3
9/7/2005	ND	0	1.57	0.3	ND	0	1.1	0.2	1.03	0.2	ND	0	1.85	0.3	1.94	0.3	ND	0	ND	0	1.3
9/13/2005	ND	0	1.2	0.2	ND	0	1.02	0.2	0.76	0.1	ND	0	1.64	0.3	1.67	0.3	ND	0	ND	0	1.1
9/20/2005	ND	0	1.05	0.2	ND	0	0.96	0.2	0.61	0.1	ND	0	1.49	0.2	1.63	0.3	ND	0	ND	0	1
9/27/2005	ND	0	0.92	0.1	ND	0	1.17	0.2	1.22	0.2	ND	0	1.34	0.2	1.23	0.2	ND	0	ND	0	0.9
10/4/2005	ND	0	0.97	0.2	ND	0	1.06	0.2	1.16	0.2	ND	0	1.24	0.2	1.14	0.2	ND	0	ND	0	1
10/11/2005	ND	0	1.17	0.2	ND	0	0.99	0.2	1.06	0.2	ND	0	1.14	0.2	1.22	0.2	ND	0	ND	0	1
10/25/2005	ND	0	1.21	0.2	ND	0	1.17	0.2	1.1	0.2	ND	0	1.32	0.2	1.34	0.2	ND	0	ND	0	1
11/8/2005	ND	0	1.4	0.2	ND	0	1.24	0.2	1.22	0.2	ND	0	1.34	0.2	1.37	0.2	ND	0	ND	0	1
11/30/2005	ND	0	1.42	0.2	ND	0	1.28	0.2	1.17	0.2	ND	0	1.4	0.2	1.45	0.2	ND	0	ND	0	1
12/14/2005	ND	0	1.43	0.2	ND	0	1.33	0.2	2.95	0.5	ND	0	1.53	0.2	1.39	0.2	ND	0	ND	0	1.3
1/3/2006	ND	0	1.59	0.3	ND	0	1.57	0.3	3.15	0.5	ND	0	1.7	0.3	1.5	0.2	ND	0	ND	0	1.6
1/19/2006	ND	0	3.76	0.6	stain	0	3.25	0.5	3.98	0.6	ND	0	3.01	0.5	2.85	0.5	ND	0	ND	0	2.7
2/10/2006	ND	0	3.01	0.5	ND	0	2.68	0.4	3.65	0.6	ND	0	2.8	0.5	2.59	0.4	ND	0	ND	0	2.4
2/23/2006	ND	0	3.08	0.5	ND	0	2.73	0.4	3.2	0.5	ND	0	2.84	0.5	2.68	0.4	ND	0	ND	0	2.3
3/7/2006	ND	0	2.61	0.4	ND	0	2.68	0.4	3.46	0.6	ND	0	2.02	0.3	2.49	0.4	ND	0	ND	0	2.1
3/21/2006	ND	0	2.46	0.4	ND	0	2.55	0.4	3.35	0.5	ND	0	1.74	0.3	2.22	0.4	ND	0	ND	0	2
4/4/2006	ND	0	2.26	0.4	ND	0	1.67	0.3	1.87	0.3	ND	0	2.3	0.4	2.23	0.4	ND	0	ND	0	1.8
4/18/2006	ND	0	2.15	0.4	ND	0	2.38	0.4	2.74	0.4	ND	0	2.34	0.4	2.48	0.4	ND	0	ND	0	2
5/3/2006	ND	0	2.01	0.3	ND	0	2.46	0.4	2.5	0.4	ND	0	2.34	0.4	2.99	0.5	ND	0	ND	0	2
5/17/2006	ND	0	5.64	0.9	ND	0	5.64	0.9	6	1	ND	0	6.74	1.1	5.82	0.9	ND	0	ND	0	4.8
5/30/2006	ND	0	3.12	0.5	ND	0	2.75	0.4	3.06	0.5	ND	0	2.43	0.4	2.45	0.4	ND	0	ND	0	2.2
6/15/2006	ND	0	3.27	0.5	ND	0	2.87	0.5	3.12	0.5	ND	0	2.58	0.4	2.59	0.4	ND	0	ND	0	2.3
6/27/2006	ND	0	2.8	0.5	ND	0	1.87	0.3	2.55	0.4	ND	0	2.34	0.4	1.99	0.3	ND	0	ND	0	1.9
7/13/2006	ND	0	2.96	0.5	ND	0	2.08	0.3	2.67	0.4	ND	0	2.5	0.4	2.23	0.4	ND	0	ND	0	2
7/25/2006	ND	0	3.07	0.5	ND	0	1.98	0.3	2.73	0.4	ND	0	2.6	0.4	2	0.3	ND	0	ND	0	1.9
8/8/2006	ND	0	2.26	0.4	ND	0	1.98	0.3	2.31	0.4	ND	0	2.01	0.3	2.05	0.3	ND	0	ND	0	1.7
8/22/2006	ND	0	2.11	0.3	ND	0	2.18	0.4	2.36	0.4	ND	0	2.28	0.4	2.31	0.4	ND	0	ND	0	1.9
9/5/2006	ND	0	2.26	0.4	ND	0	2.14	0.3	2.56	0.4	ND	0	2.46	0.4	2.43	0.4	ND	0	ND	0	1.9
9/19/2006	ND	0	2.47	0.4	ND	0	2.28	0.4	2.62	0.4	ND	0	2.66	0.4	2.49	0.4	ND	0	ND	0	2
10/3/2006	ND	0	2.51	0.4	ND	0	2.31	0.4	2.59	0.4	ND	0	2.7	0.4	2.62	0.4	ND	0	ND	0	2
10/17/2006	ND	0	2.56	0.4	ND	0	2.33	0.4	2.62	0.4	ND	0	2.71	0.4	2.54	0.4	ND	0	ND	0	2
10/31/2006	ND	0	2.41	0.4	ND	0	2.24	0.4	2.56	0.4	ND	0	2.64	0.4	2.49	0.4	ND	0	ND	0	2
11/14/2006	ND	0	2.57	0.4	ND	0	2.29	0.4	2.67	0.4	ND	0	2.7	0.4	2.54	0.4	ND	0	ND	0	2
11/28/2006	ND	0	1.92	0.3	ND	0	2.19	0.4	2.12	0.4	ND	0	2.52	0.4	2.23	0.4	ND	0	ND	0	1.9
12/12/2006	ND	0	1.97	0.3	ND	0	2.24	0.4	2.16	0.4	ND	0	2.54	0.4	2.26	0.4	ND	0	ND	0	1.9
12/27/2006	ND	0	2.1	0.3	ND	0	2.38	0.4	2.22	0.4	ND	0	2.6	0.4	2.24	0.4	ND	0	ND	0	1.9
1/10/2007	ND	0	2.31	0.4	ND	0	2.64	0.4	2.36	0.4	ND	0	2.75	0.4	2.34	0.4	ND	0	ND	0	2
1/23/2007	ND	0	2.37	0.4	ND	0	2.79	0.4	2.42	0.4	ND	0	2.71	0.4	2.4	0.4	ND	0	ND	0	2
2/6/2007	ND	0	2.42	0.4	ND	0	2.74	0.4	2.46	0.4	ND	0	2.65	0.4	2.46	0.4	ND	0	ND	0	2
2/20/2007	ND	0	2.48	0.4	ND	0	2.67	0.4	2.47	0.4	ND	0	2.56	0.4	2.49	0.4	ND	0	ND	0	2
3/6/2007	ND	0	2.52	0.4	ND	0	2.61	0.4	2.45	0.4	ND	0	2.65	0.4	2.54	0.4	ND	0	ND	0	2
3/20/2007	ND	0	2.31	0.4	ND	0	2.6	0.4	2.45	0.4	ND	0	2.53	0.4	2.47	0.4	ND	0	ND	0	2
4/3/2007	ND	0	2.42	0.4	ND	0	2.55	0.4	2.5	0.4	ND	0	2.5	0.4	2.49	0.4	ND	0	ND	0	2
4/17/2007	ND	0	2.52	0.4	ND	0	2.61	0.4	2.45	0.4	ND	0	2.56	0.4	2.43	0.4	ND	0	ND	0	2
5/9/2007	ND	0	3.51	0.6	ND	0	4.14	0.7	3.65	0.6	ND	0	3.64	0.6	3.92	0.6	ND	0	ND	0	3.1
5/31/2007	ND	0	2.11	0.3	ND	0	3.63	0.6	3.2	0.5	ND	0	2.83	0.5	2.47	0.4	ND	0	ND	0	2.3
6/12/2007	ND	0	1.97	0.3	ND	0	2.77	0.4	2.62	0.4	ND	0	2.3	0.4	2.03	0.3	ND	0	ND	0	1.8
6/26/2007	stain	0	2.07	0.3	stain	0	3.63	0.6	4.05	0.7	ND	0	2.8	0.4	2.49	0.4	ND	0	ND	0	2.4
7/10/2007	Trace	0	1.81	0.5	ND	0	11.64	1	7.04	1.25	ND	0	8.87	1.25	4.73	0.5	ND	0	ND	0	4.5

Hawthorn Group Passive NAPL Recovery (Page 3 of 4)

Well	HG-9S		HG-10S		HG-10D		HG-11S		HG-12S		HG-12D		HG-15S		HG-16S		HG-16D		FW-6		Total Vol. removed (gal)
	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	
7/26/2007	stain	0	1.95	0.25	stain	0	12.45	2.75	7.45	1	ND	0	7.58	0.6	3.98	0.25	ND	0	ND	0	4.85
8/8/2007	stain	0	1.13	0.25	stain	0	12.38	2.5	7.05	1	ND	0	10.14	0.75	3.68	0.25	ND	0	ND	0	4.75
8/21/2007	stain	0	2.23	0.25	stain	0	10.34	2.25	5.98	1.25	ND	0	11.51	0.75	2.27	0.25	ND	0	ND	0	4.75
9/5/2007	stain	0	2	1.25	stain	0	7.7	1.5	5.31	1	ND	0	12.54	1	4.64	0.5	ND	0	ND	0	5.25
9/19/2007	stain	0	0.42	0.2	stain	0	2.98	0.4	2.97	0.3	ND	0	2.5	0.4	0.54	0.1	ND	0	ND	0	1.4
10/3/2007	stain	0	1.02	0.1	stain	0	7.6	1.5	4.53	0.75	ND	0	15.75	0.75	6.07	1.5	ND	0	ND	0	4.6
10/16/2007	stain	0	1.45	0.25	stain	0	6.46	0.5	4.61	0.25	ND	0	14.36	2	3.39	1	ND	0	ND	0	4
10/30/2007	stain	0	1.05	0.25	stain	0	5.18	0.6	3.12	0.5	ND	0	9.26	1.75	1.65	0.6	ND	0	ND	0	3.7
11/13/2007	stain	0	1.61	0.3	stain	0	5.04	0.8	3.01	0.4	ND	0	8.84	1.5	1.74	0.65	ND	0	ND	0	3.65
11/28/2007	stain	0	1.16	0.2	stain	0	5.24	0.85	2.95	0.4	ND	0	8.59	1.5	1.44	0.4	ND	0	ND	0	3.35
12/11/2007	stain	0	1.82	0.25	stain	0	4.88	0.65	2.98	0.4	ND	0	8.75	1.7	1.22	0.3	ND	0	ND	0	3.3
12/28/2007	stain	0	2.14	0.3	stain	0	5.4	0.8	3.39	0.5	ND	0	8.8	1.6	2.44	0.3	ND	0	ND	0	3.5
1/9/2008	stain	0	2.07	0.3	stain	0	4.81	0.8	3.76	0.5	ND	0	8.75	1.4	1.33	0.3	ND	0	ND	0	3.3
1/21/2008	stain	0	1.91	0.2	stain	0	4.64	0.6	2.86	0.4	ND	0	8.77	1.4	2.36	0.4	ND	0	ND	0	3
2/5/2008	stain	0	2.06	0.25	stain	0	5	1	3.18	0.5	ND	0	8.7	1.3	2.34	0.3	ND	0	ND	0	3.35
2/19/2008	ND	0	2.26	0.2	stain	0	4.45	0.9	3.26	0.5	ND	0	8.76	1.3	2.62	0.4	ND	0	ND	0	3.3
3/4/2008	stain	0	NM	0	NM	0	4.27	0.7	3.24	0.5	ND	0	8.24	1.25	2.53	0.3	ND	0	ND	0	2.75
3/20/2008	stain	0	NM	0	NM	0	4.5	0.9	3.16	0.4	ND	0	8.51	1.25	2.35	0.4	ND	0	ND	0	2.95
4/1/2008	stain	0	NM	0	NM	0	4.04	0.6	2.93	0.5	ND	0	7.95	1.2	2.42	0.4	ND	0	ND	0	2.7
4/16/2008	stain	0	NM	0	NM	0	4.43	0.7	2.72	0.4	ND	0	8.04	1.2	1.95	0.4	ND	0	ND	0	2.7
4/29/2008	stain	0	NM	0	NM	0	4.27	0.75	2.57	0.4	ND	0	8.29	1.1	1.56	0.4	ND	0	ND	0	2.65
5/13/2008	stain	0	NM	0	NM	0	4	0.75	2.79	0.5	ND	0	8.1	1.2	1.79	0.3	ND	0	ND	0	2.75
5/27/2008	stain	0	NM	0	NM	0	3.98	0.9	2.58	0.4	ND	0	7.9	1.2	1.57	0.3	ND	0	ND	0	2.8
6/10/2008	stain	0	NM	0	NM	0	3.84	0.7	2.72	0.4	ND	0	7.94	1.2	1.43	0.4	ND	0	ND	0	2.7
6/24/2008	stain	0	NM	0	NM	0	3.91	0.6	2.52	0.4	ND	0	7.76	1.1	1.42	0.3	ND	0	ND	0	2.4
7/10/2008	stain	0	NM	0	NM	0	3.99	0.7	3.15	0.4	ND	0	7.73	1	1.89	0.4	ND	0	ND	0	2.5
7/24/2008	stain	0	NM	0	NM	0	5.39	0.9	3.26	0.5	ND	0	8.38	1.1	1.83	0.3	ND	0	ND	0	2.8
8/7/2008	stain	0	NM	0	NM	0	4.38	0.75	2.85	0.3	ND	0	8.38	1.1	1.44	0.4	ND	0	ND	0	2.55
8/19/2008	stain	0	NM	0	NM	0	3.76	0.7	2.83	0.4	ND	0	8.27	1.1	1.16	0.3	ND	0	ND	0	2.5
9/3/2008	stain	0	stain	0	stain	0	4.34	0.7	2.83	0.4	ND	0	8.35	1.1	1.26	0.25	ND	0	ND	0	2.45
9/16/2008	stain	0	stain	0	stain	0	3.98	0.75	2.79	0.4	ND	0	8.6	1	1.32	0.25	ND	0	ND	0	2.4
9/30/2008	stain	0	0.59	0.1	stain	0	3.9	0.7	3.03	0.3	ND	0	7.97	1.1	1.39	0.3	ND	0	ND	0	2.5
10/14/2008	stain	0	1.17	0.1	stain	0	4.04	0.75	2.68	0.4	ND	0	7.96	1.1	1.52	0.3	ND	0	ND	0	2.65
10/28/2008	stain	0	1.37	0.2	stain	0	3.92	0.7	2.73	0.35	ND	0	7.88	1	1.4	0.3	ND	0	ND	0	2.55
11/11/2008	stain	0	1.48	0.2	stain	0	3.9	0.7	2.78	0.35	ND	0	8.15	1	1.33	0.25	ND	0	ND	0	2.5
11/25/2008	stain	0	1.35	0.2	stain	0	3.79	0.75	2.37	0.4	ND	0	7.84	1.1	1.04	0.25	ND	0	ND	0	2.7
12/13/2008	stain	0	1.43	0.2	stain	0	3.99	0.7	2.66	0.4	ND	0	7.97	1.2	1.13	0.2	ND	0	ND	0	2.7
12/23/2008	stain	0	1.38	0.2	stain	0	3.68	0.7	2.17	0.4	ND	0	8.34	0.8	1.12	0.2	ND	0	ND	0	2.3
1/6/2009	stain	0	1.18	0.2	stain	0	3.94	0.7	2.56	0.4	ND	0	8.11	1	1.29	0.2	ND	0	ND	0	2.5
1/20/2009	stain	0	1.44	0.25	stain	0	4.2	0.75	2.72	0.4	ND	0	8.07	0.9	0.94	0.2	ND	0	ND	0	2.5
2/3/2009	stain	0	3.77	0.2	stain	0	5.33	0.7	3.89	0.4	ND	0	9.33	0.9	3.29	0.25	ND	0	ND	0	2.45
2/18/2009	stain	0	1.49	0.25	stain	0	3.63	0.75	2.46	0.45	ND	0	7.96	0.9	1.32	0.2	ND	0	ND	0	2.55
3/4/2009	stain	0	1.99	0.25	stain	0	3.59	0.6	2.6	0.4	ND	0	7.74	1	1.03	0.2	ND	0	ND	0	2.45
3/17/2009	NM	0	NM	0	NM	0	NM	0	NM	0	NM	0	7.55	1	NM	0	NM	0	NM	0	1
3/18/2009	stain	0	1.89	0.25	stain	0	3.77	0.7	2.47	0.4	ND	0	6.18	0.65	0.97	0.15	ND	0	ND	0	2.15
3/31/2009	stain	0	1.81	0.2	stain	0	3.89	0.7	2.38	0.4	ND	0	6.94	0.9	0.94	0.1	ND	0	ND	0	2.3
4/14/2009	stain	0	1.5	0.3	stain	0	3.74	0.8	2.22	0.3	ND	0	6.6	0.9	1.09	0.1	ND	0	ND	0	2.4
5/1/2009	stain	0	1.54	0.3	stain	0	4.03	0.6	2.1	0.3	ND	0	6.74	0.75	1.27	0.2	ND	0	ND	0	2.15
5/15/2009	stain	0	1.6	0.25	stain	0	3.77	0.7	2.16	0.4	ND	0	7.2	0.75	1.02	0.2	ND	0	ND	0	2.3
5/27/2009	stain	0	1.41	0.3	stain	0	3.54	0.65	2.02	0.4	ND	0	6.75	0.95	0.82	0.3	ND	0	ND	0	2.6
6/9/2009	stain	0	1.5	0.3	stain	0	4	0.7	2.12	0.4	ND	0	6.99	1	0.86	0.3	ND	0	ND	0	2.7
6/25/2009	stain	0	1.54	0.3	stain	0	3.96	0.75	1.96	0.5	ND	0	7.43	0.8	0.63	0.25	ND	0	ND	0	2.6
7/9/2009	stain	0	1.71	0.3	stain	0	3.82	0.7	2.39	0.4	ND	0	7.13	0.9	0.91	0.1	ND	0	ND	0	2.4

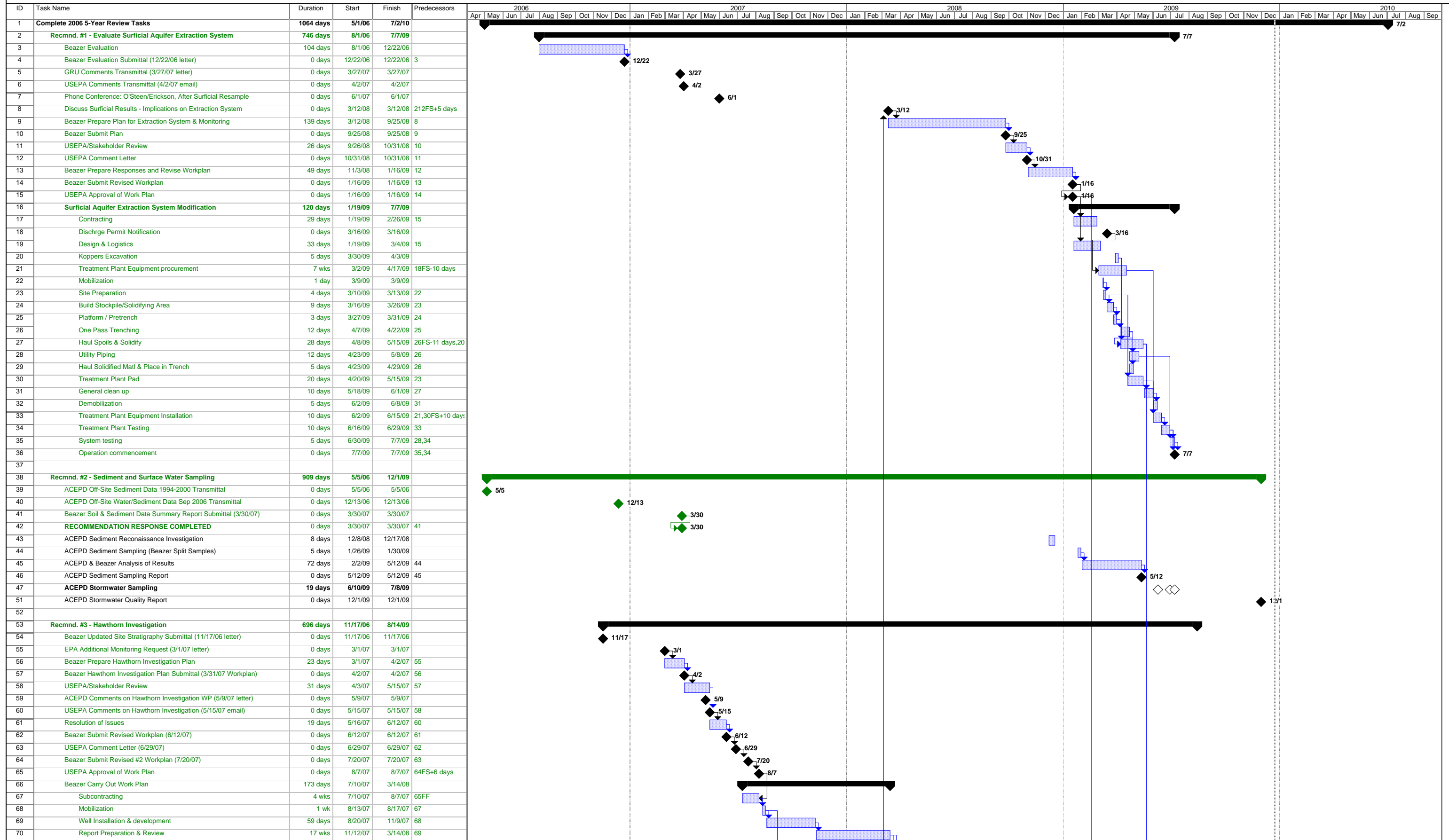
Hawthorn Group Passive NAPL Recovery (Page 4 of 4)

Well	HG-9S		HG-10S		HG-10D		HG-11S		HG-12S		HG-12D		HG-15S		HG-16S		HG-16D		FW-6		Total Vol. removed (gal)
	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	Thickness (ft)	Vol. Removed (gal)	
7/24/2009	stain	0	1.95	0.25	stain	0	3.98	0.7	3.25	0.3	ND	0	6.78	1	0.97	0.1	ND	0	ND	0	2.35
8/6/2009	stain	0	1.83	0.25	stain	0	3.42	0.8	2.95	0.5	ND	0	7.36	1.1	1.03	0.2	ND	0	ND	0	2.85
8/20/2009	stain	0	1.87	0.3	stain	0	3.43	0.8	2.42	0.5	ND	0	7.93	1.1	1.07	0.2	stain	0	ND	0	2.9
9/3/2009	stain	0	1.81	0.3	stain	0	2.84	0.8	2.06	0.3	ND	0	7.04	1	0.92	0.1	stain	0	ND	0	2.5
9/16/2009	stain	0	1.53	0.3	stain	0	2.7	0.7	2.23	0.35	ND	0	6.73	0.8	1.05	0.15	stain	0	ND	0	2.3
9/30/2009	stain	0	2.1	0.3	stain	0	2.66	0.6	2.51	0.4	ND	0	6.69	0.9	1.13	0.2	stain	0	ND	0	2.4
10/21/2009	stain	0	2.83	0.3	stain	0	2.69	0.65	2.96	0.5	ND	0	6.94	1.05	1.21	0.2	stain	0	ND	0	2.7
11/5/2009	stain	0	3.01	0.3	stain	0	2.91	0.6	2.86	0.6	ND	0	6.75	2.1	1.33	0.2	stain	0	ND	0	3.8
11/18/2009	stain	0	1.88	0.3	stain	0	2.78	0.6	2.78	0.4	ND	0	5.15	1.6	1.57	0.2	stain	0	ND	0	3.1
<b>Total Removed</b>		0.1		54.25		0.0		92.60		64.00		0.0		99.86		52.35		0.0		0.0	363.16

Notes:

- 6/19/04 measured with bailer
- 7/07/04 measured with weighted cotton string
- Other dates used Bailer & Interface Probe
- ND indicates NAPL not detected
- NM indicates measurement not taken
- Stain indicates that NAPL stained measurement probe, but thickness was unmeasurable
- Blank indicated no measured DNAPL removal
- 10/25/05 began two-week schedule
- 5/17/06 used low-flow pump (as opposed to the bailer)
- 7/10/07 RH performed bailing
- 11/13/07 New Heron Oil/Water Interface Probe (H01L/SM01L) now in use
- 3/4/08 through 8/25/08 Key Environmental pumping well running 8 ft away from HG-10S and HG-10D
- 12/23/08 Michael Toundas performed DNAPL recovery
- 2/3/2009 difficulties with obtaining DNAPL/water interface with new tape
- 3/18/09 - only performed DNAPL recovery at HG-15S
- starting on 8/20/09 - used peristaltic pump at HG-11S & HG-15S; stain observed at HG-16D and M-22B

**Cabot Carbon/Koppers Site: Combined Beazer USEPA Schedule (DRAFT FOR DISCUSSION)**



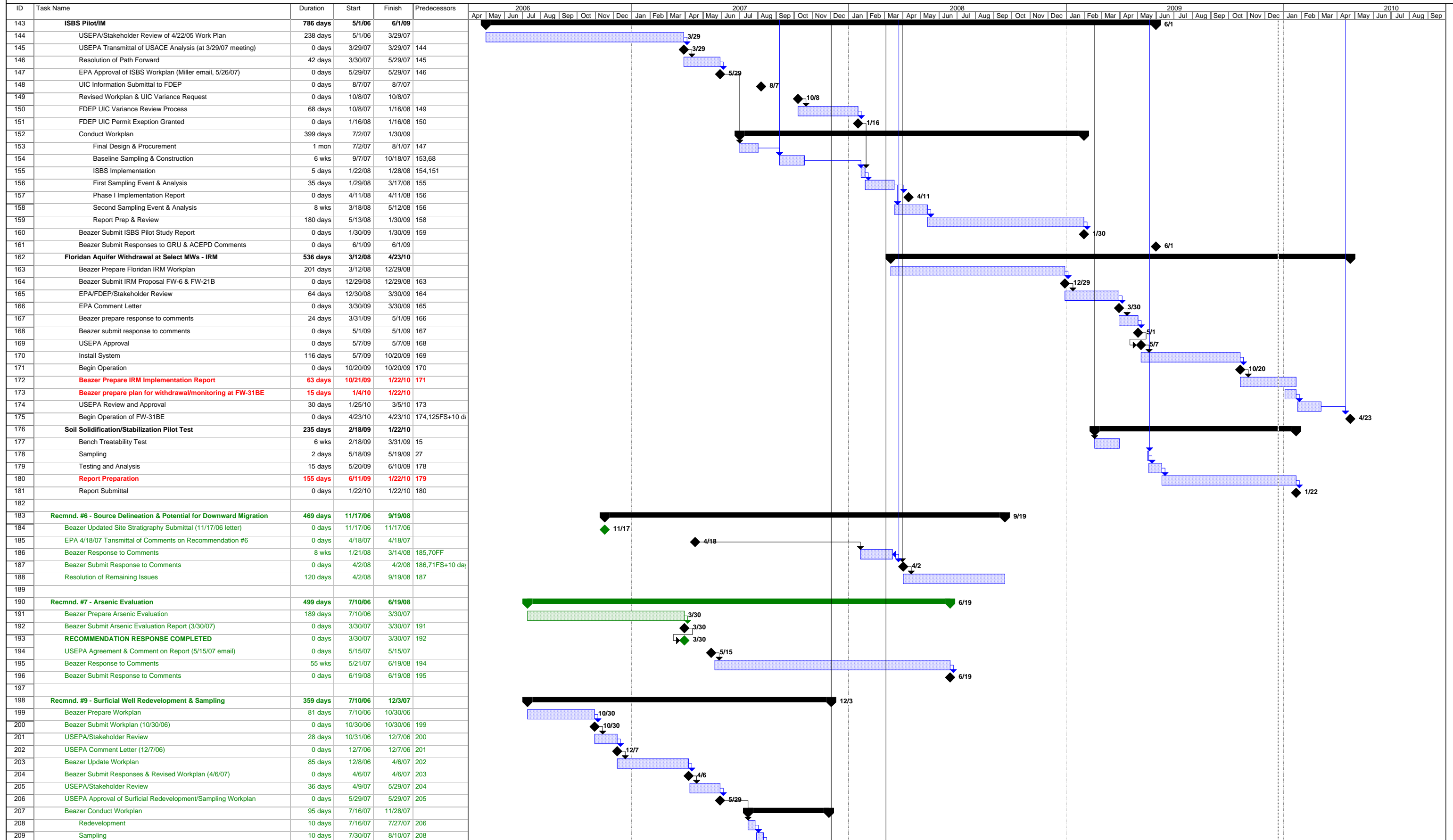
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 Current/In-Progress Item  
 Completed Major Task

Task [Bar] Milestone [Diamond] Summary [Arrow]





**Cabot Carbon/Koppers Site: Combined Beazer USEPA Schedule (DRAFT FOR DISCUSSION)**



Date: 12/23/09  
 Current/In-Progress Item  
 Completed Major Task

Task [Blue Bar] Milestone [Diamond] Summary [Thick Black Bar]



