Appendix A:
Potentiometric Maps – Former Building 028J Area
May 2007 to October 2008

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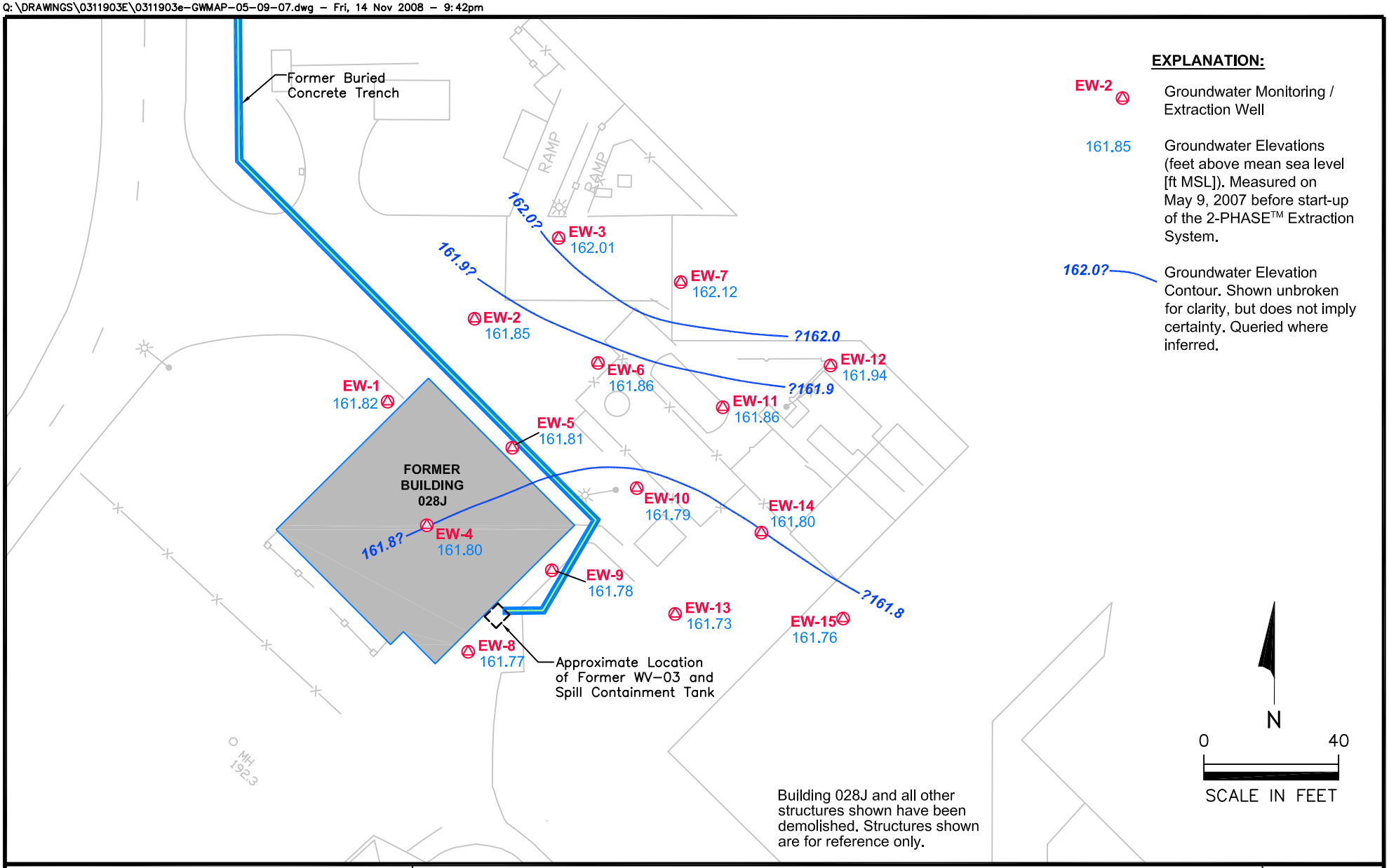
Q:\DRAWINGS\0311903E\0311903e-GWMAP-05-09-07.dwg – Fri, 14 Nov 2008 – 9:42pm



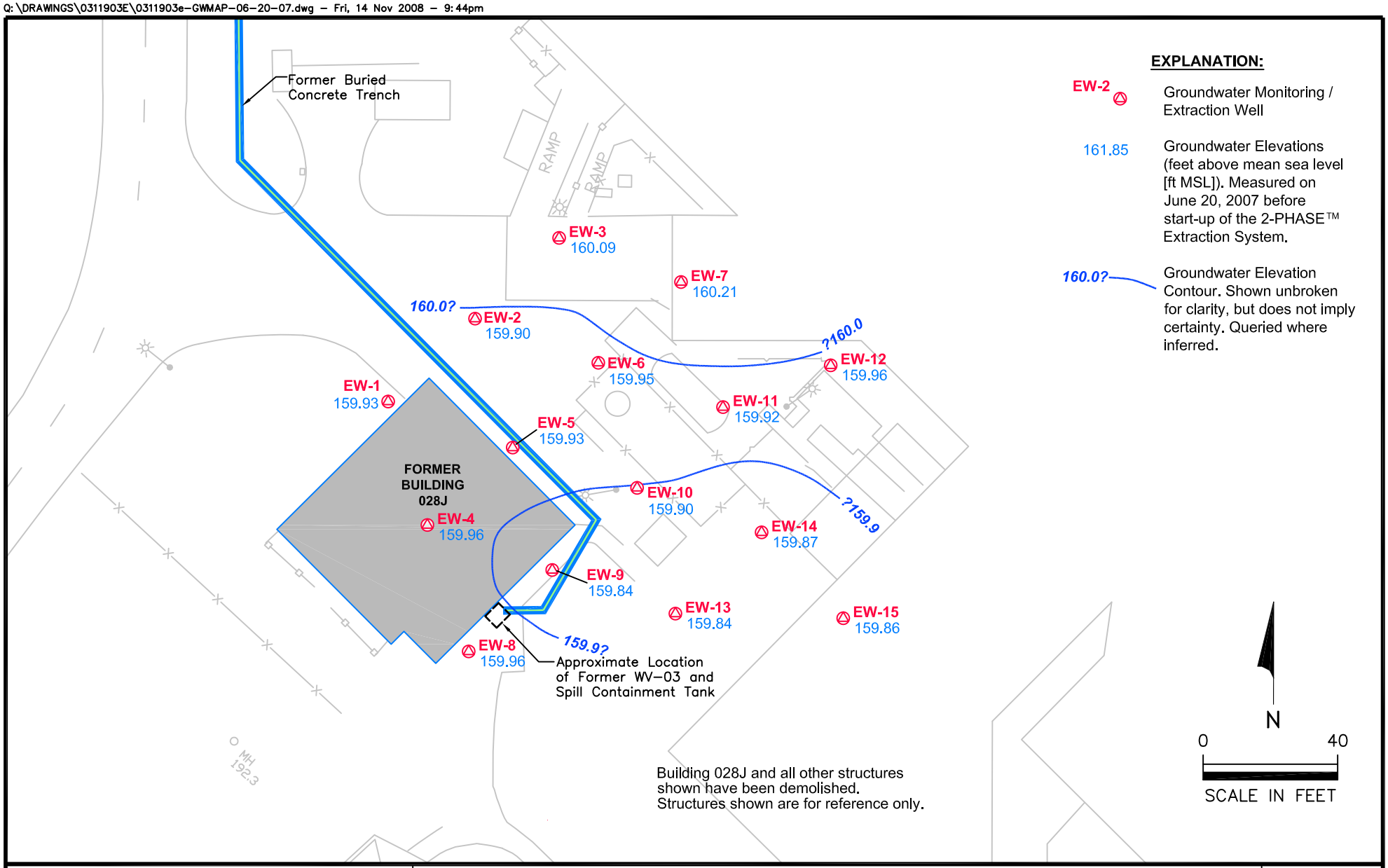
ENVIRON

Potentiometric Surface Map - May 9, 2007
Hitachi GST
San Jose, California

Figure
A-1

Drafter: MLWH Date: 10/29/08 Contract Number: 03-11903E Approved: Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-06-20-07.dwg – Fri, 14 Nov 2008 – 9:44pm



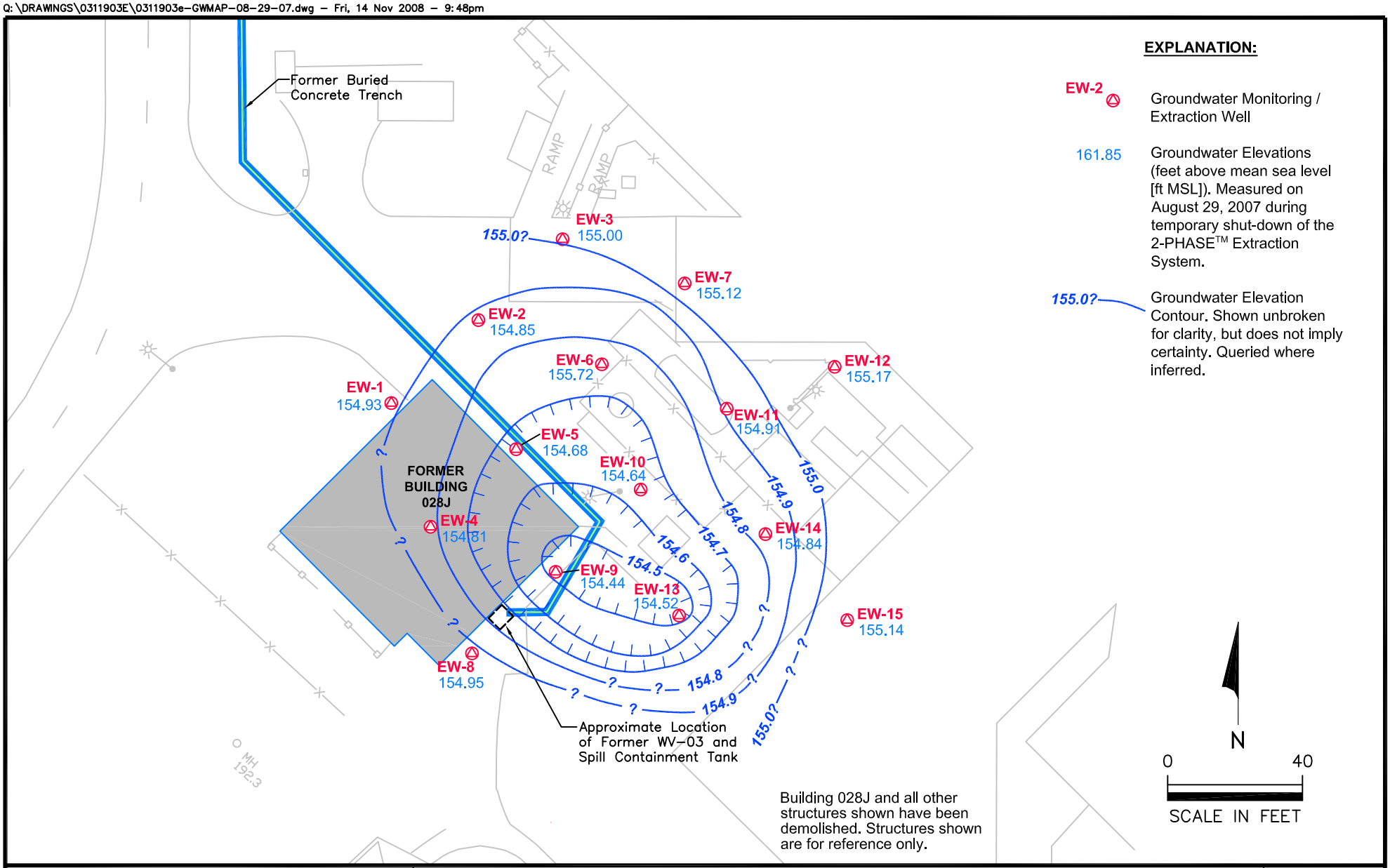
ENVIRON

Potentiometric Surface Map - June 20, 2007
Hitachi GST
San Jose, California

Figure
A-2

Drafter: MLWH Date: 10/27/08 Contract Number: 03-11903E Approved: Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-08-29-07.dwg – Fri, 14 Nov 2008 – 9:48pm



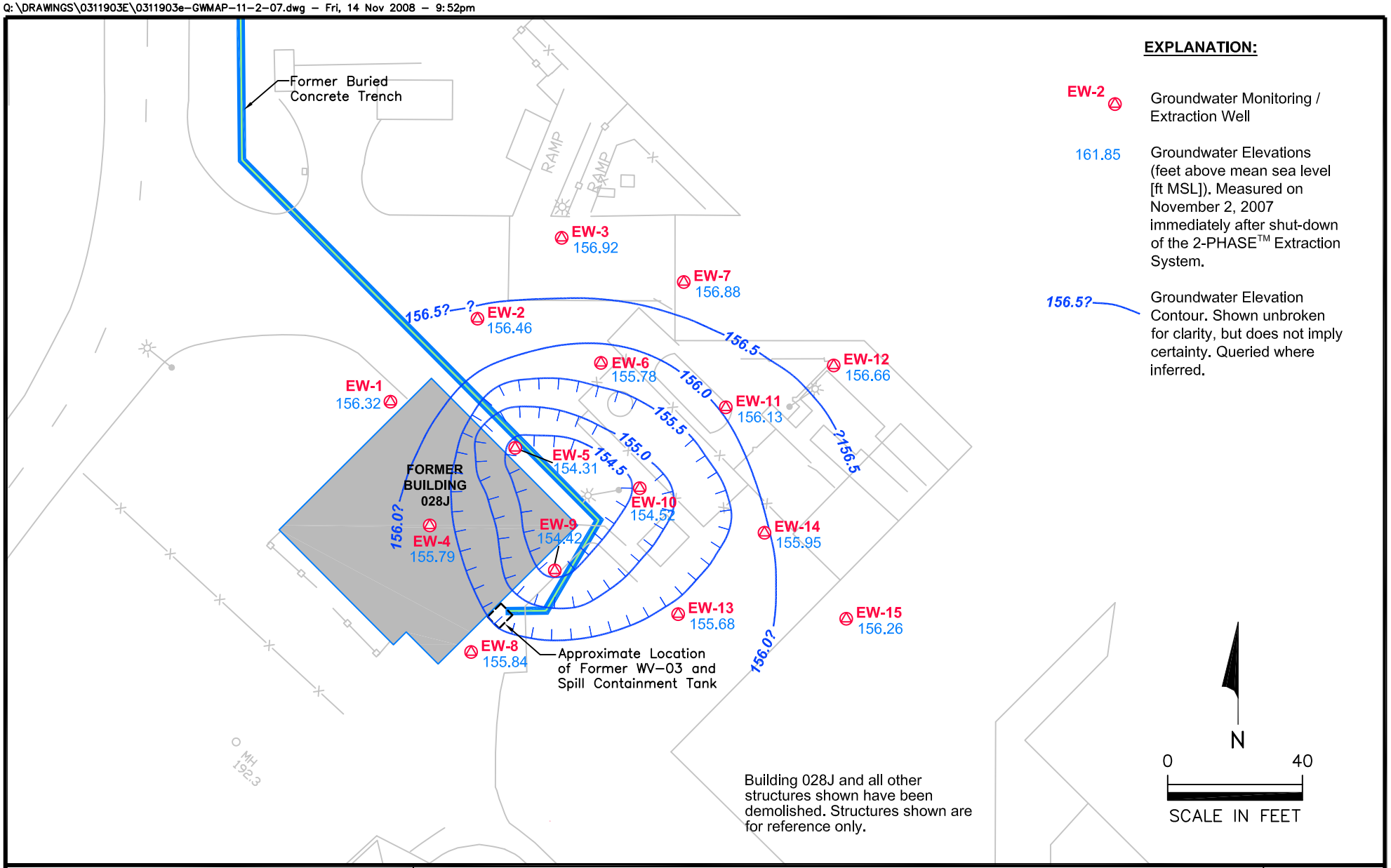
ENVIRON

Potentiometric Surface Map - August 29, 2007
Hitachi GST
San Jose, California

Figure
A-3

Drafter: MLWH | Date: 10/28/08 | Contract Number: 03-311903E | Approved: | Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-11-2-07.dwg – Fri, 14 Nov 2008 – 9:52pm



EXPLANATION:

EW-2 — Groundwater Monitoring / Extraction Well

161.85 — Groundwater Elevations (feet above mean sea level [ft MSL]). Measured on November 2, 2007 immediately after shut-down of the 2-PHASE™ Extraction System.

156.5? — Groundwater Elevation Contour. Shown unbroken for clarity, but does not imply certainty. Queried where inferred.

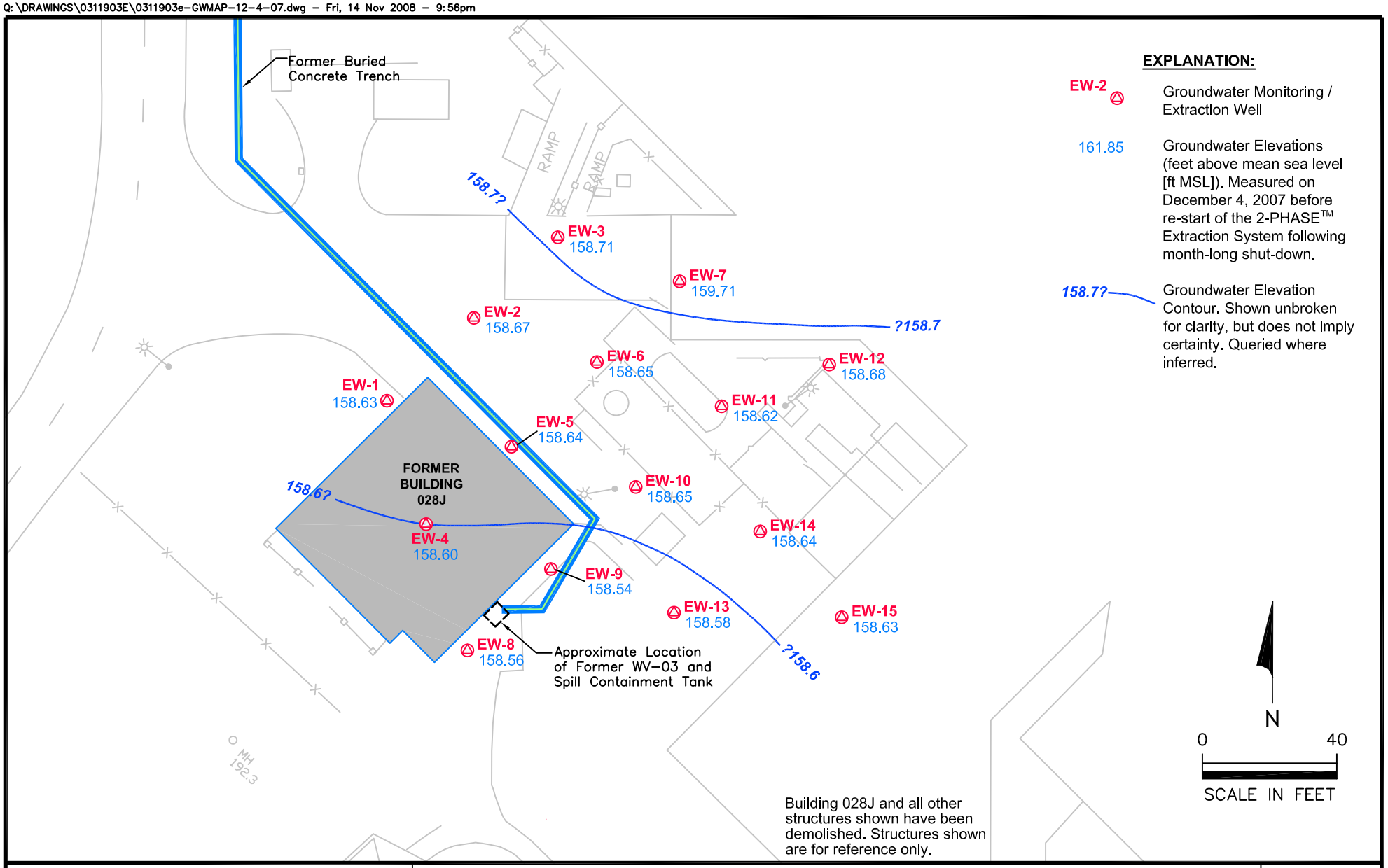
ENVIRON

Potentiometric Surface Map - November 2, 2007
Hitachi GST
San Jose, California

Figure
A-4

Drafter: MLWH | Date: 10/28/08 | Contract Number: 03-311903E | Approved: | Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-12-4-07.dwg – Fri, 14 Nov 2008 – 9:56pm



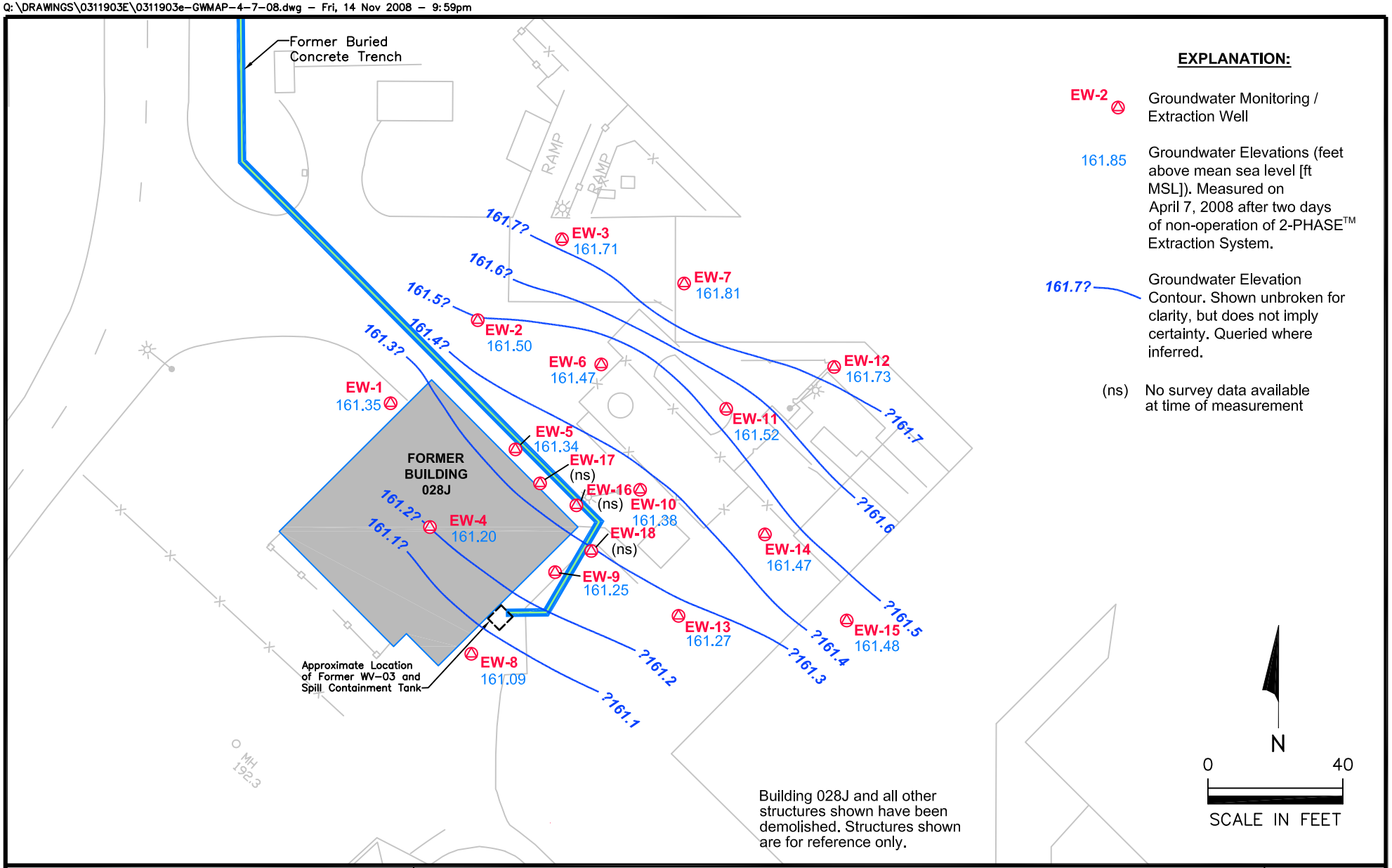
ENVIRON

Potentiometric Surface Map - December 4, 2007
Hitachi GST
San Jose, California

Figure
A-5

Drafter: MLWH Date: 10/27/08 Contract Number: 03-11903E Approved: Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-4-7-08.dwg – Fri, 14 Nov 2008 – 9:59pm



EXPLANATION:

EW-2 — Groundwater Monitoring / Extraction Well

161.85 — Groundwater Elevations (feet above mean sea level [ft MSL]). Measured on April 7, 2008 after two days of non-operation of 2-PHASE™ Extraction System.

161.7? — Groundwater Elevation Contour. Shown unbroken for clarity, but does not imply certainty. Queried where inferred.

(ns) — No survey data available at time of measurement

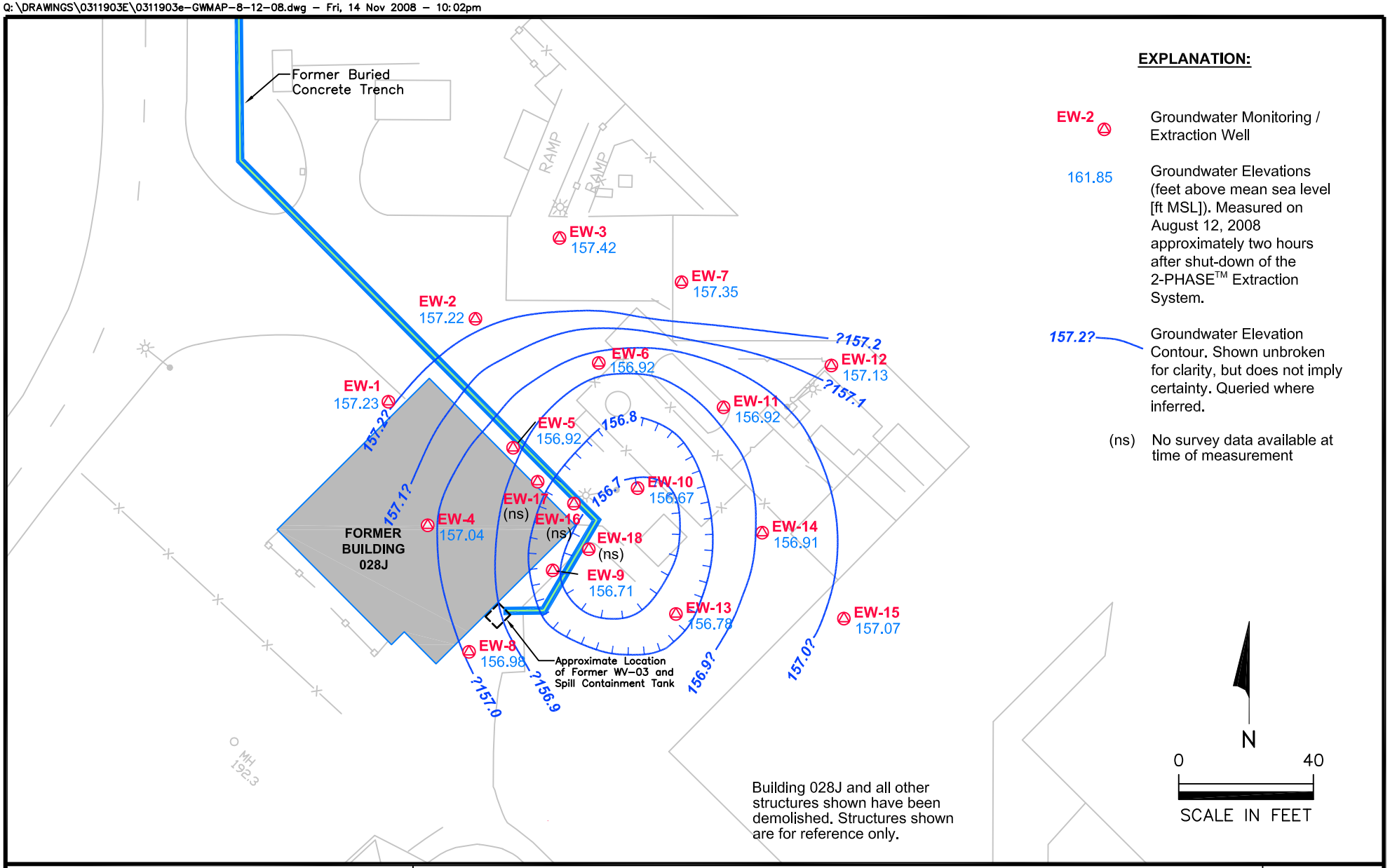
ENVIRON

Potentiometric Surface Map - April 7, 2008
Hitachi GST
San Jose, California

Figure
A-6

Drafter: MLWH | Date: 10/27/09 | Contract Number: 03-11903E | Approved: | Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-8-12-08.dwg – Fri, 14 Nov 2008 – 10:02pm



EXPLANATION:

EW-2	Groundwater Monitoring / Extraction Well
161.85	Groundwater Elevations (feet above mean sea level [ft MSL]). Measured on August 12, 2008 approximately two hours after shut-down of the 2-PHASE™ Extraction System.
157.2?	Groundwater Elevation Contour. Shown unbroken for clarity, but does not imply certainty. Queried where inferred.
(ns)	No survey data available at time of measurement

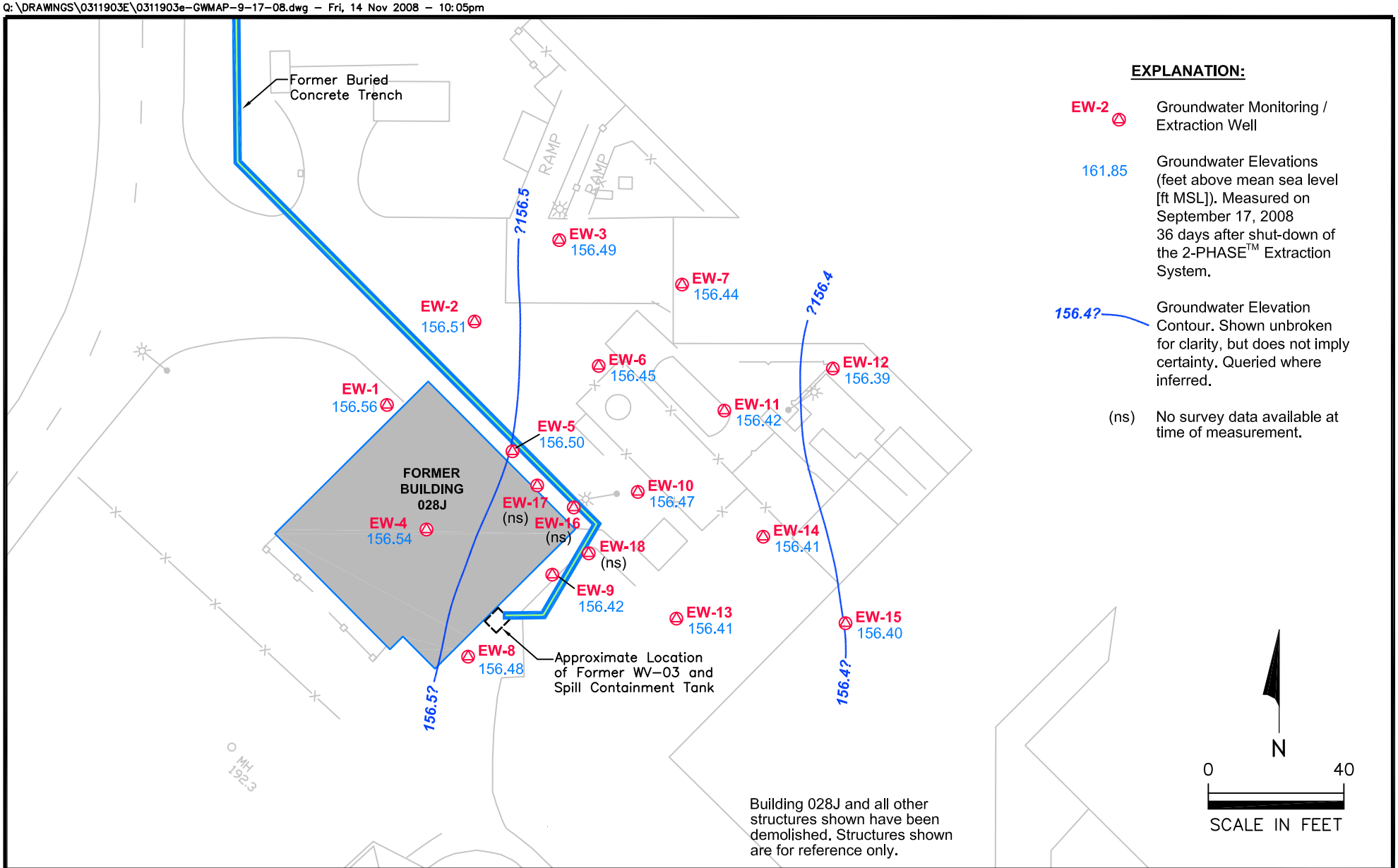
ENVIRON

Potentiometric Surface Map - August 12, 2008
Hitachi GST
San Jose, California

Figure
A-7

Drafter: MLWH Date: 10/27/08 Contract Number: 03-11903E Approved: Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-9-17-08.dwg – Fri, 14 Nov 2008 – 10:05pm



EXPLANATION:

EW-2 — Groundwater Monitoring / Extraction Well

161.85 — Groundwater Elevations (feet above mean sea level [ft MSL]). Measured on September 17, 2008 36 days after shut-down of the 2-PHASE™ Extraction System.

156.4? — Groundwater Elevation Contour. Shown unbroken for clarity, but does not imply certainty. Queried where inferred.

(ns) — No survey data available at time of measurement.

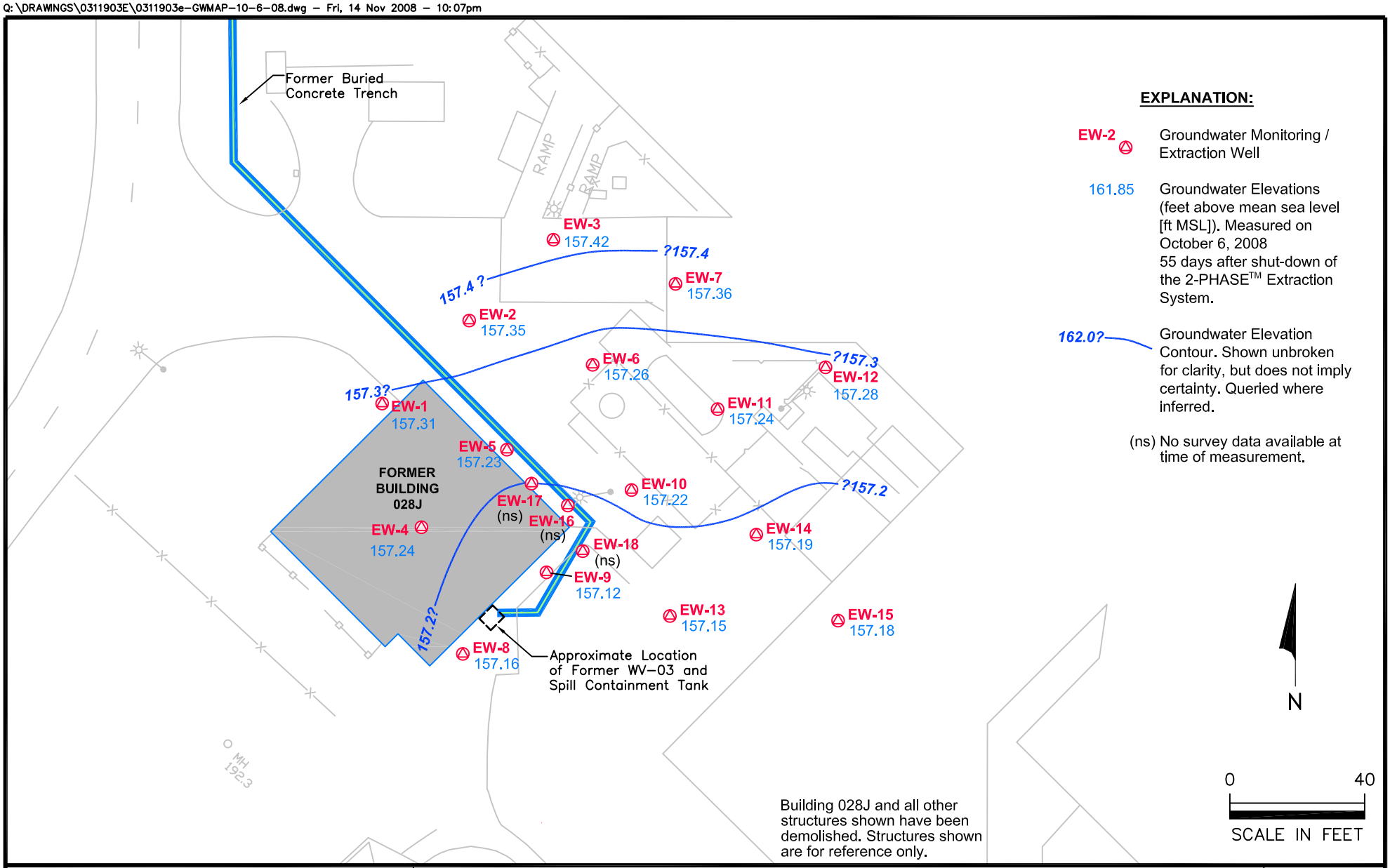
ENVIRON

Potentiometric Surface Map - September 17, 2008
Hitachi GST
San Jose, California

Figure **A-8**

Drafter: MLWH | Date: 10/24/08 | Contract Number: 03-11903E | Approved: | Revised:

Q:\DRAWINGS\0311903E\0311903e-GWMAP-10-6-08.dwg – Fri, 14 Nov 2008 – 10:07pm



EXPLANATION:

EW-2 — Groundwater Monitoring / Extraction Well

161.85 — Groundwater Elevations (feet above mean sea level [ft MSL]). Measured on October 6, 2008 55 days after shut-down of the 2-PHASE™ Extraction System.

162.0? — Groundwater Elevation Contour. Shown unbroken for clarity, but does not imply certainty. Queried where inferred.

(ns) No survey data available at time of measurement.

Building 028J and all other structures shown have been demolished. Structures shown are for reference only.

ENVIRON

Potentiometric Surface Map - October 6, 2008
Hitachi GST
San Jose, California

Figure **A-9**

Drafter: MLWH | Date: 10/24/08 | Contract Number: 03-11903E | Approved: | Revised:

Appendix B:
2-PHASE™ Extraction System Performance Data

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Appendix B: 2-PHASE™ Extraction System Performance Data

This appendix presents performance data for the 2-PHASE™ Extraction system in operation in the former Building 028J area. This appendix includes a brief summary of the operation and monitoring of the 2-PHASE™ Extraction system followed by detailed performance data summarized in tables and figures.

B.1 2-PHASE™ Extraction System Description

The 2-PHASE™ Extraction system consists of a monitoring/extraction well field of 18 dual-use groundwater wells connected via a manifold to a Reitschle VLR-500 rotary claw vacuum blower fitted with a liquid-gas separator, heat exchanger, and a granular activated carbon (GAC) vapor treatment system. The GAC vapor treatment system consists of two 1,000-pound GAC vessels ("C1" and "C2") arranged in series with two additional 1,000-pound GAC vessels on standby.

B.2 Summary Of 2-PHASE™ Extraction System Performance

Overall, since startup on July 25, 2007 to shutdown on August 12, 2008, the system operated for a total of approximately 7,967 hours. Not including the planned month-long shutdown from November 4 through December 4, 2007, the system was operable approximately 94 percent of the time. Various combinations of 13 wells (between four and eight at a time) were used for extraction since startup. Wells not used for extraction were routinely monitored for vacuum influence and water table drawdown.

In total since startup, approximately 68.7 million cubic feet of vapor were removed from the subsurface and treated by the vapor treatment system. During operation, the vapor flow rate ranged from 76 to 275 cubic feet per minute (cfm) with an average flow rate of 169 cfm.

Extracted vapor concentrations of chloroform have ranged from 0.39 to 14 micrograms per liter (µg/L) measured at the inlet of C1. Chloroform concentrations in the C1 effluent have ranged from non-detectable to 0.88 µg/L. During operation, trace levels of 20 other volatile organic contaminants (VOCs) have been detected in one or more samples from C1 influent, C1 effluent, or C2 effluent.

In total since startup, approximately 535,000 gallons of groundwater were extracted from the subsurface. During operation, the groundwater extraction rate ranged from 0.0 (during strict soil vapor extraction [SVE] operation) to 2.7 gallons per minute (gpm) with an average extraction rate of 1.2 gpm.

Extracted groundwater concentrations of chloroform ranged between 2.9 and 75 µg/L and generally have decreased over time. Only one other VOC was detected in extracted groundwater since startup. Trichloroethene (TCE) was detected at a concentration of 1.1 µg/L in the first effluent sample collected on July 26, 2007 and was not detected in any other extracted groundwater samples.

In total, it is estimated that the 2-PHASE™ Extraction system removed between 6.1 and 8.2 pounds of chloroform from the subsurface. The overwhelming majority of mass was removed in the vapor phase.

B.3 2-PHASE™ Extraction System Performance Data

Detailed summaries of the performance data and monitoring results collected from startup on July 25, 2007 to the end of operation on August 12, 2008 are presented in Tables B1 through B10 and Figures B1 through B9.

TABLE B-1: GROUNDWATER EXTRACTION/MONITORING WELL DETAILS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Well	Installation Date	Well Type [1]	Total Depth (feet bgs)	Water Level [2] (feet bgs)	Stinger Depth [2, 3] (feet bgs)	Casing Material	Casing Diameter	Screen Slot Size	Screen Interval (feet bgs)	Filter Pack Interval (feet bgs)
EW-1	04/26/2007	Monitoring	37.5	33.80	33.5	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-2	04/24/2007	Pulse	37.5	32.14	32.0	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-3	04/27/2007	Monitoring	36.5	32.75	32.5	PVC	4"	0.020"	16.0 - 36.0	14.0 - 36.5
EW-4	04/24/2007	Pulse	37.5	35.07	35.0	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-5	04/27/2007	Extraction	37.0	34.19	34.0	PVC	4"	0.020"	16.5 - 36.5	14.5 - 37.0
EW-6	04/25/2007	Pulse	37.5	33.36	33.0	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-7	04/30/2007	Monitoring	36.5	33.44	33.0	PVC	4"	0.020"	16.0 - 36.0	14.0 - 36.5
EW-8	04/26/2007	Monitoring	37.5	35.96	34.5	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-9	5/1//2007	Extraction	38.0	35.61	35.5	PVC	4"	0.020"	17.5 - 37.5	15.5 - 38.0
EW-10	04/26/2007	Extraction	38.5	35.85	35.5	PVC	4"	0.020"	18.0 - 38.0	16.0 - 38.5
EW-11	04/30/2007	Pulse	37.5	35.65	35.5	PVC	4"	0.020"	17.0 - 37.0	15.0 - 37.5
EW-12	04/23/2007	Monitoring	38.5	34.56	34.0	PVC	4"	0.020"	18.0 - 38.0	16.0 - 38.5
EW-13	05/01/2007	Pulse	38.5	37.18	37.0	PVC	4"	0.020"	18.0 - 38.0	16.0 - 38.5
EW-14	04/30/2007	Pulse	38.5	36.55	36.5	PVC	4"	0.020"	18.0 - 38.0	16.0 - 38.5
EW-15	04/25/2007	Monitoring	38.5	35.95	35.5	PVC	4"	0.020"	18.0 - 38.0	16.0 - 38.5
EW-16	03/31/2008	Extraction	39.5	35.31	35.0	PVC/SS	8"	0.010"	17.0 - 37.0	15.0 - 39.5
EW-17	05/24/2008	Extraction	41.0	40.45	40.0	PVC	8"	0.010"	34.0 - 39.0	32.0 - 39.0
EW-18	05/25/2008	Extraction	41.0	35.14	35.0	PVC	8"	0.010"	35.0 - 40.0	33.0 - 40.0

Notes:

[1] Well Type is the predominant use of well as determined by the percentage of time the well was used for extraction.

[2] Water levels and stinger depths measured August 12, 2008.

[3] The "stinger" is a 1" PVC pipe that hangs inside the well, and through which, the vacuum is applied. The depth of the stinger controls the extracted vapor/water ratio.

"feet bgs" = feet below ground surface

"feet bTOC" = feet below top of casing

"PVC" = polyvinyl chloride (SCH 40)

"PVC/SS" = polyvinyl chloride blank casing with a stainless steel screen

TABLE B-2: SUMMARY OF WELL FIELD OPERATION
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Run-Time (minutes)	Cumulative Run-Time (minutes)	Operation of Extraction Wells																	
			EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
7/25/07 13:40 - 8/1/07 16:30	7,931	7,931				X	X	X			X	X			X	X				
8/1/07 16:30 - 8/8/07 14:30	9,888	17,819		X		X	X	X			X	X			X					
8/8/07 14:30 - 8/20/07 18:45	15,509	33,328				X	X	X			X	X			X					
8/20/07 18:45 - 8/23/07 12:15	4,057	37,385				X	X				X	X			X	X				
8/23/07 12:15 - 8/29/07 20:15	8,826	46,211		X		X	X	X			X	X			X	X				
8/29/07 20:15 - 8/30/07 14:30	1,120	47,331				X	X	X			X	X			X	X				
8/30/07 14:30 - 9/6/07 19:20	7,830	55,161	X	X		X	X	X			X	X								
9/6/07 19:20 - 9/13/07 17:10	8,363	63,524				X	X				X	X	X							
9/13/07 17:10 - 9/25/07 14:40	16,494	80,018		X			X				X	X	X							
9/25/07 14:40 - 10/11/07 12:40	23,026	103,044				X	X	X			X	X			X					
10/11/07 12:40 - 10/16/07 14:00	7,300	110,344					X	X			X	X								
10/16/07 14:00 - 10/30/07 14:00	20,466	130,810				X	X				X	X			X					
10/30/07 14:00 - 11/2/07 14:00	4,420	135,230					X	X			X	X								
11/2/07 14:00 - 11/3/07 15:50	1,566	136,796		X			X	X			X	X	X							
Planned System Shutdown from November 3, 2007 to December 4, 2007																				
12/4/07 13:30 - 12/6/07 15:15	779	137,575					X				X	X								
12/6/07 15:15 - 12/18/07 13:50	17,525	155,099					X	X			X	X								
12/18/07 13:50 - 1/2/08 14:50	22,087	177,186					X				X	X			X					
1/2/08 14:50 - 1/3/08 12:30	293	177,479				X	X				X	X								
1/3/08 12:30 - 1/9/08 13:30	7,550	185,029				X	X				X	X			X					
1/9/08 13:30 - 1/23/08 7:55	20,180	205,209					X	X			X	X			X					
1/23/08 7:55 - 1/29/08 16:15	3,691	208,900				X	X	X			X	X			X					
1/29/08 16:15 - 1/30/08 16:30	1,490	210,390				X	X	X			X	X			X	X				
1/30/08 16:30 - 2/1/08 16:05	2,678	213,068				X	X	X			X	X			X					
2/1/08 16:05 - 4/1/08 9:29	75,598	288,666					X	X			X	X			X					
4/1/08 9:29 - 6/10/08 20:32	98,228	386,894					X				X	X						X		
6/10/08 20:32 - 8/12/08 9:25	91,103	477,997					X				X	X						X	X	X
Percentage of Time Used as Extraction Well			***2%***	***9%***	***0%***	***26%***	***100%***	***44%***	***0%***	***0%***	***100%***	***100%***	***6%***	***0%***	***47%***	***5%***	***0%***	***100%***	***100%***	***100%***
Percentage of Time Used as Monitoring Well			***98%***	***91%***	***100%***	***74%***	***0%***	***56%***	***100%***	***100%***	***0%***	***0%***	***94%***	***100%***	***53%***	***95%***	***100%***	***0%***	***0%***	***0%***
Well Type [2]			***Mon.***	***Pulse***	***Mon.***	***Pulse***	***Ext.***	***Pulse***	***Mon.***	***Mon.***	***Ext.***	***Ext.***	***Pulse***	***Mon.***	***Pulse***	***Pulse***	***Mon.***	***Ext.***	***Ext.***	***Ext.***

Notes:

[1] Times are approximate. Run-times are based on the hour-meter reading of the vacuum blower.

[2] Well Type is the predominant use of well as determined by the percentage of time the well was used for extraction.

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
7/25/07 13:40	0.8	0	0	0	0	0	4, 5, 6, 9, 10, 13, 14	System Start
7/25/07 14:30	1.8	59	59	266	15,800	15,800	4, 5, 6, 9, 10, 13, 14	
7/25/07 14:45	2.1	15	74	266	3,990	19,790	4, 5, 6, 9, 10, 13, 14	
7/26/07 7:00	5.0	177	251	255	46,109	65,899	4, 5, 6, 9, 10, 13, 14	System Shutdown from 18:00 7/25 to 7:00 7/26
7/26/07 11:00	9.0	240	491	265	62,400	128,299	4, 5, 6, 9, 10, 13, 14	
7/26/07 14:30	12.5	210	701	266	55,755	184,054	4, 5, 6, 9, 10, 13, 14	
7/27/07 7:00	30.0	1,050	1,751	252	271,950	456,004	4, 5, 6, 9, 10, 13, 14	
7/27/07 11:00	34.0	240	1,991	266	62,160	518,164	4, 5, 6, 9, 10, 13, 14	
7/27/07 14:00	37.0	180	2,171	265	47,790	565,954	4, 5, 6, 9, 10, 13, 14	
7/28/07 7:30	55.0	1,080	3,251	254	280,260	846,214	4, 5, 6, 9, 10, 13, 14	
7/28/07 11:00	58.0	180	3,431	265	46,710	892,924	4, 5, 6, 9, 10, 13, 14	
7/28/07 14:00	61.0	180	3,611	264	47,610	940,534	4, 5, 6, 9, 10, 13, 14	
7/29/07 7:00	79.0	1,080	4,691	264	285,120	1,225,654	4, 5, 6, 9, 10, 13, 14	System Shutdown
7/30/07 9:00	80.0	60	4,751	260	15,720	1,241,374	4, 5, 6, 9, 10, 13, 14	System Start
7/30/07 11:00	82.0	120	4,871	267	31,620	1,272,994	4, 5, 6, 9, 10, 13, 14	
7/30/07 14:00	85.0	180	5,051	265	47,880	1,320,874	4, 5, 6, 9, 10, 13, 14	
7/31/07 6:00	101.0	960	6,011	265	254,400	1,575,274	4, 5, 6, 9, 10, 13, 14	
7/31/07 10:00	105.0	240	6,251	266	63,720	1,638,994	4, 5, 6, 9, 10, 13, 14	
7/31/07 12:30	107.5	150	6,401	266	39,900	1,678,894	4, 5, 6, 9, 10, 13, 14	
7/31/07 14:00	109.0	90	6,491	267	23,985	1,702,879	4, 5, 6, 9, 10, 13, 14	
8/1/07 6:00	125.0	960	7,451	267	256,320	1,959,199	4, 5, 6, 9, 10, 13, 14	
8/1/07 11:00	130.0	300	7,751	266	79,950	2,039,149	4, 5, 6, 9, 10, 13, 14	
8/1/07 14:00	133.0	180	7,931	266	47,880	2,087,029	4, 5, 6, 9, 10, 13, 14	
8/1/07 16:30	135.5	150	8,081	240	37,950	2,124,979	2, 4, 5, 6, 9, 10, 13	EW-14 OFF; EW-2 ON; Stingers lowered

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
8/1/07 18:30	137.5	120	8,201	240	28,800	2,153,779	2, 4, 5, 6, 9, 10, 13	
8/2/07 6:30	150.0	750	8,951	244	181,500	2,335,279	2, 4, 5, 6, 9, 10, 13	
8/2/07 11:00	154.0	240	9,191	247	58,920	2,394,199	2, 4, 5, 6, 9, 10, 13	
8/2/07 14:00	157.0	180	9,371	246	44,370	2,438,569	2, 4, 5, 6, 9, 10, 13	
8/2/07 18:15	161.3	255	9,626	246	62,730	2,501,299	2, 4, 5, 6, 9, 10, 13	
8/3/07 7:00	175.0	825	10,451	242	201,300	2,702,599	2, 4, 5, 6, 9, 10, 13	
8/3/07 11:00	178.0	180	10,631	247	44,010	2,746,609	2, 4, 5, 6, 9, 10, 13	
8/3/07 14:00	181.0	180	10,811	246	44,370	2,790,979	2, 4, 5, 6, 9, 10, 13	
8/4/07 7:00	197.0	960	11,771	246	236,160	3,027,139	2, 4, 5, 6, 9, 10, 13	
8/4/07 11:00	200.0	180	11,951	250	44,640	3,071,779	2, 4, 5, 6, 9, 10, 13	
8/4/07 14:00	203.0	180	12,131	251	45,090	3,116,869	2, 4, 5, 6, 9, 10, 13	
8/5/07 7:00	221.0	1,080	13,211	248	269,460	3,386,329	2, 4, 5, 6, 9, 10, 13	
8/5/07 11:00	225.0	240	13,451	251	59,880	3,446,209	2, 4, 5, 6, 9, 10, 13	
8/5/07 14:00	228.0	180	13,631	252	45,270	3,491,479	2, 4, 5, 6, 9, 10, 13	
8/6/07 7:00	244.0	960	14,591	245	238,560	3,730,039	2, 4, 5, 6, 9, 10, 13	
8/6/07 11:00	248.0	240	14,831	248	59,160	3,789,199	2, 4, 5, 6, 9, 10, 13	
8/6/07 14:00	251.0	180	15,011	252	45,000	3,834,199	2, 4, 5, 6, 9, 10, 13	
8/7/07 7:00	268.0	1,020	16,031	249	255,510	4,089,709	2, 4, 5, 6, 9, 10, 13	
8/7/07 11:00	271.0	180	16,211	252	45,090	4,134,799	2, 4, 5, 6, 9, 10, 13	
8/7/07 14:00	274.0	180	16,391	253	45,450	4,180,249	2, 4, 5, 6, 9, 10, 13	
8/8/07 7:00	292.0	1,080	17,471	250	271,620	4,451,869	2, 4, 5, 6, 9, 10, 13	
8/8/07 10:15	295.1	186	17,657	250	46,500	4,498,369	2, 4, 5, 6, 9, 10, 13	System Shutdown @10:15
8/8/07 12:15	295.6	30	17,687	263	7,695	4,506,064	2, 4, 5, 6, 9, 10, 13	System Start @11:50
8/8/07 14:30	297.8	132	17,819	262	34,650	4,540,714	4, 5, 6, 9, 10, 13	EW-2 OFF @13:00

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
8/8/07 17:15	300.6	168	17,987	240	42,168	4,582,882	4, 5, 6, 9, 10, 13	Stingers Lowered @16:30
8/8/07 18:00	301.3	42	18,029	240	10,080	4,592,962	4, 5, 6, 9, 10, 13	
8/9/07 3:00	310.0	522	18,551	240	125,280	4,718,242	4, 5, 6, 9, 10, 13	System Shutdown @3:00
8/9/07 13:00	310.5	30	18,581	245	7,275	4,725,517	4, 5, 6, 9, 10, 13	System Start @12:45
8/9/07 18:30	316.0	330	18,911	245	80,850	4,806,367	4, 5, 6, 9, 10, 13	System Shutdown @18:30
8/10/07 10:00	319.9	234	19,145	245	57,330	4,863,697	4, 5, 6, 9, 10, 13	System Start @7:00
8/10/07 16:55	326.6	402	19,547	249	99,294	4,962,991	4, 5, 6, 9, 10, 13	
8/11/07 7:00	332.0	324	19,871	246	80,190	5,043,181	4, 5, 6, 9, 10, 13	System down from 8/10 23:00 to 8/11 6:30
8/11/07 14:00	339.0	420	20,291	243	102,690	5,145,871	4, 5, 6, 9, 10, 13	
8/12/07 7:00	357.0	1,080	21,371	237	259,200	5,405,071	4, 5, 6, 9, 10, 13	
8/12/07 13:00	364.0	420	21,791	240	100,170	5,505,241	4, 5, 6, 9, 10, 13	
8/13/07 10:30	385.5	1,291	23,083	239	309,242	5,814,483	4, 5, 6, 9, 10, 13	
8/13/07 12:15	387.3	107	23,190	240	25,722	5,840,206	4, 5, 6, 9, 10, 13	
8/13/07 13:25	388.5	70	23,260	240	16,848	5,857,054	4, 5, 6, 9, 10, 13	
8/14/07 6:30	401.0	751	24,011	231	176,908	6,033,961	4, 5, 6, 9, 10, 13	System down approx. 5 hours overnight
8/14/07 15:30	410.0	540	24,551	245	128,520	6,162,481	4, 5, 6, 9, 10, 13	
8/15/07 10:50	430.1	1,203	25,754	246	295,337	6,457,818	4, 5, 6, 9, 10, 13	
8/15/07 14:40	434.0	238	25,992	243	58,093	6,515,911	4, 5, 6, 9, 10, 13	
8/16/07 7:00	450.0	959	26,951	241	232,175	6,748,086	4, 5, 6, 9, 10, 13	
8/16/07 14:00	457.0	420	27,371	244	101,850	6,849,936	4, 5, 6, 9, 10, 13	System down approx. 1 hour for routine service
8/16/07 19:30	462.5	331	27,702	240	80,005	6,929,941	4, 5, 6, 9, 10, 13	Carbon change-out (C1 and C2) @19:00
8/17/07 7:45	475.0	749	28,451	240	179,856	7,109,797	4, 5, 6, 9, 10, 13	
8/17/07 10:45	479.0	240	28,691	226	55,920	7,165,717	4, 5, 6, 9, 10, 13	System down approx. 0.5 hours (R/R totalizer)
8/17/07 16:00	483.7	279	28,970	240	65,007	7,230,724	4, 5, 6, 9, 10, 13	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
8/18/07 6:30	499.0	921	29,891	240	221,040	7,451,764	4, 5, 6, 9, 10, 13	
8/19/07 8:00	520.0	1,260	31,151	240	302,400	7,754,164	4, 5, 6, 9, 10, 13	System down approx. 5 hours for service
8/19/07 12:00	524.0	240	31,391	241	57,720	7,811,884	4, 5, 6, 9, 10, 13	
8/20/07 11:00	548.3	1,457	32,849	247	355,606	8,167,490	4, 5, 6, 9, 10, 13	
8/20/07 18:45	556.3	479	33,328	230	114,337	8,281,826	4, 5, 9, 10, 13, 14	Stingers lowered; EW-6 OFF; EW-14 ON
8/21/07 6:30	570.0	823	34,151	242	194,275	8,476,102	4, 5, 9, 10, 13, 14	
8/21/07 17:00	579.2	554	34,705	240	133,466	8,609,567	4, 5, 9, 10, 13, 14	
8/22/07 7:15	594.0	886	35,591	244	214,460	8,824,028	4, 5, 9, 10, 13, 14	
8/22/07 14:30	601.3	438	36,029	248	107,748	8,931,776	4, 5, 9, 10, 13, 14	
8/23/07 11:00	622.6	1,277	37,306	260	324,307	9,256,083	4, 5, 9, 10, 13, 14	
8/23/07 12:15	623.9	79	37,385	260	20,436	9,276,519	4, 5, 6, 9, 10, 13, 14	EW-6 ON @12:15
8/23/07 15:00	626.7	169	37,553	245	42,572	9,319,091	4, 5, 6, 9, 10, 13, 14	Stingers lowered @13:00-14:30
8/23/07 16:30	628.2	91	37,645	260	23,028	9,342,119	2, 4, 5, 6, 9, 10, 13, 14	EW-2 ON @ 15:15
8/24/07 7:00	643.0	887	38,531	259	230,125	9,572,243	2, 4, 5, 6, 9, 10, 13, 14	
8/24/07 14:00	650.0	420	38,951	263	109,620	9,681,863	2, 4, 5, 6, 9, 10, 13, 14	
8/25/07 6:30	668.0	1,080	40,031	274	289,980	9,971,843	2, 4, 5, 6, 9, 10, 13, 14	
8/25/07 11:00	672.0	240	40,271	275	65,880	10,037,723	2, 4, 5, 6, 9, 10, 13, 14	
8/25/07 14:30	675.5	210	40,481	262	56,385	10,094,108	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 6:30	693.0	1,050	41,531	265	276,675	10,370,783	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 15:20	701.3	497	42,028	264	131,404	10,502,187	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 16:30	702.5	73	42,101	258	18,949	10,521,135	2, 4, 5, 6, 9, 10, 13, 14	EW-2 stinger lowered
8/27/07 6:30	717.0	871	42,971	273	231,144	10,752,280	2, 4, 5, 6, 9, 10, 13, 14	
8/27/07 14:30	725.5	510	43,481	265	137,190	10,889,470	2, 4, 5, 6, 9, 10, 13, 14	
8/28/07 6:30	742.0	990	44,471	265	262,350	11,151,820	2, 4, 5, 6, 9, 10, 13, 14	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
8/28/07 11:00	746.0	240	44,711	262	63,240	11,215,060	2, 4, 5, 6, 9, 10, 13, 14	
8/28/07 14:30	749.5	210	44,921	268	55,650	11,270,710	2, 4, 5, 6, 9, 10, 13, 14	
8/29/07 8:15	768.2	1,124	46,045	265	299,493	11,570,202	2, 4, 5, 6, 9, 10, 13, 14	
8/29/07 20:00	770.8	157	46,202	250	40,325	11,610,527	2, 4, 5, 6, 9, 10, 13, 14	System down 9.25 hours (generator)
8/29/07 20:15	771.0	10	46,211	245	2,376	11,612,903	4, 5, 6, 9, 10, 13, 14	EW-2 OFF ; Stingers lowered
8/30/07 11:10	786.3	917	47,128	250	226,908	11,839,811	4, 5, 6, 9, 10, 13, 14	
8/30/07 14:30	789.7	203	47,331	248	50,497	11,890,308	1, 2, 4, 5, 6, 9, 10	EW-13 and 14 OFF; EW-1 and 2 ON
9/1/07 16:00	801.0	680	48,011	247	168,251	12,058,559	1, 2, 4, 5, 6, 9, 10	System down 38.3 hours (generator)
9/2/07 14:40	823.7	1,360	49,370	248	336,501	12,395,060	1, 2, 4, 5, 6, 9, 10	
9/4/07 8:20	865.3	2,501	51,871	250	622,699	13,017,759	1, 2, 4, 5, 6, 9, 10	
9/5/07 12:55	890.0	1,479	53,350	255	373,448	13,391,206	1, 2, 4, 5, 6, 9, 10	System down 5.5 hours (generator)
9/6/07 19:05	919.9	1,796	55,146	255	457,929	13,849,135	1, 2, 4, 5, 6, 9, 10	
9/6/07 19:20	920.2	15	55,161	215	3,525	13,852,660	4, 5, 9, 10, 11	EW-11 ON; EW-1, 2, and 6 OFF
9/7/07 11:10	936.0	950	56,111	220	206,712	14,059,372	4, 5, 9, 10, 11	
9/7/07 13:45	938.1	128	56,239	216	27,860	14,087,233	4, 5, 9, 10, 11	System down 0.5 hours for generator swap
9/9/07 12:05	958.4	1,215	57,454	217	263,048	14,350,280	4, 5, 9, 10, 11	
9/11/07 8:45	1030.9	4,353	61,807	227	966,366	15,316,646	4, 5, 9, 10, 11	
9/12/07 10:20	1056.6	1,538	63,346	233	353,832	15,670,478	4, 5, 9, 10, 11	System down 30 hours for sampling
9/13/07 16:20	1058.7	127	63,473	230	29,447	15,699,925	4, 5, 9, 10, 11	
9/13/07 17:10	1059.5	51	63,524	235	11,857	15,711,782	2, 5, 9, 10, 11	EW-4 OFF; EW-2 ON
9/15/07 10:05	1101.3	2,503	66,026	233	585,608	16,297,391	2, 5, 9, 10, 11	
9/17/07 9:35	1149.7	2,905	68,932	236	681,269	16,978,660	2, 5, 9, 10, 11	
9/17/07 12:20	1152.5	168	69,100	229	39,060	17,017,720	2, 5, 9, 10, 11	
9/18/07 14:25	1163.3	647	69,746	232	149,087	17,166,808	2, 5, 9, 10, 11	System down 16 hours (generator)

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
9/19/07 14:45	1187.9	1,481	71,228	222	336,278	17,503,085	2, 5, 9, 10, 11	Carbon change-out (C1 and C2) @14:45 9/18
9/22/07 10:50	1257.4	4,166	75,394	220	920,774	18,423,860	2, 5, 9, 10, 11	
9/25/07 13:05	1332.8	4,528	79,922	216	987,017	19,410,877	2, 5, 9, 10, 11	
9/25/07 14:40	1334.5	97	80,018	237	21,880	19,432,757	4, 5, 6, 9, 10, 13	EW-2 and 11 OFF; EW-4, 6, and 13 ON
9/26/07 9:30	1353.3	1,133	81,152	241	270,883	19,703,639	4, 5, 6, 9, 10, 13	
9/28/07 9:12	1401.6	2,896	84,048	247	706,673	20,410,312	4, 5, 6, 9, 10, 13	
9/29/07 9:50	1426.6	1,502	85,550	245	369,443	20,779,755	4, 5, 6, 9, 10, 13	
10/2/07 9:30	1498.1	4,290	89,840	215	986,700	21,766,455	4, 5, 6, 9, 10, 13	
10/5/07 8:00	1570.1	4,319	94,159	180	852,963	22,619,418	4, 5, 6, 9, 10, 13	
10/9/07 9:35	1665.9	5,749	99,907	108	827,798	23,447,216	4, 5, 6, 9, 10, 13	
10/11/07 8:15	1713.8	2,875	102,782	128	339,203	23,786,419	4, 5, 6, 9, 10, 13	EW-9 and EW-10 vapor locked
10/11/07 12:25	1718.0	247	103,029	187	38,934	23,825,353	4, 5, 6, 9, 10, 13	Adjust stingers in all wells
10/11/07 12:40	1718.2	15	103,044	156	2,573	23,827,925	5, 6, 9, 10	EW-4 and EW-13 OFF
10/12/07 9:10	1739.2	1,258	104,302	149	191,876	24,019,801	5, 6, 9, 10	
10/16/07 8:20	1836.4	5,831	110,134	120	784,323	24,804,124	5, 6, 9, 10	Down 1.5 hrs to troubleshoot high blower temp
10/16/07 14:00	1839.9	211	110,344	157	29,168	24,833,292	4, 5, 9, 10, 13	EW-6 OFF; EW-4 and 13 ON
10/18/07 15:35	1890.6	3,040	113,384	140	451,470	25,284,762	4, 5, 9, 10, 13	
10/23/07 8:35	2005.9	6,918	120,302	125	916,635	26,201,397	4, 5, 9, 10, 13	
10/23/07 10:15	2007.5	101	120,404	132	13,030	26,214,427	4, 5, 9, 10, 13	
10/23/07 12:45	2009.3	104	120,508	139	14,065	26,228,492	4, 5, 9, 10, 13	Lower stingers
10/25/07 15:20	2061.0	3,101	123,609	132	420,240	26,648,732	4, 5, 9, 10, 13	
10/29/07 12:40	2156.2	5,714	129,323	125	734,300	27,383,032	4, 5, 9, 10, 13	
10/30/07 12:00	2178.9	1,363	130,686	125	170,325	27,553,357	4, 5, 9, 10, 13	
10/30/07 14:00	2181.0	124	130,810	124	15,463	27,568,820	5, 6, 9, 10	EW-4 and 13 OFF; EW-6 ON

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2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
11/1/07 12:55	2228.8	2,870	133,680	115	342,941	27,911,761	5, 6, 9, 10	
11/2/07 12:55	2253.3	1,468	135,148	109	164,438	28,076,199	5, 6, 9, 10	
11/2/07 14:00	2254.6	82	135,230	133	9,874	28,086,073	2, 5, 6, 9, 10, 11	Begin low-load operation prior to shutdown
11/3/07 15:50	2280.7	1,566	136,796	135	209,844	28,295,917	2, 5, 6, 9, 10, 11	System Shutdown @15:50; change C1 and C2
12/4/07 13:30	2282.6	112	136,908	80	12,062	28,307,978	5, 9, 10	System Start @12/4/2007 11:30
12/4/07 15:35	2284.6	234	137,030	93.5	26,735	28,322,651	5, 9, 10	
12/6/07 13:05	2291.5	413	137,443	94.5	38,803	28,361,455	5, 9, 10	System down approximately 39 hours
12/6/07 15:15	2293.7	132	137,575	104	13,101	28,374,556	5, 6, 9, 10	EW-6 ON
12/7/07 10:15	2313.1	1,163	138,738	123	132,046	28,506,602	5, 6, 9, 10	
12/7/07 11:35	2314.5	82	138,820	124	10,078	28,516,679	5, 6, 9, 10	
12/8/07 11:45	2339.2	1,481	140,301	124	183,694	28,700,373	5, 6, 9, 10	
12/11/07 10:00	2410.9	4,304	144,605	124	533,746	29,234,118	5, 6, 9, 10	
12/11/07 13:05	2413.6	164	144,769	123	20,229	29,254,348	5, 6, 9, 10	
12/13/07 7:40	2457.2	2,612	147,381	123	321,251	29,575,599	5, 6, 9, 10	
12/13/07 9:15	2458.8	98	147,479	123	12,029	29,587,628	5, 6, 9, 10	
12/13/07 9:45	2459.3	30	147,509	124	3,705	29,591,333	5, 6, 9, 10	
12/13/07 11:45	2461.3	122	147,631	125	15,239	29,606,572	5, 6, 9, 10	
12/17/07 11:55	2559.5	5,893	153,524	118	715,951	30,322,523	5, 6, 9, 10	
12/18/07 7:50	2579.9	1,219	154,743	118	143,866	30,466,389	5, 6, 9, 10	
12/18/07 12:40	2584.7	289	155,032	120	34,415	30,500,804	5, 6, 9, 10	
12/18/07 13:50	2585.8	67	155,099	122	8,131	30,508,935	5, 9, 10, 13	EW-6 OFF; EW-13 ON
12/20/07 11:25	2631.9	2,766	157,865	129	347,133	30,856,068	5, 9, 10, 13	
12/21/07 9:15	2654.2	1,340	159,205	126	170,824	31,026,892	5, 9, 10, 13	
12/21/07 11:05	2655.9	103	159,308	128	13,030	31,039,922	5, 9, 10, 13	

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2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
12/22/07 10:00	2679.4	1,407	160,715	127	179,392	31,219,315	5, 9, 10, 13	
12/24/07 13:55	2732.5	3,187	163,901	120	393,545	31,612,860	5, 9, 10, 13	
12/26/07 17:00	2784.7	3,133	167,035	116	369,718	31,982,578	5, 9, 10, 13	
12/27/07 12:25	2804.2	1,169	168,204	123	139,743	32,122,321	5, 9, 10, 13	
12/31/07 13:00	2903.0	5,926	174,130	113	699,292	32,821,613	5, 9, 10, 13	
1/2/08 14:00	2953.0	3,004	177,134	110	334,901	33,156,514	5, 9, 10, 13	
1/2/08 14:50	2953.9	52	177,186	107	5,664	33,162,178	4, 5, 9, 10	EW-13 OFF; EW-4 ON
1/3/08 9:00	2956.2	136	177,322	108	14,641	33,176,819	4, 5, 9, 10	System down overnight
1/3/08 12:30	2958.8	157	177,479	120	17,852	33,194,672	4, 5, 9, 10, 13	EW-13 ON
1/3/08 14:50	2961.2	143	177,622	121	17,207	33,211,879	4, 5, 9, 10, 13	
1/7/08 14:10	3058.7	5,853	183,475	120	705,286	33,917,165	4, 5, 9, 10, 13	
1/8/08 11:50	3078.0	1,156	184,630	120	138,672	34,055,837	4, 5, 9, 10, 13	
1/9/08 13:30	3084.6	398	185,029	129	49,601	34,105,438	5, 6, 9, 10, 13	System down overnight; EW-4 OFF; EW-6 ON
1/10/08 11:05	3106.7	1,324	186,352	126	168,759	34,274,197	5, 6, 9, 10, 13	
1/10/08 15:25	3111.1	265	186,617	124	33,075	34,307,272	5, 6, 9, 10, 13	
1/11/08 8:45	3128.7	1,059	187,676	126	132,375	34,439,647	5, 6, 9, 10, 13	
1/11/08 14:35	3134.7	357	188,033	125	44,804	34,484,451	5, 6, 9, 10, 13	
1/12/08 12:30	3157.1	1,342	189,375	125	167,775	34,652,226	5, 6, 9, 10, 13	
1/13/08 9:55	3178.9	1,313	190,688	120	160,818	34,813,044	5, 6, 9, 10, 13	
1/14/08 11:55	3205.5	1,591	192,278	120	190,872	35,003,916	5, 6, 9, 10, 13	
1/14/08 15:45	3209.4	235	192,513	118	27,917	35,031,833	5, 6, 9, 10, 13	
1/15/08 9:15	3227.2	1,073	193,586	118	126,590	35,158,424	5, 6, 9, 10, 13	
1/15/08 13:25	3230.2	176	193,762	122	21,168	35,179,592	5, 6, 9, 10, 13	System down 1 hour for routine service
1/16/08 11:20	3252.6	1,346	195,109	123	164,934	35,344,526	5, 6, 9, 10, 13	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
1/17/08 9:40	3300.2	2,853	197,962	121	348,066	35,692,592	5, 6, 9, 10, 13	
1/20/08 11:00	3350.9	3,041	201,003	114	357,365	36,049,956	5, 6, 9, 10, 13	
1/22/08 8:45	3397.9	2,819	203,822	113	320,002	36,369,958	5, 6, 9, 10, 13	
1/22/08 14:05	3402.6	287	204,109	126	34,273	36,404,231	5, 6, 9, 10, 13	
1/23/08 7:55	3421.0	1,100	205,209	128	139,675	36,543,905	5, 6, 9, 10, 13	Carbon change-out (C1 and C2)
1/24/08 19:05	3423.7	163	205,372	135	21,461	36,565,366	4, 5, 6, 9, 10, 13	System down 33 hours for sampling
1/26/08 11:35	3462.8	2,347	207,719	143	326,261	36,891,627	4, 5, 6, 9, 10, 13	R/R transfer pump
1/29/08 16:15	3482.5	1,180	208,900	165	181,751	37,073,378	4, 5, 6, 9, 10, 13, 14	System down due to flooding at site
1/30/08 14:10	3504.9	1,348	210,247	155	215,616	37,288,994	4, 5, 6, 9, 10, 13, 14	
1/30/08 16:30	3507.3	143	210,390	145	21,420	37,310,414	4, 5, 6, 9, 10, 13	EW-14 OFF
1/31/08 19:23	3534.8	1,651	212,041	142	236,861	37,547,275	4, 5, 6, 9, 10, 13	
2/1/08 8:00	3547.7	775	212,816	146	111,629	37,658,903	4, 5, 6, 9, 10, 13	R/R transfer pump
2/1/08 16:05	3551.9	252	213,068	135	35,406	37,694,309	5, 6, 9, 10, 13	EW-4 OFF
2/2/08 16:30	3577.0	1,505	214,573	129	198,713	37,893,022	5, 6, 9, 10, 13	
2/4/08 10:45	3620.5	2,608	217,181	129	336,380	38,229,403	5, 6, 9, 10, 13	
2/5/08 9:37	3643.9	1,405	218,585	132	183,300	38,412,703	5, 6, 9, 10, 13	
2/5/08 14:35	3645.7	109	218,695	137	14,687	38,427,390	5, 6, 9, 10, 13	Move skid to higher ground; install telemetry
2/6/08 11:00	3666.7	1,259	219,954	132	169,389	38,596,780	5, 6, 9, 10, 13	
2/8/08 9:05	3714.0	2,839	222,793	130	371,935	38,968,715	5, 6, 9, 10, 13	
2/11/08 9:30	3788.3	4,455	227,248	120	556,875	39,525,590	5, 6, 9, 10, 13	
2/11/08 16:45	3795.1	407	227,656	123	49,499	39,575,089	5, 6, 9, 10, 13	Stingers lowered
2/12/08 7:30	3810.2	905	228,560	123	111,290	39,686,379	5, 6, 9, 10, 13	
2/12/08 17:10	3818.3	491	229,051	122	60,123	39,746,502	5, 6, 9, 10, 13	R/R transfer pump; generator service
2/14/08 10:35	3860.7	2,542	231,593	121	308,804	40,055,307	5, 6, 9, 10, 13	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
2/17/08 17:10	3941.0	4,820	236,413	115	568,736	40,624,043	5, 6, 9, 10, 13	
2/18/08 11:30	3959.8	1,124	237,537	114	128,744	40,752,787	5, 6, 9, 10, 13	
2/18/08 16:05	3964.4	280	237,817	113	31,803	40,784,590	5, 6, 9, 10, 13	
2/19/08 9:40	3978.1	817	238,634	124	96,838	40,881,428	5, 6, 9, 10, 13	System down 2.8 hours
2/19/08 10:50	3978.7	37	238,672	122	4,576	40,886,003	5, 6, 9, 10, 13	System down 0.5 hours for routine service
2/19/08 16:00	3984.0	318	238,990	124	39,114	40,925,117	5, 6, 9, 10, 13	
2/20/08 17:10	4009.4	1,525	240,514	125	189,813	41,114,930	5, 6, 9, 10, 13	
2/21/08 10:00	4026.7	1,037	241,552	122	128,119	41,243,049	5, 6, 9, 10, 13	
2/22/08 13:35	4055.0	1,700	243,251	122	207,376	41,450,425	5, 6, 9, 10, 13	
2/24/08 18:15	4109.1	3,245	246,496	123	397,488	41,847,913	5, 6, 9, 10, 13	
2/25/08 18:15	4133.7	1,475	247,972	123	181,474	42,029,387	5, 6, 9, 10, 13	
2/26/08 13:10	4152.6	1,136	249,108	125	140,914	42,170,300	5, 6, 9, 10, 13	
2/26/08 15:25	4154.9	140	249,248	124	17,405	42,187,706	5, 6, 9, 10, 13	System down 0.5 hours for routine service
2/27/08 8:10	4172.1	1,030	250,277	123	127,156	42,314,861	5, 6, 9, 10, 13	
2/27/08 8:15	4172.2	3	250,280	0	184	42,315,046	5, 6, 9, 10, 13	System shut down for sampling
2/29/08 7:30	4173.9	105	250,385	0	0	42,315,046	5, 6, 9, 10, 13	System down 147 hours due to motor failure
3/5/08 12:05	4176.6	161	250,547	0	0	42,315,046	None	System running on fresh air only
3/5/08 15:05	4179.6	180	250,727	122	10,980	42,326,026	5, 6, 9, 10, 13	
3/5/08 17:30	4182.1	148	250,875	116	17,636	42,343,661	5, 6, 9, 10, 13	
3/6/08 8:45	4197.7	939	251,814	119	110,332	42,453,994	5, 6, 9, 10, 13	
3/7/08 9:53	4223.5	1,544	253,358	119	183,784	42,637,778	5, 6, 9, 10, 13	
3/10/08 12:20	4298.2	4,485	257,843	112	518,018	43,155,795	5, 6, 9, 10, 13	
3/11/08 7:20	4317.9	1,179	259,022	111.5	131,753	43,287,548	5, 6, 9, 10, 13	System down 0.5 hours for routine service
3/11/08 9:50	4319.3	86	259,109	111.5	9,634	43,297,182	5, 6, 9, 10, 13	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
3/14/08 7:25	4390.7	4,286	263,395	115	485,435	43,782,617	5, 6, 9, 10, 13	
3/14/08 9:30	4392.8	126	263,521	118	14,679	43,797,296	5, 6, 9, 10, 13	
3/17/08 12:40	4469.7	4,613	268,135	113	532,848	44,330,143	5, 6, 9, 10, 13	
3/17/08 13:25	4470.5	46	268,180	107	5,016	44,335,159	5, 6, 9, 10, 13	Stingers lowered
3/18/08 7:30	4488.9	1,104	269,284	112.5	121,164	44,456,323	5, 6, 9, 10, 13	System down 0.5 hours for routine service
3/18/08 11:35	4491.9	182	269,466	105	19,771	44,476,094	5, 6, 9, 10, 13	Carbon change-out (C1 and C2)
3/21/08 8:09	4562.7	4,244	273,710	101.5	438,234	44,914,328	5, 6, 9, 10, 13	EW-13 found vapor locked
3/21/08 9:28	4564.0	82	273,792	111.5	8,690	44,923,019	5, 6, 9, 10, 13	Stinger lifted on EW-13
3/23/08 18:45	4622.7	3,521	277,313	98	368,867	45,291,885	5, 6, 9, 10, 13	
3/24/08 13:20	4628.5	348	277,661	98	34,104	45,325,989	5, 6, 9, 10, 13	System down overnight due to high water
3/24/08 15:50	4630.6	125	277,786	105	12,667	45,338,657	5, 6, 9, 10, 13	
3/25/08 7:15	4646.4	949	278,735	110	101,975	45,440,631	5, 6, 9, 10, 13	
3/25/08 12:25	4650.8	266	279,001	119	30,434	45,471,065	5, 6, 9, 10, 13	
3/26/08 9:00	4663.8	778	279,779	105	87,158	45,558,224	5, 6, 9, 10, 13	System down overnight due to high water
3/26/08 10:20	4665.3	88	279,867	124.5	10,121	45,568,345	5, 6, 9, 10, 13	
3/26/08 17:00	4672.4	429	280,296	126	53,732	45,622,077	5, 6, 9, 10, 13	
3/27/08 13:08	4692.6	1,209	281,505	122	149,916	45,771,993	5, 6, 9, 10, 13	
3/27/08 15:07	4694.6	122	281,627	122	14,860	45,786,852	5, 6, 9, 10, 13	
3/28/08 7:20	4711.2	995	282,622	118.5	119,625	45,906,477	5, 6, 9, 10, 13	
3/28/08 14:00	4718.0	411	283,033	121	49,217	45,955,694	5, 6, 9, 10, 13	
4/1/08 7:20	4809.7	5,501	288,534	113	643,664	46,599,358	5, 6, 9, 10, 13	
4/1/08 9:29	4811.9	132	288,666	105	14,388	46,613,746	5, 9, 10, 16	EW-16 connected and turned on
4/7/08 15:45	4908.1	5,768	294,434	105	605,682	47,219,428	5, 9, 10, 16	System unstable for 54 hours (motor failure)
4/8/08 7:20	4924.1	961	295,396	115	105,732	47,325,160	5, 9, 10, 16	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
4/8/08 11:50	4928.0	235	295,631	121	27,754	47,352,914	5, 9, 10, 16	System down 0.5 hours for routine service
4/9/08 10:10	4950.9	1,377	297,008	119	165,240	47,518,154	5, 9, 10, 16	
4/9/08 11:10	4952.0	62	297,070	122.5	7,535	47,525,689	5, 9, 10, 16	
4/11/08 7:40	4997.5	2,729	299,800	115.5	324,799	47,850,487	5, 9, 10, 16	
4/11/08 9:00	4998.8	80	299,880	115	9,266	47,859,753	5, 9, 10, 16	
4/15/08 7:39	5095.5	5,801	305,681	101.5	627,937	48,487,690	5, 9, 10, 16	
4/15/08 11:37	5098.6	188	305,869	101.5	19,123	48,506,813	5, 9, 10, 16	System down 0.5 hours for routine service
4/18/08 7:27	5168.1	4,168	310,037	99.5	418,904	48,925,717	5, 9, 10, 16	
4/18/08 9:58	5170.7	155	310,192	93.5	14,938	48,940,655	5, 9, 10, 16	
4/22/08 7:15	5266.3	5,739	315,931	98	549,509	49,490,164	5, 9, 10, 16	
4/22/08 14:00	5272.8	385	316,316	103	38,713	49,528,877	5, 9, 10, 16	System down 0.5 hours for routine service
4/24/08 10:05	5318.0	2,715	319,031	108.5	287,111	49,815,988	5, 9, 10, 16	
4/24/08 11:55	5319.8	107	319,139	105	11,465	49,827,453	5, 9, 10, 16	
4/25/08 7:26	5339.8	1,201	320,339	100.5	123,362	49,950,815	5, 9, 10, 16	
4/25/08 10:38	5343.1	196	320,536	92	18,884	49,969,699	5, 9, 10, 16	
4/29/08 7:15	5437.5	5,664	326,200	76	475,776	50,445,475	5, 9, 10, 16	
4/29/08 10:45	5440.5	181	326,380	81.5	14,222	50,459,697	5, 9, 10, 16	System down 0.5 hours for routine service
5/2/08 7:00	5510.0	4,173	330,553	98	374,527	50,834,224	5, 9, 10, 16	
5/2/08 8:50	5511.9	113	330,666	98	11,054	50,845,278	5, 9, 10, 16	
5/6/08 7:15	5608.2	5,779	336,445	97.5	564,858	51,410,136	5, 9, 10, 16	
5/6/08 10:00	5611.0	167	336,611	99	16,388	51,426,524	5, 9, 10, 16	System down 0.5 hours for routine service
5/9/08 8:23	5682.2	4,272	340,883	102	429,336	51,855,860	5, 9, 10, 16	
5/9/08 8:43	5682.6	21	340,904	104	2,163	51,858,023	5, 9, 10, 16	
5/13/08 8:40	5763.3	4,845	345,749	103.5	502,669	52,360,692	5, 9, 10, 16	System down 0.5 hours for routine service

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
5/16/08 7:12	5834.2	4,255	350,004	106	445,669	52,806,362	5, 9, 10, 16	
5/20/08 7:37	5932.8	5,913	355,917	102.5	616,430	53,422,792	5, 9, 10, 16	System down 0.5 hours for routine service
5/21/08 10:35	5960.3	1,650	357,567	105	171,188	53,593,979	5, 9, 10, 16	
5/23/08 11:05	6008.5	2,897	360,464	90.1	282,583	53,876,562	5, 9, 10, 16	
5/23/08 12:10	6009.7	72	360,536	108	7,132	53,883,694	5, 9, 10, 16	
5/27/08 7:15	6102.8	5,581	366,116	101	583,173	54,466,866	5, 9, 10, 16	
5/27/08 9:17	6104.8	124	366,240	101	12,484	54,479,350	5, 9, 10, 16	System down 0.5 hours for routine service
5/30/08 8:35	6177.1	4,337	370,577	108	453,196	54,932,546	5, 9, 10, 16	
6/3/08 9:42	6276.2	5,944	376,521	102	624,141	55,556,687	5, 9, 10, 16	System down 0.5 hours for routine service
6/6/08 9:48	6343.8	4,059	380,580	130	470,844	56,027,531	5, 9, 10, 16	
6/10/08 9:45	6439.8	5,760	386,340	122	725,760	56,753,291	5, 9, 10, 16	
6/10/08 20:32	6449.0	554	386,894	122	67,564	56,820,854	5, 9, 10, 16, 17, 18	EW-17 and 18 connected and turned on
6/11/08 17:35	6470.5	1,286	388,180	129	161,368	56,982,222	5, 9, 10, 16, 17, 18	
6/13/08 9:30	6511.0	2,431	390,611	130	314,840	57,297,062	5, 9, 10, 16, 17, 18	
6/17/08 7:35	6606.9	5,757	396,368	112	696,597	57,993,659	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
6/17/08 11:42	6610.6	220	396,588	117	25,213	58,018,872	5, 9, 10, 16, 17, 18	Carbon change-out (C1 and C2)
6/20/08 8:32	6680.7	4,205	400,793	105.5	467,851	58,486,723	5, 9, 10, 16, 17, 18	
6/24/08 10:30	6776.2	5,732	406,526	158	755,244	59,241,967	5, 9, 10, 16, 17, 18	System down 3 hours for service
6/26/08 8:25	6823.0	2,806	409,331	160	446,090	59,688,057	5, 9, 10, 16, 17, 18	
6/26/08 9:56	6824.6	93	409,424	178	15,717	59,703,774	5, 9, 10, 16, 17, 18	
6/27/08 8:00	6846.9	1,340	410,765	180	239,932	59,943,706	5, 9, 10, 16, 17, 18	
7/1/08 7:15	6943.8	5,816	416,581	170	1,017,765	60,961,471	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/1/08 11:41	6947.1	195	416,776	170	33,150	60,994,621	5, 9, 10, 16, 17, 18	
7/3/08 15:30	7000.5	3,208	419,983	155	521,235	61,515,856	5, 9, 10, 16, 17, 18	

TABLE B-3: VAPOR EXTRACTION RATES AND CUMULATIVE VAPOR VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Vapor Flow Rate [2, 3] (cfm)	Vapor Volume (cubic feet)	Cumulative Vapor Volume (cubic feet)	Extraction Wells Open	Notes
7/8/08 12:28	7118.8	7,097	427,081	130	1,011,380	62,527,235	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/11/08 9:55	7189.3	4,229	431,310	115	518,102	63,045,337	5, 9, 10, 16, 17, 18	
7/15/08 7:40	7284.5	5,712	437,022	110.5	644,028	63,689,365	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/15/08 12:05	7288.2	220	437,242	156	29,262	63,718,627	5, 9, 10, 16, 17, 18	
7/16/08 13:52	7314.5	1,582	438,824	150	242,077	63,960,703	5, 9, 10, 16, 17, 18	
7/22/08 7:28	7454.5	8,398	447,221	121	1,137,875	65,098,578	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/22/08 11:10	7457.7	192	447,413	132	24,288	65,122,866	5, 9, 10, 16, 17, 18	
7/24/08 14:55	7510.5	3,167	450,580	120	399,017	65,521,883	5, 9, 10, 16, 17, 18	
7/29/08 7:30	7625.0	6,872	457,453	107.5	781,736	66,303,618	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/29/08 11:10	7628.0	179	457,632	131	21,393	66,325,012	5, 9, 10, 16, 17, 18	
8/6/08 8:25	7819.8	11,506	469,138	119	1,438,275	67,763,287	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
8/6/08 9:15	7820.6	51	469,189	116.5	6,005	67,769,292	5, 9, 10, 16, 17, 18	
8/8/08 9:45	7870.0	2,964	472,153	108	332,709	68,102,001	5, 9, 10, 16, 17, 18	
8/8/08 10:37	7870.9	55	472,208	111	5,979	68,107,980	5, 9, 10, 16, 17, 18	
8/12/08 9:25	7967.4	8,807	477,997	105	975,420	68,744,711	5, 9, 10, 16, 17, 18	System Shutdown

Notes:

[1] Times are approximate. Run-times are based on the hour-meter reading of the vacuum blower.

[2] Vapor flow rate measured in cubic feet per minute (cfm) using a hotwire anemometer at the inlet to the first carbon vessel.

[3] Flow rates are assumed to be constant for the period between consecutive measurements.

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
7/25/07 13:40	0.8	0	0	nm [a]	0	0	--	4, 5, 6, 9, 10, 13, 14	System Start
7/28/07 11:00	58.0	3,431	3,431	nm [a]	850	850	0.2	4, 5, 6, 9, 10, 13, 14	
7/29/07 7:00	79.0	1,260	4,691	nm [a]	350	1,200	0.3	4, 5, 6, 9, 10, 13, 14	System Shutdown
7/30/07 9:00	80.0	60	4,751	nm [a]	10	1,210	0.2	4, 5, 6, 9, 10, 13, 14	System Start
8/1/07 11:00	130.0	3,000	7,751	10	750	1,960	0.3	4, 5, 6, 9, 10, 13, 14	EW-14 OFF; EW-2 ON
8/2/07 6:30	150.0	1,200	8,951	1,760	1,750	3,710	1.5	2, 4, 5, 6, 9, 10, 13	Stingers lowered @16:30 8/1
8/2/07 11:00	154.0	240	9,191	2,080	320	4,030	1.3	2, 4, 5, 6, 9, 10, 13	
8/2/07 18:15	161.3	438	9,629	2,723	643	4,673	1.5	2, 4, 5, 6, 9, 10, 13	
8/3/07 7:00	175.0	822	10,451	3,820	1,098	5,770	1.3	2, 4, 5, 6, 9, 10, 13	
8/3/07 11:00	178.0	180	10,631	4,100	280	6,050	1.6	2, 4, 5, 6, 9, 10, 13	
8/4/07 7:00	197.0	1,140	11,771	5,540	1,440	7,490	1.3	2, 4, 5, 6, 9, 10, 13	
8/4/07 11:00	200.0	180	11,951	5,740	200	7,690	1.1	2, 4, 5, 6, 9, 10, 13	
8/5/07 7:00	221.0	1,260	13,211	7,150	1,410	9,100	1.1	2, 4, 5, 6, 9, 10, 13	
8/5/07 11:00	225.0	240	13,451	7,520	370	9,470	1.5	2, 4, 5, 6, 9, 10, 13	
8/6/07 7:00	244.0	1,140	14,591	8,690	1,170	10,640	1.0	2, 4, 5, 6, 9, 10, 13	
8/6/07 11:00	248.0	240	14,831	8,900	210	10,850	0.9	2, 4, 5, 6, 9, 10, 13	
8/7/07 7:00	268.0	1,200	16,031	10,130	1,230	12,080	1.0	2, 4, 5, 6, 9, 10, 13	
8/7/07 11:00	271.0	180	16,211	10,300	170	12,250	0.9	2, 4, 5, 6, 9, 10, 13	
8/8/07 7:00	292.0	1,260	17,471	11,500	1,200	13,450	1.0	2, 4, 5, 6, 9, 10, 13	
8/8/07 10:15	295.1	186	17,657	11,656	156	13,606	0.8	2, 4, 5, 6, 9, 10, 13	System Shutdown @10:15
8/8/07 12:15	295.6	30	17,687	11,673	17	13,623	0.6	2, 4, 5, 6, 9, 10, 13	System Start @11:50
8/8/07 14:30	297.8	132	17,819	11,791	118	13,741	0.9	4, 5, 6, 9, 10, 13	EW-2 OFF @13:00
8/8/07 17:15	300.6	168	17,987	12,009	218	13,959	1.3	4, 5, 6, 9, 10, 13	Stingers lowered @16:30
8/8/07 18:00	301.3	42	18,029	12,047	38	13,997	0.9	4, 5, 6, 9, 10, 13	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
8/9/07 3:00	310.0	522	18,551	12,360 [a]	800	14,797	1.5	4, 5, 6, 9, 10, 13	System Shutdown @3:00
8/9/07 13:00	310.5	30	18,581	nm [a]	40	14,837	1.3	4, 5, 6, 9, 10, 13	System Start @12:45
8/9/07 18:30	316.0	330	18,911	nm [a]	450	15,287	1.4	4, 5, 6, 9, 10, 13	System Shutdown @18:30
8/10/07 10:00	319.9	234	19,145	nm [a]	350	15,637	1.5	4, 5, 6, 9, 10, 13	System Start @7:00
8/10/07 16:55	326.6	402	19,547	nm [a]	500	16,137	1.2	4, 5, 6, 9, 10, 13	
8/13/07 12:15	387.3	3,643	23,190	nm [a]	3,400	19,537	0.9	4, 5, 6, 9, 10, 13	
8/15/07 14:40	434.0	2,802	25,992	nm [a]	2,000	21,537	0.7	4, 5, 6, 9, 10, 13	
8/17/07 13:40	481.2	2,834	28,826	nm [a]	2,050	23,587	0.7	4, 5, 6, 9, 10, 13	
8/17/07 14:15	481.8	31	28,856	10	0	23,587	0.7	4, 5, 6, 9, 10, 13	New totalizer installed
8/17/07 16:00	483.7	114	28,970	104	94	23,681	0.8	4, 5, 6, 9, 10, 13	
8/20/07 11:00	548.3	3,878	32,849	3,050	2,947	26,627	0.8	4, 5, 6, 9, 10, 13	
8/21/07 17:00	579.2	1,856	34,705	4,717	1,667	28,294	0.9	4, 5, 9, 10, 13, 14	EW-6 OFF; EW-14 ON
8/23/07 11:00	622.6	2,601	37,306	7,022	2,306	30,599	0.9	4, 5, 9, 10, 13, 14	
8/23/07 16:30	628.2	338	37,645	7,350	328	30,927	1.0	2, 4, 5, 6, 9, 10, 13, 14	EW-6, EW-2 ON; Stingers lowered
8/24/07 7:00	643.0	887	38,531	8,450	1,100	32,027	1.2	2, 4, 5, 6, 9, 10, 13, 14	
8/24/07 14:15	650.0	420	38,951	8,920	470	32,497	1.1	2, 4, 5, 6, 9, 10, 13, 14	
8/25/07 6:30	668.0	1,080	40,031	10,230	1,310	33,807	1.2	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 6:30	693.0	1,500	41,531	11,690	1,460	35,267	1.0	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 11:00	697.0	240	41,771	11,940	250	35,517	1.0	2, 4, 5, 6, 9, 10, 13, 14	
8/26/07 15:20	701.3	257	42,028	12,193	253	35,770	1.0	2, 4, 5, 6, 9, 10, 13, 14	
8/27/07 6:30	717.0	943	42,971	13,230	1,037	36,807	1.1	2, 4, 5, 6, 9, 10, 13, 14	
8/27/07 11:00	722.0	300	43,271	13,500	270	37,077	0.9	2, 4, 5, 6, 9, 10, 13, 14	
8/28/07 6:30	742.0	1,200	44,471	14,710	1,210	38,287	1.0	2, 4, 5, 6, 9, 10, 13, 14	
8/28/07 11:00	746.0	240	44,711	14,910	200	38,487	0.8	2, 4, 5, 6, 9, 10, 13, 14	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
8/29/07 8:15	768.2	1,334	46,045	16,160	1,250	39,737	0.9	2, 4, 5, 6, 9, 10, 13, 14	
8/29/07 10:45	770.8	157	46,202	16,284	124	39,861	0.8	2, 4, 5, 6, 9, 10, 13, 14	System down @ 10:45 (generator)
8/30/07 11:10	786.3	926	47,128	17,107	823	40,684	0.9	4, 5, 6, 9, 10, 13, 14	EW-2 OFF @ 20:00 8/29
8/30/07 14:30	789.7	203	47,331	17,278	171	40,855	0.8	1, 2, 4, 5, 6, 9, 10	EW-13/14 OFF; EW-1/2 ON
9/1/07 0:30	799.8	606	47,937	17,860	582	41,437	1.0	1, 2, 4, 5, 6, 9, 10	System down @ 00:30 (generator)
9/2/07 14:40	823.7	1,433	49,370	19,235	1,375	42,812	1.0	1, 2, 4, 5, 6, 9, 10	
9/4/07 8:20	865.3	2,501	51,871	21,510	2,275	45,087	0.9	1, 2, 4, 5, 6, 9, 10	
9/5/07 12:55	890.0	1,479	53,350	22,786	1,276	46,363	0.9	1, 2, 4, 5, 6, 9, 10	
9/6/07 19:20	920.2	1,811	55,161	24,291	1,505	47,868	0.8	4, 5, 9, 10, 11	EW-1, 2, 6 OFF; EW-11 ON
9/7/07 11:10	936.0	950	56,111	25,143	852	48,720	0.9	4, 5, 9, 10, 11	
9/9/07 12:05	985.4	2,963	59,074	27,547	2,404	51,124	0.8	4, 5, 9, 10, 11	
9/11/07 8:45	1030.9	2,733	61,807	29,587	2,040	53,164	0.7	4, 5, 9, 10, 11	
9/12/07 10:20	1056.6	1,538	63,346	30,677	1,091	54,254	0.7	4, 5, 9, 10, 11	
9/13/07 16:20	1058.7	127	63,473	30,756	79	54,333	0.6	4, 5, 9, 10, 11	System down 30 hours for sampling
9/15/07 10:05	1101.3	2,554	66,026	32,342	1,586	55,919	0.6	2, 5, 9, 10, 11	EW-4 OFF; EW-2 ON
9/17/07 9:35	1149.7	2,905	68,932	34,105	1,763	57,682	0.6	2, 5, 9, 10, 11	
9/18/07 14:25	1163.3	815	69,746	34,585	480	58,162	0.6	2, 5, 9, 10, 11	System down 16 hours (generator)
9/19/07 14:45	1187.9	1,481	71,228	35,538	953	59,115	0.6	2, 5, 9, 10, 11	
9/22/07 10:50	1257.4	4,166	75,394	38,148	2,610	61,725	0.6	2, 5, 9, 10, 11	
9/25/07 13:05	1332.8	4,528	79,922	41,071	2,923	64,648	0.6	2, 5, 9, 10, 11	
9/25/07 14:40	1334.5	97	80,018	41,136	65	64,713	0.7	4, 5, 6, 9, 10, 13	EW-2, 11 OFF; EW-4, 6, and 13 ON
9/26/07 9:30	1353.3	1,133	81,152	41,958	822	65,535	0.7	4, 5, 6, 9, 10, 13	
9/28/07 9:12	1401.6	2,896	84,048	43,988	2,030	67,565	0.7	4, 5, 6, 9, 10, 13	
9/29/07 9:50	1426.6	1,502	85,550	45,030	1,042	68,607	0.7	4, 5, 6, 9, 10, 13	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
10/2/07 9:30	1498.1	4,290	89,840	48,029	2,999	71,606	0.7	4, 5, 6, 9, 10, 13	
10/5/07 8:00	1570.1	4,319	94,159	50,651	2,622	74,228	0.6	4, 5, 6, 9, 10, 13	
10/9/07 9:35	1665.9	5,749	99,907	53,513	2,862	77,090	0.5	4, 5, 6, 9, 10, 13	
10/11/07 8:15	1713.8	2,875	102,782	54,119	606	77,696	0.2	4, 5, 6, 9, 10, 13	EW-9 and EW-10 vapor locked
10/11/07 12:40	1718.2	262	103,044	54,256	137	77,833	0.5	4, 5, 6, 9, 10, 13	EW-4 and 13 OFF; Adjust stingers
10/12/07 9:10	1739.2	1,258	104,302	55,077	821	78,654	0.7	4, 5, 6, 9, 10, 13	
10/16/07 8:20	1836.4	5,831	110,134	58,067	2,990	81,644	0.5	4, 5, 6, 9, 10, 13	
10/16/07 14:00	1839.9	211	110,344	58,197	130	81,774	0.6	4, 5, 9, 10, 13	EW-6 OFF; EW-4 and 13 ON
10/18/07 15:35	1890.6	3,040	113,384	60,008	1,811	83,585	0.6	4, 5, 9, 10, 13	
10/23/07 8:35	2005.9	6,918	120,302	64,437	4,429	88,014	0.6	4, 5, 9, 10, 13	
10/23/07 12:45	2009.3	205	120,508	64,574	137	88,151	0.7	4, 5, 9, 10, 13	Stingers lowered
10/25/07 15:20	2061.0	3,101	123,609	66,962	2,388	90,539	0.8	4, 5, 9, 10, 13	
10/29/07 12:40	2156.2	5,714	129,323	71,422	4,460	94,999	0.8	4, 5, 9, 10, 13	
10/30/07 12:00	2178.9	1,363	130,686	72,530	1,108	96,107	0.8	4, 5, 9, 10, 13	
10/30/07 14:00	2181.0	124	130,810	72,626	96	96,203	0.8	5, 6, 9, 10	EW-4 and 13 OFF; EW-6 ON
11/1/07 12:55	2228.8	2,870	133,680	74,730	2,104	98,307	0.7	5, 6, 9, 10	
11/2/07 12:55	2253.3	1,468	135,148	75,802	1,072	99,379	0.7	5, 6, 9, 10	
11/2/07 14:00	2254.6	82	135,230	75,830	28	99,407	0.3	2, 5, 6, 9, 10, 11	Begin low-load operation prior to shutdown
11/3/07 15:50	2280.7	1,566	136,796	75,844	14	99,421	0.0	2, 5, 6, 9, 10, 11	System Shutdown @15:50
12/4/07 13:30	2282.6	112	136,908	75,940	96	99,517	0.9	5, 9, 10	System Start @12/4/2007 11:30
12/4/07 15:35	2284.6	122	137,030	76,035	95	99,612	0.8	5, 9, 10	
12/6/07 13:05	2291.5	413	137,443	76,719	684	100,296	1.7	5, 9, 10	System down for approximately 39.4 hours
12/6/07 15:15	2293.7	132	137,575	77,013	294	100,590	2.2	5, 6, 9, 10	EW-6 ON
12/7/07 10:15	2313.1	1,163	138,738	78,715	1,702	102,292	1.5	5, 6, 9, 10	

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2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
12/7/07 11:35	2314.5	82	138,820	78,811	96	102,388	1.2	5, 6, 9, 10	
12/8/07 11:45	2339.2	1,481	140,301	79,909	1,098	103,486	0.7	5, 6, 9, 10	
12/11/07 10:00	2410.9	4,304	144,605	82,400	2,491	105,977	0.6	5, 6, 9, 10	
12/11/07 13:05	2413.6	164	144,769	82,573	173	106,150	1.1	5, 6, 9, 10	
12/13/07 7:40	2457.2	2,612	147,381	84,643	2,070	108,220	0.8	5, 6, 9, 10	
12/13/07 9:15	2458.8	98	147,479	84,745	102	108,322	1.0	5, 6, 9, 10	
12/13/07 9:45	2459.3	30	147,509	84,770	25	108,347	0.8	5, 6, 9, 10	
12/13/07 11:45	2461.3	122	147,631	84,920	150	108,497	1.2	5, 6, 9, 10	
12/17/07 11:55	2559.5	5,893	153,524	91,182	6,262	114,759	1.1	5, 6, 9, 10	
12/18/07 7:50	2579.9	1,219	154,743	92,550	1,368	116,127	1.1	5, 6, 9, 10	
12/18/07 12:40	2584.7	289	155,032	92,920	370	116,497	1.3	5, 6, 9, 10	
12/18/07 13:50	2585.8	67	155,099	93,011	91	116,588	1.4	5, 9, 10, 13	EW-6 OFF; EW-13 ON
12/20/07 11:25	2631.9	2,766	157,865	96,066	3,055	119,643	1.1	5, 9, 10, 13	
12/21/07 9:15	2654.2	1,340	159,205	97,382	1,316	120,959	1.0	5, 9, 10, 13	
12/21/07 11:05	2655.9	103	159,308	97,464	82	121,041	0.8	5, 9, 10, 13	Lower Stingers
12/22/07 10:00	2679.4	1,407	160,715	98,337	873	121,914	0.6	5, 9, 10, 13	
12/24/07 13:55	2732.5	3,187	163,901	101,477	3,140	125,054	1.0	5, 9, 10, 13	
12/26/07 17:00	2784.7	3,133	167,035	104,825	3,348	128,402	1.1	5, 9, 10, 13	
12/27/07 12:25	2804.2	1,169	168,204	106,090	1,265	129,667	1.1	5, 9, 10, 13	
12/31/07 13:00	2903.0	5,926	174,130	112,681	6,591	136,258	1.1	5, 9, 10, 13	
1/2/07 14:00	2953.0	3,004	177,134	116,057	3,376	139,634	1.1	5, 9, 10, 13	
1/2/07 14:50	2953.9	52	177,186	116,127	70	139,704	1.3	4, 5, 9, 10	EW-13 OFF; EW-4 ON
1/3/08 12:30	2958.8	293	177,479	116,640	513	140,217	1.8	4, 5, 9, 10, 13	System down overnight; EW-13 ON
1/3/08 14:50	2961.2	143	177,622	116,875	235	140,452	1.6	4, 5, 9, 10, 13	

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Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
1/7/08 14:10	3058.7	5,853	183,475	124,190	7,315	147,767	1.2	4, 5, 9, 10, 13	
1/8/08 11:50	3078.0	1,156	184,630	125,670	1,480	149,247	1.3	4, 5, 9, 10, 13	
1/9/08 11:30	3082.6	276	184,906	126,230	560	149,807	2.0	4, 5, 9, 10, 13	System down overnight
1/9/08 13:30	3084.6	122	185,029	126,565	335	150,142	2.7	5, 6, 9, 10, 13	EW-4 OFF; EW-6 ON
1/10/08 11:05	3106.7	1,324	186,352	128,874	2,309	152,451	1.7	5, 6, 9, 10, 13	
1/10/08 15:25	3111.1	265	186,617	129,295	421	152,872	1.6	5, 6, 9, 10, 13	
1/11/08 8:45	3128.7	1,059	187,676	130,935	1,640	154,512	1.5	5, 6, 9, 10, 13	
1/11/08 14:35	3134.7	357	188,033	131,480	545	155,057	1.5	5, 6, 9, 10, 13	
1/12/08 12:30	3157.1	1,342	189,375	133,543	2,063	157,120	1.5	5, 6, 9, 10, 13	
1/13/08 9:55	3178.9	1,313	190,688	135,553	2,010	159,130	1.5	5, 6, 9, 10, 13	
1/14/08 11:55	3205.5	1,591	192,278	137,983	2,430	161,560	1.5	5, 6, 9, 10, 13	
1/14/08 15:45	3209.4	235	192,513	138,344	361	161,921	1.5	5, 6, 9, 10, 13	
1/15/08 9:15	3227.2	1,073	193,586	139,962	1,618	163,539	1.5	5, 6, 9, 10, 13	
1/15/08 13:25	3230.2	176	193,762	140,293	331	163,870	1.9	5, 6, 9, 10, 13	System down 1 hour for routine service
1/16/08 11:20	3252.6	1,346	195,109	142,643	2,350	166,220	1.7	5, 6, 9, 10, 13	
1/17/08 9:40	3300.2	2,853	197,962	147,192	4,549	170,769	1.6	5, 6, 9, 10, 13	
1/20/08 11:00	3350.9	3,041	201,003	152,036	4,844	175,613	1.6	5, 6, 9, 10, 13	
1/22/08 8:45	3397.9	2,819	203,822	156,645	4,609	180,222	1.6	5, 6, 9, 10, 13	
1/22/08 14:05	3402.6	287	204,109	157,156	511	180,733	1.8	5, 6, 9, 10, 13	
1/23/08 7:55	3421.0	1,100	205,209	159,251	2,095	182,828	1.9	5, 6, 9, 10, 13	
1/24/08 19:05	3423.7	163	205,372	159,452	201	183,029	1.2	4, 5, 6, 9, 10, 13	System down 33 hours for sampling
1/26/08 11:35	3462.8	2,347	207,719	164,193	4,741	187,770	2.0	4, 5, 6, 9, 10, 13	R/R transfer pump
1/29/08 16:15	3482.5	1,180	208,900	165,700	1,507	189,277	1.3	4, 5, 6, 9, 10, 13, 14	System down due to flooding at site
1/30/08 14:10	3504.9	1,348	210,247	167,743	2,043	191,320	1.5	4, 5, 6, 9, 10, 13, 14	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
1/30/08 16:30	3507.3	143	210,390	167,994	251	191,571	1.8	4, 5, 6, 9, 10, 13	EW-14 OFF
1/31/08 19:23	3534.8	1,651	212,041	170,053	2,059	193,630	1.2	4, 5, 6, 9, 10, 13	
2/1/08 8:00	3547.7	775	212,816	170,962	909	194,539	1.2	4, 5, 6, 9, 10, 13	R/R transfer pump
2/1/08 16:05	3551.9	252	213,068	171,502	540	195,079	2.1	5, 6, 9, 10, 13	EW-4 OFF
2/2/08 16:30	3577.0	1,505	214,573	173,983	2,481	197,560	1.6	5, 6, 9, 10, 13	
2/4/08 10:45	3620.5	2,608	217,181	177,782	3,799	201,359	1.5	5, 6, 9, 10, 13	
2/5/08 9:37	3643.9	1,405	218,585	179,708	1,926	203,285	1.4	5, 6, 9, 10, 13	
2/5/08 14:35	3645.7	109	218,695	179,971	263	203,548	2.4	5, 6, 9, 10, 13	Move skid to higher ground; telemetry installed
2/6/08 11:00	3666.7	1,259	219,954	182,057	2,086	205,634	1.7	5, 6, 9, 10, 13	
2/8/08 9:05	3714.0	2,839	222,793	186,411	4,354	209,988	1.5	5, 6, 9, 10, 13	
2/11/08 9:30	3788.3	4,455	227,248	192,503	6,092	216,080	1.4	5, 6, 9, 10, 13	
2/11/08 16:45	3795.1	407	227,656	193,172	669	216,749	1.6	5, 6, 9, 10, 13	Stingers lowered
2/12/08 7:30	3810.2	905	228,560	194,565	1,393	218,142	1.5	5, 6, 9, 10, 13	
2/12/08 17:10	3818.3	491	229,051	195,459	894	219,036	1.8	5, 6, 9, 10, 13	R/R transfer pump, generator service
2/14/08 10:35	3860.7	2,542	231,593	199,505	4,046	223,082	1.6	5, 6, 9, 10, 13	
2/17/08 17:10	3941.0	4,820	236,413	206,650	7,145	230,227	1.5	5, 6, 9, 10, 13	
2/18/08 11:30	3959.8	1,124	237,537	208,316	1,666	231,893	1.5	5, 6, 9, 10, 13	
2/18/08 16:05	3964.4	280	237,817	208,735	419	232,312	1.5	5, 6, 9, 10, 13	
2/19/08 9:40	3978.1	817	238,634	209,651	916	233,228	1.1	5, 6, 9, 10, 13	System down 2.8 hours
2/19/08 10:50	3978.7	37	238,672	209,746	95	233,323	2.6	5, 6, 9, 10, 13	System down 0.5 hours for routine service
2/19/08 16:00	3984.0	318	238,990	210,441	695	234,018	2.2	5, 6, 9, 10, 13	
2/20/08 17:10	4009.4	1,525	240,514	213,317	2,876	236,894	1.9	5, 6, 9, 10, 13	
2/21/08 10:00	4026.7	1,037	241,552	215,200	1,883	238,777	1.8	5, 6, 9, 10, 13	
2/22/08 13:35	4055.0	1,700	243,251	218,166	2,966	241,743	1.7	5, 6, 9, 10, 13	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
2/24/08 18:15	4109.1	3,245	246,496	223,941	5,775	247,518	1.8	5, 6, 9, 10, 13	
2/25/08 18:15	4133.7	1,475	247,972	226,541	2,600	250,118	1.8	5, 6, 9, 10, 13	
2/26/08 13:10	4152.6	1,136	249,108	228,672	2,131	252,249	1.9	5, 6, 9, 10, 13	
2/26/08 15:25	4154.9	140	249,248	228,957	285	252,534	2.0	5, 6, 9, 10, 13	System down 0.5 hours for routine service
2/27/08 8:10	4172.1	1,030	250,277	230,912	1,955	254,489	1.9	5, 6, 9, 10, 13	
2/27/08 8:15	4172.2	3	250,280	230,912	0	254,489	0.0	5, 6, 9, 10, 13	System shut down for sampling
2/29/08 7:30	4173.9	105	250,385	230,912	0	254,489	0.0	5, 6, 9, 10, 13	System down 147 hours due to motor failure
3/5/08 12:05	4176.6	161	250,547	230,912	0	254,489	0.0	None	System running on fresh air only
3/5/08 15:05	4179.6	180	250,727	231,219	307	254,796	1.7	5, 6, 9, 10, 13	
3/5/08 17:30	4182.1	148	250,875	231,548	329	255,125	2.2	5, 6, 9, 10, 13	
3/6/08 8:45	4197.7	939	251,814	233,565	2,017	257,142	2.1	5, 6, 9, 10, 13	
3/7/08 9:53	4223.5	1,544	253,358	237,016	3,451	260,593	2.2	5, 6, 9, 10, 13	
3/10/08 12:20	4298.2	4,485	257,843	245,448	8,432	269,025	1.9	5, 6, 9, 10, 13	
3/11/08 7:20	4317.9	1,179	259,022	247,561	2,113	271,138	1.8	5, 6, 9, 10, 13	
3/11/08 9:50	4319.3	86	259,109	247,710	149	271,287	1.7	5, 6, 9, 10, 13	
3/14/08 7:25	4390.7	4,286	263,395	255,949	8,239	279,526	1.9	5, 6, 9, 10, 13	
3/14/08 9:30	4392.8	126	263,521	256,171	222	279,748	1.8	5, 6, 9, 10, 13	
3/17/08 12:40	4469.7	4,613	268,135	264,730	8,559	288,307	1.9	5, 6, 9, 10, 13	
3/17/08 13:25	4470.5	46	268,180	264,840	110	288,417	2.4	5, 6, 9, 10, 13	Stingers lowered
3/18/08 7:30	4488.9	1,104	269,284	267,295	2,455	290,872	2.2	5, 6, 9, 10, 13	System down 0.5 hours for routine service
3/18/08 11:35	4491.9	182	269,466	267,537	242	291,114	1.3	5, 6, 9, 10, 13	
3/21/08 8:09	4562.7	4,244	273,710	276,513	8,976	300,090	2.1	5, 6, 9, 10, 13	EW-13 found vapor locked
3/21/08 9:28	4564.0	82	273,792	276,664	151	300,241	1.9	5, 6, 9, 10, 13	Stinger lifted on EW-13
3/23/08 18:45	4622.7	3,521	277,313	282,990	6,326	306,567	1.8	5, 6, 9, 10, 13	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
3/24/08 13:20	4628.5	348	277,661	283,709	719	307,286	2.1	5, 6, 9, 10, 13	System down overnight due to high water
3/24/08 15:50	4630.6	125	277,786	283,791	82	307,368	0.7	5, 6, 9, 10, 13	
3/25/08 7:15	4646.4	949	278,735	285,540	1,749	309,117	1.8	5, 6, 9, 10, 13	
3/25/08 12:25	4650.8	266	279,001	285,998	458	309,575	1.7	5, 6, 9, 10, 13	
3/26/08 9:00	4663.8	778	279,779	287,494	1,496	311,071	1.9	5, 6, 9, 10, 13	System down overnight due to high water
3/26/08 10:20	4665.3	88	279,867	287,610	116	311,187	1.3	5, 6, 9, 10, 13	
3/26/08 17:00	4672.4	429	280,296	288,469	860	312,046	2.0	5, 6, 9, 10, 13	
3/27/08 13:08	4692.6	1,209	281,505	290,600	2,131	314,177	1.8	5, 6, 9, 10, 13	
3/27/08 15:07	4694.6	122	281,627	290,828	228	314,405	1.9	5, 6, 9, 10, 13	
3/28/08 7:20	4711.2	995	282,622	292,625	1,797	316,202	1.8	5, 6, 9, 10, 13	
3/28/08 14:00	4718.0	411	283,033	293,325	700	316,902	1.7	5, 6, 9, 10, 13	
4/1/08 7:20	4809.7	5,501	288,534	302,641	9,316	326,218	1.7	5, 6, 9, 10, 13	
4/1/08 9:29	4811.9	132	288,666	302,785	144	326,362	1.1	5, 9, 10, 16	EW-16 connected and turned on
4/7/08 15:45	4908.1	5,768	294,434	302,914	129	326,491	0.0	5, 9, 10, 16	System unstable for 54 hours (motor failure)
4/8/08 7:20	4924.1	961	295,396	304,877	1,963	328,454	2.0	5, 9, 10, 16	
4/8/08 11:50	4928.0	235	295,631	305,307	430	328,884	1.8	5, 9, 10, 16	System down 0.5 hours for routine service
4/9/08 10:10	4950.9	1,377	297,008	307,500	2,193	331,077	1.6	5, 9, 10, 16	
4/11/08 7:40	4997.5	2,792	299,800	310,875	3,375	334,452	1.2	5, 9, 10, 16	
4/11/08 9:00	4998.8	80	299,880	310,963	88	334,540	1.1	5, 9, 10, 16	
4/15/08 7:39	5095.5	5,801	305,681	315,588	4,625	339,165	0.8	5, 9, 10, 16	
4/15/08 11:37	5098.6	188	305,869	315,752	164	339,329	0.9	5, 9, 10, 16	System down 0.5 hours for routine service
4/18/08 7:27	5168.1	4,168	310,037	320,426	4,674	344,003	1.1	5, 9, 10, 16	
4/18/08 9:58	5170.7	155	310,192	320,564	138	344,141	0.9	5, 9, 10, 16	
4/22/08 7:15	5266.3	5,739	315,931	327,156	6,592	350,733	1.1	5, 9, 10, 16	

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
4/22/08 14:00	5272.8	385	316,316	327,705	549	351,282	1.4	5, 9, 10, 16	System down 0.5 hours for routine service
4/24/08 10:05	5318.0	2,715	319,031	332,110	4,405	355,687	1.6	5, 9, 10, 16	
4/24/08 11:55	5319.8	107	319,139	332,266	156	355,843	1.5	5, 9, 10, 16	
4/25/08 7:26	5339.8	1,201	320,339	333,913	1,647	357,490	1.4	5, 9, 10, 16	
4/25/08 10:38	5343.1	196	320,536	334,219	306	357,796	1.6	5, 9, 10, 16	
4/29/08 7:15	5437.5	5,664	326,200	342,284	8,065	365,861	1.4	5, 9, 10, 16	
4/29/08 10:45	5440.5	181	326,380	342,505	221	366,082	1.2	5, 9, 10, 16	System down 0.5 hours for routine service
5/2/08 7:00	5510.0	4,173	330,553	348,691	6,186	372,268	1.5	5, 9, 10, 16	
5/2/08 8:50	5511.9	113	330,666	348,846	155	372,423	1.4	5, 9, 10, 16	
5/6/08 7:15	5608.2	5,779	336,445	356,633	7,787	380,210	1.3	5, 9, 10, 16	
5/6/08 10:00	5611.0	167	336,611	356,874	241	380,451	1.4	5, 9, 10, 16	System down 0.5 hours for routine service
5/9/08 8:23	5682.2	4,272	340,883	362,007	5,133	385,584	1.2	5, 9, 10, 16	
5/13/08 8:40	5763.3	4,866	345,749	368,396	6,389	391,973	1.3	5, 9, 10, 16	System down 0.5 hours for routine service
5/16/08 7:12	5834.2	4,255	350,004	nm [a]	5,531	397,504	1.3	5, 9, 10, 16	
5/20/08 7:37	5932.8	5,913	355,917	nm [a]	7,687	405,191	1.3	5, 9, 10, 16	System down 0.5 hours for routine service
5/21/08 10:35	5960.3	1,650	357,567	nm [a]	2,145	407,336	1.3	5, 9, 10, 16	
5/23/08 11:05	6008.5	2,897	360,464	nm [a]	3,766	411,102	1.3	5, 9, 10, 16	
5/23/08 12:10	6009.7	72	360,536	nm [a]	94	411,195	1.3	5, 9, 10, 16	
5/27/08 7:15	6102.8	5,581	366,116	nm [a]	7,255	418,450	1.3	5, 9, 10, 16	
5/27/08 9:17	6104.8	124	366,240	nm [a]	161	418,611	1.3	5, 9, 10, 16	System down 0.5 hours for routine service
5/30/08 8:35	6177.1	4,337	370,577	18,559	5,638	424,249	1.3	5, 9, 10, 16	
6/3/08 9:42	6276.2	5,944	376,521	26,352	7,793	432,042	1.3	5, 9, 10, 16	System down 0.5 hours for routine service
6/6/08 9:48	6343.8	4,059	380,580	31,863	5,511	437,553	1.4	5, 9, 10, 16	
6/10/08 20:32	6449.0	6,314	386,894	42,250	10,387	447,940	1.6	5, 9, 10, 16, 17, 18	EW-17 and 18 connected and turned on

TABLE B-4: GROUNDWATER EXTRACTION RATES AND CUMULATIVE WATER VOLUME
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
6/11/08 17:35	6470.5	1,286	388,180	44,300	2,050	449,990	1.6	5, 9, 10, 16, 17, 18	
6/13/08 9:30	6511.0	2,431	390,611	47,996	3,696	453,686	1.5	5, 9, 10, 16, 17, 18	
6/17/08 7:35	6606.9	5,757	396,368	55,430	7,434	461,120	1.3	5, 9, 10, 16, 17, 18	
6/17/08 11:42	6610.6	220	396,588	55,740	310	461,430	1.4	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
6/20/08 8:32	6680.7	4,205	400,793	61,164	5,424	466,854	1.3	5, 9, 10, 16, 17, 18	
6/24/08 10:30	6776.2	5,732	406,526	66,246	5,082	471,936	0.9	5, 9, 10, 16, 17, 18	System down 3 hours for service
6/26/08 8:25	6823.0	2,806	409,331	70,400	4,154	476,090	1.5	5, 9, 10, 16, 17, 18	
6/26/08 9:56	6824.6	93	409,424	70,540	140	476,230	1.5	5, 9, 10, 16, 17, 18	
6/27/08 8:00	6846.9	1,340	410,765	72,556	2,016	478,246	1.5	5, 9, 10, 16, 17, 18	
7/1/08 7:15	6943.8	5,816	416,581	79,796	7,240	485,486	1.2	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/1/08 11:41	6947.1	195	416,776	80,061	265	485,751	1.4	5, 9, 10, 16, 17, 18	
7/3/08 15:30	7000.5	3,208	419,983	83,808	3,747	489,498	1.2	5, 9, 10, 16, 17, 18	
7/8/08 12:28	7118.8	7,097	427,081	90,730	6,922	496,420	1.0	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/11/08 9:55	7189.3	4,229	431,310	93,578	2,848	499,268	0.7	5, 9, 10, 16, 17, 18	
7/15/08 7:40	7284.5	5,712	437,022	96,497	2,919	502,187	0.5	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/15/08 12:05	7288.2	220	437,242	96,686	189	502,376	0.9	5, 9, 10, 16, 17, 18	
7/16/08 13:52	7314.5	1,582	438,824	97,979	1,293	503,669	0.8	5, 9, 10, 16, 17, 18	
7/22/08 7:28	7454.5	8,398	447,221	105,347	7,368	511,037	0.9	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/22/08 11:10	7457.7	192	447,413	105,533	186	511,223	1.0	5, 9, 10, 16, 17, 18	
7/24/08 14:55	7510.5	3,167	450,580	108,636	3,103	514,326	1.0	5, 9, 10, 16, 17, 18	
7/29/08 7:30	7625.0	6,872	457,453	114,300	5,664	519,990	0.8	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
7/29/08 11:10	7628.0	179	457,632	114,500	200	520,190	1.1	5, 9, 10, 16, 17, 18	
8/6/08 8:25	7819.8	11,506	469,138	123,940	9,440	529,630	0.8	5, 9, 10, 16, 17, 18	System down 0.5 hours for routine service
8/6/08 9:15	7820.6	51	469,189	123,980	40	529,670	0.8	5, 9, 10, 16, 17, 18	

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2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time [1]	Hour-Meter Reading	Run-Time (minutes)	Cumulative Run-Time (minutes)	Totalizer Reading (gallons)	Water Volume (gallons)	Cumulative Water Volume (gallons)	Extraction Rate[2] (gpm)	Extraction Wells Open	Notes
8/8/08 9:45	7870.0	2,964	472,153	126,080	2,100	531,770	0.7	5, 9, 10, 16, 17, 18	
8/8/08 10:37	7870.9	55	472,208	126,110	30	531,800	0.5	5, 9, 10, 16, 17, 18	
8/12/08 9:25	7967.4	8,807	477,997	129,772	5,792	535,462	0.7	5, 9, 10, 16, 17, 18	System Shutdown

Notes:

[1] Times are approximate. Run-times are based on the hour-meter reading of the vacuum blower.

[2] The "Extraction Rate" is an estimated extraction rate for each time interval calculated from the Water Volume and Run-Time. gpm = gallons per minute.

[a] Totalizer malfunction - meter not recording volume. Extracted water volumes are estimated.

"nm" = no measurement

"--" = not analyzed

TABLE B-5: WELL HEAD VACUUM MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Vacuum at Blower (in. H2O) [1]	Vacuum at Well Head (in. H2O) [1]																	
		EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
7/26/07 1600	122	0.0	0.1	0.1	32.0	45.0	38.0	0.1	0.0	50.0	50.0	0.3	0.1	32.0	35.0	0.1	nm	nm	nm
7/27/07 15:00	129	0.0	0.1	0.1	30.0	44.0	37.0	0.2	0.1	50.0	49.0	0.3	0.1	30.0	31.5	0.1	nm	nm	nm
7/28/07 8:00	68	0.0	0.1	0.1	30.8	48.5	40.0	0.2	0.1	50.5	50.1	0.2	0.1	31.3	33.8	0.0	nm	nm	nm
7/28/07 11:00	95	0.0	0.0	0.1	29.3	45.9	39.3	0.1	0.0	49.5	49.2	0.1	0.1	30.5	31.8	0.0	nm	nm	nm
7/30/07 8:30	75	0.0	0.0	0.1	29.4	44.2	38.9	0.1	0.0	51.4	50.3	0.2	0.0	31.3	31.9	0.0	nm	nm	nm
7/30/07 11:30	95	0.0	0.0	0.1	29.2	44.0	38.3	0.1	0.0	50.1	49.6	0.1	0.0	30.9	31.6	0.0	nm	nm	nm
7/31/07 14:30	116	0.0	0.1	0.1	26.7	42.5	37.0	0.2	0.1	45.8	48.3	0.3	0.1	27.9	29.0	0.1	nm	nm	nm
8/1/07 10:30	109	0.1	0.1	0.1	27.5	43.9	39.3	0.2	0.1	46.2	49.0	0.3	0.1	28.5	29.6	0.1	nm	nm	nm
8/2/07 18:15	136	0.0	21.0	0.1	18.6	42.0	44.0	0.2	0.0	25.7	36.7	0.2	0.0	21.4	0.2	0.0	nm	nm	nm
8/3/07 14:30	166	0.1	20.6	0.1	18.4	38.3	44.0	0.2	0.0	25.0	33.5	0.2	0.0	20.8	0.1	0.0	nm	nm	nm
8/6/07 13:40	136	0.0	22.1	0.1	19.7	40.1	43.6	0.2	0.1	27.4	36.1	0.3	0.1	22.3	0.3	0.0	nm	nm	nm
8/8/07 12:15	109	0.1	22.0	0.1	19.7	37.8	30.2	0.1	0.1	27.0	34.4	0.2	0.0	22.0	0.1	0.0	nm	nm	nm
8/8/07 16:45	177	0.0	0.1	0.1	17.0	40.8	32.3	0.2	0.1	29.3	41.8	0.2	0.1	21.5	0.2	0.1	nm	nm	nm
8/10/07 10:45	136	0.0	0.0	0.1	17.2	33.4	31.5	0.2	0.0	29.2	40.2	0.1	0.0	21.6	0.1	0.0	nm	nm	nm
8/10/07 16:55	163	0.0	0.0	0.0	17.1	37.7	31.1	0.1	0.1	28.8	39.8	0.3	0.1	21.3	0.3	0.0	nm	nm	nm
8/13/07 10:30	136	0.0	0.0	0.1	17.6	37.7	32.2	0.1	0.1	30.0	41.3	0.3	0.1	22.0	0.3	0.0	nm	nm	nm
8/13/07 13:25	163	0.0	0.1	0.1	17.1	37.4	31.5	0.1	0.1	30.8	40.6	0.2	0.0	21.9	0.2	0.0	nm	nm	nm
8/15/07 10:50	136	0.0	0.1	0.0	18.0	35.3	30.0	0.2	0.0	27.0	31.6	0.3	0.1	22.6	0.3	0.0	nm	nm	nm
8/15/07 14:40	163	0.0	0.1	0.1	17.9	35.0	29.9	0.2	0.1	29.6	31.3	0.2	0.1	22.5	0.2	0.0	nm	nm	nm
8/17/07 13:40	163	0.0	0.1	0.0	17.6	36.2	31.3	0.1	0.0	31.1	39.8	0.1	0.0	21.8	0.1	0.0	nm	nm	nm
8/20/07 10:10	129	0.1	0.1	0.1	18.1	36.7	31.3	0.2	0.1	31.8	40.5	0.2	0.0	22.1	0.1	0.1	nm	nm	nm
8/20/07 18:45	136	0.0	0.1	0.0	17.1	33.7	0.2	0.1	0.1	30.9	41.5	0.3	0.0	21.4	16.2	0.1	nm	nm	nm
8/23/07 11:00	129	0.0	0.1	0.0	17.2	33.3	0.1	0.1	0.0	30.9	41.8	0.2	0.0	21.9	16.2	0.1	nm	nm	nm
8/23/07 16:30	136	0.0	13.6	0.1	13.5	27.4	18.8	0.1	0.0	23.4	31.1	0.3	0.1	18.0	10.8	0.1	nm	nm	nm
8/26/07 15:20	129	0.1	15.2	0.1	13.6	27.3	19.8	0.3	0.0	23.4	30.7	0.3	0.0	18.0	11.8	0.1	nm	nm	nm
8/29/07 8:15	88	0.1	15.6	0.1	13.8	27.6	20.5	0.1	0.1	23.9	31.1	0.3	0.0	18.3	12.2	0.1	nm	nm	nm
8/30/07 11:10	136	0.0	0.1	0.1	13.7	28.5	21.4	0.3	0.1	25.6	32.2	0.3	0.1	19.6	12.8	0.1	nm	nm	nm
8/30/07 14:30	156	27.7	16.2	0.1	13.6	28.8	22.5	0.3	0.1	25.9	32.9	0.2	0.0	0.1	0.1	0.0	nm	nm	nm
9/1/07 16:00	163	27.7	15.4	0.1	13.4	26.9	21.4	0.2	0.0	24.3	30.3	0.2	0.0	0.0	0.1	0.0	nm	nm	nm
9/4/07 8:20	95	30.3	17.1	0.1	14.4	28.8	23.6	0.2	0.0	26.9	33.5	0.1	0.0	0.1	0.1	0.0	nm	nm	nm

TABLE B-5: WELL HEAD VACUUM MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Vacuum at Blower (in. H2O) [1]	Vacuum at Well Head (in. H2O) [1]																	
		EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
9/5/07 12:55	136	28.9	17.1	0.1	13.7	27.7	22.9	0.1	0.0	25.3	31.3	0.2	0.0	0.0	0.1	0.0	nm	nm	nm
9/7/07 13:45	170	0.0	0.0	0.1	18.2	36.8	0.2	0.1	0.0	34.3	44.9	33.9	0.1	0.1	0.2	0.0	nm	nm	nm
9/11/07 8:45	129	0.0	0.1	0.1	19.1	38.2	0.3	0.2	0.1	36.3	46.9	37.2	0.1	0.1	0.2	0.0	nm	nm	nm
9/13/07 16:20	163	0.0	0.0	0.0	18.1	35.4	0.2	0.1	0.0	33.8	42.3	34.6	0.1	0.1	0.1	0.0	nm	nm	nm
9/13/07 17:10	143	0.0	34.3	0.1	0.0	34.4	0.3	0.2	0.0	32.8	41.5	34.2	0.1	0.1	0.2	0.0	nm	nm	nm
9/17/07 9:35	129	0.0	29.6	0.1	0.1	36.7	0.3	0.1	0.0	34.6	44.6	36.8	0.1	0.0	0.2	0.0	nm	nm	nm
9/18/07 14:25	163	0.0	28.8	0.1	0.0	34.8	0.3	0.3	0.0	32.9	41.1	34.5	0.1	0.1	0.1	0.0	nm	nm	nm
9/19/07 14:45	143	0.0	28.7	0.1	0.0	35.9	0.3	0.3	0.0	33.9	43.6	36.3	0.1	0.1	0.3	0.0	nm	nm	nm
9/22/07 10:50	122	0.0	28.8	0.1	0.0	36.7	0.3	0.1	0.0	35.0	44.7	36.3	0.1	0.1	0.1	0.0	nm	nm	nm
9/25/07 14:40	163	0.0	0.1	0.1	14.6	31.5	24.3	0.1	0.0	29.0	36.0	0.1	0.0	21.0	0.3	0.0	nm	nm	nm
9/26/07 10:10	122	0.0	0.0	0.0	15.2	31.7	25.2	0.1	0.1	29.7	36.5	0.1	0.0	21.5	0.2	0.0	nm	nm	nm
9/28/07 11:00	109	0.0	0.1	0.1	15.5	32.0	25.7	0.1	0.0	30.2	37.4	0.1	0.0	21.6	0.1	0.0	nm	nm	nm
9/29/07 9:50	102	0.0	0.0	0.1	15.1	31.6	25.7	0.1	0.0	30.0	37.1	0.1	0.0	21.2	0.1	0.0	nm	nm	nm
10/2/07 10:00	95	0.0	0.3	0.3	14.7	32.9	25.1	0.3	0.0	29.4	36.3	0.1	0.2	20.8	0.1	0.0	nm	nm	nm
10/5/07 8:15	82	0.0	0.0	0.0	14.1	30.7	24.5	0.0	0.0	28.3	35.1	0.0	0.0	20.5	0.1	0.0	nm	nm	nm
10/9/07 8:25	54	0.0	0.0	0.0	15.4	21.0	22.1	0.1	0.0	0.0 [2]	30.5	0.0	0.0	18.2	0.1	0.0	nm	nm	nm
10/11/07 8:15	14	0.1	0.0	0.0	16.7	19.8	15.1	0.0	0.0	0.0 [2]	0.0 [2]	0.0	0.0	13.1	0.0	0.0	nm	nm	nm
10/11/07 12:25	95	0.0	0.0	0.0	11.7	23.8	18.6	0.1	0.0	21.3	26.6	0.0	0.0	16.0	0.0	0.0	nm	nm	nm
10/11/07 12:40	150	0.0	0.1	0.1	0.0	33.1	26.6	0.1	0.0	31.2	39.8	0.2	0.0	0.1	0.0	0.0	nm	nm	nm
10/12/07 9:10	88	0.0	0.0	0.1	0.0	32.6	25.8	0.1	0.0	30.7	39.7	0.1	0.0	0.1	0.1	0.0	nm	nm	nm
10/16/07 8:20	48	0.0	0.0	0.1	0.0	24.6	19.3	0.1	0.0	22.5	28.5	0.1	0.0	0.0	0.0	0.0	nm	nm	nm
10/16/07 14:00	75	0.0	0.0	0.0	12.4	24.6	0.0	0.0	0.0	23.5	29.3	0.1	0.0	13.1	0.1	0.0	nm	nm	nm
10/18/07 15:35	95	0.0	0.0	0.0	11.2	22.7	0.1	0.0	0.0	21.4	26.4	0.0	0.0	12.1	0.1	0.0	nm	nm	nm
10/23/07 8:35	48	0.0	0.0	0.0	10.3	22.3	0.0	0.0	0.0	20.4	24.8	0.0	0.0	11.6	0.1	0.0	nm	nm	nm
10/23/07 12:45	116	0.0	0.0	0.0	10.4	24.5	0.0	0.0	0.0	21.9	26.4	0.0	0.0	12.0	0.0	0.0	nm	nm	nm
10/25/07 15:20	88	0.0	0.0	0.0	9.8	23.6	0.1	0.0	0.0	20.3	24.5	0.0	0.0	11.3	0.0	0.0	nm	nm	nm
10/29/07 12:40	82	0.0	0.0	0.0	9.1	22.7	0.0	0.0	0.0	18.8	22.6	0.0	0.0	10.6	0.1	0.0	nm	nm	nm
10/30/07 12:00	61	0.0	0.0	0.0	11.1	24.7	0.1	0.0	0.0	20.8	25.7	0.0	0.0	15.3	0.1	0.0	nm	nm	nm
10/30/07 14:00	88	0.0	0.0	0.0	0.0	27.1	20.9	0.0	0.0	23.4	28.8	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
11/1/07 12:55	75	0.0	0.0	0.0	0.0	24.5	19.2	0.0	0.0	20.2	25.3	0.0	0.0	0.0	0.0	0.0	nm	nm	nm

TABLE B-5: WELL HEAD VACUUM MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Vacuum at Blower (in. H2O) [1]	Vacuum at Well Head (in. H2O) [1]																	
		EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
11/2/07 12:55	95	0.0	0.0	0.1	0.0	24.2	18.4	0.1	0.0	19.0	24.6	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
11/2/07 14:00	41	0.0	15.8	0.1	0.0	13.9	15.0	0.1	0.0	15.8	19.5	18.6	0.0	0.0	0.0	0.0	nm	nm	nm
11/3/07 15:50	48	0.0	18.5	0.1	0.0	19.2	18.5	0.1	0.0	21.6	22.7	23.3	0.0	0.0	0.1	0.0	nm	nm	nm
Planned System Shutdown from November 3, 2007 to December 4, 2007																			
12/4/07 15:35	163	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	36.3	45.8	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
12/6/07 13:05	136	0.0	0.0	0.0	0.0	30.5	0.0	0.0	0.0	33.9	43.9	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
12/6/07 15:15	109	0.0	0.0	0.0	0.0	31.5	30.0	0.0	0.0	33.5	42.5	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
12/7/07 10:15	95	0.0	0.0	0.0	0.0	25.5	30.5	0.1	0.0	34.5	41.5	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
12/8/07 11:45	102	0.0	0.0	0.1	0.0	25.0	29.0	0.1	0.0	33.5	40.8	0.0	0.0	0.0	0.0	0.0	nm	nm	nm
12/11/07 10:00	88	0.0	0.1	0.1	0.0	23.2	27.7	0.2	0.0	32.5	40.2	0.1	0.0	0.0	0.0	0.0	nm	nm	nm
12/13/07 9:15	75	0.0	0.1	0.1	0.0	23.0	26.3	0.1	0.0	30.2	38.7	0.1	0.0	0.1	0.1	0.0	nm	nm	nm
12/17/07 11:55	95	0.0	0.1	0.1	0.0	23.7	24.5	0.1	0.0	27.0	36.6	0.1	0.0	0.0	0.0	0.0	nm	nm	nm
12/18/07 13:50	95	0.0	0.1	0.1	0.0	25.0	0.1	0.1	0.0	30.0	41.0	0.1	0.0	18.4	0.0	0.0	nm	nm	nm
12/20/07 11:25	109	0.0	0.0	0.0	0.0	24.0	0.1	0.0	0.0	27.5	39.5	0.0	0.0	20.1	0.1	0.0	nm	nm	nm
12/22/07 10:00	88	0.0	0.1	0.1	0.1	23.5	0.2	0.1	0.1	22.8	36.4	0.0	0.0	19.0	0.1	0.0	nm	nm	nm
12/24/07 13:55	88	0.0	0.0	0.0	0.0	21.7	0.0	0.0	0.0	20.0	33.2	0.0	0.0	17.3	0.0	0.0	nm	nm	nm
12/27/07 12:25	82	0.0	0.0	0.0	0.0	23.6	0.1	0.0	0.0	20.3	36.9	0.0	0.0	18.8	0.0	0.0	nm	nm	nm
1/3/08 12:30	82	0.0	0.1	0.0	14.7	18.5	0.1	0.1	0.0	16.0	27.5	0.0	0.0	16.2	0.0	0.0	nm	nm	nm
1/7/08 14:10	61	0.0	0.1	0.0	15.2	18.5	0.1	0.1	0.0	16.9	21.3	0.0	0.0	15.6	0.0	0.0	nm	nm	nm
1/9/08 13:30	95	0.7	0.6	0.6	0.7	22.5	21.2	0.7	0.6	17.3	35.0	0.8	0.5	17.5	0.8	0.3	nm	nm	nm
1/10/08 11:05	68	0.7	0.8	0.7	0.7	22.3	20.8	0.8	0.5	17.6	33.6	0.8	0.5	17.9	0.8	0.4	nm	nm	nm
1/11/08 14:35	82	0.6	0.7	0.6	0.7	21.2	19.9	0.7	0.5	16.7	31.4	0.7	0.4	17.1	0.7	0.3	nm	nm	nm
1/12/08 12:30	88	0.5	0.6	0.5	0.5	20.8	19.2	0.6	0.3	16.5	30.3	0.5	0.3	16.7	0.5	0.3	nm	nm	nm
1/14/08 11:55	88	0.4	0.5	0.5	0.5	20.0	18.6	0.5	0.3	15.8	28.4	0.5	0.3	16.1	0.5	0.2	nm	nm	nm
1/15/08 9:15	54	0.6	0.7	0.6	0.6	20.3	18.7	0.7	0.5	15.8	28.7	0.7	0.5	16.2	0.7	0.4	nm	nm	nm
1/16/08 11:20	88	0.5	0.5	0.5	0.5	21.0	19.5	0.5	0.3	16.2	31.4	0.6	0.3	16.7	0.5	0.3	nm	nm	nm
1/17/08 9:40	68	0.5	0.6	0.6	0.6	21.1	18.8	0.6	0.5	15.2	29.9	0.6	0.4	16.2	0.6	0.3	nm	nm	nm
1/22/08 8:45	54	0.7	0.8	0.7	0.8	20.3	18.8	0.8	0.7	15.9	29.8	0.9	0.7	16.1	0.9	0.5	nm	nm	nm
1/23/08 7:55	61	0.8	0.9	0.9	0.9	23.2	21.9	0.9	0.7	18.0	36.3	1.0	0.7	18.2	1.0	0.5	nm	nm	nm
1/26/08 11:35	82	0.8	0.8	0.7	16.6	20.6	22.4	0.8	0.7	19.5	24.6	0.9	0.7	20.0	0.9	0.3	nm	nm	nm

TABLE B-5: WELL HEAD VACUUM MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Vacuum at Blower (in. H2O) [1]	Vacuum at Well Head (in. H2O) [1]																	
		EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
2/5/08 9:37	61	0.6	0.7	0.5	0.8	18.4	27.2	0.9	0.5	17.7	24.3	0.9	0.6	18.8	0.9	0.5	nm	nm	nm
2/5/08 14:45	122	0.7	0.9	0.8	0.9	19.5	28.8	0.9	0.7	18.9	29.6	1.0	0.7	20.9	1.0	0.5	nm	nm	nm
2/6/08 11:00	68	0.7	0.9	0.8	0.8	18.6	28.1	0.9	0.7	18.6	27.5	0.9	0.7	20.4	0.9	0.5	nm	nm	nm
2/8/08 9:25	54	0.6	0.7	0.6	0.7	17.0	25.8	0.7	0.5	17.1	24.2	0.7	0.5	19.1	0.7	0.3	nm	nm	nm
2/11/08 9:30	61	0.5	0.7	0.7	0.7	15.1	23.9	0.7	0.5	16.0	20.3	0.7	0.5	17.3	0.7	0.3	nm	nm	nm
2/11/08 16:45	95	0.5	0.6	0.6	0.6	16.3	24.8	0.7	0.4	16.9	23.8	0.8	0.5	17.8	0.8	0.3	nm	nm	nm
2/12/08 7:30	54	0.5	0.7	0.6	0.7	16.3	25.1	0.7	0.5	17.0	23.4	0.7	0.6	18.1	0.8	0.4	nm	nm	nm
2/14/08 10:30	68	0.5	0.6	0.5	0.6	15.9	24.6	0.6	0.4	16.4	22.1	0.7	0.4	17.7	0.7	0.3	nm	nm	nm
2/18/08 16:05	68	0.4	0.4	0.4	0.5	14.1	22.8	0.5	0.3	14.7	19.3	0.5	0.3	16.2	0.5	0.3	nm	nm	nm
2/20/08 17:00	82	0.6	0.7	0.7	0.7	16.5	26.0	0.8	0.6	16.7	25.0	0.9	0.7	18.6	0.9	0.3	nm	nm	nm
2/25/08 18:00	68	0.8	0.9	0.9	0.9	16.4	25.1	1.0	0.7	16.0	23.6	1.0	0.8	17.8	1.0	0.6	nm	nm	nm
2/26/08 13:00	122	0.6	0.7	0.7	0.7	17.1	25.2	0.8	0.6	16.2	25.0	0.8	0.5	18.0	0.8	0.5	nm	nm	nm
3/5/08 17:30	95	0.7	0.6	0.5	0.6	17.3	20.0	0.7	0.5	31.0	38.0	0.7	0.5	14.7	0.7	0.3	nm	nm	nm
3/6/08 8:45	95	0.5	0.6	0.6	0.6	19.7	26.4	0.7	0.4	20.1	32.4	0.6	0.3	16.0	0.5	0.2	nm	nm	nm
3/10/08 12:00	109	0.3	0.5	0.4	0.4	18.2	23.0	0.5	0.3	19.5	26.1	0.5	0.3	13.8	0.4	0.1	nm	nm	nm
3/11/08 7:20	54	0.3	0.4	0.4	0.4	17.0	21.0	0.5	0.3	19.7	24.7	0.5	0.4	14.0	0.6	0.3	nm	nm	nm
3/17/08 13:30	122	0.2	0.3	0.3	0.3	16.0	16.6	0.3	0.2	15.5	21.6	0.4	0.3	13.6	0.4	0.1	nm	nm	nm
3/18/08 9:00	54	0.3	0.3	0.3	0.3	16.6	16.2	0.3	0.3	16.4	21.7	0.4	0.3	13.2	0.4	0.2	nm	nm	nm
3/21/08 8:30	71	0.2	0.3	0.2	0.2	19.9	20.4	0.3	0.1	17.9	24.9	0.3	0.1	0.3	0.3	0.0	nm	nm	nm
3/21/08 9:30	54	0.2	0.3	0.2	0.2	16.7	16.4	0.3	0.1	16.0	21.0	0.3	0.1	14.6	0.3	0.0	nm	nm	nm
3/23/08 18:45	88	0.2	0.1	0.1	0.1	13.7	14.2	0.3	0.1	14.2	18.1	0.3	0.1	12.4	0.3	0.0	nm	nm	nm
3/28/08 9:00	68	0.3	0.3	0.3	0.3	19.0	18.0	0.3	0.2	21.0	25.6	0.3	0.2	16.4	0.4	0.1	nm	nm	nm
4/1/08 7:20	48	0.1	0.3	0.2	0.2	17.7	16.1	0.3	0.1	21.0	24.0	0.3	0.2	15.6	0.3	0.1	nm	nm	nm
4/7/08 16:00	163	0.1	0.1	0.1	0.1	25.1	0.3	0.1	0.1	29.0	41.0	0.1	0.1	0.3	0.1	0.0	22.3	nm	nm
4/8/08 7:35	88	0.1	0.1	0.1	0.1	23.8	0.3	0.1	0.1	30.0	nm	0.1	0.1	0.3	0.1	0.0	19.5	nm	nm
4/11/08 7:50	54	0.0	0.0	0.0	0.1	25.0	0.0	0.2	0.0	29.2	26.5	0.2	0.1	0.2	0.2	0.0	15.4	nm	nm
4/16/08 9:05	34	0.1	0.1	0.1	0.1	20.6	0.2	0.1	0.1	24.7	21.5	0.0	0.0	0.1	0.0	0.0	13.1	nm	nm
4/18/08 8:00	41	0.1	0.1	0.1	0.1	22.8	0.2	0.1	0.1	16.9	23.8	0.1	0.0	0.2	0.1	0.0	15.6	nm	nm
4/22/08 7:30	41	0.0	0.0	0.0	0.0	17.4	0.1	0.0	0.0	16.5	21.1	0.0	0.0	0.0	0.0	0.0	13.4	nm	nm
4/25/08 8:40	57	0.0	0.1	0.1	0.0	18.8	0.1	0.1	0.0	15.0	24.5	0.0	0.0	0.1	0.1	0.0	10.5	nm	nm

TABLE B-5: WELL HEAD VACUUM MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Vacuum at Blower (in. H2O) [1]	Vacuum at Well Head (in. H2O) [1]																	
		EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10	EW-11	EW-12	EW-13	EW-14	EW-15	EW-16	EW-17	EW-18
4/29/08 7:20	54	0.0	0.0	0.0	0.0	13.4	0.1	0.0	0.0	10.6	20.1	0.1	0.0	0.1	0.0	0.0	20.0	nm	nm
5/2/08 7:07	54	0.0	0.0	0.0	0.0	15.7	0.1	0.1	0.0	12.7	22.5	0.1	0.1	0.1	0.1	0.0	11.8	nm	nm
5/13/08 7:30	95	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0	13.4	22.0	0.0	0.0	0.0	0.0	0.0	7.8	nm	nm
5/16/08 7:30	75	0.1	0.0	0.0	0.1	15.6	0.1	0.0	0.0	12.6	21.4	0.0	0.0	0.1	0.0	0.0	13.4	nm	nm
5/21/08 10:35	136	0.0	0.0	0.0	0.0	16.3	0.1	0.0	0.0	9.3	22.0	0.0	0.0	0.0	0.0	0.0	10.4	nm	nm
5/23/08 11:15	95	0.0	0.0	0.0	0.0	16.9	0.1	0.0	0.0	9.8	22.4	0.1	0.0	0.0	0.1	0.0	10.8	nm	nm
5/27/08 7:15	68	0.0	0.0	0.0	0.0	15.4	0.1	0.0	0.0	9.7	21.4	0.1	0.0	0.1	0.0	0.0	10.9	nm	nm
5/30/08 7:30	68	0.0	0.0	0.0	0.0	16.3	0.2	0.1	0.0	10.0	21.8	0.1	0.0	0.1	0.1	0.0	9.8	nm	nm
6/3/08 9:40	68	0.0	0.0	0.0	0.0	15.2	0.1	0.0	0.0	13.2	21.3	0.0	0.0	0.1	0.0	0.0	11.9	nm	nm
6/6/08 9:45	197	0.0	0.1	0.0	0.0	20.0	0.1	0.0	0.0	10.1	24.6	0.1	0.0	0.1	0.1	0.0	12.0	nm	nm
6/13/08 9:30	109	0.0	0.0	0.0	0.1	17.5	0.1	0.0	0.0	8.0	16.0	0.0	0.0	0.1	0.1	0.0	8.0	85.0	30.0
6/17/08 8:55	56	0.0	0.1	0.0	0.0	14.5	0.1	0.0	0.0	7.0	13.5	0.0	0.0	0.0	0.0	0.0	5.6	46.7	17.3
6/20/08 7:50	82	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	2.2	8.6	0.0	0.1	0.1	0.1	0.1	6.1	39.5	46.5
6/26/08 8:35	163	0.0	0.1	0.0	0.1	23.5	0.1	0.0	0.1	9.2	18.7	0.0	0.0	0.0	0.0	0.0	13.8	130.0	74.0
6/27/08 8:00	136	0.0	0.0	0.0	0.0	24.5	0.1	0.0	0.0	8.9	19.4	0.0	0.0	0.1	0.0	0.0	14.3	115.0	70.6
7/1/08 7:15	122	0.0	0.0	0.0	0.0	23.6	0.1	0.0	0.0	8.5	19.1	0.0	0.0	0.1	0.0	0.0	13.7	108.8	64.0
7/8/08 8:15	91	0.0	0.0	0.0	0.0	17.7	0.1	0.0	0.0	4.3	14.9	0.0	0.0	0.1	0.0	0.0	9.3	55.9	54.9
7/11/08 8:30	56	0.0	0.0	0.0	0.0	13.3	0.0	0.0	0.0	3.7	12.7	0.0	0.0	0.0	0.0	0.0	7.0	21.5	15.0
7/15/08 7:45	56	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0	6.1	17.3	0.0	0.0	0.0	0.0	0.0	11.3	76.4	22.5
7/22/08 7:30	75	0.0	0.0	0.0	0.0	18.1	0.1	0.0	0.0	0.4	15.8	0.0	0.0	0.0	0.0	0.0	8.0	60.2	23.9
7/29/08 7:40	63	0.0	0.0	0.0	0.0	16.8	0.0	0.0	0.0	2.1	14.4	0.0	0.0	0.0	0.0	0.0	6.6	53.4	21.2
8/8/08 9:50	78	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	2.0	13.7	0.0	0.0	0.0	0.0	0.0	7.2	43.5	14.8
8/12/08 9:00	75	0.0	0.1	0.0	0.0	16.0	0.1	0.0	0.0	1.8	13.1	0.0	0.0	0.1	0.0	0.0	6.7	41.9	15.8
Minimum	*14*	*0.0*	*0.0*	*0.0*	*0.0*	*6.8*	*0.0*	*0.0*	*0.0*	*0.4*	*8.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*5.6*	*21.5*	*14.8*
Maximum	*197*	*30.3*	*34.3*	*0.9*	*32.0*	*48.5*	*44.0*	*1.0*	*0.7*	*51.4*	*50.3*	*37.2*	*0.8*	*32.0*	*35.0*	*0.6*	*22.3*	*130.0*	*74.0*
Average	*98*	*0.9*	*2.8*	*0.2*	*6.6*	*25.3*	*15.5*	*0.2*	*0.1*	*22.7*	*30.7*	*2.5*	*0.1*	*11.2*	*2.8*	*0.1*	*11.5*	*67.5*	*36.2*

Notes:

[1] Vacuum readings are in inches of water (in. H2O). 1 in. H2O is equal to 0.0736 inches of mercury (in. Hg).

[2] Wells became "vapor locked." This means that the stingers contained a plug of water that would not allow vapor to pass.

"nm" = no measurement

TABLE B-6: WATER LEVEL MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

	Depth to Water (feet bgs)																	
Date/Time	**EW-1**	**EW-2**	**EW-3**	**EW-4**	**EW-5**	**EW-6**	**EW-7**	**EW-8**	**EW-9**	**EW-10**	**EW-11**	**EW-12**	**EW-13**	**EW-14**	**EW-15**	**EW-16**	**EW-17**	**EW-18**
07/25/2007 9:00	32.11	30.77	31.42	33.49	31.91	31.87	32.19	34.13	33.53	33.99	34.73	34.08	35.66	34.99	35.10	nm	nm	nm
08/03/2007 15:00	32.98	nm	32.26	nm	nm	nm	32.79	34.90	nm	nm	35.31	34.49	nm	35.50	35.46	nm	nm	nm
08/06/2007 15:00	33.16	nm	32.47	nm	nm	nm	32.98	35.15	nm	nm	35.53	34.67	nm	35.74	35.64	nm	nm	nm
08/08/2007 11:00	33.33	32.02	32.60	34.53	32.91	33.00	33.10	35.27	34.84	35.10	35.65	34.79	36.67	35.85	35.74	nm	nm	nm
08/10/2007 17:00	33.40	32.12	32.72	nm	nm	nm	33.24	35.37	nm	nm	35.77	34.91	nm	35.97	35.84	nm	nm	nm
08/13/2007 10:30	33.46	32.21	32.81	nm	nm	nm	33.36	35.55	nm	nm	35.90	35.04	nm	36.12	35.97	nm	nm	nm
08/15/2007 15:00	33.61	32.27	32.85	nm	nm	nm	33.43	35.63	nm	nm	35.98	35.08	nm	36.21	36.04	nm	nm	nm
08/20/2007 15:00	33.72	32.35	32.95	35.21	33.50	33.48	33.54	35.77	35.41	35.68	36.10	35.19	37.28	36.37	36.20	nm	nm	nm
08/23/2007 12:30	33.78	32.38	32.96	nm	nm	33.65	33.58	35.85	nm	nm	36.19	35.26	nm	nm	36.32	nm	nm	nm
08/26/2007 15:00	33.88	nm	33.03	nm	nm	nm	33.63	35.89	nm	nm	36.27	35.31	nm	nm	36.39	nm	nm	nm
08/29/2007 9:00	33.93	32.59	33.09	35.43	33.93	33.81	33.67	35.91	35.67	35.96	36.33	35.35	37.69	36.70	36.46	nm	nm	nm
09/04/2007 9:00	nm	nm	33.14	nm	nm	nm	33.74	35.96	nm	nm	36.35	35.40	37.46	36.62	36.46	nm	nm	nm
09/12/2007 8:00	34.08	32.64	33.18	nm	nm	33.95	33.85	36.02	nm	nm	nm	35.55	37.64	36.78	36.55	nm	nm	nm
09/13/2007 14:00	34.08	32.68	33.30	35.57	34.49	33.93	33.89	36.06	35.69	36.09	36.95	36.20	37.58	36.76	36.58	nm	nm	nm
09/22/2007 10:00	33.97	nm	33.08	35.49	nm	33.93	33.82	36.01	nm	nm	nm	35.56	nm	nm	36.57	nm	nm	nm
09/25/2007 12:00	33.84	nm	nm	35.43	nm	33.83	nm	nm	nm	nm	nm	nm	37.59	36.75	nm	nm	nm	nm
09/28/2007 9:30	33.79	32.34	32.84	nm	nm	nm	33.57	35.95	nm	nm	36.36	35.26	nm	36.72	36.41	nm	nm	nm
10/05/2007 9:00	33.67	32.22	32.70	nm	nm	nm	33.53	35.86	nm	nm	36.16	35.09	nm	36.54	36.29	nm	nm	nm
10/11/2007 10:00	33.51	32.10	32.57	nm	nm	nm	33.31	35.60	nm	35.71	36.06	34.98	nm	36.40	36.16	nm	nm	nm
10/16/2007 9:00	33.29	31.84	32.30	34.94	nm	33.48	33.10	35.46	nm	nm	35.88	34.77	37.05	36.20	35.96	nm	nm	nm
10/23/2007 9:00	32.92	31.31	31.65	nm	nm	32.80	32.49	35.32	nm	nm	35.52	34.39	nm	35.97	35.71	nm	nm	nm
10/30/2007 10:00	32.74	31.13	31.42	nm	nm	32.56	32.18	35.19	nm	nm	35.26	34.11	nm	35.75	35.49	nm	nm	nm
11/02/2007 12:55	32.54	30.98	31.17	34.45	34.30	32.75	31.91	35.02	35.69	36.08	35.11	33.86	36.53	35.59	35.34	nm	nm	nm
Planned System Shutdown from November 3, 2007 to December 4, 2007																		
12/04/2007 11:30	30.23	28.77	29.38	31.64	29.97	29.88	30.08	32.30	31.57	31.95	32.62	31.84	33.63	32.90	32.97	nm	nm	nm
12/07/2007 10:15	30.70	29.33	29.70	32.28	nm	nm	30.34	32.78	nm	nm	33.16	32.00	34.23	33.38	33.11	nm	nm	nm
12/11/2007 10:00	30.75	29.31	29.66	32.38	30.88	30.77	30.31	32.94	32.54	32.88	33.17	32.04	34.32	33.45	33.22	nm	nm	nm
12/20/2007 11:25	30.55	29.02	29.39	32.26	nm	30.39	30.06	32.89	nm	nm	33.01	31.90	nm	33.44	33.20	nm	nm	nm

TABLE B-6: WATER LEVEL MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

	Depth to Water (feet bgs)																	
Date/Time	**EW-1**	**EW-2**	**EW-3**	**EW-4**	**EW-5**	**EW-6**	**EW-7**	**EW-8**	**EW-9**	**EW-10**	**EW-11**	**EW-12**	**EW-13**	**EW-14**	**EW-15**	**EW-16**	**EW-17**	**EW-18**
12/27/2007 12:30	30.29	28.78	29.14	31.98	nm	30.15	29.81	32.60	nm	nm	32.75	31.62	nm	33.17	32.90	nm	nm	nm
01/03/2008 10:30	29.99	28.47	28.87	nm	nm	29.71	29.52	32.22	nm	nm	32.29	31.30	33.63	32.63	32.52	nm	nm	nm
01/09/2008 11:30	29.64	28.13	28.56	nm	nm	29.44	29.23	31.95	nm	nm	32.00	31.02	33.30	32.35	32.26	nm	nm	nm
01/23/2008 8:00	29.69	28.21	28.47	31.48	29.88	30.04	29.10	32.07	31.49	31.60	32.22	30.88	33.58	32.58	32.23	nm	nm	nm
01/29/2008 8:30	28.93	27.43	27.91	30.43	28.73	28.61	28.60	31.13	30.37	30.71	31.26	30.36	32.38	31.56	31.62	nm	nm	nm
02/05/2008 9:20	28.85	27.32	27.66	30.54	28.91	28.70	28.35	31.23	30.61	30.94	31.27	30.14	32.57	31.63	31.50	nm	nm	nm
02/19/2008 10:00	28.52	27.05	27.33	30.23	nm	nm	27.95	30.84	nm	nm	30.90	29.71	nm	31.25	31.05	nm	nm	nm
02/27/2008 9:00	28.51	28.03	27.23	30.24	28.79	28.62	27.85	30.87	30.79	30.80	30.91	29.53	32.33	30.28	30.93	nm	nm	nm
03/04/2008 11:00	27.84	26.28	26.68	29.51	27.70	27.47	27.33	30.23	29.45	29.69	30.13	29.13	31.38	30.50	30.48	nm	nm	nm
03/07/2008 9:15	28.18	26.73	26.98	29.90	28.01	27.56	27.58	30.49	29.19	29.42	30.62	29.29	32.34	30.98	30.62	nm	nm	nm
03/11/2008 9:00	28.22	26.77	27.02	29.91	nm	nm	27.62	30.50	nm	nm	30.63	29.29	nm	30.99	30.64	nm	nm	nm
03/18/2008 10:45	28.21	26.78	27.03	29.91	nm	nm	27.59	30.51	nm	nm	30.63	29.26	31.98	30.96	30.60	nm	nm	nm
03/21/2008 8:45	28.31	26.91	27.12	30.02	nm	nm	27.64	30.55	nm	nm	30.70	29.29	nm	30.96	30.57	nm	nm	nm
03/28/2008 12:40	28.12	26.70	26.94	29.81	nm	nm	27.52	30.36	nm	nm	30.52	29.19	nm	30.86	30.53	nm	nm	nm
04/01/2008 9:00	28.09	26.66	26.89	29.75	28.13	28.10	27.46	30.33	28.87	29.58	30.46	29.14	31.60	30.79	30.51	nm	nm	nm
04/03/2008 10:00	27.72	26.15	26.52	29.33	27.56	27.32	27.13	30.03	29.25	29.52	29.95	28.93	31.23	30.32	30.31	28.42	nm	nm
04/07/2008 9:00	27.51	25.94	26.38	29.04	27.27	27.06	26.98	29.77	28.86	29.22	29.72	28.79	30.94	30.07	30.12	28.11	nm	nm
04/08/2008 9:25	27.80	26.32	26.57	29.44	nm	27.66	27.16	29.99	nm	nm	30.12	28.91	31.39	29.45	30.22	nm	nm	nm
04/09/2008 10:20	27.86	26.36	26.64	29.51	nm	27.70	27.21	nm	nm	nm	30.17	28.98	31.45	30.52	30.27	nm	nm	nm
04/11/2008 7:30	27.91	26.42	26.72	29.51	27.21	27.70	27.31	30.08	28.04	29.11	30.23	29.09	31.45	30.56	30.35	28.39	nm	nm
04/15/2008 9:15	28.00	26.53	26.89	29.52	nm	27.74	27.48	30.13	nm	nm	30.32	29.29	31.50	30.64	30.54	nm	nm	nm
04/18/2008 8:30	28.10	26.63	26.98	29.65	nm	27.87	27.56	30.25	nm	nm	30.44	29.38	31.64	30.78	30.64	nm	nm	nm
04/25/2008 9:55	28.54	27.09	27.33	30.19	nm	28.43	27.90	30.70	nm	nm	30.91	29.74	32.18	31.24	30.99	nm	nm	nm
04/29/2008 9:00	28.71	27.24	27.48	30.33	nm	28.54	28.06	30.89	nm	nm	30.05	29.91	32.31	31.38	31.18	nm	nm	nm
05/02/2008 7:00	28.86	27.39	27.59	30.53	29.86	28.72	28.16	31.07	30.29	30.73	31.22	30.03	32.50	31.57	31.33	30.09	nm	nm
05/06/2008 8:00	28.87	27.36	27.57	30.55	nm	28.73	28.14	31.09	nm	nm	31.21	30.00	32.52	31.57	31.33	nm	nm	nm
05/09/2008 8:00	28.87	27.35	27.56	30.62	nm	28.72	28.15	31.15	nm	nm	31.21	30.02	32.55	31.58	31.37	nm	nm	nm
05/21/2008 10:00	28.99	27.54	27.80	30.73	nm	nm	28.40	31.32	31.03	30.99	31.45	30.33	32.78	31.80	31.62	30.14	nm	nm

TABLE B-6: WATER LEVEL MEASUREMENTS
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

	Depth to Water (feet bgs)																	
Date/Time	**EW-1**	**EW-2**	**EW-3**	**EW-4**	**EW-5**	**EW-6**	**EW-7**	**EW-8**	**EW-9**	**EW-10**	**EW-11**	**EW-12**	**EW-13**	**EW-14**	**EW-15**	**EW-16**	**EW-17**	**EW-18**
05/23/2008 11:15	29.09	27.58	27.79	30.83	nm	28.96	28.41	31.37	nm	nm	31.46	30.31	32.78	31.83	31.60	30.42	nm	nm
05/27/2008 10:00	29.22	27.73	27.92	30.96	nm	29.05	28.52	31.47	nm	nm	31.55	30.42	32.89	31.93	31.74	30.54	nm	nm
06/03/2008 10:00	29.27	27.77	27.99	31.04	29.70	29.15	28.60	31.59	31.24	31.08	31.67	30.45	33.12	32.06	31.82	30.80	35.32	30.68
06/17/2008 8:20	29.68	28.16	28.35	31.45	nm	29.56	28.96	32.04	nm	nm	32.11	30.95	33.47	32.51	32.29	nm	35.52	29.72
06/20/2008 8:00	29.88	28.39	28.58	31.63	30.71	29.80	29.20	32.24	32.66	33.99	32.42	31.29	33.75	32.83	32.63	32.23	nm	nm
06/24/2008 7:25	30.39	28.59	28.83	31.70	nm	29.86	29.50	32.42	nm	nm	32.57	31.63	33.81	32.98	32.98	nm	nm	nm
06/26/2008 9:00	30.53	29.01	29.12	32.38	nm	30.46	29.77	33.03	nm	nm	33.11	31.98	34.63	33.58	33.38	nm	nm	nm
06/27/2008 7:05	30.61	29.10	29.20	32.44	31.95	30.65	29.86	33.09	33.15	34.82	33.28	32.07	34.74	33.73	33.46	32.77	nm	nm
07/01/2008 7:20	30.96	29.46	29.55	32.74	31.95	30.96	30.28	33.39	33.14	34.83	33.66	32.55	35.03	34.10	33.91	32.76	nm	nm
07/08/2008 8:40	31.25	29.79	29.97	32.96	nm	31.23	30.74	33.61	nm	nm	33.91	32.90	35.17	34.31	34.16	nm	nm	nm
07/11/2008 9:00	31.54	30.10	30.36	33.17	nm	31.49	31.16	33.83	nm	nm	34.25	33.35	35.42	34.62	34.56	nm	nm	nm
07/15/2008 7:45	31.80	30.38	30.73	33.39	34.01	31.76	31.54	34.07	nm	nm	34.50	33.66	35.62	34.86	34.85	nm	nm	nm
07/24/2008 14:00	31.66	nm	30.47	nm	35.10	nm	31.27	34.06	34.57	35.11	nm	33.27	nm	nm	34.51	nm	nm	nm
07/29/2008 8:15	31.59	30.12	30.45	33.27	nm	31.57	31.23	33.92	nm	nm	34.25	33.22	35.47	34.60	34.44	nm	nm	nm
08/06/2008 8:30	31.67	nm	30.56	nm	nm	nm	31.35	34.02	nm	nm	nm	33.34	nm	nm	34.56	nm	nm	nm
08/08/2008 10:10	31.64	30.19	30.57	33.28	nm	31.60	31.36	34.02	nm	nm	34.28	33.33	35.45	34.63	34.50	nm	nm	nm
08/12/2008 11:00	31.63	30.22	30.67	33.20	31.69	31.61	31.44	33.88	33.40	33.93	34.32	33.39	35.43	34.63	34.53	32.73	37.87	32.56
08/26/2008 14:45	31.72	30.37	31.10	33.13	31.59	31.55	31.85	33.81	33.18	33.62	34.36	33.65	35.30	34.65	34.74	32.41	34.97	32.23
09/17/2008 11:30	32.30	30.93	31.60	33.70	32.11	32.08	32.35	34.38	33.69	34.13	34.82	34.13	35.80	35.13	35.20	32.93	32.19	32.78
10/06/2008 8:15	31.55	30.09	30.67	33.00	31.38	31.27	31.43	33.70	32.99	33.38	34.00	33.24	35.06	34.35	34.42	32.20	31.41	32.07
10/10/2008 7:00	31.45	30.03	30.67	32.87	31.25	31.19	31.42	33.56	32.86	33.26	33.93	33.23	34.95	34.24	34.33	31.93	30.99	32.07
10/13/2008 7:45	31.24	29.70	30.35	32.67	31.05	30.99	31.17	33.41	32.68	33.11	33.72	32.94	34.64	34.03	34.08	31.92	30.73	31.78
Average	*30.76*	*29.09*	*29.68*	*31.78*	*30.85*	*30.40*	*30.34*	*33.01*	*32.15*	*32.72*	*33.08*	*32.17*	*34.02*	*33.41*	*33.39*	*31.11*	*33.63*	*31.74*
Min	*27.51*	*25.94*	*26.38*	*29.04*	*27.21*	*27.06*	*26.98*	*29.77*	*28.04*	*29.11*	*29.72*	*28.79*	*30.94*	*29.45*	*30.12*	*28.11*	*30.73*	*29.72*
Max	*34.08*	*32.68*	*33.30*	*35.57*	*35.10*	*33.95*	*33.89*	*36.06*	*35.69*	*36.09*	*36.95*	*36.20*	*37.69*	*36.78*	*36.58*	*32.93*	*37.87*	*32.78*

Notes:

"feet bgs" = feet ground surface

"nm" = no measurement

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 1																				
C1IN-07252007-1445	C1 Influent	7/25/07 14:45	**0.036**	<0.0016	**0.12**	**0.012**	**0.079**	**14**	<0.0025	**0.019**	**0.39**	<0.0022	<0.0043	**0.047**	**0.0043**	**0.58**	**0.045**	**0.12**	**0.65**	**0.0059**
C1IN-07262007-1100	C1 Influent	7/26/07 11:00	**0.019**	<0.0016	**0.037**	**0.0097**	**0.046**	**11**	**0.0070**	**0.016**	**0.26**	<0.0022	<0.0043	**0.047**	**0.0024**	**0.51**	**0.032**	**0.064**	**0.48**	**0.0053**
C1EFF-07262007-1100	C1 Effluent	7/26/07 11:00	**0.032**	<0.0016	**0.0049**	**0.013**	<0.0031	**0.0054**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0090**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-07262007-1100	C2 Effluent	7/26/07 11:00	**0.037**	<0.0016	**0.0046**	**0.013**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0058**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
BLANK-07262007-1105	Field Blank	7/26/07 11:05	**0.050**	<0.0016	**0.0060**	**0.022**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0081**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 2																				
C1IN-07312007-1230	C1 Influent	7/31/07 12:30	**0.022**	<0.0016	**0.010**	**0.024**	**0.018**	**8.9**	<0.0025	**0.0065**	**0.082**	<0.0022	<0.0043	**0.025**	**0.0062**	**0.25**	**0.024**	**0.017**	**0.16**	**0.0035**
C1EFF-07312007-1230	C1 Effluent	7/31/07 12:30	**0.029**	<0.0016	**0.0079**	**0.020**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.021**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C1IN-08012007-1830	C1 Influent	8/1/07 18:30	**0.016**	<0.0016	**0.0063**	**0.015**	**0.024**	**6.4**	<0.0025	**0.011**	**0.15**	<0.0022	<0.0043	**0.020**	**0.0047**	**0.22**	**0.022**	**0.0098**	**0.22**	**0.0035**
C1IN-08022007-1815	C1 Influent	8/2/07 18:15	<0.076	<0.026	<0.047	**0.031**	<0.050	**6.4**	<0.040	<0.032	**0.12**	<0.035	<0.069	<0.054	<0.030	**0.19**	<0.090	<0.12	**0.18**	<0.044
Week 3																				
C1IN-08082007-1215	C1 Influent	8/8/07 12:15	**0.019**	<0.0016	**0.0042**	**0.029**	**0.011**	**5.1**	<0.0025	**0.0047**	**0.068**	<0.0022	<0.0043	**0.014**	**0.0060**	**0.15**	**0.023**	**0.010**	**0.099**	<0.0027
C1EFF-08082007-1215	C1 Effluent	8/8/07 12:15	**0.027**	**0.0021**	**0.014**	**0.030**	<0.0031	**0.32**	<0.0025	<0.0020	**0.010**	<0.0022	<0.0043	<0.0034	**0.017**	<0.0027	**0.015**	<0.0077	<0.0027	<0.0027
C1IN-08082007-1715	C1 Influent	8/8/07 17:15	**0.0097**	<0.0016	<0.0029	**0.019**	**0.010**	**7.0**	<0.0025	**0.0047**	**0.060**	<0.0022	<0.0043	**0.017**	**0.0036**	**0.18**	**0.023**	**0.011**	**0.090**	**0.0027**
Week 4																				
C1IN-08132007-1215	C1 Influent	8/13/07 12:15	**0.012**	<0.0016	<0.0029	**0.019**	**0.0087**	**4.7**	<0.0025	**0.0023**	**0.035**	<0.0022	<0.0043	**0.015**	**0.0052**	**0.13**	**0.012**	<0.0077	**0.067**	<0.0027
C1EFF-08132007-1215	C1 Effluent	8/13/07 12:15	**0.038**	<0.0024	<0.0045	**0.055**	<0.0048	**0.75**	<0.0038	<0.0031	**0.027**	<0.0033	<0.0066	<0.0052	**0.012**	<0.0041	**0.042**	<0.012	<0.0042	<0.0042
C1IN-08162007-1930	C1 Influent	8/16/07 19:30	**0.024**	<0.0016	**0.0041**	**0.039**	**0.0090**	**4.4**	<0.0025	**0.0034**	**0.053**	<0.0022	<0.0043	**0.011**	**0.028**	**0.13**	**0.024**	**0.0079**	**0.069**	<0.0027
C1EFF-08162007-1930	C1 Effluent	8/16/07 19:30	**0.024**	<0.0016	**0.0034**	**0.034**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.022**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-08162007-1930	C2 Effluent	8/16/07 19:30	**0.028**	<0.0016	**0.0040**	**0.033**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.025**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 5																				
C1IN-08202007-1100	C1 Influent	8/20/07 11:00	**0.024**	<0.0016	**0.0041**	**0.016**	**0.0076**	**4.9**	<0.0025	**0.0032**	**0.050**	<0.0022	<0.0043	**0.010**	**0.0052**	**0.12**	**0.025**	**0.0079**	**0.064**	<0.0027
C1IN-08202007-1845	C1 Influent	8/20/07 18:45	**0.022**	<0.0016	**0.0042**	**0.016**	**0.010**	**6.3**	<0.0025	**0.0033**	**0.050**	<0.0022	<0.0043	**0.012**	**0.0043**	**0.12**	**0.027**	**0.025**	**0.11**	<0.0027
C1EFF-08202007-1845	C1 Effluent	8/20/07 18:45	**0.019**	<0.0016	**0.0031**	**0.015**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0050**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-08202007-1845	C2 Effluent	8/20/07 18:45	**0.022**	<0.0016	**0.0033**	**0.017**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0040**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C1IN-08232007-1100	C1 Influent	8/23/07 11:00	**0.022**	<0.0016	<0.0029	**0.022**	**0.0079**	**2.5**	**0.0036**	**0.0021**	**0.031**	<0.0022	<0.0043	**0.0097**	**0.0053**	**0.094**	**0.024**	**0.0093**	**0.060**	<0.0027
C1IN-08232007-1630	C1 Influent	8/23/07 16:30	**0.020**	<0.0016	<0.0029	**0.025**	**0.0093**	**2.8**	**0.0038**	**0.0033**	**0.063**	<0.0022	<0.0043	**0.0084**	**0.0058**	**0.084**	**0.020**	**0.0099**	**0.084**	<0.0027
C1EFF-08232007-1630	C1 Effluent	8/23/07 16:30	**0.016**	<0.0016	<0.0029	**0.016**	<0.0031	<0.0024	**0.0057**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0042**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 6																				
C1IN-08292007-0815	C1 Influent	8/29/07 8:15	**0.028**	<0.0016	**0.0040**	**0.030**	**0.0065**	**2.0**	<0.0025	**0.0023**	**0.040**	<0.0022	<0.0043	**0.0084**	**0.0071**	**0.083**	**0.021**	**0.0082**	**0.055**	<0.0027
C1IN-08302007-1430	C1 Influent	8/30/07 14:30	**0.024**	<0.0016	**0.0032**	**0.032**	**0.015**	**1.5**	**0.0037**	**0.0075**	**0.11**	<0.0022	<0.0043	**0.0040**	**0.0063**	**0.098**	**0.0091**	<0.0077	**0.19**	<0.0027
C1EFF-08302007-1430	C1 Effluent	8/30/07 14:30	**0.022**	<0.0016	**0.0035**	**0.024**	<0.0031	**0.0086**	**0.0060**	<0.0020	**0.0022**	<0.0022	<0.0043	<0.0034	**0.0056**	<0.0027	**0.015**	<0.0077	<0.0027	<0.0027
C2EFF-08302007-1430	C2 Effluent	8/30/07 14:30	**0.018**	<0.0016	**0.0032**	**0.024**	<0.0031	<0.0024	**0.0066**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0053**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 7																				
C1IN-09062007-1905	C1 Influent	9/6/07 19:05	**0.011**	**0.0016**	<0.0029	**0.023**	<0.0031	**1.6**	<0.0025	<0.0020	**0.026**	**0.011** [3]	**0.011** [3]	<0.0034	**0.013**	**0.073**	**0.0060**	<0.0077	0.037	<0.0027
C1IN-09062007-1920	C1 Influent	9/6/07 19:20	**0.017**	<0.0016	<0.0029	**0.025**	<0.0031	**2.4**	<0.0025	**0.0024**	**0.042**	<0.0043 [3]	<0.0043 [3]	**0.0039**	**0.0057**	**0.095**	**0.0089**	**0.011**	**0.081**	<0.0027
C1EFF-09062007-1920	C1 Effluent	9/6/07 19:20	**0.025**	**0.0050**	<0.0029	**0.039**	<0.0031	**0.023**	<0.0025	<0.0020	**0.0046**	<0.0043 [3]	<0.0043 [3]	<0.0034	**0.010**	<0.0027	**0.0073**	<0.0077	<0.0027	<0.0027
C2EFF-09062007-1920	C2 Effluent	9/6/07 19:20	**0.014**	<0.0016	<0.0029	**0.030**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0043 [3]	<0.0043 [3]	<0.0034	**0.0038**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 8																				
C1IN-09132007-1620	C1 Influent	9/13/07 16:20	**0.011**	<0.0016	<0.0029	**0.018**	**0.0042**	**2.2**	<0.0025	<0.0020	**0.033**	<0.0022	<0.0087	**0.0042**	**0.0032**	**0.090**	**0.011**	<0.0077	**0.038**	<0.0027
C1EFF-09132007-1620	C1 Effluent	9/13/07 16:20	**0.012**	<0.0016	<0.0029	**0.020**	<0.0031	**0.88**	<0.0025	**0.0025**	**0.039**	<0.0022	<0.0087	<0.0034	**0.0040**	<0.0027	**0.033**	<0.0077	<0.0027	<0.0027
C2EFF-09132007-1620	C2 Effluent	9/13/07 16:20	**0.012**	<0.0016	<0.0029	**0.018**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0033**	<0.0027	**0.022**	<0.0077	<0.0027	<0.0027
C1IN-09132007-1710	C1 Influent	9/13/07 17:10	**0.012**	<0.0016	<0.0029	**0.019**	**0.0034**	**2.0**	<0.0025	<0.0020	**0.051**	<0.0022	<0.0087	<0.0034	**0.0032**	**0.060**	**0.011**	<0.0077	**0.045**	<0.0027
Week 9																				
C1IN-09192007-1445	C1 Influent	9/19/07 14:45	**0.011**	<0.0016	<0.0029	**0.0076**	<0.0031	**1.6**	<0.0025	<0.0020	**0.021**	<0.0022	<0.0087	**0.0039**	**0.0026**	**0.061**	**0.011**	<0.0077	**0.024**	<0.0027
C1EFF-09192007-1445	C1 Effluent	9/19/07 14:45	**0.0098**	<0.0016	<0.0029	**0.0066**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0022**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-09192007-1445	C2 Effluent	9/19/07 14:45	**0.010**	<0.0016	<0.0029	**0.0068**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0023**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 10																				
C1IN-09252007-1305	C1 Influent	9/25/07 13:05	**0.019**	<0.0016	<0.0029	**0.012**	<0.0031	**1.4**	<0.0025	<0.0020	**0.018**	<0.0022	<0.0087	<0.0034	**0.0028**	**0.049**	**0.011**	<0.0077	**0.017**	<0.0027
C1IN-09252007-1440	C1 Influent	9/25/07 14:40	**0.019**	<0.0016	<0.0029	**0.012**	**0.0076**	**1.5**	<0.0025	<0.0020	**0.048**	<0.0022	<0.0087	**0.012**	**0.0028**	**0.069**	**0.029**	<0.0077	**0.038**	<0.0027
C1EFF-09252007-1440	C1 Effluent	9/25/07 14:40	**0.022**	<0.0016	<0.0029	**0.015**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0033**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-09252007-1440	C2 Effluent	9/25/07 14:40	**0.028**	<0.0016	<0.0029	**0.022**	<0.0031	<0.0024	**0.010**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0053**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 11																				
C1IN-10022007-0930	C1 Influent	10/2/07 9:30	**0.027**	<0.0032	<0.0059	**0.015**	<0.0063	**1.2**	<0.0049	<0.0040	**0.022**	<0.0043	<0.017	**0.010**	**0.0039**	**0.064**	**0.014**	<0.015	**0.023**	<0.0055
C1EFF-10022007-0935	C1 Effluent	10/2/07 9:35	**0.032**	<0.0016	**0.0031**	**0.017**	<0.0031	<0.0024	**0.0041**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0049**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-10022007-0940	C2 Effluent	10/2/07 9:40	**0.028**	<0.0016	**0.0035**	**0.015**	<0.0031	<0.0024	**0.0063**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0032**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 12																				
C1IN-10092007-0940	C1 Influent	10/9/07 9:40	**0.031**	<0.0016	**0.0032**	**0.016**	**0.0070**	**0.52**	**0.0039**	<0.0020	<0.0020	<0.0022	<0.0087	**0.0064**	**0.0030**	**0.070**	**0.013**	<0.0077	**0.036**	<0.0027
C1EFF-10092007-0935	C1 Effluent	10/9/07 9:35	**0.062**	<0.0039	<0.0071	**0.038**	<0.0076	<0.0059	<0.0060	<0.0049	<0.0048	<0.0053	<0.021	<0.0082	**0.0057**	<0.0065	<0.014	<0.019	<0.0066	<0.0066
C2EFF-10092007-0930	C2 Effluent	10/9/07 9:30	**0.027**	<0.0016	<0.0029	**0.016**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0036**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 13																				
C1IN-10162007-1400	C1 Influent	10/16/07 14:00	**0.023**	<0.0016	<0.0029	**0.0091**	**0.0058**	**0.97**	**0.0041**	<0.0020	**0.028**	<0.0022	<0.0087	**0.0089**	**0.0038**	**0.081**	**0.017**	<0.0077	**0.025**	<0.0027
C1EFF-10162007-1400	C1 Effluent	10/16/07 14:00	**0.020**	<0.0016	<0.0029	**0.0085**	<0.0031	**0.017**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0041**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-10162007-1400	C2 Effluent	10/16/07 14:00	**0.020**	<0.0016	<0.0029	**0.0074**	<0.0031	<0.0024	**0.0047**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0043**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 14																				
C1IN-10232007-1015	C1 Influent	10/23/07 10:15	**0.044**	<0.0016	**0.034**	**0.010**	**0.0035**	**0.62**	**0.0033**	<0.0020	**0.015**	<0.0022	<0.0087	**0.0076**	**0.0086**	**0.064**	**0.010**	<0.0077	**0.017**	<0.0027
C1EFF-10232007-1015	C1 Effluent	10/23/07 10:15	**0.040**	<0.0016	**0.031**	**0.011**	<0.0031	**0.029**	**0.0039**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0063**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-10232007-1015	C2 Effluent	10/23/07 10:15	**0.046**	<0.0016	**0.032**	**0.015**	<0.0031	<0.0024	**0.0052**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0087**	**0.0041**	<0.0056	<0.0077	<0.0027	<0.0027
Week 15																				
C1IN-10302007-1200	C1 Influent	10/30/07 12:00	**0.025**	<0.0016	**0.020**	**0.077**	<0.0031	**0.41**	<0.0025	<0.0020	**0.012**	<0.0022	<0.0087	**0.0062**	**0.0033**	**0.051**	**0.0088**	<0.0077	**0.013**	<0.0027
C1EFF-10302007-1200	C1 Effluent	10/30/07 12:00	**0.020**	<0.0016	<0.0029	**0.0054**	<0.0031	**0.026**	**0.0029**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0041**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-10302007-1200	C2 Effluent	10/30/07 12:00	**0.027**	<0.0016	<0.0029	**0.0066**	<0.0031	<0.0024	**0.0032**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0059**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Planned System Shutdown from November 3, 2007 to December 4, 2007																				
Week 20																				
C1IN-12042007-1535	C1 Influent	12/4/07 15:35	**0.20**	<0.0016	**0.15**	**0.0038**	<0.0031	**1.6**	<0.0025	<0.0020	**0.026**	<0.0022	<0.0087	**0.0046**	**0.010**	**0.083**	<0.0056	<0.0077	**0.019**	<0.0027
C1EFF-12042007-1535	C1 Effluent	12/4/07 15:35	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]	NA [4]
C2EFF-12042007-1535	C2 Effluent	12/4/07 15:35	**0.056**	<0.0016	**0.048**	**0.014**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	**0.0025**	**0.012**	<0.0034	**0.0084**	**0.0063**	<0.0056	<0.0077	<0.0027	<0.0027
Week 21																				
C1IN-12112007-1305	C1 Influent	12/11/07 13:05	**0.030**	<0.0016	**0.0046**	**0.0071**	<0.0031	**0.89**	**0.0039**	<0.0020	**0.018**	<0.0022	<0.0087	**0.0052**	**0.0034**	**0.059**	**0.016**	<0.0077	**0.015**	<0.0027
C1EFF-12112007-1305	C1 Effluent	12/11/07 13:05	**0.023**	<0.0016	<0.0029	**0.0058**	<0.0031	**0.031**	**0.0055**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0047**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-12112007-1305	C2 Effluent	12/11/07 13:05	**0.018**	<0.0016	<0.0029	**0.0049**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0045**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 22																				
C1IN-12182007-1240	C1 Influent	12/18/07 12:40	**0.028**	<0.0016	**0.0046**	**0.010**	<0.0031	**0.73**	<0.0025	<0.0020	**0.0083**	<0.0022	<0.0087	**0.0072**	**0.0063**	**0.044**	**0.0088**	<0.0077	**0.010**	<0.0027
C1IN-12182007-1350	C1 Influent	12/18/07 13:50	**0.024**	<0.0016	**0.0047**	**0.013**	<0.0031	**0.85**	<0.0025	<0.0020	**0.0052**	<0.0022	<0.0087	**0.019**	**0.0075**	**0.044**	**0.024**	<0.0077	**0.011**	<0.0027
C1EFF-12182007-1350	C1 Effluent	12/18/07 13:50	**0.023**	<0.0016	**0.0041**	**0.012**	<0.0031	<0.0024	**0.0039**	<0.0020	<0.0020	<0.0022	<0.0087	**0.0047**	**0.0077**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-12182007-1350	C2 Effluent	12/18/07 13:50	**0.022**	<0.0016	<0.0029	**0.013**	<0.0031	<0.0024	**0.0031**	<0.0020	<0.0020	<0.0022	<0.0087	**0.0038**	**0.0065**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 23																				
C1IN-12262007-1700	C1 Influent	12/26/07 17:00	**0.023**	<0.0016	<0.0029	**0.0055**	<0.0031	**0.87**	**0.0041**	<0.0020	**0.0080**	<0.0022	<0.0087	**0.010**	**0.0032**	**0.055**	**0.018**	<0.0077	**0.011**	<0.0027
C1EFF-12262007-1700	C1 Effluent	12/26/07 17:00	**0.025**	<0.0016	<0.0029	**0.0050**	<0.0031	<0.0024	**0.0047**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0047**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-12262007-1700	C2 Effluent	12/26/07 17:00	**0.020**	<0.0016	<0.0029	**0.0037**	<0.0031	<0.0024	**0.0039**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0044**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 24																				
C1IN-01022008-1400	C1 Influent	1/2/08 14:00	**0.018**	<0.0016	<0.0029	**0.0043**	<0.0031	**0.67**	**0.0025**	<0.0020	**0.0056**	<0.0022	<0.0087	**0.0084**	**0.0046**	**0.043**	**0.010**	<0.0077	**0.0085**	<0.0027
C1EFF-01022008-1400	C1 Effluent	1/2/08 14:00	**0.012**	<0.0016	<0.0029	**0.0046**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0047**	<0.0027	**0.012**	<0.0077	<0.0027	<0.0027
C2EFF-01022008-1400	C2 Effluent	1/2/08 14:00	**0.011**	<0.0016	<0.0029	**0.0043**	<0.0031	<0.0024	**0.0028**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0031**	<0.0027	**0.012**	<0.0077	<0.0027	<0.0027
C1IN-01022008-1450	C1 Influent	1/2/08 14:50	**0.017**	<0.0016	**0.0036**	**0.0060**	**0.0047**	**0.80**	<0.0025	<0.0020	**0.021**	<0.0022	<0.0087	**0.0041**	**0.0043**	**0.085**	<0.0056	<0.0077	**0.021**	<0.0027
Week 25																				
C1IN-01092008-1330	C1 Influent	1/9/08 13:30	**0.015**	<0.0016	<0.0029	**0.0056**	<0.0031	**0.91**	**0.0042**	<0.0020	**0.013**	<0.0022	<0.0087	**0.0075**	**0.0043**	**0.034**	**0.11**	**0.019**	**0.016**	<0.0027
C1EFF-01092008-1330	C1 Effluent	1/9/08 13:30	**0.013**	<0.0016	<0.0029	**0.0049**	<0.0031	<0.0024	**0.0079**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0037**	<0.0027	**0.0091**	<0.0077	<0.0027	<0.0027
C2EFF-01092008-1330	C2 Effluent	1/9/08 13:30	**0.0088**	<0.0016	<0.0029	**0.0033**	<0.0031	<0.0024	**0.0078**	<0.0020	<0.0020	<0.0022	<0.0087	<0.0034	**0.0026**	<0.0027	**0.012**	<0.0077	<0.0027	<0.0027
Week 26																				
C1IN-01152008-1325	C1 Influent	1/15/08 13:25	**0.011**	<0.0016	<0.0029	**0.0071**	<0.0031	**0.68**	<0.0025	<0.0020	<0.0020	<0.0022	**0.0061**	<0.0034	**0.060**	<0.0027	**0.019**	<0.0077	<0.0027	<0.0027
C1EFF-01152008-1325	C1 Effluent	1/15/08 13:25	**0.045**	**0.0024**	**0.0120**	**0.0095**	<0.0031	**0.027**	<0.0025	<0.0020	<0.0020	<0.0022	**0.0061**	<0.0034	**0.060**	<0.0027	**0.019**	<0.0077	<0.0027	<0.0027
C2EFF-01152088-1325	C2 Effluent	1/15/08 13:25	**0.015**	<0.0016	<0.0029	**0.0081**	<0.0031	**0.0071**	**0.0026**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0042**	<0.0027	**0.026**	<0.0077	<0.0027	<0.0027
Week 27																				
C1IN-01232008-0755	C1 Influent	1/23/08 7:55	**0.012**	<0.0016	<0.0029	**0.0039**	<0.0031	**1.1**	<0.0025	<0.0020	**0.0089**	<0.0022	<0.0043	**0.0081**	<0.0019	**0.041**	**0.11**	**0.017**	**0.016**	<0.0027
C1EFF-01232008-0755	C1 Effluent	1/23/08 7:55	<0.0048	<0.0016	<0.0029	**0.0049**	<0.0031	**0.10**	<0.0025	<0.0020	**0.0035**	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.092**	<0.0077	<0.0027	<0.0027
C2EFF-01232008-0755	C2 Effluent	1/23/08 7:55	**0.019**	<0.0016	<0.0029	**0.0063**	<0.0031	**0.015**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0050**	<0.0027	**0.069**	<0.0077	<0.0027	<0.0027
Week 28																				
C1IN-01302008-1410	C1 Influent	1/30/08 14:10	**0.010**	<0.0016	<0.0029	**0.0051**	<0.0031	**0.71**	**0.0050**	<0.0020	**0.0051**	<0.0022	<0.0043	**0.0054**	<0.0019	**0.027**	**0.16**	**0.022**	**0.013**	<0.0027
C1IN-01302008-1630	C1 Influent	1/30/08 16:30	**0.012**	<0.0016	<0.0029	**0.0062**	**0.0036**	**0.49**	**0.0046**	<0.0020	**0.0096**	<0.0022	<0.0043	**0.0071**	<0.0019	**0.040**	**0.13**	**0.015**	**0.017**	<0.0027
C1EFF-01302008-1630	C1 Effluent	1/30/08 16:30	**0.011**	<0.0016	<0.0029	**0.0055**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-01302008-1630	C2 Effluent	1/30/08 16:30	**0.0096**	<0.0016	<0.0029	**0.0046**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 29																				
C1IN-02052008-1435	C1 Influent	2/5/08 14:35	**0.051**	<0.0016	**0.029**	**0.0067**	<0.0031	**0.69**	**0.0042**	<0.0020	**0.0049**	<0.0022	<0.0043	**0.0068**	**0.0055**	**0.029**	**0.098**	**0.018**	**0.011**	<0.0027
C1EFF-02052008-1435	C1 Effluent	2/5/08 14:35	**0.031**	<0.0016	**0.0039**	**0.012**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0047**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-02052008-1435	C2 Effluent	2/5/08 14:35	**0.029**	<0.0016	<0.0029	**0.0065**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0056**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 30																				
C1IN-02122008-1710	C1 Influent	2/12/08 17:10	**0.063**	<0.0016	**0.0051**	**0.012**	<0.0031	**0.97**	<0.0025	<0.0020	**0.0059**	<0.0022	**0.0057**	**0.0077**	**0.017**	**0.032**	**0.11**	**0.018**	**0.013**	<0.0027
C1EFF-02122008-1710	C1 Effluent	2/12/08 17:10	**0.062**	<0.0016	**0.0052**	**0.0096**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	**0.0053**	<0.0034	**0.019**	<0.0027	**0.0075**	<0.0077	<0.0027	<0.0027
C2EFF-02122008-1710	C2 Effluent	2/12/08 17:10	**0.048**	<0.0016	**0.0038**	**0.0079**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.012**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
BLANK-02122008-1700	Field Blank	2/12/08 17:00	**0.078**	<0.0016	**0.0063**	**0.010**	<0.0031	<0.0024	**0.0034**	<0.0020	<0.0020	<0.0022	**0.0065**	<0.0034	**0.022**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 31																				
C1IN-02192008-1050	C1 Influent	2/19/08 10:50	**0.046**	<0.0016	**0.0041**	**0.0072**	<0.0031	**0.74**	<0.0025	<0.0020	**0.0074**	<0.0022	<0.0043	**0.0048**	**0.0021**	**0.028**	**0.13**	**0.013**	**0.014**	<0.0027
C1EFF-02192008-1050	C1 Effluent	2/19/08 10:50	**0.046**	<0.0016	**0.0043**	**0.0085**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0026**	<0.0027	**0.011**	<0.0077	<0.0027	<0.0027
C2EFF-02192008-1050	C2 Effluent	2/19/08 10:50	**0.038**	<0.0016	**0.099**	**0.0045**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0076**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 32																				
C1IN-02272008-0810	C1 Influent	2/27/08 8:10	**0.068**	<0.0016	**0.0041**	**0.014**	<0.0031	**0.54**	**0.0039**	<0.0020	**0.0052**	<0.0022	<0.0043	**0.0067**	**0.0098**	**0.025**	**0.15**	**0.019**	**0.012**	<0.0027
C1EFF-02272008-0810	C1 Effluent	2/27/08 8:10	**0.077**	<0.0016	**0.0041**	**0.015**	<0.0031	**0.042**	**0.0027**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.013**	<0.0027	**0.061**	<0.0077	<0.0027	<0.0027
C2EFF-02272008-0810	C2 Effluent	2/27/08 8:10	**0.076**	<0.0016	**0.0041**	**0.014**	<0.0031	<0.0024	**0.0040**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.013**	<0.0027	**0.034**	<0.0077	<0.0027	<0.0027
Week 33																				
C1IN-03052008-1730	C1 Influent	3/5/08 17:30	**0.041**	<0.0016	**0.0055**	**0.0082**	<0.0031	**0.70**	<0.0025	<0.0020	**0.0049**	<0.0022	<0.0043	**0.0066**	**0.0030**	**0.024**	**0.17**	**0.018**	**0.013**	<0.0027
C1EFF-03052008-1730	C1 Effluent	3/5/08 17:30	**0.025**	<0.0016	<0.0029	**0.0067**	<0.0031	**0.017**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0022**	<0.0027	**0.070**	<0.0077	<0.0027	<0.0027
C2EFF-03052008-1730	C2 Effluent	3/5/08 17:30	**0.023**	<0.0016	<0.0029	**0.0050**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0021**	<0.0027	**0.062**	<0.0077	<0.0027	<0.0027
Week 34																				
C1IN-03112008-1010	C1 Influent	3/11/08 10:10	**0.032**	<0.0027	<0.0050	**0.019**	<0.0053	**0.58**	**0.0045**	<0.0034	**0.0049**	<0.0037	<0.0073	<0.0057	**0.0040**	**0.018**	**0.12**	<0.013	**0.011**	<0.0046
C1EFF-03112008-1005	C1 Effluent	3/11/08 10:05	<0.0048	<0.0016	<0.0029	<0.0016	<0.0031	**0.078**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.015**	<0.0077	<0.0027	<0.0027
C2EFF-03112008-1000	C2 Effluent	3/11/08 10:00	**0.028**	<0.0016	<0.0029	**0.011**	<0.0031	<0.0024	**0.0040**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.003**	<0.0027	**0.039**	<0.0077	<0.0027	<0.0027
Week 35																				
C1IN-03182008-1115	C1 Influent	3/18/08 11:15	**0.049**	<0.0016	**0.0085**	**0.011**	<0.0031	**1.0**	**0.0055**	<0.0020	**0.0086**	<0.0022	<0.0043	<0.0034	**0.0066**	**0.027**	**0.076**	**0.0097**	**0.016**	<0.0027
C1EFF-03182008-1110	C1 Effluent	3/18/08 11:10	**0.050**	<0.0016	**0.0085**	**0.011**	<0.0031	**0.045**	**0.0070**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0060**	<0.0027	**0.14**	**0.0091**	<0.0027	<0.0027
C2EFF-03132008-1105	C2 Effluent	3/18/08 11:05	**0.054**	<0.0016	**0.0100**	**0.012**	<0.0031	**0.0053**	**0.0068**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.006**	<0.0027	**0.011**	<0.0077	<0.0027	<0.0027
Week 36																				
C1IN-03252008-1225	C1 Influent	3/25/08 12:25	**0.028**	<0.0016	**0.0047**	**0.0066**	<0.0031	**0.59**	**0.0029**	<0.0020	**0.0049**	<0.0022	<0.0043	**0.0034**	**0.0026**	**0.016**	**0.065**	<0.0077	**0.0094**	<0.0027
C1EFF-03252008-1225	C1 Effluent	3/25/08 12:25	**0.021**	<0.0016	<0.0029	**0.0070**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.003**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-03252008-1225	C2 Effluent	3/25/08 12:25	**0.016**	<0.0016	<0.0029	**0.0055**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.002**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 37																				
C1IN-04012008-0720	C1 Influent	4/1/08 7:20	**0.028**	<0.0016	<0.0029	**0.007**	<0.0031	**0.74**	<0.0025	<0.0020	**0.0057**	<0.0022	<0.0043	**0.0044**	**0.0046**	**0.022**	**0.073**	<0.0077	**0.011**	<0.0027
C1EFF-04012008-0720	C1 Effluent	4/1/08 7:20	**0.039**	**0.0019**	<0.0029	**0.009**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.007**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-04012008-0720	C2 Effluent	4/1/08 7:20	**0.021**	<0.0016	<0.0029	**0.006**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.003**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 38																				
C1IN-04072008-1545	C1 Influent	4/7/08 15:45	**0.028**	<0.0016	**0.0220**	**0.004**	<0.0031	**0.90**	<0.0025	<0.0020	**0.0065**	<0.0022	<0.0043	<0.0034	**0.0023**	**0.037**	**0.048**	<0.0077	**0.012**	<0.0027
C1EFF-04072008-1545	C1 Effluent	4/7/08 15:45	**0.022**	<0.0016	<0.0029	**0.004**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-04072008-1545	C2 Effluent	4/7/08 15:45	**0.013**	<0.0016	<0.0029	**0.006**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 39																				
C1IN-04152008-0750	C1 Influent	4/15/08 7:50	**0.023**	<0.0016	<0.0029	**0.011**	<0.0031	**0.42**	<0.0025	<0.0020	**0.0047**	<0.0022	<0.0043	<0.0034	**0.0029**	**0.028**	**0.046**	<0.0077	**0.0082**	<0.0027
C1EFF-04152008-0751	C1 Effluent	4/15/08 7:51	**0.021**	<0.0016	<0.0029	**0.010**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-04152008-0752	C2 Effluent	4/15/08 7:52	**0.019**	<0.0016	<0.0029	**0.011**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.002**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 40																				
C1IN-04222008-1400	C1 Influent	4/22/08 14:00	**0.018**	<0.0016	<0.0029	**0.008**	<0.0031	**1.0**	**0.0030**	<0.0020	**0.0079**	<0.0022	<0.0043	<0.0034	<0.0019	**0.034**	**0.042**	<0.0077	**0.012**	<0.0027
C1EFF-04222008-1400	C1 Effluent	4/22/08 14:00	**0.019**	<0.0016	<0.0029	**0.008**	<0.0031	<0.0024	**0.0043**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.002**	<0.0027	**0.031**	<0.0077	<0.0027	<0.0027
C2EFF-04222008-1400	C2 Effluent	4/22/08 14:00	**0.020**	<0.0016	<0.0029	**0.008**	<0.0031	<0.0024	**0.0053**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 41																				
C1IN-04292008-0910	C1 Influent	4/29/08 9:10	**0.027**	<0.0016	<0.0029	**0.006**	<0.0031	**1.0**	<0.0025	<0.0020	**0.0094**	<0.0022	<0.0043	<0.0034	**0.0028**	**0.031**	**0.046**	<0.0077	**0.012**	<0.0027
C1EFF-04292008-0910	C1 Effluent	4/29/08 9:10	**0.028**	**0.0026**	<0.0029	**0.008**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.004**	<0.0027	**0.025**	<0.0077	<0.0027	<0.0027
C2EFF-04292008-0910	C2 Effluent	4/29/08 9:10	**0.038**	<0.0016	<0.0029	**0.009**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.009**	<0.0027	**0.027**	<0.0077	<0.0027	<0.0027
Week 42																				
C1IN-05062008-0955	C1 Influent	5/6/08 9:55	**0.045**	<0.0031	<0.0057	**0.024**	<0.0061	**0.90**	<0.0048	<0.0039	**0.0058**	<0.0042	<0.0084	<0.0065	**0.0058**	**0.027**	**0.025**	<0.015	**0.0095**	<0.0053
C1EFF-05062008-0955	C1 Effluent	5/6/08 9:55	**0.032**	<0.0016	<0.0029	**0.019**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.006**	<0.0027	**0.023**	<0.0077	<0.0027	<0.0027
C2EFF-05062008-0955	C2 Effluent	5/6/08 9:55	**0.033**	<0.0016	<0.0029	**0.006**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.003**	<0.0027	**0.015**	<0.0077	<0.0027	<0.0027

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 43																				
C1IN-05132008-0900	C1 Influent	5/13/08 9:00	**0.028**	<0.0016	<0.0029	**0.008**	<0.0031	**0.54**	**0.0031**	<0.0020	**0.0052**	<0.0022	<0.0043	<0.0034	**0.0050**	**0.023**	**0.022**	<0.0077	**0.0074**	<0.0027
C1EFF-05132008-0915	C1 Effluent	5/13/08 9:15	**0.021**	<0.0016	<0.0029	**0.008**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.032**	<0.0077	<0.0027	<0.0027
C2EFF-05132008-0925	C2 Effluent	5/13/08 9:25	**0.037**	<0.0018	**0.0036**	**0.046**	<0.0035	<0.0027	**0.0029**	<0.0022	<0.0022	<0.0024	<0.0048	<0.0037	**0.004**	<0.0030	**0.018**	<0.0084	<0.0030	<0.0030
Week 44																				
C1IN-0520008-0832	C1 Influent	5/20/08 8:32	**0.041**	<0.0016	<0.0029	**0.022**	<0.0031	**0.88**	**0.0029**	<0.0020	**0.0069**	<0.0022	<0.0043	<0.0034	**0.0079**	**0.027**	**0.022**	<0.0077	**0.011**	<0.0027
C1EFF-05202008-0830	C1 Effluent	5/20/08 8:30	**0.052**	<0.0016	<0.0029	**0.030**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.008**	<0.0027	**0.014**	<0.0077	<0.0027	<0.0027
C2EFF-05202008-0834	C2 Effluent	5/20/08 8:34	**0.042**	<0.0016	<0.0029	**0.024**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.008**	<0.0027	**0.0078**	<0.0077	<0.0027	<0.0027
Week 45																				
C1IN-05272008-0900	C1 Influent	5/27/08 9:00	**0.041**	<0.0016	<0.0029	**0.015**	<0.0031	**1.0**	**0.0032**	<0.0020	**0.0083**	<0.0022	<0.0043	**0.0036**	**0.0047**	**0.042**	**0.022**	<0.0077	**0.013**	<0.0027
C1EFF-05272008-0915	C1 Effluent	5/27/08 9:15	**0.020**	<0.0016	<0.0029	**0.012**	<0.0031	**0.0026**	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.013**	<0.0077	<0.0027	<0.0027
C2EFF-05272008-0925	C2 Effluent	5/27/08 9:25	**0.043**	<0.0016	<0.0029	**0.017**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0031**	<0.0027	**0.026**	<0.0077	<0.0027	<0.0027
Week 46																				
C1IN-06032008-1010	C1 Influent	6/3/08 10:10	**0.038**	<0.0016	<0.0029	**0.0076**	<0.0031	**0.55**	<0.0025	<0.0020	**0.0051**	<0.0022	<0.0043	<0.0034	**0.0030**	**0.021**	**0.014**	<0.0077	**0.0067**	<0.0027
C1EFF-06032008-1020	C1 Effluent	6/3/08 10:20	**0.036**	<0.0016	<0.0029	**0.010**	<0.0031	**0.013**	**0.0026**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.020**	<0.0077	<0.0027	<0.0027
C2EFF-06032008-1030	C2 Effluent	6/3/08 10:30	**0.035**	<0.0016	<0.0029	**0.012**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0023**	<0.0027	**0.022**	<0.0077	<0.0027	<0.0027
Week 47																				
C1IN-06102008-0945	C1 Influent	6/10/08 9:45	**0.053**	<0.0016	**0.0041**	**0.016**	<0.0031	**0.87**	**0.0026**	<0.0020	**0.0090**	<0.0022	<0.0043	<0.0034	**0.0038**	**0.032**	**0.012**	<0.0077	**0.011**	<0.0027
C1EFF-06102008-0948	C1 Effluent	6/10/08 9:48	**0.045**	<0.0016	<0.0029	**0.013**	<0.0031	**0.18**	**0.0035**	<0.0020	**0.0037**	<0.0022	<0.0043	<0.0034	**0.0033**	<0.0027	**0.020**	<0.0077	<0.0027	<0.0027
C2EFF-06102008-0950	C2 Effluent	6/10/08 9:50	**0.052**	<0.0016	<0.0029	**0.019**	<0.0031	**0.0074**	**0.0036**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0053**	<0.0027	**0.025**	<0.0077	<0.0027	<0.0027
C1IN-06112008-1735	C1 Influent	6/11/08 17:35	**0.12**	<0.0016	**0.062**	**0.0038**	<0.0031	**0.43**	<0.0025	<0.0020	**0.0036**	<0.0022	<0.0043	<0.0034	**0.0050**	**0.021**	**0.0077**	<0.0077	**0.0073**	<0.0027
Week 48																				
C1IN-06172008-1130	C1 Influent	6/17/08 11:30	**0.030**	<0.0016	**0.0065**	**0.012**	<0.0031	**0.87**	<0.0025	<0.0020	**0.0073**	<0.0022	<0.0043	<0.0034	**0.0086**	**0.031**	**0.013**	<0.0077	**0.011**	<0.0027
C1EFF-06172008-1132	C1 Effluent	6/17/08 11:32	**0.025**	<0.0016	<0.0029	**0.014**	<0.0031	**0.30**	**0.0035**	<0.0020	**0.0053**	<0.0022	<0.0043	<0.0034	**0.0099**	<0.0027	**0.031**	<0.0077	<0.0027	<0.0027
C2EFF-06172008-1134	C2 Effluent	6/17/08 11:34	**0.028**	<0.0016	<0.0029	**0.013**	<0.0031	**0.014**	**0.0042**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.014**	<0.0027	**0.032**	<0.0077	<0.0027	<0.0027
Week 49																				
C1IN-06242008-0925	C1 Influent	6/24/08 9:25	**0.036**	<0.0016	**0.0034**	**0.014**	<0.0031	**0.20**	**0.0025**	<0.0020	**0.0039**	<0.0022	<0.0043	<0.0034	**0.0095**	**0.008**	<0.0056	<0.0077	**0.0042**	<0.0027
C1EFF-06242008-0920	C1 Effluent	6/24/08 9:20	**0.026**	<0.0016	<0.0029	**0.013**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0088**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-06242008-0915	C2 Effluent	6/24/08 9:15	**0.027**	<0.0016	<0.0029	**0.018**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.018**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 50																				
C1IN-07012008-1125	C1 Influent	7/1/08 11:25	**0.031**	<0.0016	<0.0029	**0.015**	<0.0031	**0.60**	**0.0025**	<0.0020	**0.010**	<0.0022	<0.0043	<0.0034	**0.0085**	**0.026**	**0.0090**	<0.0077	**0.0097**	<0.0027
C1EFF-07012008-1120	C1 Effluent	7/1/08 11:20	**0.030**	<0.0016	<0.0029	**0.013**	<0.0031	<0.0024	**0.0033**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0081**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-07012008-1115	C2 Effluent	7/1/08 11:15	**0.029**	<0.0016	<0.0029	**0.016**	<0.0031	<0.0024	**0.0051**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.011**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 51																				
C1IN-07082008-1216	C1 Influent	7/8/08 12:16	**0.046**	**0.0016**	**0.0086**	**0.013**	<0.0031	**0.56**	<0.0025	<0.0020	**0.0098**	<0.0022	<0.0043	<0.0034	**0.0077**	**0.027**	**0.0088**	<0.0077	**0.0093**	<0.0027
C1EFF-07082008-1218	C1 Effluent	7/8/08 12:18	**0.030**	<0.0016	<0.0029	**0.012**	<0.0031	<0.0024	**0.0040**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0072**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
C2EFF-07082008-1220	C2 Effluent	7/8/08 12:20	**0.047**	**0.0019**	**0.0049**	**0.019**	<0.0031	<0.0024	**0.0058**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.014**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 52																				
C1IN-07152008-1135	C1 Influent	7/15/08 11:35	**0.027**	<0.0016	<0.0029	**0.0098**	<0.0031	**0.50**	**0.0028**	<0.0020	**0.010**	<0.0022	<0.0043	**0.0046**	**0.0052**	**0.026**	**0.0097**	<0.0077	**0.010**	<0.0027
C1EFF-07152008-1130	C1 Effluent	7/15/08 11:30	**0.021**	<0.0016	<0.0029	**0.010**	<0.0031	<0.0024	**0.0043**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	<0.0019	<0.0027	**0.0054**	<0.0077	<0.0027	<0.0027
C2EFF-07152008-1125	C2 Effluent	7/15/08 11:25	**0.023**	<0.0016	<0.0029	**0.012**	<0.0031	<0.0024	**0.0054**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0061**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027

TABLE B-7: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED VAPOR
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

			Vapor Concentration (ug/L) [1, 2]																	
Sample Name	**Sample Location**	**Date/Time**	**Acetone**	**Benzene**	**2-Butanone**	**Carbon Disulfide**	**CT**	**Chloroform**	**Freon 12**	**1,1-DCA**	**1,1-DCE**	**o-Xylene**	**p/m-Xylene**	**PCE**	**Toluene**	**TCE**	**Freon 11**	**Freon 113**	**1,1,1-TCA**	**1,1,2-TCA**
Week 53																				
C1IN-07222008-1110	C1 Influent	7/22/08 11:10	**0.037**	<0.0016	<0.0029	**0.010**	<0.0031	**0.57**	**0.0097**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0068**	**0.022**	**0.0078**	<0.0077	**0.010**	<0.0027
C1EFF-07222008-1105	C1 Effluent	7/22/08 11:05	**0.030**	<0.0016	<0.0029	**0.0099**	<0.0031	<0.0024	**0.0046**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0068**	<0.0027	**0.0066**	<0.0077	<0.0027	<0.0027
C2EFF-07222008-1100	C2 Effluent	7/22/08 11:00	**0.030**	<0.0016	<0.0029	**0.012**	<0.0031	<0.0024	**0.0055**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0075**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 54																				
C1IN-07292008-1057	C1 Influent	7/29/08 10:57	**0.036**	<0.0016	**0.0054**	**0.013**	<0.0031	**0.84**	<0.0025	<0.0020	**0.011**	<0.0022	<0.0043	<0.0034	**0.0084**	**0.027**	**0.0077**	<0.0077	**0.012**	<0.0027
C1EFF-07292008-1059	C1 Effluent	7/29/08 10:59	**0.026**	<0.0016	<0.0029	**0.012**	<0.0031	<0.0024	**0.0032**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0082**	<0.0027	**0.0087**	<0.0077	<0.0027	<0.0027
C2EFF-07292008-1102	C2 Effluent	7/29/08 11:02	**0.040**	<0.0016	<0.0029	**0.018**	<0.0031	<0.0024	**0.0029**	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.014**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 55																				
C1IN-08062008-0900	C1 Influent	8/6/08 9:00	**0.041**	<0.0016	**0.0048**	**0.022**	<0.0031	**0.72**	<0.0025	<0.0020	**0.011**	<0.0022	<0.0043	<0.0034	**0.011**	**0.030**	**0.0081**	<0.0077	**0.012**	<0.0027
C1EFF-08062008-0902	C1 Effluent	8/6/08 9:02	**0.040**	<0.0016	<0.0029	**0.025**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.013**	<0.0027	**0.0067**	<0.0077	<0.0027	<0.0027
C2EFF-08062008-0904	C2 Effluent	8/6/08 9:04	**0.046**	<0.0016	**0.0035**	**0.0091**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.015**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027
Week 56																				
C1IN-08122008-0925	C1 Influent	8/12/08 9:25	**0.026**	<0.0016	<0.0029	**0.0095**	<0.0031	**0.39**	<0.0025	<0.0020	**0.0064**	<0.0022	<0.0043	<0.0034	**0.0051**	**0.017**	**0.0070**	<0.0077	**0.0081**	<0.0027
C1EFF-08122008-0925	C1 Effluent	8/12/08 9:25	**0.025**	<0.0016	<0.0029	**0.011**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0058**	<0.0027	**0.0061**	<0.0077	<0.0027	<0.0027
C2EFF-08122008-0925	C2 Effluent	8/12/08 9:25	**0.030**	<0.0016	<0.0029	**0.011**	<0.0031	<0.0024	<0.0025	<0.0020	<0.0020	<0.0022	<0.0043	<0.0034	**0.0062**	<0.0027	<0.0056	<0.0077	<0.0027	<0.0027

Notes:
[1] For clarity, only compounds routinely detected above reporting limits in influent samples are tabulated.
[2] Samples analyzed by Calscience Environmental Laboratories, Inc., of Garden Grove, California by USEPA Method TO-15.
[3] Reported as total xylenes.
[4] Sample not analyzed because Tedlar bag failed during transit to laboratory.
"C1" = First carbon vessel
"C2" = Second carbon vessel (connected in series)
"<" = The analyte was not detected above the reporting limit. Results detected above the reporting limit are shown in **bold**.
ug/L = micrograms per liter

"CT" = Carbon Tetrachloride
"Freon 12" = Dichlorodifluoromethane
"1,1-DCA" = 1,1-Dichloroethane
"1,1-DCE" = 1,1-Dichloroethene

"PCE" = Tetrachloroethene
"TCE" = Trichloroethene
"Freon 11" = Trichlorofluoromethane
"Freon 113" = 1,1,2-Trichloro-1,2,2-trifluoroethane
"1,1,1-TCA" = 1,1,1-Trichloethane
"1,1,2-TCA" = 1,1,2-Trichloroethane

TABLE B-8: SUMMARY OF CHEMICAL TEST RESULTS - EXTRACTED GROUNDWATER
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

		Extracted Groundwater Concentration (ug/L) [1, 2]	
Sample Name	**Sample Date/Time**	**Chloroform**	**Trichloroethene (TCE)**
EFF-07262007-1300	7/26/07 13:00	**75**	**1.1**
EFF-08022007-1815	8/2/07 18:15	**38**	<0.50
EFF-08082007-1215	8/8/07 12:15	**24**	<0.50
EFF-08082007-1715	8/8/07 17:15	**26**	<0.50
EFF-08202007-1100	8/20/07 11:00	**11**	<0.50
EFF-08212007-1700	8/21/07 17:00	**12**	<0.50
EFF-08232007-1630	8/23/07 16:30	**11**	<0.50
EFF-08302007-1430	8/30/07 14:30	**9.5**	<0.50
EFF-09112007-0845	9/11/07 8:45	**7.5**	<0.50
EFF-09252007-1440	9/25/07 14:40	**6.6**	<0.50
EFF-10162007-1400	10/16/07 14:00	**6.9**	<0.50
EFF-12132007-0945	12/13/07 9:45	**5.6**	<0.50
EFF-01152008-1345	1/15/08 13:45	**5.4**	<0.50
EFF-02192008-1050	2/19/08 10:50	**4.9**	<0.50
EFF-03182008-1025	3/18/08 10:25	**6.3**	<0.50
EFF-03272008-1308	3/27/08 13:08	**3.8**	<0.50
EFF-06062008-1115	6/6/08 11:15	**4.3**	<0.50
EFF-08122008-0925	8/12/08 9:25	**2.9**	<0.50

Notes:

[1] Only compounds detected at least once in the extracted groundwater are shown. Results are shown in micrograms per liter (ug/L).

[2] Samples analyzed by STL-San Francisco of Pleasanton, California by USEPA Method 8260B.

"<" = The analyte was not detected above the reporting limit.

Results detected above the reporting limit are shown in **bold**.

TABLE B-9: MASS REMOVAL ESTIMATE FOR VAPOR PHASE
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Cumulative Run-Time (minutes)	Cumulative Vapor Volume (cubic feet)	Chloroform Concentration (ug/L)	Chloroform Mass Removed in Vapor Phase		
				Low Estimate [2] (pounds)	Averaged [1] (pounds)	High Estimate [3] (pounds)
7/25/07 13:40	0	0	--	0	0	0
7/25/07 14:45	74	19,790	14	1.73E-02	1.73E-02	1.73E-02
7/26/07 11:00	491	128,299	11	7.45E-02	8.47E-02	9.48E-02
7/31/07 12:30	6,401	1,678,894	8.9	8.62E-01	9.63E-01	1.06E+00
8/1/07 18:30	8,201	2,153,779	6.4	1.90E-01	2.27E-01	2.64E-01
8/2/07 18:15	9,626	2,501,299	6.4	1.39E-01	1.39E-01	1.39E-01
8/8/07 12:15	17,687	4,506,064	5.1	6.38E-01	7.20E-01	8.01E-01
8/8/07 17:15	17,987	4,582,882	7.0	2.45E-02	2.90E-02	3.36E-02
8/13/07 13:25	23,260	5,857,054	4.7	3.74E-01	4.65E-01	5.57E-01
8/16/07 19:30	27,702	6,929,941	4.4	2.95E-01	3.05E-01	3.15E-01
8/20/07 11:00	32,849	8,167,490	4.9	3.40E-01	3.59E-01	3.79E-01
8/20/07 18:45	33,328	8,281,826	6.3	3.50E-02	4.00E-02	4.50E-02
8/23/07 11:00	37,306	9,256,083	2.5	1.52E-01	2.68E-01	3.83E-01
8/23/07 16:30	37,645	9,342,119	2.8	1.34E-02	1.42E-02	1.50E-02
8/29/07 8:15	46,045	11,570,202	2.0	2.78E-01	3.34E-01	3.89E-01
8/30/07 14:30	47,331	11,890,308	1.5	3.00E-02	3.50E-02	4.00E-02
9/6/07 19:05	55,146	13,849,135	1.6	1.83E-01	1.90E-01	1.96E-01
9/6/07 19:20	55,161	13,852,660	2.4	3.52E-04	4.40E-04	5.28E-04
9/13/07 16:20	63,473	15,699,925	2.2	2.54E-01	2.65E-01	2.77E-01
9/13/07 17:10	63,524	15,711,782	2.0	1.48E-03	1.55E-03	1.63E-03
9/19/07 14:45	71,228	17,503,085	1.6	1.79E-01	2.01E-01	2.24E-01
9/25/07 13:05	79,922	19,410,877	1.4	1.67E-01	1.79E-01	1.91E-01
9/25/07 14:40	80,018	19,432,757	1.5	1.91E-03	1.98E-03	1.91E-03
10/2/07 9:30	89,840	21,766,455	1.2	1.75E-01	1.97E-01	2.19E-01
10/9/07 9:35	99,907	23,447,216	0.52	5.46E-02	9.02E-02	1.26E-01
10/16/07 14:00	110,344	24,833,292	0.97	4.50E-02	6.45E-02	8.39E-02
10/23/07 10:15	120,404	26,214,427	0.62	5.35E-02	6.85E-02	8.36E-02

TABLE B-9: MASS REMOVAL ESTIMATE FOR VAPOR PHASE
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Cumulative Run-Time (minutes)	Cumulative Vapor Volume (cubic feet)	Chloroform Concentration (ug/L)	Chloroform Mass Removed in Vapor Phase		
				Low Estimate [2] (pounds)	Averaged [1] (pounds)	High Estimate [3] (pounds)
10/30/07 12:00	130,686	27,553,357	0.41	3.43E-02	4.30E-02	5.18E-02
Planned System Shutdown from November 3, 2007 to December 4, 2007						
12/4/07 15:35	137,030	28,322,651	1.6	1.47E-03	1.47E-03	1.47E-03
12/11/07 13:05	144,769	29,254,348	0.89	5.18E-02	7.24E-02	9.31E-02
12/18/07 12:40	155,032	30,500,804	0.73	5.68E-02	6.30E-02	6.93E-02
12/18/07 13:50	155,099	30,508,935	0.85	3.71E-04	4.01E-04	4.31E-04
12/26/07 17:00	167,035	31,982,578	0.87	7.82E-02	7.91E-02	8.00E-02
1/2/08 14:00	177,134	33,156,514	0.67	4.91E-02	5.64E-02	6.38E-02
1/2/08 14:50	177,186	33,162,178	0.80	2.37E-04	2.60E-04	2.83E-04
1/9/08 13:30	185,029	34,105,438	0.91	4.71E-02	5.03E-02	5.36E-02
1/15/08 13:25	193,762	35,179,592	0.68	4.56E-02	5.33E-02	6.10E-02
1/23/08 7:55	205,209	36,543,905	1.1	5.79E-02	7.58E-02	9.37E-02
1/30/08 14:10	210,247	37,288,994	0.71	3.30E-02	4.21E-02	5.12E-02
1/30/08 16:30	210,390	37,310,414	0.49	6.55E-04	8.02E-04	9.49E-04
2/5/08 14:35	218,695	38,427,390	0.69	3.42E-02	4.11E-02	4.81E-02
2/12/08 17:10	229,051	39,746,502	0.97	5.68E-02	6.83E-02	7.99E-02
2/19/08 10:50	238,672	40,886,003	0.74	5.26E-02	6.08E-02	6.90E-02
2/27/08 8:10	250,277	42,314,861	0.54	4.82E-02	5.71E-02	6.60E-02
3/5/08 17:30	250,875	42,343,661	0.70	9.71E-04	1.11E-03	1.26E-03
3/11/08 10:10	259,109	43,297,182	0.58	3.45E-02	3.81E-02	4.17E-02
3/18/08 11:15	269,466	44,476,094	1.0	4.27E-02	5.81E-02	7.36E-02
3/25/08 12:25	279,001	45,471,065	0.59	3.66E-02	4.94E-02	6.21E-02
4/1/08 7:20	288,534	46,599,358	0.74	4.16E-02	4.68E-02	5.21E-02
4/7/08 15:45	294,434	47,219,428	0.90	2.86E-02	3.17E-02	3.48E-02
4/15/08 7:50	305,681	48,487,690	0.42	3.33E-02	5.23E-02	7.13E-02
4/22/08 14:00	316,316	49,490,164	1.0	2.63E-02	4.44E-02	6.26E-02
4/29/08 9:10	326,200	50,445,475	1.0	5.96E-02	5.96E-02	5.96E-02

TABLE B-9: MASS REMOVAL ESTIMATE FOR VAPOR PHASE
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

Date/Time	Cumulative Run-Time (minutes)	Cumulative Vapor Volume (cubic feet)	Chloroform Concentration (ug/L)	Chloroform Mass Removed in Vapor Phase: Low Estimate [2] (pounds)	Averaged [1] (pounds)	High Estimate [3] (pounds)
5/6/08 9:55	336,611	51,426,524	0.90	0.0551	0.0582	0.0612
5/13/08 9:00	345,749	52,360,692	0.54	0.0315	0.0420	0.0525
5/20/08 8:32	355,917	53,422,792	0.88	0.0358	0.0471	0.0583
5/27/08 9:00	366,240	54,479,350	0.90	0.0580	0.0587	0.0594
6/3/08 10:10	376,521	55,556,687	0.55	0.0370	0.0488	0.0605
6/10/08 9:45	386,340	56,753,291	0.87	0.0411	0.0530	0.0650
6/11/08 17:35	388,180	56,982,222	0.43	0.0061	0.0093	0.0124
6/17/08 11:30	396,588	58,018,872	0.87	0.0278	0.0421	0.0563
6/24/08 9:25	406,526	59,241,967	0.20	0.0153	0.0408	0.0664
7/1/08 11:25	416,776	60,994,621	0.60	0.0219	0.0438	0.0656
7/8/08 12:16	427,081	62,527,235	0.56	0.0536	0.0555	0.0574
7/15/08 11:35	437,242	63,718,627	0.50	0.0372	0.0394	0.0417
7/22/08 11:10	447,413	65,122,866	0.57	0.0438	0.0469	0.0500
7/29/08 10:57	457,632	66,325,012	0.84	0.0428	0.0529	0.0630
8/6/08 9:00	469,189	67,769,292	0.72	0.0649	0.0703	0.0757
8/12/08 9:25	477,997	68,744,711	0.39	0.0237	0.0338	0.0438
	Estimated Chloroform Mass Removed through August 12, 2008			**6.1**	**7.2**	**8.2**

Notes:

[1] Mass removed is calculated from the average concentration and cumulative vapor volume over a given time interval according to the following generalized equation:

$$Mass\ Removed = (C_1 + C_2)/2 * (V_2 - V_1)$$

[2] The Low Estimate is calculated using the lower concentration over a given time interval: $Mass\ Removed = C_{low} * (V_2 - V_1)$

[3] The High Estimate is calculated using the higher concentration over a given time interval: $Mass\ Removed = C_{high} * (V_2 - V_1)$

"--" = not analyzed

ug/L = micrograms per liter

TABLE B-10: MASS REMOVAL ESTIMATE FOR WATER PHASE
2-PHASE™ Extraction System at Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

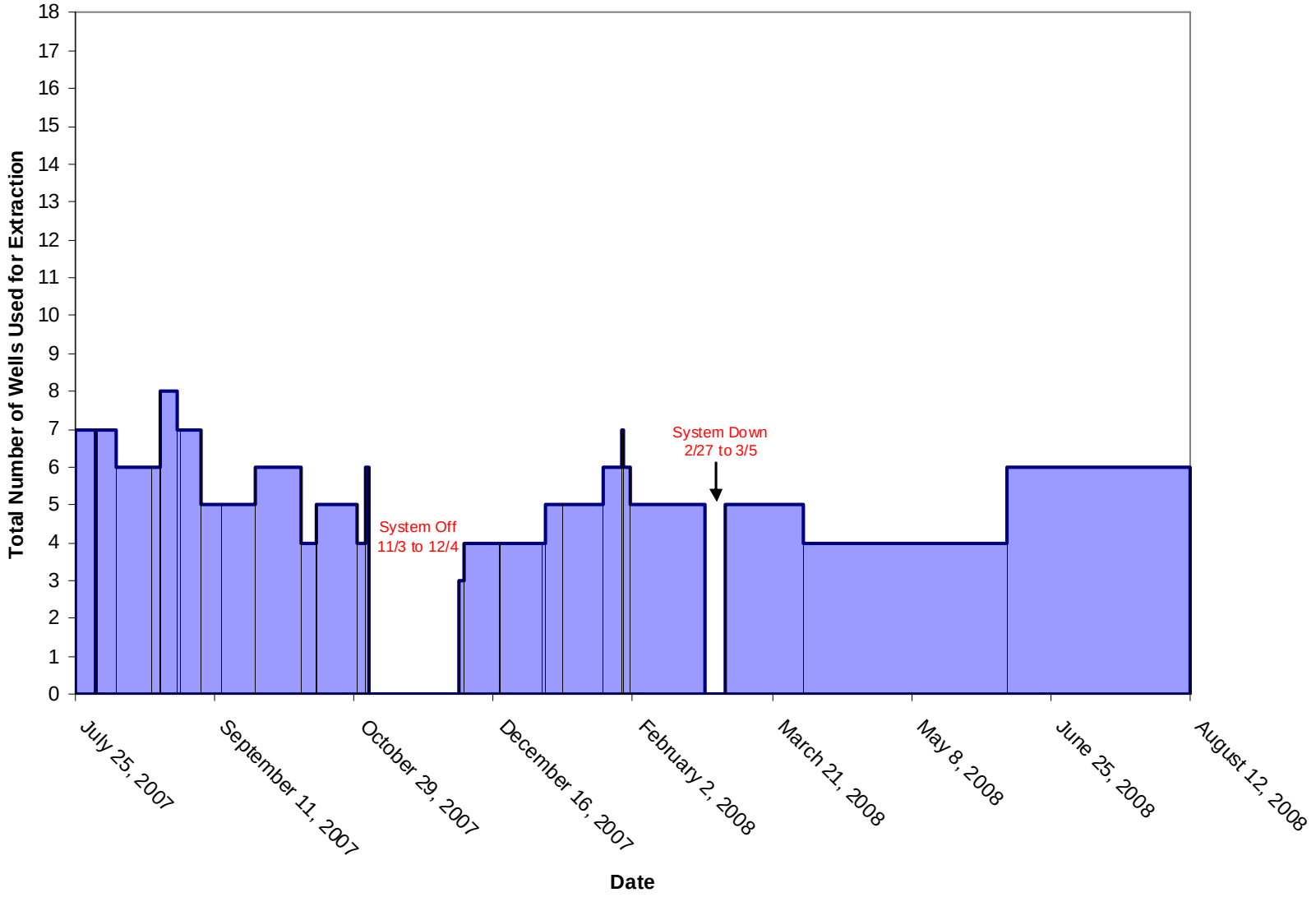
Date/Time	Cumulative Run-Time (minutes)	Cumulative Water Volume (gallons)	Chloroform Concentration (ug/L)	Chloroform Mass Removed in Water[1] (kilograms)	Chloroform Mass Removed in Water[1] (pounds)
7/25/07 13:40	0	0	--	0	0
7/26/07 13:00	1,400	280	75	7.95E-05	1.75E-04
8/2/07 18:15	9,629	4,673	38	9.39E-04	2.07E-03
8/8/07 12:15	17,687	13,623	24	1.05E-03	2.32E-03
8/8/07 17:15	17,987	13,959	26	3.18E-05	7.02E-05
8/20/07 11:00	32,849	26,627	11	1.11E-03	2.44E-03
8/21/07 17:00	34,705	28,294	12	7.25E-05	1.60E-04
8/23/07 16:30	37,645	30,927	11	1.15E-04	2.53E-04
8/30/07 14:30	47,331	40,855	9.5	3.85E-04	8.49E-04
9/11/07 8:45	61,807	53,164	7.5	3.96E-04	8.73E-04
9/25/07 14:40	80,018	64,713	6.6	3.08E-04	6.79E-04
10/16/07 14:00	110,344	81,774	6.9	4.36E-04	9.61E-04
12/13/07 9:45	147,509	108,347	5.6	6.29E-04	1.39E-03
1/15/08 13:45	193,762	163,870	5.4	1.16E-03	2.55E-03
2/19/08 10:50	238,672	233,323	4.9	1.35E-03	2.98E-03
3/18/08 10:25	269,466	291,114	6.3	1.22E-03	2.70E-03
3/27/08 13:08	281,505	314,177	3.8	4.41E-04	9.72E-04
6/6/08 11:15	380,580	437,553	4.3	1.89E-03	4.17E-03
8/12/08 9:25	477,997	535,462	2.9	1.33E-03	2.94E-03
	Estimated Chloroform Mass Removed in Water Phase through August 12, 2008			**1.30E-02**	**2.86E-02**

Notes:

[1] Mass removed is calculated from the average concentration and cumulative water volume over a given time interval according to the following generalized equation:

$$Mass\ Removed = (C_1 + C_2)/2 * (V_2 - V_1)$$

ug/L = micrograms per liter

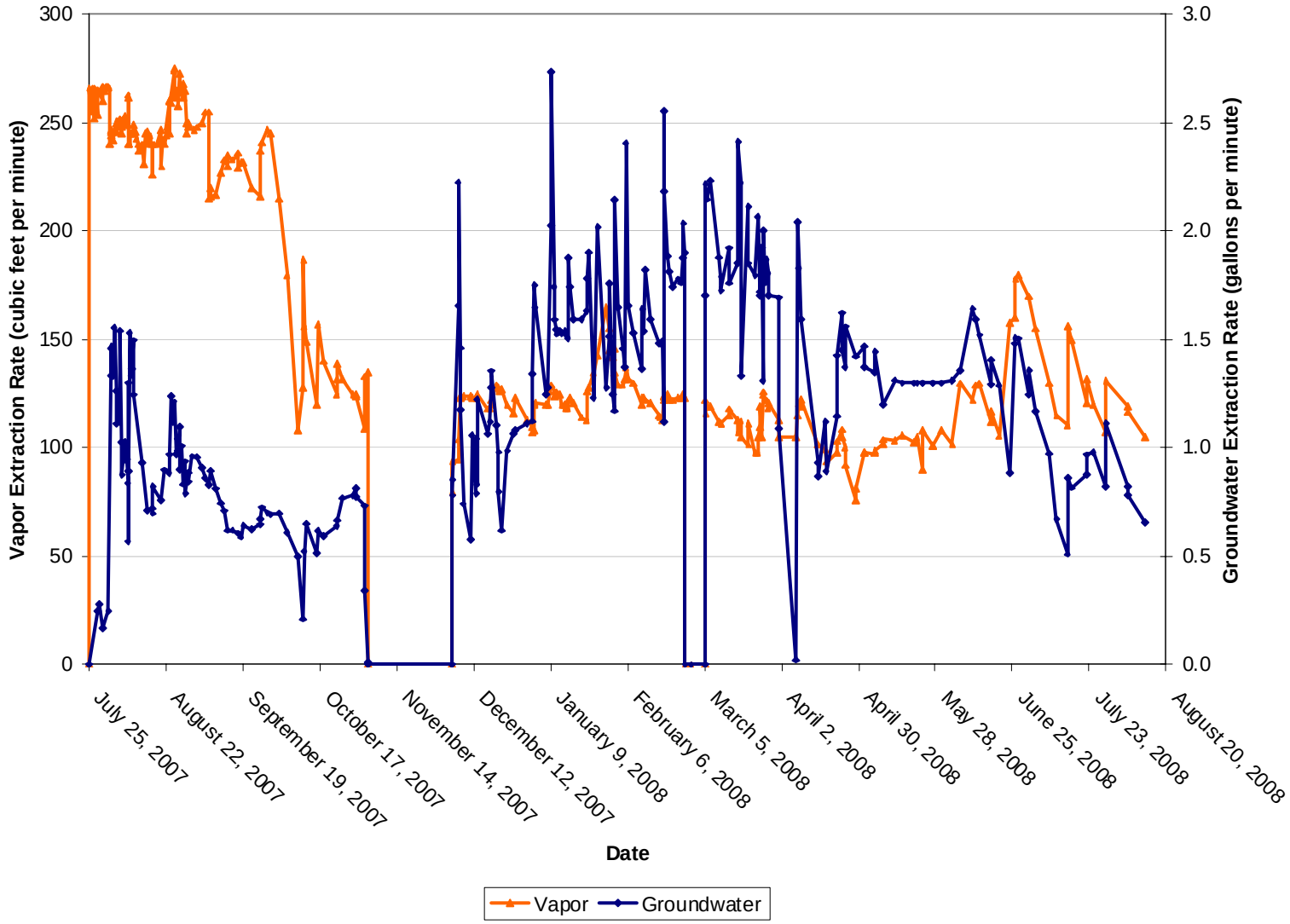


ENVIRON

Well Field Operation – Number of Wells Used for Extraction
Hitachi GST
San Jose, California

Figure
B-1

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

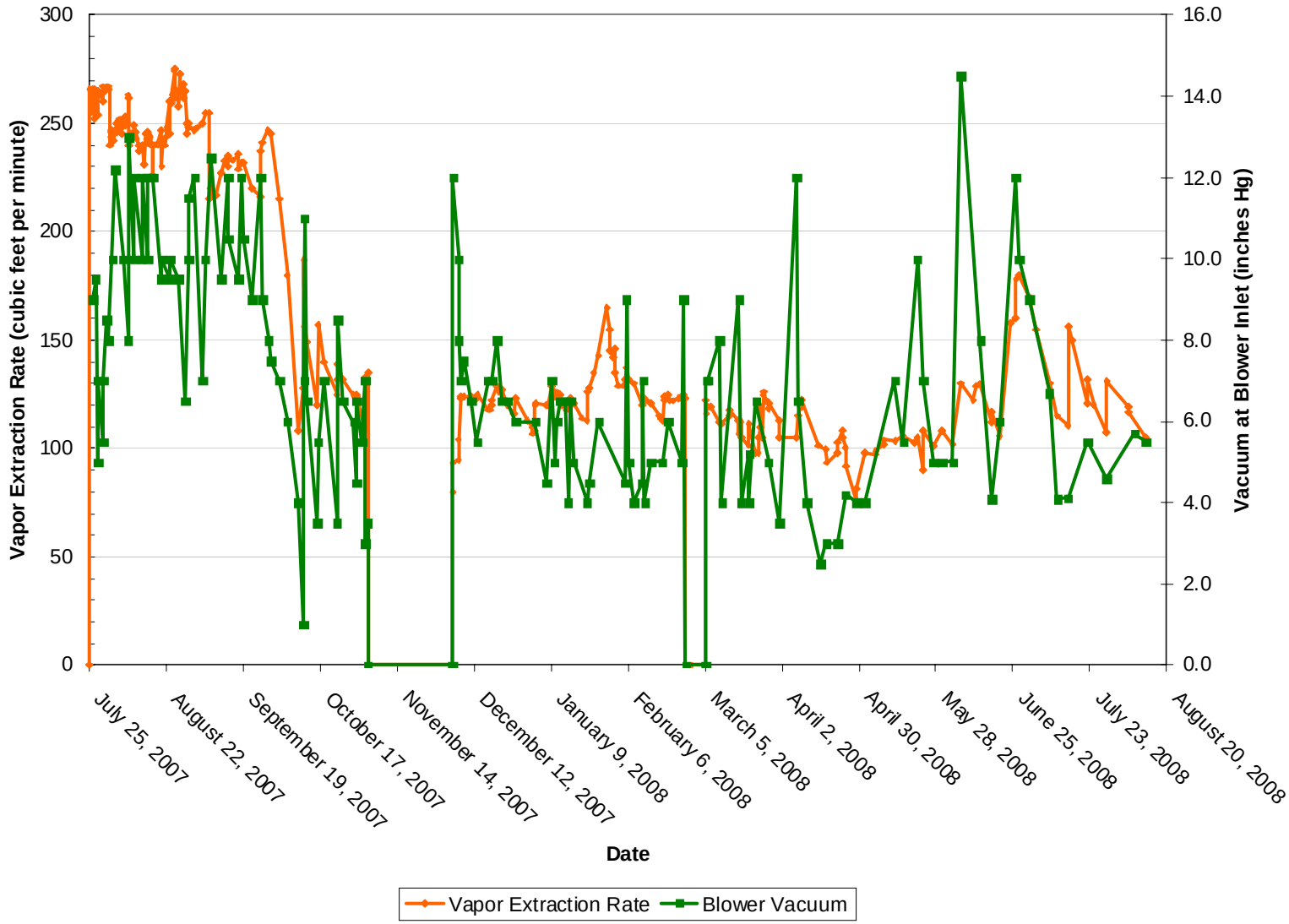


ENVIRON

Groundwater and Vapor Extraction Rates
Hitachi GST
San Jose, California

Figure
B-2

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

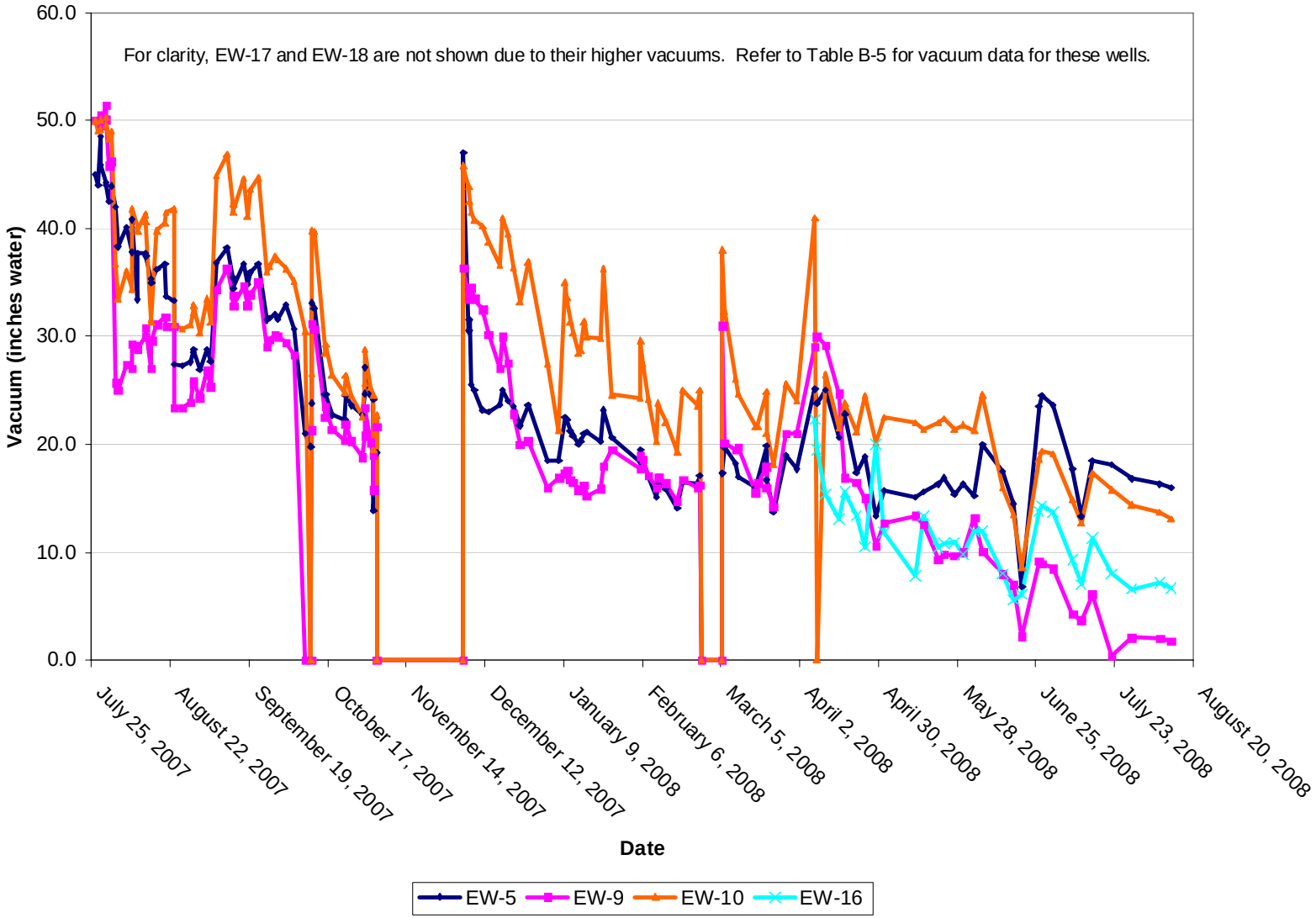


ENVIRON

Blower Performance Measured as Vapor Extraction and Blower Vacuum
Hitachi GST
San Jose, California

Figure
B-3

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

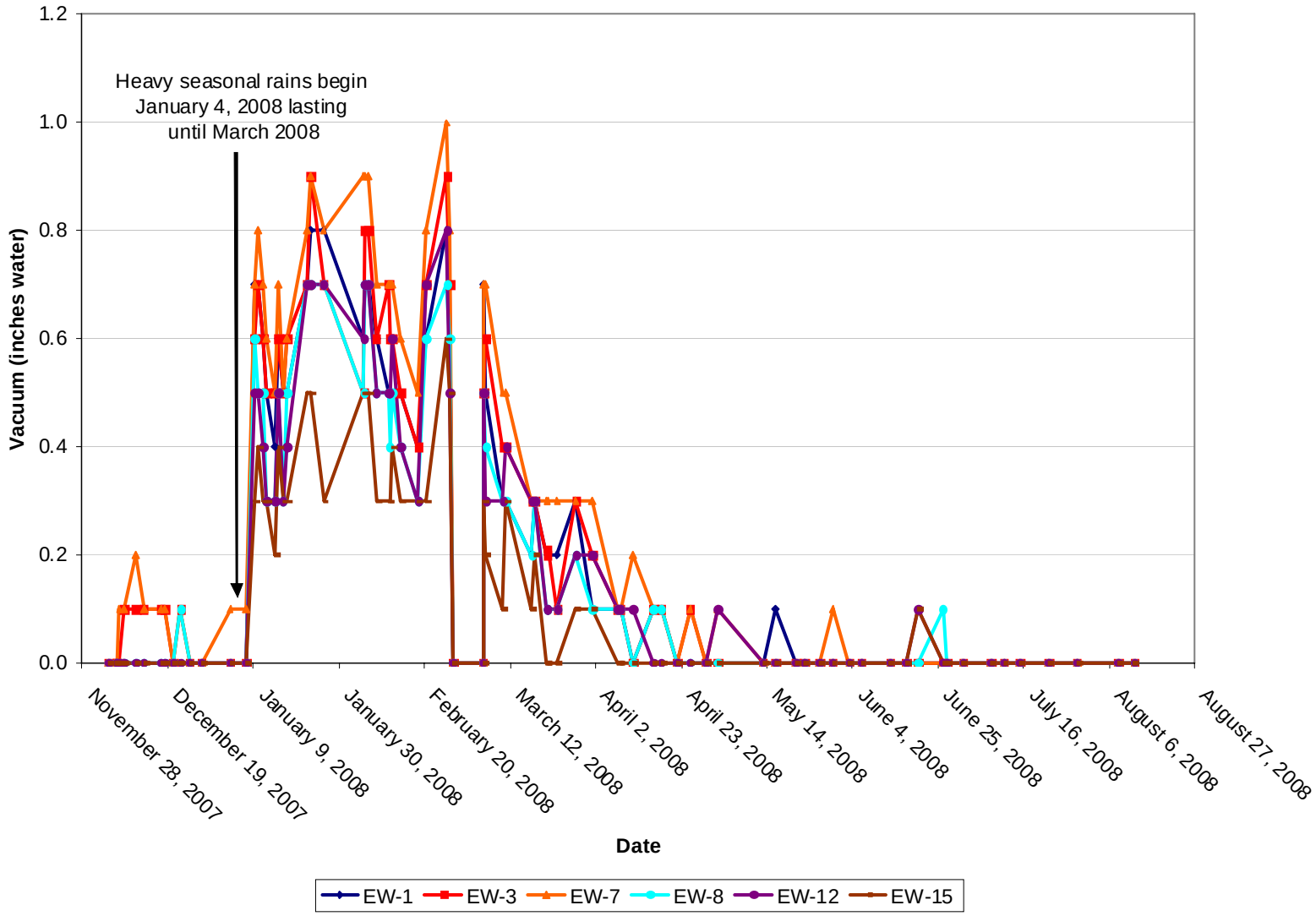


ENVIRON

Vacuum Measured at Extraction Wells
Hitachi GST
San Jose, California

Figure
B-4

Drafter: CJR Date: 11/14/08 Contract Number: 03-11903E Approved: Revised:

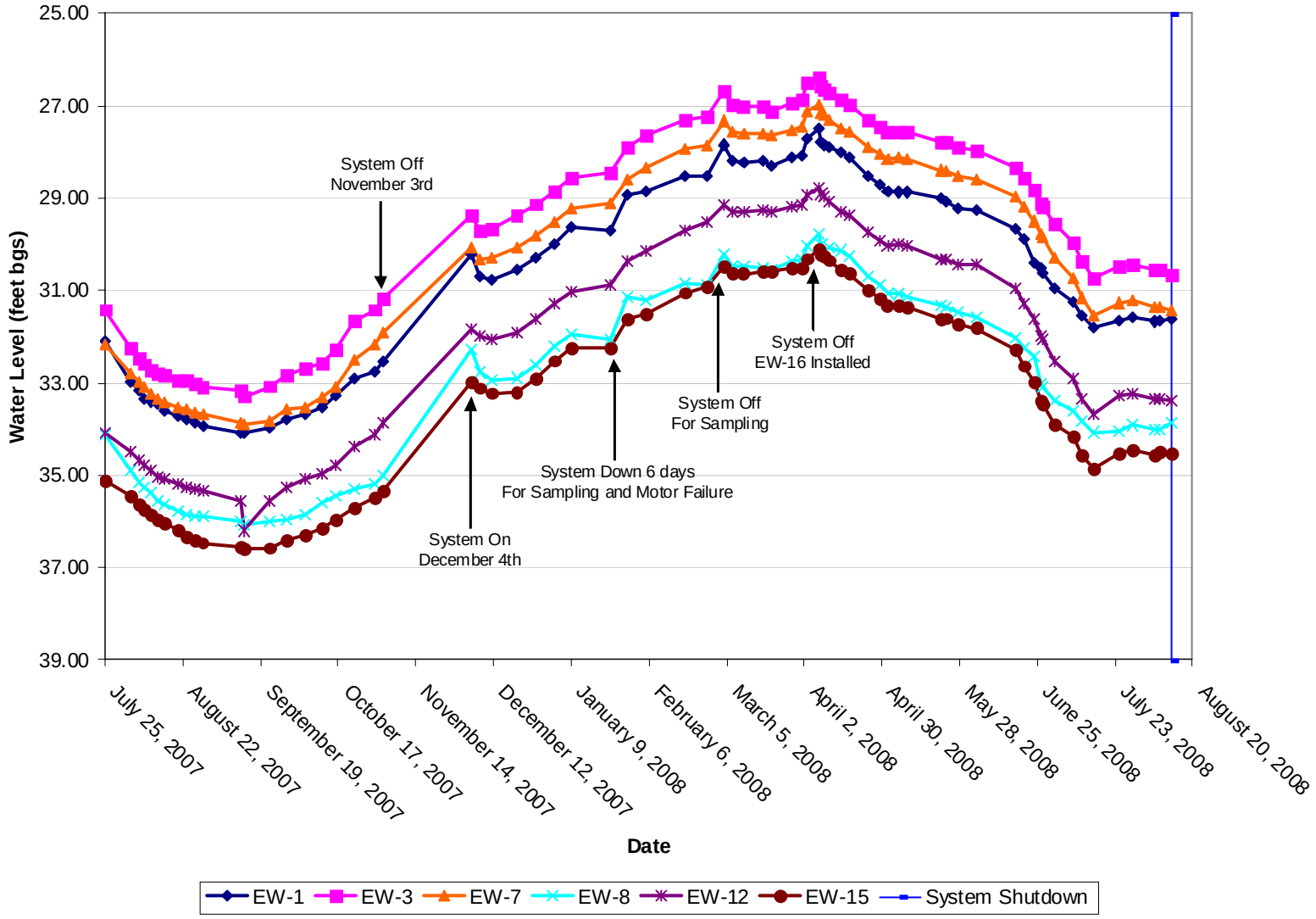


ENVIRON

Vacuum Measured at Monitoring Wells Since Winter Rains
Hitachi GST
San Jose, California

Figure
B-5

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

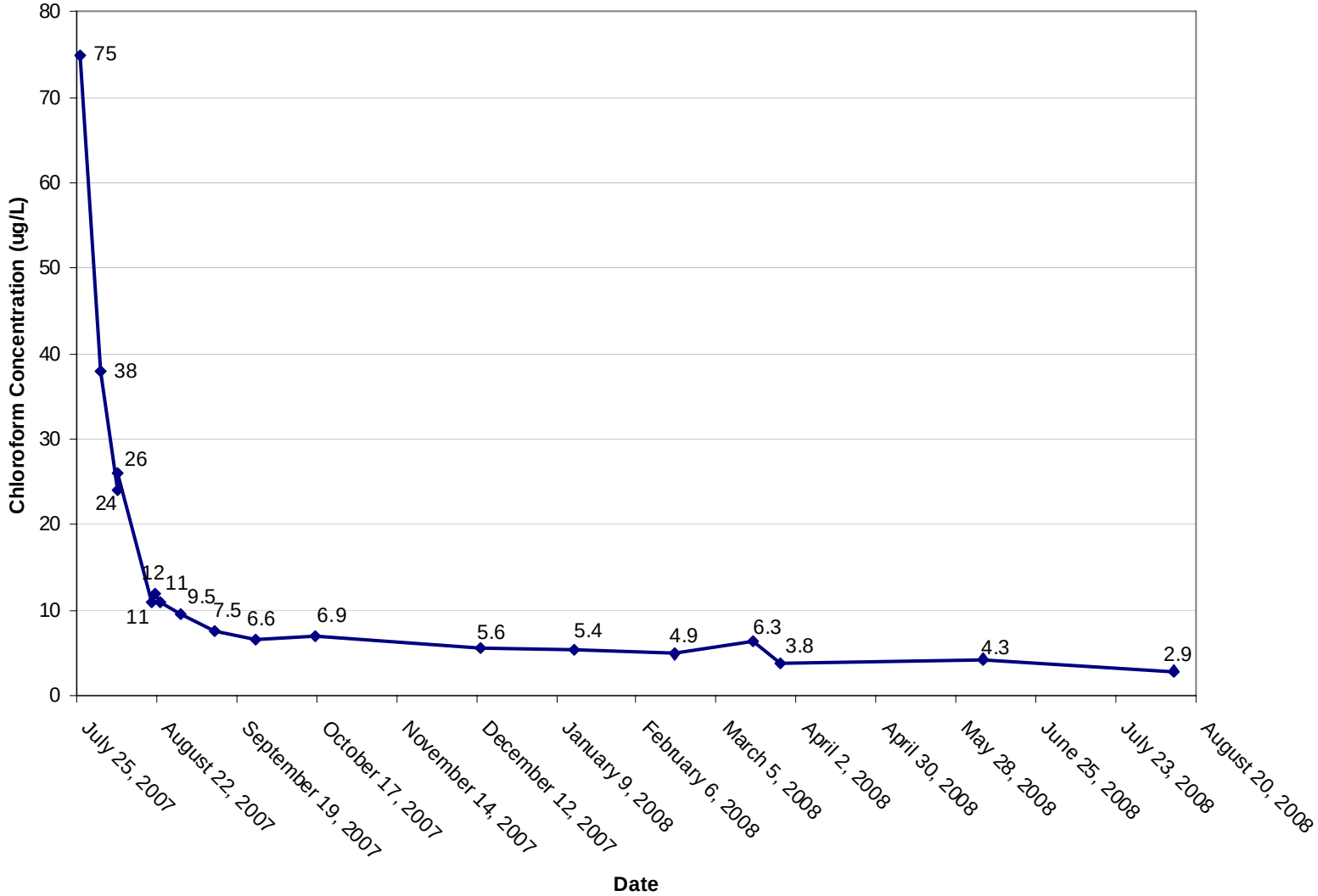


ENVIRON

Water Level Measurements in Monitoring Wells
Hitachi GST
San Jose, California

Figure
B-6

Drafter: CJR Date: 10/27/08 Contract Number: 03-11903E Approved: Revised:

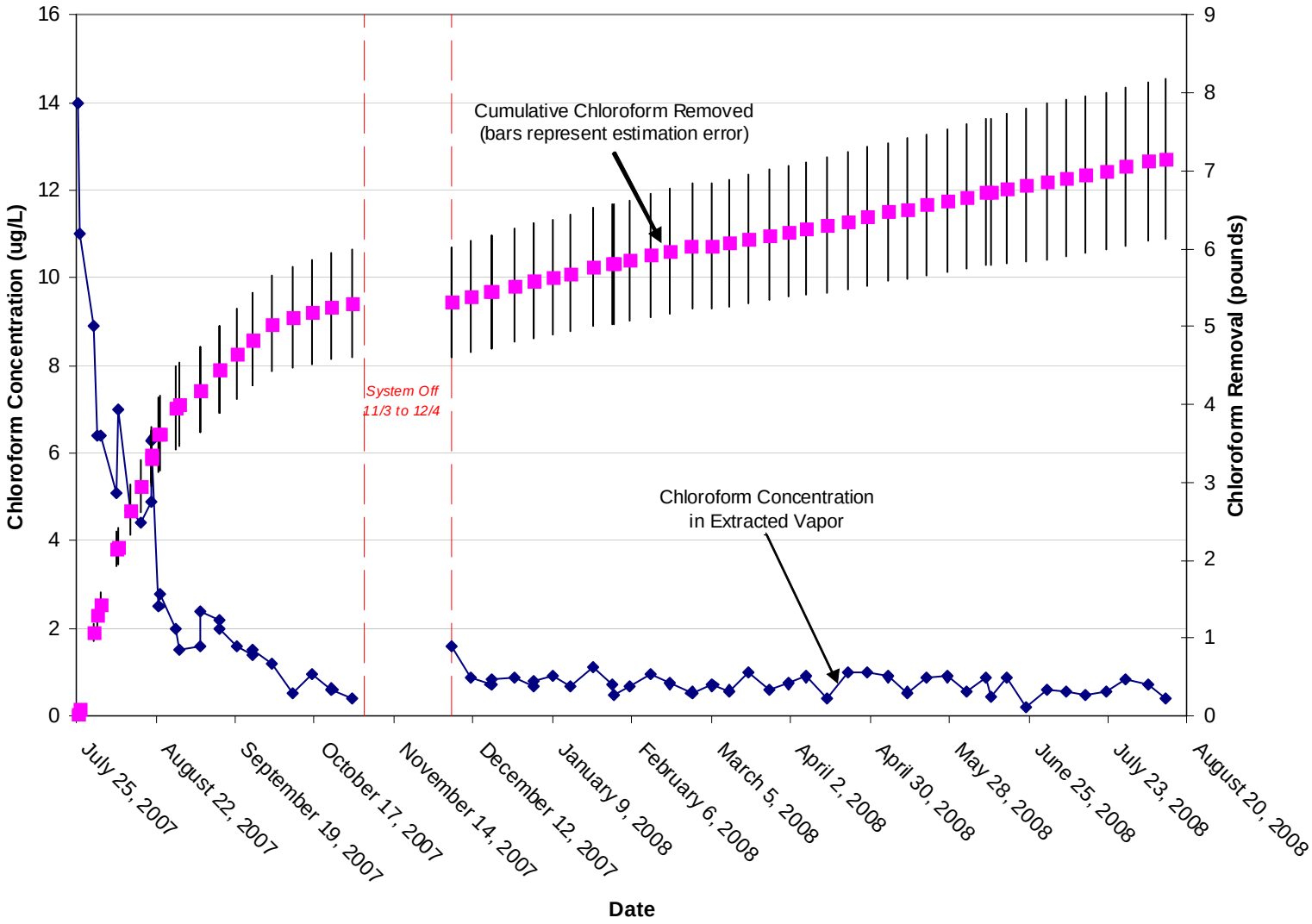


ENVIRON

Chloroform Concentration in Extracted Groundwater
Hitachi GST
San Jose, California

Figure
B-7

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

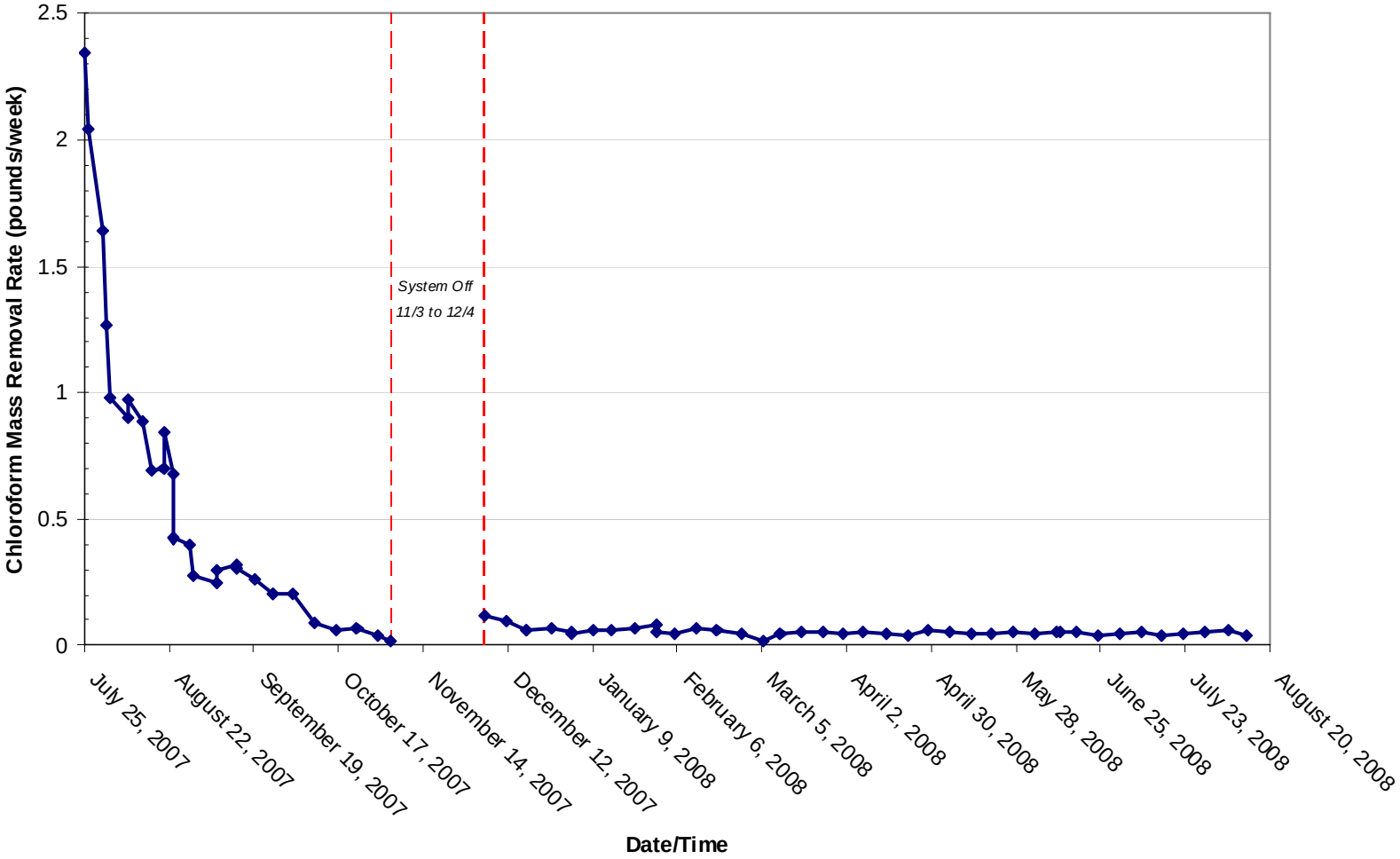


ENVIRON

Chloroform Concentration in Extracted Vapor and Cumulative Mass Removal
Hitachi GST
San Jose, California

Figure
B-8

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:



ENVIRON

Chloroform Mass Removal Rate Over Time
Hitachi GST
San Jose, California

Figure
B-9

Drafter: CJR Date: 08/27/08 Contract Number: 03-11903E Approved: Revised:

Appendix C:
Human Health Risk Evaluation
Pro UCL Calculations

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C-2 Post-Remediation EW-1 to EW-15
C-3 Post-Remediation EW-1 to EW-18

Table C-1: Pre-Remediation EW-1 to EW-15

Data File	Y:\Hitachi\Chloroform Modeling Report\ProUCLs	Variable:	Pre-Remediation EW-1 to EW-15
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	15	Shapiro-Wilk Test Statisitic	0.769613
Number of Unique Samples	15	Shapiro-Wilk 5% Critical Value	0.881
Minimum	2	Data not normal at 5% significance level	
Maximum	920		
Mean	248.1933	95% UCL (Assuming Normal Distribution)	
Median	95	Student's-t UCL	393.4829
Standard Deviation	319.4804		
Variance	102067.7	Gamma Distribution Test	
Coefficient of Variation	1.287224	A-D Test Statistic	0.363325
Skewness	1.264946	A-D 5% Critical Value	0.79687
		K-S Test Statistic	0.150184
Gamma Statistics		K-S 5% Critical Value	0.234377
k hat	0.481748	Data follow gamma distribution	
k star (bias corrected)	0.429842	at 5% significance level	
Theta hat	515.1938		
Theta star	577.4053	95% UCLs (Assuming Gamma Distribution)	
nu hat	14.45243	Approximate Gamma UCL	549.7958
nu star	12.89527	Adjusted Gamma UCL	610.0355
Approx.Chi Square Value (.05)	5.82129		
Adjusted Level of Significance	0.03235	Lognormal Distribution Test	
Adjusted Chi Square Value	5.24645	Shapiro-Wilk Test Statisitic	0.928603
		Shapiro-Wilk 5% Critical Value	0.881
Log-transformed Statistics		Data are lognormal at 5% significance level	
Minimum of log data	0.693147		
Maximum of log data	6.824374	95% UCLs (Assuming Lognormal Distribution)	
Mean of log data	4.188055	95% H-UCL	7489.579
Standard Deviation of log data	2.067756	95% Chebyshev (MVUE) UCL	1463.846
Variance of log data	4.275614	97.5% Chebyshev (MVUE) UCL	1924.73
		99% Chebyshev (MVUE) UCL	2830.048
		95% Non-parametric UCLs	
		CLT UCL	383.8765
		Adj-CLT UCL (Adjusted for skewness)	412.6641
		Mod-t UCL (Adjusted for skewness)	397.9732
		Jackknife UCL	393.4829
		Standard Bootstrap UCL	378.1469
		Bootstrap-t UCL	475.6652
RECOMMENDATION		Hall's Bootstrap UCL	413.7538
Data follow gamma distribution (0.05)		Percentile Bootstrap UCL	386.6933
		BCA Bootstrap UCL	410.06
Use Adjusted Gamma UCL		95% Chebyshev (Mean, Sd) UCL	607.7567
		97.5% Chebyshev (Mean, Sd) UCL	763.34
		99% Chebyshev (Mean, Sd) UCL	1068.953

Table C-2: Post Remediation EW-1 to EW-15

Data File					Variable:	Post Remediation EW-1 to EW-15	
Raw Statistics				Normal Distribution Test			
Number of Valid Samples			15	Shapiro-Wilk Test Statisitic			0.77616534
Number of Unique Samples			14	Shapiro-Wilk 5% Critical Value			0.881
Minimum			0.5	Data not normal at 5% significance level			
Maximum			170				
Mean			43.27333	95% UCL (Assuming Normal Distribution)			
Median			11	Student's-t UCL			68.5075559
Standard Deviation			55.48809				
Variance			3078.928	Gamma Distribution Test			
Coefficient of Variation			1.28227	A-D Test Statistic			0.37289241
Skewness			1.385775	A-D 5% Critical Value			0.79200296
				K-S Test Statistic			0.15396888
Gamma Statistics				K-S 5% Critical Value			0.23361182
k hat			0.513801	Data follow gamma distribution			
k star (bias corrected)			0.455485	at 5% significance level			
Theta hat			84.22199				
Theta star			95.00493	95% UCLs (Assuming Gamma Distribution)			
nu hat			15.41403	Approximate Gamma UCL			93.2486165
nu star			13.66455	Adjusted Gamma UCL			103.0708
Approx.Chi Square Value (.05)			6.341229				
Adjusted Level of Significance			0.03235	Lognormal Distribution Test			
Adjusted Chi Square Value			5.736938	Shapiro-Wilk Test Statisitic			0.93091014
				Shapiro-Wilk 5% Critical Value			0.881
Log-transformed Statistics				Data are lognormal at 5% significance level			
Minimum of log data			-0.693147				
Maximum of log data			5.135798	95% UCLs (Assuming Lognormal Distribution)			
Mean of log data			2.53649	95% H-UCL			890.295138
Standard Deviation of log data			1.956282	95% Chebyshev (MVUE) UCL			227.042594
Variance of log data			3.827038	97.5% Chebyshev (MVUE) UCL			297.485264
				99% Chebyshev (MVUE) UCL			435.856247
				95% Non-parametric UCLs			
				CLT UCL			66.8390895
				Adj-CLT UCL (Adjusted for skewness)			72.3165791
				Mod-t UCL (Adjusted for skewness)			69.3619335
				Jackknife UCL			68.5075559
				Standard Bootstrap UCL			65.6433861
				Bootstrap-t UCL			83.1571938
RECOMMENDATION				Hall's Bootstrap UCL			81.662917
Data follow gamma distribution (0.05)				Percentile Bootstrap UCL			68.1933333
				BCA Bootstrap UCL			71.8
Use Approximate Gamma UCL				95% Chebyshev (Mean, Sd) UCL			105.723115
				97.5% Chebyshev (Mean, Sd) UCL			132.745185
				99% Chebyshev (Mean, Sd) UCL			185.82481

Table C-3: Post Remediation EW-1 to EW-18

Data File		Variable:	Post Remediation EW-1 to EW-18
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	18	Shapiro-Wilk Test Statisitic	0.773499
Number of Unique Samples	17	Shapiro-Wilk 5% Critical Value	0.897
Minimum	0.5	Data not normal at 5% significance level	
Maximum	325		
Mean	67.17222	95% UCL (Assuming Normal Distribution)	
Median	33.5	Student's-t UCL	102.5878
Standard Deviation	86.37326		
Variance	7460.34	Gamma Distribution Test	
Coefficient of Variation	1.285848	A-D Test Statistic	0.356704
Skewness	1.798962	A-D 5% Critical Value	0.799517
		K-S Test Statistic	0.133675
Gamma Statistics		K-S 5% Critical Value	0.214999
k hat	0.506912	Data follow gamma distribution	
k star (bias corrected)	0.459463	at 5% significance level	
Theta hat	132.5127		
Theta star	146.1971	95% UCLs (Assuming Gamma Distribution)	
nu hat	18.24882	Approximate Gamma UCL	133.1636
nu star	16.54069	Adjusted Gamma UCL	142.65
Approx.Chi Square Value (.05)	8.343684		
Adjusted Level of Significance	0.03574	Lognormal Distribution Test	
Adjusted Chi Square Value	7.788814	Shapiro-Wilk Test Statisitic	0.924444
		Shapiro-Wilk 5% Critical Value	0.897
Log-transformed Statistics		Data are lognormal at 5% significance level	
Minimum of log data	-0.693147		
Maximum of log data	5.783825	95% UCLs (Assuming Lognormal Distribution)	
Mean of log data	2.956879	95% H-UCL	1361.767
Standard Deviation of log data	2.037292	95% Chebyshev (MVUE) UCL	408.0306
Variance of log data	4.150558	97.5% Chebyshev (MVUE) UCL	534.4247
		99% Chebyshev (MVUE) UCL	782.7015
		95% Non-parametric UCLs	
		CLT UCL	100.6588
		Adj-CLT UCL (Adjusted for skewness)	109.8826
		Mod-t UCL (Adjusted for skewness)	104.0265
		Jackknife UCL	102.5878
		Standard Bootstrap UCL	99.72869
		Bootstrap-t UCL	125.2916
RECOMMENDATION		Hall's Bootstrap UCL	121.6826
Data follow gamma distribution (0.05)		Percentile Bootstrap UCL	100.2944
		BCA Bootstrap UCL	109.4167
Use Approximate Gamma UCL		95% Chebyshev (Mean, Sd) UCL	155.9123
		97.5% Chebyshev (Mean, Sd) UCL	194.3102
		99% Chebyshev (Mean, Sd) UCL	269.7355

Appendix D:
Chloroform Mass Estimates

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Appendix D: Chloroform Mass Estimates

The following appendix describes the methods used to estimate the distribution and total mass of subsurface chloroform in the former Building 028J area. Estimates were prepared based on measured values for the pre-remediation conditions and the post-remediation conditions following implementation of 2-PHASE™ Extraction. The equations used are presented below.

D.1 General Methodology

In this analysis, the subsurface in the former Building 028J area was vertically divided into four units based on the conceptual hydrostratagraphic cross-sections: (1) the vadose zone (thickness varies depending on A-Aquifer water levels), (2) the A-Aquifer below the vadose zone, (3) the approximately 8-foot thick clayey aquitard overlain by the A-Aquifer, and (4) the approximately 15-foot thick B-Aquifer beneath the aquitard.

In the vadose zone, the total chloroform mass was calculated as the sum of chloroform present in soil gas, soil moisture, and sorbed to soil. In the A-Aquifer and A/B Aquitard, the total chloroform mass was calculated as the sum of chloroform present in groundwater and sorbed to saturated soil. The following summarizes the procedures used for selecting input data and performing the partitioning calculations.

Soil property data (i.e., porosity, bulk density) required for the mass estimates were specified for the vadose zone and A-Aquifer using the average of measured values for each of these zones. The fraction of organic carbon in soil (f_{oc}) in the vadose zone, which was not measured, was set to the average value for the A-Aquifer (0.002). A summary of the soil properties for A-Aquifer and vadose zone as well as the A/B Aquitard is provided in Tables 7 through 9 of the main report.

In the vadose zone, soil gas concentrations were used as starting data to estimate average concentrations in the soil moisture and sorbed phases. To estimate the average soil gas concentration in the vadose zone, soil gas measurements collected in the area of residual chloroform concentrations were averaged (as the arithmetic average of detected values).

The average chloroform level in soil moisture was estimated using Equation D-1 below:

$$C_{vm} = \frac{C_{vg}}{K_H} \qquad \text{D-1}$$

Where: C_{vg} = Chloroform concentration in soil gas (µg/L)[1]
C_{vm} = Chloroform concentration in soil moisture (µg/L)

[1] µg = microgram; L = liter

K_H = Henry's *Law* constant (unitless)[2]

The average chloroform concentration sorbed to the vadose zone soil was estimated using Equation D-2 below:

$$C_s = K_d \cdot C_{vm} \qquad \text{D-2}$$

Where: C_s = Chloroform concentration sorbed to soil (µg/kg)[3]
C_{vm} = Chloroform concentration in soil moisture (µg/L)
K_d = Distribution coefficient (L/kg)

The total chloroform mass in soil gas, soil moisture, and sorbed to soil were calculated using the average concentration estimated above:

$$M_{vg} = C_{vg} \cdot V_v \cdot \eta_{air} \qquad \text{D-3}$$

$$M_{vm} = C_{vm} \cdot V_v \cdot \eta_{wat} \qquad \text{D-4}$$

$$M_{vs} = C_{vs} \cdot V_v \cdot \rho \qquad \text{D-5}$$

Where: M_{vg} = Mass of chloroform in soil gas
M_{vm} = Mass of chloroform in soil moisture
M_{vs} = Mass of chloroform sorbed to vadose zone soil
C_{vs} = Chloroform concentration sorbed to unsaturated soil (µg/kg)
V_v = Vadose zone volume
η_{air} = Air-filled porosity
η_{wat} = Water-filled porosity

For the A-Aquifer, the following equation was used to estimate the average concentration of chloroform in soil (sorbed phase) based on the average concentration in groundwater:

$$C_s = K_d \cdot C_w \qquad \text{D-6}$$

[2] The K_H value for chloroform (0.118) assumes an average soil temperature of 66º F (USEPA 2004).
[3] kg = kilogram

Where: C_s = Chloroform concentration sorbed to soil (µg/kg)
C_w = Chloroform concentration in groundwater (µg/L)
K_d = Distribution coefficient (L/kg)

The distribution coefficient, K_d, was calculated using the following equation:

$$K_d = K_{oc} \cdot f_{oc} \qquad \text{D-7}$$

Where: K_{oc} = Organic carbon partition coefficient (L/kg)

The K_{oc} value for chloroform (39.8 L/kg) was obtained from *User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings* (USEPA 2004). The f_{oc} value was the average measured value for A-Aquifer soil (0.002).

In the A-Aquifer, the total chloroform mass in groundwater and soil was then calculated using the estimated volume of the area of residual chloroform concentration in the A-Aquifer and the average soil properties for the A-Aquifer as follows:

$$M_{gw} = C_w \cdot V_a \cdot \eta_{tot} \qquad \text{D-8}$$

$$M_{as} = C_s \cdot V_a \cdot \rho \qquad \text{D-9}$$

Where: M_{gw} = Mass of chloroform in groundwater
M_{as} = Mass of chloroform in A-Aquifer soil
V_a = Total volume of A-Aquifer
η_{tot} = Total porosity of A-Aquifer
ρ = Bulk density

Data collected during the additional aquitard soil investigation in April and May 2008 was used as an estimate of the current mass of chloroform in the A/B aquitard. The mass of chloroform in the aquitard was estimated using the arithmetic mean of soil concentrations detected in the aquitard and the following equation:

$$\mathrm{M_{ts}} = \mathrm{C_{ts}} \cdot \mathrm{V_{ad}} \cdot \rho_{\mathrm{ad}} \qquad \text{D-10}$$

Where: M_{ts} = Mass of chloroform in aquitard soil
C_{ts} = Average chloroform concentration in bulk soil samples
V_{ad} = Aquitard volume

ρ_{ad} = Average bulk density for the aquitard

Input parameters were based on available measured values. It is noted that reported soil concentrations include chloroform in both the solid and aqueous phases. The average aquifer thickness was determined from water levels collected in groundwater wells EW-1 through EW-16. For the benefit of the analysis, the saturated portions of the capillary fringe, as observed from the April-May 2008 drilling activities, were included as part of the A-Aquifer thickness.

D.2 Uncertainty and Estimated Range in Post Remediation Chloroform Mass Estimates

D.2.1 A-Aquifer Mass

The following parameters were used in the mass estimation of the chloroform mass in the A-Aquifer: average chloroform concentration in groundwater, average organic carbon content, average total porosity, average bulk density, organic carbon distribution coefficient, and the volume of the impacted area. Among these parameters, average groundwater concentration is the most uncertain because it was calculated based on a dataset with the fewest data points and with the widest variation in observed values. Therefore, the uncertainty of the average groundwater concentration in the A-Aquifer is expected to result in the uncertainty of the A-Aquifer mass estimate.

To quantify the uncertainty of the average groundwater concentration in the A-Aquifer, ENVIRON calculated the 90% and 95% confidence limits of the average groundwater concentration in the A-Aquifer, assuming that the concentration data follow either a normal or a log-normal distribution. The confidence limits were calculated using the "CONFIDENCE" function in Microsoft Excel. Assuming that all other parameters remain the same, mass is linearly proportional to average groundwater concentration. Therefore, the 90% and the 95% upper and lower confidence limits of the average groundwater concentration can be used to calculate the range of chloroform mass in the A-Aquifer.

The estimated mass ranges are summarized in Table D-1. The widest range of chloroform mass in the A-aquifer is from 0.07 to 0.24 pounds based on the 95% confidence limits calculated assuming a normally distributed dataset.

D.2.2 A/B Aquitard Mass

Data collected during the additional aquitard soil investigation in April and May 2008 was used to estimate the mass of chloroform in the A/B aquitard. Because the aquitard mass estimate was calculated based on average soil concentration, average bulk density of the aquitard, and the volume of the impacted aquitard, the upper and lower 90% or 95% confidence limits of average soil concentration can be used to estimate the range of chloroform mass in the aquitard (Equation D-10), assuming that all other parameters

remain the same. The widest range of chloroform mass in the aquitard is from 0.25 to 0.81 pounds, based on the 95% confidence limits calculated assuming a normally distributed dataset (Table D-1). However, the dataset fails all normal distribution tests but passes a lognormal distribution test. Using the lognormal distribution, the range of chloroform mass in the aquitard is 0.28 to 0.50 pounds.

D.3 References

United States Environmental Protection Agency (USEPA). 2004. *User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings. Office of Emergency and Remedial Response.* February 22.

TABLE D-1: PROJECTED RANGE OF POST-REMEDIATION MASS ESTIMATE
Former Building 028J Area
Hitachi Global Storage Technologies, Inc.
5600 Cottle Road, San Jose, California

A-Aquifer Mass Using the October 2008 Data

Estimated Mass (Units: lbs)	Normal Distribution		Lognormal Distribution	
	Sorbed Mass	Soluble Mass	Sorbed Mass	Soluble Mass
Lower 90% CL	0.02	0.06	0.02	0.07
Mean	0.03	0.12	0.03	0.10
Upper 90% CL	0.05	0.18	0.05	0.16
Lower 95% CL	0.02	0.05	0.02	0.06
Mean	0.03	0.12	0.03	0.10
Upper 95% CL	0.05	0.19	0.05	0.18

Aquitard Mass

Estimated Mass (Units: lbs)	Normal Distribution	Lognormal Distribution
Lower 90% CL	0.30	0.30
Mean	0.53	0.38
Upper 90% CL	0.77	0.47
Lower 95% CL	0.25	0.28
Mean	0.53	0.38
Upper 95% CL	0.81	0.50

Note:
1. A-Aquifer mass based on the average groundwater chloroform concentration (EW- 5, 9, 10, 13, and 16) and the average values of bulk density, organic carbon content, and porosity reported in the main report.
2. Data of aquitard soil concentrations fail all normal distribution tests, but pass the log-normal test with a significance level 0.01.
3. CL=confidence limit; lbs = pounds

Appendix E:
Estimated Future Groundwater Conditions

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Appendix E: Estimated Future Groundwater Conditions

This appendix describes the methods used to predict future groundwater conditions in the former Building 028J area.

E.1 Impact of Chloroform in the Aquitard on the A-Aquifer

The purpose of the analysis in this subsection is to show that the residual concentrations of chloroform in the A/B Aquitard are unlikely to have a significant effect on the post-remediation concentrations of chloroform in the A-Aquifer.

Contaminant transport in the subsurface is typically driven by two main processes: chemical diffusion and advection. In order to predict future groundwater conditions in the former Building 028J area, it is important to understand the contaminant transport processes that are occurring. The vertical chloroform concentration distribution observed in the A/B Aquitard shows that the chloroform concentration fluctuates vertically with no discernible or consistent decreasing or increasing concentration trend. The lack of a consistent trend strongly indicates that diffusion is not the dominant transport process responsible for chloroform transport from the A-Aquifer to the bottom of the aquitard and/or top of B-Aquifer. A diffusion dominant transport will produce a skewed concentration profile with the high concentration toward the source (i.e. the A-Aquifer).

Because of the lack of a concentration profile within the A/B Aquitard, it is important to understand whether or not the residual chloroform in the aquitard is close to achieving equilibrium with respect to chemical diffusion transport processes. To understand this, an estimate of the characteristic diffusion time (T_{char}), a measure of the approximate time required to achieve the equilibrium conditions, was made. T_{char} has the following definition:

$$T_{char} = \frac{\left(H_{ad}\right)^2}{\frac{D_w}{\tau}} \qquad \text{E-1}$$

Where: T_{char} = Characteristic diffusion time

D_w = Aqueous diffusion coefficient of chloroform (10^{-5} cm^2/s)[1]

τ = Tortuosity (=2)

H_{ad} = Thickness of the aquitard (8 feet)

The tortuosity, τ, is a factor that accounts for the distance required for diffusional transport in a porous medium, typically ranging from two to six (Cussler 1997). For this

[1] cm^2 = square centimeter; s = second

analysis, the lowest (most conservative) number (=2) was used. The calculated T_{char} value with Equation E-1 is 377 years, (much longer than the Site operation history) indicating that diffusion alone cannot explain the observed chloroform profile in the aquitard and the effects of advection are likely the primary force for chloroform transport.

The conclusion obtained from the analysis above is consistent with the observed predominantly downward hydraulic gradients near the Site over a period of 10 years (Golder 2007, 2008). Under the influence of downward advection transport, the only mechanism for chloroform in the aquitard to migrate back to the A-Aquifer is upward. To evaluate whether upward would be an effective transport process to transfer chloroform from the aquitard back to the A-Aquifer, the dimensionless parameter, Peclet number, was used. The Peclet number, Pe, is defined by the following equation (Chapra 1997):

$$Pe = \frac{L \times U}{\frac{D_w}{\tau}} = \frac{\text{rate of advective transport}}{\text{rate of diffusive transport}} \qquad \text{E-2}$$

Where L = The saturated thickness of the A-Aquifer (about 9 feet)

U = Downward groundwater flow velocity through the aquitard

D_w = Aqueous diffusion coefficient of chloroform (10^{-5} cm^2/s)

τ = Tortuosity (=2)

The average groundwater flow velocity through the aquitard can be calculated using Darcy's law:

$$U = \frac{1}{\eta_{ad}} K_{v_ad} G_v \qquad \text{E-3}$$

Where: K_{v_ad} = Vertical hydraulic conductivity of the aquitard

G_v = Hydraulic gradient in the aquitard

η_{ad} = Porosity of the aquitard

Based on the site specific measurements and monitoring data (see Table 8 of the main report), the average values of K_v, and n_{ad} are 9 x10^{-7} cm/s and 0.46. Based on the recent groundwater monitoring reports for International Business Machines (IBM) (Golder 2007, 2008), the flow direction in the aquitard is downward and the values of G_v at the former Building 028J area range from 0.625 to 0.875. To conservatively estimate

the downward flow velocity, U, the smaller gradient was used. The resulting U is 1.2×10^{-6} cm/s. Substituting the values of L, U, and D, into Equation E-2, the Peclet number was calculated to be 64.

A Peclet number larger than 10 indicates that advection is the dominant transport process (Chapra 1997). The transport of chloroform from the aquitard to the A-Aquifer due to upward diffusion is thus considered to be insignificant since it is overwhelmed by the downward advection.

E.2 Impact of Chloroform in the Aquitard on the B-Aquifer

Based on the analysis above, advection is the primary mechanism for chloroform transport at the Site. As a result, chloroform in the aquitard is expected to gradually migrate into the B-Aquifer because of the predominant downward hydraulic gradient in the aquitard. To evaluate the impact of residual chloroform in the aquitard on the water quality in the B-Aquifer, the extent of chloroform dilution that is anticipated to occur in the B-Aquifer was estimated using the method described below.

The vertical flow from the aquitard to the B-Aquifer was calculated using the following formula:

$$Q_v = K_{v_ad} \cdot G_v \cdot A_v \qquad \text{E-4}$$

Where: Q_v = Vertical flow from the impacted aquitard into the B-Aquifer

K_{v_ad} = Vertical hydraulic conductivity of the aquitard (9×10^{-7} cm/s; geometric mean of measured data in Table 8 of the main report)

G_v = Vertical gradient in the aquitard (0.625 to 0.875 from Golder 2007, 2008)

A_v = Area extent of the impacted aquitard (4000 square feet)

The horizontal flow in the B-Aquifer beneath the impacted aquitard was calculated using the following formula:

$$Q_h = K_h \cdot G_h \cdot W_h \cdot H \qquad \text{E-5}$$

Where: Q_h = Horizontal flow beneath the impacted aquitard in the B-Aquifer

K_h = Horizontal hydraulic conductivity in the B-Aquifer (= 0.26 cm/s from Golder 2007)
G_h = Horizontal gradient in the B-Aquifer (=0.001)
W_h = Width of the impacted aquitard (= 63.3 feet)
H = Height of the B-Aquifer (= 15 feet)

Assuming that the aquitard is an infinite source and the average groundwater concentration in the B-Aquifer is a result of complete mixing, the extent of dilution can be characterized using the dilution ratio, $(Q_h+Q_v)/Q_v$, using a simple box model (Figure E-1) (Levenspiel 1972, Chapra 1997, Schwarzenbach et al. 1993). Based on the Site-specific values presented above, the dilution ratio was estimated to range from 78 to 110. The lower dilution ratio was obtained using the larger G_v value (0.875).

The average chloroform aqueous concentration in the B-Aquifer, C_{wB}, was then calculated using the following formula:

$$C_{wB} = \frac{C_{s_ad} \times \rho}{\left(\eta_{ad} + \rho \times K_{d_ad}\right)} \div \left(\frac{Q_h + Q_v}{Q_v}\right) \qquad \text{E-6}$$

Where: C_{wB} = average aqueous chloroform concentration in the B-Aquifer
C_{s_ad} = representative soil chloroform concentration in the aquitard
η_{ad} = Porosity of the aquitard (=0.46)
ρ = Bulk density (=1.44 kg/L)[2]
K_{d_ad} = Distribution coefficient for the aquitard (=0.17 L/kg)

The site-specific geotechnical properties for the aquitard are provided in Tables 7 through 9 of the main report. Using Equation E-6 and the lowest dilution ratio of 78, the average aqueous concentration of chloroform in the B-Aquifer would be only about 2.6 % of the chloroform soil concentration in the aquitard.

E.3 Sensitivity Analysis

A sensitivity analysis was performed to assess the range of possible chloroform concentrations in the A-Aquifer. In the sensitivity analysis, minimum and maximum possible values were selected for four parameters: the percentage of chloroform mass

[2] kg = kilogram; L = liter

transferred to the B aquifer, the post-remediation A/B-Aquitard chloroform soil concentration, the A-Aquifer thickness, and the fraction of organic content of the A/B Aquitard soil (f_{oc}). The results of the sensitivity analysis were presented in Appendix D of the report: *Chloroform Mass Estimates and Projected Future Groundwater Conditions* (ENVIRON 2008).

E.4 References

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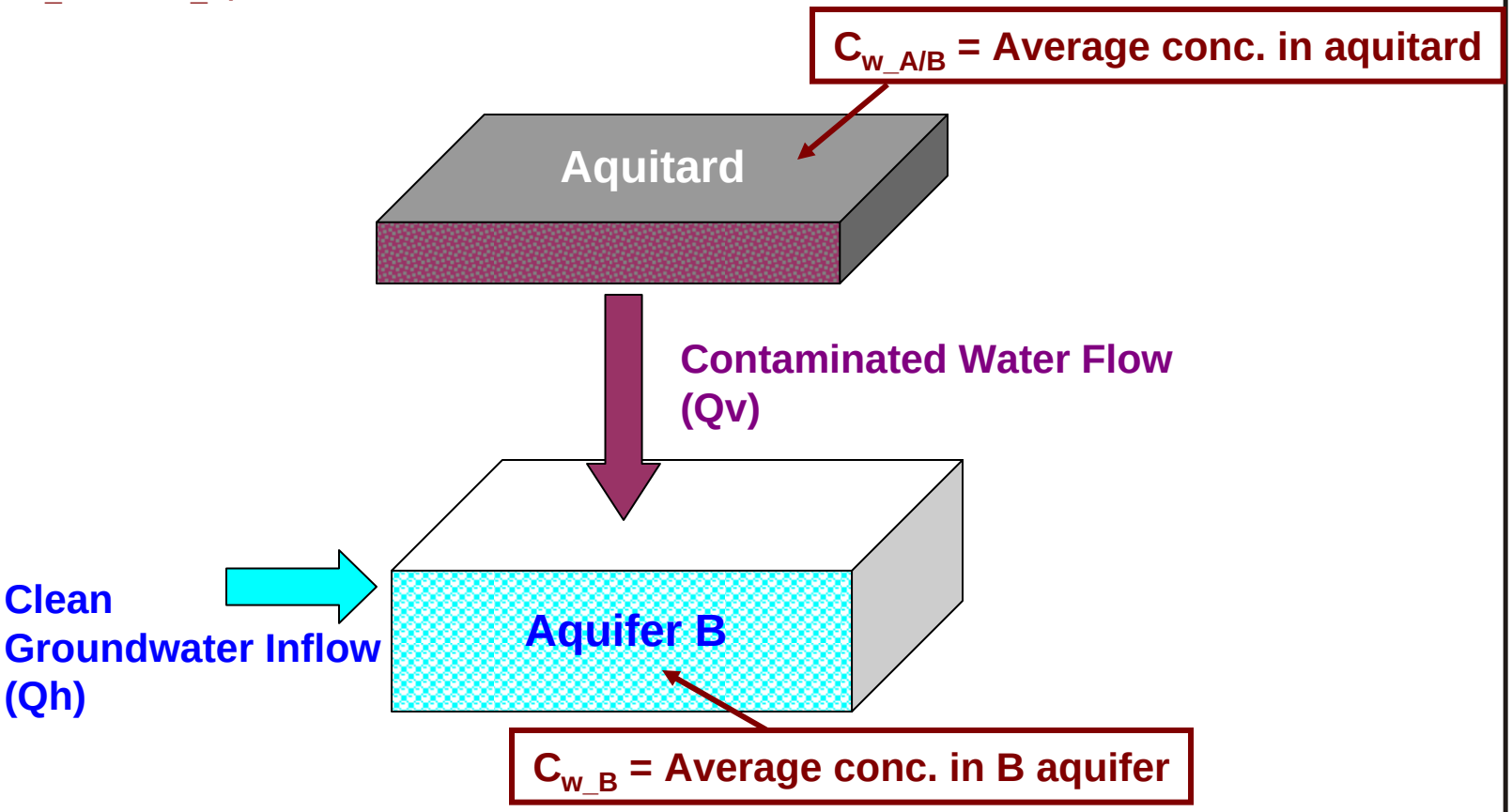
Dilution Ratio = (Qv+Qh)/ Qv

$C_{w_B} = C_{w_A/B}$ / Dilution Ratio



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Box Model Schematic Used to Estimate Impacts on the B-Aquifer
Hitachi GST
San Jose, California

Figure
E-1

Drafter: JC Date: 06/27/08 Contract Number: 03-11903E Approved: Revised:

Appendix F:
Estimated Time to Reach Chloroform Drinking Water Goal in A-Aquifer

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Appendix F: Estimated Time to Reach Chloroform Drinking Water Goal in A-Aquifer

This appendix presents a time-scale analysis of subsurface conditions in the former Building 028J area considering flushing effects of seasonal groundwater flux. The methods and calculations used are presented and estimates of the time necessary to reach the goal for chloroform in drinking water of 80 micrograms/liter (µg/L) under natural conditions are provided. The time-scale analysis presented here is based on a generic box model approach that has been introduced in many environmental and chemical engineering textbooks (Schwarzenbach et al. 1993; Chapra et al. 1997; Levenspiel 1972), and is consistent with the flushing model presented by Wiedemeier et al (1999).

F.1 Context of the Analysis

The equilibrium partitioning approach presented in Appendix E is a very conservative approach used to establish upper-bound concentrations for the purpose of evaluating the future human health risk for the chloroform mass remaining in the A-Aquifer and A/B Aquitard. As concluded in Appendix E, the chloroform mass remaining in the aquitard is not expected to impact the B-Aquifer to a significant degree, and the chloroform concentration in the A-Aquifer is not predicted to exceed the residential risk-based target concentration (RBTC) for groundwater of 380 µg/L.

However, the equilibrium partitioning approach in Appendix E does not take into account the effects of natural flushing in the A-Aquifer. Natural flushing in the A-Aquifer in the former Building 028J area is evident based on the observed seasonal water table fluctuation (see Figure 13 of the main report). During the period between May 9, 2007 and July 25, 2007, a natural fall of the groundwater table was observed.[1] After the extraction system started operating, the water table started to rise between September 13, 2007 and April 7, 2008. Using the water table on July 25, 2007 as a reference point (representing the pre-remediation level), the magnitude of this water table rise is about six feet despite the operation of the 2-PHASE™ Extraction system in the former Building 028J area.

F.2 Calculations and Estimates of Time

Conservatively assuming a 4-foot annual rise and fall of the water table in the former Building 028J area, a pore-volume flushing concept was used to estimate the time required to achieve the goal for drinking water under natural conditions. The calculation procedure is provided below.

[1] A pilot-scale study of 2-PHASE™ Extraction was conducted in the former Building 028J area from June 4, 2007 through June 9. The study was limited to approximately 100 hours of run-time. During the study, approximately 9,400 gallons of groundwater were extracted while operating one to three extraction wells. The decline in water levels was temporarily accelerated during this time period. The effect was not great, but can be seen in the first 11 measurements shown on Figure 13.

- The theoretical number of pore volumes required to remove a contaminant from an aquifer can be calculated using the following equation:

$$NP = -\left(1 + \frac{K_d \times \rho}{\eta}\right) Ln\left(\frac{C_{wt}}{C_{wo}}\right) \qquad \text{F-1}$$

Where: NP = Number of pore volumes
K_d = Distribution coefficient (=0.0796 L/kg)[2]
ρ = Bulk density (=1.54 kg/L)
η = Porosity of the A-Aquifer (=0.43)
C_{wt} = Chloroform drinking water goal (=80 ug/L)
C_{wo} = Average aqueous chloroform conc. in the A-Aquifer (=158 ug/L)

Using the site-specific values as indicated above, the number of pore volumes was found to be 0.87.

- Calculate the total amount of water that flushes through the impacted area, assuming a 4 to 6-foot water table fluctuation annually:

$$V_f = H_f \times L \times W \times \eta_y \qquad \text{F-2}$$

Where: V_f = Annual flushing volume (cm^3/year)[3]
H_f = Annual water table fluctuation (=121.92 cm/year)[4]
L = Impacted area length (= 63.3 feet = 1929.4 cm)
W = Impacted area width (= 63.3 feet = 1929.4 cm)
η_Y = Drainable porosity for the A-Aquifer (=0.1)

The use of drainable porosity in the above equation is to account for the amount of water that actually flows in and out of the impacted zone annually. This parameter is similar to specific yield, which denotes the volumetric fraction of the bulk aquifer volume that a given aquifer will yield when all the water is allowed to drain out. The ranges of specific yield values for various soil types are provided in Table F-1.

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[2] kg = kilogram
[3] cm^3 = cubic centimeter
[4] cm = centimeter

Table F-1: Values of Specific Yield (Johnson 1967)

	Specific Yield (%)		
Material	Minimum	Average	Maximum
Clay	0	2	5
Sandy clay	3	7	12
Silt	3	18	19
Fine sand	10	21	28
Medium sand	15	26	32
Coarse sand	20	27	35
Gravelly sand	20	25	35
Fine gravel	21	25	35
Medium gravel	13	23	26
Coarse gravel	12	22	26

Because the A-aquifer is a composite aquifer consisting of sand and silt material with some interbedded clay layers, ENVIRON uses the mean of average specific yield values for silt and fine sand to represent the specific yield value for the A-aquifer (0.2). Because of the capillary effects near the water table, not all the water in the capillary fringe can freely drain. ENVIRON conservatively assumes that the drainable porosity (0.1) used in Equation F-2 is half of the specific yield value for the A-aquifer (0.2) to account for the capillary effects.

Using the site-specific values as indicated above, the annual flushing volume ranges from 4.5×10^7 to 6.8×10^7 cm^3/year.

- Calculate the total impacted aquifer pore volume:

$$V_A = H \times L \times W \times \eta \qquad \text{F-3}$$

Where: V_A = Aquifer pore volume (cm^3)
H = Average thickness of the A-Aquifer (= 9 feet = 274.3 cm)
L = Impacted area length (= 63.3 feet = 1929.4 cm)
W = Impacted area width (= 63.3 feet = 1929.4 cm)
η = Porosity of the A-Aquifer (=0.43)

Using the site-specific values as indicated above, the aquifer pore volume of the impacted area is 4.4×10^8 cm^3.

- Calculate the time required for natural flushing to achieve the drinking water goal of 80 µg/L:

$$T = \frac{V_A \times NP}{V_f} \qquad \text{F-4}$$

Where: T = the time required for natural flushing (year)
V_A = Aquifer pore volume (4.4×10^8 cm^3)
V_f = Annual flushing volume (4.5×10^7 to 6.8×10^7 cm^3/year)
NP = Number of pore volumes (0.87)

The time required for natural flushing to achieve the drinking water goal in the A-Aquifer ranges from 5.6 to 8.5 years.

The pore-volume flushing analysis above uses the water table fluctuation as an indicator of the extent of natural flushing occurring at the Site. The source of water for natural flushing includes precipitation and ambient groundwater flow. The clean water entering into the area of residual chloroform concentrations in the A-Aquifer may either horizontally exit the area or seep downward into the aquitard.

To provide an even more conservative estimate of natural flushing time to achieve the goal for drinking water in the A-Aquifer, the horizontal flow component was ignored, and only the vertical leakage was used to represent the annual flushing rate. While the head differences between the A- and B-Aquifer changes over time, the average head difference between these two aquifers is about 5.7 feet based on the Site monitoring reports (Table 16 of the main report).

- The annual flushing rate based on the vertical leakage:

$$V_{f_v} = K_{v_ad} \times \frac{\Delta H}{\Delta Z} \times W \times L \times \frac{86400 \times 365 \text{ seconds}}{\text{year}} \qquad \text{F-5}$$

Where: V_{f_v} = Annual flushing volume assuming vertical flow only (cm^3/year)
K_{v_ad} = Vertical hydraulic conductivity of the aquitard (= 9×10^{-7} cm/s)
ΔH = Average head difference between two aquifers (= 5.7 feet)
ΔZ = Aquitard thickness (= 8 feet)
L = Impacted area length (= 63.3 feet = 1929.4 cm)
W = Impacted area width (= 63.3 feet = 1929.4 cm)

Using the above values, the annual flushing volume is estimated to be 7.5×10^7 cm^3/year. Substituting this number into Equation F-4, the time required to achieve the goal for drinking water was found to be 8.6 years.

The above presentation shows that it is expected that the time required for natural flushing to reduce the chloroform concentration in the A-Aquifer to the goal from drinking water ranges from 5.6 to 8.6 years depending on the amount of natural rainfall and artificial recharge, and hence flushing that occurs in the future.

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