



SDMS DocID 2138516

ORIGINAL



GLENN SPRINGS HOLDINGS, INC.

375 Armand Hammer Blvd., Pottstown, PA 19464

David Madeira
Facility Manager

Telephone (610) 327-4174

March 10, 2011

VIA OVERNIGHT COURIER

Mr. Tim Gallagher
USEPA Region III
Mail Call 3HS21
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Re: Progress Report No. 186 - February 2011
Occidental Chemical Corporation Site
Lower Pottsgrove Township - Montgomery County, Pennsylvania
EPA Unilateral Order No. III-94-26-DC
Administrative Settlement Agreement and Order on Consent CERC-03-2005-0090DC

Dear Mr. Gallagher:

This progress report is provided in accordance with Section XIII, A of the Administrative Order for the Remedial Design/Remedial Action and the Administrative Settlement Agreement and Order on Consent for Occidental Chemical Corporation's (OxyChem's) Pottstown facility.

1.0 PROJECT SCHEDULE

Table 1 presents the schedule and percent completion of the current remedial activities.

2.0 ACTIVITIES COMPLETED

2.1 GROUNDWATER:

- i) The total and average monthly flows from the individual recovery wells are summarized monthly for 2011 in Table 2. In February 2011, the average groundwater pumping rate was approximately 200 gpm.
- ii) During the last week of February, a decrease in the pumping yield of RW-A indicated fouling due to iron bacteria. On February 28, RW-A was turned off, "shocked" with five gallons of sodium hypochlorite and allowed to sit overnight. RW-A was brought back on-line on March 1 at a restored pumping rate.
- iii) Table 3 presents the analytical results for the 1st quarter 2011 sampling event completed in late-January/early-February. The monthly January recovery well sampling was completed as part of the PMP sampling event. TetraTech collected split samples of several wells as part of this event.

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AR300370

- iv) Table 4 presents the analytical results for surface water split samples collected on January 25, 2011. The surface water sampling was completed at the request of EPA.
- v) Table 5 presents the analytical results for the February recovery well sampling event.
- vi) On February 3, 2011, GSHI received EPA comments regarding the Step 2B Interim Recovery Well Optimization report dated December 16, 2010. The report documents the monitoring data collected during Step 2B (the shut down of RW-5). GSHI responded to the EPA's comments on February 24, 2011. A meeting was held at the Plant on February 28th to review the comments/responses with EPA. Based on EPA's comments and discussions at the meeting, GSHI will proceed with Step 3A (50% reduction of recovery well RW-10A).
- vii) The mass removal of contaminants of concern for the Groundwater Treatment System (GWTS) during January and February are presented in Table 6 and 7.
- viii) Attachment A presents groundwater contour maps for groundwater level measurements collected during February 2011 from all bedrock wells at the site. Wells used in the contouring for each map are noted as blue dots.
- ix) The Discharge Monitoring Report (DMR) for the Groundwater Treatment System (GWTS) (Outfall 005 in Permit #0010944) for January is presented in Attachment B. The sample results for volatile organic compounds (VOCs) for Outfall 005 were all within the required limits.

3.0 PLANNED ACTIVITIES

- i) GSHI will proceed with Step 3A (the 50% reduction in recovery well RW-10A flow rate).
- ii) GSHI will modify and resubmit the Step 2B Interim Recovery Well Optimization report as per discussion during site meeting with the EPA.

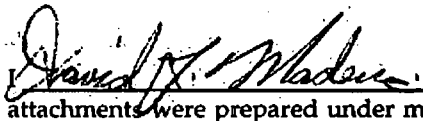
4.0 OTHER ACTIVITIES

- i) The voluntary pilot SVE system will be started as soon as warmer weather allows. The pilot SVE system was shut down in January as long periods below freezing temperatures caused freezing of condensation in the vacuum lines.

If you have any questions, please do not hesitate to call.

Sincerely,

David Madeira
Facility Manager

 certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to

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assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, 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.

Attachment

cc: Thomas Sheehan, PADEP
Ralph Boedeker, Tetra Tech NUS
John Garges, CRA
George Luxbacher, GSHI
Richard Passmore, GSHI

**TABLE 1 – PERCENT COMPLETE OF RD/RA SCHEDULED ACTIVITIES
PROGRESS REPORT NO. 186 – FEBRUARY 2011**

RD/RA Activity	Percent Complete	Expected Start	Expected Completion	Actual Completion
PROGRESS REPORT		Monthly		10th of month
GROUNDWATER				
EPA Approval of Recovery Well (RW) Optimization Work Plan	100	---	---	Mar. 27, 2007
Revise O&M Manual to Add Post-Stripper Liquid Phase Carbon Treatment and Discharge	100	---	---	Sept. 2007
Implement Step 1A of RW Optimization (Shutdown RW-04 & reduce RW-06 flow rate by 50%)	100	---	---	Dec. 2007
Submittal of Step 1A RW Interim Status Report	100	---	---	Dec. 20, 2007
EPA approval to commence Step 1B of RW Optimization	100	---	---	Oct. 2, 2008
Implement SVE System for 2008	100	---	---	Oct. 29, 2008
Implement Step 1B of RW Optimization (Shutdown RW-06)	100	---	---	Jan. 2008
Submittal of Step 1B RW Interim Status Report	100	---	---	Apr. 2, 2009
EPA approval to commence Step 2 of RW Optimization	100	---	---	June 8, 2009
Implement SVE System for 2009	100	---	---	Dec. 2009
Implement Step 2A of RW Optimization (Reduce RW-05 flow rate by 50%)	100	---	---	Feb. 2010
Submittal of Step 2A RW Interim Status Report	100	---	---	July 2010
Implement Step 2B of RW Optimization (Complete shutdown of RW-05)	100	---	---	July 1, 2010
Submittal of Step 2B RW Interim Status Report	100	---	---	Dec. 16, 2010
Conduct 1 st Quarter 2011 PMP groundwater sampling	100	---	---	Jan.-Feb. 2011
EPA comments on Step 2B RW Interim Status Report	100	---	---	Feb. 4, 2011
Response to EPA comments on Step 2B RW Interim Status Report	100	---	---	Feb. 28, 2011
EARTHEN LAGOONS				
AOC for FFS finalized	100	---	---	Oct. 7, 2005
EPA Approval of Final FFS Work Plan	100	---	---	Aug. 11, 2006
Identification of Candidate Technologies Memorandum	100	---	---	Dec 21, 2006
Draft FFS	100	---	---	Mar. 30, 2007
Response to EPA Comments on FFS and Final FFS Report	100	---	---	May 25, 2007
Submission of Remedial Design/Remedial Action Work Plan	100	---	---	Nov. 6, 2007
Response to EPA comments and Revised FFS Report	100	---	---	Feb. 20, 2008
EPA Review and Approval of FFS	100	---	---	Mar. 2008
EPA Review and Approval of RD/RA Work Plan	100	---	---	June 2008
Remediation	100	---	---	Sept. 26, 2008
Receive Closure Approval from EPA	100	---	---	Sept. 26, 2008
Final Inspection	100	---	---	Nov. 24, 2008
Post-Construction Report	100	---	---	Feb. 13, 2009
EPA comments on Post-Construction Report	100	---	---	Mar. 5, 2009
Response to EPA comments on Post-Construction Report	100	---	---	April 21, 2009
EPA Approval of Post-Construction Report	100	---	---	May 19, 2009
EPA Final Inspection of Earthen Lagoons	100	---	---	June 19, 2009

**TABLE 2
AVERAGE GROUNDWATER PUMPING RATES
PROGRESS REPORT 186 - FEBRUARY 2011**

	January-11		February-11		March-11		April-11		May-11		June-11	
	Total Gallons (x 1,000)	Average (gpm)	Total Gallons (x 1,000)	Average (gpm)	Total Gallons (x 1,000)	Average (gpm)	Total Gallons (x 1,000)	Average (gpm)	Total Gallons (x 1,000)	Average (gpm)	Total Gallons (x 1,000)	Average (gpm)
<u>Recovery Wells</u>												
<u>RW-4 Pumped Interval</u>												
RW-4	2,620	59	2,233	55		0		0		0		0
Subtotal, RW-4 Pumped Interval	2,620	59	2,233	55	-	0	-	0	-	0	-	0
<u>RW-ABC Pumped Interval</u>												
RW-A	220	5	234	6		0		0		0		0
RW-B	556	12	615	15		0		0		0		0
RW-C	403	9	468	12		0		0		0		0
RW-5	6	0	13	0		0		0		0		0
RW-8A	301	7	247	6		0		0		0		0
Subtotal, RW-ABC Pumped Interval	1,487	33	1,577	39	-	0	-	0	-	0	-	0
<u>RW-8 Pumped Interval</u>												
RW-8	1,089	24	923	23		0		0		0		0
RW-9A	742	17	941	23		0		0		0		0
RW-10A	2,016	45	1,796	45		0		0		0		0
Subtotal, RW-8 Pumped Interval	3,847	86	3,660	91	-	0	-	0	-	0	-	0
<u>RW-6 Pumped Interval</u>												
RW-6	6	0	9	0		0		0		0		0
RW-9	655	15	591	15		0		0		0		0
Subtotal, RW-6 Pumped Interval	661	15	600	15	-	0	-	0	-	0	-	0
<u>Total Recovery Wells</u>	8,615	193	8,070	200	-	0	-	0	-	0	-	0

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:			BR-1	BR-2	BR-2	BR-3	BR-4	BR-5	BR-6
Sample ID:			GW-9904-020911-38	GW-9904-012411-AH-03	GW-9904-012411-AH-04	GW-9904-012411-AH-06	GW-9904-012411-AH-10	GW-9904-012511-AH-17	GW-9904-020411-036
Sample Date:			2/9/2011	1/24/2011	1/24/2011	1/24/2011	1/24/2011	1/25/2011	2/4/2011
Parameters	Units	MCLs			(Duplicate)				
Volatile Organic Compounds									
cis-1,2-Dichloroethene	ug/L	70	6.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0
Ethylbenzene	ug/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	1.0 U
Styrene	ug/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.59 J
Vinyl chloride	ug/L	2	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Notes:									
J - Estimated value.									
U - Analyte was analyzed but not detected.									

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		BR-7	BR-8	BR-9	BR-10	BR-12	BR-13	BR-14
Sample ID:		GW-9904-020411-035	GW-9904-012511-AH-29	GW-9904-012511-AH-14	GW-9904-012511-AH-16	GW-9904-012411-AH-02	GW-9904-020911-AH-39	GW-9904-020911-AH-37
Sample Date:		2/4/2011	1/25/2011	1/25/2011	1/25/2011	1/24/2011	2/9/2011	2/9/2011
Parameters	Units							
Volatile Organic Compounds								
cis-1,2-Dichloroethene	ug/L	1.0 U	0.37 J	1.0 U	1.0 U	1.0 U	10.3	2.9
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	0.48 J	1.1	1.0 U	1.0 U	1.0 U	75.4	8.0
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Notes:								
J - Estimated value.								
U - Analyte was analyzed but not detected.								

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		BR-15	BR-16	BR-17	PW-1	PW-1R	PW-7	RW-4	RW-5
Sample ID:		GW-9904-020911-AH-40	GW-9904-020211-AH-32	GW-9904-012411-001	GW-9904-020911-48	GW-9904-020911-47	GW-9904-020411-034	GW-9904-012511-020	GW-9904-012511-021
Sample Date:		2/9/2011	2/2/2011	1/24/2011	2/9/2011	2/9/2011	2/4/2011	1/25/2011	1/25/2011
Parameters	Units								
Volatile Organic Compounds									
cis-1,2-Dichloroethene	ug/L	1.0 U	0.56 J	1.0 U	1.0 U	1.0 U	1.0 U	0.60 J	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.7	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	0.84 J	1.0 U	1.0 U	1.0 U	1.0 U	0.97 J	0.87 J
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Notes:									
J - Estimated value.									
U - Analyte was analyzed but not detected.									

TABLE 3

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		RW-6	RW-8	RW-8A	RW-9	RW-9A	RW-10A	RW-A	RW-B
Sample ID:		GW-9904-012511-022	GW-9904-012511-023	GW-9904-012511-024	GW-9904-012511-027	GW-9904-013111-033	GW-9904-012511-028	GW-9904-012511-025	GW-9904-012511-011
Sample Date:		1/25/2011	1/25/2011	1/25/2011	1/25/2011	1/31/2011	1/25/2011	1/25/2011	1/25/2011
Parameters	Units								
Volatile Organic Compounds									
cis-1,2-Dichloroethene	ug/L	1.0 U	5.5	0.87 J	0.80 J	16.8	3.4	2700	93.7
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	77.6
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	117
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	0.35 J	1.0 U	1.0 U	1.0 U	1.0 U	11.3	0.48 J
Trichloroethene	ug/L	1.0 U	3.0	1.2	1.0 U	10.5	2.7	2130	83.0
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	0.73 J	1.0 U	10 U	1.0 U
Notes:									
J - Estimated value.									
U - Analyte was analyzed but not detected.									

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		RW-C	RW-C	SBMW-1	SBMW-2	SBMW-3	TB-1B	TB-2
Sample ID:		GW-9904-012511-013	GW-9904-012511-015	GW-9904-012411-AH-12	GW-9904-012511-AH-19	GW-9904-012511-AH-18	GW-9904-021011-AH-51	GW-9904-020911-AH-46
Sample Date:		1/25/2011	1/25/2011 (Duplicate)	1/24/2011	1/25/2011	1/25/2011	2/10/2011	2/9/2011
Parameters	Units							
Volatile Organic Compounds								
cis-1,2-Dichloroethene	ug/L	11.4	11.6	0.43 J	7.3	0.47 J	138	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	0.78 J	1.0 U
Trichloroethene	ug/L	11.2	11.3	1.5	9.7	1.4	218	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J	1.0 U
Notes:								
J - Estimated value.								
U - Analyte was analyzed but not detected.								

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		TB-2A	TB-4	TB-5	TB-5A	TB-6	TB-7	TB-7A
Sample ID:		GW-9904-021011-AH-49	GW-9904-012511-026	GW-9904-012611-AH-031	GW-9904-012611-AH-030	GW-9904-012411-009	GW-9904-020911-AH-44	GW-9904-020911-AH-42
Sample Date:		2/10/2011	1/25/2011	1/26/2011	1/26/2011	1/24/2011	2/9/2011	2/9/2011
Parameters	Units							
Volatile Organic Compounds								
cis-1,2-Dichloroethene	ug/L	104	1.0 U	32.2	42.4	1.0 U	0.52 J	0.55 J
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	0.75 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	3.6	1.0 U	0.63 J	0.48 J	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	3.3	0.29 J	14.0	36.9	0.71 J	0.84 J	0.67 J
Vinyl chloride	ug/L	83.9	1.0 U	2.6	1.0 U	1.0 U	1.0 U	1.0 U
Notes:								
J - Estimated value.								
U - Analyte was analyzed but not detected.								

ANALYTICAL RESULTS SUMMARY
SEMI ANNUAL PMP SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY FEBRUARY 2011

Sample Location:		TB-7A	TB-8	TB-9	TB-10	TB-11	TB-12	TB-13
Sample ID:		GW-9904-020911-AH-43	GW-9904-020911-45	GW-9904-012411-AH-08	GW-9904-012411-005	GW-9904-020911-41	GW-9904-012411-007	GW-9904-021011-AH-50
Sample Date:		2/9/2011	2/9/2011	1/24/2011	1/24/2011	2/9/2011	1/24/2011	2/10/2011
		(Duplicate)						
Parameters	Units							
Volatile Organic Compounds								
cis-1,2-Dichloroethene	ug/L	0.67 J	1.0 U	1.0 U	0.79 J	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	0.63 J	1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Notes:								
J - Estimated value.								
U - Analyte was analyzed but not detected.								

ANALYTICAL RESULTS SUMMARY
SURFACE WATER SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY 2011

Sample Location:		OUTFALL 005 Discharge	OUTFALL 005 Headwall	OUTFALL 005 Midpoint
Sample ID:		SW-9904-012511-003	SW-9904-012511-001	SW-9904-012511-002
Sample Date:		1/25/2011	1/25/2011	1/25/2011
Parameters	Units			
Volatile Organic Compounds				
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	5.0 U	5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	5.0 U	5.0 U	5.0 U
Acetone	ug/L	5.0 U	5.0 U	5.0 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	2.0 U	2.0 U	2.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (Freon 113)	ug/L	2.0 U	2.0 U	2.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	1.0 U	1.0 U	1.0 U
Metals				
Aluminum	ug/L	528	200 U	200 U
Antimony	ug/L	6.0 U	6.0 U	6.0 U
Arsenic	ug/L	3.0 U	3.0 U	3.0 U
Barium	ug/L	200 U	200 U	200 U
Beryllium	ug/L	1.0 U	1.0 U	1.0 U
Cadmium	ug/L	3.0 U	3.0 U	3.0 U
Calcium	ug/L	54900	59400	59500

**ANALYTICAL RESULTS SUMMARY
SURFACE WATER SAMPLING
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
JANUARY 2011**

<i>Sample Location:</i>		<i>OUTFALL 005 Discharge</i>	<i>OUTFALL 005 Headwall</i>	<i>OUTFALL 005 Midpoint</i>
<i>Sample ID:</i>		SW-9904-012511-003	SW-9904-012511-001	SW-9904-012511-002
<i>Sample Date:</i>		1/25/2011	1/25/2011	1/25/2011
<i>Parameters</i>	<i>Units</i>			
Chromium	ug/L	10 U	10 U	10 U
Cobalt	ug/L	50 U	50 U	50 U
Copper	ug/L	10 U	10 U	10 U
Iron	ug/L	621	100 U	100 U
Lead	ug/L	3.3	3.0 U	3.0 U
Magnesium	ug/L	18500	19800	19800
Manganese	ug/L	46.0	15 U	15 U
Mercury	ug/L	0.20 U	0.20 U	0.20 U
Nickel	ug/L	10.0	10 U	10 U
Potassium	ug/L	10000 U	10000 U	10000 U
Selenium	ug/L	10 U	10 U	10 U
Silver	ug/L	10 U	10 U	10 U
Sodium	ug/L	32500	36300	35400
Thallium	ug/L	2.0 U	2.0 U	2.0 U
Vanadium	ug/L	50 U	50 U	50 U
Zinc	ug/L	20 U	20 U	20 U
<i>General Chemistry</i>				
Cyanide (total)	mg/L	0.010 U	0.010 U	0.010 U
Notes:				
U - Analyte was analyzed but not detected.				

TABLE 5

ANALYTICAL RESULTS SUMMARY
MONTHLY RECOVERY WELLS
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
FEBRUARY 2011

Sample Location:			RW-4	RW-5	RW-6	RW-8	RW-8A	RW-9	
Sample ID:			GW-9904-021411-RW4	GW-9904-021411-RW5	GW-9904-021411-RW6	GW-9904-021411-RW8	GW-9904-021411-RW8A	GW-9904-021411-RW9	
Sample Date:			2/14/2011	2/14/2011	2/14/2011	2/14/2011	2/14/2011	2/14/2011	
Parameters	Units	MCLs							
Volatile Organic Compounds									
cis-1,2-Dichloroethene	ug/L	70	0.80 J	1.0 U	1.0 U	5.4	0.60 J	0.75 J	
Ethylbenzene	ug/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Styrene	ug/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Tetrachloroethene	ug/L	5	7.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,2-Dichloroethene	ug/L	100	1.0 U	1.0 U	1.0 U	0.40 J	1.0 U	1.0 U	
Trichloroethene	ug/L	5	0.97 J	0.65 J	1.0 U	2.6	0.77 J	1.0 U	
Vinyl chloride	ug/L	2	1.0 U	1.0 U	1.0 U	0.56 J	1.0 U	1.0 U	
Notes:									
J - Estimated value.									
U - Analyte was analyzed but not detected.									

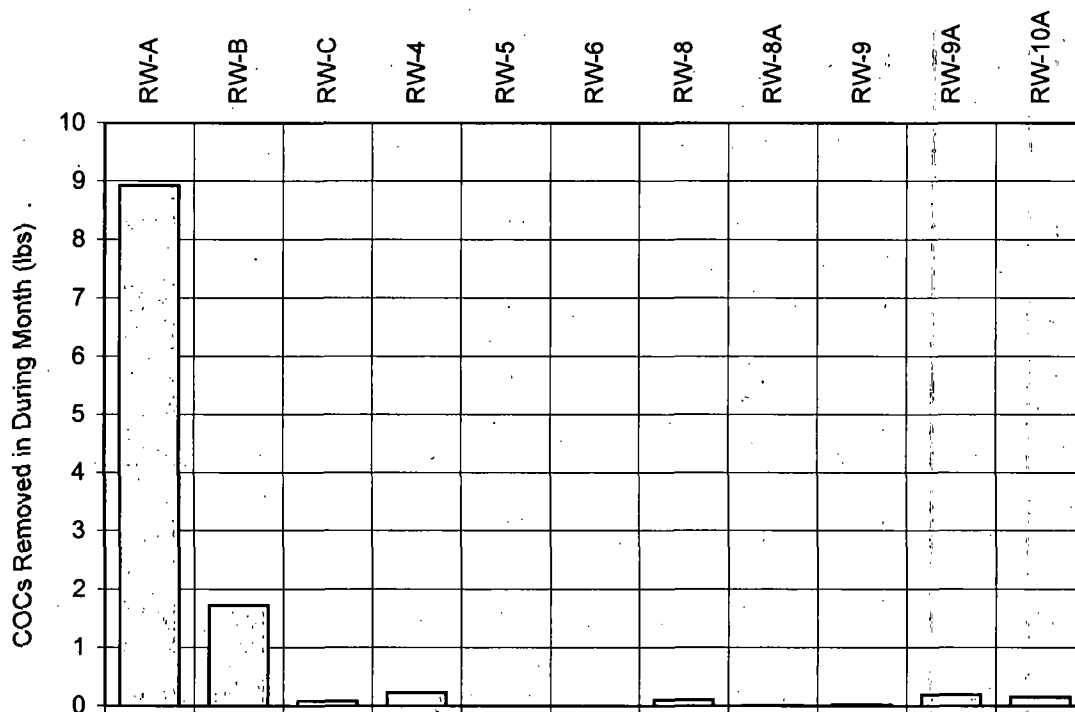
TABLE 5

ANALYTICAL RESULTS SUMMARY
MONTHLY RECOVERY WELLS
GLENN SPRINGS HOLDINGS, INC.
POTTSTOWN
FEBRUARY 2011

			RW-9A	RW-10A	RW-A	RW-B	RW-C
Sample Location:							
Sample ID:			GW-9904-021411-RW9A	GW-9904-021411-RW10A	GW-9904-021411-RWA	GW-9904-021411-RWB	GW-9904-021411-RWC
Sample Date:			2/14/2011	2/14/2011	2/14/2011	2/14/2011	2/14/2011
Parameters	Units	MCLs					
Volatile Organic Compounds							
cis-1,2-Dichloroethene	ug/L	70	14.8	3.3	3100	130	13.4
Ethylbenzene	ug/L	700	1.0 U	1.0 U	160	260	1.0 U
Styrene	ug/L	100	1.0 U	1.0 U	34.8	454	1.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	20 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	100	1.0 U	1.0 U	9.6 J	0.61 J	1.0 U
Trichloroethene	ug/L	5	8.9	2.5	2260	101	11.6
Vinyl chloride	ug/L	2	0.72 J	1.0 U	20 U	0.76 J	1.0 U
Notes:							
J - Estimated value.							
U - Analyte was analyzed but not detected							

TABLE 6
RECOVERY WELL PUMPING RATES AND COC MASS RECOVERY
JANUARY 2011
Occidental Chemical Corporation
Pottstown, Pennsylvania

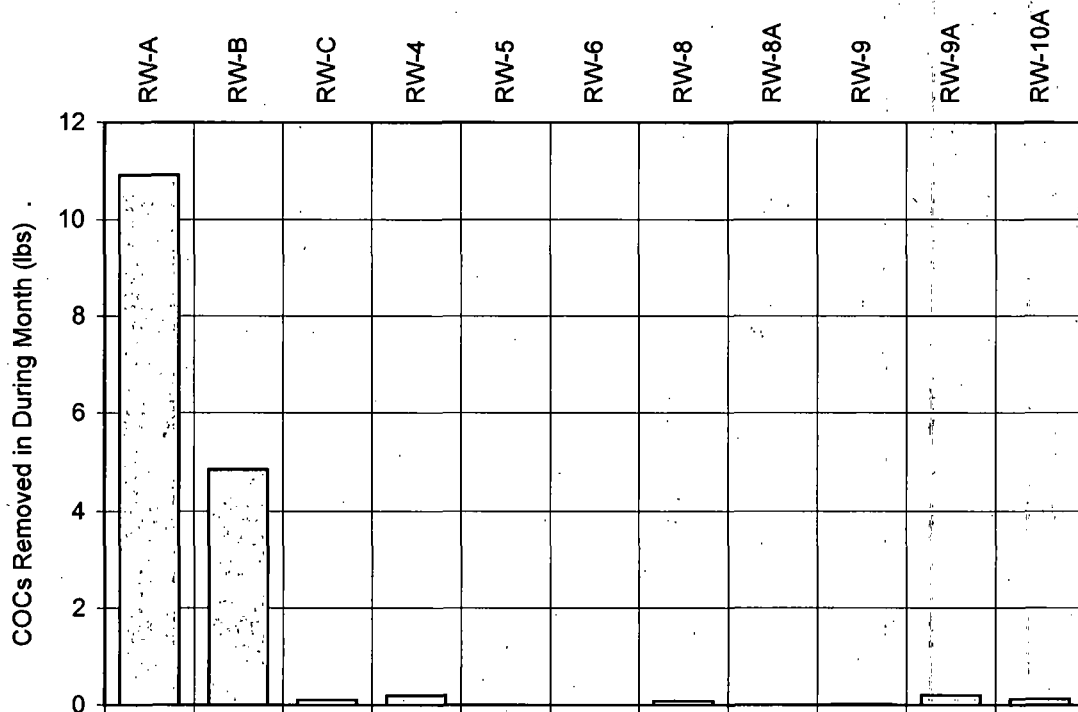
Recovery Well	Volume Pumped (thousand gallons)	Average Total COC* Conc. (mg/L)	COC Mass Removed (lbs)
RW-A	220	4.861	8.920
RW-B	556	0.373	1.729
RW-C	403	0.025	0.085
RW-4	2,620	0.010	0.225
RW-5	6	0.004	0.000
RW-6	6	0.004	0.000
RW-8	1,089	0.011	0.099
RW-8A	301	0.005	0.012
RW-9	655	0.004	0.021
RW-9A	742	0.030	0.186
RW-10A	2,016	0.009	0.145
Total	8,614		11.42



* COCs include: trans-1,2-DCE; ethylbenzene; styrene; TCE; vinyl chloride; and cis 1,2-DCE. Concentrations of COCs that were non-detects were assumed to be one-half of the detection limit.

TABLE 7
RECOVERY WELL PUMPING RATES AND COC MASS RECOVERY
FEBRUARY 2011
Occidental Chemical Corporation
Pottstown, Pennsylvania

Recovery Well	Volume Pumped (thousand gallons)	Average Total COC* Conc. (mg/L)	COC Mass Removed (lbs)
RW-A	234	5.584	10.898
RW-B	615	0.947	4.857
RW-C	468	0.028	0.107
RW-4	2,233	0.011	0.201
RW-5	13	0.004	0.000
RW-6	9	0.004	0.000
RW-8	923	0.011	0.081
RW-8A	247	0.004	0.008
RW-9	591	0.004	0.019
RW-9A	941	0.026	0.207
RW-10A	1,796	0.008	0.124
Total	8,070		16.50



* COCs include: trans-1,2-DCE; ethylbenzene; styrene; TCE; vinyl chloride; and cis 1,2-DCE. Concentrations of COCs that were non-detects were assumed to be one-half of the detection limit.

ATTACHMENT A

GROUNDWATER CONTOUR MAPS
FEBRUARY 2011

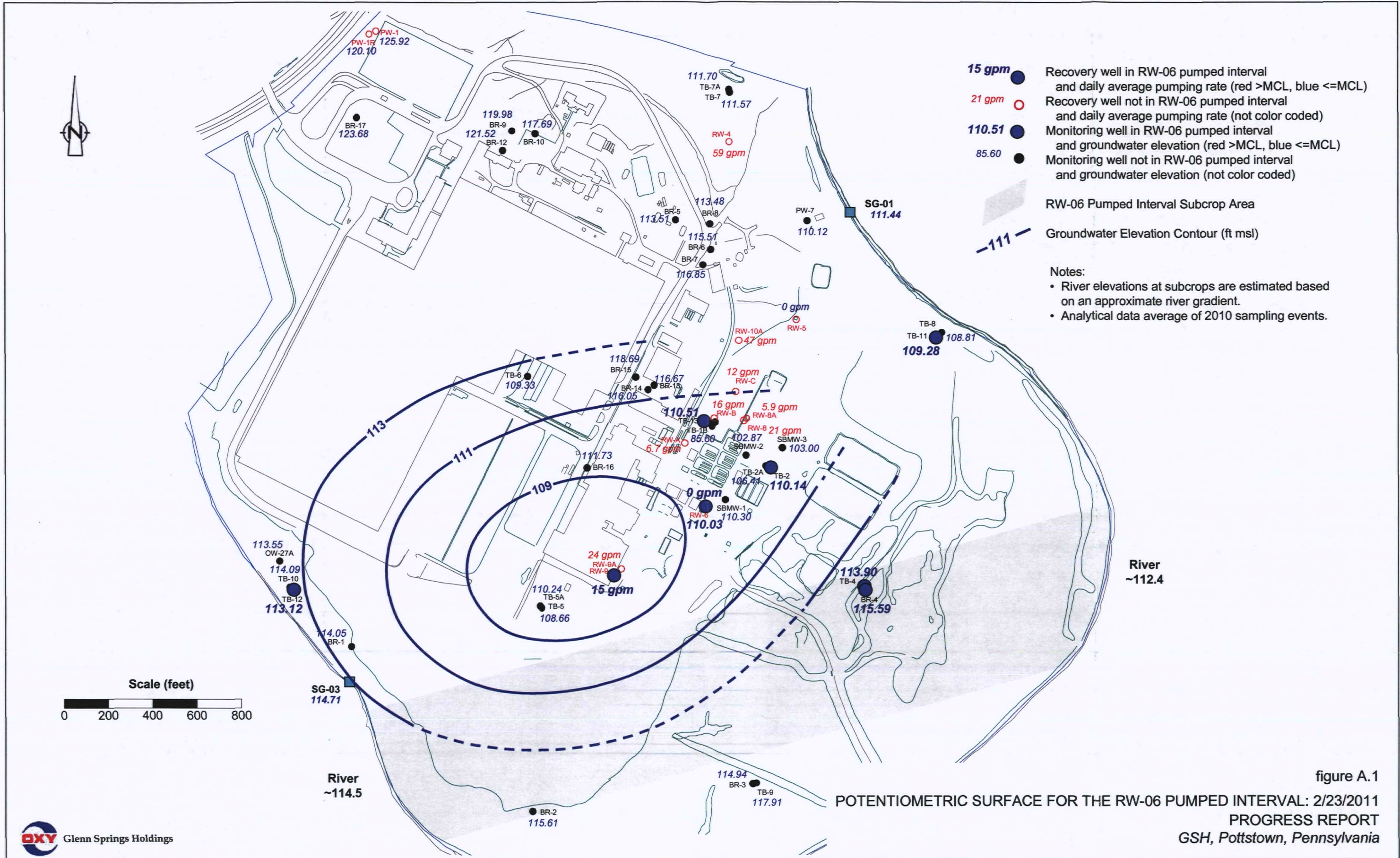


figure A.1
 POTENTIOMETRIC SURFACE FOR THE RW-06 PUMPED INTERVAL: 2/23/2011
 PROGRESS REPORT
 GSH, Pottstown, Pennsylvania

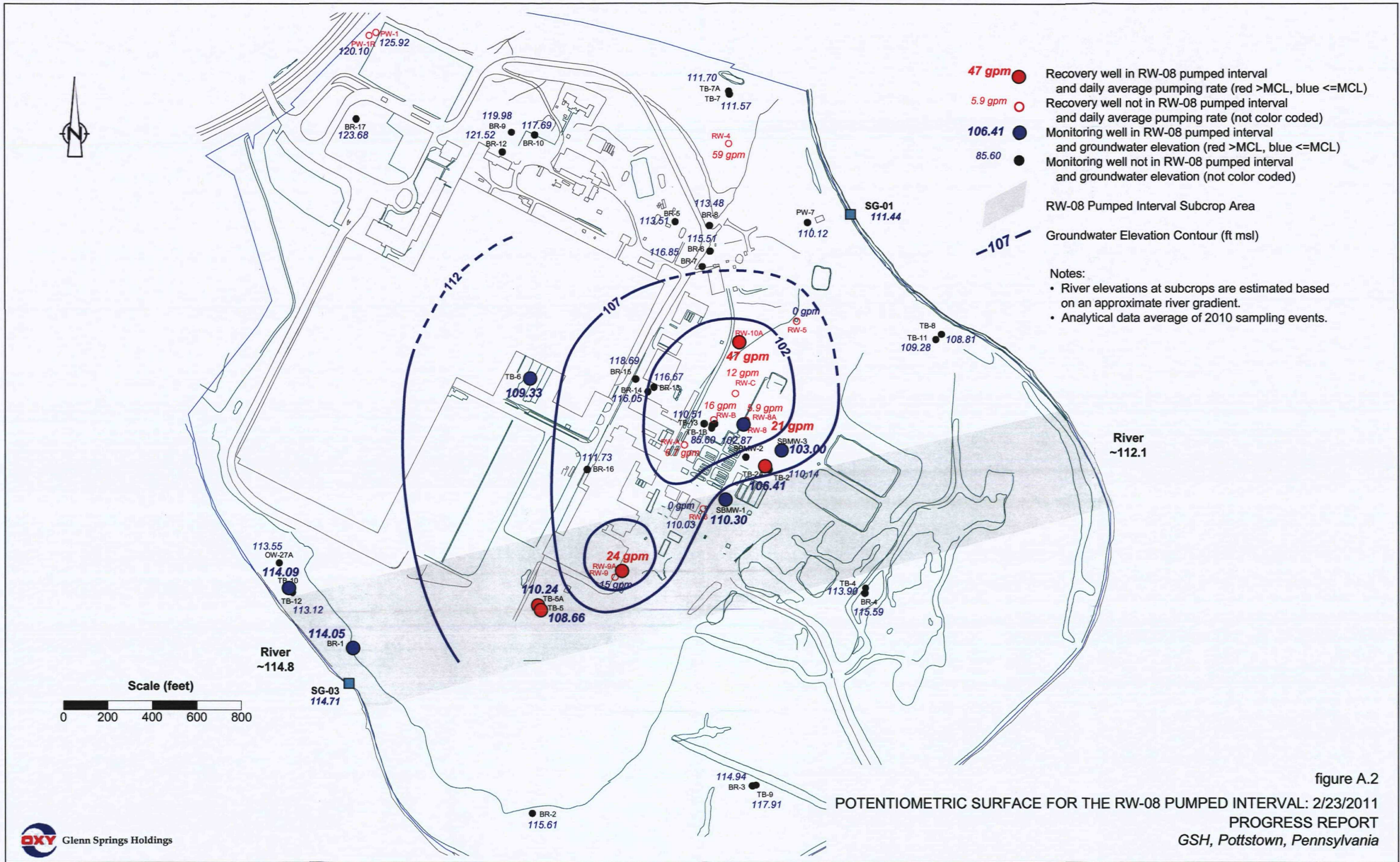
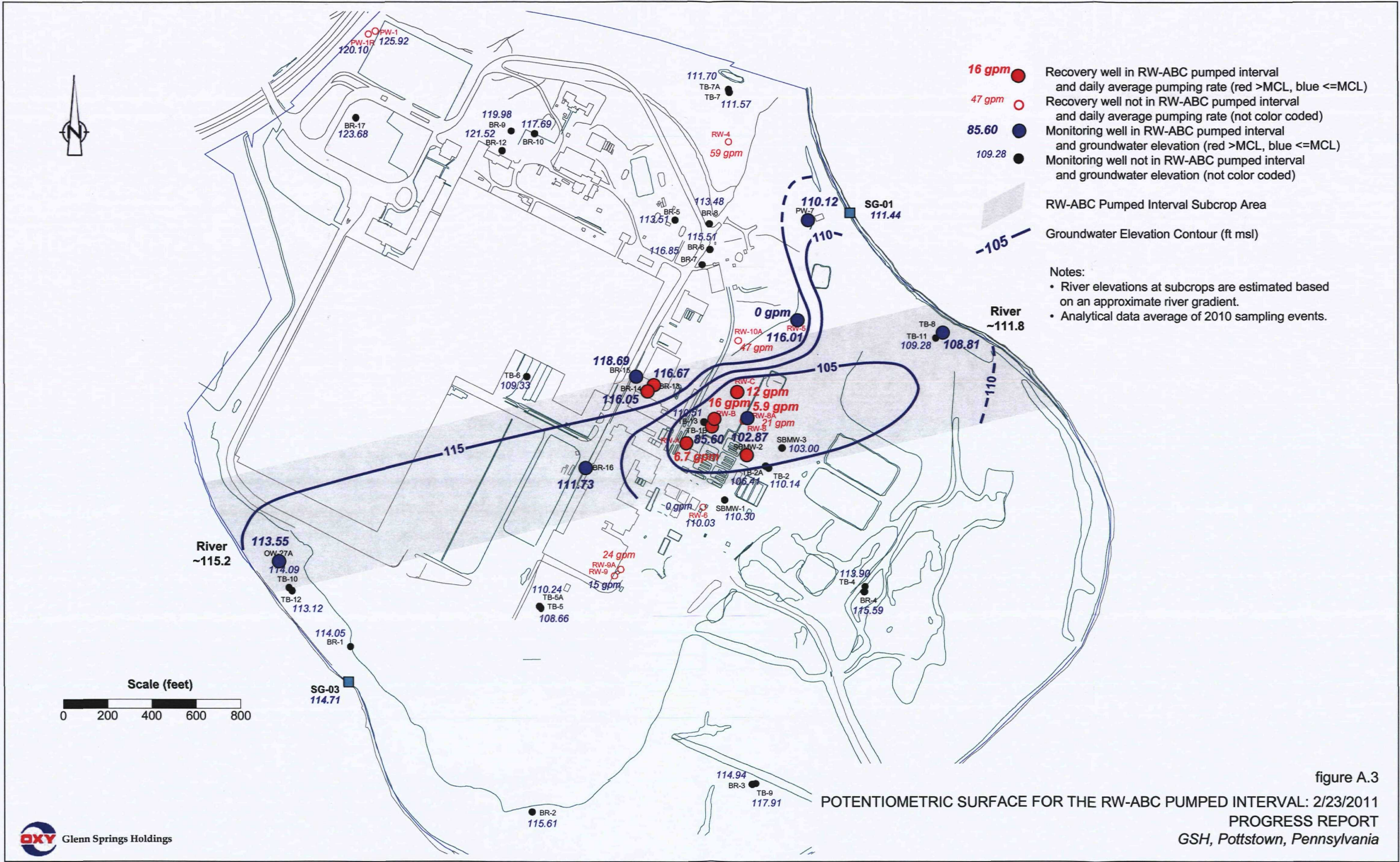


figure A.2
 POTENTIOMETRIC SURFACE FOR THE RW-08 PUMPED INTERVAL: 2/23/2011
 PROGRESS REPORT
 GSH, Pottstown, Pennsylvania



ATTACHMENT B
DISCHARGE MONITORING REPORTS
FEBRUARY 2011

PERMITTEE NAME ADDRESS (include Facility Name / Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

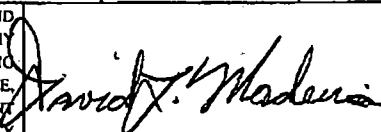
PRIMARY FACILITY: OCCIDENTAL CHEMICAL GROUNDWATER REMEDIATION SITE

CLIENT: GLENN SPRINGS HOLDINGS, INC.	PA0010944	005					
ADDRESS: 5005 LBJ FREEWAY, STE 1350	PERMIT NUMBER	DISCHARGE NUMBER					
DALLAS, TX 75244	MONITORING PERIOD						
SITE ADDRESS: 375 ARMAND HAMMER BOULEVARD	YEAR	MO	DAY	TO	YEAR	MO	DAY
MUNICIPALITY: LOWER POTTS GROVE TOWNSHIP	2011	02	01		2011	02	28
COUNTY: MONTGOMERY							

Southeast Region
Facsimile

NOTE: Read instructions before completing this form

Parameter		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	INST. MINIMUM	MONTHLY AVERAGE	INST. MAXIMUM	UNITS			
FLOW	Sample Measurement	0.2972	0.3424	mgd	XXXX	XXXX	XXXX		0	DAILY	RECORDED
	Permit Requirement	MONITOR/REPORT	MONITOR/REPORT	XXXX	XXXX	XXXX	XXXX	XXXX		DAILY	RECORDED
pH	Sample Measurement	XXXX	XXXX		7.45	XXXX	7.45		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	6.0	XXXX	INST. MAX. 9.0	STD UNITS		1/MONTH	GRAB
TETRACHLOROETHENE	Sample Measurement	XXXX	XXXX		XXXX	< 0.004	< 0.004		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB
TRANS-1,2-DICHLOROETHENE	Sample Measurement	XXXX	XXXX		XXXX	< 0.001	< 0.001		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB
CIS-1,2-DICHLOROETHENE	Sample Measurement	XXXX	XXXX		XXXX	< 0.001	< 0.001		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	0.00275	0.0041	MG/L		1/MONTH	GRAB
CHLOROFORM	Sample Measurement	XXXX	XXXX		XXXX	< 0.001	< 0.001		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB
TRICHLOROETHENE (TCE)	Sample Measurement	XXXX	XXXX		XXXX	< 0.001	< 0.001		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	0.00445	0.0070	MG/L		1/MONTH	GRAB
ETHYLBENZENE	Sample Measurement	XXXX	XXXX		XXXX	< 0.007	< 0.007		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER GEORGE LUXBACHER VP OPERATIONS-GSHI TYPE OR PRINT	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. §1001 AND 33 U.S.C. §1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years)	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE
			610-327-4174	2011 03 04

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) PERMIT EXPIRES August 31, 2014 SUBMIT RENEWAL BY February 28, 2014

PERMITTEE NAME ADDRESS (include Facility Name / Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PRIMARY FACILITY: OCCIDENTAL CHEMICAL GROUNDWATER REMEDIATION SITE

CLIENT: GLENN SPRINGS HOLDINGS, INC.	PA0010944	005					
ADDRESS: 5005 LBJ FREEWAY, STE 1350	PERMIT NUMBER	DISCHARGE NUMBER					
DALLAS, TX 75244	MONITORING PERIOD						
SITE ADDRESS: 375 ARMAND HAMMER BOULEVARD	YEAR	MO	DAY	TO	YEAR	MO	DAY
MUNICIPALITY: LOWER POTTS GROVE TOWNSHIP	2011	02	01		2011	02	28
COUNTY: MONTGOMERY							

Southeast Region
Facsimile

NOTE: Read instructions before completing this form

Parameter		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	INST. MINIMUM	MONTHLY AVERAGE	INST. MAXIMUM				UNITS
STYRENE	Sample Measurement	XXXX	XXXX		XXXX	< 0.001	< 0.001		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB
PHENOLS, TOTAL	Sample Measurement	XXXX	XXXX		XXXX	0.012	0.012		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	MONITOR/REPORT	MONITOR/REPORT	MG/L		1/MONTH	GRAB
VINYL CHLORIDE	Sample Measurement	XXXX	XXXX		XXXX	< 0.002	< 0.002		0	1/MONTH	GRAB
	Permit Requirement	XXXX	XXXX	XXXX	XXXX	NON-DETECT	NON-DETECT	MG/L		1/MONTH	GRAB
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER GEORGE LUXBACHER, VP OPERATIONS-GSHI TYPE OR PRINT	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. §1001 AND 33 U.S.C. §1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years)	TELEPHONE 610-327-4174 AREA CODE NUMBER	DATE 2011 03 04 YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) PERMIT EXPIRES August 31, 2014 SUBMIT RENEWAL BY February 28, 2014