Final Remedial Investigation Report

Quanta Resources Superfund Site Operable Unit 1

Volume 5 of 7

Submitted to

US Environmental Protection Agency, Region 2

August 2008

Submitted by

CH2MHILL

596226

J

TarGOST™ Log Sample IDs

TL09_03_5
TL09_05_5

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TL10_04_5
TL10_05_5

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TL11_03_5
TL11_04_5
TL11_05_5
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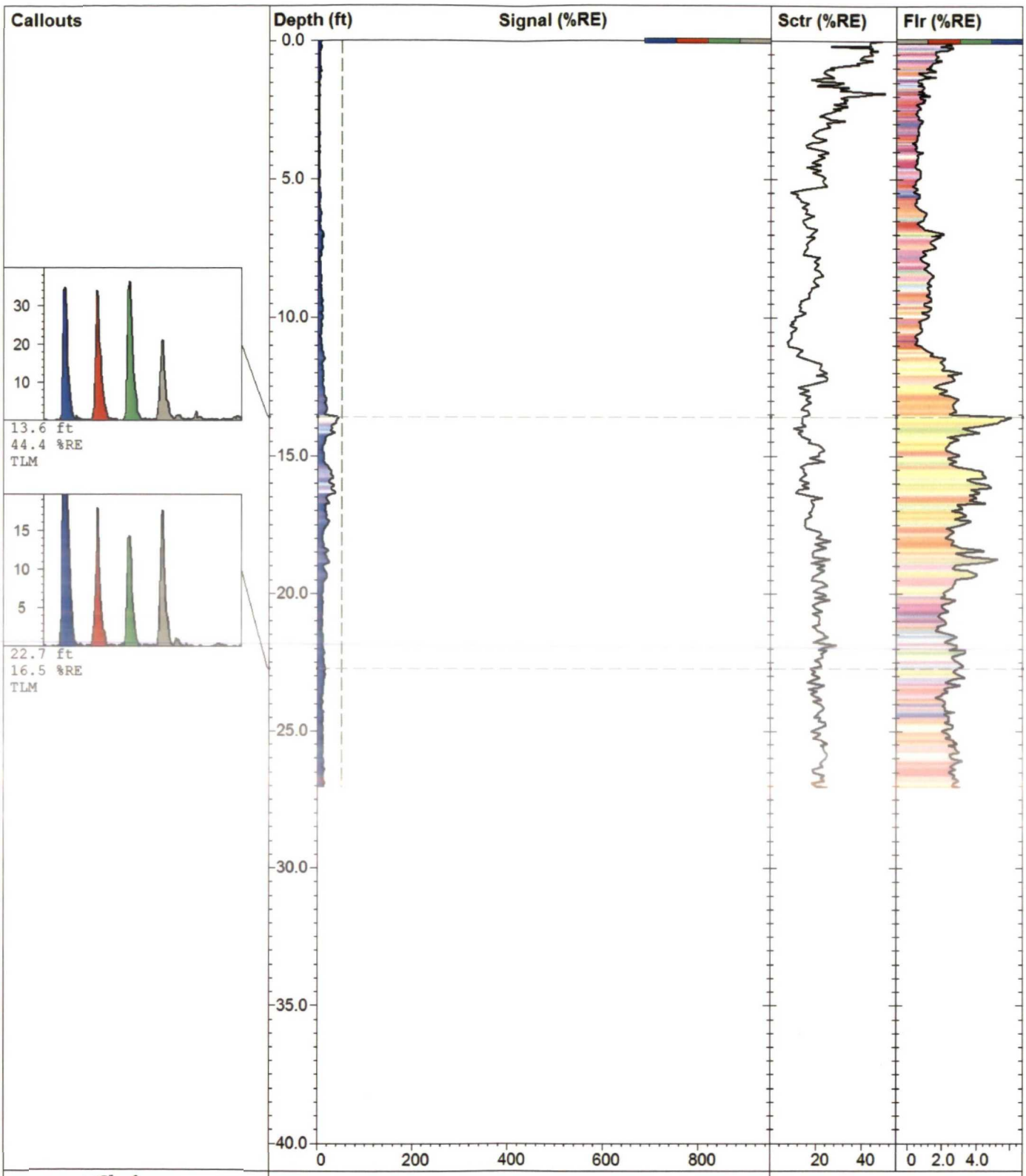
TL19_0_5
TL19_01
TL19_5_0_5



TL09_03_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.226391 N / NAD83**	*Final depth:* **27.07 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.452670 W**	*Max signal:* **44.4 % @ 13.60 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 4:25:51 PM**

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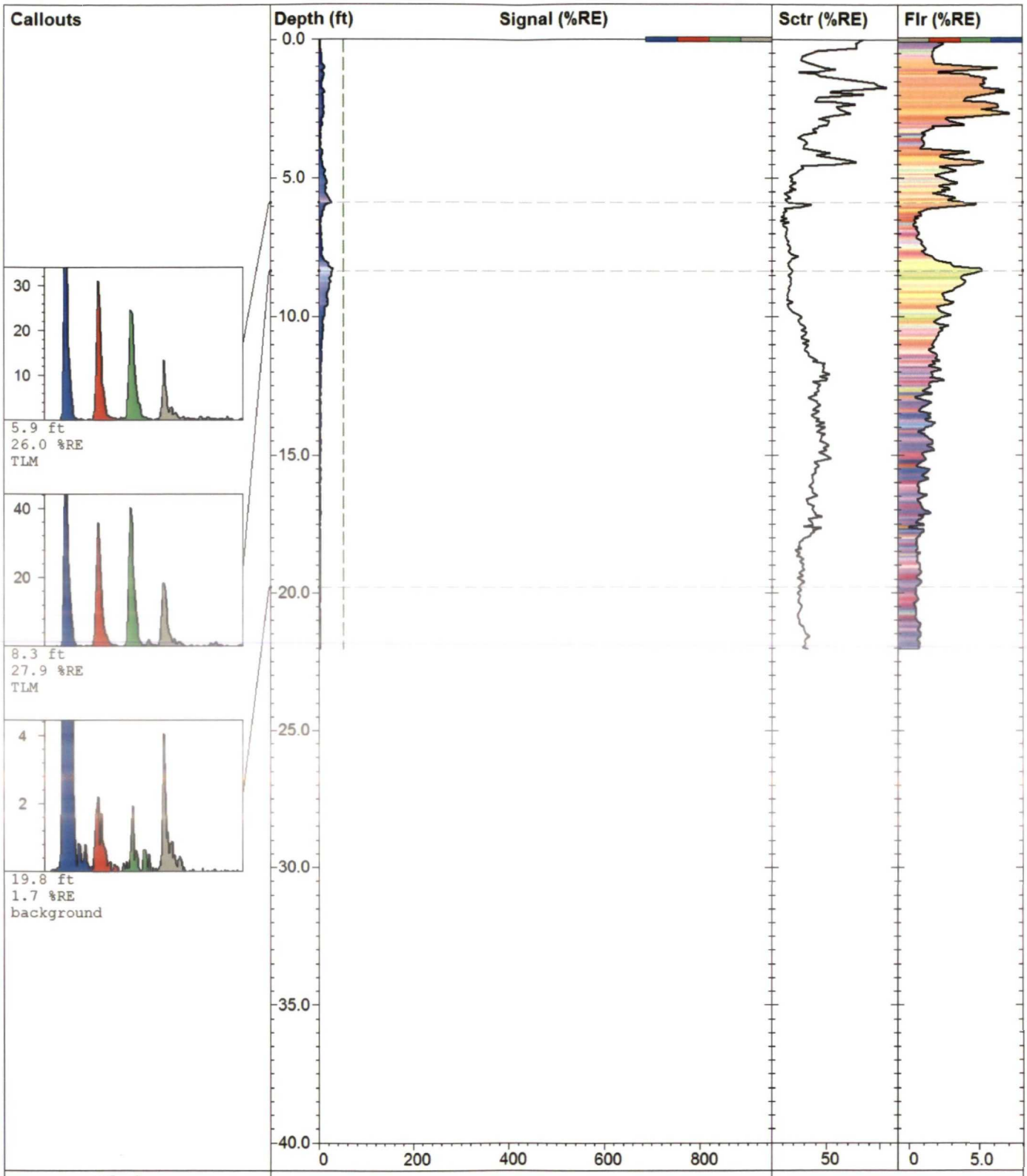

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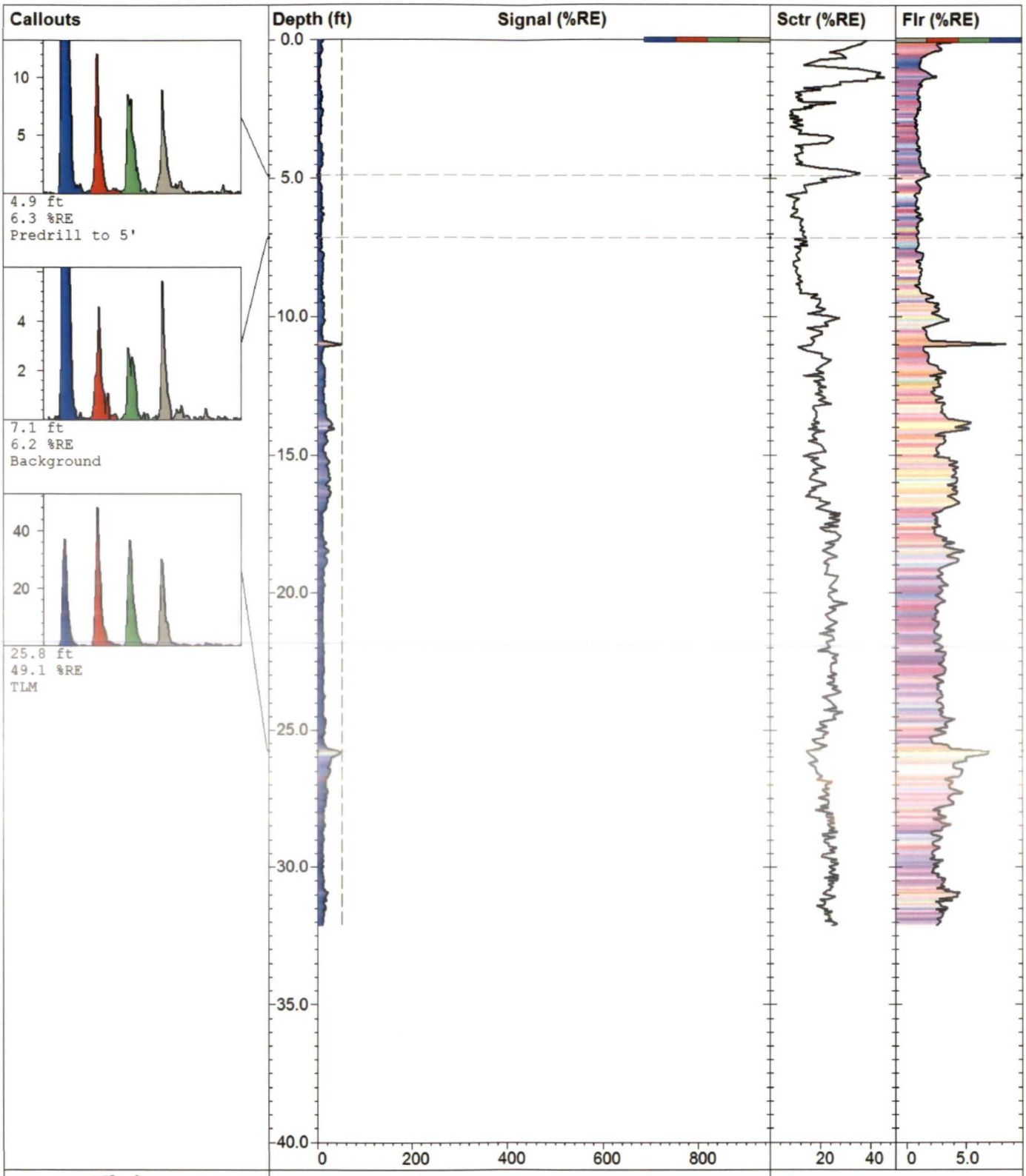
TL09_05_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.245114 N / NAD83**	*Final depth:* **22.06 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.488727 W**	*Max signal:* **29.4 % @ 8.26 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 5:02:38 PM**



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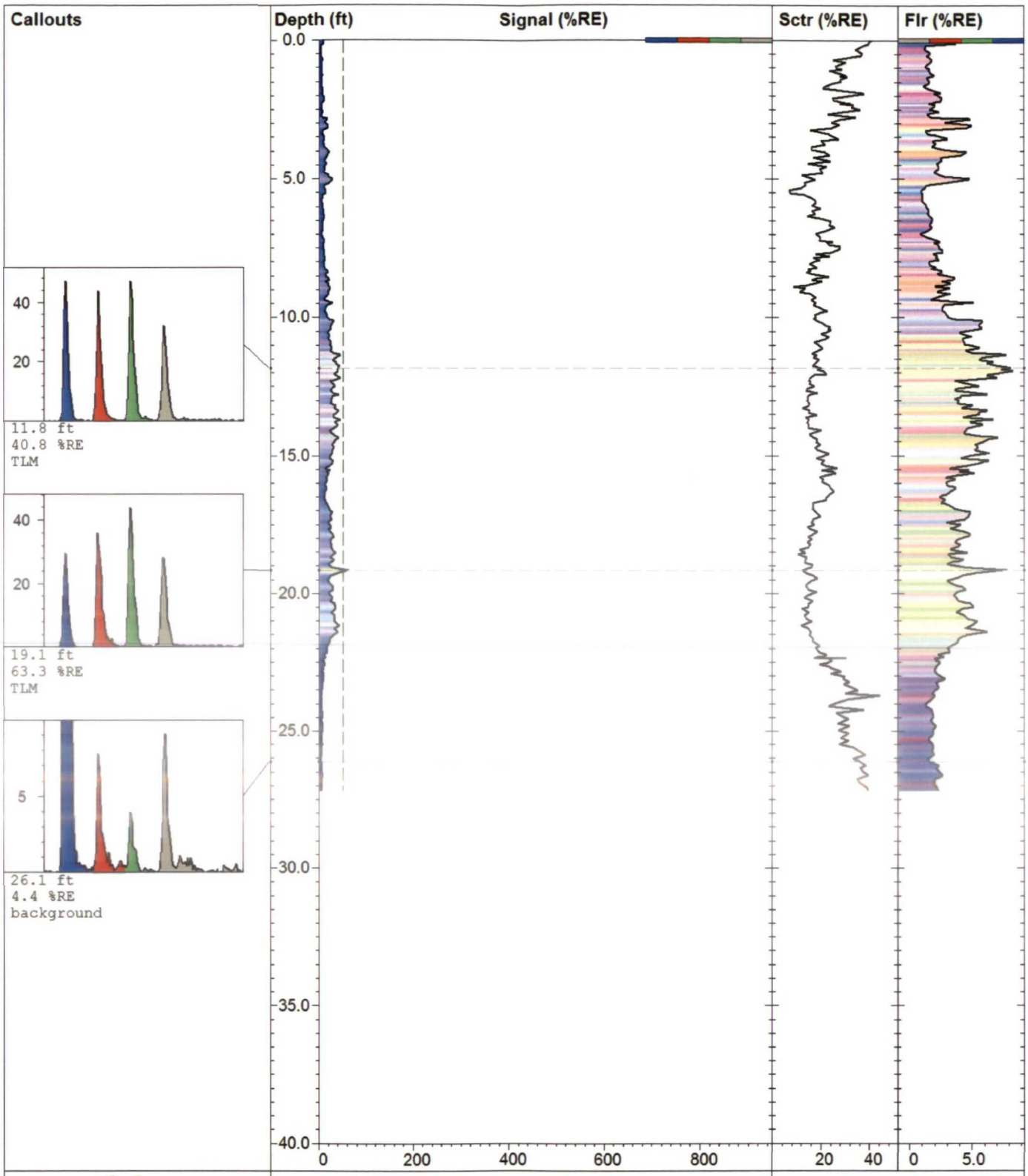
TL10_03_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.240468 N / NAD83**	*Final depth:* **32.14 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.441818 W**	*Max signal:* **53.8 % @ 11.00 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 8:11:07 AM**



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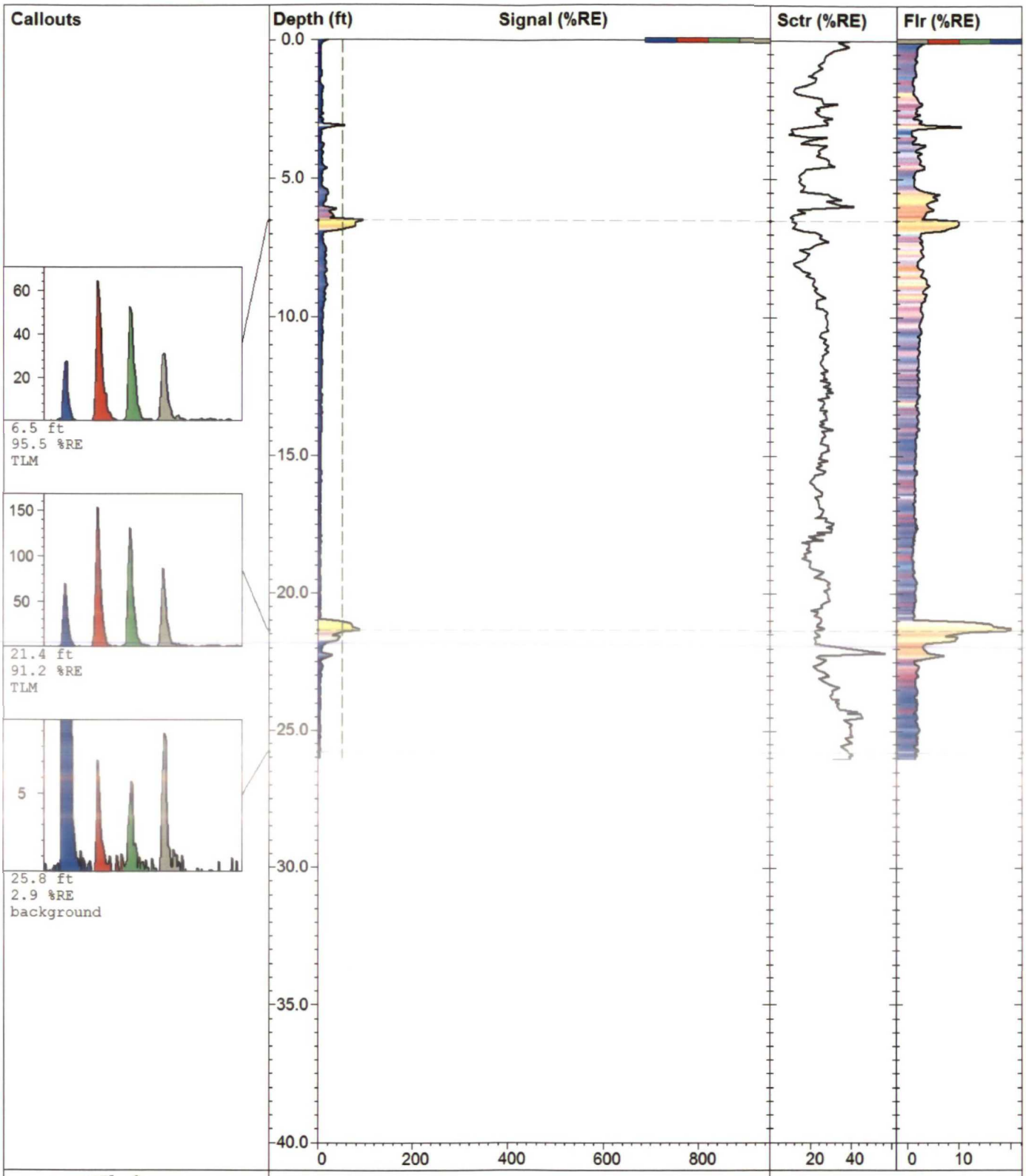
TL10_04_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.248814 N / NAD83**	*Final depth:* **27.20 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.460158 W**	*Max signal:* **63.3 % @ 19.15 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 1:59:05 PM**



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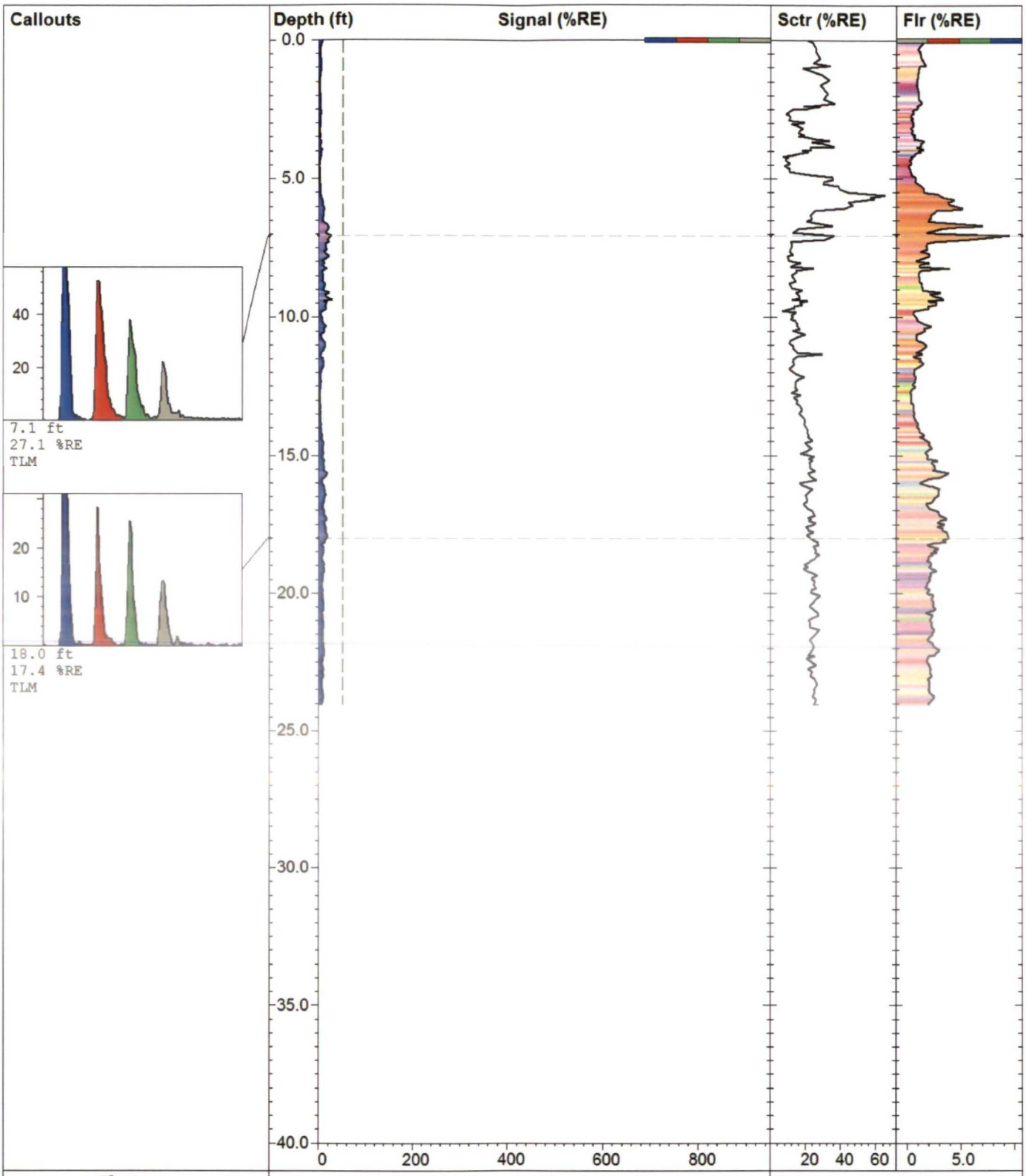
TL10_05_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.258044 N / NAD83**	*Final depth:* **26.04 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.478026 W**	*Max signal:* **95.5 % @ 6.52 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 2:23:38 PM**



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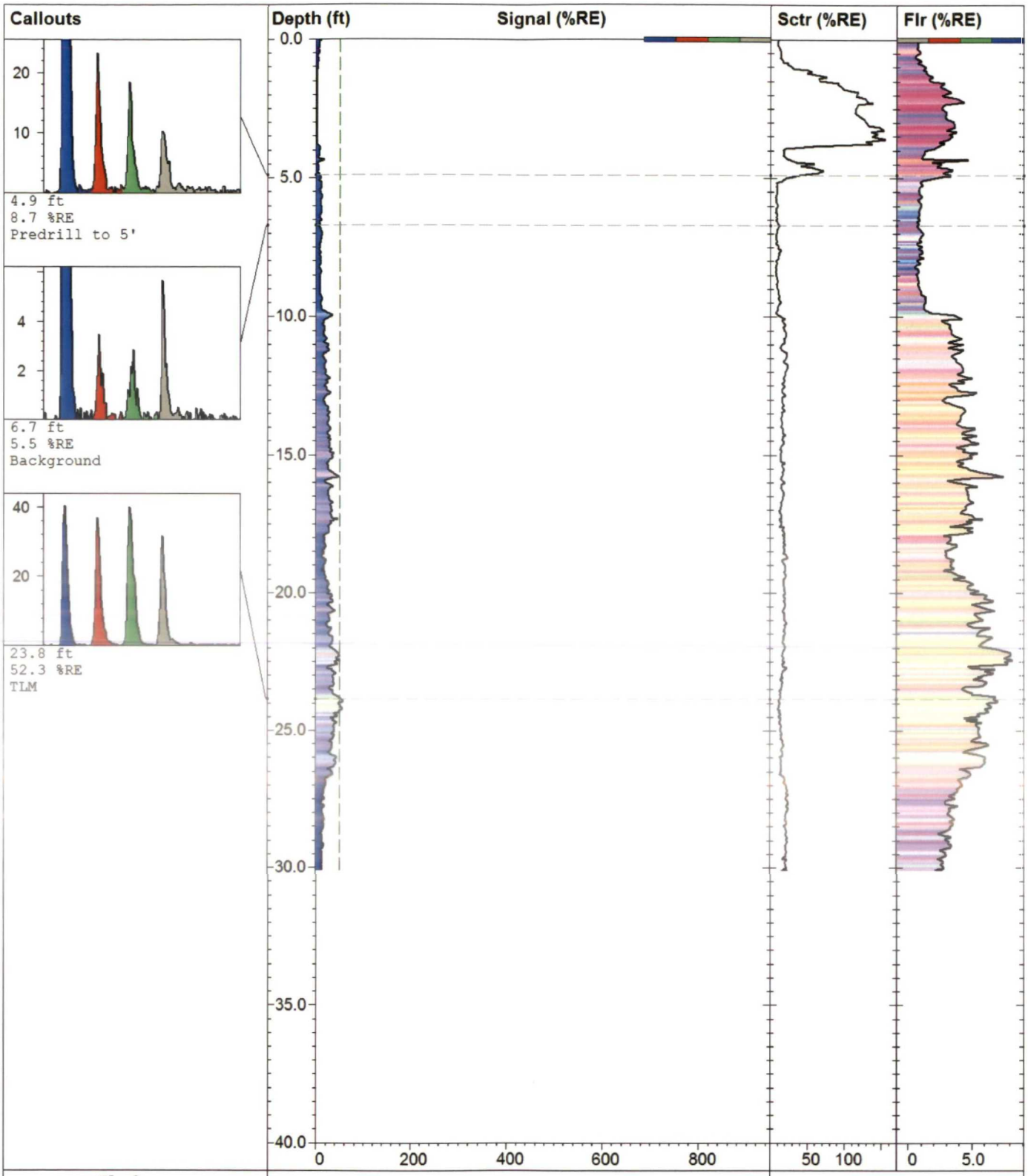
TL11_02_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.245250 N / NAD83**	*Final depth:* **24.08 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.412404 W**	*Max signal:* **27.4 % @ 9.36 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 3:53:45 PM**



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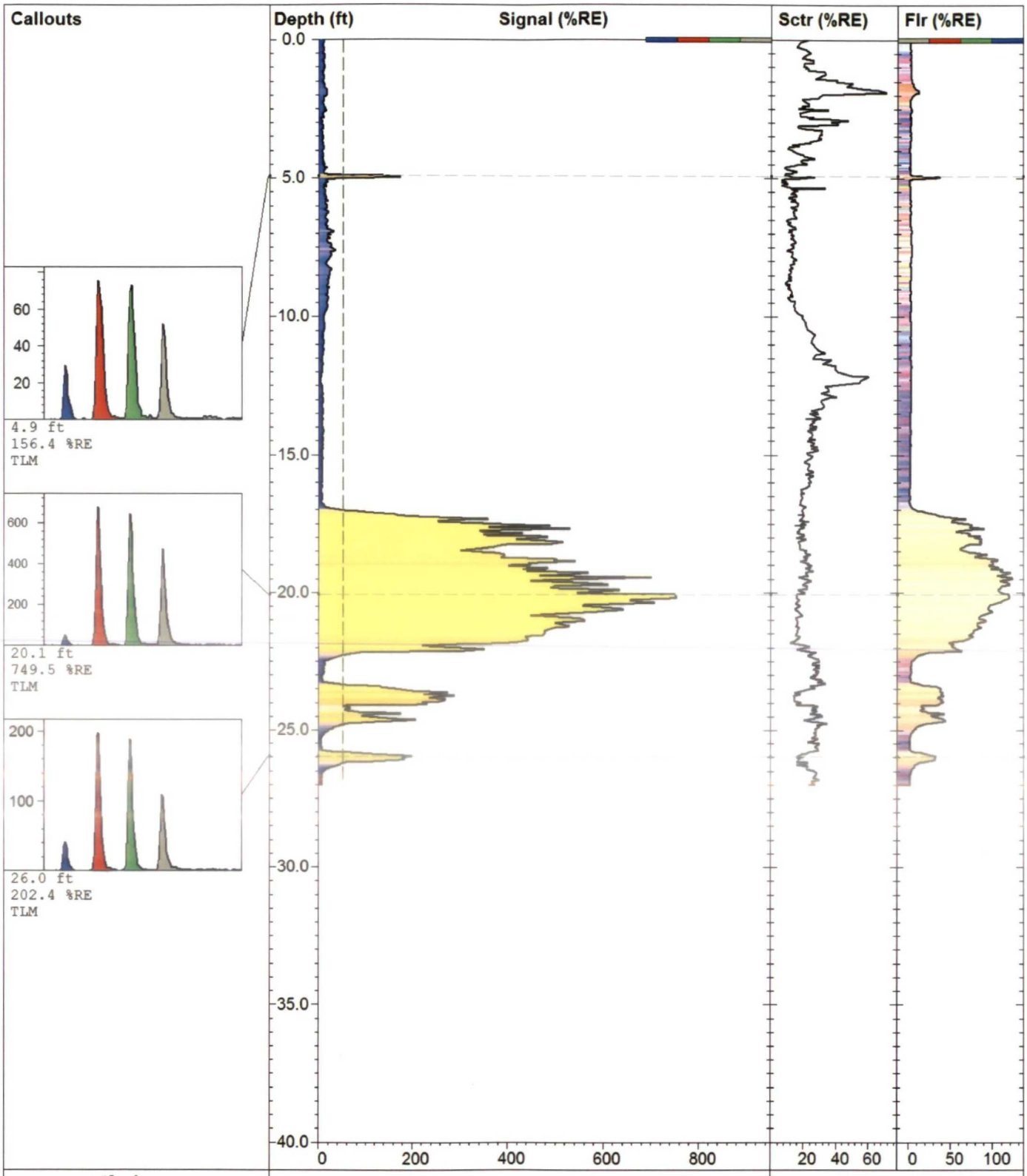
TL11_03_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.254692 N / NAD83**	*Final depth:* **30.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.430032 W**	*Max signal:* **58.8 % @ 23.94 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 8:46:25 AM**



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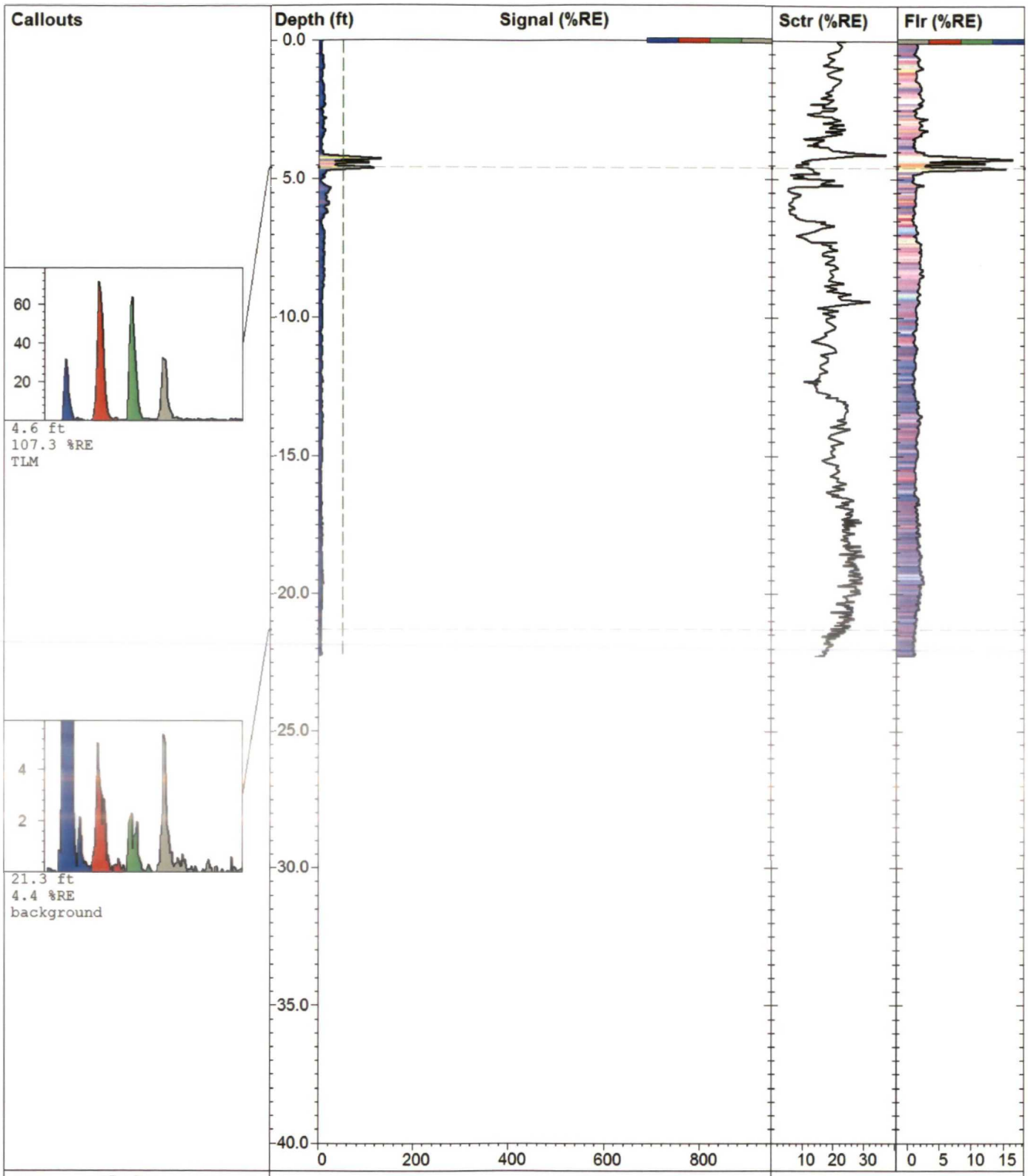
TL11_04_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.263465 N / NAD83**	*Final depth:* **27.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.448401 W**	*Max signal:* **752.4 % @ 20.19 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 9:48:15 AM**



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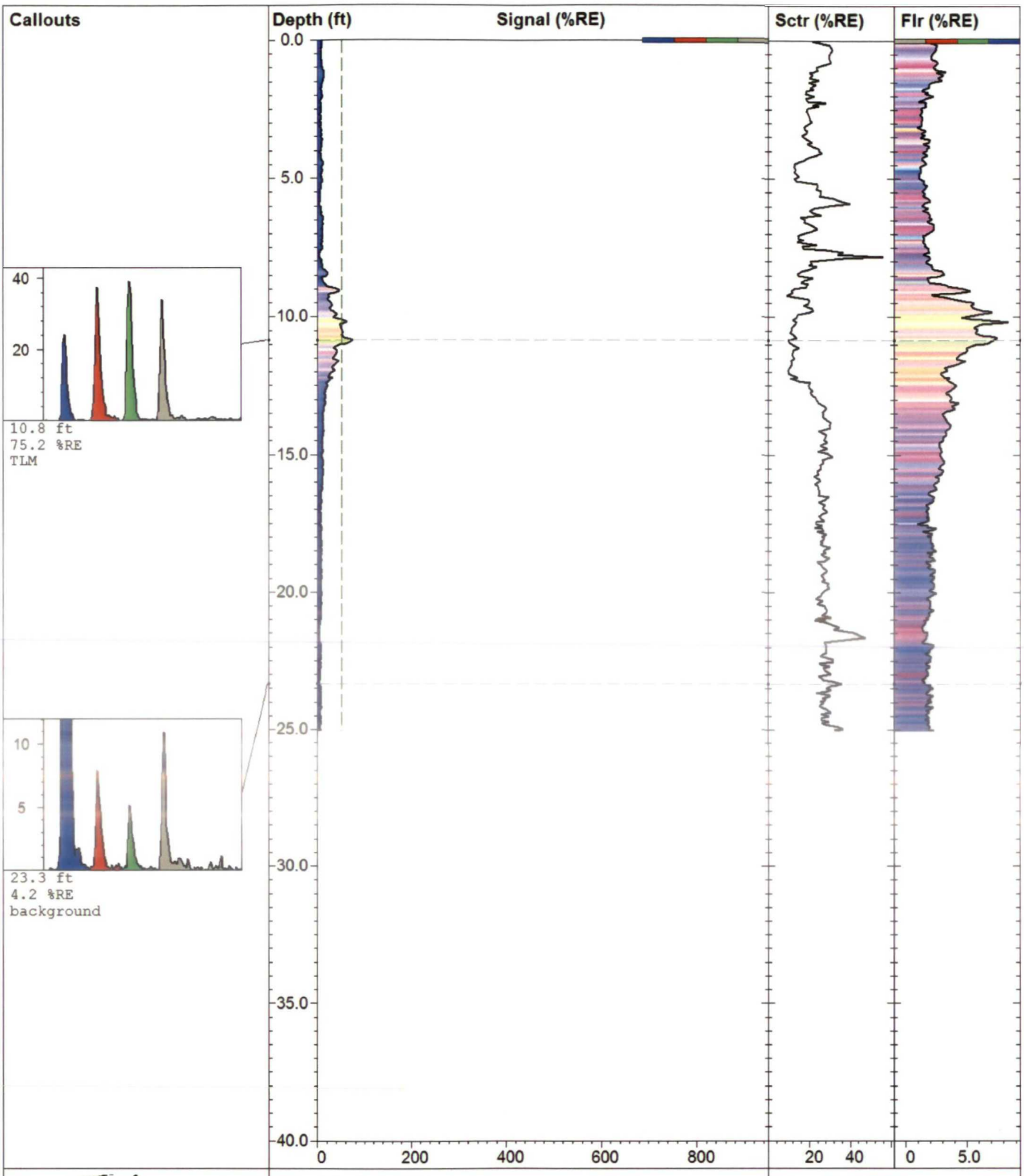
TL11_05_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.272268 N / NAD83**	*Final depth:* **22.28 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.466807 W**	*Max signal:* **133.1 % @ 4.28 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 10:23:26 AM**



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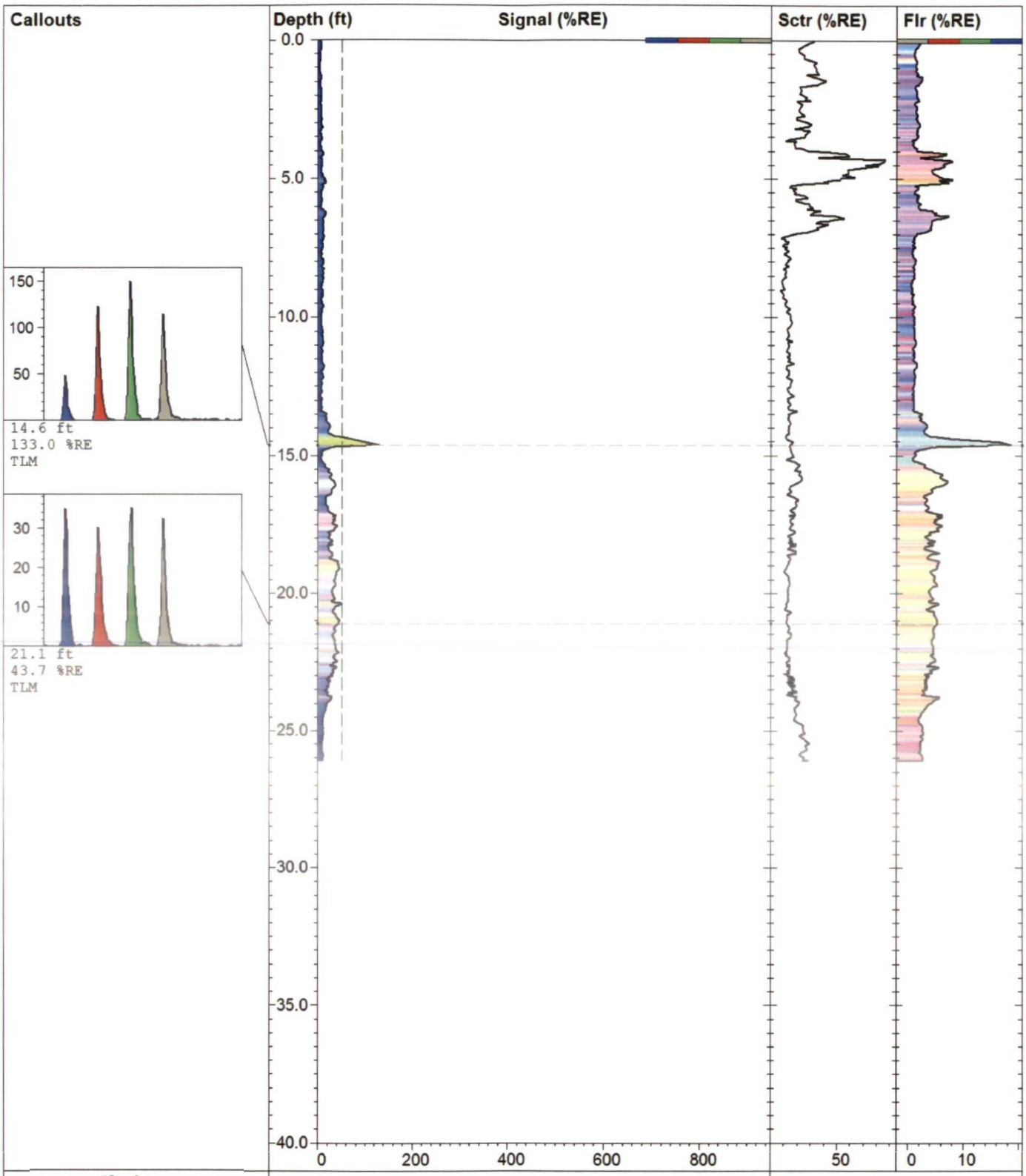
TL11_06_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.280821 N / NAD83**	*Final depth:* **25.06 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.485295 W**	*Max signal:* **75.2 % @ 10.84 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 10:49:34 AM**



TL11_07_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.28909 N / NAD83**	*Final depth:* **26.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.50354 W**	*Max signal:* **133.0 % @ 14.62 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 11:19:42 AM**

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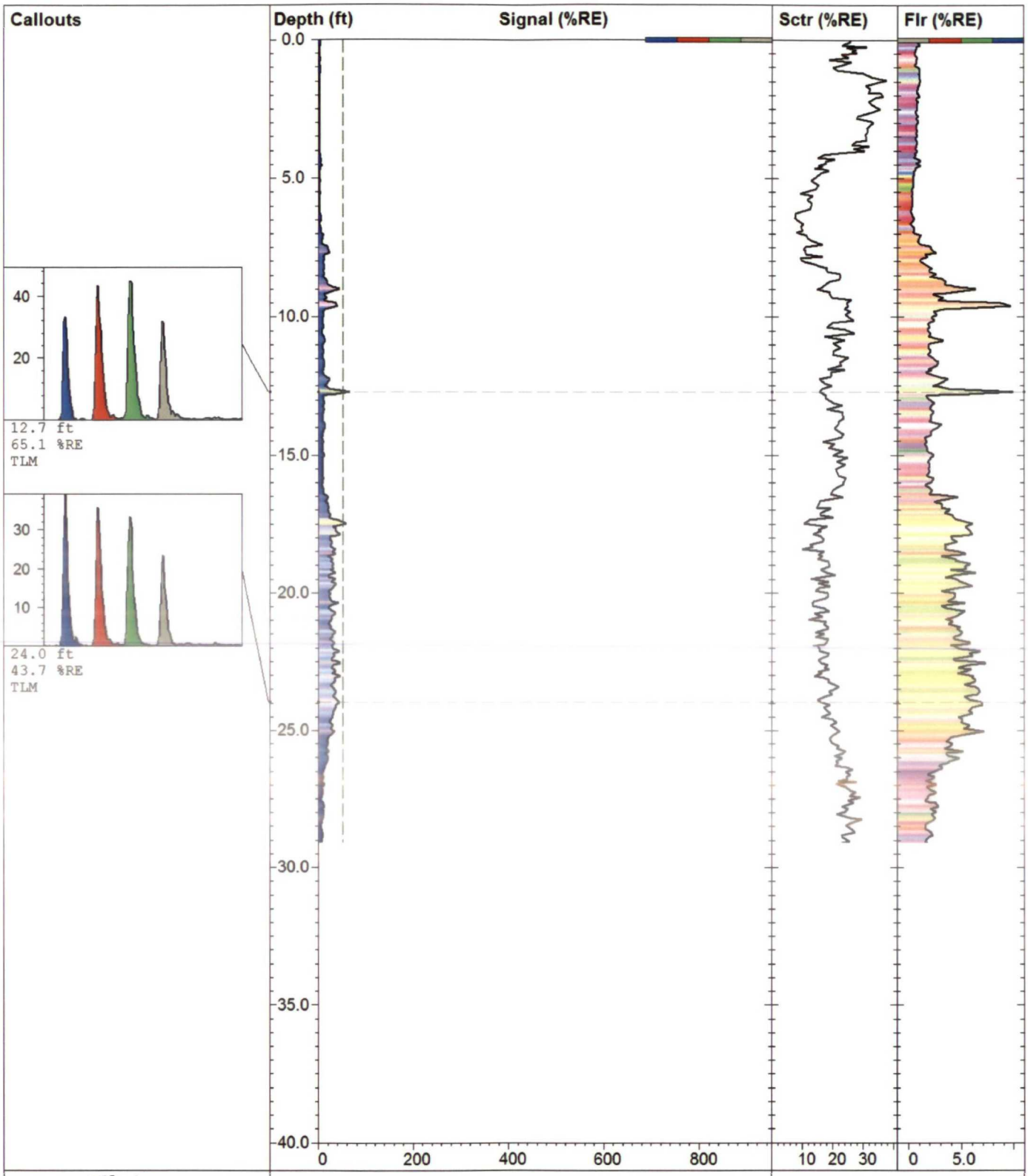

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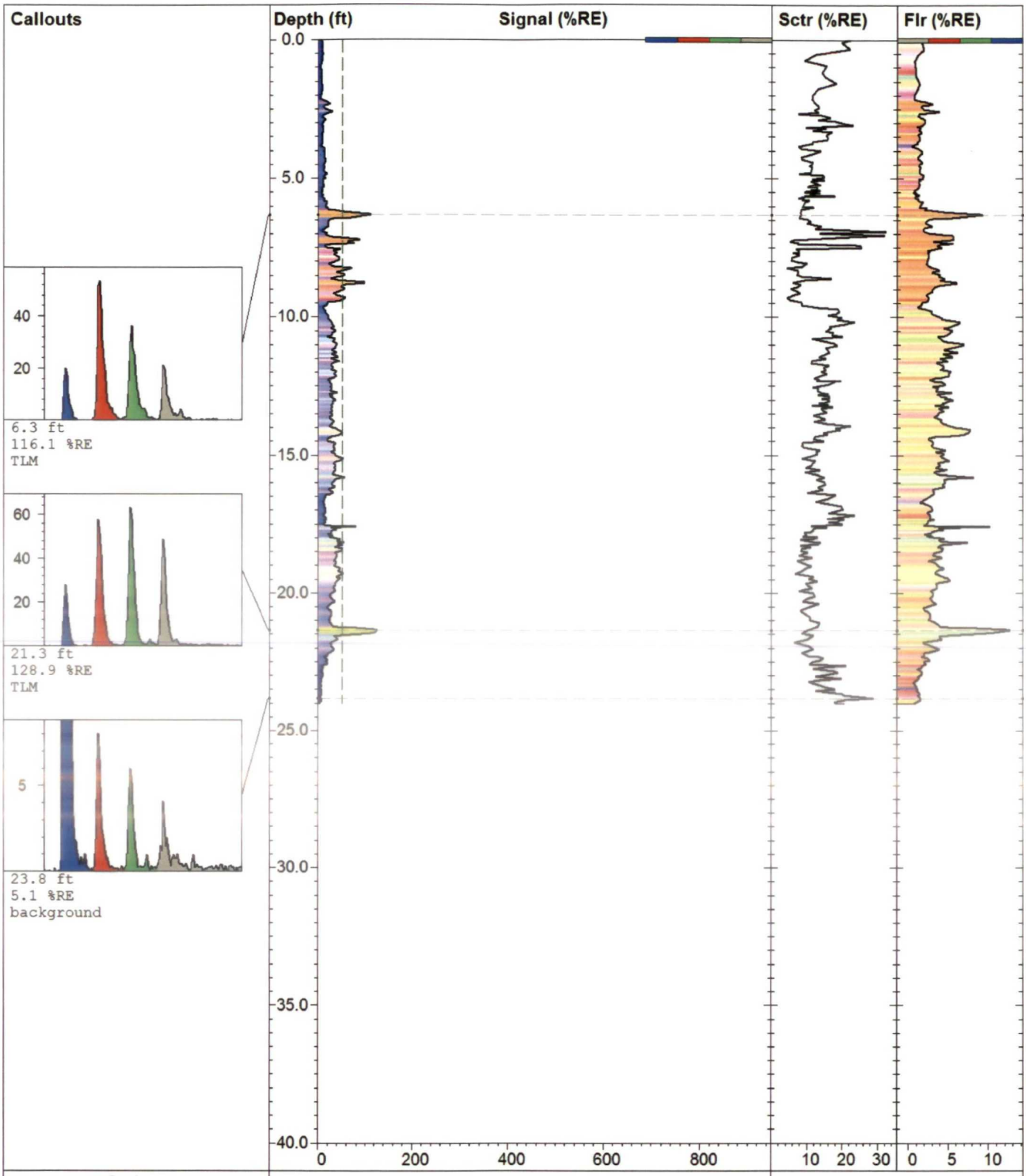
TL11_08_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.302529 N / NAD83**	*Final depth:* **29.10 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.519655 W**	*Max signal:* **65.1 % @ 12.70 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 5:53:28 PM**



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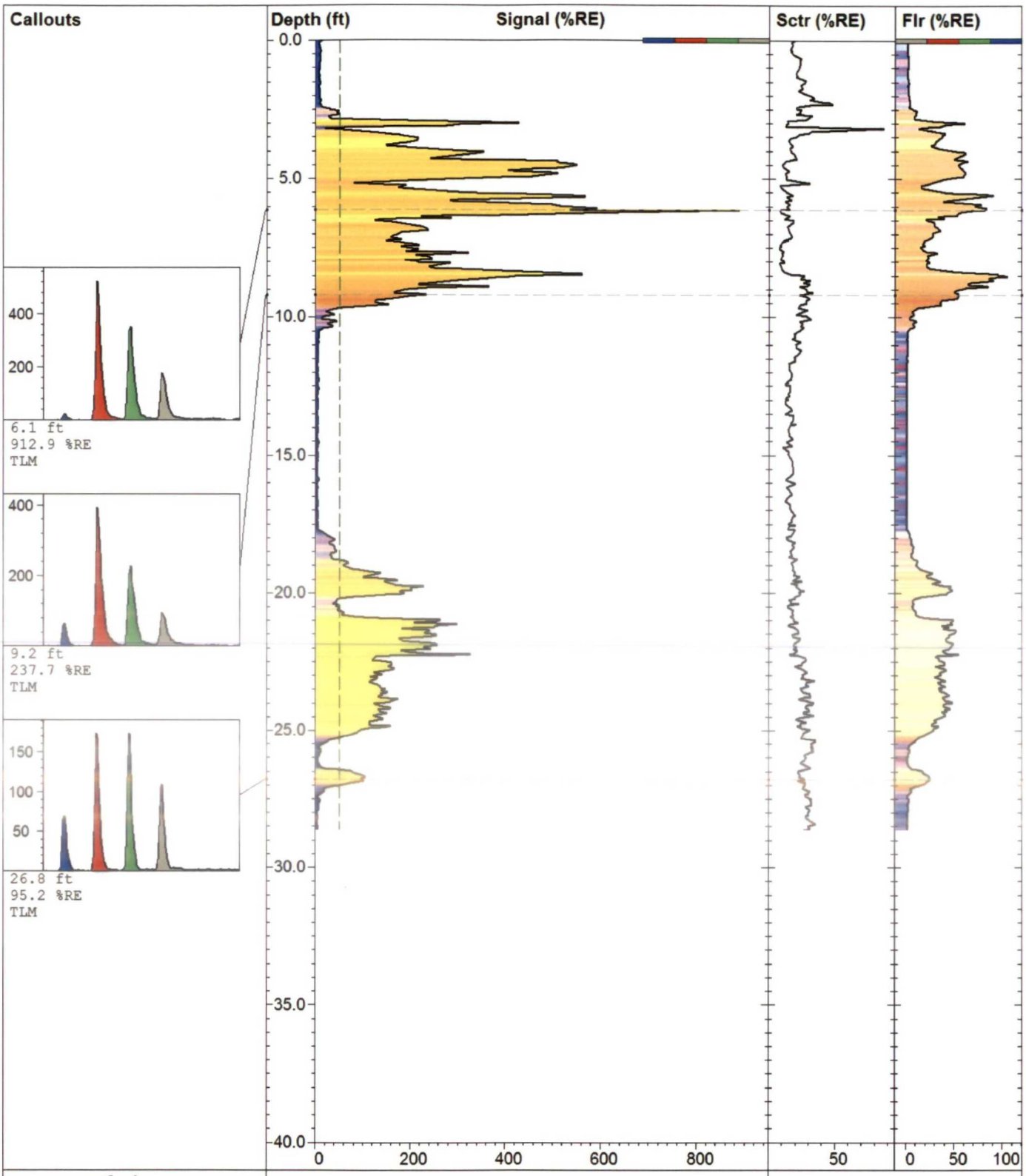
TL12_03_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.267716 N / NAD83**	*Final depth:* **24.04 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.421091 W**	*Max signal:* **128.9 % @ 21.35 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 3:19:38 PM**



TL12_04_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.276429 N / NAD83**	*Final depth:* **28.63 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.439038 W**	*Max signal:* **912.9 % @ 6.13 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 1:17:35 PM**

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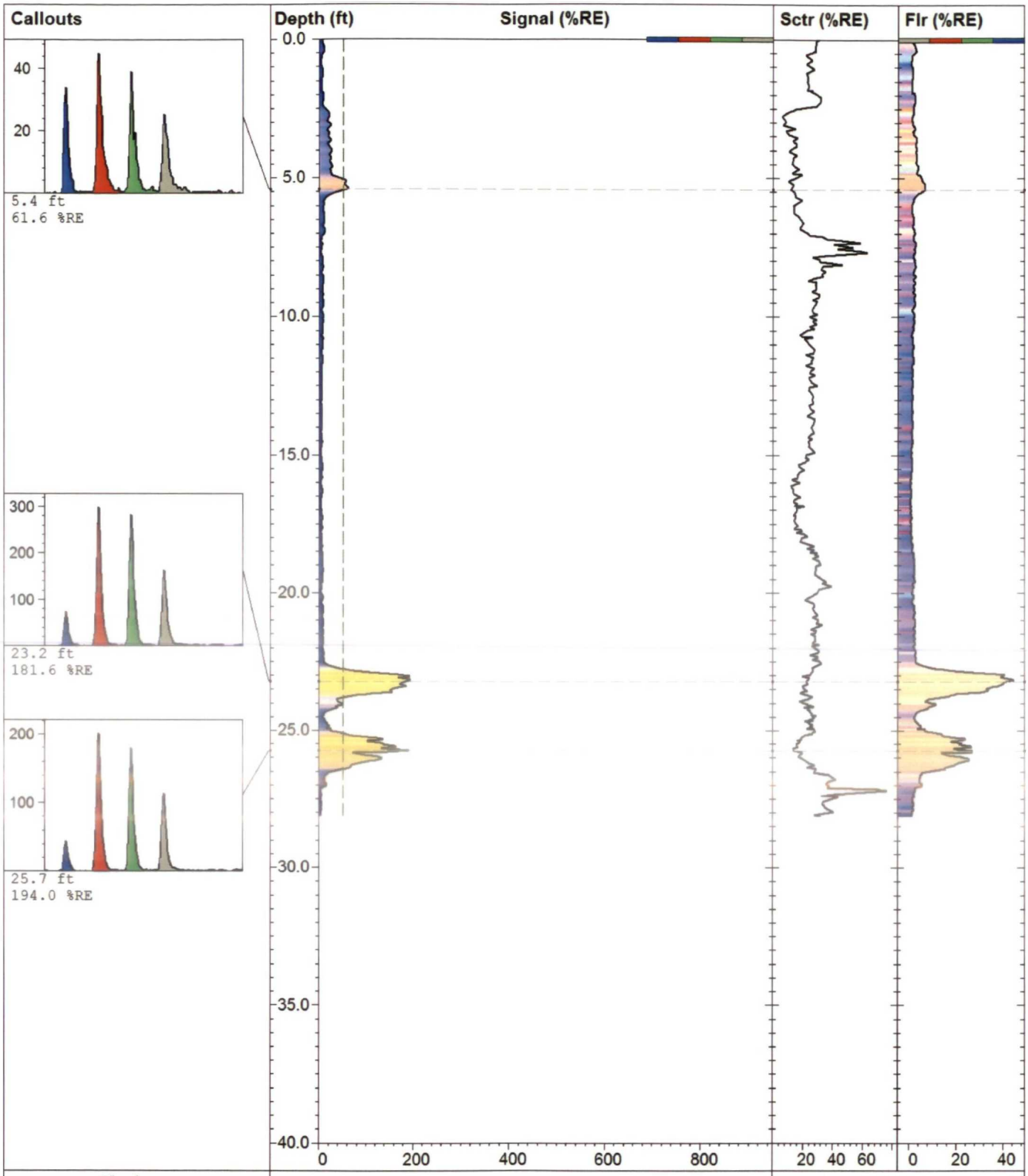

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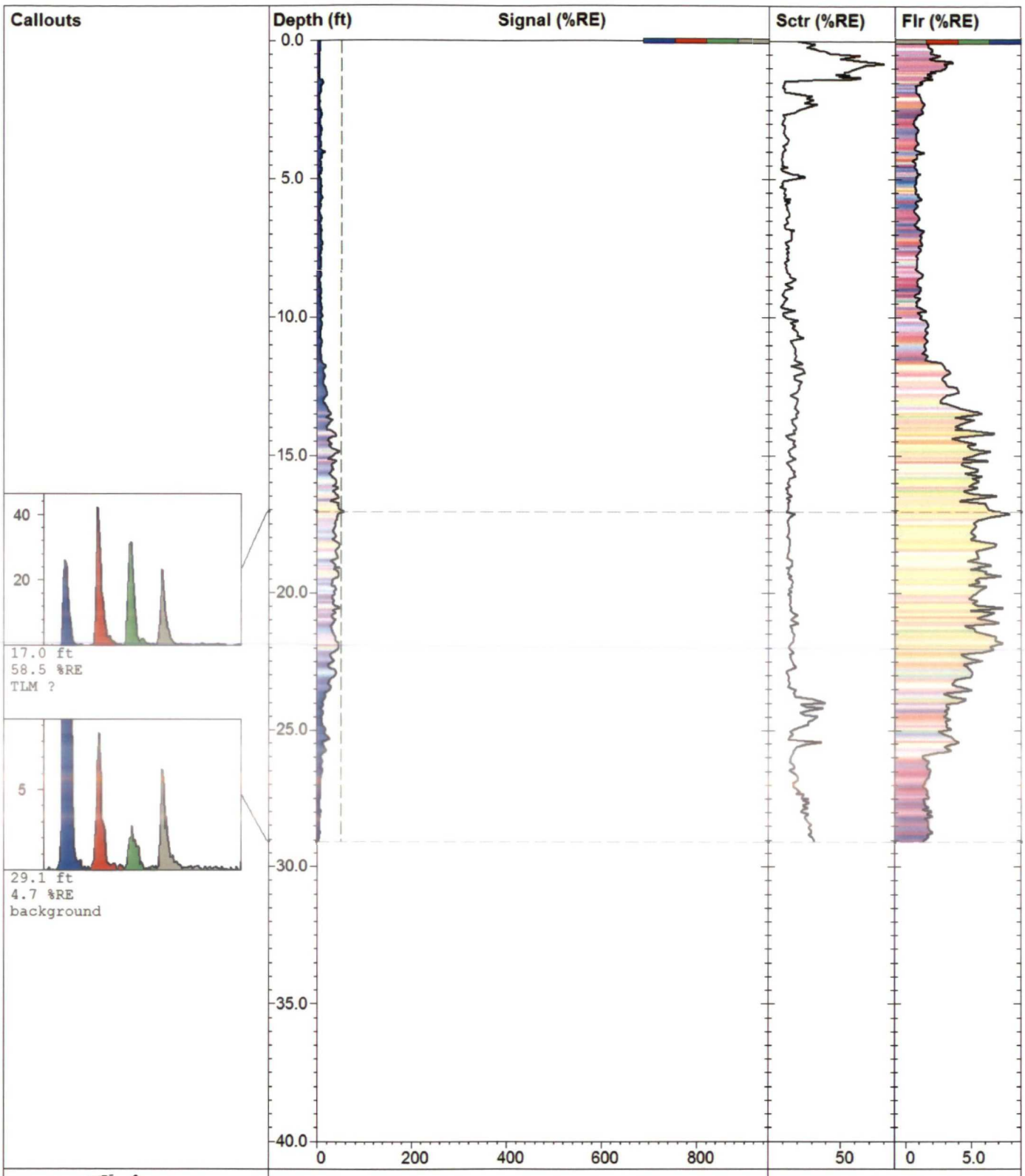
TL12_05_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.286277 N / NAD83**	*Final depth:* **28.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.455715 W**	*Max signal:* **198.9 % @ 23.03 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 12:43:27 PM**



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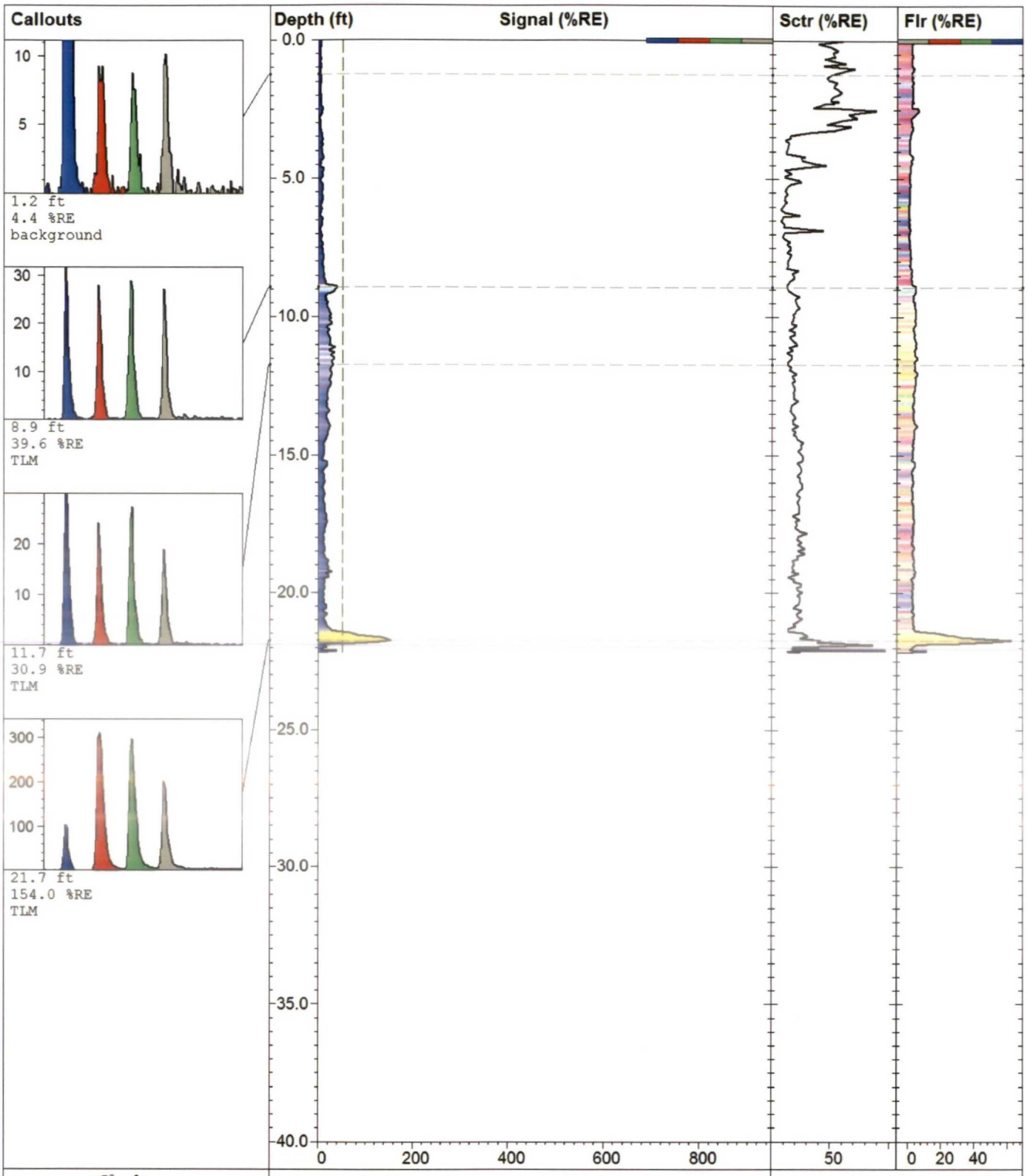
TL12_5_11_25

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.342921 N / NAD83**	*Final depth:* **29.07 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.555900 W**	*Max signal:* **58.5 % @ 17.04 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 3:33:46 PM**



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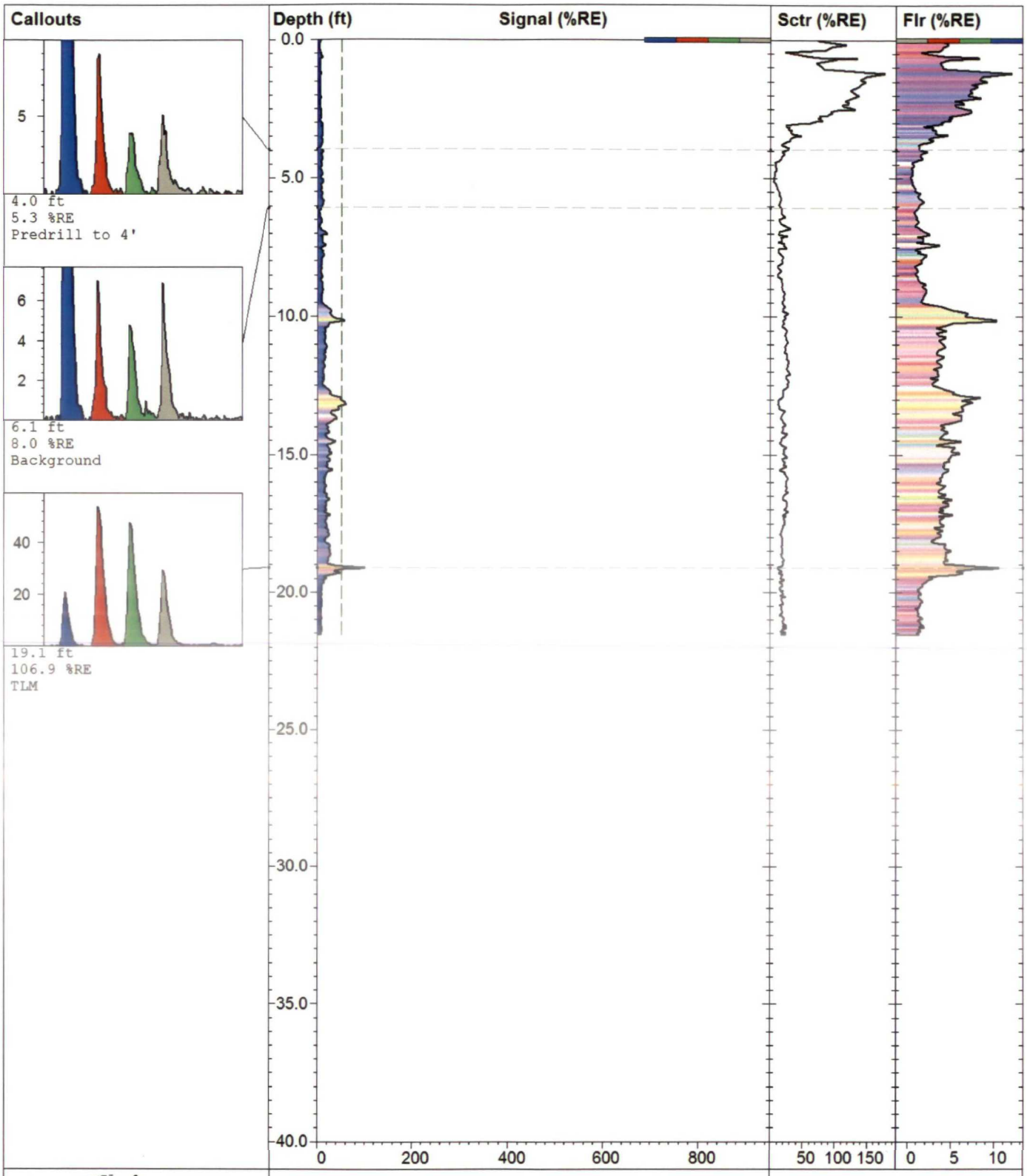
TL12_5_11_75		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.348017 N / NAD83**	*Final depth:* **22.21 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.562559 W**	*Max signal:* **154.0 % @ 21.74 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 4:04:08 PM**



TL12_5_12_25		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.351371 N / NAD83**	*Final depth:* **21.57 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.575477 W**	*Max signal:* **106.9 % @ 19.10 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 9:16:42 AM**

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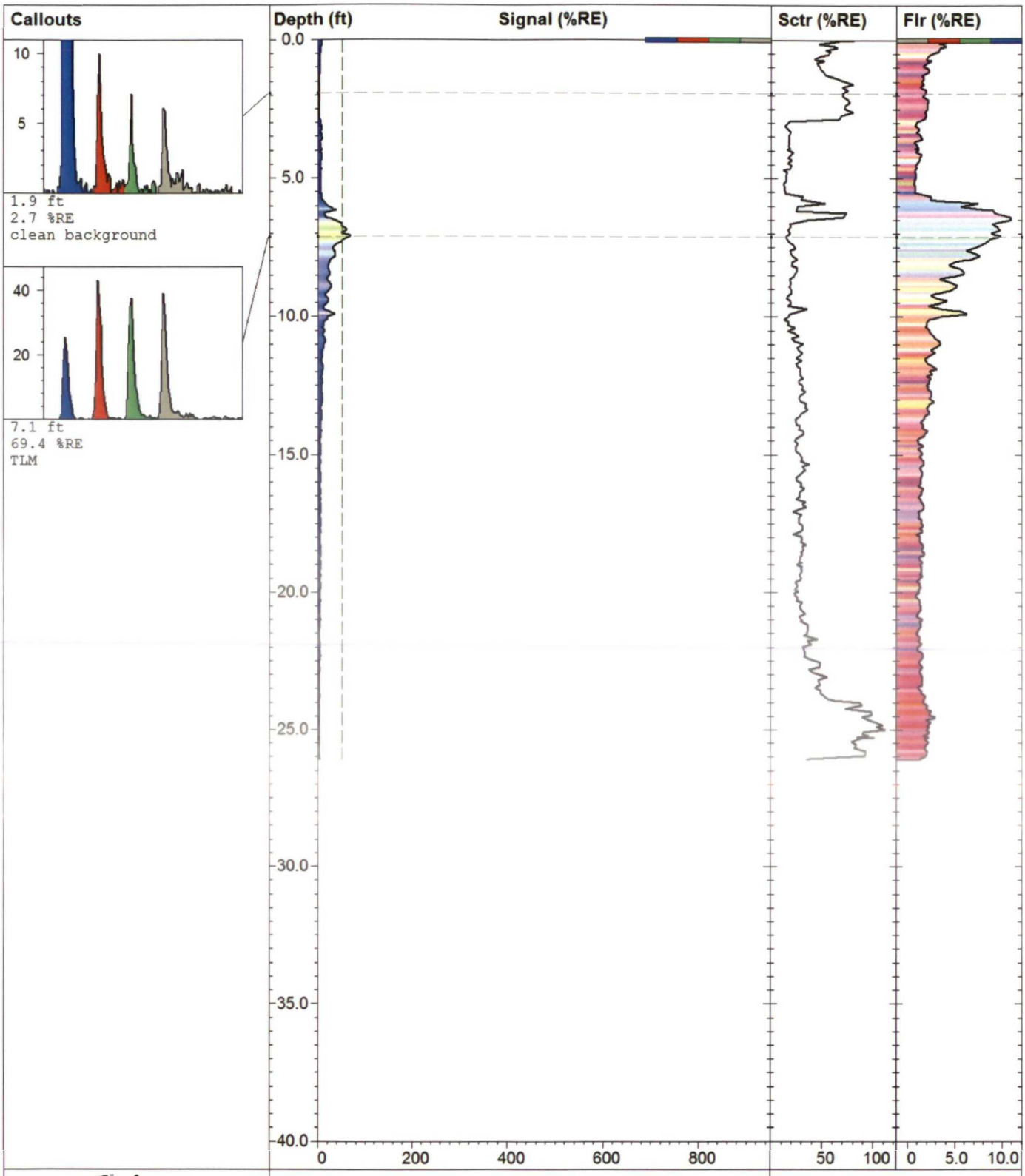

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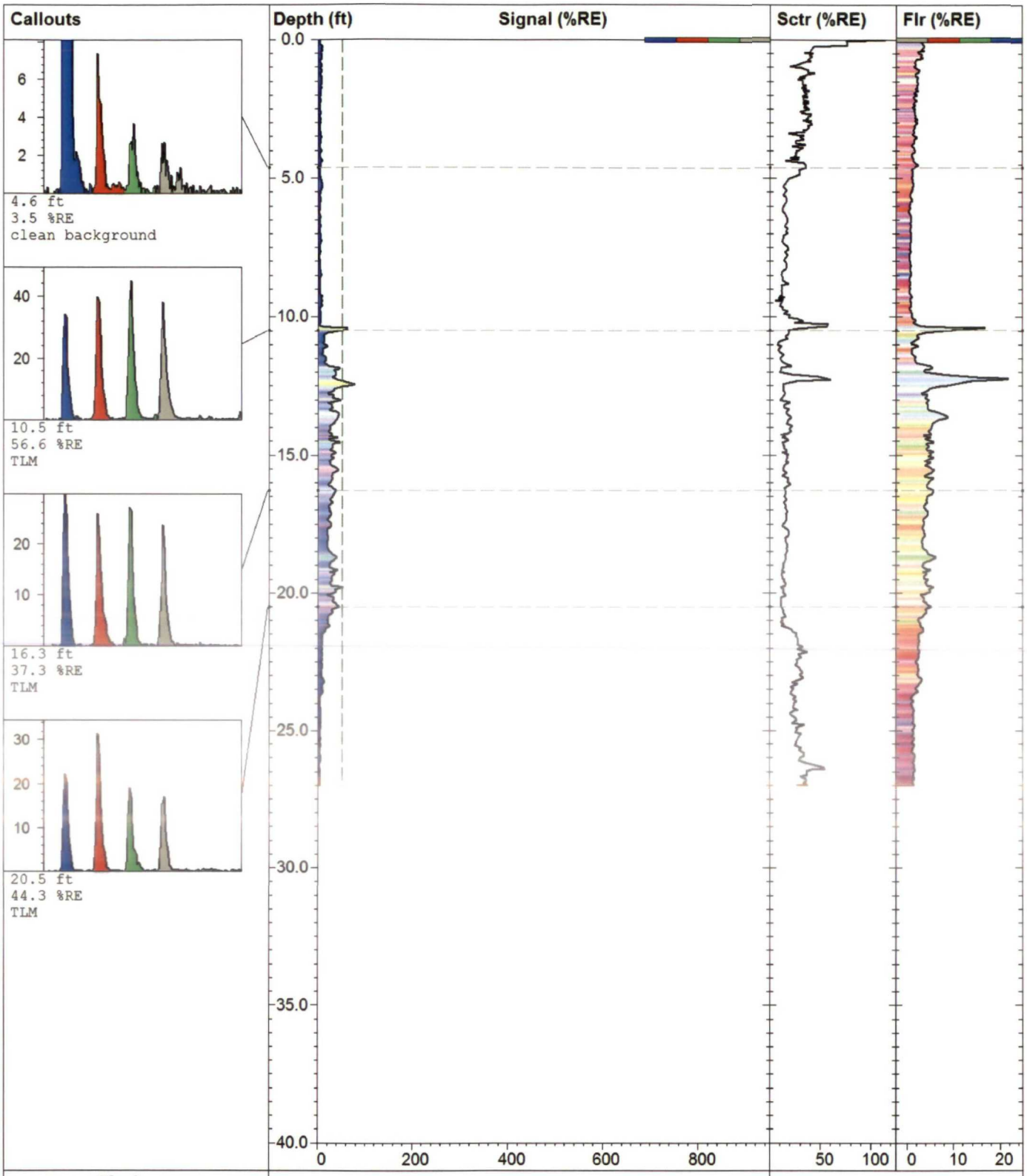
TL12_06_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.294670 N / NAD83**	*Final depth:* **26.13 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.474583 W**	*Max signal:* **69.4 % @ 7.10 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 1:46:34 PM**



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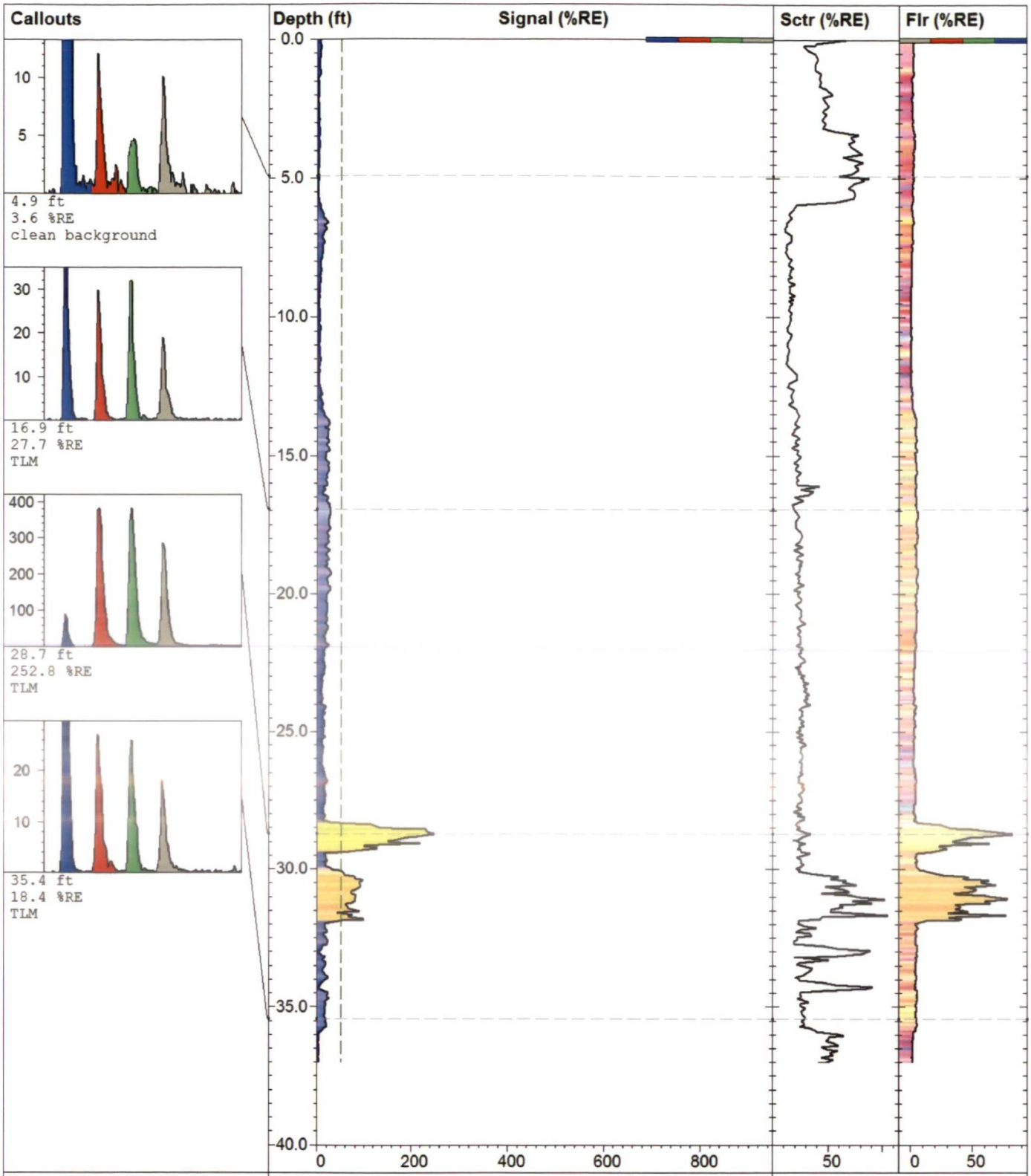
TL12_07_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.304319 N / NAD83**	*Final depth:* **27.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.492192 W**	*Max signal:* **79.4 % @ 12.43 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 1:16:16 PM**



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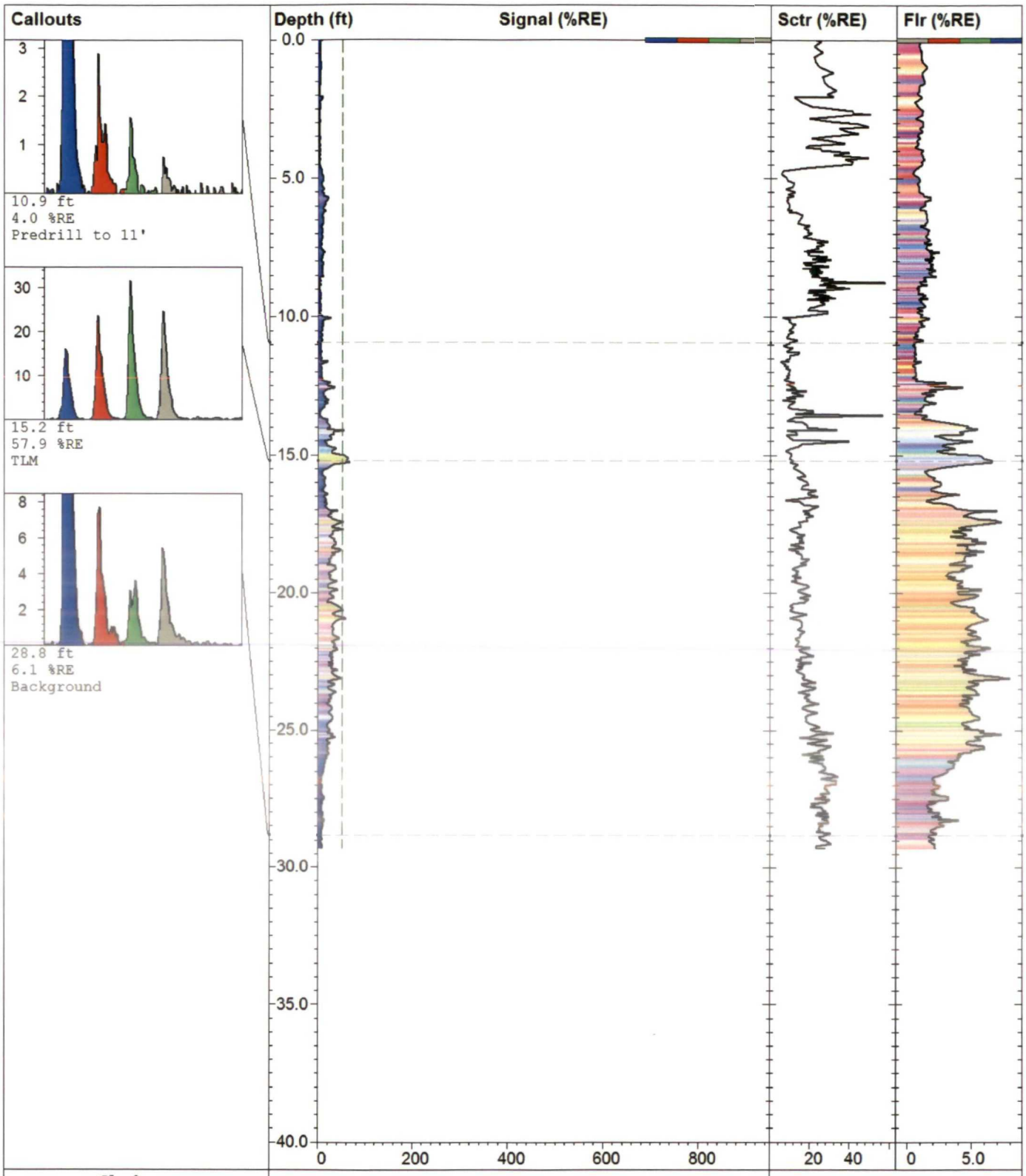
TL12_08_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.310233 N / NAD83**	*Final depth:* **37.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.514061 W**	*Max signal:* **252.8 % @ 28.72 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 2:24:37 PM**



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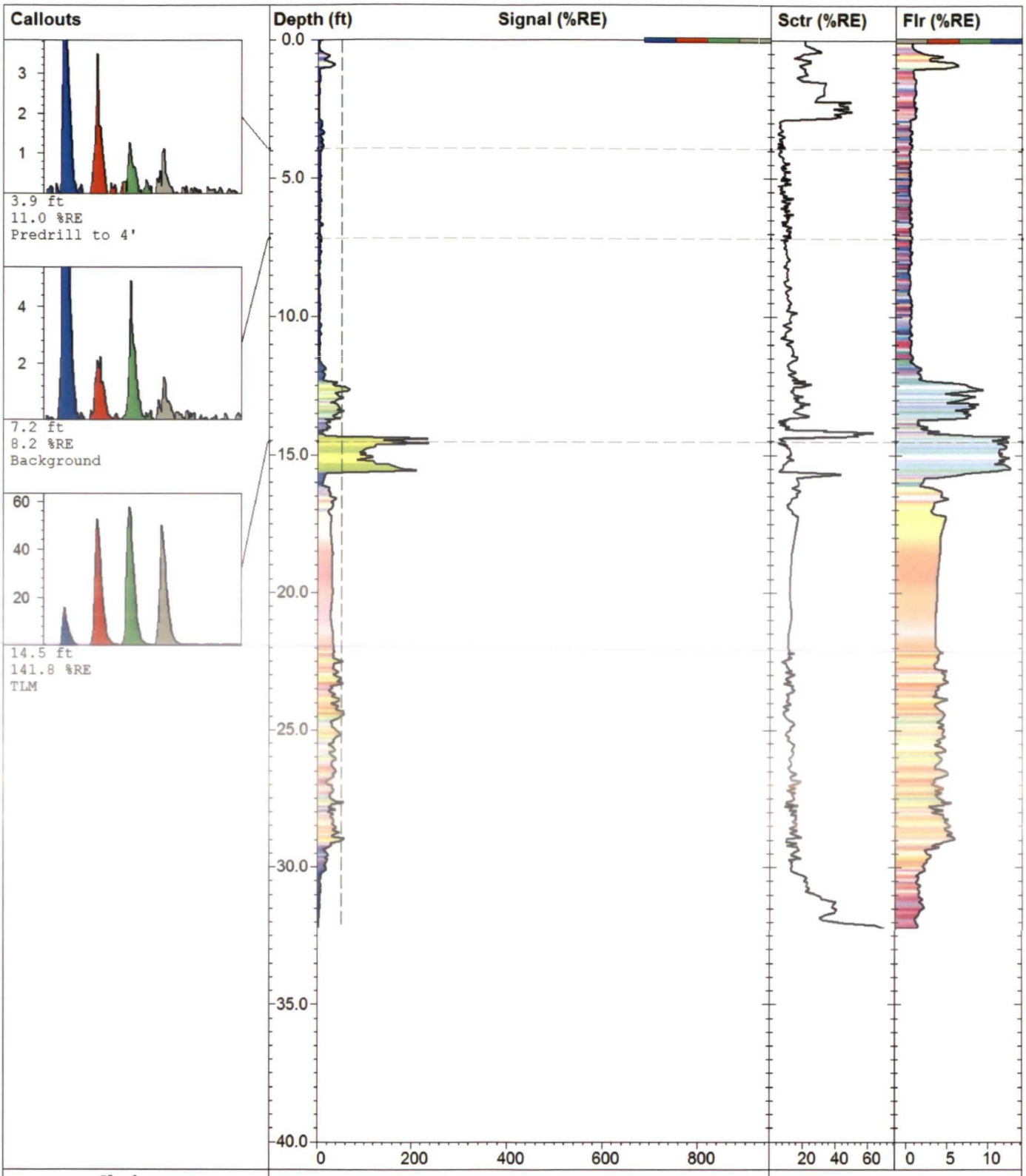
TL12_09		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.319040 N / NAD83**	*Final depth:* **29.32 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.519718 W**	*Max signal:* **66.8 % @ 15.27 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 11:24:55 AM**



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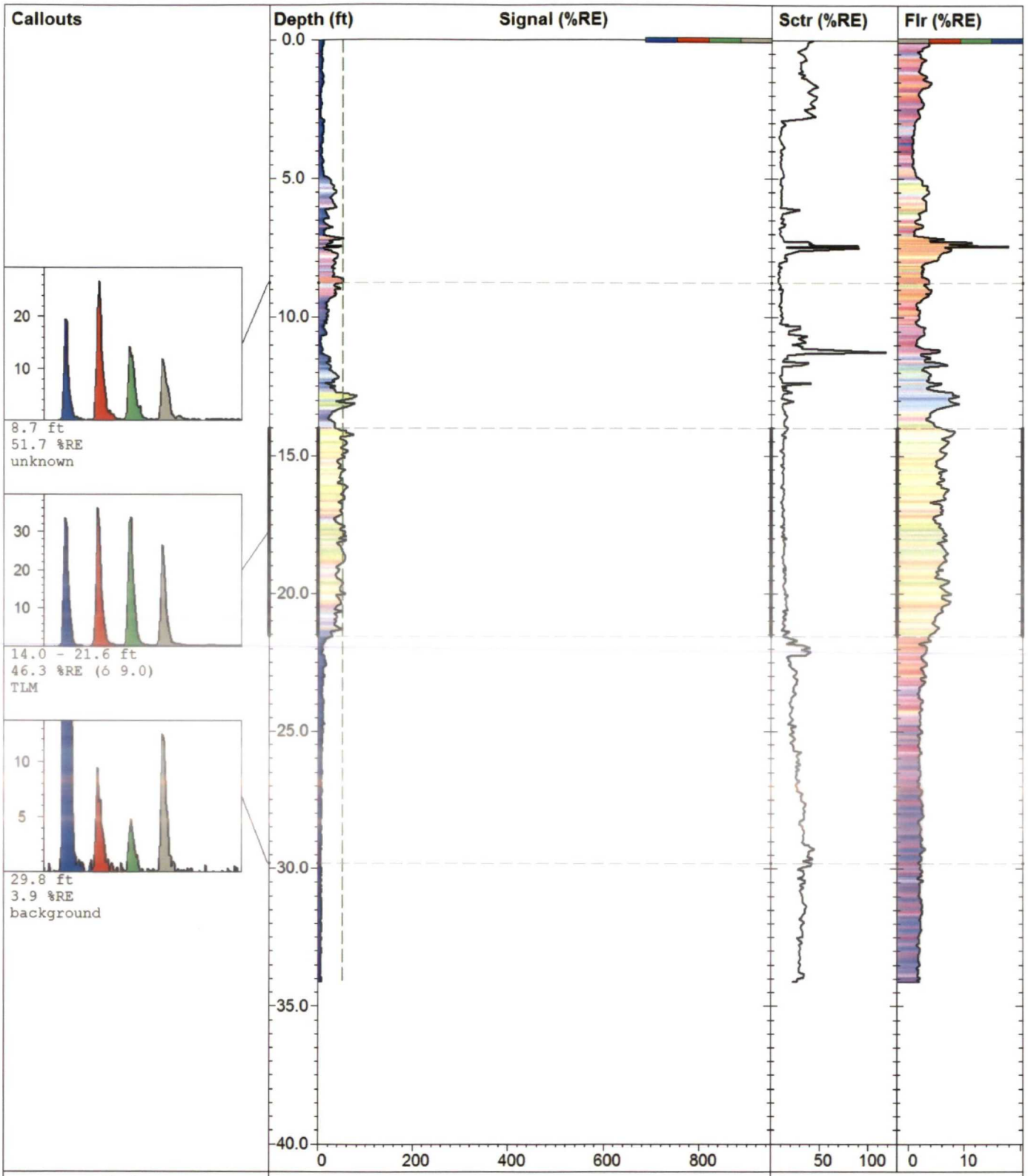
TL12_10_75

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.327527 N / NAD83**	*Final depth:* **32.22 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.554442 W**	*Max signal:* **248.7 % @ 14.41 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 9:49:10 AM**



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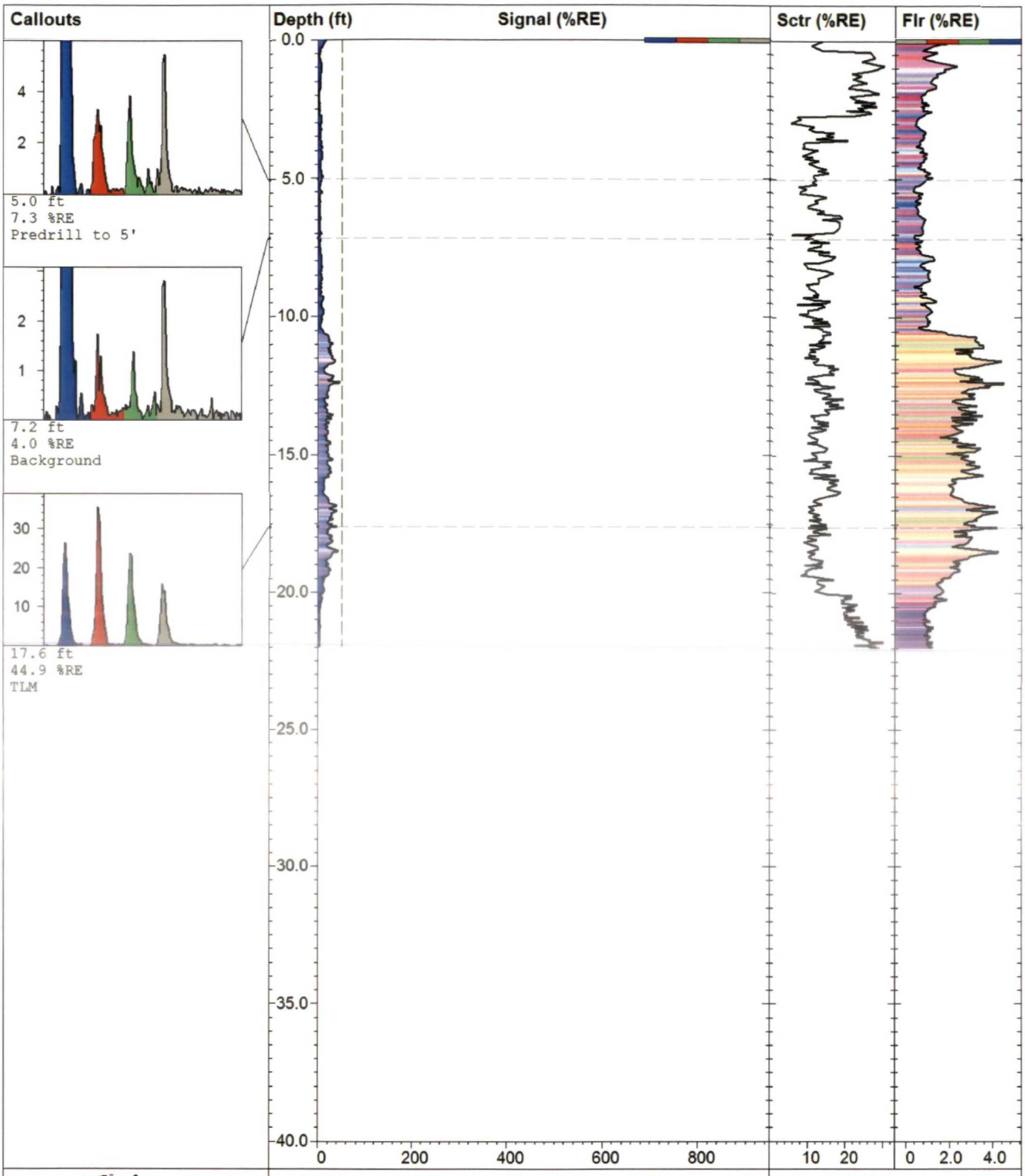
TL12_11_25		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.335625 N / NAD83**	*Final depth:* **34.13 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.560006 W**	*Max signal:* **81.2 % @ 12.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 4:26:07 PM**



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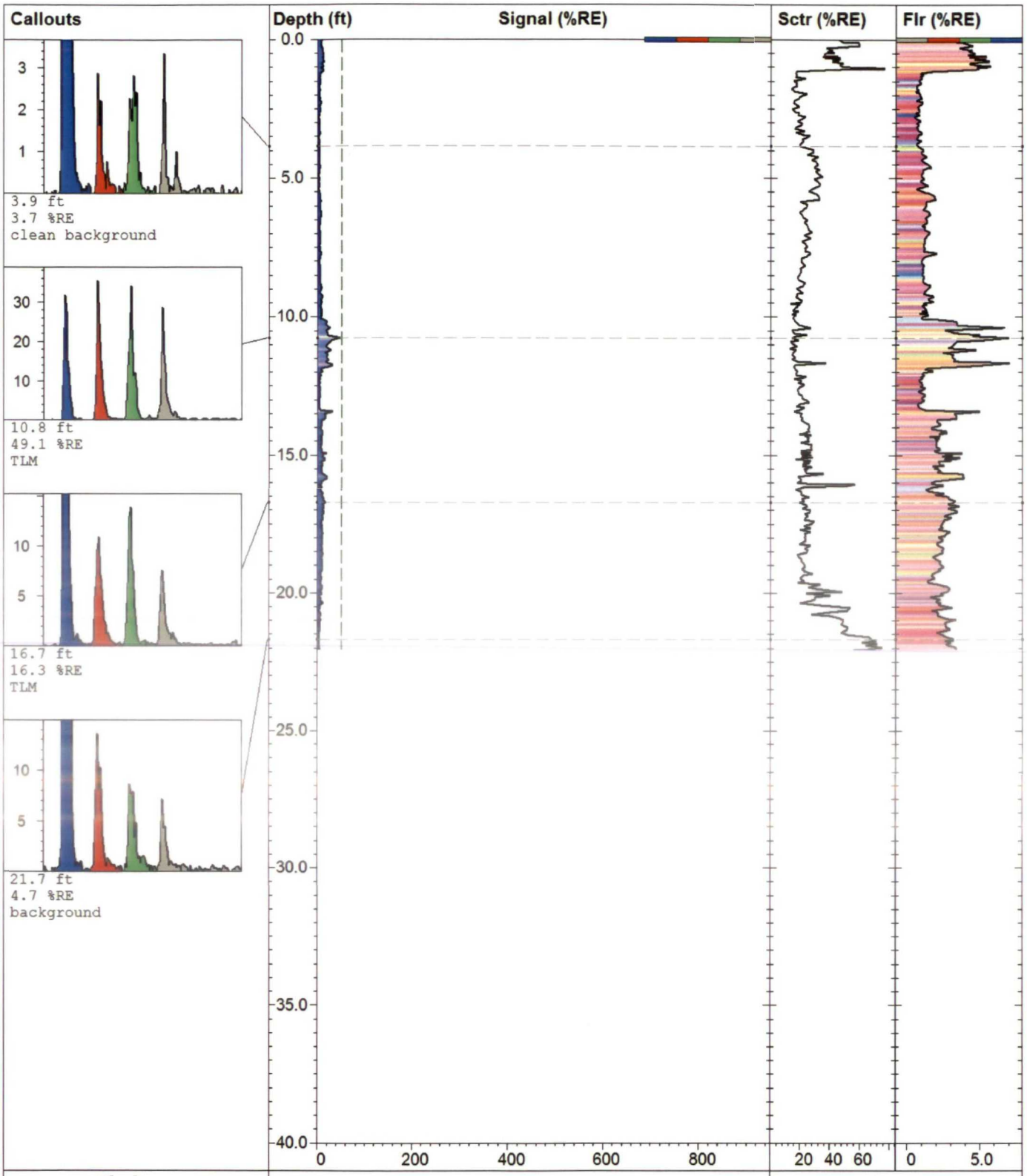
TL12_11_75

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **22.02 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **50.7 % @ 12.39 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 8:44:32 AM**



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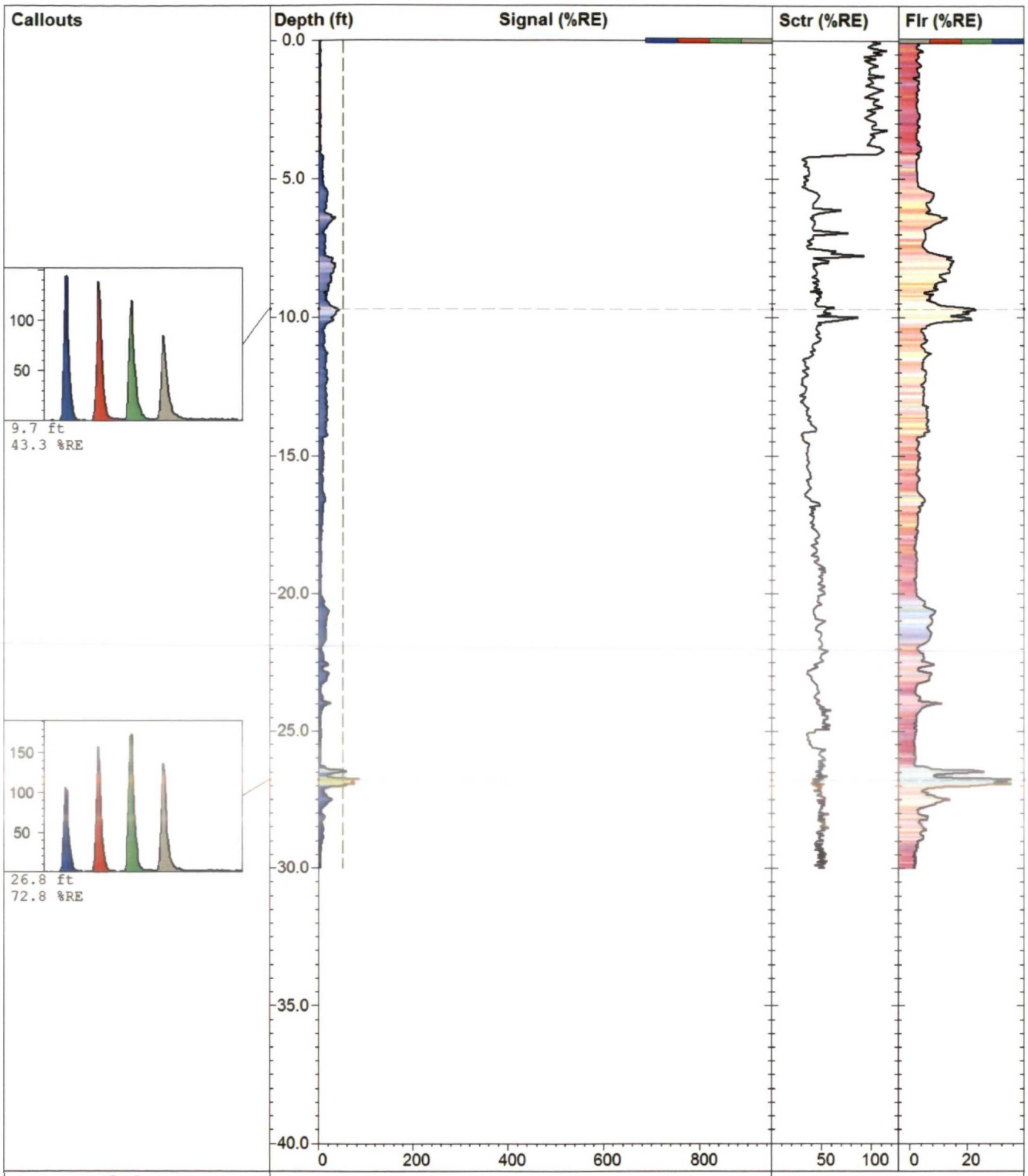
TL13_02

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.271364 N / NAD83**	*Final depth:* **22.07 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.381075 W**	*Max signal:* **49.1 % @ 10.76 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 3:38:19 PM**



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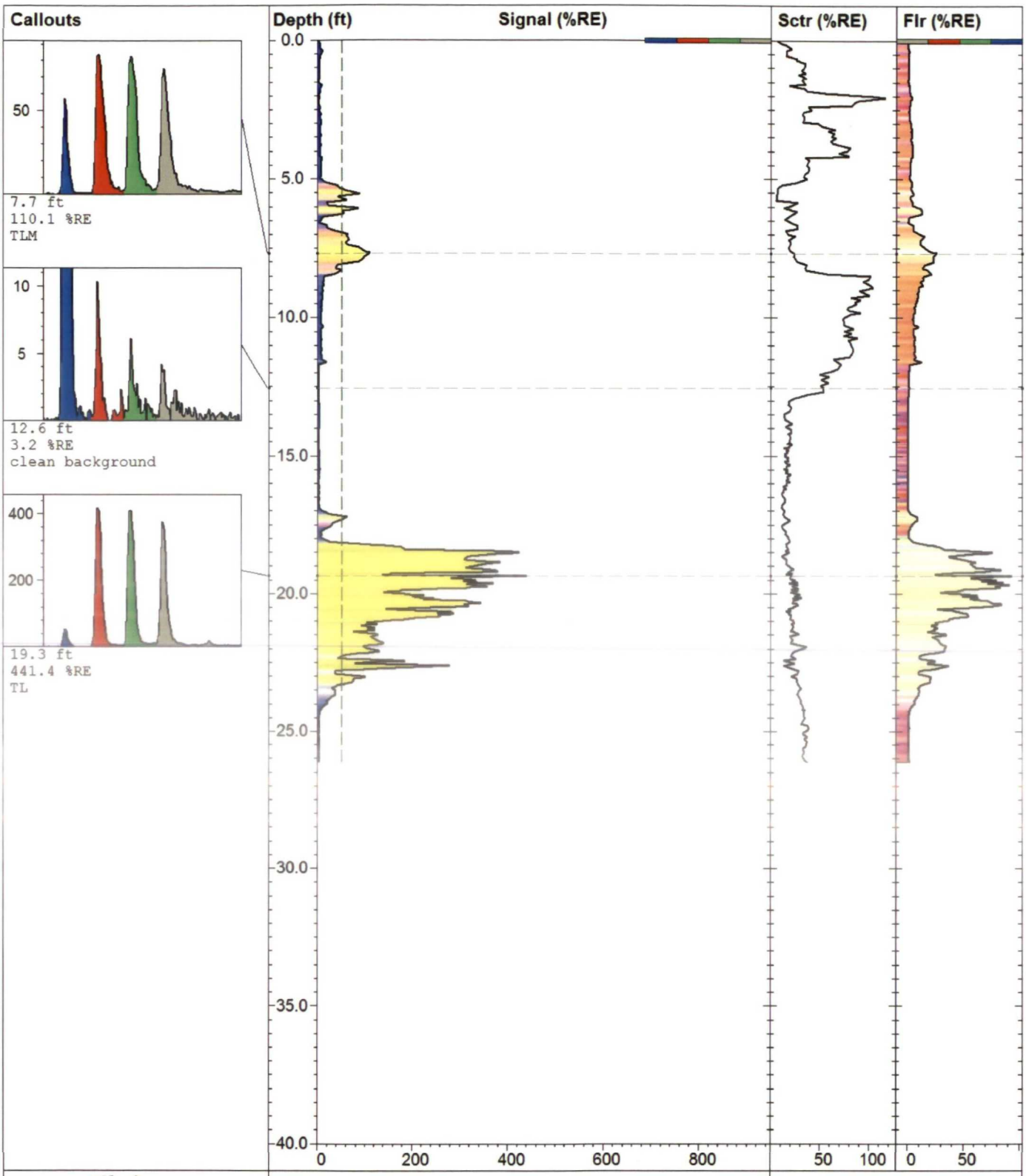
TL13_03

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **30.02 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **88.8 % @ 26.77 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 4:17:49 PM**



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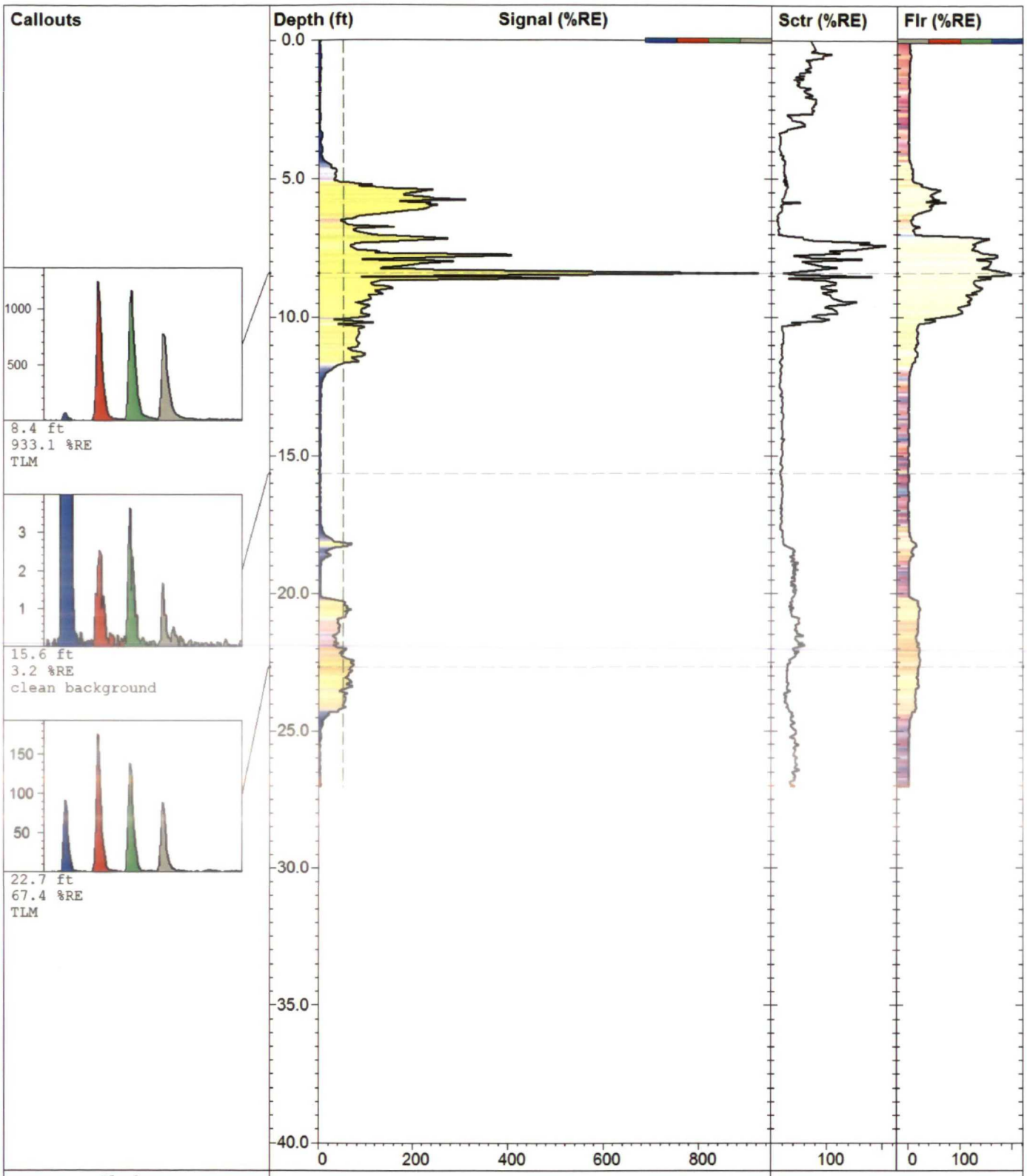
TL13_04

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **26.15 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **441.4 % @ 19.35 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 8:32:47 AM**



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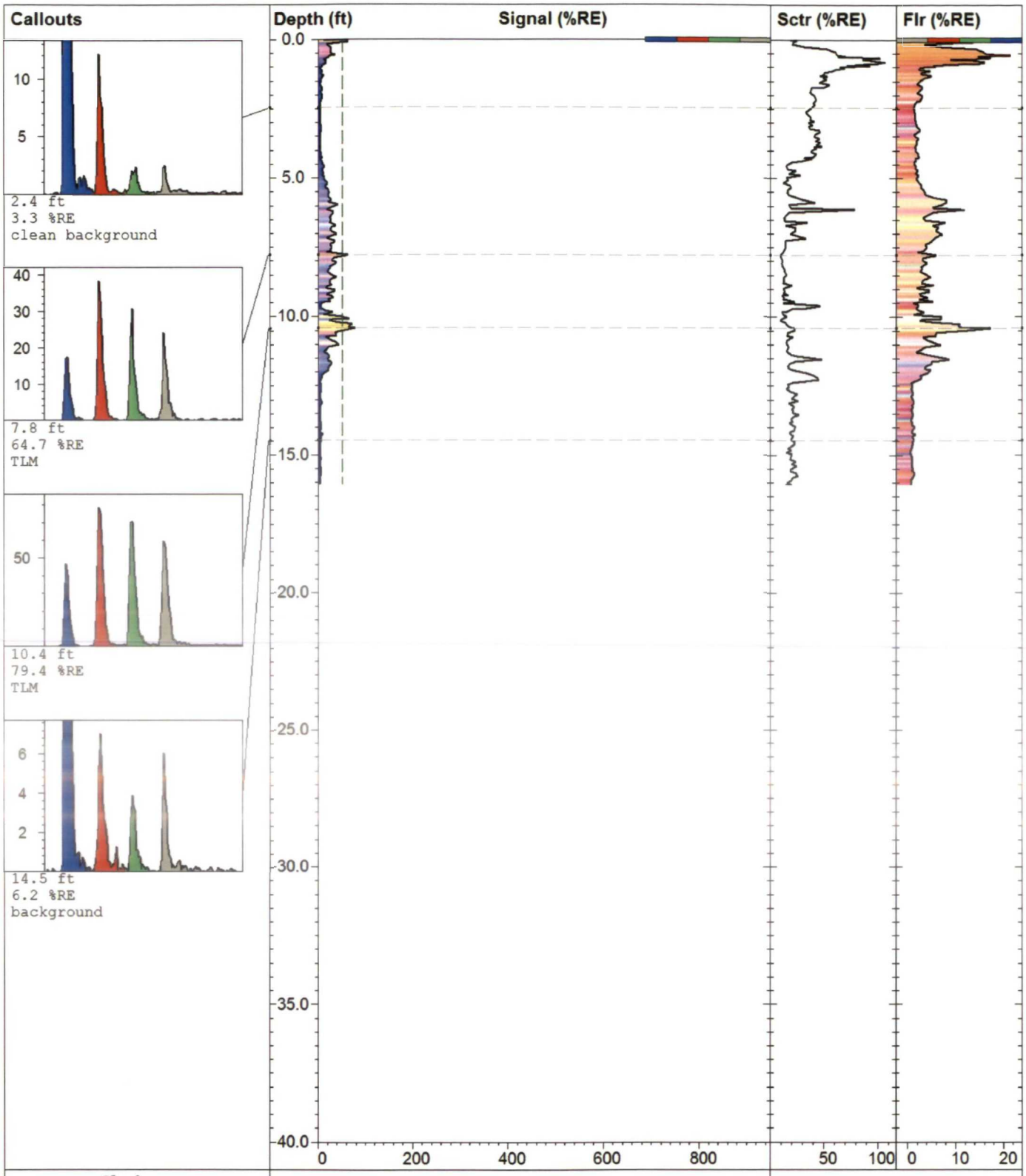
TL13_05		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **27.06 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **933.1 % @ 8.40 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 9:30:47 AM**



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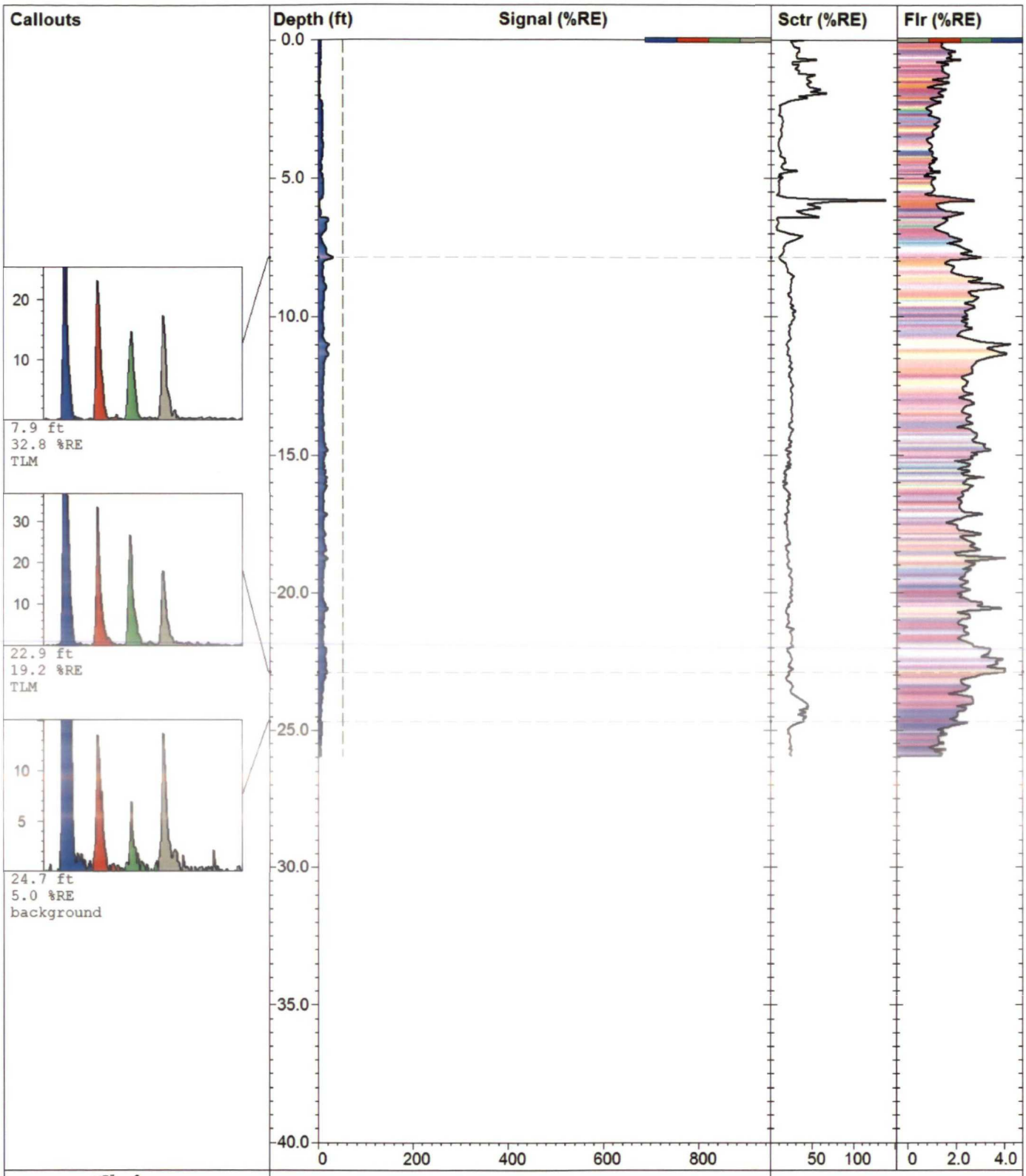
TL13_5_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.267717 N / NAD83**	*Final depth:* **16.08 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.357627 W**	*Max signal:* **79.4 % @ 10.41 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 3:16:36 PM**



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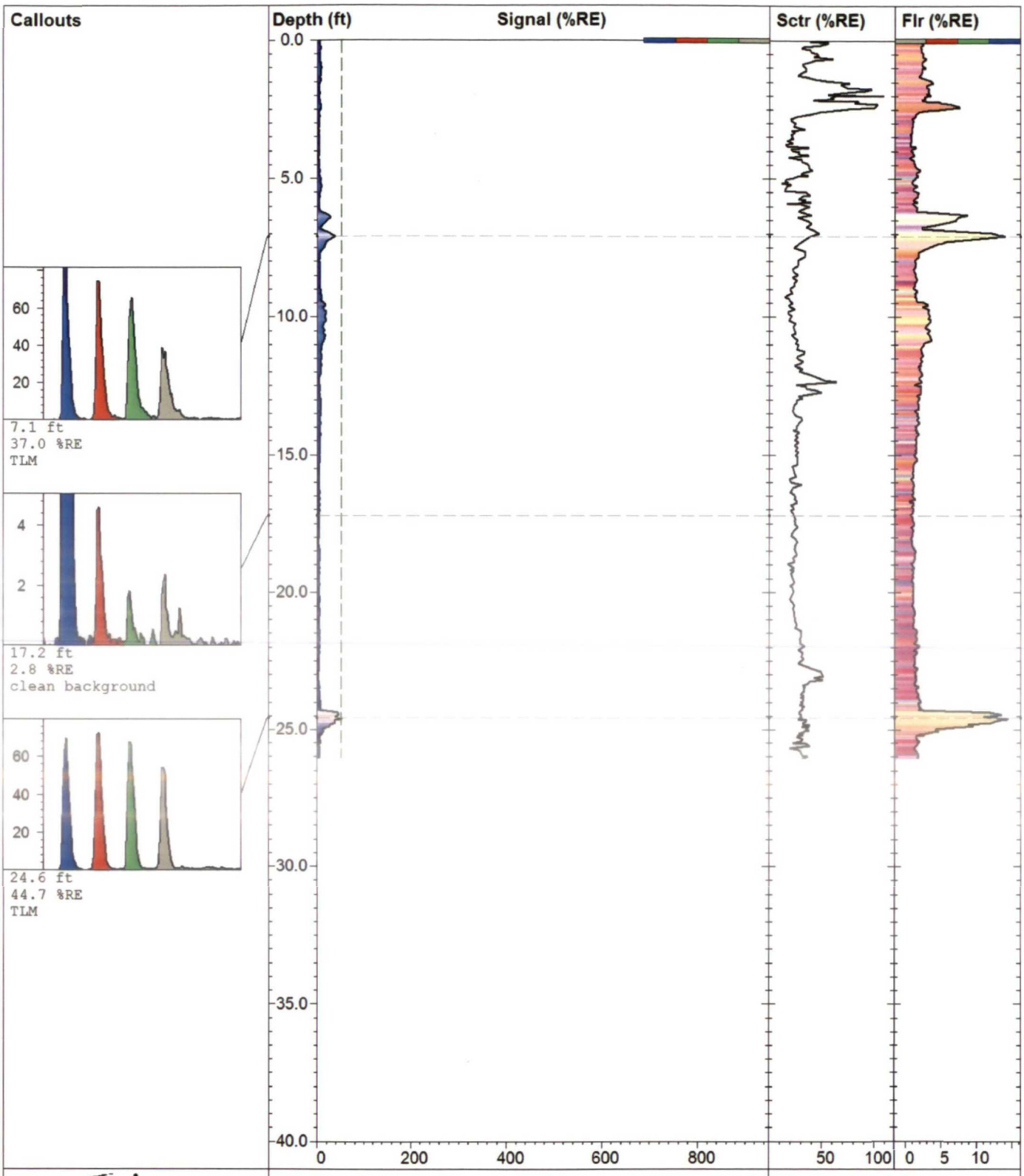
TL13_5_11_25

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **25.99 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **32.8 % @ 7.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 2:18:24 PM**



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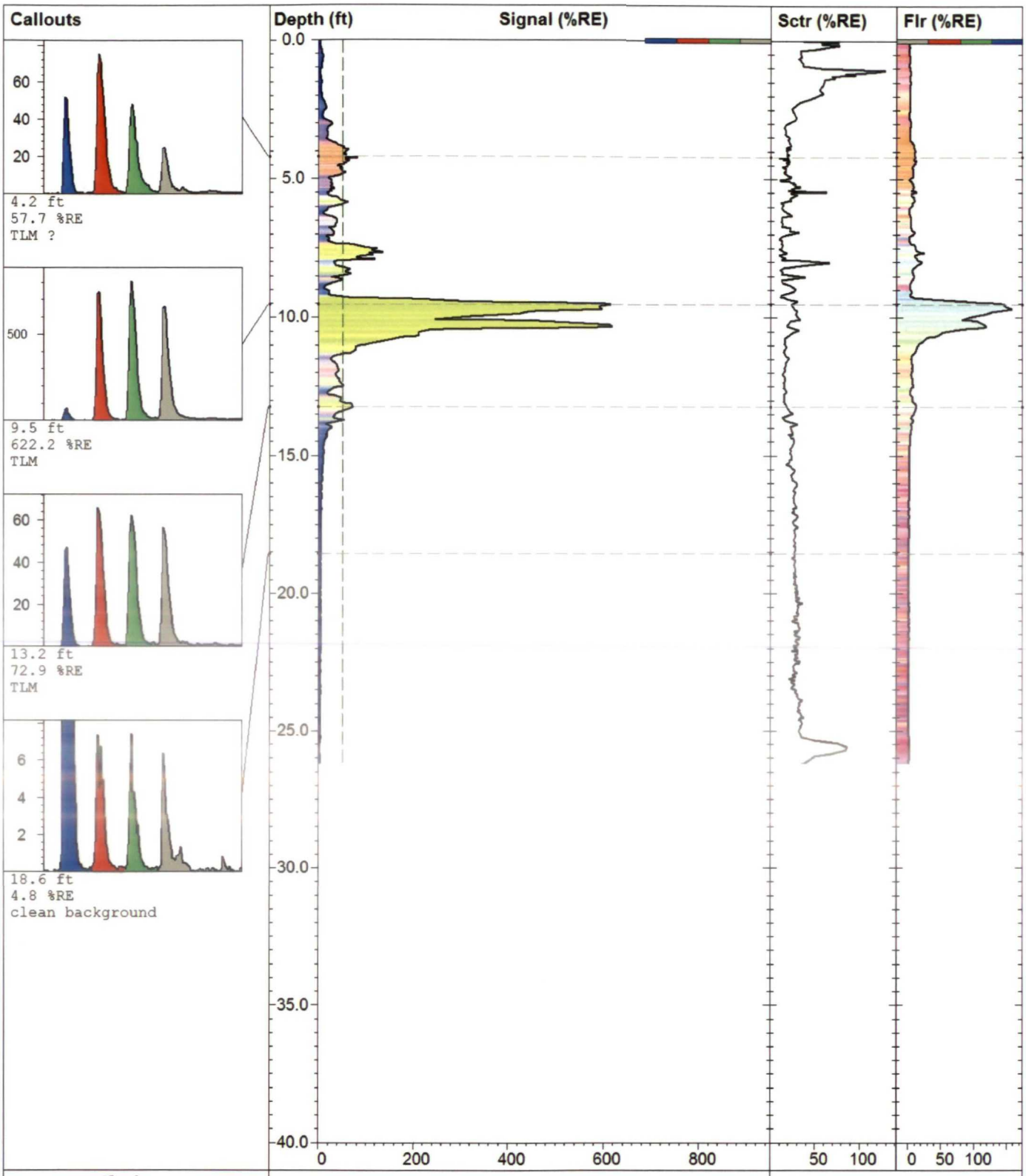
TL13_06

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **26.07 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **53.7 % @ 24.61 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 9:27:17 AM**



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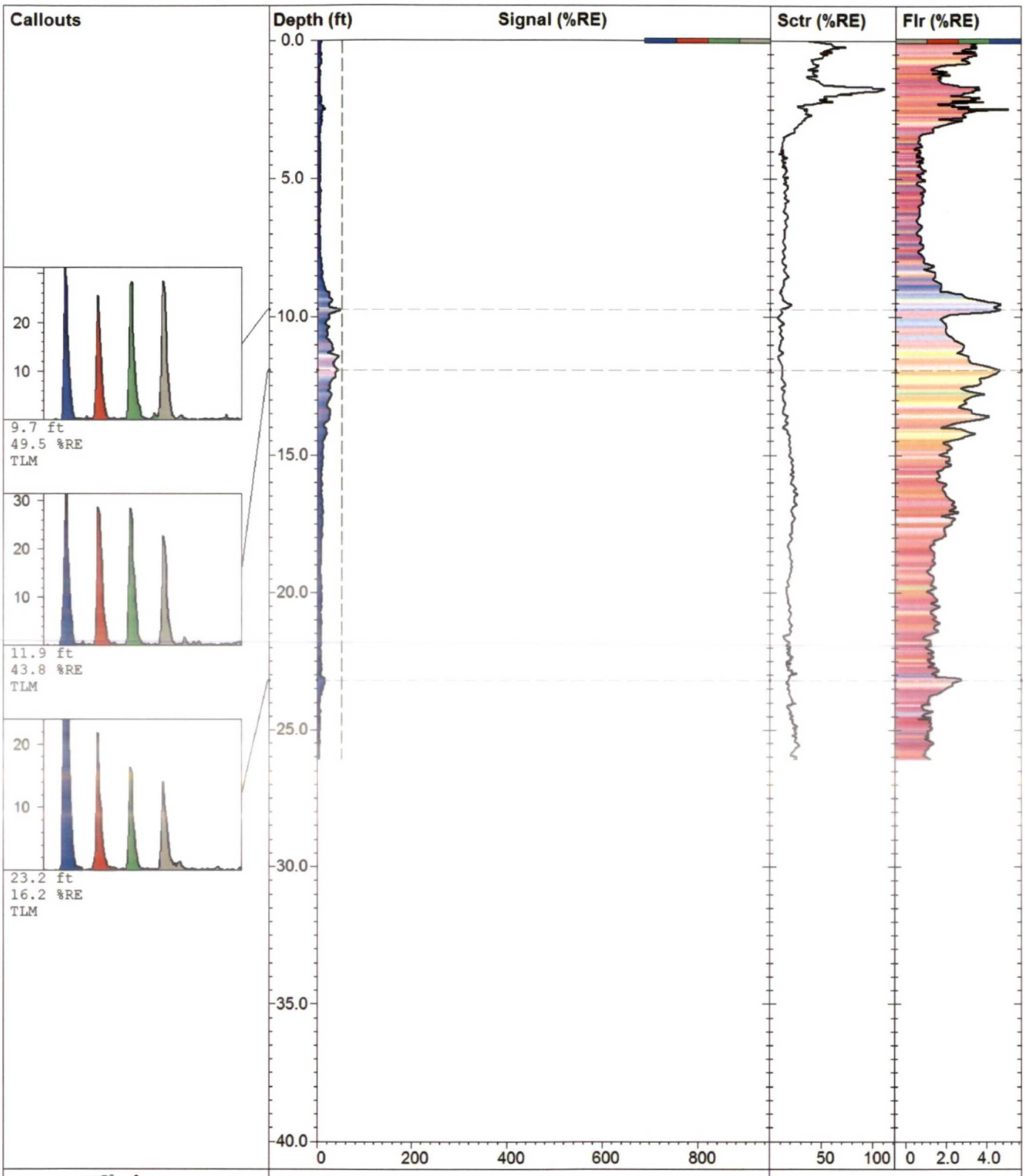
TL13_07

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **26.21 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **622.2 % @ 9.52 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 10:28:12 AM**



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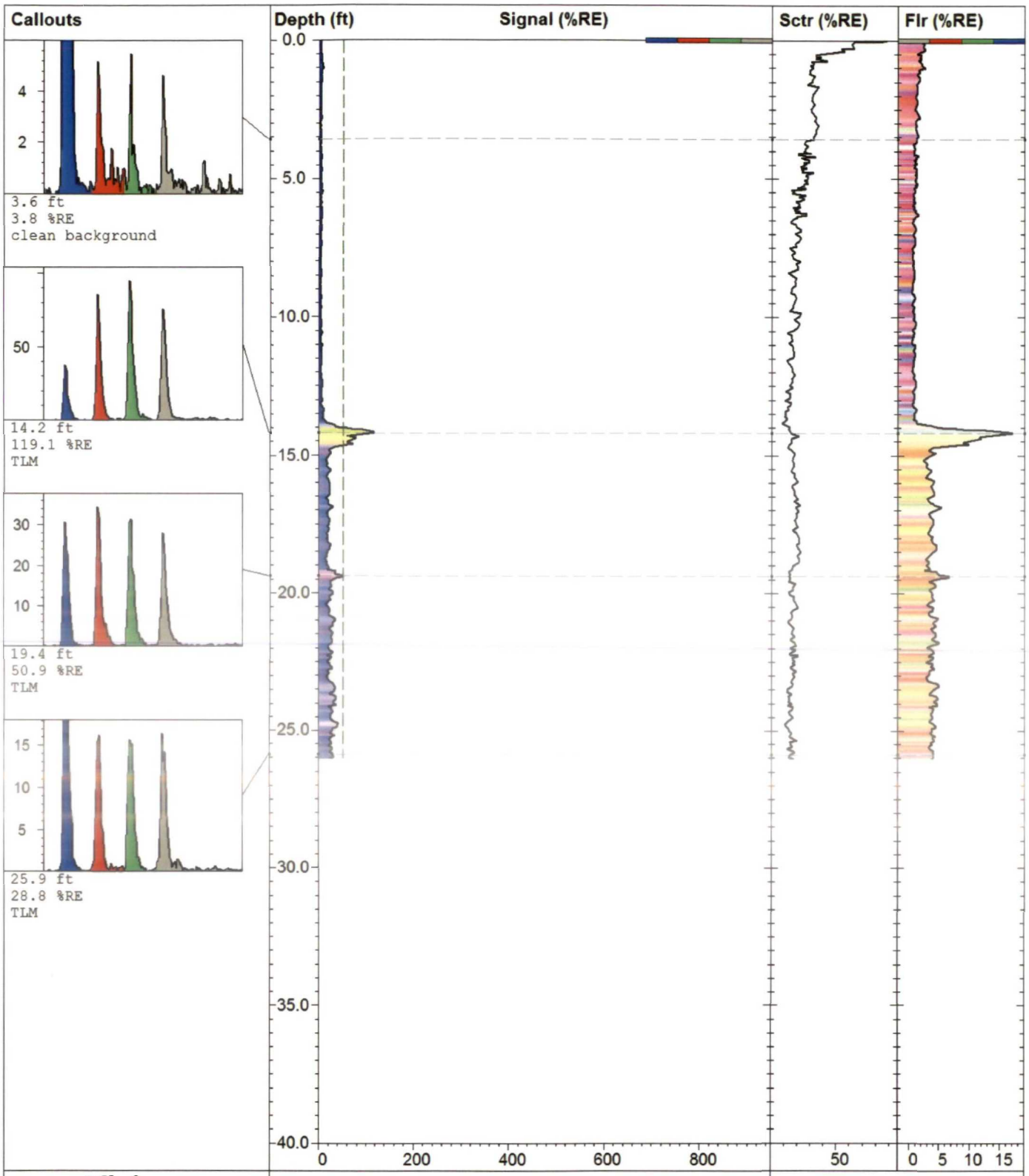
TL13_08

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **26.09 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **49.5 % @ 9.72 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 10:59:49 AM**



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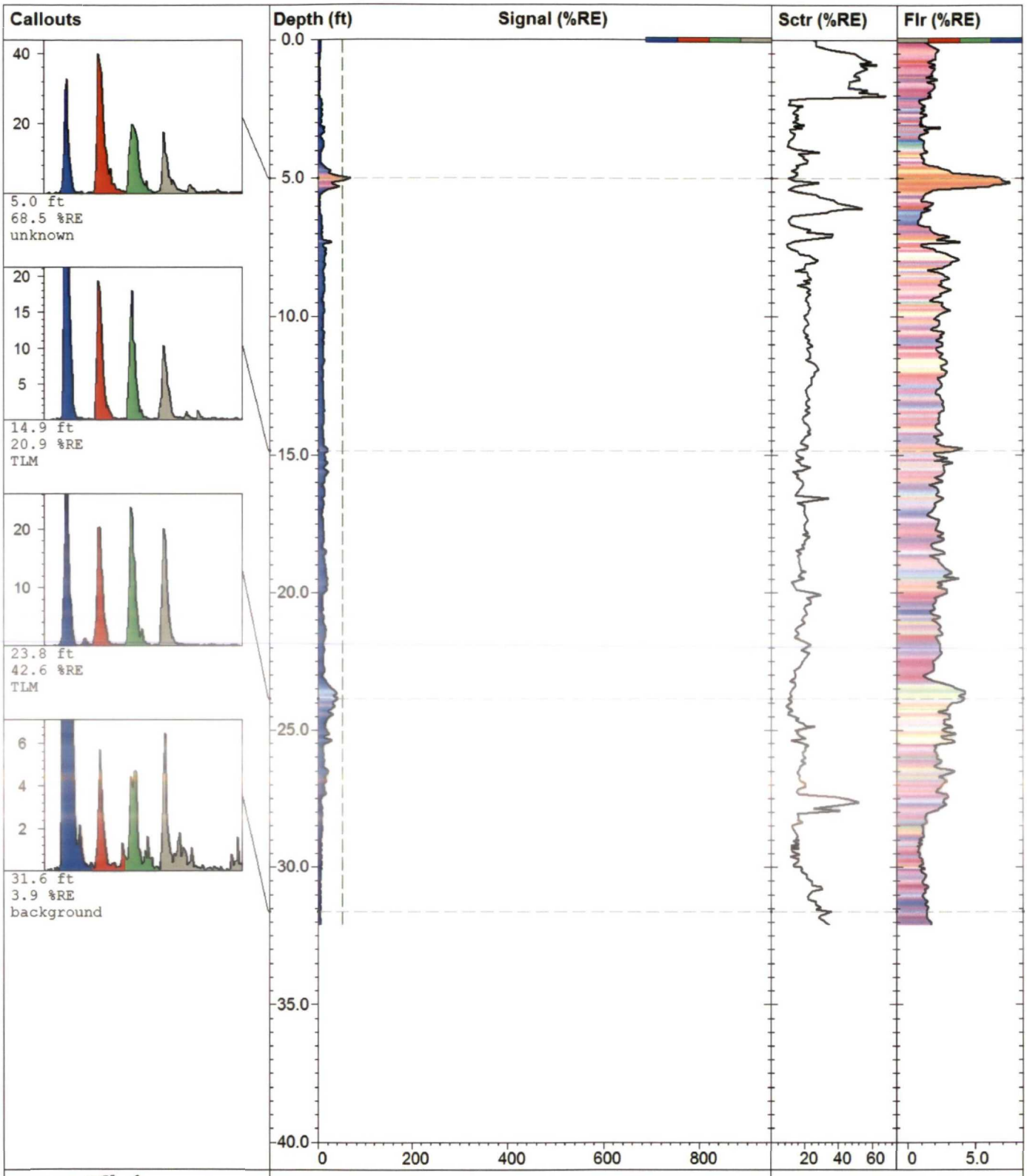
TL13_09

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.328893 N / NAD83**	*Final depth:* **26.06 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.509934 W**	*Max signal:* **119.1 % @ 14.18 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/30/2006 12:39:05 PM**



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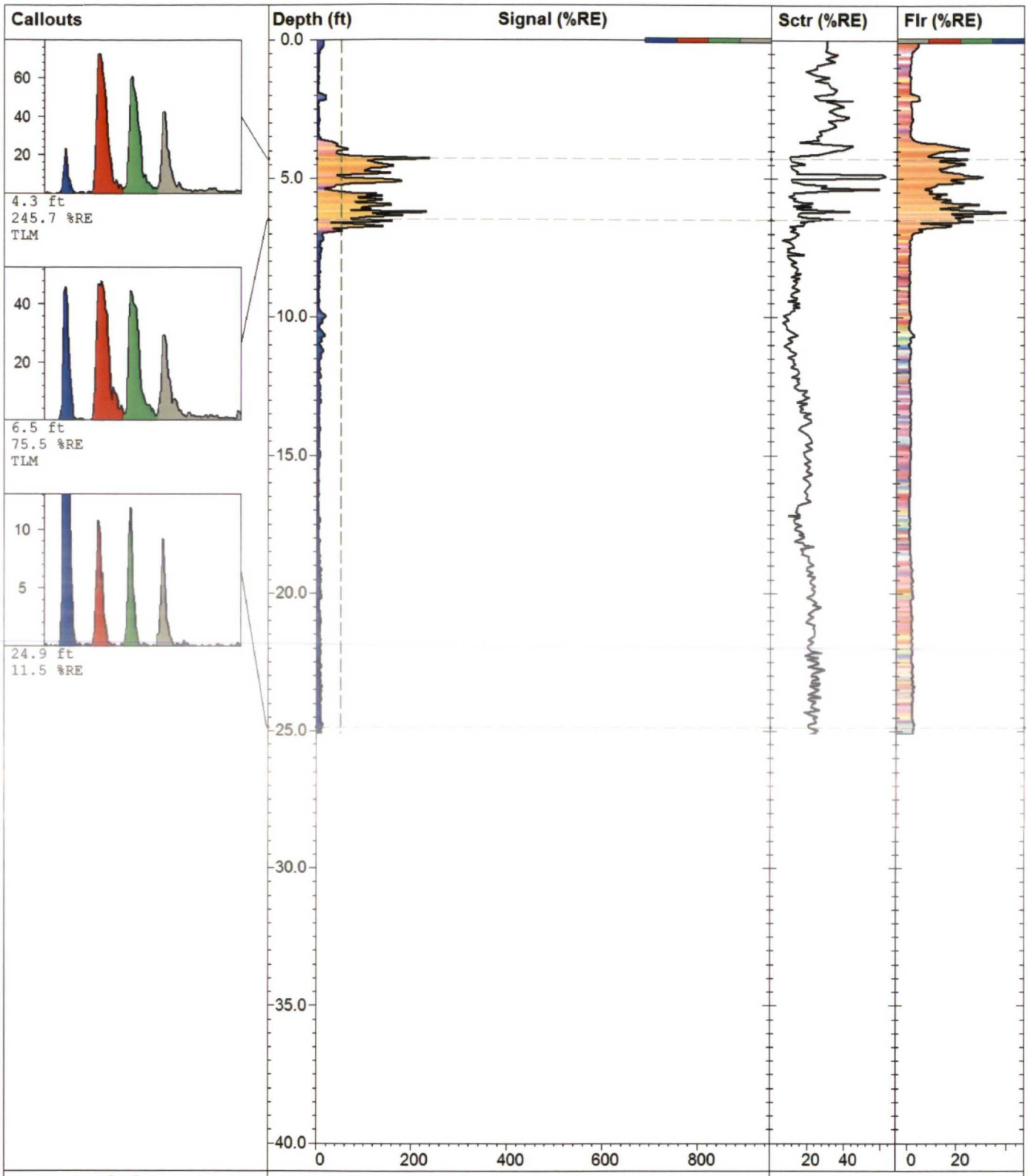
TL13_11_25

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.350022 N / NAD83**	*Final depth:* **32.11 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.550869 W**	*Max signal:* **68.5 % @ 5.01 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 3:07:41 PM**



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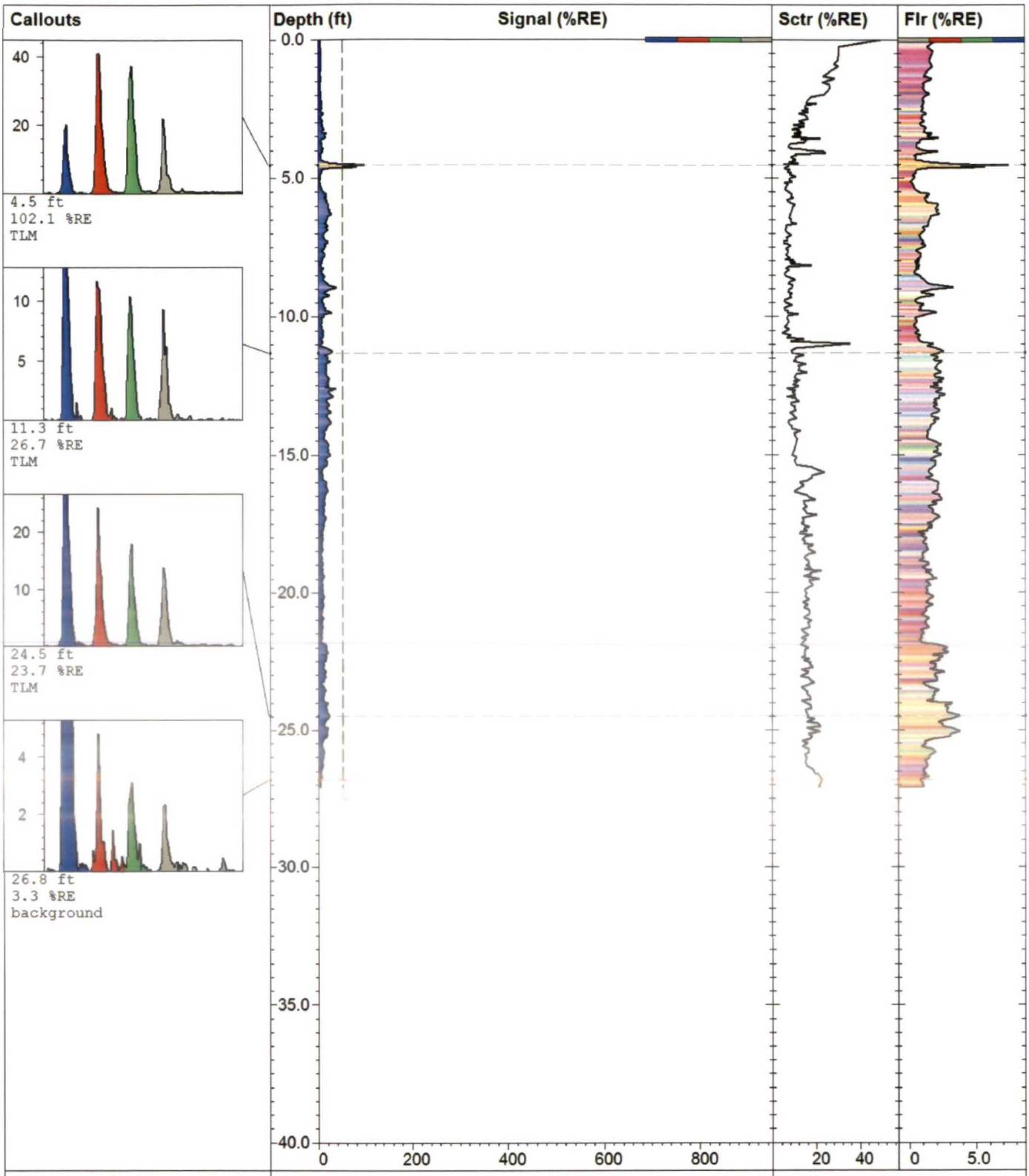
TL14_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **25.10 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **276.1 % @ 6.23 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 1:36:47 PM**



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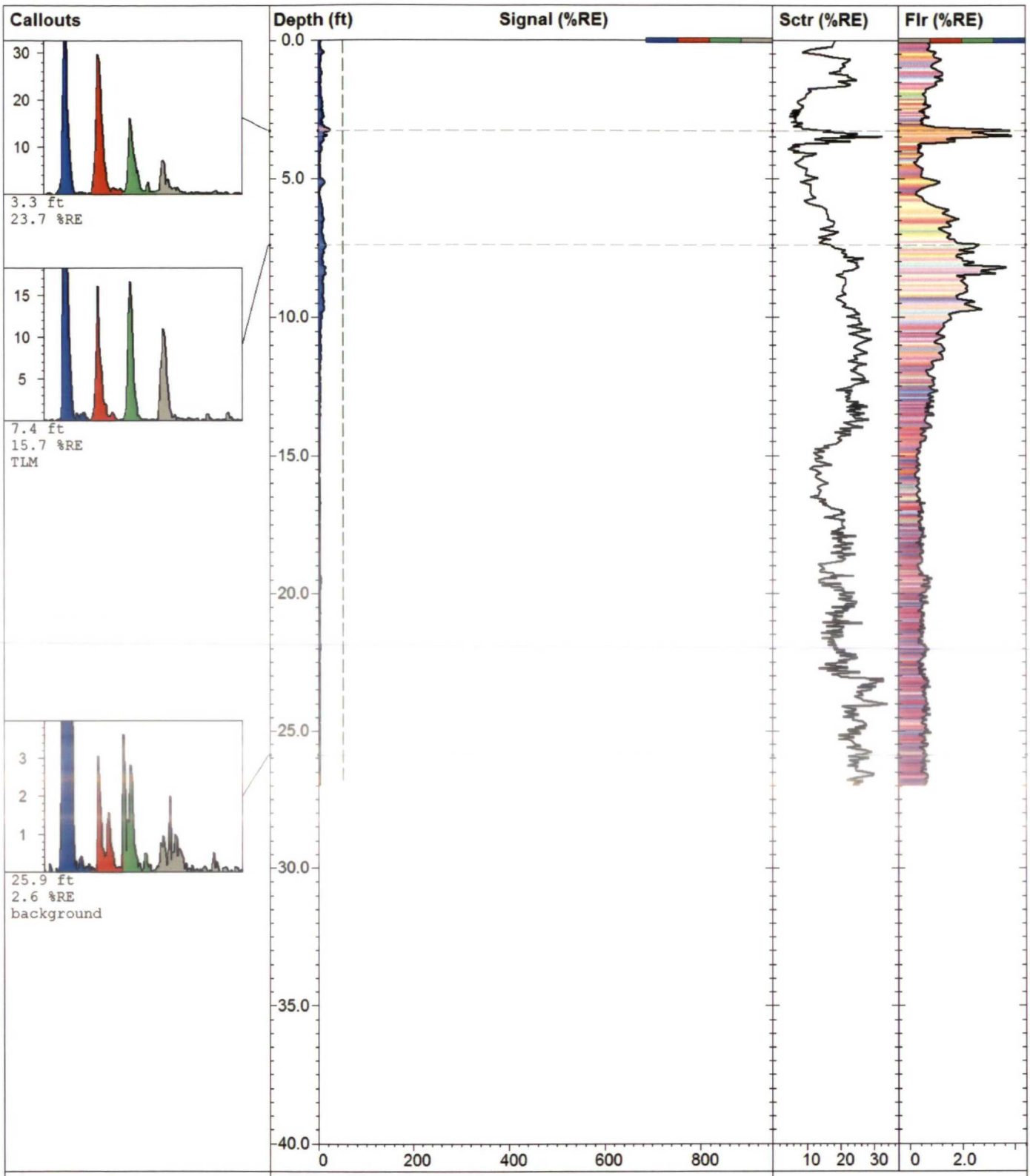
TL14_02

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.283909 N / NAD83**	*Final depth:* **27.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.367337 W**	*Max signal:* **102.1 % @ 4.53 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 11:27:02 AM**



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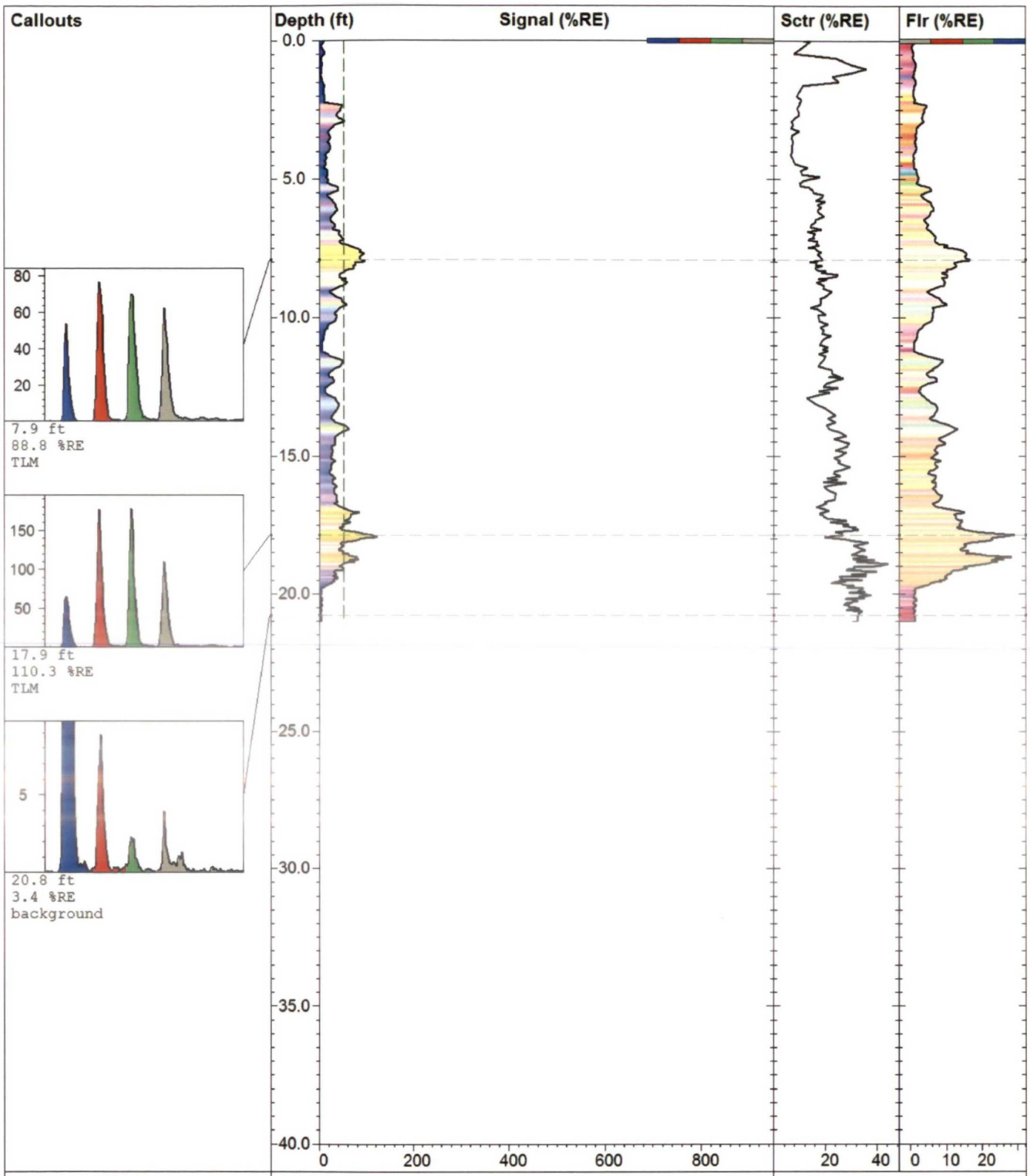
TL14_03		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.29300 N / NAD83**	*Final depth:* **27.01 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.38739 W**	*Max signal:* **25.1 % @ 3.24 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 9:59:02 AM**



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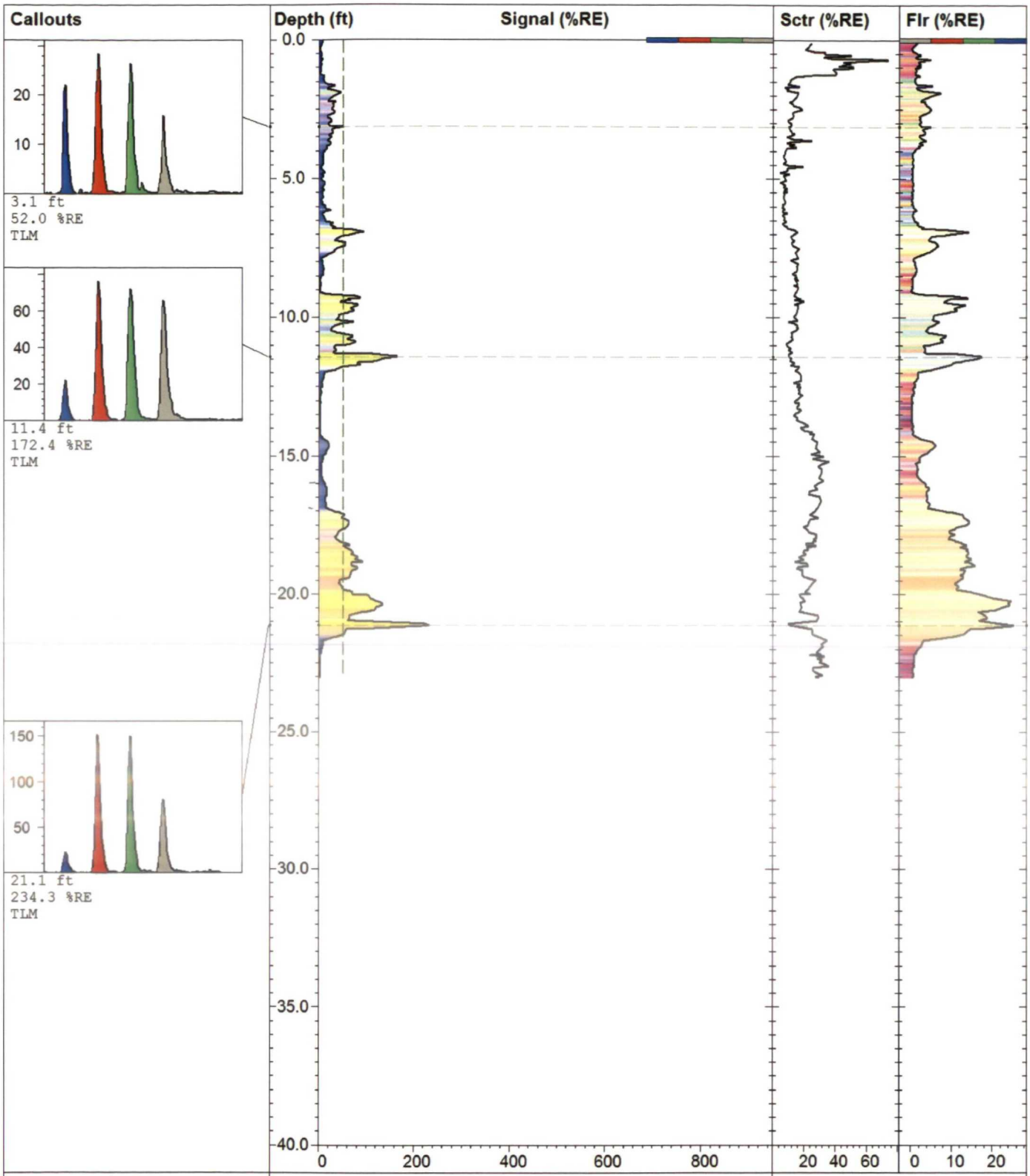
TL14_04		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.302636 N / NAD83**	*Final depth:* **21.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.405311 W**	*Max signal:* **126.1 % @ 17.95 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 2:24:48 PM**



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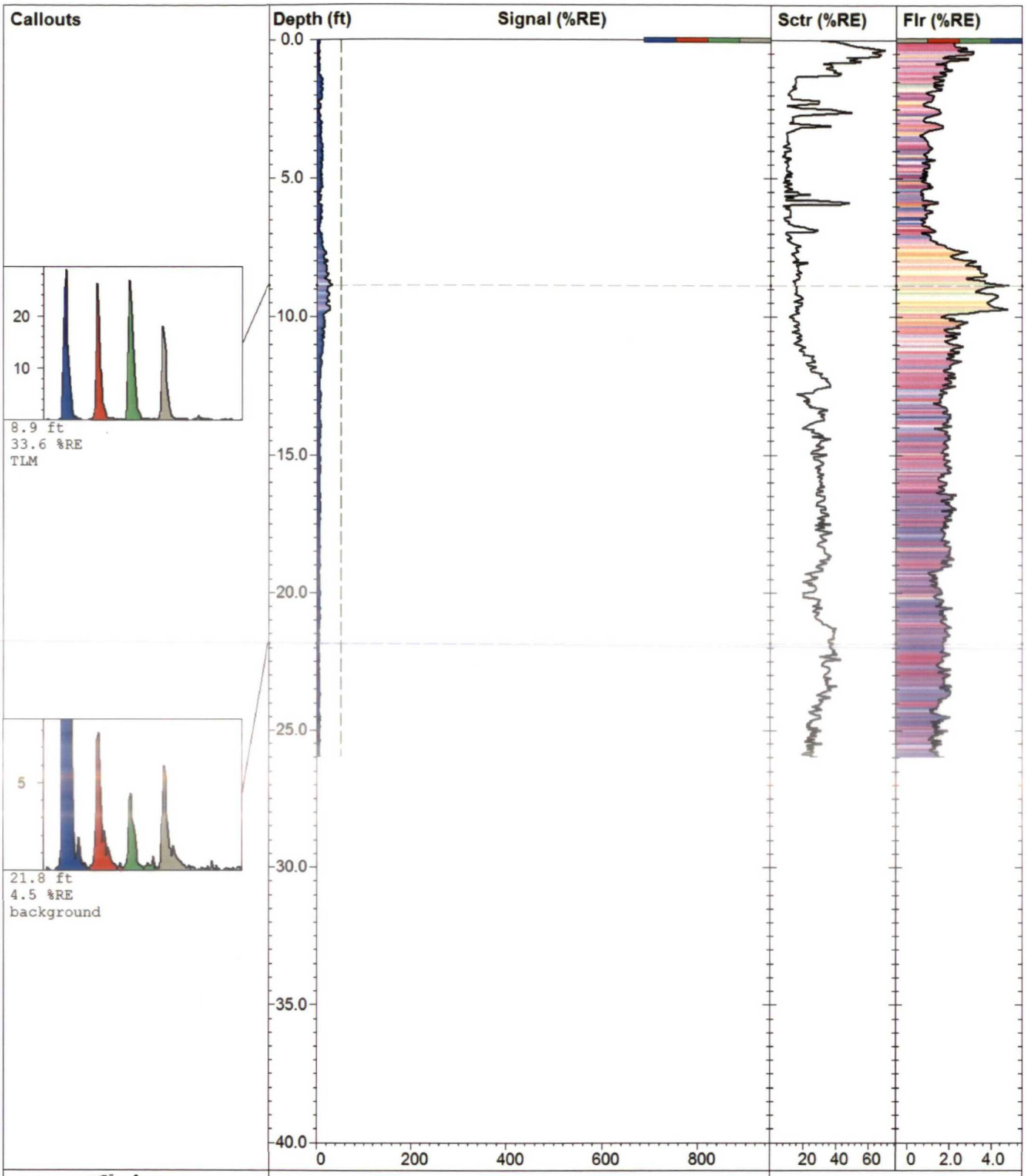
TL14_05

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **23.06 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **234.3 % @ 21.14 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 9:27:15 AM**



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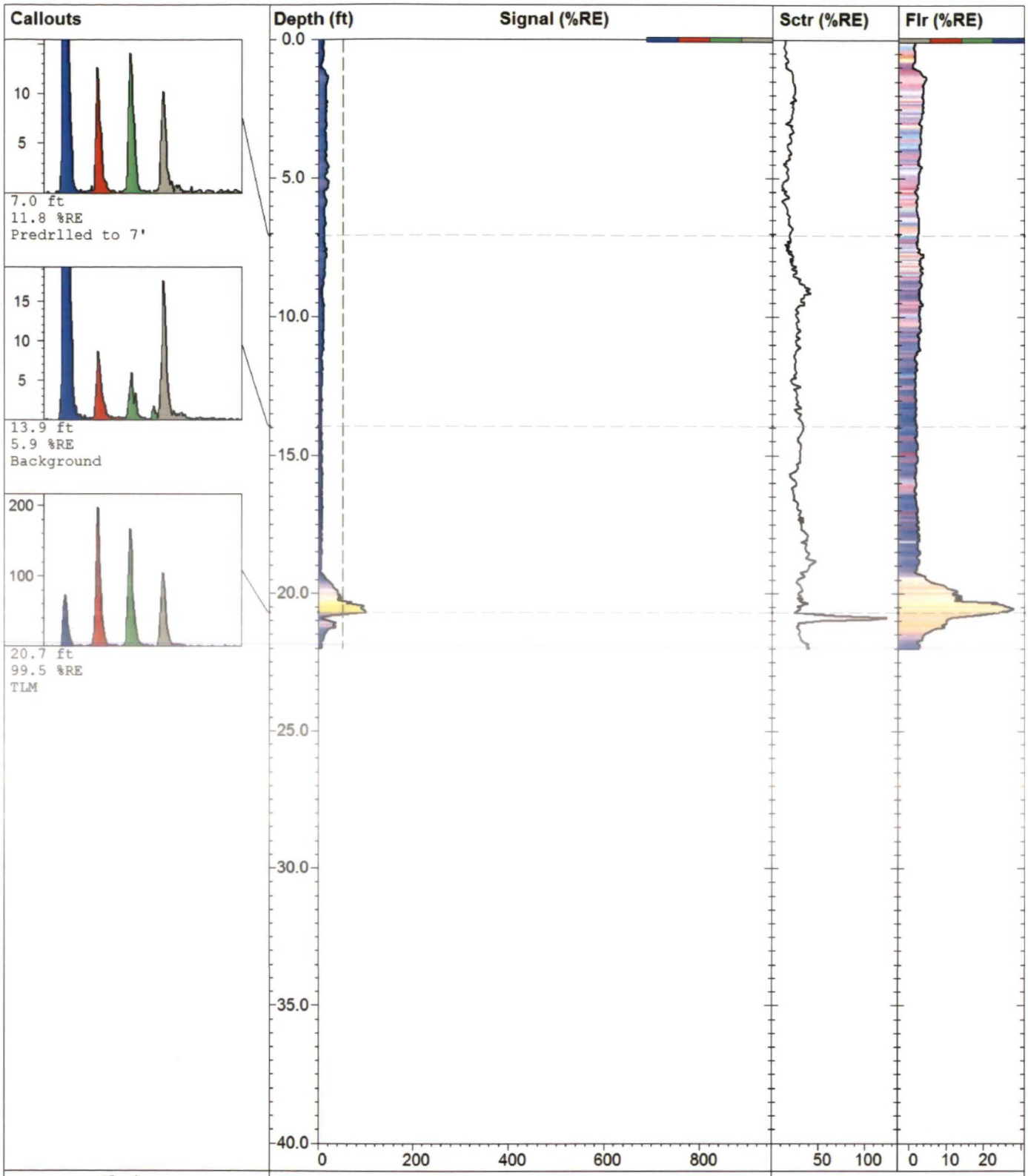
TL14_5_11_25

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.372845 N / NAD83**	*Final depth:* **26.00 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.534001 W**	*Max signal:* **33.6 % @ 8.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 12:57:50 PM**



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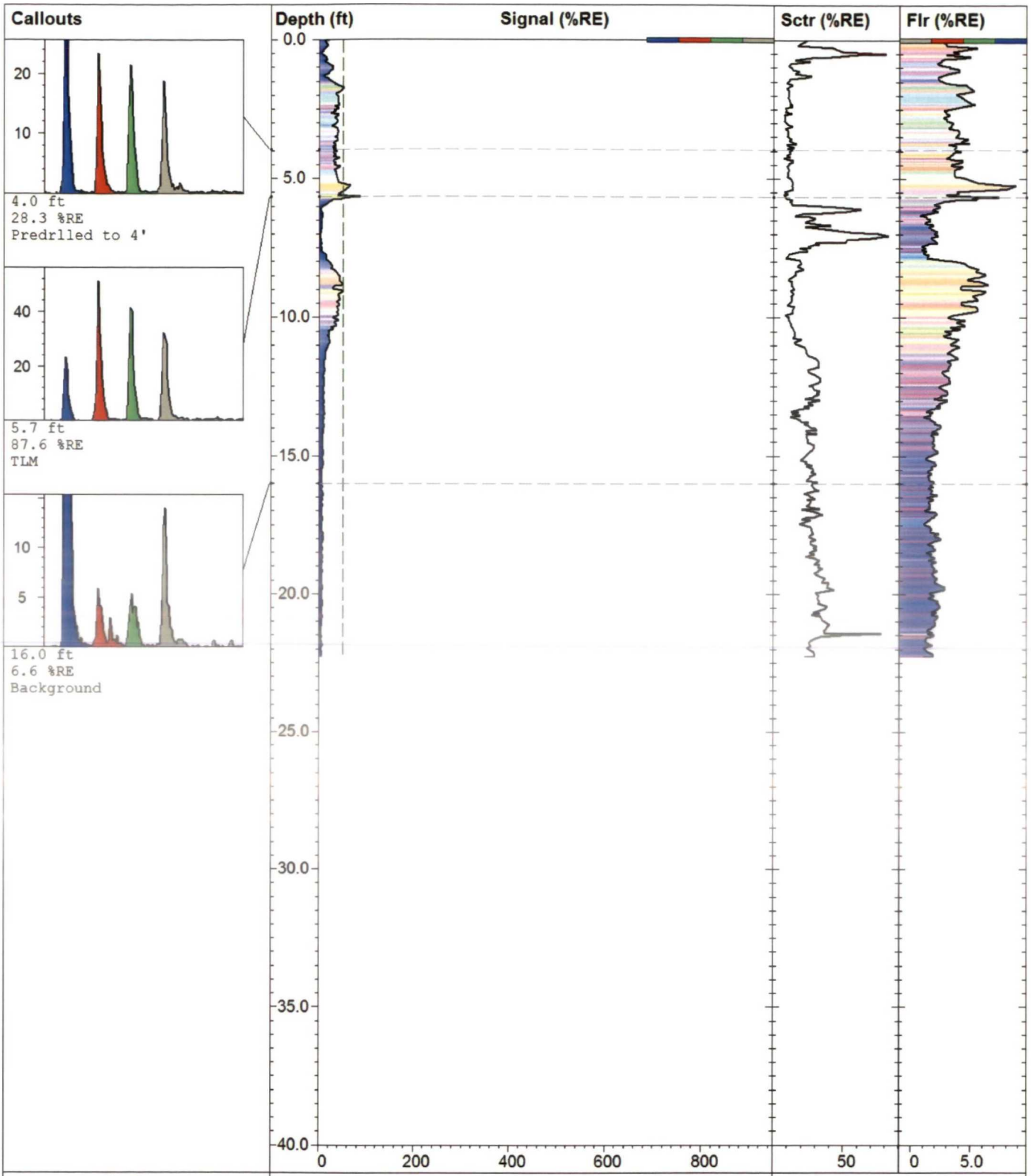
TL14_06

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.319157 N / NAD83**	*Final depth:* **22.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.442534 W**	*Max signal:* **99.5 % @ 20.71 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 4:06:00 PM**



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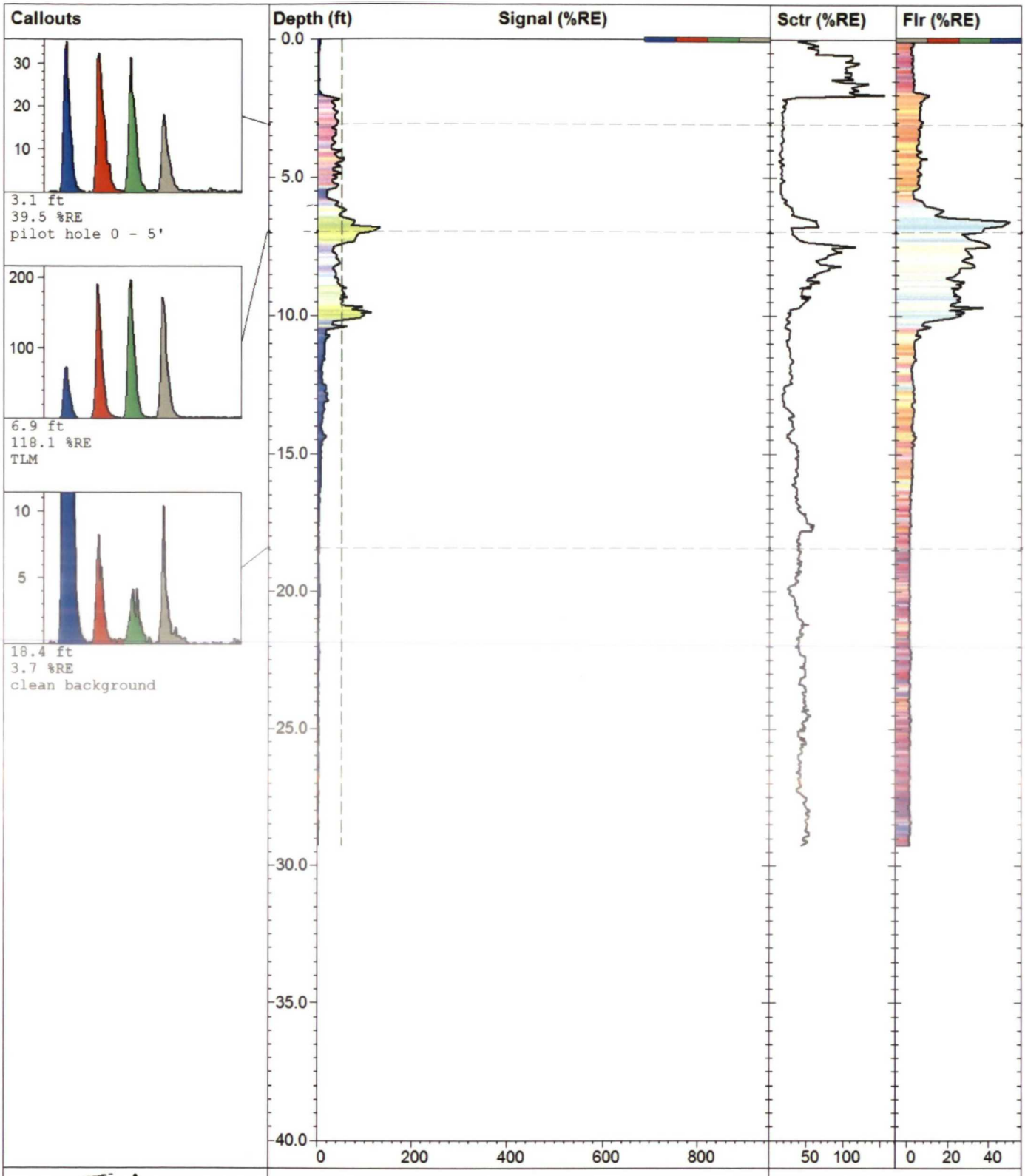
TL14_07

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.327796 N / NAD83**	*Final depth:* **22.29 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.456369 W**	*Max signal:* **87.6 % @ 5.66 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 3:12:38 PM**



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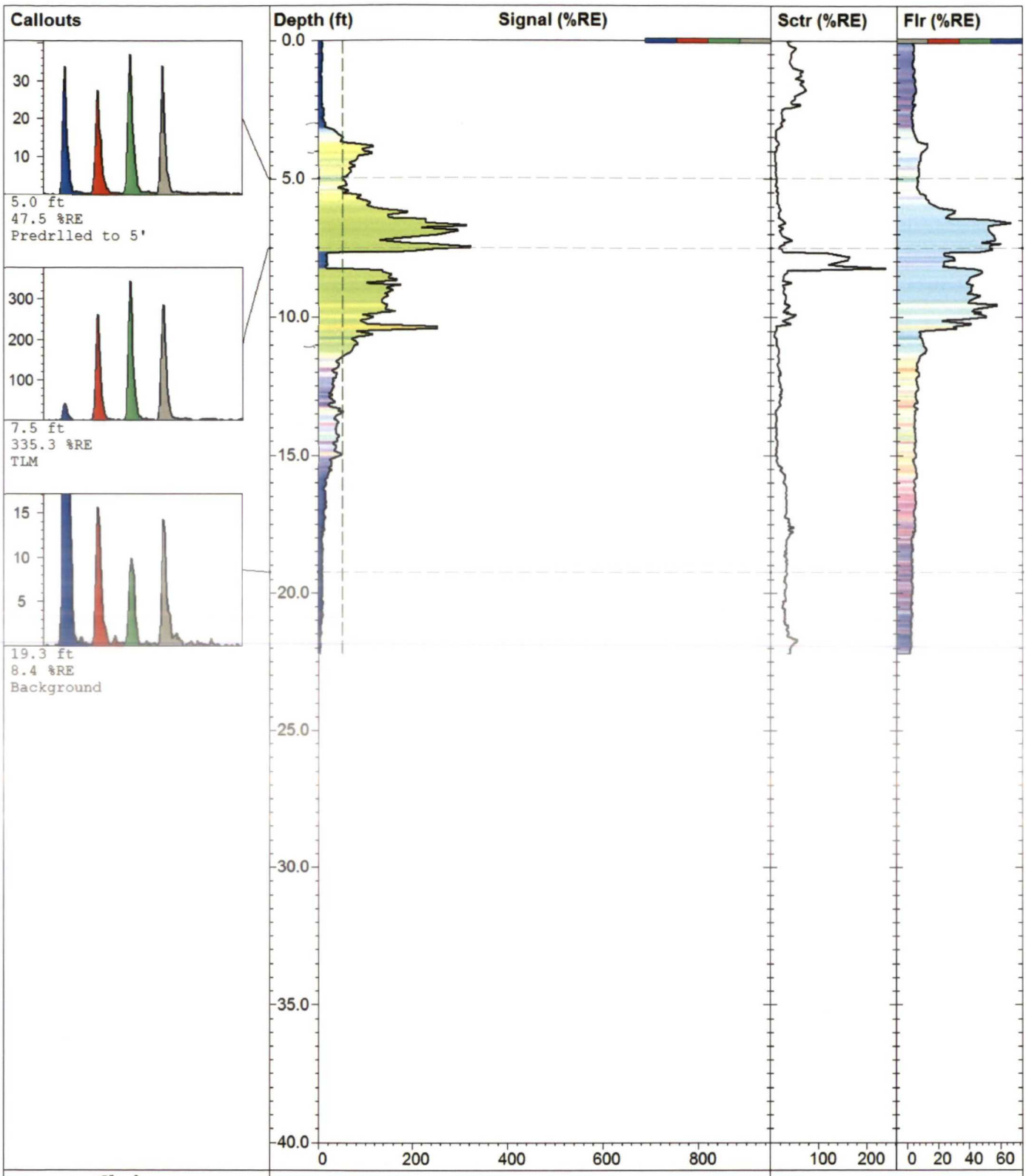
TL14_08

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.335867 N / NAD83**	*Final depth:* **29.28 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.479005 W**	*Max signal:* **133.7 % @ 6.82 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 11:51:38 AM**



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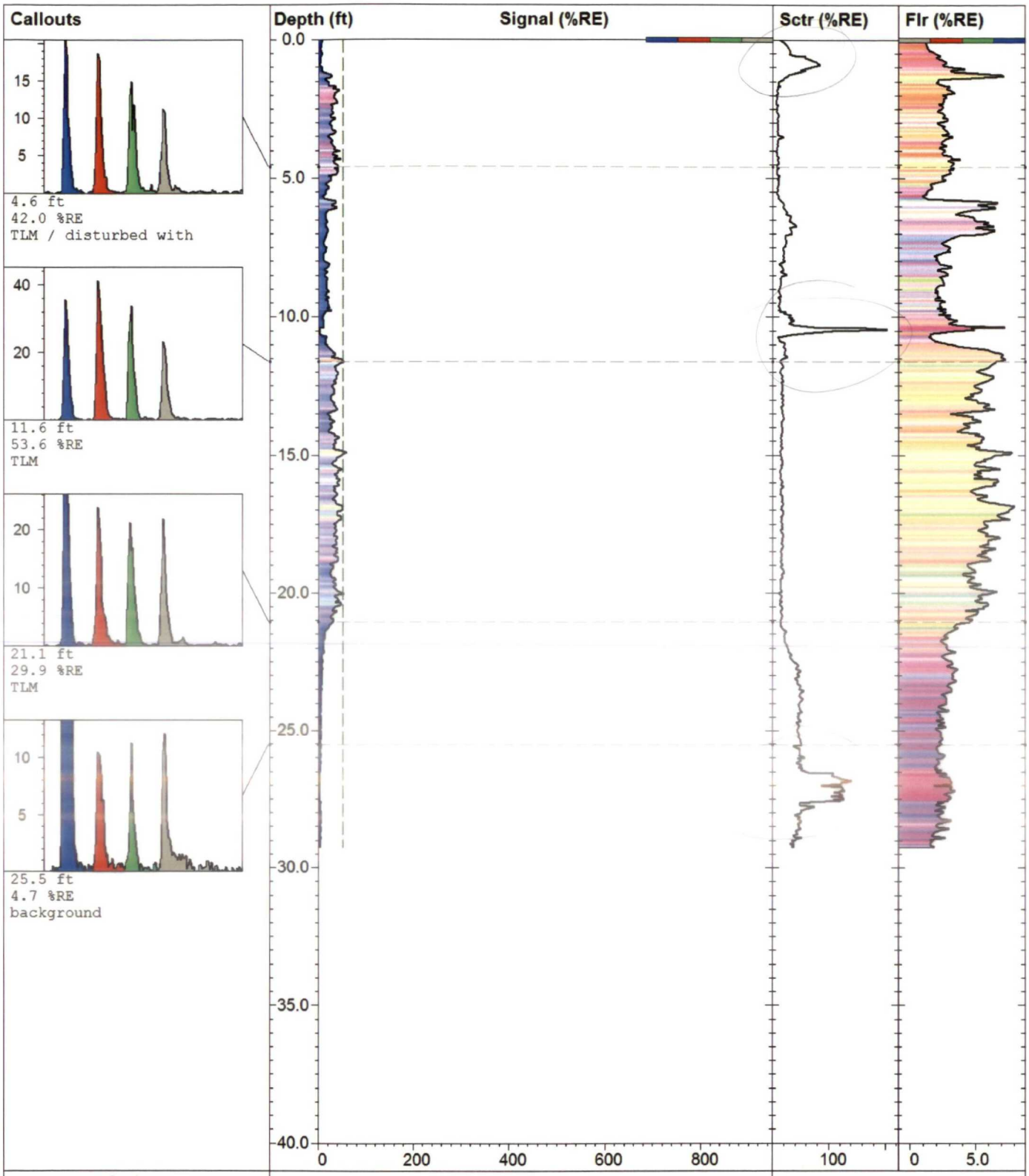
TL14_09

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.343146 N / NAD83**	*Final depth:* **22.23 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.493114 W**	*Max signal:* **335.3 % @ 7.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 2:41:20 PM**



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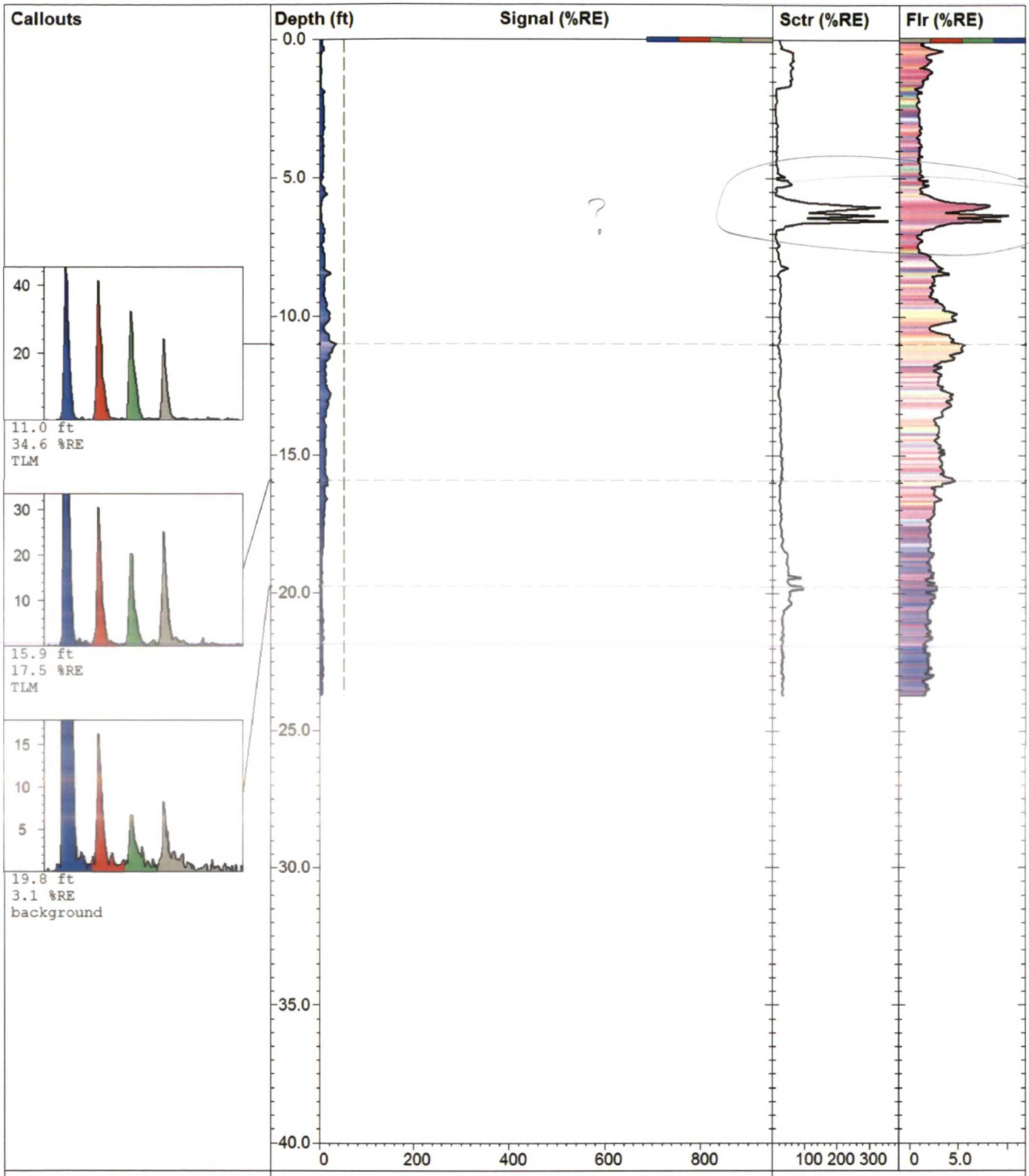
TL14_10_75		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.359819 N / NAD83**	*Final depth:* **29.27 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.529800 W**	*Max signal:* **59.7 % @ 14.90 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 10:56:00 AM**



TL14_11_25		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.365214 N / NAD83**	*Final depth:* **23.73 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.542553 W**	*Max signal:* **34.6 % @ 10.99 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 1:54:11 PM**

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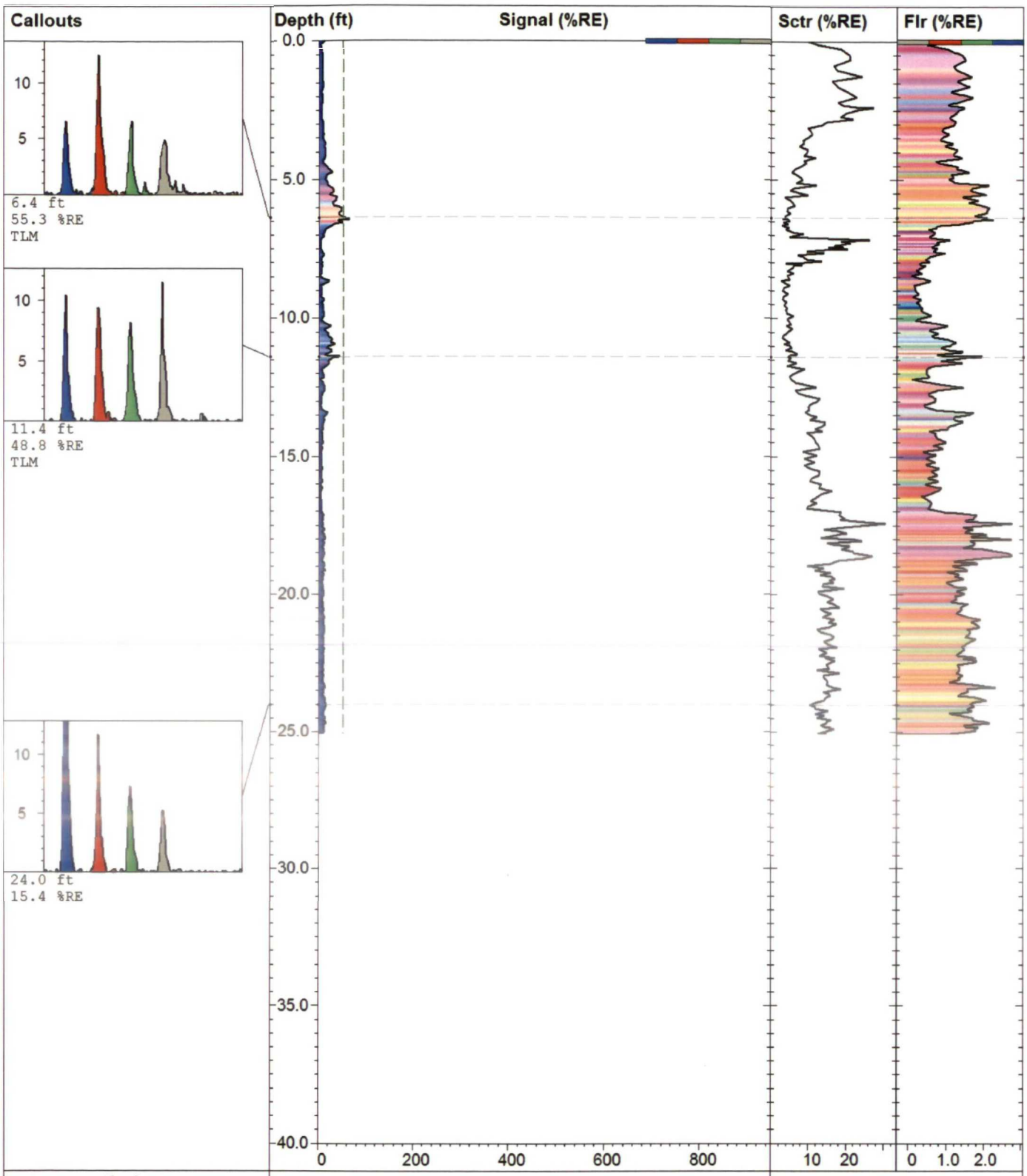

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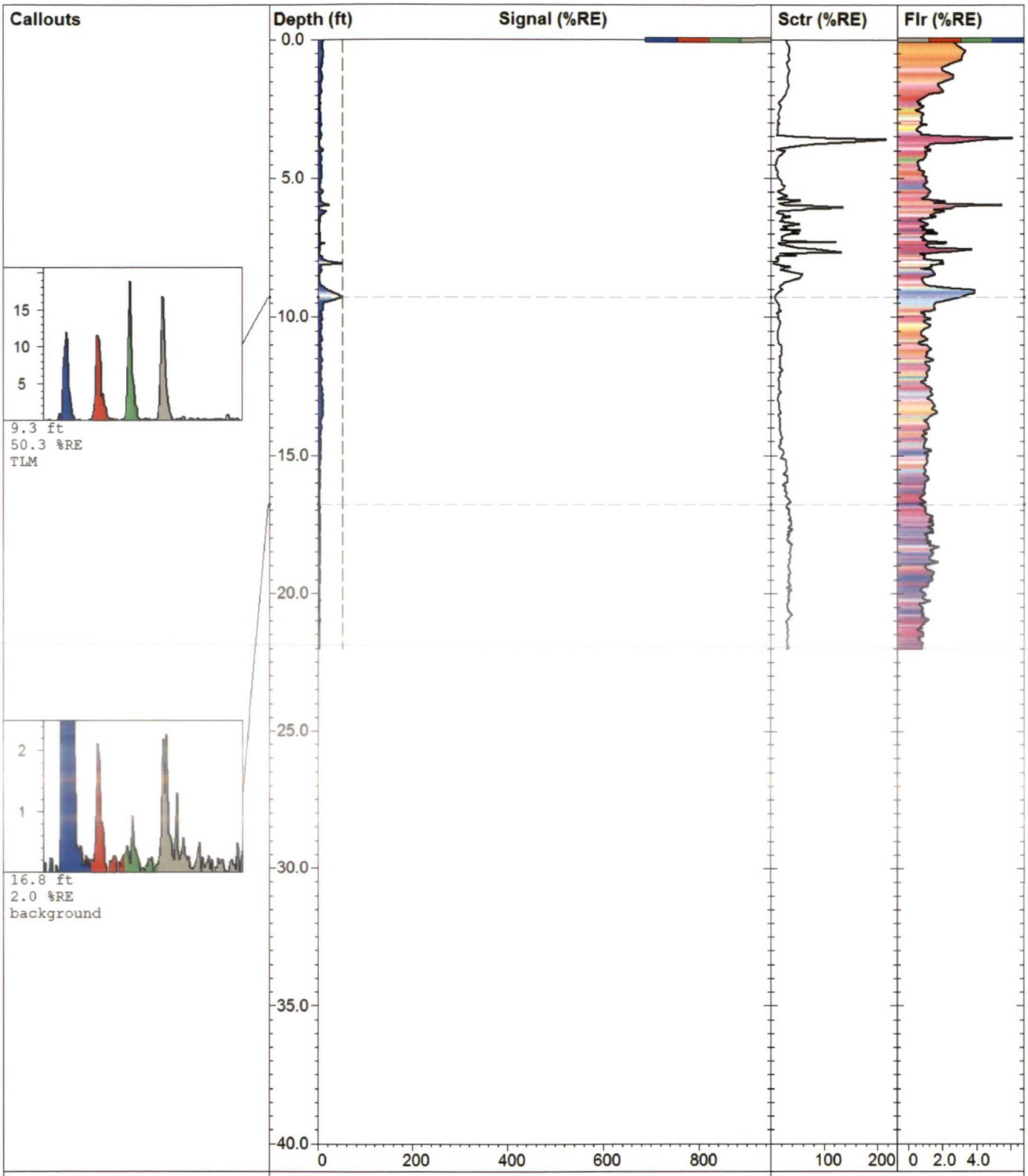
TL15_01		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.28966 N / NAD83**	*Final depth:* **25.08 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.33871 W**	*Max signal:* **64.7 % @ 6.42 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 1:06:19 PM**



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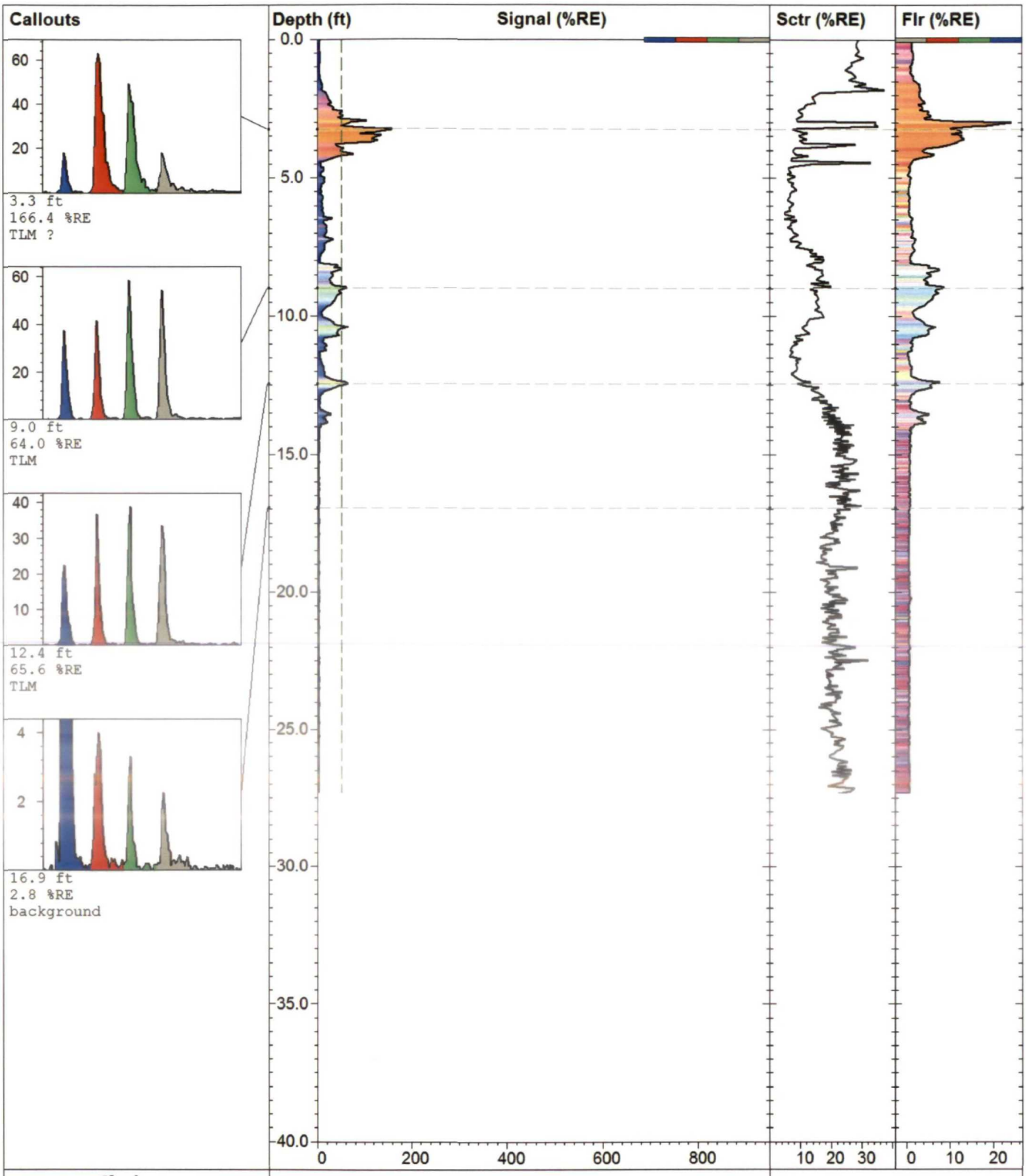
TL15_02		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.297869 N / NAD83**	*Final depth:* **22.04 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.357845 W**	*Max signal:* **50.6 % @ 8.07 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 11:00:12 AM**



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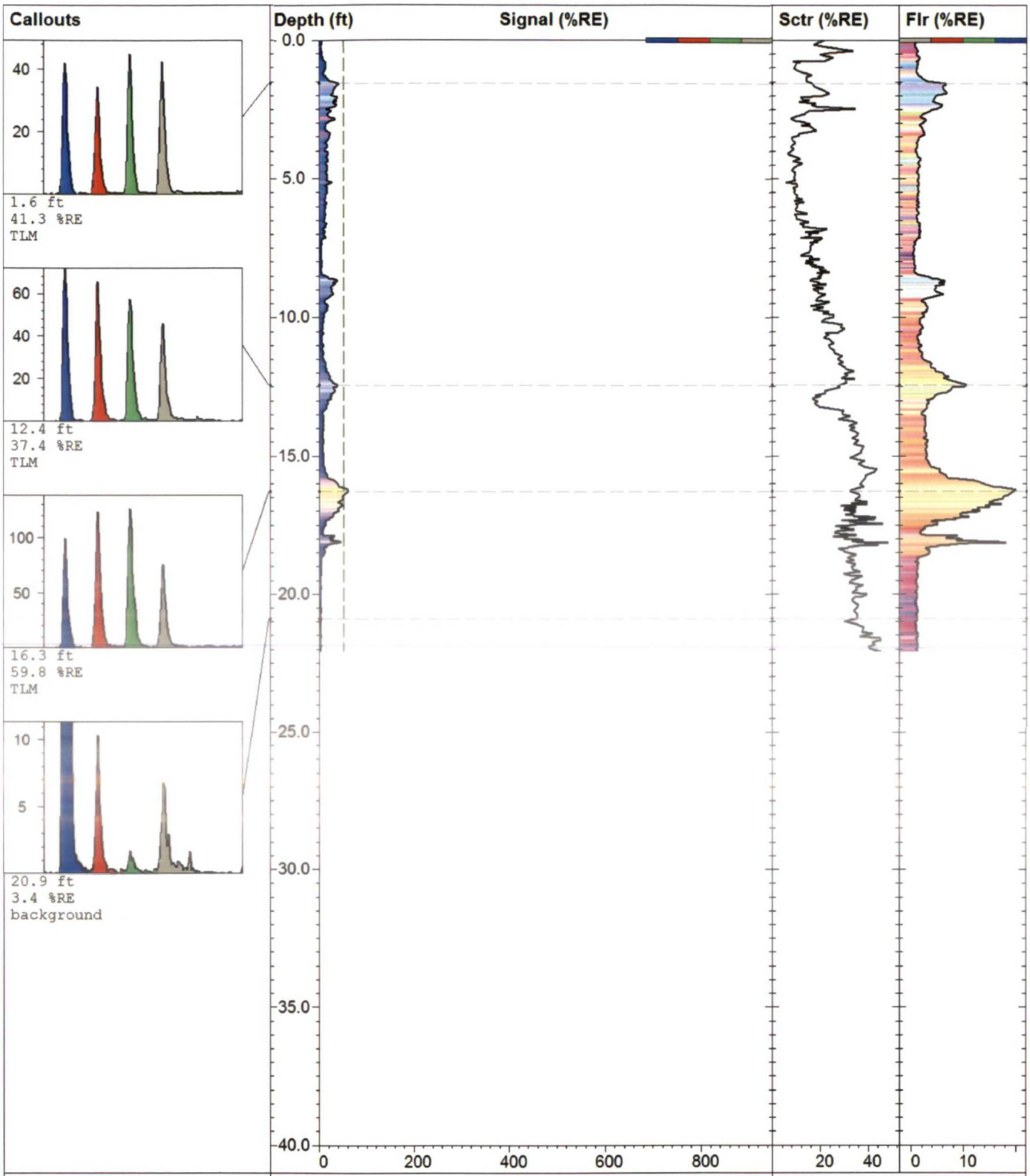
TL15_03

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.305769 N / NAD83**	*Final depth:* **27.34 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.375578 W**	*Max signal:* **166.4 % @ 3.25 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 10:29:51 AM**



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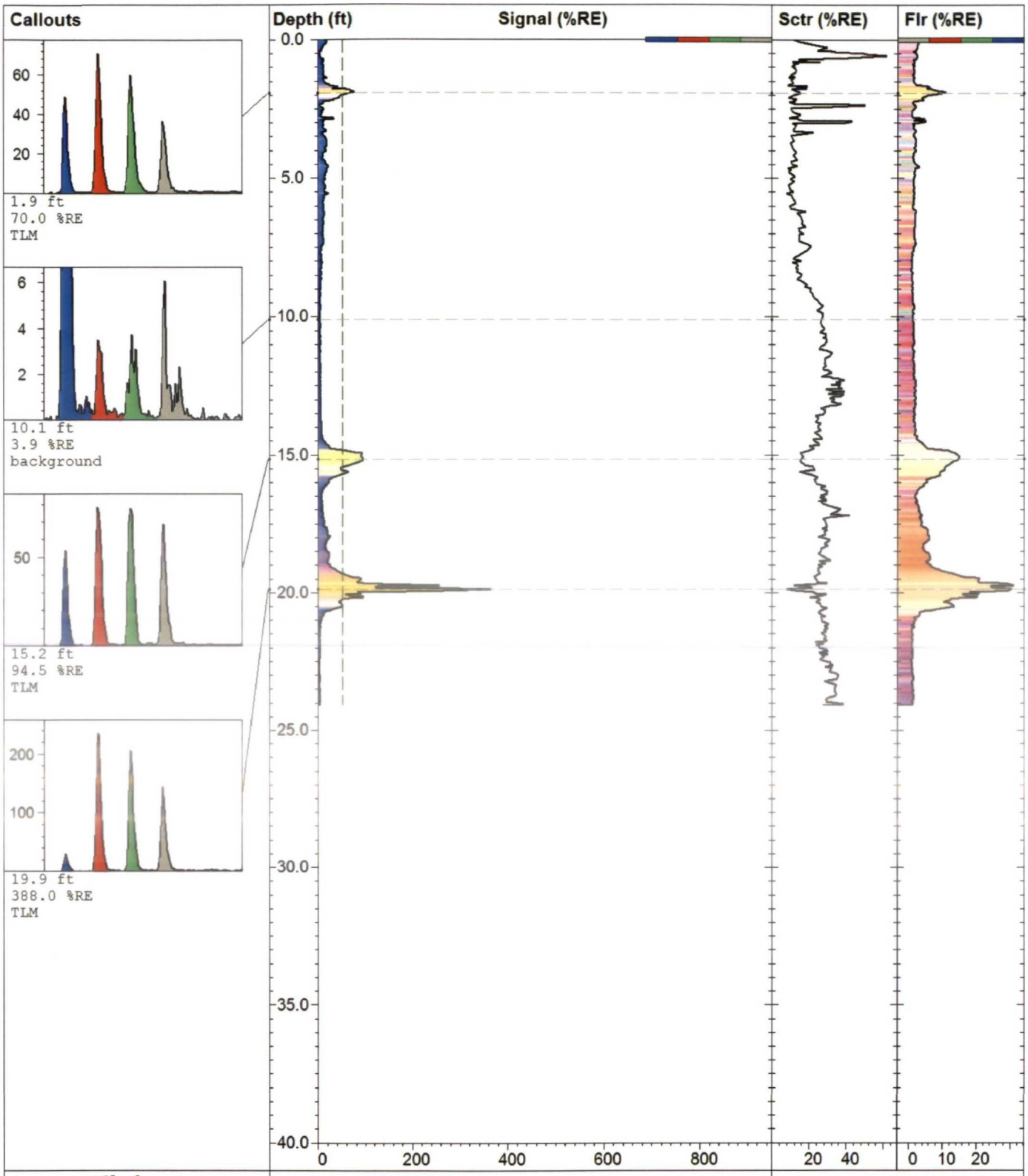
TL15_04

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.315475 N / NAD83**	*Final depth:* **22.10 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.396747 W**	*Max signal:* **59.8 % @ 16.28 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 8:26:44 AM**



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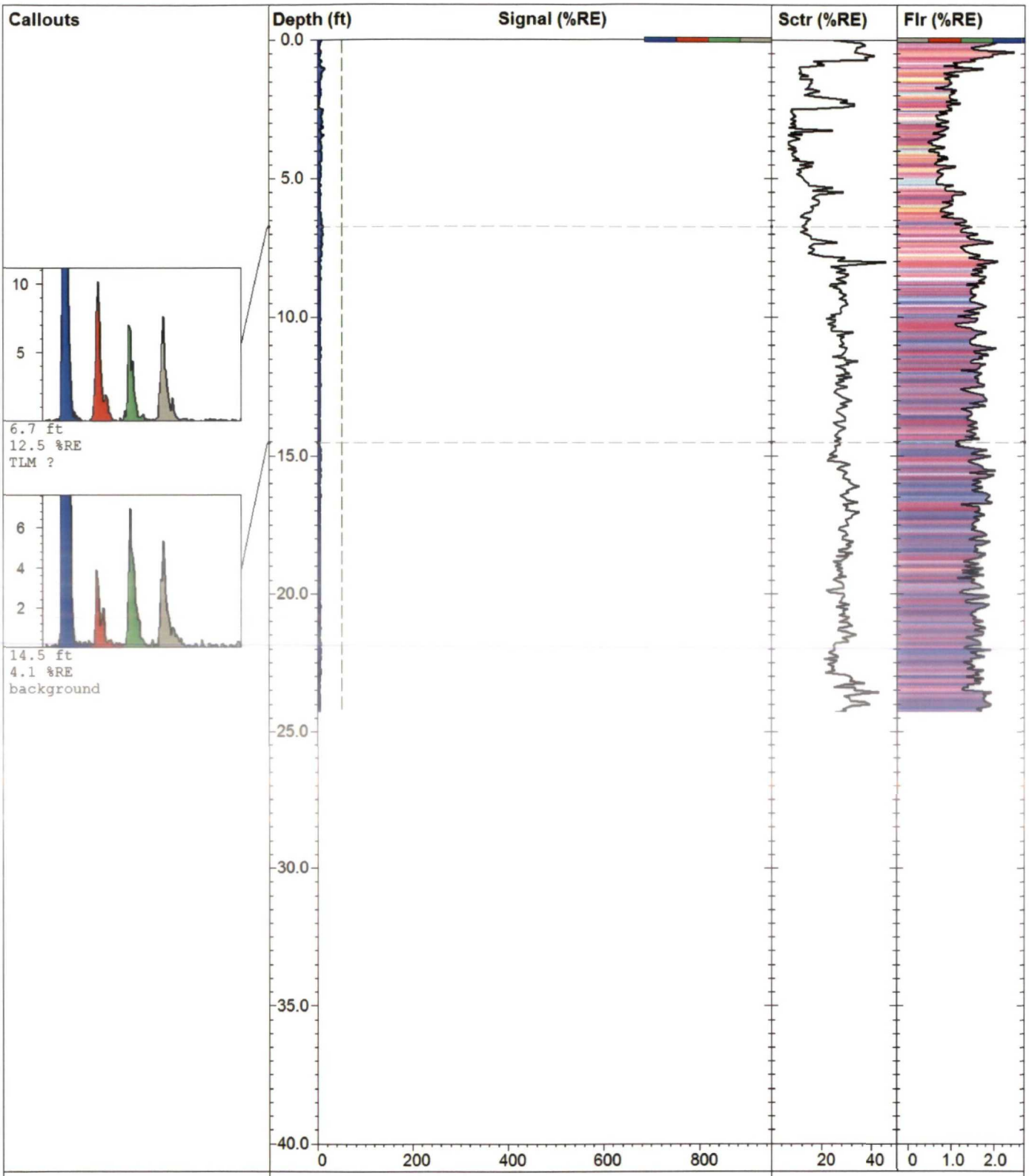
TL15_05		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.321220 N / NAD83**	*Final depth:* **24.09 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.413750 W**	*Max signal:* **388.0 % @ 19.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 8:52:01 AM**



TL15_5_11_25		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.378061 N / NAD83**	*Final depth:* **24.30 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.527877 W**	*Max signal:* **15.9 % @ 1.05 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 1:27:51 PM**

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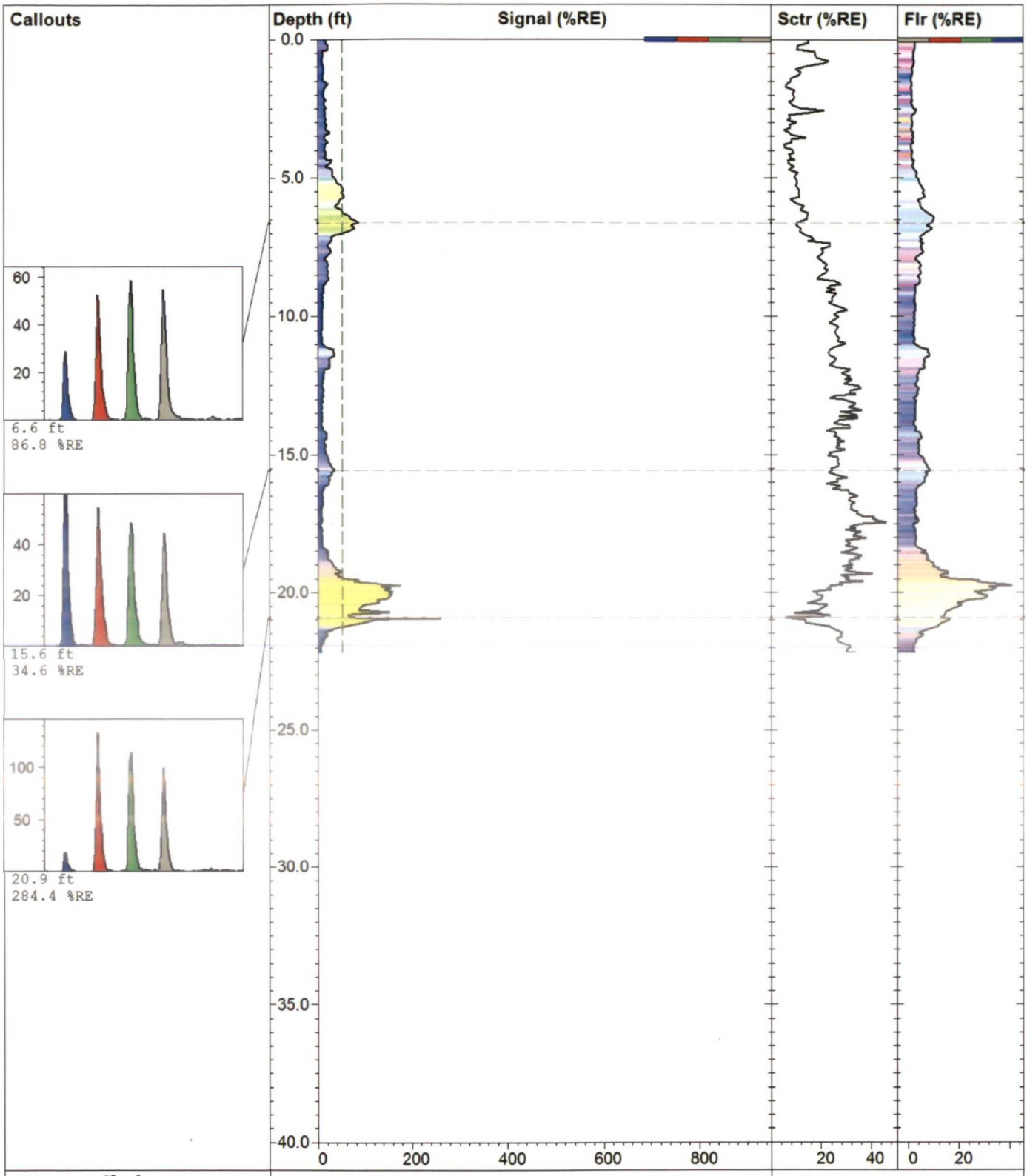

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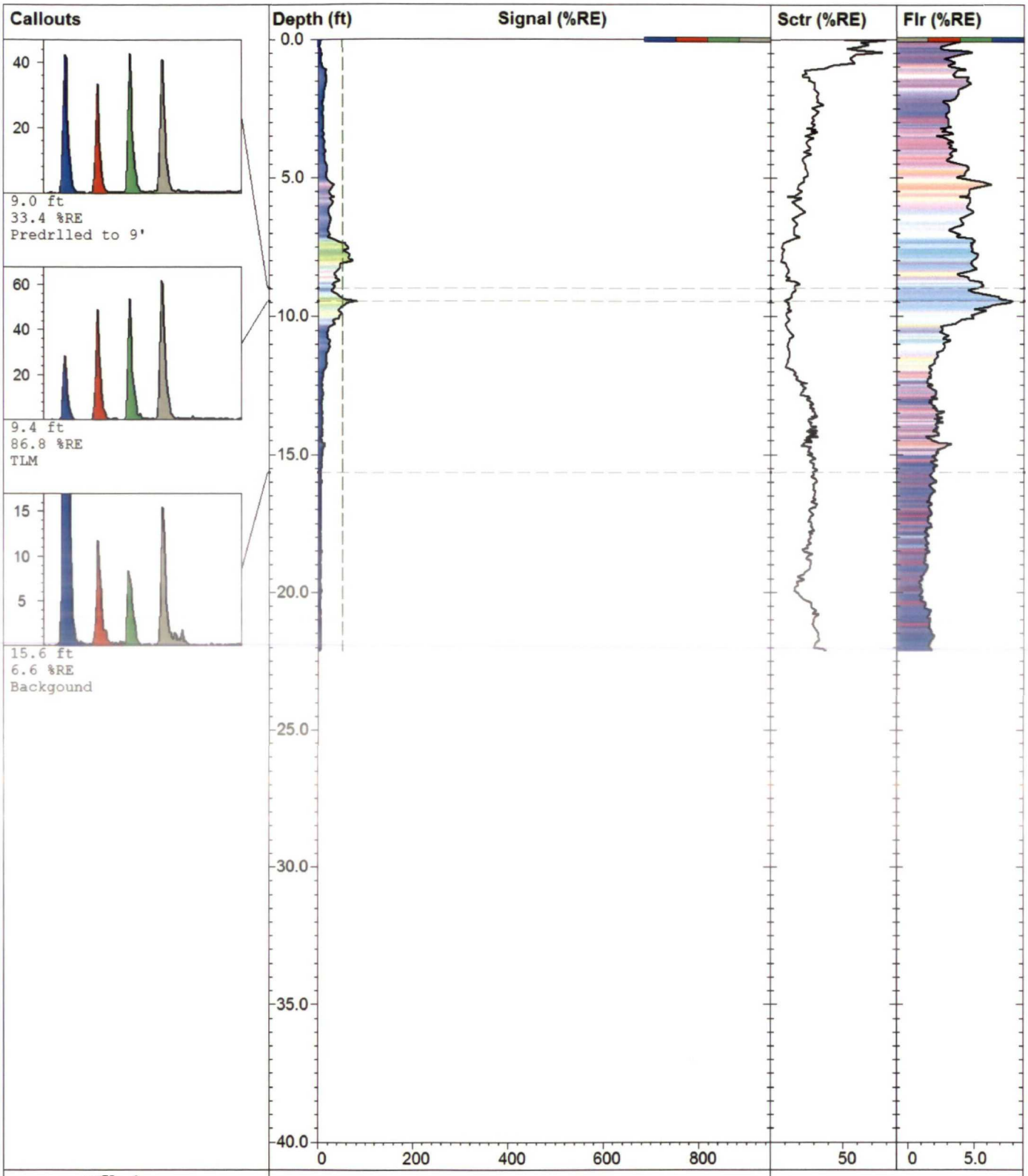
TL15_06

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.329841 N / NAD83**	*Final depth:* **22.19 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.429066 W**	*Max signal:* **284.4 % @ 20.92 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 1:58:09 PM**



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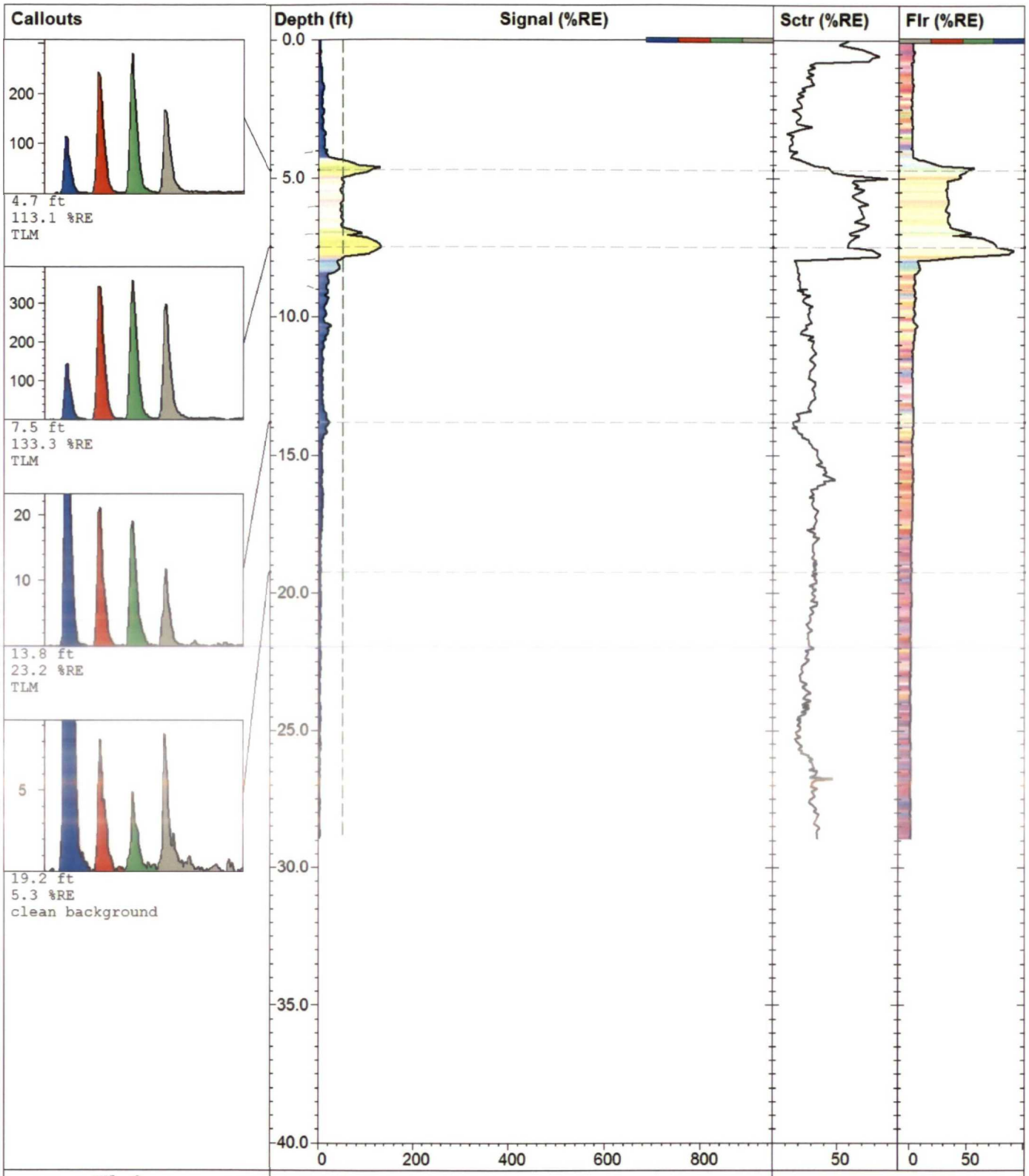
TL15_07		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.341567 N / NAD83**	*Final depth:* **22.15 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.448676 W**	*Max signal:* **86.8 % @ 9.45 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 11:14:43 AM**



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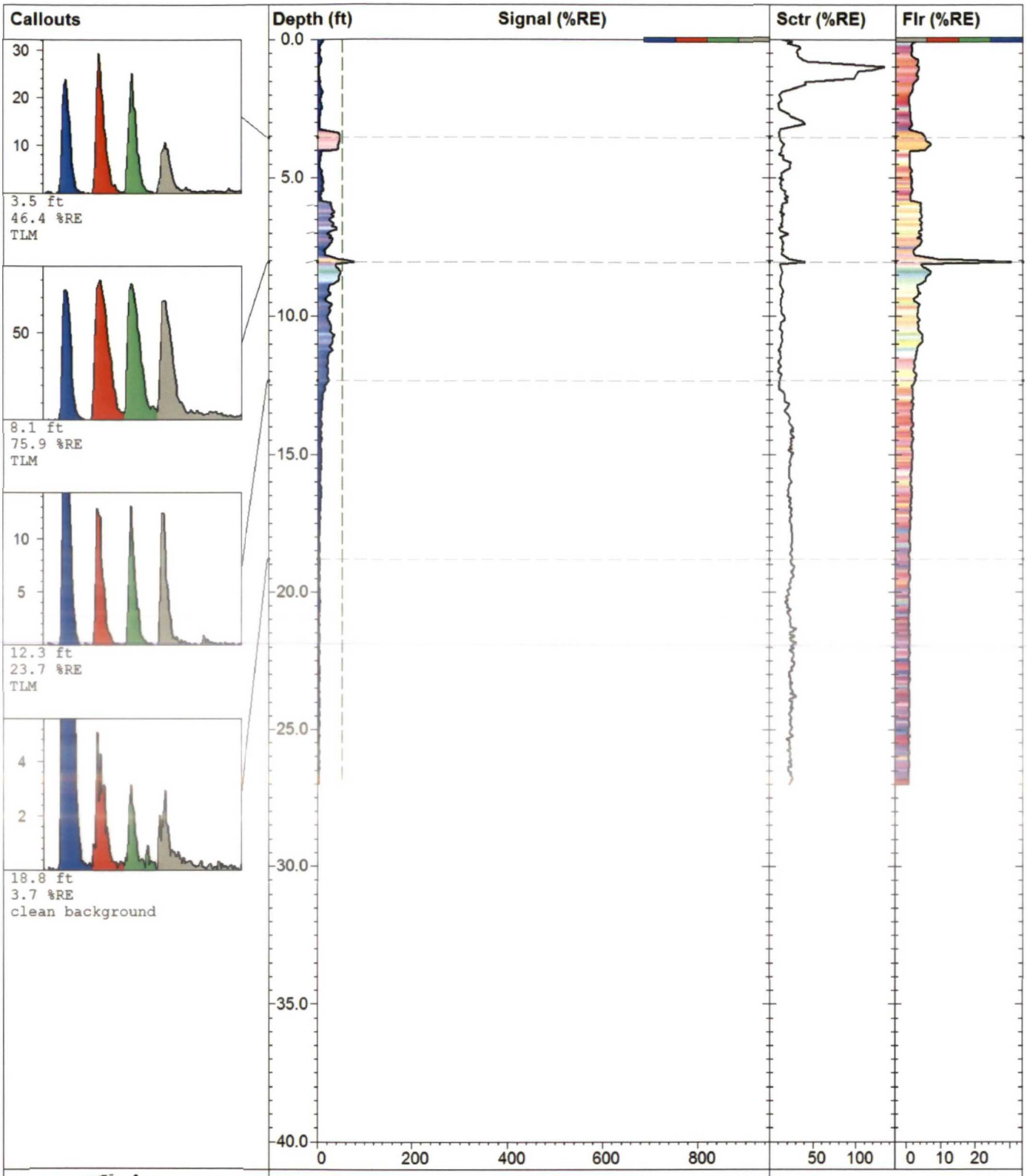
TL15_08		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.351961 N / NAD83**	*Final depth:* **28.96 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.465467 W**	*Max signal:* **133.3 % @ 7.48 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 1:25:41 PM**



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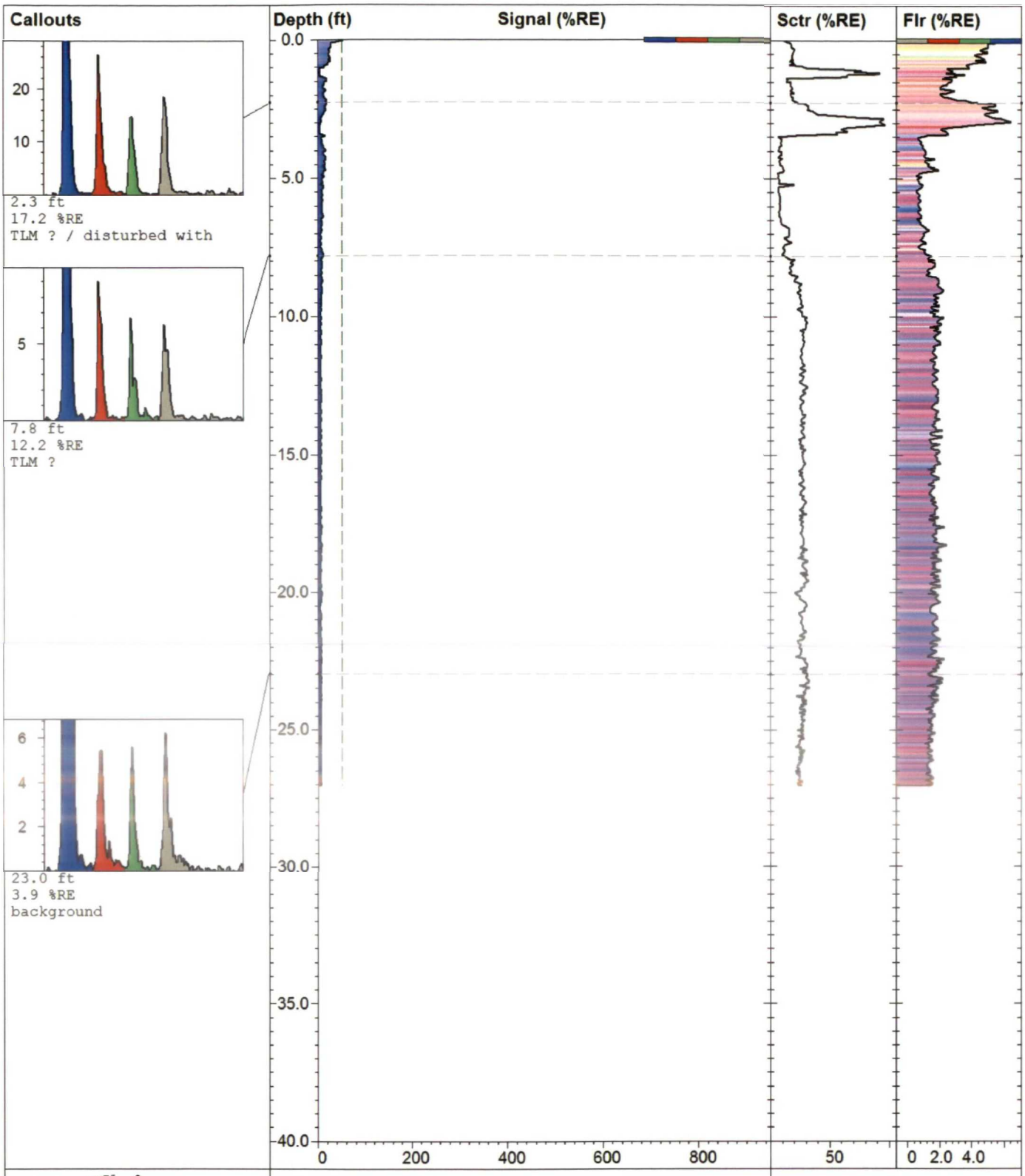
TL15_09

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.357215 N / NAD83**	*Final depth:* **27.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.482659 W**	*Max signal:* **75.9 % @ 8.05 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 1:52:16 PM**



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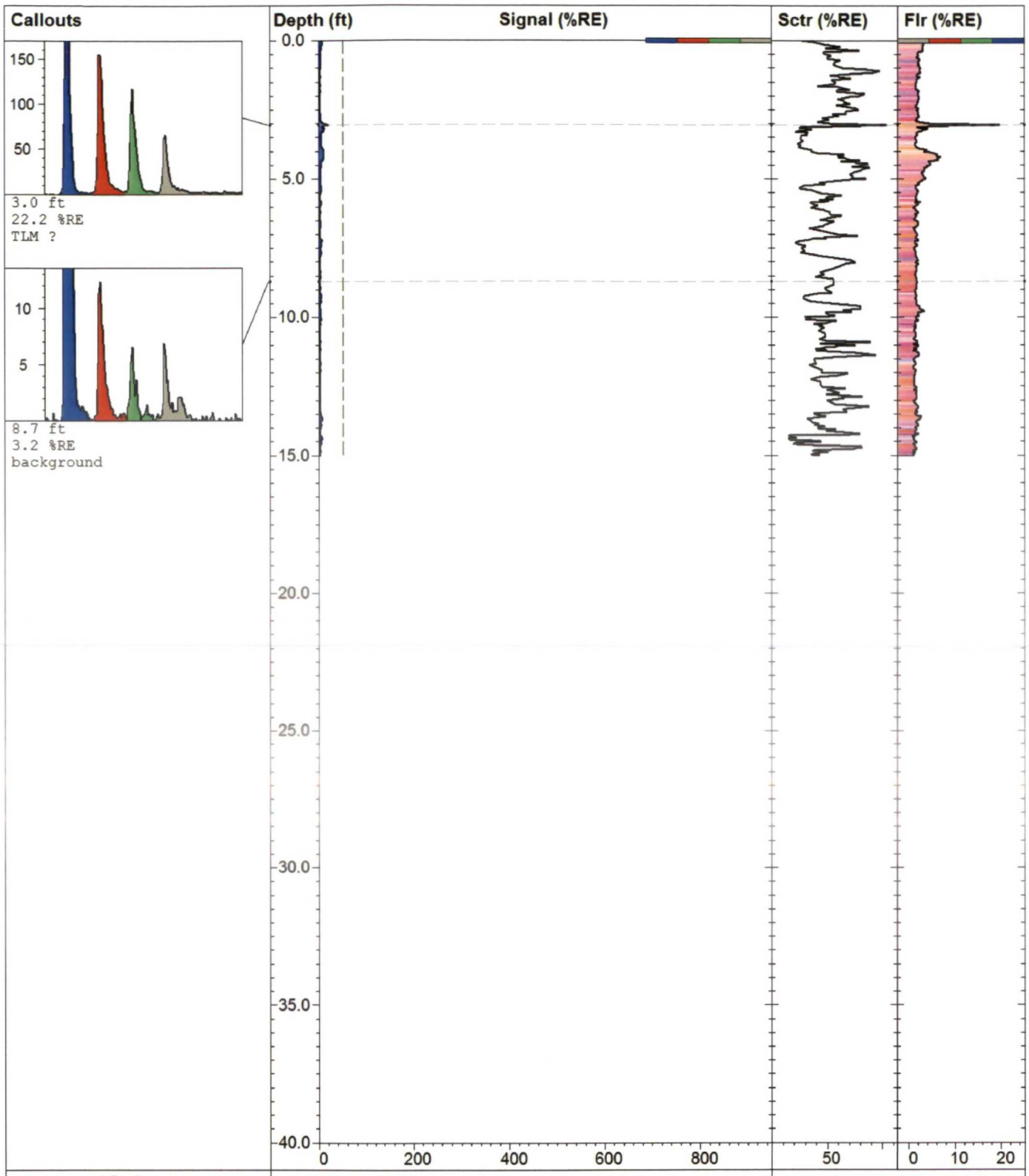
TL15_10_75

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.373444 N / NAD83**	*Final depth:* **27.05 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.518715 W**	*Max signal:* **54.3 % @ 0.02 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 11:31:04 AM**



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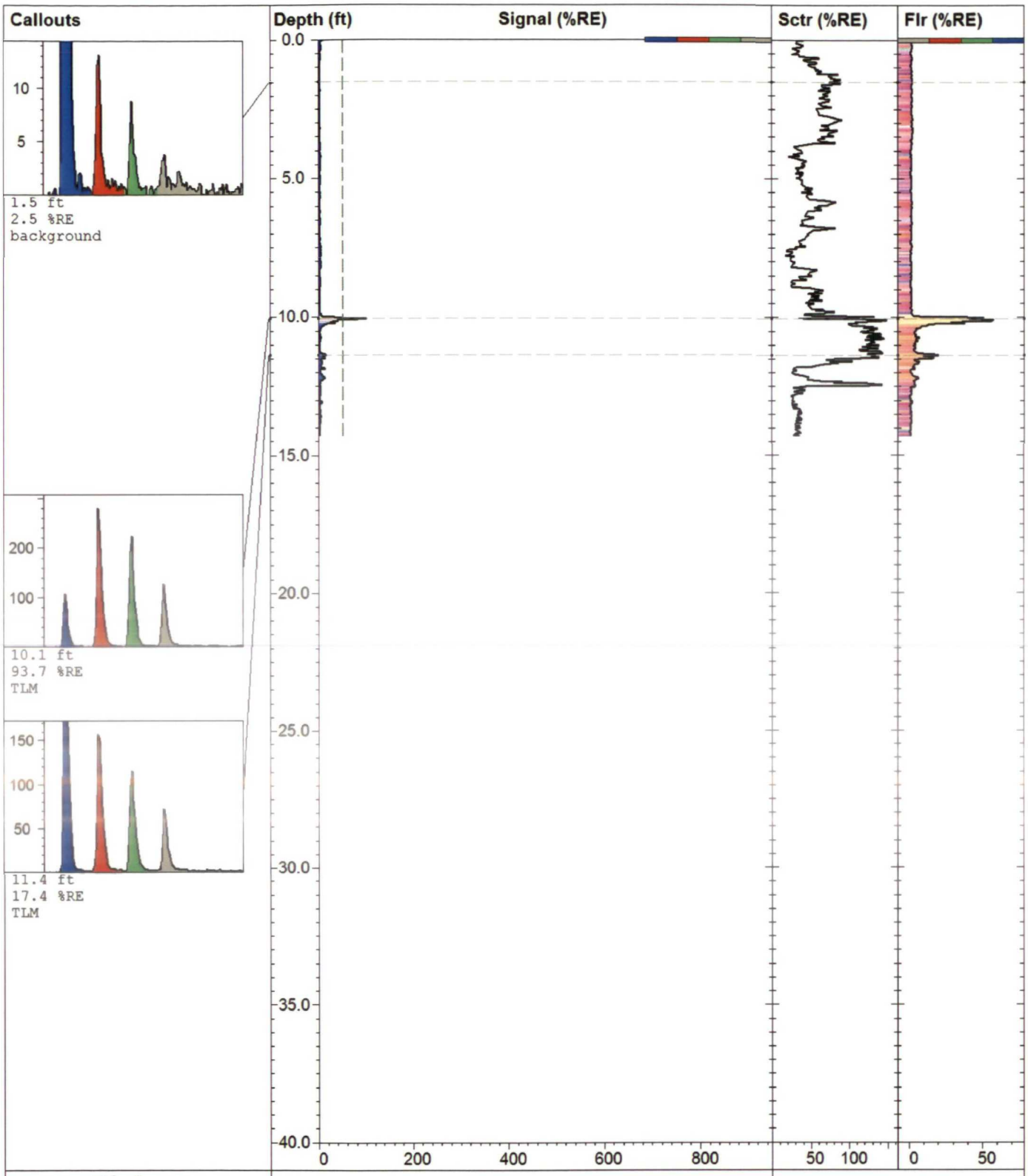
TL16_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.309333 N / NAD83**	*Final depth:* **15.04 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.326702 W**	*Max signal:* **22.2 % @ 3.04 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 11:53:00 AM**



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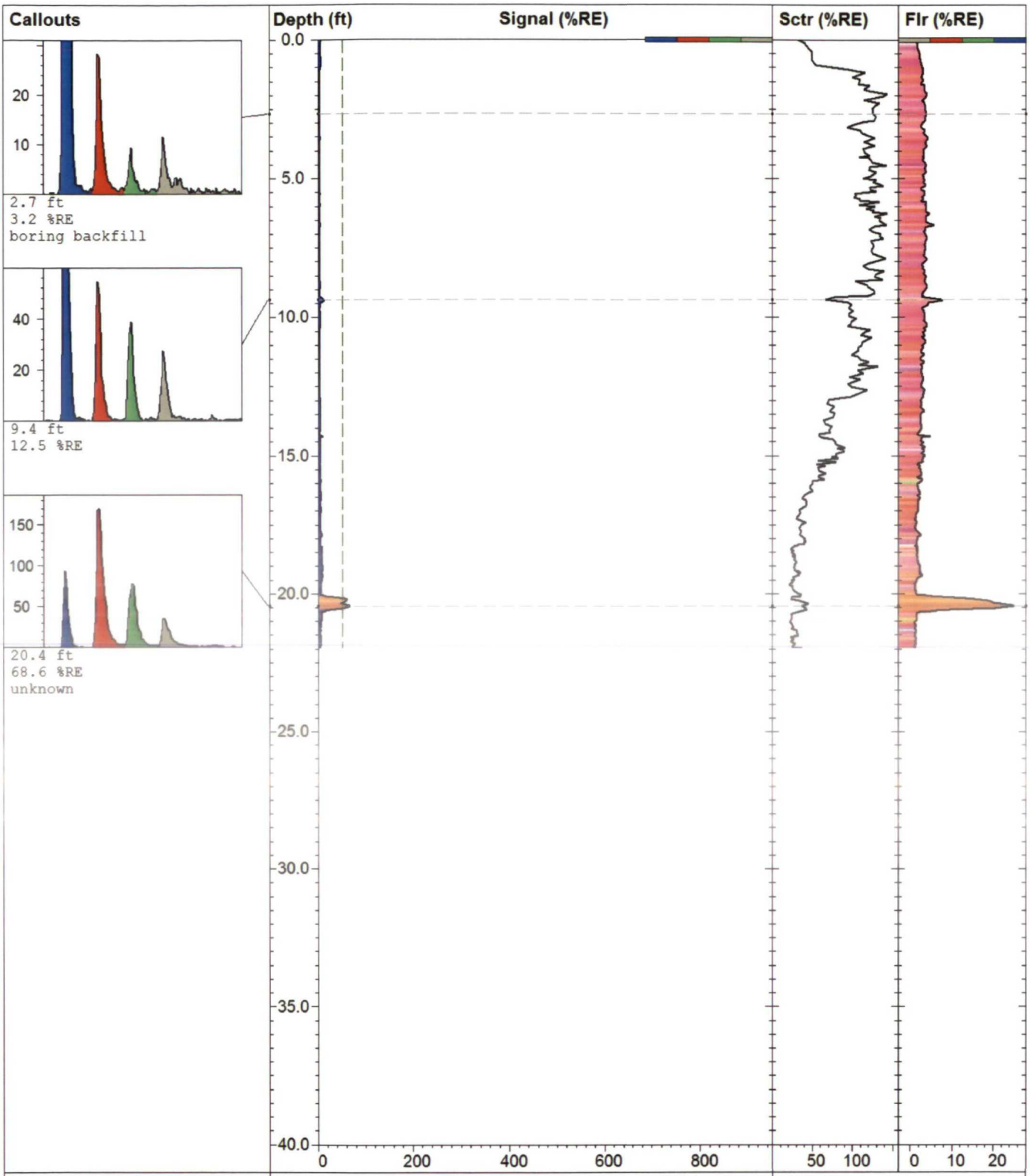
TL16_02

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.312880 N / NAD83**	*Final depth:* **14.30 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.343665 W**	*Max signal:* **111.7 % @ 10.04 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 11:15:13 AM**



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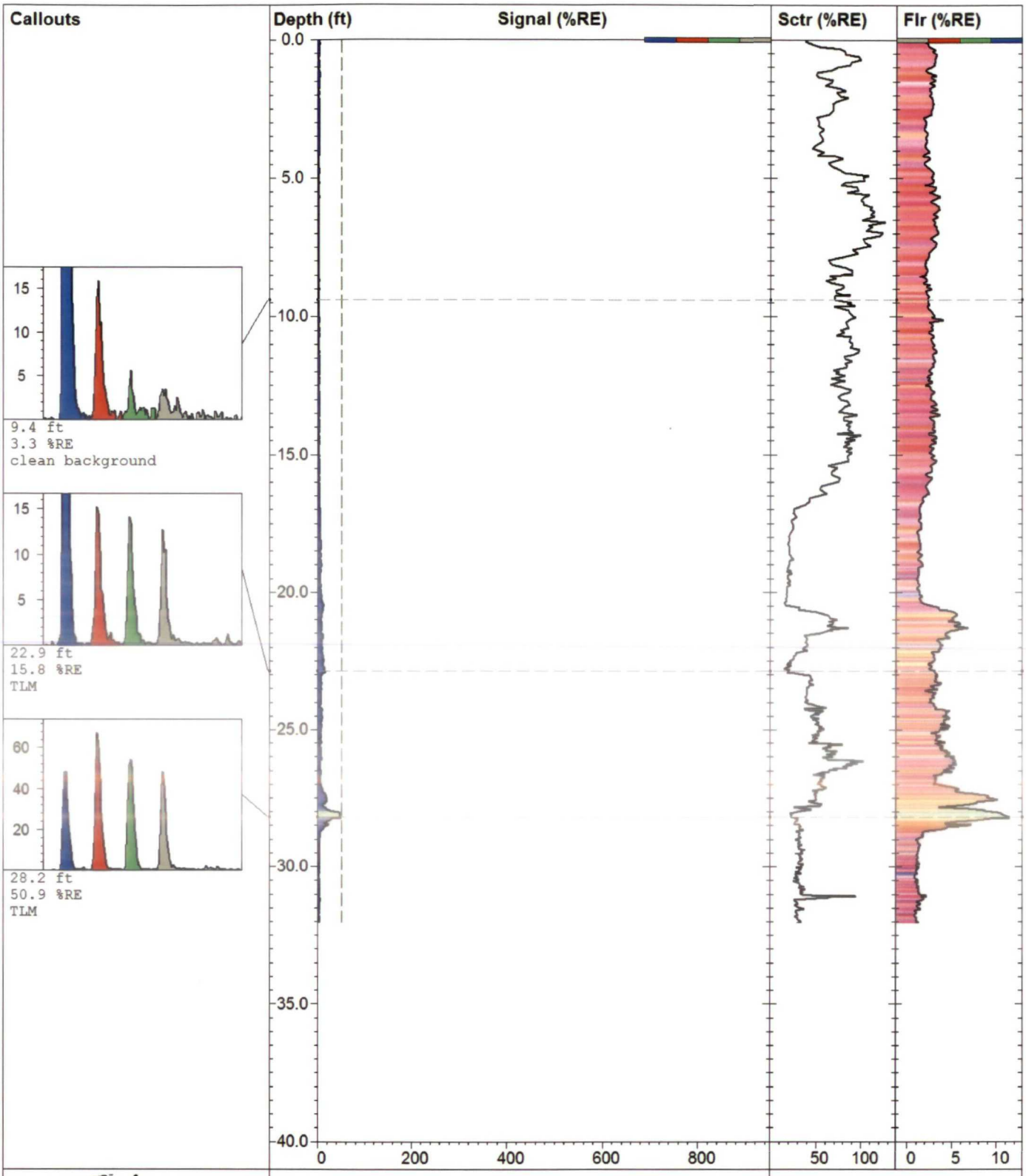
TL16_03		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.320181 N / NAD83**	*Final depth:* **21.99 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.364194 W**	*Max signal:* **68.6 % @ 20.45 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 8:41:38 AM**



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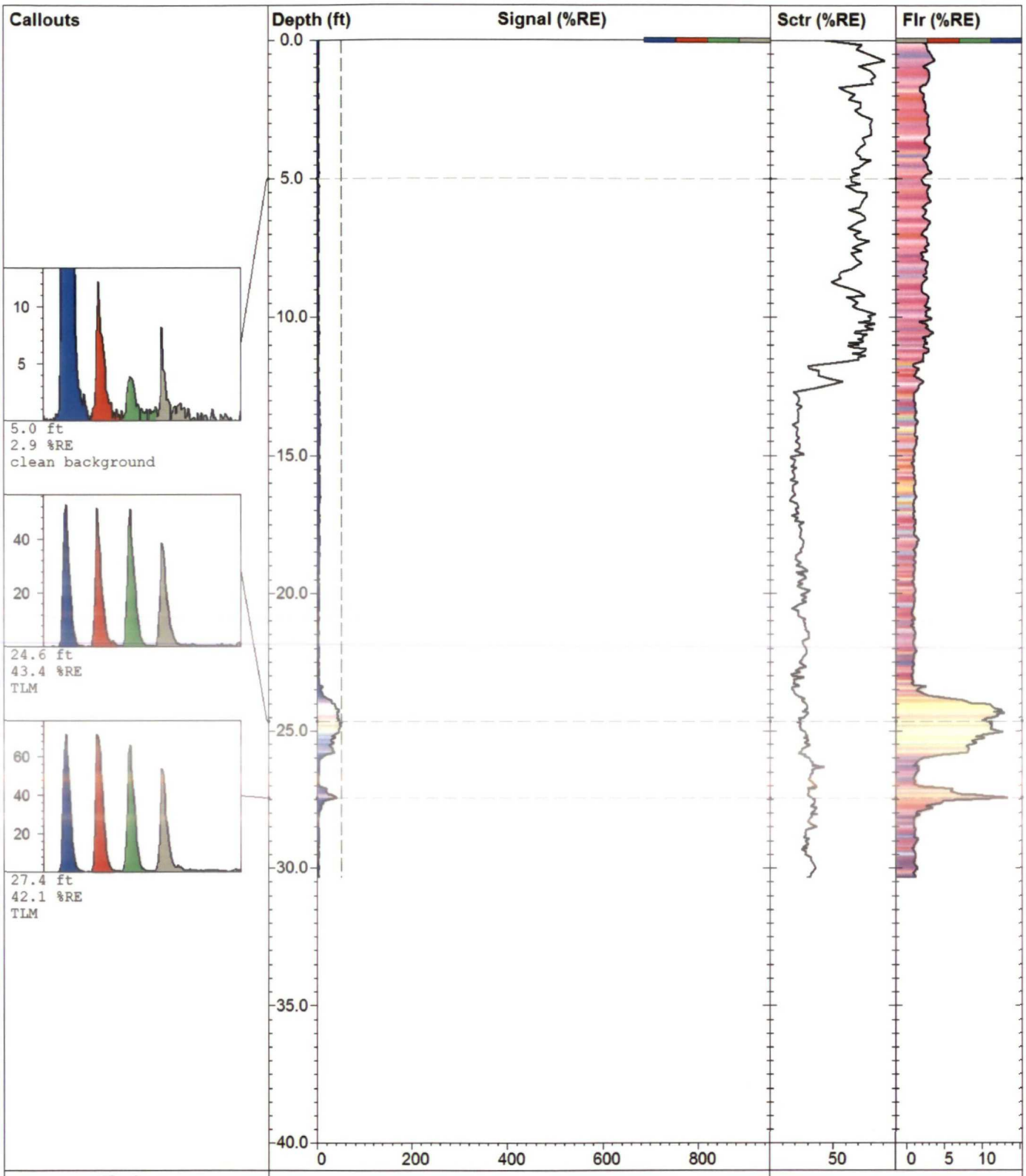
TL16_04

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.328689 N / NAD83**	*Final depth:* **32.05 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.382845 W**	*Max signal:* **50.9 % @ 28.20 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 8:04:36 AM**



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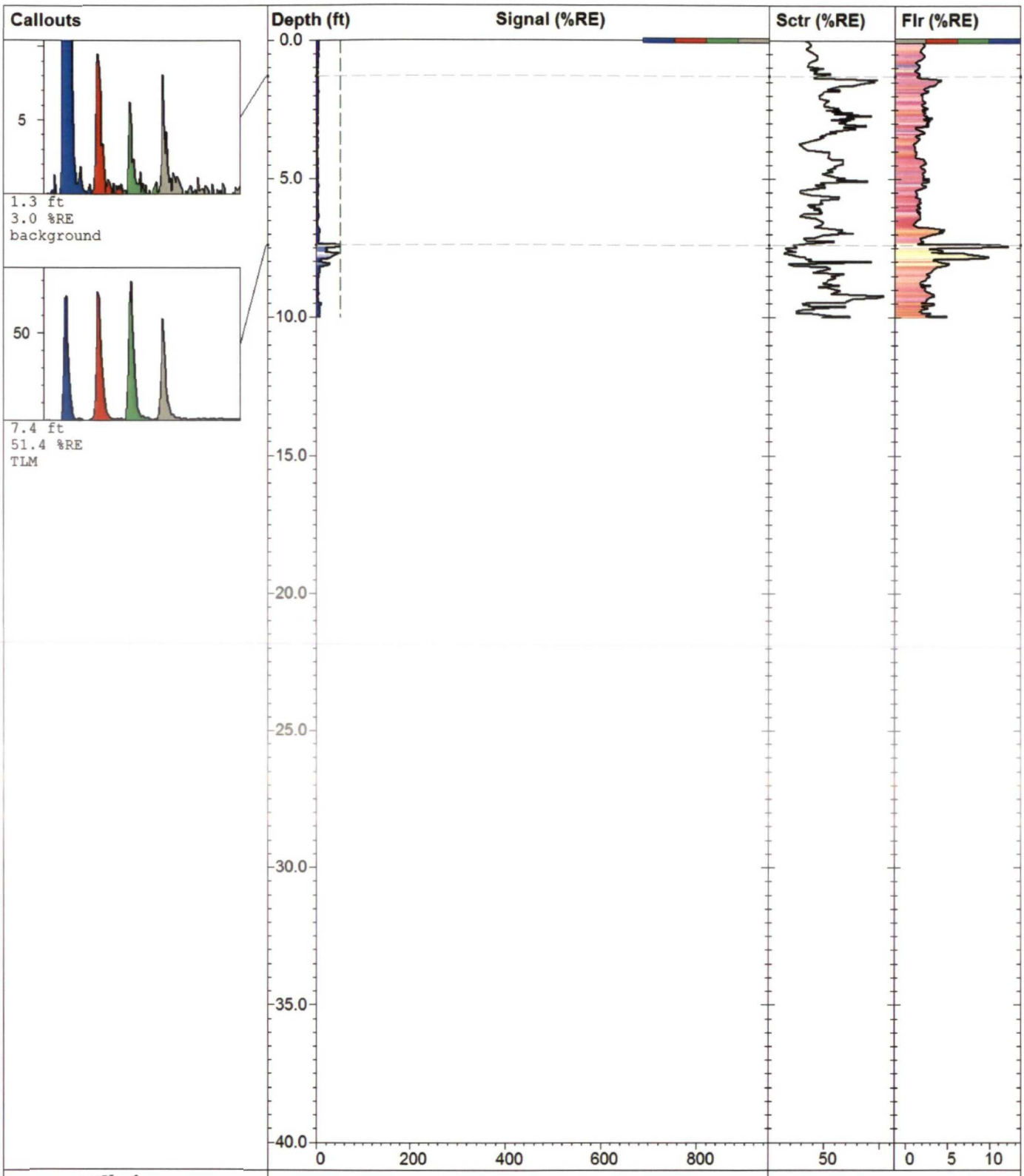
TL16_05		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.338104 N / NAD83**	*Final depth:* **30.35 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.400614 W**	*Max signal:* **54.9 % @ 24.70 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 3:19:33 PM**



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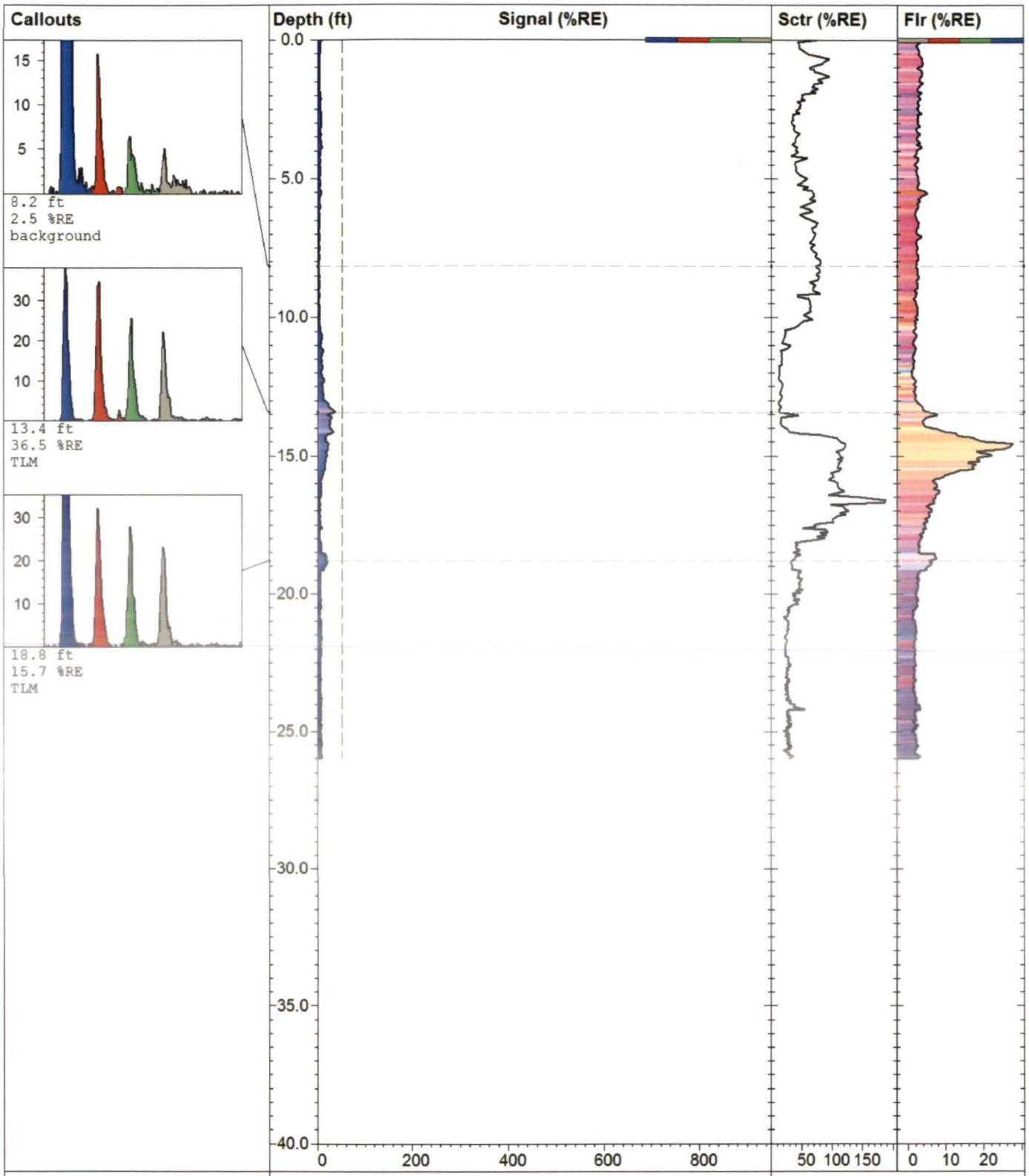
TL16_5_03		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.327360 N / NAD83**	*Final depth:* **10.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.356806 W**	*Max signal:* **51.4 % @ 7.38 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 10:27:30 AM**



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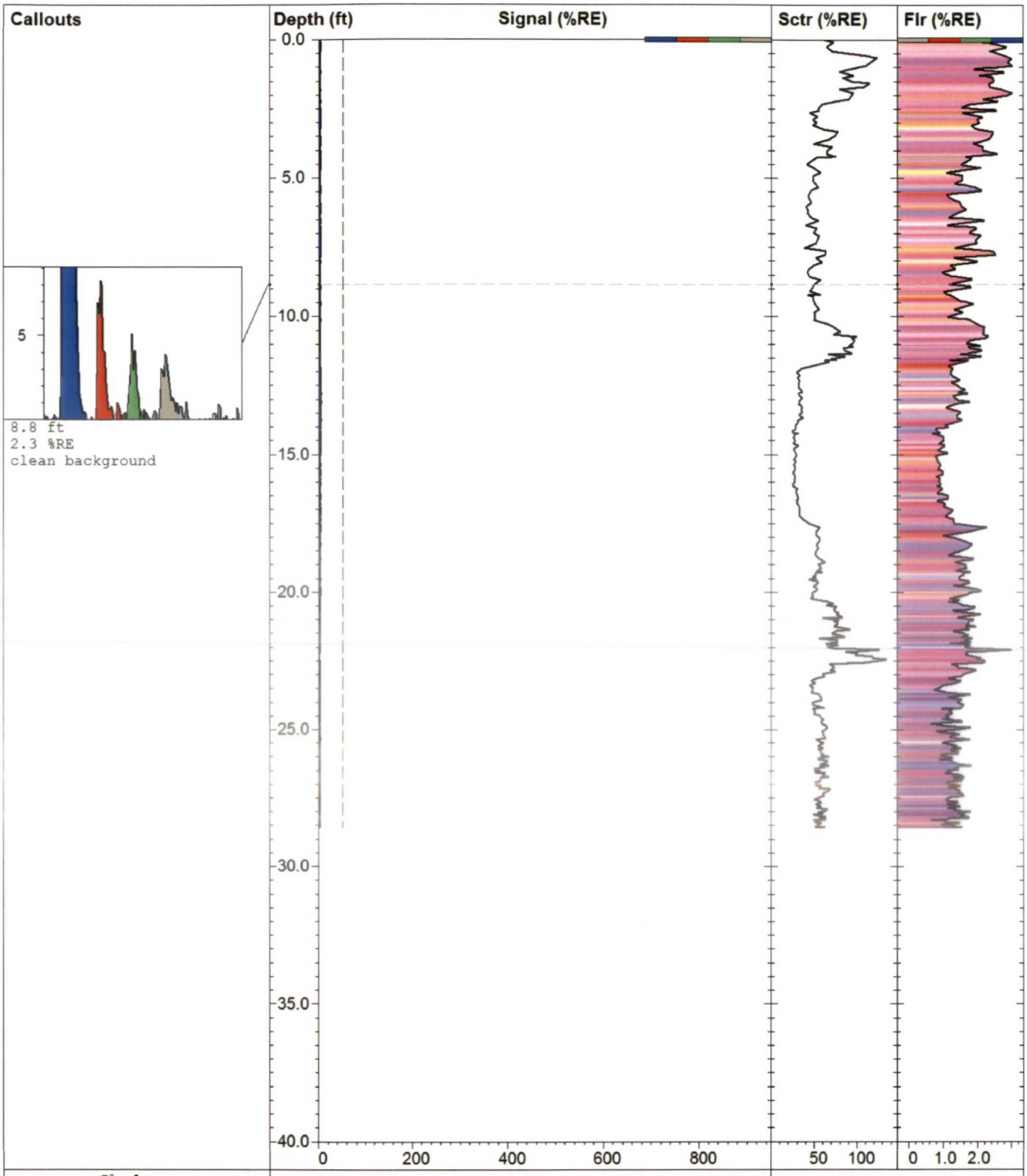
TL16_5_04

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.336251 N / NAD83**	*Final depth:* **26.01 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.376802 W**	*Max signal:* **36.5 % @ 13.42 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 8:04:07 AM**



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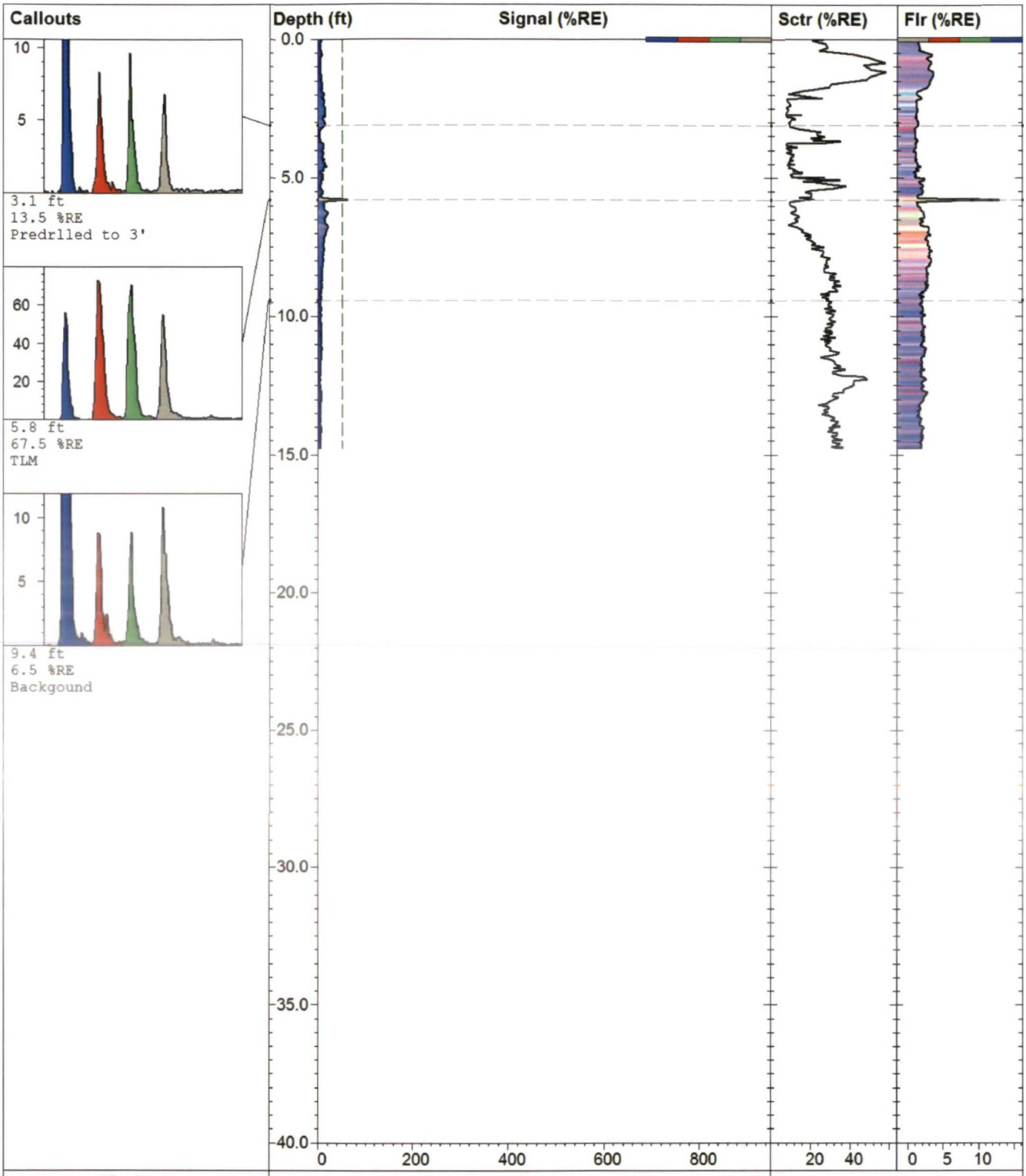
TL16_5_05

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.344616 N / NAD83**	*Final depth:* **28.61 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.395548 W**	*Max signal:* **5.6 % @ 13.09 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 2:35:46 PM**



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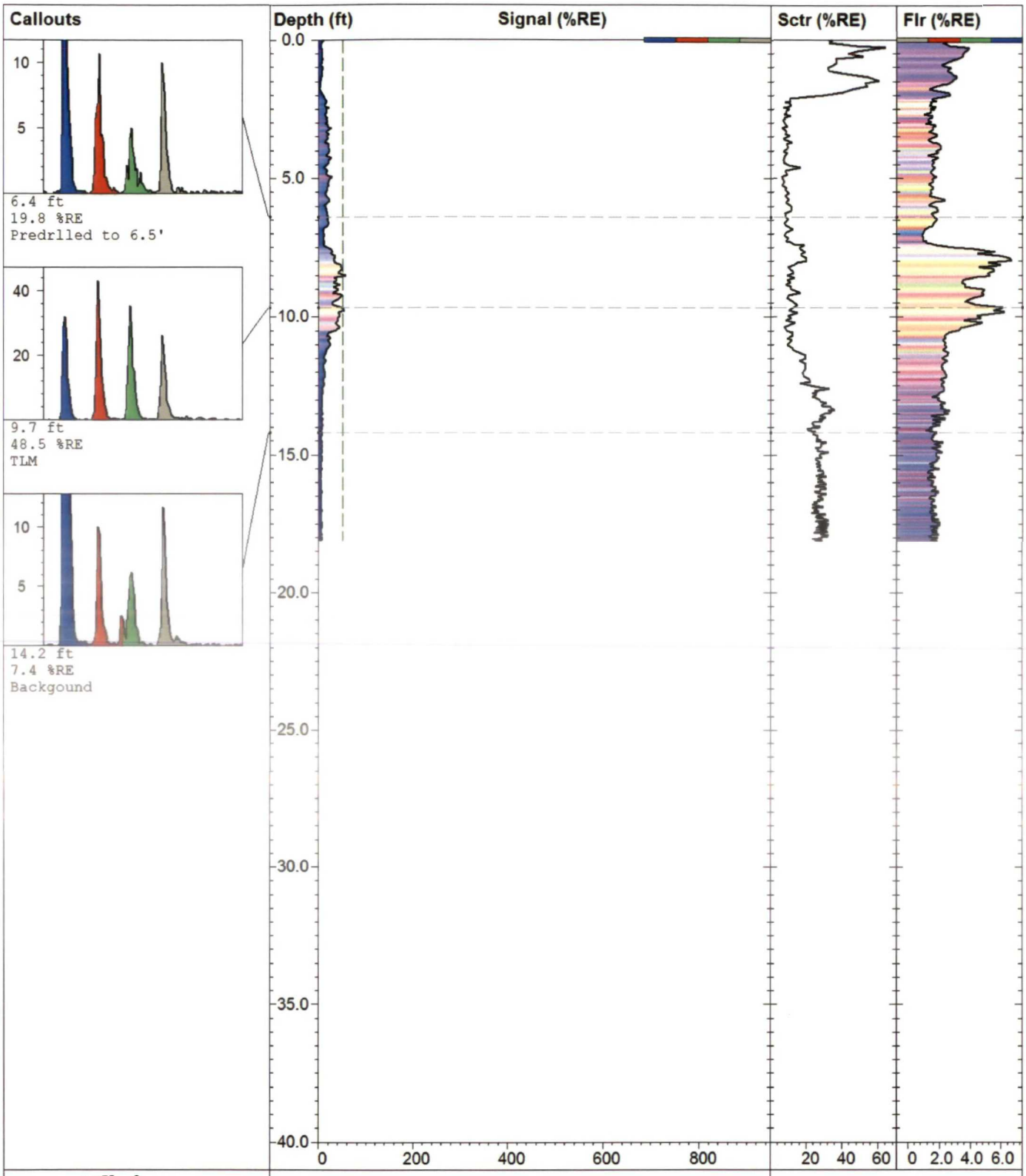
TL16_06		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.346982 N / NAD83**	*Final depth:* **14.79 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.418834 W**	*Max signal:* **67.5 % @ 5.78 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 10:19:12 AM**



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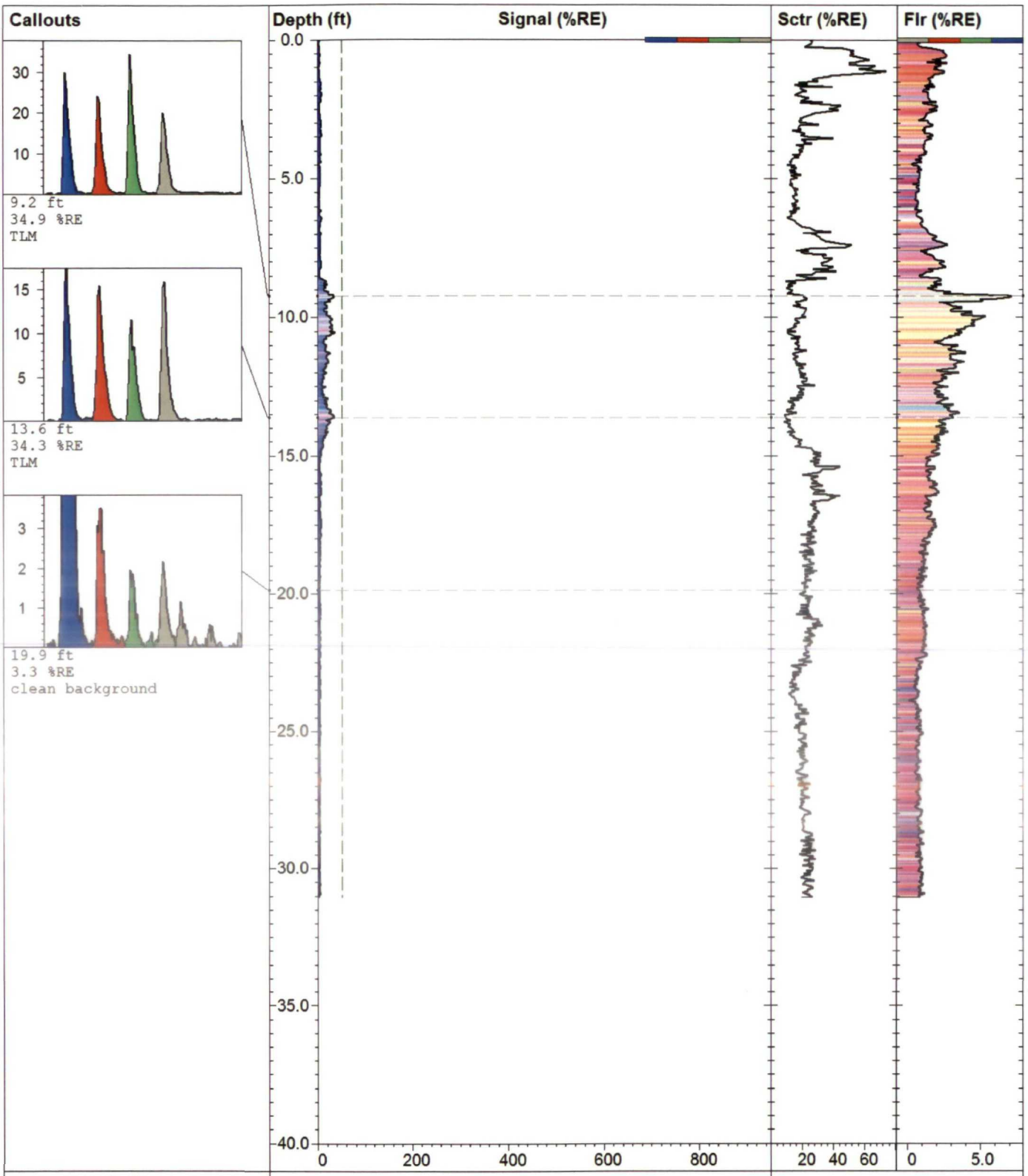
TL16_07		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.356897 N / NAD83**	*Final depth:* **18.15 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.437789 W**	*Max signal:* **56.4 % @ 8.50 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 10:41:36 AM**



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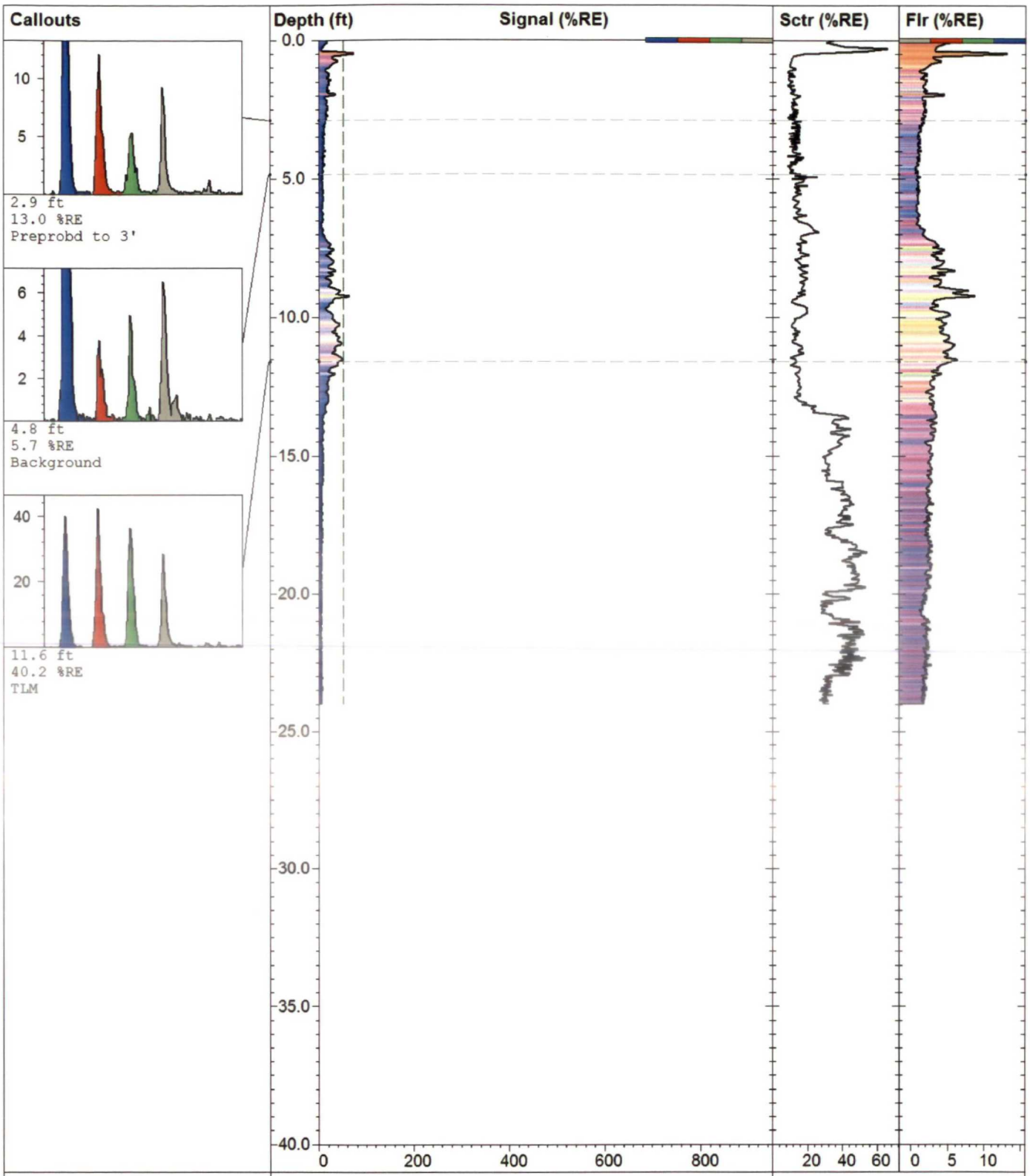
TL16_08		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.364116 N / NAD83**	*Final depth:* **31.07 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.455242 W**	*Max signal:* **37.2 % @ 10.53 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 10:58:39 AM**



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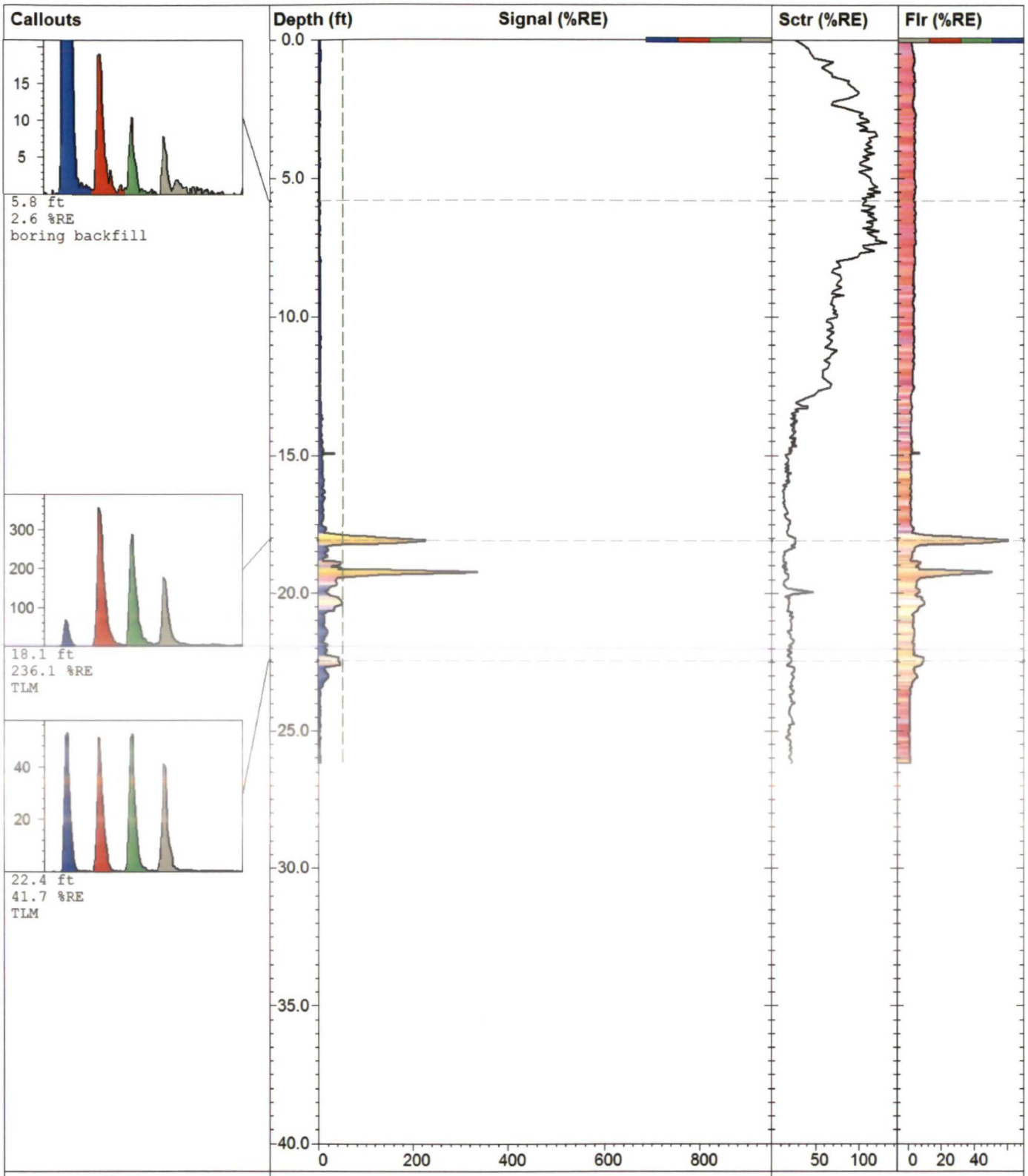
TL16_09

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.372108 N / NAD83**	*Final depth:* **24.01 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.470475 W**	*Max signal:* **80.3 % @ 0.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 8:00:34 AM**



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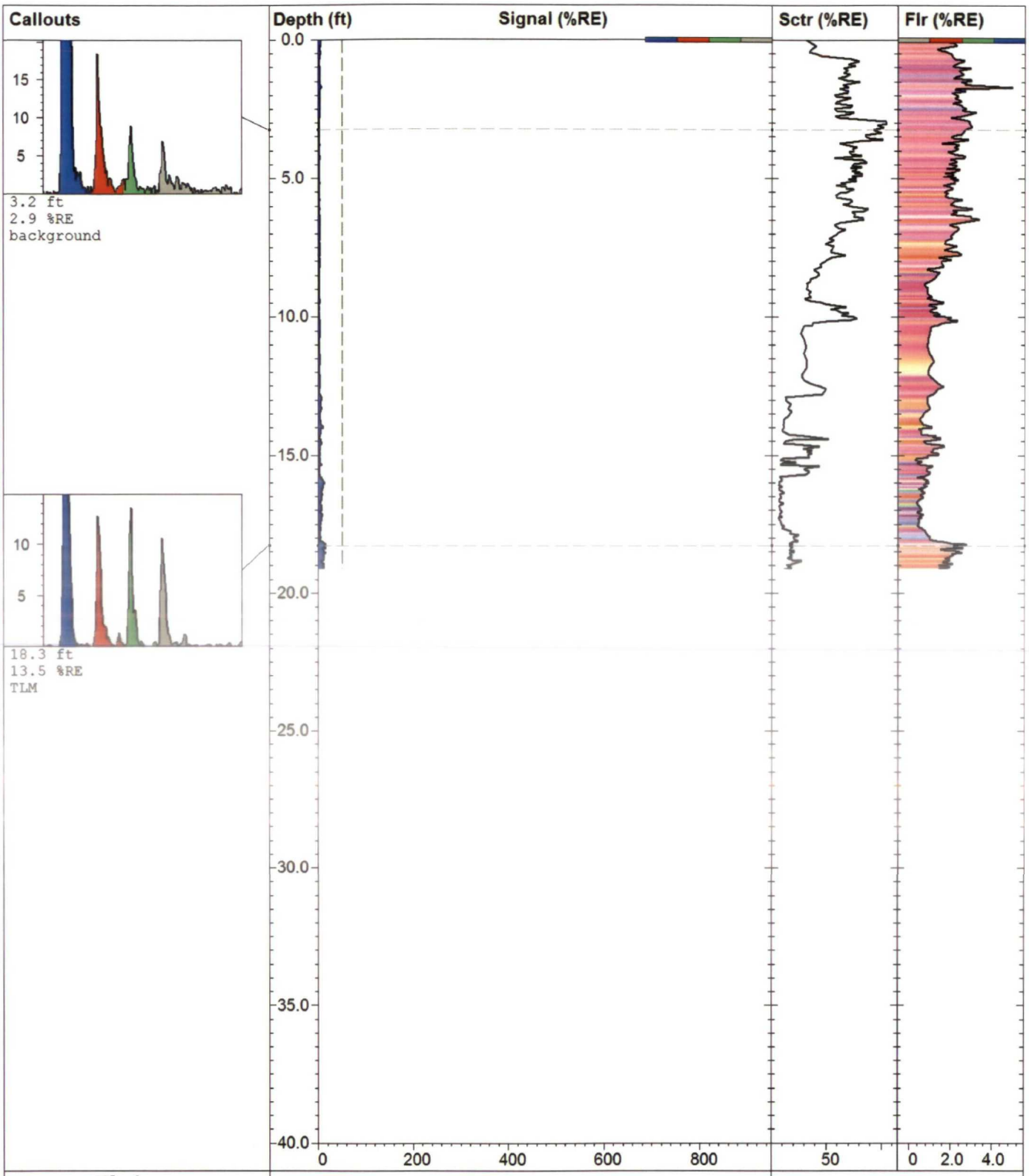
TL17_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.317862 N / NAD83**	*Final depth:* **26.21 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.318644 W**	*Max signal:* **335.9 % @ 19.24 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 9:08:34 AM**



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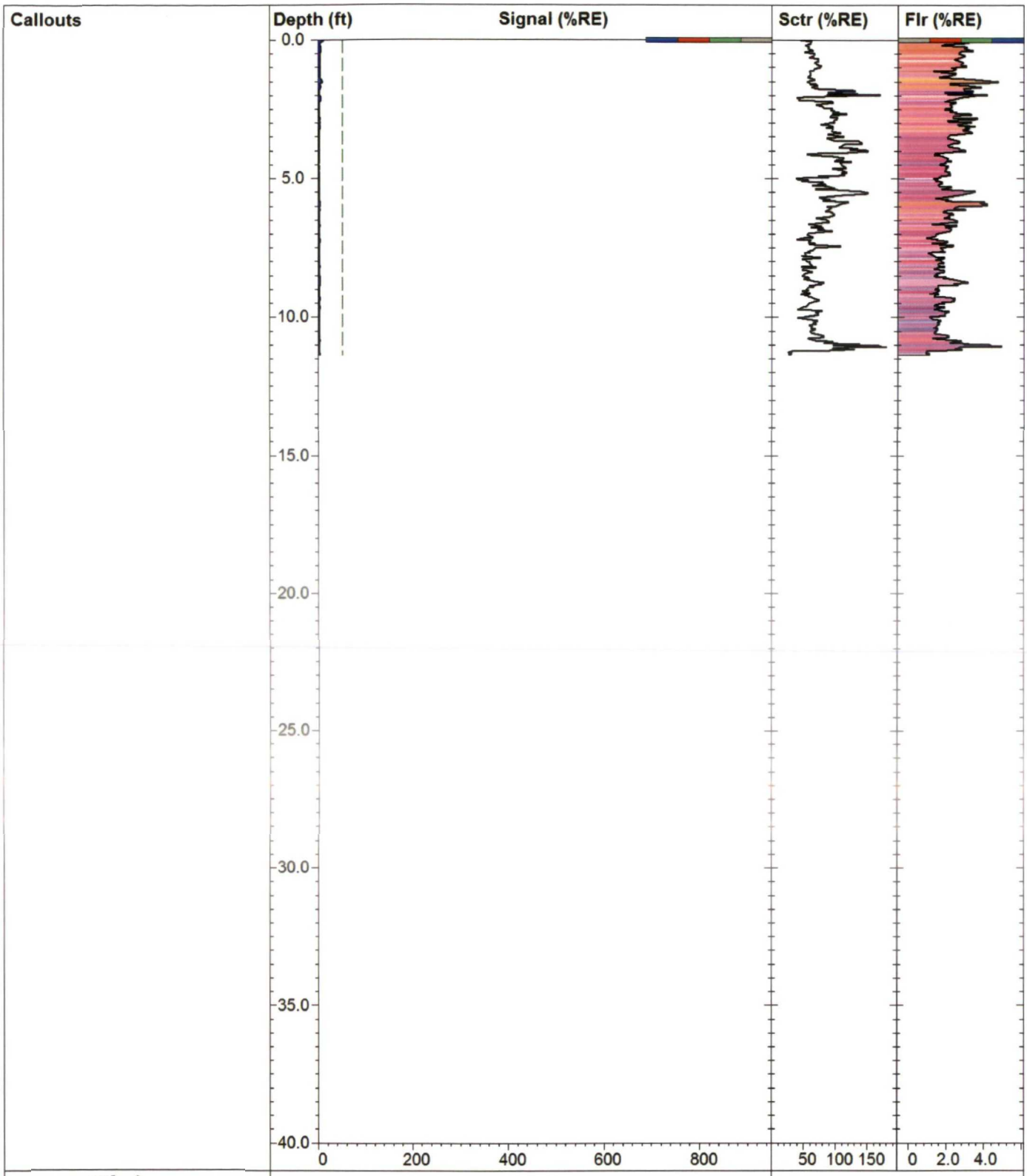
TL17_02

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.325736 N / NAD83**	*Final depth:* **19.13 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.334095 W**	*Max signal:* **16.3 % @ 18.22 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 10:46:36 AM**



TL17_03

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.334549 N / NAD83**	*Final depth:* **11.39 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.352561 W**	*Max signal:* **12.2 % @ 0.01 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 9:44:45 AM**

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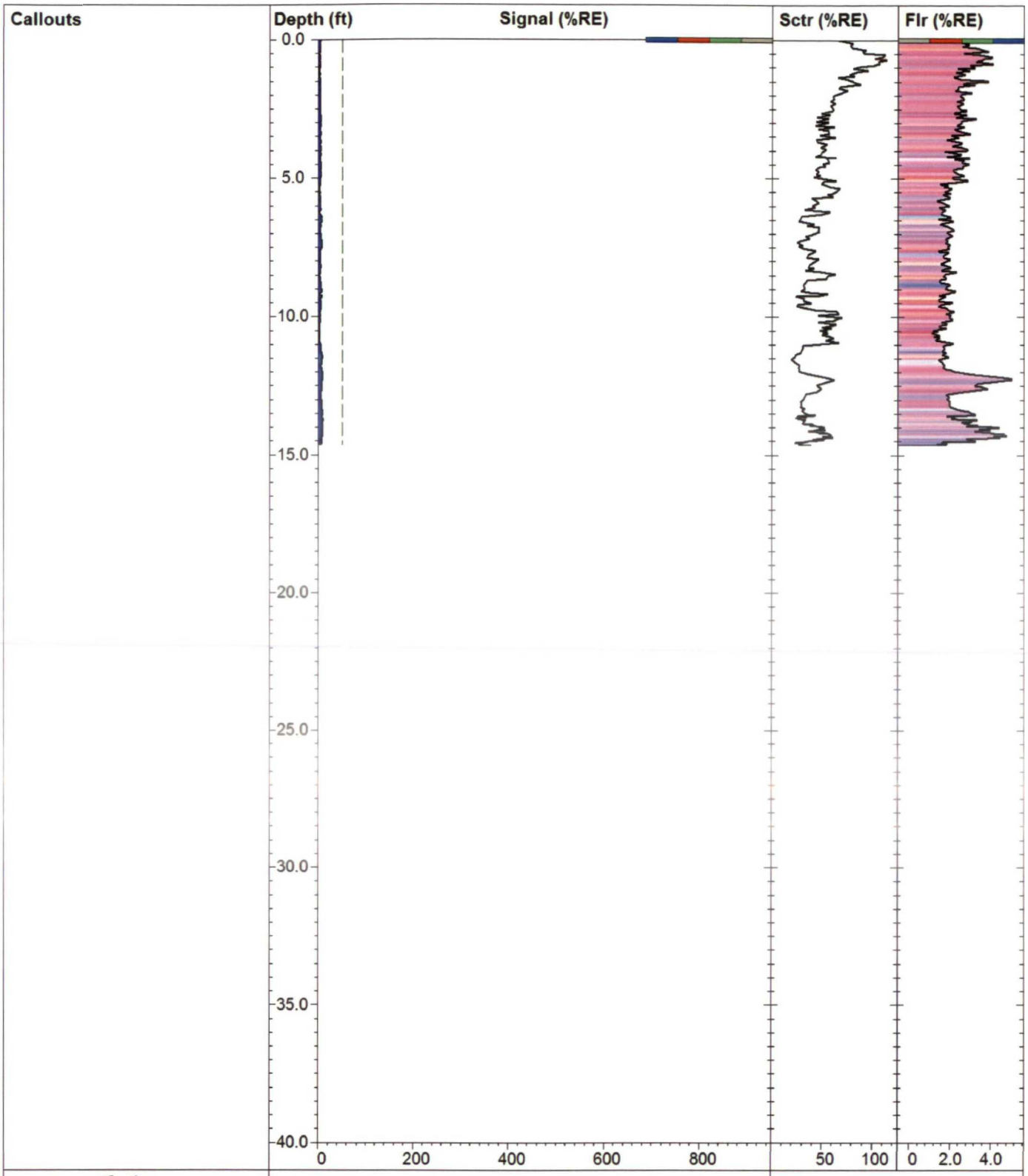

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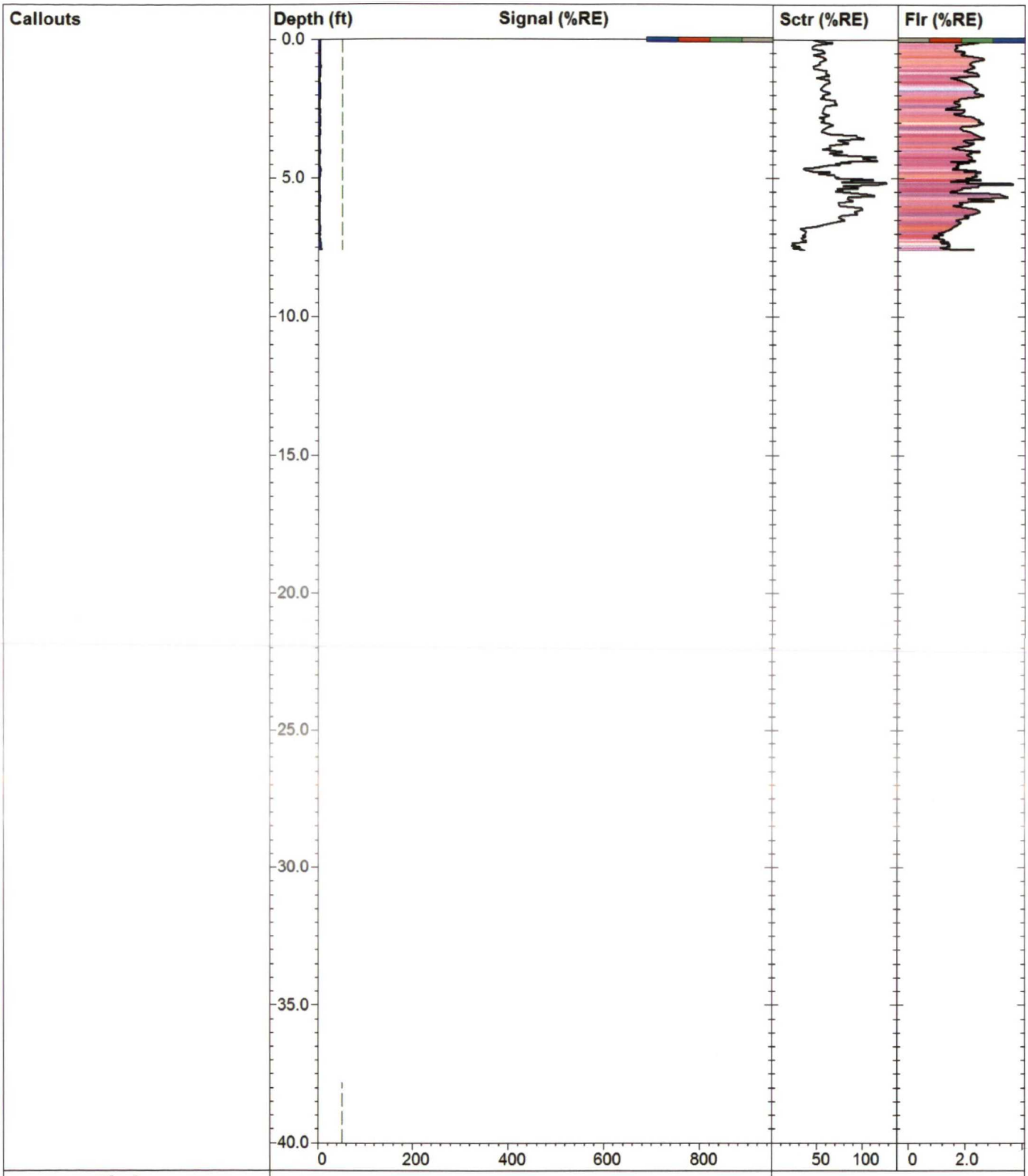
TL17_04

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.344790 N / NAD83**	*Final depth:* **14.66 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.370275 W**	*Max signal:* **11.3 % @ 13.73 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 9:07:24 AM**



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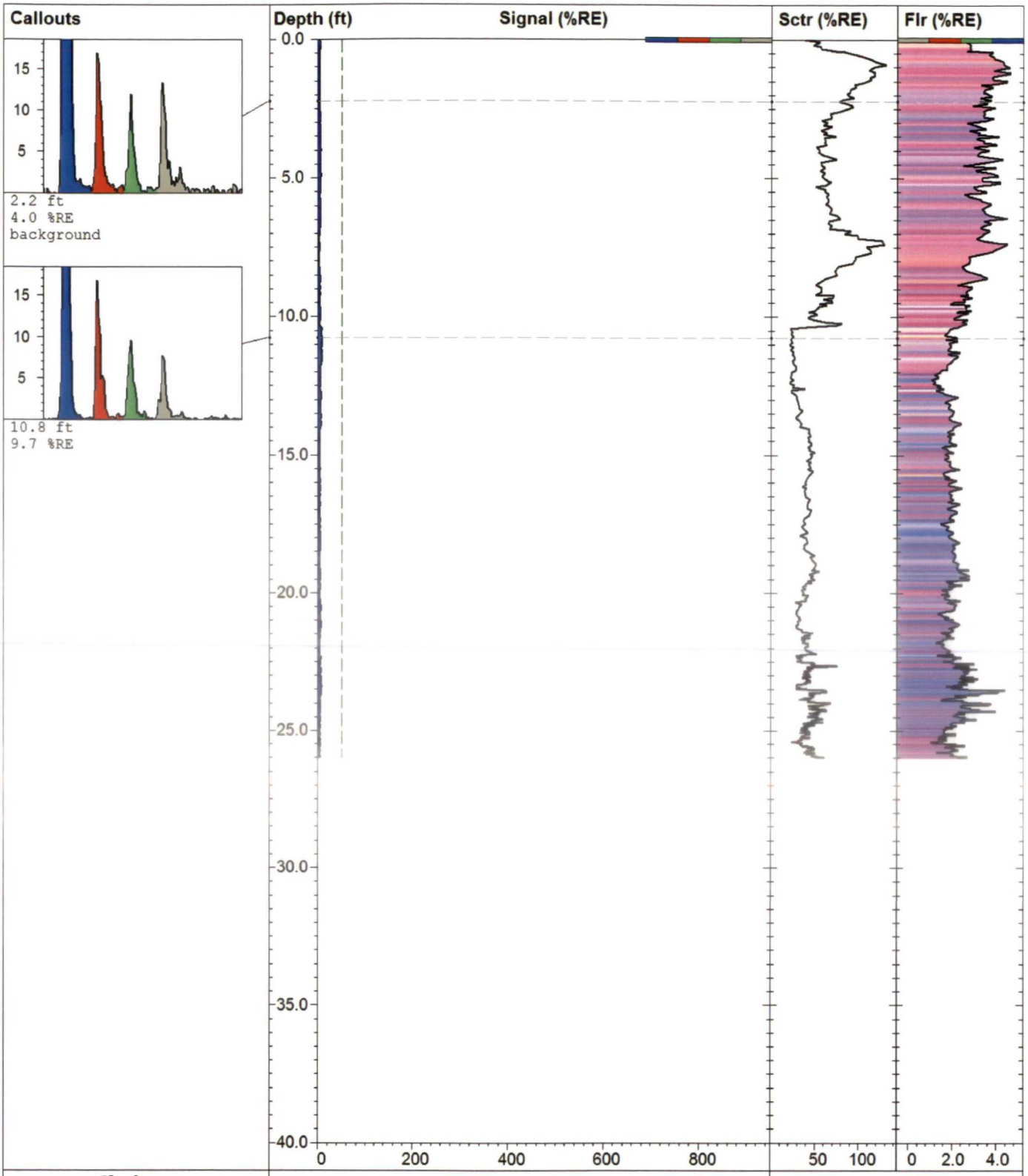
TL17_04R

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.344416 N / NAD83**	*Final depth:* **7.60 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.369883 W**	*Max signal:* **7.4 % @ 7.58 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 9:26:52 AM**



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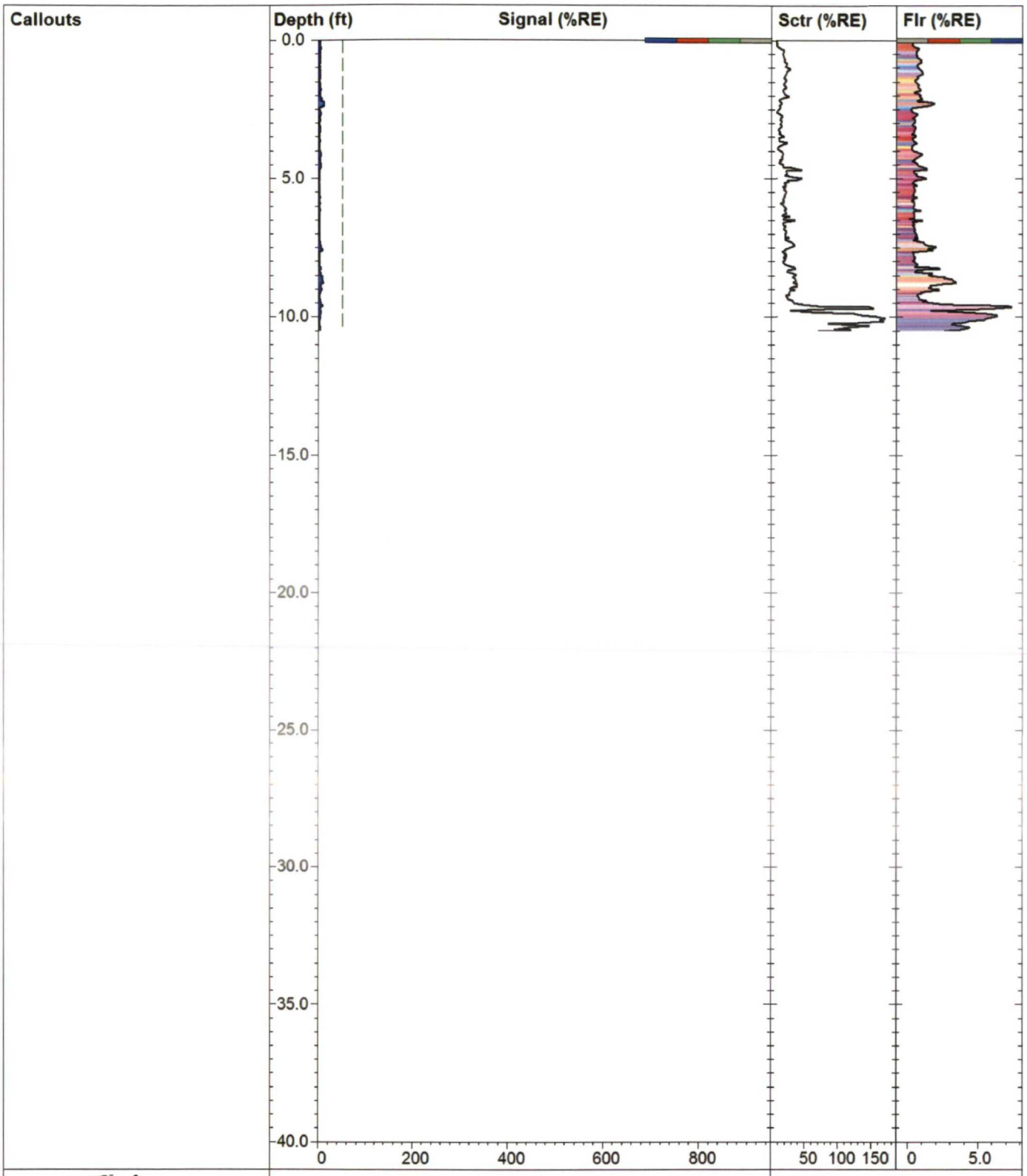
TL17_05

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.352210 N / NAD83**	*Final depth:* **26.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.389378 W**	*Max signal:* **9.7 % @ 10.76 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 8:36:16 AM**



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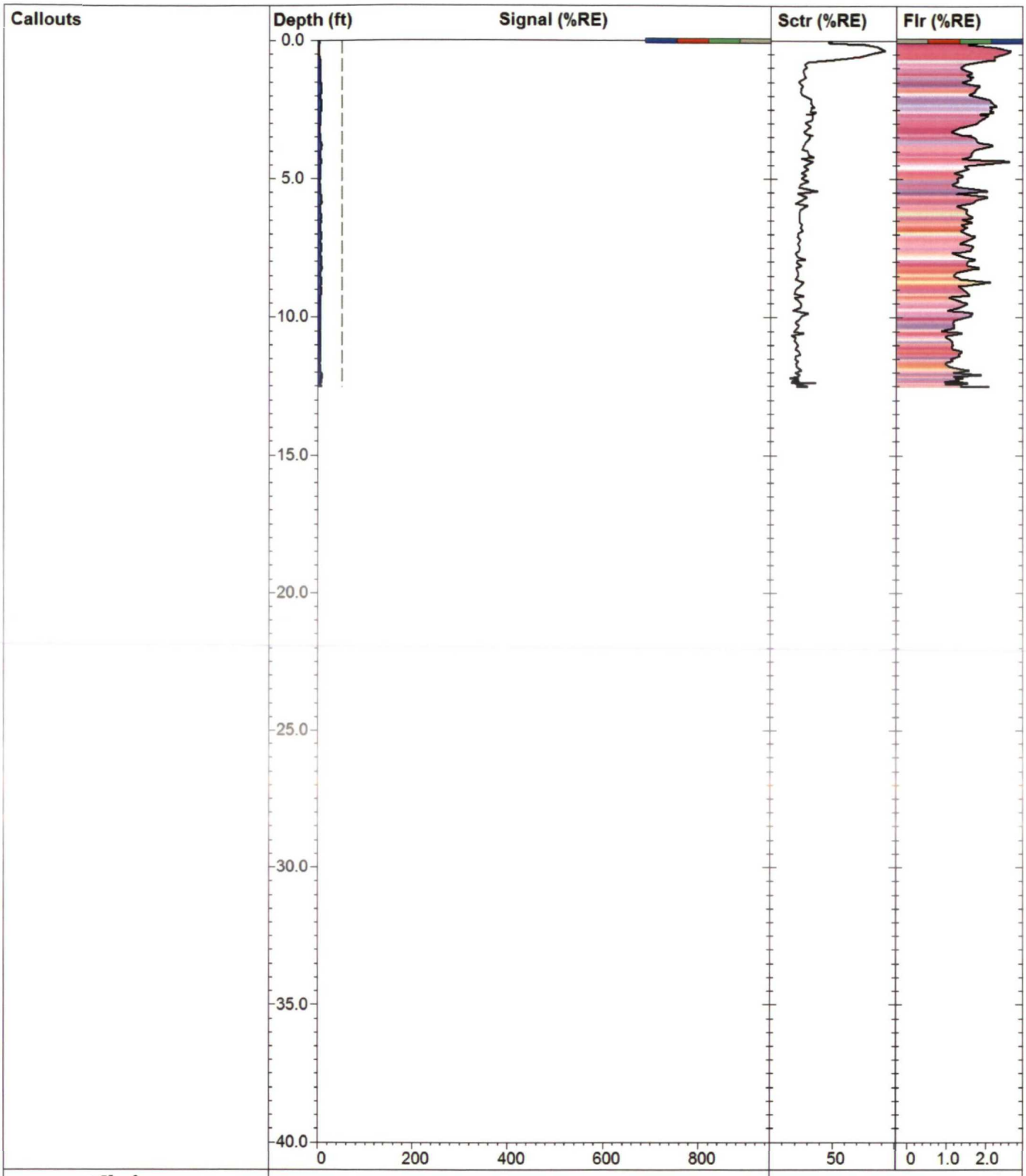
TL17_05_1		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.324787 N / NAD83**	*Final depth:* **10.52 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.305944 W**	*Max signal:* **12.8 % @ 2.28 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 3:55:18 PM**



TL17_5_03		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.341513 N / NAD83**	*Final depth:* **12.56 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.347152 W**	*Max signal:* **9.6 % @ 12.19 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 4:24:18 PM**

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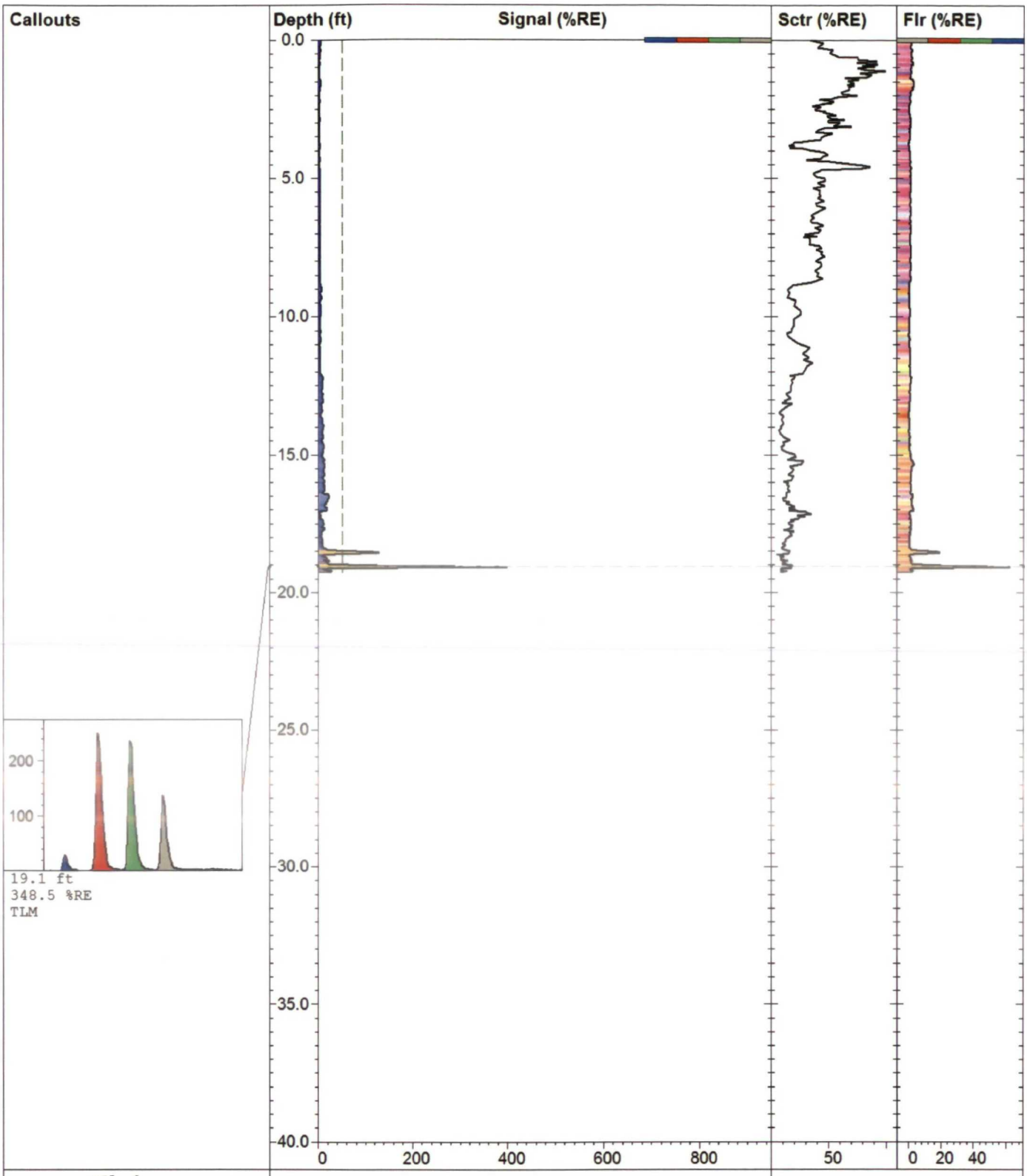

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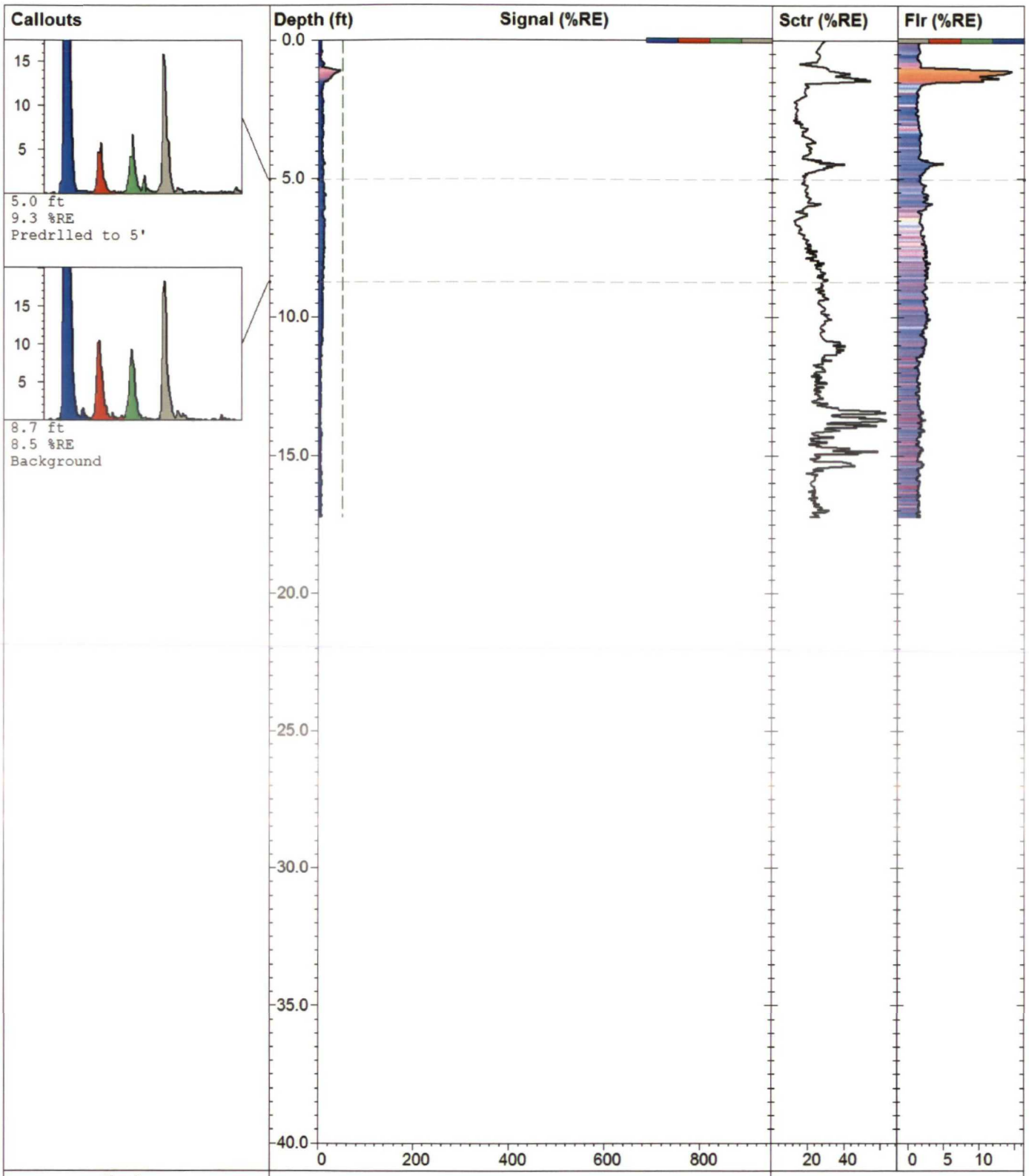
TL17_05_5_1_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.329834 N / NAD83**	*Final depth:* **19.29 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.320552 W**	*Max signal:* **414.6 % @ 19.07 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/5/2006 3:19:09 PM**



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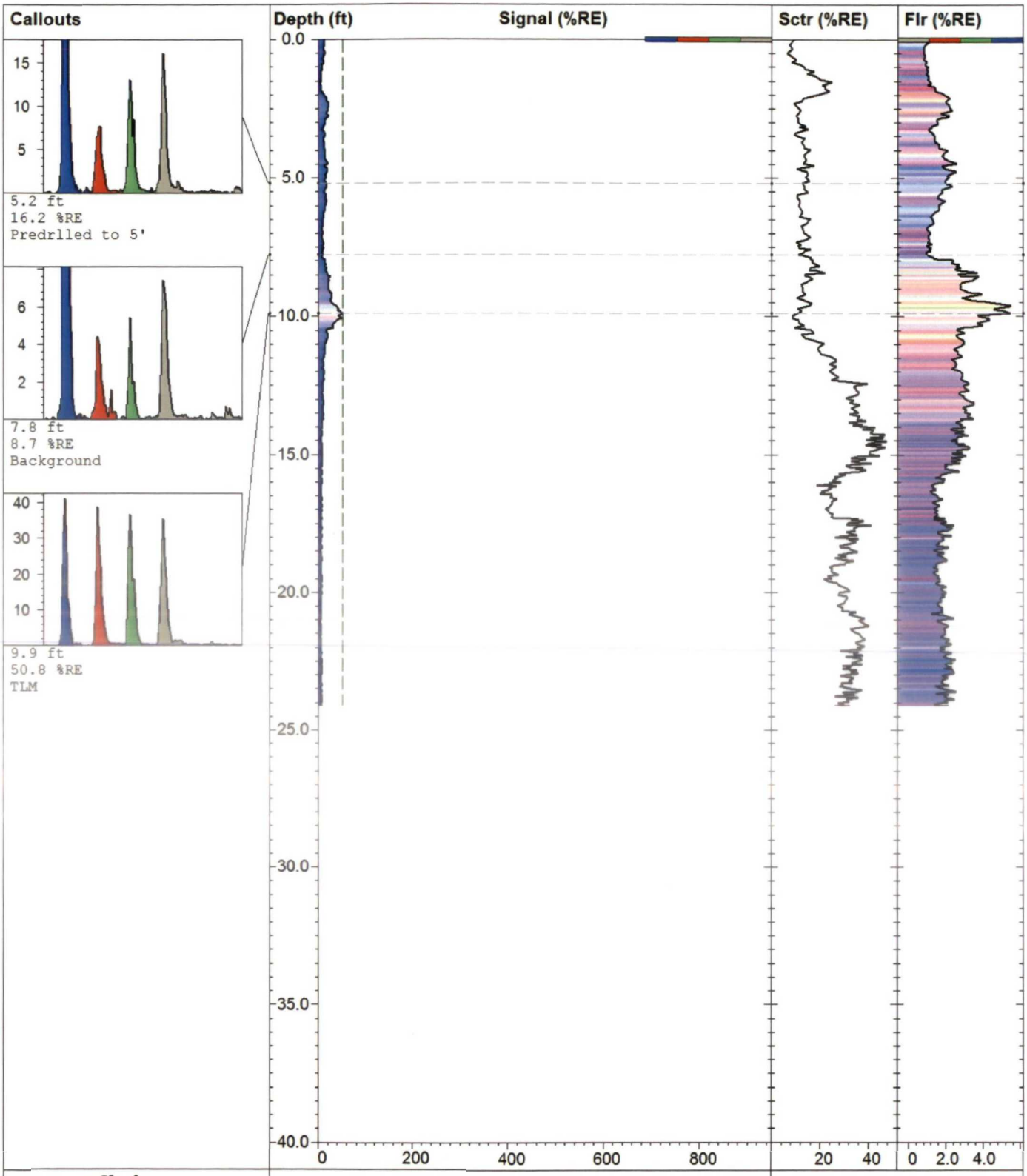
TL17_06

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.358761 N / NAD83**	*Final depth:* **17.26 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.410303 W**	*Max signal:* **47.3 % @ 1.11 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 9:51:16 AM**



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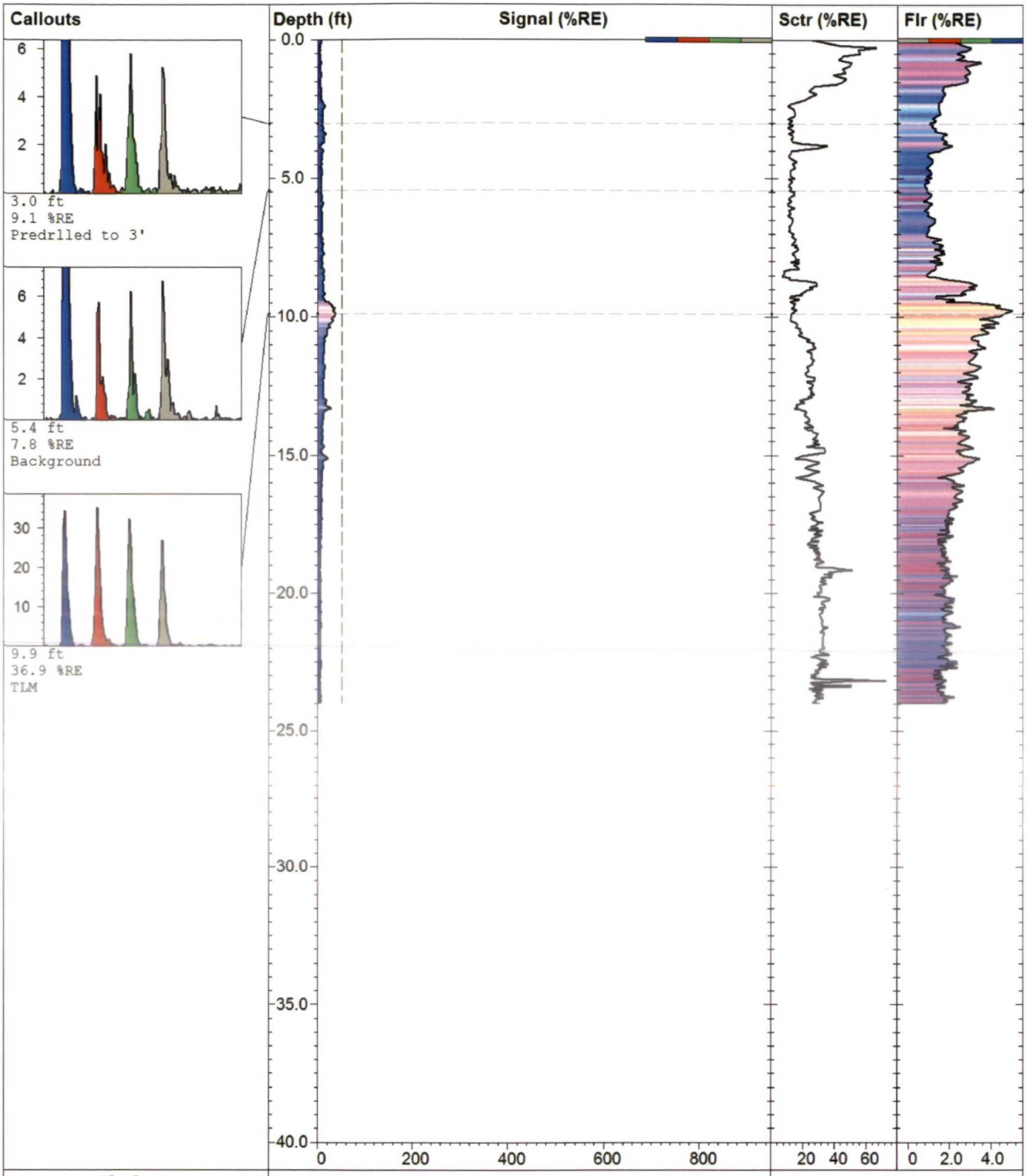
TL17_07

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.366840 N / NAD83**	*Final depth:* **24.13 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.432004 W**	*Max signal:* **50.8 % @ 9.89 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 9:21:56 AM**



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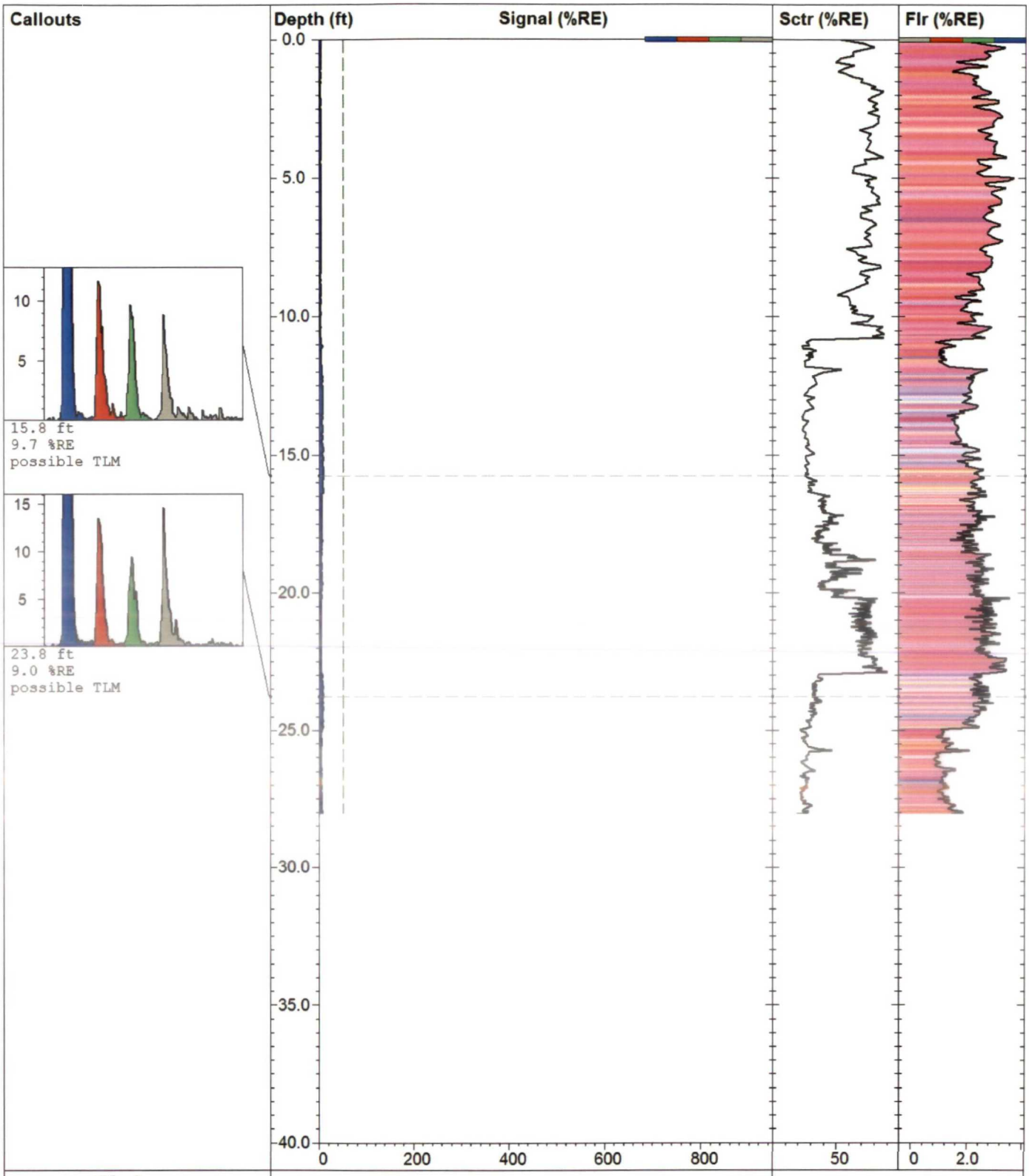
TL17_08

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.374143 N / NAD83**	*Final depth:* **24.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.449779 W**	*Max signal:* **36.9 % @ 9.88 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 8:34:01 AM**



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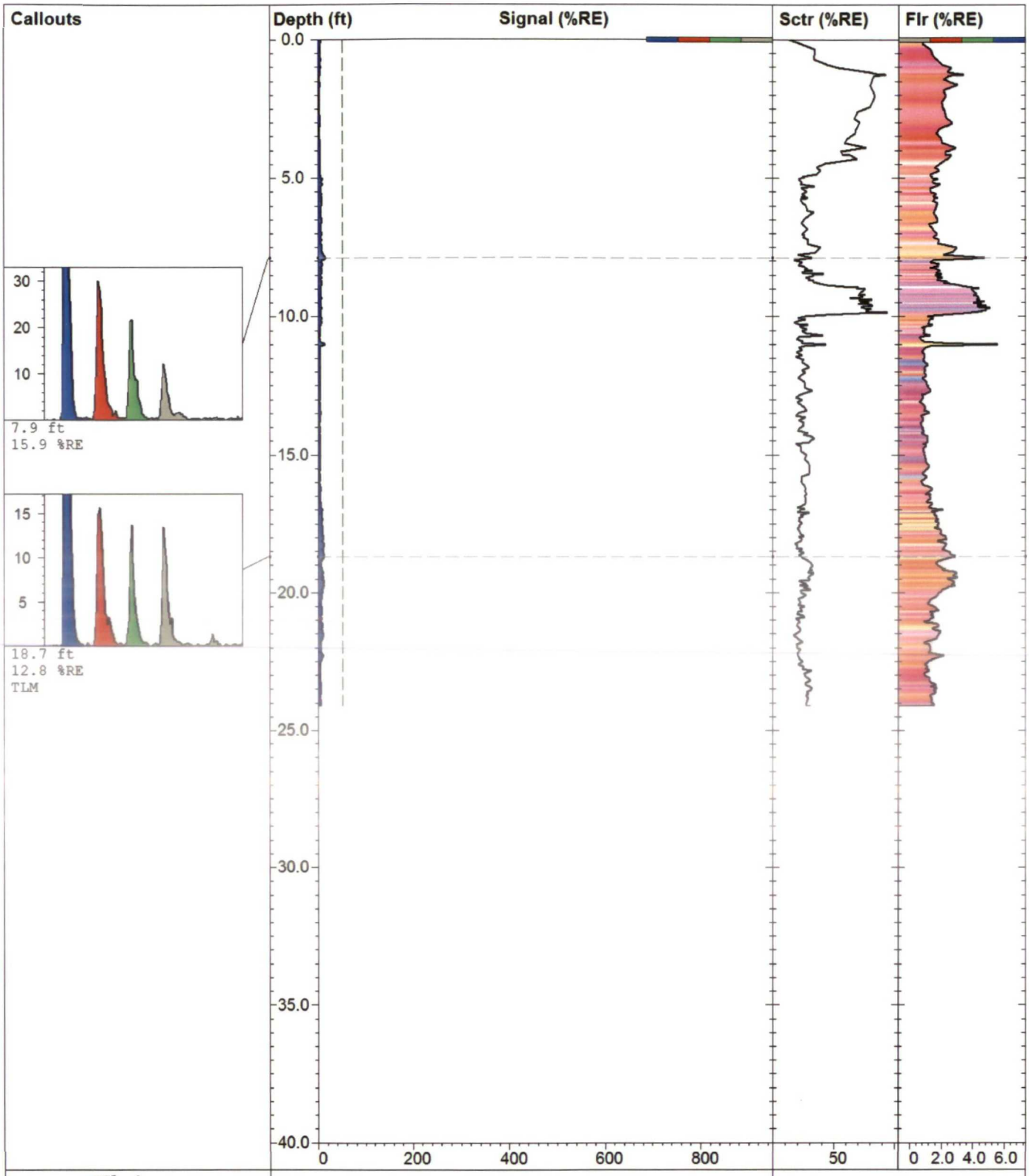
TL18_0_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.328090 N / NAD83**	*Final depth:* **28.06 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.295263 W**	*Max signal:* **9.9 % @ 16.34 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 10:43:18 AM**



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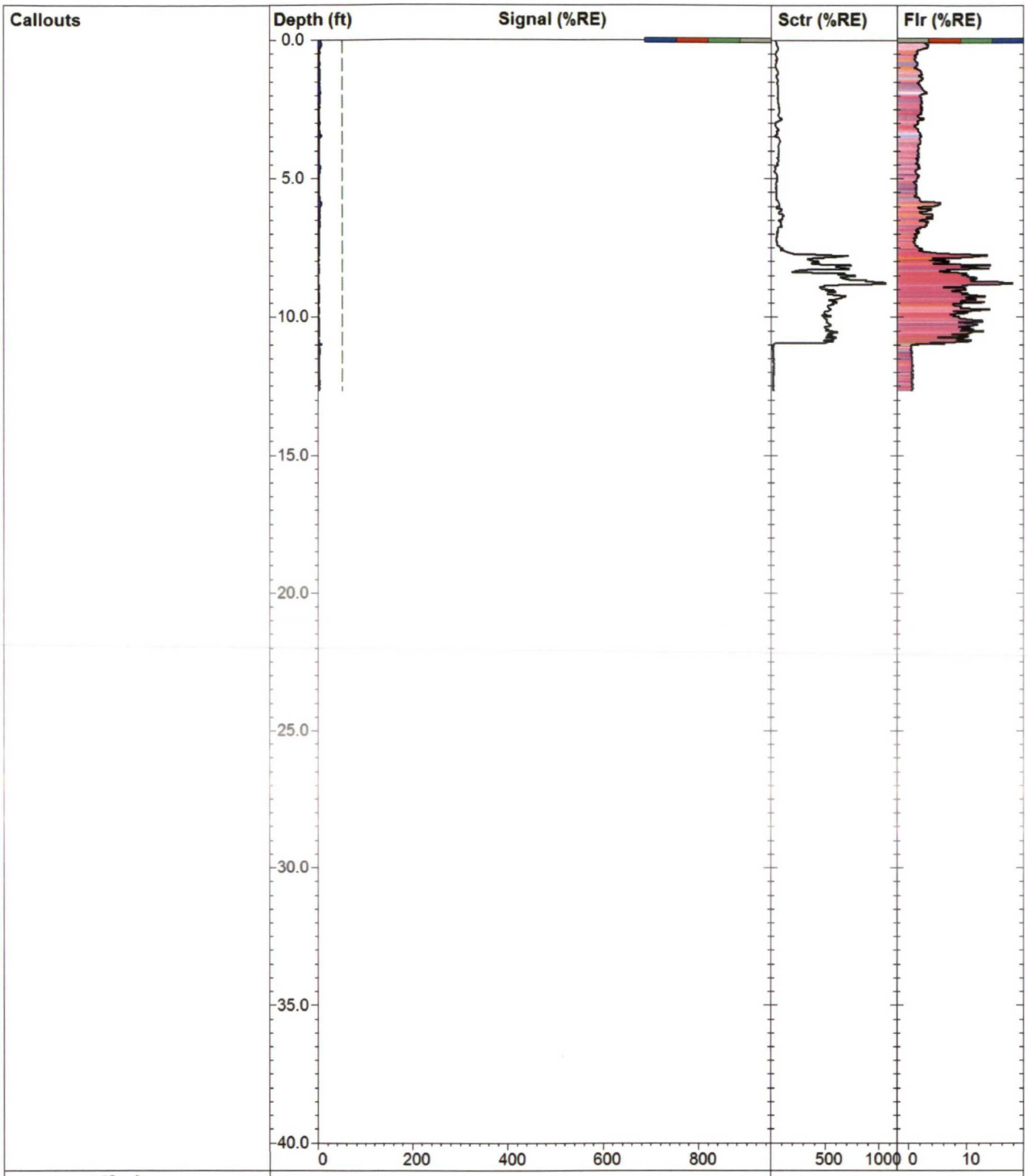
TL18_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.330930 N / NAD83**	*Final depth:* **24.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.303579 W**	*Max signal:* **15.9 % @ 7.88 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 9:49:19 AM**



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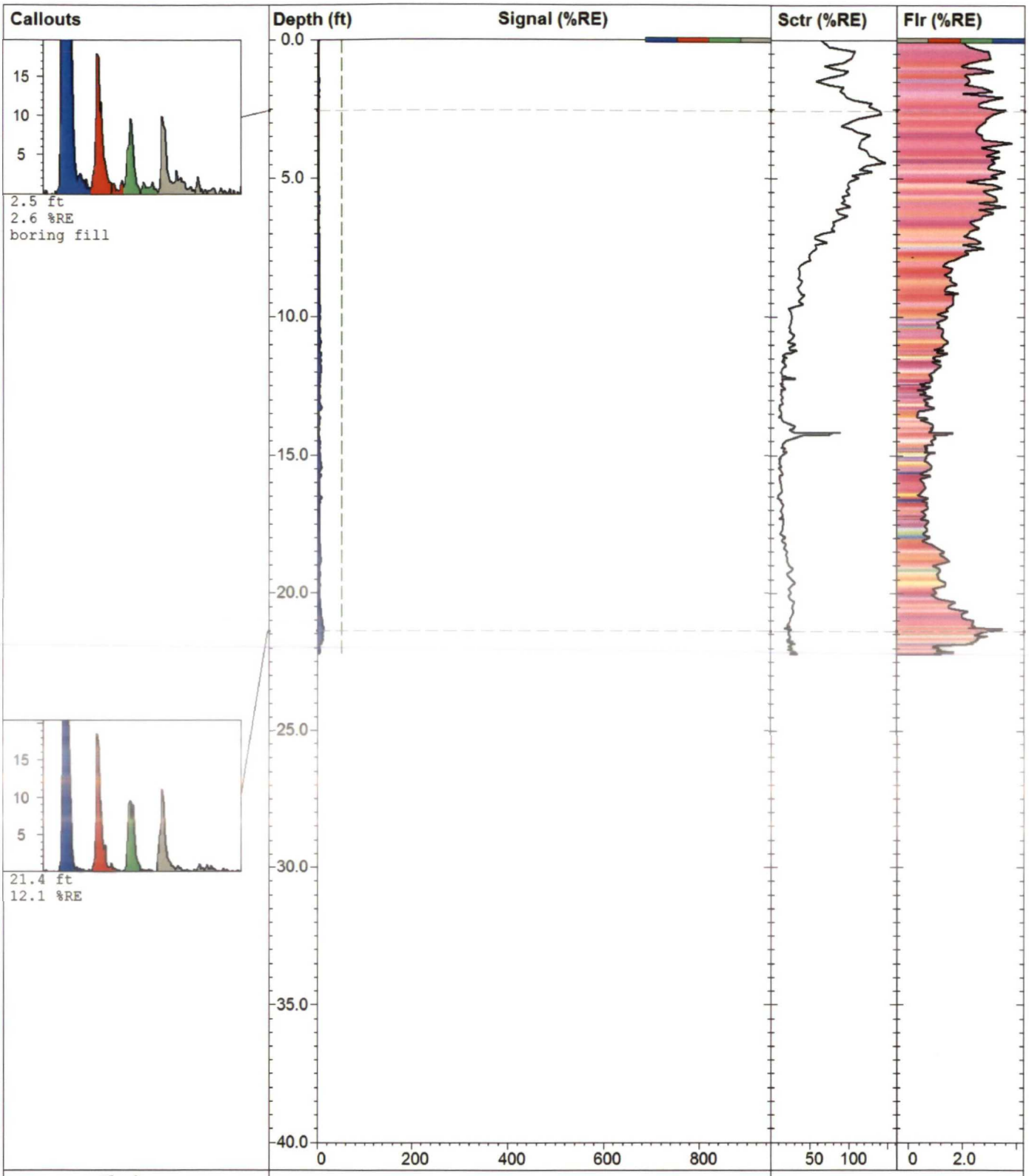
TL18_1_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.336609 N / NAD83**	*Final depth:* **12.69 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.314443 W**	*Max signal:* **7.7 % @ 5.89 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 1:29:07 PM**



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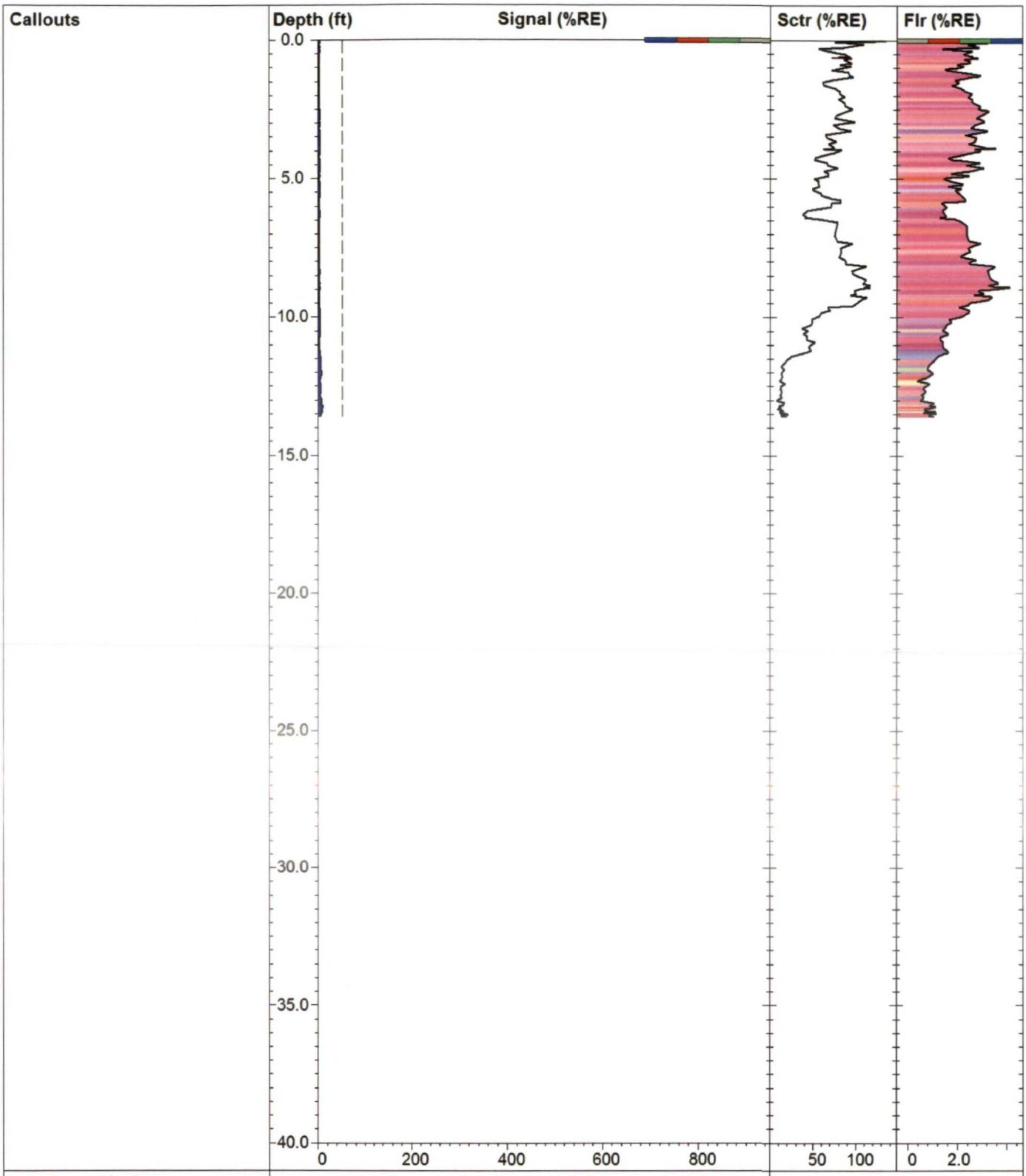
TL18_02

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.340180 N / NAD83**	*Final depth:* **22.26 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.322377 W**	*Max signal:* **13.6 % @ 21.31 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 3:19:34 PM**



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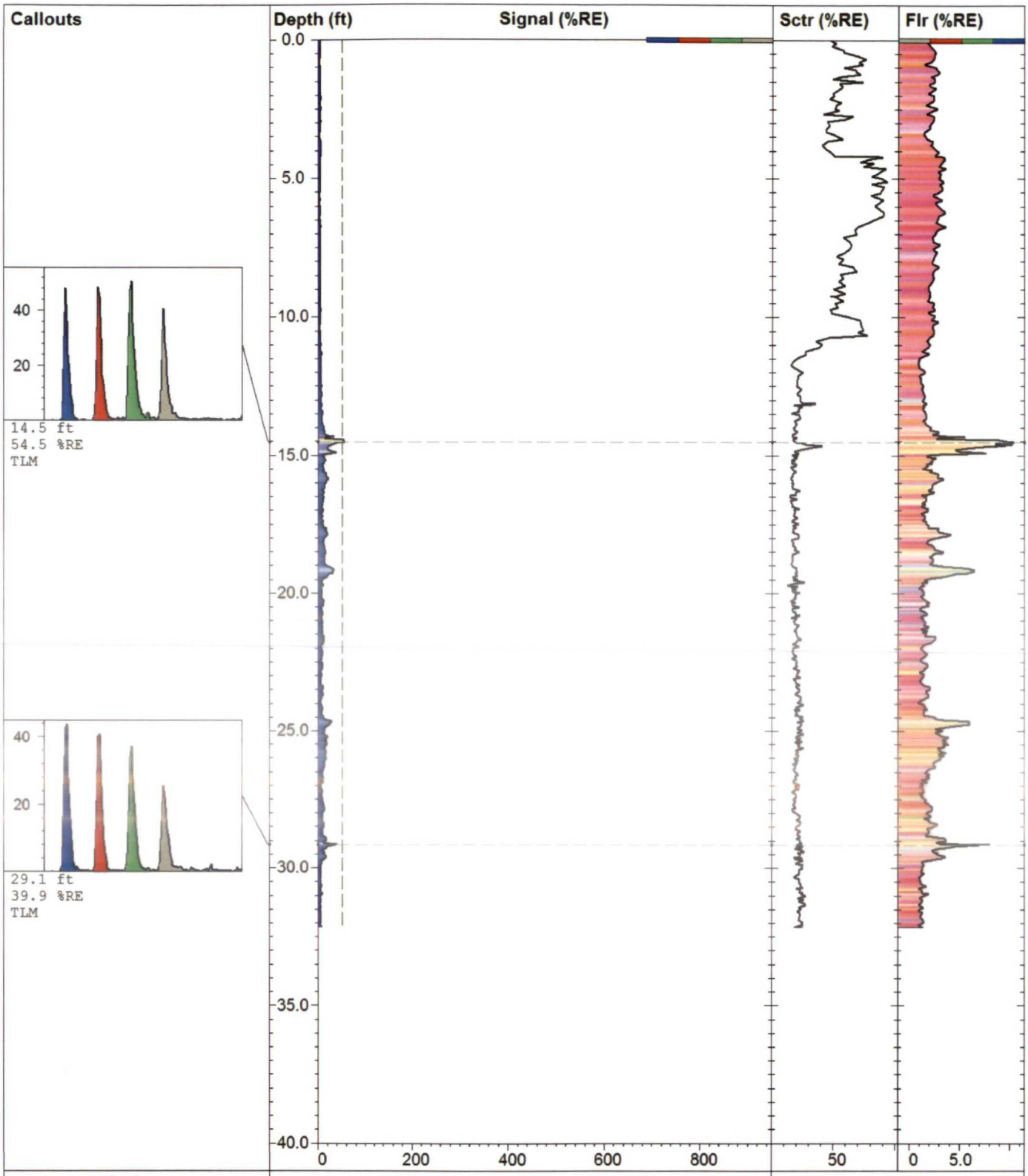
TL18_03		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.347434 N / NAD83**	*Final depth:* **13.62 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.341659 W**	*Max signal:* **10.7 % @ 13.23 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 3:45:23 PM**



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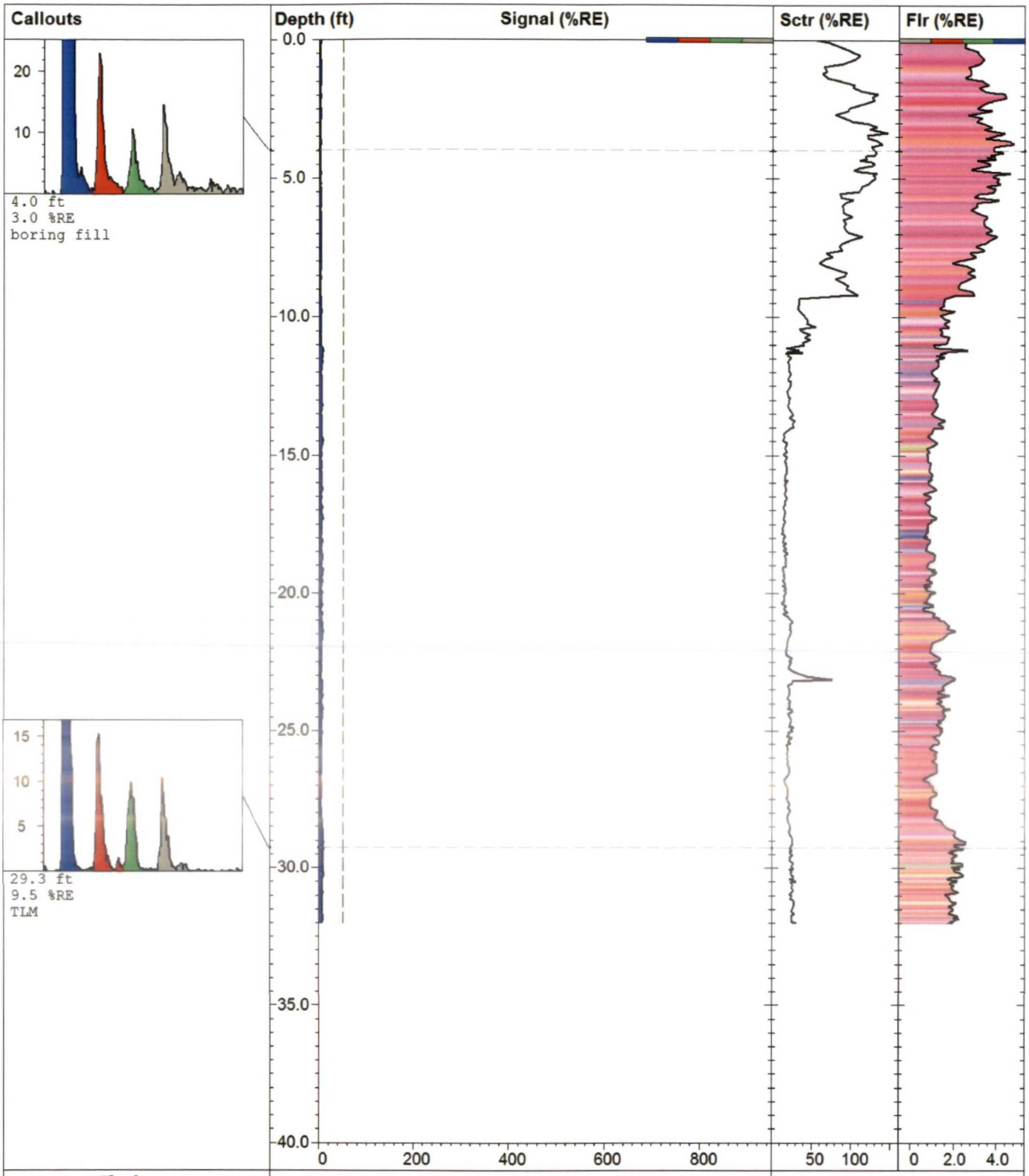
TL18_5_0_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.333399 N / NAD83**	*Final depth:* **32.15 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.289434 W**	*Max signal:* **56.3 % @ 14.45 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 11:21:32 AM**



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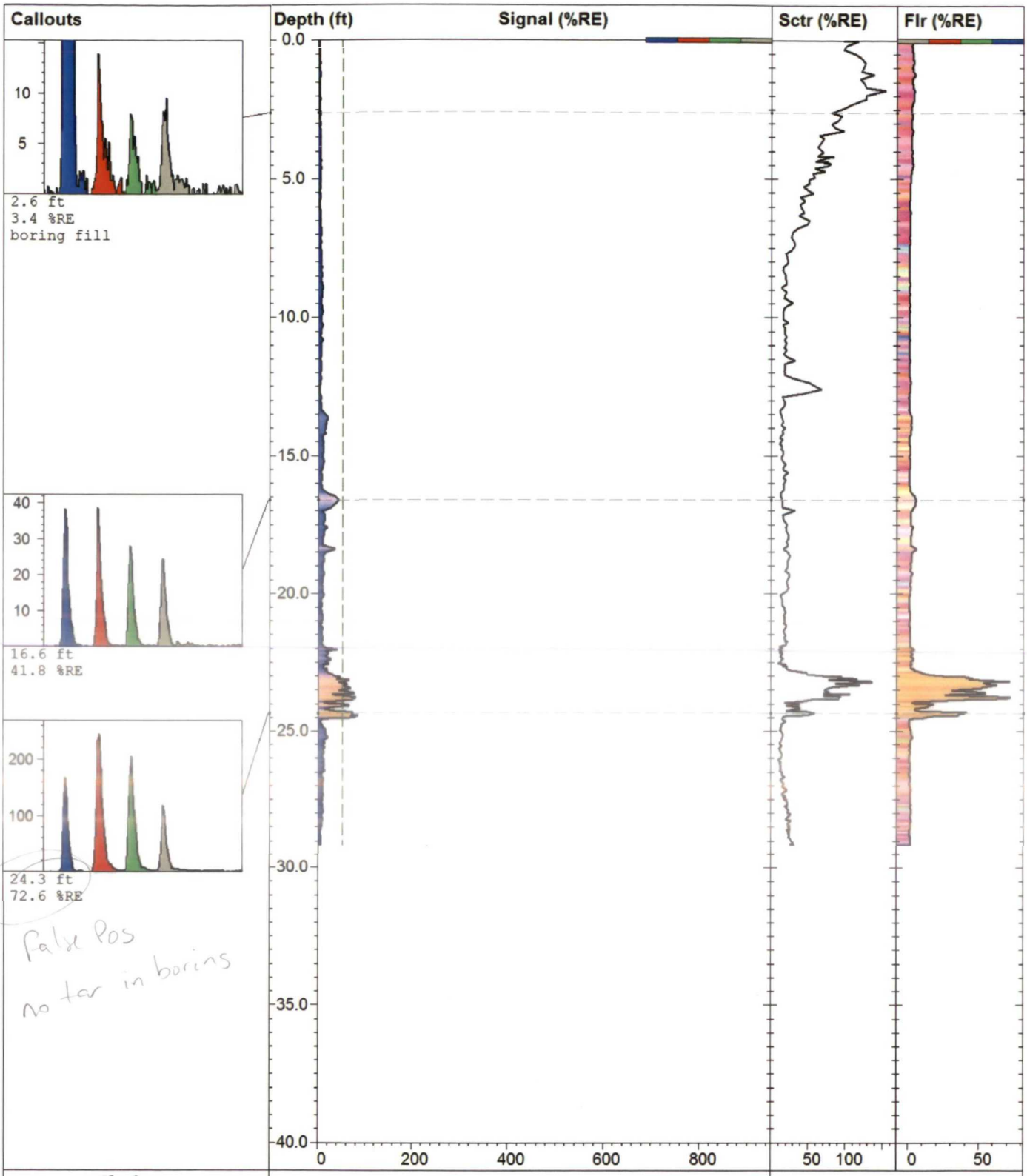
TL18_5_01		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.337990 N / NAD83**	*Final depth:* **32.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.298703 W**	*Max signal:* **11.5 % @ 29.30 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 2:16:06 PM**



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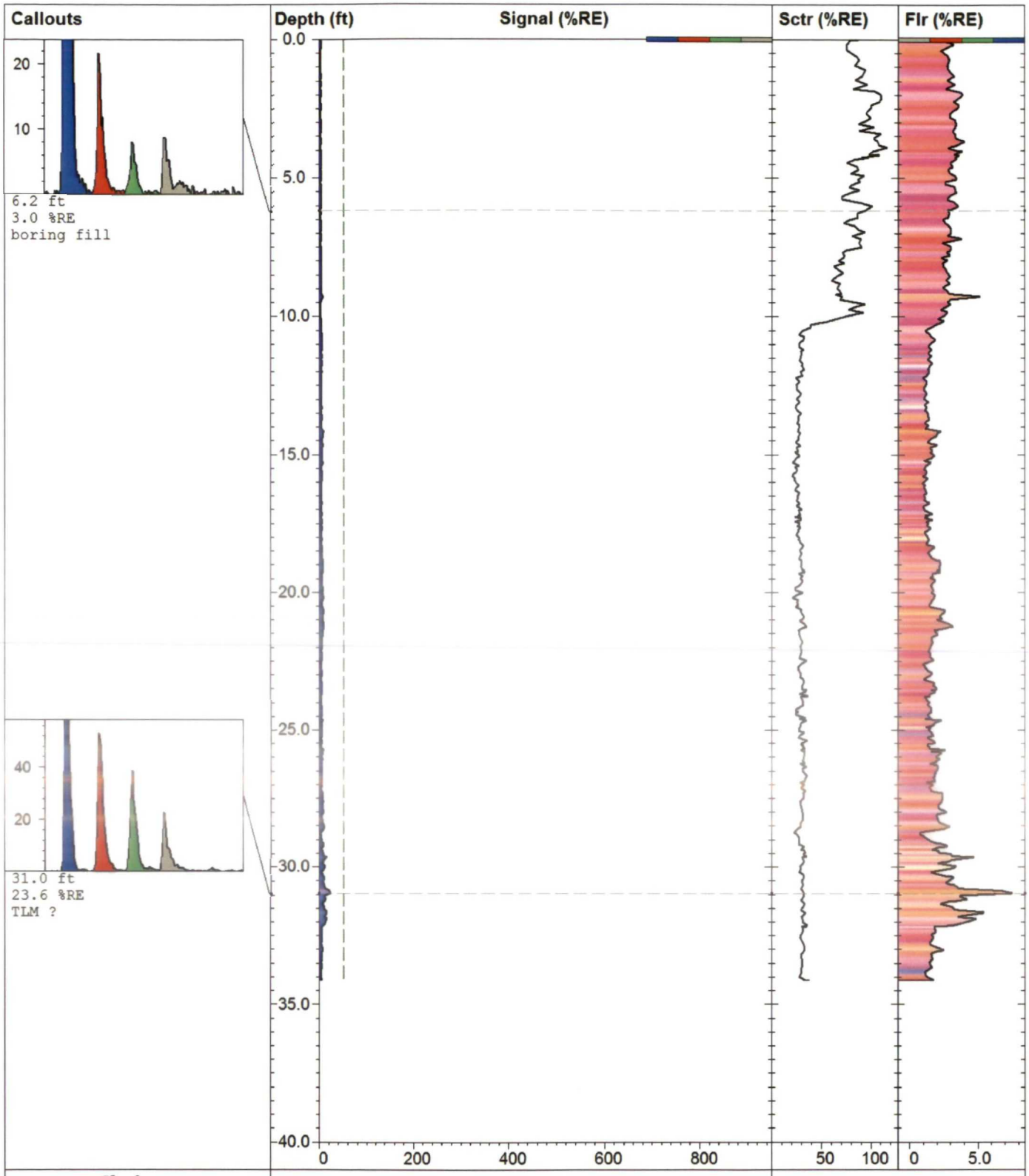
TL18_5_01_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.341321 N / NAD83**	*Final depth:* **29.18 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.307876 W**	*Max signal:* **87.1 % @ 24.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 2:54:27 PM**



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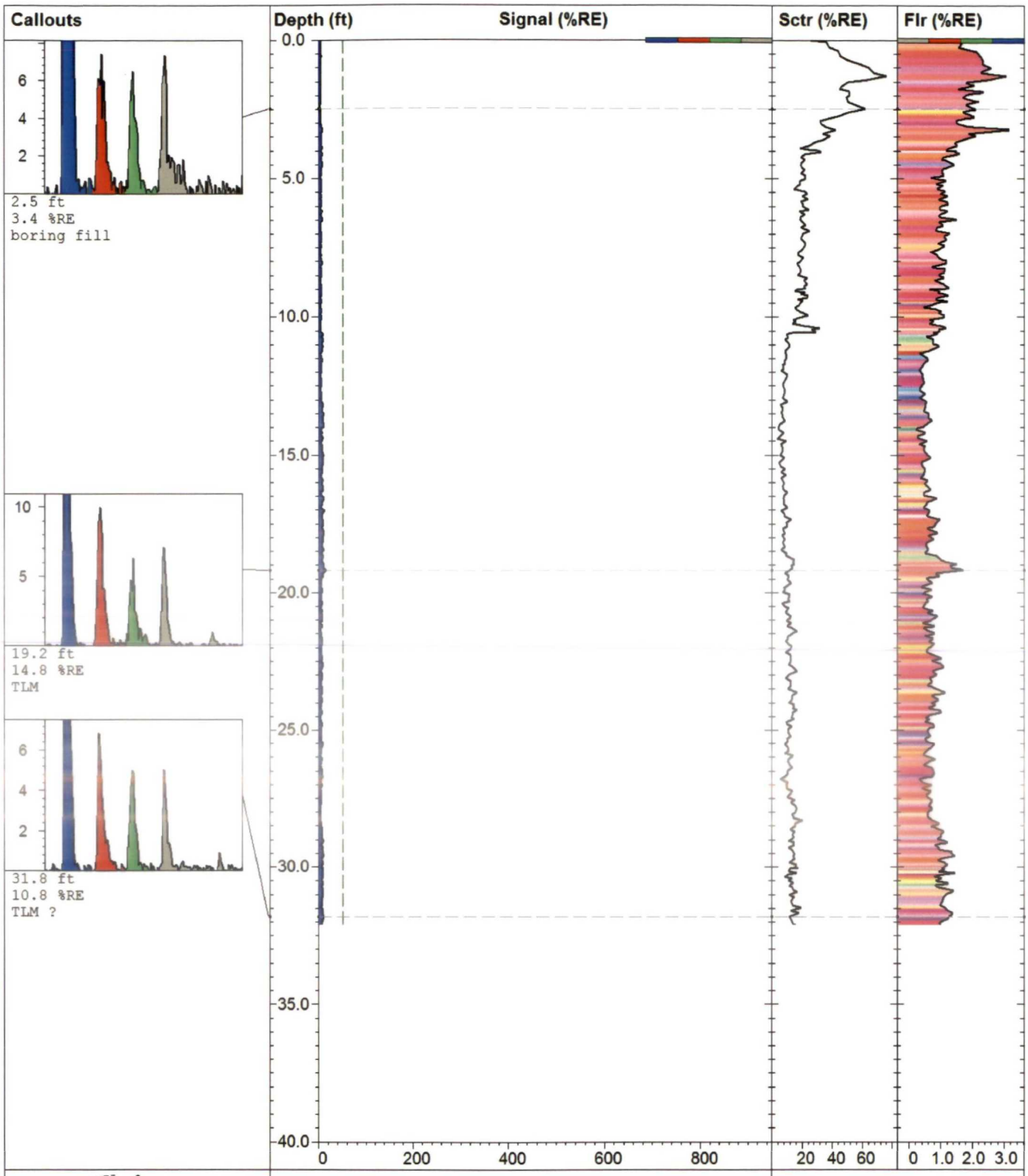
TL19_0_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.340454 N / NAD83**	*Final depth:* **34.14 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.283749 W**	*Max signal:* **23.6 % @ 30.96 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 11:53:44 AM**



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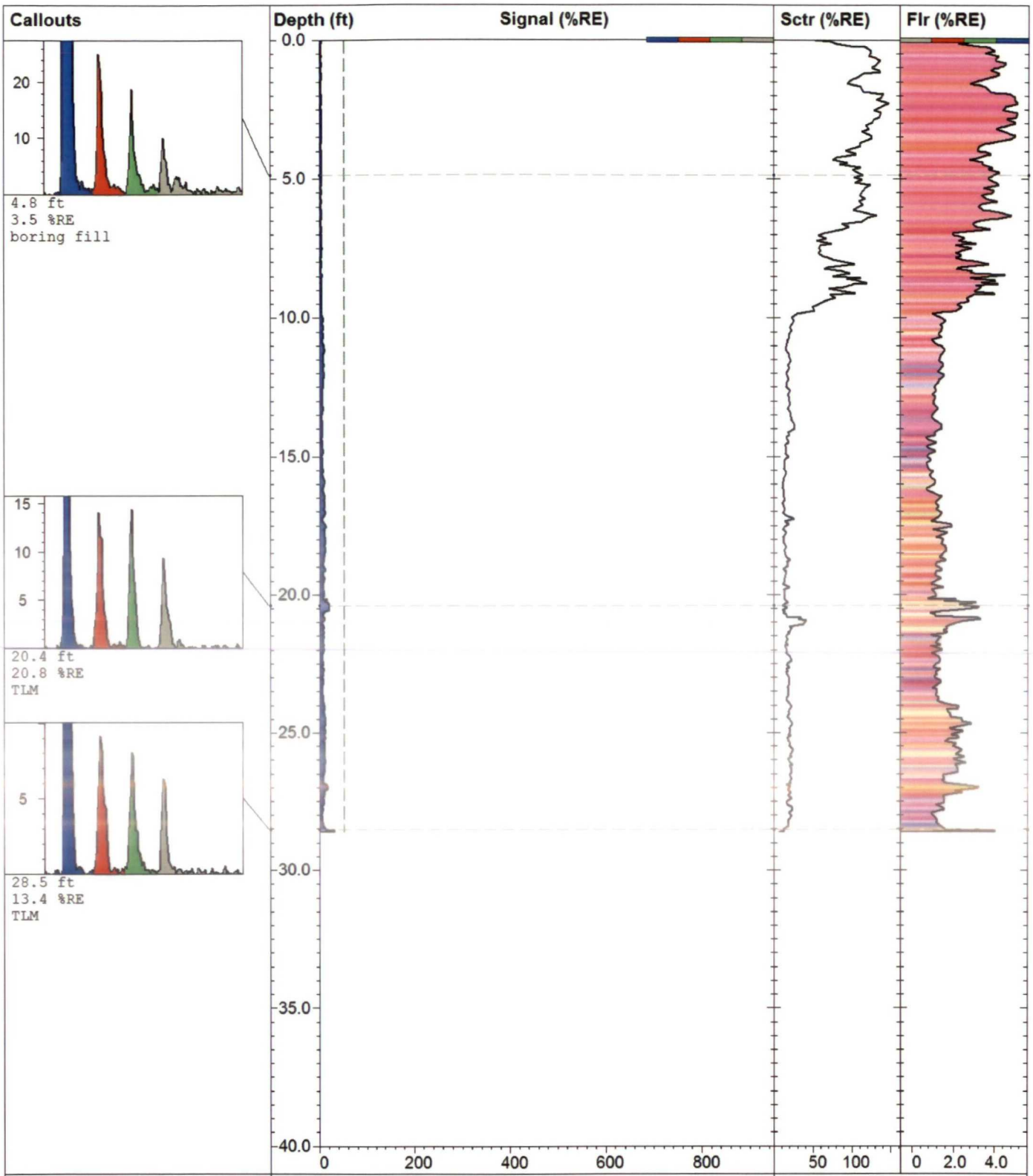
TL19_01

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.346397 N / NAD83**	*Final depth:* **32.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.292031 W**	*Max signal:* **14.8 % @ 19.19 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 1:18:28 PM**



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TL19_5_0_5

TarGOST

Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.346430 N / NAD83**	*Final depth:* **28.62 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.277284 W**	*Max signal:* **37.2 % @ 28.58 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 1:44:48 PM**

Data Visualization

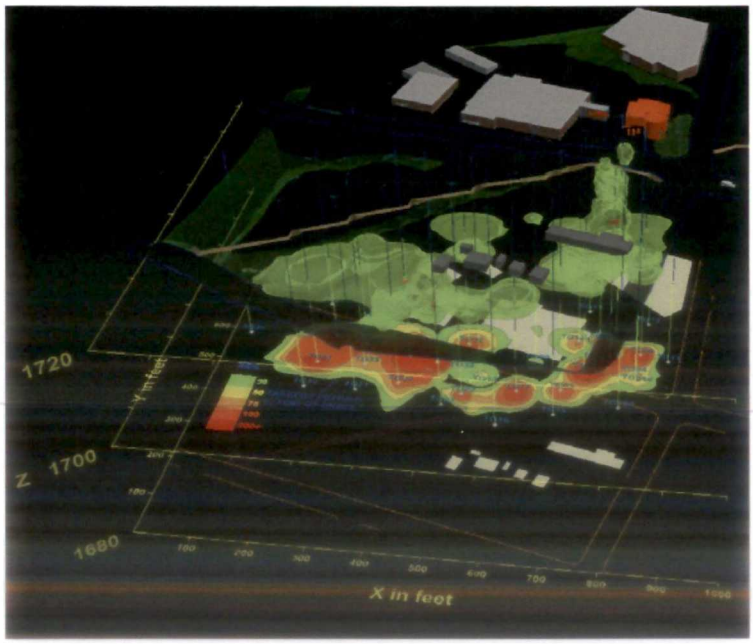
DAKOTA TECHNOLOGIES, INC.

TarGOST™/ROST Data Visualization Service

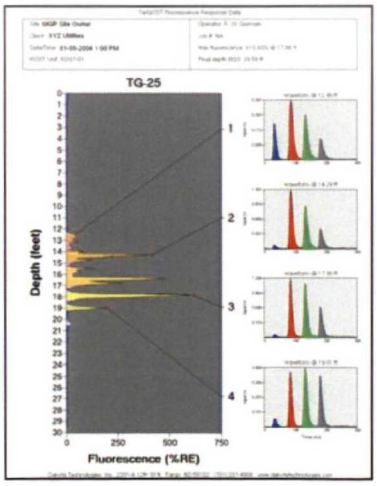
- Enables better decisions for site assessment and remediation
- Provides comprehensive and high quality communication tool
- Saves time and money

Description

Dakota Technologies has developed the capability to easily visualize Tar-specific Green Optical Screening Tool (TarGOST™) and Rapid Optical Screening Tool (ROST) site characterization data. ROST delineated petroleum, oil and lubricant contaminants while TarGOST specifically delineates coal tars and creosote contaminants in the subsurface. Dakota now provides the capability to view TarGOST/ ROST site characterization data in static or dynamic format with unparalleled resolution. Dakota can also overlay the site with aerial photographs or building CAD models over GIS terrain data to provide an accurate overall picture of the site with relevant subsurface features.



Technology



TarGOST/ROST data logs are typically acquired at 1 inch vertical resolution which is orders of magnitude higher resolution than traditional sampling methods. Dakota's key advantage is high accuracy in the contamination models. When visualized in 3-D, contaminants migrating in narrow seams or "stringers" of sand, silt, or gravel are easy to see. TarGOST's/ROST high data density reveals these types of contaminant distribution features often missed by conventional methods.

Dakota's interpolation algorithms combined with the high density TarGOST/ROST data produces a high correlation between individual TarGOST/ROST data logs (shown at left) and the 3-D source term model.

DAKOTA TECHNOLOGIES, INC. Contact: Tel: 701-237-4908, Email: info@dakotatechnologies.com, Website: www.dakotatechnologies.com

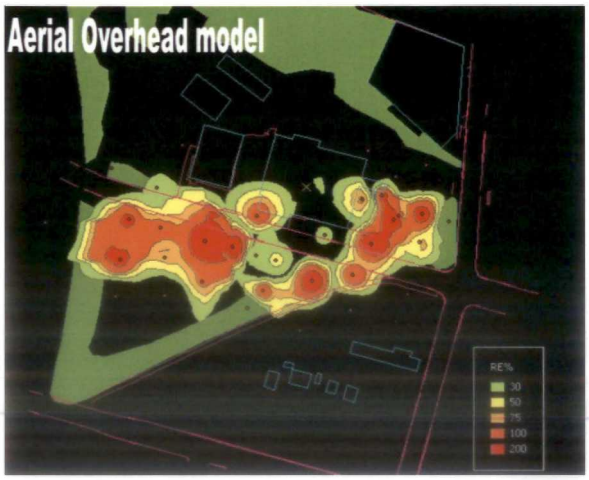
DAKOTA TECHNOLOGIES, INC.

Data Visualization

Features

- 2-D (fence or cross section) and 3-D models such as Plume and Stick provide a variety of methods to best represent the log data
- Choose a variety of display formats including static graphics and dynamic video
- Overlay site aerial photographs or satellite images onto the model
- Integrate Dakota's visual models with client's existing AutoCAD drawings
- Fast turn-around time

Sample Models



High Resolution

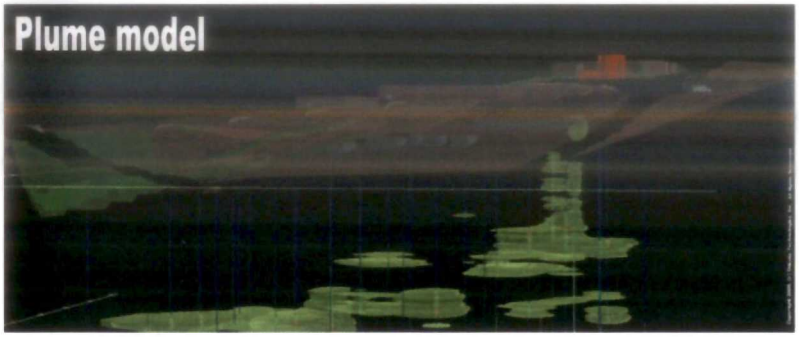
- Vertical resolution less than 1 inch
- Log interpolation between direct push locations using a highly accurate modeling algorithm

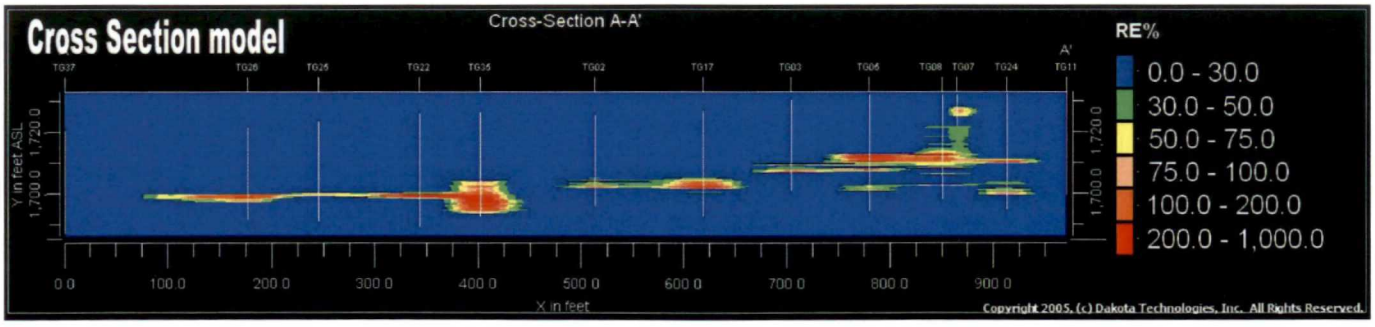
Customizable

- Static visualization of subsurface features to ease data interpretation
- Dynamic full 360 degree fly-by video
- Add surface contour and buildings to gain perspective and ease data interpretation

Save Time & Money

- Optimize placement of validation sampling and treatment technologies
- "Machine Vision" eliminates subjectivity typical during boring analysis





Value

- Visualize the "big picture"
- Superior communication tool
- Consultants can produce high quality results for their clients

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TarGOST User's Guide

The Tar-specific Green Optical Screening Tool (TarGOST™) is a laser-induced fluorescence (LIF) screening tool that is specifically designed to detect non-aqueous phase liquid (NAPL) in the subsurface. It responds almost exclusively to the NAPL found at former manufactured gas plants (MGPs) and creosote/pentachlorophenol sites. It does this by sensing the fluorescence of polycyclic aromatic hydrocarbons (PAHs) found in MGP and creosote NAPLs. TarGOST is a modification of the Rapid Optical Screening Tool (ROST). Dakota developed the ROST early in the 1990's with U.S. Air Force funding. The ROST platform is a mature technology that has been applied at hundreds of petroleum, oil, and lubricant (POL) contaminated sites in the U.S., Europe, and Japan since 1994. TarGOST has been in commercial use since March, 2003.

General TarGOST Principles

The TarGOST system is, in its simplest sense, a front-face fluorometer that is coupled via fiber optics to a sapphire-windowed probe that is shoved into the ground. A front-face fluorometer is a device that shines excitation light onto, and collects emission from, the same surface. This is different from standard fluorometers, which operate with the excitation and emission beams at 90°. The TarGOST system makes continuous front-face fluorescence measurements of the soil matrix as the windowed probe is pushed slowly down into the subsurface.

The fluorescence measurements are made 20 to 50 times each second (20 to 50 Hz). Each individual measurement begins with a pulse of laser excitation light being launched into one of two fiber optic cables that are strung through the drill/push rod string. As the rod is advanced into the subsurface, the very fast pulses of laser light (10 nanoseconds in duration) are directed out the sapphire window and onto the soil surface that is pressed very firmly against the outside of the window. The pulses of green light strike whatever is present just outside the surface of the window. Most of the laser light is simply reflected by the soil matrix. However, if oil-like material (OLM) or tar-like material (TLM) associated with former MGP processes is present, the PAHs that exist in these NAPLs absorb some of the light and are driven into an electronically excited state. When these PAHs eventually return to the ground state (this typically takes less than 10 ns), a portion of the PAHs emit red-shifted light (longer wavelength light than the excitation laser). Some of this fluorescence, along with a small portion of the reflected excitation laser light, are collected by a mirror and focused into the second collection fiber optic for return to the TarGOST instrument for detection.

The return light is directed into a spectrometer located inside the TarGOST system. A grating in the spectrometer disperses this light into a "rainbow" across the back plane of spectrometer. Four optical fibers are located in this backplane. One of the fibers collects a small portion of the relatively intense laser light (more about this laser scatter channel later) while the other three fibers capture bands of the fluorescence (~10nm wide) emitted by any PAHs present in the NAPL. The four fibers are different lengths so that each fiber delivers its 'packet' of fluorescence photons to the photomultiplier tube (PMT) at delayed time intervals. The result is a "train" of time delayed photon packets all arriving at the same PMT over a period of 300 nano-seconds (ns). The PMT is a device that converts photons into a current pulse. This current pulse

is wired into a fast digital storage oscilloscope where it is converted into a transient voltage signal, is digitized, and recorded. This digitized transient is called a waveform. The laser light that is being reflected from the soil matrix is monitored in the first channel (left-most) and the three fluorescence bands are observed in the three right-most channels.

Figure 1 illustrates waveforms that are typical of those generated with TarGOST. If the soil is clean of NAPL, the laser scatter channel (leftmost) is far more intense than the three fluorescence channels. The Clean Sand waveform in Figure 1 illustrates what clean (or very low NAPL) soil typically looks like on the TarGOST system. If NAPL is present, the fluorescence channels begin to grow in comparison to the laser channel. The 1000 ppm waveform in Figure 1 illustrates such a condition. The more coal tar present, the lower the scatter channel gets and the higher the three fluorescence channels get. Finally, with pure NAPL on the window, the greatest increase in the fluorescence channels is observed, along with maximum loss of signal in the laser reflectance channel – due to absorbance by the PAH-laden NAPL. The NAPL waveform in Figure 1 illustrates the waveform resulting from such a condition.

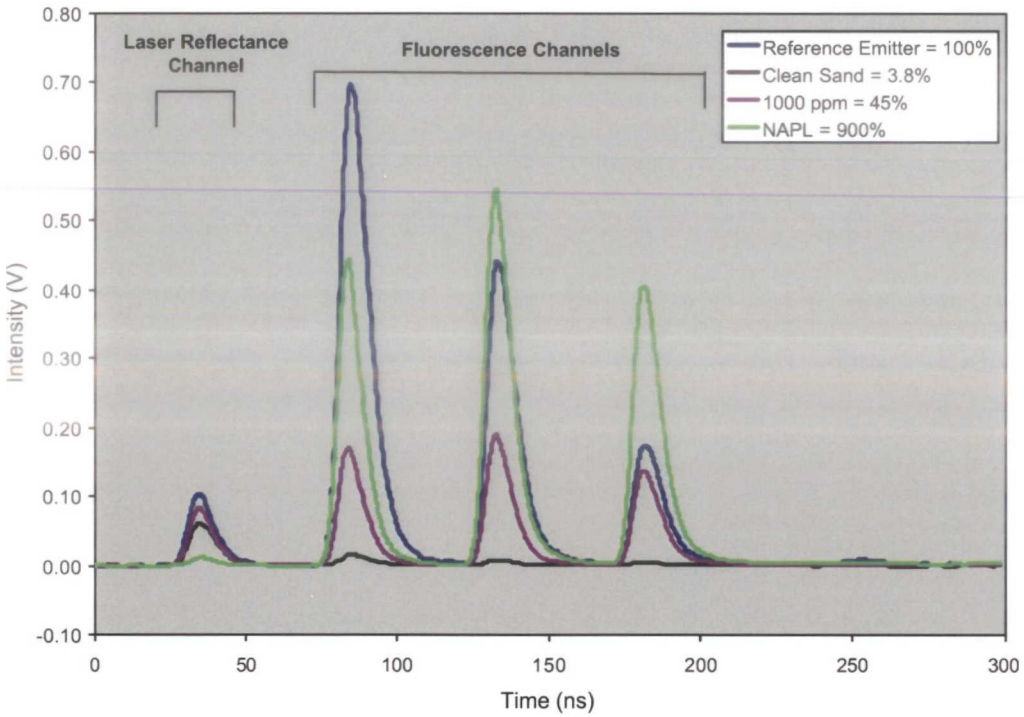


Figure 1. Example TarGOST waveforms.

Calibration/Normalization

The waveform shapes (the relative amount of signal in each channel and the decay time on the right side of each peak) tell us quite a bit about the qualitative nature of what's happening outside the window. But what interests people most is the **amount** of NAPL that is present vs. depth. We do this by portraying the fluorescence vs. depth (FVD) in a continuous log format. To accomplish this we must reduce the 2-D waveform to a single quantitative number. We also need to normalize for any energy drift of the laser and optical alignment changes, so it is necessary to calibrate the system prior to each sounding and plot the downhole data relative to a known fluorescence emitting reference (RE) material. The RE is a stable and known material that can be applied to the window and measured just prior to each sounding. The fluorescence of the downhole data, relative to this RE, is then plotted as a function of depth.

Figure 2 graphically illustrates the calibration procedure. The RE both reflects some of the laser light and fluoresces at levels that are in the same general range as soils that are moderately to heavily contaminated with MGP NAPL. The Reference Emitter waveform shown in Figure 1 is an actual RE waveform taken with the TarGOST. Notice that the RE fluoresces in the same general intensity range as the pure NAPL, but it also (by design) reflects a high degree of scatter due to its buff gray color and lack of photon absorbing PAHs. The RE is designed to do this so that both the system's fluorescence and scatter components can be properly gauged and recorded on the same scaling of the oscilloscope. Once the RE is measured, all subsequent downhole (or laboratory) measurements can be normalized by this RE waveform, providing an apples-to-apples presentation of the data regardless of laser energy drift or other changes that would cause a difference in raw signal amplitude over time. It is useful to think of the RE waveform as the equivalent of the single-point 100ppm isobutylene calibration used for hand-held photo-ionization detectors.

To calculate the %RE, the area under the three fluorescence channels of the waveform is determined. The fluorescence area is then divided by the area under the laser scatter channel. This is called scatter correction. This is necessary because at very high concentrations the fluorescence does not continue to scale with concentration. This is due to complicated processes such as energy transfer, photon cycling, and other phenomenon that "quench" the fluorescence in high NAPL concentration soils. The uncorrected TLM curve in Figure 3 illustrates the problem. The addition of more and more NAPL to a soil sample should result in increasing fluorescence, but for some reason it only increase up to a certain point, at which the fluorescence response flattens out, or even worse, begins to fall. This poor type of response is called non-monotonic behavior and is obviously undesirable behavior for a screening tool. The laser scatter correction system is designed to prevent this "roll-over" affect. The scatter correction keeps this from occurring at the high end of concentrations (where soil is heavily contaminated or even saturated with NAPL). The scatter-corrected curves in Figure 3 illustrate the desired effect of scatter correction.

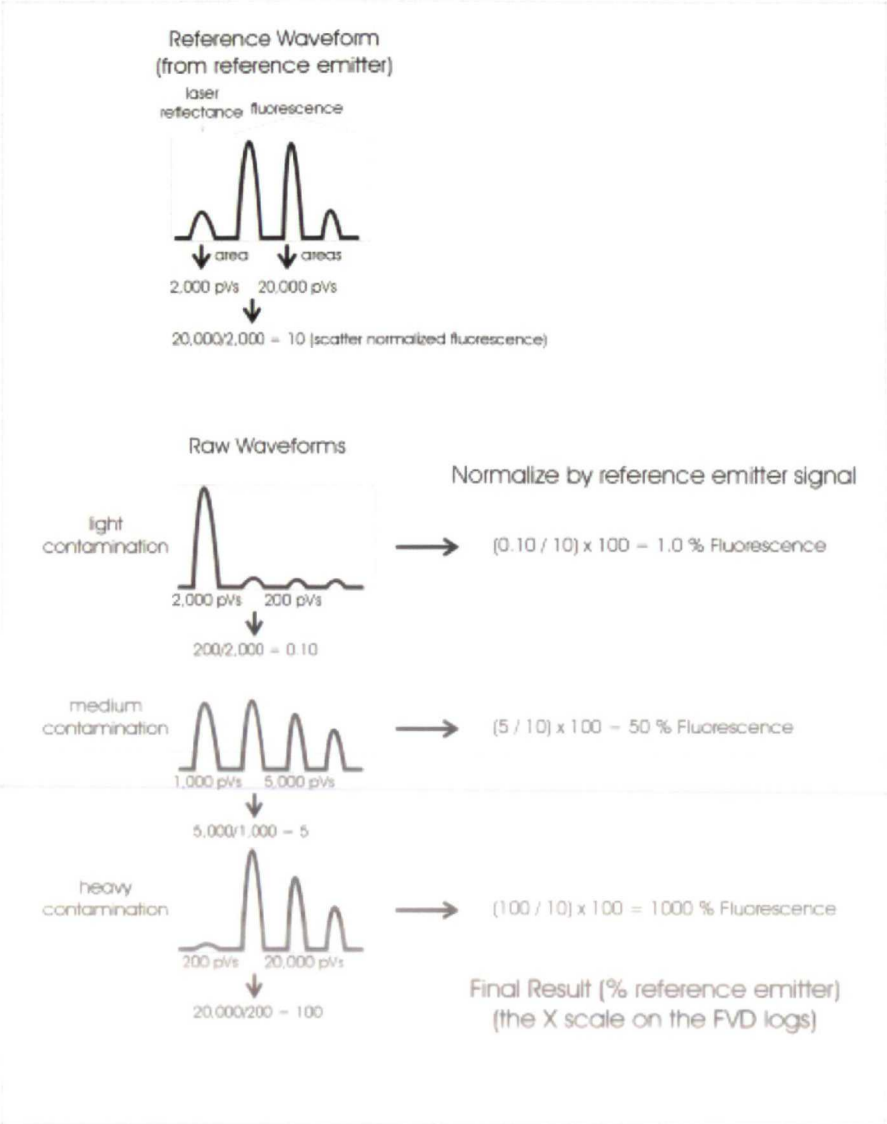


Figure 2. Single point RE calibration made prior to each TarGOST log.

The laser scatter intensity is relatively unaffected until NAPL concentrations reach the tens or hundreds of thousands PPM level, where the quenching (non-linearity of fluorescence response) is most pronounced. Laser scatter correction generally doesn't "kick in" until high concentrations are being measured, where fluorescence response flattens out or rolls over. In this way, the scatter corrected fluorescence readings scale relatively well across a wide range of concentrations, from the typical limit of detection (LOD) of 250-500 ppm, to the almost neat NAPL encountered in soil saturated with free product. Remember that TarGOST is designed to respond only to the NAPL impacted soils, not the PAHs attached in "dry" form to soot or dissolved phase PAHs. This makes it ideal for delineating source term areas of mobile MGP NAPL.

The scatter correction works well, but it isn't perfect. The TarGOST system is not an analytical instrument like a laboratory GC that sits in a clean, stable environment and only gets fed ultra-

clean matrix-isolated analytes. Instead, it is asked to respond faithfully to an analyte that exists in a thousand different forms in an endless number of different environments. Variation in optical

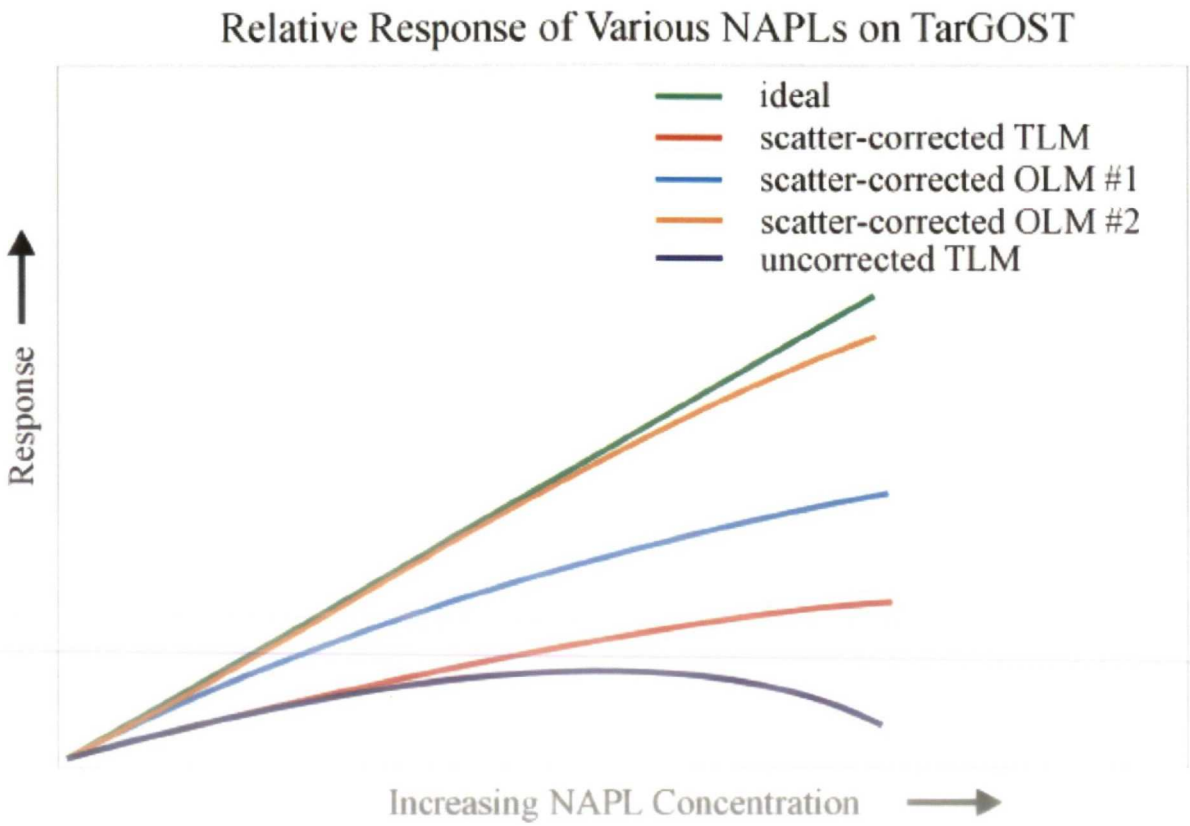


Figure 3. Variability of TarGOST response to NAPL products.

design (CPT vs. Geoprobe), mirror angle, and spectrometer settings can vary the amount of scatter present, especially at very high NAPL concentrations when the scatter is getting weak and difficult to measure relative to the much more intense fluorescence.

At high NAPL concentrations, even small variations in the laser scatter greatly influences the %RE number, especially when the laser scatter gets close to zero. For instance, let's imagine that with neat NAPL in front of the window, the fluorescence channels are averaging around 10,000 pico-Volt seconds (pVs) in area with each pulse of the laser. The laser scatter may be dancing around 400 and 800 pVs, because the scattered light is dim from being absorbed so highly by the PAHs. Now, even if the fluorescence stays almost exactly at 10,000 pVs every measurement, the relatively large variation in the tiny laser scatter that occurs will create a two or three-fold increase/decrease in %RE, even with the same NAPL sitting dead still on the window. That's why very high readings (500-1500%) often look unstable and jagged – because the laser scatter signal is so weak it "jitters" a lot compared to the fluorescence, causing large variations in %RE, even though the fluorescence portion of the waveform is relatively stable. For this reason, any wide swings in signals over 500% should "be taken with a grain of salt".

The TarGOST operators do their best to adjust the amount of launched laser light, the spectrometer position, and mirror angle in the probe to achieve a consistent waveform for the RE at each job site and strives to maintain the same optical arrangement and a consistent RE signal for the entire project. Even though there are small differences in the setup from location to location, the variations in NAPL viscosity, soil matrix, and signal magnitude can swing the signal up or down by a factor of two or three, which dwarfs the calibration differences.

The limitations in the current calibration technique can lead to the case of significant differences in the maximum signal generated by the same NAPL from one platform to another. For instance, even if the technician adjusts the system to achieve the exact same signal with RE on both a CPT and a Geoprobe platform, the same NAPL may yield 500% on one of the platforms and 1000% on the other. This is not typical but it can and does happen for reasons that aren't fully understood. Our goal is to stay consistent at a particular site so that the entire data set from that site can be viewed consistently. TarGOST data is relatively consistent and semi-quantitative across all the data generated **at one site** and **for a particular NAPL product,** but significant cross-platform or lab-to-field variations can and have taken place. While this may alarm users, and we're not happy with it, it's not as serious as it seems. As an example, let us imagine a site that is contaminated with a single origin homogeneous NAPL product. With TarGOST, 100% response does indeed represent approximately twice as much NAPL as a 50% response at that site. Even if the laser energy or optics alignments change, the RE will do a reasonable job of normalizing the log-to-log data variation for that site. Dakota is currently working on an improved system that will better normalize across all systems/platforms regardless of design or conditions.

Lab studies with MGP NAPL on moist Fisher® sea sand consistently demonstrate that TarGOST is capable of linear response vs. NAPL concentration, but some NAPLS are better behaved than others. Figure 4 is one example of the TarGOST response vs. MGP NAPL concentration on sand.

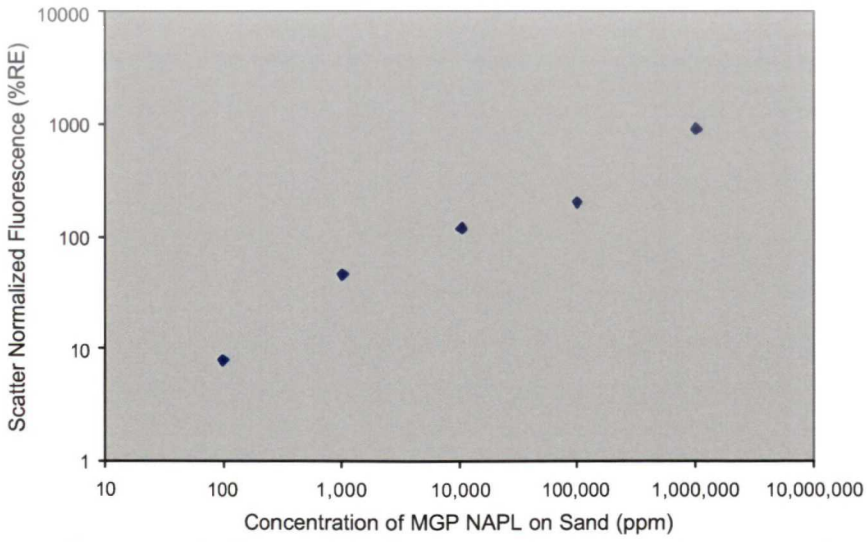


Figure 4. Calibration curve for MGP NAPL on Fisher Sea Sand

NAPLs do vary in their ability to fluoresce, even NAPLs found at the same site. Figure 3 illustrates conceptually that TarGOST often responds with varying sensitivity (ΔTarGOST Signal/ΔNAPL Concentration) toward different NAPLs, depending on their origin and/or variances in the conditions under which they've been exposed in the decades they've spent in the subsurface. For instance, a more ashaltine TLM will typically fluoresce much less intensely than a runny, less viscous OLM. This may well be due to the relative abundance of solvent in one matrix vs. the other. The more solvent available (i.e. the less viscous the NAPL), the higher the likelihood of the PAHs being able to emit photons (fluoresce) before a non-radiative mechanism allows the PAH to come back down to the ground state without emitting a photon (quenching).

The preferential sensitivity of TarGOST toward the runnier (more mobile) OLMs is welcomed by most users, since TarGOST seems to accentuate the presence of the more mobile NAPLs. It is these more mobile NAPLs that are of the highest regulatory/compliance concern. There is an abundance of anecdotal evidence that suggests that some NAPLs may fractionate in the subsurface into OLM and TLM or even DNAPL and LNAPL. Dakota has participated in a number of investigations where a single NAPL body seems to have 'split' into two distinct NAPLS, with both NAPLs having similar but distinct waveform shapes as we moved away from the suspected release point and they appear to form two separate horizons (a "high" and "low" layer). Although there has been plenty of speculation, the exact mechanism for this phenomenon (if it actually occurs) is not known.

As previously described, TarGOST uses a green laser to excite the larger (4 -5 rings and higher) PAHs that exist almost exclusively in NAPL form, as opposed to smaller (2-3 ring) PAHs that can more readily partition into the groundwater due to their much higher solubilities in water. ROST on the other hand employs ultra-violet (UV) light which can and does excite the smaller 2-3 ring aqueous phase PAHs and therefore detects dissolved phase PAHs such as naphthalenes in the groundwater. When this behavior is combined with ROST's non-monotonic response for many NAPLs, extremely complicated logs are generated that need to be computer analyzed to separate the NAPL fluorescence contribution from that of the dissolved phase. The dissolved phase signals can even surpass NAPL signals, making confident NAPL delineation almost impossible at many sites. This is especially true for those sites with sand/gravel, where pockets of NAPL are perched in or amongst slow-moving or stagnant groundwater.

It should also be mentioned that TarGOST was designed to exclusively detect heavy PAH NAPLs. It has, by design, a very limited, if any, response to lighter POLs. For instance, fresh diesel applied to the window will not elicit even a small response from the TarGOST. However, if the diesel has co-mingled with coal tar, the mixture will fluoresce brightly and TarGOST will respond well.

To better appreciate the qualitative information that TarGOST provides, the FVD logs are color-coded by "filling in" the FVD's x-axis (%RE) with colors generated from the waveform at each and every depth. The color is determined by "mixing" the amount of red, green, and blue (RGB) channels and applying the resulting color to the area under the curve on the FVD. This makes the interpretation of the logs easier to see "at-a-glance" as opposed to relying solely on the few selected waveforms to understand the qualitative nature of the data vs. depth. Color-coding alerts the observer to shifts in NAPL types and can also help identify weak interfering

compounds like calcium rich (crushed limestone) soils and rotting wood/vegetation, both of which can sometimes (rarely) be mistaken for MGP waste.

Figure 5 shows the resulting colors for differing amounts of signal in each channel of the waveforms. Clean soil shows up blue (nearly 100% laser scatter), low-to-medium contamination often shows up orange or maroon (mostly red with some blue and green), and highly contaminated soils or neat NAPL typically shows up yellow (nearly all red and green with very little blue makes yellow). The color is simply another way of representing the information contained in the associated waveforms (shown in sub-panels at right in the figure). Just think of the color-coding as mixing paints in amounts equal to that contained under each associated red, green, and blue channel of the waveform. The standard for TarGOST is to use blue, red, and green in channels 1, 2, and 3 - leaving the fourth channel unused. The fourth channel was chosen to be the non-contributor to the color scheme because it varies the least in intensity across differing classes of NAPL.

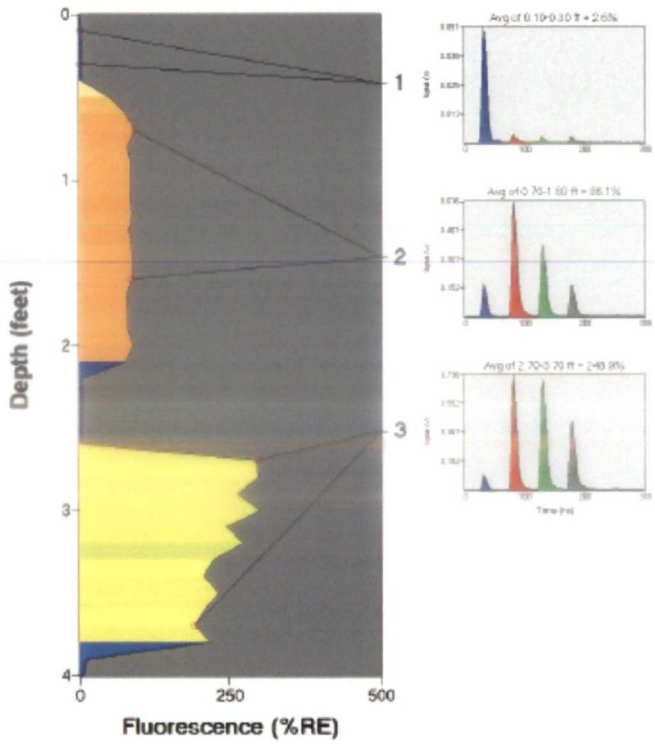


Figure 5. Example waveforms showing colors generated from RGB channel ratios.

The list below summarizes some of what we've learned in this section.

- TarGOST specifically targets the PAHs found in former MGP and creosote NAPLs
- TarGOST does detect staining and residual levels of NAPL as well as free phase
- TarGOST is "blind" to aqueous phase PAHs
- TarGOST is not able to reliably detect "dry" PAHs that are sorbed to soot, wood chips, and ash. They can generate a signal but it is often weak and not easily teased out of the background. Many times we're left wondering whether a small signal is caused by very

high concentrations of "dry" PAHs on purifier chips or ash/soot or very low (100s of ppm) residual NAPL levels.

- TarGOST's typical lab-determined LOD for NAPL on site soil (or Fisher sea sand) is 250-500 ppm (weight of NAPL/weight of soil matrix). Note that this is not the same as weight of Total PAHs /weight of soil matrix, since not all of a NPAL is PAHs
- TarGOST has, on rare occasions, responded to mineral or plant interference enough to be a nuisance. One incident involved crushed limestone gravel fill while another involved buried rotting wood/brush debris (the result of major flooding on a gravelly river)
- TarGOST has not been observed to significantly respond to peat material (but this does not guarantee it won't on some future occasion)
- TarGOST does not respond to typical lighter end fuels like gasoline, kerosene, or diesel – unless they contain MGP waste or creosote that they are co-mingled with
- TarGOST is single-point calibrated with a reference emitter (RE) immediately prior to each sounding and the results are always plotted relative to RE in percent
- TarGOST calibration/setup isn't perfect and the response for an identical NAPL can vary with optical platform (CPT vs. Geoprobe) and from lab to field. However, once set up on site, the response remains stable over time and from log-to-log.
- NAPLs can vary greatly in their fluorescence response – even those found on the same site.
- Thinner, less viscous NPALS typically fluoresce much more than the more viscous TLMs. Asphalt-like TLMS which are solid/plastic fluoresce very poorly.
- Scatter-correction is applied to TarGOST data to reduce/eliminate "response rollover" at high concentrations
- Color-coding is deduced from the first 3 waveform channel areas and provides "at-a-glance" recognition of waveform consistency or changes
- The waveforms contain both quantitative and qualitative information

On-site TarGOST Fundamentals

So now that we understand the fundamentals of how TarGOST works, let's examine the logging procedure at the site. When the system first arrives on site, it is powered up and tested for proper function. If it is in Dakota's Geoprobe, the TarGOST is simply powered up and we're ready to begin probing after proper warm-up. If CPT deployment is involved, the TarGOST system is integrated into the CPT truck and proper data flow connections are made (about a 2 hour procedure). Once the system is warmed up and tested for proper function, the actual logging can begin.

The delivery platform (CPT, Geoprobe truck, or track-rig) is positioned over the flag/mark as directed by the controlling geologist/consultant. Clients typically start out in an area where NAPL is known to (or strongly believed to) exist. Pushing in "the heart" of the source term at the start gives everyone involved a feel for how well the NAPL is going to respond to TarGOST delineation. From there, the effort often moves out and away from the "hot zone" toward the edges, with hopes of bounding the extent of the NAPL source term.

TarGOST productivity can range anywhere from 200 to over 500 ft/day. If the pushes are fairly deep (>30 ft), and the obstructions or rubble are minimal, then the average is on the higher end

because we spend a lot more time actually probing, not moving around from location to location and/or trying multiple times to get holes started through rubble. On jobs with lots of shallow holes and/or numerous subsurface obstructions, like brick/rubble from previous demolitions, the production obviously slows down. This is due to spending lots of time making attempts to "get a straight hole going" or from break-offs and the subsequent repair they entail. We typically can achieve between 10 and 20 locations a day, again depending on the site conditions.

Buried utility clearance is often an overlooked issue, until the first day of the project when everyone realizes we can't probe without it. Weeks or months of planning are often stalled the first day due to improper preparations with regard to utility clearance. The TarGOST crew has been instructed NOT TO PROCEED if there is even a remote chance that the proper precautions have not been made to clear the location for underground utilities.

Once the location has been cleared for utilities, the RE material is put on the cleaned window, any necessary tweaks are made to the TarGOST, and an RE waveform is acquired. The probe is then positioned in the push platform for advancement into the soil. In the case of percussion or "jack-hammering" delivery such as Dakota's Geoprobe, the window is approximately 8 inches above the tip of the probe. In the case of cone-penetrometer test (CPT) delivery, the window is approximately 16 inches above the tip of the probe. When using Geoprobe delivery, the log is initiated when the window is at the ground surface. In CPT delivery, the log is initialized when the CPT tip is in contact with the ground. In both cases, the software automatically corrects for the window position and all logs are depth correct.

A unique name for the current log location is entered into the control computer and logging is started (probe advance begins). As the probe is pushed into the ground (at ~2cm/sec) the laser fires continuously, generating waveform after waveform on the detection system oscilloscope as the probe advances. We don't store every waveform that the oscilloscope records. We instead average the waveforms over every 1-2 inches, depending on the probe speed and laser repetition rate. The averaged waveforms are downloaded from the oscilloscope every second or two by the control software. These waveforms are immediately 'tagged' with the current depth, which is constantly being sent to the TarGOST system by depth monitoring systems built into the Geoprobe or CPT truck. All the averaged waveforms from the logging event are stored to the hard-drive for later viewing and presentation if necessary or desired. The scatter and fluorescence areas are calculated and these are normalized to the RE waveform's areas. The fluorescence response is plotted vs. depth in real time as the probe is advanced. Logging continues until "refusal" is met due to bedrock or very tight sands/gravels, or the client wishes to terminate.

The technician then uses the TarGOST software to highlight the waveforms at "depths of interest" for display in the print out. The waveforms are located in panel plots at the right of the FVD log to guide the viewer's interpretation of the log. These waveforms contain the qualitative information and are often chosen from depths with peak signal, signal changes, or other zones of interest along the log's Y depth axis. The technician immediately prints a hard copy, which is usually printed out before the probe is completely retrieved from the subsurface. The technician also saves an electronic image of the printed log in JPG format. At the end of the project the

technician typically writes all the data and image logs to a CD, which is given to the lead geologist before departure.

Once the rods are all up and out of the hole, the hole is grouted (if necessary) and the probe tip and sapphire window is wiped clean in preparation for the next RE calibration. Time and money can often be saved by hiring a second crew/rig to grout the holes, instead of relying on the more expensive TarGOST system to do an otherwise routine task such as grouting. The next location is chosen and the procedure is repeated. The site investigation is often started with a grid or transect in mind, but it is common for the controlling geologist to modify the initially proposed investigation plan due to unforeseen "dirty" or "clean" zones encountered during the project. It is actually rare for the original transect or grid pattern to remain unchanged during the entire investigation, since the TarGOST regularly reveals previously unknown conditions at the site, including NAPL-free areas where significant NAPL was expected.

We recommend that the client conduct validation/confirmation sampling to bolster confidence in the body of evidence generated with TarGOST. Validation sampling of 10% of the TarGOST locations seems to be the most common co-sampling effort. Once the client gets familiar with TarGOST and becomes more comfortable with interpreting the results, they typically only sample where results are confusing or fly in the face of previous site understanding/information.

It is recommended that the client also conduct a few side-by-side tests of TarGOST for site heterogeneity assessment. Some sites yield nearly identical TarGOST logs when they are conducted a few feet apart because the NAPL is lying in well-behaved, homogeneously distributed layers. Other sites have extremely complex and heterogeneous NAPL distribution and yield side-by-side TarGOST logs with significant differences. In these conditions it is certainly unfair to conduct co-sampling efforts for TarGOST validation and expect TarGOST to "match" the traditional sampling results. In this case, even though the NAPL is scattered here and there, the validation hole is considered to be "right" and the TarGOST log, if not matching, is considered "wrong". In such heterogeneous environments even two side-by-side traditional sampling efforts might not come close to matching each other. So which one of the two traditional sampling locations is "right" and which one is "wrong" in this instance? Clearly neither is right or wrong, the site NAPL is simply heterogeneously distributed. Please keep this in mind when validation sampling against TarGOST as well.

The list below summarizes key aspects of deploying TarGOST at a former MGP or creosote site.

- TarGOST production averages between 10 and 20 locations/day and 200-500 ft/day, depending to large degree on subsurface conditions and difficulty in positioning the push platform over the desired location
- Proper utility clearance is the most important step in assuring a timely start and to prevent delays
- Start pushing in the "heart" of the source term to get a feel for the responsiveness of the TarGOST to your particular site's NAPL, then work your way out to find the edges and bound the source term NAPL
- Be prepared to adapt your transect and grid to ever-changing site model as TarGOST logs are reviewed

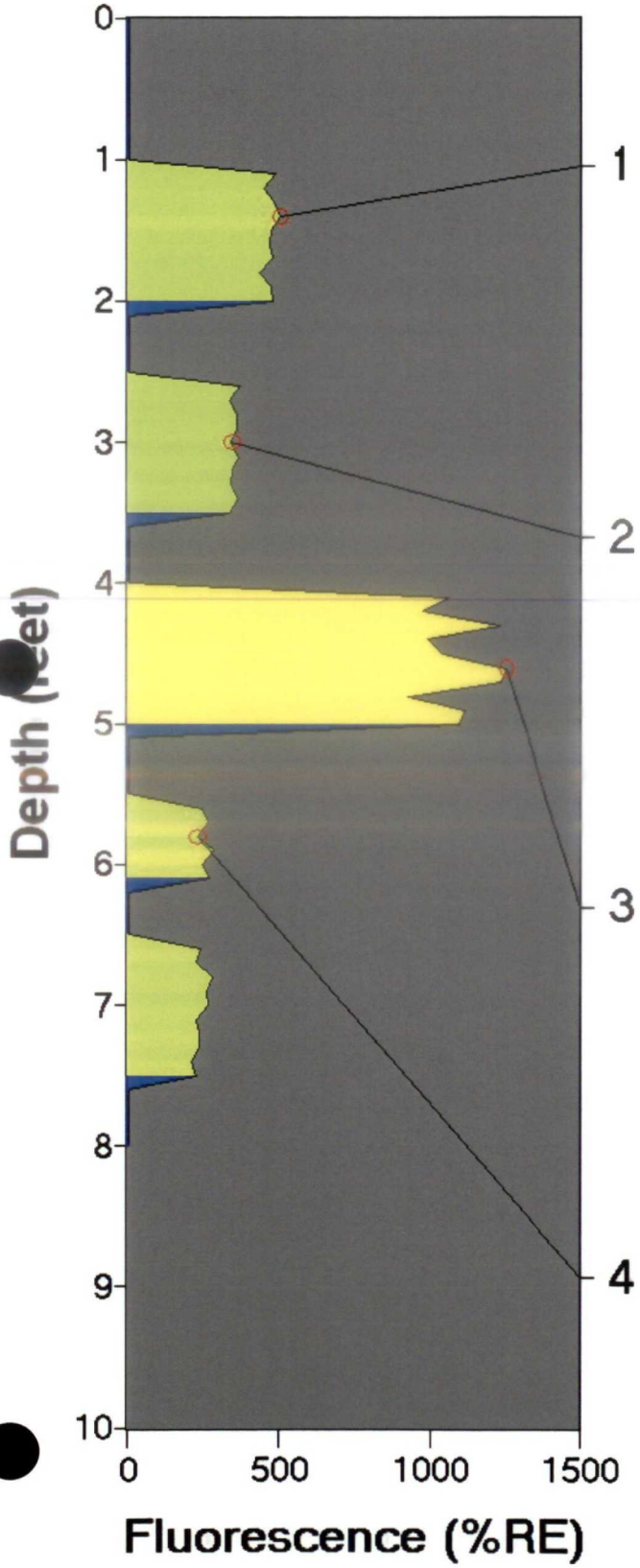
- On large-scale projects, consider hiring a second crew to pre-probe and/or grout with a small Geoprobe or drill rig if regulations/conditions warrant. While we don't mind doing the pre-probing or grouting ourselves, we want to spend the majority of our time doing what it is we're getting paid to do – delineate the site's NAPL
- Can TarGOST tell the difference between residual and free phase NAPL? The answer is clearly "No". There is no exact concentration where all NAPLs make a magical transition from "heavy residual" to "saturated or free-phase". Likewise, there is no set %RE that we can cite as being representative of saturated or free phase NAPL, since the response is continuous with concentration. With that said, it is certainly possible to determine a certain cutoff or signal range that is representative of the residual to free-phase transition for your site. For instance, let's say that after examining all the TarGOST logs and comparing them to previous efforts and the validation sampling, the geologist notes that free phase existed at depths/locations where the TarGOST logs exceeded 50%. It's certainly reasonable then to make the assertion that the 50% RE level is a general cutoff for the absence/presence of free-phase. Just remember that the entire body of evidence for any particular site should be used to come up with your %RE number

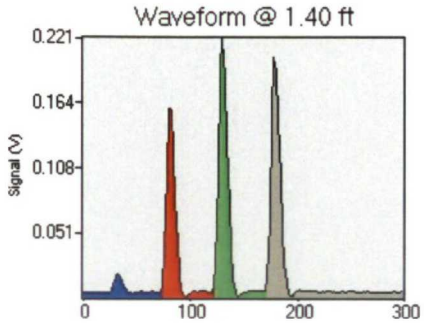
If you have any questions regarding your past or future project, feel free to call or write to your TarGOST operator or Randy St. Germain at stgermain@dakotatechnologies.com.

TarGOST Fluorescence Response Data

Site: Quanta	Operator: T. Rudolph
Client: CH2MHILL	Job #: 001
Date/Time: 4/4/2006 @ 8:40:23 AM	Max fluorescence: 1252.68% @ 4.60 ft
OST Unit: DTI02	Final depth BGS: 8.00 ft
Latitude: Unavailable	Longitude: Unavailable

Quanta Site TarGOST01





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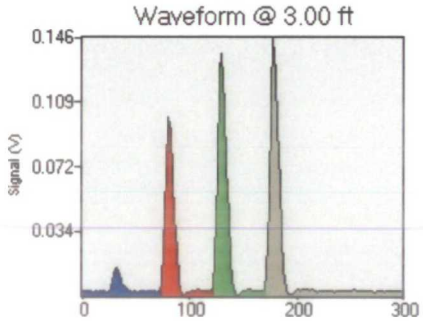

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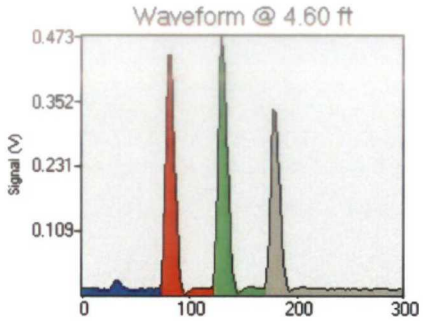

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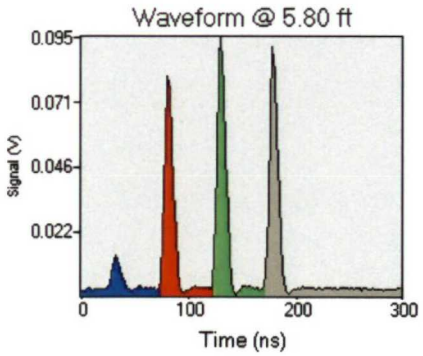
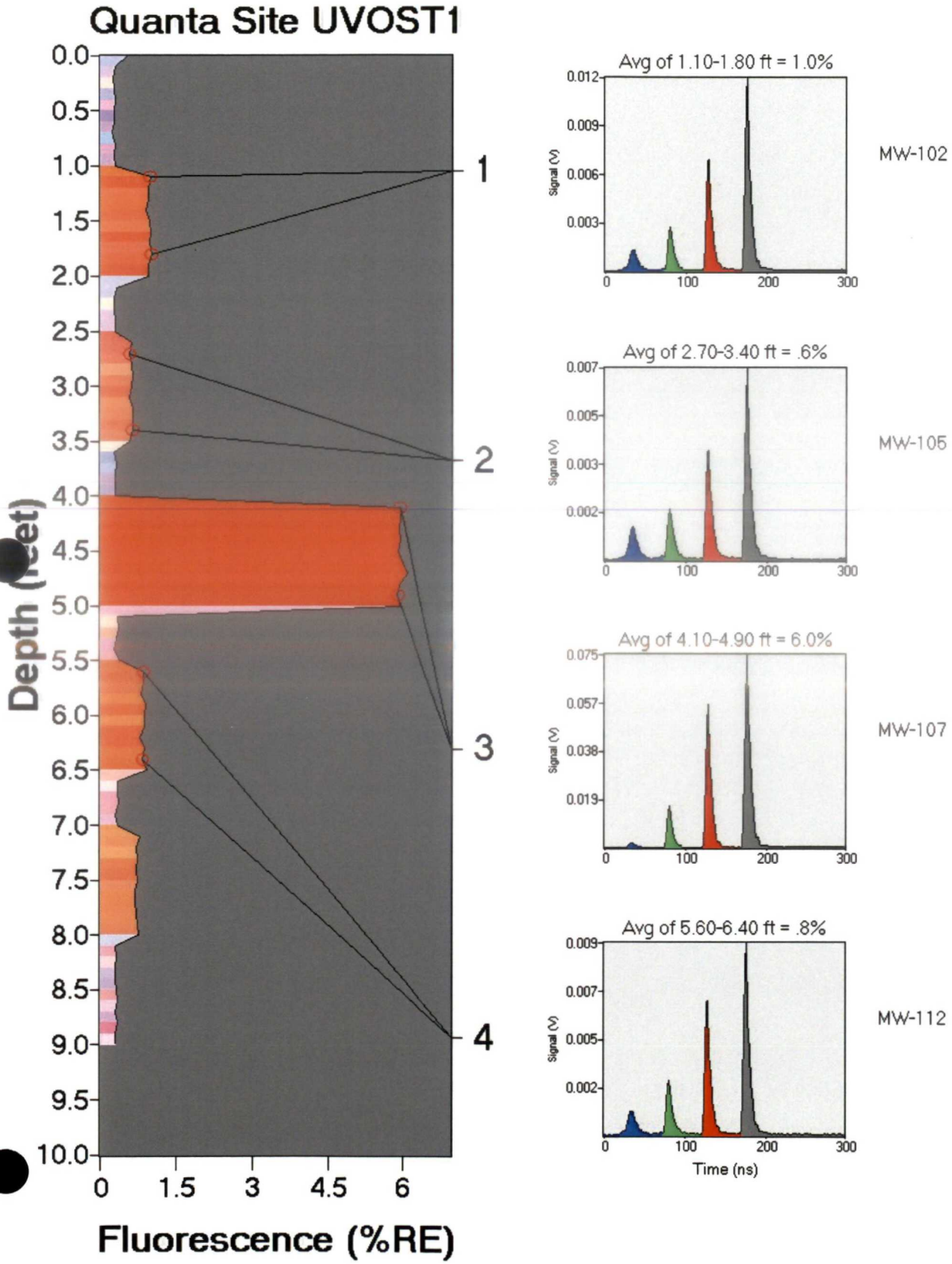
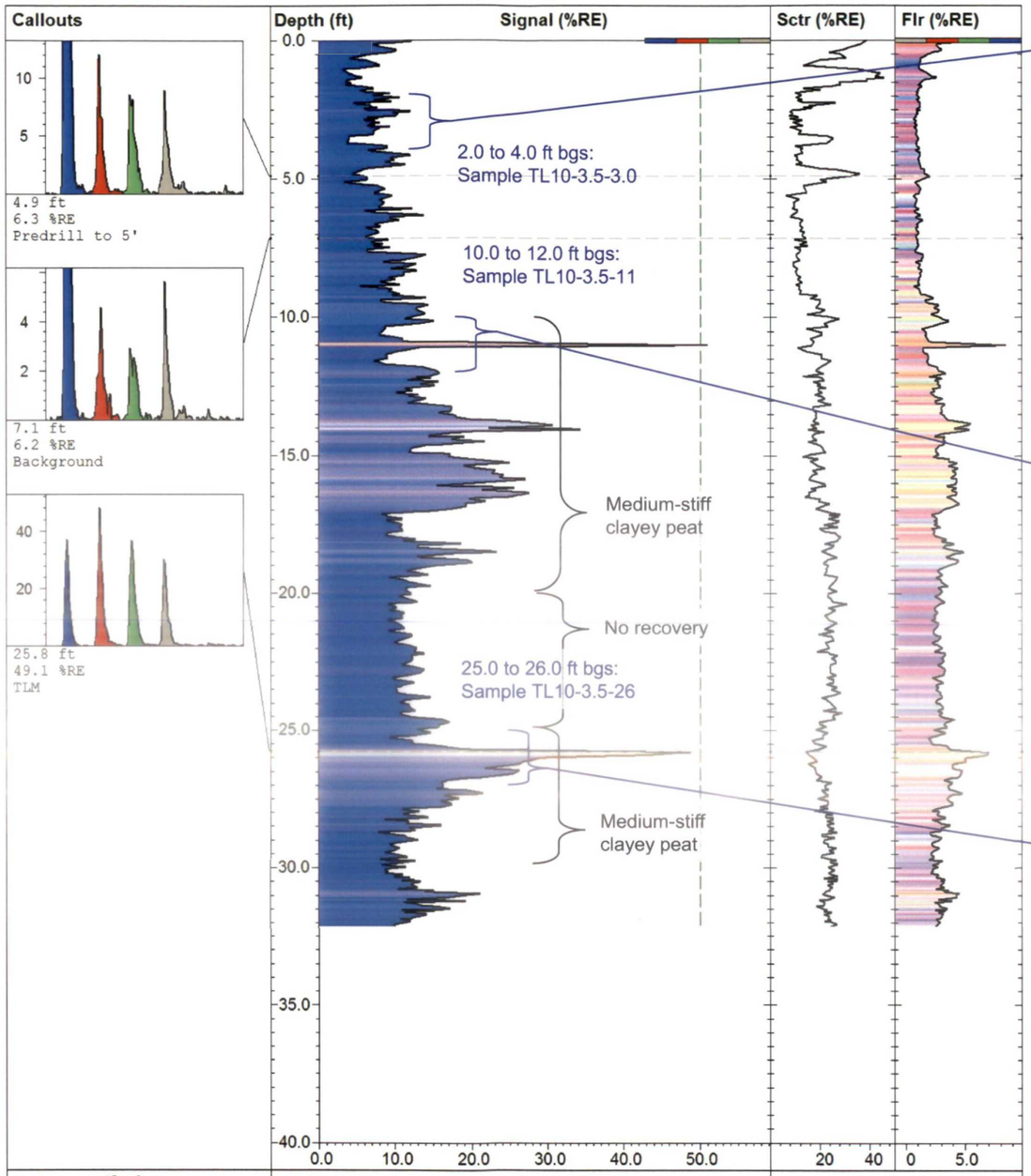


MW-112

UVOST Fluorescence Response Profile

Site: Quanta	Operator: T. Rudolph
Client: CH2MHILL	Job #: 001
Date/Time: 3/31/2006 @ 8:54:34 AM	Max fluorescence: 6.09% @ 4.70 ft
OST Unit: 01	Final depth BGS: 9.00 ft
Latitude:	Longitude:





TL10_03_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.240468 N / NAD83**	*Final depth:* **32.14 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.441818 W**	*Max signal:* **53.8 % @ 11.00 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 8:11:07 AM**

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TL10-3.5-3.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.97 U
2-Methylphenol	2800	0.97 U
3&4-Methylphenol	310	0.282 U
Acenaphthene	100	0.583
Acenaphthylene	NA	0.561
Anthracene	100	12.7
Benzene	0.64	0.069 U
Benzo(a)anthracene	0.62	33
Benzo(a)pyrene	0.06	31.1
Benzo(b)fluoranthene	0.62	26.3
Benzo(g,h,i)perylene	NA	15.1
Benzo(k)fluoranthene	0.9	23.5
Chrysene	9	31.9
Dibenzo(a,h)anthracene	0.06	6.32
Ethylbenzene	100	0.069 U
Fluoranthene	100	69.2
Indeno(1,2,3-cd)pyrene	0.62	14.7
Naphthalene	56	1.69
Phenanthrene	NA	40.8
Pyrene	100	54.3
Toluene	500	0.069 U
Xylenes, (total)	67	0.14 U

Low RE% shows high contamination

TL10-3.5-11		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.31 U
2-Methylphenol	2800	0.31 U
3&4-Methylphenol	310	6.53 U
Acenaphthene	100	0.35 J
Acenaphthylene	NA	0.12 U
Anthracene	100	0.142
Benzene	0.64	0.18 U
Benzo(a)anthracene	0.62	0.483
Benzo(a)pyrene	0.06	0.519
Benzo(b)fluoranthene	0.62	0.52
Benzo(g,h,i)perylene	NA	0.344
Benzo(k)fluoranthene	0.9	0.331
Chrysene	9	0.632
Dibenzo(a,h)anthracene	0.06	0.102 J
Ethylbenzene	100	0.18 U
Fluoranthene	100	1.06
Indeno(1,2,3-cd)pyrene	0.62	0.271
Naphthalene	56	0.0512 J
Phenanthrene	NA	0.593
Pyrene	100	0.902
Toluene	500	0.18 U
Xylenes, (total)	67	0.36 U

TL10-3.5-26		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.29 U
2-Methylphenol	2800	0.29 U
3&4-Methylphenol	310	1.15 U
Acenaphthene	100	0.14 U
Acenaphthylene	NA	0.12 U
Anthracene	100	0.0421 J
Benzene	0.64	0.15 U
Benzo(a)anthracene	0.62	0.11 J
Benzo(a)pyrene	0.06	0.0931 J
Benzo(b)fluoranthene	0.62	0.0803 J
Benzo(g,h,i)perylene	NA	0.0594 J
Benzo(k)fluoranthene	0.9	0.0686 J
Chrysene	9	0.116 J
Dibenzo(a,h)anthracene	0.06	0.12 U
Ethylbenzene	100	0.15 U
Fluoranthene	100	0.25
Indeno(1,2,3-cd)pyrene	0.62	0.0496 J
Naphthalene	56	0.12 U
Phenanthrene	NA	0.203
Pyrene	100	0.232
Toluene	500	0.15 U
Xylenes, (total)	67	0.3 U

CH2MHILL

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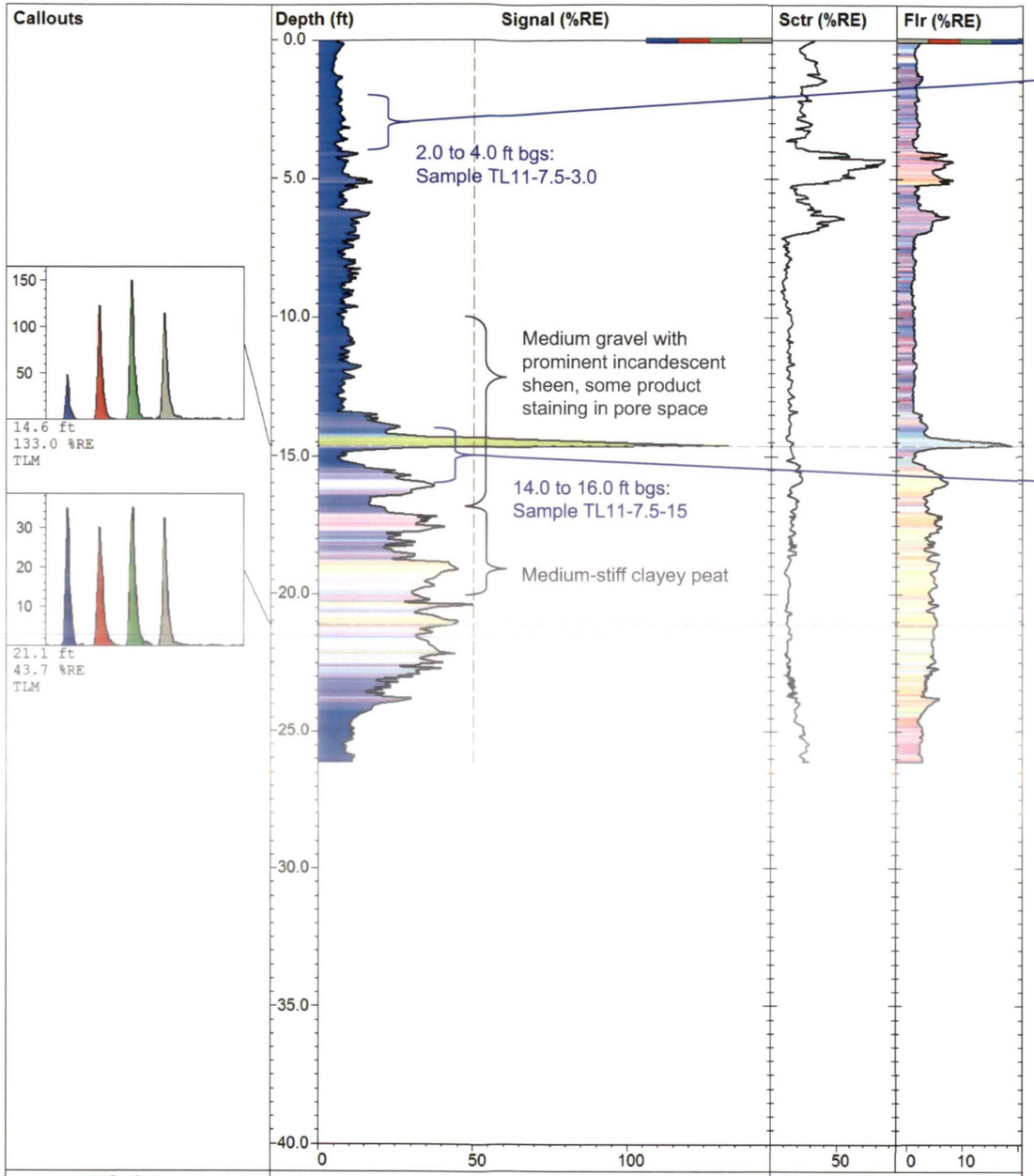
05/03/2007 | **FIGURE E-1**



TL11-7.5-3.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.93 U
2-Methylphenol	2800	0.93 U
3&4-Methylphenol	310	8.84 U
Acenaphthene	100	0.27
Acenaphthylene	NA	0.399
Anthracene	100	5.91
Benzene	0.64	0.064 U
Benzo(a)anthracene	0.62	16
Benzo(a)pyrene	0.06	13.3
Benzo(b)fluoranthene	0.62	13.5
Benzo(g,h,i)perylene	NA	7.14
Benzo(k)fluoranthene	0.9	11.6
Chrysene	9	15.1
Dibenzo(a,h)anthracene	0.06	3.29
Ethylbenzene	100	0.064 U
Fluoranthene	100	34.1
Indeno(1,2,3-cd)pyrene	0.62	7.03
Naphthalene	56	1.03
Phenanthrene	NA	20.7
Pyrene	100	24.3
Toluene	500	0.064 U
Xylenes, (total)	67	0.13 U

TL11-7.5-15		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.24 U
2-Methylphenol	2800	0.24 U
3&4-Methylphenol	310	1.2 U
Acenaphthene	100	0.22
Acenaphthylene	NA	0.234
Anthracene	100	2.25
Benzene	0.64	0.11 U
Benzo(a)anthracene	0.62	2.26
Benzo(a)pyrene	0.06	1.91
Benzo(b)fluoranthene	0.62	1.47
Benzo(g,h,i)perylene	NA	0.99
Benzo(k)fluoranthene	0.9	1.33
Chrysene	9	2.08
Dibenzo(a,h)anthracene	0.06	0.334
Ethylbenzene	100	0.11 U
Fluoranthene	100	6.5
Indeno(1,2,3-cd)pyrene	0.62	0.844
Naphthalene	56	12.3
Phenanthrene	NA	10.2
Pyrene	100	5.34
Toluene	500	0.11 U
Xylenes, (total)	67	0.23 U

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TL11_07_5		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.28909 N / NAD83**	*Final depth:* **26.12 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.50354 W**	*Max signal:* **133.0 % @ 14.62 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/4/2006 11:19:42 AM**

CH2MHILL

TarGOST™ Boring TL11-7.5

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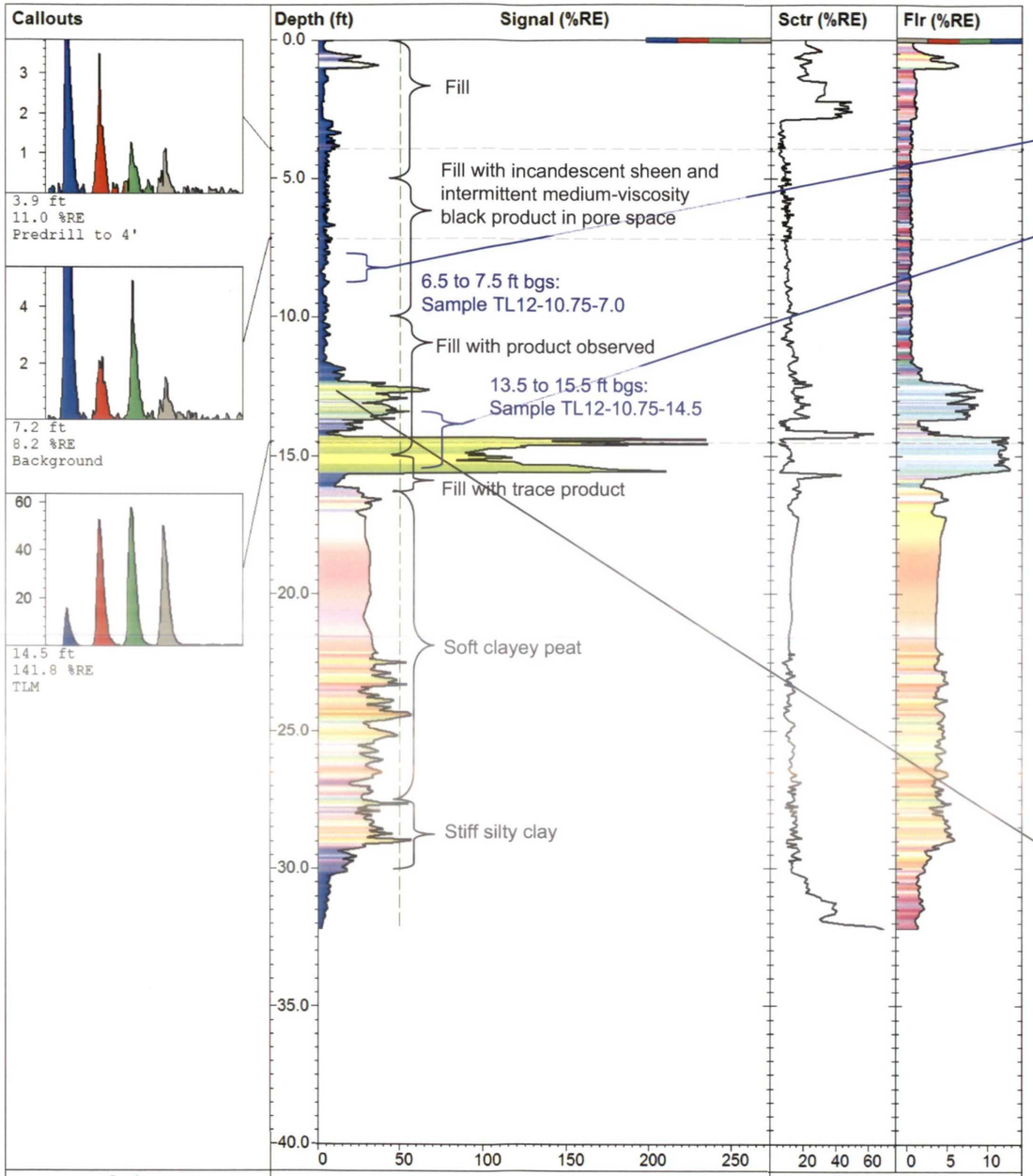
05/03/2007 | **FIGURE E-2**



TL12_10_75		TarGOST
Site: Quanta, Edgewater, NJ	Latitude / System: 40 48.327527 N / NAD83	Final depth: 32.22 ft
Client: CH2M Hill	Longitude: 073 59.554442 W	Max signal: 248.7 % @ 14.41 ft
Job: 03-2588	Operator/Unit: Steve Adamek/DTI01	Date & Time: 10/6/2006 9:49:10 AM

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TL12-10.75-14.5		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	8.34
2-Methylphenol	2800	6.3 U
3&4-Methylphenol	310	1.2 U
Acenaphthene	100	0.226
Acenaphthylene	NA	54.2
Anthracene	100	646
Benzene	0.64	29.3
Benzo(a)anthracene	0.62	399
Benzo(a)pyrene	0.06	240
Benzo(b)fluoranthene	0.62	165
Benzo(g,h,i)perylene	NA	77.8
Benzo(k)fluoranthene	0.9	202
Chrysene	9	337
Dibenzo(a,h)anthracene	0.06	31.4
Ethylbenzene	100	174
Fluoranthene	100	1710
Indeno(1,2,3-cd)pyrene	0.62	81.9
Naphthalene	56	5360
Phenanthrene	NA	3310
Pyrene	100	1170
Toluene	500	70.7
Xylenes, (total)	67	288

TL12-10.75-7.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.21 U
2-Methylphenol	2800	0.21 U
3&4-Methylphenol	310	0.755 U
Acenaphthene	100	0.747
Acenaphthylene	NA	0.47
Anthracene	100	1.23
Benzene	0.64	2.7
Benzo(a)anthracene	0.62	1.9
Benzo(a)pyrene	0.06	1.8
Benzo(b)fluoranthene	0.62	2.02
Benzo(g,h,i)perylene	NA	0.956
Benzo(k)fluoranthene	0.9	1.31
Chrysene	9	1.87
Dibenzo(a,h)anthracene	0.06	0.41
Ethylbenzene	100	2.72
Fluoranthene	100	3.35
Indeno(1,2,3-cd)pyrene	0.62	0.995
Naphthalene	56	11
Phenanthrene	NA	14
Pyrene	100	2.17
Toluene	500	0.296
Xylenes, (total)	67	1.08

Fill with product observed at approximately 13 feet bgs at TL12-10.75

CH2MHILL

TarGOST™ Boring TL12-10.75

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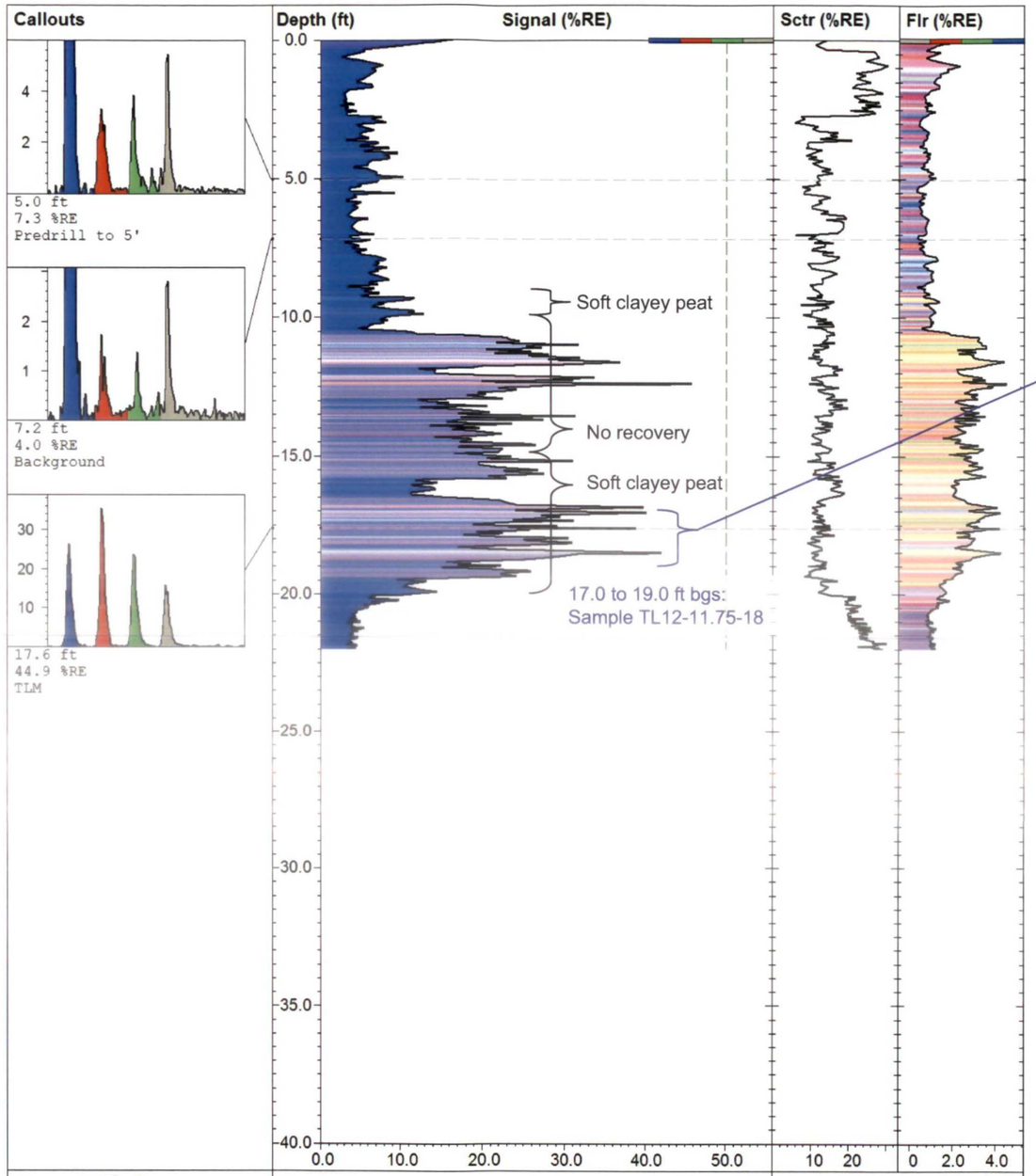
05/03/2007 | **FIGURE E-3**



TL12-11.75-18		
Parameter	**Criteria**	**Result**
2,4-Dimethylphenol	10	0.36 U
2-Methylphenol	2800	0.36 U
3&4-Methylphenol	310	1.42 U
Acenaphthene	100	91.8 J
Acenaphthylene	NA	0.14 U
Anthracene	100	0.0796 J
Benzene	0.64	0.2 U
Benzo(a)anthracene	0.62	0.0828 J
Benzo(a)pyrene	0.06	0.0552 J
Benzo(b)fluoranthene	0.62	0.0408 J
Benzo(g,h,i)perylene	NA	0.14 U
Benzo(k)fluoranthene	0.9	0.14 U
Chrysene	9	0.0727 J
Dibenzo(a,h)anthracene	0.06	0.14 U
Ethylbenzene	100	0.2 U
Fluoranthene	100	0.276
Indeno(1,2,3-cd)pyrene	0.62	0.14 U
Naphthalene	56	0.215
Phenanthrene	NA	0.402
Pyrene	100	0.209
Toluene	500	0.2 U
Xylenes, (total)	67	0.4 U

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TL12_11_75		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **22.02 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **50.7 % @ 12.39 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 8:44:32 AM**

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TarGOST™ Boring TL12-11.75

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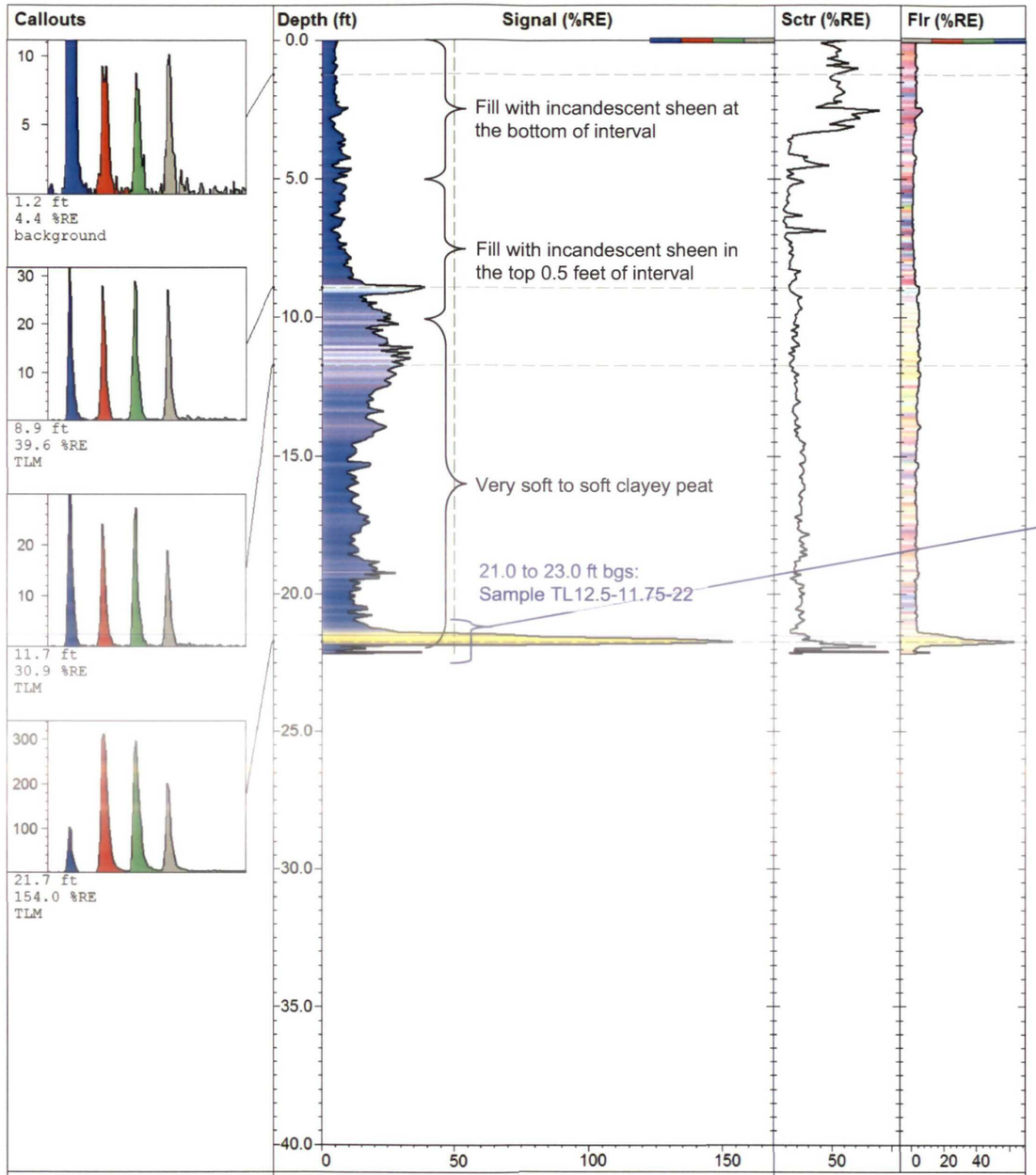
05/03/2007 | **FIGURE E-4**



TL12.5-11.75-22		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.33 U
2-Methylphenol	2800	0.33 U
3&4-Methylphenol	310	0.19 U
Acenaphthene	100	0.12
Acenaphthylene	NA	0.13 U
Anthracene	100	0.295
Benzene	0.64	0.19 U
Benzo(a)anthracene	0.62	0.156
Benzo(a)pyrene	0.06	0.108 J
Benzo(b)fluoranthene	0.62	0.0702 J
Benzo(g,h,i)perylene	NA	0.0583 J
Benzo(k)fluoranthene	0.9	0.0841 J
Chrysene	9	0.153
Dibenzo(a,h)anthracene	0.06	0.13 U
Ethylbenzene	100	0.19 U
Fluoranthene	100	0.665
Indeno(1,2,3-cd)pyrene	0.62	0.0539 J
Naphthalene	56	1.06
Phenanthrene	NA	1.31
Pyrene	100	0.465
Toluene	500	0.19 U
Xylenes, (total)	67	0.37 U

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TL12_5_11_75		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.348017 N / NAD83**	*Final depth:* **22.21 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.562559 W**	*Max signal:* **154.0 % @ 21.74 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 4:04:08 PM**

CH2MHILL

TarGOST™ Boring TL12.5-11.75

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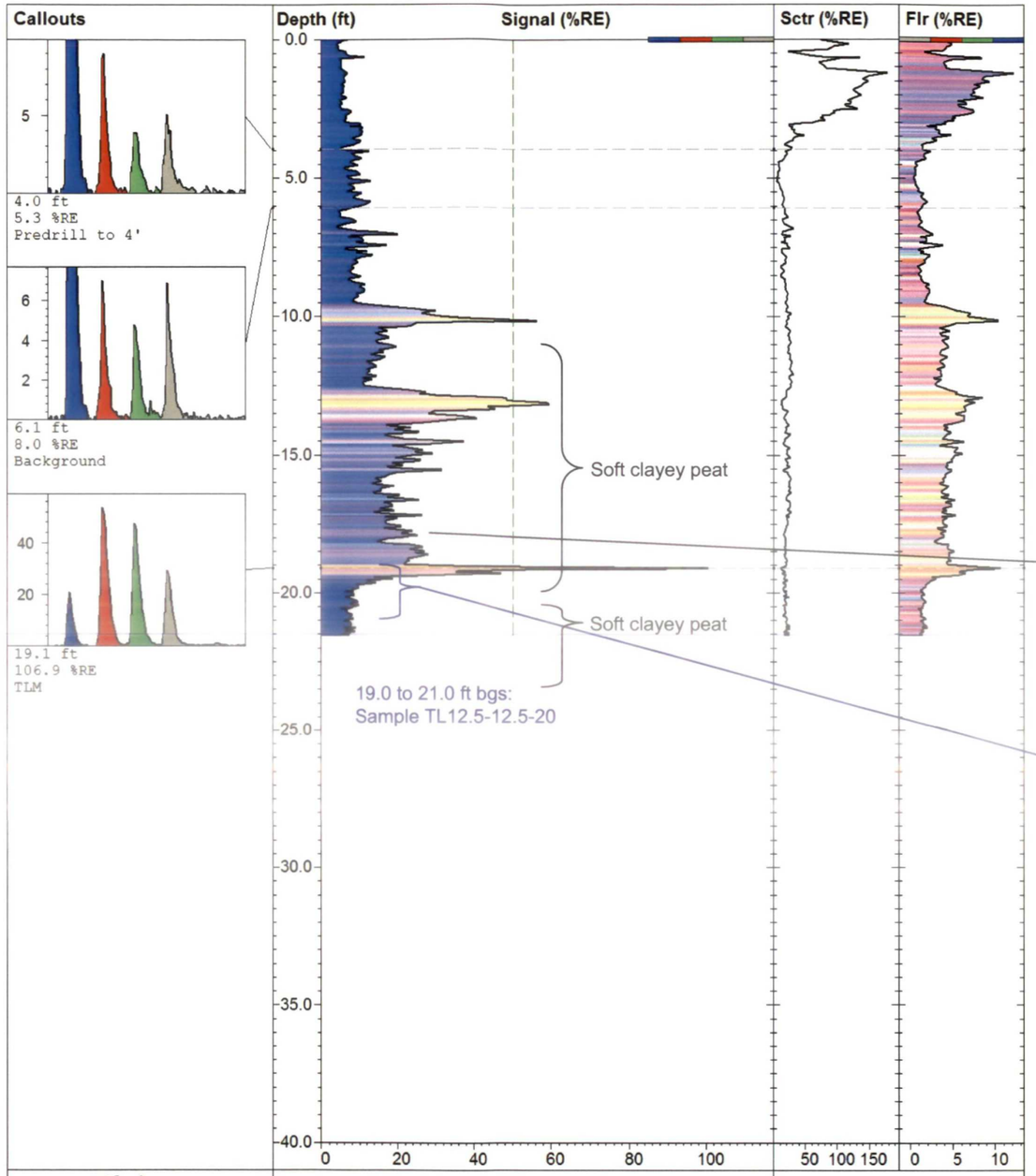
05/03/2007 | **FIGURE E-5**



Clayey peat at TL 12.5-12.25 at approximately 18 feet bgs where coal tar was expected based on TarGOST results.

TL12.5-12.25-20		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.24 U
2-Methylphenol	2800	0.24 U
3&4-Methylphenol	310	0.2 U
Acenaphthene	100	0.11
Acenaphthylene	NA	0.0267 J
Anthracene	100	0.0845 J
Benzene	0.64	0.1 U
Benzo(a)anthracene	0.62	0.473
Benzo(a)pyrene	0.06	0.392
Benzo(b)fluoranthene	0.62	0.373
Benzo(g,h,i)perylene	NA	0.221
Benzo(k)fluoranthene	0.9	0.278
Chrysene	9	0.543
Dibenzo(a,h)anthracene	0.06	0.0533 J
Ethylbenzene	100	0.1 U
Fluoranthene	100	0.653
Indeno(1,2,3-cd)pyrene	0.62	0.137
Naphthalene	56	0.0806 J
Phenanthrene	NA	0.185
Pyrene	100	0.714
Toluene	500	0.1 U
Xylenes, (total)	67	0.21 U

High RE, low PAHs

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TL12_5_12_25		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.351371 N / NAD83**	*Final depth:* **21.57 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.575477 W**	*Max signal:* **106.9 % @ 19.10 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/6/2006 9:16:42 AM**

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TarGOST™ Boring TL12.5-12.25

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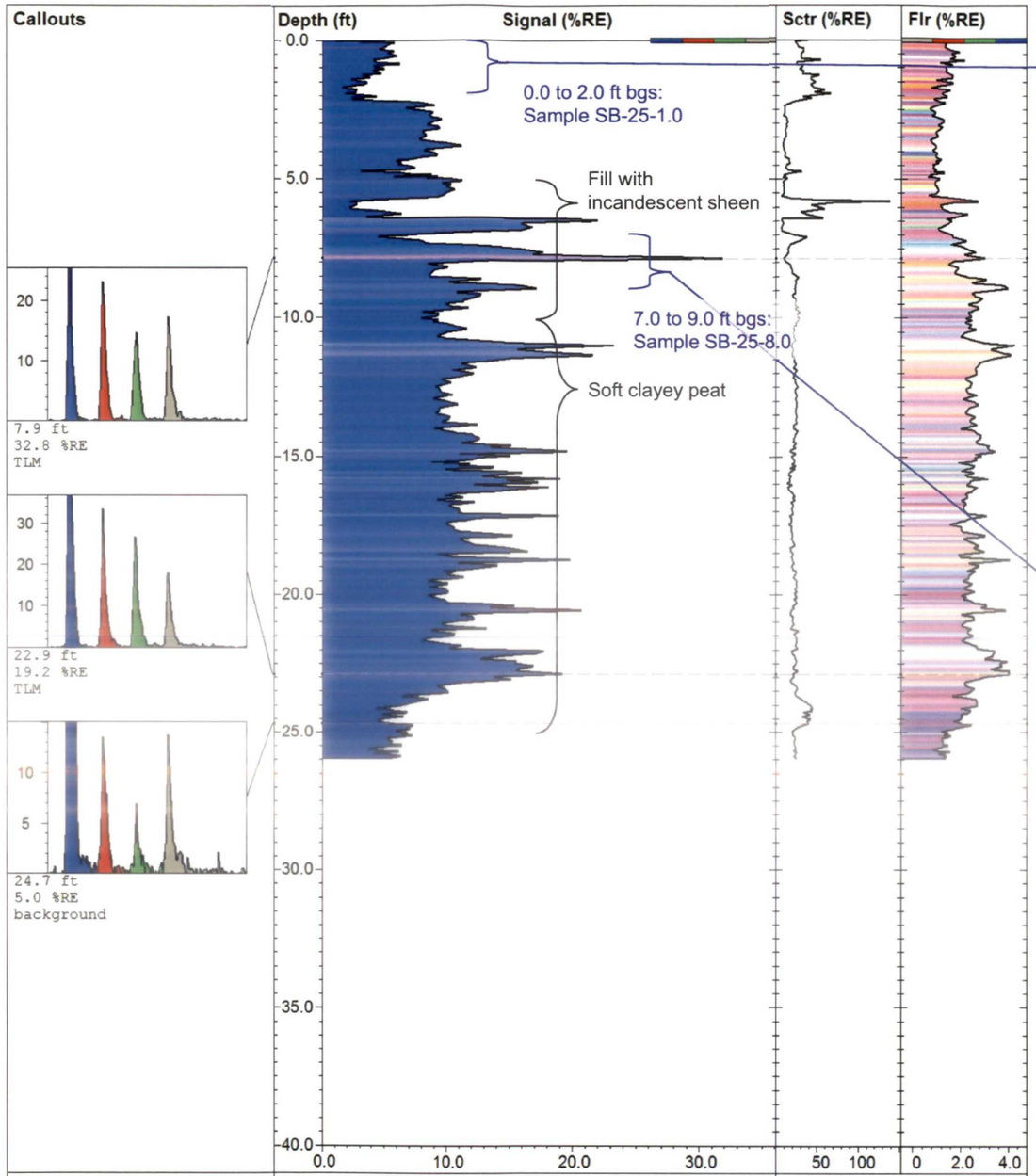
05/03/2007 | **FIGURE E-6**



SB-25-1.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	1.9 U
2-Methylphenol	2800	12 U
3&4-Methylphenol	310	1.9 U
Acenaphthene	100	4.4
Acenaphthylene	NA	1.6
Anthracene	100	5.0
Benzene	0.64	0.07 U
Benzo(a)anthracene	0.62	28
Benzo(a)pyrene	0.06	38
Benzo(b)fluoranthene	0.62	35
Benzo(g,h,i)perylene	NA	24
Benzo(k)fluoranthene	0.9	27
Chrysene	9	31
Dibenzo(a,h)anthracene	0.06	8.5
Ethylbenzene	100	0.07 U
Fluoranthene	100	45
Indeno(1,2,3-cd)pyrene	0.62	22
Naphthalene	56	0.57 J
Phenanthrene	NA	17
Pyrene	100	38
Toluene	500	0.039 J
Xylenes, (total)	67	0.036 J

SB-25-8.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	12 U
2-Methylphenol	2800	1.9 U
3&4-Methylphenol	310	12 U
Acenaphthene	100	294
Acenaphthylene	NA	19
Anthracene	100	354
Benzene	0.64	3.9
Benzo(a)anthracene	0.62	228
Benzo(a)pyrene	0.06	205
Benzo(b)fluoranthene	0.62	162
Benzo(g,h,i)perylene	NA	94
Benzo(k)fluoranthene	0.9	105
Chrysene	9	229
Dibenzo(a,h)anthracene	0.06	29
Ethylbenzene	100	51
Fluoranthene	100	684
Indeno(1,2,3-cd)pyrene	0.62	84
Naphthalene	56	1840
Phenanthrene	NA	1130
Pyrene	100	635
Toluene	500	4.0
Xylenes, (total)	67	91

High values indicate tar but RE is only 32.8, so this interval wouldn't be included.

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TL13_5_11_25		**TarGOST**
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **25.99 ft**
Client: **CH2M Hill**	*Longitude:* **Unavailable**	*Max signal:* **32.8 % @ 7.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 2:18:24 PM**

CH2MHILL

TarGOST™ Boring TL13.5-11.25

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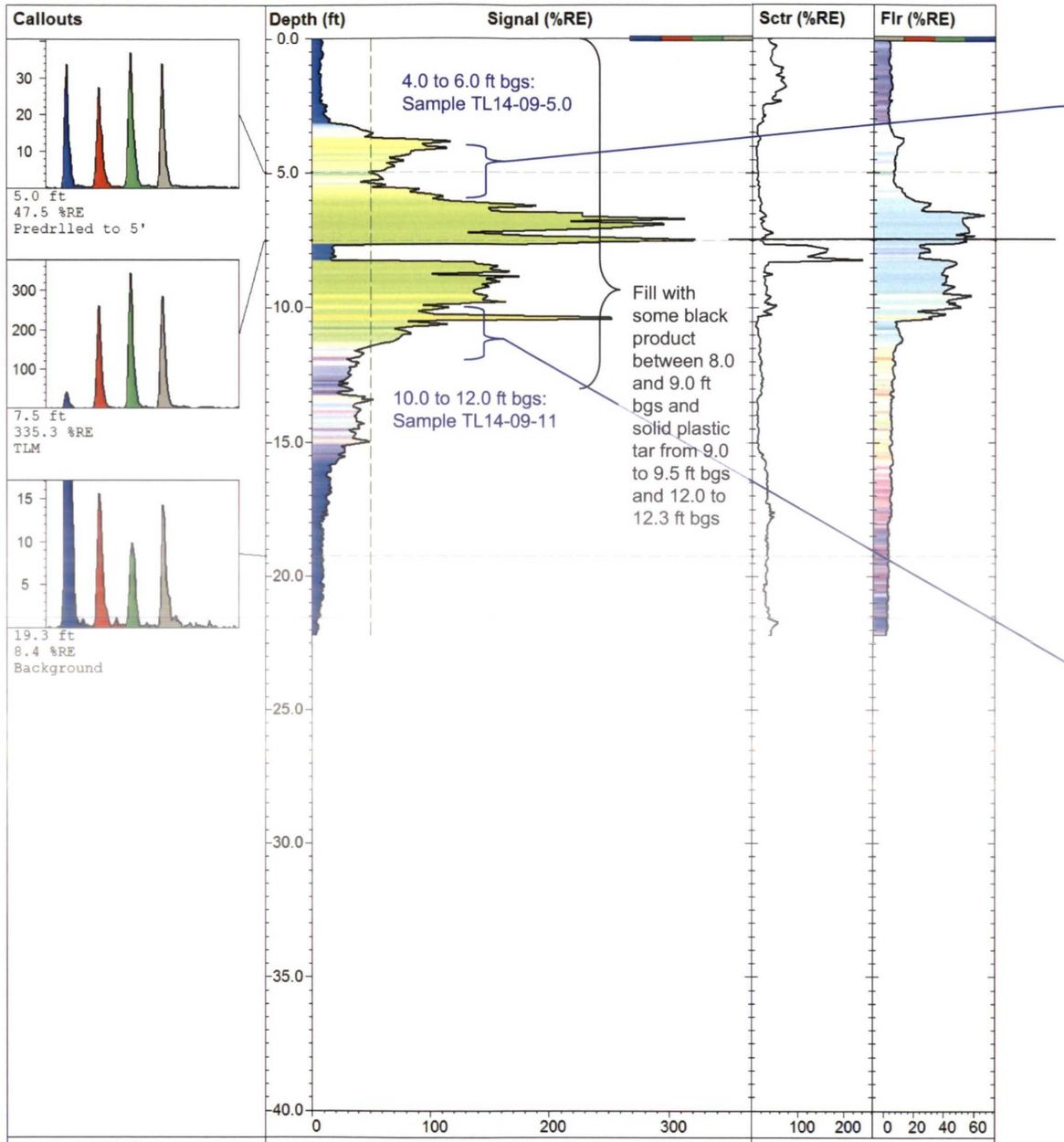
05/03/2007 | **FIGURE E-7**



TL14_09		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.343146 N / NAD83**	*Final depth:* **22.23 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.493114 W**	*Max signal:* **335.3 % @ 7.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 2:41:20 PM**

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TL14-09-5.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	10.7
2-Methylphenol	2800	3.5 U
3&4-Methylphenol	310	0.93 U
Acenaphthene	100	0.347
Acenaphthylene	NA	53.9 J
Anthracene	100	478
Benzene	0.64	23.9
Benzo(a)anthracene	0.62	319
Benzo(a)pyrene	0.06	214
Benzo(b)fluoranthene	0.62	178
Benzo(g,h,i)perylene	NA	114
Benzo(k)fluoranthene	0.9	129
Chrysene	9	273
Dibenzo(a,h)anthracene	0.06	38.4 J
Ethylbenzene	100	94.2
Fluoranthene	100	1140
Indeno(1,2,3-cd)pyrene	0.62	97.4
Naphthalene	56	4770
Phenanthrene	NA	2230
Pyrene	100	826
Toluene	500	57.3
Xylenes, (total)	67	177

TL14-09-11		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	113
2-Methylphenol	2800	83.2
3&4-Methylphenol	310	0.19
Acenaphthene	100	0.12
Acenaphthylene	NA	402
Anthracene	100	1050
Benzene	0.64	92.6
Benzo(a)anthracene	0.62	686
Benzo(a)pyrene	0.06	434
Benzo(b)fluoranthene	0.62	346
Benzo(g,h,i)perylene	NA	191
Benzo(k)fluoranthene	0.9	262
Chrysene	9	596
Dibenzo(a,h)anthracene	0.06	71 J
Ethylbenzene	100	138
Fluoranthene	100	2350
Indeno(1,2,3-cd)pyrene	0.62	170
Naphthalene	56	10200
Phenanthrene	NA	4600
Pyrene	100	1700
Toluene	500	186
Xylenes, (total)	67	348

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TarGOST™ Boring TL14-09

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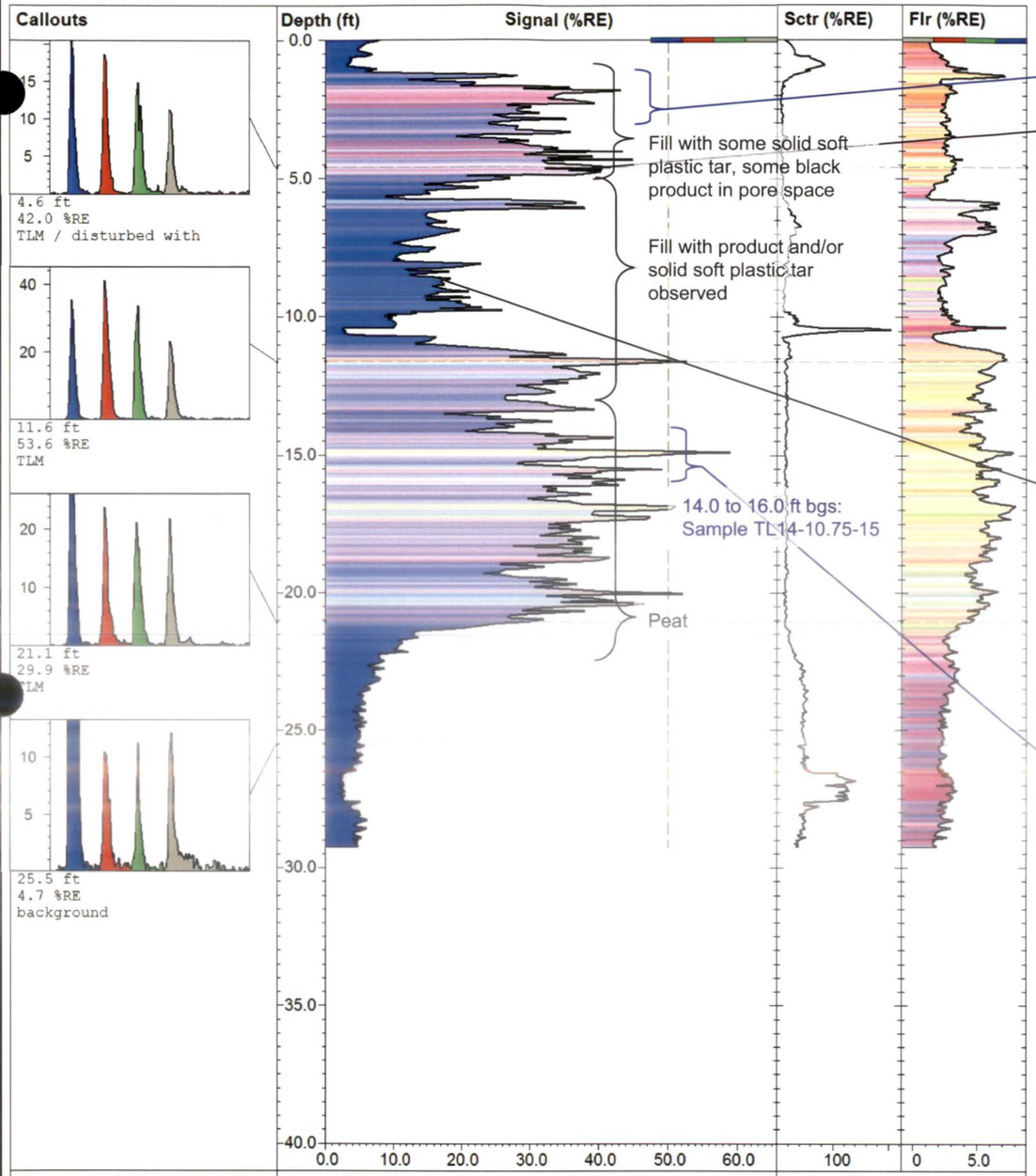
05/03/2007 | **FIGURE E-8**



1.0 to 3.0 ft bgs:
Sample TL14-10.75-2.0

TL14-10.75-2.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	3.23 J
2-Methylphenol	2800	1.19
3&4-Methylphenol	310	7 U
Acenaphthene	100	1.07
Acenaphthylene	NA	0.38 U
Anthracene	100	1510
Benzene	0.64	13.9
Benzo(a)anthracene	0.62	396
Benzo(a)pyrene	0.06	181
Benzo(b)fluoranthene	0.62	183
Benzo(g,h,i)perylene	NA	65.9 J
Benzo(k)fluoranthene	0.9	184
Chrysene	9	417
Dibenzo(a,h)anthracene	0.06	26.1 J
Ethylbenzene	100	40.1
Fluoranthene	100	2430
Indeno(1,2,3-cd)pyrene	0.62	78.7
Naphthalene	56	1600
Phenanthrene	NA	3620
Pyrene	100	1530
Toluene	500	26.6
Xylenes, (total)	67	270

Incandescent sheen and solid, semi-plastic coal tar from TL 14-10.75 at approximately 4.5 feet bgs.

TL14-10.75-15		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	8.52
2-Methylphenol	2800	3.37
3&4-Methylphenol	310	0.21
Acenaphthene	100	0.12
Acenaphthylene	NA	5.47
Anthracene	100	314
Benzene	0.64	17.7
Benzo(a)anthracene	0.62	247
Benzo(a)pyrene	0.06	177
Benzo(b)fluoranthene	0.62	154
Benzo(g,h,i)perylene	NA	80.2
Benzo(k)fluoranthene	0.9	118
Chrysene	9	228
Dibenzo(a,h)anthracene	0.06	33.7
Ethylbenzene	100	40.1
Fluoranthene	100	691
Indeno(1,2,3-cd)pyrene	0.62	83.6
Naphthalene	56	746
Phenanthrene	NA	1100
Pyrene	100	572
Toluene	500	39.1
Xylenes, (total)	67	58.4

Black product in pore space of sand at approximately 8.5 feet bgs at TL 14-10.75.

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TL14_10_75		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.359819 N / NAD83**	*Final depth:* **29.27 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.529800 W**	*Max signal:* **59.7 % @ 14.90 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 10:56:00 AM**

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TarGOST™ Boring TL14-10.75

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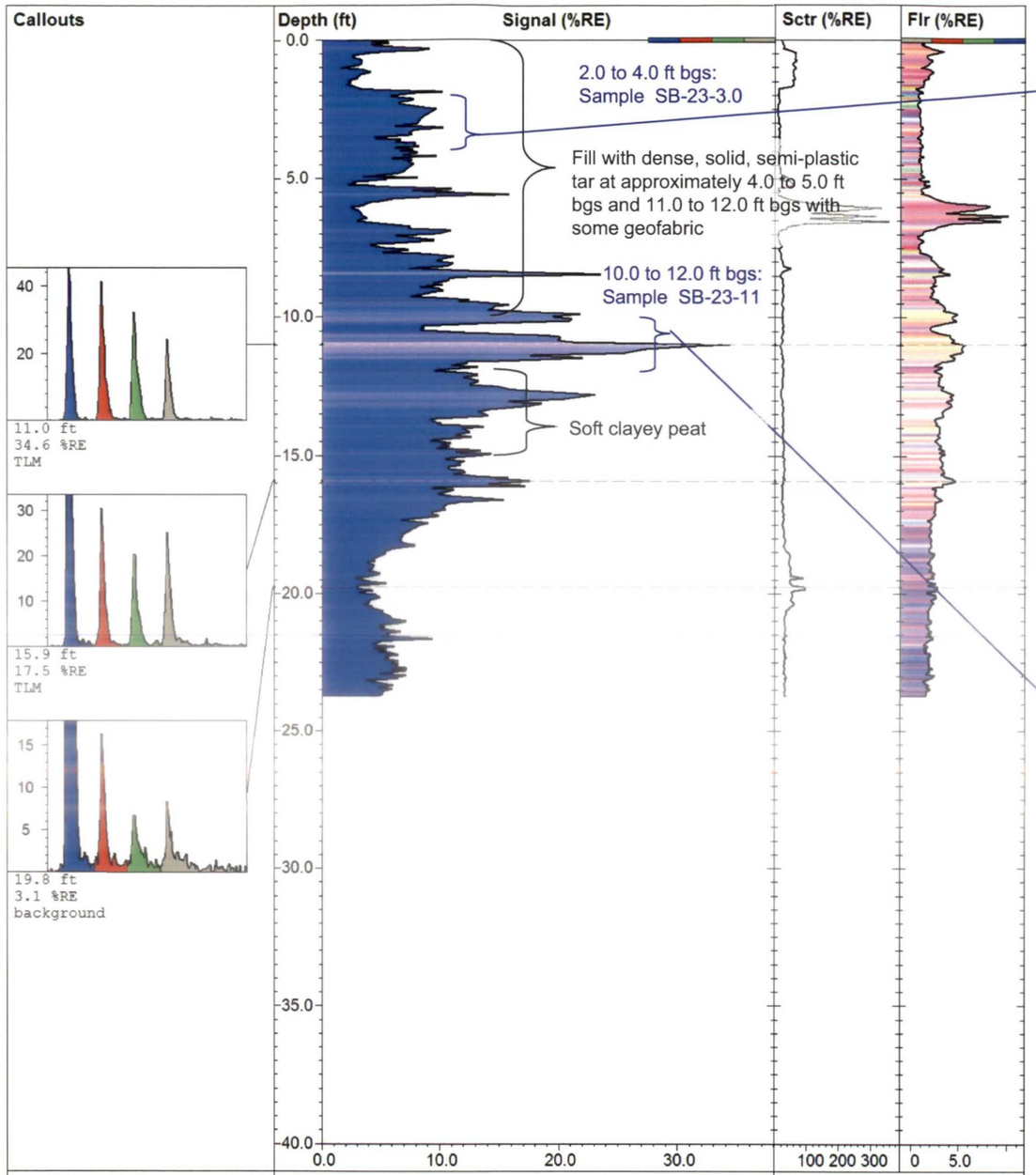
05/03/2007 | **FIGURE E-9**



TL14_11_25		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.365214 N / NAD83**	*Final depth:* **23.73 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.542553 W**	*Max signal:* **34.6 % @ 10.99 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 1:54:11 PM**

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SB-23-3.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	6.5
2-Methylphenol	2800	2.1 J
3&4-Methylphenol	310	6.310
Acenaphthene	100	345
Acenaphthylene	NA	13
Anthracene	100	516
Benzene	0.64	2.8
Benzo(a)anthracene	0.62	507
Benzo(a)pyrene	0.06	455
Benzo(b)fluoranthene	0.62	332
Benzo(g,h,i)perylene	NA	178
Benzo(k)fluoranthene	0.9	347
Chrysene	9	474
Dibenzo(a,h)anthracene	0.06	67
Ethylbenzene	100	2.4
Fluoranthene	100	1210
Indeno(1,2,3-cd)pyrene	0.62	203
Naphthalene	56	396
Phenanthrene	NA	1460
Pyrene	100	1050
Toluene	500	1.1 J
Xylenes, (total)	67	3.7

SB-23-11		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	14
2-Methylphenol	2800	3 J
3&4-Methylphenol	310	8.630
Acenaphthene	100	360
Acenaphthylene	NA	3.5
Anthracene	100	426
Benzene	0.64	3.7 J
Benzo(a)anthracene	0.62	374
Benzo(a)pyrene	0.06	308
Benzo(b)fluoranthene	0.62	247
Benzo(g,h,i)perylene	NA	156 J
Benzo(k)fluoranthene	0.9	212
Chrysene	9	335
Dibenzo(a,h)anthracene	0.06	45 J
Ethylbenzene	100	9.6
Fluoranthene	100	977
Indeno(1,2,3-cd)pyrene	0.62	116
Naphthalene	56	2560 J
Phenanthrene	NA	1370
Pyrene	100	824
Toluene	500	4.8 J
Xylenes, (total)	67	7.8 J

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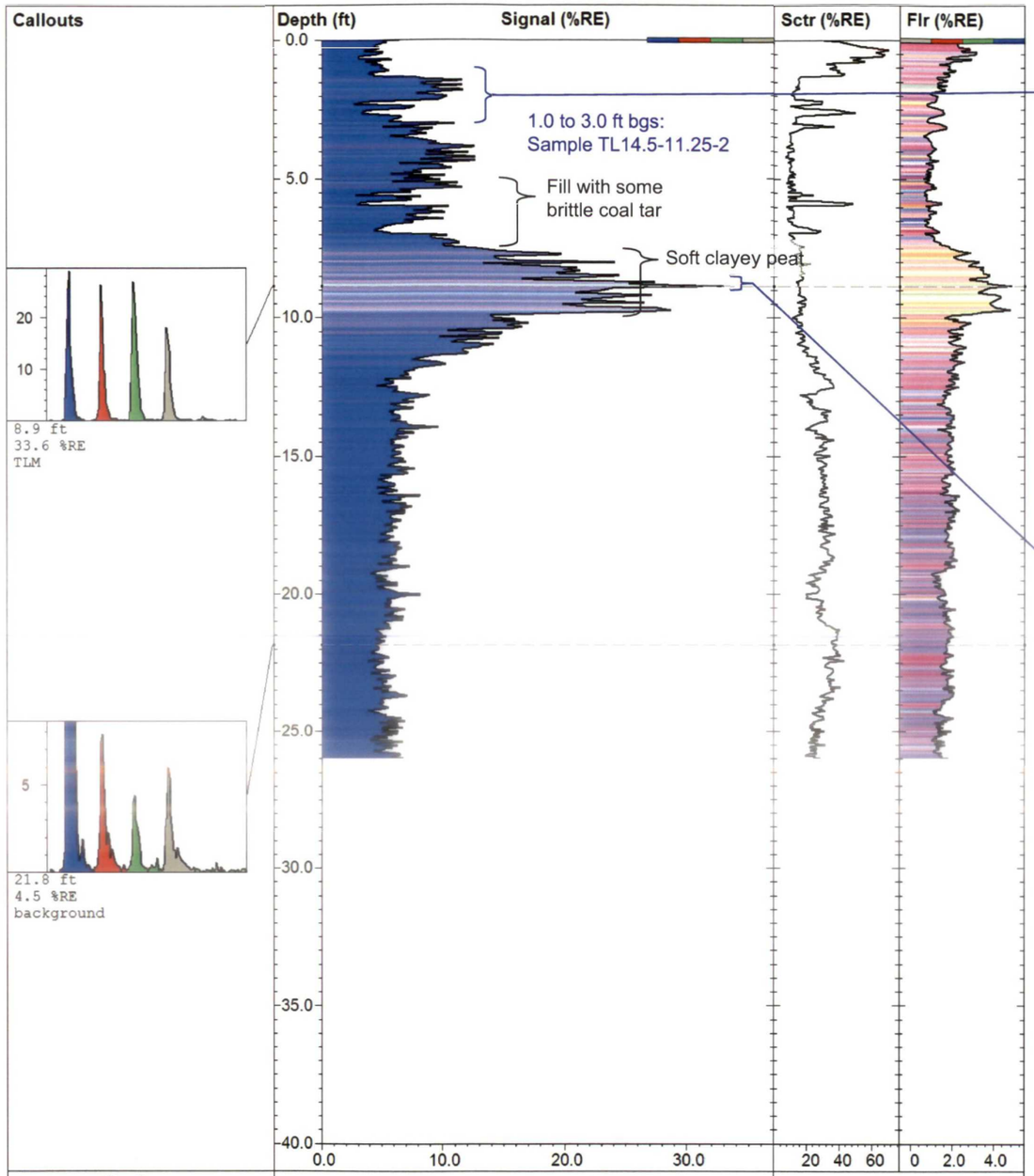
05/03/2007 | **FIGURE E-11**



8.5 to 9.0 ft bgs:
Sample TL14.5-11.25-9

TL14.5-11.25-2.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	1.1 U
2-Methylphenol	2800	1.1 U
3&4-Methylphenol	310	0.331 U
Acenaphthene	100	47.5
Acenaphthylene	NA	4.54
Anthracene	100	10.2
Benzene	0.64	0.0405 J
Benzo(a)anthracene	0.62	39.6
Benzo(a)pyrene	0.06	55.6
Benzo(b)fluoranthene	0.62	61
Benzo(g,h,i)perylene	NA	49.7
Benzo(k)fluoranthene	0.9	32.2
Chrysene	9	44.4
Dibenzo(a,h)anthracene	0.06	12.7
Ethylbenzene	100	0.066 U
Fluoranthene	100	74.6
Indeno(1,2,3-cd)pyrene	0.62	47.3
Naphthalene	56	1.65
Phenanthrene	NA	21.2
Pyrene	100	56.4
Toluene	500	0.066 U
Xylenes, (total)	67	0.13 U

TL14.5-11.25-9.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.3 U
2-Methylphenol	2800	0.3 U
3&4-Methylphenol	310	0.19 U
Acenaphthene	100	0.13
Acenaphthylene	NA	0.12 U
Anthracene	100	0.0941 J
Benzene	0.64	0.384
Benzo(a)anthracene	0.62	0.0942 J
Benzo(a)pyrene	0.06	0.079 J
Benzo(b)fluoranthene	0.62	0.0518 J
Benzo(g,h,i)perylene	NA	0.0417 J
Benzo(k)fluoranthene	0.9	0.0633 J
Chrysene	9	0.103 J
Dibenzo(a,h)anthracene	0.06	0.12 U
Ethylbenzene	100	0.254
Fluoranthene	100	0.249
Indeno(1,2,3-cd)pyrene	0.62	0.12 U
Naphthalene	56	7.98
Phenanthrene	NA	0.297
Pyrene	100	0.188
Toluene	500	0.14 U
Xylenes, (total)	67	0.379

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TL14_5_11_25		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.372845 N / NAD83**	*Final depth:* **26.00 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.534001 W**	*Max signal:* **33.6 % @ 8.86 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 12:57:50 PM**

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TarGOST™ Boring TL14.5-11.25

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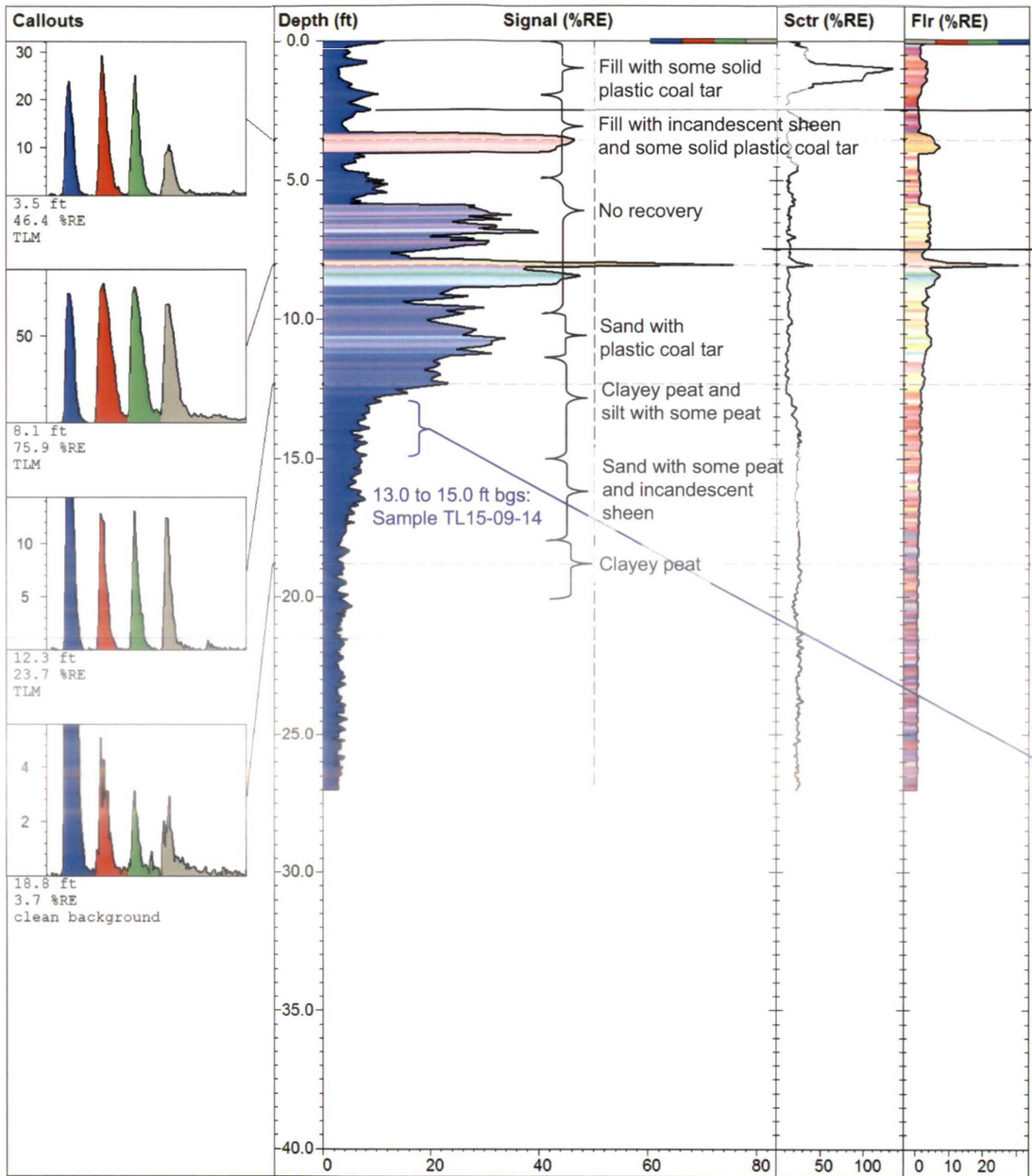
05/03/2007 | **FIGURE E-11**



Solid, semi-plastic coal tar taken from approximately 2.5 feet below ground surface (bgs) from TL 15-09.

TL15-09-14		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	3.28
2-Methylphenol	2800	2.57
3&4-Methylphenol	310	0.27
Acenaphthene	100	0.26
Acenaphthylene	NA	0.51 U
Anthracene	100	66.4
Benzene	0.64	12.6
Benzo(a)anthracene	0.62	245
Benzo(a)pyrene	0.06	226
Benzo(b)fluoranthene	0.62	193
Benzo(g,h,i)perylene	NA	127
Benzo(k)fluoranthene	0.9	151
Chrysene	9	283
Dibenzo(a,h)anthracene	0.06	46.8
Ethylbenzene	100	0.18 U
Fluoranthene	100	524
Indeno(1,2,3-cd)pyrene	0.62	107
Naphthalene	56	62.4
Phenanthrene	NA	349
Pyrene	100	446
Toluene	500	0.243
Xylenes, (total)	67	0.35 U

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TL15_09		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.357215 N / NAD83**	*Final depth:* **27.03 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.482659 W**	*Max signal:* **75.9 % @ 8.05 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/28/2006 1:52:16 PM**

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TarGOST™ Boring TL15-09

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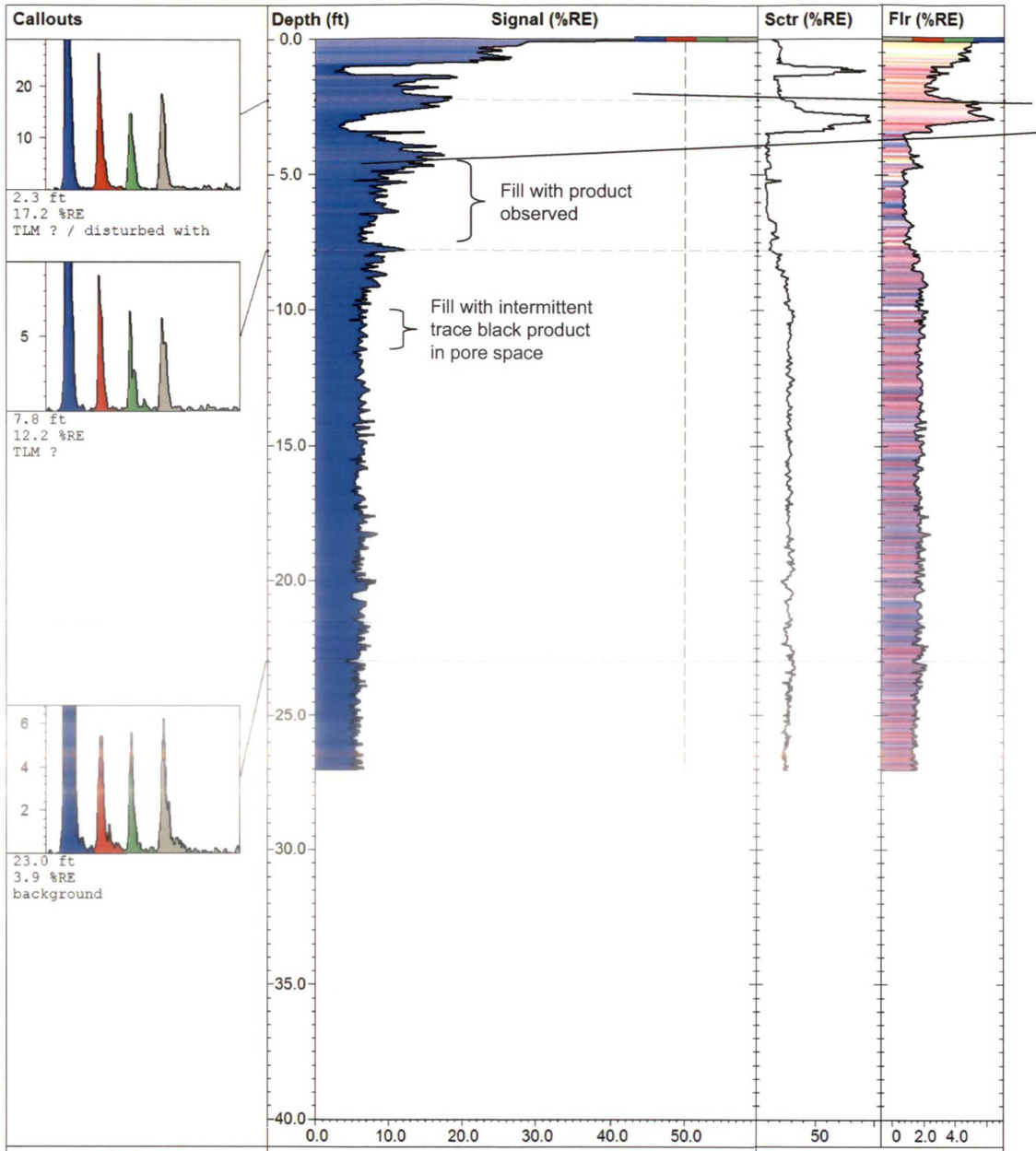
05/03/2007 | **FIGURE E-12**



Black product in fill at approximately 4.5 feet bgs at TL 15 10.75. The highest PID reading during the Supplemental Investigation was observed during sampling from this interval.

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TL15_10_75		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.373444 N / NAD83**	*Final depth:* **27.05 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.518715 W**	*Max signal:* **54.3 % @ 0.02 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/1/2006 11:31:04 AM**

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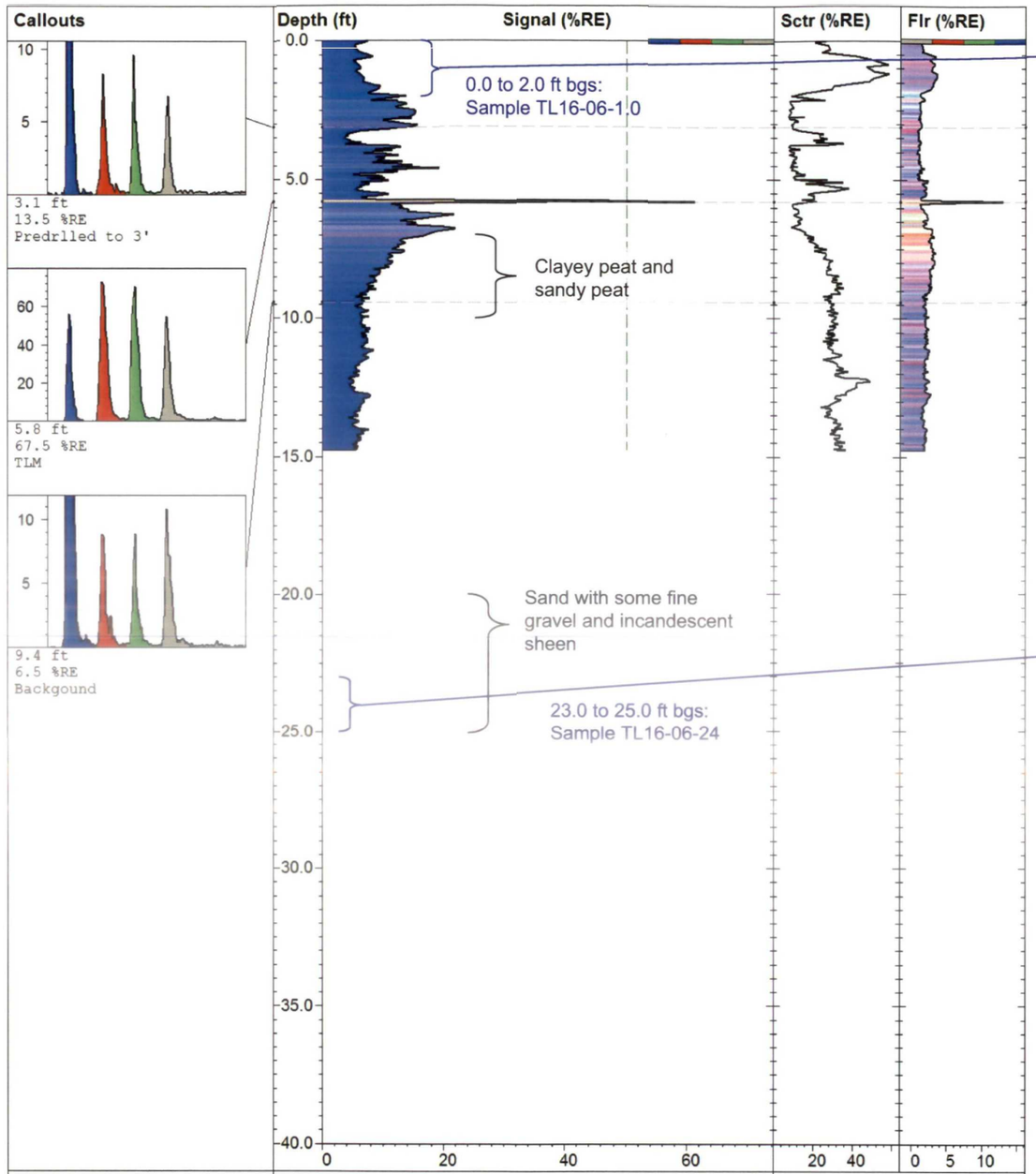
TarGOST™ Boring TL15-10.75

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-13**



TL16_06		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.346982 N / NAD83**	*Final depth:* **14.79 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.418834 W**	*Max signal:* **67.5 % @ 5.78 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 10:19:12 AM**

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TL16-06-1.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	1 U
2-Methylphenol	2800	0.201 J
3&4-Methylphenol	310	0.4
Acenaphthene	100	0.59
Acenaphthylene	NA	8012 J
Anthracene	100	106
Benzene	0.64	0.072 U
Benzo(a)anthracene	0.62	210
Benzo(a)pyrene	0.06	200
Benzo(b)fluoranthene	0.62	216
Benzo(g,h,i)perylene	NA	112
Benzo(k)fluoranthene	0.9	145
Chrysene	9	223
Dibenzo(a,h)anthracene	0.06	48.8
Ethylbenzene	100	0.072 U
Fluoranthene	100	525
Indeno(1,2,3-cd)pyrene	0.62	115
Naphthalene	56	9.53 J
Phenanthrene	NA	228
Pyrene	100	381
Toluene	500	0.072 U
Xylenes, (total)	67	0.14 U

TL16-06-24		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.98 U
2-Methylphenol	2800	0.05 U
3&4-Methylphenol	310	0.12 J
Acenaphthene	100	22.7
Acenaphthylene	NA	1.35 J
Anthracene	100	29.7
Benzene	0.64	0.198
Benzo(a)anthracene	0.62	31.8
Benzo(a)pyrene	0.06	26
Benzo(b)fluoranthene	0.62	20.2
Benzo(g,h,i)perylene	NA	12.6 J
Benzo(k)fluoranthene	0.9	18.4
Chrysene	9	30.6
Dibenzo(a,h)anthracene	0.06	5.38 J
Ethylbenzene	100	1.21
Fluoranthene	100	87.4
Indeno(1,2,3-cd)pyrene	0.62	12.9 J
Naphthalene	56	25.4
Phenanthrene	NA	111
Pyrene	100	70.4
Toluene	500	0.177
Xylenes, (total)	67	1.15

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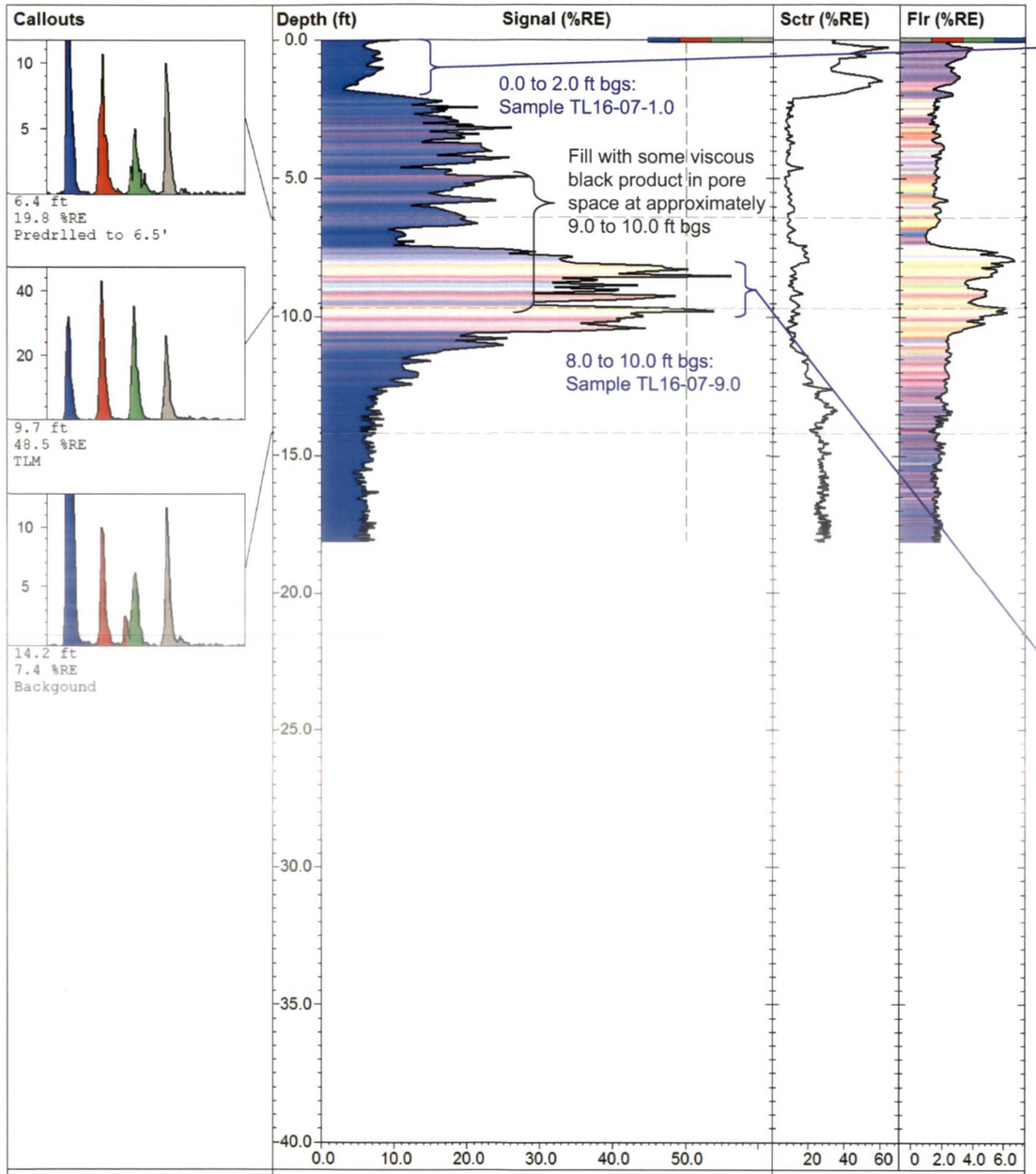
05/03/2007 | **FIGURE E-14**



TL16_07		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.356897 N / NAD83**	*Final depth:* **18.15 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.437789 W**	*Max signal:* **56.4 % @ 8.50 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 10:41:36 AM**

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TL16-07-1.0

Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	2.84
2-Methylphenol	2800	0.05
3&4-Methylphenol	310	0.3
Acenaphthene	100	208
Acenaphthylene	NA	16.8 J
Anthracene	100	309
Benzene	0.64	0.14 U
Benzo(a)anthracene	0.62	942
Benzo(a)pyrene	0.06	941
Benzo(b)fluoranthene	0.62	967
Benzo(g,h,i)perylene	NA	553
Benzo(k)fluoranthene	0.9	632
Chrysene	9	965
Dibenzo(a,h)anthracene	0.09	200
Ethylbenzene	100	0.14 U
Fluoranthene	100	2170
Indeno(1,2,3-cd)pyrene	0.62	540
Naphthalene	56	279
Phenanthrene	NA	1390
Pyrene	100	1490
Toluene	500	0.14 U
Xylenes, (total)	67	0.131 J

TL16-07-9.0

Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	1.2 U
2-Methylphenol	2800	0.05 U
3&4-Methylphenol	310	0.14 U
Acenaphthene	100	39.6
Acenaphthylene	NA	8.28 J
Anthracene	100	75.1
Benzene	0.64	0.0766 J
Benzo(a)anthracene	0.62	78.9
Benzo(a)pyrene	0.06	59.6
Benzo(b)fluoranthene	0.62	45.7
Benzo(g,h,i)perylene	NA	23.4 J
Benzo(k)fluoranthene	0.9	41.4
Chrysene	9	73.4
Dibenzo(a,h)anthracene	0.09	10.8 J
Ethylbenzene	100	0.504
Fluoranthene	100	196
Indeno(1,2,3-cd)pyrene	0.62	24.1 J
Naphthalene	56	23.7 J
Phenanthrene	NA	238
Pyrene	100	169
Toluene	500	0.1 J
Xylenes, (total)	67	0.544

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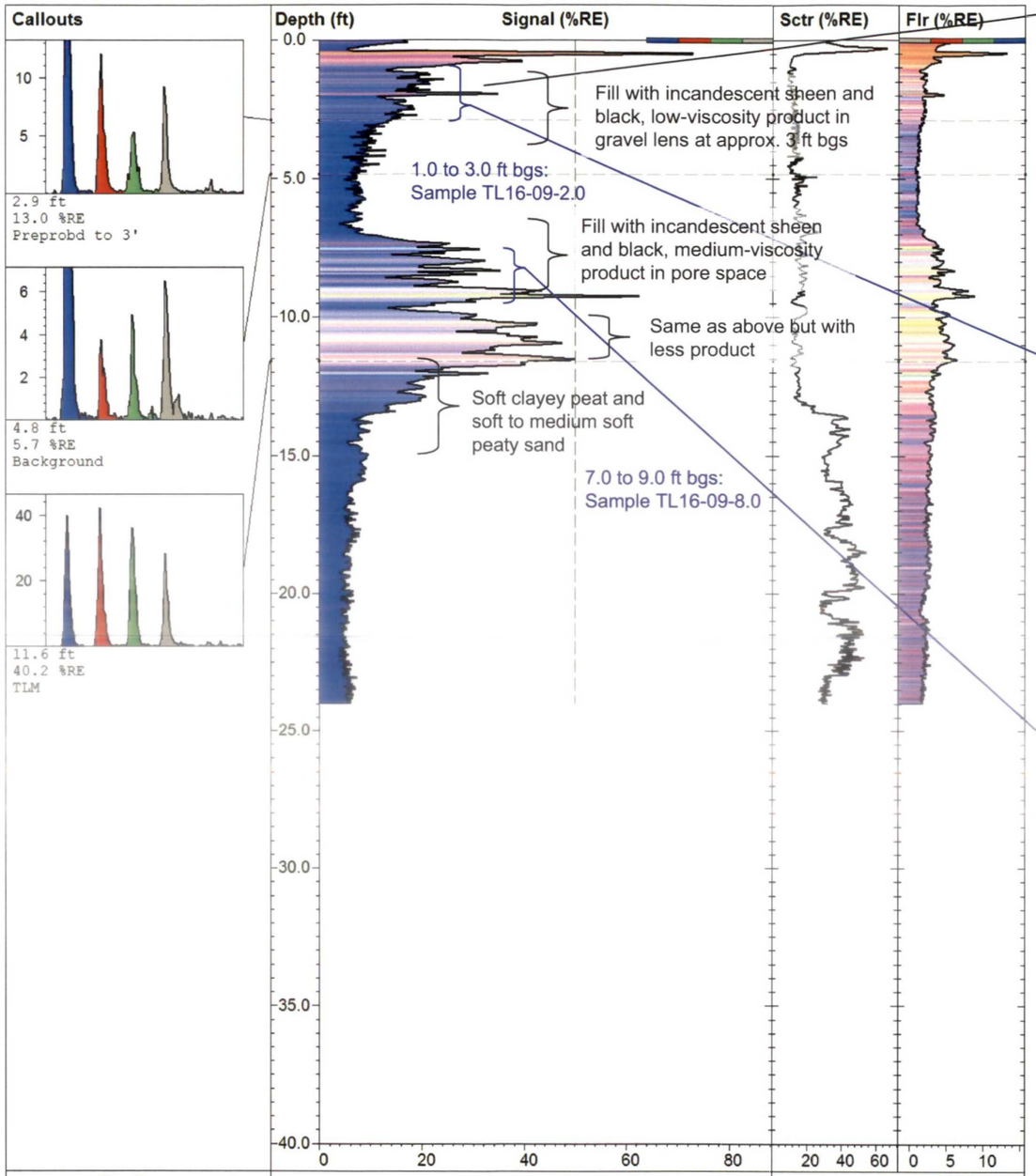
05/03/2007 | **FIGURE E-15**



Purplish red cinders. Photo was taken at TL 16-09 from approximately 1.5 to 3.5 feet bgs. Note incandescent sheen.

TL16-09-8.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	2.25
2-Methylphenol	2800	0.96 J
3&4-Methylphenol	310	0.13
Acenaphthene	100	94
Acenaphthylene	NA	110
Anthracene	100	133
Benzene	0.64	25.1
Benzo(a)anthracene	0.62	77.5
Benzo(a)pyrene	0.06	51.3
Benzo(b)fluoranthene	0.62	34.4
Benzo(g,h,i)perylene	NA	23.9
Benzo(k)fluoranthene	0.9	26.8
Chrysene	9	75.5
Dibenzo(a,h)anthracene	0.06	8.23
Ethylbenzene	100	24.8
Fluoranthene	100	201
Indeno(1,2,3-cd)pyrene	0.62	19.4 J
Naphthalene	56	1300
Phenanthrene	NA	484
Pyrene	100	210
Toluene	500	67
Xylenes, (total)	67	134

TL16-09-2.0		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	1.13 J
2-Methylphenol	2800	0.05 J
3&4-Methylphenol	310	0.23 J
Acenaphthene	100	117
Acenaphthylene	NA	6.59 J
Anthracene	100	57.3
Benzene	0.64	0.323
Benzo(a)anthracene	0.62	35.5
Benzo(a)pyrene	0.06	19.9 J
Benzo(b)fluoranthene	0.62	20.6 J
Benzo(g,h,i)perylene	NA	10.9 J
Benzo(k)fluoranthene	0.9	12 J
Chrysene	9	31.6
Dibenzo(a,h)anthracene	0.06	4.23 J
Ethylbenzene	100	0.22
Fluoranthene	100	164
Indeno(1,2,3-cd)pyrene	0.62	11.2 J
Naphthalene	56	208
Phenanthrene	NA	311
Pyrene	100	110
Toluene	500	0.483
Xylenes, (total)	67	1.07

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TL16_09		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.372108 N / NAD83**	*Final depth:* **24.01 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.470475 W**	*Max signal:* **80.3 % @ 0.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 8:00:34 AM**

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TarGOST™ Boring TL16-09

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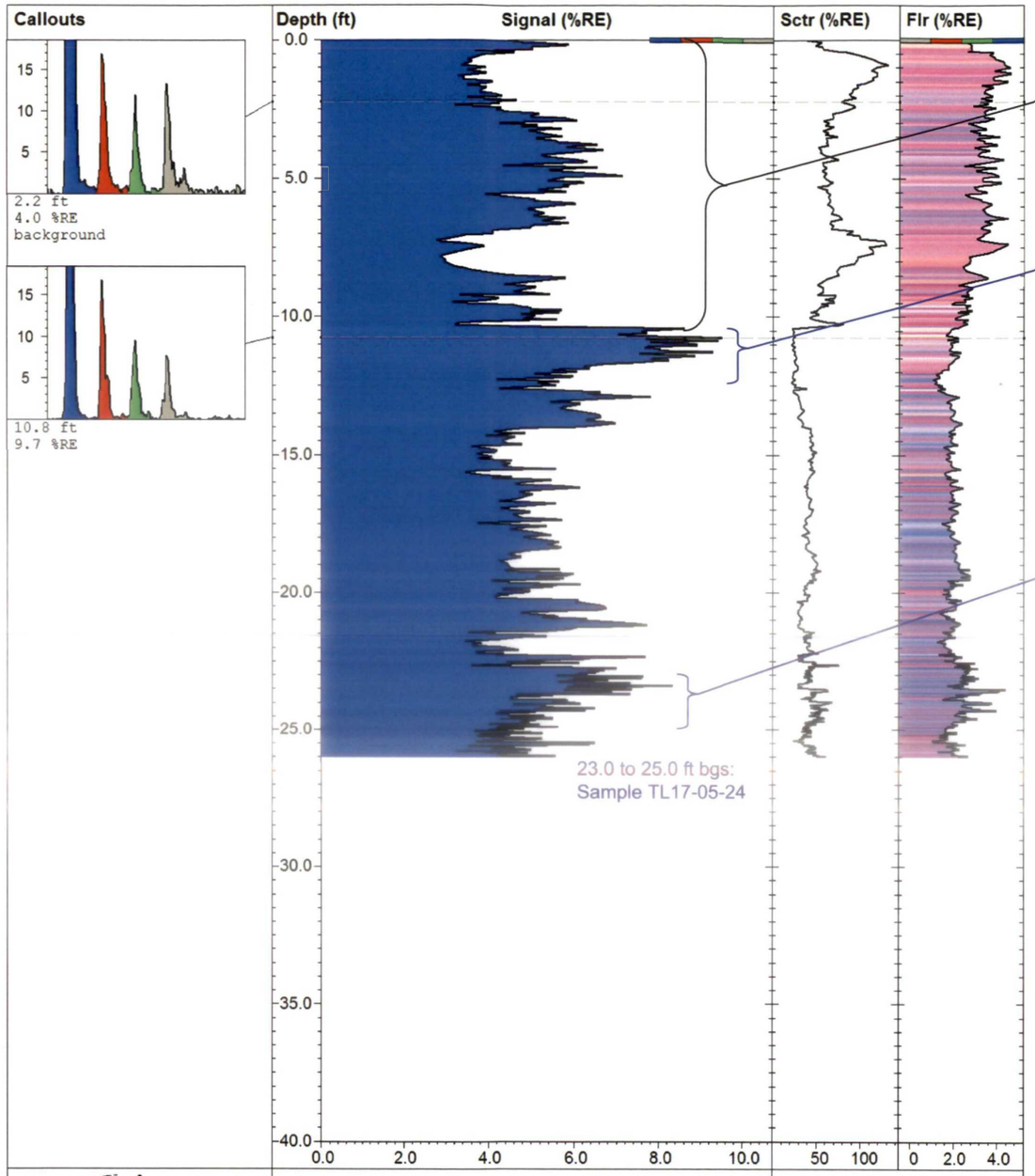
05/03/2007 | **FIGURE E-16**



TL17_05		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.352210 N / NAD83**	*Final depth:* **26.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.389378 W**	*Max signal:* **9.7 % @ 10.76 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/2/2006 8:36:16 AM**

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TL17-05-11.5		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.2 U
2-Methylphenol	2800	0.97 U
3&4-Methylphenol	310	0.786 U
Acenaphthene	100	0.079 U
Acenaphthylene	NA	0.079 U
Anthracene	100	0.079 U
Benzene	0.64	0.057 U
Benzo(a)anthracene	0.62	0.079 U
Benzo(a)pyrene	0.06	0.079 U
Benzo(b)fluoranthene	0.62	0.079 U
Benzo(g,h,i)perylene	NA	0.079 U
Benzo(k)fluoranthene	0.9	0.079 U
Chrysene	9	0.079 U
Dibenzo(a,h)anthracene	0.06	0.079 U
Ethylbenzene	100	0.057 U
Fluoranthene	100	0.079 U
Indeno(1,2,3-cd)pyrene	0.62	0.079 U
Naphthalene	56	0.079 U
Phenanthrene	NA	0.079 U
Pyrene	100	0.079 U
Toluene	500	0.057 U
Xylenes, (total)	67	0.11 U

TL17-05-20		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.19 U
2-Methylphenol	2800	6.3 U
3&4-Methylphenol	310	0.4 U
Acenaphthene	100	0.077 U
Acenaphthylene	NA	0.077 U
Anthracene	100	0.077 U
Benzene	0.64	0.058 U
Benzo(a)anthracene	0.62	0.077 U
Benzo(a)pyrene	0.06	0.077 U
Benzo(b)fluoranthene	0.62	0.077 U
Benzo(g,h,i)perylene	NA	0.077 U
Benzo(k)fluoranthene	0.9	0.077 U
Chrysene	9	0.077 U
Dibenzo(a,h)anthracene	0.06	0.077 U
Ethylbenzene	100	0.058 U
Fluoranthene	100	0.077 U
Indeno(1,2,3-cd)pyrene	0.62	0.077 U
Naphthalene	56	0.058 U
Phenanthrene	NA	0.077 U
Pyrene	100	0.077 U
Toluene	500	0.058 U
Xylenes, (total)	67	0.12 U

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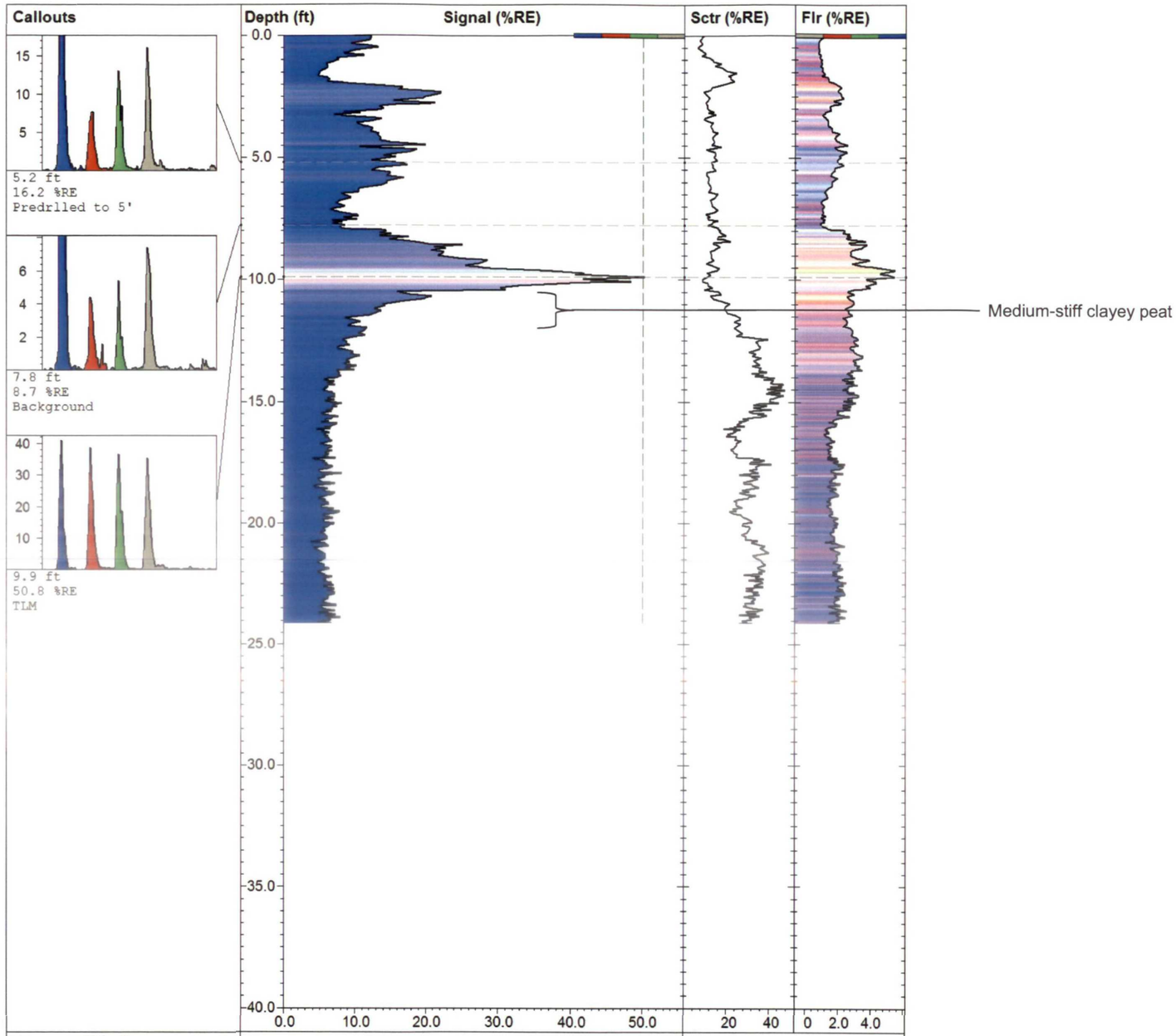
TarGOST™ Boring TL17-05

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-17**



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TL17_07		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.366840 N / NAD83**	*Final depth:* **24.13 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.432004 W**	*Max signal:* **50.8 % @ 9.89 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 9:21:56 AM**

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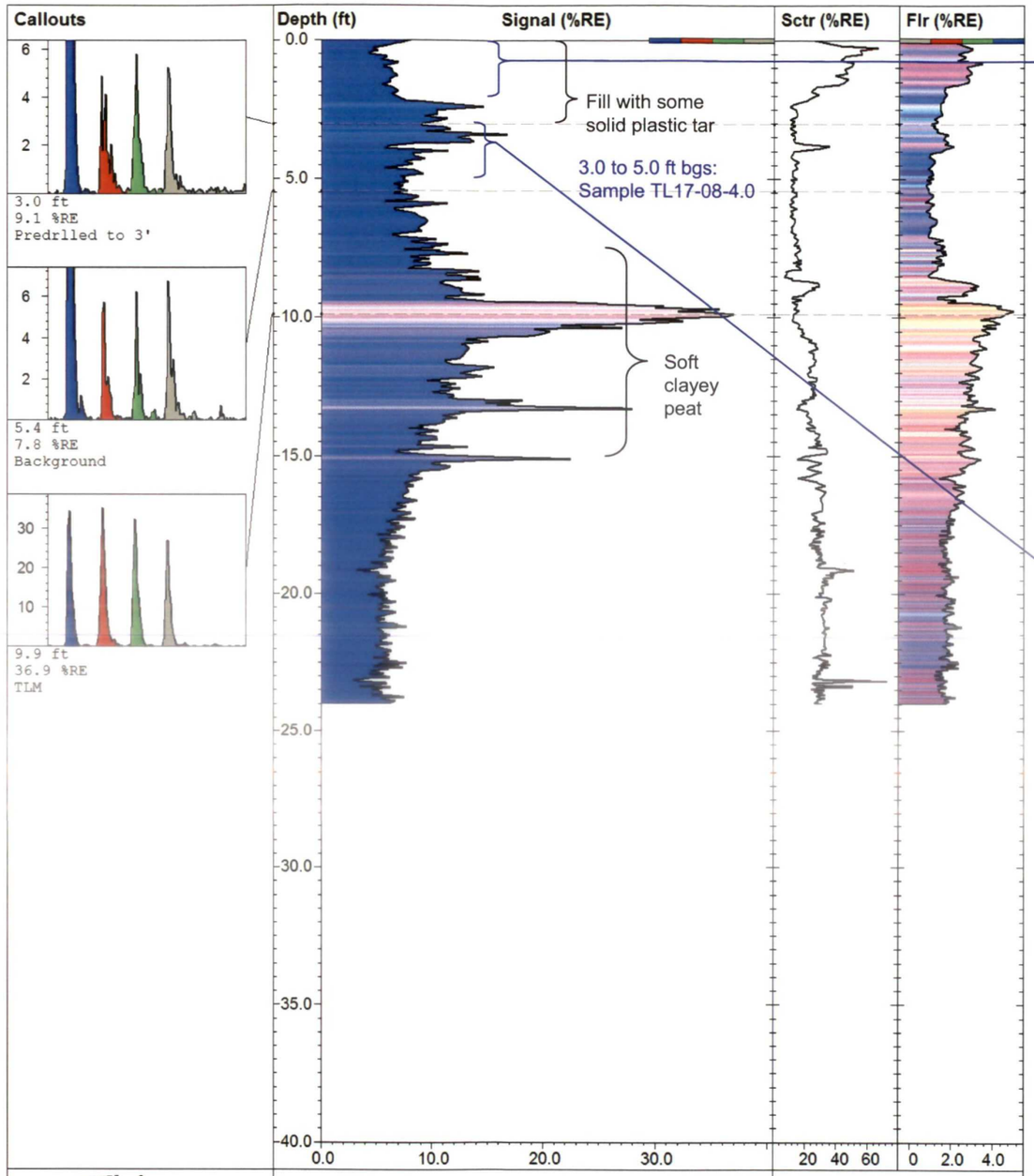
TarGOST™ Boring TL17-07

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-19**



TL17_08		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.374143 N / NAD83**	*Final depth:* **24.02 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.449779 W**	*Max signal:* **36.9 % @ 9.88 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **10/3/2006 8:34:01 AM**

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TL17-08-1.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.93 U
2-Methylphenol	2800	0.36 J
3&4-Methylphenol	310	0.37 U
Acenaphthene	100	189
Acenaphthylene	NA	16.5
Anthracene	100	282
Benzene	0.64	0.058 U
Benzo(a)anthracene	0.62	315
Benzo(a)pyrene	0.06	305
Benzo(b)fluoranthene	0.62	318
Benzo(g,h,i)perylene	NA	201
Benzo(k)fluoranthene	0.9	221
Chrysene	9	343
Dibenzo(a,h)anthracene	0.06	62.8
Ethylbenzene	100	0.058 U
Fluoranthene	100	855
Indeno(1,2,3-cd)pyrene	0.62	179
Naphthalene	56	57.9
Phenanthrene	NA	764
Pyrene	100	614
Toluene	500	0.0644
Xylenes, (total)	67	0.347

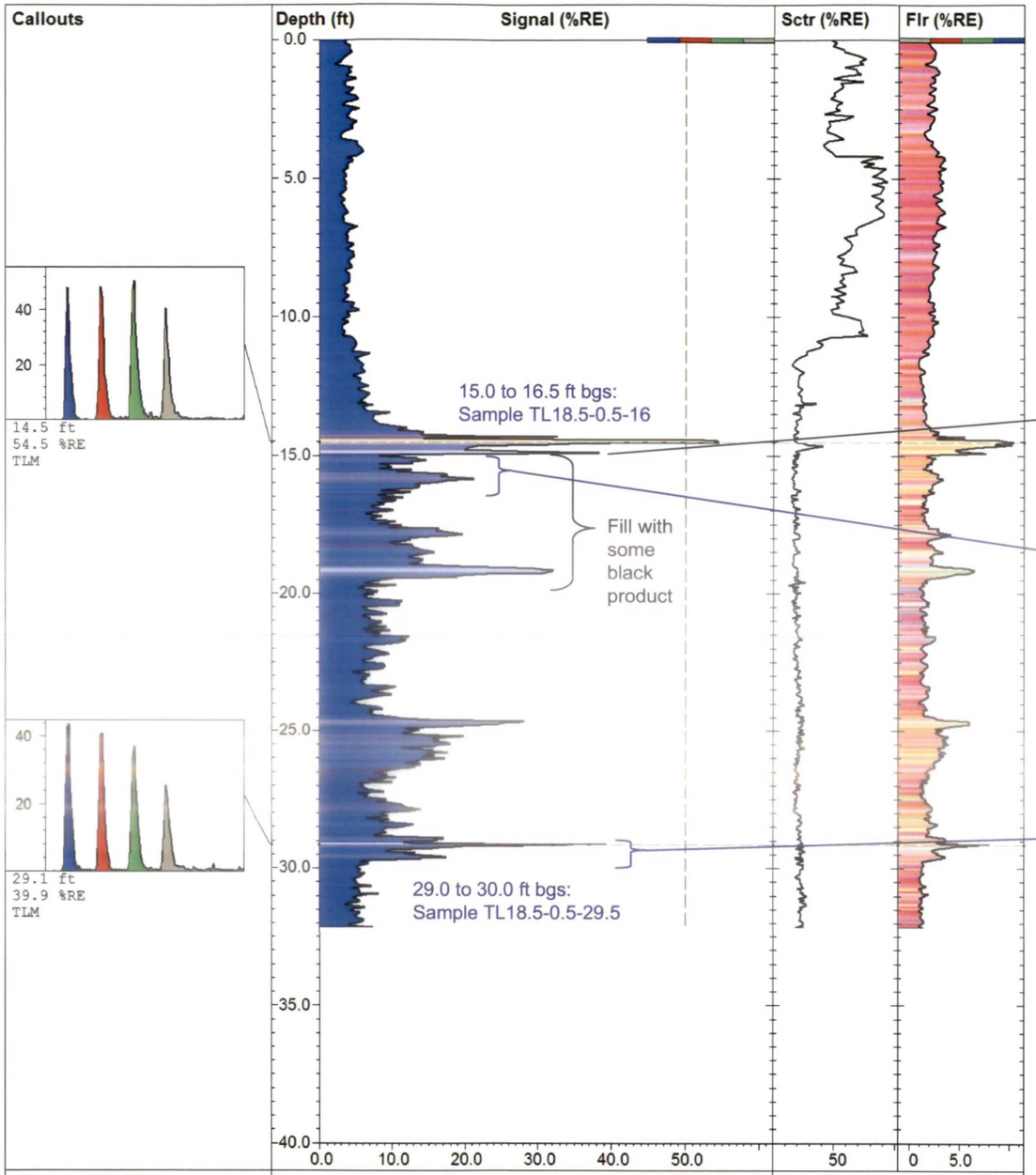
TL17-08-4.0		
Parameter	**Criteria**	**Result (mg/kg)**
2,4-Dimethylphenol	10	0.21 U
2-Methylphenol	2800	0.33 U
3&4-Methylphenol	310	0.21 U
Acenaphthene	100	0.115
Acenaphthylene	NA	0.0282 J
Anthracene	100	0.327
Benzene	0.64	0.058 U
Benzo(a)anthracene	0.62	0.905
Benzo(a)pyrene	0.06	0.723
Benzo(b)fluoranthene	0.62	0.847
Benzo(g,h,i)perylene	NA	0.398
Benzo(k)fluoranthene	0.9	0.634
Chrysene	9	0.998
Dibenzo(a,h)anthracene	0.06	0.167
Ethylbenzene	100	0.058 U
Fluoranthene	100	2.11
Indeno(1,2,3-cd)pyrene	0.62	0.361
Naphthalene	56	0.265
Phenanthrene	NA	1.47
Pyrene	100	1.82
Toluene	500	0.058 U
Xylenes, (total)	67	0.12 U

CH2MHILL

TarGOST™ Boring TL17-08

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-20**



Black product coating wood and gravel from TL18.5-0.5 at approximately 15 feet bgs.

TL18.5-0.5-16		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	7 U
2-Methylphenol	2800	174 U
3&4-Methylphenol	310	241 U
Acenaphthene	100	3480
Acenaphthylene	NA	125 J
Anthracene	100	2660
Benzene	0.64	0.854
Benzo(a)anthracene	0.62	1980
Benzo(a)pyrene	0.06	1110
Benzo(b)fluoranthene	0.62	851
Benzo(g,h,i)perylene	NA	376
Benzo(k)fluoranthene	0.9	971
Chrysene	9	1680
Dibenzo(a,h)anthracene	0.06	160
Ethylbenzene	100	2.71
Fluoranthene	100	5520
Indeno(1,2,3-cd)pyrene	0.62	421
Naphthalene	56	4120
Phenanthrene	NA	10700
Pyrene	100	4680
Toluene	500	0.757
Xylenes, (total)	67	2.12

TL18.5-0.5-29.5		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	1.43
2-Methylphenol	2800	3.5 U
3&4-Methylphenol	310	122
Acenaphthene	100	19.6
Acenaphthylene	NA	0.412
Anthracene	100	9.87
Benzene	0.64	7.31
Benzo(a)anthracene	0.62	3.08
Benzo(a)pyrene	0.06	2.43 J
Benzo(b)fluoranthene	0.62	2.41 J
Benzo(g,h,i)perylene	NA	0.646 J
Benzo(k)fluoranthene	0.9	1.9 J
Chrysene	9	2.79
Dibenzo(a,h)anthracene	0.06	0.251 J
Ethylbenzene	100	21.6
Fluoranthene	100	13.5
Indeno(1,2,3-cd)pyrene	0.62	0.712 J
Naphthalene	56	129
Phenanthrene	NA	36.5
Pyrene	100	10.7
Toluene	500	13.4
Xylenes, (total)	67	64.4

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TL18_5_0_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.333399 N / NAD83**	*Final depth:* **32.15 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.289434 W**	*Max signal:* **56.3 % @ 14.45 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 11:21:32 AM**

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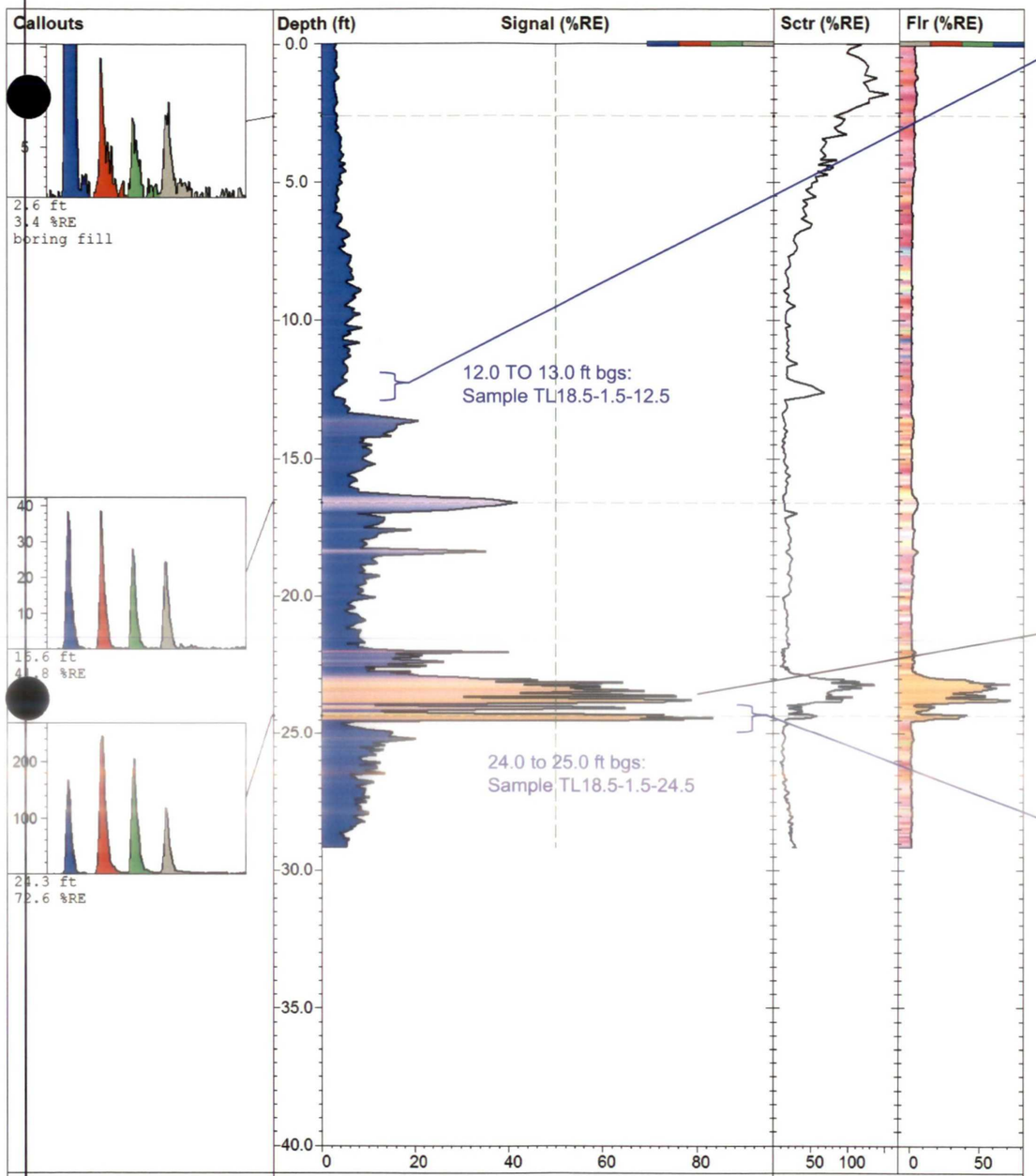
TarGOST™ Boring TL18.5-0.5

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-21**



TL18.5-1.5-12.5		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.19 U
2-Methylphenol	2800	7.42 U
3&4-Methylphenol	310	42.3 U
Acenaphthene	100	0.64
Acenaphthylene	NA	0.39
Anthracene	100	2.62
Benzene	0.64	0.064 U
Benzo(a)anthracene	0.62	6.52
Benzo(a)pyrene	0.06	5.29
Benzo(b)fluoranthene	0.62	5.18
Benzo(g,h,i)perylene	NA	2.89
Benzo(k)fluoranthene	0.9	4.31
Chrysene	9	6.68
Dibenzo(a,h)anthracene	0.06	1.2
Ethylbenzene	100	0.064 U
Fluoranthene	100	15.5
Indeno(1,2,3-cd)pyrene	0.62	2.98
Naphthalene	56	0.45
Phenanthrene	NA	10
Pyrene	100	10.5
Toluene	500	0.064 U
Xylenes, (total)	67	0.13 U

TL18.5-1.5-24.5		
Parameter	Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.27 U
2-Methylphenol	2800	0.96 U
3&4-Methylphenol	310	180 U
Acenaphthene	100	0.11 U
Acenaphthylene	NA	0.11 U
Anthracene	100	0.0274 J
Benzene	0.64	0.13 U
Benzo(a)anthracene	0.62	0.0578 J
Benzo(a)pyrene	0.06	0.0445 J
Benzo(b)fluoranthene	0.62	0.0278 J
Benzo(g,h,i)perylene	NA	0.11 U
Benzo(k)fluoranthene	0.9	0.11 U
Chrysene	9	0.0515 J
Dibenzo(a,h)anthracene	0.06	0.11 U
Ethylbenzene	100	0.13 U
Fluoranthene	100	0.0909 J
Indeno(1,2,3-cd)pyrene	0.62	0.11 U
Naphthalene	56	0.0518 J
Phenanthrene	NA	0.0667 J
Pyrene	100	0.0878 J
Toluene	500	0.13 U
Xylenes, (total)	67	0.26 U

Black silty clay at TL18.5-1.5 at approximately 23.5 feet bgs where coal tar was expected based on TarGOST results.

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TL18_5_01_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.341321 N / NAD83**	*Final depth:* **29.18 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.307876 W**	*Max signal:* **87.1 % @ 24.49 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 2:54:27 PM**

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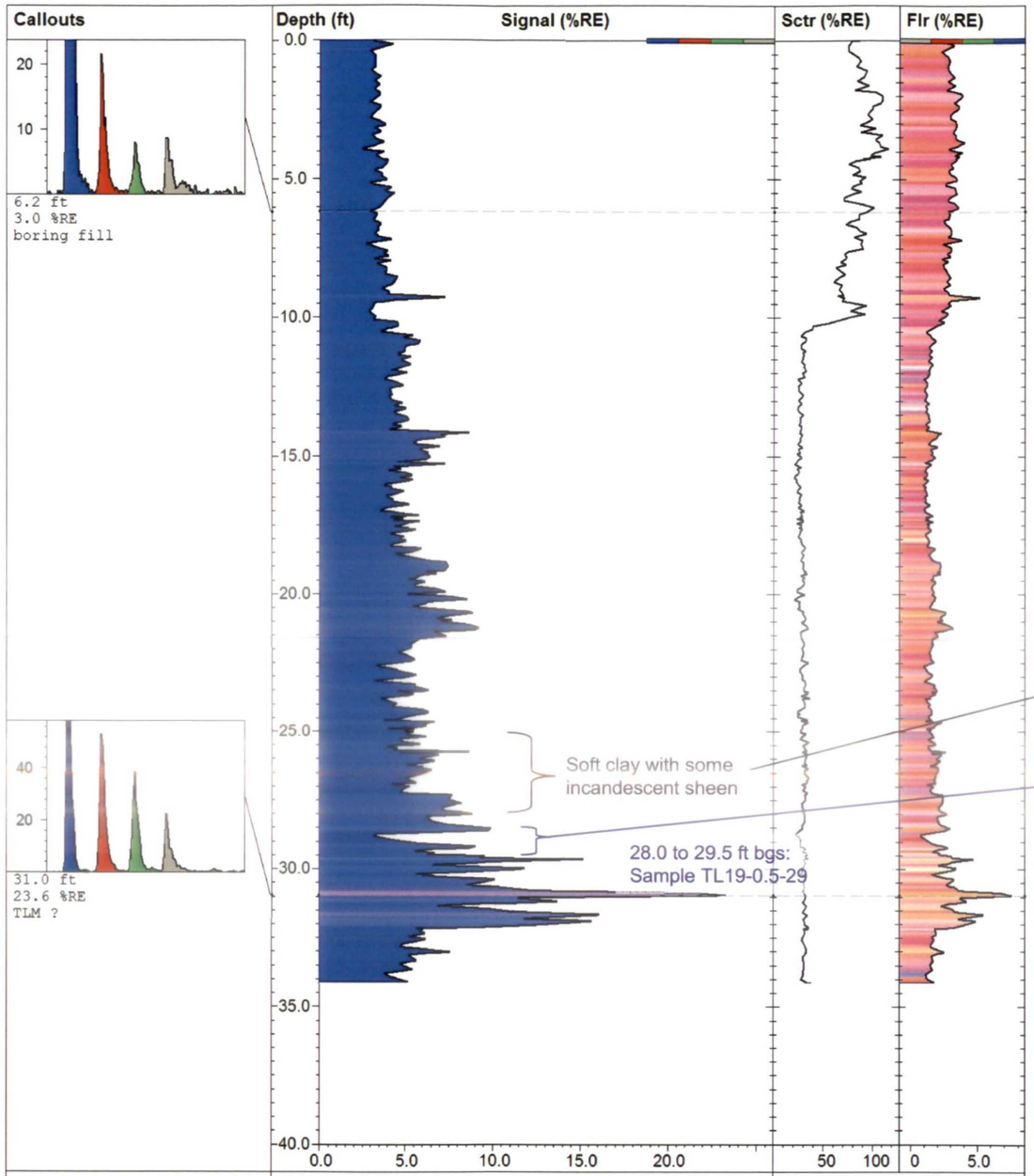
TarGOST™ Boring TL18.5-1.5

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-22**



Very soft, saturated clay at TL 19-0.5 at approximately 26.5 feet bgs. Note small areas of incandescent sheen.

Parameter	TL19-0.5-29 Criteria	Result (mg/kg)
2,4-Dimethylphenol	10	0.4 U
2-Methylphenol	2800	1.1 U
3&4-Methylphenol	310	0.13 U
Acenaphthene	100	0.48
Acenaphthylene	NA	0.191
Anthracene	100	0.723
Benzene	0.64	0.29 U
Benzo(a)anthracene	0.62	3.62
Benzo(a)pyrene	0.06	2.28 J
Benzo(b)fluoranthene	0.62	2.13 J
Benzo(g,h,i)perylene	NA	0.498 J
Benzo(k)fluoranthene	0.9	2.06 J
Chrysene	9	3.4
Dibenzo(a,h)anthracene	0.06	0.229 J
Ethylbenzene	100	0.29 U
Fluoranthene	100	14.8
Indeno(1,2,3-cd)pyrene	0.62	0.615 J
Naphthalene	56	0.233
Phenanthrene	NA	0.404
Pyrene	100	11.9
Toluene	500	0.29 U
Xylenes, (total)	67	0.59 U

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TL19_0_5		TarGOST
Site: **Quanta, Edgewater, NJ**	*Latitude / System:* **40 48.340454 N / NAD83**	*Final depth:* **34.14 ft**
Client: **CH2M Hill**	*Longitude:* **073 59.283749 W**	*Max signal:* **23.6 % @ 30.96 ft**
Job: **03-2588**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/29/2006 11:53:44 AM**

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TarGOST™ Boring TL19-0.5

Quanta Resources Superfund Site
Edgewater, New Jersey

05/03/2007 | **FIGURE E-23**

K

Vapor Intrusion Evaluation March 2008 Sample Results, 163 Old River Road (Former Jono's Restaurant), Block 93, Edgewater, N.J.

PREPARED FOR:	Richard Ho/USEPA Region 2
PREPARED BY:	CH2M HILL
COPIES	Bob Hayton/NJDEP John Morris/Honeywell Rich Kampf/ESAG
DATE:	July 25, 2008

Executive Summary

This technical memorandum presents the results from the March 2008 sampling event conducted to evaluate whether a potential vapor intrusion pathway exists at the Tomaso's Ristorante building (the former Jono's Restaurant and Cantina), at 163 Old River Road, Edgewater, New Jersey. This sampling event was conducted as a follow-up to the vapor intrusion evaluations conducted in 2007. This memorandum recommends an additional sampling event for the winter of 2008–2009. The March 2008 sampling event—which included the collection of three indoor air samples, two subslab samples and one outdoor air sample—was performed under conservative operating conditions: during the heating season with the HVAC system and kitchen exhaust fans running and with all doors and windows closed.

It is reasonably probable to conclude from the results of the March 2008 sampling event that a potential vapor intrusion pathway is not causing unacceptable risk concentrations of potentially site-related constituents in indoor air. This conclusion is consistent with the results from two previously conducted evaluations of the potential vapor intrusion pathway at the building. The initial evaluation, submitted in April 2007 (CH2M HILL, 2007a), involved reviewing the existing site-characterization data at Block 93 and resulted in the conclusion that potential vapor intrusion pathways were unlikely to be complete in the building. The second evaluation, submitted in October 2007 (CH2M HILL, 2007b), examined groundwater-sampling data and geophysical survey data collected in June 2007 to provide further lines of evidence regarding the potential vapor intrusion pathway at the building. The results from the June 2007 groundwater-sampling event reinforced the initial assessment presented in the April 2007 vapor intrusion evaluation: that a potentially complete vapor intrusion pathway likely does not exist in the building.

Key conclusions from the sampling event conducted in March 2008 are as follows:

- No constituents were detected in indoor air at concentrations above the New Jersey Department of Environmental Protection (NJDEP) Rapid Action Levels (RALs) and

Health Department Notification Levels (HDNLs).[1] On the basis of these results, and in accordance with NJDEP guidance (NJDEP, 2005), there is no need for prompt action to further investigate or reduce potential exposures in the building and there is no need to notify state or local health departments.

- Six constituents were detected at concentrations above the lowest screening criteria in indoor air. Of these five constituents, two may be related to vapor intrusion: 1,2,4-trimethylbenzene and naphthalene. 1,2,4-trimethylbenzene is not a confirmed site-related constituent. The concentrations of these two compounds in indoor air exceeded only the lowest screening criteria and are not considered an unacceptable risk in indoor air.
- Three compounds were detected at concentrations above the non-cancer hazard quotient of 1.0 in subslab soil gas at Q2-VI-02: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes. The presence of these constituents in subslab soil gas is not causing an unacceptable risk in indoor air; 1,2,4-trimethylbenzene was detected at a concentration above the non-cancer hazard quotient of 0.1 but below the non-cancer hazard quotient of 1.0, and concentrations of 1,3,5-trimethylbenzene and total xylenes in indoor did not exceed the non-cancer hazard quotient of 0.1.
- Five compounds were detected at concentrations above the lowest and below the highest screening criteria in subslab soil gas at Q2-VI-02: chloroform, ethylbenzene, naphthalene, tetrachloroethene, and tetrahydrofuran. The presence of these constituents in subslab soil gas is not causing an unacceptable risk in indoor air; naphthalene was detected at a concentration above the non-cancer hazard quotient of 0.1 but below the non-cancer hazard quotient of 1.0. Chloroform was detected at a concentration above the 10^{-6} target cancer risk level but below the 10^{-5} target cancer risk level. Concentrations of ethylbenzene, tetrachloroethene, and tetrahydrofuran in indoor did not exceed the lowest screening criteria.

Recommendations based on this vapor intrusion sampling event are as follows:

- Conduct an additional vapor intrusion sampling event for the 2008–2009 heating season to confirm that indoor concentrations remain below the risk-based screening levels in indoor air. Constituents recommended for further monitoring are those that exceeded the lowest screening criteria in subslab soil gas or indoor air, as identified in Tables 1 and 2.
- The need for future vapor intrusion activities at the building will be determined on the basis of the results of the 2008–2009 heating season monitoring event and the remedy selected in the Record of Decision.

[1] RALs "represent trigger levels for the initiation of prompt action at occupied buildings to further investigate the vapor intrusion pathway and/or minimize impacts to building occupants through the implementation of an interim remedial measure." The HDNLs "indicate the need for the Department [of Environmental Protection] to inform the local and/or state health departments about the site and the associated vapor intrusion related indoor air concentrations for further evaluation and possible emergency actions." (NJDEP, 2007)

1 Introduction

This technical memorandum presents the results from the March 2008 sampling event conducted to evaluate vapor intrusion at the 163 Old River Road building, in Edgewater, New Jersey. The building sits on the Block 93 North property, west of the Quanta Resources property across River Road. It houses Tomaso's Ristorante, formerly Jono's Restaurant and Cantina; Tomaso's Ristorante opened for business in summer 2007, after the building had been vacant for several years.

The building is approximately 6,000 ft^2 and consists of two stories with a single-story front dining area. A detailed description of the building was provided in the initial evaluation (CH2M HILL, 2007a). Samples of indoor air, subslab soil gas, and outdoor air were collected at the building March 24 and 25, 2008 (see Section 2), as part of the supplemental vapor intrusion evaluation. Sampling was conducted according to the U.S. Environmental Protection Agency (USEPA)-approved "Vapor Intrusion Evaluation at 163 Old River Road Work Plan Addendum" (CH2M HILL 2008) and the USEPA-approved "Vapor Intrusion Evaluation Work Plan" (CH2M HILL 2006a). The 2008 addendum was modified as requested by the agencies during the March 20, 2008, site visit to include the full USEPA Method TO-15 constituent list.

Upon receipt of the preliminary data from the laboratory, the indoor air sample results were compared to NJDEP RALs and HDNLs to determine if there was a need for prompt action to further investigate or reduce potential exposures in the building and if there was a need to notify state or local health departments. Once the laboratory data were validated, the results of the indoor air and subslab soil gas samples were compared to site-specific screening criteria, which are presented Section 4.2. The indoor air sample results were also compared to the outdoor air sample results to determine if constituent detections were the result of background sources in ambient air. The observations made from these comparisons are presented in Section 4.

The purpose of this supplemental evaluation is to confirm that the vapor intrusion pathway is not causing unacceptable concentrations of site-related constituents in indoor air and to further refine the conceptual site model.

2 Sampling Methods

The March 2008 vapor intrusion evaluation at the building consisted of the following activities:

- Collecting indoor air samples at three locations for TO-15 full volatile organic compound (VOC) list analysis in accordance with the procedures set forth in the EPA-approved Quality Assurance Project Plan (QAPP)
- Installing permanent subslab soil gas probes at two locations within the building and collecting subslab soil gas samples from the probes for TO-15 full VOC list analysis
- Collecting one outdoor air sample at the southeast corner of the building for TO-15 full VOC list analysis.
- Performing a building inventory of potential interferences in the building.

During a site visit on March 20, 2008, NJDEP and USEPA reviewed and approved the sampling locations. (See Attachment A-1 for the sample location key.) Figures 1 and 2 show the indoor air and subslab sample locations.

The Summa™ canisters were managed and shipped to the laboratory under chain of custody procedures (Attachment B).

2.1 Building Inventory

The building inventory conducted on March 22, 2008, revealed activities taking place in the sampling area, such as chemical or storage use, which could influence the indoor air-sampling results. The pilot lights on the stoves were lit at the time of the sampling event. The building owner/manager informed the field team that a pesticide application occurs typically every 2 weeks around the perimeter of the building. Within the building, the project team observed various industrial cleaning products, primarily of the Ecolab® brand, including a grease cutter, glass cleaner, and detergent(s). These products are not expected to be significant indoor sources of VOCs.

2.2 Indoor Air Sampling

The CH2M HILL field team collected three indoor air samples—one in the kitchen on the countertop (Q2-IA-01), one in the first-floor dining room on a table near the center wall (Q2-IA-02), and one in the second floor dining room on a table in the southwest room (Q2-IA-03) (Figures 1 and 2). The team also collected indoor air samples over a 24-hour period using 6-L Summa™ canisters equipped with flow controllers. The Summa™ canisters were placed on either tables or countertops at a height approximately 4 feet above the ground (roughly breathing zone height). Pressure and temperature during the sampling event were obtained from the U.S. National Weather Service's Web site. The indoor air-sampling log is provided in Attachment A-2.

The field team performed indoor air sampling during conditions that were more conservative than typical operating conditions. The building was unoccupied during the sample collection period—from Monday morning to Tuesday morning—because the restaurant was closed. Doors and windows remained shut during that time. The field team checked back periodically to ensure that doors and windows remained closed and that nobody had entered the building. Under typical operating conditions, restaurant workers and customers would have been opening and closing the door; during warm weather months, the windows of the restaurant would have stayed open to allow outdoor air exchange. The heating system was set to operate at a typical temperature, i.e., 68°F. The vent fans over the stoves were turned on and left running for the entire sample collection period.

2.3 Subslab Soil Gas Sampling

Two subslab sample probes, consisting of stainless steel Swagelok® parts, were installed flush with the building floor using an industrial hand drill with concrete masonry drill bits. The foundation was approximately 5 inches thick at both subslab probe locations. The probe holes were sealed at the floor surface with mortar and checked for leaks using helium to ensure that ambient air was not introduced along with the subslab soil gas sample. Field team members collected samples at a flow rate of 200 mL/min (5-minute period) using Summa™ canisters with flow controllers, as described in the QAPP.

The field team successfully collected subslab samples from both of the installed probes—one in the storage room next to the stairs (Q2-VI-01), and one in the kitchen on the north side of the building, next to the water service closet (Q2-VI-02) (Figure 1). Subslab samples were collected over an approximately 5-minute period in 1-L Summa™ canisters equipped with critical orifices. The subslab soil gas-sampling log is provided as Attachment A-3.

2.4 Outdoor Air Sampling

One outdoor air sample was collected at the fence on the south side of the building (Q2-OA-01). Field team members collected the sample over a 24-hour period synoptically with the indoor air sampling using a Summa™ canister equipped with a flow controller, as described in the QAPP (CH2M HILL, 2005). The outdoor air-sampling log is provided in Attachment A-2.

3 Analytical Results

Columbia Analytical Services (CAS), in Simi Valley, California, performed the analyses using USEPA Method TO-15. CAS is certified for TO-15 analyses by NJDEP (NJ Certification No. CA009).

Analytical results from the indoor air, outdoor air, and subslab soil gas samples are presented in Attachment C.

A CH2M HILL chemist performed a data quality evaluation report (Attachment D). The QAPP amendment in the work plan describes the data quality evaluation procedures that address precision, accuracy, representativeness, completeness, and comparability parameters (CH2M HILL, 2006a). USEPA (1999, 2002) individual method requirements and guidelines were used in this data quality evaluation. The data quality evaluation reports indicate that the project goals for data precision and accuracy, as measured by field and laboratory quality control (QC) indicators, have been met, and that analyte and method objectives for completeness were met.

4 Vapor Intrusion Evaluation

The table to the right identifies constituents detected during the vapor intrusion sampling event that have also been detected in soil and/or groundwater samples at the Quanta site and therefore are potentially site-related. Also presented are constituents detected in indoor air samples but potentially unrelated to the Quanta site. These constituents are discussed further in Section 4.6.

Potentially Site-Related (Confirmed Site Constituent)	Potentially Unrelated to the Quanta Site (Not a Confirmed Site-Related Constituent)
Benzene	Acrolein
Chloroform	Carbon tetrachloride
Ethylenzene	Tetrahydrofuran
Naphthalene	1,2,4-trimethylbenzene
Tetrachloroethene	1,3,5-trimethylbenzene
Trichloroethene	n-propylbenzene
Xylenes	

4.1 Data Comparison to NJDEP RALs and HDNLs

CH2M HILL compared the indoor air sample results, once they were received from the laboratory, to the NJDEP RALs and HDNLs. As stated in NJDEP's (2007) vapor intrusion guidance, RALs "represent trigger levels for the initiation of prompt action at occupied buildings to further investigate the VI pathway and/or minimize impacts to building occupants through the implementation of an interim remedial measure (IRM)." Exceedances of HDNLs "indicate the need for the Department [NJDEP] to inform the local and/or state health departments about the site and the associated vapor intrusion related indoor air concentrations for further evaluation and possible emergency actions."

The RALs and HDNLs were obtained from Table 2 of NJDEP's (2007) guidance; RALs not listed there were generated for constituents from the health-based indoor air screening levels provided in Table G-4 of the guidance, according to NJDEP (2005). This comparison is provided in Attachment E-1.

CH2M HILL received the preliminary data from the March 2008 sampling from the laboratory on April 10, 2008, and provided this data to the agencies for review on April 11, 2008.

There were no exceedances of the NJDEP RALs or HDNLs at any of the three indoor air sampling locations for any of the constituents; therefore, there is no need to notify state or local health departments and no need to implement IRMs.

4.2 Data Comparison to Indoor Air and Subslab Soil Gas Screening Criteria

Screening Criteria

The indoor air and subslab soil gas sample results were compared to the screening criteria listed in Attachments F-1 (indoor air) and F-2 (subslab). CH2M HILL updated the screening criteria identified in the original vapor intrusion evaluation work plan (CH2M HILL, 2006a) to stay current with NJDEP's screening levels, which were updated in March 2007. The field team developed the screening criteria using a combination of the USEPA Region 9 Preliminary Remediation Goals (PRGs) for ambient air and NJDEP generic vapor intrusion screening levels from Table 1 of the NJDEP (2007) vapor intrusion guidance. The only exception to these criteria is trichloroethene (TCE), for which CH2M HILL used the New York State Department of Health (NYSDOH) criterion of 5 $\mu g/m^3$.

For indoor air screening criteria, CH2M HILL compared the USEPA PRGs for ambient air and the NJDEP residential Indoor Air Screening Levels and used the lesser of the two values. The field team calculated the subslab soil gas screening criteria from the indoor air criteria using an attenuation factor of 0.1. The screening criteria correspond to target risks of 10^{-6} to 10^{-4} for potentially carcinogenic constituents and hazard quotients of 0.1 and 1 for non-carcinogenic constituents.

CH2M HILL (2006b) reviewed the modified criterion for TCE in detail. The 5-$\mu g/m^3$ indoor air value was derived by NYSDOH, who concluded that a concentration of 5 $\mu g/m^3$ in air lies in the risk range of 1×10^{-6} to 1×10^{-4}, which is generally used by regulatory agencies when making decisions (NYSDOH, 2003). For this evaluation the 5 $\mu g/m^3$ is applied at the 10^{-4} target risk level and the corresponding subslab soil gas concentration at the 10^{-4} level is 50 $\mu g/m^3$.

March 2008 Data Comparison

The comparison of the March 2008 indoor air and subslab soil gas analytical data to the screening criteria is provided in Attachments E-2 (indoor air) and E-3 (subslab soil gas). CH2M HILL offers the following overall observations resulting from this comparison:

- Concentrations of all carcinogenic constituents lie below the 10^{-5} target cancer-risk level at the three indoor air-sampling locations.
- Concentrations of most carcinogenic constituents in indoor air did not exceed the 10^{-6} target cancer-risk level, except for benzene, carbon tetrachloride, and chloroform.
- Concentrations of all carcinogenic constituents were below the 10^{-4} target cancer-risk level at the two subslab soil gas probes.
- Concentrations of most carcinogenic constituents were below the 10^{-5} target cancer-risk level at the two sampled subslab soil gas probes with the exception of chloroform at Q2-VI-01.
- Concentrations of most carcinogenic constituents were below the 10^{-6} target cancer-risk level at the two sampled subslab soil gas probes, except for chloroform at both probes and tetrachloroethene at Q2-VI-02.
- Concentrations of most non-carcinogenic constituents were below the cumulative non-cancer hazard quotient of 1.0 in indoor air, with the exception of acrolein. The acrolein exceedances occurred at Q2-IA-03 in the second-floor dining room.
- Concentrations of most non-carcinogenic constituents were below the cumulative non-cancer hazard quotient of 0.1 in indoor air, with the exception of acrolein, 1,2,4-trimethylbenzene, and naphthalene. The 1,2,4-trimethylbenzene exceedances occurred at Q2-IA-01, in the first-floor kitchen, and at Q2-IA-03, in the second-floor dining room.
- Concentrations of most non-carcinogenic constituents were below the cumulative non-cancer hazard quotient of 1.0 at the two subslab soil gas probes, with the exception of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, acrolein, n-propylbenzene, and total xylenes. These exceedances occurred primarily at Q2-VI-02, the subslab probe in the kitchen, with the exception of acrolein, which occurred only at Q2-VI-01.
- Concentrations of most non-carcinogenic constituents were below the cumulative non-cancer hazard quotient of 0.1 at the two subslab soil gas probes, with the exception of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, acrolein, ethylbenzene, naphthalene, n-propylbenzene, tetrahydrofuran, and total xylenes.

Evaluation of Aerobic Biodegradation Potential in Subslab Soil Gas

The NJDEP (2005) *Vapor Intrusion Guidance* states that several petroleum hydrocarbons have been documented to degrade under aerobic conditions. Due to this degradation potential, the guidance lists a 10-fold degradation factor that is applied to a specific list of hydrocarbons that includes benzene, toluene, ethylbenzene, and xylenes. The attenuation factor is used when a minimum of 4 percent oxygen exists in the soil column beneath the structure (or proposed structure in the case of this site).

Petroleum hydrocarbons readily degrade to carbon dioxide in the presence of oxygen by microbes in soil within the vadose zone. The subslab soil gas samples were analyzed for oxygen and carbon dioxide to evaluate the potential for aerobic biodegradation in the subsurface vadose zone. The sample results are provided in Attachment C-1.

In both samples the concentration of oxygen was 21.9 percent, and carbon dioxide was not detected. This indicates that although there is ample oxygen present to allow for biodegradation, the existing measured oxygen and carbon dioxide levels indicate that aerobic biodegradation is limited or not occurring.

4.3 Data Comparison by Sample Location

Indoor Air

The three indoor air sample locations yielded similar constituent concentrations (Attachment C-2), confirming the previous building characteristic observation that the relatively large indoor air volume is well connected within the building. In general, the highest detections of constituents occurred at Q2-IA-01 (first-floor kitchen) and the lowest detections occurred at Q2-IA-02 (first-floor dining room).

Subslab Soil Gas

Significantly higher detections of at least one order of magnitude were observed at Q2-VI-02 (kitchen) for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, n-propylbenzene, tetrahydrofuran, and total xylenes. Exceedances of the non-cancer hazard quotient of 1.0 occurred only at Q2-VI-02.

4.4 Potential Constituents of Interest

CH2M HILL evaluated the constituents detected in indoor air or subslab soil gas above the lowest screening criteria—that is, 10^{-6} target cancer-risk level or non-cancer hazard quotient of 0.1—to determine if they are related to the site and/or vapor intrusion and should therefore be considered as constituents of interest for vapor intrusion.

The confirmed site-related constituents that were detected in either indoor air or subslab soil gas above the lowest screening criteria are benzene, chloroform, ethylbenzene, naphthalene, tetrachloroethene, and total xylenes. It is reasonably probable to conclude from a comparison of subslab, indoor air and outdoor air sample results that indoor air concentrations of benzene, chloroform, ethylbenzene, and tetrachloroethene are not the related to a potential vapor intrusion pathway. Indoor air concentrations of naphthalene (above the cumulative non-cancer hazard quotient of 0.1 but below the hazard quotient of 1.0) and total xylenes (below the cumulative non-cancer hazard quotient of 0.1) are probably related to a potential vapor intrusion pathway.

The constituents not confirmed to be site related that were detected above the lowest screening criteria in either indoor air or subslab soil gas are 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, acrolein, carbon tetrachloride, n-propylbenzene and tetrahydrofuran. It is reasonably probable to conclude from a comparison of subslab, indoor air and outdoor air sample results that indoor air concentrations of acrolein, carbon tetrachloride, n-propylbenzene, and tetrahydrofuran are not the related to a potential vapor intrusion pathway. Indoor air concentrations of 1,2,4-trimethylbenzene (above the cumulative non-

cancer hazard quotient of 0.1 but below the hazard quotient of 1.0) and 1,3,5-trimethylbenzene (below the cumulative non-cancer hazard quotient of 0.1) are probably related to a potential vapor intrusion pathway.

Constituents Confirmed to Be Site Related

Benzene.

Benzene was identified as a constituent of concern in soil and groundwater in the OU1 RI. The benzene detections in indoor air do not appear to be related to vapor intrusion; detections of benzene were comparable to outdoor air detections though not detected in subslab soil gas. Benzene should be included on the analyte list for future vapor intrusion sampling events because it is a confirmed site constituent, but further action is not necessary.

Chloroform.

Chloroform was identified in the OU1 RI as a constituent of interest in groundwater but not in soil. Chloroform was not detected in the shallow groundwater samples collected at the Block 93 North property for the October 2007 evaluation (CH2M HILL, 2007b). Chloroform was detected at one of the three indoor air sample locations (Q2-IA-01) at a concentration above the 10^{-6} target cancer-risk level; however, chloroform was not detected at the duplicate sample collected at this same location. Chloroform was detected at both subslab probes at concentrations above the 10^{-6} target cancer-risk level; the concentration at Q2-VI-01 also exceeded the 10^{-5} target cancer-risk level. Chloroform should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Ethylbenzene.

Ethylbenzene was identified as a constituent of concern in soil and groundwater in the OU1 RI. Concentrations of ethylbenzene did not exceed the cumulative non-cancer hazard quotient of 0.1 in any of the indoor air samples in March 2008. The concentrations of ethylbenzene detected in indoor air were comparable to the concentration detected in outdoor air. Concentrations of ethylbenzene exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-02. Detections of ethylbenzene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air did not exceed the lowest screening criterion, the non-cancer hazard quotient of 0.1. Ethylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Naphthalene.

Naphthalene was identified in the OU1 RI as a constituent of concern in soil and groundwater. Concentrations of naphthalene were above the cumulative non-cancer hazard quotient of 0.1 but below the cumulative non-cancer hazard quotient of 1.0 at the three indoor air locations in March 2008. Naphthalene was detected in the outdoor air sample at a concentration less than the indoor air samples but within the same order of magnitude. Concentrations of naphthalene exceeded the cumulative non-cancer hazard quotient of 0.1 at one of the two subslab probes. Detections of naphthalene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air and subslab soil gas did not exceed the lowest screening criterion, the non-cancer hazard quotient of 0.1. Naphthalene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Tetrachloroethene.

Tetrachloroethene was identified in the OU1 RI as a constituent of concern in soil and groundwater. Concentrations of tetrachloroethene did not exceed the 10^{-6} target cancer-risk level in any of the indoor air samples in March 2008. Concentrations of tetrachloroethene exceeded the 10^{-6} target cancer-risk level at Q1-VI-02. Detections of tetrachloroethene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air did not exceed the lowest screening criterion, the 10^{-6} target cancer-risk level. n-propylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Total Xylenes.

Total xylenes were identified in the OU1 RI as a constituent of concern in soil and groundwater. Concentrations of total xylenes did not exceed the cumulative non-cancer hazard quotient of 0.1 in any of the indoor air samples in March 2008. Concentrations of total xylenes exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-01 and the non-cancer hazard quotient of 1.0 at Q1-VI-02. Detections of total xylenes in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air did not exceed the lowest screening criterion, the non-cancer hazard quotient of 0.1. Total xylenes should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Constituents Not Confirmed to Be Site-Related

1,2,4-trimethylbenzene.

1,2,4-trimethylbenzene was not analyzed for in OU1 remedial investigation (RI) groundwater samples. It was detected in some OU1 RI soil samples below the screening criteria. Concentrations of 1,2,4-trimethylbenzene did not exceed the cumulative non-cancer hazard quotient of 1.0 in any of the indoor air samples in March 2008, but did exceed the cumulative non-cancer hazard quotient of 0.1 at two of the three locations—specifically, at Q2-IA-01 (first-floor kitchen) and Q2-IA-03 (second-floor dining room).

Concentrations of 1,2,4-trimethylbenzene exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-01 and the non-cancer hazard quotient of 1.0 at Q1-VI-02. Detections of 1,2,4-trimethylbenzene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air exceeded only the lowest screening criterion, the non-cancer hazard quotient of 0.1. 1,2,4-trimethylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

1,3,5-trimethylbenzene.

1,3,5-trimethylbenzene was not analyzed for in OU1 RI groundwater or soil samples. Concentrations of 1,3,5-trimethylbenzene did not exceed the cumulative non-cancer hazard quotient of 0.1 in any of the indoor air samples in March 2008. Concentrations of 1,3,5-trimethylbenzene exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-01 and the non-cancer hazard quotient of 1.0 at Q1-VI-02. Detections of 1,3,5-trimethylbenzene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air did not exceed the lowest screening criterion, the non-cancer hazard quotient of 0.1 of 1,3,5-trimethylbenzene should

be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Acrolein.

Acrolein[2] was not included on the analyte list in previous vapor intrusion sampling events and was either not analyzed for or not detected in the soil and groundwater samples collected during the OU1 RI. This constituent is a combustion byproduct present in cigarette smoke and automobile exhaust. Acrolein was detected at a concentration in exceedance of the non-cancer hazard quotient of 1.0 in one of the two subslab probes and at one of the three indoor air locations in March 2008. There are two reasons to suspect that detections of acrolein in indoor samples may not be site related or vapor intrusion related:

- Acrolein was not detected at either of the two first-floor indoor air locations (Q2-IA-01 and Q2-IA-02) but it was detected at the second-floor location (Q2-IA-03). Detections of all other constituents at Q2-IA-03 were less than or comparable to detections at Q2-IA-01.
- Acrolein was detected at subslab probe Q2-VI-01 but not at Q2-VI-02, which for most other constituents had significantly higher detections than Q2-VI-01.

Carbon Tetrachloride.

Carbon tetrachloride has not been identified as a constituent of interest in the soil or groundwater in the OU1 RI. The carbon tetrachloride detections in indoor air do not appear to be related to vapor intrusion; detections in indoor air, subslab soil gas, and outdoor air were all comparable. No further action is necessary, and carbon tetrachloride does not need to be included on the analyte list for future vapor intrusion sampling events.

n-propylbenzene.

The field team did not analyze for n-propylbenzene in OU1 RI groundwater or soil samples. Concentrations of n-propylbenzene did not exceed the cumulative non-cancer hazard quotient of 0.1 in any of the indoor air samples from March 2008. Concentrations of 1,3,5-trimethylbenzene exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-02. Detections of n-propylbenzene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the indoor air did not exceed the lowest screening criterion, the 0.1 non-cancer hazard quotient. n-propylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Tetrahydrofuran.

Tetrahydrofuran was not included on the analyte list in previous vapor-intrusion-sampling events, nor was it analyzed for in OU1 RI groundwater or soil samples. Tetrahydrofuran was not detected in any of the three indoor air samples. Concentrations of tetrahydrofuran exceeded the non-cancer hazard quotient of 0.1 at Q1-VI-02. Tetrahydrofuran should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

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[2] Acrolein is commonly found in automobile exhaust and cigarette smoke and is formed from the burning of trees and other plants, gasoline, and oils (ATSDR ToxFAQs™, www.atsdr.cdc.gov/tfacts124.html#bookmark02).

4.5 Revisions to the Vapor Intrusion Conceptual Site Model

The indoor and subslab soil gas data obtained from the March 2008 sampling event were used to update the conceptual site model that was presented in the October 2007 evaluation (CH2M HILL, 2007b).

The following are the revisions to the previous vapor intrusion conceptual site model:

- The maximum soil gas concentrations of BTEX and naphthalene that were modeled from the shallow groundwater data in the October 2007 evaluation (CH2M HILL, 2007b) were compared to the maximum subslab soil concentrations of these constituents in March 2008. This comparison is shown in Table 4.
  - Naphthalene was identified in the October 2007 evaluation as the only potential constituent of interest for vapor intrusion at the building (CH2M HILL, 2007b). However, based on the March 2008 sample data, naphthalene was below the non-cancer hazard quotient of 1.0 at the three indoor air locations. In addition, naphthalene was below the non-cancer hazard quotient of 0.1 at one subslab sample location and below the non-cancer hazard quotient of 1.0 at both subslab sample locations. The maximum soil gas concentration modeled from the July 2007 shallow groundwater sampling was 59.64 $\mu g/m^3$, compared to the maximum subslab soil gas concentration of 3.2 $\mu g/m^3$ detected in the March 2008 event. Figure 3 shows the June 2007 groundwater grab sample data and the March 2008 subslab soil gas sample data.
  - The maximum modeled soil gas concentrations from October 2007 of ethylbenzene and total xylenes were considerable lower (by three orders of magnitude) than the maximum March 2008 subslab soil gas concentrations.
- The results of the March 2008 sampling event confirm the previous conclusions from the April and October 2007 evaluations that building characteristics are precluding a vapor intrusion pathway at the building. A comparison of subslab soil gas data to indoor air data for potential constituents of concern that are probably vapor intrusion related yields large attenuation factors: 0.0005 for 1,2,4-trimethylbenzene, 0.0006 for 1,3,5-trimethylbenzene, and 0.0003 for total xylenes. The calculated attenuation factor for naphthalene was 0.1938, but this value is skewed because naphthalene was detected in outdoor air, and the detection of naphthalene in subslab soil gas was relatively low compared to other constituents. The calculation of attenuation factors is presented in Table 5. The specific building characteristics are the following:
  - The slab underlying the building is relatively thick (from 6 inches to 2 feet) and is in good condition, with relatively few penetrations.
  - Inhabited areas are generally elevated 1.5 to 3 feet above the ground surface. There is an approximately 4-inch annular space above the floor in the inhabited areas. This annular space is under the dining room floor and is filled with insulation. If soil vapor were able to migrate through the slab, it would still have to travel through this insulation-filled space and then the dining room floor to reach indoor air.

- The indoor air volume is relatively large and is connected throughout the building. The dining area contains an upstairs portion, providing an approximate ceiling height of 20 feet. The ceiling in the kitchen and store room is 8 to 10 feet high.
- The kitchen hoods and exhaust fans are operational when the building is occupied. There are also ceiling fans in the dining areas. The exhaust fans and ceiling fans increase the air exchange rate within the building.

5 Conclusions

The results from the March 2008 vapor intrusion sampling event at the 163 Old River Road building indicate that a potential vapor intrusion pathway is not causing unacceptable concentrations of site-related constituents in indoor air.

No constituents were detected in indoor air at concentrations above NJDEP RALs and HDNLs. Based on these results, in accordance with the NJDEP (2005) vapor intrusion guidance, there is no need for prompt action to further investigate or reduce potential exposures in the building, and there is no need to notify state or local health departments.

Six constituents were detected at concentrations above the lowest screening criteria in indoor air. Of these six constituents, two are probably related to vapor intrusion: 1,2,4-trimethylbenzene and naphthalene. 1,2,4-trimethylbenzene is not a confirmed site-related constituent. The concentrations of these two compounds in indoor air exceeded only the lowest screening criteria and are not considered an unacceptable risk in indoor air.

Three compounds were detected at concentrations above the non-cancer hazard quotient of 1.0 in subslab soil gas at Q2-VI-02: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes. The presence of these constituents in subslab soil gas is not causing an unacceptable risk in indoor air; 1,2,4-trimethylbenzene was detected at a concentration above the non-cancer hazard quotient of 0.1 but below the non-cancer hazard quotient of 1.0, and concentrations of 1,3,5-trimethylbenzene and total xylenes in indoor did not exceed the non-cancer hazard quotient of 0.1.

Five compounds were detected at concentrations above the lowest and below the highest screening criteria in subslab soil gas at Q2-VI-02: chloroform, ethylbenzene, naphthalene, tetrachloroethene, and tetrahydrofuran. The presence of these constituents in subslab soil gas is not causing an unacceptable risk in indoor air. Naphthalene was detected at a concentration above the non-cancer hazard quotient of 0.1 but below the non-cancer hazard quotient of 1.0. Chloroform was detected at a concentration above the 10^{-6} target cancer risk level but below the 10^{-5} target cancer risk level. Concentrations of ethylbenzene, tetrachloroethene, and tetrahydrofuran in indoor did not exceed the lowest screening criteria.

The March 2008 sample data confirms the previous observation that building characteristics may preclude a vapor intrusion pathway. These characteristics include the relatively large and connected indoor air volume, the thick slab (from 6 inches to 2 feet), and the elevated dining room floor.

6 Recommendations for Further Action

An additional monitoring event is proposed for the 2008–2009 heating season at the 163 Old River Road building. This additional monitoring will verify that indoor air concentrations of site-related or potentially site-related constituents remain below acceptable risk levels. The monitoring event will include the following activities:

- Indoor air sample collection at the same three March 2008 indoor air sample locations (Q2-IA-01, Q2-IA-02, and Q2-IA-03)
- Subslab soil gas sample collection at the two existing subslab probes
- Outdoor air sample collection at the same March 2008 outdoor air location (Q2-OA-01)

A revised analyte list is proposed for the winter 2008–2009 vapor intrusion sampling event. Constituents recommended for further monitoring are those that exceeded the lowest screening criteria in subslab soil gas or indoor air, as identified in Tables 1 and 2. These constituents are 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, acrolein, benzene, carbon tetrachloride, chloroform, ethylbenzene, naphthalene, n-propylbenzene, tetrachloroethene, tetrahydrofuran, and total xylenes.

The need for additional vapor intrusion activities at the 163 Old River Road building will be evaluated on the basis of the results of 2008–2009 heating season monitoring event and the final remedy set forth in the Quanta Site Record of Decision.

7 References

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Tables

TABLE 1
Screening of Vapor Intrusion Potential Constituents of Interest Based on Indoor Air Data - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Constituents warranting further evaluation based on screening indoor air data against lowest screening levels	**Chemicals that should not require further evaluation based on screening indoor air data against lowest screening levels**		**Constituents where reporting limits were discussed further - constituents were not evaluated further for vapor intrusion potential**
Constituents detected above lowest screening level in at least one sample	***Constituents detected at concentrations less than the lowest screening level***	***Constituents not detected and reporting limits are below lowest screening level***	***Constituents not detected, but reporting limits are above lowest screening level in some samples***
1,2,4-TRIMETHYLBENZENE	1,1,2-TRICHLOROTRIFLUOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE
ACROLEIN	1,2,4-TRIMETHYLBENZENE	1,1-DICHLOROETHANE	1,1,2-TRICHLOROETHANE
BENZENE	1,3,5-TRIMETHYLBENZENE	1,1-DICHLOROETHENE	1,2,4-TRICHLOROBENZENE
CARBON TETRACHLORIDE	1,4-DICHLOROBENZENE	1,2-DICHLOROBENZENE	1,2-DIBROMO-3-CHLOROPROPANE
CHLOROFORM	4-METHYL-2-PENTANONE	1,3-DICHLOROBENZENE	1,2-DIBROMOETHANE (EDB)
NAPHTHALENE	ACETIC ACID, ETHYL ESTER	2-BUTANONE (MEK)	1,2-DICHLOROETHANE
	ACETONITRILE	4-METHYL-2-PENTANONE	1,2-DICHLOROPROPANE
	CHLOROMETHANE	ACETONE	1,3,5-TRIMETHYLBENZENE
	DICHLORODIFLUOROMETHANE	ALLYL CHLORIDE	1,3-BUTADIENE
	ETHYLBENZENE	BROMOFORM	1,4-DIOXANE
	METHYLENE CHLORIDE	CARBON DISULFIDE	ACROLEIN
	N-HEXANE	CHLOROBENZENE	ACRYLONITRILE
	N-PROPYLBENZENE	CHLOROETHANE	BENZENE, (CHLOROMETHYL)-
	O-XYLENE	CIS-1,2-DICHLOROETHENE	BROMODICHLOROMETHANE
	STYRENE	CYCLOHEXANE	BROMOMETHANE
	TETRACHLOROETHENE	ISOPROPYLBENZENE	CHLORODIBROMOMETHANE
	TOLUENE	METHYL METHACRYLATE	CHLOROFORM
	TRICHLOROFLUOROMETHANE	METHYL TERT-BUTYL ETHER (MTBE)	CIS-1,3-DICHLOROPROPENE
	XYLENES, M & P	N-PROPYLBENZENE	HEXACHLOROBUTADIENE
	XYLENES, TOTAL - sum of isomers	STYRENE	TETRAHYDROFURAN
		TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE
		VINYL ACETATE	TRICHLOROETHENE
			VINYL CHLORIDE

TABLE 2
Screening of Vapor Intrusion Potential Constituents of Interest in Subslab Samples - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Constituents warranting further evaluation based on screening soil gas data against lowest screening levels	Chemicals that should not require further evaluation based on screening soil gas data against lowest screening levels		Constituents where reporting limits were discussed further - constituents were not evaluated further for vapor intrusion potential
Constituents detected above lowest screening level in at least one sample	***Constituents detected at concentrations less than the lowest screening level***	***Constituents not detected and reporting limits are below lowest screening level***	***Constituents not detected, but reporting limits are above lowest screening level in some samples***
1,2,4-TRIMETHYLBENZENE	1,1,2-TRICHLOROTRIFLUOROETHANE	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE
1,3,5-TRIMETHYLBENZENE	2-BUTANONE (MEK)	1,1,2-TRICHLOROTRIFLUOROETHANE	1,1,2-TRICHLOROETHANE
ACROLEIN	4-METHYL-2-PENTANONE	1,1-DICHLOROETHANE	1,2-DIBROMOETHANE (EDB)
CHLOROFORM	ACETIC ACID, ETHYL ESTER	1,1-DICHLOROETHENE	1,2-DICHLOROETHANE
ETHYLBENZENE	ACETONITRILE	1,2,4-TRICHLOROBENZENE	1,2-DICHLOROPROPANE
NAPHTHALENE	CARBON DISULFIDE	1,2-DIBROMO-3-CHLOROPROPANE	1,3-BUTADIENE
N-PROPYLBENZENE	CARBON TETRACHLORIDE	1,2-DICHLOROBENZENE	1,4-DICHLOROBENZENE
O-XYLENE	CHLOROMETHANE	1,3-DICHLOROBENZENE	1,4-DIOXANE
TETRACHLOROETHENE	DICHLORODIFLUOROMETHANE	1,4-DICHLOROBENZENE	ACROLEIN
TETRAHYDROFURAN	ETHYLBENZENE	ACETONE	ACRYLONITRILE
XYLENES, M & P	ISOPROPYLBENZENE	ACETONITRILE	ALLYL CHLORIDE
XYLENES, TOTAL - sum of isomers	NAPHTHALENE	BENZENE	BENZENE
	N-PROPYLBENZENE	BROMOFORM	BENZENE, (CHLOROMETHYL)-
	O-XYLENE	BROMOMETHANE	BROMODICHLOROMETHANE
	TETRACHLOROETHENE	CARBON DISULFIDE	BROMOFORM
	TOLUENE	CHLOROBENZENE	CARBON TETRACHLORIDE
	TRICHLOROFLUOROMETHANE	CHLOROETHANE	CHLORODIBROMOMETHANE
	VINYL ACETATE	CHLOROMETHANE	CHLOROETHANE
		CIS-1,2-DICHLOROETHENE	CIS-1,3-DICHLOROPROPENE
		CYCLOHEXANE	HEXACHLOROBUTADIENE
		METHYL METHACRYLATE	METHYL TERT-BUTYL ETHER (MTBE)
		METHYL TERT-BUTYL ETHER (MTBE)	METHYLENE CHLORIDE
		METHYLENE CHLORIDE	TETRAHYDROFURAN
		N-HEXANE	TRANS-1,3-DICHLOROPROPENE
		STYRENE	TRICHLOROETHENE
		TRANS-1,2-DICHLOROETHENE	VINYL CHLORIDE
		VINYL ACETATE	

TABLE 3
Sample Results for Potential Constituents of Concern - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Concentrations in Air (µg/m^3)						
	Subslab Soil Gas		Indoor Air				Outdoor Air
Constituent	**Q2-VI-01**	**Q2-VI-02**	**Q2-IA-01**	**Q2-IA-01 Duplicate**	**Q2-IA-02**	**Q2-IA-03**	**Q2-OA-01**
1,2,4-Trimethylbenzene	25	2,100	1	0.91 J	0.41 J	1.1	0.37 J
1,3,5-Trimethylbenzene	9	690	0.38 J	0.3 J	ND (0.95)	0.38 J	ND (0.61)
Acrolein	2.3	ND (1.8)	ND (0.6)	ND (1.1)	ND (1.0)	0.95	ND (0.66)
Benzene	ND (1.9)	ND (5.9)	1	0.85	0.76	0.81	0.81
Carbon Tetrachloride	0.42 J	ND (5.9)	0.31 J	0.44 J	0.39 J	0.47 J	0.47 J
Chloroform	8.7	1.4 J	0.23 J	ND (0.96)	ND (0.95)	ND (0.79)	ND (0.61)
Ethylbenzene	50	1,500	0.65 J	0.57 J	0.35 J	0.43 J	0.36 J
Naphthalene	0.46 J	3.2 J	0.62	0.38	0.32	0.42	0.14
n-Propylbenzene	4.6	330	0.26 J	ND (0.96)	ND (0.95)	0.22 J	ND (0.61)
Tetrachloroethene	2.1	4.2 J	0.31 J	0.27 J	0.3 J	0.28 J	0.28 J
Tetrahydrofuran	ND (1.9)	7.9	ND (0.96)	ND (0.96)	ND (0.95)	ND (0.79)	ND (0.61)
m&p-Xylenes	190	8,100	2.5	2.3	1.3 J	1.6	0.41 J
o-Xylene	66	3,500	0.97	0.86 J	0.45 J	0.61 J	1.2
Total Xylenes	256	11,600	3.47	3.16 J	1.75 J	2.21 J	1.61 J

Notes:
n = number of samples
J = Data below calibration curve for that constituent, quantity estimated.
ND = Non Detected
(3 ND) = number of samples with non detect out of the total number of samples
ND (0.06) = RL for non detects

TABLE 4
Comparison of Concentrations of Potential Constituents of Concern - October 2007 and March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Concentrations in Air ($\mu g/m^3$)	
Constituent	**Max Modeled Soil Gas Concentration from October 2007**	**Max Subslab Soil Gas Concentation from March 2008**
Benzene	9.30	ND (5.9)
Ethylbenzene	2.06	1,500
Toluene	0.86	9.40
Total Xylenes	1.83	11,600
Naphthalene	59.64	3.2 J

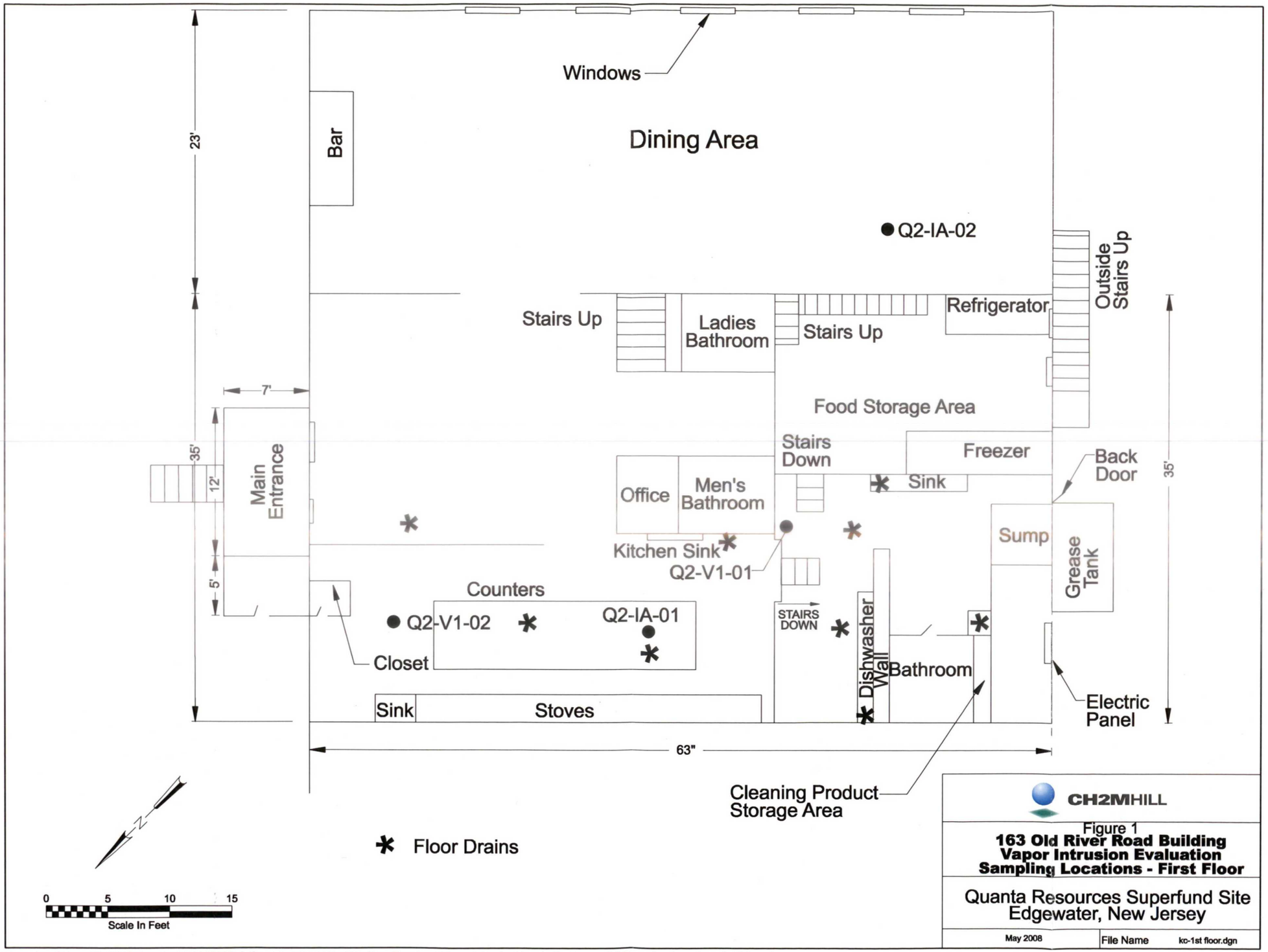
Notes:
J = Data below calibration curve for that constituent, quantity estimated.

TABLE 5
Attenuation Factors for Potential Constituents of Concern Related to Vapor Intrusion - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Concentrations in Air ($\mu g/m^3$)		
Constituent	**Max Subslab Soil Gas Detection**	**Max Indoor Air Detection**	**Attenuation Factor**
1,2,4-Trimethylbenzene	2,100	1	0.0005
1,3,5-Trimethylbenzene	690	0.38 J	0.0006
Naphthalene	3.2 J	0.62	0.1938
Total Xylenes	11,600	3.47	0.0003

Notes:
J = Data below calibration curve for that constituent, quantity estimated.

Figures



Taurus\proj\HoneyWellINC\Quanta_328676\GIS & Graphics\CAD Files\Working Drawings\Vapor Intrusion\Jono's Restaurant VI Sampling Locations 1st Floor.dgn

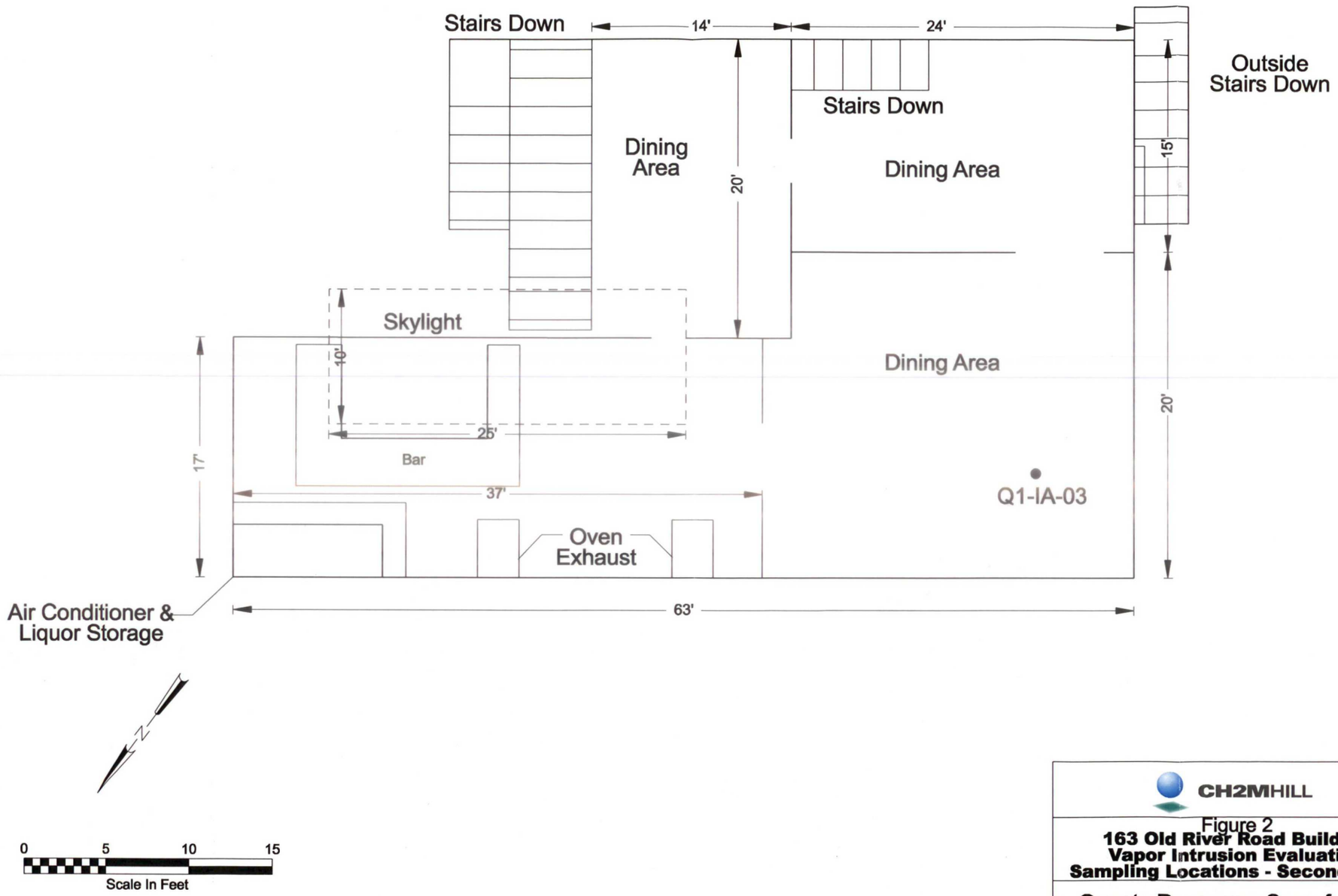


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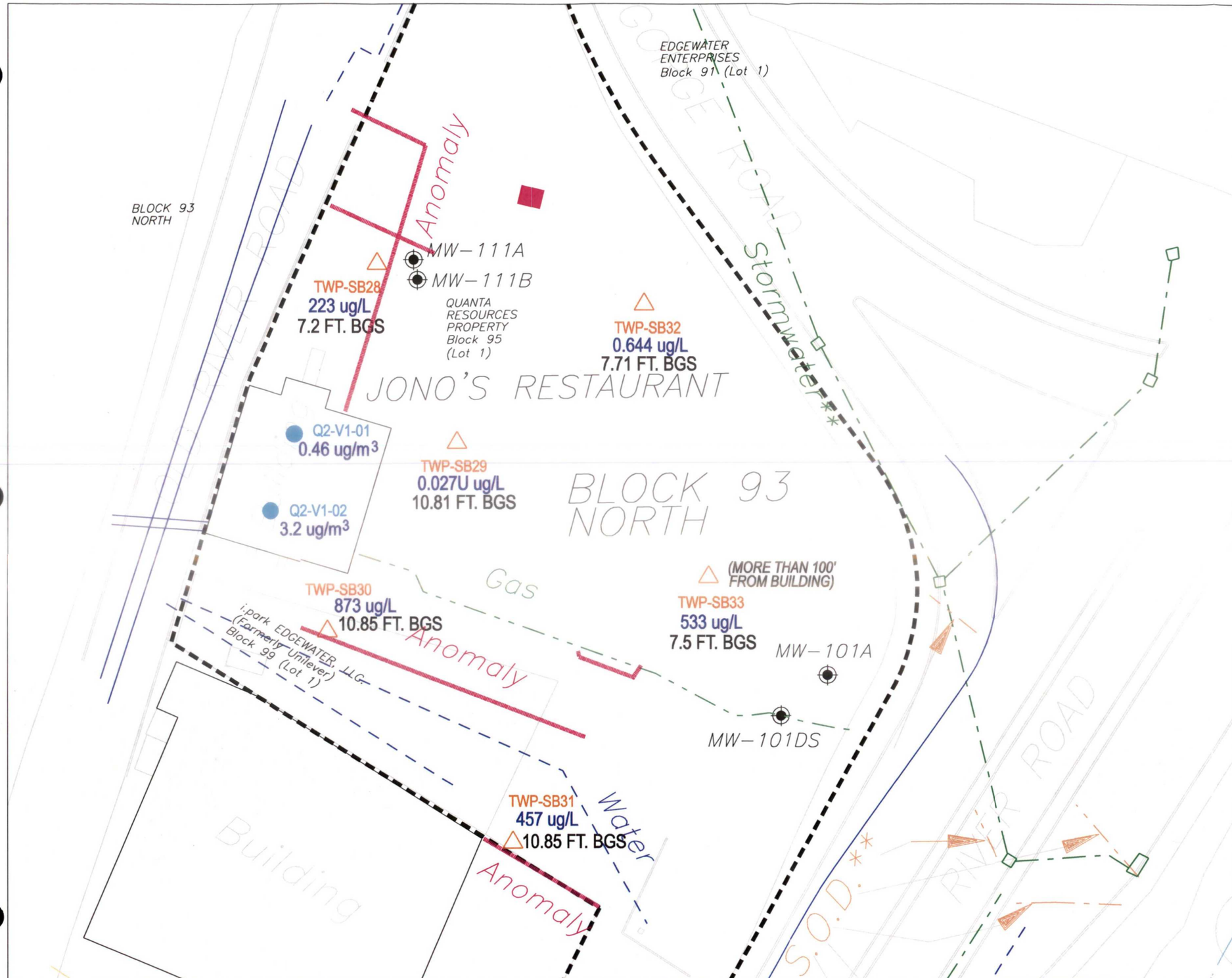
Figure 2
163 Old River Road Building
Vapor Intrusion Evaluation
Sampling Locations - Second Floor

Quanta Resources Superfund Site
Edgewater, New Jersey

May 2008

File Name
jono's restaurant vi sampling locations 2nd floor.dgn

Taurus\proj\HoneyWellINC\Quanta_328676\GIS & Graphics\CAD Files\Working Drawings\Vapor Intrusion\Jono's Restaurant VI Sampling Locations 2nd Floor.dgn



LEGEND

N

TWP-SB29 — GW GRAB WELL POINT LOCATION

MW-101A — EXISTING MONITORING WELL

CURRENT BLOCK 93 NORTH PROPERTY BOUNDARY

223 ug/L — CONCENTRATION OF NAPHTHALENE IN GROUNDWATER GRAB SAMPLE

OBSERVED / APPARENT WATER LINE

APPARENT STORMWATER LINE

LINEAR ANOMALY

SUB-BASE OUTLET DRAIN

GAS LINE

Notes:

1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.

2. Property boundary lines are not exact.

3. S.O.D.: Sub-base Outlet Drain

4. The geophysical survey of Block 93 North was performed by Enviroscan, Inc. on May 31, 2007. Utilities and anomalys shown on Block 93 North were found during this survey.

5. Other pipe and trench locations are approximate and are based on field observations and historical information sources including Sanborn Fire Insurance Maps and the Removal Site Investigation report (Geosyntec, 1998).

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

CH2MHILL

JONO'S RESTAURANT VAPOR INTRUSION EVALUATION NAPHTHALENE CONCENTRATIONS

QUANTA RESOURCES SUPERFUND SITE

Edgewater, New Jersey

August 2007

FIGURE 3

Taurus\proj\HoneyWellINC\Quanta_328676\GIS & Graphics\CAD Files\Working Drawings\Vapor Intrusion\ ch-jono's_vi_tech_memo_figures_rev1.dgn

Attachment A
Sample Location Key and Sampling Logs

ATTACHMENT A-1
Sample Location Key - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Sample Location Description
Q2-IA-01	Kitchen - counter top
Q2-IA-02	1st floor dinning room - on table near wall
Q2-IA-03	2nd floor dinnig room - on table in SW room

Subslab Sample Locations

Location ID	Sample Location Description
Q2-VI-01	Storage room next to stairs
Q2-VI-02	Kitchen - north side next to water service closet

Outdoor Air Sample Locations

Location ID	Sample Location Description
Q2-OA-01	south side of building - chained to fence

ATTACHMENT A-2
Indoor and Ambient Air Sampling Log - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Initial Canister Pressure ("Hg)	Start Date	Start Time	End Date	End Time	Final Pressure ("Hg)	Flow Controller Rate (ml/min)	Temp oF
Q2-IA-01-032508	Kitchen - counter top	1177	0654	0300	-30	3/24/2008	10:34	3/25/2008	10:31	-8	24 Hour Period	64
Q2-IA-02-032508	1st floor dinning room - on table near wall	1487	0468	0112	-29	3/24/2008	10:31	3/25/2008	10:30	-10.5	24 Hour Period	68
Q2-IA-03-032508	2nd floor dinnig room - on table in SW room	1124	0473	0257	-29.5	3/24/2008	10:29	3/25/2008	10:29	-7	24 Hour Period	67
Q2-DUP2-032508	Kitchen - counter top	1061	0391	0528	-30	3/24/2008	10:34	3/25/2008	10:31	-12	24 Hour Period	64
Q2-OA-01-032508	South of Bldg chained to fence	1468	0669	0698	-30	3/24/2008	10:42	3/25/2008	10:49	-3.5	24 Hour Period	50

ATTACHMENT A-3
Subslab Soil Gas Sampling Log - March 2008
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Date	Initial PID in Probe (ppm)	Purge Start Time	Purge End Time	Purge Rate (mL/min)	PID from Purge (ppm)	Helium Leak Check (ppm)	Sample Start Time	Initial Pressure ("Hg)	Sample Finish Time	Final Pressure (" Hg)	Temp (oF)	Comment
Q2-VI-01-032308	Storage room next to stairs	0148	0073	0549	03/24/08	0	9:51	9:58	200	0	100	10:00	-30	10:01	-3	64	None
Q2-VI-02-032308	Kitchen - north side next to water service closet	0208	0135	0460	03/25/08	62.4	11:06	11:12	200	0	0	11:13	-30	11:20	-3.5	64	None

Attachment B
Chain of Custody Form

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

Air Analytical Services Inc.
An Employee - Owned Company
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No.:

CAS Contact: Kate Aguilera

Company Name & Address (Reporting Information): CH2M Hill, 3011 SW Williston Rd, Gainesville, FL 32608, Attn: Amy Klopper

Project Name: Quanta Resources

Project Number: 363725.37.01.VI.JN

Project Manager: Steve Zarlinski

P.O. # / Billing Information: 927189
CH2M HILL A/P
PO Box 241329
Denver CO 80224

Phone: 352-335-5877 Ext. 52901

Fax: 352-271-4870

Email Address for Result Reporting: amy.klopper@ch2m.com

Sampler (Print & Sign): Jen Simms / Jen Simms

Analysis Method and/or Analytes: TO-15 and TO-15 SIM; EPA 3C (oxygen and carbon dioxide)

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Sample Type (Air/Tube/Solid)	Canister ID (Bar Code # - AC, SC, etc.)	Flow Controller (Bar Code - FC #)	Sample Volume	TO-15 and TO-15 SIM	EPA 3C (oxygen and carbon dioxide)			Comments e.g. Actual Preservative or specific instructions
~~Q2-01~~					~~1177~~							
~~Q2-02~~					~~1487~~							
~~Q2-03~~ LMB 3.25.08					~~112~~							
~~Q2-DUP1~~												
Q2-IA-01-032508		3/25/08	1031	Air	1177	0654	6L	X				
Q2-IA-02-032508		3/25/08	1030	Air	1487	0468	6L	X				
Q2-IA-03-032508		3/25/08	1029	Air	1124	0473	6L	X				
Q2-DUP1-032508		3/25/08	—	Air	1061	0391	6L	X				
Q2-OA-01-032508		3/25/08	1049	Air	1468	0669	6L	X				
Q2-VI-01-032408		3/24/08	1001	Air	0148	0073	1L	X	X			
Q2-VI-02-032508		3/25/08	1120	Air	0208	0135	1L	X	X			

Report Tier Levels - please select: Please refer to SOW
Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) ____
EDD required Yes / No
Type: _____ EDD Units: _____

Project Requirements (MRLs, QAPP):

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms	03/25	16:30			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank
Temperature _____ °C

Attachment C
Analytical Data

ATTACHMENT C-1

Subslab Soil Gas Sampling Results for O2 and CO2 - March 2008

163 Old River Road Building

Quanta Resources Site

Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier
Q2-VI-01	Q2-VI-01-032408	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.31		ND
Q2-VI-01	Q2-VI-01-032408	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.31	21.9	
Q2-VI-02	Q2-VI-02-032408	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.17		ND
Q2-VI-02	Q2-VI-02-032408	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.17	21.9	

Notes:

%V/V = Percent by volume

ND = Not detected above laboratory reporting limits

ATTACHMENT C-2
Indoor Air Sampling Results - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

		AREA	Kitchen	1st Floor Dining Room	2nd Floor - Dining Room	
		LOCATION DESCRIPTION	Counter Top	On Table Near Wall	On Table in SW Room	
		LOCATION ID	Q2-IA-01	Q2-IA-02	Q2-IA-03	Q2-IA-03
		FIELD SAMPLE ID	Q2-IA-01-032508	Q2-IA-02-032508	Q2-IA-03-032508	Q2-DUP1-032508
		SAMPLE DATE	3/25/2008	3/25/2008	3/25/2008	3/25/2008
		SAMPLE PURPOSE	Normal	Normal	Normal	Duplicate
Parameter Name	Units	Analytical Method				
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.72 J	0.69 J	0.59 J	0.61 J
1,1-DICHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	1	0.41 J	1.1	0.91 J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.34 J	0.95 U	0.79 U	0.96 U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	0.38 J	0.95 U	0.38 J	0.3 J
1,3-BUTADIENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.23 J	0.21 J	0.16 J	0.96 U
1,4-DIOXANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	0.37 J	0.95 U	0.35 J	0.31 J
2-BUTANONE (MEK)	ug/m3	TO-15	1.3 U	1.9 U	1.6 U	2.1 U
2-HEXANONE	ug/m3	TO-15	0.22 J	0.6 J	0.33 J	0.5 J
2-PROPANOL	ug/m3	TO-15	8.6 J	1.7 J	35	2.5 J
4-METHYL-2-PENTANONE	ug/m3	TO-15	0.96 U	0.95 U	0.25 J	0.22 J
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	3.2 J	6.1	13	10 J
ACETONE	ug/m3	TO-15	9.2 U	12 U	13 U	12 U
ACETONITRILE	ug/m3	TO-15	0.57 J	0.47 J	0.31 J	0.41 J
ACROLEIN	ug/m3	TO-15	0.6 U	1 U	0.95	1.1 U
ACRYLONITRILE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
ALLYL CHLORIDE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
ALPHA-PINENE	ug/m3	TO-15	0.98	0.95 U	0.28 J	0.59 J
BENZENE	ug/m3	TO-15	1	0.76	0.81	0.85
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
BROMOFORM	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
BROMOMETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CARBON DISULFIDE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.31 J	0.39 J	0.47 J	0.44 J
CHLOROBENZENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CHLOROETHANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CHLOROFORM	ug/m3	TO-15	0.23 J	0.95 U	0.79 U	0.96 U
CHLOROMETHANE	ug/m3	TO-15	1.1	0.99	1.1	1.1
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
CYCLOHEXANE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.8	2.6	2.6	2.7
D-LIMONENE	ug/m3	TO-15	5.6 J	0.19 J	0.19 J	0.53 J
ETHANOL	ug/m3	TO-15	150	26 J	130	170
ETHYLBENZENE	ug/m3	TO-15	0.65 J	0.35 J	0.43 J	0.57 J
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
ISOPROPYLBENZENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
METHYL METHACRYLATE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
METHYLENE CHLORIDE	ug/m3	TO-15	0.46 J	0.41 J	0.36 J	0.37 J
NAPHTHALENE	ug/m3	TO-15	0.62	0.32	0.42	0.38
N-BUTYL ACETATE	ug/m3	TO-15	0.96 U	0.25 J	0.24 J	0.25 J
N-HEPTANE	ug/m3	TO-15	0.34 J	0.25 J	0.29 J	0.31 J
N-HEXANE	ug/m3	TO-15	0.56 J	0.47 J	0.44 J	0.54 J
N-NONANE	ug/m3	TO-15	1.3	0.37 J	2.4	1.2
N-OCTANE	ug/m3	TO-15	0.34 J	0.3 J	0.41 J	0.36 J
N-PROPYLBENZENE	ug/m3	TO-15	0.26 J	0.95 U	0.22 J	0.96 U
O-XYLENE	ug/m3	TO-15	0.97	0.45 J	0.61 J	0.86 J
PROPYLENE	ug/m3	TO-15	3.5 J	1.3 J	2.5 J	3.9 J
STYRENE	ug/m3	TO-15	0.24 J	0.95 U	0.79 U	0.96 U
TETRACHLOROETHENE	ug/m3	TO-15	0.31 J	0.3 J	0.28 J	0.27 J
TETRAHYDROFURAN	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
TOLUENE	ug/m3	TO-15	2.6	2.6	2.6	2.7
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
TRICHLOROETHENE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.7	1.3	1.4	1.6
VINYL ACETATE	ug/m3	TO-15	9.6 U	9.5 U	7.9 U	9.6 U
VINYL CHLORIDE	ug/m3	TO-15	0.96 U	0.95 U	0.79 U	0.96 U
XYLENES, M & P	ug/m3	TO-15	2.5	1.3 J	1.6	2.3

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

ATTACHMENT C-3
Subslab Sampling Result - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

		AREA	Storage Room	Kitchen - North Side
		LOCATION DESCRIPTION	Next to Stairs	Next to water service closet
		LOCATION ID	Q2-VI-01	Q2-VI-02
		FIELD SAMPLE ID	Q2-VI-01-032408	Q2-VI-02-032508
		SAMPLE DATE	3/24/2008	3/25/2008
		SAMPLE PURPOSE	Normal	Normal
Parameter Name	Units	Analytical Method		
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.64 J	5.9 U
1,1-DICHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,1-DICHLOROETHENE	ug/m3	TO-15	1.9 U	5.9 U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	1.9 U	5.9 U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	25	2100
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	1.9 U	5.9 U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	1.9 U	5.9 U
1,2-DICHLOROBENZENE	ug/m3	TO-15	1.9 U	5.9 U
1,2-DICHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,2-DICHLOROPROPANE	ug/m3	TO-15	1.9 U	5.9 U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	9	690
1,3-BUTADIENE	ug/m3	TO-15	1.9 U	5.9 U
1,3-DICHLOROBENZENE	ug/m3	TO-15	1.9 U	5.9 U
1,4-DICHLOROBENZENE	ug/m3	TO-15	1.9 U	5.9 U
1,4-DIOXANE	ug/m3	TO-15	1.9 U	5.9 U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	8.1	610
2-BUTANONE (MEK)	ug/m3	TO-15	5.3	16
2-HEXANONE	ug/m3	TO-15	1.2 J	5.9 U
2-PROPANOL	ug/m3	TO-15	4.4	9.6 J
4-METHYL-2-PENTANONE	ug/m3	TO-15	190	140
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	3.3	4.1 J
ACETONE	ug/m3	TO-15	41 U	68 U
ACETONITRILE	ug/m3	TO-15	0.87 J	5.9 U
ACROLEIN	ug/m3	TO-15	2.3	1.8 U
ACRYLONITRILE	ug/m3	TO-15	1.9 U	5.9 U
ALLYL CHLORIDE	ug/m3	TO-15	1.9 U	5.9 U
ALPHA-PINENE	ug/m3	TO-15	1.9 U	7.7
BENZENE	ug/m3	TO-15	1.9 U	5.9 U
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	1.9 U	5.9 U
BROMODICHLOROMETHANE	ug/m3	TO-15	1.9 U	5.9 U
BROMOFORM	ug/m3	TO-15	1.9 U	5.9 U
BROMOMETHANE	ug/m3	TO-15	1.9 U	5.9 U
CARBON DISULFIDE	ug/m3	TO-15	1.7 J	5.9 U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.42 J	5.9 U
CHLOROBENZENE	ug/m3	TO-15	1.9 U	5.9 U
CHLORODIBROMOMETHANE	ug/m3	TO-15	1.9 U	5.9 U
CHLOROETHANE	ug/m3	TO-15	1.9 U	5.9 U
CHLOROFORM	ug/m3	TO-15	8.7	1.4 J
CHLOROMETHANE	ug/m3	TO-15	0.5 J	5.9 U
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	1.9 U	5.9 U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	1.9 U	5.9 U
CYCLOHEXANE	ug/m3	TO-15	1.9 U	5.9 U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.7	2.5 J
D-LIMONENE	ug/m3	TO-15	2.1	12
ETHANOL	ug/m3	TO-15	30 J	56 J
ETHYLBENZENE	ug/m3	TO-15	50	1500
HEXACHLOROBUTADIENE	ug/m3	TO-15	1.9 U	5.9 U
ISOPROPYLBENZENE	ug/m3	TO-15	1.8 J	130
METHYL METHACRYLATE	ug/m3	TO-15	1.9 U	5.9 U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	1.9 U	5.9 U
METHYLENE CHLORIDE	ug/m3	TO-15	1.9 U	5.9 U
NAPHTHALENE	ug/m3	TO-15	0.46 J	3.2 J
N-BUTYL ACETATE	ug/m3	TO-15	1.9 U	5.9 U
N-HEPTANE	ug/m3	TO-15	3.2	4.4 J
N-HEXANE	ug/m3	TO-15	1.9 U	5.9 U
N-NONANE	ug/m3	TO-15	5	15
N-OCTANE	ug/m3	TO-15	1.5 J	1.6 J
N-PROPYLBENZENE	ug/m3	TO-15	4.6	330
O-XYLENE	ug/m3	TO-15	66	3500
PROPYLENE	ug/m3	TO-15	2.5 J	5.9 U
STYRENE	ug/m3	TO-15	1.9 U	5.9 U
TETRACHLOROETHENE	ug/m3	TO-15	2.1	4.2 J
TETRAHYDROFURAN	ug/m3	TO-15	1.9 U	7.9
TOLUENE	ug/m3	TO-15	2	9.4
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	1.9 U	5.9 U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	1.9 U	5.9 U
TRICHLOROETHENE	ug/m3	TO-15	1.9 U	5.9 U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.5 J	1.2 J
VINYL ACETATE	ug/m3	TO-15	9.8 J	59 U
VINYL CHLORIDE	ug/m3	TO-15	1.9 U	5.9 U
XYLENES, M & P	ug/m3	TO-15	190	8100

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

ATTACHMENT C-4
Outdoor Air Sampling Results - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

		AREA	South Side of Building
		LOCATION DESCRIPTION	Chained to Fence
		LOCATION ID	Q2-OA-01
		FIELD SAMPLE ID	Q2-OA-01-032508
		SAMPLE DATE	3/25/2008
		SAMPLE PURPOSE	Normal
Parameter Name	**Units**	**Analytical Method**	
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.61 U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.61 U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.61 U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.66
1,1-DICHLOROETHANE	ug/m3	TO-15	0.61 U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.61 U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.61 U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	0.37 J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.61 U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.61 U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.61 U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.61 U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.61 U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.61 U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	0.61 U
1,3-BUTADIENE	ug/m3	TO-15	0.61 U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.61 U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.16 J
1,4-DIOXANE	ug/m3	TO-15	0.61 U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	0.13 J
2-BUTANONE (MEK)	ug/m3	TO-15	1.2 U
2-HEXANONE	ug/m3	TO-15	0.23 J
2-PROPANOL	ug/m3	TO-15	1.1 J
4-METHYL-2-PENTANONE	ug/m3	TO-15	0.61 U
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	1.7
ACETONE	ug/m3	TO-15	7.7 U
ACETONITRILE	ug/m3	TO-15	0.24 J
ACROLEIN	ug/m3	TO-15	0.66 U
ACRYLONITRILE	ug/m3	TO-15	0.61 U
ALLYL CHLORIDE	ug/m3	TO-15	0.61 U
ALPHA-PINENE	ug/m3	TO-15	0.61 U
BENZENE	ug/m3	TO-15	0.81
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.61 U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.61 U
BROMOFORM	ug/m3	TO-15	0.61 U
BROMOMETHANE	ug/m3	TO-15	0.61 U
CARBON DISULFIDE	ug/m3	TO-15	0.61 U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.47 J
CHLOROBENZENE	ug/m3	TO-15	0.61 U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.61 U
CHLOROETHANE	ug/m3	TO-15	0.61 U
CHLOROFORM	ug/m3	TO-15	0.61 U
CHLOROMETHANE	ug/m3	TO-15	1.1
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.61 U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.61 U
CYCLOHEXANE	ug/m3	TO-15	0.61 U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.7
D-LIMONENE	ug/m3	TO-15	0.61 U
ETHANOL	ug/m3	TO-15	12 J
ETHYLBENZENE	ug/m3	TO-15	0.36 J
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.61 U
ISOPROPYLBENZENE	ug/m3	TO-15	0.61 U
METHYL METHACRYLATE	ug/m3	TO-15	0.61 U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.61 U
METHYLENE CHLORIDE	ug/m3	TO-15	0.35 J
NAPHTHALENE	ug/m3	TO-15	0.14
N-BUTYL ACETATE	ug/m3	TO-15	0.14 J
N-HEPTANE	ug/m3	TO-15	0.36 J
N-HEXANE	ug/m3	TO-15	0.74
N-NONANE	ug/m3	TO-15	0.48 J
N-OCTANE	ug/m3	TO-15	0.26 J
N-PROPYLBENZENE	ug/m3	TO-15	0.61 U
O-XYLENE	ug/m3	TO-15	0.41 J
PROPYLENE	ug/m3	TO-15	1.1 J
STYRENE	ug/m3	TO-15	0.61 U
TETRACHLOROETHENE	ug/m3	TO-15	0.28 J
TETRAHYDROFURAN	ug/m3	TO-15	0.61 U
TOLUENE	ug/m3	TO-15	2.4
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.61 U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.61 U
TRICHLOROETHENE	ug/m3	TO-15	0.55 J
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.4
VINYL ACETATE	ug/m3	TO-15	6.1 U
VINYL CHLORIDE	ug/m3	TO-15	0.61 U
XYLENES, M & P	ug/m3	TO-15	1.2

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

Attachment D
Data Quality Evaluation Report

Honeywell Quanta
163 Old River Road Air Sampling
Data Quality Evaluation Report

Introduction

The objective of this Data Quality Evaluation (DQE) report is to assess the data quality of analytical results for the air samples collected at the Honeywell Quanta site in March 2008. Individual method requirements and guidelines from the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review, October 1999 were used in this assessment.

This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers 6 normal environmental samples and 1 field duplicate sample. These sample results were reported as one sample delivery group, P0800817. Samples were analyzed for one or more of the methods listed in **Table 1** below. The analyses were performed by Columbia Analytical Services, (CAS) located in Simi Valley, California.

TABLE 1
Analytical Parameter, Method and Laboratory

Parameter	Method	Laboratory
Volatile Organic Compounds	TO-15	CAS
Fixed Gases	EPA 3C	CAS

The assessment of data includes a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required quality control (QC) samples at the specified frequencies; (4) flagging for method blanks; (5) laboratory control spiking samples; (6) surrogate spike recoveries for organic analyses; (7) analytical spike data; (8) calibration data, and other method-specific criteria.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of field duplicate samples.

The data flags used in this assessment are defined below:

- J = Analyte is present but the reported value may not be accurate or precise (estimated).

- R = The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
- U = Analyte was not detected at the specified detection limit.
- UJ = Analyte was not detected and the specified detection limit may not be accurate or precise (estimated).
- X = Result was excluded. The data are associated with re-runs and dilutions and are excluded because another useable result exists. (There can only be a single valid result per parameter per sample.)

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Table 2.

The laboratory noted that sample detects for propylene may be biased high due to coelution with a non-target compound. All associated results were qualified as estimated, "J", due to this possible high bias.

Holding Times

All holding-time criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were generally free of contamination. Acetone, acrolein, and methylene chloride were detected in a laboratory method blank and the associated sample data were qualified as not detected, "U", when the samples results were within 10X (acetone or methylene chloride) or 5X (acrolein) of the amount detected in the laboratory method blank. Other analytes were detected at low levels in the method blanks but caused no data qualification.

Field Duplicates

One field duplicate was collected and analyzed as required for this event. This field duplicate set had three compounds out of RPD criteria. Both native and field dulicate results were qualified as estimated, "J".

Surrogates

All surrogates were recovered within laboratory established QC limits.

Laboratory Control Samples

Laboratory control samples were analyzed as required and were recovered within laboratory established QC limits.

Calibration

Initial and continuing calibrations were analyzed as required and were generally within laboratory established QC limits. Ethanol had a percent deviation above acceptance criteria in the initial calibration verification standard. All associated sample detects for this compound were qualified as estimated, "J". Non-detects were not qualified.

Chain of Custody

Each sample was documented in a completed CoC. All sample container criteria were met.

Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The procedures for assessing the precision, accuracy, representativeness, completeness, and comparability parameters (PARCC) were based on the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review, October 1999. The following summary highlights the PARCC findings for the above-defined events:

1. The completeness objectives were met for all method/analyte combinations.
2. Some data are qualified because of low-level blank contamination.
3. A few results were qualified as estimated concentrations.
4. The precision and accuracy of the data, as measured by field and laboratory QC indicators, suggest that the project goals have been met.

TABLE 2
Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q2-DUP1-032508	2-Propanol	2.5	ug/m3	J	FD
TO-15	Q2-DUP1-032508	Acetic Acid, Ethyl Ester	10	ug/m3	J	FD
TO-15	Q2-DUP1-032508	Acetone	12	ug/m3	U	LBL
TO-15	Q2-DUP1-032508	Acrolein	1.1	ug/m3	U	LBL
TO-15	Q2-DUP1-032508	D-LIMONENE	0.53	ug/m3	J	FD
TO-15	Q2-DUP1-032508	MEK (2-Butanone)	2.1	ug/m3	U	LBL
TO-15	Q2-DUP1-032508	PROPYLENE	3.9	ug/m3	J	COELUT
TO-15	Q2-IA-01-032508	2-Propanol	8.6	ug/m3	J	FD
TO-15	Q2-IA-01-032508	Acetic Acid, Ethyl Ester	3.2	ug/m3	J	FD
TO-15	Q2-IA-01-032508	Acetone	9.2	ug/m3	U	LBL
TO-15	Q2-IA-01-032508	Acrolein	0.6	ug/m3	U	LBL
TO-15	Q2-IA-01-032508	D-LIMONENE	5.6	ug/m3	J	FD

TABLE 2
Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q2-IA-01-032508	MEK (2-Butanone)	1.3	ug/m3	U	LBL
TO-15	Q2-IA-01-032508	PROPYLENE	3.5	ug/m3	J	COELUT
TO-15	Q2-IA-02-032508	Acetone	12	ug/m3	U	LBL
TO-15	Q2-IA-02-032508	Acrolein	1	ug/m3	U	LBL
TO-15	Q2-IA-02-032508	Ethanol	26	ug/m3	J	ICVSH
TO-15	Q2-IA-02-032508	MEK (2-Butanone)	1.9	ug/m3	U	LBL
TO-15	Q2-IA-02-032508	PROPYLENE	1.3	ug/m3	J	COELUT
TO-15	Q2-IA-03-032508	Acetone	13	ug/m3	U	LBL
TO-15	Q2-IA-03-032508	MEK (2-Butanone)	1.6	ug/m3	U	LBL
TO-15	Q2-IA-03-032508	PROPYLENE	2.5	ug/m3	J	COELUT
TO-15	Q2-OA-01-032508	Acetone	7.7	ug/m3	U	LBL
TO-15	Q2-OA-01-032508	Acrolein	0.66	ug/m3	U	LBL
TO-15	Q2-OA-01-032508	Ethanol	12	ug/m3	J	ICVSH
TO-15	Q2-OA-01-032508	MEK (2-Butanone)	1.2	ug/m3	U	LBL
TO-15	Q2-OA-01-032508	PROPYLENE	1.1	ug/m3	J	COELUT
TO-15	Q2-VI-01-032408	Acetone	41	ug/m3	U	LBL
TO-15	Q2-VI-01-032408	Ethanol	30	ug/m3	J	ICVSH
TO-15	Q2-VI-01-032408	PROPYLENE	2.5	ug/m3	J	COELUT
TO-15	Q2-VI-02-032508	Acetone	68	ug/m3	U	LBL
TO-15	Q2-VI-02-032508	Acrolein	1.8	ug/m3	U	LBL
TO-15	Q2-VI-02-032508	Ethanol	56	ug/m3	J	ICVSH

LBL - Analyte detected in the associated laboratory method blank less than the reporting limit.
FD – Field duplicate precision exceeded.
ICVSH – Initial calibration verification standard exceeded acceptance criteria.
COELUT – Sample result may have a high bias due to coelution with non-target compound.

Attachment E
Analytical Data Comparison to Screening Levels

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.96		ND	2000	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.96		ND	3	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.96	0.72	J	62000	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.96		ND	1020	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.96		ND	440	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.96		ND	72	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.96	1		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.96		ND	0.3	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.96		ND	300	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.96		ND	7	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.96		ND	9	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.96	0.38	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.96		ND	6	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.96		ND	22	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.96	0.23	J	30	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.96	0.37	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.3		ND	10200	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.96	0.22	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	8.6	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.96		ND	6200	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.96	3.2	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	9.2		ND	6600	No	31000	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.96	0.57	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.96		ND	30	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.96	0.98		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.19	1		14	No	14	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.96		ND	200	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.96		ND	1460	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.96	0.31	J	10	No	100	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.96		ND	102	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.96		ND	7	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.96		ND	200	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.96	0.23	J	8	No	80	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.96	1.1		190	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	72	No	400	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.96		ND	12400	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.96	2.8		360	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.96	5.6	J	NA	NA	NA	NA

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	9.6	150		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.96	0.65	J	2200	No	4300	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.96		ND	8	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.96		ND	200	No	2000	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.96	0.46	J	400	No	1000	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.62		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.96	0.56	J	1460	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.96	1.3		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.96	0.26	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.96	0.97		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.96	3.5	J	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.96	0.24	J	2000	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.96	0.31	J	30	No	300	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.96	2.6		10000	No	5100	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	146	No	400	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.96		ND	20	No	20	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.96	1.7		1460	No	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.6		ND	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.96		ND	7	No	70	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	2.5		NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	3.47		220	No	4300	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.96		ND	2000	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.96		ND	3	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.96	0.61	J	62000	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.96		ND	1020	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.96		ND	440	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.96		ND	72	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.96	0.91	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.96		ND	0.3	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.96		ND	300	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.96		ND	7	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.96		ND	9	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.96	0.3	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.96		ND	6	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.96		ND	22	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.96		ND	30	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.96	0.31	J	NA	NA	NA	NA

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.1		ND	10200	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.96	0.5	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	2.5	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.96	0.22	J	6200	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.96	10	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-64-1	ACETONE	ug/m3	12		ND	6600	No	31000	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.96	0.41	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-02-8	ACROLEIN	ug/m3	1.1		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.96		ND	30	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.96	0.59	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	71-43-2	BENZENE	ug/m3	0.19	0.85		14	No	14	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.96		ND	200	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.96		ND	10	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.96		ND	1460	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.96	0.44	J	10	No	100	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.96		ND	102	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.96		ND	7	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.96		ND	200	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.96		ND	8	No	80	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.96	1.1		190	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	72	No	400	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.96		ND	12400	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.96	2.7		360	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.96	0.53	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	64-17-5	ETHANOL	ug/m3	9.6	170		NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.96	0.57	J	2200	No	4300	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.96		ND	8	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.96		ND	200	No	2000	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.96	0.37	J	400	No	1000	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.38		NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.96	0.25	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.96	0.31	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.96	0.54	J	1460	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.96	1.2		NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.96	0.36	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.96	0.86	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.96	3.9	J	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-42-5	STYRENE	ug/m3	0.96		ND	2000	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.96	0.27	J	30	No	300	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.96	2.7		10000	No	5100	No

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	146	No	400	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.96		ND	20	No	20	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.96	1.6		1460	No	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.6		ND	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.96		ND	7	No	70	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	2.3		NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	3.16	J	220	No	4300	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.95		ND	2000	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.95		ND	3	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.95		ND	10	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.95	0.69	J	62000	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.95		ND	1020	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.95		ND	440	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.95		ND	72	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.95	0.41	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.95		ND	0.3	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.95		ND	300	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.95		ND	7	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.95		ND	9	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.95		ND	6	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.95		ND	22	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.95	0.21	J	30	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.9		ND	10200	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.95	0.6	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	1.7	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.95		ND	6200	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.95	6.1		NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	6600	No	31000	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.95	0.47	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.95		ND	30	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.19	0.76		14	No	14	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.95		ND	10	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.95		ND	200	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.95		ND	10	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.95		ND	1460	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.95	0.39	J	10	No	100	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.95		ND	102	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.95		ND	7	No	NA	NA

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.95		ND	200	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.95		ND	8	No	80	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.95	0.99		190	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.95		ND	72	No	400	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.95		ND	12400	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.95	2.6		360	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.95	0.19	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	9.5	26	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.95	0.35	J	2200	No	4300	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.95		ND	8	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.95		ND	200	No	2000	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.95	0.41	J	400	No	1000	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.32		NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.95	0.25	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.95	0.25	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.95	0.47	J	1460	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.95	0.37	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.95	0.3	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.95	0.45	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.95	1.3	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.95		ND	2000	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.95	0.3	J	30	No	300	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.95	2.6		10000	No	5100	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.95		ND	146	No	400	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.95		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.95		ND	20	No	20	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.95	1.3		1460	No	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.5		ND	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.95		ND	7	No	70	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	1.3	J	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	1.75	J	220	No	4300	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.79		ND	2000	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.79		ND	3	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.79		ND	10	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.79	0.59	J	62000	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.79		ND	1020	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.79		ND	440	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.79		ND	72	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.79	1.1		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.79		ND	0.3	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.79		ND	300	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.79		ND	7	No	NA	NA

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163 Old River Road Building
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Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.79		ND	9	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.79	0.38	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.79		ND	6	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.79		ND	22	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.79	0.16	J	30	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.79	0.35	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.6		ND	10200	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.79	0.33	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.6	35		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.79	0.25	J	6200	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.79	13		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	13		ND	6600	No	31000	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.79	0.31	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.79	0.95		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.79		ND	30	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.79	0.28	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.16	0.81		14	No	14	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.79		ND	10	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.79		ND	200	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.79		ND	10	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.79		ND	1460	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.79	0.47	J	10	No	100	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.79		ND	102	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.79		ND	7	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.79		ND	200	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.79		ND	8	No	80	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.79	1.1		190	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.79		ND	72	No	400	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.79		ND	12400	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.79	2.6		360	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.79	0.19	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.9	130		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.79	0.43	J	2200	No	4300	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.79		ND	8	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.79		ND	200	No	2000	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.79	0.36	J	400	No	1000	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.16	0.42		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.79	0.24	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.79	0.29	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.79	0.44	J	1460	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.79	2.4		NA	NA	NA	NA

Attachment E-1
Indoor Air Sampling Results Compared to NJDEP RALS and HDNLs - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNLs ug/m3	NJDEP HDNL Exceed?
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.79	0.41	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.79	0.22	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.79	0.61	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.79	2.5	J	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.79		ND	2000	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.79	0.28	J	30	No	300	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.79	2.6		10000	No	5100	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.79		ND	146	No	400	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.79		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.79		ND	20	No	20	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.79	1.4		1460	No	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.9		ND	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.79		ND	7	No	70	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	1.6		NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.6	2.21	J	220	No	4300	No

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

Attachment E-2
Indoor Air Sampling Results Compared to Response Levels - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	Indoor Air Response Levels 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ = 1	IA HQ = 1 Exceed?
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.96		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.96		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.96	0.72	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.96	1		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.96		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.96		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.96		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.96	0.38	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.96		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.96	0.23	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.96	0.37	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.3		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.96	0.22	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	8.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.96	3.2	J	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	9.2		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.96	0.57	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.96		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.96	0.98		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.19	1		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.96		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.96		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.96	0.31	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.96		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.96		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.96	0.23	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.96	1.1		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.96	2.8		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.96	5.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	9.6	150		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.96	0.65	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.96		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.96		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.96	0.46	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.62		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.96	0.56	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.96	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.96	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.96	0.26	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.96	0.97		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.96	3.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.96	0.24	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.96	0.31	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.96	2.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.96		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.96	1.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.96		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	2.5		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-01	Q2-IA-01-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	3.47		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.96		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.96		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.96	0.61	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.96	0.91	J	NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.96		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.96		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.96		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.96	0.3	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.96		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.96		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.96	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.1		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.96	0.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	2.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.96	0.22	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.96	10	J	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-64-1	ACETONE	ug/m3	12		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.96	0.41	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-02-8	ACROLEIN	ug/m3	1.1		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.96		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.96	0.59	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	71-43-2	BENZENE	ug/m3	0.19	0.85		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.96		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.96		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.96	0.44	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.96		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.96		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.96		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.96	1.1		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.96	2.7		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.96	0.53	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	64-17-5	ETHANOL	ug/m3	9.6	170		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.96	0.57	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.96		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.96		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.96	0.37	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.38		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.96	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.96	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.96	0.54	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.96	1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.96	0.36	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.96	0.86	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.96	3.9	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	100-42-5	STYRENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.96	0.27	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.96	2.7		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.96		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.96		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.96	1.6		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.96		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	2.3		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-01	Q2-DUP1-032508	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	3.16	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.95		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.95		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.95	0.69	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.95	0.41	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.95		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.95		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.95		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.95		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.95	0.21	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.95	0.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.9	1.7	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.95	6.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.95	0.47	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.95		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.19	0.76		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.95		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.95		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.95	0.39	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.95		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.95		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.95		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA

Attachment E-2
Indoor Air Sampling Results Compared to Response Levels - March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	Indoor Air Response Levels 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ = 1	IA HQ = 1 Exceed?
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.95	0.99		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.95	2.9		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.95	0.19	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	9.5	26	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.95	0.35	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.95		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.95		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.95	0.41	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.19	0.32		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.95	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.95	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.95	0.47	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.95	0.37	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.95	0.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.95	0.45	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.95	1.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.95	0.3	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.95	2.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.95		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.95		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.95	1.3		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	9.5		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.95		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.9	1.3	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-02	Q2-IA-02-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.9	1.75	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.79		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.79		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.79	0.59	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.79	1.1		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.79		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.79		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.79		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.79	0.38	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.79		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.79	0.16	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.79	0.35	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.6		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.79	0.33	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.6	35		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.79	0.25	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.79	13		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	13		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.79	0.31	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.79	0.65		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.79		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.79	0.28	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	0.18	0.81		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.79		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.79		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.79	0.47	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.79		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.79		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.79		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.79	1.1		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.79	2.8		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.79	0.19	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.9	130		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.79	0.43	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.79		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.79		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.79	0.35	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.42		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.79	0.24	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.79	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.79	0.44	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.79	2.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.79	0.41	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.79	0.22	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.79	0.61	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.79	2.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.79	0.28	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.79	2.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.79		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.79		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.79	1.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.9		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.79		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	1.6		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-IA-03	Q2-IA-03-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1.6	2.21	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

Attachment E-3
Sub Slab Sampling Results Compared to Response Levels, March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ = 1	SS HQ = 1 Exceed?
Q2-VI-01	Q2-VI-01-032408	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.31		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.31	21.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1.9		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1.9		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1.9	0.64	J	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1.9	25		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1.9		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1.9		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1.9		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1.9	9		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1.9		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1.9		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1.9	8.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	3.8	5.3		NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	1.9	1.2	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	3.8	4.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1.9	190		NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1.9	3.3		NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	67-64-1	ACETONE	ug/m3	41		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	1.9	0.87	J	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1.9	2.3		NA	NA	NA	NA	NA	NA	2.10E-02	EXCEED	2.10E-01	EXCEED
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1.9		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	71-43-2	BENZENE	ug/m3	1.9		ND	2.50E+00	No	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-25-2	BROMOFORM	ug/m3	1.9		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1.9	1.7	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1.9	0.42	J	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1.9		ND	8.00E-01	No	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	1.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	1.9	8.7		8.30E-01	EXCEED	8.30E+00	EXCEED	8.30E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1.9	0.5	J	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1.9	2.7		NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	1.9	2.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	64-17-5	ETHANOL	ug/m3	19	30	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1.9	50		NA	NA	NA	NA	NA	NA	1.10E+03	No	1.10E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1.9		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1.9	1.8	J	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1.9		ND	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	1.9	0.46	J	NA	NA	NA	NA	NA	NA	3.10E+00	No	3.10E+01	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	1.9	3.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	110-54-3	N-HEXANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	111-84-2	N-NONANE	ug/m3	1.9	5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	111-65-9	N-OCTANE	ug/m3	1.9	1.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1.9	4.6		NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	95-47-6	O-XYLENE	ug/m3	1.9	66		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	115-07-1	PROPYLENE	ug/m3	1.9	2.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	100-42-5	STYRENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1.9	2.1		3.20E+00	No	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	9.90E-01	No	9.90E+00	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	108-88-3	TOLUENE	ug/m3	1.9	2		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1.9		ND	5.00E-01	No	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1.9	1.5	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	1.9	9.8	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	3.8	190		NA	NA	NA	NA	NA	NA	1.10E+02	EXCEED	1.10E+03	No
Q2-VI-01	Q2-VI-01-032408	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	3.8	256		NA	NA	NA	NA	NA	NA	1.10E+02	EXCEED	1.10E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.17		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.17	21.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	5.9		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	5.9		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No

Attachment E-3
Sub Slab Sampling Results Compared to Response Levels, March 2008
163 Old River Road Building
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ = 1	SS HQ = 1 Exceed?
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	5.9	2100		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	EXCEED
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	5.9		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	5.9		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	5.9		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	5.9	690		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	EXCEED
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	5.9		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	5.9		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	5.9	610		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	12	16		NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	12	9.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	5.9	140		NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	5.9	4.1	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	68		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.10E-02	No	2.10E-01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	5.9		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	5.9	7.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	5.9		ND	2.50E+00	No	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	5.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	5.9		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	5.9		ND	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	5.9		ND	8.00E-01	No	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	5.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	5.9	1.4	J	8.30E-01	EXCEED	8.30E+00	No	8.30E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	5.9	2.5	J	NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	5.9	12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	59	56	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	5.9	1500		NA	NA	NA	NA	NA	NA	1.10E+03	EXCEED	1.10E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	5.9		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	5.9	130		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	5.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	5.9		ND	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	5.9	3.2	J	NA	NA	NA	NA	NA	NA	3.10E+00	EXCEED	3.10E+01	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	5.9	4.4	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	5.9	15		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	5.9	1.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	5.9	330		NA	NA	NA	NA	NA	NA	1.50E+02	EXCEED	1.50E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	5.9	3500		NA	NA	NA	NA	NA	NA	1.10E+02	EXCEED	1.10E+03	EXCEED
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	5.9	4.2	J	3.20E+00	EXCEED	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	5.9	7.9		NA	NA	NA	NA	NA	NA	9.90E-01	EXCEED	9.90E+00	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	5.9	9.4		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	5.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	5.9		ND	5.00E-01	No	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	5.9	1.2	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	59		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	5.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	12	8100		NA	NA	NA	NA	NA	NA	1.10E+02	EXCEED	1.10E+03	EXCEED
Q2-VI-02	Q2-VI-02-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	12	11600		NA	NA	NA	NA	NA	NA	1.10E+02	EXCEED	1.10E+03	EXCEED

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

Attachment F
Revised Screening Levels

ATTACHMENT F-1
Indoor Air Screening Levels
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Screening Criteria Source	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
1,1,1-Trichloroethane (TCA)	71-55-6	NC	NJDEP	NA		NA		NA		1.00E+03	2.30E+03	1.00E+02	2.30E+02
1,1,2,2-Tetrachloroethane	79-34-5	C	EPAR2 PRG	3.30E-02		3.30E-01		3.30E+00		NA	2.20E+02	NA	2.20E+01
1,1,2,2-Tetrachloroethane	79-34-5	C	EPAR2 PRG	3.30E-02		3.30E-01		3.30E+00		NA	2.20E+02	NA	2.20E+01
1,1,2-Trichloroethane	79-00-5	C	EPAR2 PRG	1.20E-01		1.20E+00		1.20E+01		NA	1.50E+01	NA	1.50E+00
1,1,2-Trichloroethane	79-00-5	C	EPAR2 PRG	1.20E-01		1.20E+00		1.20E+01		NA	1.50E+01	NA	1.50E+00
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NJDEP	NA		NA		NA		3.10E+04		3.10E+03	
1,1-Dichloroethane (1,1-DCA)	75-34-3	NC	NJDEP	NA		NA		NA		5.10E+02	5.20E+02	5.10E+01	5.20E+01
1,1-Dichloroethene (1,1-DCE)	75-35-4	NC	EPAR2 PRG	NA		NA		NA		2.10E+02		2.10E+01	
1,2,4-Trichlorobenzene	120-82-1	NC	EPAR2 PRG	NA		NA		NA		3.70E+00		3.70E-01	
1,2,4-Trimethylbenzene	95-63-6	NC	EPAR2 PRG	NA		NA		NA		6.20E+00	6.00E+00	6.20E-01	6.00E-01
1,2-Dibromo-3-Chloropropane	96-12-8	NC	EPAR2 PRG	NA		NA		NA		2.80E+00	NA	2.80E-01	NA
1,2-Dibromoethane	106-93-4	C	EPAR2 PRG	3.40E-03		3.40E-02		3.40E-01		NA	9.50E+00	NA	9.50E-01
1,2-Dibromoethane	106-93-4	C	EPAR2 PRG	3.40E-03		3.40E-02		3.40E-01		NA	9.50E+00	NA	9.50E-01
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	76-14-2	NC		NA		NA		NA		NA		NA	
1,2-Dichlorobenzene	95-50-1	NC	NJDEP	NA		NA		NA		1.50E+02		1.50E+01	
1,2-Dichloroethane	107-06-2	C	EPAR2 PRG	7.40E-02		7.40E-01		7.40E+00		NA	5.10E+00	NA	5.10E-01
1,2-Dichloroethane	107-06-2	C	EPAR2 PRG	7.40E-02		7.40E-01		7.40E+00		NA	5.10E+00	NA	5.10E-01
1,2-Dichloroethane-d4	17060-07-0	NC		NA		NA		NA		NA	NA	NA	NA
1,2-Dichloroethane-d4	17060-07-0	NC		NA		NA		NA		NA	NA	NA	NA
1,2-Dichloropropane	78-87-5	C	EPAR2 PRG	9.90E-02		9.90E-01		9.90E+00		NA	4.20E+00	NA	4.20E-01
1,2-Dichloropropane	78-87-5	C	EPAR2 PRG	9.90E-02		9.90E-01		9.90E+00		NA	4.20E+00	NA	4.20E-01
1,3,5-Trimethylbenzene	108-67-8	NC	EPAR2 PRG	NA		NA		NA		6.20E+00	6.00E+00	6.20E-01	6.00E-01
1,3-Butadiene	106-99-0	C	EPAR2 PRG	6.10E-02		6.10E-01		6.10E+00		NA	2.10E+00	NA	2.10E-01
1,3-Dichlorobenzene	541-73-1	NC	NJDEP	NA		NA		NA		1.10E+01	1.10E+02	1.10E+00	1.10E+01
1,4-Dichlorobenzene	106-46-7	C	EPAR2 PRG	3.10E-01		3.10E+00		3.10E+01		NA	8.40E+02	NA	8.40E+01
1,4-Dioxane	123-91-1	NC	EPAR2 PRG	NA		NA		NA		6.10E-01	NA	6.10E-02	NA
1-ethyl-4-methyl-Benzene	622-96-8	NC		NA		NA		NA		NA		NA	
2-Butanone (MEK)	78-93-3	NC	Same	NA		NA		NA		5.10E+03		5.10E+02	
2-Hexanone	591-78-6	NC		NA		NA		NA		NA		NA	
2-Propanol	67-63-0	NC		NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC		NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC		NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	108-10-1	NC	Same	NA		NA		NA		3.10E+03		3.10E+02	
Acetic Acid, Ethyl Ester	141-78-6	NC	EPAR2 PRG	NA		NA		NA		7.30E+02	NA	7.30E+01	NA
Acetone	67-64-1	NC	Same	NA		NA		NA		3.30E+03	NA	3.30E+02	NA
Acetonitrile	75-05-8	NC	EPAR2 PRG	NA		NA		NA		6.20E+01		6.20E+00	
Acrolein	107-02-8	NC	EPAR2 PRG	NA		NA		NA		2.10E-02	NA	2.10E-03	NA
Acrylonitrile	107-13-1	NC	EPAR2 PRG	NA	2.80E-02	NA	2.80E-01	NA	2.80E+00	2.80E-02	2.10E+00	2.80E-03	2.10E-01
Allyl chloride	107-05-1	C	EPAR2 PRG	1.00E+00	NA	1.00E+01	NA	1.00E+02	NA	NA		NA	
alpha-Pinene	80-56-8	NC		NA		NA		NA		NA		NA	
Benzene	71-43-2	C	EPAR2 PRG	2.50E-01		2.50E+00		2.50E+01		NA	3.10E+01	NA	3.10E+00

ATTACHMENT F-1
Indoor Air Screening Levels
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Screening Criteria Source	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
Benzyl Chloride	100-44-7	NC	EPAR2 PRG	NA	4.00E-02	NA	4.00E-01	NA	4.00E+00	4.00E-02	1.10E+01	4.00E-03	1.10E+00
Bromodichloromethane	75-27-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	7.30E+01	NA	7.30E+00
Bromoform	75-25-2	C	EPAR2 PRG	1.70E+00	1.80E+00	1.70E+01	1.80E+01	1.70E+02		NA	7.30E+01	NA	7.30E+00
Bromomethane	74-83-9	NC	NJDEP	NA		NA		NA		5.00E+00		5.00E-01	
Carbon Disulfide	75-15-0	NC	Same	NA		NA		NA		7.30E+02	NA	7.30E+01	NA
Carbon Tetrachloride	56-23-5	C	EPAR2 PRG	1.30E-01		1.30E+00		1.30E+01		NA	2.60E+00	NA	2.60E-01
Chlorobenzene	108-90-7	NC	NJDEP	NA		NA		NA		5.10E+01	6.20E+01	5.10E+00	6.20E+00
Chloroethane	75-00-3	C	NJDEP	2.00E+00		2.00E+01		2.00E+02		NA	1.00E+04	NA	1.00E+03
Chloroform	67-66-3	C	EPAR2 PRG	8.30E-02		8.30E-01		8.30E+00		NA	5.10E+01	NA	5.10E+00
Chloromethane	74-87-3	NC	Same	NA		NA		NA		9.50E+01		9.50E+00	
cis-1,2-Dichloroethene	156-59-2	NC	NJDEP	NA		NA		NA		3.60E+01		3.60E+00	
cis-1,3-Dichloropropene	10061-01-5	NC	EPAR2 PRG	NA	4.80E-01	NA	4.80E+00	NA	4.80E+01	4.80E-01	2.10E+01	4.80E-02	2.10E+00
CYCLOHEXANE	110-82-7	NC	Same	NA		NA		NA		6.20E+03	NA	6.20E+02	NA
Dibromochloromethane	124-48-1	C	EPAR2 PRG	8.00E-02		8.00E-01		8.00E+00		NA	7.30E+01	NA	7.30E+00
Dichlorodifluoromethane (CFC 12)	75-71-8	NC	NJDEP	NA		NA		NA		1.80E+02		1.80E+01	
Dichloromethane (Methylene Chloride)	75-09-2	C	NJDEP	4.00E+00	4.10E+00	4.00E+01	4.10E+01	4.00E+02	4.10E+02	NA	3.10E+03	NA	3.10E+02
D-LIMONENE	5989-27-5	NC		NA		NA		NA		NA		NA	
Ethanol	64-17-5	NC		NA		NA		NA		NA		NA	
Ethyl tert-Butyl Ether	637-92-3	NC		NA		NA		NA		NA		NA	
Ethylbenzene	100-41-4	NC	Same	NA		NA		NA		1.10E+03		1.10E+02	
Hexachlorobutadiene	87-68-3	C	EPAR2 PRG	8.60E-02		8.60E-01		8.60E+00		NA	1.10E+00	NA	1.10E-01
Hexachlorobutadiene	87-68-3	C	EPAR2 PRG	8.60E-02		8.60E-01		8.60E+00		NA	1.10E+00	NA	1.10E-01
Isopropylbenzene	98-82-8	NC	EPAR2 PRG	NA		NA		NA		4.00E+02	NA	4.00E+01	NA
m,p-Xylenes	XYLENES 14	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	
Methyl Methacrylate	80-62-6	NC	EPAR2 PRG	NA		NA		NA		7.30E+02		7.30E+01	
Methyl tert-Butyl Ether	1634-04-4	C	NJDEP	2.00E+00		2.00E+01		2.00E+02		NA	3.10E+03	NA	3.10E+02
Naphthalene	91-20-3	NC	EPAR2 PRG	NA		NA		NA		3.10E+00		3.10E-01	
n-Butyl Acetate	123-86-4	NC		NA		NA		NA		NA		NA	
N-HEPTANE	142-82-5	NC		NA		NA		NA		NA		NA	
N-HEXANE	110-54-3	NC	EPAR2 PRG	NA		NA		NA		2.10E+02	NA	2.10E+01	NA
n-Nonane	111-84-2	NC		NA		NA		NA		NA		NA	
n-Octane	111-65-9	NC		NA		NA		NA		NA		NA	
n-propylbenzene	103-65-1	NC	EPAR2 PRG	NA		NA		NA		1.50E+02	NA	1.50E+01	NA
o-Xylene	95-47-6	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	
Propene	115-07-1	NC		NA		NA		NA		NA		NA	
Styrene	100-42-5	NC	NJDEP	NA		NA		NA		1.00E+03		1.00E+02	
tert-Amyl Methyl Ether	994-05-8	NC		NA		NA		NA		NA		NA	
Tetrachloroethene (PCE)	127-18-4	C	EPAR2 PRG	3.20E-01		3.20E+00		3.20E+01		NA	3.70E+01	NA	3.70E+00
Tetrahydrofuran	109-99-9	NC	EPAR2 PRG	NA		NA		NA		9.90E-01	NA	9.90E-02	NA
Toluene	108-88-3	NC	EPAR2 PRG	NA		NA		NA		4.00E+02	4.20E+02	4.00E+01	4.20E+01
trans-1,2-Dichloroethene	156-60-5	NC	Same	NA		NA		NA		7.30E+01	6.20E+01	7.30E+00	6.20E+00

ATTACHMENT F-1
Indoor Air Screening Levels
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	**Cas #**	**Cancer / Non-Cancer**	**Screening Criteria Source**	**Revised 10 -6 Target Risk Level**	**Previously Used 10-6 Target Risk**	**Revised 10 -5 Target Risk Level**	**Previously Used 10-5 Target Risk**	**Revised 10 -4 Target Risk Level**	**Previously Used 10-4 Target Risk**	**Revised SLs HQ = 1.0**	**Previously Used HQ = 1**	**Updated SLs HQ = 0.1**	**Previously Used HQ= 0_1**
trans-1,3-Dichloropropene	10061-02-6	NC	EPAR2 PRG	NA	4.80E-01	NA	4.80E+00	NA	4.80E+01	4.80E-01	2.10E+01	4.80E-02	2.10E+00
Trichloroethene (TCE)*	79-01-6	C	NYDOH	5.00E-02		5.00E-01		5.00E+00		NA	3.70E+01	NA	3.70E+00
Trichlorofluoromethane (CFC 11)	75-69-4	NC	Same	NA		NA		NA		7.30E+02		7.30E+01	
Vinyl acetate	108-05-4	NC	EPAR2 PRG	NA		NA		NA		2.10E+02	NA	2.10E+01	NA
Vinyl Chloride	75-01-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	1.00E+02	NA	1.00E+01
Vinyl Chloride	75-01-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	1.00E+02	NA	1.00E+01
Xylenes (total)	1330-20-7	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	

Screening levels that changed from the 2006 Vapor Intrusion Evaluation Work Plan are highlighted.
The previously used screening criteria are provided in the adjacent column

ATTACHMENT F-2
Subslab Soil Gas Screening Levels
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

			Subslab Soil Gas Screening Levels for Carcinogenic Constituents						Subslab Soil Gas Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
1,1,1-Trichloroethane (TCA)	71-55-6	NC	NA		NA		NA		1.00E+03	2.30E+03	1.00E+04	2.30E+04
1,1,2,2-Tetrachloroethane	79-34-5	C	3.30E-01		3.30E+00		3.30E+01		NA		NA	
1,1,2-Trichloroethane	79-00-5	C	1.20E+00		1.20E+01		1.20E+02		NA		NA	
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NA		NA		NA		3.10E+04		3.10E+05	
1,1-Dichloroethane (1,1-DCA)	75-34-3	NC	NA		NA		NA		5.10E+02	5.20E+02	5.10E+03	5.20E+03
1,1-Dichloroethene (1,1-DCE)	75-35-4	NC	NA		NA		NA		2.10E+02		2.10E+03	
1,2,4-Trichlorobenzene	120-82-1	NC	NA		NA		NA		3.70E+00		3.70E+01	
1,2,4-Trimethylbenzene	95-63-6	NC	NA		NA		NA		6.20E+00	6.00E+00	6.20E+01	6.00E+01
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NA		NA		NA		2.80E+00	NA	2.80E+01	NA
1,2-Dibromoethane	106-93-4	C	3.40E-02		3.40E-01		3.40E+00		NA		NA	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	76-14-2	NC	NA		NA		NA		NA		NA	
1,2-Dichlorobenzene	95-50-1	NC	NA		NA		NA		1.50E+02		1.50E+03	
1,2-Dichloroethane	107-06-2	C	7.40E-01		7.40E+00		7.40E+01		NA		NA	
1,2-Dichloropropane	78-87-5	C	9.90E-01		9.90E+00		9.90E+01		NA		NA	
1,3,5-Trimethylbenzene	108-67-8	NC	NA		NA		NA		6.20E+00	6.00E+00	6.20E+01	6.00E+01
1,3-Butadiene	106-99-0	C	6.10E-01		6.10E+00		6.10E+01		NA		NA	
1,3-Dichlorobenzene	541-73-1	NC	NA		NA		NA		1.10E+01	1.10E+02	1.10E+02	1.10E+03
1,4-Dichlorobenzene	106-46-7	C	3.10E+00		3.10E+01		3.10E+02		NA		NA	
1,4-Dioxane	123-91-1	NC	NA		NA		NA		6.10E-01	NA	6.10E+00	NA
1-ethyl-4-methyl-Benzene	622-96-8	NC	NA		NA		NA		NA		NA	
2-Butanone (MEK)	78-93-3	NC	NA		NA		NA		5.10E+03		5.10E+04	
2-Hexanone	591-78-6	NC	NA		NA		NA		NA		NA	
2-Propanol	67-63-0	NC	NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC	NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	108-10-1	NC	NA		NA		NA		3.10E+03		3.10E+04	
Acetic Acid, Ethyl Ester	141-78-6	NC	NA		NA		NA		7.30E+02	NA	7.30E+03	NA
Acetone	67-64-1	NC	NA		NA		NA		3.30E+03	NA	3.30E+04	NA
Acetonitrile	75-05-8	NC	NA		NA		NA		6.20E+01		6.20E+02	
Acrolein	107-02-8	NC	NA		NA		NA		2.10E-02	NA	2.10E-01	NA
Acrylonitrile	107-13-1	NC	NA		NA		NA		2.80E-02	2.10E+00	2.80E-01	2.10E+01
Allyl chloride	107-05-1	C	1.00E+01		1.00E+02		1.00E+03		NA		NA	
alpha-Pinene	80-56-8	NC	NA		NA		NA		NA		NA	
Benzene	71-43-2	C	2.50E+00		2.50E+01		2.50E+02		NA		NA	
Benzyl Chloride	100-44-7	NC	NA		NA		NA		4.00E-02	1.10E+01	4.00E-01	1.10E+02
Bromodichloromethane	75-27-4	C	1.10E+00	1.10E+00	1.10E+01		1.10E+02		NA		NA	
Bromoform	75-25-2	C	1.70E+01	1.80E+01	1.70E+02		1.70E+03		NA		NA	
Bromomethane	74-83-9	NC	NA		NA		NA		5.00E+00		5.00E+01	
Carbon Disulfide	75-15-0	NC	NA		NA		NA		7.30E+02	NA	7.30E+03	NA
Carbon Tetrachloride	56-23-5	C	1.30E+00		1.30E+01		1.30E+02		NA		NA	
Chlorobenzene	108-90-7	NC	NA		NA		NA		5.10E+01	6.20E+01	5.10E+02	6.20E+02
Chloroethane	75-00-3	C	2.00E+01		2.00E+02		2.00E+03		NA		NA	
Chloroform	67-66-3	C	8.30E-01		8.30E+00		8.30E+01		NA		NA	

ATTACHMENT F-2
Subslab Soil Gas Screening Levels
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

			Subslab Soil Gas Screening Levels for Carcinogenic Constituents						Subslab Soil Gas Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
Chloromethane	74-87-3	NC	NA		NA		NA		9.50E+01		9.50E+02	
cis-1,2-Dichloroethene	156-59-2	NC	NA		NA		NA		3.60E+01		3.60E+02	
cis-1,3-Dichloropropene	10061-01-5	NC	NA		NA		NA		4.80E-01	2.10E+01	4.80E+00	2.10E+02
Cyclohexane	110-82-7	NC	NA		NA		NA		6.20E+03	NA	6.20E+04	NA
Dibromochloromethane	124-48-1	C	8.00E-01		8.00E+00		8.00E+01		NA		NA	
Dichlorodifluoromethane (CFC 12)	75-71-8	NC	NA		NA		NA		1.80E+02		1.80E+03	
Dichloromethane (Methylene Chloride)	75-09-2	C	4.00E+01	4.10E+01	4.00E+02	4.10E+02	4.00E+03	4.10E+03	NA		NA	
D-LIMONENE	5989-27-5	NC	NA		NA		NA		NA		NA	
Ethanol	64-17-5	NC	NA		NA		NA		NA		NA	
Ethyl tert-Butyl Ether	637-92-3	NC	NA		NA		NA		NA		NA	
Ethylbenzene	100-41-4	NC	NA		NA		NA		1.10E+03		1.10E+04	
Hexachlorobutadiene	87-68-3	C	8.60E-01		8.60E+00		8.60E+01		NA		NA	
Isopropylbenzene	98-82-8	NC	NA		NA		NA		4.00E+02	NA	4.00E+03	NA
m,p-Xylenes	XYLENES1314	NC	NA		NA		NA		1.10E+02		1.10E+03	
Methane	74-82-8	NC	NA		NA		NA		NA		NA	
Methyl Methacrylate	80-62-6	NC	NA		NA		NA		7.30E+02		7.30E+03	
Methyl tert-Butyl Ether	1634-04-4	C	2.00E+01		2.00E+02		2.00E+03		NA		NA	
Naphthalene	91-20-3	NC	NA		NA		NA		3.10E+00		3.10E+01	
n-Butyl Acetate	123-86-4	NC	NA		NA		NA		NA		NA	
N-Heptane	142-82-5	NC	NA		NA		NA		NA		NA	
N-Hexane	110-54-3	NC	NA		NA		NA		2.10E+02	NA	2.10E+03	NA
Nitrogen	7727-37-9	NC	NA		NA		NA		NA		NA	
n-Nonane	111-84-2	NC	NA		NA		NA		NA		NA	
n-Octane	111-65-9	NC	NA		NA		NA		NA		NA	
n-propylbenzene	103-65-1	NC	NA		NA		NA		1.50E+02	NA	1.50E+03	NA
o-Xylene	95-47-6	NC	NA		NA		NA		1.10E+02		1.10E+03	
Propene	115-07-1	NC	NA		NA		NA		NA		NA	
Styrene	100-42-5	NC	NA		NA		NA		1.00E+03		1.00E+04	
tert-Amyl Methyl Ether	994-05-8	NC	NA		NA		NA		NA		NA	
Tetrachloroethene (PCE)	127-18-4	C	3.20E+00		3.20E+01		3.20E+02		NA		NA	
Tetrahydrofuran	109-99-9	NC	NA		NA		NA		9.90E-01	NA	9.90E+00	NA
Toluene	108-88-3	NC	NA		NA		NA		4.00E+02	4.20E+02	4.00E+03	4.20E+03
trans-1,2-Dichloroethene	156-60-5	NC	NA		NA		NA		7.30E+01	6.20E+01	7.30E+02	6.20E+02
trans-1,3-Dichloropropene	10061-02-6	NC	NA		NA		NA		4.80E-01	2.10E+01	4.80E+00	2.10E+02
Trichloroethene (TCE)	79-01-6	C	5.00E-01		5.00E+00		5.00E+01		NA		NA	
Trichlorofluoromethane (CFC 11)	75-69-4	NC	NA		NA		NA		7.30E+02		7.30E+03	
Vinyl acetate	108-05-4	NC	NA		NA		NA		2.10E+02	NA	2.10E+03	NA
Vinyl Chloride	75-01-4	C	1.10E+00		1.10E+01		1.10E+02		NA		NA	
Xylenes (total)	1330-20-7	NC	NA		NA		NA		1.10E+02		1.10E+03	

Screening levels that changed from the 2006 Vapor Intrusion Evaluation Work Plan are highlighted.
The previously used screening criteria are provided in the adjacent column.

Vapor Intrusion Evaluation March and April 2008 Sample Results, 115 River Road, Edgewater, N.J.

PREPARED FOR: Richard Ho/EPA Region 2

PREPARED BY: CH2M HILL

COPIES Bob Hayton/NJDEP
John Morris/Honeywell
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DATE: June 20, 2008

Executive Summary

This technical memorandum presents the results from the March and April 2008 sampling events conducted to evaluate vapor intrusion at the building at 115 River Road, Edgewater, New Jersey. Recommendations for further activities are also presented on the basis of the evaluation of these results. These sampling events were conducted as a follow-up to initial vapor intrusion sampling conducted in 2006.

Sampling was conducted under routine and nonroutine operating conditions. At the request of the agencies, sampling was conducted in March 2008, under nonroutine, extremely conservative conditions, with basement fans turned off and sealed. Follow-up sampling was conducted in April 2008 under routine operating conditions, with basement fans operating.

The results from these sampling events indicate that under routine operating conditions in the building, concentrations of most constituents detected in air in the occupied spaces were similar to outdoor ambient air concentrations. These results are consistent with the results from the vapor intrusion sampling events conducted in 2006.

Benzene and naphthalene were detected in air in the Building 7/8 basement in the April 2008 sampling events at concentrations higher than those detected in the 2006 indoor air sampling event, when sampling was conducted under routine operating conditions. When indoor air sampling was conducted in March 2008 under the extremely conservative conditions, with building fans turned off and sealed, concentrations of benzene and naphthalene were detected at concentrations higher than the previous 2006 indoor air sampling event both in the basement and in some of the overlying occupied spaces. When the building was returned to routine operating conditions and resampled in April 2008, constituents in indoor air in the occupied spaces decreased.

Key conclusions from the sampling event conducted in March and April 2008 are as follows:

- Under routine operating conditions in the building, no constituents were detected at concentrations above NJDEP Rapid Action Level (RAL) and Health Department

Notification Level (HDNL).[1] Based on these results, there is no need for prompt action to reduce potential exposures in the building. When sampling under nonroutine and extremely conservative conditions (basement ventilation fans turned off and sealed with plastic), concentrations of benzene in the unoccupied Building 7/8 basement were higher than the RAL and HDNL. When routine conditions were resumed in the basement, concentrations decreased below the RAL and HDNL. Concentrations in indoor air within occupied spaces did not exceed the RAL and HDNL at any time during the sampling events.

- Most of the constituents sampled in indoor air during both the March and April 2008 sampling events were either not detected or were detected at concentrations below the lowest screening levels (see Tables 1a and 1b).
- Constituents detected that are confirmed to be site related include benzene, chloroform, naphthalene, and total xylenes. Several of the remaining constituents detected in indoor air were considered to be not site related or considered to be unrelated to vapor intrusion. Those constituents are 1,4-dichlorobenzene, acrolein, carbon tetrachloride, tetrachloroethene, tetrahydrofuran, trichloroethene, and trimethylbenzenes.
- A few constituents were detected in some indoor air samples within the unoccupied Building 7/8 basement at concentrations above outdoor ambient air levels (benzene, naphthalene and xylenes). These constituents have been detected in groundwater samples from the site and on the 115 River Road property. They also have been detected in subslab samples. These results indicate that vapor intrusion conditions may be present within the basement. In addition, potential indoor sources of VOCs in the Building 7/8 basement may be contributing to concentrations in indoor air and acting as confounding factors to the vapor intrusion evaluation. Further investigation will be conducted to identify the potential migration pathways from the subsurface into the basement.
- Under routine building operating conditions, constituent concentrations in air in occupied spaces resembled outdoor ambient air concentrations, with the exception of naphthalene. This result is consistent with previous sampling events. Concentrations of naphthalene higher than outdoor ambient air levels also were detected in some indoor air samples from occupied spaces during the July 2006 sampling event.

Recommendations based on this vapor intrusion sampling event are as follows:

- Install passive engineering controls in Basement 7/8 by sealing up floor sumps and venting the sumps to the outdoors. The building owner sealed the open floor sumps in May 2008 which will be vented to the outside.
- Conduct an additional vapor intrusion sampling event for the 2008–2009 heating season to confirm that indoor concentrations, especially after passive vapor engineering controls have been installed in the basement, remain below the acceptable risk-based

[1] RALs "represent trigger levels for the initiation of prompt action at occupied buildings to further investigate the vapor intrusion pathway and/or minimize impacts to building occupants through the implementation of an interim remedial measure." The HDNLs "indicate the need for the Department [of Environmental Protection] to inform the local and/or state health departments about the site and the associated vapor intrusion related indoor air concentrations for further evaluation and possible emergency actions."

screening levels in indoor air. Constituents recommended for further monitoring are 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, chloroform, naphthalene, and total xylenes.

- In addition to installing passive engineering controls, the building owners/managers should be instructed to keep the Building 7/8 basement fans operational at all times, as this has been shown to reduce constituent concentrations within occupied spaces.
- Further investigation will be conducted within the unoccupied Building 7/8 basement to better understand potential sources and/or migration pathways that may be producing constituent concentrations in indoor air within the basement. These additional data will support the design of the passive engineering controls.
- The need for additional vapor intrusion activities at the 115 River Road building will be determined based on the results of 2008–2009 heating season monitoring event and the status of the OU1 Feasibility Study and Remedial Action.

1 Introduction

This technical memorandum presents the results from the March 2008 sampling event and associated April 2008 resampling event conducted to evaluate vapor intrusion at the 115 River Road building, Edgewater, New Jersey. The 115 River Road building is located immediately south of the Quanta Resources property.

Indoor air, subslab vapor, and outdoor air samples were collected at the Building March 22–26, 2008, as part of the supplemental vapor intrusion evaluation. Several indoor air locations were resampled on April 26 and 27, 2008, due to exceedances of the NJDEP RAL and HDNL at two locations during the March 2008 event under atypical operating conditions, as required by the agencies. Sampling was conducted according to the USEPA-approved "Vapor Intrusion Evaluation at 115 River Road Work Plan Addendum" (CH2M HILL 2008) and the USEPA-approved "Vapor Intrusion Evaluation Work Plan" (CH2M HILL, 2006a). Several modifications to the work approach were made in accordance with the mobilization site visit with the agencies on March 20, 2008: the Building 8 basement vent fans were turned off and sealed with plastic, samples were analyzed for the full TO-15 list, and one indoor air sample location in the Building 6 half basement was added.

The purpose of this supplemental evaluation is to confirm that the vapor intrusion pathway is not causing unacceptable concentrations of site-related constituents in indoor air, to further refine the conceptual site model, and to gather more subslab data.

A revised building layout has been developed for the 115 River Road Building and is provided as Figure 1. Revised floor plans for both the Building 7/8 and 10 basements have been developed as well and are provided in Figures 2 and 3. These figures have been developed from data collected during multiple field events and are approximately to scale. The key observations are the following:

- Building 8 does not have a first floor except for the lobby. The Building 7 daycare extends into what could be considered the Building 8 first floor.
- Building 9 does not have a third floor; the Building 8 third floor extends over Building 9.

- The Building 8 basement extends under Building 7 and is now referred to as the Building 7/8 basement.
- There is a crawl space under Buildings 2, 3, 4, and 5 that makes subslab sampling infeasible at these buildings. There is a small access point to this crawl space behind Building 4.
- Building 6 has a half basement with a small crawl space underneath. There are access points to this crawl space in the Building 7/8 basement.
- There is a floor drain that runs the length of the Building 7/8 basement which drains to the Building 8 Sump 1.

2 Sampling Methods

2.1 March 2008 Sampling Event

The following sampling activities were performed:

- Indoor air sampling was performed at 15 locations within Buildings 6–10, ten of which had been previously sampled
- Subslab soil gas sampling was attempted at the seven existing probes.
- Outdoor air samples were collected from six of the eight previously sampled locations.

The sampling locations were reviewed and approved by NJDEP and USEPA during a site visit on March 20, 2008. The sample location key is provided in Attachment A-1a. The indoor air and subslab sample locations are shown in Figure 4. The outdoor sample locations are shown in Figure 5.

2.1.1 Building Inventory

The building inventory revealed that products similar to those observed during previous sampling events were stored in the Building 8 and 10 basements. During the mobilization site visit with the agencies on March 20, 2008, the building owners/operators were instructed to remove gasoline and paint cans from the Building 10 basement (not including the storage room). These products were not present during sample collection. In the Building 7/8 basement there were several 5-gallon buckets of Barrier Relkem "99" all-purpose industrial super cleaner and other products such as adhesives and sealants that have been observed during previous sampling events.

The tenants in the Building 9 modeling agency have not allowed the sampling team to perform a building survey in their space during any vapor intrusion events. There were several plotters observed in the Virgona and Virgona Architects office (Building 10 third floor; Q1-IA-01) as well as other typical office products. No cleaning products or other potential indoor sources of VOCs were observed in the Unitex Hosiery office, where Q1-IA-06 is located. In the Building 7 daycare, typical household cleaning products and several cans of paint were observed. It was determined during the mobilization site visit by CH2M HILL with concurrence from the agencies that these products would not interfere with the indoor air sampling and could be left in the storage closet.

2.1.2 Indoor Air Sampling

Indoor air samples were collected over a 24-hour period (March 22–23) using 6-L Summa™ canisters equipped with flow controllers. In occupied spaces the Summa canisters were placed on top of a book shelf or table between 2 and 5 feet above ground surface (roughly breathing zone height), with the exception of Q1-IA-26 and Q1-IA-28, which were placed on the floor. In the Building 8 and 10 basements the Summa™ canisters were placed on the floor, with the exception of Q1-IA-21, which was placed on a table approximately 3 feet above ground surface. The March 2008 indoor air sampling log is provided in Attachment A-2a.

The building was mostly unoccupied during the sample collection period, from Saturday, March 22, to Sunday, March 23 (Easter Sunday). The modeling agency in Building 9 was open for business on Saturday but was closed Sunday. The field team made arrangements with the building owners/managers so that the building maintenance staff would not disturb the basements. Doors and windows remained closed during the sample collection period, except at the modeling agency, where people went in and out the front door. The field team checked back periodically to ensure the doors and windows remained closed. Pressure and temperature during the sampling event were obtained from the U.S. National Weather Service's Web site.

The HVAC systems in the tenant spaces were set to operate at typical conditions with the exception of the Unitex Hosiery office, where Q1-IA-06 was located; the HVAC system in this office is not operated on weekends. The heating system in the Building 7/8 basement was operating during the sampling event.

The ventilation fans in the Building 7/8 basement were turned off and sealed with plastic during the sampling event in accordance with the agencies' request during the site visit on March 20, 2008. This was done in part because subslab data have been successfully collected from only one of three Building 7/8 basement probes.

2.1.3 Subslab Soil Gas Sampling

Subslab soil gas sampling was attempted between March 23 and 26, 2008, at the seven existing subslab probes: three in the Building 7/8 basement, two in the Building 10 basement, and two in the Building 12 parking lot. Two of the subslab probes were reinstalled: Q1-VI-07, in the Building 12 parking lot, whose probe cap was stuck and could not be sampled during the July 2006 sampling event, and Q1-VI-02, which had failed the helium leak check after it was installed in March 2006. Subslab samples were successfully collected from four of the seven probes: two in the Building 12 parking lot (Q1-VI-07 and Q1-VI-08); one in the Building 7/8 basement (Q1-VI-06), and one in the Building 10 basement (Q1-VI-02). Water was encountered during either purging or sampling at the other three probes. Subslab samples were collected in 1-L Summa canisters equipped with critical orifices over an approximately 5-minute period. The subslab soil gas sampling log is provided in Attachment A-3.

2.1.4 Outdoor Air Sampling

Outdoor (background) air samples were collected from six of the eight previous outdoor locations: two on the roof of the building, one in the 115 River Road parking lot, two on the

Quanta Resources property, and one approximately 1 mile north on River Road at the ambulance building. The two previous locations, Q1-OA-05 and Q1-OA-08, were not sampled due to a lack of canisters from the additional indoor air location and one faulty canister. Q1-OA-05, which is on the Quanta Resources property, was eliminated because it is within approximately 100–200 feet of both Q1-OA-04 and Q1-OA-06. Q1-OA-08, which is approximately 1 mile north of the 115 River Road building at the fire department, was eliminated because Q1-OA-07 is also located approximately 1 mile north at the ambulance building, which is one block away. The outdoor air sampling log is provided in Attachment A-2a.

The outdoor air samples were collected over a 24-hour period synoptically with the indoor air sampling using Summa canisters equipped with a flow controller, as described in the QAPP.

2.2 April 2008 Sampling Event

Indoor air resampling was performed April 26 and 27, 2008, at four locations under normal building ventilation conditions: the two locations in the Building 7/8 basement (Q1-IA-21 and Q1-IA-23), which exceeded the NJDEP RAL and HDNL for benzene in the March 2008 sampling event, and two locations in the Building 7 daycare (Q1-IA-12 and Q1-IA-26). One outdoor air sample was also collected at Q1-OA-01. The sample location key is provided in Attachment A-1b.

2.2.1 Indoor Air Sampling

Air samples were collected over a 24-hour period using Summa™ canisters equipped with flow controllers. At Q1-IA-12 and Q1-IA-21 the Summa canisters were placed on top of a table between 2 and 4 feet above ground surface (roughly breathing zone height). At Q1-IA-26 and Q1-IA-23 the Summa canisters were placed on the floor. The April 2008 indoor air sampling log is provided in Attachment A-2b.

The daycare and the basement were unoccupied during the sample collection period. The field team checked back periodically to ensure the doors and windows remained closed. The HVAC system in the daycare was set to operate at typical conditions during sample collection. The Building 7/8 basement ventilation fans were left running during the sample collection period to capture typical operating conditions in the basement. The field team confirmed with the building owner/manager that the fans are left running at all times to act as dehumidifiers for the basement. During previous visits to the Building 7/8 basement the CH2M HILL field teams have observed the fans running. There are three ventilation fans in the Building 7/8 basement, each of which is approximately 3 feet by 3 feet. The fans discharge to the ground level behind the building.

The building owners/managers placed lids on the two sumps located in the Building 7/8 basement between the March and April 2008 sampling events. Dense foam mats were placed over the floor drains in the basement as well.

2.2.2 Outdoor Air Sampling

One outdoor (background) air sample, Q1-OA-01, was collected from the Building 6 roof. The April 2008 outdoor air sampling log is provided in Attachment A-2b.

The outdoor air sample was collected over a 24-hour period synoptically with the indoor air sampling using a Summa canister equipped with a flow controller, as described in the QAPP.

3 Analytical Results

The analyses were performed by Columbia Analytical Services (CAS), in Simi Valley, California, using USEPA Method TO-15. CAS is certified for TO-15 analyses by NJDEP (NJ Certification number CA009).

Analytical results from the indoor air, outdoor air, and subslab soil gas samples are presented as Attachment B.

Analytical results for Q1-IA-01-032308 (Building 10, third floor) are not available because the canister leaked in the laboratory before it was analyzed.

A data quality evaluation report was prepared by a CH2M HILL chemist and is provided as Attachment C. The data quality evaluation procedures addressing precision, accuracy, representativeness, completeness, and comparability parameters (PARCC) are described in the QAPP amendment to the work plan (CH2M HILL, 2006b). USEPA (1999, 2002) individual method requirements and guidelines were used in this data quality evaluation. The data quality evaluation reports indicate that the project goals for precision and accuracy of the data, as measured by field and laboratory QC indicators, have been met, and that analyte and method objectives for completeness were met.

4 Vapor Intrusion Evaluation

Constituents detected during this vapor intrusion sampling event that are potentially related to the Quanta site are identified in the following table. Also presented are constituents detected in indoor air samples but considered unrelated to the Quanta site. These constituents are discussed further in Section 4.6.

4.1 Data Comparison to NJDEP RALs and HDNLs

Potentially Site-Related (Confirmed Site Constituent)	Unrelated to the Quanta Site (Not a Confirmed Site Constituent)
Benzene	Acrolein
Chloroform	Carbon tetrachloride
1,4-Dichlorobenzene[a]	Tetrahydrofuran
Naphthalene	1,2,4-Trimethylbenzene
Tetrachloroethene	1,3,5-Trimethylbenzene
Trichloroethene	
Xylenes	

[a]Not detected in 115 River Road shallow groundwater and not detected in subslab samples; has been detected in OU1 groundwater.

The indoor air sample results were compared to the NJDEP RALs and HDNLs once they were received from the laboratory. As stated in NJDEP (2007) "Vapor Intrusion Guidance," RALs "represent trigger levels for the initiation of prompt action at occupied buildings to further investigate the VI pathway and/or minimize impacts to building occupants through the implementation of an interim remedial measure (IRM)." Exceedances of HDNLs "indicate the need for the Department to inform the local and/or state health departments about the

site and the associated vapor intrusion related indoor air concentrations for further evaluation and possible emergency actions."

The RALs and HDNLs were obtained from Table 2 of NJDEP (2007); RALs not listed there were generated for constituents from the health-based indoor air screening levels provided in Table G-4 of the guidance according to NJDEP (2005). This comparison is provided in Attachment E-1a (March 2008) and E-1b (April 2008).

4.1.1 March 2008

The preliminary data from the March 2008 sampling was received from the laboratory on April 10, 2008, and provided to the agencies for review on April 11, 2008.

Two samples collected from the Building 7/8 basement at locations Q1-IA-21 and Q1-IA-23 exceeded the NJDEP RAL and HDNL for benzene, 14 $\mu g/m^3$. Sample Q1-IA-21-032308 had a benzene result of 20 $\mu g/m^3$. Sample Q1-IA-23-032308 had a benzene result of 19 $\mu g/m^3$, and the duplicate sample, Q1-IA-DUP2-032308, collected at this location had a benzene result of 18 $\mu g/m^3$. Location Q1-IA-21 is in the Building 7/8 basement hallway between the former office area and the storage area, on a table directly above the floor drain and approximately 5 feet from the large rectangular sump at which the floor drains terminate. Q1-IA-21 was sampled for the first time in July 2006; it was not sampled in March 2006.

Location Q1-IA-23 is in the far eastern storage room of the Building 7/8 basement, which is directly next to Building 6 and beneath the Building 7 daycare. The canister was placed on the floor directly next to the floor drain. An odor was detected during the March 20 site visit with the agencies, and this location, which had not been sampled previously, was selected for sampling because of this odor. The ventilation fan in the room was turned off and taped up, in accordance with agency direction.

In response to the exceedances, locations Q1-IA-21 and Q1-IA-23 were resampled on April 26 and 27, 2008, under normal operating conditions (i.e., with basement fans turned on). Two locations within the Building 7 daycare and one outdoor air location were also resampled. Because the Building 7/8 basement is unoccupied and the sample results during March 2008 do not represent typical operating conditions, the state or local health departments were not notified.

4.1.2 April 2008

The preliminary data from the April 2008 resampling was received from the laboratory on May 14, 2008, and provided to the agencies for review on April 23, 2008.

There were no exceedances of the NJDEP RALs or HDNLs at any of the four indoor air sample locations for any of the constituents; therefore there is no need for notification of state or local health departments, and no need to implement interim remedial measures.

4.2 Data Comparison to Indoor Air and Subslab Soil Gas Screening Criteria

4.2.1 Screening Criteria

The indoor air and subslab soil gas sample results were compared to the screening criteria listed in Attachments D-1 (indoor air) and D-2 (subslab). The screening criteria that were identified in the original vapor intrusion evaluation work plan (CH2M HILL, 2006a) were

updated because NJDEP screening levels were updated in March 2007. The screening criteria were developed from a combination of the USEPA Region 9 Preliminary Remediation Goals (PRGs) for ambient air and NJDEP generic vapor intrusion screening levels from Table 1 of NJDEP (2007) vapor intrusion guidance with the exception of TCE, for which the New York State Department of Health (NYSDOH) criterion of 5 $\mu g/m^3$ is used.

For indoor air screening criteria, the USEPA PRGs for ambient air and the NJDEP residential Indoor Air Screening Levels (IASLs) were compared and the lower of the two values used. The subslab soil gas screening criteria were calculated from the indoor air criteria using an attenuation factor of 0.1. The screening criteria correspond to target risks of 10^{-6} to 10^{-4} for potentially carcinogenic constituents and hazard quotients of 0.1 and 1 for noncarcinogenic constituents.

The modified criterion for TCE is discussed in detail by CH2M HILL (2006c). The 5 $\mu g/m^3$ indoor air value was derived by the NYSDOH, which concludes that a concentration of 5 $\mu g/m^3$ in air is in the risk range of 1×10^{-6} to 1×10^{-4}, which is generally used by regulatory agencies when making decisions (NYSDOH, 2003). This concentration is applied to the decision matrices at the 10^{-4} target risk level; the subslab soil gas concentration at the 10^{-4} level would be 50 $\mu g/m^3$.

4.2.2 March 2008

The comparison of the March 2008 indoor air and subslab soil gas analytical data to the screening criteria is provided in Attachment E-2a (indoor air) and E-3 (subslab soil gas). The following overall observations were made from this comparison:

- Concentrations of all carcinogenic constituents were below the 10^{-4} target cancer risk level at the 15 indoor air sampling locations.
- Concentrations of most carcinogenic constituents in indoor air did not exceed the 10^{-5} target cancer risk level, except for benzene. The benzene exceedances occurred at the four Building 7/8 basement locations, the one Building 6 half basement location, and one location in the Building 7 daycare.
- Concentrations of most carcinogenic constituents were below the 10^{-4} target cancer risk level at the four sampled subslab soil gas probes with the exception of chloroform at Q1-VI-06.
- Concentrations of most carcinogenic constituents were below the 10^{-5} target cancer risk level at the four sampled subslab soil gas probes with the exception of bromodichloromethane and chloroform at Q1-VI-06.
- Concentrations of most noncarcinogenic constituents were below the cumulative noncancer hazard quotient of 1.0 in indoor air with the exception of naphthalene and acrolein. The naphthalene exceedances occurred at four locations within the Building 7/8 basement. The acrolein exceedances occurred at one of the Building 7 daycare locations (Q1-IA-12) and at one of the Building 9 modeling agency locations (Q1-IA-04).
- Concentrations of most noncarcinogenic constituents were below the cumulative noncancer hazard quotient of 0.1 at the four sampled subslab soil gas probes with the exception of 1,2,4-trimethylbenzene and acrolein. 1,2,4-Trimethylbenzne exceeded the

cumulative noncancer hazard quotient at Q1-VI-02, in the Building 10 basement, and Q1-VI-07, in the Building 12 parking lot. Acrolein exceeded the cumulative noncancer hazard quotient of 1.0 in three of the subslab probes in the Building 12 parking lot: Q1-VI-02, Q1-VI-07, and Q1-VI-08.

4.2.3 Evaluation of Aerobic Biodegradation Potential in Subslab Soil Gas

Petroleum hydrocarbons readily degrade to carbon dioxide in the presence of oxygen by microbes in soil within the vadose zone. The subslab soil gas samples were analyzed for oxygen and carbon dioxide to evaluate the potential for aerobic biodegradation in the subsurface vadose zone. The sample results are provided in Attachment E-4. The concentrations of oxygen range from 22 to 19.6 percent. This indicates that there is an ample amount of oxygen available for aerobic biodegradation in the subslab soil gas, but aerobic biodegradation is likely not occurring at considerable rates because the oxygen is not being consumed. The concentrations of carbon dioxide, ranging from nondetect to 1.63 percent, confirm this conclusion because carbon dioxide is not being generated at considerable rates.

4.2.4 April 2008

The comparison of the April 2008 indoor air analytical data to the screening criteria is provided in Attachment E-2b. The following overall observations were made from this comparison:

- Concentrations of all carcinogenic constituents were below the 10^{-4} target cancer risk level at the four indoor air sampling locations.
- Concentrations of most constituents in indoor air did not exceed the 10^{-5} target cancer risk level with the exception of benzene at the two Building 7/8 basement locations.
- Concentrations of most constituents in indoor air did not exceed the 10^{-6} target cancer risk level with the exception of benzene at three locations and carbon tetrachloride and chloroform at all four locations.
- Concentrations of most noncarcinogenic constituents were below the cumulative noncancer hazard quotient of 0.1 in indoor air with the exception of acrolein, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, naphthalene tetrahydrofuran, and total xylenes. These exceedances occurred primarily at the two locations within the Building 7/8 basement, with the exception of acrolein and naphthalene at one of the Building 7 daycare locations (Q1-IA-12).
- Concentrations of most noncarcinogenic constituents were below the cumulative noncancer hazard quotient of 1.0 in indoor air with the exception of acrolein, naphthalene, and tetrahydrofuran. These exceedances occurred primarily at four locations within the Building 7/8 basement, with the exception of acrolein at one of the Building 7 daycare locations (Q1-IA-12).

4.3 Data Comparison by Building

4.3.1 March 2008

The following observations were made from a comparison of the indoor air and outdoor air data by building and floor (Table 3-A2):

- Building 7/8
  - 1,4-Dichlorobenzene and trichloroethene were undetected in Building 7/8 indoor air samples.
  - The concentrations of carbon tetrachloride in indoor air samples were comparable to those in outdoor air samples.
  - Concentrations of acrolein and chloroform were higher on the first and second floors than in the basement.
  - 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, naphthalene, and total xylenes were detected at concentrations higher in the basement than on the first floor, on the second floor, and in outdoor air.
  - The detected concentrations in the basement indoor air samples of tetrahydrofuran were less than outdoor air sample reporting limits.
- Building 10
  - 1,4-Dichlorobenzene, chloroform, and trichloroethene were undetected in Building 10 indoor air samples.
  - The constituents that were detected in the first floor sample (benzene, carbon tetrachloride, tetrachloroethene, and total xylenes) were detected in outdoor air at comparable concentrations. Benzene and carbon tetrachloride were detected in comparable concentrations in the basement, on the first floor, and in outdoor air.
  - Acrolein, benzene, naphthalene, and total xylenes were detected at concentrations higher in the basement than on the first floor and in outdoor air.
  - Detected concentrations in the basement indoor air samples of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, tetrachloroethene and tetrahydrofuran were less than outdoor air sample reporting limits.
- Building 9
  - Concentrations for the constituents were comparable among the first, second, and third floors.
  - Detected concentrations in the indoor air samples of 1,3,5-trimethylbenzene, chloroform, and trichloroethene were less than outdoor air sample reporting limits.
- Building 6
  - Chloroform, tetrachloroethene, tetrahydrofuran, and trichloroethene were not detected in the half-basement sample.
  - Detected concentrations in the half-basement indoor air sample of 1,3,5-trimethylbenzene, 1,4-dichlorobenzne, and acrolein were less than outdoor air sample reporting limits.

4.3.2 April 2008

The following observations were made from a comparison of the indoor air and outdoor air data for Building 7/8 (Table 3-B2):

- 1,3,5-trimethylbenzene and tetrahydrofuran were undetected in the first floor indoor air samples.
- The concentrations of carbon tetrachloride in indoor air samples were comparable to those in the outdoor air samples.
- The concentrations of acrolein between the first floor and basement indoor air samples were comparable.
- The concentrations of chloroform were lower in the basement than on the first floor.
- 1,2,4-trimethylbenzene, benzene, naphthalene, and total xylenes were detected in the basement at concentrations higher than on the first floor and in outdoor air.

4.4 Data Comparison between March and April 2008 Events

Sampling was conducted under routine and nonroutine operating conditions. At the request of the agencies, sampling was conducted in March 2008, under nonroutine, extremely conservative conditions, with basement fans turned off and sealed. Follow-up sampling was conducted in April 2008 under routine operating conditions, with basement fans operating. The four indoor air locations that were resampled in April 2008 had significantly lower concentrations of VOCs. The comparison of the sample results at each location is presented in Attachment F. Some of the observations include the following:

Q1-IA-12, Building 7/8 Daycare First Floor Toddler Room. In March 2008 benzene was detected in exceedance of the 10^{-5} target cancer risk level (2.5 $\mu g/m^3$), at 3.1 $\mu g/m^3$; in April 2008 benzene was detected in exceedance of the 10^{-6} target cancer risk level (0.25 $\mu g/m^3$), at 0.56 $\mu g/m^3$. 1,2,4-trimethylbenzene was detected in exceedance of the noncancer hazard quotient of 0.1 (0.62 $\mu g/m^3$), at 0.64 $\mu g/m^3$ in March 2008 and then below the noncancer hazard quotient of 0.1, at 0.28 $\mu g/m^3$, in April 2008. The detected concentrations of acrolein, carbon tetrachloride, and chloroform were comparable between the two events.

Q1-IA-26, Building 7/8 Daycare First Floor Kitchen. In March 2008 benzene was detected in exceedance of the 10^{-6} target cancer risk level (0.25 $\mu g/m^3$), at 1.5 $\mu g/m^3$; in April 2008 benzene was not detected. The detected concentrations of carbon tetrachloride and chloroform were comparable between the two events. Acrolein was detected in exceedance of the noncancer hazard quotient of 1.0 in April 2008 but was not detected in March 2008. Naphthalene was detected in exceedance of the noncancer hazard quotient of 0.1 in April 2008 but was detected below this level in March 2008.

Q1-IA-21, Building 7/8 Basement. Benzene was detected in March and April 2008 at 20 $\mu g/m^3$ and 12 $\mu g/m^3$, respectively, in exceedance of the 10^{-5} target cancer risk level (2.5 $\mu g/m^3$). The detected concentrations of carbon tetrachloride and naphthalene were comparable between the two events. Chloroform and acrolein were detected in April 2008 but not in March 2008. The detected concentrations of 1,2,4-trimethylbenze, 1,3,5-trimethlybenzene, and total xylenes were higher in March 2008 than in April 2008.

Q1-IA-23, Building 7/8 Basement. Benzene was detected in March and April 2008 at 19 $\mu g/m^3$ and 8.7 $\mu g/m^3$, respectively, in exceedance of the 10^{-5} target cancer risk level (2.5 $\mu g/m^3$). The detected concentrations of carbon tetrachloride were comparable between the two events. Chloroform and acrolein were detected in April 2008 but not in March 2008. The detected concentrations of 1,2,4-trimethylbenze, 1,3,5-trimethlybenzene, naphthalene, and total xylenes were higher in March 2008 than in April 2008.

4.5 Data Comparison between 2006 and 2008 Events

The indoor air sample data collected at each location during the March and July 2006 and March and April 2008 sampling events is presented in Attachment G-1. Several observations can be made from this comparison:

- Concentrations of constituents were generally higher during the July 2006 event than during the March 2006 and March and April 2008 events. This was specifically observed for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-dichlorobenzne, carbon tetrachloride, chloroform, and naphthalene.
- The benzene concentrations at the same locations were consistent across all sampling events except at Q1-IA-21, where the concentration increased significantly between July 2006 and March 2008. This is likely due to the vent fans in the Building 7/8 basement being shut off and sealed with plastic during the March 2008 event.

The subslab soil gas sample data collected at each location during the March 2006, July 2006, and March 2008 sampling events is presented in Attachment G-2. Several observations can be made from this comparison:

- 1,2,4-Trimethylbenzene, 1,3,5-trimethylbenzene, benzene, naphthalene, and total xylenes at Q1-VI-03 in July 2006 were higher than in all other subslab samples.
- There is no significant difference among concentrations of various constituents for most locations for the March 2006, July 2006, March 2008, and April 2008 events.

The outdoor air sample data collected at each location during the March 2006, July 2006, and March 2008 sampling events is presented in Attachment G-3. Several observations can be made from this comparison:

- Most of the 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, naphthalene, total xylenes, and carbon tetrachloride concentrations were higher during the July 2006 event than during the March 2006, March 2008, and April 2008 events.
- Chloroform concentrations were relatively consistent across all sampling events.

4.6 Determination of Potential Constituents of Concern for Vapor Intrusion

The constituents detected in indoor air or subslab soil gas above the lowest screening criteria (10^{-6} target cancer risk level or noncancer hazard quotient of 0.1) were evaluated to determine if they are site related or vapor intrusion related and should therefore be considered as constituents of concern for vapor intrusion.

1,2,4-Trimethylbenzene (Not a Confirmed Site Constituent). 1,2,4-Trimethylbenzene was not analyzed for in OU1 RI groundwater samples. It was detected in some OU1 RI soil samples

below the screening criteria. Concentrations of 1,2,4-trimethylbenzene did not exceed the cumulative noncancer hazard quotient of 1.0 in any of the indoor air or subslab samples in March and April 2008 but did exceed the cumulative noncancer hazard quotient of 0.1 at several indoor air and subslab sample locations. At the same locations, observed detections in March 2008 were higher than those in April 2008. The highest detections in indoor air were observed in the Building 7/8 basement and the Building 6 half basement. Detections of 1,2,4-trimethylbenzene in subslab soil gas and indoor air indicate that it may be a vapor-intrusion-related constituent. However, the detections of this constituent in the subslab soil gas and indoor air exceeded only the lowest screening criterion, the noncancer hazard quotient of 0.1. 1,2,4-trimethylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

1,3,5-Trimethylbenzene (Not a Confirmed Site Constituent). 1,3,5-Trimethylbenzene was not analyzed for in OU1 RI groundwater or soil samples. Concentrations of 1,3,5-trimethylbenzene did not exceed the cumulative noncancer hazard quotient of 1.0 in any of the indoor air or subslab samples in March and April 2008 but did exceed the cumulative noncancer hazard quotient of 0.1 at several indoor air and subslab sample locations. At the same locations, detections observed in March 2008 than those observed in April 2008. The highest detections in indoor air were observed in the Building 7/8 basement and the Building 6 half basement. Detections in subslab soil gas below the lowest screening criterion and were comparable to the Building 7/8 basement detections in March 2008. This seems to indicate that detections of 1,3,5-trimethylbenzene may be due partly to an indoor source in the Building 7/8 basement. Detections in subslab soil gas were below the lowest screening criterion. 1,3,5-trimethylbenzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

1,4-Dichlorobenzene (Confirmed Site Constituent). 1,4-dichlorobenzene has not been detected in shallow groundwater at the 115 River Road property. It had been identified as a constituent of interest in groundwater in the OU1 RI. 1,4-dichlorobenzene was not detected in any of the four subslab soil gas probes in March 2008 and is therefore not considered to be related to vapor intrusion. This constituent was detected above the lowest screening criteria (the 10^{-6} target cancer risk level) only in the Building 9 modeling agency and is likely related to an indoor source in that building.

Acrolein (Not a Confirmed Site Constituent). Acrolein was not included on the analyte list in previous vapor intrusion sampling events. Acrolein was either not analyzed for or not detected in the soil and groundwater samples collected during the OU1 RI. Acrolein is a combustion byproduct present in cigarette smoke and automobile exhaust. Acrolein was detected at concentrations in exceedance of the noncancer hazard quotient of 1.0 in the subslab soil gas and indoor air samples in March and April 2008. There are several reasons to suspect that detections of acrolein in indoor samples may not be site related or vapor intrusion related:

- It is possible that acrolein is a laboratory contaminant because acrolein was detected in four of the six laboratory method blanks in March 2008.
- Acrolein was detected in three of the 14 sample locations in March 2008. These detections occurred at seemingly random locations: Q1-IA-04 (Building 9 modeling

agency, second floor), Q1-IA-12 (Building 7 daycare, first floor), and Q1-IA-22 (Building 10, basement).

- Acrolein was detected in the subslab and indoor air at comparable levels; March 2008 indoor air detections ranged from 0.97 to 1.6 $\mu g/m^3$, April 2008 indoor air detections ranged from 0.77 to 1.4 $\mu g/m^3$, and March 2008 subslab detections ranged from 1.4 to 1.5 $\mu g/m^3$. The highest detected value among any of the subslab or indoor air samples of acrolein, 1.6 $\mu g/m^3$, actually occurred at Q1-IA-04, on the second floor of Building 9.
- Two of the three sets of indoor air field duplicate results for acrolein do not confirm; the field duplicate collected at Q1-IA-12 in March 2008 was 1.2 $\mu g/ m^3$, whereas the initial sample result was nondetect. In April 2008 the field duplicate was 1.4 $\mu g/ m^3$ and the initial sample was 0.77 $\mu g/m^3$.
- Detections of acrolein were higher on the first and second floors of Building 7/8 than in the basement. Detections of acrolein were also higher on the second and third floors of Building 9 than on the first floor.

Benzene (Confirmed Site Constituent). Benzene was identified as a constituent of concern in soil and groundwater in the OU1 RI. Benzene was also identified as a potential constituent of concern for vapor intrusion in the March and July 2006 sampling events. Detected concentrations of benzene in the indoor air samples collected from occupied tenant spaces in the building (not including the Building 7/8 basement) under typical operating conditions were below the 10^{-5} target cancer risk level. Benzene was detected in the outdoor air at concentrations exceeding the 10^{-6} target cancer risk level. The highest detections in indoor air were observed in the Building 7/8 basement and the Building 6 half basement. Detections of benzene in the Building 7/8 basement were higher than detections in the subslab probes in March 2008. This seems to indicate that detections of benzene may be due partly to an indoor source in the Building 7/8 basement. Benzene should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Carbon Tetrachloride (Not a Confirmed Site Constituent). Carbon tetrachloride has not been identified as a constituent of interest in the soil or groundwater in the OU1 RI. Concentrations of carbon tetrachloride were below the 10^{-5} but above the 10^{-6} target cancer risk level in all indoor air and outdoor air samples in March and April 2008. Carbon tetrachloride was detected at only one of the four subslab probes, and the detected concentration was less than any of the indoor air sample results. Detections of carbon tetrachloride in indoor air are probably related to an indoor or ambient source.

Chloroform (Confirmed Site Constituent). Chloroform has either not been detected or been detected at very low concentrations in the 115 River Road shallow groundwater. Chloroform was identified in the OU1 RI as a constituent of interest in groundwater but not in soil. Concentrations of chloroform did not exceed the 10^{-5} target cancer risk level in any of the indoor air or subslab samples in March and April 2008. Exceedances of the 10^{-6} target cancer risk level occurred at several indoor air locations and at three of the four subslab probes. The concentration of chloroform at one probe, Q1-VI-06 in the Building 7/8 basement, exceeded the 10^{-4} target cancer risk level with a result of 1,000 $\mu g/m^3$ compared to the screening criterion of 83 $\mu g/m^3$. Chloroform should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Naphthalene (Confirmed Site Constituent). Naphthalene was identified in the OU1 RI as a constituent of concern in soil and groundwater. Naphthalene was also identified in the March and July 2006 sampling events as a potential constituent of concern for vapor intrusion. Concentrations of naphthalene exceeded the cumulative noncancer hazard quotient of 0.1 at 10 of the 14 indoor air locations in March 2008 and the cumulative noncancer hazard quotient of 1.0 at four indoor air locations, all within the Building 7/8 basement. Naphthalene was not detected in any of the four subslab probes in March 2008; the conclusion can therefore be made that detection of this constituent in indoor air in March and April 2008 is not related to vapor intrusion. The previous evaluations concluded otherwise, and therefore this constituent should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

Tetrachloroethene (Confirmed Site Constituent). Tetrachloroethene was identified in the OU1 RI as a constituent of concern in soil and groundwater. Tetrachloroethene was detected in exceedance of the lowest screening criterion in only two of the indoor air samples in March and April 2008. Tetrachloroethene was detected in only one of the subslab probes in March 2008 at a concentration above the lowest screening criteria (the 10^{-6} target cancer risk level) and comparable to the highest detections in indoor air. The indoor air exceedances occurred in the Building 9 modeling agency and are likely related to an indoor source in that building and not to vapor intrusion.

Tetrahydrofuran (Not a Confirmed Site Constituent). Tetrahydrofuran was not included on the analyte list in previous vapor-intrusion-sampling events. It was not analyzed for in OU1 RI groundwater or soil samples. Concentrations of tetradyhydrofuran did not exceed the cumulative noncancer hazard quotient of 1.0 in any of the indoor air samples. Exceedances of the noncancer hazard quotient of 0.1 were observed at several indoor air locations, primarily in the basements. Tetrahydrofuran was detected in only one of the four subslab soil gas samples in March 2008 and at a concentration comparable to the indoor air detections. Based on this observation, tetrahydrofuran is not considered to be related to vapor intrusion.

Trichloroethene (Confirmed Site Constituent). Trichloroethene has not been detected or was detected at very low concentrations in shallow groundwater at the 115 River Road property. Trichloroethene was identified in the OU1 RI as a constituent of concern in soil and groundwater. Trichloroethene was detected in only one of the subslab probes, and the detection was at a concentration above the lowest screening criteria, the 10^{-6} target cancer risk level. Trichloroethene was detected in only two of the indoor air samples in March and April 2008, both at concentrations above the lowest screening criteria. These detections occurred in the Building 9 modeling agency and are likely related to an indoor source in that building and not to vapor intrusion.

Total Xylenes (Confirmed Site Constituent). Total xylenes were identified in the OU1 RI as a constituent of concern in soil and groundwater. Xylenes were detected at low concentrations, below the NJDEP vapor intrusion screening value for groundwater, on the 115 River Road property in shallow groundwater. Total xylenes were detected in all of the indoor air, outdoor air, and subslab samples in March and April 2008. Total xylenes exceeded the lowest screening criteria (the noncancer hazard quotient of 0.1) in indoor air only in the Building 7/8 basement samples in March and April 2008. The detections of total

xylenes in the subslab soil gas samples did not exceed the lowest screening criterion. The subslab soil gas detections in March 2008 were less than the detections in the four indoor air samples in March 2008 and the two indoor air samples in April 2008 in the Building 7/8 basement. Total xylenes should be included on the analyte list for future vapor intrusion sampling events, but further action is not necessary.

5 Conclusions

5.1 Summary of the Vapor Intrusion Evaluation Activities to Date

5.1.1 115 River Road Vapor Intrusion Evaluation Timeline

Vapor intrusion investigation activities have been under way at the 115 River Road building since 2006. A summary of the key events is presented below:

January 2006	Draft vapor intrusion work plan completed
March 2006	Final vapor intrusion work plan completed
	Work plan approved by USEPA
	Vapor intrusion sampling performed
April 2006	Memorandum of results from the March 2006 vapor intrusion sampling event completed
July 2006	Vapor intrusion sampling performed
September 2006	Site visit conducted to investigate potential indoor sources of naphthalene, which may have impacted the July 2006 sample results
October 2006	Memorandum of results from the March and July 2006 vapor intrusion sampling events completed
January 2007	Memorandum of September 2006 site visit completed; concludes that roofing activities at the site may have impacted the July 2006 sample results
	Memorandum of further activities for the evaluation of the potential vapor intrusion pathway completed
April 2007	Site visit conducted to gather an updated building inventory and perform a pressurization survey
July 2007	Memorandum of the results of the April 2007 site visit completed; concludes that substantial depressurized conditions, which would create migration pathways, were not observed in the building and that there were indoor VOC sources, including urinal deodorizers containing p-dichlorobenzene and asphalt roof patch containing naphthalene
January 2008	"Vapor Intrusion Evaluation at 115 River Road Work Plan Addendum" completed

March 2008	Site visit with NJDEP and USEPA conducted to review sampling locations; agency direction is given to turn off and seal the Building 7/8 basement fans during the sampling event
	Work plan approved by USEPA
	Vapor intrusion sampling performed
April 2008	Preliminary analytical data from the March 2008 sampling event indicates that two of the indoor air samples collected in the Building 7/8 basement exceed NJDEP RAL and HDNL for benzene. The ventilation fans in the Building 7/8 basement are turned off and sealed with plastic during the sampling event in accordance with the agencies' request during the site visit on March 20, 2008
	Resampling performed under normal building conditions at the two Building 7/8 basement locations with benzene exceedances and at two locations within the daycare

5.1.2 Key Conclusions from the March and July 2006 Sampling Events

Constituents were detected in indoor air during both the March and July 2006 sampling events. Constituents not detected during the March sampling event were detected during the July event. Several of the constituents detected in March and July 2006 have not been detected in groundwater at the 115 River Road property, including groundwater underlying the building. Since some of the constituents detected in the indoor air samples were not detected in shallow groundwater and are unlikely to be associated with vapor intrusion.

Indoor air sampling results did not exceed the available NJDEP RALs and HDNLs. Based on this, there is no need for notification of state or local health departments, and no need to implement interim remedial measures.

Concentrations of some constituents were detected in indoor air at higher concentrations in July 2006 than in March 2006; however, these constituents were also detected at similar elevated concentrations in outdoor air samples. As such, potential vapor intrusion cannot be discernable from the influences of ambient sources.

Several of the constituents detected in indoor air are associated with sources other than vapor intrusion, including mobile sources (e.g., motor vehicle emissions) and chemicals in commercial products used and stored indoors.

Concentrations of most constituents in indoor air did not exceed the 10^{-5} target cancer risk level. During the July 2006 sampling event, 1,4-dichlorobenzene, acrylonitrile, 1,3-butadiene, and chloroform were detected in indoor air at concentrations higher than the 10^{-5} target cancer risk level. No constituents were detected in indoor air at concentrations higher than the 10^{-4} target cancer risk levels, with the exception of 1,4-dichlorobenzene in two samples collected during July 2006. USEPA generally takes action to reduce lifetime cancer risks that are higher than 10^{-4}; however, none of these constituents have been detected in soil or groundwater at the 115 River Road property and thus would not be associated with vapor intrusion.

Concentrations of all constituents in indoor air were lower than the cumulative noncancer hazard quotient of 1.0 during the March 2006 sampling event. Concentrations in indoor air were lower than the noncancer hazard quotient of 1.0 during the July 2006 sampling event, with the exception of 1,2,4-trimethylbenzene in three samples, naphthalene in two samples, and trichlorofluoromethane in one sample. USEPA generally takes action to reduce exposures below the noncancer hazard quotient of 1; however, 1,2,4-trimethylbenzene and trichlorofluoromethane have not been detected in soil or groundwater at the 115 River Road property and are not associated with vapor intrusion. Although naphthalene has been detected in groundwater at the 115 River Road property or in the vicinity of the building, it is also present in emissions from motor vehicles and other combustion sources, and was also detected in ambient (outdoor) air samples.

One subslab sample collected in July 2006 detected elevated concentrations of benzene, naphthalene, toluene, and xylenes. These constituents also have been detected in groundwater. Although there is the possibility that the presence of these constituents both in groundwater and subslab samples indicates a potential vapor intrusion pathway, these constituents also have been detected at comparable levels in outdoor air and may also be found in maintenance and consumer products stored in the buildings. If a vapor intrusion pathway is present, the influence of it on concentrations in indoor air is not readily discernable from the influences of ambient outdoor concentrations or emission sources from indoor products.

5.1.3 Key Conclusions from the March and April 2008 Sampling Events

Constituent concentrations were below applicable NJDEP action levels under typical operating conditions. The March 2008 event was conducted under atypical and extremely conservative conditions, in accordance with agency direction: Building 7/8 basement ventilation fans were turned off and sealed with plastic. Concentrations of benzene at two sample locations in the unoccupied Building 7/8 basement, Q1-IA-21 and Q1-IA-23, exceeded the NJDEP RAL and HDNL. The two Building 7/8 basement locations were resampled in April 2008 under normal operating conditions (i.e., with basement fans turned on) along with two indoor air locations in the Building 7 daycare. Lower concentrations of benzene were detected in the April 2008 resamples, and these were below the NJDEP RAL and HDNL.

Indoor air samples collected from the Building 7 daycare in March and April 2008 did not exceed the NJDEP RALs or HDNLs for any constituent. These samples also did not exceed the 10^{-4} target cancer risk level for any constituent. The one exceedance of the noncancer hazard quotient of 1.0 for acrolein, which is not a confirmed site-related constituent, does not appear to be vapor intrusion related.

There were no exceedances of the 10^{-4} target cancer risk level in indoor air in either March or April 2008. Concentrations in indoor air were lower than the 10^{-5} cancer risk level for most constituents, with the exception of benzene. Detected concentrations of benzene in the indoor air samples collected from occupied tenant spaces in the building (not including the Building 7/8 basement) under typical operating conditions were below the 10^{-5} target cancer risk level.

Concentrations in indoor air were lower than the noncancer hazard quotient of 1.0 during the March 2008 sampling event, with the exception of naphthalene and acrolein. Naphthalene exceedances occurred in the four Building 7/8 basement samples, where the vent fans were turned off and sealed with plastic. When these locations were resampled in April 2008, the concentrations of naphthalene in indoor air decreased.

There were exceedances of the indoor air screening criteria for several constituents—1,4-dichlorobenzene, tetrachloroethene and trichloroethene—that occurred only in the Building 9 modeling agency, suggesting that detections of these constituents may be related to indoor air sources within that building; however, that could not be determined due to the lack of building inventory information from Building 9.

Most constituents detected in indoor air in exceedance of the lowest risk-based screening criteria were either not site related or determined to be unrelated to vapor intrusion. These constituents are 1,4-dichlorobenzene, acrolein, carbon tetrachloride, tetrachloroethene, tetrahydrofuran, and trichloroethene.

Concentrations of benzene in the Building 7/8 were higher during the March 2008 sampling event, when compared with previous sampling events. This occurrence is thought to be related to the basement vent fans being turned off and sealed during sampling. Concentrations returned to levels resembling previous sampling events when resampling was conducted in April 2008. The April 2008 sampling event was conducted under normal building conditions (basement vent fans in operation).

Exceedances of indoor air screening criteria were observed primarily in the unoccupied Building 7/8 basement during the March and April 2008 sampling events.

Potential indoor sources of VOCs in the Building 7/8 basement may be contributing to concentrations in indoor air and acting as confounding factors to the vapor intrusion evaluation. Several constituents were detected in indoor air at concentrations higher than subslab soil gas, including 1,3,5-trimethylbenzene, benzene, naphthalene, total xylenes.

There are several constituents that were recommended for further monitoring: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, chloroform, naphthalene and total xylenes. An additional vapor intrusion sampling event is proposed for the 2008–2009 heating season to ensure that indoor concentrations of these constituents remain below the acceptable risk-based screening levels in indoor air.

5.2 Recommendations for Further Action

The building owners/managers should be instructed to keep the Building 7/8 basement fans operational at all times because this has been shown to reduce the concentration of benzene in indoor air by the comparison of the March and April 2008 sample data. In May 2008, the building owner sealed the open floor sumps. Additional passive engineering controls will be installed to vent these sumps to the outdoors. Further investigation will be conducted within the unoccupied Building 7/8 basement to better understand potential sources or migration pathways that may be producing constituent concentrations in indoor air within the basement. These additional data will support the design of the any additional passive engineering controls, if needed.

An additional monitoring event is proposed for the 2008–2009 heating season at the 115 River Road building based on the evaluation provided in Section 4 to ensure that indoor air concentrations of site-related or potentially site-related constituents remain below acceptable risk levels in the occupied tenant spaces. The monitoring event will include the following activities:

- Indoor air sample collection in the Building 7/8 basement, in the Building 6 half basement, and at Building 7 and 8 locations
- Subslab soil gas sample collection at the seven existing subslab probes
- Outdoor air sample collection at four of the previous locations (Q1-OA-01, on the Building 6 roof; Q1-OA-04, at the northeast corner of the Quanta property; Q1-OA-06, on the Quanta property near the bulkhead; and Q1-OA-07, 1 mile north on River Road at the ambulance building)

A revised analyte list is proposed for the winter 2008–2009 vapor intrusion sampling event. The following constituents will be monitored: 1,2,4-trichlorobenzene, 1,3,5-trichlorobenzene, benzene, chloroform, naphthalene, and total xylenes.

The need for additional vapor intrusion activities at the 115 River Road building will be determined based on the results of 2008–2009 heating season monitoring event and the status of the OU1 Feasibility Study and Remedial Action.

6 References

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Tables

TABLE 1a
Screening of Vapor Intrusion Potential Constituents of Interest Based on Indoor Air Data - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Constituents warranting further evaluation based on screening indoor air data against lowest screening levels	Chemicals that should not require further evaluation based on screening indoor air data against lowest screening levels	Chemicals that should not require further evaluation because they were not detected
Constituents detected above lowest screening level in at least one sample	***Constituents detected at concentrations less than the lowest screening level***	***Constituents not detected, but reporting limits are above lowest screening level in some samples***
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,4-Dichlorobenzene Acrolein Benzene Carbon tetrachloride Chloroform Naphthalene Tetrachloroethene Tetrahydrofuran Trichloroethene m-Xylene o&p-Xylene Xylenes (total) - sum of isomers	1,1,2-Trichlorotrifluoroethane 4-Methyl-2-pentanone Acetic Acid, Ethyl Ester Acetone Acetonitrile Bromomethane Chlorobenzene Chloromethane Cyclohexane Dichlorodifluoromethane Ethylbenzene 2-Butanone (MEK) Isopropylbenzene Methyl methacrylate Methyl tert-butyl ether (MTBE) Methylene chloride n-Hexane Styrene Toluene Trichlorofluoromethane n-Propylbenzene	1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane (EDB) 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Butadiene 1,4-Dioxane Acrylonitrile Benzene, (chloromethyl) Bromodichloromethane Chlorodibromomethane cis-1,3-Dichloropropene Hexachlorobutadiene trans-1,3-Dichloropropene Vinyl chloride
	Constituents detected and no standard available for comparison.	***Constituents not detected and reporting limits are below lowest screening level***
	1,2-Dichlorotetrafluoroethane 1-ethyl-4-methyl-Benzene 2-Hexanone 2-Propanol Alpha-Pinene d-Limonene Ethanol n-Butyl Acetate n-Heptane n-Nonane n-Octane Propylene	Carbon disulfide 1,1,1-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichlorobenzene 1,3-Dichlorobenzene Allyl chloride Bromoform Chloroethane cis-1,2-Dichloroethene trans-1,2-Dichloroethene Vinyl acetate

TABLE 1b
Screening of Vapor Intrusion Potential Constituents of Interest Based on Indoor Air Data - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Constituents warranting further evaluation based on screening indoor air data against lowest screening levels	Chemicals that should not require further evaluation based on screening indoor air data against lowest screening levels	Chemicals that should not require further evaluation because they were not detected
Constituents detected above lowest screening level in at least one sample	***Constituents detected at concentrations less than the lowest screening level***	***Constituents not detected, but reporting limits are above lowest screening level in some samples***
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Acrolein Benzene Carbon tetrachloride Chloroform Naphthalene Tetrahydrofuran XYLENES (total) - sum of isomers	1,1,2-Trichlorotrifluoroethane 1,4-Dichlorobenzene 2-Butanone (MEK) 4-Methyl-2-pentanone Acetic Acid, Ethyl Ester Acetone Carbon disulfide Chloromethane Cyclohexane Dichlorodifluoromethane Ethylbenzene Isopropylbenzene Methylene chloride n-Hexane n-propylbenzene o-Xylene Styrene Tetrachloroethene Toluene Trichlorofluoromethane Vinyl acetate m&p-Xylenes	1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane (EDB) 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Butadiene 1,4-Dioxane Acrylonitrile Benzene, (chloromethyl) Bromodichloromethane Chlorodibromomethane cis-1,3-Dichloropropene Hexachlorobutadiene trans-1,3-Dichloropropene Trichloroethene Vinyl chloride
	Constituents detected and no standard available for comparison.	***Constituents not detected and reporting limits are below lowest screening level***
	1-Ethyl-4-methyl-benzene 2-Hexanone 2-Propanol Alpha-Pinene d-Limonene Ethanol n-Butyl Acetate n-Heptane n-Nonane n-Octane Propylene	1,1,1-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,4-Trichlorobenzene 1,2-Dichlorobenzene 1,3-Dichlorobenzene Acetonitrile Allyl chloride Bromoform Bromomethane Chlorobenzene Chloroethane cis-1,2-Dichloroethene Methyl methacrylate Methyl tert-butyl ether (MTBE) trans-1,2-Dichloroethene
		Constituents not detected and no standard available for comparison.
		1,2-Dichlorotetrafluoroethane

TABLE 3a
Summary Statistics for Indoor and Outdoor Air Samples By Building and Floor - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Concentrations in Air (µg/m³)

	Indoor Air - Building 7/8 Basement				Indoor Air - Building 7/8 1st Floor				Indoor Air - Building 7/8 2nd Floor (1 sample)	Outdoor Air			
Constituent	minimum	median	maximum	n	minimum	median	maximum	n	result	minimum	median	maximum	n
1,2,4-Trimethylbenzene	2.3	4.1	5.1	5	0.32	0.6	0.64	3	0.37	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,3,5-Trimethylbenzene	1.1	1.9	2.5	5	ND (0.14)	0.265	0.29	3 (1 ND)	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,4-Dichlorobenzene	ND (0.12)	ND (0.14)	ND (0.16)	5 (5 ND)	ND (0.14)	ND(0.18)	ND (0.18)	3 (3 ND)	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Acrolein	0.39	0.55	0.71	5	0.45	0.69	1.2	3	0.88	ND (0.26)	ND (0.56)	ND (0.7)	6 (6 ND)
Benzene	9.1	18	20	5	1.5	3	3.1	3	1.7	0.5	0.51	0.56	6
Carbon tetrachloride	0.41	0.44	0.44	5	0.46	0.47	0.47	3	0.43	0.35	0.44	0.5	6
Chloroform	ND (0.15)	0.2	0.2	5 (3 ND)	0.33	0.33	0.53	3	0.5	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Naphthalene	3.5	6.6	11	5	0.2	0.41	0.61	3	0.27	ND (0.13)	ND (0.15)	ND (0.16)	6 (6 ND)
Tetrachloroethene	ND (0.12)	ND (0.14)	ND (0.16)	5 (5 ND)	0.15	0.225	0.3	3 (1 ND)	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Tetrahydrofuran	ND (0.18)	0.46	0.55	5 (2 ND)	ND (0.18)	ND (0.19)	ND (0.23)	3 (3 ND)	0.25	ND (0.64)	ND (0.75)	ND (0.82)	6 (6 ND)
Trichloroethene	ND (0.12)	ND (0.14)	ND (0.16)	5 (5 ND)	ND (0.14)	ND(0.18)	ND (0.18)	3 (3 ND)	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Xylenes (total) - sum of isomers	14.9	30.00	34	5	1.91	3.7	4	3	2.2	0.32	0.39	0.62	6

Concentrations in Air (µg/m3)

	Indoor Air - Building 10 Basement				Indoor Air - Building 10 1st Floor (1 sample)	Outdoor Air			
Constituent	minimum	median	maximum	n	result	minimum	median	maximum	n
1,2,4-Trimethylbenzene	0.27	0.36	0.44	2	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,3,5-Trimethylbenzene	ND (0.15)	0.17	0.17	2 (1 ND)	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,4-Dichlorobenzene	ND (0.12)	ND (0.15)	ND (0.15)	2 (2 ND)	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Acrolein	0.39	0.68	0.97	2	ND (0.15)	ND (0.26)	ND (0.56)	ND (0.7)	6 (6 ND)
Benzene	0.76	0.78	0.79	2	0.56	0.5	0.51	0.56	6
Carbon tetrachloride	0.41	0.42	0.43	2	0.42	0.35	0.44	0.5	6
Chloroform	ND (0.13)	ND (0.17)	ND (0.17)	2 (2 ND)	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Naphthalene	0.31	0.43	0.55	2	ND (0.1)	ND (0.13)	ND (0.15)	ND (0.16)	6 (6 ND)
Tetrachloroethene	ND (0.15)	0.17	0.17	2 (1 ND)	0.15	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Tetrahydrofuran	0.31	0.48	0.65	2	ND (0.18)	ND (0.64)	ND (0.75)	ND (0.82)	6 (6 ND)
Trichloroethene	ND (0.12)	ND (0.15)	ND (0.15)	2 (2 ND)	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Xylenes (total) - sum of isomers	1.83	2.44	3.04	2	0.35	0.32	0.39	0.62	6

Concentrations in Air (µg/m3)

	Indoor Air - Building 9 1st Floor (1 sample)	Indoor Air - Building 9 2nd or 3rd Floor				Outdoor Air			
Constituent	result	minimum	median	maximum	n	minimum	median	maximum	n
1,2,4-Trimethylbenzene	0.81	0.5	0.69	0.87	2	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,3,5-Trimethylbenzene	0.33	0.16	0.25	0.33	2	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,4-Dichlorobenzene	0.8	0.25	0.57	0.88	2	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Acrolein	0.47	0.66	1.13	1.6	2	ND (0.26)	ND (0.56)	ND (0.7)	6 (6 ND)
Benzene	1.9	0.61	1.21	1.8	2	0.5	0.51	0.56	6
Carbon tetrachloride	0.42	0.44	0.45	0.45	2	0.35	0.44	0.5	6
Chloroform	0.22	0.23	0.28	0.32	2	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Naphthalene	1.2	0.97	1.24	1.5	2	ND (0.13)	ND (0.15)	ND (0.16)	6 (6 ND)
Tetrachloroethene	2.9	ND (0.15)	2.7	2.7	2 (1 ND)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Tetrahydrofuran	ND (0.19)	ND (0.2)	ND (0.21)	ND (0.21)	2 (2ND)	ND (0.64)	ND (0.75)	ND (0.82)	6 (6 ND)
Trichloroethene	0.22	ND (0.15)	0.19	0.19	2 (1 ND)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Xylenes (total) - sum of isomers	3.9	1.31	2.46	3.6	2	0.32	0.39	0.62	6

Concentrations in Air (µg/m3)

	Indoor Air - Building 6 1/2 Basement (1 sample)	Outdoor Air			
Constituent	result	minimum	median	maximum	n
1,2,4-Trimethylbenzene	1.3	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,3,5-Trimethylbenzene	0.65	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
1,4-Dichlorobenzene	0.15	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Acrolein	0.58	ND (0.26)	ND (0.56)	ND (0.7)	6 (6 ND)
Benzene	7	0.5	0.51	0.56	6
Carbon tetrachloride	0.42	0.35	0.44	0.5	6
Chloroform	ND (0.15)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Naphthalene	1.6	ND (0.13)	ND (0.15)	ND (0.16)	6 (6 ND)
Tetrachloroethene	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Tetrahydrofuran	ND (0.18)	ND (0.64)	ND (0.75)	ND (0.82)	6 (6 ND)
Trichloroethene	ND (0.14)	ND (0.64)	ND (0.77)	ND (0.82)	6 (6 ND)
Xylenes (total) - sum of isomers	10.3	0.32	0.39	0.62	6

Notes:
n = number of samples
ND = Non Detected
(7 ND) = number of samples with non detect out of the total number of samples
ND (0.14) = RL for non detects

TABLE 2
Screening of Vapor Intrusion Potential Constituents of Interest in Subslab Samples - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

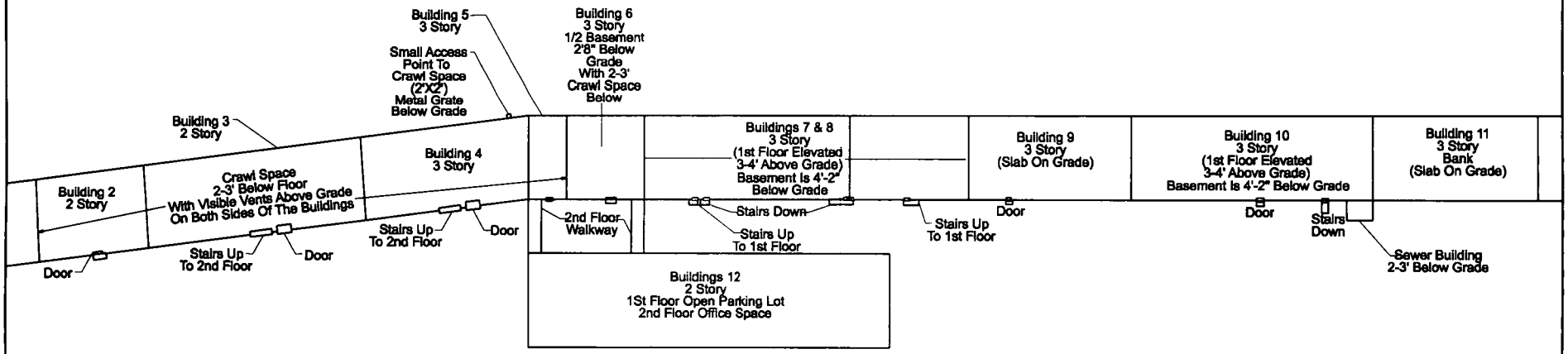
Constituents warranting further evaluation based on screening indoor air data against lowest screening levels	**Chemicals that should not require further evaluation based on screening indoor air data against lowest screening levels**	**Chemicals that should not require further evaluation because they were not detected**
Constituents detected above lowest screening level in at least one sample	***Constituents detected at concentrations less than the lowest screening level***	***Constituents not detected, but reporting limits are above lowest screening level in some samples***
1,2,4-Trimethylbenzene Acrolein Benzene Bromochloromethane Chlorodibromomethane Chloroform Tetrachloroethene Trichloroethene	1,1,2-Trichlorotrifluoroethane 1,1-Dichloroethane 1,3,5-Trimethylbenzene 2-Butanone (MEK) 4-Methyl-2-pentanone Acetic Acid, Ethyl Ester Acetonitrile Carbon tetrachloride Chloromethane Cyclohexane Dichlorodifluoromethane Ethylbenzene m&p-Xylenes Methylene chloride n-Hexane n-propylbenzene o-Xylene Tetrahydrofuran Toluene Vinyl acetate XYLENES (total) - sum of isomers	1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,2,4-Trichlorobenzene 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane (EDB) 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Butadiene 1,4-Dichlorobenzene 1,4-Dioxane Acrylonitrile Benzene, (chloromethyl) Bromomethane cis-1,3-Dichloropropene Hexachlorobutadiene Naphthalene trans-1,3-Dichloropropene Vinyl chloride
	Constituents detected and no standard available for comparison.	***Constituents not detected and reporting limits are below lowest screening level***
	1-Ethyl-4-methyl-benzene 2-Hexanone 2-Propanol d-Limonene Ethanol n-Butyl Acetate n-Heptane n-Nonane n-Octane Propylene	1,1,1-Trichloroethane 1,1-Dichloroethene 1,2-Dichlorobenzene 1,3-Dichlorobenzene Acetone Allyl chloride Bromoform Carbon disulfide Chlorobenzene Chloroethane cis-1,2-Dichloroethene Isopropylbenzene Methyl methacrylate Methyl tert-butyl ether (MTBE) Styrene trans-1,2-Dichloroethene Trichlorofluoromethane
		Constituents not detected and no standard available for comparison.
		1,2-Dichlorotetrafluoroethane Alpha-Pinene

TABLE 3b
Summary Statistics for Indoor and Outdoor Air Samples By Building and Floor - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

	Concentrations in Air (µg/m^3)								
	Indoor Air - Building 7/8 Basement				Indoor Air - Building 7/8 1st Floor				Outdoor Air
Constituent	minimum	median	maximum	n	minimum	median	maximum	n	result
1,2,4-Trimethylbenzene	1.8	2.4	3	2	0.26	0.28	0.3	3	0.19
1,3,5-Trimethylbenzene	0.83	1.12	1.4	2	ND (0.12)	ND (0.12)	ND (0.18)	3 (3 ND)	ND (0.12)
Acrolien	1.1	1.15	1.2	2	0.77	0.99	1.4	3	0.61
Benzene	8.7	10.35	12	2	ND(0.088)	0.56	0.56	3 (2 ND)	0.48
Carbon tetrachloride	0.47	0.47	0.47	2	0.45	0.46	0.46	3	0.46
Chloroform	0.2	0.21	0.22	2	ND (0.22)	0.45	0.66	3 (1 ND)	ND (0.13)
Naphthalene	3.6	6.80	10	2	0.38	0.5	0.59	3	0.13
Tetrahydrofuran	0.91	1.16	1.4	2	ND (0.61)	ND (0.88)	ND (1)	3 (3 ND)	ND (0.15)
XYLENES (total) - sum of isomers	9.9	11.3	12.7	2	1	1.03	1.09	3	0.71

Notes:
n = number of samples
ND = Non Detected
(7 ND) = number of samples with non detect out of the total number of samples
ND (0.14) = RL for non detects

Figures



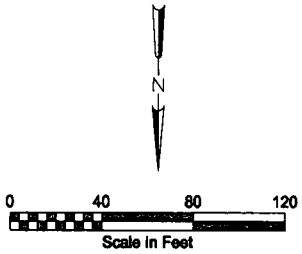


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Figure 1
115 River Road
Building Layout

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2008 | File Name buildings_all_general.dgn

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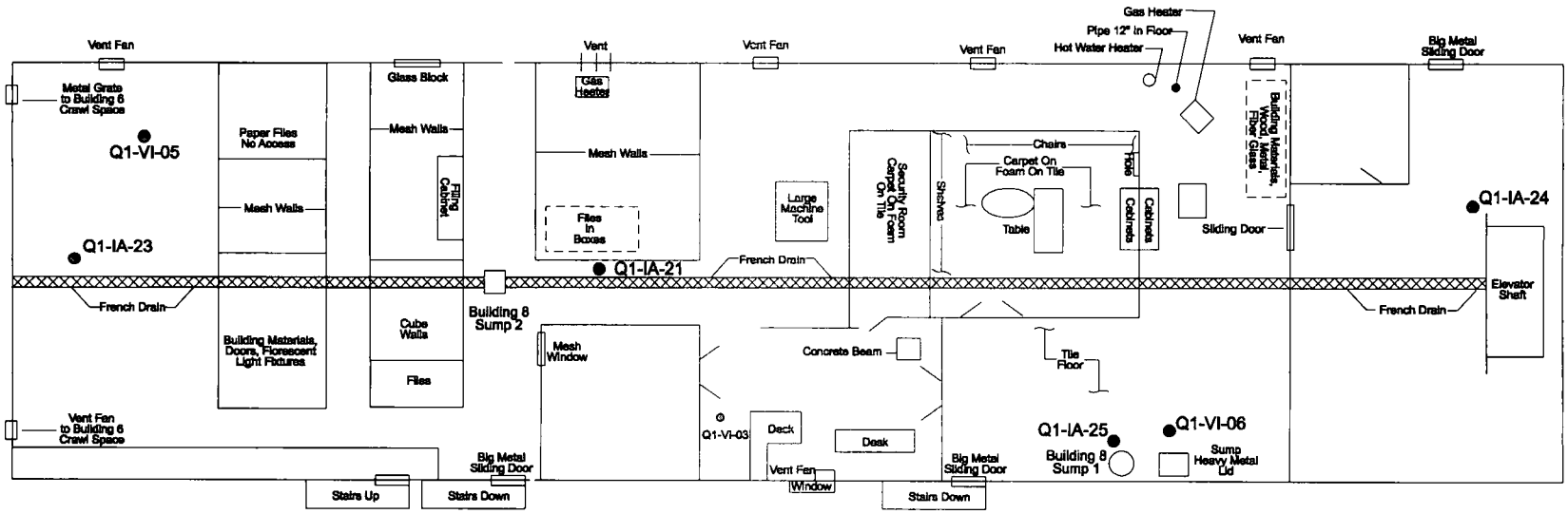

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Figure 2
Building 7/ 8 Basement Floor Plan

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

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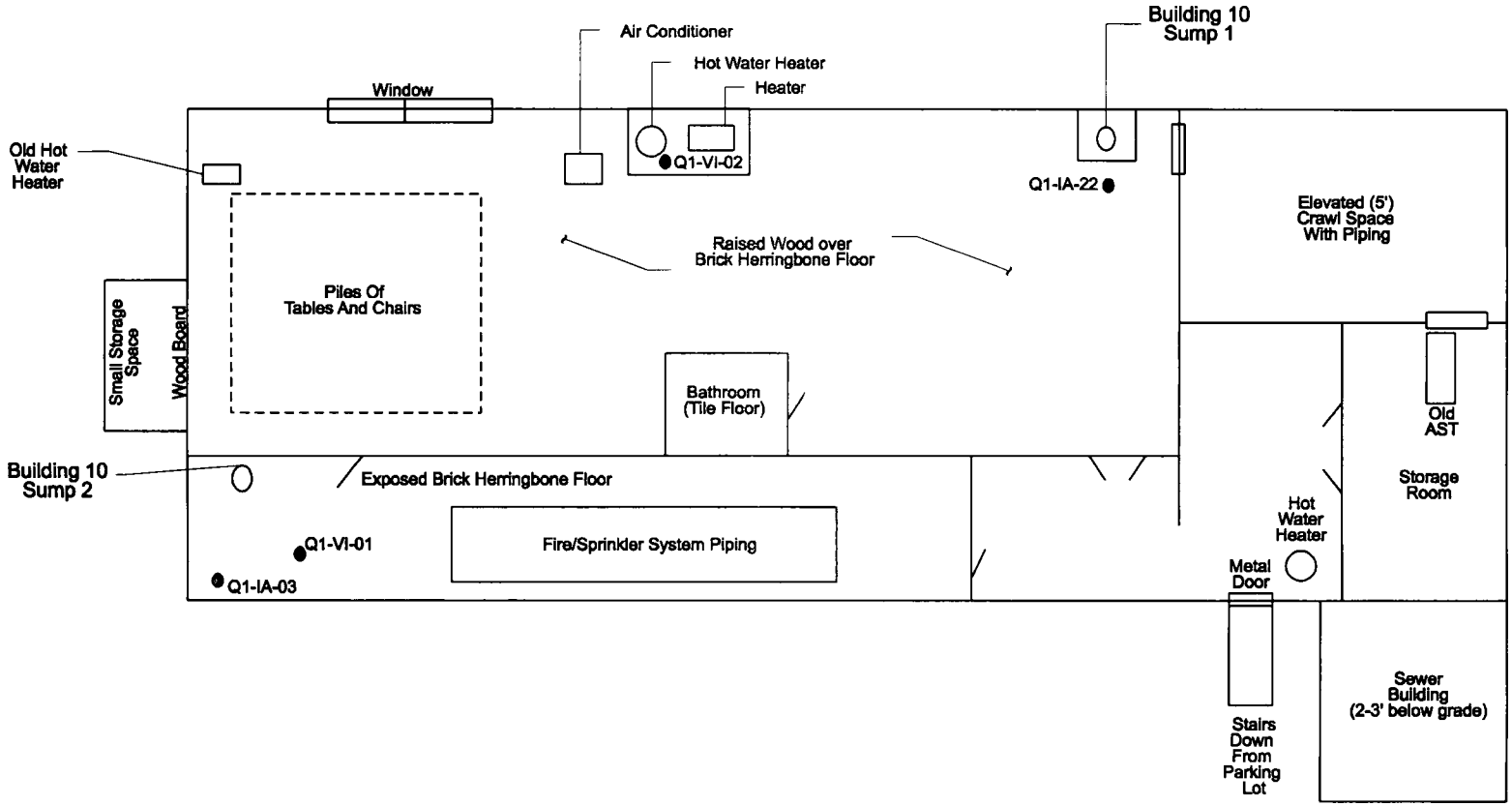

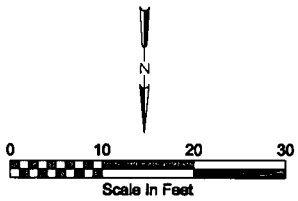

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Figure 3
Building 10 Basement Floor Plan

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2008 | File Name bldg 10-basement_rev2.dgn

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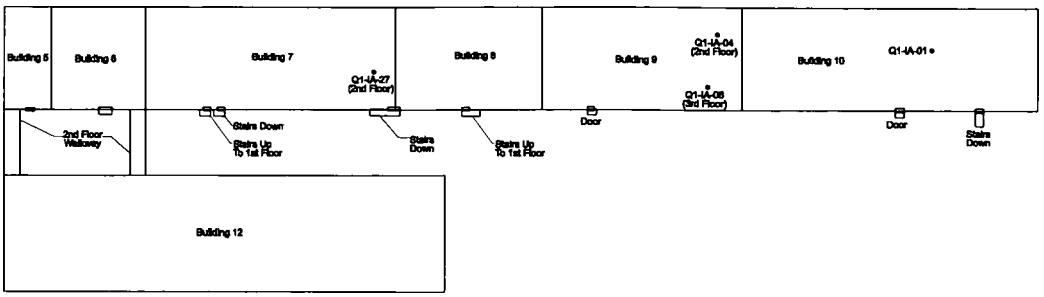
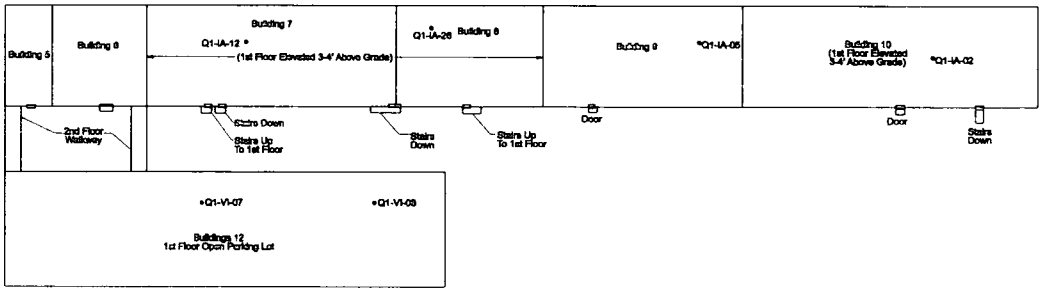
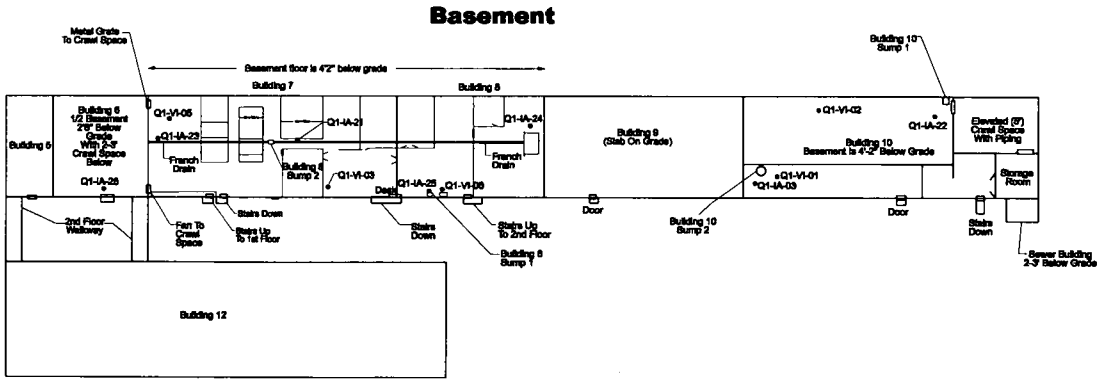
Second and Third Floor

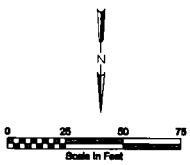


First Floor



Basement





* Sample Locations are approximate.

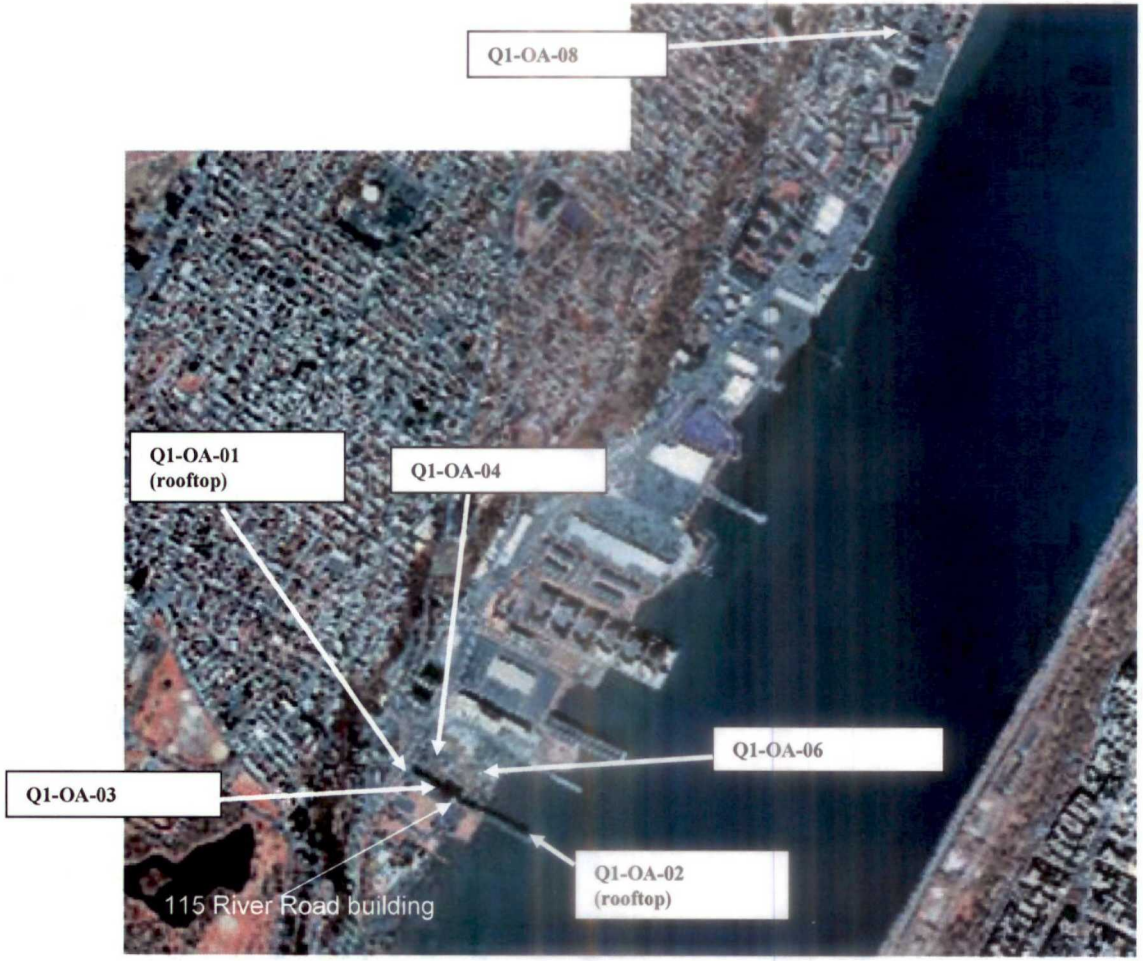
CH2MHILL

Figure 4
115 River Road - March 2008 Indoor Air and Subslab Sample Locations

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2008 | File Name buildings_all three floors.dgn

Taurus\proj\HoneyWell\NC\Quanta_326576\GIS & Graphics\CAD Files\Working Drawings\Vapor Intrusion\Buildings_All Three Floors.dgn



Aerial Image from: http://njgin.nj.gov/OIT_IW/index.jsp

Figure 5
Outdoor Air Sampling Locations
Quanta Resources Site, Edgewater, NJ

Attachment A

Sample Location Key and Sampling Logs

Table A-1a – Sample Location Key – March 2008

Table A-1b – Sample Location Key – April 2008

Table A-2a – Indoor and Ambient Air Sampling Log – March 2008

Table A-2b – Indoor and Ambient Air Sampling Log – April 2008

Table A-3 – Subslab Soil Gas Sampling Log – March 2008

ATTACHMENT A-1a
Sample Location Key - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-IA-01	10	3rd	Virgona & Virgona Architects - on conference room table
Q1-IA-02	10	1st	Stairwell - under stairs
Q1-IA-03	10	Basement	In small pipe room next to Q1-VI-01
Q1-IA-04	9	2nd	Industry Modeling Agency - upstairs, turn left, corner office on bookcase
Q1-IA-05	9	1st	Industry Modeling Agency - downstairs office next to stairs in corner
Q1-IA-06	8 (9)	3rd	Unitex Hosiery middle office - Trend Source LLC Suite 837 - on desk
Q1-IA-12	7	1st	Daycare Center - toddler room on table
Q1-IA-21	8	Basement	Hallway between Q1-VI-03 and Q1-VI-05 on table
Q1-IA-22	10	Basement	Main room next to Bldg 10 Sump 1
Q1-IA-23	7	Basement	Far east room - middle of room next to floor drain
Q1-IA-24	8	Basement	Far west room - middle of room, under Bldg 9
Q1-IA-25	8	Basement	Main room next to Bldg 8 Sump 1
Q1-IA-26	8	1st	Daycare Center - kitchen on floor next to bathroom
Q1-IA-27	7	2nd	Daycare Center - top of stairs, room to the right
Q1-IA-28	6	Basement	Under the stairwell

Subslab Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-VI-01	10	Basement	In small pipe room
Q1-VI-02	10	Basement	Main room next to heater
Q1-VI-03	7	Basement	In office room next to fish tank
Q1-VI-05	7	Basement	Far east room near fan
Q1-VI-06	8	Basement	Main room next to Bldg 8 Sump 1
Q1-VI-07	12	Parking Lot	East side of parking lot next to storage room
Q1-VI-08	12	Parking Lot	West side of parking lot

Outdoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-OA-01	6	Roof	Roof - climb ladder and place on roof of bldg 6
Q1-OA-02	10	Roof	Roof - cross over air handling units go down plank and place on roc
Q1-OA-03	NA	Ground	South of 115 Building - between bushes in parking lot
Q1-OA-04	NA	Fence	North Site - Chain to fence near end of ramp
Q1-OA-06	NA	Fence	NE Site Corner - chain to fence near bulkhead
Q1-OA-07	NA	Ground	Ambulance Building - 915 River Road - chain to orange box foc

ATTACHMENT A-1b
Sample Location Key - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-IA-12	7	1st	Daycare Center - toddler room on table
Q1-IA-21	8	Basement	Hallway between Q1-VI-03 and Q1-VI-05 on table
Q1-IA-23	7	Basement	Far east room - middle of room next to floor drain
Q1-IA-26	8	1st	Daycare Center - kitchen on floor next to bathroom

Outdoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-OA-01	6	Roof	Roof - climb ladder and place on roof of bldg 6

ATTACHMENT A-2a

Indoor Air and Outdoor Air Sampling Log - March 2008

115 River Road Building

Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Initial Canister Pressure ("Hg)	Start Date	Start Time	End Date	End Time	Final Pressure ("Hg)	Flow Controller Rate (ml/min)	Temp oF
Q1-IA-01-032308	10	3rd floor - Virgona & Virgona - conference room table	1135	0458	0545	-30.0	3/22/2008	13:17	3/23/2008	13:01	-12.5	24 Hour Period	66
Q1-IA-02-032308	10	1st floor - under stairwell	0640	0656	0398	-29.0	3/22/2008	13:14	3/23/2008	13:19	-6.5	24 Hour Period	65
Q1-IA-03-032308	10	Basement - in small pipe room next to Q1-VI-01	1206	0126	0731	-29.0	3/22/2008	12:50	3/23/2008	13:08	0.0	24 Hour Period	55
Q1-IA-04-032308	9	2nd floor - Industry Modeling Agency - west corner office	1503	0601	0498	-30.0	3/22/2008	13:37	3/23/2008	13:29	-8.5	24 Hour Period	70
Q1-IA-05-032308	9	1st floor - Industry Modeling Agency - southwest corner office	1173	0639	0573	-30.0	3/22/2008	13:39	3/23/2008	13:30	-7.0	24 Hour Period	68
Q1-IA-06-032308	8/9	3rd floor - Unitex middle office (Trend Source LLC Suite 837)	0655	0545	0219	-29.0	3/22/2008	13:31	3/23/2008	13:34	-8.0	24 Hour Period	58
Q1-IA-12-032308	7	1st floor - Daycare - Toddler Room	0614	0486	0591	-30.0	3/22/2008	13:58	3/23/2008	13:43	-11.0	24 Hour Period	68
Q1-IA-21-032308	7/8	Basement - in hallway btwn VI-03 and VI-05	0718	0483	0469	-26.0	3/22/2008	14:28	3/23/2008	14:24	-7.0	24 Hour Period	68
Q1-IA-22-032308	10	Basement - main room next to Bldg Sump 1	0510	0663	0582	-30.0	3/22/2008	12:51	3/23/2008	13:10	-8.0	24 Hour Period	55
Q1-IA-23-032308	7/8	Basement - far east room - middle of room next to drain	1283	0514	0375	-30.0	3/22/2008	14:29	3/23/2008	14:25	-8.0	24 Hour Period	68
Q1-IA-24-032308	7/8	Basement - far west room - middle of room	0970	0099	0381	-27.0	3/22/2008	14:25	3/23/2008	14:20	-3.0	24 Hour Period	64
Q1-IA-25-032308	7/8	Basement - main room next to Bldg 8 Sump 1	1312	0492	0642	-30.0	3/22/2008	14:26	3/23/2008	14:22	-8.5	24 Hour Period	70
Q1-IA-26-032308	7/8	1st floor - Daycare - kitchen on floor next to bathroom	0425	0608	0298	-29.0	3/22/2008	14:11	3/23/2008	13:45	-4.0	24 Hour Period	68
Q1-IA-27-032308	7/8	2nd floor - Daycare - top of stairs, room to the right	0910	0548	0639	-30.0	3/22/2008	15:37	3/23/2008	15:23	-9.0	24 Hour Period	68
Q1-IA-28-032308	6	1/2 Basement - under stairwell	0530	0343	0397	-29.5	3/22/2008	15:44	3/23/2008	15:07	-4.0	24 Hour Period	65
Q1-DUP1-032308	7	1st floor - Daycare - Toddler Room	1101	0510	0463	-28.5	3/22/2008	13:58	3/23/2008	13:43	-9.5	24 Hour Period	68
Q1-DUP2-032308	6	Basement - far east room - middle of room next to drain	0595	065_	0680	-29.5	3/22/2008	14:29	3/23/2008	14:25	0.0	24 Hour Period	68
Q1-OA-01-032308	6	Building 6 roof	1372	0549	0748	-29.5	3/22/2008	14:44	3/23/2008	14:42	-1.5	24 Hour Period	56

ATTACHMENT A-2a

Indoor Air and Outdoor Air Sampling Log - March 2008

115 River Road Building

Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Initial Canister Pressure ("Hg)	Start Date	Start Time	End Date	End Time	Final Pressure ("Hg)	Flow Controller Rate (ml/min)	Temp oF
Q1-OA-02-032308	10	Building 10 roof	0557	0257	0438	-30.0	3/22/2008	14:46	3/23/2008	14:45	-12.5	24 Hour Period	56
Q1-OA-03-032308	NA	South of 115 Bldg - chained to the fence in the parking lot behind a bush	0661	0583	0707	-30.0	3/22/2008	15:25	3/23/2008	15:14	-8.0	24 Hour Period	Variable
Q1-OA-04-032308	NA	North Site - chained to fence near side entrance	1042	0661	0627	-29.5	3/22/2008	16:25	3/23/2008	17:05	-6.5	24 Hour Period	Variable
Q1-OA-05-mmddyy	NA	NE Site Corner - chained to fence	not sampled due to lack of canisters										
Q1-OA-06-032308	NA	NE Site Corner - chained to fence near bulkhead	1310	0525	0495	-30.0	3/22/2008	16:30	3/23/2008	17:10	-6.5	24 Hour Period	Variable
Q1-OA-07-032308	NA	Ambulance	1381	0384	0359	-28.0	3/22/2008	16:50	3/23/2008	17:38	9.0	24 Hour Period	Variable
Q1-IA-08-mmddyy	NA	Fire Department	not sampled due to lack of canisters										

ATTACHMENT A-2b
Indoor Air and Outdoor Air Sampling Log - Arpil 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Initial Canister Pressure ("Hg)	Start Date	Start Time	End Date	End Time	Final Pressure ("Hg)	Flow Controller Rate (ml/min)	Temp oF
Q1-IA-12-042708	7	1st floor - Daycare - Toddler Room	1030	0492	0105	-29.0	4/26/2008	11:53	4/27/2008	10:40	-8.0	24 Hour Period	68
Q1-IA-21-042708	8	Basement - in hallway btwn VI-03 and VI-05	0877	0581	0539	-30.0	4/26/2008	10:55	4/27/2008	10:24	-1.5	24 Hour Period	68
Q1-IA-23-042708	7	Basement - far east room - middle of room next to drain	1334	0257	0115	-27.5	4/26/2008	10:49	4/27/2008	10:25	-0.5	24 Hour Period	68
Q1-IA-26-042708	8	1st floor - Daycare - kitchen on floor next to bathroom	0538	0650	0564	-29.0	4/26/2008	11:47	4/27/2008	10:37	0.0	24 Hour Period	68
Q1-DUP1-042708	7	1st floor - Daycare - Toddler Room	1188	0692	0697	-30.0	4/26/2008	11:53	4/27/2008	10:40	-2.5	24 Hour Period	68
Q1-OA-01-042708	6	Building 6 roof	1126	0611	0210	-30.0	4/26/2008	11:25	4/27/2008	10:32	0.0	24 Hour Period	Variable

ATTACHMENT A-3
Subslab Soil Gas Sampling Log - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Location Description	Canister ID	Flow Controller ID	Pressure Gauge ID	Date	Initial PID in Probe (ppm)	Purge Start Time	Purge End Time	Purge Rate (mL/min)	PID from Purge (ppm)	Helium Leak Check (ppm)	Sample Start Time	Initial Pressure ("Hg)	Sample Finish Time	Final Pressure (" Hg)	Temp (oF)	Comment
Q1-VI-01-mmddyy	10	In small pipe room				3/24/2008	22.9	19:20										NOT SAMPLED. Water in tubing when pump turned on.
Q1-VI-02-032408	10	Main room next to heater	0563	0437	0536	3/24/2008	0	19:33	19:44		0.0	9600	19:59	-28.5	20:05	-3.5	55	NOT ANALYZED. Re-installed probe on 03/24 and re-sampled on 03/25.
Q1-VI-02-032508	10	Main room next to heater	0021	0076	0482	3/25/2008	0.2	19:00	19:08		0.2	50	19:11	-28.5	19:18	-3.0	56	
Q1-VI-03-032408	8	In office room next to fish tank	0620	0053	0607	3/24/2008	40	17:50	17:55		0.0	75	17:56					NOT SAMPLED. Water in tubing when canister was opened.
Q1-VI-05-mmddyy	8	Far east room near fan				3/24/2008	3.6	17:19										NOT SAMPLED. Water in tubing when pump turned on.
Q1-VI-06-032408	8	Main room next to Bldg Sump 1	0192	0051	0521	3/24/2008	0.3	18:34	18:47		0.0	125	18:51	-30.0	18:57	-4.0	66	
Q1-VI-07-032608	12	East side of parking lot next to storage room	0298	0056	0497	3/26/2008	0.2	9:53	10:04		0.2	50	10:05	-30.0	10:11	-3.0	51	Probe cap stuck in 07/2006. RE-INSTALLED 3/25/2008
Q1-VI-08-032308	12	West side of parking lot	0494	0059	0175	3/23/2008	0	18:40	18:49		0.0	0	18:50	-30.0	18:55	-3.0	45	NOT ANALYZED. Re-sampled on 03/25 with correct purging procedures.
Q1-VI-08-032508	12	West side of parking lot	0313	0049	0461	3/25/2008	0	10:03	10:09		0.0	175	10:11	-27.5	10:19	-3.5	36	

Attachment B

Analytical Data

Table B-1a - Indoor Air - March 2008 Analytical Results

Table B-1b - Indoor Air - April 2008 Analytical Results

Table B-2 - Subslab Soil Gas- March 2008 Analytical Results

Table B-3a - Outdoor Air - March 2008 Analytical Results

Table B-3b - Outdoor Air - April 2008 Analytical Results

ATTACHMENt B-1a
Indoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 10 - Virgona & Virgona Architects	Building 10 - 1st floor, stairwell	Building 10 - Basement	Building 9 - Modeling Agency	Building 9 - Modeling Agency	Building 8 - Unitex Hoisery	Building 7 - Daycare Center	Building 7 - Daycare Center	Building 7/8 - Basement	Building 10 - Basement
		LOCATION DESCRIPTION	3rd floor conference room	Right stairwell at entrance	Basement in northeastern most storage room	Office Downstairs	Upstairs office west	2nd floor, Conference Room	Toddler room	Toddler room	Hallway between Q1-VI-03 and Q1-VI-05 on table	Main room next to Sump
		LOCATION ID	Q1-IA-01	Q1-IA-02	Q1-IA-03	Q1-IA-04	Q1-IA-05	Q1-IA-06	Q1-IA-12	Q1-IA-12	Q1-IA-21	Q1-IA-22
		FIELD SAMPLE ID	Q1-IA-01-032308	Q1-IA-02-032308	Q1-IA-03-032308	Q1-IA-04-032308	Q1-IA-05-032308	Q1-IA-06-032308	Q1-IA-12-032308	Q1-DUP1-032308	Q1-IA-21-032308	Q1-IA-22-032308
		SAMPLE DATE	3/23/2008	3/23/2008	3/23/2008	3/23/2008	3/23/2008	3/23/2008	3/23/2008	3/23/2008,	3/23/2008	3/23/2008
		SAMPLE PURPOSE	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Duplicate	Normal	Normal
Parameter Name	Units	Analytical Method										
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	NA	0.54 J	0.56 J	0.51 J	0.55 J	0.59 J	0.61 J	0.55 J	0.55 J	0.6
1,1-DICHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,1-DICHLOROETHENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	NA	0.69 U	0.27 J	0.87	0.81	0.5 J	0.64 J	0.6 J	5.1	0.44 J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (CFC 114)	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.18 J
1,2-DICHLOROBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2-DICHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2-DICHLOROPROPANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.18 J
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.33 J	0.33 J	0.16 J	0.29 J	0.24 J	2.5	0.17 J
1,3-BUTADIENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,3-DICHLOROBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1,4-DICHLOROBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.88	0.8	0.25 J	0.89 U	0.9 U	0.78 U	0.59 U
1,4-DIOXANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.27 J	0.27 J	0.19 J	0.25 J	0.24 J	2.5	0.18 J
2-BUTANONE (MEK)	ug/m3	TO-15	NA	1.1 U	2 U	2.7 U	2 U	1.8 U	1.5 U	2.2 U	2.3 U	3
2-HEXANONE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.49 J	0.4 J	0.19 J	0.26 J	0.29 J	0.26 J	0.24 J
2-PROPANOL	ug/m3	TO-15	NA	0.81 J	4.1	89	77	9.1	3.8	3.4	5.8	12
4-METHYL-2-PENTANONE	ug/m3	TO-15	NA	0.69 U	0.28 J	9.6	8.8	0.18 J	0.27 J	0.28 J	1.5	0.17 J
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	NA	1.2	7.7	3.9	4.3	1.8	5.4	6.3	2.5	4.1
ACETONE	ug/m3	TO-15	NA	11 U	8 U	42	31	12 U	9.5 U	13 U	10 U	13 U
ACETONITRILE	ug/m3	TO-15	NA	0.17 J	0.19 J	0.6 J	0.59 J	0.17 J	0.24 J	0.38 J	0.18 J	0.16 J
ACROLEIN	ug/m3	TO-15	NA	0.69 U	0.39 U	1.6	0.47 U	0.66 U	0.69 U	1.2	0.63 U	0.97
ACRYLONITRILE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
ALLYL CHLORIDE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
ALPHA-PINENE	ug/m3	TO-15	NA	0.69 U	0.15 J	1.4	1.3	1.5	0.55 J	0.25 J	0.38 J	0.24 J
BENZENE	ug/m3	TO-15	NA	0.56	0.76	1.8	1.9	0.61	3.1	3	20	0.79
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
BROMODICHLOROMETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
BROMOFORM	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
BROMOMETHANE	ug/m3	TO-15	NA	0.14 J	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.16 J
CARBON DISULFIDE	ug/m3	TO-15	NA	0.34 U	0.41 U	0.44 U	0.49 U	0.36 U	0.39 U	0.45 U	0.35 U	0.33 U
CARBON TETRACHLORIDE	ug/m3	TO-15	NA	0.42 J	0.41 J	0.44 J	0.42 J	0.45 J	0.46 J	0.47 J	0.41 J	0.43 J
CHLOROBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
CHLORODIBROMOMETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
CHLOROETHANE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
CHLOROFORM	ug/m3	TO-15	NA	0.69 U	0.75 U	0.23 J	0.22 J	0.32 J	0.33 J	0.33 J	0.78 U	0.59 U
CHLOROMETHANE	ug/m3	TO-15	NA	0.73	0.63 J	0.91	0.86	0.69 J	0.69 J	0.73 J	0.75 J	0.67
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
CYCLOHEXANE	ug/m3	TO-15	NA	0.69 U	0.75 U	3.9	4.1	0.77 U	0.89 U	0.9 U	1.1	0.59 U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	NA	2.3	2.3	4.7	5.3	2.3	4.8	4.7	2.1	2.2
D-LIMONENE	ug/m3	TO-15	NA	0.69 U	1.2	69	75	2.1	1.3	0.9 U	0.18 J	1
ETHANOL	ug/m3	TO-15	NA	10	19	1200	1100	45	130	120	12	14
ETHYLBENZENE	ug/m3	TO-15	NA	0.69 U	0.48 J	1.4	1.4	0.36 J	1.7	1.7	16	0.81
HEXACHLOROBUTADIENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.59 U
ISOPROPYLBENZENE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.16 J	0.77 U	0.18 J	0.9 U	1.7	0.59 U
METHYL METHACRYLATE	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.73
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	NA	0.69 U	0.75 U	0.81 U	0.72 U	0.77 U	0.89 U	0.9 U	0.78 U	0.24 J
METHYLENE CHLORIDE	ug/m3	TO-15	NA	0.3 J	0.29 J	0.39 J	0.44 J	0.59 J	0.29 J	0.33 J	0.26 J	0.26 J
NAPHTHALENE	ug/m3	TO-15	NA	0.14 U	0.31	1.5	1.2	0.97	0.61	0.41	11	0.55
N-BUTYL ACETATE	ug/m3	TO-15	NA	0.69 U	0.75 U	5.8	1.6	0.31 J	0.43 J	0.29 J	0.78 U	0.16 J
N-HEPTANE	ug/m3	TO-15	NA	0.24 J	0.31 J	2.8	3.1	1.1	0.55 J	0.59 J	0.69 J	0.36 J
N-HEXANE	ug/m3	TO-15	NA	0.28 J	0.47 J	2.7	2.8	0.22 J	0.41 J	0.53 J	1.3	0.56 J

ATTACHMENt B-1a
Indoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 10 - Virgona & Virgona Architects		Building 10 - 1st floor, stairwell		Building 10 - Basement		Building 9 - Modeling Agency		Building 9 - Modeling Agency		Building 8 - Unitex Hoisery		Building 7 - Daycare Center		Building 7 - Daycare Center		Building 7/8 - Basement		Building 10 - Basement	
		LOCATION DESCRIPTION	3rd floor conference room		Right stairwell at entrance		Basement in northeastern most storage room		Office Downstairs		Upstairs office west		2nd floor, Conference Room		Toddler room		Toddler room		Hallway between Q1-VI-03 and Q1-VI-05 on table		Main room next to Sump	
		LOCATION ID	Q1-IA-01		Q1-IA-02		Q1-IA-03		Q1-IA-04		Q1-IA-05		Q1-IA-06		Q1-IA-12		Q1-IA-12		Q1-IA-21		Q1-IA-22	
		FIELD SAMPLE ID	Q1-IA-01-032308		Q1-IA-02-032308		Q1-IA-03-032308		Q1-IA-04-032308		Q1-IA-05-032308		Q1-IA-06-032308		Q1-IA-12-032308		Q1-DUP1-032308		Q1-IA-21-032308		Q1-IA-22-032308	
		SAMPLE DATE	3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008	
		SAMPLE PURPOSE	Normal		Normal		Normal		Normal		Normal		Normal		Normal		Duplicate		Normal		Normal	
Parameter Name	Units	Analytical Method																				
N-NONANE	ug/m3	TO-15	NA		0.69	U	0.29	J	0.57	J	0.43	J	0.3	J	0.39	J	0.39	J	0.47	J	0.59	U
N-OCTANE	ug/m3	TO-15	NA		0.69	U	0.18	J	0.45	J	0.49	J	0.77	U	0.39	J	0.47	J	0.59	J	0.25	J
N-PROPYLBENZENE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.81	U	0.72	U	0.77	U	0.89	U	0.9	U	0.68	J	0.59	U
O-XYLENE	ug/m3	TO-15	NA		0.69	U	0.43	J	1.1		1.2		0.34	J	1.3		1.2		12		0.64	
PROPYLENE	ug/m3	TO-15	NA		1.3	J	8.5	J	6.8	J	7	J	1.2	J	3.6	J	3.7	J	18	J	6.7	J
STYRENE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.64	J	0.62	J	0.24	J	0.89	U	0.9	U	0.78	U	0.59	U
TETRACHLOROETHENE	ug/m3	TO-15	NA		0.15	J	0.75	U	2.7		2.9		0.77	U	0.89	U	0.3	J	0.78	U	0.17	J
TETRAHYDROFURAN	ug/m3	TO-15	NA		0.69	U	0.31	J	0.81	U	0.72	U	0.77	U	0.89	U	0.9	U	0.37	J	0.65	
TOLUENE	ug/m3	TO-15	NA		1.2		1.6		3.5		4.4		2.7		3		2.7		8.2		1.6	
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.81	U	0.72	U	0.77	U	0.89	U	0.9	U	0.78	U	0.59	U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.81	U	0.72	U	0.77	U	0.89	U	0.9	U	0.78	U	0.59	U
TRICHLOROETHENE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.19	J	0.22	J	0.77	U	0.89	U	0.9	U	0.78	U	0.59	U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	NA		1.2		1.3		1.6		1.7		3.9		2.5		2.4		1.1		1.2	
VINYL ACETATE	ug/m3	TO-15	NA		6.9	U	7.5	U	8.1	U	7.2	U	7.7	U	8.9	U	9	U	7.8	U	0.69	U
VINYL CHLORIDE	ug/m3	TO-15	NA		0.69	U	0.75	U	0.81	U	0.72	U	0.77	U	0.89	U	0.9	U	0.78	U	0.59	U
XYLENES, M & P	ug/m3	TO-15	NA		0.35	J	1.4	J	2.5		2.7		0.97	J	2.7		2.5		22		2.4	

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not Analyzed

ATTACHMENt B-1a
Indoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 7/8 - Basement				Building 7/8 - Basement		Building 7/8 - Basement		Building 7/8 - Day Care Center		Building 7 - Day Care Center		Building 6 - 1/2 Basement	
		LOCATION DESCRIPTION	Far east room - Middle of room next to floor drain				Far west room - Middle of room		Main room next Sump		1st Floor Kitchen, next to bathroom		2nd Floor - Top of stairs, room to right		Under the Stairwell	
		LOCATION ID	Q1-IA-23		Q1-IA-23		Q1-IA-24		Q1-IA-25		Q1-IA-26		Q1-IA-27		Q1-IA-28	
		FIELD SAMPLE ID	Q1-IA-23-032308		Q1-DUP2-032308		Q1-IA-24-032308		Q1-IA-25-032308		Q1-IA-26-032308		Q1-IA-27-032308		Q1-IA-28-032308	
		SAMPLE DATE	3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008	
		SAMPLE PURPOSE	Normal		Duplicate		Normal		Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method														
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.56	J	0.55	J	0.53	J	0.57	J	0.53	J	0.57	J	0.58	J
1,1-DICHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	4.1		4.2		2.3		2.7		0.32	J	0.37	J	1.3	
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (CFC 114)	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	1.9		2		1.1		1.3		0.72	U	0.77	U	0.65	J
1,3-BUTADIENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.15	J
1,4-DIOXANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	2		1.9		1.2		1.4		0.72	U	0.16	J	0.67	J
2-BUTANONE (MEK)	ug/m3	TO-15	2.7		2.2	U	1.5	U	1.9	U	1.4	U	1.7	U	1.5	U
2-HEXANONE	ug/m3	TO-15	0.23	J	0.27	J	0.14	J	0.17	J	0.18	J	0.17	J	0.14	J
2-PROPANOL	ug/m3	TO-15	5.2		4.1		3.8		4.4		2.3		3.2		6.1	
4-METHYL-2-PENTANONE	ug/m3	TO-15	3	J	4.9	J	0.36	J	0.42	J	0.18	J	0.24	J	0.91	
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	3.4		2.4		2.8		3.7		3.7		11		2.1	
ACETONE	ug/m3	TO-15	10	U	7.9	U	7.8	U	11	U	7.4	U	12	U	8.7	U
ACETONITRILE	ug/m3	TO-15	0.75	U	0.16	J	0.69	U	0.72	U	0.17	J	3.3		0.18	J
ACROLEIN	ug/m3	TO-15	0.71	U	0.39	U	0.47	U	0.55	U	0.45	U	0.88	U	0.58	U
ACRYLONITRILE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
ALLYL CHLORIDE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
ALPHA-PINENE	ug/m3	TO-15	0.29	J	0.38	J	0.38	J	0.26	J	0.18	J	0.19	J	0.28	J
BENZENE	ug/m3	TO-15	19		18		9.1		10		1.5		1.7		7	
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
BROMOFORM	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
BROMOMETHANE	ug/m3	TO-15	0.16	J	0.12	J	0.15	J	0.72	U	0.15	J	0.19	J	0.15	J
CARBON DISULFIDE	ug/m3	TO-15	0.35	U	0.28	U	0.31	U	0.32	U	0.53	U	0.88	U	0.3	U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.44	J	0.44	J	0.43	J	0.44	J	0.47	J	0.43	J	0.42	J
CHLOROBENZENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.17	J	0.72	U	0.77	U	0.7	U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
CHLOROETHANE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
CHLOROFORM	ug/m3	TO-15	0.75	U	0.2	J	0.69	U	0.2	J	0.53	J	0.5	J	0.7	U
CHLOROMETHANE	ug/m3	TO-15	0.67	J	0.74		0.73		0.72		0.7	J	0.73	J	0.71	
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
CYCLOHEXANE	ug/m3	TO-15	0.94		0.97		0.59	J	0.65	J	0.72	U	0.77	U	0.42	J
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.1		2.1		2.1		2.1		3.3		3.4		2.3	
D-LIMONENE	ug/m3	TO-15	0.75	U	0.39	J	0.55	J	0.72	U	0.63	J	0.77	U	0.7	U
ETHANOL	ug/m3	TO-15	11		12		9.3		8.2		59		91		18	
ETHYLBENZENE	ug/m3	TO-15	15		14		7.1		8.4		0.76		0.88		4.7	
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
ISOPROPYLBENZENE	ug/m3	TO-15	1.5		1.4		0.73		0.84		0.72	U	0.77	U	0.51	J
METHYL METHACRYLATE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.24	J	0.28	J	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
METHYLENE CHLORIDE	ug/m3	TO-15	0.26	J	0.26	J	0.25	J	0.28	J	0.26	J	0.76	J	0.27	J
NAPHTHALENE	ug/m3	TO-15	6.6	J	9.7	J	3.5		6.3		0.2		0.27		1.6	
N-BUTYL ACETATE	ug/m3	TO-15	0.75	U	0.16	J	0.69	U	0.72	U	0.15	J	0.29	J	0.7	U
N-HEPTANE	ug/m3	TO-15	0.61	J	0.67		0.47	J	0.46	J	0.29	J	0.43	J	0.44	J
N-HEXANE	ug/m3	TO-15	1.1		1.2		1		1.1		0.3	J	0.48	J	0.58	J

ATTACHMENt B-1a
Indoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 7/8 - Basement				Building 7/8 - Basement		Building 7/8 - Basement		Building 7/8 - Day Care Center		Building 7 - Day Care Center		Building 6 - 1/2 Basement	
		LOCATION DESCRIPTION	Far east room - Middle of room next to floor drain				Far west room - Middle of room		Main room next Sump		1st Floor Kitchen, next to bathroom		2nd Floor - Top of stairs, room to right		Under the Stairwell	
		LOCATION ID	Q1-IA-23		Q1-IA-23		Q1-IA-24		Q1-IA-25		Q1-IA-26		Q1-IA-27		Q1-IA-28	
		FIELD SAMPLE ID	Q1-IA-23-032308		Q1-DUP2-032308		Q1-IA-24-032308		Q1-IA-25-032308		Q1-IA-26-032308		Q1-IA-27-032308		Q1-IA-28-032308	
		SAMPLE DATE	3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008	
		SAMPLE PURPOSE	Normal		Duplicate		Normal		Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method														
N-NONANE	ug/m3	TO-15	0.31	J	0.34	J	0.29	J	0.29	J	0.2	J	0.37	J	0.21	J
N-OCTANE	ug/m3	TO-15	0.65	J	0.66		0.46	J	0.32	J	0.17	J	0.22	J	0.7	U
N-PROPYLBENZENE	ug/m3	TO-15	0.6	J	0.6	J	0.41	J	0.44	J	0.72	U	0.77	U	0.22	J
O-XYLENE	ug/m3	TO-15	10		10		5.2		6.2		0.61	J	0.7	J	3.4	
PROPYLENE	ug/m3	TO-15	16	J	20	J	16	J	13	J	1.9	J	2.2	J	7.6	J
STYRENE	ug/m3	TO-15	0.75	U	0.61	U	0.27	J	0.72	U	0.72	U	0.77	U	0.7	U
TETRACHLOROETHENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.15	J	0.77	U	0.7	U
TETRAHYDROFURAN	ug/m3	TO-15	0.55	J	0.46	J	0.69	U	0.72	U	0.72	U	0.25	J	0.7	U
TOLUENE	ug/m3	TO-15	7.4		7.2		4.2		5		1.6		2.1		3.3	
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
TRICHLOROETHENE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.1		1.2		1.3		1.1		1.6		1.6		1.4	
VINYL ACETATE	ug/m3	TO-15	7.5	U	6.1	U	6.9	U	7.2	U	7.2	U	7.7	U	7	U
VINYL CHLORIDE	ug/m3	TO-15	0.75	U	0.61	U	0.69	U	0.72	U	0.72	U	0.77	U	0.7	U
XYLENES, M & P	ug/m3	TO-15	21		20		9.7		12		1.3	J	1.5	J	6.9	

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not Analyzed

ATTACHMENT B-1b
Indoor Air Sampling Results - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 7 - Daycare Center		Building 8 - Basement	Building 7 - Basement	Building 7/8 - Daycare Center
		LOCATION DESCRIPTION	Infant room		Hallway between Q1-VI-03 and Q1-VI-05 on Table	Far East Room - Middle of room next to floor drain	1st floor - kitchen, On floor next to bathroom
		LOCATION ID	Q1-IA-12	Q1-IA-12	Q1-IA-21	Q1-IA-23	Q1-IA-26
		FIELD SAMPLE ID	Q1-IA-12-042708	Q1-DUP-042708	Q1-IA-21-042708	Q1-IA-23-042708	Q1-IA-26-042708
		SAMPLE DATE	4/27/2008	4/27/2008	4/27/2008	4/27/2008	4/27/2008
		SAMPLE PURPOSE	Normal	Duplicate	Normal	Normal	Normal
Parameter Name	Units	Analytical Method					
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.56 J	0.57 J	0.55 J	0.53 J	0.63 J
1,1-DICHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	0.28 J	0.26 J	3	1.8	0.3 J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.17 U	1 U	0.15 U	0.6 U	0.3 U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	0.61 U	1 U	1.4	0.83	0.88 U
1,3-BUTADIENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.2 J	1 U	0.23 J	0.25 J	0.26 J
1,4-DIOXANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	0.13 J	1 U	1.3	0.78	0.88 U
2-BUTANONE (MEK)	ug/m3	TO-15	1.3	1.5	2.6	3.7	1.4
2-HEXANONE	ug/m3	TO-15	0.25 J	0.27 J	0.32 J	0.58 J	0.3 J
2-PROPANOL	ug/m3	TO-15	6.7	8.7	9.9	11	8.2
4-METHYL-2-PENTANONE	ug/m3	TO-15	0.22 J	1 U	1.2	3	0.3 J
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	4	3.2	4.1	7.9	3.7
ACETONE	ug/m3	TO-15	12	16	18	19	14
ACETONITRILE	ug/m3	TO-15	0.45 U	0.42 U	0.37 U	0.39 U	0.59 U
ACROLEIN	ug/m3	TO-15	0.77	1.4	1.2	1.1	0.99
ACRYLONITRILE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
ALLYL CHLORIDE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
ALPHA-PINENE	ug/m3	TO-15	0.31 J	0.3 J	0.8	1.2	0.29 J
BENZENE	ug/m3	TO-15	0.56	0.56 U	12	8.7	0.62 U
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
BROMOFORM	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
BROMOMETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CARBON DISULFIDE	ug/m3	TO-15	0.61 U	1 U	0.76	0.6 U	0.88 U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.45 J	0.46 J	0.47 J	0.47 J	0.46 J
CHLOROBENZENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CHLOROETHANE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CHLOROFORM	ug/m3	TO-15	0.24 J	1 U	0.2 J	0.22 J	0.66 J
CHLOROMETHANE	ug/m3	TO-15	0.59 J	0.94 J	0.58 J	0.59 J	0.84 J
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
CYCLOHEXANE	ug/m3	TO-15	0.61 U	1 U	0.78	0.81	0.88 U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	3.4	3.4	3.9	4.6	3.2
D-LIMONENE	ug/m3	TO-15	1.6	1.7	0.86	1.5	2.9

ATTACHMENT B-1b
Indoor Air Sampling Results - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 7 - Daycare Center		Building 8 - Basement	Building 7 - Basement	Building 7/8 - Daycare Center
		LOCATION DESCRIPTION	Infant room		Hallway between Q1-VI-03 and Q1-VI-05 on Table	Far East Room - Middle of room next to floor drain	1st floor - kitchen, On floor next to bathroom
		LOCATION ID	Q1-IA-12	Q1-IA-12	Q1-IA-21	Q1-IA-23	Q1-IA-26
		FIELD SAMPLE ID	Q1-IA-12-042708	Q1-DUP-042708	Q1-IA-21-042708	Q1-IA-23-042708	Q1-IA-26-042708
		SAMPLE DATE	4/27/2008	4/27/2008	4/27/2008	4/27/2008	4/27/2008
		SAMPLE PURPOSE	Normal	Duplicate	Normal	Normal	Normal
Parameter Name	Units	Analytical Method					
ETHANOL	ug/m3	TO-15	140	150	63	77	160
ETHYLBENZENE	ug/m3	TO-15	0.25 J	0.24 J	7.1	5.3	0.25 J
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
ISOPROPYLBENZENE	ug/m3	TO-15	0.61 U	1 U	0.72	0.49 J	0.88 U
METHYL METHACRYLATE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
METHYLENE CHLORIDE	ug/m3	TO-15	0.45 J	0.53 J	0.35 J	0.37 J	0.54 J
NAPHTHALENE	ug/m3	TO-15	0.59	0.38	10	3.6	0.5
N-BUTYL ACETATE	ug/m3	TO-15	0.27 J	0.25 J	0.36 J	0.41 J	0.38 J
N-HEPTANE	ug/m3	TO-15	0.34 J	0.36 J	1	1.3	0.4 J
N-HEXANE	ug/m3	TO-15	0.39 J	0.39 J	1.4	1.6	0.42 J
N-NONANE	ug/m3	TO-15	0.26 J	0.28 J	0.34 J	0.44 J	0.32 J
N-OCTANE	ug/m3	TO-15	0.39 J	1 U	0.39 J	0.5 J	0.31 J
N-PROPYLBENZENE	ug/m3	TO-15	0.61 U	1 U	0.33 J	0.22 J	0.88 U
O-XYLENE	ug/m3	TO-15	0.28 J	0.26 J	6.6	4.4	0.31 J
PROPYLENE	ug/m3	TO-15	1.1	1.3	2	1.8	1.4
STYRENE	ug/m3	TO-15	0.13 J	1 U	0.17 J	0.21 J	0.18 J
TETRACHLOROETHENE	ug/m3	TO-15	0.27 J	0.32 J	0.32 J	0.31 J	0.28 J
TETRAHYDROFURAN	ug/m3	TO-15	0.61 U	1 U	0.91	1.4	0.88 U
TOLUENE	ug/m3	TO-15	2.1	2	4	3.6	1.9
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
TRICHLOROETHENE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.5	1.4	1.7	2	1.6
VINYL ACETATE	ug/m3	TO-15	6.1 U	1.3 J	6 U	6 U	1.1 J
VINYL CHLORIDE	ug/m3	TO-15	0.61 U	1 U	0.6 U	0.6 U	0.88 U
XYLENES, M & P	ug/m3	TO-15	0.75	0.74 J	9.9	8.3	0.78 J

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not Analyzed

ATTACHMENT B-2
Subslab Soil Gas Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 10 - Basement		Building 8 - Basement		Building 12 - Parking Lot		Building 12 - Parking Lot	
		LOCATION DESCRIPTION	Main room next to heater		Main room next to Bld 8 Sump 1		East side of Parking Lot next to storage room		West Side of Parking	
		LOCATION ID	Q1-VI-02		Q1-VI-06		Q1-VI-07		Q1-VI-08	
		FIELD SAMPLE ID	Q1-VI-02-032508		Q1-VI-06-032408		Q1-VI-07-032608		Q1-VI-08-032508	
		SAMPLE DATE	3/25/2008		3/24/2008		3/26/2008		3/25/2008	
		PURPOSE	Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method								
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.43	J	7.8	U	0.42	J	1.8	U
1,1-DICHLOROETHANE	ug/m3	TO-15	1.9	U	26		1.8	U	1.8	U
1,1-DICHLOROETHENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	13		4.9	J	7.8		1.7	J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (CFC 114)	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DICHLOROBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DICHLOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DICHLOROPROPANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	2.5		2.7	J	1.3	J	1.8	U
1,3-BUTADIENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,3-DICHLOROBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,4-DICHLOROBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1,4-DIOXANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	2.5		1.9	J	2.8		0.6	J
2-BUTANONE (MEK)	ug/m3	TO-15	3.2	J	3.4	J	5.9		3.3	J
2-HEXANONE	ug/m3	TO-15	0.69	J	7.8	U	1.9		1.1	J
2-PROPANOL	ug/m3	TO-15	5.9		4.6	J	3	J	1.6	J
4-METHYL-2-PENTANONE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	83		7.8	U	2.5		1	J
ACETONE	ug/m3	TO-15	17	U	17	U	16	U	11	U
ACETONITRILE	ug/m3	TO-15	1.9	U	7.8	U	0.46	J	0.6	J
ACROLEIN	ug/m3	TO-15	1.5	J	7.8	U	1.5	J	1.4	J
ACRYLONITRILE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
ALLYL CHLORIDE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
ALPHA-PINENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
BENZENE	ug/m3	TO-15	1.9		8.9		2		0.65	J
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
BROMODICHLOROMETHANE	ug/m3	TO-15	1.9	U	77		1.8	U	1.8	U
BROMOFORM	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
BROMOMETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
CARBON DISULFIDE	ug/m3	TO-15	1.1	U	7.8	U	1.8	U	1.2	U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.41	J	7.8	U	1.8	U	1.8	U
CHLOROBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
CHLORODIBROMOMETHANE	ug/m3	TO-15	1.9	U	4.8	J	1.8	U	1.8	U
CHLOROETHANE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U

ATTACHMENT B-2
Subslab Soil Gas Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 10 - Basement		Building 8 - Basement		Building 12 - Parking Lot		Building 12 - Parking Lot	
		LOCATION DESCRIPTION	Main room next to heater		Main room next to Bld 8 Sump 1		East side of Parking Lot next to storage room		West Side of Parking	
		LOCATION ID	Q1-VI-02		Q1-VI-06		Q1-VI-07		Q1-VI-08	
		FIELD SAMPLE ID	Q1-VI-02-032508		Q1-VI-06-032408		Q1-VI-07-032608		Q1-VI-08-032508	
		SAMPLE DATE	3/25/2008		3/24/2008		3/26/2008		3/25/2008	
		PURPOSE	Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method								
CHLOROFORM	ug/m3	TO-15	0.81	J	1000		3		1.1	J
CHLOROMETHANE	ug/m3	TO-15	1.6	J	7.8	U	1.8	U	1.8	U
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
CYCLOHEXANE	ug/m3	TO-15	1.9	U	4	J	1.8	U	1.8	U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.7		2.8	J	5.5		2.7	
D-LIMONENE	ug/m3	TO-15	0.42	J	7.8	U	0.37	J	0.55	J
ETHANOL	ug/m3	TO-15	40		5	J	5.5	J	5.8	J
ETHYLBENZENE	ug/m3	TO-15	2.3		5.5	J	1.3	J	0.38	J
HEXACHLOROBUTADIENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
ISOPROPYLBENZENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
METHYL METHACRYLATE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
METHYLENE CHLORIDE	ug/m3	TO-15	0.58	J	7.8	U	1.8	U	1.8	U
NAPHTHALENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
N-BUTYL ACETATE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	0.41	J
N-HEPTANE	ug/m3	TO-15	3.8		6.9	J	8.3		2.4	
N-HEXANE	ug/m3	TO-15	1.1	J	7.8	U	1	J	1.8	U
N-NONANE	ug/m3	TO-15	2.8		7.8	U	2.5		1.1	J
N-OCTANE	ug/m3	TO-15	1.9	U	7.8	U	2.2		1.8	U
N-PROPYLBENZENE	ug/m3	TO-15	1.1	J	7.8	U	1.1	J	1.8	U
O-XYLENE	ug/m3	TO-15	3.3		4.2	J	2.2		0.47	J
PROPYLENE	ug/m3	TO-15	4.7	J	16	J	1.5	J	1.8	U
STYRENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
TETRACHLOROETHENE	ug/m3	TO-15	0.42	J	4.3	J	0.37	J	2.9	
TETRAHYDROFURAN	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	0.7	J
TOLUENE	ug/m3	TO-15	17		12		6.6		1.4	J
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
TRICHLOROETHENE	ug/m3	TO-15	1.9	U	3.2	J	1.8	U	1.8	U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.4	J	23		1.7	J	73	
VINYL ACETATE	ug/m3	TO-15	3.4	J	4.9	J	6.3	J	4.5	J
VINYL CHLORIDE	ug/m3	TO-15	1.9	U	7.8	U	1.8	U	1.8	U
XYLENES, M & P	ug/m3	TO-15	8.9		8.2	J	6.5		1.4	J

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

ATTACHMENT B-3a
Outdoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 6 - Roof		Building 10 - Roof		Ground		Fence		Fence		Ground	
		LOCATION DESCRIPTION	Roof		Roof		South of 115 Bldg		North Site		NE Site Corner		Ambulance Building	
		LOCATION ID	Q1-OA-01		Q1-OA-02		Q1-OA-03		Q1-OA-04		Q1-OA-06		Q1-OA-07	
		FIELD SAMPLE ID	Q1-OA-01-032308		Q1-OA-02-032308		Q1-OA-03-032308		Q1-OA-04-032308		Q1-OA-06-032308		Q1-OA-07-032308	
		SAMPLE DATE	3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008	
		SAMPLE PURPOSE	Normal		Normal		Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method												
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.56	J	0.58	J	0.55	J	0.54	J	0.6	J	0.57	J
1,1-DICHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (CFC 114)	ug/m3	TO-15	0.16	J	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.16	J	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,3-BUTADIENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1,4-DIOXANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
2-BUTANONE (MEK)	ug/m3	TO-15	1.4	U	1.1	U	1.8	U	0.92	U	1.2	U	1.3	U
2-HEXANONE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
2-PROPANOL	ug/m3	TO-15	0.41	J	0.62	J	10		0.37	J	1.4	U	1.6	U
4-METHYL-2-PENTANONE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	1.4		3.9		10		0.33	J	1.5		3.9	
ACETONE	ug/m3	TO-15	7.3	U	5.8	U	8.8	U	6.3	U	7.1	U	6.9	U
ACETONITRILE	ug/m3	TO-15	0.17	J	0.17	J	1		0.15	J	0.14	J	0.18	J
ACROLEIN	ug/m3	TO-15	0.59	U	0.47	U	0.42	U	0.26	U	0.7	U	0.63	U
ACRYLONITRILE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
ALLYL CHLORIDE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
ALPHA-PINENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
BENZENE	ug/m3	TO-15	0.54		0.5		0.52		0.5		0.5		0.56	
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
BROMOFORM	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
BROMOMETHANE	ug/m3	TO-15	0.17	J	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CARBON DISULFIDE	ug/m3	TO-15	0.41	U	0.33	U	0.53	U	0.38	U	0.35	U	0.43	U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.5	J	0.43	J	0.41	J	0.35	J	0.46	J	0.45	J
CHLOROBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CHLOROETHANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CHLOROFORM	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U

ATTACHMENT B-3a
Outdoor Air Sampling Results - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 6 - Roof		Building 10 - Roof		Ground		Fence		Fence		Ground	
		LOCATION DESCRIPTION	Roof		Roof		South of 115 Bldg		North Site		NE Site Corner		Ambulance Building	
		LOCATION ID	Q1-OA-01		Q1-OA-02		Q1-OA-03		Q1-OA-04		Q1-OA-06		Q1-OA-07	
		FIELD SAMPLE ID	Q1-OA-01-032308		Q1-OA-02-032308		Q1-OA-03-032308		Q1-OA-04-032308		Q1-OA-06-032308		Q1-OA-07-032308	
		SAMPLE DATE	3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008		3/23/2008	
		SAMPLE PURPOSE	Normal		Normal		Normal		Normal		Normal		Normal	
Parameter Name	Units	Analytical Method												
CHLOROMETHANE	ug/m3	TO-15	0.75		0.69	J	0.74	J	0.77		0.76		0.76	J
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
CYCLOHEXANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.2		2.2		2.2		2.2		2.3		2.2	
D-LIMONENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
ETHANOL	ug/m3	TO-15	6.1	J	7.6	J	8.8		5.3	J	4.1	J	5	J
ETHYLBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
ISOPROPYLBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
METHYL METHACRYLATE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
METHYLENE CHLORIDE	ug/m3	TO-15	0.28	J	0.27	J	0.4	J	0.32	J	0.32	J	0.22	J
NAPHTHALENE	ug/m3	TO-15	0.13	U	0.15	U	0.15	U	0.14	U	0.14	U	0.16	U
N-BUTYL ACETATE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
N-HEPTANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
N-HEXANE	ug/m3	TO-15	0.18	J	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
N-NONANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.21	J
N-OCTANE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.27	J
N-PROPYLBENZENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
O-XYLENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.17	J
PROPYLENE	ug/m3	TO-15	2.4	J	0.88	J	0.79	J	0.47	J	0.45	J	0.48	J
STYRENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TETRACHLOROETHENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TETRAHYDROFURAN	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TOLUENE	ug/m3	TO-15	0.66		1.2		0.94		0.83		0.9		1.9	
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TRICHLOROETHENE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.3		1.3		1.2		1.1		1.2		1.1	
VINYL ACETATE	ug/m3	TO-15	6.4	U	7.7	U	7.7	U	7.2	U	6.8	U	8.2	U
VINYL CHLORIDE	ug/m3	TO-15	0.64	U	0.77	U	0.77	U	0.72	U	0.68	U	0.82	U
XYLENES, M & P	ug/m3	TO-15	0.32	J	0.4	J	0.39	J	0.34	J	0.36	J	0.45	J

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

ATTACHMENT B-3b
Outdoor Air Sampling Results - Aoril 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 6 - Roof	
		LOCATION DESCRIPTION	Roof	
		LOCATION ID	Q1-OA-01	
		FIELD SAMPLE ID	Q1-OA-01-042708	
		SAMPLE DATE	4/27/2008	
		SAMPLE PURPOSE	Normal	
Parameter Name	Units	Analytical Method		
1,1,1-TRICHLOROETHANE	ug/m3	TO-15	0.6	U
1,1,2,2-TETRACHLOROETHANE	ug/m3	TO-15	0.6	U
1,1,2-TRICHLOROETHANE	ug/m3	TO-15	0.6	U
1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	TO-15	0.58	J
1,1-DICHLOROETHANE	ug/m3	TO-15	0.6	U
1,1-DICHLOROETHENE	ug/m3	TO-15	0.6	U
1,2,4-TRICHLOROBENZENE	ug/m3	TO-15	0.6	U
1,2,4-TRIMETHYLBENZENE	ug/m3	TO-15	0.19	J
1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	TO-15	0.6	U
1,2-DIBROMOETHANE (EDB)	ug/m3	TO-15	0.6	U
1,2-DICHLOROBENZENE	ug/m3	TO-15	0.6	U
1,2-DICHLOROETHANE	ug/m3	TO-15	0.6	U
1,2-DICHLOROPROPANE	ug/m3	TO-15	0.6	U
1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	TO-15	0.6	U
1,3,5-TRIMETHYLBENZENE	ug/m3	TO-15	0.6	U
1,3-BUTADIENE	ug/m3	TO-15	0.6	U
1,3-DICHLOROBENZENE	ug/m3	TO-15	0.6	U
1,4-DICHLOROBENZENE	ug/m3	TO-15	0.15	J
1,4-DIOXANE	ug/m3	TO-15	0.6	U
1-ETHYL-4-METHYL-BENZENE	ug/m3	TO-15	0.6	U
2-BUTANONE (MEK)	ug/m3	TO-15	0.82	
2-HEXANONE	ug/m3	TO-15	0.6	U
2-PROPANOL	ug/m3	TO-15	0.95	
4-METHYL-2-PENTANONE	ug/m3	TO-15	0.6	U
ACETIC ACID, ETHYL ESTER	ug/m3	TO-15	4.2	
ACETONE	ug/m3	TO-15	8.1	
ACETONITRILE	ug/m3	TO-15	0.29	U
ACROLEIN	ug/m3	TO-15	0.61	
ACRYLONITRILE	ug/m3	TO-15	0.6	U
ALLYL CHLORIDE	ug/m3	TO-15	0.6	U
ALPHA-PINENE	ug/m3	TO-15	0.6	U
BENZENE	ug/m3	TO-15	0.48	
BENZENE, (CHLOROMETHYL)-	ug/m3	TO-15	0.6	U
BROMODICHLOROMETHANE	ug/m3	TO-15	0.6	U
BROMOFORM	ug/m3	TO-15	0.6	U
BROMOMETHANE	ug/m3	TO-15	0.6	U
CARBON DISULFIDE	ug/m3	TO-15	0.6	U
CARBON TETRACHLORIDE	ug/m3	TO-15	0.46	J
CHLOROBENZENE	ug/m3	TO-15	0.6	U
CHLORODIBROMOMETHANE	ug/m3	TO-15	0.6	U
CHLOROETHANE	ug/m3	TO-15	0.6	U
CHLOROFORM	ug/m3	TO-15	0.6	U
CHLOROMETHANE	ug/m3	TO-15	0.57	J
CIS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.6	U
CIS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.6	U
CYCLOHEXANE	ug/m3	TO-15	0.6	U
DICHLORODIFLUOROMETHANE	ug/m3	TO-15	2.5	
D-LIMONENE	ug/m3	TO-15	0.6	U
ETHANOL	ug/m3	TO-15	7.3	
ETHYLBENZENE	ug/m3	TO-15	0.16	J
HEXACHLOROBUTADIENE	ug/m3	TO-15	0.6	U
ISOPROPYLBENZENE	ug/m3	TO-15	0.6	U
METHYL METHACRYLATE	ug/m3	TO-15	0.6	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	TO-15	0.6	U
METHYLENE CHLORIDE	ug/m3	TO-15	0.33	J
NAPHTHALENE	ug/m3	TO-15	0.13	
N-BUTYL ACETATE	ug/m3	TO-15	0.6	U
N-HEPTANE	ug/m3	TO-15	0.21	J
N-HEXANE	ug/m3	TO-15	0.27	J
N-NONANE	ug/m3	TO-15	0.18	J
N-OCTANE	ug/m3	TO-15	0.14	J

ATTACHMENT B-3b
Outdoor Air Sampling Results - Aoril 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

		AREA	Building 6 - Roof	
		LOCATION DESCRIPTION	Roof	
		LOCATION ID	Q1-OA-01	
		FIELD SAMPLE ID	Q1-OA-01-042708	
		SAMPLE DATE	4/27/2008	
		SAMPLE PURPOSE	Normal	
Parameter Name	Units	Analytical Method		
N-PROPYLBENZENE	ug/m3	TO-15	0.6	U
O-XYLENE	ug/m3	TO-15	0.18	J
PROPYLENE	ug/m3	TO-15	0.56	U
STYRENE	ug/m3	TO-15	0.6	U
TETRACHLOROETHENE	ug/m3	TO-15	0.27	J
TETRAHYDROFURAN	ug/m3	TO-15	0.6	U
TOLUENE	ug/m3	TO-15	1.6	
TRANS-1,2-DICHLOROETHENE	ug/m3	TO-15	0.6	U
TRANS-1,3-DICHLOROPROPENE	ug/m3	TO-15	0.6	U
TRICHLOROETHENE	ug/m3	TO-15	0.6	U
TRICHLOROFLUOROMETHANE	ug/m3	TO-15	1.3	
VINYL ACETATE	ug/m3	TO-15	6	U
VINYL CHLORIDE	ug/m3	TO-15	0.6	U
XYLENES, M & P	ug/m3	TO-15	0.53	J

Notes:
U = Below laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.

Attachment C

Data Quality Evaluation Report

Honeywell Quanta
115 River Road Air Sampling
Data Quality Evaluation Report

Introduction

The objective of this Data Quality Evaluation (DQE) report is to assess the data quality of analytical results for the air samples collected at the Honeywell Quanta site in March and April, 2008. Individual method requirements and guidelines from the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review, October 1999 were used in this assessment.

This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers 29 normal environmental samples and 3 field duplicate samples. These sample results were reported as three sample delivery groups, P0800820, P0800828, and P0801259. Samples were analyzed for one or more of the methods listed in **Table 1** below. The analyses were performed by Columbia Analytical Services, (CAS) located in Simi Valley, California.

Table 1

Analytical Parameter, Method and Laboratory

Parameter	Method	Laboratory
Volatile Organic Compounds	TO-15	CAS
Fixed Gases	EPA 3C	CAS

The assessment of data includes a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required quality control (QC) samples at the specified frequencies; (4) flagging for method blanks; (5) laboratory control spiking samples; (6) surrogate spike recoveries for organic analyses; (7) analytical spike data; (8) calibration data, and other method-specific criteria.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of field duplicate samples.

The data flags used in this assessment are defined below:

- J = Analyte is present but the reported value may not be accurate or precise (estimated).
- R = The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
- U = Analyte was not detected at the specified detection limit.
- UJ = Analyte was not detected and the specified detection limit may not be accurate or precise (estimated).
- X - Result was excluded. The data are associated with re-runs and dilutions and are excluded because another useable result exists. (There can only be a single valid result per parameter per sample.)

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in **Table 2**.

The laboratory noted that sample detects for propylene may be biased high due to coelution with a non-target compound. All associated results were qualified as estimated, "J", due to this possible high bias.

Holding Times

All holding-time criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were generally free of contamination. Several compounds were detected in a laboratory method blank and the associated sample data were qualified as not detected, "U", when the samples results were within 10X (common lab contaminants) or 5X (all other compounds) of the amount detected in the laboratory method blank.

Field Duplicates

Three field duplicates were collected and analyzed as required for this event. One field duplicate set had two compounds out of RPD criteria. Both native and field dulicate results were qualified as estimated, "J".

Surrogates

All surrogates were recovered within laboratory established QC limits.

Laboratory Control Samples

Laboratory control samples were analyzed as required and were recovered within laboratory established QC limits.

Calibration

Initial and continuing calibrations were analyzed as required and were within laboratory established QC limits.

Chain of Custody

Each sample was documented in a completed CoC. All sample container criteria were generally met. One sample canister, Q1-IA-01-032308, was leaking when received by the laboratory. Analysis of that sample was cancelled.

Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The procedures for assessing the precision, accuracy, representativeness, completeness, and comparability parameters (PARCC) were based on the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review, October 1999. The following summary highlights the PARCC findings for the above-defined events:

1. The completeness objectives were met for all method/analyte combinations.
2. Some data are qualified because of low-level blank contamination.
3. A few results were qualified as estimated concentrations.
4. The precision and accuracy of the data, as measured by field and laboratory QC indicators, suggest that the project goals have been met.

Table 2 – Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q1-DUP-042708	ACETONITRILE	0.42	ug/m3	U	LBL
TO-15	Q1-DUP-042708	Benzene	0.56	ug/m3	U	LBL
TO-15	Q1-DUP1-032308	Acetone	13	ug/m3	U	LBL
TO-15	Q1-DUP1-032308	Carbon Disulfide	0.45	ug/m3	U	LBL
TO-15	Q1-DUP1-032308	MEK (2-Butanone)	2.2	ug/m3	U	LBL
TO-15	Q1-DUP1-032308	PROPYLENE	3.7	ug/m3	J	COELUT
TO-15	Q1-DUP2-032308	Acetone	7.9	ug/m3	U	LBL
TO-15	Q1-DUP2-032308	Acrolein	0.39	ug/m3	U	LBL
TO-15	Q1-DUP2-032308	Carbon Disulfide	0.28	ug/m3	U	LBL
TO-15	Q1-DUP2-032308	MEK (2-Butanone)	2.2	ug/m3	U	LBL
TO-15	Q1-DUP2-032308	MIBK (Methyl isobutyl ketone)	4.9	ug/m3	J	FD
TO-15	Q1-DUP2-032308	Naphthalene	9.7	ug/m3	J	FD
TO-15	Q1-DUP2-032308	PROPYLENE	20	ug/m3	J	COELUT
TO-15	Q1-IA-02-032308	Acetone	11	ug/m3	U	LBL
TO-15	Q1-IA-02-032308	Carbon Disulfide	0.34	ug/m3	U	LBL
TO-15	Q1-IA-02-032308	MEK (2-Butanone)	1.1	ug/m3	U	LBL
TO-15	Q1-IA-02-032308	PROPYLENE	1.3	ug/m3	J	COELUT
TO-15	Q1-IA-03-032308	Acetone	8	ug/m3	U	LBL
TO-15	Q1-IA-03-032308	Acrolein	0.39	ug/m3	U	LBL
TO-15	Q1-IA-03-032308	Carbon Disulfide	0.41	ug/m3	U	LBL
TO-15	Q1-IA-03-032308	MEK (2-Butanone)	2	ug/m3	U	LBL
TO-15	Q1-IA-03-032308	PROPYLENE	8.5	ug/m3	J	COELUT
TO-15	Q1-IA-04-032308	Carbon Disulfide	0.44	ug/m3	U	LBL
TO-15	Q1-IA-04-032308	MEK (2-Butanone)	2.7	ug/m3	U	LBL
TO-15	Q1-IA-04-032308	PROPYLENE	6.8	ug/m3	J	COELUT
TO-15	Q1-IA-05-032308	Acrolein	0.47	ug/m3	U	LBL
TO-15	Q1-IA-05-032308	Carbon Disulfide	0.49	ug/m3	U	LBL
TO-15	Q1-IA-05-032308	MEK (2-Butanone)	2	ug/m3	U	LBL
TO-15	Q1-IA-05-032308	PROPYLENE	7	ug/m3	J	COELUT
TO-15	Q1-IA-06-032308	Acetone	12	ug/m3	U	LBL

Table 2 – Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q1-IA-06-032308	Acrolein	0.66	ug/m3	U	LBL
TO-15	Q1-IA-06-032308	Carbon Disulfide	0.36	ug/m3	U	LBL
TO-15	Q1-IA-06-032308	MEK (2-Butanone)	1.8	ug/m3	U	LBL
TO-15	Q1-IA-06-032308	PROPYLENE	1.2	ug/m3	J	COELUT
TO-15	Q1-IA-12-032308	Acetone	9.5	ug/m3	U	LBL
TO-15	Q1-IA-12-032308	Acrolein	0.69	ug/m3	U	LBL
TO-15	Q1-IA-12-032308	Carbon Disulfide	0.39	ug/m3	U	LBL
TO-15	Q1-IA-12-032308	MEK (2-Butanone)	1.5	ug/m3	U	LBL
TO-15	Q1-IA-12-032308	PROPYLENE	3.6	ug/m3	J	COELUT
TO-15	Q1-IA-12-042708	1,2-Dichlorotetrafluoroethane	0.17	ug/m3	U	LBL
TO-15	Q1-IA-12-042708	ACETONITRILE	0.45	ug/m3	U	LBL
TO-15	Q1-IA-21-032308	Acetone	10	ug/m3	U	LBL
TO-15	Q1-IA-21-032308	Acrolein	0.63	ug/m3	U	LBL
TO-15	Q1-IA-21-032308	Carbon Disulfide	0.35	ug/m3	U	LBL
TO-15	Q1-IA-21-032308	MEK (2-Butanone)	2.3	ug/m3	U	LBL
TO-15	Q1-IA-21-032308	PROPYLENE	18	ug/m3	J	COELUT
TO-15	Q1-IA-21-042708	1,2-Dichlorotetrafluoroethane	0.15	ug/m3	U	LBL
TO-15	Q1-IA-21-042708	ACETONITRILE	0.37	ug/m3	U	LBL
TO-15	Q1-IA-22-032308	Acetone	13	ug/m3	U	LBL
TO-15	Q1-IA-22-032308	Carbon Disulfide	0.33	ug/m3	U	LBL
TO-15	Q1-IA-22-032308	PROPYLENE	6.7	ug/m3	J	COELUT
TO-15	Q1-IA-22-032308	Vinyl acetate	0.69	ug/m3	U	LBL
TO-15	Q1-IA-23-032308	Acetone	10	ug/m3	U	LBL
TO-15	Q1-IA-23-032308	Acrolein	0.71	ug/m3	U	LBL
TO-15	Q1-IA-23-032308	Carbon Disulfide	0.35	ug/m3	U	LBL
TO-15	Q1-IA-23-032308	MIBK (Methyl isobutyl ketone)	3	ug/m3	J	FD
TO-15	Q1-IA-23-032308	Naphthalene	6.6	ug/m3	J	FD
TO-15	Q1-IA-23-032308	PROPYLENE	16	ug/m3	J	COELUT
TO-15	Q1-IA-23-042708	ACETONITRILE	0.39	ug/m3	U	LBL
TO-15	Q1-IA-24-032308	Acetone	7.8	ug/m3	U	LBL
TO-15	Q1-IA-24-032308	Acrolein	0.47	ug/m3	U	LBL

Table 2 – Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q1-IA-24-032308	Carbon Disulfide	0.31	ug/m3	U	LBL
TO-15	Q1-IA-24-032308	MEK (2-Butanone)	1.5	ug/m3	U	LBL
TO-15	Q1-IA-24-032308	PROPYLENE	16	ug/m3	J	COELUT
TO-15	Q1-IA-25-032308	Acetone	11	ug/m3	U	LBL
TO-15	Q1-IA-25-032308	Acrolein	0.55	ug/m3	U	LBL
TO-15	Q1-IA-25-032308	Carbon Disulfide	0.32	ug/m3	U	LBL
TO-15	Q1-IA-25-032308	MEK (2-Butanone)	1.9	ug/m3	U	LBL
TO-15	Q1-IA-25-032308	PROPYLENE	13	ug/m3	J	COELUT
TO-15	Q1-IA-26-032308	Acetone	7.4	ug/m3	U	LBL
TO-15	Q1-IA-26-032308	Acrolein	0.45	ug/m3	U	LBL
TO-15	Q1-IA-26-032308	Carbon Disulfide	0.53	ug/m3	U	LBL
TO-15	Q1-IA-26-032308	MEK (2-Butanone)	1.4	ug/m3	U	LBL
TO-15	Q1-IA-26-032308	PROPYLENE	1.9	ug/m3	J	COELUT
TO-15	Q1-IA-26-042708	1,2-Dichlorotetrafluoroethane	0.3	ug/m3	U	LBL
TO-15	Q1-IA-26-042708	ACETONITRILE	0.59	ug/m3	U	LBL
TO-15	Q1-IA-26-042708	Benzene	0.62	ug/m3	U	LBL
TO-15	Q1-IA-27-032308	Acetone	12	ug/m3	U	LBL
TO-15	Q1-IA-27-032308	Acrolein	0.88	ug/m3	U	LBL
TO-15	Q1-IA-27-032308	Carbon Disulfide	0.88	ug/m3	U	LBL
TO-15	Q1-IA-27-032308	MEK (2-Butanone)	1.7	ug/m3	U	LBL
TO-15	Q1-IA-27-032308	PROPYLENE	2.2	ug/m3	J	COELUT
TO-15	Q1-IA-28-032308	Acetone	8.7	ug/m3	U	LBL
TO-15	Q1-IA-28-032308	Acrolein	0.58	ug/m3	U	LBL
TO-15	Q1-IA-28-032308	Carbon Disulfide	0.3	ug/m3	U	LBL
TO-15	Q1-IA-28-032308	MEK (2-Butanone)	1.5	ug/m3	U	LBL
TO-15	Q1-IA-28-032308	PROPYLENE	7.6	ug/m3	J	COELUT
TO-15	Q1-OA-01-032308	Acetone	7.3	ug/m3	U	LBL
TO-15	Q1-OA-01-032308	Acrolein	0.59	ug/m3	U	LBL
TO-15	Q1-OA-01-032308	Carbon Disulfide	0.41	ug/m3	U	LBL
TO-15	Q1-OA-01-032308	MEK (2-Butanone)	1.4	ug/m3	U	LBL
TO-15	Q1-OA-01-032308	PROPYLENE	2.4	ug/m3	J	COELUT

Table 2 – Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q1-OA-01-042708	ACETONITRILE	0.29	ug/m3	U	LBL
TO-15	Q1-OA-01-042708	PROPYLENE	0.56	ug/m3	U	LBL
TO-15	Q1-OA-02-032308	Acetone	5.8	ug/m3	U	LBL
TO-15	Q1-OA-02-032308	Acrolein	0.47	ug/m3	U	LBL
TO-15	Q1-OA-02-032308	Carbon Disulfide	0.33	ug/m3	U	LBL
TO-15	Q1-OA-02-032308	MEK (2-Butanone)	1.1	ug/m3	U	LBL
TO-15	Q1-OA-02-032308	PROPYLENE	0.88	ug/m3	J	COELUT
TO-15	Q1-OA-03-032308	Acetone	8.8	ug/m3	U	LBL
TO-15	Q1-OA-03-032308	Acrolein	0.42	ug/m3	U	LBL
TO-15	Q1-OA-03-032308	Carbon Disulfide	0.53	ug/m3	U	LBL
TO-15	Q1-OA-03-032308	MEK (2-Butanone)	1.8	ug/m3	U	LBL
TO-15	Q1-OA-03-032308	PROPYLENE	0.79	ug/m3	J	COELUT
TO-15	Q1-OA-04-032308	Acetone	6.3	ug/m3	U	LBL
TO-15	Q1-OA-04-032308	Acrolein	0.26	ug/m3	U	LBL
TO-15	Q1-OA-04-032308	Carbon Disulfide	0.38	ug/m3	U	LBL
TO-15	Q1-OA-04-032308	MEK (2-Butanone)	0.92	ug/m3	U	LBL
TO-15	Q1-OA-04-032308	PROPYLENE	0.47	ug/m3	J	COELUT
TO-15	Q1-OA-06-032308	Acetone	7.1	ug/m3	U	LBL
TO-15	Q1-OA-06-032308	Acrolein	0.7	ug/m3	U	LBL
TO-15	Q1-OA-06-032308	Carbon Disulfide	0.35	ug/m3	U	LBL
TO-15	Q1-OA-06-032308	MEK (2-Butanone)	1.2	ug/m3	U	LBL
TO-15	Q1-OA-06-032308	PROPYLENE	0.45	ug/m3	J	COELUT
TO-15	Q1-OA-07-032308	Acetone	6.9	ug/m3	U	LBL
TO-15	Q1-OA-07-032308	Acrolein	0.63	ug/m3	U	LBL
TO-15	Q1-OA-07-032308	Carbon Disulfide	0.43	ug/m3	U	LBL
TO-15	Q1-OA-07-032308	MEK (2-Butanone)	1.3	ug/m3	U	LBL
TO-15	Q1-OA-07-032308	PROPYLENE	0.48	ug/m3	J	COELUT
TO-15	Q1-VI-02-032508	Acetone	17	ug/m3	U	LBL
TO-15	Q1-VI-02-032508	Carbon Disulfide	1.1	ug/m3	U	LBL
TO-15	Q1-VI-02-032508	PROPYLENE	4.7	ug/m3	J	COELUT
TO-15	Q1-VI-06-032408	Acetone	17	ug/m3	U	LBL

Table 2 – Validation Flags

Method	Native ID	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
TO-15	Q1-VI-06-032408	PROPYLENE	16	ug/m3	J	COELUT
TO-15	Q1-VI-07-032608	Acetone	16	ug/m3	U	LBL
TO-15	Q1-VI-07-032608	PROPYLENE	1.5	ug/m3	J	COELUT
TO-15	Q1-VI-08-032508	Acetone	11	ug/m3	U	LBL
TO-15	Q1-VI-08-032508	Carbon Disulfide	1.2	ug/m3	U	LBL

Notes:
LBL - Analyte detected in the associated laboratory method blank less than the reporting limit.
FD - Field duplicate precision exceeded.
COELUT - Sample result may have a high bias due to coelution with non-target compound

Attachment D

Revised Screening Levels

Table D-1 - Revised Indoor Air Screening Levels

Table D-2 -Revised Subslab Soil Gas Screening Levels

ATTACHMENT D-1
Indoor Air Screening Levels
115 River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Screening Criteria Source	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
1,1,1-Trichloroethane (TCA)	71-55-6	NC	NJDEP	NA		NA		NA		1.00E+03	2.30E+03	1.00E+02	2.30E+02
1,1,2,2-Tetrachloroethane	79-34-5	C	EPAR2 PRG	3.30E-02		3.30E-01		3.30E+00		NA	2.20E+02	NA	2.20E+01
1,1,2,2-Tetrachloroethane	79-34-5	C	EPAR2 PRG	3.30E-02		3.30E-01		3.30E+00		NA	2.20E+02	NA	2.20E+01
1,1,2-Trichloroethane	79-00-5	C	EPAR2 PRG	1.20E-01		1.20E+00		1.20E+01		NA	1.50E+01	NA	1.50E+00
1,1,2-Trichloroethane	79-00-5	C	EPAR2 PRG	1.20E-01		1.20E+00		1.20E+01		NA	1.50E+01	NA	1.50E+00
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NJDEP	NA		NA		NA		3.10E+04		3.10E+03	
1,1-Dichloroethane (1,1-DCA)	75-34-3	NC	NJDEP	NA		NA		NA		5.10E+02	5.20E+02	5.10E+01	5.20E+01
1,1-Dichloroethene (1,1-DCE)	75-35-4	NC	EPAR2 PRG	NA		NA		NA		2.10E+02		2.10E+01	
1,2,4-Trichlorobenzene	120-82-1	NC	EPAR2 PRG	NA		NA		NA		3.70E+00		3.70E-01	
1,2,4-Trimethylbenzene	95-63-6	NC	EPAR2 PRG	NA		NA		NA		6.20E+00	6.00E+00	6.20E-01	6.00E-01
1,2-Dibromo-3-Chloropropane	96-12-8	NC	EPAR2 PRG	NA		NA		NA		2.80E+00	NA	2.80E-01	NA
1,2-Dibromoethane	106-93-4	C	EPAR2 PRG	3.40E-03		3.40E-02		3.40E-01		NA	9.50E+00	NA	9.50E-01
1,2-Dibromoethane	106-93-4	C	EPAR2 PRG	3.40E-03		3.40E-02		3.40E-01		NA	9.50E+00	NA	9.50E-01
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	76-14-2	NC		NA		NA		NA		NA		NA	
1,2-Dichlorobenzene	95-50-1	NC	NJDEP	NA		NA		NA		1.50E+02		1.50E+01	
1,2-Dichloroethane	107-06-2	C	EPAR2 PRG	7.40E-02		7.40E-01		7.40E+00		NA	5.10E+00	NA	5.10E-01
1,2-Dichloroethane	107-06-2	C	EPAR2 PRG	7.40E-02		7.40E-01		7.40E+00		NA	5.10E+00	NA	5.10E-01
1,2-Dichloroethane-d4	17060-07-0	NC		NA		NA		NA		NA	NA	NA	NA
1,2-Dichloroethane-d4	17060-07-0	NC		NA		NA		NA		NA	NA	NA	NA
1,2-Dichloropropane	78-87-5	C	EPAR2 PRG	9.90E-02		9.90E-01		9.90E+00		NA	4.20E+00	NA	4.20E-01
1,2-Dichloropropane	78-87-5	C	EPAR2 PRG	9.90E-02		9.90E-01		9.90E+00		NA	4.20E+00	NA	4.20E-01
1,3,5-Trimethylbenzene	108-67-8	NC	EPAR2 PRG	NA		NA		NA		6.20E+00	6.00E+00	6.20E-01	6.00E-01
1,3-Butadiene	106-99-0	C	EPAR2 PRG	6.10E-02		6.10E-01		6.10E+00		NA	2.10E+00	NA	2.10E-01
1,3-Dichlorobenzene	541-73-1	NC	NJDEP	NA		NA		NA		1.10E+01	1.10E+02	1.10E+00	1.10E+01
1,4-Dichlorobenzene	106-46-7	C	EPAR2 PRG	3.10E-01		3.10E+00		3.10E+01		NA	8.40E+02	NA	8.40E+01
1,4-Dioxane	123-91-1	NC	EPAR2 PRG	NA		NA		NA		6.10E-01	NA	6.10E-02	NA
1-ethyl-4-methyl-Benzene	622-96-8	NC		NA		NA		NA		NA		NA	
2-Butanone (MEK)	78-93-3	NC	Same	NA		NA		NA		5.10E+03		5.10E+02	
2-Hexanone	591-78-6	NC		NA		NA		NA		NA		NA	
2-Propanol	67-63-0	NC		NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC		NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC		NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	108-10-1	NC	Same	NA		NA		NA		3.10E+03		3.10E+02	
Acetic Acid, Ethyl Ester	141-78-6	NC	EPAR2 PRG	NA		NA		NA		7.30E+02	NA	7.30E+01	NA
Acetone	67-64-1	NC	Same	NA		NA		NA		3.30E+03	NA	3.30E+02	NA
Acetonitrile	75-05-8	NC	EPAR2 PRG	NA		NA		NA		6.20E+01		6.20E+00	
Acrolein	107-02-8	NC	EPAR2 PRG	NA		NA		NA		2.10E-02	NA	2.10E-03	NA
Acrylonitrile	107-13-1	NC	EPAR2 PRG	NA	2.80E-02	NA	2.80E-01	NA	2.80E+00	2.80E-02	2.10E+00	2.80E-03	2.10E-01
Allyl chloride	107-05-1	C	EPAR2 PRG	1.00E+00	NA	1.00E+01	NA	1.00E+02	NA	NA		NA	
alpha-Pinene	80-56-8	NC		NA		NA		NA		NA		NA	
Benzene	71-43-2	C	EPAR2 PRG	2.50E-01		2.50E+00		2.50E+01		NA	3.10E+01	NA	3.10E+00

ATTACHMENT D-1
Indoor Air Screening Levels
115 River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Screening Criteria Source	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
Benzyl Chloride	100-44-7	NC	EPAR2 PRG	NA	4.00E-02	NA	4.00E-01	NA	4.00E+00	4.00E-02	1.10E+01	4.00E-03	1.10E+00
Bromodichloromethane	75-27-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	7.30E+01	NA	7.30E+00
Bromoform	75-25-2	C	EPAR2 PRG	1.70E+00	1.80E+00	1.70E+01	1.80E+01	1.70E+02		NA	7.30E+01	NA	7.30E+00
Bromomethane	74-83-9	NC	NJDEP	NA		NA		NA		5.00E+00		5.00E-01	
Carbon Disulfide	75-15-0	NC	Same	NA		NA		NA		7.30E+02	NA	7.30E+01	NA
Carbon Tetrachloride	56-23-5	C	EPAR2 PRG	1.30E-01		1.30E+00		1.30E+01		NA	2.60E+00	NA	2.60E-01
Chlorobenzene	108-90-7	NC	NJDEP	NA		NA		NA		5.10E+01	6.20E+01	5.10E+00	6.20E+00
Chloroethane	75-00-3	C	NJDEP	2.00E+00		2.00E+01		2.00E+02		NA	1.00E+04	NA	1.00E+03
Chloroform	67-66-3	C	EPAR2 PRG	8.30E-02		8.30E-01		8.30E+00		NA	5.10E+01	NA	5.10E+00
Chloromethane	74-87-3	NC	Same	NA		NA		NA		9.50E+01		9.50E+00	
cis-1,2-Dichloroethene	156-59-2	NC	NJDEP	NA		NA		NA		3.60E+01		3.60E+00	
cis-1,3-Dichloropropene	10061-01-5	NC	EPAR2 PRG	NA	4.80E-01	NA	4.80E+00	NA	4.80E+01	4.80E-01	2.10E+01	4.80E-02	2.10E+00
CYCLOHEXANE	110-82-7	NC	Same	NA		NA		NA		6.20E+03	NA	6.20E+02	NA
Dibromochloromethane	124-48-1	C	EPAR2 PRG	8.00E-02		8.00E-01		8.00E+00		NA	7.30E+01	NA	7.30E+00
Dichlorodifluoromethane (CFC 12)	75-71-8	NC	NJDEP	NA		NA		NA		1.80E+02		1.80E+01	
Dichloromethane (Methylene Chloride)	75-09-2	C	NJDEP	4.00E+00	4.10E+00	4.00E+01	4.10E+01	4.00E+02	4.10E+02	NA	3.10E+03	NA	3.10E+02
D-LIMONENE	5989-27-5	NC		NA		NA		NA		NA		NA	
Ethanol	64-17-5	NC		NA		NA		NA		NA		NA	
Ethyl tert-Butyl Ether	637-92-3	NC		NA		NA		NA		NA		NA	
Ethylbenzene	100-41-4	NC	Same	NA		NA		NA		1.10E+03		1.10E+02	
Hexachlorobutadiene	87-68-3	C	EPAR2 PRG	8.60E-02		8.60E-01		8.60E+00		NA	1.10E+00	NA	1.10E-01
Hexachlorobutadiene	87-68-3	C	EPAR2 PRG	8.60E-02		8.60E-01		8.60E+00		NA	1.10E+00	NA	1.10E-01
Isopropylbenzene	98-82-8	NC	EPAR2 PRG	NA		NA		NA		4.00E+02	NA	4.00E+01	NA
m,p-Xylenes	XYLENES1314	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	
Methyl Methacrylate	80-62-6	NC	EPAR2 PRG	NA		NA		NA		7.30E+02		7.30E+01	
Methyl tert-Butyl Ether	1634-04-4	C	NJDEP	2.00E+00		2.00E+01		2.00E+02		NA	3.10E+03	NA	3.10E+02
Naphthalene	91-20-3	NC	EPAR2 PRG	NA		NA		NA		3.10E+00		3.10E-01	
n-Butyl Acetate	123-86-4	NC		NA		NA		NA		NA		NA	
N-HEPTANE	142-82-5	NC		NA		NA		NA		NA		NA	
N-HEXANE	110-54-3	NC	EPAR2 PRG	NA		NA		NA		2.10E+02	NA	2.10E+01	NA
n-Nonane	111-84-2	NC		NA		NA		NA		NA		NA	
n-Octane	111-65-9	NC		NA		NA		NA		NA		NA	
n-propylbenzene	103-65-1	NC	EPAR2 PRG	NA		NA		NA		1.50E+02	NA	1.50E+01	NA
o-Xylene	95-47-6	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	
Propene	115-07-1	NC		NA		NA		NA		NA		NA	
Styrene	100-42-5	NC	NJDEP	NA		NA		NA		1.00E+03		1.00E+02	
tert-Amyl Methyl Ether	994-05-8	NC		NA		NA		NA		NA		NA	
Tetrachloroethene (PCE)	127-18-4	C	EPAR2 PRG	3.20E-01		3.20E+00		3.20E+01		NA	3.70E+01	NA	3.70E+00
Tetrahydrofuran	109-99-9	NC	EPAR2 PRG	NA		NA		NA		9.90E-01	NA	9.90E-02	NA
Toluene	108-88-3	NC	EPAR2 PRG	NA		NA		NA		4.00E+02	4.20E+02	4.00E+01	4.20E+01
trans-1,2-Dichloroethene	156-60-5	NC	Same	NA		NA		NA		7.30E+01	6.20E+01	7.30E+00	6.20E+00

ATTACHMENT D-1
Indoor Air Screening Levels
115 River Road Building
Quanta Site, Edgewater, New Jersey

				Indoor Air Screening Levels for Carcinogenic Constituents						Indoor Air Screening Levels for Non-Carcinogenic Constituents			
Analyte	**Cas #**	**Cancer / Non-Cancer**	**Screening Criteria Source**	**Revised 10 -6 Target Risk Level**	**Previously Used 10-6 Target Risk**	**Revised 10 -5 Target Risk Level**	**Previously Used 10-5 Target Risk**	**Revised 10 -4 Target Risk Level**	**Previously Used 10-4 Target Risk**	**Revised SLs HQ = 1.0**	**Previously Used HQ = 1**	**Updated SLs HQ = 0.1**	**Previously Used HQ= 0.1**
trans-1,3-Dichloropropene	10061-02-6	NC	EPAR2 PRG	NA	4.80E-01	NA	4.80E+00	NA	4.80E+01	4.80E-01	2.10E+01	4.80E-02	2.10E+00
Trichloroethene (TCE)*	79-01-6	C	NYDOH	5.00E-02		5.00E-01		5.00E+00		NA	3.70E+01	NA	3.70E+00
Trichlorofluoromethane (CFC 11)	75-69-4	NC	Same	NA		NA		NA		7.30E+02		7.30E+01	
Vinyl acetate	108-05-4	NC	EPAR2 PRG	NA		NA		NA		2.10E+02	NA	2.10E+01	NA
Vinyl Chloride	75-01-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	1.00E+02	NA	1.00E+01
Vinyl Chloride	75-01-4	C	EPAR2 PRG	1.10E-01		1.10E+00		1.10E+01		NA	1.00E+02	NA	1.00E+01
Xylenes (total)	1330-20-7	NC	Same	NA		NA		NA		1.10E+02		1.10E+01	

Screening levels that changed from the 2006 Vapor Intrusion Evaluation Work Plan are highlighted.
The previously used screening criteria are provided in the adjacent column.

ATTACHMENT D-2
Subslab Soil Gas Screening Levels
115 River Road Building
Quanta Site, Edgewater, New Jersey

			Subslab Soil Gas Screening Levels for Carcinogenic Constituents						Subslab Soil Gas Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
1,1,1-Trichloroethane (TCA)	71-55-6	NC	NA		NA		NA		1.00E+03	2.30E+03	1.00E+04	2.30E+04
1,1,2,2-Tetrachloroethane	79-34-5	C	3.30E-01		3.30E+00		3.30E+01		NA		NA	
1,1,2-Trichloroethane	79-00-5	C	1.20E+00		1.20E+01		1.20E+02		NA		NA	
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NA		NA		NA		3.10E+04		3.10E+05	
1,1-Dichloroethane (1,1-DCA)	75-34-3	NC	NA		NA		NA		5.10E+02	5.20E+02	5.10E+03	5.20E+03
1,1-Dichloroethene (1,1-DCE)	75-35-4	NC	NA		NA		NA		2.10E+02		2.10E+03	
1,2,4-Trichlorobenzene	120-82-1	NC	NA		NA		NA		3.70E+00		3.70E+01	
1,2,4-Trimethylbenzene	95-63-6	NC	NA		NA		NA		6.20E+00	6.00E+00	6.20E+01	6.00E+01
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NA		NA		NA		2.80E+00	NA	2.80E+01	NA
1,2-Dibromoethane	106-93-4	C	3.40E-02		3.40E-01		3.40E+00		NA		NA	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	76-14-2	NC	NA		NA		NA		NA		NA	
1,2-Dichlorobenzene	95-50-1	NC	NA		NA		NA		1.50E+02		1.50E+03	
1,2-Dichloroethane	107-06-2	C	7.40E-01		7.40E+00		7.40E+01		NA		NA	
1,2-Dichloropropane	78-87-5	C	9.90E-01		9.90E+00		9.90E+01		NA		NA	
1,3,5-Trimethylbenzene	108-67-8	NC	NA		NA		NA		6.20E+00	6.00E+00	6.20E+01	6.00E+01
1,3-Butadiene	106-99-0	C	6.10E-01		6.10E+00		6.10E+01		NA		NA	
1,3-Dichlorobenzene	541-73-1	NC	NA		NA		NA		1.10E+01	1.10E+02	1.10E+02	1.10E+03
1,4-Dichlorobenzene	106-46-7	C	3.10E+00		3.10E+01		3.10E+02		NA		NA	
1,4-Dioxane	123-91-1	NC	NA		NA		NA		6.10E-01	NA	6.10E+00	NA
1-ethyl-4-methyl-Benzene	622-96-8	NC	NA		NA		NA		NA		NA	
2-Butanone (MEK)	78-93-3	NC	NA		NA		NA		5.10E+03		5.10E+04	
2-Hexanone	591-78-6	NC	NA		NA		NA		NA		NA	
2-Propanol	67-63-0	NC	NA		NA		NA		NA		NA	
4-Bromofluorobenzene	460-00-4	NC	NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	108-10-1	NC	NA		NA		NA		3.10E+03		3.10E+04	
Acetic Acid, Ethyl Ester	141-78-6	NC	NA		NA		NA		7.30E+02	NA	7.30E+03	NA
Acetone	67-64-1	NC	NA		NA		NA		3.30E+03	NA	3.30E+04	NA
Acetonitrile	75-05-8	NC	NA		NA		NA		6.20E+01		6.20E+02	
Acrolein	107-02-8	NC	NA		NA		NA		2.10E-02	NA	2.10E-01	NA
Acrylonitrile	107-13-1	NC	NA		NA		NA		2.80E-02	2.10E+00	2.80E-01	2.10E+01
Allyl chloride	107-05-1	C	1.00E+01		1.00E+02		1.00E+03		NA		NA	
alpha-Pinene	80-56-8	NC	NA		NA		NA		NA		NA	
Benzene	71-43-2	C	2.50E+00		2.50E+01		2.50E+02		NA		NA	
Benzyl Chloride	100-44-7	NC	NA		NA		NA		4.00E-02	1.10E+01	4.00E-01	1.10E+02
Bromodichloromethane	75-27-4	C	1.10E+00	1.10E+00	1.10E+01		1.10E+02		NA		NA	
Bromoform	75-25-2	C	1.70E+01	1.80E+01	1.70E+02		1.70E+03		NA		NA	
Bromomethane	74-83-9	NC	NA		NA		NA		5.00E+00		5.00E+01	
Carbon Disulfide	75-15-0	NC	NA		NA		NA		7.30E+02	NA	7.30E+03	NA
Carbon Tetrachloride	56-23-5	C	1.30E+00		1.30E+01		1.30E+02		NA		NA	
Chlorobenzene	108-90-7	NC	NA		NA		NA		5.10E+01	6.20E+01	5.10E+02	6.20E+02
Chloroethane	75-00-3	C	2.00E+01		2.00E+02		2.00E+03		NA		NA	
Chloroform	67-66-3	C	8.30E-01		8.30E+00		8.30E+01		NA		NA	
Chloromethane	74-87-3	NC	NA		NA		NA		9.50E+01		9.50E+02	
cis-1,2-Dichloroethene	156-59-2	NC	NA		NA		NA		3.60E+01		3.60E+02	
cis-1,3-Dichloropropene	10061-01-5	NC	NA		NA		NA		4.80E-01	2.10E+01	4.80E+00	2.10E+02
Cyclohexane	110-82-7	NC	NA		NA		NA		6.20E+03	NA	6.20E+04	NA
Dibromochloromethane	124-48-1	C	8.00E-01		8.00E+00		8.00E+01		NA		NA	
Dichlorodifluoromethane (CFC 12)	75-71-8	NC	NA		NA		NA		1.80E+02		1.80E+03	

ATTACHMENT D-2
Subslab Soil Gas Screening Levels
115 River Road Building
Quanta Site, Edgewater, New Jersey

			Subslab Soil Gas Screening Levels for Carcinogenic Constituents						Subslab Soil Gas Screening Levels for Non-Carcinogenic Constituents			
Analyte	Cas #	Cancer / Non-Cancer	Revised 10 -6 Target Risk Level	Previously Used 10-6 Target Risk	Revised 10 -5 Target Risk Level	Previously Used 10-5 Target Risk	Revised 10 -4 Target Risk Level	Previously Used 10-4 Target Risk	Revised SLs HQ = 1.0	Previously Used HQ = 1	Updated SLs HQ = 0.1	Previously Used HQ= 0_1
Dichloromethane (Methylene Chloride)	75-09-2	C	4.00E+01	4.10E+01	4.00E+02	4.10E+02	4.00E+03	4.10E+03	NA		NA	
D-LIMONENE	5989-27-5	NC	NA		NA		NA		NA		NA	
Ethanol	64-17-5	NC	NA		NA		NA		NA		NA	
Ethyl tert-Butyl Ether	637-92-3	NC	NA		NA		NA		NA		NA	
Ethylbenzene	100-41-4	NC	NA		NA		NA		1.10E+03		1.10E+04	
Hexachlorobutadiene	87-68-3	C	8.60E-01		8.60E+00		8.60E+01		NA		NA	
Isopropylbenzene	98-82-8	NC	NA		NA		NA		4.00E+02	NA	4.00E+03	NA
m,p-Xylenes	XYLENES1314	NC	NA		NA		NA		1.10E+02		1.10E+03	
Methane	74-82-8	NC	NA		NA		NA		NA		NA	
Methyl Methacrylate	80-62-6	NC	NA		NA		NA		7.30E+02		7.30E+03	
Methyl tert-Butyl Ether	1634-04-4	C	2.00E+01		2.00E+02		2.00E+03		NA		NA	
Naphthalene	91-20-3	NC	NA		NA		NA		3.10E+00		3.10E+01	
n-Butyl Acetate	123-86-4	NC	NA		NA		NA		NA		NA	
N-Heptane	142-82-5	NC	NA		NA		NA		NA		NA	
N-Hexane	110-54-3	NC	NA		NA		NA		2.10E+02	NA	2.10E+03	NA
Nitrogen	7727-37-9	NC	NA		NA		NA		NA		NA	
n-Nonane	111-84-2	NC	NA		NA		NA		NA		NA	
n-Octane	111-65-9	NC	NA		NA		NA		NA		NA	
n-propylbenzene	103-65-1	NC	NA		NA		NA		1.50E+02	NA	1.50E+03	NA
o-Xylene	95-47-6	NC	NA		NA		NA		1.10E+02		1.10E+03	
Propene	115-07-1	NC	NA		NA		NA		NA		NA	
Styrene	100-42-5	NC	NA		NA		NA		1.00E+03		1.00E+04	
tert-Amyl Methyl Ether	994-05-8	NC	NA		NA		NA		NA		NA	
Tetrachloroethene (PCE)	127-18-4	C	3.20E+00		3.20E+01		3.20E+02		NA		NA	
Tetrahydrofuran	109-99-9	NC	NA		NA		NA		9.90E-01	NA	9.90E+00	NA
Toluene	108-88-3	NC	NA		NA		NA		4.00E+02	4.20E+02	4.00E+03	4.20E+03
trans-1,2-Dichloroethene	156-60-5	NC	NA		NA		NA		7.30E+01	6.20E+01	7.30E+02	6.20E+02
trans-1,3-Dichloropropene	10061-02-6	NC	NA		NA		NA		4.80E-01	2.10E+01	4.80E+00	2.10E+02
Trichloroethene (TCE)	79-01-6	C	5.00E-01		5.00E+00		5.00E+01		NA		NA	
Trichlorofluoromethane (CFC 11)	75-69-4	NC	NA		NA		NA		7.30E+02		7.30E+03	
Vinyl acetate	108-05-4	NC	NA		NA		NA		2.10E+02	NA	2.10E+03	NA
Vinyl Chloride	75-01-4	C	1.10E+00		1.10E+01		1.10E+02		NA		NA	
Xylenes (total)	1330-20-7	NC	NA		NA		NA		1.10E+02		1.10E+03	

Screening levels that changed from the 2006 Vapor Intrusion Evaluation Work Plan are highlighted.
The previously used screening criteria are provided in the adjacent column.

Attachment E

Analytical Data Comparison to Screening Levels

Table E-1a – Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008

Table E-1b – Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008

Table E-2a – Indoor Air Sampling Results Compared to Screening Levels - March 2008

Table E-2b – Indoor Air Sampling Results Compared to Screening Levels - April 2008

Table E-3 – Subslab Soil Gas Sampling Results Compared to Screening Levels - March 2008

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.69		ND	2000	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.69		ND	3	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.69		ND	10	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.69	0.54	J	62000	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.69		ND	1020	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.69		ND	440	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.69		ND	72	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.69		ND	0.3	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.69		ND	300	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.69		ND	7	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.69		ND	9	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.69		ND	6	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.69		ND	22	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.69		ND	30	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.1		ND	10200	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	0.81	J	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.69		ND	6200	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.69	1.2		NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	11		ND	6600	No	31000	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.69	0.17	J	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.69		ND	30	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	0.56		14	No	14	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.69		ND	10	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.69		ND	200	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.69	0.14	J	10	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.34		ND	1460	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.69	0.42	J	10	No	100	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.69		ND	102	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.69		ND	7	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.69		ND	200	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.69		ND	8	No	80	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.69	0.73		190	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	72	No	400	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.69		ND	12400	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.69	2.3		360	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.9	10		NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.69		ND	2200	No	4300	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.69		ND	8	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.69		ND	200	No	2000	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.69	0.3	J	400	No	1000	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.69	0.24	J	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.69	0.28	J	1460	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.69	1.3	J	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.69		ND	2000	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.69	0.15	J	30	No	300	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.69	1.2		10000	No	5100	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	146	No	400	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.69		ND	20	No	20	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.69	1.2		1460	No	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.9		ND	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.69		ND	7	No	70	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	0.35	J	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.69	0.35	J	220	No	4300	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.75		ND	2000	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.75		ND	3	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.75		ND	10	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.75	0.56	J	62000	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.75		ND	1020	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.75		ND	440	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.75		ND	72	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.75	0.27	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.75		ND	0.3	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.75		ND	300	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.75		ND	7	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.75		ND	9	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.75		ND	6	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.75		ND	22	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.75		ND	30	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2		ND	10200	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	4.1		NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.75	0.28	J	6200	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.75	7.7		NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	8		ND	6600	No	31000	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.75	0.19	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.39		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.75		ND	30	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.75	0.15	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	0.76		14	No	14	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.75		ND	10	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.75		ND	200	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.75		ND	10	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.41		ND	1460	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.75	0.41	J	10	No	100	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.75		ND	102	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.75		ND	7	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.75		ND	200	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.75		ND	8	No	80	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.75	0.63	J	190	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	72	No	400	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.75		ND	12400	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.75	2.3		360	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.75	1.2		NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.5	19		NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.75	0.48	J	2200	No	4300	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.75		ND	8	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.75		ND	200	No	2000	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.75	0.29	J	400	No	1000	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.31		NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.75	0.31	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.75	0.47	J	1460	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.75	0.29	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.75	0.18	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.75	0.43	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.75	8.5	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.75		ND	2000	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.75		ND	30	No	300	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.75	0.31	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.75	1.6		10000	No	5100	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	146	No	400	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.75		ND	20	No	20	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.75	1.3		1460	No	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.5		ND	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.75		ND	7	No	70	No
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	1.4	J	NA	NA	NA	NA
Q1-IA-03	Q1-IA-03-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.75	1.83	J	220	No	4300	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.81		ND	2000	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.81		ND	3	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.81		ND	10	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.81	0.51	J	62000	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.81		ND	1020	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.81		ND	440	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.81		ND	72	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.81	0.87		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.81		ND	0.3	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.81		ND	300	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.81		ND	7	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.81		ND	9	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.81	0.33	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.81		ND	6	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.81		ND	22	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.81	0.88		30	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.81	0.27	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.7		ND	10200	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.81	0.49	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.6	89		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.81	9.6		6200	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.81	3.9		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	8.1	42		6600	No	31000	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.81	0.6	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.81	1.6		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.81		ND	30	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.81	1.4		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.16	1.8		14	No	14	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.81		ND	10	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.81		ND	200	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.81		ND	10	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.44		ND	1460	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.81	0.44	J	10	No	100	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.81		ND	102	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.81		ND	7	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.81		ND	200	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.81	0.23	J	8	No	80	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.81	0.91		190	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.81		ND	72	No	400	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.81	3.9		12400	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.81	4.7		360	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.81	69		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.1	1200		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.81	1.4		2200	No	4300	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.81		ND	8	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.81		ND	NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.81		ND	200	No	2000	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.81	0.39	J	400	No	1000	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.16	1.5		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.81	5.8		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.81	2.8		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.81	2.7		1460	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.81	0.57	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.81	0.45	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.81	1.1		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.81	6.8	J	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.81	0.64	J	2000	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.81	2.7		30	No	300	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.81	3.5		10000	No	5100	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.81		ND	146	No	400	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.81		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.81	0.19	J	20	No	20	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.81	1.6		1460	No	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.1		ND	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.81		ND	7	No	70	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	2.5		NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.81	3.6		220	No	4300	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	2000	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.55	J	62000	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	1020	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	440	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	72	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	0.81		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	0.3	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	300	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72	0.33	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	22	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72	0.8		30	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72	0.27	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2		ND	10200	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.4	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	77		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	8.8		6200	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	4.3		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.2	31		6600	No	31000	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72	0.59	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.47		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	30	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	1.3		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	1.9		14	No	14	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.49		ND	1460	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.42	J	10	No	100	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72		ND	102	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.22	J	8	No	80	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.86		190	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	72	No	400	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72	4.1		12400	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	5.3		360	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72	75		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	1100		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	1.4		2200	No	4300	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72	0.16	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	200	No	2000	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.44	J	400	No	1000	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	1.2		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72	1.6		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	3.1		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	2.8		1460	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.43	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.49	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	1.2		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	7	J	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72	0.62	J	2000	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72	2.9		30	No	300	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	4.4		10000	No	5100	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	146	No	400	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72	0.22	J	20	No	20	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.7		1460	No	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	7	No	70	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	2.7		NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	3.9		220	No	4300	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.77		ND	2000	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.77		ND	3	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.77		ND	10	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.77	0.59	J	62000	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.77		ND	1020	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.77		ND	440	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.77		ND	72	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.77	0.5	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.77		ND	0.3	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.77		ND	300	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.77		ND	7	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.77		ND	9	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.77	0.16	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.77		ND	6	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.77		ND	22	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.77	0.25	J	30	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.77	0.19	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.8		ND	10200	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.77	0.19	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	9.1		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.77	0.18	J	6200	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.77	1.8		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	6600	No	31000	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.77	0.17	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.66		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.77		ND	30	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.77	1.5		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	0.61		14	No	14	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.77		ND	10	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.77		ND	200	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.77		ND	10	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.36		ND	1460	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.77	0.45	J	10	No	100	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.77		ND	102	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.77		ND	7	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.77		ND	200	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.77	0.32	J	8	No	80	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.77	0.69	J	190	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	72	No	400	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.77		ND	12400	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.77	2.3		360	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.77	2.1		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.7	45		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.77	0.36	J	2200	No	4300	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.77		ND	8	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.77		ND	200	No	2000	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.77	0.59	J	400	No	1000	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.97		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.77	0.31	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.77	1.1		NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.77	0.22	J	1460	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.77	0.3	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.77	0.34	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.77	1.2	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.77	0.24	J	2000	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.77		ND	30	No	300	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.77	2.7		10000	No	5100	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	146	No	400	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.77		ND	20	No	20	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.77	3.9		1460	No	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.7		ND	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.77		ND	7	No	70	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	0.97	J	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.77	1.31	J	220	No	4300	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.89		ND	2000	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.89		ND	3	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.89		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.89	0.61	J	62000	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.89		ND	1020	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.89		ND	440	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.89		ND	72	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.89	0.64	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.89		ND	0.3	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.89		ND	300	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.89		ND	7	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.89		ND	9	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.89	0.29	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.89		ND	6	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.89		ND	22	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.89		ND	30	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.89	0.25	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	10200	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.89	0.26	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.8	3.8		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.89	0.27	J	6200	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.89	5.4		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	9.5		ND	6600	No	31000	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.89	0.24	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.89		ND	30	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.89	0.55	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.18	3.1		14	No	14	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.89		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.89		ND	200	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.89		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.39		ND	1460	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.89	0.46	J	10	No	100	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.89		ND	102	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.89		ND	7	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.89		ND	200	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.89	0.33	J	8	No	80	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.89	0.69	J	190	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.89		ND	72	No	400	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.89		ND	12400	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.89	4.8		360	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.89	1.3		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.9	130		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.89	1.7		2200	No	4300	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.89		ND	8	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.89	0.18	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.89		ND	200	No	2000	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.89	0.29	J	400	No	1000	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.61		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.89	0.43	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.89	0.55	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.89	0.41	J	1460	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.89	0.39	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.89	0.39	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.89	1.3		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.89	3.6	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.89		ND	2000	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.89		ND	30	No	300	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.89	3		10000	No	5100	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.89		ND	146	No	400	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.89		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.89		ND	20	No	20	No

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.89	2.5		1460	No	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.89		ND	7	No	70	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.8	2.7		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.89	4		220	No	4300	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.9		ND	2000	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.9		ND	3	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.9		ND	10	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.9	0.55	J	62000	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.9		ND	1020	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.9		ND	440	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.9		ND	72	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.9	0.6	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.9		ND	0.3	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.9		ND	300	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.9		ND	7	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.9		ND	9	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.9	0.24	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.9		ND	6	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.9		ND	22	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.9		ND	30	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.9	0.24	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.2		ND	10200	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.9	0.29	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.8	3.4		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.9	0.28	J	6200	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.9	6.3		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-64-1	ACETONE	ug/m3	13		ND	6600	No	31000	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.9	0.38	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-02-8	ACROLEIN	ug/m3	0.9	1.2		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.9		ND	30	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.9	0.25	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	71-43-2	BENZENE	ug/m3	0.18	3		14	No	14	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.9		ND	10	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.9		ND	200	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.9		ND	10	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.45		ND	1460	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.9	0.47	J	10	No	100	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.9		ND	102	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.9		ND	7	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.9		ND	200	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.9	0.33	J	8	No	80	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.9	0.73	J	190	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.9		ND	72	No	400	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.9		ND	12400	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.9	4.7		360	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	64-17-5	ETHANOL	ug/m3	9	120		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.9	1.7		2200	No	4300	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.9		ND	8	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.9		ND	200	No	2000	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.9	0.33	J	400	No	1000	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.41		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.9	0.29	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.9	0.59	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.9	0.53	J	1460	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.9	0.39	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.9	0.47	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.9	1.2		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.9	3.7	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-42-5	STYRENE	ug/m3	0.9		ND	2000	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.9	0.3	J	30	No	300	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.9	2.7		10000	No	5100	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.9		ND	146	No	400	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.9		ND	20	No	20	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.9	2.4		1460	No	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	9		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.9		ND	7	No	70	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.8	2.5		NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.9	3.7		220	No	4300	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.78		ND	2000	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.78		ND	3	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.78		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.78	0.55	J	62000	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.78		ND	1020	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.78		ND	440	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.78		ND	72	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.78	5.1		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.78		ND	0.3	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.78		ND	300	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.78		ND	7	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.78		ND	9	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.78	2.5		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.78		ND	6	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.78		ND	22	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.78		ND	30	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.78	2.5		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.3		ND	10200	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.78	0.26	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.6	5.8		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.78	1.5		6200	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.78	2.5		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	10		ND	6600	No	31000	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.78	0.18	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.63		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.78		ND	30	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.78	0.38	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.16	20		14	EXCEED	14	EXCEED
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.78		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.78		ND	200	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.78		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.35		ND	1460	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.78	0.41	J	10	No	100	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.78		ND	102	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.78		ND	7	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.78		ND	200	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.78		ND	8	No	80	No

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.78	0.75	J	190	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.78		ND	72	No	400	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.78	1.1		12400	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.78	2.1		360	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.78	0.18	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.8	12		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.78	16		2200	No	4300	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.78		ND	8	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.78	1.7		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.78		ND	200	No	2000	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.78	0.26	J	400	No	1000	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.16	11		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.78	0.69	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.78	1.3		1460	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.78	0.47	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.78	0.59	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.78	0.68	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.78	12		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.78	18	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.78		ND	2000	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.78		ND	30	No	300	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.78	0.37	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.78	8.2		10000	No	5100	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.78		ND	146	No	400	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.78		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.78		ND	20	No	20	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.78	1.1		1460	No	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.8		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.78		ND	7	No	70	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	22		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.78	34		220	No	4300	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.59		ND	2000	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.59		ND	3	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.59		ND	10	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.59	0.6		62000	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.59		ND	1020	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.59		ND	440	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.59		ND	72	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.59	0.44	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.59		ND	0.3	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.59		ND	300	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.59		ND	7	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.59		ND	9	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.59	0.18	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.59	0.17	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.59		ND	6	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.59		ND	22	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.59		ND	30	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.59	0.18	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.2	3		10200	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.59	0.24	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.2	12		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.59	0.17	J	6200	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.59	4.1		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	13		ND	6600	No	31000	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.59	0.16	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.59	0.97		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.59		ND	30	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.59	0.24	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	0.79		14	No	14	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.59		ND	10	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.59		ND	200	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.59	0.16	J	10	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.33		ND	1460	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.59	0.43	J	10	No	100	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.59		ND	102	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.59		ND	7	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.59		ND	200	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.59		ND	8	No	80	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.59	0.67		190	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.59		ND	72	No	400	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.59		ND	12400	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.59	2.2		360	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.59	1		NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	5.9	14		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.59	0.81		2200	No	4300	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.59		ND	8	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.59	0.73		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.59	0.24	J	200	No	2000	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.59	0.26	J	400	No	1000	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	0.55		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.59	0.16	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.59	0.36	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.59	0.56	J	1460	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.59	0.25	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.59	0.64		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.59	6.7	J	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.59		ND	2000	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.59	0.17	J	30	No	300	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.59	0.65		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.59	1.6		10000	No	5100	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.59		ND	146	No	400	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.59		ND	20	No	20	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.59	1.2		1460	No	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.59		ND	7	No	70	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.2	2.4		NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.59	3.04		220	No	4300	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.75		ND	2000	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.75		ND	3	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.75		ND	10	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.75	0.56	J	62000	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.75		ND	1020	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.75		ND	440	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.75		ND	72	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.75	4.1		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.75		ND	0.3	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.75		ND	300	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.75		ND	7	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.75		ND	9	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.75	1.9		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.75		ND	6	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.75		ND	22	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.75		ND	30	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.75	2		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5	2.7		10200	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.75	0.23	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	5.2		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.75	3	J	6200	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.75	3.4		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	10		ND	6600	No	31000	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.71		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.75		ND	30	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.75	0.29	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	19		14	EXCEED	14	EXCEED
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.75		ND	10	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.75		ND	200	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.75	0.16	J	10	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.35		ND	1460	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.75	0.44	J	10	No	100	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.75		ND	102	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.75		ND	7	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.75		ND	200	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.75		ND	8	No	80	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.75	0.67	J	190	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	72	No	400	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.75	0.94		12400	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.75	2.1		360	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.5	11		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.75	15		2200	No	4300	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.75		ND	8	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.75	1.5		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.75	0.24	J	200	No	2000	No

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.75	0.26	J	400	No	1000	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	6.6	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.75	0.61	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.75	1.1		1460	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.75	0.31	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.75	0.65	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.75	0.6	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.75	10		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.75	16	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.75		ND	2000	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.75		ND	30	No	300	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.75	0.55	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.75	7.4		10000	No	5100	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	146	No	400	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.75		ND	20	No	20	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.75	1.1		1460	No	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.5		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.75		ND	7	No	70	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	21		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.75	31		220	No	4300	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.61		ND	2000	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.61		ND	3	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.61		ND	10	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.61	0.55	J	62000	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.61		ND	1020	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.61		ND	440	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.61		ND	72	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.61	4.2		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.61		ND	0.3	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.61		ND	300	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.61		ND	7	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.61		ND	9	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.61	2		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.61		ND	6	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.61		ND	22	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.61		ND	30	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.61		ND	NA	NA	NA	NA

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Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.61	1.9		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.2		ND	10200	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.61	0.27	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.2	4.1		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.61	4.9	J	6200	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.61	2.4		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-64-1	ACETONE	ug/m3	7.9		ND	6600	No	31000	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.61	0.16	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-02-8	ACROLEIN	ug/m3	0.39		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.61		ND	30	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.61	0.38	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	71-43-2	BENZENE	ug/m3	0.12	18		14	EXCEED	14	EXCEED
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.61		ND	10	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.61		ND	200	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.61	0.12	J	10	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.28		ND	1460	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.61	0.44	J	10	No	100	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.61		ND	102	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.61		ND	7	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.61		ND	200	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.61	0.2	J	8	No	80	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.61	0.74		190	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	72	No	400	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.61	0.97		12400	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.61	2.1		360	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.61	0.39	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	64-17-5	ETHANOL	ug/m3	6.1	12		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.61	14		2200	No	4300	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.61		ND	8	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.61	1.4		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.61	0.28	J	200	No	2000	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.61	0.26	J	400	No	1000	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	9.7	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.61	0.16	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.61	0.67		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.61	1.2		1460	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.61	0.34	J	NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.61	0.66		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.61	0.6	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.61	10		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.61	20	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-42-5	STYRENE	ug/m3	0.61		ND	2000	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.61		ND	30	No	300	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.61	0.46	J	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.61	7.2		10000	No	5100	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	146	No	400	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.61		ND	20	No	20	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.61	1.2		1460	No	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.1		ND	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.61		ND	7	No	70	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.2	20		NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.61	30		220	No	4300	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.69		ND	2000	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.69		ND	3	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.69		ND	10	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.69	0.53	J	62000	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.69		ND	1020	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.69		ND	440	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.69		ND	72	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.69	2.3		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.69		ND	0.3	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.69		ND	300	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.69		ND	7	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.69		ND	9	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.69	1.1		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.69		ND	6	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.69		ND	22	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.69		ND	30	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.69	1.2		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	10200	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.69	0.14	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	3.8		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.69	0.36	J	6200	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.69	2.8		NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.8		ND	6600	No	31000	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.47		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.69		ND	30	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.69	0.38	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	9.1		14	No	14	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.69		ND	10	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.69		ND	200	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.69	0.15	J	10	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.31		ND	1460	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.69	0.43	J	10	No	100	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.69		ND	102	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.69		ND	7	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.69		ND	200	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.69		ND	8	No	80	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.69	0.73		190	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	72	No	400	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.69	0.59	J	12400	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.69	2.1		360	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.69	0.55	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.9	9.3		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.69	7.1		2200	No	4300	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.69		ND	8	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.69	0.73		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.69		ND	200	No	2000	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.69	0.25	J	400	No	1000	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	3.5		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.69	0.47	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.69	1		1460	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.69	0.29	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.69	0.46	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.69	0.41	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.69	5.2		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.69	16	J	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.69	0.27	J	2000	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.69		ND	30	No	300	No

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
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Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.69	4.2		10000	No	5100	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	146	No	400	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.69		ND	20	No	20	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.69	1.3		1460	No	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.9		ND	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.69		ND	7	No	70	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	9.7		NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.69	14.9		220	No	4300	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	2000	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.57	J	62000	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	1020	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	440	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	72	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	2.7		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	0.3	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	300	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72	1.3		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	22	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72		ND	30	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72	1.4		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.9		ND	10200	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.17	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	4.4		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	0.42	J	6200	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	3.7		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	11		ND	6600	No	31000	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.55		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	30	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	0.26	J	NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	10		14	No	14	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.32		ND	1460	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.44	J	10	No	100	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72	0.17	J	102	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.2	J	8	No	80	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.72		190	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	72	No	400	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72	0.65	J	12400	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	2.1		360	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	8.2		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	8.4		2200	No	4300	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72	0.84		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	200	No	2000	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.28	J	400	No	1000	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	6.3		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	0.46	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	1.1		1460	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.29	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.32	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72	0.44	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	6.2		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	13	J	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72		ND	2000	No	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72		ND	30	No	300	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	5		10000	No	5100	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	146	No	400	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72		ND	20	No	20	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.1		1460	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	7	No	70	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	12		NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	18.2		220	No	4300	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	2000	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.53	J	62000	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	1020	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	440	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	72	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	0.32	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	0.3	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	300	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	22	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72		ND	30	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.4		ND	10200	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.18	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	2.3		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	0.18	J	6200	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	3.7		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.4		ND	6600	No	31000	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72	0.17	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.45		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	30	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	0.18	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	1.5		14	No	14	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	10	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72	0.15	J	10	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.53		ND	1460	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.47	J	10	No	100	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72		ND	102	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	7	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	200	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.53	J	8	No	80	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.7	J	190	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	72	No	400	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72		ND	12400	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	3.3		360	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72	0.63	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	59		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	0.76		2200	No	4300	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	200	No	2000	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.26	J	400	No	1000	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	0.2		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72	0.15	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	0.29	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	0.3	J	1460	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.2	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.17	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	0.61	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	1.9	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72		ND	2000	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72	0.15	J	30	No	300	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	1.6		10000	No	5100	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	146	No	400	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72		ND	20	No	20	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.6		1460	No	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	7	No	70	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	1.3	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	1.91	J	220	No	4300	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.77		ND	2000	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.77		ND	3	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.77		ND	10	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.77	0.57	J	62000	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.77		ND	1020	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.77		ND	440	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.77		ND	72	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.77	0.37	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.77		ND	0.3	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.77		ND	300	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.77		ND	7	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.77		ND	9	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.77		ND	6	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.77		ND	22	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.77		ND	30	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.77	0.16	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.7		ND	10200	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.77	0.17	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	3.2		NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.77	0.24	J	6200	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.77	11		NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	6600	No	31000	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.77	3.3		NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.77		ND	30	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.77	0.19	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	1.7		14	No	14	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.77		ND	10	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.77		ND	200	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.77	0.19	J	10	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.88		ND	1460	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.77	0.43	J	10	No	100	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.77		ND	102	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.77		ND	7	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.77		ND	200	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.77	0.5	J	8	No	80	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.77	0.73	J	190	No	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	72	No	400	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.77		ND	12400	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.77	3.4		360	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.7	91		NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.77	0.88		2200	No	4300	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.77		ND	8	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.77		ND	200	No	2000	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.77	0.76	J	400	No	1000	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.27		NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.77	0.29	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.77	0.43	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.77	0.48	J	1460	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.77	0.37	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.77	0.22	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.77	0.7	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.77	2.2	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.77		ND	2000	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.77		ND	30	No	300	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.77	0.25	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.77	2.1		10000	No	5100	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	146	No	400	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.77		ND	20	No	20	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.77	1.6		1460	No	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.7		ND	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.77		ND	7	No	70	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	1.5	J	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.77	2.2	J	220	No	4300	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.7		ND	2000	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.7		ND	3	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.7		ND	10	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.7	0.58	J	62000	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.7		ND	1020	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.7		ND	440	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.7		ND	72	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.7	1.3		NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.7		ND	0.3	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.7		ND	300	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.7		ND	7	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.7		ND	9	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.7	0.65	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.7		ND	6	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.7		ND	22	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.7	0.15	J	30	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.7	0.67	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	10200	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.7	0.14	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	6.1		NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.7	0.91		6200	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.7	2.1		NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	8.7		ND	6600	No	31000	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.7	0.18	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.58		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.7		ND	30	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.7	0.28	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	7		14	No	14	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.7		ND	10	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.7		ND	200	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.7	0.15	J	10	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.3		ND	1460	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.7	0.42	J	10	No	100	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.7		ND	102	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.7		ND	7	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.7		ND	200	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.7		ND	8	No	80	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.7	0.71		190	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.7		ND	72	No	400	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.7	0.42	J	12400	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.7	2.3		360	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7	18		NA	NA	NA	NA

ATTACHMENT E-1a
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.7	4.7		2200	No	4300	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.7		ND	8	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.7	0.51	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.7		ND	200	No	2000	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.7	0.27	J	400	No	1000	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	1.6		NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.7	0.44	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.7	0.58	J	1460	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.7	0.21	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.7	0.22	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.7	3.4		NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.7	7.6	J	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.7		ND	2000	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.7		ND	30	No	300	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.7	3.3		10000	No	5100	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.7		ND	146	No	400	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.7		ND	20	No	20	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.7	1.4		1460	No	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7		ND	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.7		ND	7	No	70	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	6.9		NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.7	10.3		220	No	4300	No

Notes:
ND = Not detected above laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not applicable

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.61		ND	2000	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.61		ND	3	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.61		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.61	0.56	J	62000	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.61		ND	1020	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.61		ND	440	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.61		ND	72	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.61	0.28	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.61		ND	0.3	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.61		ND	300	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.61		ND	7	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.61		ND	9	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.17		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.61		ND	6	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.61		ND	22	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.61	0.2	J	30	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.61	0.13	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.61	1.3		10200	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.61	0.25	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.61	6.7		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.61	0.22	J	6200	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.61	4		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6.1	12		6600	No	31000	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.45		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.61	0.77		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.61		ND	30	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.61	0.31	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	0.56		14	No	14	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.61		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.61		ND	200	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.61		ND	10	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.61		ND	1460	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.61	0.45	J	10	No	100	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.61		ND	102	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.61		ND	7	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.61		ND	200	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.61	0.24	J	8	No	80	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.61	0.59	J	190	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	72	No	400	No

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.61		ND	12400	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.61	3.4		360	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.61	1.6		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.1	140		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.61	0.25	J	2200	No	4300	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.61		ND	8	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.61		ND	200	No	2000	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.61	0.45	J	400	No	1000	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	0.59		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.61	0.27	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.61	0.34	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.61	0.39	J	1460	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.61	0.26	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.61	0.39	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.61	0.28	J	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.61	1.1		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.61	0.13	J	2000	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.61	0.27	J	30	No	300	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.61	2.1		10000	No	5100	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	146	No	400	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.61		ND	20	No	20	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.61	1.5		1460	No	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.61		ND	7	No	70	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	0.61	0.75		NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.61	1.03	J	220	No	4300	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1		ND	2000	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1		ND	3	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1		ND	10	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1	0.57	J	62000	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1		ND	1020	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1		ND	440	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1		ND	72	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1	0.26	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1		ND	0.3	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1		ND	300	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1		ND	7	No	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detecled Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-DUP-042708	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1		ND	9	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1		ND	6	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1		ND	22	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1		ND	30	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1	1.5		10200	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	1	0.27	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1	8.7		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1		ND	6200	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1	3.2		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-64-1	ACETONE	ug/m3	10	16		6600	No	31000	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.42		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-02-8	ACROLEIN	ug/m3	1	1.4		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1		ND	30	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1	0.3	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	71-43-2	BENZENE	ug/m3	0.56		ND	14	No	14	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1		ND	10	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-25-2	BROMOFORM	ug/m3	1		ND	200	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	1		ND	10	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1		ND	1460	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1	0.46	J	10	No	100	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1		ND	102	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1		ND	7	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	1		ND	200	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	1		ND	8	No	80	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1	0.94	J	190	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1		ND	72	No	400	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1		ND	12400	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1	3.4		360	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	1	1.7		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	64-17-5	ETHANOL	ug/m3	10	150		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1	0.24	J	2200	No	4300	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1		ND	8	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1		ND	200	No	2000	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1	0.53	J	400	No	1000	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.2	0.38		NA	NA	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-12	Q1-DUP-042708	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1	0.25	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	1	0.36	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	110-54-3	N-HEXANE	ug/m3	1	0.39	J	1460	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	111-84-2	N-NONANE	ug/m3	1	0.28	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	111-65-9	N-OCTANE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-47-6	O-XYLENE	ug/m3	1	0.26	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	115-07-1	PROPYLENE	ug/m3	1	1.3		NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-42-5	STYRENE	ug/m3	1		ND	2000	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1	0.32	J	30	No	300	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-88-3	TOLUENE	ug/m3	1	2		10000	No	5100	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1		ND	146	No	400	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1		ND	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1		ND	20	No	20	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1	1.4		1460	No	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	10	1.3	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1		ND	7	No	70	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1	0.74	J	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1	1	J	220	No	4300	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.6		ND	2000	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.6		ND	3	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.6		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.6	0.55	J	62000	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.6		ND	1020	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.6		ND	440	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.6		ND	72	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.6	3		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.6		ND	0.3	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.6		ND	300	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.6		ND	7	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.6		ND	9	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.15		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.6	1.4		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.6		ND	6	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.6		ND	22	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.6	0.23	J	30	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.6	1.3		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.6	2.6		10200	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.6	0.32	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.6	9.9		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.6	1.2		6200	No	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.6	4.1		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6	18		6600	No	31000	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.37		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6	1.2		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.6		ND	30	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.6	0.8		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	12		14	No	14	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.6		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.6		ND	200	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.6		ND	10	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.6	0.76		1460	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.6	0.47	J	10	No	100	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.6		ND	102	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.6		ND	7	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.6		ND	200	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.6	0.2	J	8	No	80	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.6	0.58	J	190	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	72	No	400	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.6	0.78		12400	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.6	3.9		360	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.6	0.86		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6	63		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.6	7.1		2200	No	4300	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.6		ND	8	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.6	0.72		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.6		ND	200	No	2000	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.6	0.35	J	400	No	1000	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	10		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.6	0.36	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.6	1		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.6	1.4		1460	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.6	0.34	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.6	0.39	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.6	0.33	J	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.6	6.6		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.6	2		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.6	0.17	J	2000	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.6	0.32	J	30	No	300	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.6	0.91		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.6	4		10000	No	5100	No

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	146	No	400	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.6		ND	20	No	20	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.6	1.7		1460	No	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6		ND	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.6		ND	7	No	70	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	0.6	9.9		NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.6	16.5		220	No	4300	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.6		ND	2000	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.6		ND	3	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.6		ND	10	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.6	0.53	J	62000	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.6		ND	1020	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.6		ND	440	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.6		ND	72	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.6	1.8		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.6		ND	0.3	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.6		ND	300	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.6		ND	7	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.6		ND	9	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.6	0.83		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.6		ND	6	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.6		ND	22	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.6	0.25	J	30	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.6	0.78		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.6	3.7		10200	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.6	0.58	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.6	11		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.6	3		6200	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.6	7.9		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6	19		6600	No	31000	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.39		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6	1.1		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.6		ND	30	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.6	1.2		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	8.7		14	No	14	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.6		ND	10	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.6		ND	200	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.6		ND	10	No	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.6		ND	1460	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.6	0.47	J	10	No	100	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.6		ND	102	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.6		ND	7	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.6		ND	200	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.6	0.22	J	8	No	80	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.6	0.59	J	190	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	72	No	400	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.6	0.81		12400	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.6	4.6		360	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.6	1.5		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6	77		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.6	5.3		2200	No	4300	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.6		ND	8	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.6	0.49	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.6		ND	200	No	2000	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.6	0.37	J	400	No	1000	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	3.6		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.6	0.41	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.6	1.3		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.6	1.6		1460	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.6	0.44	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.6	0.5	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.6	0.22	J	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.6	4.4		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.6	1.8		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.6	0.21	J	2000	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.6	0.31	J	30	No	300	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.6	1.4		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.6	3.6		10000	No	5100	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	146	No	400	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.6		ND	20	No	20	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.6	2		1460	No	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6		ND	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.6		ND	7	No	70	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	0.6	8.3		NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.6	12.7		220	No	4300	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.88		ND	2000	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.88		ND	3	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.88		ND	10	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.88	0.63	J	62000	No	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.88		ND	1020	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.88		ND	440	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.88		ND	72	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.88	0.3	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.88		ND	0.3	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.88		ND	300	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.88		ND	7	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.88		ND	9	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.3		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.88		ND	6	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.88		ND	22	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.88	0.26	J	30	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.88	1.4		10200	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.88	0.3	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.88	8.2		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.88	0.3	J	6200	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.88	3.7		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	8.8	14		6600	No	31000	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.59		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.88	0.99		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.88		ND	30	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.88	0.29	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.62		ND	14	No	14	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.88		ND	10	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.88		ND	200	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.88		ND	10	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.88		ND	1460	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.88	0.46	J	10	No	100	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.88		ND	102	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.88		ND	7	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.88		ND	200	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.88	0.66	J	8	No	80	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.88	0.84	J	190	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.88		ND	72	No	400	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.88		ND	12400	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.88	3.2		360	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.88	2.9		NA	NA	NA	NA

ATTACHMENT E-1b
Indoor Air Sampling Results Compared to NJDEP RALs and HDNLs - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	NJDEP RAL ug/m3	NJDEP RAL Exceed?	NJDEP HDNL ug/m3	NJDEP HDNL Exceed?
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.8	160		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.88	0.25	J	2200	No	4300	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.88		ND	8	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.88		ND	200	No	2000	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.88	0.54	J	400	No	1000	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.5		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.88	0.38	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.88	0.4	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.88	0.42	J	1460	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.88	0.32	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.88	0.31	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.88	0.31	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.88	1.4		NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.88	0.18	J	2000	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.88	0.28	J	30	No	300	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.88	1.9		10000	No	5100	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.88		ND	146	No	400	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.88		ND	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.88		ND	20	No	20	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.88	1.6		1460	No	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.8	1.1	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.88		ND	7	No	70	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	0.88	0.78	J	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.88	1.09	J	220	No	4300	No

Notes:
ND = Not detected above laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not applicable

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jeisey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.69		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.69		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.69	0.54	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.69		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.69		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.69		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.69		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.69		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.1		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	0.81	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.69	1.2		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	11		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.69	0.17	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.69		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	0.56		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.69		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.69		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.69	0.14	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.34		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.69	0.42	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.69		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.69		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.69		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.69	0.73		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.69	2.3		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.9	10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.69		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.69		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.69	0.3	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14		ND	NA	NA	NA	NA	NA	NA	3.10E-01	No	3.10E+00	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.69	0.24	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.69	0.28	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.69	1.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-02	Q1-IA-02-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.81	3.9		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.81	4.7		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.81	69		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.1	1200		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.81	1.4		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.81		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.81		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.81	0.39	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.16	1.5		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.81	5.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.81	2.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.81	2.7		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.81	0.57	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.81	0.45	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.81	1.1		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.81	6.8	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.81	0.64	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.81	2.7		3.20E-01	EXCEED	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.81	3.5		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.81		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.81	0.19	J	5.00E-02	EXCEED	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.81	1.6		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.1		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.81		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	2.5		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-04	Q1-IA-04-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.81	3.6		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.55	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	0.81		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72	0.33	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72	0.8		3.10E-01	EXCEED	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72	0.27	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.4	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	77		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	8.8		NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	4.3		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.2	31		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72	0.59	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.47		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	1.9		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.49		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.42	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.22	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.86		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72	4.1		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	5.3		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72	75		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	1100		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	1.4		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72	0.16	J	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.44	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	1.2		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72	1.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	3.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	2.8		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.43	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.49	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	1.2		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	7	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72	0.62	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72	2.9		3.20E-01	EXCEED	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	4.4		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72	0.22	J	5.00E-02	EXCEED	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	2.7		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-05	Q1-IA-05-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	3.9		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.77		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.77		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.77	0.59	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.77	0.5	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.77		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.77		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.77		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.77	0.16	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.77		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.77	0.25	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.77	0.19	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.77	0.19	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	9.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.77	0.18	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.77	1.8		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.77	0.17	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.66		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.77		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.77	1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	0.61		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.77		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.77		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.36		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.77	0.45	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.77		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.77		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.77	0.32	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.77	0.69	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.77	2.3		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.77	2.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.7	45		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.77	0.36	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.77		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.77		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.77	0.59	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.97		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.77	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.77	1.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.77	0.22	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.77	0.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.77	0.34	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.77	1.2	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.77	0.24	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.77		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.77	2.7		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.77		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.77	3.9		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.7		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.77		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	0.97	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-06	Q1-IA-06-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.77	1.31	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.89		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.89		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.89	0.61	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.89	0.64	J	NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.89		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.89		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.89		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.89	0.29	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.89		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.89		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.89	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.89	0.26	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.8	3.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.89	0.27	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.89	5.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	9.5		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.89	0.24	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.89		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.89	0.55	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.18	3.1		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.89		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.89		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.39		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.89	0.46	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.89		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.89		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.89	0.33	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.89	0.69	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.89	4.8		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.89	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.9	130		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.89	1.7		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.89		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.89	0.18	J	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.89		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.89	0.29	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.61		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.89	0.43	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.89	0.55	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.89	0.41	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.89	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.89	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.89	1.3		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.89	3.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.89		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.89	3		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.89		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.89		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.89	2.5		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.9		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.89		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.8	2.7		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No

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115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-IA-12-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.89	4		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.9		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.9		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.9	0.55	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.9	0.6	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.9		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.9		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.9		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.9	0.24	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.9		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.9		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.9	0.24	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.2		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.9	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.8	3.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.9	0.28	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.9	6.3		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-64-1	ACETONE	ug/m3	13		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.9	0.38	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-02-8	ACROLEIN	ug/m3	0.9	1.2		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.9		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.9	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	71-43-2	BENZENE	ug/m3	0.18	3		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.9		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.9		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.45		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.9	0.47	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.9		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.9		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.9	0.33	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.9	0.73	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.9	4.7		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	64-17-5	ETHANOL	ug/m3	9	120		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.9	1.7		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.9		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.9		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.9	0.33	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.41		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.9	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.9	0.59	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.9	0.53	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.9	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.9	0.47	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.9	1.2		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.9	3.7	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	100-42-5	STYRENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.9	0.3	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.9	2.7		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.9		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.9		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.9	2.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	9		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.9		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.8	2.5		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP1-032308	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.9	3.7		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.78		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.78		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.78	0.55	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.78	5.1		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.78		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.78		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.78		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.78	2.5		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.78		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.78		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.78	2.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.3		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.78	0.26	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.6	5.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.78	1.5		NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.78	2.5		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	10		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.78	0.18	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.63		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.78		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.78	0.38	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.16	20		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.78		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.78		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.35		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.78	0.41	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.78		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.78		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.78		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.78	0.75	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.78	1.1		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.78	2.1		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.78	0.18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.8	12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.78	16		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.78		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.78	1.7		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.78		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.78	0.26	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.16	11		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.78	0.69	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.78	1.3		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.78	0.47	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.78	0.59	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.78	0.68	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.78	12		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.78	18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.78		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.78	0.37	J	NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.78	8.2		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.78		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.78		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.78	1.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.78		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.6	22		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-21	Q1-IA-21-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.78	34		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.59		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.59		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.59	0.6		NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.59	0.44	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.59		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.59		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.59		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.59	0.18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.59	0.17	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.59		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.59		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.59	0.18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.2	3		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.59	0.24	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.2	12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.59	0.17	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.59	4.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	13		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.59	0.16	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.59	0.97		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.59		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.59	0.24	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	0.79		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.59		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.59		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.59	0.16	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.33		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.59	0.43	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.59		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.59		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.59		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.59	0.67		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.59	2.2		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.59	1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	5.9	14		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.59	0.81		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.59		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.59	0.73		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.59	0.24	J	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.59	0.26	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	0.55		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.59	0.16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.59	0.36	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.59	0.56	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.59	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.59	0.64		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.59	6.7	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.59	0.17	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.59	0.65		NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.59	1.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.59		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.59	1.2		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.59		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.2	2.4		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-22	Q1-IA-22-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.59	3.04		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.75		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.75		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.75	0.56	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.75	4.1		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.75		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.75		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.75		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.75	1.9		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.75		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.75		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.75	2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5	2.7		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.75	0.23	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	5.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.75	3	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.75	3.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	10		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.71		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.75		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.75	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ATTACHMENT E-2a
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115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	19		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.75		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.75		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.75	0.16	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.35		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.75	0.44	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.75		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.75		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.75		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.75	0.67	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.75	0.94		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.75	2.1		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.5	11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.75	15		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.75		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.75	1.5		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.75	0.24	J	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.75	0.26	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	6.6	J	NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.75	0.61	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.75	1.1		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.75	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.75	0.65	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.75	0.6	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.75	10		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.75	16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.75		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.75	0.55	J	NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.75	7.4		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.75		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.75		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.75	1.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.5		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.75		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	21		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-23	Q1-IA-23-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.75	31		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.61		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.61		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.61	0.55	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.61	4.2		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.61		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.61		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.61		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.61	2		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.61		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.61		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.61	1.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	2.2		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	0.61	0.27	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1.2	4.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.61	4.9	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.61	2.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-64-1	ACETONE	ug/m3	7.9		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.61	0.16	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-02-8	ACROLEIN	ug/m3	0.39		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.61		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.61	0.38	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	71-43-2	BENZENE	ug/m3	0.12	18		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.61		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-25-2	BROMOFORM	ug/m3	0.61		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.61	0.12	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.28		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.61	0.44	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.61		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.61		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	0.61	0.2	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.61	0.74		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.61	0.97		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.61	2.1		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.61	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	64-17-5	ETHANOL	ug/m3	6.1	12		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.61	14		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.61		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.61	1.4		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.61	0.28	J	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.61	0.26	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	9.7	J	NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.61	0.16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	0.61	0.67		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	110-54-3	N-HEXANE	ug/m3	0.61	1.2		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	111-84-2	N-NONANE	ug/m3	0.61	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	111-65-9	N-OCTANE	ug/m3	0.61	0.66		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.61	0.6	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	95-47-6	O-XYLENE	ug/m3	0.61	10		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	115-07-1	PROPYLENE	ug/m3	0.61	20	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	100-42-5	STYRENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.61		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.61	0.46	J	NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-88-3	TOLUENE	ug/m3	0.61	7.2		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.61		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.61	1.2		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.1		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.61		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.2	20		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-23	Q1-DUP2-032308	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.61	30		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.69		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.69		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.69	0.53	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.69	2.3		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.69		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.69		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.69		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.69	1.1		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.69		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.69		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.69	1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.69	0.14	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	3.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.69	0.36	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.69	2.8		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.47		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.69		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.69	0.38	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	9.1		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.69		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.69		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.69	0.15	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.31		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.69	0.43	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.69		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.69		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.69		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.69	0.73		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.69	0.59	J	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.69	2.1		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.69	0.55	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.9	9.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.69	7.1		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.69		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.69	0.73		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.69		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.69	0.25	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	3.5		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.69	0.47	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.69	1		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.69	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.69	0.46	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.69	0.41	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.69	5.2		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.69	16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.69	0.27	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.69		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.69	4.2		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.69		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.69		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.69	1.3		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.9		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.69		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA

ATTACHMENT E-2a
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115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	9.7		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-24	Q1-IA-24-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.69	14.9		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.57	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	2.7		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72	1.3		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72	1.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.17	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	4.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	0.42	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	3.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	11		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.55		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	0.26	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	10		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.32		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.44	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72	0.17	J	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.2	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.72		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72	0.65	J	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	2.1		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	8.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	8.4		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72	0.84		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.28	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	6.3		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	0.46	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	1.1		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.32	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72	0.44	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	6.2		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	13	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	5		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	12		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-25	Q1-IA-25-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	18.2		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.72		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.72		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.72	0.53	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.72	0.32	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.72		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.72		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.72		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.72		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.72		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.4		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.72	0.18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	2.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.72	0.18	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.72	3.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	7.4		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.72	0.17	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.45		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.72		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.72	0.18	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	1.5		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.72		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.72	0.15	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.53		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.72	0.47	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.72		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.72	0.53	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.72	0.7	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.72	3.3		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.72	0.63	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.2	59		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.72	0.76		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.72		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.72		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.72	0.26	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	0.2		NA	NA	NA	NA	NA	NA	3.10E-01	No	3.10E+00	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.72	0.15	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.72	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.72	0.3	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.72	0.2	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.72	0.17	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.72	0.61	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.72	1.9	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.72	0.15	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.72	1.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.72		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.72		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.72	1.6		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.2		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.72		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	1.3	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-26	Q1-IA-26-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.72	1.91	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.77		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.77		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.77	0.57	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.77	0.37	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.77		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.77		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.77		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.77		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.77		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.77	0.16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.7		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.77	0.17	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.5	3.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.77	0.24	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.77	11		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	12		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.77	3.3		NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.77		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.77	0.19	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.15	1.7		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.77		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.77		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.77	0.19	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.77	0.43	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.77		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.77		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.77	0.5	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.77	0.73	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.77	3.4		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7.7	91		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.77	0.88		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.77		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.77		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.77	0.76	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.15	0.27		NA	NA	NA	NA	NA	NA	3.10E-01	No	3.10E+00	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.77	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.77	0.43	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.77	0.48	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.77	0.37	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.77	0.22	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.77	0.7	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.77	2.2	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.77		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.77	0.25	J	NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.77	2.1		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.77		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.77		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.77	1.6		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.7		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.77		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.5	1.5	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-27	Q1-IA-27-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.77	2.2	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.7		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.7		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.7	0.58	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.7	1.3		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.7		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.7		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.7		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.7	0.65	J	NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.7		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.7	0.15	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.7	0.67	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1.5		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.7	0.14	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	1.4	6.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.7	0.91		NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.7	2.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-64-1	ACETONE	ug/m3	8.7		ND	NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.7	0.18	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.58		ND	NA	NA	NA	NA	NA	NA	2.10E-03	No	2.10E-02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.7		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.7	0.28	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	71-43-2	BENZENE	ug/m3	0.14	7		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.7		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.7		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.7	0.15	J	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.3		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.7	0.42	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.7		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.7		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.7		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.7	0.71		NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.7	0.42	J	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.7	2.3		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	64-17-5	ETHANOL	ug/m3	7	18		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.7	4.7		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.7		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.7	0.51	J	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.7		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.7	0.27	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.14	1.6		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.7	0.44	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.7	0.58	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.7	0.21	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.7	0.22	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.7	3.4		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.7	7.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	100-42-5	STYRENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.7		ND	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.7	3.3		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.7		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.7		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA

ATTACHMENT E-2a
Indoor Air Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Report Units	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.7	1.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.7		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	1.4	6.9		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-28	Q1-IA-28-032308	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.7	10.3		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No

Notes:
ND = Not detected above laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not applicable

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.61		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.61		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.61	0.56	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.61	0.28	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.61		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.61		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.61		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.17		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.61		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.61	0.2	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.61	0.13	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.61	1.3		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.61	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.61	6.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.61	0.22	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.61	4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6.1	12		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.45		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.61	0.77		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.61		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.61	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	0.56		2.50E-01	EXCEED	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.61		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.61		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.61	0.45	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.61		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.61		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.61	0.24	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.61	0.59	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.61	3.4		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.61	1.6		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6.1	140		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.61	0.25	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.61		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.61		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.61	0.45	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	0.59		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.61	0.27	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.61	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.61	0.39	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.61	0.26	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.61	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.61	0.28	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.61	1.1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.61	0.13	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.61	0.27	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.61	2.1		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.61		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.61		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.61	1.5		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6.1		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.61		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	XYLENES131	XYLENES, M & P	ug/m3	0.61	0.75		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-IA-12-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.61	1.03	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1	0.57	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1	0.26	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1		ND	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	1	1.5		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	591-78-6	2-HEXANONE	ug/m3	1	0.27	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-63-0	2-PROPANOL	ug/m3	1	8.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1	3.2		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-64-1	ACETONE	ug/m3	10	16		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-05-8	ACETONITRILE	ug/m3	0.42		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-02-8	ACROLEIN	ug/m3	1	1.4		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1	0.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	71-43-2	BENZENE	ug/m3	0.56		ND	2.50E-01	No	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-25-2	BROMOFORM	ug/m3	1		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	74-83-9	BROMOMETHANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1	0.46	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-00-3	CHLOROETHANE	ug/m3	1		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	67-66-3	CHLOROFORM	ug/m3	1		ND	8.30E-02	No	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1	0.94	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1	3.4		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	5989-27-5	D-LIMONENE	ug/m3	1	1.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	64-17-5	ETHANOL	ug/m3	10	150		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1	0.24	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1	0.53	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.2	0.38		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1	0.25	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	142-82-5	N-HEPTANE	ug/m3	1	0.36	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	110-54-3	N-HEXANE	ug/m3	1	0.39	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	111-84-2	N-NONANE	ug/m3	1	0.28	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	111-65-9	N-OCTANE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	95-47-6	O-XYLENE	ug/m3	1	0.26	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	115-07-1	PROPYLENE	ug/m3	1	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	100-42-5	STYRENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1	0.32	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-88-3	TOLUENE	ug/m3	1	2		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1	1.4		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	108-05-4	VINYL ACETATE	ug/m3	10	1.3	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-12	Q1-DUP-042708	FD	TO-15	XYLENES131	XYLENES, M & P	ug/m3	1	0.74	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-12	Q1-DUP-042708	FD	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	1	1	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.6		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.6		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.6	0.55	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.6	3		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.6		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.6		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.6		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.15		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.6	1.4		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.6		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.6	0.23	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.6	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.6	2.6		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.6	0.32	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.6	9.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.6	1.2		NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.6	4.1		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6	18		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.37		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6	1.2		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.6		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.6	0.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	12		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.6		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.6		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.6	0.76		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.6	0.47	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.6		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.6		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.6	0.2	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.6	0.58	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.6	0.78		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.6	3.9		NA	NA	NA	NA	NA	NA	1.60E+01	No	1.80E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.6	0.86		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6	63		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.6	7.1		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.6		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.6	0.72		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.6		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.6	0.35	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	10		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.6	0.36	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.6	1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.6	1.4		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.6	0.34	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.6	0.39	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.6	0.33	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.6	6.6		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.6	2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.6	0.17	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.6	0.32	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.6	0.91		NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.6	4		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.6		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.6	1.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.6		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	XYLENES131	XYLENES, M & P	ug/m3	0.6	9.9		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-21	Q1-IA-21-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.6	16.5		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.6		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.6		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.6	0.53	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.6	1.8		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.6		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.6		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.6		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.6	0.83		NA	NA	NA	NA	NA	NA	6.20E-01	EXCEED	6.20E+00	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.6		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.6	0.25	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.6	0.78		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.6	3.7		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.6	0.58	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.6	11		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.6	3		NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.6	7.9		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	6	19		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.39		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.6	1.1		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.6		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.6	1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.12	8.7		2.50E-01	EXCEED	2.50E+00	EXCEED	2.50E+01	No	NA	NA	NA	NA

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.6		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.6		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.6	0.47	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.6		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.6		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.6	0.22	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.6	0.59	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.6	0.81		NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.6	4.6		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.6	1.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	6	77		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.6	5.3		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.6		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.6	0.49	J	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.6		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.6	0.37	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.12	3.6		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	EXCEED
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.6	0.41	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.6	1.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.6	1.6		NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.6	0.44	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.6	0.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.6	0.22	J	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.6	4.4		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.6	1.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.6	0.21	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.6	0.31	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.6	1.4		NA	NA	NA	NA	NA	NA	9.90E-02	EXCEED	9.90E-01	EXCEED
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.6	3.6		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.6		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.6		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.6	2		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	6		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.6		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	XYLENES131	XYLENES, M & P	ug/m3	0.6	8.3		NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-23	Q1-IA-23-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.6	12.7		NA	NA	NA	NA	NA	NA	1.10E+01	EXCEED	1.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	0.88		ND	3.30E-02	No	3.30E-01	No	3.30E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	0.88		ND	1.20E-01	No	1.20E+00	No	1.20E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	0.88	0.63	J	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	3.70E-01	No	3.70E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	0.88	0.3	J	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	2.80E-01	No	2.80E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	0.88		ND	3.40E-03	No	3.40E-02	No	3.40E-01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	0.88		ND	7.40E-02	No	7.40E-01	No	7.40E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	0.88		ND	9.90E-02	No	9.90E-01	No	9.90E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	0.3		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	6.20E-01	No	6.20E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	0.88		ND	6.10E-02	No	6.10E-01	No	6.10E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	1.10E+00	No	1.10E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	0.88	0.26	J	3.10E-01	No	3.10E+00	No	3.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	6.10E-02	No	6.10E-01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	0.88	1.4		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No

ATTACHMENT E-2b
Indoor Air Sampling Results Compared to Sceening Levels - April 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Cas #	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	IA 10-6 Target Risk	IA 10-6 Target Risk Exceed?	IA 10-5 Target Risk	IA 10-5 Target Risk Exceed?	IA 10-4 Target Risk	IA 10-4 Target Risk Exceed?	IA HQ = 0.1	IA HQ = 0.1 Exceed?	IA HQ =1	IA HQ =1 Exceed?
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	0.88	0.3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	0.88	8.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	0.88	0.3	J	NA	NA	NA	NA	NA	NA	3.10E+02	No	3.10E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	0.88	3.7		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-64-1	ACETONE	ug/m3	8.8	14		NA	NA	NA	NA	NA	NA	3.30E+02	No	3.30E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	0.59		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-02-8	ACROLEIN	ug/m3	0.88	0.99		NA	NA	NA	NA	NA	NA	2.10E-03	EXCEED	2.10E-02	EXCEED
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	2.80E-03	No	2.80E-02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	0.88		ND	1.00E+00	No	1.00E+01	No	1.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	0.88	0.29	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	71-43-2	BENZENE	ug/m3	0.62		ND	2.50E-01	No	2.50E+00	No	2.50E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	4.00E-03	No	4.00E-02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	0.88		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-25-2	BROMOFORM	ug/m3	0.88		ND	1.70E+00	No	1.70E+01	No	1.70E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	5.00E-01	No	5.00E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	0.88	0.46	J	1.30E-01	EXCEED	1.30E+00	No	1.30E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	5.10E+00	No	5.10E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	0.88		ND	8.00E-02	No	8.00E-01	No	8.00E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	0.88		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	0.88	0.66	J	8.30E-02	EXCEED	8.30E-01	No	8.30E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	0.88	0.84	J	NA	NA	NA	NA	NA	NA	9.50E+00	No	9.50E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	3.60E+00	No	3.60E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	6.20E+02	No	6.20E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	0.88	3.2		NA	NA	NA	NA	NA	NA	1.80E+01	No	1.80E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	0.88	2.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	64-17-5	ETHANOL	ug/m3	8.8	160		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	0.88	0.25	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	0.88		ND	8.60E-02	No	8.60E-01	No	8.60E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	0.88		ND	2.00E+00	No	2.00E+01	No	2.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	0.88	0.54	J	4.00E+00	No	4.00E+01	No	4.00E+02	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	0.18	0.5		NA	NA	NA	NA	NA	NA	3.10E-01	EXCEED	3.10E+00	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	0.88	0.38	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	0.88	0.4	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	110-54-3	N-HEXANE	ug/m3	0.88	0.42	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	111-84-2	N-NONANE	ug/m3	0.88	0.32	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	111-65-9	N-OCTANE	ug/m3	0.88	0.31	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	1.50E+01	No	1.50E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	95-47-6	O-XYLENE	ug/m3	0.88	0.31	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	115-07-1	PROPYLENE	ug/m3	0.88	1.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	100-42-5	STYRENE	ug/m3	0.88	0.18	J	NA	NA	NA	NA	NA	NA	1.00E+02	No	1.00E+03	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	0.88	0.28	J	3.20E-01	No	3.20E+00	No	3.20E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	9.90E-02	No	9.90E-01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-88-3	TOLUENE	ug/m3	0.88	1.9		NA	NA	NA	NA	NA	NA	4.00E+01	No	4.00E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	7.30E+00	No	7.30E+01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	0.88		ND	NA	NA	NA	NA	NA	NA	4.80E-02	No	4.80E-01	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	0.88		ND	5.00E-02	No	5.00E-01	No	5.00E+00	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	0.88	1.6		NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	8.8	1.1	J	NA	NA	NA	NA	NA	NA	2.10E+01	No	2.10E+02	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	0.88		ND	1.10E-01	No	1.10E+00	No	1.10E+01	No	NA	NA	NA	NA
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	XYLENES131	XYLENES, M & P	ug/m3	0.88	0.78	J	NA	NA	NA	NA	NA	NA	1.10E+01	No	110	No
Q1-IA-26	Q1-IA-26-042708	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	0.88	1.09	J	NA	NA	NA	NA	NA	NA	11	No	110	No

Notes:
ND = Not detected above laboratory reporting limits
J = Data below calibration curve for that constituent, quantity estimated.
NA = Not applicable

ATTACHMENT E-3
Subslab Soil Gas Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ = 1	SS HQ = 1 Exceed?
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1.9		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1.9		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1.9	0.43	J	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1.9	13		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1.9		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1.9		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1.9		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1.9	2.5		NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1.9		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1.9		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1.9	2.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	3.8	3.2	J	NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	1.9	0.69	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	3.8	5.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1.9	83		NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	17		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1.9	1.5	J	NA	NA	NA	NA	NA	NA	2.10E-02	EXCEED	2.10E-01	EXCEED
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1.9		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	1.9	1.9		2.50E+00	No	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	1.9		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1.1		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1.9	0.41	J	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1.9		ND	8.00E-01	No	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	1.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	1.9	0.81	J	8.30E-01	No	8.30E+00	No	8.30E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1.9	1.6	J	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1.9	2.7		NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	1.9	0.42	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	19	40		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1.9	2.3		NA	NA	NA	NA	NA	NA	1.10E+03	No	1.10E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1.9		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1.9		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1.9	0.58	J	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	3.10E+00	No	3.10E+01	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	1.9	3.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	1.9	1.1	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	1.9	2.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1.9	1.1	J	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	1.9	3.3		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No

ATTACHMENT E-3
Subslab Soil Gas Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ =1	SS HQ =1 Exceed?
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	1.9	4.7	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1.9	0.42	J	3.20E+00	No	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	9.90E-01	No	9.90E+00	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	1.9	17		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1.9		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1.9		ND	5.00E-01	No	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1.9	1.4	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	19	3.4	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1.9		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	3.8	8.9		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-02	Q1-VI-02-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	3.8	12.2		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	7.8		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	7.8		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	7.8	26		NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	7.8	4.9	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	7.8		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	7.8		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	7.8		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	7.8	2.7	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	7.8		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	7.8		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	7.8	1.9	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	16	3.4	J	NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	16	4.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	67-64-1	ACETONE	ug/m3	17		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	107-02-8	ACROLEIN	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.10E-02	No	2.10E-01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	7.8		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	71-43-2	BENZENE	ug/m3	7.8	8.9		2.50E+00	EXCEED	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	7.8	77		1.10E+00	EXCEED	1.10E+01	EXCEED	1.10E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-25-2	BROMOFORM	ug/m3	7.8		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	7.8		ND	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	7.8	4.8	J	8.00E-01	EXCEED	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	7.8		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	7.8	1000		8.30E-01	EXCEED	8.30E+00	EXCEED	8.30E+01	EXCEED	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	7.8	4	J	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	7.8	2.8	J	NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	64-17-5	ETHANOL	ug/m3	78	5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	7.8	5.5	J	NA	NA	NA	NA	NA	NA	1.10E+03	No	1.10E+04	No

ATTACHMENT E-3
Subslab Soil Gas Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ =1	SS HQ =1 Exceed?
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	7.8		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	7.8		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	7.8		ND	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	3.10E+00	No	3.10E+01	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	7.8	6.9	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	110-54-3	N-HEXANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	111-84-2	N-NONANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	111-65-9	N-OCTANE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	95-47-6	O-XYLENE	ug/m3	7.8	4.2	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	115-07-1	PROPYLENE	ug/m3	7.8	16	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	100-42-5	STYRENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	7.8	4.3	J	3.20E+00	EXCEED	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	9.90E-01	No	9.90E+00	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	108-88-3	TOLUENE	ug/m3	7.8	12		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	7.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	7.8	3.2	J	5.00E-01	EXCEED	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	7.8	23		NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	7.8	4.9	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	7.8		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	16	8.2	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-06	Q1-VI-06-032408	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	16	12.4	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1.8		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1.8		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1.8	0.42	J	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1.8	7.8		NA	NA	NA	NA	NA	NA	6.20E+00	EXCEED	6.20E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1.8		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1.8		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1.8		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1.8	1.3	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1.8		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1.8		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1.8	2.8		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	3.7	5.9		NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	1.8	1.9		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	3.7	3	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1.8	2.5		NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	67-64-1	ACETONE	ug/m3	16		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	1.8	0.46	J	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1.8	1.5	J	NA	NA	NA	NA	NA	NA	2.10E-02	EXCEED	2.10E-01	EXCEED
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1.8		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	71-43-2	BENZENE	ug/m3	1.8	2		2.50E+00	No	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1.8		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-25-2	BROMOFORM	ug/m3	1.8		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No

ATTACHMENT E-3
Subslab Soil Gas Sampling Results Compared to Sceening Levels - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ =1	SS HQ =1 Exceed?
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1.8		ND	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1.8		ND	8.00E-01	No	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	1.8		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	1.8	3		8.30E-01	EXCEED	8.30E+00	No	8.30E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1.8	5.5		NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	1.8	0.37	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	64-17-5	ETHANOL	ug/m3	18	5.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1.8	1.3	J	NA	NA	NA	NA	NA	NA	1.10E+03	No	1.10E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1.8		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1.8		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1.8		ND	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.10E+00	No	3.10E+01	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	1.8	8.3		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	110-54-3	N-HEXANE	ug/m3	1.8	1	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	111-84-2	N-NONANE	ug/m3	1.8	2.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	111-65-9	N-OCTANE	ug/m3	1.8	2.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1.8	1.1	J	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	95-47-6	O-XYLENE	ug/m3	1.8	2.2		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	115-07-1	PROPYLENE	ug/m3	1.8	1.5	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	100-42-5	STYRENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1.8	0.37	J	3.20E+00	No	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	9.90E-01	No	9.90E+00	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	108-88-3	TOLUENE	ug/m3	1.8	6.6		NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1.8		ND	5.00E-01	No	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1.8	1.7	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	18	6.3	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1.8		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	3.7	6.5		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-07	Q1-VI-07-032608	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	3.7	8.7		NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	1.8		ND	3.30E-01	No	3.30E+00	No	3.30E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	1.8		ND	1.20E+00	No	1.20E+01	No	1.20E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.10E+04	No	3.10E+05	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-34-3	1,1-DICHLOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.10E+02	No	5.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-35-4	1,1-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.70E+00	No	3.70E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	1.8	1.7	J	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.80E+00	No	2.80E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	106-93-4	1,2-DIBROMOETHANE (EDB)	ug/m3	1.8		ND	3.40E-02	No	3.40E-01	No	3.40E+00	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	95-50-1	1,2-DICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	107-06-2	1,2-DICHLOROETHANE	ug/m3	1.8		ND	7.40E-01	No	7.40E+00	No	7.40E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	78-87-5	1,2-DICHLOROPROPANE	ug/m3	1.8		ND	9.90E-01	No	9.90E+00	No	9.90E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	76-14-2	1,2-DICHLOROTETRAFLUOROETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	108-67-8	1,3,5-TRIMETHYLBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	6.20E+00	No	6.20E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	106-99-0	1,3-BUTADIENE	ug/m3	1.8		ND	6.10E-01	No	6.10E+00	No	6.10E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	541-73-1	1,3-DICHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.10E+01	No	1.10E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	106-46-7	1,4-DICHLOROBENZENE	ug/m3	1.8		ND	3.10E+00	No	3.10E+01	No	3.10E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	123-91-1	1,4-DIOXANE	ug/m3	1.6		ND	NA	NA	NA	NA	NA	NA	6.10E-01	No	6.10E+00	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	622-96-8	1-ETHYL-4-METHYL-BENZENE	ug/m3	1.8	0.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	78-93-3	2-BUTANONE (MEK)	ug/m3	3.5	3.3	J	NA	NA	NA	NA	NA	NA	5.10E+03	No	5.10E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	591-78-6	2-HEXANONE	ug/m3	1.8	1.1	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	67-63-0	2-PROPANOL	ug/m3	3.5	1.6	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	108-10-1	4-METHYL-2-PENTANONE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.10E+03	No	3.10E+04	No

ATTACHMENT E-3

Subslab Soil Gas Sampling Results Compared to Sceening Levels - March 2008

115 River Road Building

Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier	SS 10-6 Target Risk	SS 10-6 Target Risk Exceed?	SS 10-5 Target Risk	SS 10-5 Target Risk Exceed?	SS 10-4 Target Risk	SS 10-4 Target Risk Exceed?	SS HQ = 0.1	SS HQ = 0.1 Exceed?	SS HQ = 1	SS HQ = 1 Exceed?
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	141-78-6	ACETIC ACID, ETHYL ESTER	ug/m3	1.8	1	J	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	67-64-1	ACETONE	ug/m3	11		ND	NA	NA	NA	NA	NA	NA	3.30E+03	No	3.30E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-05-8	ACETONITRILE	ug/m3	1.8	0.6	J	NA	NA	NA	NA	NA	NA	6.20E+01	No	6.20E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	107-02-8	ACROLEIN	ug/m3	1.8	1.4	J	NA	NA	NA	NA	NA	NA	2.10E-02	EXCEED	2.10E-01	EXCEED
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	107-13-1	ACRYLONITRILE	ug/m3	1.6		ND	NA	NA	NA	NA	NA	NA	2.80E-02	No	2.80E-01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	107-05-1	ALLYL CHLORIDE	ug/m3	1.8		ND	1.00E+01	No	1.00E+02	No	1.00E+03	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	80-56-8	ALPHA-PINENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	71-43-2	BENZENE	ug/m3	1.8	0.65	J	2.50E+00	No	2.50E+01	No	2.50E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	100-44-7	BENZENE, (CHLOROMETHYL)-	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.00E-02	No	4.00E-01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-27-4	BROMODICHLOROMETHANE	ug/m3	1.8		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-25-2	BROMOFORM	ug/m3	1.8		ND	1.70E+01	No	1.70E+02	No	1.70E+03	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	74-83-9	BROMOMETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.00E+00	No	5.00E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-15-0	CARBON DISULFIDE	ug/m3	1.2		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	56-23-5	CARBON TETRACHLORIDE	ug/m3	1.8		ND	1.30E+00	No	1.30E+01	No	1.30E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	108-90-7	CHLOROBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	5.10E+01	No	5.10E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	124-48-1	CHLORODIBROMOMETHANE	ug/m3	1.8		ND	8.00E-01	No	8.00E+00	No	8.00E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-00-3	CHLOROETHANE	ug/m3	1.6		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	67-66-3	CHLOROFORM	ug/m3	1.8	1.1	J	8.30E-01	EXCEED	8.30E+00	No	8.30E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	74-87-3	CHLOROMETHANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	9.50E+01	No	9.50E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.60E+01	No	3.60E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	110-82-7	CYCLOHEXANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	6.20E+03	No	6.20E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	1.8	2.7		NA	NA	NA	NA	NA	NA	1.80E+02	No	1.80E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	5989-27-5	D-LIMONENE	ug/m3	1.8	0.55	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	64-17-5	ETHANOL	ug/m3	18	5.8	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	100-41-4	ETHYLBENZENE	ug/m3	1.8	0.38	J	NA	NA	NA	NA	NA	NA	1.10E+03	No	1.10E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	87-68-3	HEXACHLOROBUTADIENE	ug/m3	1.8		ND	8.60E-01	No	8.60E+00	No	8.60E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	98-82-8	ISOPROPYLBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	80-62-6	METHYL METHACRYLATE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	ug/m3	1.8		ND	2.00E+01	No	2.00E+02	No	2.00E+03	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-09-2	METHYLENE CHLORIDE	ug/m3	1.8		ND	4.00E+01	No	4.00E+02	No	4.00E+03	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	91-20-3	NAPHTHALENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	3.10E+00	No	3.10E+01	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	123-86-4	N-BUTYL ACETATE	ug/m3	1.8	0.41	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	142-82-5	N-HEPTANE	ug/m3	1.8	2.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	110-54-3	N-HEXANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	111-84-2	N-NONANE	ug/m3	1.8	1.1	J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	111-65-9	N-OCTANE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	103-65-1	N-PROPYLBENZENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.50E+02	No	1.50E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	95-47-6	O-XYLENE	ug/m3	1.8	0.47	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	115-07-1	PROPYLENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	100-42-5	STYRENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	1.00E+03	No	1.00E+04	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	127-18-4	TETRACHLOROETHENE	ug/m3	1.8	2.9		3.20E+00	No	3.20E+01	No	3.20E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	109-99-9	TETRAHYDROFURAN	ug/m3	1.8	0.7	J	NA	NA	NA	NA	NA	NA	9.90E-01	No	9.90E+00	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	108-88-3	TOLUENE	ug/m3	1.8	1.4	J	NA	NA	NA	NA	NA	NA	4.00E+02	No	4.00E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	7.30E+01	No	7.30E+02	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/m3	1.8		ND	NA	NA	NA	NA	NA	NA	4.80E-01	No	4.80E+00	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	79-01-6	TRICHLOROETHENE	ug/m3	1.8		ND	5.00E-01	No	5.00E+00	No	5.00E+01	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	1.8	73		NA	NA	NA	NA	NA	NA	7.30E+02	No	7.30E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	108-05-4	VINYL ACETATE	ug/m3	18	4.5	J	NA	NA	NA	NA	NA	NA	2.10E+02	No	2.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	75-01-4	VINYL CHLORIDE	ug/m3	1.8		ND	1.10E+00	No	1.10E+01	No	1.10E+02	No	NA	NA	NA	NA
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	XYLENES1314	XYLENES, M & P	ug/m3	3.5	1.4	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No
Q1-VI-08	Q1-VI-08-032508	REG	TO-15	1330-20-7	XYLENES, TOTAL - sum of isomers	ug/m3	3.5	1.87	J	NA	NA	NA	NA	NA	NA	1.10E+02	No	1.10E+03	No

Notes:

ND = Not detected above laboratory reporting limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not applicable

ATTACHMENT E-4
Subslab Soil Gas Sampling Results for O2 and CO2 - March 2008
115 River Road Building
Quanta Site, Edgewater, New Jersey

Location ID	Field Sample ID	Sample Purpose	Analytical Method	Parameter Code	Parameter Name	Reporting Unit	Reporting Limit	Detected Result	Validation Qualifier
Q1-VI-02	Q1-VI-02-032508	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.27		ND
Q1-VI-02	Q1-VI-02-032508	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.27	22	
Q1-VI-06	Q1-VI-06-032408	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.18	1.08	
Q1-VI-06	Q1-VI-06-032408	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.18	19.6	
Q1-VI-07	Q1-VI-07-032608	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.3	0.673	
Q1-VI-07	Q1-VI-07-032608	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.3	20.9	
Q1-VI-08	Q1-VI-08-032508	REG	EPA 3C	124-38-9	CARBON DIOXIDE	%V/V	0.27	1.63	
Q1-VI-08	Q1-VI-08-032508	REG	EPA 3C	AROX	OXYGEN + ARGON	%V/V	0.27	19.6	

Notes:
%V/V = Percent by volume
ND = Not detected above laboratory reporting limits

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March 28, 2007

Mr. Richard Ho, RPM / OSC
U.S. Environmental Protection Agency - Region 2
Emergency and Remedial Response Division
290 Broadway, Floor 19
New York, New York 10007-1866

Subject: Quanta Resources Site, OU1
Edgewater, New Jersey
Additional Evaluation of Potential Air Exposure Pathways at the Quanta Resources Site, Edgewater, New Jersey

Dear Mr. Ho:

Enclosed is an additional analysis of potential air exposure pathways at the 115 River Road building from the Quanta Resources Site and Block 93 North parcel. This analysis responds to EPA's concerns over potential dust emissions from the Site, and has been provided for our use as we discuss approaches for addressing potential dust emissions.

As you recall, EPA had requested in e-mail messages from November 15, 2006 and January 5, 2007 that ambient air monitoring for arsenic be performed at the 115 River Road building. In response, we have conducted an air pathway analysis, in accordance with EPA guidelines, to better characterize the potential for emissions from the Site. We feel that characterizing the potential for air emissions from the Site is an important prerequisite to making any decisions regarding conducting ambient air monitoring.

The enclosed analysis indicates a negligible potential for suspension of wind-blown dust, and correspondingly a negligible potential for inhalation exposure to arsenic in soil. Based on the Site-specific data collection and modeling, we feel there is no need to further evaluate the potential air exposure pathway for arsenic, under the current Site conditions.

If ambient air sampling is determined to be necessary to evaluate the air exposure pathway for arsenic, the air sampling program should also include background air samples, located away from the Site. Due to the very low potential for dust emissions from the Site, detection of arsenic in air samples would be an indication of regional ambient air quality, and not emission impacts from the Quanta Resources Site or the Block 93 North area.

If you have any questions or concerns, please feel free to contact Steve Zarlinski at 215-640-9087.

Sincerely,

CH2M HILL

Stephen J. Zarlinski , P.E.
Project Manager

Cc: Timothy J. Metcalf (Honeywell)
Bob Hayton (NJDEP)
Rich Kampf (ESAG Representative)

Summary

A site-specific evaluation was conducted of the potential wind-blown dust emissions of arsenic from the Quanta Resources Superfund Site, and the adjacent Block 93 North parcel. Soil sampling was performed to estimate concentrations of arsenic in the surface soil, and to obtain data for estimating dust emissions from the soil.

This evaluation indicates a negligible potential for suspension of wind-blown dust, and correspondingly a negligible potential for inhalation exposure to arsenic in soil. Based on the Site-specific data collection and modeling, there is no need to further evaluate the potential air exposure pathway for arsenic, under the current Site conditions.

If ambient air sampling is determined to be necessary to evaluate the air exposure pathway for arsenic, the air sampling program should also include background air samples, located away from the Site. Due to the very low potential for dust emissions from the Site, detection of arsenic in air samples would be an indication of regional ambient air quality, and not emission impacts from the Quanta Resources Site or the Block 93 North area.

Introduction

This memorandum provides a Site-specific evaluation of the potential for wind-blown dust emissions of arsenic from surface soil at the Quanta Resources Superfund Site (the "Site") and the adjacent Block 93 parcel. This memorandum updates the results from a previous evaluation presented in a memorandum submitted in December 2006 to the U.S. Environmental Protection Agency, Region 2 (USEPA).[1] That previous evaluation estimated a risk-based screening level in soil based on potential inhalation exposure using both residential exposure assumptions and a particulate emission factor calculated with conservative default assumptions.

As recommended in the December 2006 memorandum, additional characterization was performed to develop a Site-specific estimate of potential dust emissions from surface soil at the Site. This Site-specific estimate of potential dust emissions was used to calculate a site-specific screening level in soil based on potential inhalation exposure under residential exposure assumptions. The approach for developing this Site-specific estimate of potential dust emissions was based on the procedures in EPA's *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination* (Cowherd, et. al., 1985).

This Site-specific evaluation involved the following steps:

- Collection of surface soil samples within an area of previously detected high concentrations of arsenic (Block 93 North, and the northwestern corner of the Quanta Resources property). These samples were analyzed to estimate the particle size distribution in surface soils (an input to calculation of wind-blown dust emissions). Also, these samples were analyzed for arsenic to estimate concentrations in surface soil.

[1] CH2M HILL. 2006. Technical Memorandum: Evaluation of Potential Air Exposure Pathways at the Quanta Resources Site, Edgewater, New Jersey, December 20, 2006.

- Visual observations of the soil surface - presence of vegetation and "non-erodible" elements (pebbles, rocks, sticks). These two factors also were inputs for calculating wind-blown dust emissions.
- Use of the field data (particle size distribution and visual observations) to estimate the parameters for calculating a Site-specific wind-blown dust emissions
- Calculation of the Site-specific wind-blown dust emission rate using an emission factor equation presented in Cowherd et al, 1985.
- Calculation of the Site-specific particulate emission factor (PEF) using the emission rate and an air dispersion modeling factor; this approach is based on EPA's *Soil Screening Guidance* (EPA, 1996).
- Calculation of a screening level for arsenic in soil based on potential inhalation exposure to wind-blown dust, using the Site-specific particulate emission factor.
- Comparison of the arsenic concentrations detected in surface soil with the screening level calculated using the Site-specific particulate emission factor.

Data Collection

Data collected from the site consisted of surface soil samples from the northwestern corner of the Quanta Resources property and on Block 93 North, and visual observations made of the locations where the surface soil samples had been collected. As described in the air pathway analysis presented in the December 2006 memorandum, elevated concentrations of arsenic have been detected in soil in these areas. As described in the December 2006 memorandum, concentrations of arsenic in surface soil throughout the remainder of the Site generally were below 13.2 mg/kg, which is the average concentration in soil in New Jersey, as defined in Appendix D, NJAC 7:26E, Technical Requirements for Site Remediation, 2005. Data collection methods are briefly described below:

- Surface soil samples were collected from depths of 0 to 6 inches at twelve locations; nine sampling locations were on the Site proper, while two locations were on Block 93 Central and one location was on Block 93 North. The samples were collected using disposable plastic spoons and homogenized in disposable metal pans. Large particles were sifted out (i.e., roots and gravel/stone greater than 1 centimeter or 0.5 inch in diameter were removed) and the samples were transferred into labeled, clean, laboratory-supplied glassware.
- Overhead photographs were made of each sampling location. These photographs documented the presence and extent of stones larger than 1 cm in diameter in the soil.[2] As described below, these overhead photographs were compared with photographs presented in Appendix A in the Cowherd et al., 1985 guidance document to quantify the fraction of non-erodible elements in the surface soil. Angled photographs were also taken of the area around each sample location for estimating the fraction of vegetative cover present.

[2] Stones larger than 1 cm in diameter are defined as "non-erodible elements" in EPA's guidance (Cowherd et al., 1985).

Grain size analysis using both sieve and hydrometer testing (ASTM Method D422) was performed on each soil sample. These grain size data were used to estimate the mode particle size at each location sampled, as described in the Cowherd et al., 1985 guidance document. In addition, arsenic concentrations were determined in each soil sample using EPA Method 6010.

The soil sample locations are presented in Figure 1.

Results

A summary of analytical results for the sampling described herein is presented in Table 1. The arsenic concentrations on the Quanta Resources property were 50 mg/kg or lower, with the exception of a single sample. That sample was AD-SS-05, where 1,380 mg/kg was detected in surface soil. The arsenic concentrations detected on Block 93 North ranged from 19 to 1,380 mg/kg.

Parameters used to calculate a Site-specific particulate emission factor (PEF) using the "unlimited reservoir" emissions model were determined using the soil grain size data, and observations from the Site. A description of the model equations and parameters is presented in Attachment A. The parameters estimated using the Site data were:

Aggregate size distribution mode (ADSM) in soil. The ASDM is used to calculate the threshold friction velocity in soil.[3] This is determined by a grain size analysis. The mode of particle sizes in soil lies between the opening size with the largest catch of particles and the opening size of the next largest sieve. The grain size data for each soil sample are summarized in Attachment B.

Silhouette of non-erodible elements in soil (L_c). This parameter is used to correct the calculated threshold friction velocity for the presence of large particles (> 1 cm in diameter) in soil. L_c in each surface soil sample was estimated by comparing overhead photographs taken during the site visit to the standards photographs provided in Appendix A of Cowherd et al., 1985, and assigning the corresponding L_c value to the sample. An example of photographic log taken at Sample Location SS-01 is shown in Attachment C. The calculation of L_c values for all of the samples using the Site photographs is shown in Attachment D.

Fraction of vegetation (F_v). This parameter reflects the effects of vegetation in suppressing dust emissions. F_v was estimated from photographs of each sample location (shown in the photo log in Attachment C). The calculation of F_v values for each sample from the Site photographs is shown in Attachment D.

The Site specific parameters for modeling dust emissions using the unlimited reservoir model are shown in Table 2. These are used to estimate the Site-specific PEF, as discussed in the following section.

Estimation of Site-Specific Particulate Emission Factor (PEF)

The average Site-specific particulate emission factors (PEFs) for the northwestern corner of the Quanta Resources property and Block 93 North parcel are presented in Table 3. These

[3] The threshold friction velocity is the wind velocity at which erosion and suspension of dust from soil begins to occur.

PEF values represent the potential for dust emissions from a 1 acre portion of the Site. Sample calculations for a single sample location (SS-01) are shown in Attachment E.

Evaluation of the potential for an air exposure pathway is presented in Table 4. Presented in Table 4 is the estimated dust concentration in air (in terms of PM_{10} – particulate matter finer than 10 um in diameter) potentially associated with wind-blown dust from the northwestern corner of the Quanta Resources property and Block 93 North parcel. The calculated PEFs based on Site-specific conditions in soil correspond to calculated PM_{10} concentrations in air that are far below background levels[4], and that would be undetectable.

The extremely low potential for windblown dust emissions from the Site means that risk-based screening concentrations that are protective of an inhalation exposure pathway would correspondingly be very high. As shown in Table 4, a PEF of 1.77×10^{10} m^3/kg corresponds to a residential screening level for arsenic in soil, based on a 1×10^{-6} target cancer risk level, of 10,000 mg/kg. The average PEF values for the northwestern corner of the Quanta Resources property and Block 93 North parcel are several orders of magnitude higher than this value. Therefore, the Site-specific risk-based screening level in soil based on protecting residents from inhalation exposure to arsenic in wind-blown dust would be higher than 10,000 mg/kg.

As shown in Table 1, all of the concentrations detected in surface soil in the northwestern corner of the Quanta Resources property and Block 93 North parcel are well below 10,000 mg/kg. Concentrations detected in surface soil samples collected prior to December 2006 are also below 10,000 mg/kg. Therefore, the concentrations detected in surface soil in these locations do not represent a significant air exposure pathway to nearby human populations.

The site-specific PEFs calculated above account for wind-blown dust emissions. Portions of the surface in Block 93 could be accessible by vehicles. There is the potential for transient episodes of higher dust emissions, should vehicles drive over the locations with elevated concentrations of arsenic in soil. These moments of elevated emissions would be relatively limited compared with longer-term wind-blown dust emissions; emissions from vehicle traffic would not substantially increase arsenic concentrations in air.

Conclusions and Recommendations

A Site-specific evaluation of the potential air exposure pathway for arsenic in surface soil at the Quanta Resources property and the Block 93 North parcel indicates a negligible potential for suspension of wind-blown dust, and correspondingly a negligible potential for inhalation exposure to arsenic in soil. Based on the site-specific data collection and modeling, there should not be further need to evaluate the potential air exposure pathway, under the current Site conditions.

If ambient air sampling is determined to be necessary to evaluate the air exposure pathway for arsenic, the air sampling program should also include background air samples, located away from the Site. Arsenic is normally present in urban air, at concentrations ranging from 20 to 30 nanograms per cubic meter (ng/m^3) (ATSDR, 2005). As shown in Table 4, the

[4] The annual average PM_{10} concentration in air for northern New Jersey was about 13 ug/m^3, in 2003 http://www.state.nj.us/dep/airmon/pm03.pdf (most current data available).

worst-case arsenic concentration in air from dust emissions from the site would be well below the levels typically encountered in urban air. In addition, emissions from vehicle traffic would not substantially increase arsenic concentrations in air. Based on the results from this Site-specific air pathway analysis, detection of arsenic in air samples would be an indication of regional ambient air quality, and not emission impacts from the Quanta Resources property or Block 93 North parcel.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for Arsenic. http://www.atsdr.cdc.gov/toxprofiles/tp2.html.

Cowherd, C.C. et al. 1985. *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination.* EPA/600/8-85/002. U.S. Environmental Protection Agency. Office of Health and Environmental Assessment, Washington, DC.

U.S. Environmental Protection Agency. 1996. *Technical Background Document for Soil Screening Guidance.* Office of Solid Waste and Emergency Response, EPA/540-R95/128. Washington, D.C.

TABLE 1
Soil Analytical Data - Arsenic
Quanta Resources Site
Edgewater, NJ

Location ID	Field Sample ID	Concentration in Soil (mg/kg)	Validation Qualifier
AD-SS-01	AD-SS-01-0-0.5	3.7	
AD-SS-02	AD-SS-02-0-0.5	7.3	
AD-SS-03	AD-SS-03-0-0.5	2.3	J
AD-SS-04	AD-SS-04-0-0.5	36.2	
AD-SS-05	AD-SS-05-0-0.5	1380	
AD-SS-06	AD-SS-06-0-0.5	50.2	
AD-SS-07	AD-SS-07-0-0.5	52.2	
AD-SS-08	AD-SS-08-0-0.5	29.1	
AD-SS-09	AD-SS-09-0-0.5	16.6	
AD-SS-10	AD-SS-10-0-0.5	19.3	
AD-SS-11	AD-SS-11-0-0.5	312	
AD-SS-12	AD-SS-12-0-0.5	1380	J

Notes:

J - Estimated result.

Field duplicate was collected at location AD-SS-12. Validation qualifier has been placed on this sample because of high variability between the native and duplicate samples.

TABLE 2
Site-Specific Parameters for Unlimited Reservoir Emissions Model
Quanta Resources Site
Edgewater, NJ

Sample ID	Aggregate Size Distribution Mode (ASDM) (mm)	Ratio of Silhouette Area of Non-erodible Elements to Total Soil Surface (L_c)	Fraction of Total Soil Area Covered with Vegetation (F_v)
AD-SS-01	2	0.1	0.2
AD-SS-02	4.75	0.1	0.4
AD-SS-03	0.6	0.1	0.4
AD-SS-04	4.75	0.1	0.7
AD-SS-05	9.525	0.1	0.5
AD-SS-06	4.75	0.1	0.75
AD-SS-07	0.25	0.1	0.85
AD-SS-08	4.75	0.1	0.8
AD-SS-09	0.25	0.1	0.99
AD-SS-10	4.75	0.1	0.3
AD-SS-11	4.75	0.1	0.2
AD-SS-12	4.75	0.1	0.99

TABLE 3
Summary Table - Site-Specific Particulate Emission Factors
Quanta Resources Site
Edgewater, NJ

Sample ID	PEF (m^3/kg)	Arsenic Concentration in Soil (mg/kg)
AD-SS-01	1.21E+11	3.7
AD-SS-02	4.36E+15	7.3
AD-SS-03	2.70E+08	2.3
AD-SS-04	8.71E+15	36.2
AD-SS-05	2.97E+22	1380
AD-SS-06	1.05E+16	50.2
AD-SS-07	1.34E+08	52.2
AD-SS-08	1.31E+16	29.1
AD-SS-09	2.01E+09	16.6
Average (Quanta)	3.30E+21	
AD-SS-10	3.73E+15	19.3
AD-SS-11	3.27E+15	312
AD-SS-12	2.61E+17	1380
Average (Block 93)	8.95E+16	

TABLE 4
Calculation of Screening Level in Soil Based on Dust Inhalation - Arsenic
Quanta Resources Site
Edgewater, NJ

Particulate Screening Level (mg/kg) = (TR x AT x 365d/yr) / (URF x 1000ug/kg x EF x ED x (1/PEF))

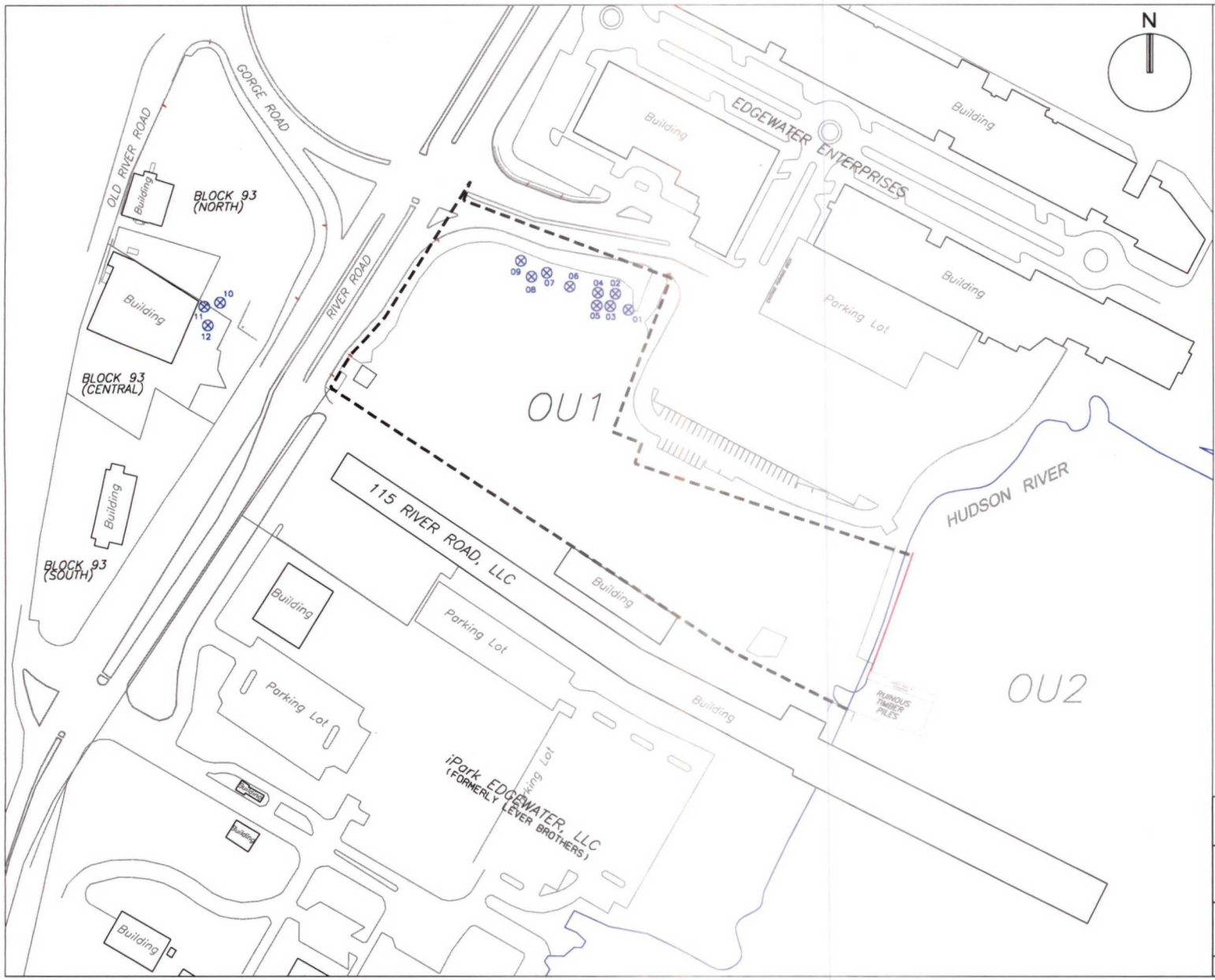
= 1E-6 * 70 * 365 / (URF * 1000 * 350 * 30 * (1/PEF))

TR - Target Risk Level, 1×10^{-6}
AT - Averaging Time, 70 years
URF - Unit Risk Factor in $(\mu g/m^3)^{-1}$
Arsenic URF = 4.3 x 10-3 $(\mu g/m^3)^{-1}$
EF - Exposure Frequency, Residential, 350 days/year
ED - Exposure Duration, Residential, 30 years
PEF - Particulate Emission Factor, m^3/kg
From USEPA Soil Screening Guidance, 1996

Screening Level - (PEF Summary Statistic)	**PEF (m^3/kg)**	**PM10 Concentration in Air (ug/m^3)**	**Calculated Screening Value in Soil (mg/kg)**	**Screening Level (mg/kg)**
SL (Quanta) =	3.30E+21	3.03E-13	1.87E+15	>10,000
SL (Block 93) =	8.95E+16	1.12E-08	5.06E+10	>10,000
Upper bound SL	1.77E+10	5.65E-02	1.00E+04	

Note:
Calculated arsenic concentration in air based on the highest concentration in soil (1,380 mg/kg) and most conservative PEF is:

1.54E-08 ng/m^3



LEGEND

CURRENT QUANTA RESOURCES PROPERTY BOUNDARY

⊗ 01 SURFACE SOIL SAMPLING LOCATION

GRAPHIC SCALE

(IN FEET)
1 INCH = 140 FT.

CH2MHILL

SURFACE SOIL SAMPLE LOCATIONS

Quanta Resources Site
Edgewater, New Jersey

February 9, 2007

FIGURE 1

Attachment A – Particulate Emission Factor (PEF) Equations

Unlimited Reservoir Emission Factor Equation

The unlimited reservoir emission factor equation presented in Cowherd et al., 1985 computes the annual average emission rate of particulate matter of 10 microns in size or smaller (PM_{10}). Particulate emissions are related to the threshold friction velocity, or the wind velocity at ground surface at which particles are suspended into the air. The emission factor model for an unlimited reservoir is presented as follows:

$$Q = \frac{0.036\,(1 - F_v)\left(U_m / U_t\right)^3 F(x)}{3{,}600\ s/hr}$$

Q = Emission rate of PM_{10} (g/m^2-s)

F_v = Fraction of surface area covered with vegetation (0 - bare surface; 1 - completely vegetated)

U_m = Mean annual windspeed (m/s)

U_t = Threshold friction velocity at anemometer height of 7 m (m/s). The methods used to calculate the threshold friction velocity are described below.

F(x) = Wind speed distribution function (unitless - see below for description)

Particulate Emission Factor (PEF)

The Particulate Emission Factor (PEF) relates the concentration of a chemical constituent in soil to the concentration in dust particles in air (USEPA, 1996). The PEF represents the annual average dust emission rate based on wind erosion. The PEF consists of two components, the unlimited reservoir emission factor equation (shown previously) and an air dispersion factor. The PEF is shown below:

$$PEF = Q/C \times \frac{3{,}600\ s/hr}{0.036 \times (1 - F_v) \times \left(U_m / U_t\right)^3 \times F(x)}$$

Where,

PEF = particulate emission factor (m^3/kg)

Q/C = inverse of the mean concentration in air at center of a square source - Q/C is related to the size of the source area (g/m^2-s per kg/m^3). The value used these calculations is 79.14 g/m^2-s per kg/m^3, based on meteorological data for Philadelphia and a source area that is 1 acre in size (USEPA, 1996).

All of the other assumptions are as described previously.

Calculation of Model Parameters

Threshold Friction Velocity

The threshold friction velocity is the wind velocity at which erosion from the soil surface begins. It is proportional to the Aggregate Size Distribution Mode (ASDM) in soil. There are three steps in calculating the threshold friction velocity:

Calculation of threshold friction velocity from ASDM. The threshold friction velocity is related to the Aggregate Size Distribution Mode (ASDM) of the particles on the surface. The ASDM is determined from a particle size analysis (sieving) of the surface soil. The threshold friction windspeed at the ground surface, u* is related to the ADSM as follows:

$$u^* = 65.5315 \ \mathrm{ADSM}^{0.417673}$$

Where.

u* = threshold friction velocity at ground level (cm/s)

ASDM = aggregate size distribution mode in soil (mm)

This relationship is calculated from the curve presented in Figure 3-4, of Cowherd et al. (1985). The source of the calculation is presented in RAC, 2006.

Correction of threshold friction velocity for non-erodible elements in soil. If the soil contains non-erodible elements which are too large to include in the sieving (stones larger than 1 cm in diameter), the effect of these elements must be taken into account by correcting the threshold friction velocity. Presented in Cowherd et al., 1985 is a graph of the corrected to uncorrected threshold friction velocity versus L_c, where L_c is the ratio of the silhouette area of the non-erodible elements to the total area of bare loose soil. A reproduction of that graph is shown below in Figure A-1.

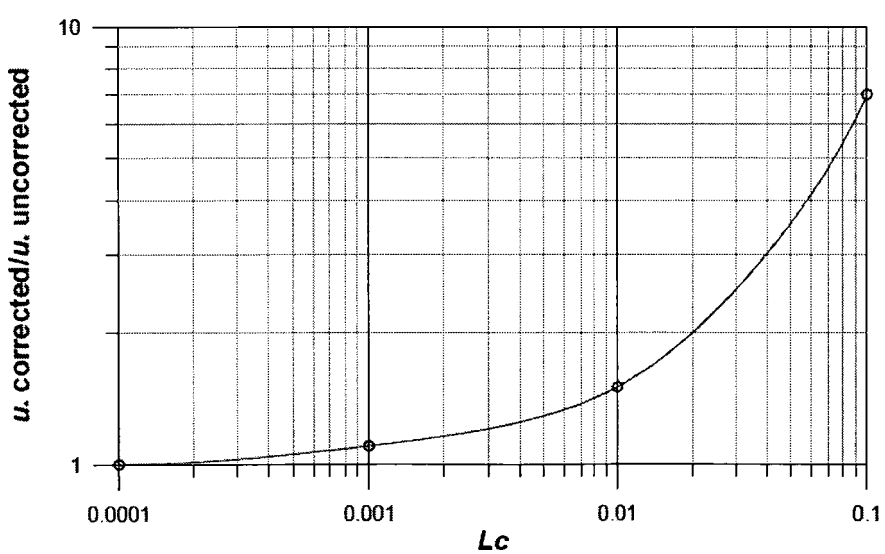


FIGURE A-1.
Threshold Friction Velocity (u*) at Ground Level as a Function of L_c
Adapted from Cowherd, et al., 1985.

During the field investigation conducted in December 2006, the sample locations were photographed, and the non-erodible elements were compared with reference photographs presented in Appendix A of Cowherd et al., 1985. Examples of these calculations are presented in Attachment E.

Calculation of equivalent windspeed at anemometer height. The windspeed at anemometer height equivalent to the threshold friction velocity, is calculated from the threshold friction velocity (u^*) at ground surface, assuming that wind speed increases logarithmically with height near the surface. This calculation is:

$$u_t = \left(\frac{u^*}{0.4}\right) \ln\left(\frac{z}{z_o}\right)$$

where,

u_t = Windspeed at anemometer height equivalent to the threshold friction velocity (m/s)
u^* = Threshold friction velocity at ground surface (m/s)
z = Anemometer height above surface, 700 (cm)
z_o = Roughness height (cm)

The roughness height[5] is estimated from Figure 3-6 of Cowherd et al. (1985). The roughness height for the site is assumed to be 200 cm, which is consistent with an urban setting.

Fraction of Surface Area Covered with Vegetation

This parameter reflects the effects of vegetation in suppressing dust emissions. F_v was estimated from photographs of each sample location.

Mean Annual Windspeed - U_m

The mean annual wind speed is 5.5 m/s, from data collected from the meteorological station located in New York City. The source for this value is Table 4-1 of Cowherd et al., 1985.

Windspeed Distribution Function – F(x)

This simulates the probability distribution of windspeeds that are higher than the threshold friction velocity. The detailed derivation of this function is presented in Appendix B of Cowherd et al., 1985. The value for 'x' is calculated as follows:

$$x = 0.886\left(\frac{u_t}{u_m}\right)$$

The value for F(x) is derived from the curve depicted in Figure 4-3 of Cowherd et al., 1985 (reproduced below as Figure A-2). For values of x > 2, the value for F(x) is calculated as follows:

$$F(x) = 0.18\,(8\,x^3 + 12\,x)\exp-(x^2)$$

For values of x < 2, an analytical expression for the curve has been developed in RAC, 2006:

[5] Roughness height describes the height above the ground where turbulent air movement occurs.

$$F(x) = 1.91207 - 0.0278085x + 0.48113x^2 - 1.09871x^3 + 0.335341x^4$$

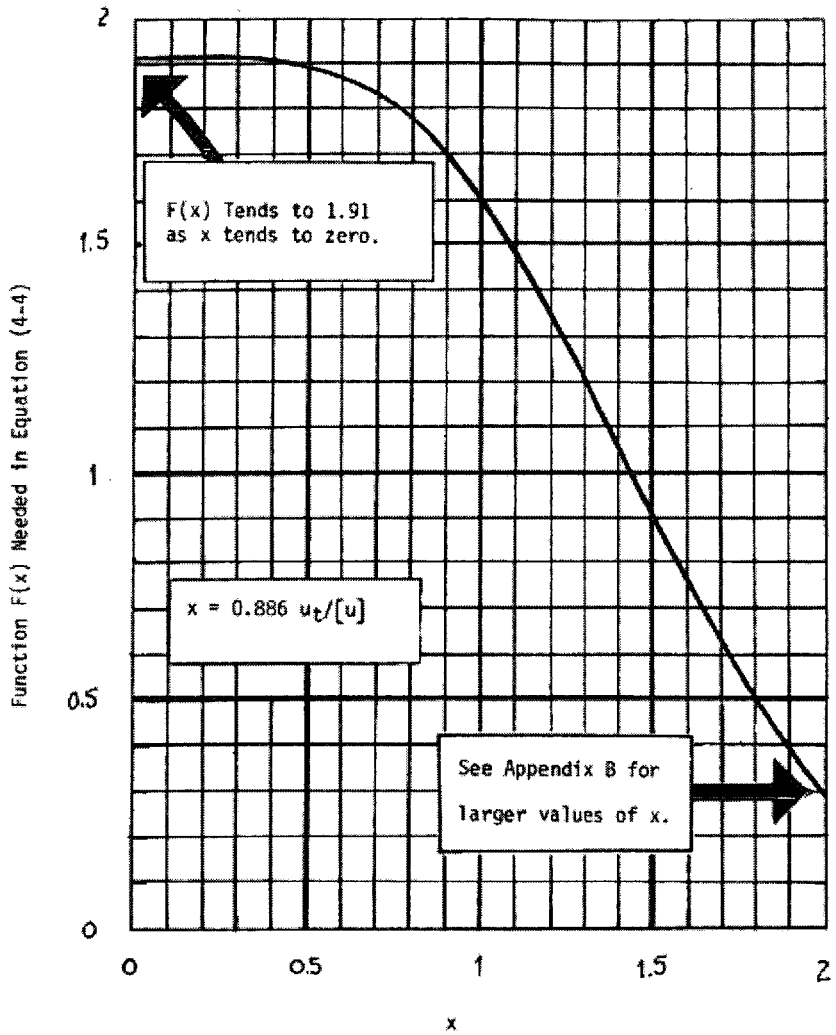


FIGURE A-2
Graph of Function F(x) Needed to Estimate Unlimited Erosion
Source: Cowherd et al., 1985, Figure 4-3.

References

Cowherd, C.C. et al. 1985. *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination.* EPA/600/8-85/002. U.S. Environmental Protection Agency. Office of Health and Environmental Assessment, Washington, DC.

Risk Assessment Corporation (RAC). 2006. *Risk Assessment, Communication, Evaluation and Reduction at Los Alamos National Laboratory: Risk Calculation Tool Methodology.* September 2006. http://www.racteam.com/LANLRisk/Reports/Draft%20Risk%20Tool%20Methodology%2011-08-06.pdf. Appendix E: Resuspension Model.

http://www.racteam.com/LANLRisk/Reports/Risk%20Tool%20AppE%20Resuspension%2011-08-06.pdf.

U.S. Environmental Protection Agency. 1996. *Technical Background Document for Soil Screening Guidance.* Office of Solid Waste and Emergency Response, EPA/540-R95/128. Washington, D.C.

ATTACHMENT B

Soil Aggregate Particle Size Mode Evaluation

Quanta Resources Site

Edgewater, New Jersey

AD-SS-01					AD-SS-02				AD-SS-03			
US standard sieve size	Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated	
			Percent remaining	Fractional distribution			Percent remaining	Fractional distribution			Percent remaining	Fractional distribution
0.75	19.05	100	0	0	19.05	100	0	0	19.05	100	0	0
0.375	9.525	92.5	7.5	7.5	9.525	89.7	10.3	10.3	9.525	99.2	0.8	0.8
# 4	4.75	89.1	10.9	3.4	4.75	65.8	34.2	23.9	4.75	98.8	1.2	0.4
# 10	2	72.7	27.3	16.4	2	57.3	42.7	8.5	2	83.9	16.1	14.9
# 16	1.18	60.8	39.2	11.9	1.18	51.6	48.4	5.7	1.18	68.7	31.3	15.2
# 30	0.6	47.1	52.9	13.7	0.6	42.3	57.7	9.3	0.6	51.4	48.6	17.3
# 60	0.25	30.9	69.1	16.2	0.25	27.7	72.3	14.6	0.25	37.7	62.3	13.7
# 100	0.15	21.4	78.6	9.5	0.15	21.3	78.7	6.4	0.15	31.9	68.1	5.8
# 200	0.075	12	88	9.4	0.075	16.4	83.6	4.9	0.075	25.9	74.1	6
	0.0509	9.2	90.8	2.8	0.0492	12.8	87.2	3.6	0.0488	21.7	78.3	4.2
	0.0364	6.2	93.8	3	0.035	11.7	88.3	1.1	0.035	17.6	82.4	4.1
	0.0258	5.5	94.5	0.7	0.0251	9	91	2.7	0.0249	15.9	84.1	1.7
	0.0173	4	96	1.5	0.0168	8.4	91.6	0.6	0.0168	12.6	87.4	3.3
	0.013	4	96	0	0.0127	7.3	92.7	1.1	0.0127	11	89	1.6
	0.0104	2.5	97.5	1.5	0.0102	5.7	94.3	1.6	0.0101	11	89	0
	0.0087	2.5	97.5	0	0.0086	5.1	94.9	0.6	0.0085	9.3	90.7	1.7
	0.0075	1.7	98.3	0.8	0.0074	4	96	1.1	0.0073	7.7	92.3	1.6
	0.0048	1.7	98.3	0	0.0047	2.9	97.1	1.1	0.0047	6.1	93.9	1.6
	0.0014	1.7	98.3	0	0.0014	1.8	98.2	1.1	0.0014	4.4	95.6	1.7
Sieve size with greatest mass fraction =				2			Sieve size =	4.75			Sieve size =	0.6

ATTACHMENT B
Soil Aggregate Particle Size Mode Evaluation
Quanta Resources Site
Edgewater, New Jersey

AD-SS-04				AD-SS-05				AD-SS-06			
Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated	
		Percent remaining	Fractional distribution			Percent remaining	Fractional distribution			Percent remaining	Fractional distribution
19.05	100	0	0	19.05	100	0	0	19.05	100	0	0
9.525	95.3	4.7	4.7	9.525	71.4	28.6	28.6	9.525	96.4	3.6	3.6
4.75	75.7	24.3	19.6	4.75	43.1	56.9	28.3	4.75	81	19	15.4
2	65.8	34.2	9.9	2	35.2	64.8	7.9	2	73.4	26.6	7.6
1.18	59.2	40.8	6.6	1.18	32	68	3.2	1.18	68.1	31.9	5.3
0.6	49.7	50.3	9.5	0.6	28.4	71.6	3.6	0.6	59.2	40.8	8.9
0.25	36.3	63.7	13.4	0.25	23.5	76.5	4.9	0.25	44.1	55.9	15.1
0.15	30.5	69.5	5.8	0.15	20.8	79.2	2.7	0.15	36.1	63.9	8
0.075	25.8	74.2	4.7	0.075	18.1	81.9	2.7	0.075	29.1	70.9	7
0.048	19.8	80.2	6	0.0455	17	83	1.1	0.0471	25.2	74.8	3.9
0.0343	17.9	82.1	1.9	0.0332	13.8	86.2	3.2	0.0342	19.8	80.2	5.4
0.0254	8.4	91.6	9.5	0.024	11.3	88.7	2.5	0.0246	15.8	84.2	4
0.0171	5.9	94.1	2.5	0.0164	8.8	91.2	2.5	0.0166	13.7	86.3	2.1
0.0128	5.9	94.1	0	0.0124	7.3	92.7	1.5	0.0125	11.7	88.3	2
0.0103	5.3	94.7	0.6	0.01	6.2	93.8	1.1	0.0101	10.4	89.6	1.3
0.0086	5.3	94.7	0	0.0084	5.2	94.8	1	0.0085	9	91	1.4
0.0074	4.6	95.4	0.7	0.0073	4.1	95.9	1.1	0.0073	7.7	92.3	1.3
0.0047	4.6	95.4	0	0.0047	2.6	97.4	1.5	0.0047	5.6	94.4	2.1
0.0014	4.6	95.4	0	0.0014	1.2	98.8	1.4	0.0014	2.3	97.7	3.3
		Sieve size =	4.75			Sieve size =	9.525			Sieve size =	4.75

ATTACHMENT B

Soil Aggregate Particle Size Mode Evaluation

Quanta Resources Site

Edgewater, New Jersey

AD-SS-07				AD-SS-08				AD-SS-09			
Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated	
		Percent remaining	Fractional distribution			Percent remaining	Fractional distribution			Percent remaining	Fractional distribution
19.05	100	0	0	19.05	100	0	0	19.05	100	0	0
9.525	96.8	3.2	3.2	9.525	85.3	14.7	14.7	9.525	96.4	3.6	3.6
4.75	86.4	13.6	10.4	4.75	58.2	41.8	27.1	4.75	87.8	12.2	8.6
2	81.1	18.9	5.3	2	45.5	54.5	12.7	2	81.3	18.7	6.5
1.18	77.3	22.7	3.8	1.18	40.5	59.5	5	1.18	75.9	24.1	5.4
0.6	70.3	29.7	7	0.6	33.9	66.1	6.6	0.6	67.6	32.4	8.3
0.25	57.1	42.9	13.2	0.25	24.9	75.1	9	0.25	53.8	46.2	13.8
0.15	49.9	50.1	7.2	0.15	20.5	79.5	4.4	0.15	45.1	54.9	8.7
0.075	42.9	57.1	7	0.075	16.4	83.6	4.1	0.075	36.6	63.4	8.5
0.045	37.4	62.6	5.5	0.0486	14.5	85.5	1.9	0.0467	30.7	69.3	5.9
0.0328	31.6	68.4	5.8	0.0348	12.6	87.4	1.9	0.0337	26.3	73.7	4.4
0.0235	28.7	71.3	2.9	0.0251	9.7	90.3	2.9	0.0243	21.9	78.1	4.4
0.016	23.7	76.3	5	0.0167	9.7	90.3	0	0.0164	19	81	2.9
0.0122	20.1	79.9	3.6	0.0127	7.7	92.3	2	0.0124	16.8	83.2	2.2
0.01	15.8	84.2	4.3	0.0102	6.3	93.7	1.4	0.0101	13.1	86.9	3.7
0.0084	14.3	85.7	1.5	0.0086	5.3	94.7	1	0.0085	11.6	88.4	1.5
0.0072	12.9	87.1	1.4	0.0074	4.8	95.2	0.5	0.0073	10.2	89.8	1.4
0.0047	8.6	91.4	4.3	0.0048	3.4	96.6	1.4	0.0047	7.3	92.7	2.9
0.0014	4.6	95.4	4	0.0014	2.1	97.9	1.3	0.0014	4.6	95.4	2.7
		Sieve size =	0.25			Sieve size =	4.75			Sieve size =	0.25

ATTACHMENT B
Soil Aggregate Particle Size Mode Evaluation
Quanta Resources Site
Edgewater, New Jersey

AD-SS-10				AD-SS-11				AD-SS-12			
Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated		Sieve size in mm	Percent finer	Calculated	
		Percent remaining	Fractional distribution			Percent remaining	Fractional distribution			Percent remaining	Fractional distribution
19.05	100	0	0	19.05	100	0	0	19.05	100	0	0
9.525	88	12	12	9.525	82.6	17.4	17.4	9.525	79.3	20.7	20.7
4.75	62.5	37.5	25.5	4.75	61.5	38.5	21.1	4.75	55.3	44.7	24
2	49.5	50.5	13	2	49	51	12.5	2	43.2	56.8	12.1
1.18	42.5	57.5	7	1.18	43.5	56.5	5.5	1.18	39.2	60.8	4
0.6	29.9	70.1	12.6	0.6	36.6	63.4	6.9	0.6	34.5	65.5	4.7
0.25	16	84	13.9	0.25	26.5	73.5	10.1	0.25	28.7	71.3	5.8
0.15	11.8	88.2	4.2	0.15	21.1	78.9	5.4	0.15	25.5	74.5	3.2
0.075	8.8	91.2	3	0.075	16.3	83.7	4.8	0.075	22	78	3.5
0.0508	8.3	91.7	0.5	0.0489	14.3	85.7	2	0.0465	19.8	80.2	2.2
0.0364	5.7	94.3	2.6	0.0351	11.7	88.3	2.6	0.0337	16.5	83.5	3.3
0.026	3.6	96.4	2.1	0.0253	8.7	91.3	3	0.0243	13.8	86.2	2.7
0.0175	2.6	97.4	1	0.017	7.1	92.9	1.6	0.0165	11	89	2.8
0.0131	2	98	0.6	0.0128	6.6	93.4	0.5	0.0125	9.2	90.8	1.8
0.0105	2	98	0	0.0103	5.1	94.9	1.5	0.0102	7.3	92.7	1.9
0.0088	1	99	1	0.0087	4.1	95.9	1	0.0085	6.4	93.6	0.9
0.0075	1	99	0	0.0074	3.5	96.5	0.6	0.0073	5.5	94.5	0.9
0.0048	0	100	1	0.0048	2	98	1.5	0.0048	3.2	96.8	2.3
0.0014	0.2	99.8	-0.2	0.0014	1.2	98.8	0.8	0.0014	1.5	98.5	1.7
		Sieve size =	4.75			Sieve size =	4.75			Sieve size =	9.525

ATTACHMENT C

Photographic Log

Client Name: Honeywell, Inc.
Project Number: 332898
Site Location: Quanta Resourcs Superfund Site, Edgewater, Bergen County, New Jersey
Date: 12/21/06
General Area: Surrounded by weeds and tall grass (3-4' tall). Next to the side gate driveway and concrete dike.
Description: D-SS-01-0-0.5 Exposed Sub-rounded/Angular Gravel to Very Coarse Sand, Medium Dark Grey

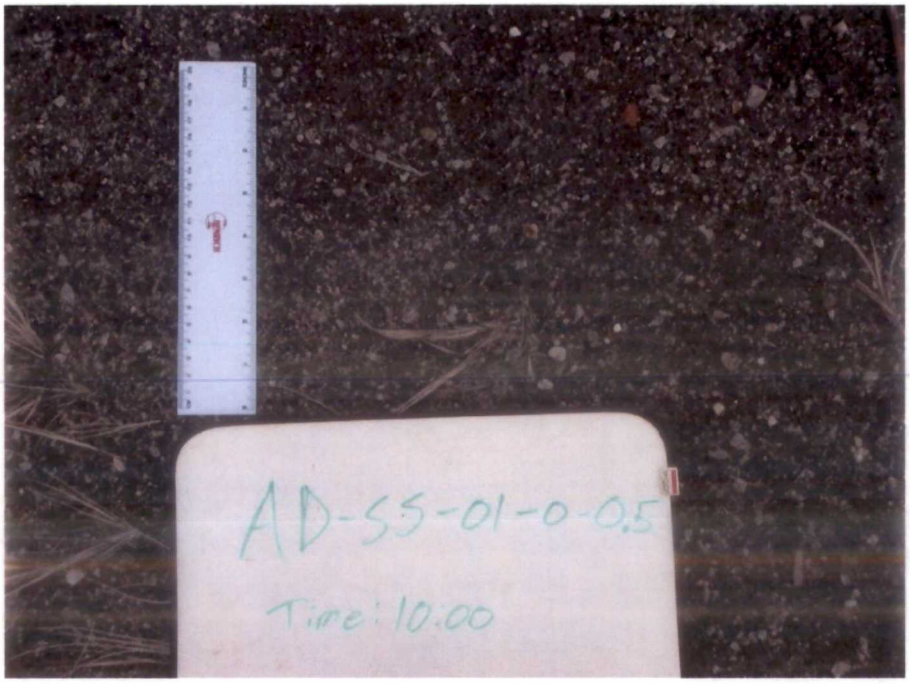


Photo 1

Client Name: Honeywell, Inc.
Project Number: 332898
Site Location: Quanta Resourcs Superfund Site, Edgewater, Bergen County, New Jersey
Date: 12/21/06
General Area: Surrounded by weeds and tall grass (3-4' tall). Next to the side gate driveway and concrete dike.
Description: D-SS-01-0-0.5 Exposed Sub-rounded/Angular Gravel to Very Coarse Sand, Medium Dark Grey

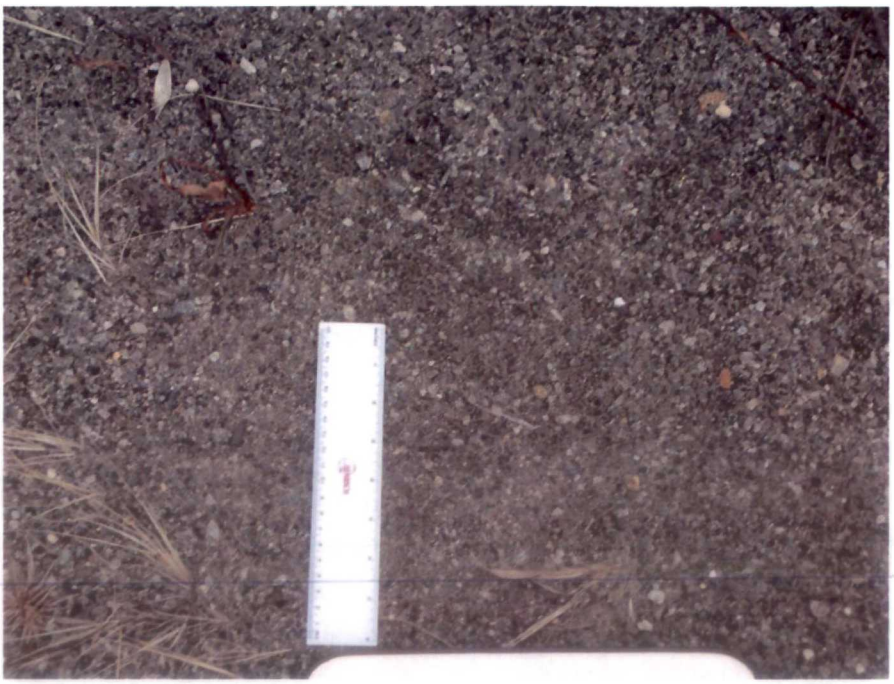


Photo 2

Photo 3

Client Name: Honeywell, Inc.
Project Number: 332898
Site Location: Quanta Resourcs Superfund Site, Edgewater, Bergen County, New Jersey
Date: 12/21/06
General Area: Surrounded by weeds and tall grass (3-4' tall). Next to the side gate driveway and concrete dike.
Description: D-SS-01-0-0.5 Exposed Sub-rounded/Angular Gravel to Very Coarse Sand, Medium Dark Grey

Photo 4

Photo 5

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-01				
Quanta 019.jpg	Figure A-2	0.01	0.05	
Quanta 020.jpg	Figure A-2	0.01	0.05	
Quanta 021.jpg		not determined	0.2	Angled photograph - difficult to compare with EPA, 1985 figures. Some vegetation visible.
Quanta 022.jpg		not determined	0.4	Angled photograph. Some vegetation visible.
Quanta 023.jpg		not determined	0.5	Angled photograph. Some vegetation visible.
Average Lc		**0.01**		
Average Fv			**0.2**	
Sample AD-SS-02				
Quanta 024.jpg	Figure A-3	0.1	0.2	
Quanta 025.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 026.jpg	Figure A-3	0.1	0.2	
Quanta 027.jpg		not determined	0.7	Angled photograph.
Quanta 028.jpg		not determined	0.6	Angled photograph.
Average Lc		**0.1**		
Average Fv			**0.4**	
Sample AD-SS-03				
Quanta 029.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 030.jpg	Figure A-2	0.01	0.1	
Quanta 031.jpg	Figure A-2	0.01	0.4	
Quanta 032.jpg		not determined	0.5	Angled photograph.
Quanta 033.jpg		not determined	not determined	Angled photograph.
Average Lc		**0.01**		
Average Fv			**0.4**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-04				
Quanta 034.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 035.jpg	Figure A-2	0.01	0.05	
Quanta 036.jpg		not determined	0.6	Angled photograph.
Quanta 037.jpg		not determined	0.7	Angled photograph.
Quanta 038.jpg		not determined	0.9	Angled photograph.
Quanta 039.jpg		not determined	0.7	Angled photograph.
Average Lc		**0.01**		
Average Fv			**0.7**	
Sample AD-SS-05				
Quanta 040.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 041.jpg	Figure A-3	0.1	0.1	Slightly out of focus
Quanta 042.jpg		not determined	0.5	Angled photograph.
Quanta 043.jpg		not determined	0.5	Angled photograph.
Quanta 044.jpg		not determined	0.5	Angled photograph.
Quanta 045.jpg		not determined	0.6	Angled photograph.
Average Lc		**0.1**		
Average Fv			**0.5**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-06				
Quanta 046.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 047.jpg		not determined	0.7	Angled photograph.
Quanta 048.jpg	Figure A-2	0.1	0.8	Significant vegetation. Some large gravel (>1 cm) visible. Difficult to compare to EPA, 1985 figures due to vegetation. Soil surface classification is an estimate based on other exposed sampling points. Actual dust emissions is expected to be negligible due to vegetative cover.
Quanta 049.jpg		not determined	0.8	Angled photograph. Slightly out of focus
Quanta 050.jpg		not determined	0.7	Angled photograph.
Quanta 051.jpg		not determined	0.7	Angled photograph.
Quanta 052.jpg		not determined	0.8	Angled photograph.
Average Lc		**0.1**		
Average Fv			**0.75**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-07				
Quanta 053.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 054.jpg	Figure A-1	0.1	1	Complete vegetative cover. Difficult to compare to EPA, 1985 figures due to vegetation. Soil surface classification is an estimate based on other exposed sampling points. Actual dust emissions is expected to be negligible due to vegetative cover.
Quanta 055.jpg		not determined	0.9	Some exposed soil at edges of photograph. But at those areas, soil surface is comparable to Figure A-2.
Quanta 056.jpg		not determined	0.9	Angled photograph. Vegetative cover pressed down into the soil surface near recently installed posts.
Quanta 057.jpg		not determined	0.8	Angled photograph. Vegetative cover pressed down into the soil surface near recently installed posts.
Quanta 058.jpg		not determined	0.8	Angled photograph. Vegetative cover pressed down into the soil surface near recently installed posts.
Quanta 059.jpg		not determined	0.8	Angled photograph. Where vegetation is absent, soil surface is comparable to Figure A-3.
Average Lc		**0.1**		
Average Fv			**0.85**	

ATTACHMENT D

Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model

Quanta Resources Site

Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-08				
Quanta 060.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 061.jpg	Figure A-3	0.1	0.8	Slight angle.
Quanta 062.jpg	Figure A-3	0.1	0.7	
Quanta 063.jpg		not determined	0.8	Angled photograph.
Quanta 064.jpg		not determined	0.8	Angled photograph.
Quanta 065.jpg		not determined	0.8	Angled photograph. Pooled water area in background not included in evaluation.
Average Lc		**0.1**		
Average Fv			**0.8**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-09				
Quanta 066.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 067.jpg	Figure A-1	0.1	1	Complete vegetative cover. Difficult to compare to EPA, 1985 figures due to vegetation. Soil surface classification is an estimate based on other exposed sampling points. Actual dust emissions is expected to be negligible due to vegetative cover.
Quanta 068.jpg	Figure A-1	0.1	1	Complete vegetative cover. Difficult to compare to EPA, 1985 figures due to vegetation. Soil surface classification is an estimate based on other exposed sampling points. Actual dust emissions is expected to be negligible due to vegetative cover.
Quanta 069.jpg		not determined	1	Angled photograph.
Quanta 070.jpg		not determined	1	Angled photograph.
Quanta 071.jpg		not determined	1	Angled photograph.
Quanta 072.jpg		not determined	0.95	Angled photograph. Small bare area in background.
Quanta 073.jpg		not determined	1	Angled photograph.
Quanta 074.jpg		not determined	1	Angled photograph.
Average Lc		**0.1**		
Average Fv			**1**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-10				
Quanta 075.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 076.jpg	Figure A-2	0.1	0.05	
Quanta 077.jpg	Figure A-2	0.1	0.05	
Quanta 078.jpg		not determined	0.3	Angled photograph. 30% cover in foreground. 100% vegetative cover in background not evaluated as may be beyond area of investigation?.
Quanta 079.jpg		not determined	0.3	Angled photograph. Area up to the vehicle is evaluated.
Quanta 080.jpg		not determined	0.6	Angled photograph. Vegetation pressed into the soil surface in fore- and middle ground of photograph.
Quanta 081.jpg		not determined	0.3	Angled photograph. Vegetation pressed into the soil surface.
Quanta 082.jpg		not determined	0.1	Angled photograph.
Average Lc		**0.1**		
Average Fv			**0.3**	
Sample AD-SS-11				
Quanta 083.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 084.jpg	Figure A-3	0.1	0.1	
Quanta 085.jpg	Figure A-3	0.1	0.1	Slightly out of focus.
Quanta 086.jpg		not determined	0.2	Angled photograph.
Quanta 087.jpg		not determined	0.5	Angled photograph.
Quanta 088.jpg		not determined	0.5	Angled photograph.
Quanta 089.jpg		not determined	0.1	Angled photograph. Area up to sample cooler evaluated.
Quanta 095.jpg		not determined	1	Angled photograph. Tall plant stalks appear to be cut down in the foreground.
Average Lc		**0.1**		
Average Fv			**0.2**	

ATTACHMENT D
Estimation of Model Parameters for Unlimited Reservoir Emissions Factor Model
Quanta Resources Site
Edgewater, NJ

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Sample AD-SS-12				
Quanta 090.jpg		not determined	not determined	Cannot see soil sufficiently.
Quanta 091.jpg	Figure A-3	0.1	1	Appears vegetative cover removed from sample location.
Quanta 092.jpg	Figure A-3	0.1	1	Appears vegetative cover removed from sample location.
Quanta 093.jpg		not determined	0.9	Bare surface soil in foreground.
Quanta 094.jpg		not determined	1	Angled photograph. Some vegetation visible.
Average Lc		**0.1**		
Average Fv			**1**	

TABLE E-1
Particulate Emission Factor - AD-SS-01
Quanta Resources Site
Edgewater, NJ

Unlimited Reservoir Emissions Factor Model Based on Cowherd et al., 1985

Calculation of threshold friction velocity

$$u^* = 65.5315\ p^{0.417673}$$

Parameter	Symbol	Value	Notes
Aggregate size distribution mode (mm)	p	2	From analytical data
Threshold friction velocity, uncorrected (cm/s)	u_star	87.54	

Correction of threshold friction velocity for non-erodible elements

Ratio of silhouette area of non-erodible elements to bare surfac (unitless)	L_c	0.10	Compared site observations with the Appendix A figures, Cowherd et al., 1985
Ratio of corrected/uncorrected threshold friction velocity	ratio	7.001	From Lc table
Threshold friction velocity corrected for nonerodible elements (cm/s)	u_star_t	612.833	
Converted to m/s		6.128	

TABLE E-1
Particulate Emission Factor - AD-SS-01
Quanta Resources Site
Edgewater, NJ

Unlimited Reservoir Emissions Factor Model
Based on Cowherd et al., 1985

Calculation of the equivalent threshold value of windspeed at 7 m anemometer height

$$u_t = \left[\frac{u_t^*}{0.4} \ln \left(\frac{700}{z_o} \right) \right]$$

Parameter	Symbol	Value	Notes
Equivalent threshold windspeed at 7 m anemometer height (m/s)	u_t	19.19	
Surface roughness height (cm)	z_0	200	Urban buildings, Cowherd et al., 1985

Unlimited reservoir dust emissions model

$$F = \left[0.036 \times (1 - V) \times \left(\frac{u}{u_t} \right)^3 \times F(x) \right] \times \frac{1}{3600}$$

The empirical constant, 0.036, has units of g/m^2-hr and is converted to g/m^2-s using 1hr/3600s.

TABLE E-1
Particulate Emission Factor - AD-SS-01
Quanta Resources Site
Edgewater, NJ

Unlimited Reservoir Emissions Factor Model
Based on Cowherd et al., 1985
Calculation of Windspeed Distribution Function

x < 2

$$F(x) = 1.91207 - 0.0278085x + 0.48113x^2 - 1.0987x^e + 0.335341x^4$$

x ≥ 2

$$F(x) = 0.18\left(8x^3 + 12x\right)\exp-\left(x^2\right)$$

$$x = 0.886\left(\frac{u_t}{u}\right)$$

Parameter	Symbol	Value	Notes
PM10 annual average emissions flux (g/m2-s)	F	6.54E-10	Calculated
Fraction of contaminated surface with continuous vegetation cover (unitless)	V	0.2	Compared site observations with the Appendix A figures, Cowherd et al., 1985
Mean annual windspeed (m/s)	u	5.5	Mean Wind Speed, New York City, Cowherd et al., 1985
Windspeed distribution function - F(x)	F_x	3.47E-03	for x ≥ 2
		4.597	for x < 2
		3.47E-03	Selected value
	x_term	3.09	

TABLE E-1
Particulate Emission Factor - AD-SS-01
Quanta Resources Site
Edgewater, NJ

Unlimited Reservoir Emissions Factor Model
Based on Cowherd et al., 1985

Convert F (g/m2-s) to PEF (m3/kg)

$$PEF = \frac{1}{F} \times \left(\frac{Q}{C}\right)$$

Parameter	Symbol	Value	Notes
PM10 annual average emissions flux (g/m2-s)	F	6.54E-10	
Inverse of mean concentration at center of source (g/m^2-s per kg/m^3)	Q/C	79.14	1 acre, Philidelphia, USEPA Soil Screening Guidance
Particulate Emission Factor (m^3/kg)	PEF	**1.21E+11**	

TABLE E-2
Soil Aggregate Particle Size Mode - AD-SS-01
Quanta Resources Site
Edgewater, NJ

US standard sieve size	Sieve size in mm	Percent finer	Calculated	
			Percent remaining	Fractional distribution
0.75	19.05	100	0	0
0.375	9.525	92.5	7.5	7.5
# 4	4.75	89.1	10.9	3.4
# 10	2	72.7	27.3	16.4
# 16	1.18	60.8	39.2	11.9
# 30	0.6	47.1	52.9	13.7
# 60	0.25	30.9	69.1	16.2
# 100	0.15	21.4	78.6	9.5
# 200	0.075	12	88	9.4
	0.0509	9.2	90.8	2.8
	0.0364	6.2	93.8	3
	0.0258	5.5	94.5	0.7
	0.0173	4	96	1.5
	0.013	4	96	0
	0.0104	2.5	97.5	1.5
	0.0087	2.5	97.5	0
	0.0075	1.7	98.3	0.8
	0.0048	1.7	98.3	0
	0.0014	1.7	98.3	0

Sieve size capturing the greatest fraction of particles = 2

TABLE E-3
Lc and Fv Evaluation - AD-SS-01
Quanta Resources Site
Edgewater, NJ

Sample AD-SS-01

Photograph file name	Closest Comparable Figure from EPA, 1985	L_c Nonerodible Fraction Value	Fv Fraction covered with vegetation	Comments
Quanta 019.jpg	Figure A-2	0.01	0.05	
Quanta 020.jpg	Figure A-2	0.01	0.05	
Quanta 021.jpg		not determined	0.2	Angled photograph - difficult to compare with EPA, 1985 figures. Some vegetation visible.
Quanta 022.jpg		not determined	0.4	Angled photograph. Some vegetation visible.
Quanta 023.jpg		not determined	0.5	Angled photograph. Some vegetation visible.

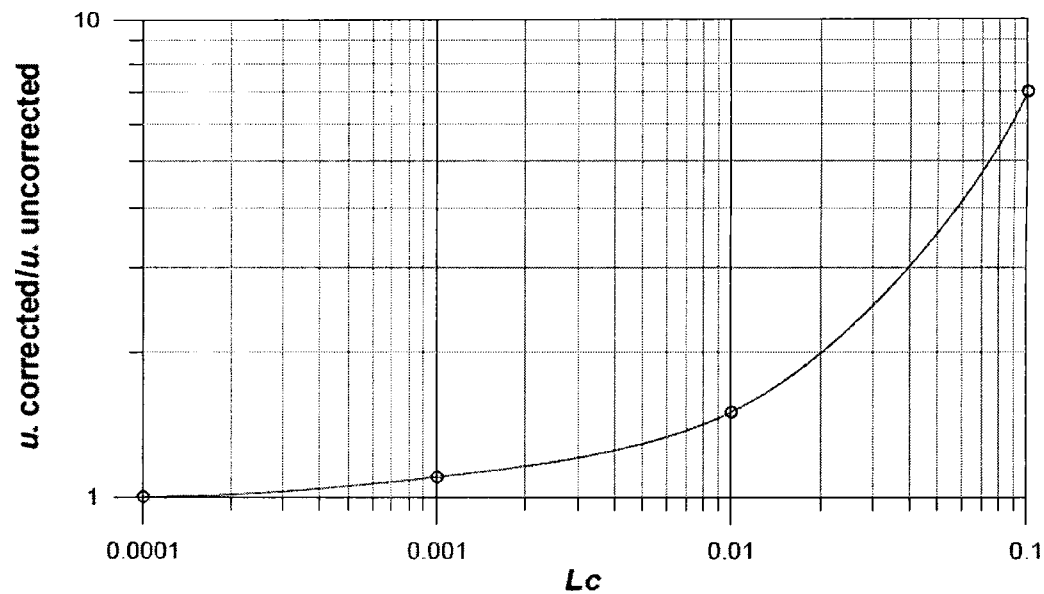
Overall results:

Lc	0.01
Fv	0.2

ATTACHMENT E-4
Tabulated values of Lc and Ratio of Corrected to Uncorrected Threshold Friction Velocity
Quanta Resources Site
Edgewater, NJ

Derived from Cubic Spline Fit to Data in Figure 3-5 in Cowherd et al., 1985
(Source: RAC, 2006, Appendix E).

Lc	Ratio of Corrected to Uncorrected u*
0.00010	1.000
0.00011	1.000
0.00012	1.000
0.00013	1.001
0.00014	1.002
0.00015	1.004
0.00016	1.005
0.00018	1.007
0.00019	1.010
0.00021	1.012
0.00023	1.015
0.00025	1.018
0.00027	1.022
0.00029	1.025
0.00032	1.029
0.00035	1.033
0.00038	1.037
0.00041	1.042
0.00044	1.046
0.00048	1.051
0.00052	1.056
0.00057	1.061
0.00062	1.066
0.00067	1.072
0.00073	1.077
0.00079	1.083



Threshold friction velocity (u*) as a function of Lc (adapted from Cowherd, et al., 1985.

ATTACHMENT E-4
Tabulated values of Lc and Ratio of Corrected to Uncorrected Threshold Friction Velocity
Quanta Resources Site
Edgewater, NJ

Derived from Cubic Spline Fit to Data in Figure 3-5 in Cowherd et al., 1985
(Source: RAC, 2006, Appendix E).

Lc	Ratio of Corrected to Uncorrected u*
0.00086	1.089
0.00093	1.095
0.001	1.101
0.0011	1.107
0.0012	1.114
0.0013	1.120
0.0014	1.127
0.0015	1.134
0.0017	1.142
0.0018	1.150
0.002	1.158
0.0022	1.166
0.0023	1.175
0.0026	1.185
0.0028	1.195
0.003	1.205
0.0033	1.217
0.0036	1.229
0.0039	1.241
0.0042	1.255
0.0045	1.269
0.0049	1.285
0.0053	1.302
0.0058	1.320
0.0062	1.339
0.0067	1.360

ATTACHMENT E-4
Tabulated values of Lc and Ratio of Corrected to Uncorrected Threshold Friction Velocity
Quanta Resources Site
Edgewater, NJ

Derived from Cubic Spline Fit to Data in Figure 3-5 in Cowherd et al., 1985
(Source: RAC, 2006, Appendix E).

Lc	Ratio of Corrected to Uncorrected u*
0.0073	1.382
0.0078	1.406
0.0084	1.432
0.0091	1.460
0.0098	1.491
0.011	1.524
0.011	1.559
0.012	1.598
0.013	1.639
0.014	1.683
0.015	1.730
0.016	1.780
0.017	1.833
0.018	1.889
0.019	1.948
0.02	2.011
0.022	2.077
0.023	2.147
0.025	2.220
0.026	2.297
0.028	2.379
0.029	2.464
0.031	2.554
0.033	2.648
0.035	2.748
0.037	2.852

ATTACHMENT E-4
Tabulated values of Lc and Ratio of Corrected to Uncorrected Threshold Friction Velocity
Quanta Resources Site
Edgewater, NJ

Derived from Cubic Spline Fit to Data in Figure 3-5 in Cowherd et al., 1985
(Source: RAC, 2006, Appendix E).

Lc	Ratio of Corrected to Uncorrected u*
0.039	2.961
0.041	3.075
0.043	3.196
0.046	3.322
0.048	3.454
0.051	3.493
0.053	3.738
0.056	3.890
0.059	4.050
0.062	4.218
0.064	4.394
0.067	4.578
0.071	4.771
0.074	4.974
0.077	5.187
0.08	5.410
0.083	5.644
0.087	5.890
0.09	6.148
0.093	6.418
0.097	6.703
0.1	7.001

CH2M HILL
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Tel 973.316.9300
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April 12, 2007

Mr. Richard Ho, RPM / OSC
U.S. Environmental Protection Agency - Region 2
Emergency and Remedial Response Division
290 Broadway, Floor 19
New York, New York 10007-1866

Subject: Quanta Resources Site, OU1
Edgewater, New Jersey
Technical Memorandum: Vapor Intrusion Evaluation at 163 River Road Building (Jono's Restaurant), Edgewater, New Jersey

Dear Mr. Ho:

Enclosed is a technical memorandum summarizing an evaluation of potential vapor intrusion pathways at the Jono's Restaurant building located on the Block 93 North parcel. This technical memorandum also presents recommendations for further activities to address potential vapor intrusion pathways at this building.

Based on the results from this evaluation, it is unlikely there is a vapor intrusion pathway into the building. In order to confirm our assessment, we propose to conduct some additional investigation, including some sampling.

Our recommendations for further vapor intrusion activities are as follows:

- Collecting soil gas samples from up to six locations near the building and evaluating the results using target concentrations in soil gas presented in EPA and NJDEP vapor intrusion guidance.
- Obtaining more information, as available, from municipal authorities (city and county) regarding the locations of subsurface utilities, that could represent potential preferential pathways to the building.
- Conducting an engineering evaluation of the building foundation and envelope to identify feasible mitigation measures for vapor intrusion, should these be deemed necessary, based on the shallow soil gas sampling data.

We are looking to conduct these activities on an expedited basis, but cannot confirm a schedule until we have set a firm date for implementation of the field activities, and have a better understanding that the proposed activities are acceptable to the regulatory agencies.

If you have any questions or concerns, please feel free to contact Steve Zarlinski at 215-640-9087 or John Lowe at (937) 228-3180 x247.

Sincerely,

CH2M HILL

Stephen J. Zarlinski, P.E.
Project Manager

Cc: Timothy J. Metcalf (Honeywell)
Bob Hayton (NJDEP)
Rich Kampf (ESAG Representative)

Summary

The former Jono's Restaurant and Cantina building (the "Building"), at 163 River Road, Edgewater, New Jersey is located on the Block 93 Parcel across River Road from the Quanta Resources property. The building is currently undergoing renovations and will be reopened as another restaurant. Environmental sampling in the vicinity of the building has indicated the presence of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in soil and groundwater within Block 93. This memorandum presents an evaluation of the available environmental sampling data, along with the results of a recent walkthrough survey of the building. These activities were conducted to evaluate the potential presence of vapor intrusion pathways in the building.

Based on the available sampling data and building observation from a February 22, 2007 site visit with the United States Environmental Protection Agency (EPA) and New Jersey Department of Environmental Protection (NJDEP), a potential vapor intrusion pathway is not likely to be present in the restaurant building. Further steps for investigation have been identified (as discussed below) to confirm this conclusion.

Our recommended steps for addressing the potential for a vapor intrusion pathway at the restaurant are:

- Collecting shallow soil gas samples from up to 6 locations near the building to evaluate the potential presence of volatile constituents in soil gas. If concentrations in the soil gas samples fall below target concentrations in soil gas presented in EPA and NJDEP vapor intrusion guidance, then further evaluation or action would not be required to address the potential vapor intrusion pathway. As discussed below, the feasibility of mitigation measures also will be evaluated for the building; feasible mitigation measures will be identified and recommended if these appear warranted based on the soil gas data.
- Obtaining more information, as available, from municipal authorities (city and county) regarding the locations of subsurface utilities, which could represent potential preferential pathways.
- Conducting an engineering evaluation of the building foundation and envelope to identify feasible mitigation measures for vapor intrusion, should these be deemed necessary.

Introduction

This technical memorandum has been prepared to present the current site conditions at the Building. The restaurant is no longer operating but is currently undergoing renovations, with plans for a new restaurant reopening sometime in the near future. The building is part of Block 93 (Lots 1 and 2) which was purchased in 1999 by Three Y, LLC, and is located west of the Quanta Resources property. A portion of Block 93 (i.e., Lot 3)

lies within the limits of the Quanta Resources Superfund Site which was placed on the National Priority List (NPL) by the EPA in September 2002 (EWMA, 2005).

Background

Site History

Block 93 consists of three lots – Lots 1, 2, and 3 (Figure 1). The Three Y, LLC property consists of Lots 1 and 2. The Building is located in Lot 1 and was reportedly used as a quality control laboratory by AlliedSignal until 1974. It remained vacant for approximately 10 years, after which it was used for miscellaneous purposes (as an office, for storage, and as a musical rehearsal studio) and then converted to a restaurant in the early 1990s. The restaurant is now closed. Future site plans are for a restaurant to be reopened at this building once renovations are completed. The Building is located in the southwest corner of Lot 1 along with a partially paved parking area. Remnants of a building foundation, construction vehicles, and old vehicles are located near the southeast corner of Lot 1. The remainder of the lot consists of a grassy area with an old food concession. Lot 2 is a former railroad right-of-way that is partially paved. There is a solid waste dumpster, old vehicles, portions of a chain-link fence, and remnants of railroad track on Lot 2 (O'Brien & Gere, 2004).

Summary of Existing Sampling and Analytical Data

Soils

As part of the Quanta Resources Superfund Site Operable Unit (OU1) Remedial Investigation (RI), and as reported in the Draft Preliminary Site Characterization Report (PSCR; CH2M HILL, 2006), soil samples were collected in Block 93 (Lots 1, 2, and 3). Soil samples were collected at five soil boring locations in August and September 2005 (SB-10J, SB-11K, SB-13M, SB-111A, and SB-101DS). Sample SB-111A was within 100 feet (ft) of the building, while the remaining samples were collected from 140 to 200 ft from the building. VOCs detected in soil include benzene, bromodichloromenthane, carbon disulfide, ethylbenzene, methylcyclohexane, and xylenes. Naphthalene also was detected in soil.

As part of Fall 2006 Supplemental Site Investigation (SI), additional soil samples were collected from Block 93, as shown in Figure 2. The results for VOCs (and naphthalene) detected in soil in Block 93 are provided in Attachment A, Table A-1. Results for borings located within 140 ft of the building are provided in Table 1. Results for most analytes in soil were non-detect. Some of the results were J-flagged, meaning the values were estimated. In the borings closest to the building (SB-26 and SB-27), most constituents were also non-detect. Naphthalene was the only constituent detected at 0 to 2 ft (0.99 J parts per million [ppm]; SB-27-1.0). Constituents detected at 9 to 10 ft (SB-27-9.5) included benzene (0.085 ppm), ethylbenzene (0.11 ppm), toluene (0.12 ppm), o-xylene (0.048 J ppm), m&p-xylenes (0.122 ppm), and total xylenes 0.17 ppm, and naphthalene (101 ppm). Constituents detected at 13 to 15 ft (SB-26-14) were limited to benzene (0.26 ppm), toluene (0.067 J ppm), and naphthalene (12 ppm). As discussed below, groundwater occurs approximately at a depth of 9 ft below grade near the Building. Therefore, many of the detected concentrations in soil are below the water table.

"Product staining" observed in soil west of River Road during RI activities in the fall of 2005 indicated the potential for the presence of coal tar west of River Road at the property located at Block 93 Lots 1, 2, and 3. During the supplemental SI activities in Fall 2006, TarGOST® (Tar-specific Green Optical Screening Tool) was used to determine the depth and lateral extent of coal tar impacts in the subsurface. Results of the TarGOST® profiling are presented in Figure 2. As seen in the figure, coal tar is present in the eastern portion of Block 93, at a depth of 10 ft below grade or more, and greater than 100 ft from the edge of the Building. Detailed results of the TarGOST® profiling will be presented in the RI Report for Operable Unit 1, which is currently being prepared by CH2M HILL.

Groundwater

Groundwater at the site occurs in three distinct hydrostratigraphic units. The shallowest unit consists of an unconfined, surficial water-bearing zone extending from the water table (about 9 ft below ground surface [bgs]) to approximately 15 to 20 ft bgs (unconfined shallow groundwater). Groundwater samples were collected from three shallow monitoring wells (MW-101, MW-111A, and MW-111B) in November 2005. The screens in MW-101, MW-111A, and MW-111B are installed at 4 to 19 feet bgs, 2 to 9 ft bgs, and 3 to 13 ft bgs, respectively.

VOCs detected in shallow groundwater include benzene, chloromethane, cis-1,2-dichloroethene, ethylbenzene, isopropylbenzene, methyl tert-butyl ether (MTBE), toluene, trichloroethene, and total xylenes. Naphthalene was also detected in shallow groundwater.

The three shallow groundwater monitoring wells located in Block 93 (MW-101, MW-111A, and MW-111B) have been sampled quarterly by CH2M HILL starting in November 2005. In 2006, quarterly samples were collected in February, May, and August. The highest concentrations of VOCs and naphthalene detected in groundwater in November 2005 and 2006 were in MW-111A (see Table 2), which is screened at a depth of 2 to 9 ft bgs. MW-111A and MW-111B are both located within 100 ft of the Building. The highest concentrations of VOCs and naphthalene detected in these two wells during the November 2005 and December 2006 quarterly sampling are presented in Table 3. Constituents detected in these wells include benzene, chloromethane, ethylbenzene, isopropylbenzene, toluene, total xylenes, and naphthalene. In the August 2006 quarterly sampling event, only ethylbenzene (MW-111A, 1.6 µg/L) and naphthalene (MW-111A, 3.16 J µg/L; MW-111B, 2.35 µg/L) were detected in groundwater within 100 ft of the Building.

Summary of Site Visit

A walkthrough of the former restaurant building was conducted on February 22, 2007 with representatives from the EPA and the New Jersey Department of Environmental Protection (NJDEP). Photographs taken of the Building during the site visit are provided in Attachment B. The building is currently undergoing remodeling to be reopened as a restaurant. This is an approximately 6,000 square foot building consisting of two stories, with a single-story front dining area.

Interior Details

The Building consists of two entrances: one on the north side of the building (front entrance) and a back entrance on the south side. The front portion of the building faces east, and contains the dining area (Photographs 1 and 2). The kitchen is directly to the west of the dining area (Photographs 3 through 5). A storage area is to the south of the kitchen, and a walk-in refrigerator is located to the east of the storage area (Photographs 6 through 9). Ceiling height in the kitchen and store room is approximately 8 to 10 ft. There is an approximate 18-inch step down from the dining area/kitchen to the store room (Photograph 6). There is an approximate 18-inch step down from the store room to outdoor ground level (Photograph 10).

Air Handling Systems

There was no central air conditioning duct work observed. Hot-water baseboard heaters were observed (Photograph 15). One ceiling fan was observed in the dining room (Photograph 13). Several gas-fired stoves with hoods were observed in the kitchen (Photograph 3).

Foundation Details

There was no basement observed in the building. The inhabited areas appear to be constructed approximately 1.5 to 3 ft above grade (Photographs 10, 12, 22, and 23). The higher grade is in the dining room. During subsequent site visits on April 7 and April 11, 2007, observations were made of the space underlying the floor in the dining area addition on the eastern side of the restaurant building (Photographs 28 and 29). Based on these observations and from conversations with the contractor who constructed this addition, there is an approximate 4 inch annular space above the foundation. This annular space is located under the dining room floor, and is filled with insulation. The foundation in the remainder of the floor in the building was observed to be slab-on-grade concrete (Photograph 2). The thickness of the foundation was observed to be least 6 to 24 inches.

Penetrations through Foundation

In the dining area, one penetration was observed—a vertical PVC pipe (Photograph 25). There were floor drains in the kitchen; these reportedly drained to a sump in the storeroom (Photographs 4 and 5). There is a drain under the sink. The concrete slab appears to be greater than 6 inches thick (Photograph 24).

In the walk-in refrigerator, two penetrations were observed—a 6-inch diameter polyvinyl chloride (PVC) pipe and 1-inch PVC pipe (Photographs 16 and 18). According to the owners, these were connected to the bar located in the front dining area. When tested with air current tubes, the indoor space was neutral to slightly negatively pressurized relative to these pipes.

A large shallow sump (approximately 2.5 ft in diameter) is in the storeroom; the depth is unknown. There is a concrete lid over the top of the sump with a gap around the edge in case the sump overfills. The sump is equipped with a pump. According to the building owners, the sump discharges to the municipal storm sewer.

A lined sewer cleanout is located in the utility room containing the water heater (Photograph 19). This is approximately 2 ft deep, with no drain or other penetrations visible. The bottom appeared to be concrete-lined. It is not known if this cleanout is recessed into the ground, or if it indicates the slab thickness throughout the building.

Utilities entering the building include water, gas, and sewer lines. Water and gas lines were observed to enter the building through the walls, not the floor.

Evaluation of Potential Vapor Intrusion Pathways

The sampling and analytical data conducted as part of the RI and Supplemental Investigation along with the building conditions observed during the walkthrough survey were evaluated using the pathway screening processes described in EPA's draft vapor intrusion guidance document (EPA, 2002) and the New Jersey Department of Environmental Protection (NJDEP) vapor intrusion guidance (March 2007). Key findings from this evaluation were:

The available data suggests that volatiles in groundwater are not likely to represent a potential vapor intrusion pathway. The available monitoring data indicates that volatile constituents are in groundwater within 100 feet from the building. However, volatile constituents were not detected in shallow groundwater at concentrations higher than 2 micrograms per liter (µg/L) with the exception of naphthalene. Concentrations of all constituents were below the most conservative value from either the draft EPA or NJDEP vapor intrusion guidance. Naphthalene was detected at 140 µg/L in 2005 in MW-111A, located approximately 60 ft from the building. The target groundwater concentration presented in EPA's vapor intrusion guidance is 150 µg/L.

While a vapor intrusion pathway is not likely to be present from volatiles in soil, the available data are not adequate to confirm the absence of a potential pathway. Volatile constituents were detected in low levels in soil within 100 ft of the building. The highest concentrations in soil generally were around 0.1 ppm (ethylbenzene, toluene) to 0.26 ppm (benzene), detected in SB-27 located 45 feet from the Building at a depth of 13 to 15 feet below grade. The constituent with the highest concentrations detected is naphthalene, with 12 ppm found in SB-26 (30 ft from the building, at a depth of 9 to 10 ft below grade) and 101 ppm found in SB-27 (45 ft from the building). As described previously, groundwater occurs at a depth of approximately 9 ft below grade, so these detected concentrations are likely within the saturated zone. Naphthalene has less volatility compared with VOCs such as benzene; however, there is no data available to rule out the presence of naphthalene in soil gas. In addition, there are no screening levels available to evaluate potential vapor intrusion pathways based on volatile constituents detected in bulk soil samples; EPA provides vapor intrusion target concentrations only for soil gas data.

Coal tar free product is not located near the building. As shown in Figure 2, the closest extent of free product, based on the TARGOST® investigation, is greater than 100 ft from the edge of the building.

Constituents detected in soil and groundwater are amenable to aerobic biodegradation. The constituents principally detected in soil and groundwater near the restaurant building

are aromatic hydrocarbons, including benzene and naphthalene. As discussed in NJDEP's vapor intrusion guidance, numerous studies have shown that this class of compounds undergoes aerobic biodegradation. The 100-foot horizontal or vertical distance criterion for investigating the vapor intrusion pathway, used in both the EPA and NJDEP guidance does not consider the degradability of hydrocarbon compounds. As such, NJDEP also uses a 30-foot horizontal and vertical distance criterion for hydrocarbon contamination provided non-aqueous phase product is not present. As discussed previously, free product is located further than 100 feet from the restaurant building location.

The building characteristics may preclude a vapor intrusion pathway. Inhabited areas are generally elevated 1.5 to 3 ft above the ground surface. The slab underlying the building is relatively thick (from 6 inches to 2 feet), and is in good condition with relatively few penetrations.

Preferential pathways (such as utility conduits) were not identified, which represents an uncertainty in evaluating the presence of a potentially significant vapor intrusion pathway into the building. The presence of natural gas-fired ranges and ventilation hoods in the kitchen might slightly depressurize the indoor space relative to outdoors, but it is not known if this will create a driving force for vapor from the subsurface to the indoor space.

Overall assessment of potential vapor intrusion pathways. Consideration of the weight of evidence from available sampling data and building conditions suggests that a potential vapor intrusion pathway is not likely to be present in the restaurant building.

The proposed use of the building (as a restaurant) significantly limits the usability of indoor air sampling for evaluating potential vapor intrusion pathways In addition, combustion of natural gas in the gas-fired ranges in the kitchen will create interferences for indoor air sampling; natural gas combustion results in the emission of combustion products such as benzene, toluene, ethylbenzene, and xylenes [BTEX], and naphthalene, which have also been detected as constituents in soil or groundwater at the Quanta Resources property.

While the overall assessment is that potential vapor intrusion pathways are not present in the restaurant building, some further steps for investigation have been identified (as discussed below) that can confirm this conclusion, and provide additional assurance that the vapor intrusion pathway to the restaurant building does not exist.

Recommendations

The following steps are recommended to further evaluate a potential vapor intrusion pathway at the restaurant building:

- Collect soil gas samples from up to 6 locations to evaluate the potential presence of volatile constituents in soil gas. These probes would be installed using Geoprobe® Post-Run Tubing technique, and would be leak-tested using helium tracer gas. Proposed locations for these soil gas samples are shown in Figure 3.
- Three of these soil gas samples would be collected close to the Building footprint. One sample each will be collected near the locations of the SB-26 and SB-27 soil samples.

One sample will be collected from a location between the restaurant building and the location of MW-111A. Two of these soil gas samples would be collected further to the east of the building, between the furthest extent of coal tar free product and the building. One sample will be collected between the restaurant building and Block 92, which is cross-gradient from the building.[1]

- If feasible, soil gas samples will be collected from two depths at each sample location - one sample from near the water table (approximately 8 - 9 feet in depth); and the second at a depth of approximately 4 to 5 feet. These samples will be analyzed for volatile organic compounds, and for fixed gases (such as oxygen and carbon dioxide) to determine if aerobic conditions exist in the vadose zone that favor biodegradation of aromatic hydrocarbon compounds.
- Analytical results from these soil gas samples would be evaluated using lowest target soil gas concentrations from EPA's draft vapor intrusion guidance (EPA, 2002) and NJDEP's vapor intrusion guidance (March, 2007). Greater weight would be placed on the results from the three probes closest to the building in determining the potential presence of a vapor intrusion pathway. If concentrations fall below the target soil gas concentrations, this would indicate no significant vapor intrusion pathway is present; further evaluation or action with regard to vapor intrusion therefore should not be required. As discussed below, the feasibility of mitigation measures also will be evaluated for the building; feasible mitigation measures will be identified and recommended if these appear warranted based on the soil gas data.
- Available information will be obtained from municipal authorities (city of Edgewater and Bergen County) concerning the location of subsurface utilities which could potentially represent preferential pathways. In addition, a utility survey will be conducted to better identify the presence or absence of preferential pathways. This information will be combined with the soil gas sampling data to better define the presence of a potential vapor intrusion pathway to the building.
- It is not anticipated that mitigation will be required for vapor intrusion in the building. However, an engineering evaluation should be conducted of the building foundation and envelope to identify feasible mitigation measures for vapor intrusion, should these be deemed necessary. This evaluation will identify conditions within the building envelope that are either resistant to vapor intrusion, or that could represent potential conduits and driving forces for vapor intrusion.

References

Environmental Waste Management Associates, LLC (EWMA). 2005. *Remedial Investigation Report.* Prepared for Three Y, LLC. April 25.

CH2M HILL. 2006. *Draft Preliminary Site Characterization Report, Operable Unit 1, Quanta Resources Site, Edgewater, New Jersey.* February.

[1] The purpose for this last soil gas sample is to evaluate a pathway from potential sources located around Block 92.

New Jersey Department of Environmental Protection (NJDEP). 2007. *Vapor Intrusion Guidance* (Revised, March 2007). NJDEP, Site Remediation and Waste Management Program (SRWMP), Trenton, NJ.

O'Brien & Gere Engineers, Inc. 2004. *Preliminary Assessment, Heagney/Frola Properties, Old River Road, Edgewater, New Jersey.* August.

U.S. Environmental Protection Agency (EPA). 2002. *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance).* November 29.

TABLE 1
VOC and SVOC Analytical Sample Results for October 2006
Samples Located in Block 93
Former Jono's Restaurant and Cantina - Vapor Intrusion Evaluation
Quanta Resources Superfund Site, Edgewater, New Jersey

	Location	SB-23 (135 ft SE of building)		SB-24 (140 ft E of building)		SB-26 (30 ft S of building)	SB-27 (45 ft E of building)		TL14.5-11.25 (130 ft SE of building)	
	Field Sample ID	SB-23-11	SB-23-3.0	SB-24-1.0	SB-24-11	SB-26-14	SB-27-1.0	SB-27-9.5	TL14.5-11.25-2.0	TL14.5-11.25-9.0
	Date	10/18/2006	10/18/2006	10/16/2006	10/16/2006	10/13/2006	10/13/2006	10/13/2006	10/16/2006	10/16/2006
	Start Depth	10	2	0	10	13	0	9	1	8.5
Analyte	End Depth	12	4	2	12	15	2	10	3	9
VOCs										
BENZENE	PPM	3.7 J	2.8	0.073ND	0.080ND	0.26	0.054ND	0.085	0.041 J	0.38
CARBON DISULFIDE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.20 J
CIS-1,2-DICHLOROETHENE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.71ND
ETHYLBENZENE	PPM	9.6	2.4	0.073ND	0.080ND	0.099ND	0.054ND	0.11	0.066ND	0.25
ISOPROPYLBENZENE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.29 J
METHYL ACETATE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	1.5
METHYLCYCLOHEXANE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.71ND
O-XYLENE	PPM	5.4ND	1.06 J	0.073ND	0.080ND	0.099ND	0.054ND	0.048 J	0.066ND	0.103 J
TOLUENE	PPM	4.8 J	1.1 J	0.073ND	0.080ND	0.067 J	0.054ND	0.12	0.066ND	0.14ND
TRANS-1,2-DICHLOROETHENE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.71ND
TRICHLOROETHENE	PPM	27ND	6.5ND	0.37ND	0.40ND	0.50ND	0.27ND	0.28ND	0.33ND	0.71ND
XYLENES, M & P	PPM	5.92 J	2.63	0.15ND	0.16ND	0.20ND	0.11ND	0.122	0.13ND	0.276 J
XYLENES, TOTAL	PPM	7.8 J	3.7	0.15ND	0.16ND	0.20ND	0.11ND	0.17	0.13ND	0.38
SVOCs										
NAPHTHALENE	PPM	2560 J	396	5.7ND	0.087ND	12	0.99 J	101	1.7	8.0

Notes:
ft = feet
J = estimated value
ND = not detected (reporting limit shown)
PPM = parts per million
PPB = parts per billion
N = north
S = south
E = east
W = west

TABLE 2

Maximum Detected Concentrations of VOCs and Naphthalene in Shallow Groundwater in Block 93
November 2005 and February, May, and August 2006 Sampling Events
Former Jono's Restaurant and Cantina - Vapor Intrusion Evaluation
Quanta Resources Superfund Site, Edgewater, New Jersey

Location ID[1]	Field Sample ID	Sample Date	Parameter	Maximum Detected Result (ug/L)	Groundwater Screening Level (ug/L)
MW-101A	MW-101A-082106	8/21/2006	ACETONE	8.3 J	220000
MW-111A	MW-111A-111605	11/16/2005	BENZENE	0.3 J	5
MW-111A	MW-111A-051806	5/18/2006	CARBON DISULFIDE	0.2 J	560
MW-111A	MW-111A-111605	11/16/2005	CHLOROMETHANE	0.4 J	6.7
MW-101A	MW-101A-111705	11/17/2005	CIS-1,2-DICHLOROETHENE	0.1 J	210
MW-111A	MW-111A-082106	8/21/2006	ETHYLBENZENE	1.6	700
MW-111A	MW-111A-021706	2/17/2006	ISOPROPYLBENZENE	0.2 J	NA
MW-101A	MW-101A-022106	2/21/2006	METHYL TERT-BUTYL ETHER	0.3 J	78
MW-111B	MW-111B-111605	11/16/2005	METHYL TERT-BUTYL ETHER	0.3 J	78
MW-101A	MW-101A-051806	5/18/2006	TETRACHLOROETHENE	0.1 J	1
MW-111B	MW-111B-021706	2/17/2006	TOLUENE	0.3 J	1500
MW-111A	MW-111A-111605	11/16/2005	TOLUENE	0.3 J	1500
MW-101A	MW-101A-051806	5/18/2006	TRICHLOROETHENE	0.2 J	1
MW-111B	DUP-111605-GW	11/16/2005	XYLENES, TOTAL	1.1	7000
MW-111A	MW-111A-111605	11/16/2005	NAPHTHALENE	140	150

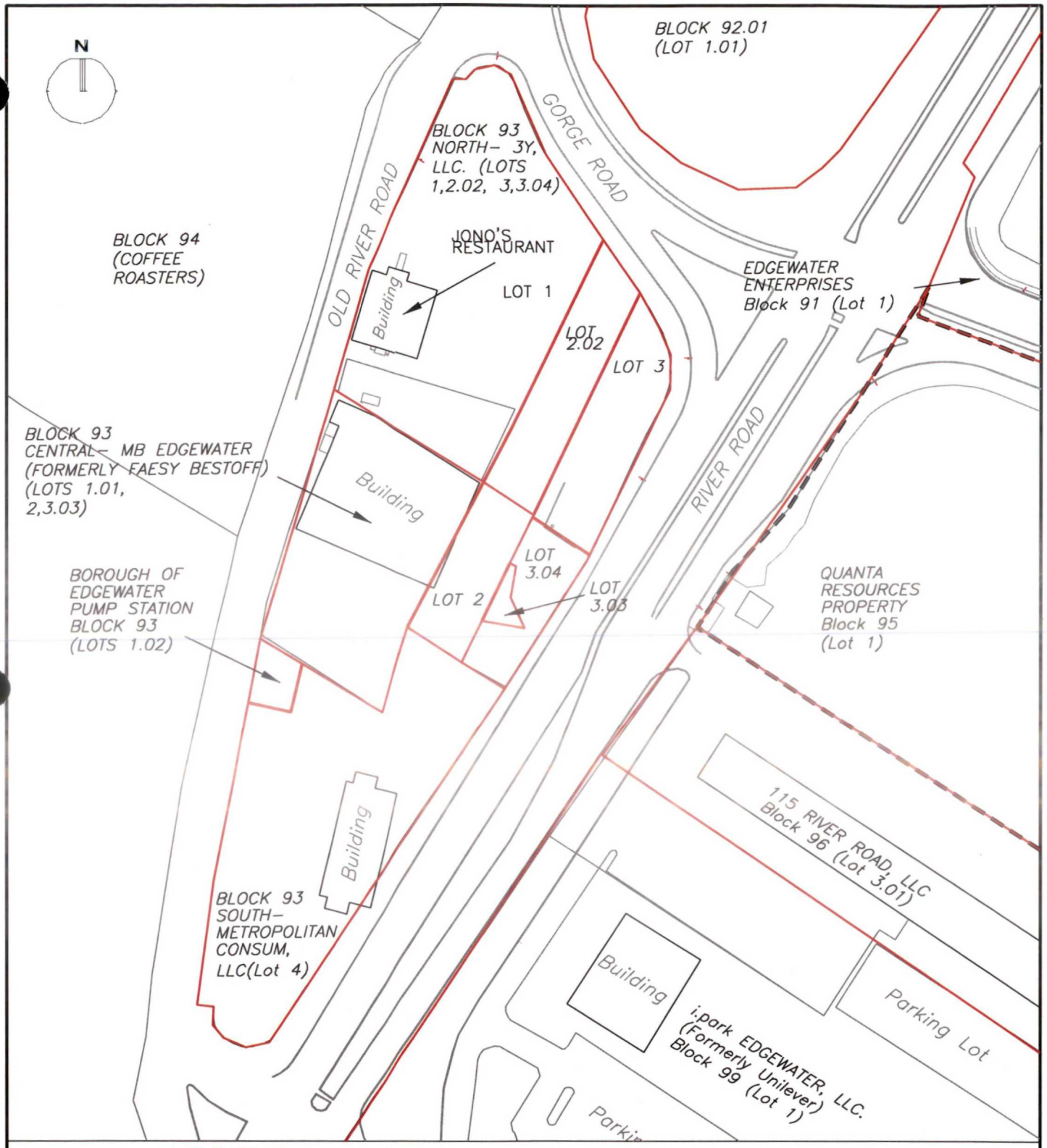
Notes:
All concentrations are in micrograms per liter (µg/L)
[1] Well 111A located approximately 60 feet north of the building.
Well 111B located approximately 68 feet north of the building.
Well-101A located approximately 200 feet east of the building.
Groundwater Screening Levels are the lowest value from the EPA Draft Vapor Intrusion Guidance (November 2005) or the NJDEP Vapor Intrusion Guidance (March 2007)

TABLE 3

Maximum Detected Concentration of VOCs and Naphthalene in Shallow Groundwater (MW-111A and MW-111B)
November 2005 and February, May, and August 2006 Sampling Events
Former Jono's Restaurant and Cantina - Vapor Intrusion Evaluation
Quanta Resources Superfund Site, Edgewater, New Jersey

Location ID[1]	Field Sample ID	Sample Date	Parameter	Maximum Detected Result
MW-111A	MW-111A-111605	11/16/2005	BENZENE	0.3 J
MW-111A	MW-111A-051806	5/18/2006	CARBON DISULFIDE	0.2 J
MW-111A	MW-111A-111605	11/16/2005	CHLOROMETHANE	0.4 J
MW-111A	MW-111A-082106	8/21/2006	ETHYLBENZENE	1.6
MW-111A	Dup-021706-GW	2/17/2006	ISOPROPYLBENZENE	0.2 J
MW-111B	MW-111B-111605	11/16/2005	METHYL TERT-BUTYL ETHER	0.3 J
MW-111A	MW-111A-111605	11/16/2005	TOLUENE	0.3 J
MW-111B	DUP-111605-GW	11/16/2005	XYLENES, TOTAL	1.1
MW-111A	MW-111A-111605	11/16/2005	NAPHTHALENE	140

Notes:
All concentrations are in micrograms per liter (µg/L)
[1] Well 111A located approximately 60 feet north of the building.
Well 111B located approximately 68 feet north of the building.



LEGEND

PROPERTY LOT BOUNDARY LINES

CURRENT QUANTA RESOURCES PROPERTY BOUNDARY

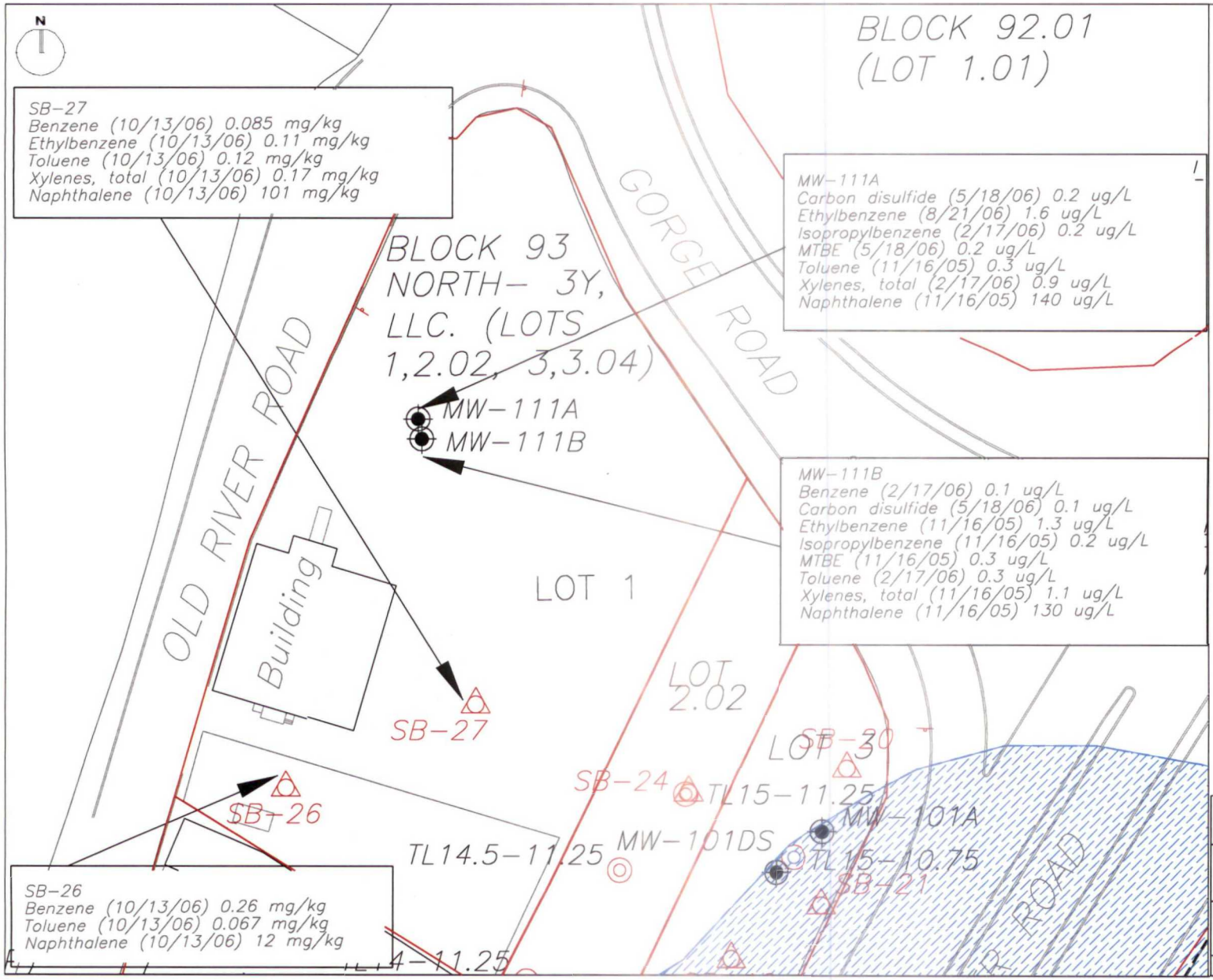
GRAPHIC SCALE

(IN FEET)
1 inch = 140 ft.

Notes: 1. Property boundary lines are based on Borough of Edgewater tax maps. 2. Property boundary lines are not exact.

Figure 1
Location of Block 93
Quanta Resources
Edgewater, New Jersey

CH2MHILL



LEGEND

MW-103 EXISTING MONITORING WELL

SI TarGOST™ BORING LOCATION

EXTENT OF NON-AQUEOUS PHASE COAL TAR (EQUAL TO THE EXTENT OF 50%RE TarGOST™ RESPONSES - OTHER COLORS REPRESENT INCREASING RESPONSES)

AREA WHERE EXTENT OF NON-AQUEOUS COAL TAR IS INTERPOLATED (ADDITIONAL INFO REQUIRED TO CONFIRM)

CURRENT QUANTA RESOURCES PROPERTY BOUNDARY

Notes:
1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.
2. Property boundary lines are not exact.

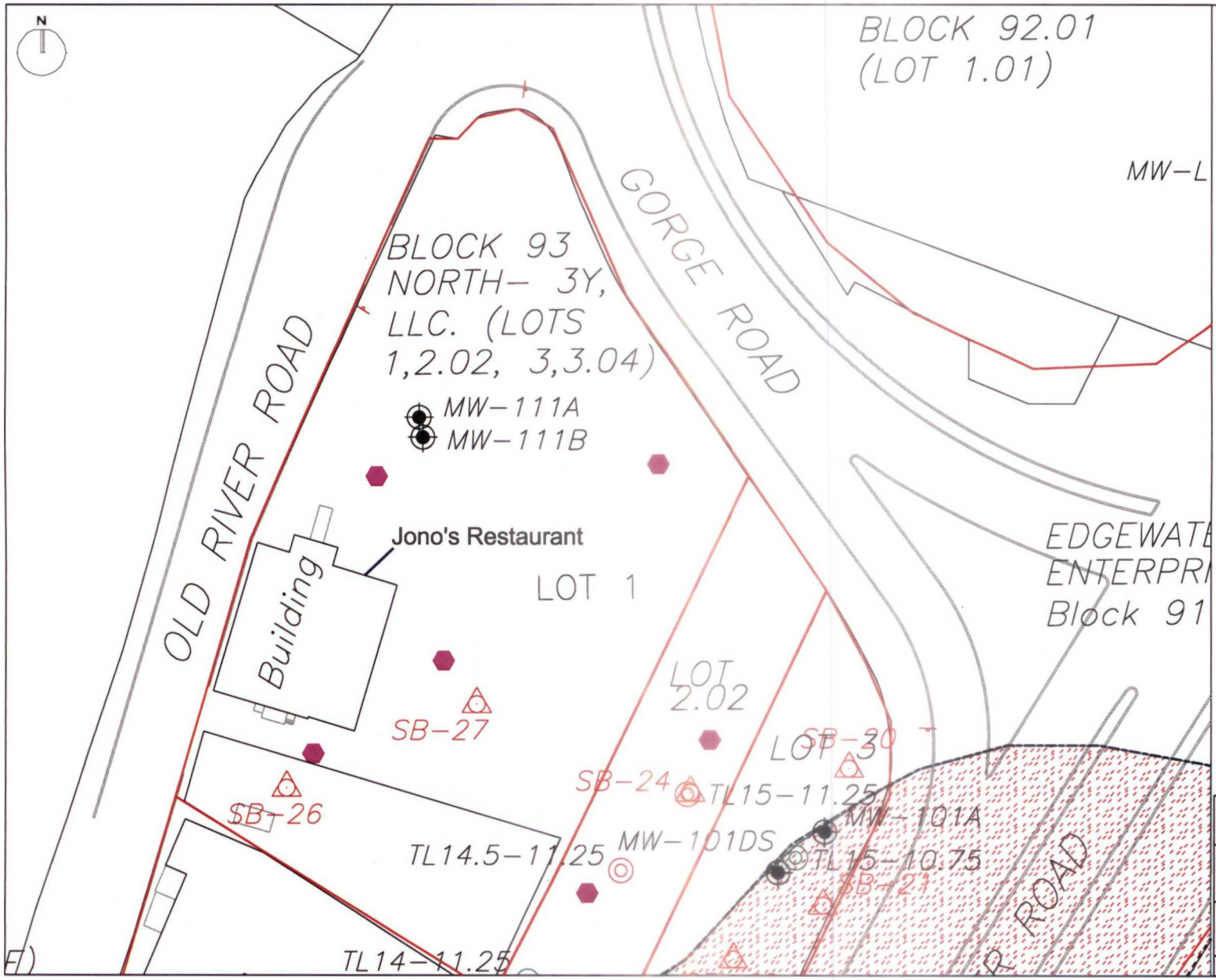
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CH2MHILL

SAMPLE LOCATIONS AND MAXIMUM DETECTED CONCENTRATIONS

QUANTA RESOURCES SUPERFUND SITE
Edgewater, New Jersey

March 2007 | FIGURE 2



LEGEND

MW-103 EXISTING MONITORING WELL

SI TarGOST™ BORING LOCATION

EXTENT OF NON-AQUEOUS PHASE COAL TAR (EQUAL TO THE EXTENT OF 50%RE TarGOST™ RESPONSES - OTHER COLORS REPRESENT INCREASING RESPONSES)

AREA WHERE EXTENT OF NON-AQUEOUS COAL TAR IS INTERPOLATED (ADDITIONAL INFO REQUIRED TO CONFIRM)

CURRENT QUANTA RESOURCES PROPERTY BOUNDARY

Notes:
1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.
2. Property boundary lines are not exact.

Proposed soil gas sampling probe location

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

CH2MHILL

PROPOSED SOIL GAS SAMPLING PROBE LOCATIONS

QUANTA RESOURCES SUPERFUND SITE
Edgewater, New Jersey

March 2007 | FIGURE 3

...\CH-VaporIntrusionBlock93AH_Rev.dgn 4/6/2007 11:20:02 AM

ATTACHMENT A-1
VOC and SVOC Analytical Sample
Results for October 2006
Samples Located in Block 93
Former Jono's Restaurant and Cantina
Quanta Resources Superfund Site

Anaylte	Location	SB-19 (180 ft SE of building)		SB-21 (220 ft E of building)		SB-22 (230 ft SE of building)		SB-23 (135 ft SE of building)		SB-24 (140 ft E of building)	
	Field Sample ID	SB-19-1.0	SB-19-5.0	SB-21-2.0	SB-21-6.0	SB-22-16	SB-22-2.0	SB-23-11	SB-23-3.0	SB-24-1.0	SB-24-11
	Date	10/12/2006	10/12/2006	10/13/2006	10/13/2006	10/13/2006	10/13/2006	10/18/2006	10/18/2006	10/16/2006	10/16/2006
	Start Depth	1	4	1	5	15	1	10	2	0	10
	End Depth	3	6	3	7	17	3	12	4	2	12
VOCs											
BENZENE	PPM	0.075ND	1.9 J	0.13 J	2.0	2.9 J	0.067ND	3.7 J	2.8	0.073ND	0.080ND
CARBON DISULFIDE	PPM	0.38ND	18ND	1.2ND	0.49ND	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
CIS-1,2-DICHLOROETHENE	PPM	0.38ND	18ND	1.2ND	0.085 J	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
ETHYLBENZENE	PPM	0.075ND	30	0.23 J	0.66	8.2	0.067ND	9.6	2.4	0.073ND	0.080ND
ISOPROPYLBENZENE	PPM	0.38ND	19	1.2ND	0.37 J	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
METHYL ACETATE	PPM	0.38ND	18ND	1.2ND	0.49ND	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
METHYLCYCLOHEXANE	PPM	0.38ND	18ND	1.2ND	0.49ND	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
O-XYLENE	PPM	0.075ND	23.8	0.250	0.140	4.110	0.067ND	5.4ND	1.06 J	0.073ND	0.080ND
TOLUENE	PPM	0.075ND	3.6ND	0.73	2.2	8.2	0.067ND	4.8 J	1.1 J	0.073ND	0.080ND
TRANS-1,2-DICHLOROETHENE	PPM	0.38ND	18ND	1.2ND	0.082 J	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
TRICHLOROETHENE	PPM	0.38ND	18ND	1.2ND	0.070 J	20ND	0.34ND	27ND	6.5ND	0.37ND	0.40ND
XYLENES, M & P	PPM	0.15ND	35.2	0.643	0.532	9.37	0.13ND	5.92 J	2.63	0.15ND	0.16ND
XYLENES, TOTAL	PPM	0.15ND	59	0.89	0.67	14	0.13ND	7.8 J	3.7	0.15ND	0.16ND
SVOCs											
NAPHTHALENE	PPM	18 J	1690	434	281	7250	0.25	2560 J	396	5.7ND	0.087ND

Notes:
ft = feet
J = estimated value
ND = not detected (reporting limit shown)
PPM = parts per million
PPB = parts per billion

N = north
S = south
E = east
W = west

ATTACHMENT A-1
VOC and SVOC Analytical Sample
Results for October 2006
Samples Located in Block 93
Former Jono's Restaurant and Cantina
Quanta Resources Superfund Site

	Location	SB-25 (150 ft SSE of building)		SB-26 (30 ft S of building)	SB-27 (45 ft E of building)		TL12-10.75 (330 ft S of building)		
	Field Sample ID	SB-25-1.0	SB-25-8.0	SB-26-14	SB-27-1.0	SB-27-9.5	TL12-10.75-1.0	TL12-10.75-14.5	TL12-10.75-7.0
	Date	10/17/2006	10/17/2006	10/13/2006	10/13/2006	10/13/2006	10/16/2006	10/16/2006	10/16/2006
	Start Depth	0	7	13	0	9	0	13.5	5.5
Anaylte	End Depth	2	9	15	2	10	2	15.5	7.5
VOCs									
BENZENE	PPM	0.070ND	3.9	0.26	0.054ND	0.085		29	2.7
CARBON DISULFIDE	PPM	0.35ND	9.3ND	0.50ND	0.27ND	0.28ND		25ND	0.46ND
CIS-1,2-DICHLOROETHENE	PPM	0.35ND	9.3ND	0.50ND	0.27ND	0.28ND		25ND	0.46ND
ETHYLBENZENE	PPM	0.070ND	51	0.099ND	0.054ND	0.11		174	2.7
ISOPROPYLBENZENE	PPM	0.35ND	18	0.50ND	0.27ND	0.28ND		30	0.24 J
METHYL ACETATE	PPM	0.35ND	9.3ND	0.50ND	0.27ND	0.28ND		25ND	0.46ND
METHYLCYCLOHEXANE	PPM	0.35ND	1.6 J	0.50ND	0.27ND	0.28ND		25ND	0.46ND
O-XYLENE	PPM	0.070ND	38.4	0.099ND	0.054ND	0.048 J		93.1	0.296
TOLUENE	PPM	0.039 J	4.0	0.067 J	0.054ND	0.12		71	0.30
TRANS-1,2-DICHLOROETHENE	PPM	0.35ND	9.3ND	0.50ND	0.27ND	0.28ND		25ND	0.46ND
TRICHLOROETHENE	PPM	0.35ND	9.3ND	0.50ND	0.27ND	0.28ND		25ND	0.46ND
XYLENES, M & P	PPM	0.14ND	52.3	0.20ND	0.11ND	0.122		195	0.786
XYLENES, TOTAL	PPM	0.036 J	91	0.20ND	0.11ND	0.17		288	1.1
SVOCs									
NAPHTHALENE	PPM	0.57 J	1840	12	0.99 J	101		5360	11

Notes:
ft = feet
J = estimated value
ND = not detected (reporting limit shown)
PPM = parts per million
PPB = parts per billion

ATTACHMENT A-1
VOC and SVOC Analytical Sample
Results for October 2006
Samples Located in Block 93
Former Jono's Restaurant and Cantina
Quanta Resources Superfund Site

Anaylte	Location	TL12-11.75 (260 ft S of building)	TL12.5-11.75 (210 ft S of building)	TL12.5-12.25 (200 ft S of building)	TL14-10.75 (190 SE of building)	
	Field Sample ID	TL12-11.75-18	TL12.5-11.75-22	TL12.5-12.25-20	TL14-10.75-15	TL14-10.75-2.0
	Date	10/17/2006	10/17/2006	10/18/2006	10/13/2006	10/13/2006
	Start Depth	17	21	19	14	1
	End Depth	19	23	21	16	3
VOCs						
BENZENE	PPM	0.20ND	0.19ND	0.10ND	18	14
CARBON DISULFIDE	PPM	1.0ND	0.94ND	0.52ND	23ND	22ND
CIS-1,2-DICHLOROETHENE	PPM	1.0ND	0.94ND	0.52ND	23ND	22ND
ETHYLBENZENE	PPM	0.20ND	0.19ND	0.10ND	40	40
ISOPROPYLBENZENE	PPM	1.0ND	0.94ND	0.52ND	4.4 J	16 J
METHYL ACETATE	PPM	0.32 J	0.94ND	0.52ND	23ND	22ND
METHYLCYCLOHEXANE	PPM	1.0ND	0.94ND	0.52ND	23ND	22ND
O-XYLENE	PPM	0.20ND	0.19ND	0.10ND	16.1	90.4
TOLUENE	PPM	0.20ND	0.19ND	0.10ND	39	27
TRANS-1,2-DICHLOROETHENE	PPM	1.0ND	0.94ND	0.52ND	23ND	22ND
TRICHLOROETHENE	PPM	1.0ND	0.94ND	0.52ND	23ND	22ND
XYLENES, M & P	PPM	0.40ND	0.37ND	0.210ND	42.3	180
XYLENES, TOTAL	PPM	0.40ND	0.37ND	0.21ND	58	270
SVOCs						
NAPHTHALENE	PPM	0.22	1.1	0.081 J	746	1600

Notes:
ft = feet
J = estimated value
ND = not detected (reporting limit shown)
PPM = parts per million
PPB = parts per billion

ATTACHMENT A-1
VOC and SVOC Analytical Sample
Results for October 2006
Samples Located in Block 93
Former Jono's Restaurant and Cantina
Quanta Resources Superfund Site

Anaylte	Location	TL14.5-11.25 (130 ft SE of building)		TL15-10.75 (180 ft E of building)			TL15-10.75
	Field Sample ID	TL14.5-11.25-2.0	TL14.5-11.25-9.0	TL15-10.75-1.0	TL15-10.75-41	TL15-10.75-47	TL15-10.75-8.0
	Date	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006
	Start Depth	1	8.5	0	40.5	47	8
	End Depth	3	9	2	41.5	47.5	8.5
VOCs							
BENZENE	PPM	0.041 J	0.38				
CARBON DISULFIDE	PPM	0.33ND	0.20 J				
CIS-1,2-DICHLOROETHENE	PPM	0.33ND	0.71ND				
ETHYLBENZENE	PPM	0.066ND	0.25				
ISOPROPYLBENZENE	PPM	0.33ND	0.29 J				
METHYL ACETATE	PPM	0.33ND	1.5				
METHYLCYCLOHEXANE	PPM	0.33ND	0.71ND				
O-XYLENE	PPM	0.066ND	0.103 J				
TOLUENE	PPM	0.066ND	0.14ND				
TRANS-1,2-DICHLOROETHENE	PPM	0.33ND	0.71ND				
TRICHLOROETHENE	PPM	0.33ND	0.71ND				
XYLENES, M & P	PPM	0.13ND	0.276 J				
XYLENES, TOTAL	PPM	0.13ND	0.38				
SVOCs							
NAPHTHALENE	PPM	1.7	8.0				

Notes:
ft = feet
J = estimated value
ND = not detected (reporting limit shown)
PPM = parts per million
PPB = parts per billion

Photographic Log

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

1. Interior, front dining room.

2. Interior, main dining room, entrance to restrooms. Ceramic tile on floor.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

3. Interior, kitchen (gas range in background).

4. Interior, kitchen. Detail of sinks, wall penetrations for water lines and floor drain. Floor is painted concrete.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

5. Interior, kitchen. Sink is in the background. Foreground - floor drain.

6. Interior, foreground - entrance to the kitchen from storeroom. Background, entrance to the walk-in (refrigerator). Note that the kitchen and walk-in area are at a 1.5 ft higher elevation than the storeroom (note: dining rooms are at the same elevation as the kitchen).

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

7. Interior, storeroom. Sump for collection of drainage from floor drains in other portions of the building. Discharges to the municipal storm sewer.

8. Interior, storeroom. Bathroom located at the rear of the storeroom.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

9. Interior, storeroom. Utility closet containing gas-fired water heater, off of the storeroom.

10. Exterior, entrance to storeroom, south side of the building. Note that the storeroom is approximately 1.5 feet higher than ground level elevation.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

12. Exterior, south side of building, east storeroom entrance. Further detail that inhibited area is elevated approximately 3 feet above ground level.

13. Interior, main dining room. Detail of ceiling fan, and second floor dining area.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

14. Interior, main dining room. Additional detail of second floor dining area.

15. Interior, main dining room. Detail of hot water convection floor heater.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

16. Interior, walk-in. Detail of floor/wall penetration (4" PVC pipe), reportedly pressure relief for the bar (bar is located in the front dining area).

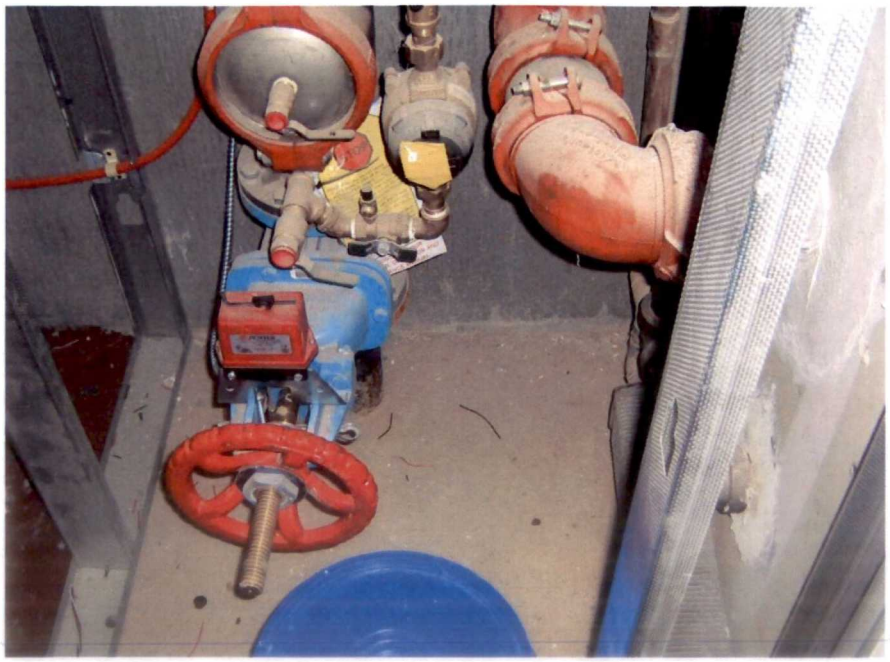
17. Interior, walk-in. Refrigerator on the right.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

18. Interior, walk-in - pullback shot of 4" PVC floor/wall penetration.

19. Interior, storeroom utility closet - cleanout for the water heater. Not certain if this represents slab thickness throughout building, or a concrete lined sump. Bottom appears to be concrete lined.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07



20. Interior, kitchen. Plumbing for fire suppression system (wall penetrations). Newly constructed.

21. Interior, kitchen. Behind stoves - wall penetration for gas lines.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

22. Exterior, south side of building, east of storeroom entrance. Further detail that inhibited area is elevated approximately 3 feet above ground level.

23. Exterior, south side, looking southwest (front dining room in the background). Further detail that inhibited area is elevated approximately 3 feet above ground level.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

24. Interior, storeroom. Drain underneath sink. Slab appears >6 inches.

25. Interior, main dining room. PVC pipe intrusion observed in floor.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 2/22/07

26. Exterior, from the north side of the building.

27. Exterior, from the north side of the building, front dining room in the background. Note the doors-inhibited space is elevated about 2 feet above ground surface.

Client Name: Honeywell Inc.
Project Number: 332898
Site Location: Jono's Restaurant, Block 93, Edgewater, Bergen County, New Jersey
Date: 4/07/07

28. Detail behind exterior plywood, south side. Note vertical girders under ½ in. plywood, with sheet insulation on the interior. Indicates but does not confirm presence of an open air space between inhabited area and ground.

29. Location of access on south side.

Updated Vapor Intrusion Evaluation, 163 River Road (Former Jono's Restaurant), Block 93, Edgewater, NJ

PREPARED FOR:	Richard Ho, EPA Region 2
PREPARED BY:	CH2MHILL
COPIES	Bob Hayton, NJDEP
	John Morris, Honeywell
	Rich Kampf, ESAG
DATE:	October 1, 2007

1.0 Summary

This memorandum summarizes the results from an evaluation of the potential vapor intrusion pathway at the building located at 163 River Road, on Block 93; the former Jono's Restaurant building (the "Building") is located at this address. This memorandum provides additional data that supplements a previously conducted evaluation[1] of potential vapor intrusion pathways at the Building. That previous evaluation, submitted in April 2007, had reviewed the existing site characterization data at Block 93 and concluded that potential vapor intrusion pathways were unlikely to be complete in the Building. In June 2007, groundwater sampling and a geophysical survey were conducted to provide further lines of evidence regarding potential vapor intrusion pathways at the Building.

The results from the June 2007 groundwater sampling event reinforce the overall assessment, originally presented in the April 2007 vapor intrusion evaluation, that a potential vapor intrusion pathway is not present in the Building. Key conclusions from these two studies are:

- Soil gas concentrations of naphthalene, estimated from concentrations detected in groundwater samples collected several feet below the water table near the footprint of the Building, are lower than site-specific risk-based screening levels. These screening levels are based on the individuals with the highest frequency and duration of potential exposure (workers in the restaurant).
- As discussed in the April 2007 vapor intrusion evaluation, the building characteristics may preclude a vapor intrusion pathway.
- A geophysical survey was performed to identify subsurface utilities that could be located near the Building. Based on this survey, the presence of subsurface features, such as municipal utilities, does not appear to affect the potential for a vapor intrusion pathway into the Building.

[1] CH2M HILL. 2007. Vapor Intrusion Evaluation at 163 River Road Building (Jono's Restaurant), April 12, 2007.

2.0 Introduction

This memorandum presents the results from shallow groundwater samples collected near the former Jono's Restaurant and Cantina building (the "Building"), at 163 River Road, Edgewater, New Jersey. This building is located on the Block 93 Parcel across River Road from the Quanta Resources property. The building is currently undergoing renovations and will be reopened as another restaurant.

The purpose for collecting groundwater samples was to follow up from a previously-conducted evaluation of the potential for indoor vapor intrusion pathways near the Building. That evaluation, conducted in April 2007, summarized the results of previous investigations which detected volatile and semi-volatile organic compounds in soil and groundwater at Block 93, and presented the results from the survey of the building.[2] The overall assessment in April 2007 was that potential vapor intrusion pathways were not present in the restaurant building. Further investigation was recommended to confirm the results from that April 2007 evaluation.

Further investigation of potential vapor intrusion pathways around the building consisted of the following activities:

- Collecting grab samples from shallow groundwater using low-flow sampling techniques and analyzing these samples for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs)[3];
- Performing a geophysical survey around the building, to identify subsurface utilities that potentially represent preferential pathways for the migration of soil vapor into the Building.

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[2] CH2M HILL. 2007. Vapor Intrusion Evaluation at 163 River Road Building (Jono's Restaurant), April 12, 2007.

[3] The April 2007 evaluation originally recommended collection of shallow soil gas samples. Based on the groundwater elevation around the Building (groundwater occurs at less than 5 feet below ground surface), soil gas sampling was deemed to not be feasible. Shallow groundwater sampling was proposed instead.

3.0 Sampling Methods

3.1 Groundwater Grab Sampling

The April 2007 vapor intrusion evaluation recommended collection of soil gas samples to provide additional lines of evidence regarding potential vapor intrusion pathways near the Building. Further review of groundwater elevations in monitoring wells near the building indicated that collection of soil gas samples might not be feasible. The New Jersey Department of Environmental Protection (NJDEP) provides guidance for the installation of soil gas samples for evaluation of potential vapor intrusion pathways (NJDEP, 2007). NJDEP recommends that soil gas samples be collected at a minimum depth of 5 feet below the ground surface, and one foot above the capillary fringe. The depth to groundwater near the Building precluded collection of soil gas samples in this manner (note: USEPA does not provide guidelines for the installation of soil gas probes for use in vapor intrusion investigations). Therefore, instead of soil gas samples, shallow groundwater samples were collected using low-flow sampling techniques.

Temporary well points were installed to collect the groundwater grab samples (see Figure 1 for the locations of these well points). Description of the well point installations will be included in the Draft RI Report for OU1. Originally, 1-foot screens associated with the temporary monitoring wells were to be installed at shallower depths such that the screens were just below the water table (5-6 feet bgs) [4]. This was attempted at location TWP-SB-33, however, the length of the well screen, the limited hydraulic conductivity of the saturated soils and the inability to create a significant hydraulic head variance between the shallow well and the adjacent formation resulted in very low recharge rates. As a result, purging and sampling at this location took approximately 10 hours. Based on the experience at this location, the remainder of the temporary well points was installed to greater depths below the water table, but no deeper than approximately 5.5 feet below the water table. The depth to water at each sample location, and depth at which groundwater was sampled are presented in Table 1. The effect of this deviation in the sampling approach on the evaluation of potential vapor intrusion pathways is discussed in further detail in this memorandum.

Field parameters that were collected were depth to groundwater, pH, conductivity, turbidity, dissolved oxygen (D.O.), temperature, and oxidation reduction potential (ORP). The field parameters are summarized in Table 1. The effect of these field conditions on potential vapor intrusion pathways is discussed in further detail in this memorandum.

3.2 Evaluation of Subsurface Utilities

NJDEP's vapor intrusion guidance (NJDEP, 2007) recommends canvassing the area around a building to identify subsurface utilities. Correspondingly, a survey was conducted to identify subsurface utilities in proximity to the Building. Attempts were made to obtain engineering and utility drawings from the Borough of Edgewater, but none apparently exist. In the absence of other information regarding subsurface utilities, Enviroscan, Inc.

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[4] As discussed below in this memorandum, agency guidelines state that groundwater samples from the top of the water table provide the best indication of potential vapor intrusion pathways (USEPA, 2002; NJDEP, 2007).

conducted a subsurface utility survey using geophysical survey techniques (Enviroscan, 2007). This survey identified the following utilities or linear features within 100 feet of the building (see Figure 2):

- A water line running from southeast to northwest, approximately 50 feet to the south of the Building, and parallel to the Building. An unidentified linear feature (referred to as a "linear anomaly") is adjacent to the water line. The groundwater grab sample location closest to this utility is TWP-SB30.
- A gas line running from southeast to northwest adjacent to the Building. The groundwater grab sampling location closest to this utility, and the Building, is TWP-SB29.
- An unidentified linear feature running from north to south, and adjacent to the Building. The groundwater grab sampling location closest to this feature is TWP-SB28. This possibly represents a water or sewer line.

4.0 Analytical Results

The groundwater samples were collected and analyzed for VOCs and SVOCs in accordance with the methods provided in the Quality Assurance Project Plan (QAPP) for the Quanta Resources site (CH2M HILL, 2005). Analytical results from the groundwater samples are presented in Attachment A. The primary constituents detected in groundwater were aromatic volatile hydrocarbons, specifically benzene, toluene, ethylbenzene and xylenes (BTEX), and polycyclic aromatic hydrocarbons.

5.0 Vapor Intrusion Evaluation

An evaluation of the potential for a vapor intrusion pathway into the Building was conducted using the groundwater monitoring data. The vapor intrusion evaluation consisted of the following steps:

- Identify the constituents of interest for vapor intrusion;
- Compare the estimated soil gas concentrations with conservative screening levels;
- Develop the conceptual model of the potential vapor intrusion pathway (for the constituents of interest) and estimate soil gas concentrations corresponding to the concentrations in groundwater.

Constituents of interest were identified using the primary screening method presented in the U.S. Environmental Protection Agency's draft vapor intrusion guidance (USEPA, 2002). Those screening results are presented in Attachment B. Based on this screening process, the constituents warranting further evaluation for vapor intrusion potential were BTEX and naphthalene.

The concentrations of BTEX and naphthalene detected in groundwater were converted to estimated concentrations in soil gas, using analytical modeling, as described below. The estimated soil gas concentrations were compared with conservative risk-based screening levels presented in the vapor intrusion evaluation work plan approved by USEPA Region 2 (CH2M HILL, 2006). The risk-based screening levels presented in the work plan were derived from indoor air levels that were based on residential land use assumptions. These residential indoor air concentrations were converted to corresponding soil gas concentrations using the USEPA recommended attenuation factor of 0.1 (USEPA, 2002).

The maximum soil gas concentration that may be derived from a specified groundwater concentration located at a specific depth below the soil gas-water interface was calculated using the steady-state analytical solution provided by Barber et al., 1990 (see Table 2). This calculation is based on Fick's Law of diffusion and uses equilibrium Henry's Law partitioning at the soil gas-water interface. This modeling is based on studies indicating that groundwater concentrations at little as 1 meter below the water table are unlikely to create significant soil gas signatures in the overlying vadose zone. Overlying ground water can greatly impede volatile constituents in deeper ground water from reaching the unsaturated zone, thus possibly preventing or limiting a vapor intrusion situation (Rivett, 1995; NJDEP, 2007). Further description of the conceptual model supporting the assumptions underlying this modeling is presented below.

Data collected during Remedial Investigation (RI) activities as recently suggests that coal tar is present in the eastern portion of Block 93, at a depth of approximately 10 ft below grade or more, and greater than 100 ft from the edge of the Building. This coal tar represents dense non-aqueous phase liquid (DNAPL), which is several feet below the water table. Soluble contaminants (such as naphthalene) may dissolve from the DNAPL. These would migrate towards the Building via diffusion and groundwater transport (there is a very slight groundwater gradient towards the west, based on the differences in water levels between MW-101 and MW-111; see Figure 3-6 in the RI Report). During the June 2007 Vapor

Intrusion Evaluation and Cinder Evaluation field efforts an isolated occurrence of 'black' NAPL was observed in the soil between 10 and 12 feet below grade at TWP-SB-30 which is located a distance of approximately 20 feet from the southern corner of the former Jono's Restaurant building. Groundwater grab samples collected at this location were taken from 1 foot above this impacted interval in order to best characterize the effects of this NAPL on groundwater concentrations and ultimately soil vapor and indoor air .

Prior to June 2007, the area between River Road and the Building was unpaved, allowing the infiltration of precipitation.[5] The NJDEP observes, [a]s ground water moves away from the source area, infiltrating water that reaches the water table will lie on top of the contaminated ground water and, gradually, a lens of clean ground water may form above a contaminant plume". This lens may increases distance for liquid-phase diffusion and limit transport to the overlying soil gas. Because the rate of diffusion of contaminants through the overlying clean ground water is so slow, the overlying ground water can greatly impede or prevent volatiles in deeper ground water from reaching the unsaturated zone, thus possibly preventing a vapor intrusion situation (NJDEP, 2007; Fitzpatrick & Fitzgerald 2002; McAlary et al. 2004). Since the potential source for dissolved volatile constituents lies several feet below the water table and was for the most part over 100 feet away from the Building, it was assumed that a lens of groundwater with low or non-detectable concentrations was present over the concentrations detected in samples near the Building.

The soil gas concentrations of BTEX and naphthalene, estimated using the modeling presented in Table 2, were first compared with default residential risk-based screening levels. The comparison of modeled soil gas concentrations with the default residential screening levels is shown in Table 3. The results from that screening indicated that naphthalene is the only constituent which might warrant further evaluation. Further evaluation of the naphthalene results is presented below.

The conceptual model of conditions around the Building is shown in Figure 3. Concentrations of naphthalene in groundwater were relatively lower to the north (TWP-SB28) and east (TWP-SB29) of the Building. Naphthalene was not detected in groundwater in sample TWP-SB29, approximately 30 feet east of the Building. The highest concentration was detected in a grab sample located to the southeast of the Building (sample TWP-SB30). The naphthalene concentration detected in TWP-SB30 was from a groundwater sample collected approximately six feet below the water table and one foot above an interval found to contain NAPL, which provided a soil gas concentration only slightly higher than the default residential risk-based level. However, the land use at the restaurant is not residential; building occupants would consist of workers and restaurant patrons. Therefore, a site-specific soil gas screening level was developed to evaluate potential vapor intrusion pathways for naphthalene. The calculation of that site-specific screening level is presented below.

Workers have a higher frequency and duration of exposure, and would represent the most conservative exposure scenario in the Building (restaurant patrons would enter the building infrequently and only for limited periods of time). Based on this consideration, a site-specific indoor air screening level was calculated using USEPA's default assumptions for a

[5] This area was paved with asphalt in June 2007 to create a parking lot for the reopened restaurant. This will reduce infiltration and possibly reduce the clean groundwater lens effect over time.

worker exposure scenario. That indoor air screening level was converted to a soil gas screening level with the same attenuation factor (a factor of 0.1) used to calculate the default residential soil gas screening levels. Derivation of that screening level and a site-specific evaluation of estimated naphthalene concentrations in soil gas are presented in Table 4.

The results from the screening presented in Table 4 show that estimated soil gas concentrations fall below a site-specific risk-based level (i.e. a non-cancer hazard quotient of one) at all sampling locations except TWP-SB33. However, as shown in Figure 3, that sample location is over 100 feet away from the building, which limits the potential for vapor intrusion into the Building from groundwater at that location.

The locations of subsurface utilities overlain with the naphthalene concentrations in groundwater are also shown in Figure 3. The sample location TWP-SB30 is in proximity to a linear anomaly that is located approximately 20 feet from the Building. The sample location TWP-SB28 is near a linear anomaly which runs south towards the Building. However, the naphthalene concentration in groundwater at sample TWP-SB28 corresponds to an estimated soil gas concentration which is lower than a default residential risk-based screening level. The lower concentration of naphthalene detected at this location, and the distance from the Building (approximately 100 feet), limits the potential for vapor intrusion from groundwater at this location.

The overall assessment of potential vapor intrusion pathways in the Building is based on the following factors, as developed from information in the previously-conducted evaluation (April 2007), and information obtained during this sampling event:

- Naphthalene has been detected in groundwater near the footprint of the Building. The naphthalene concentrations in groundwater nearest the Building are several feet below the water table. The state of New Jersey's guidance for vapor intrusion investigation states that sites with a clean groundwater lens at least 3 feet above contaminated groundwater are not likely to be associated with significant offgassing or vapor intrusion (NJDEP, 2007). As described previously, a clean groundwater lens may be present near the Building, based on the conceptual model of the release and transport of volatile constituents from the Quanta Site. The effect of this clean lens may decrease over time, due to paving around the site, performed in June 2007. However, this is unlikely to result in increased risk of vapor intrusion in the future, because concentrations in groundwater around the Building will not remain static. Remedial actions to be conducted for the Quanta Site in the future are anticipated to reduce source materials (DNAPL) and concentrations in groundwater, further reducing the potential risk of vapor intrusion in the Building.

- Soil gas concentrations of naphthalene from groundwater near the Building were estimated using analytical modeling, based on the assumption that overlying groundwater would impede volatile constituents in deeper ground water from reaching the unsaturated zone, thus possibly limiting vapor intrusion.

- The estimated soil gas concentrations are slightly higher than default risk-based concentrations that are based on residential land use assumptions. However, the land use at the restaurant is not residential; building occupants would consist of workers and restaurant patrons. Site-specific risk-based concentrations were calculated based on the

workers, who are likely to have the highest frequency and duration of exposure. The estimated soil gas concentrations fall below a site-specific risk-based level (i.e. a non-cancer hazard quotient of one) at all sampling locations except one location that is over 100 feet away from the building. There is limited potential for vapor intrusion into the Building from groundwater at that location.

- Inhabited areas are generally elevated 1.5 to 3 ft above the ground surface. The slab underlying the building is relatively thick (from 6 inches to 2 feet), and is in good condition with relatively few penetrations. There is an approximate 4 inch annular space above the floor in the inhabited areas. This annular space is located under the dining room floor, and is filled with insulation. The dining area contains an upstairs portion, providing an approximate ceiling height of 20 feet. The ceiling height in the kitchen and store room is approximately 8 to 10 ft. The restaurant does not have a central air conditioning unit, though the gas-fired ranges in the kitchen are equipped with hoods and exhaust fans. As discussed in the April 2007 vapor intrusion evaluation, the building characteristics may preclude a vapor intrusion pathway.
- The locations of subsurface utilities and other subsurface features around the building were identified using geophysical methods. The highest naphthalene concentration in groundwater were detected near one "linear anomaly" (sample TWP-SB300; however this feature is located approximately 20 feet from the Building, and does not intersect with the Building foundation, and does not create a pathway to the Building. A second linear anomaly traverses north to south, and intersects with the Building; however concentrations of naphthalene in groundwater in this area are lower, and the corresponding soil gas concentrations do not exceed risk-based screening levels. The presence of these subsurface features does not appear to affect the potential for a vapor intrusion pathway into the Building.

6.0 Conclusions

The following conclusions are based on the results from the groundwater sampling event conducted in June 2007, and the previously-conducted vapor intrusion evaluation in April 2007:

- Soil gas concentrations of naphthalene, estimated from concentrations detected several feet in groundwater near the footprint of the Building, are lower than site-specific risk-based screening levels. These screening levels are based on the individuals with the highest frequency and duration of potential exposure (workers in the restaurant).
- As discussed in the April 2007 vapor intrusion evaluation, the building characteristics may preclude a vapor intrusion pathway.
- The presence of subsurface features, such as municipal utilities, does not appear to affect the potential for a vapor intrusion pathway into the Building.

The results from the June 2007 groundwater sampling event reinforce the overall assessment, originally provided in the April 2007 evaluation, that a potential vapor intrusion pathway is not present in the Building.

7.0 References

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Tables

Table 1
Field Parameters from Groundwater Grab Samples
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Well Number	Property	pH	Temp. (° C)	Depth to Water (ft)	Well Depth (ft)	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Comments
TWP-SB28	Block 93 North	6.69	21.67	5.5	7.2	0.033	-150.1	0.99	38.7	Clear/None
TWP-SB29	Block 93 North	6.67	18.31	5.21	10.81	6.819	-171.9	1.07	13	Clear/None
TWP-SB30	Block 93 North	6.83	17.89	3.98	10.85	0.018	-180.8	0.17	116	Clear/None
TWP-SB31	Block 93 North	7.25	15.09	5.43	10.85	0.43	-182	4.02	19	Clear/None
TWP-SB32	Block 93 North	7.13	15.81	3.34	7.71	1.604	-180.8	2	17.3	Clear/None
TWP-SB33	Block 93 North	8.02	18.96	6.65	7.5	1.212	120.7	1.95	12	Clear/None

Notes:
ORP - Oxidizing-reducing potential
DO - Dissolved oxygen
ORP results less than zero indicate the presence of reducing conditions in groundwater.
Measurement Units:
mL/min - milliliters per minute
mS/cm - milliSiemens per centimeter
NTU - Nephelometric turbidity unit
mV - millivolt

Table 2
Steady-State Diffusion Modeling in Groundwater for Estimation of Soil Gas Concentrations
Block 93 Vapor Intrusion Evaluation
Edgewater, New Jersey

Chemical	C_o (µg/L)	C_{go} (µg/m^3)	D_g (cm^2/s)	D_w (cm^2/s)	L_g (cm)	X_w (cm)	Henry's Law Constant	C_o (µg/cm^3)	C_{go} (µg/cm^3)	C_{gi} (µg/cm^3)	C_{gi} (µg/m^3)
TWP-SB28											
Benzene	2.4	0	0.088	0.0000098	168	219	0.197	0.0024	0	2.05E-07	2.05E-01
Ethylbenzene	5.9	0	0.075	0.0000078	168	219	0.269	0.0059	0	4.71E-07	4.71E-01
Toluene	2.6	0	0.087	0.0000086	168	219	0.231	0.0026	0	1.97E-07	1.97E-01
Xylene (total)	4.2	0	0.0769	0.00000844	168	219	0.261	0.0042	0	3.54E-07	3.54E-01
Naphthalene	223	0	0.059	0.0000075	168	219	0.016	0.223	0	2.16E-05	2.16E+01
TWP-SB29											
Benzene	0.5	0	0.088	0.0000098	168	219	0.197	0.0005	0	4.27E-08	4.27E-02
Ethylbenzene	0.5	0	0.075	0.0000078	168	219	0.269	0.0005	0	3.99E-08	3.99E-02
Toluene	0.5	0	0.087	0.0000086	168	219	0.231	0.0005	0	3.79E-08	3.79E-02
Xylene (total)	0.5	0	0.0769	0.00000844	168	219	0.261	0.0005	0	4.21E-08	4.21E-02
Naphthalene	0.105	0	0.059	0.0000075	168	219	0.016	0.000105	0	1.02E-08	1.02E-02
TWP-SB30											
Benzene	44.1	0	0.088	0.0000098	121	331	0.197	0.0441	0	1.79E-06	1.79E+00
Ethylbenzene	21.7	0	0.075	0.0000078	121	331	0.269	0.0217	0	8.25E-07	8.25E-01
Toluene	2.0	0	0.087	0.0000086	121	331	0.231	0.002	0	7.23E-08	7.23E-02
Xylene (total)	17.1	0	0.0769	0.00000844	121	331	0.261	0.0171	0	6.86E-07	6.86E-01
Naphthalene	873	0	0.059	0.0000075	121	331	0.016	0.873	0	4.05E-05	4.05E+01
TWP-SB31											
Benzene	28.9	0	0.088	0.0000098	166	331	0.197	0.0289	0	1.61E-06	1.61E+00
Ethylbenzene	28.4	0	0.075	0.0000078	166	331	0.269	0.0284	0	1.48E-06	1.48E+00
Toluene	17.3	0	0.087	0.0000086	166	331	0.231	0.0173	0	8.57E-07	8.57E-01
Xylene (total)	30.2	0	0.0769	0.00000844	166	331	0.261	0.0302	0	1.66E-06	1.66E+00
Naphthalene	457	0	0.059	0.0000075	166	331	0.016	0.457	0	2.90E-05	2.90E+01

Table 2
Steady-State Diffusion Modeling in Groundwater for Estimation of Soil Gas Concentrations
Block 93 Vapor Intrusion Evaluation
Edgewater, New Jersey

Chemical	C_o (µg/L)	C_{go} (µg/m^3)	D_g (cm^2/s)	D_w (cm^2/s)	L_g (cm)	X_w (cm)	Henry's Law Constant	C_o (µg/cm^3)	C_{go} (µg/cm^3)	C_{gi} (µg/cm^3)	C_{gi} (µg/m^3)
TWP-SB32											
Benzene	0.5	0	0.088	0.0000098	166	331	0.197	0.0005	0	2.79E-08	2.79E-02
Ethylbenzene	0.5	0	0.075	0.0000078	166	331	0.269	0.0005	0	2.61E-08	2.61E-02
Toluene	0.5	0	0.087	0.0000086	166	331	0.231	0.0005	0	2.48E-08	2.48E-02
Xylene (total)	0.5	0	0.0769	0.00000844	166	331	0.261	0.0005	0	2.75E-08	2.75E-02
Naphthalene	0.644	0	0.059	0.0000075	166	331	0.016	0.000644	0	4.09E-08	4.09E-02
TWP-SB33											
Benzene	94.3	0	0.088	0.0000098	203	229	0.197	0.0943	0	9.30E-06	9.30E+00
Ethylbenzene	22.3	0	0.075	0.0000078	203	229	0.269	0.0223	0	2.06E-06	2.06E+00
Toluene	3.3	0	0.087	0.0000086	203	229	0.231	0.0033	0	2.89E-07	2.89E-01
Xylene (total)	18.8	0	0.0769	0.00000844	203	229	0.261	0.0188	0	1.83E-06	1.83E+00
Naphthalene	533	0	0.059	0.0000075	203	229	0.016	0.533	0	5.96E-05	5.96E+01

Note: Concentrations are assumed present at 1/2 the reporting limit for constituents reported as not detected.
µg/cm^3 - micrograms per cubic centimeter
µg/L - micrograms per liter
µg/m^3 - micrograms per cubic meter
cm^2/s - square centimeters per second

Table 2
Steady-State Diffusion Modeling in Groundwater for Estimation of Soil Gas Concentrations
Block 93 Vapor Intrusion Evaluation
Edgewater, New Jersey

Description	Symbol	Units	Comments
Gas-phase concentration immediately adjacent to the air-water interface	C_{gi}	ug/cm^3	
Gas-phase concentration near the ground surface	C_{go}	ug/cm^3	Assumed to be zero to estimate only the contribution from groundwater
Depth of the unsaturated zone	L_g	cm	
Groundwater concentration at depth below water table	C_o	ug/cm3	
Depth below water table	X_w	cm	
Liquid-phase diffusion coefficient	D_w	cm^2/s	
Gas-phase diffusion coefficient	D_g	cm^2/s	

$$C_{gi} = \frac{C_{go} + \left(\frac{L_g \times D_w \times C_o}{X_w \times D_g} \right)}{1 + \left(\frac{L_g \times D_w}{X_w \times D_g \times H} \right)}$$

Steady-State Diffusion Modeling in Groundwater for Estimation of Soil Gas Concentrations - long version (for values of H > 0.01):

This is a calculation of the maximum soil gas concentration that may be derived from a specified groundwater concentration. This calculation uses the steady-state analytical solution provided by Barber et al., 1990. It is based on a concentration in groundwater located at a depth below the soil gas-water interface. It is based on Fick's Law of diffusion and uses equilibrium Henry's Law partitioning at the soil gas-water interface.

Sources: Barber et al., 1990; Rivett, 1995; CSIRO, 2004

Well Number	Temp. (° C)	Depth to Water (ft)	Well Depth (ft)	Depth to Water (cm)	Well Depth (cm)
TWP-SB28	21.67	5.5	7.2	168	219
TWP-SB29	18.31	5.21	10.81	159	329
TWP-SB30	17.89	3.98	10.85	121	331
TWP-SB31	15.09	5.43	10.85	166	331
TWP-SB32	15.81	3.34	7.71	102	235
TWP-SB33	18.96	6.65	7.5	203	229

Table 3
Comparison of Modeled Soil Gas Concentrations with Default Residential Risk-Based Screening Levels
Block 93 Vapor Intrusion Evaluation
Edgewater, New Jersey

Chemical	Concentration in Groundwater (ug/L)	Modeled Concentration in Soil Gas (ug/m^3)	Screening Based on Default Residential Assumptions									
			Soil Gas Screening Levels					Soil Gas Concentrations Exceed Screening Levels?				
			10^{-6}	10^{-5}	10^{-4}	HQ=0.1	HQ=1	10^{-6}	10^{-5}	10^{-4}	HQ=0.1	HQ=1
TWP-SB28												
Benzene	2.4	2.05E-01	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	N	N	N	N	N
Ethylbenzene	5.9	4.71E-01				1.06E+03	1.06E+04				N	N
Toluene	2.6	1.97E-01				4.20E+02	4.20E+03				N	N
Xylene (total)	4.2	3.54E-01				1.06E+02	1.06E+03				N	N
Naphthalene	223	2.16E+01				3.13E+00	3.13E+01				Y	N
TWP-SB29												
Benzene	0.5	4.27E-02	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	N	N	N	N	N
Ethylbenzene	0.5	3.99E-02				1.06E+03	1.06E+04				N	N
Toluene	0.5	3.79E-02				4.20E+02	4.20E+03				N	N
Xylene (total)	0.5	4.21E-02				1.06E+02	1.06E+03				N	N
Naphthalene	0.105	1.02E-02				3.13E+00	3.13E+01				N	N
TWP-SB30												
Benzene	44.1	1.79E+00	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	N	N	N	N	N
Ethylbenzene	21.7	8.25E-01				1.06E+03	1.06E+04				N	N
Toluene	2.0	7.23E-02				4.20E+02	4.20E+03				N	N
Xylene (total)	17.1	6.86E-01				1.06E+02	1.06E+03				N	N
Naphthalene	873	4.05E+01				3.13E+00	3.13E+01				Y	Y
TWP-SB31												
Benzene	28.9	1.61E+00	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	N	N	N	N	N
Ethylbenzene	28.4	1.48E+00				1.06E+03	1.06E+04				N	N
Toluene	17.3	8.57E-01				4.20E+02	4.20E+03				N	N
Xylene (total)	30.2	1.66E+00				1.06E+02	1.06E+03				N	N
Naphthalene	457	2.90E+01				3.13E+00	3.13E+01				Y	N
TWP-SB32												
Benzene	0.5	2.79E-02	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	N	N	N	N	N
Ethylbenzene	0.5	2.61E-02				1.06E+03	1.06E+04	N	N	N	N	N
Toluene	0.5	2.48E-02				4.20E+02	4.20E+03	N	N	N	N	N
Xylene (total)	0.5	2.75E-02				1.06E+02	1.06E+03	N	N	N	N	N
Naphthalene	0.644	4.09E-02				3.13E+00	3.13E+01	N	N	N	N	N
TWP-SB33												
Benzene	94.3	9.30E+00	2.49E+00	2.49E+01	2.49E+02	3.14E+01	3.14E+02	Y	N	N	N	N
Ethylbenzene	22.3	2.06E+00				1.06E+03	1.06E+04	N	N	N	N	N
Toluene	3.3	2.89E-01				4.20E+02	4.20E+03	N	N	N	N	N
Xylene (total)	18.8	1.83E+00				1.06E+02	1.06E+03	N	N	N	N	N
Naphthalene	533	5.96E+01				3.13E+00	3.13E+01	N	N	N	Y	Y

Note: Concentrations are assumed present at 1/2 reporting limit for constituents reported as not detected.
µg/L - micrograms per liter
µg/m^3 - micrograms per cubic meter

Table 4
Site-Specific Evaluation of Potential Vapor Intrusion
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Groundwater Monitoring Location	Naphthalene Concentration in Groundwater (µg/L)	Modeled Concentration in Soil Gas (µg/m³)	Screening Based on Site-Specific Assumptions				Comments
			Soil Gas Screening Levels		Soil Gas Concentrations Exceed Screening Levels?		
			HQ=0.1	HQ=1	HQ=0.1	HQ=1	
TWP-SB28	223	2.16E+01	4.4E+00	4.4E+01	Y	N	
TWP-SB29	0.105	1.02E-02	4.4E+00	4.4E+01	N	N	
TWP-SB30	873	4.05E+01	4.4E+00	4.4E+01	Y	N	
TWP-SB31	457	2.90E+01	4.4E+00	4.4E+01	Y	N	
TWP-SB32	0.644	4.09E-02	4.4E+00	4.4E+01	N	N	
TWP-SB33	533	5.96E+01	4.4E+00	4.4E+01	Y	Y	This groundwater sample was more than 100 feet from the Building, reducing the potential for vapor intrusion from this location.

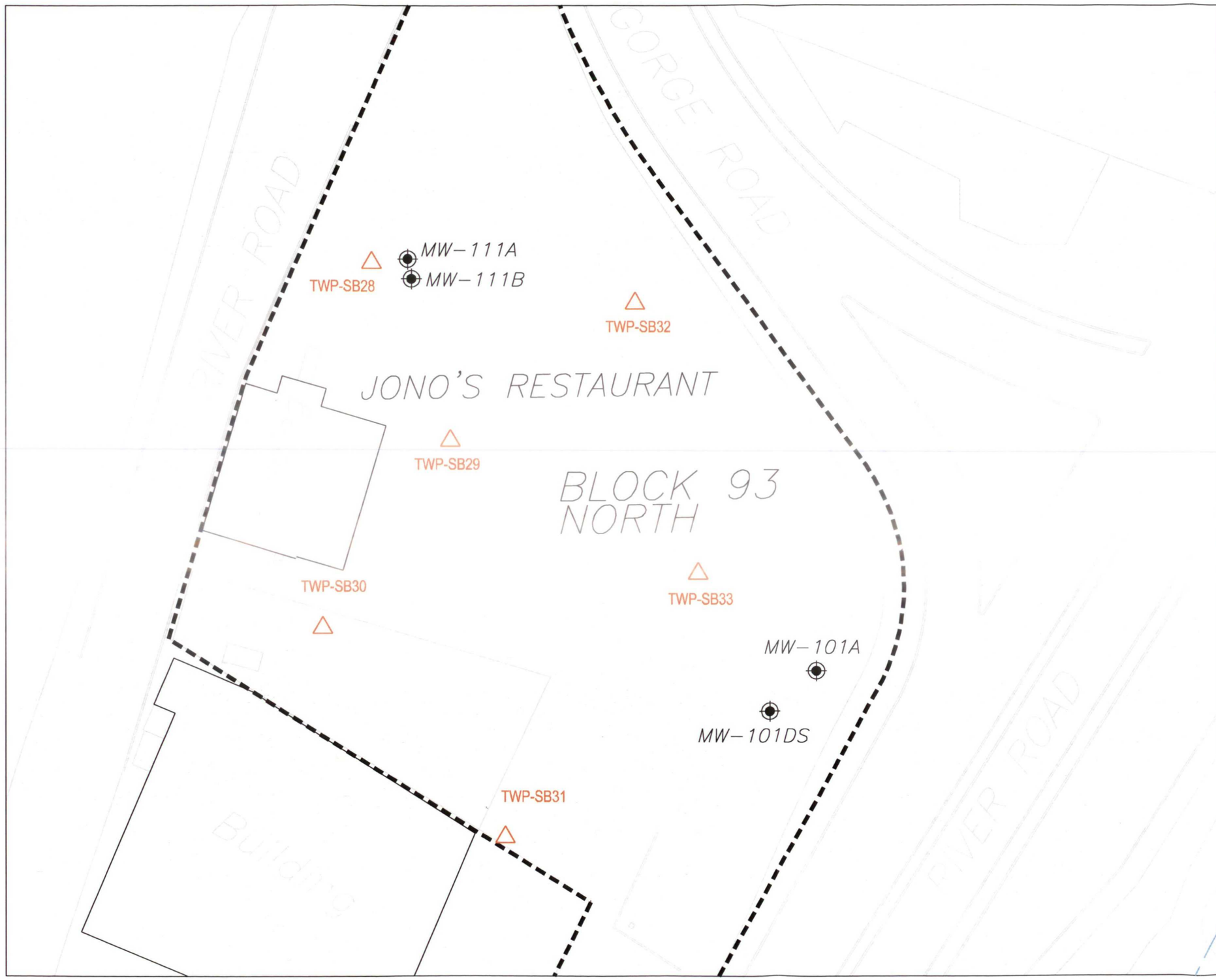
Note: Concentrations are assumed present at 1/2 the reporting limit for constituents reported as not detected.
Ths soil gas screening level was calculated from the indoor air screening level using an attenuation factor of 0.1.

CALCULATION OF SITE-SPECIFIC SCREENING LEVEL

Chemical			Screening Levels in Indoor Air (µg/m³)			Final Screening Level in Air (µg/m³)
	Inhalation Slope Factor (kg-day/mg)	Inhalation RfD (mg/kg-day)	Carcinogenic	Noncarcinogenic	Lowest Value	
NAPHTHALENE		8.57E-04		4.4E+00	4.4E+00	4.4E+00

EXPOSURE PARAMETERS	VALUE
Target cancer risk	1E-06
Target Hazard Quotient	1.0
Body weight, adult (kg)	70
Air breathed (m³/d)	20
Exposure frequency (d/yr)	250
Exposure duration (yr)	25.0
Averaging time - carcinogenic (yr)	70
Averaging time - noncarcinogenic (yr)	25.0

Figures



N

LEGEND

TWP-SB29 — GW GRAB WELL POINT LOCATION

MW-101A — EXISTING MONITORING WELL

CURRENT BLOCK 93 NORTH PROPERTY BOUNDARY

Notes:

1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.

2. Property boundary lines are not exact.

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

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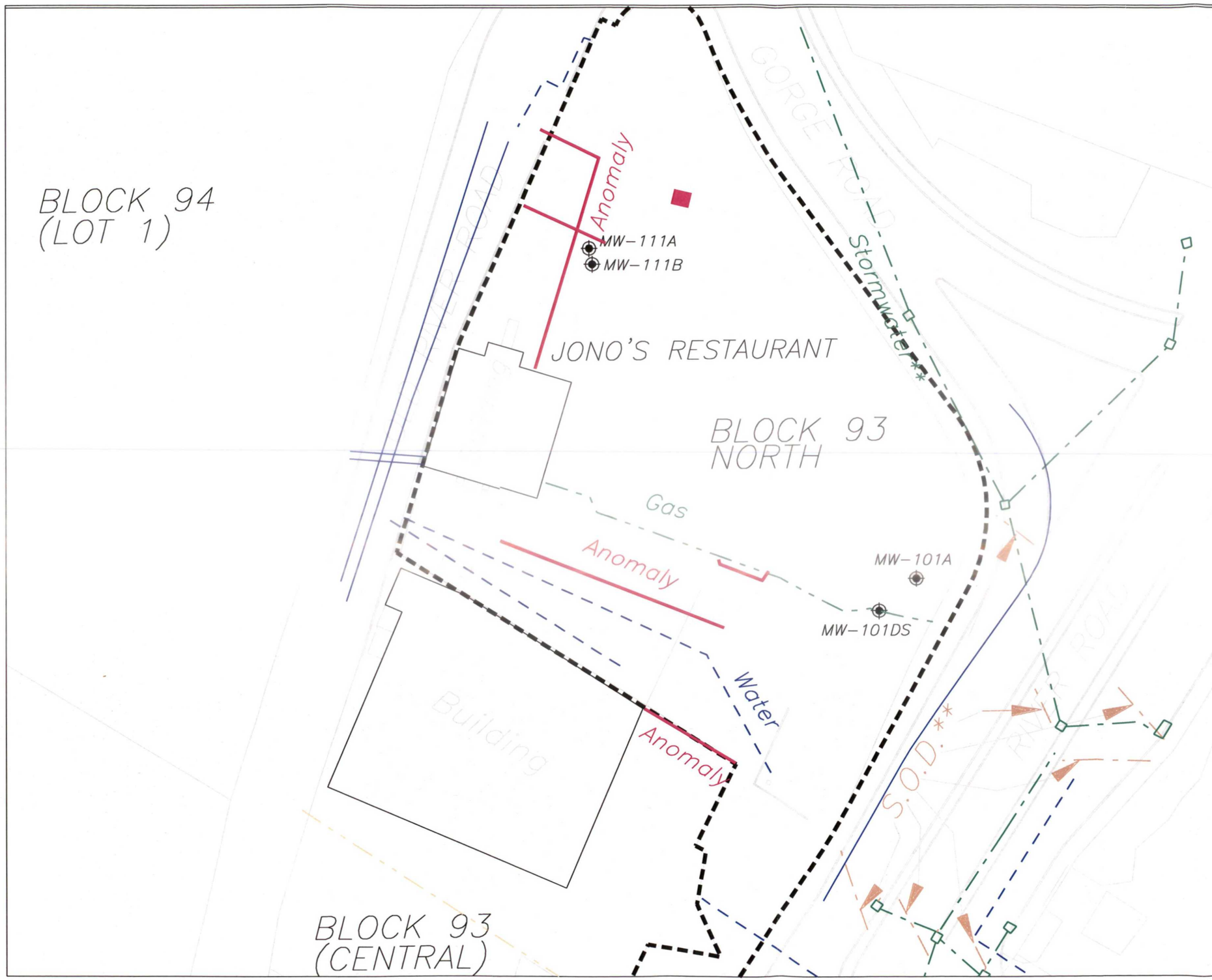
JONO'S RESTAURANT VAPOR INTRUSION EVALUATION GROUNDWATER GRAB LOCATIONS

QUANTA RESOURCES SUPERFUND SITE

Edgewater, New Jersey

August 2007

FIGURE 1



N

LEGEND

TWP-SB29 GW GRAB WELL POINT LOCATION

MW-101A EXISTING MONITORING WELL

CURRENT BLOCK 93 NORTH PROPERTY BOUNDARY

OBSERVED / APPARENT WATER LINE

APPARENT STORMWATER LINE

LINEAR ANOMALY

SUB-BASE OUTLET DRAIN

GAS LINE

Notes:

1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.

2. Property boundary lines are not exact.

3. S.O.D.: Sub-base Outlet Drain

4. The geophysical survey of Block 93 North was performed by Enviroscan, Inc. on May 31, 2007. Utilities and anomalys shown on Block 93 North were found during this survey.

5. Other pipe and trench locations are approximate and are based on field observations and historical information sources including Sanborn Fire Insurance Maps and the Removal Site Investigation report (Geosyntec, 1998).

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

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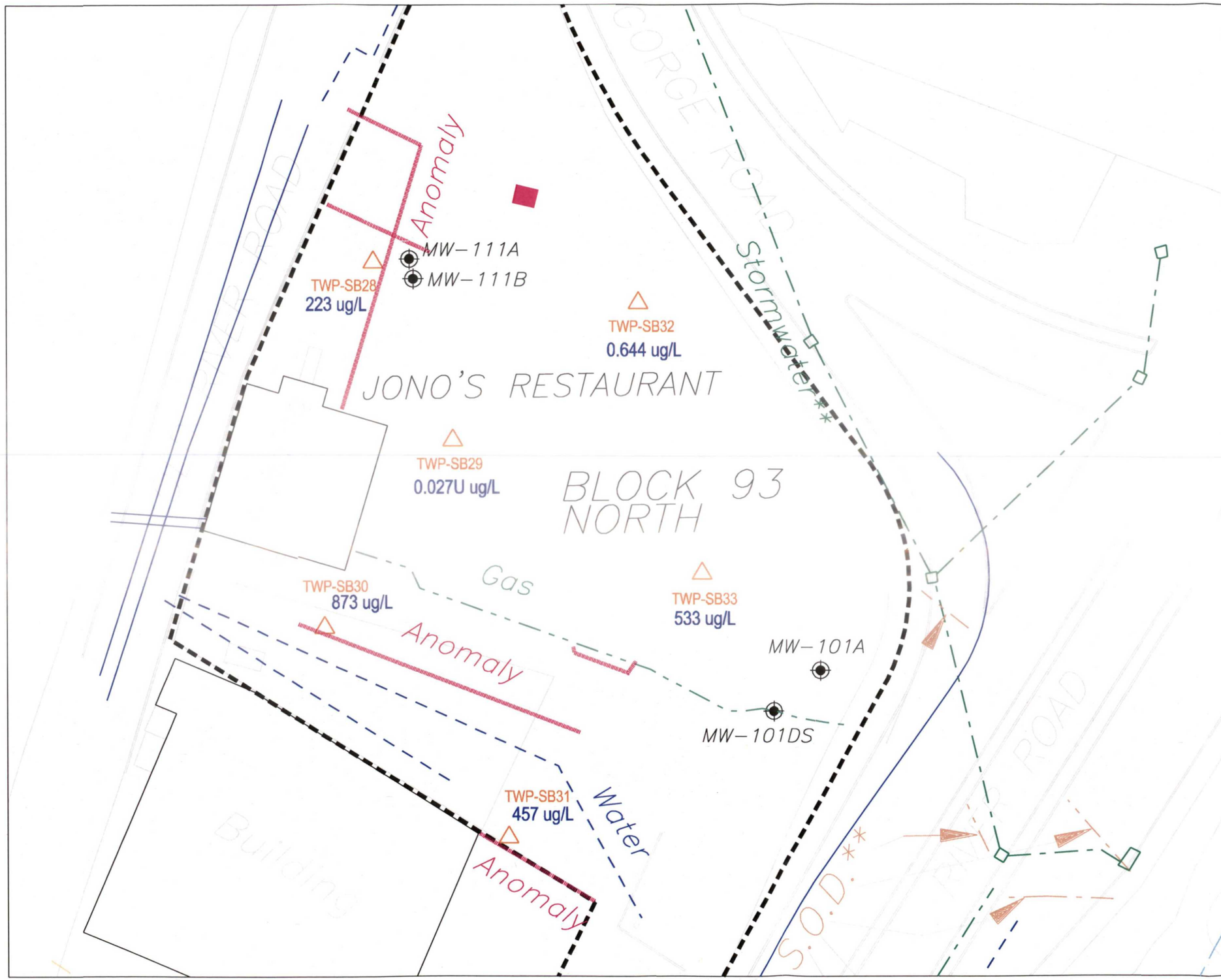
JONO'S RESTAURANT VAPOR INTRUSION EVALUATION
BLOCK 93 NORTH UTILITY LOCATIONS

QUANTA RESOURCES SUPERFUND SITE
Edgewater, New Jersey

August 2007 | FIGURE 2



LEGEND

N

TWP-SB29	GW GRAB WELL POINT LOCATION
MW-101A	EXISTING MONITORING WELL
	CURRENT BLOCK 93 NORTH PROPERTY BOUNDARY
223 ug/L	CONCENTRATION OF NAPHTHALENE IN GROUNDWATER GRAB SAMPLE
	OBSERVED / APPARENT WATER LINE
	APPARENT STORMWATER LINE
	LINEAR ANOMALY
	SUB-BASE OUTLET DRAIN
	GAS LINE

Notes:

1. Property boundary lines are based on November 1959 Borough of Edgewater tax maps.

2. Property boundary lines are not exact.

3. S.O.D.: Sub-base Outlet Drain

4. The geophysical survey of Block 93 North was performed by Enviroscan, Inc. on May 31, 2007. Utilities and anomalys shown on Block 93 North were found during this survey.

5. Other pipe and trench locations are approximate and are based on field observations and historical information sources including Sanborn Fire Insurance Maps and the Removal Site Investigation report (Geosyntec, 1998).

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

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JONO'S RESTAURANT VAPOR INTRUSION EVALUATION NAPHTHALENE CONCENTRATIONS

QUANTA RESOURCES SUPERFUND SITE

Edgewater, New Jersey

August 2007

FIGURE 3

Attachment A

Groundwater Sampling and Analytical Data

Table A-1 - Volatile Organic Compounds (VOCs) in Groundwater - All Analytical Results

Table A-2 - Volatile Organic Compounds (VOCs) in Groundwater - Detected Compounds

Table A-3 - Semi-Volatile Organic Compounds (SVOCs) in Groundwater - All Analytical Results

Table A-4 - Semi-Volatile Organic Compounds (SVOCs) in Groundwater - Detected Compounds

Table A-1
Volatile Organic Compounds (VOCs) in Groundwater - All Analytical Results
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28		TWP-SB29		TWP-SB30		TWP-SB31		TWP-SB31		TWP-SB32		TWP-SB33	
			Field Sample ID:	TWP-SB28-060507		TWP-SB29-060607		TWP-SB30-060507		DUP-060607-GW		TWP-SB31-060607		TWP-SB32-060607		TWP-SB33-060407	
			Date:	6/5/2007		6/6/2007		6/5/2007		6/6/2007		6/6/2007		6/6/2007		6/4/2007	
			Start Depth:	8		7.5		8		7.5		7.5		6.5		5	
			End Depth:	9		8.5		9		8.5		8.5		7.5		6	
			Depth Units:	ft		ft		ft		ft		ft		ft		ft	
Parameter	**Parameter Code**	**Units**	**Analytical Method**														
1,1,1-TRICHLOROETHANE	71-55-6	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-TRICHLOROETHANE	79-00-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	75-34-3	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	75-35-4	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-TRICHLOROBENZENE	120-82-1	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	1996-12-08	µg/l	SW8260	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-DIBROMOETHANE	106-93-4	µg/l	SW8260	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-DICHLOROBENZENE	95-50-1	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-DICHLOROETHANE	107-06-2	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-DICHLOROPROPANE	78-87-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-DICHLOROBENZENE	541-73-1	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-DICHLOROBENZENE	106-46-7	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-BUTANONE	78-93-3	µg/l	SW8260	10	UJ	10	U	10	UJ	10	U	10	U	10	U	10	UJ
2-HEXANONE	591-78-6	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	108-10-1	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ACETONE	67-64-1	µg/l	SW8260	10	U	3.2	J	10	U	10	U	10	U	10	U	10	U
BENZENE	71-43-2	µg/l	SW8260	2.4		1	U	44.1		28.7		28.9		1	U	94.3	
BROMODICHLOROMETHANE	75-27-4	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
BROMOFORM	75-25-2	µg/l	SW8260	4	U	4	U	4	U	4	U	4	U	4	U	4	U
BROMOMETHANE	74-83-9	µg/l	SW8260	2	U	2	U	2	U	2	U	2	U	2	U	2	U
CARBON DISULFIDE	75-15-0	µg/l	SW8260	0.43	J	2	U	0.59	J	0.55	J	0.39	J	2	U	2	U
CARBON TETRACHLORIDE	56-23-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CHLOROBENZENE	108-90-7	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CHLORODIBROMOMETHANE	124-48-1	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CHLOROETHANE	75-00-3	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CHLOROFORM	67-66-3	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CHLOROMETHANE	74-87-3	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CIS-1,2-DICHLOROETHENE	156-59-2	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CYCLOHEXANE	110-82-7	µg/l	SW8260	5	U	5	U	5	U	1.9	J	1.7	J	5	U	5	U
DICHLORODIFLUOROMETHANE	75-71-8	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ETHYLBENZENE	100-41-4	µg/l	SW8260	5.9		1	U	21.7		28.6		28.4		1	U	22.3	

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Table A-1
Volatile Organic Compounds (VOCs) in Groundwater - All Analytical Results
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28		TWP-SB29		TWP-SB30		TWP-SB31		TWP-SB31		TWP-SB32		TWP-SB33	
			Field Sample ID:	TWP-SB28-060507		TWP-SB29-060607		TWP-SB30-060507		DUP-060607-GW		TWP-SB31-060607		TWP-SB32-060607		TWP-SB33-060407	
			Date:	6/5/2007		6/6/2007		6/5/2007		6/6/2007		6/6/2007		6/6/2007		6/4/2007	
			Start Depth:	8		7.5		8		7.5		7.5		6.5		5	
			End Depth:	9		8.5		9		8.5		8.5		7.5		6	
			Depth Units:	ft		ft		ft		ft		ft		ft		ft	
Parameter	**Parameter Code**	**Units**	**Analytical Method**														
ISOPROPYLBENZENE	98-82-8	µg/l	SW8260	0.57	J	2	U	3.7		5.4		5.2		2	U	2.5	
METHYL ACETATE	79-20-9	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER	1634-04-4	µg/l	SW8260	1	U	0.98	J	0.62	J	1	U	1	U	1	U	1.1	
METHYLCYCLOHEXANE	108-87-2	µg/l	SW8260	5	U	5	U	5	U	0.61	J	0.6	J	5	U	5	U
METHYLENE CHLORIDE	1975-09-02	µg/l	SW8260	2	U	2	U	2	U	2	U	2	U	2	U	2	U
STYRENE	100-42-5	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	127-18-4	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
TOLUENE	108-88-3	µg/l	SW8260	2.6		1	U	2		17.4		17.3		1	U	3.3	
TRANS-1,2-DICHLOROETHENE	156-60-5	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
TRICHLOROETHENE	1979-01-06	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
TRICHLOROFLUOROMETHANE	75-69-4	µg/l	SW8260	5	U	5	U	5	U	5	U	5	U	5	U	5	U
VINYL CHLORIDE	1975-01-04	µg/l	SW8260	1	U	1	U	1	U	1	U	1	U	1	U	1	U
O-XYLENE	95-47-6	µg/l	SW8260	1.8		1	U	7.1		9.8		9.6		1	U	6.1	
XYLENES, M & P	XYLENES1314	µg/l	SW8260	2.4		1	U	10		20		20.5		1	U	12.7	
XYLENES, TOTAL	1330-20-7	µg/l	SW8260	4.2		1	U	17.1		29.8		30.2		1	U	18.8	

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Table A-2
Volatile Organic Compounds (VOCs) in Groundwater - Detected Compounds
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28	TWP-SB29	TWP-SB30	TWP-SB31	TWP-SB31	TWP-SB33
			Field Sample ID:	TWP-SB28-060507	TWP-SB29-060607	TWP-SB30-060507	DUP-060607-GW	TWP-SB31-060607	TWP-SB33-060407
			Date:	6/5/2007	6/6/2007	6/5/2007	6/6/2007	6/6/2007	6/4/2007
			Start Depth:	8	7.5	8	7.5	7.5	5
			End Depth:	9	8.5	9	8.5	8.5	6
			Depth Units:	ft	ft	ft	ft	ft	ft
Parameter	**Parameter Code**	**Units**	**Analytical Method**						
ACETONE	67-64-1	µg/l	SW8260		3.2 J				
BENZENE	71-43-2	µg/l	SW8260	2.4		44.1	28.7	28.9	94.3
CARBON DISULFIDE	75-15-0	µg/l	SW8260	0.43 J		0.59 J	0.55 J	0.39 J	
CYCLOHEXANE	110-82-7	µg/l	SW8260				1.9 J	1.7 J	
ETHYLBENZENE	100-41-4	µg/l	SW8260	5.9		21.7	28.6	28.4	22.3
ISOPROPYLBENZENE	98-82-8	µg/l	SW8260	0.57 J		3.7	5.4	5.2	2.5
METHYL TERT-BUTYL ETHER	1634-04-4	µg/l	SW8260		0.98 J	0.62 J			1.1
METHYLCYCLOHEXANE	108-87-2	µg/l	SW8260				0.61 J	0.6 J	
TOLUENE	108-88-3	µg/l	SW8260	2.6		2	17.4	17.3	3.3
O-XYLENE	95-47-6	µg/l	SW8260	1.8		7.1	9.8	9.6	6.1
XYLENES, M & P	XYLENES1314	µg/l	SW8260	2.4		10	20	20.5	12.7
XYLENES, TOTAL	1330-20-7	µg/l	SW8260	4.2		17.1	29.8	30.2	18.8

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Table A-3
Semi-Volatile Organic Compounds (SVOCs) in Groundwater - All Analytical Results
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28		TWP-SB29		TWP-SB30		TWP-SB31		TWP-SB31		TWP-SB32		TWP-SB33	
			Field Sample ID:	TWP-SB28-060507		TWP-SB29-060607		TWP-SB30-060507		DUP-060607-GW		TWP-SB31-060607		TWP-SB32-060607		TWP-SB33-060407	
			Date:	6/5/2007		6/6/2007		6/5/2007		6/6/2007		6/6/2007		6/6/2007		6/4/2007	
			Start Depth:	8		7.5		8		7.5		7.5		6.5		5	
			End Depth:	9		8.5		9		8.5		8.5		7.5		6	
			Depth Units:	ft		ft		ft		ft		ft		ft		ft	
Parameter	Parameter Code	Units	Analytical Method														
1,1'-BIPHENYL	92-52-4	µg/l	SW8270	5.8		2.1	U	6		8.1		9		2.2	U	2.1	J
2,4,5-TRICHLOROPHENOL	95-95-4	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
2,4,6-TRICHLOROPHENOL	1988-06-02	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
2,4-DICHLOROPHENOL	120-83-2	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
2,4-DIMETHYLPHENOL	105-67-9	µg/l	SW8270	16.6		5.3	U	49.1		111		143		5.4	U	28.6	
2,4-DINITROPHENOL	51-28-5	µg/l	SW8270	23	UJ	21	UJ	20	UJ	20	UJ	22	UJ	22	UJ	24	UJ
2,4-DINITROTOLUENE	121-14-2	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
2,6-DINITROTOLUENE	606-20-2	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
2-CHLORONAPHTHALENE	91-58-7	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
2-CHLOROPHENOL	95-57-8	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
2-METHYLNAPHTHALENE	91-57-6	µg/l	SW8270	23.2		2.1	U	74.6		49.5		56.4		2.2	U	9.5	J
2-METHYLPHENOL	95-48-7	µg/l	SW8270	6.4		5.3	U	4.8	J	36		45.6		5.4	U	3.7	J
2-NITROANILINE	88-74-4	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
2-NITROPHENOL	88-75-5	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
3&4-METHYLPHENOL	34METPH	µg/l	SW8270	16.9		5.3	U	7.9		93		119		5.4	U	6.5	J
3,3'-DICHLOROBENZIDINE	91-94-1	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
3-NITROANILINE	1999-09-02	µg/l	SW8270	5.7	UJ	5.3	UJ	5	UJ	5	UJ	5.4	UJ	5.4	UJ	5.9	UJ
4,6-DINITRO-2-METHYLPHENOL	534-52-1	µg/l	SW8270	23	UJ	21	U	20	UJ	20	U	22	U	22	U	24	UJ
4-BROMOPHENYL PHENYL ETHER	101-55-3	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
4-CHLORO-3-METHYLPHENOL	59-50-7	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	UJ
4-CHLOROANILINE	106-47-8	µg/l	SW8270	5.7	UJ	5.3	UJ	5	UJ	5	UJ	5.4	UJ	5.4	UJ	5.9	UJ
ETHER	7005-72-3	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
4-NITROANILINE	100-01-6	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
4-NITROPHENOL	100-02-7	µg/l	SW8270	23	U	21	U	20	U	20	U	22	U	22	U	24	U
ACENAPHTHENE	83-32-9	µg/l	SW8270	34		3.36		110		128		141		0.469		45.9	J
ACENAPHTHYLENE	208-96-8	µg/l	SW8270	0.588	J	0.21	U	1.89	J	0.783		0.22	U	0.22	U	3.06	J
ACETOPHENONE	98-86-2	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
ANTHRACENE	120-12-7	µg/l	SW8270	11.6		0.472		16.5		124		132		0.412		20.1	
ATRAZINE	1912-24-9	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
BENZO(A)ANTHRACENE	56-55-3	µg/l	SW8270	3.35		0.11	U	5.7		2.84		2.59		0.518		29.9	
BENZO(A)PYRENE	50-32-8	µg/l	SW8270	2.9		0.11	U	4.58		2.38		1.97		0.319		33.5	
BENZO(B)FLUORANTHENE	205-99-2	µg/l	SW8270	3.1		0.21	U	4.6		2.67		2.23		0.489		31.7	
BENZO(G,H,I)PERYLENE	191-24-2	µg/l	SW8270	2.07		0.21	U	2.94		1.27		1.09		0.27		22.4	
BENZO(K)FLUORANTHENE	207-08-9	µg/l	SW8270	3		0.21	U	2.7		1.8	J	1.01		0.22	U	18.3	
BIS(2-CHLOROETHOXY)METHANE	111-91-1	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
BIS(2-CHLOROETHYL)ETHER	111-44-4	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
BIS(2-CHLOROISOPROPYL)ETHER	39638-32-9	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	3.4	
BUTYLBENZYL PHTHALATE	85-68-7	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
CAPROLACTAM	105-60-2	µg/l	SW8270	2.3	U	2.1	UJ	2	U	2	UJ	2.2	UJ	2.2	U	2.4	U
CARBAZOLE	86-74-8	µg/l	SW8270	37.8		2.1	U	121		316		332		2.2	U	36.6	J
CHRYSENE	218-01-9	µg/l	SW8270	2.87		0.21	U	4.66		2.28		2.03		0.348		30.5	
DI-N-BUTYL PHTHALATE	84-74-2	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
DI-N-OCTYL PHTHALATE	117-84-0	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
DIBENZO(A,H)ANTHRACENE	53-70-3	µg/l	SW8270	0.574		0.21	U	0.797		0.411		0.345		0.22	U	3.99	
DIBENZOFURAN	132-64-9	µg/l	SW8270	13.4		5.3	U	48.6		64.4		70.6		5.4	U	16.3	J
DIETHYL PHTHALATE	84-66-2	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
DIMETHYL PHTHALATE	131-11-3	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Table A-3
Semi-Volatile Organic Compounds (SVOCs) in Groundwater - All Analytical Results
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28		TWP-SB29		TWP-SB30		TWP-SB31		TWP-SB31		TWP-SB32		TWP-SB33	
			Field Sample ID:	TWP-SB28-060507		TWP-SB29-060607		TWP-SB30-060507		DUP-060607-GW		TWP-SB31-060607		TWP-SB32-060607		TWP-SB33-060407	
			Date:	6/5/2007		6/6/2007		6/5/2007		6/6/2007		6/6/2007		6/6/2007		6/4/2007	
			Start Depth:	8		7.5		8		7.5		7.5		6.5		5	
			End Depth:	9		8.5		9		8.5		8.5		7.5		6	
			Depth Units:	ft		ft		ft		ft		ft		ft		ft	
Parameter	**Parameter Code**	**Units**	**Analytical Method**														
FLUORANTHENE	206-44-0	µg/l	SW8270	15		0.21	U	26.5		23.7		23.6		0.671		68.2	
FLUORENE	86-73-7	µg/l	SW8270	21		1.38		52.4		65.5		69.8		0.392		22.8	J
HEXACHLOROBENZENE	118-74-1	µg/l	SW8270	0.023	U	0.021	U	0.02	U	0.02	U	0.022	U	0.022	U	0.024	U
HEXACHLOROBUTADIENE	87-68-3	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
HEXACHLOROCYCLOPENTADIENE	77-47-4	µg/l	SW8270	23	U	21	U	20	U	20	U	22	U	22	U	24	U
HEXACHLOROETHANE	67-72-1	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
INDENO(1,2,3-CD)PYRENE	193-39-5	µg/l	SW8270	1.84		0.21	U	2.71		1.26		1.07		0.252		20.5	
ISOPHORONE	78-59-1	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
N-NITROSODIPHENYLAMINE	86-30-6	µg/l	SW8270	5.7	U	5.3	U	5	U	5	U	5.4	U	5.4	U	5.9	U
NAPHTHALENE	91-20-3	µg/l	SW8270	223		0.21	U	873		380		457		0.644		533	J
NITROBENZENE	98-95-3	µg/l	SW8270	2.3	U	2.1	U	2	U	2	U	2.2	U	2.2	U	2.4	U
PENTACHLOROPHENOL	87-86-5	µg/l	SW8270	0.34	U	0.32	U	0.3	U	0.3	U	0.33	U	0.32	U	0.35	U
PHENANTHRENE	1985-01-08	µg/l	SW8270	43.8		1.24		86		121		129		1.11		49.7	J
PHENOL	108-95-2	µg/l	SW8270	2.9	J	5.3	U	5	U	13.6		17.3		5.4	U	5.9	U
PYRENE	129-00-0	µg/l	SW8270	13.2		0.21	U	20.3		15.9		15		0.637		57.5	

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Table A-4
Semi-Volatile Organic Compounds (SVOCs) in Groundwater - Detected Compounds
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

			Location:	TWP-SB28	TWP-SB29	TWP-SB30	TWP-SB31	TWP-SB31	TWP-SB32	TWP-SB33
			Field Sample ID:	TWP-SB28-060507	TWP-SB29-060607	TWP-SB30-060507	DUP-060607-GW	TWP-SB31-060607	TWP-SB32-060607	TWP-SB33-060407
			Date:	6/5/2007	6/6/2007	6/5/2007	6/6/2007	6/6/2007	6/6/2007	6/4/2007
			Start Depth:	8	7.5	8	7.5	7.5	6.5	5
			End Depth:	9	8.5	9	8.5	8.5	7.5	6
			Depth Units:	ft	ft	ft	ft	ft	ft	ft
Parameter	**Parameter Code**	**Units**	**Analytical Method**							
1,1'-BIPHENYL	92-52-4	µg/l	SW8270	5.8		6	8.1	9		2.1 J
2,4-DIMETHYLPHENOL	105-67-9	µg/l	SW8270	16.6		49.1	111	143		28.6
2-METHYLNAPHTHALENE	91-57-6	µg/l	SW8270	23.2		74.6	49.5	56.4		9.5 J
2-METHYLPHENOL	95-48-7	µg/l	SW8270	6.4		4.8 J	36	45.6		3.7 J
3&4-METHYLPHENOL	34METPH	µg/l	SW8270	16.9		7.9	93	119		6.5 J
ACENAPHTHENE	83-32-9	µg/l	SW8270	34	3.36	110	128	141	0.469	45.9 J
ACENAPHTHYLENE	208-96-8	µg/l	SW8270	0.588 J		1.89 J	0.783			3.06 J
ANTHRACENE	120-12-7	µg/l	SW8270	11.6	0.472	16.5	124	132	0.412	20.1
BENZO(A)ANTHRACENE	56-55-3	µg/l	SW8270	3.35		5.7	2.84	2.59	0.518	29.9
BENZO(A)PYRENE	50-32-8	µg/l	SW8270	2.9		4.58	2.38	1.97	0.319	33.5
BENZO(B)FLUORANTHENE	205-99-2	µg/l	SW8270	3.1		4.6	2.67	2.23	0.489	31.7
BENZO(G,H,I)PERYLENE	191-24-2	µg/l	SW8270	2.07		2.94	1.27	1.09	0.27	22.4
BENZO(K)FLUORANTHENE	207-08-9	µg/l	SW8270	3		2.7	1.8 J	1.01		18.3
CARBAZOLE	86-74-8	µg/l	SW8270	37.8		121	316	332		36.6 J
CHRYSENE	218-01-9	µg/l	SW8270	2.87		4.66	2.28	2.03	0.348	30.5
DIBENZO(A,H)ANTHRACENE	53-70-3	µg/l	SW8270	0.574		0.797	0.411	0.345		3.99
DIBENZOFURAN	132-64-9	µg/l	SW8270	13.4		48.6	64.4	70.6		16.3 J
FLUORANTHENE	206-44-0	µg/l	SW8270	15		26.5	23.7	23.6	0.671	68.2
FLUORENE	86-73-7	µg/l	SW8270	21	1.38	52.4	65.5	69.8	0.392	22.8 J
INDENO(1,2,3-CD)PYRENE	193-39-5	µg/l	SW8270	1.84		2.71	1.26	1.07	0.252	20.5
NAPHTHALENE	91-20-3	µg/l	SW8270	223		873	380	457	0.644	533 J
PHENANTHRENE	1985-01-08	µg/l	SW8270	43.8	1.24	86	121	129	1.11	49.7 J
PHENOL	108-95-2	µg/l	SW8270	2.9 J			13.6	17.3		
PYRENE	129-00-0	µg/l	SW8270	13.2		20.3	15.9	15	0.637	57.5

J - Estimated Value; detected between the RL and MDL
ND - Not Detected
U - Analyte not detected above the MDL
D - Analyte reported from a diluted extract

Attachment B

Primary Screening of Constituents of Potential Concern (USEPA, 2002)

Table B-1 - Primary Screening of Volatile Organic Compounds in Groundwater

Table B-2 - Primary Screening of Semi-Volatile Organic Compounds in Groundwater

Table B-1
Primary Screening of Volatile Organic Compounds in Groundwater
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Constituent	Is Chemical Sufficiently Volatile?	Detected in Groundwater?	Evaluate Potential Vapor Intrusion Pathway?	Comments
Acetone	YES	YES		Detected below the reporting limit
Benzene	YES	YES	YES	
Bromodichloromethane	YES			
Bromoform	YES			
Bromomethane	YES			
2-Butanone (MEK)	YES			
Carbon disulfide	YES	YES		Detected below the reporting limit
Carbon tetrachloride	YES			
Chlorobenzene	YES			
Chloroethane	YES			
Chloroform	YES			
Chloromethane	YES			
Cyclohexane	not applicable	YES		Detected below the reporting limit
1,2-Dibromo-3-chloropropane	YES			
Dibromochloromethane	not applicable			
1,2-Dibromoethane	YES			
1,2-Dichlorobenzene	YES			
1,3-Dichlorobenzene	YES			
1,4-Dichlorobenzene	YES			
Dichlorodifluoromethane	YES			
1,1-Dichloroethane	YES			
1,2-Dichloroethane	YES			
1,1-Dichloroethene	not applicable			
cis-1,2-Dichloroethene	not applicable			
trans-1,2-Dichloroethene	not applicable			
1,2-Dichloropropane	YES			
cis-1,3-Dichloropropene	not applicable			
trans-1,3-Dichloropropene	not applicable			
Ethylbenzene	YES	YES	YES	
Freon 113	YES			
2-Hexanone	not applicable			
Isopropylbenzene	not applicable	YES		Detected at lower concentrations than other aromatic VOCs
Methyl Acetate	YES			
Methylcyclohexane	YES	YES		Detected below the reporting limit
MTBE	YES	YES		Detected below the reporting limit
4-Methyl-2-pentanone (MIBK)	YES			
Methylene chloride	YES			
Styrene	YES			
1,1,2,2-Tetrachloroethane	YES			
Tetrachloroethene	YES			
Toluene	YES	YES	YES	

Table B-1
Primary Screening of Volatile Organic Compounds in Groundwater
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Constituent	Is Chemical Sufficiently Volatile?	Detected in Groundwater?	Evaluate Potential Vapor Intrusion Pathway?	Comments
1,2,4-Trichlorobenzene	YES			
1,1,1-Trichloroethane	YES			
1,1,2-Trichloroethane	YES			
Trichloroethene	YES			
Trichlorofluoromethane	YES			
Vinyl chloride	YES			
Xylene (total)	YES	YES	YES	

Notes:
not applicable - not identified as a volatile constituent in EPA's draft vapor intrusion guidance (USEPA, 2002).

Table B-2
Primary Screening of Semi-Volatile Organic Compounds in Groundwater
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Constituent	Is Chemical Sufficiently Volatile?	Detected in Groundwater?	Evaluate Potential Vapor Intrusion Pathway?	Comments
2-Chlorophenol	YES			
4-Chloro-3-methyl phenol	not applicable			
2,4-Dichlorophenol	NO			
2,4-Dimethylphenol	NO	YES		
2,4-Dinitrophenol	NO			
4,6-Dinitro-o-cresol	not applicable			
2-Methylphenol	not applicable	YES		
3&4-Methylphenol	not applicable	YES		
2-Nitrophenol	not applicable			
4-Nitrophenol	NO			
Pentachlorophenol	NO			
Phenol	NO	YES		
2,4,5-Trichlorophenol	NO			
2,4,6-Trichlorophenol	NO			
Acenaphthene	YES	YES		
Acenaphthylene	not applicable	YES		
Acetophenone	YES			
Anthracene	YES	YES		
Atrazine	not applicable			
Benzaldehyde	YES			
Benzo(a)anthracene	not applicable	YES		
Benzo(a)pyrene	NO	YES		
Benzo(b)fluoranthene	YES	YES		
Benzo(g,h,i)perylene	not applicable	YES		
Benzo(k)fluoranthene	NO	YES		Target soil gas concentration exceeds maximum theoretical soil gas concentration (pathway incomplete) (EPA, 2002).
4-Bromophenyl phenyl ether	not applicable			
Butyl benzyl phthalate	not applicable			
1,1'-Biphenyl	not applicable	YES		
2-Chloronaphthalene	not applicable			
4-Chloroaniline	not applicable			
Carbazole	NO	YES		
Caprolactam	not applicable			
Chrysene	YES	YES		Health-based target breathing concentration exceeds maximum possible chemical vapor concentration (pathway incomplete) (EPA, 2002)
bis(2-Chloroethoxy)methane	not applicable			
bis(2-Chloroethyl)ether	YES			
bis(2-Chloroisopropyl)ether	YES			
4-Chlorophenyl phenyl ether	not applicable			
2,4-Dinitrotoluene	NO			
2,6-Dinitrotoluene	NO			
3,3'-Dichlorobenzidine	not applicable			
Dibenzo(a,h)anthracene	not applicable	YES		Not identified as a volatile constituent in USEPA's draft vapor intrusion guidance. As with other PAHs, the target soil gas concentration exceeds maximum theoretical soil gas concentration (pathway incomplete).

Table B-2
Primary Screening of Semi-Volatile Organic Compounds in Groundwater
Block 93 Vapor Intrusion Evaluation
Edgewater, NJ

Constituent	Is Chemical Sufficiently Volatile?	Detected in Groundwater?	Evaluate Potential Vapor Intrusion Pathway?	Comments
Dibenzofuran	YES	YES	YES	
Di-n-butyl phthalate	not applicable			
Di-n-octyl phthalate	not applicable			
Diethyl phthalate	not applicable			
Dimethyl phthalate	not applicable			
bis(2-Ethylhexyl)phthalate	NO			
Fluoranthene	YES	YES		
Fluorene	YES	YES		Target soil gas concentration exceeds maximum theoretical soil gas concentration (pathway incomplete) (EPA, 2002).
Hexachlorobenzene	YES			
Hexachlorobutadiene	not applicable			
Hexachlorocyclopentadiene	YES			
Hexachloroethane	YES			
Indeno(1,2,3-cd)pyrene	NO	YES		
Isophorone	NO			
2-Methylnaphthalene	YES	YES		
2-Nitroaniline	not applicable			
3-Nitroaniline	not applicable			
4-Nitroaniline	not applicable			
Naphthalene	YES	YES	YES	
Nitrobenzene	YES			
N-Nitroso-di-n-propylamine	not applicable			
N-Nitrosodiphenylamine	NO			
Phenanthrene	not applicable	YES		
Pyrene	YES	YES		Target soil gas concentration exceeds maximum theoretical soil gas concentration (pathway incomplete) (EPA, 2002).

Notes:
not applicable - not identified as a volatile constituent in EPA's draft vapor intrusion guidance (USEPA, 2002).

Vapor Intrusion Evaluation Site Visit at 115 River Road Building, Edgewater New Jersey, April 6 – 7, 2007 - DRAFT

July 9, 2007

Summary

CH2M HILL has been conducting an evaluation of potential vapor intrusion pathways in the commercial building located at 115 River Road, Edgewater, New Jersey, located adjacent to the Quanta Resources Superfund site (Site). A vapor intrusion technical memorandum presenting the results from two sampling events, conducted at the 115 River Road building in March and July 2006, was submitted to the U.S. Environmental Protection Agency Region 2 (EPA) in October 2006 (CH2M HILL, 2006a). In comments provided on November 3, 2006, EPA stated that the memorandum should present recommendations for remedial or interim action for naphthalene detected in subslab and indoor air samples collected from the building. CH2M HILL proposed additional survey activities to reduce uncertainties in the understanding of the potential vapor intrusion pathway (CH2M HILL, 2007a; 2007b).

These additional survey activities were conducted during a site visit at the 115 River Road building on April 6 & 7, 2007. This site visit had two objectives: 1) first to evaluate conditions in the building that might create potential vapor intrusion pathways to inhabited spaces from constituents detected in soil and groundwater in proximity to the building; 2) second to identify potential sources, such as products or chemicals stored at the building, which could produce emissions to indoor air (some of the chemicals in products stored in the building contain similar constituents as those detected in soil and groundwater). This survey involved creating a site map showing pressure differences using a digital micromanometer. The purpose of this map was to identify pressure differences between indoor air and outdoor spaces. This survey provides a conservative snapshot of pressure and airflow conditions in the 115 River Road buildings that were surveyed, measured over a weekend, with few occupants present (except for a single building), and with windows and doors closed. Measurements were made under "heating season" conditions. When possible, measurements were made with air handling systems operating, and while turned off.

The results from such mapping were used to identify indoor spaces with significant depressurization relative to outdoor spaces or other indoor spaces. If present at a sufficient magnitude, this depressurization could cause VOCs to be drawn into indoor air spaces. In addition, air current tubes were used to observe the flow of air through penetrations through walls or floors.

In addition, further information was obtained regarding indoor products that could emit VOCs that may contribute to VOCs detected in indoor air samples.

The results from the pressure mapping and the additional survey of indoor products were evaluated along with the air sampling results collected in March and July 2006. These data were used to refine the conceptual model of potential vapor intrusion pathways in the 115 River Road building, and to develop recommendations for measures, if any, to address vapor intrusion in the building.

The results from this site visit are as follows:

- This work did not identify substantial depressurized conditions throughout the 115 River Road buildings that would create migration pathways into inhabited spaces. The results from this survey are consistent with the indoor air sampling data collected during March and July 2006. The indoor air sampling data collected during March and July 2006 does not show a potential exposure pathway from VOCs in soil and groundwater to indoor air in the 115 River Road buildings.
- Indoor storage of janitorial supplies (urinal deodorizers containing p-dichlorobenzene) was observed in buildings where indoor concentrations of p-dichlorobenzene were detected. P-dichlorobenzene has not been detected in soil or groundwater at the adjoining Site. Therefore, this constituent is not associated with impacts at the Site.
- Storage of asphalt roofing tar (which contains naphthalene) was observed in the Building 10 basement. In addition, the building owner reported that roofing tar was placed on the Building 8 and 12 roofs during late spring/early summer, prior to the July 2006 sampling event. This may produce emissions of naphthalene to the air that could have been detected in indoor air samples. While the presence of roofing tar stored in the basement does not fully explain the occurrence of naphthalene in indoor air in July 2006, tt is possible that emissions during the roofing activities might have resulted in detectable concentrations of naphthalene in the indoor air samples.
- In Building 7 (location for the day care center), observations did not identify penetrations through the floor that could transport air from the subsurface and underlying basement into the building. Therefore, it is unlikely that a potential exposure pathway for vapor intrusion is present in this building.

Recommendations are provided to address vapor intrusion issues in the 115 River Road buildings, both for the short-term as well as for the long-term, based on the results from this survey, and the vapor intrusion sampling events conducted in March and July 2006. These recommendations are as follows:

- There is evidence that naphthalene soil vapor concentrations below Building 8 slab (115 River Road) are above conservative screening levels. The available data does not indicate that the concentrations under the slab are producing indoor air impacts in the habitable spaces of the building, However, a precautionary measure to prevent potential future migration pathways into inhabited spaces may be to increase ventilation in the basements.
- As a part of the Feasibility Study (FS) for the Site, a remedial alternative is being evaluated to prevent potential future migration pathways into inhabited spaces in the building. This would involve use of existing slab-on-grade portions of building

foundation for controlling potential migration, and installation of a single-layer engineered impermeable cap in the existing basements.

Introduction

The following is a report of a site visit conducted at the commercial building located at 115 River Road, Edgewater, New Jersey, located next to the Quanta Resources Superfund site (Site). This site visit had two objectives: 1) evaluate conditions in the building that might create potential migration pathways to inhabited spaces from constituents detected in soil and groundwater in close proximity to the building; 2) identify potential sources, such as products or chemicals stored at the building, which could produce emissions to indoor air. Some of the chemicals in products stored in the building contain similar constituents as those detected in soil and groundwater. Conversely, there are some chemicals associated with products stored in the building that have not been detected in soil or groundwater. The emissions from these indoor sources could be detected in indoor air samples and mistakenly be attributed to vapor intrusion.

Background

In October 2006, CH2M HILL submitted to the U.S. Environmental Protection Agency (EPA) Region 2 a vapor intrusion technical memorandum presenting the results from two sampling events, conducted at the 115 River Road building in March and July 2006 (CH2M HILL, 2006a). Those sampling events were conducted in accordance with a work plan approved by EPA. In comments on this technical memorandum provided in November 2006, EPA Region 2 has noted that concentrations of naphthalene were detected in some subslab and indoor air samples. Those concentrations, when compared with thresholds defined in the vapor intrusion decision matrix used by EPA Region 2, indicate that remediation or further monitoring should be performed for naphthalene. In its comments on the vapor intrusion technical memorandum, EPA Region 2 stated that the memorandum should present recommendations for remedial or interim action that are consistent with EPA matrices. In addition, EPA Region 2 recommended that another sampling effort, which would include subslab, indoor air, and ambient air, be conducted.

In responses to EPA's comments, CH2M HILL proposed further activities, which are described below in the technical approach, to reduce uncertainties in the understanding of the potential vapor intrusion pathways in the 115 River Road building.

Technical Approach

Prior to making any decisions concerning remedial measures or further sampling, it is necessary to better understand the conceptual model of the potential vapor intrusion pathway in the 115 River Road building. The site visit conducted on April 6 & 7, 2007 consisted of two activities. The information from these activities was used to update the conceptual model of potential vapor intrusion pathways. These activities were:

- Perform a survey of indoor pressure in the basements and inhabited spaces. Portions of the building envelope were surveyed to identify if significantly depressurized conditions were present that could potentially promote vapor intrusion. Conduits from

the subsurface into the basements and inhabited spaces were examined for evidence of air flow into inhabited spaces, using a digital micromanometer and air current tubes.

- Update the inventory and locations of indoor products and sources that could emit constituents in indoor air (such as, asphalt roofing materials, deodorizer blocks, paints and coatings, glues and adhesives, fuels and lubricants, cleansers, office supply storage, etc.). The specific locations of these products and sources were identified and linked to the locations of the indoor air samples. The purpose for this activity was to provide a better understanding of the potential contribution of indoor sources to the concentrations detected in indoor air samples. In particular, the product inventory identified the locations of products, such as asphalt roofing materials, which could emit naphthalene into air (CH2M HILL, 2007c).

Evaluation of Indoor Pressure Measurements

The general conceptual model of the vapor intrusion pathway assumes that convective air movement within the soil column may transport vapors through cracks or other penetrations through the foundation into inhabited space. This convective sweep effect would be induced by a depressurization within the structure which may be caused by a combination of wind effects, stack effects due to building heating, and pressure differences due to mechanical ventilation (EPA, 2004).

The possible presence of depressurized conditions in the 115 River Road building was evaluating with a pressurization survey to assess the conceptual site model regarding the potential vapor intrusion pathways at this property. The pressurization survey involved performing the following measurements:

- Air temperature measurements: air temperatures were measured at multiple indoor and outdoor locations using a digital thermometer. The purpose for these measurements was to better understand indoor-outdoor differences that could provide an indication of the presence of a stack effect and a potential driver for vapor intrusion.

- Pressure mapping: a pressure map measured at multiple indoor and outdoor locations using a TEC DG-500 digital micromanometer (TEC, 2005). The purpose of this map was to identify pressure differences between indoor air and outdoor spaces, pressure differences between different indoor spaces, and pressure differences across floor/wall intrusions. The results from such mapping were used to identify indoor spaces with significant depressurization relative to outdoors or other indoor spaces. It is expected that vapor intrusion from the subsurface might occur in indoor spaces that are significantly depressurized relative to outdoors. There are no regulatory criteria for indoor pressure measurements. However, for purposes of this study, interpretation of pressure measurements was based on EPA guidance for radon mitigation (EPA, 1993). A matrix outlining the levels used to interpret pressure measurements is presented in Table 1.

- Air current measurements: air current tubes (Drager) were used to observe the flow of air through penetrations through walls or floors. Air current tubes contain sulfuric acid, which reacts with water vapor to produce an easily visible smoke. Small jets of smoke

were emitted into a penetration or conduit, allowing the direction of airflow through the penetration to be more easily observed.

Areas Surveyed

Three distinct buildings are present on the 115 River Road property (Figure 1). The main 115 River Road building consists of two attached buildings (older building and newer Pier building) that are approximately 800 feet long and between 30 and 60 feet wide. The original western portion of this building located between River Road and the Hudson River is approximately 500 feet long and reportedly dates back to the turn of the 20th Century (referred to in Figure 2 as the "Main 115 River Road building").

This building is constructed of brick and contains two distinct basements. The main building is divided into 10 different tenant-occupied "buildings", numbered from east to west as Buildings 2 through 11 (Figure 2). Much of the building is leased as office space. Other building uses include commercial graphic production, medical offices, a day care center, consumer products marketing, and a modeling agency. Basements are located under Building 10 and Building 8; the Building 8 basement also appears to extend partly under Building 7 (the day care center). This portion of the 115 River Road building is closest to the constituents detected in soil and groundwater; in addition, lenses of coal tar free product have been observed under portions of Buildings 7 and 8. The site visit focused on this portion of the building.

A smaller two-story, brick building (referred to in Figure 2 as "Building 12"), approximately 100 feet by 25 feet, is located to the north of the main 115 River Road building. The remainder of the approximate 3-acre upland area consists of parking area paved with either asphalt or concrete. Building 12 is approximately 30 feet in height. In that building, the inhabited office spaces are elevated over a semi-enclosed parking lot. This building was surveyed during the site visit, because it is closest to the Site

A second office building consists of an approximately 300 foot long expansion of the main building which is constructed on piers over the Hudson River. It appears to have been constructed in the 1990s (based on the dates of available design drawings) and is referred to as the "Pier building". The pier building has aluminum frame construction with insulated glass and corrugated metal siding and is elevated approximately 15 feet above the Hudson River. The inhabited office spaces are elevated approximately 12 feet over an open-air parking lot, which is over open water. There is no complete vapor intrusion pathway at this building, since it is not in contact with the subsurface. The Pier building was not included in the site visit.

This survey provides a snapshot of pressure and airflow conditions in the 115 River Road buildings. Measurements were made under "heating season" conditions, with outdoor temperatures approximately 20 degrees cooler than indoor temperatures, as shown in Table 2. Measurements of indoor/outdoor pressure differences made under "heating season" conditions would be more conservative than other seasons of the year, because the stack effect may be more apparent in the buildings.[1] The measurements were made over a

[1] One cause of pressure differences across the building envelope that creates air flow through leaks is indoor-outdoor temperature differences (or the stack effect). Under heating conditions, it is presumed that air is more likely to flow into the

weekend, with few occupants present (except for Building 9). Therefore, exterior doors and windows generally remained closed, reducing possible fluctuations in pressures. When possible, measurements were made both with air handling systems operating, and while turned off. These measurements were made to examine the pressure fluctuations that may occur during operation of the air handling systems.

Building Survey Results

The following sections describe the results from this site visit, including an overall description of the 115 River Road building, the results from the product survey including comparison with selected indoor air sampling results, and the results from the building pressurization survey. These have been combined to update the conceptual model of potential vapor intrusion pathways within the 115 River Road building.

The products and sources observed in the building are summarized in Table 3. Indoor and outdoor temperature measurements are presented in Table 3. Pressure measurements are shown in Tables 4 through 11, and also on floor plans for the buildings (see Figures 2 through 9). The results of air current testing are discussed in the narrative sections shown below.

Building 7

Product Inventory

Few products that could emit VOCs were observed in Building 7. The products observed included air fresheners, which contained fragrant oils, and a can of DAP Touch 'n Tone spray paint. A Material Safety Data Sheet (MSDS) was not located for the spray paint. However, a review of similar products listed on the Household Products Database (National Library of Medicine, 2007) indicates that spray paints can contain solvent carriers, including acetone, toluene, and glycol ethers such as 2-butoxyethanol.

Pressurization Survey Results

Overall, this building was neutral to slightly negatively pressurized relative to outdoors. The pressurization survey results are presented in Table 4, and are also shown on Figure 2. There appears to be a lower potential for a vapor intrusion pathway into this building compared with Building 8, 9, or 10. The following observations were made in Building 7:

- Pressures relative to outdoors were evaluated with air conditioning fans in operation. The pressure measurements throughout the building were less than 0 Pa (a measurement of -4 Pa being the largest measurement).
- There were no penetrations through the floor observed in this building. The entire floor is covered with carpeting or vinyl floor tile, which limited observations of the floor. Coving was observed along the wall, which would also conceal the floor-wall intersections from observation. However, as discussed below for the Building 8

building at lower floors and out of the building at higher floors. During the cooling season, the direction of the pressure differences and airflows is expected to be reversed. The magnitude of the pressure differences depends on the building height, the indoor-outdoor temperature difference, and resistance to vertical airflow within the building caused by interior walls and floors (Persily, 1994).

basement, there were no penetrations observed in the ceiling of the Building 8 basement underneath Building 7, suggesting there are no conduits for migration of air flow from the basement to Building 7.

Building 8

Product Inventory

Basement: the types of products observed in the Building 8 basement were similar to those found in the Building 10 basement (paints, adhesives, and urinal deodorizers). There were no containers of asphalt coating product (i.e. Karnak) or gasoline observed in the Building 8 basement. Containers of solvents (acetone and xylenes), PVC cement, and PVC cement solvent were observed in the basement (see Table 2). The types of VOCs that could be present in the basement included:

- Solvent containers - acetone and xylenes
- PVC cement and cement solvent - acetone, methyl-isobutyl ketone, xylenes and petroleum distillates (middle distillate aliphatic hydrocarbons similar to kerosene)
- Paints - ethylene glycol
- Adhesives - petroleum naphtha, light aliphatic
- Urinal deodorizers -p-dichlorobenzene

Indoor Space: the products observed in the janitorial closets included cleaners, bleach, and urinal deodorizers.

Pressurization Survey

Overall, this building was neutral to negatively pressurized relative to outdoors. There is some potential for a vapor intrusion pathway to indoor spaces in this building. This evaluation is based on the following observations:

Basement:pressure measurements indicate this area is neutral to negatively pressurized (see Table 5 and Figure 3). The Building 8 basement contains the following penetrations in the floor that could be potential conduits for soil gas into the basement:

- A large sump (approximately 6 feet deep, 3 feet in diameter) in the northwestern corner of the basement. No air flow from this sump was observed when tested with an air current tube.
- A large rectangular steel hatch (dimensions approximately 2 feet by 3 feet, and 2 inches thick) in the northwestern corner of the basement. This could not be safely moved; however, testing with an air current tube indicated the presence of air flow from under this hatch into the basement.
- A shallow drain, approximately 1.5 feet wide and recessed about 1 foot into the ground, traverses the entire length of the basement from east to west. A sump in the center of the basement intersects this drain; the sump contains water, and is approximately 3 feet by 3 feet in area. It is recessed approximately 3 feet into the ground to the water surface (depth of water in the sump was not measured). A sump pump and attached pipe were

observed in this sump; the pipe discharges outside the basement. Testing with an air current tube indicated the presence of air flow into the basement from the sump, and from both the eastern and western ends of the drain.

- Water seepage was observed coming up through floor tiles on the eastern portion of the basement. According to the building owners, the drain in the basement is intended to collect surface water leakage from rainfall.
- Air flow through floor-wall joints was observed along the west wall and in the office area when tested using an air current tube.
- Odors were occasionally noted by some field team members during the survey in the basement. The sources of the potential odors, which included hydrocarbon odors (gasoline) and "musty" odors were not apparent; there could be multiple sources, including water in the sump and products stored in the basement. The basement under Building 8 was the only location in the 115 River Road building complex where odors were noted during this survey.
- In contrast with the Building 10 basement, observations of the ceiling in the Building 8 basement did not reveal potential penetrations into the inhabited spaces; in particular, penetrations in the ceiling were not observed in the eastern portion of the basement, underlying Building 7 (the day care center).

During this site visit, a blue sliding door was observed on west wall of the basement. This door could not be opened and the space beyond that door was not observed. However, during a subsequent visit on April 11, 2007 this door was observed to be open. There were two small rooms observed, which were un-occupied and appeared to be used for storage. The rooms were largely empty. Products containing VOCs were not observed in these rooms. The concrete floor was intact with no observable penetrations through the slab. There were grooves observed in the floor which are thought to be for drainage. These grooves terminated at the west wall and appear to drain into the floor drain located in the adjacent Building 8 basement. There are two entry ways to these rooms: one leading from the adjacent Building 8 basement on the east side and a second on the south side of the building leading outdoor. The indoor space is slightly depressurized relative to outdoors - this is based on the observation that air flowed into the building when the south door was opened.

Photographs depicting these features in the Building 8 basement are presented in the Photographic Log, included as Attachment A.

Interior Spaces: the 2nd floor hallway contained a vertical drain pipe that penetrated the floor. Air flowed into the 2nd floor from the 1st floor through this penetration, as determined with an air current tube. The hallways and atriums in the 2nd floor were neutral to slightly negatively pressurized relative to both the 1st floor and the outdoors (See Table 6 and Figure 4). The 3rd floor hallway was neutral to slightly negatively pressurized relative to the outdoors (See Table 7 and Figure 5).

Pressures in a tenant space located on the south end of the 3rd floor were evaluated relative to outdoors and relative to the hallway, with the fans turned on, then turned off. The tenant space was neutral relative to the hallway, and was neutral to slightly negatively pressurized

relative to outdoors, under most conditions; however, this tenant space was negatively pressurized relative to outdoors when the air conditioning fans were in operation.

Elevator Shaft: the elevator shaft was not observed during this inspection because the elevator was out of service. According to the elevator repair technician, this elevator was constructed in the same manner as the Building 10 elevator (i.e. concrete-lined along the walls and floor). Concerns have been raised that the floors of the elevator shafts consisted of bare soil, and were potential conduits for the migration of subsurface vapors. However, the available observations of the elevator shafts suggest that they are not potential conduits for vapor migration.

Building 9

Product Inventory

Building 9 was observed during the site visit to be very busy with high occupant traffic. A formal inventory was not attempted in order to minimize disruption of building activities. This building is used as a modeling and photographic studio, so the products that could be present include cosmetics, skin-care products, and hair-care products.

VOCs that might be present in these products include acetone and ethyl acetate (nail polish and nail polish remover) and ethylene glycol and ethanol (hair styling products).

Pressurization Survey

A pressure map of the entire building was not attempted due to the high occupancy in the building. However, pressure measurements relative to outdoors were made in a single office. That office was negatively pressurized (-5 to -10 Pa) relative to outdoors.

Building 10

Product Inventory

Basement: the products observed in the Building 10 basement that could produce emissions of VOCs included paints, floor and tile adhesives, gasoline, lubricating and hydraulic oils, and asphalt exterior coating (Karnak Aluminum 97 brand). In addition, one box of urinal deodorant blocks was observed in this basement.

A preliminary list of the characteristic VOCs that could be emitted from these products is as follows:

- Paints and varnishes - ethylene glycol and xylenes
- Adhesives - petroleum naphtha, light aliphatic (CASRN 064742-89-8); this is a middle distillate hydrocarbon similar to kerosene with constituents including C10 to C21 range aliphatic hydrocarbons (11 to 21 carbons in length), alkylbenzenes and naphthalene (approximately 1 percent)
- Gasoline - benzene, toluene, ethylbenzene and xylenes, trimethylbenzenes, aliphatic hydrocarbons from C4 to C12 range, a trace of naphthalene, and methyl tert-butyl ether (MTBE)
- Urinal deodorizers - p-dichlorobenzene

- Asphalt exterior coating (Karnak brand) – asphalt; constituents in asphalt include naphthalene; middle distillate hydrocarbons similar to kerosene. According to the building owner, the building maintenance crew performs roof patching on an as needed basis (when they observe a leak), using the product observed in the basement.

Indoor space: products observed in the second and third floor janitorial closets in Building 10 included bleach, bathroom cleaners, and urinal deodorant blocks.

MSDSs for a range of bathroom cleaners obtained from the Household Products Data Base indicate that the types of VOCs that might be present in bathroom cleaners are principally glycol ethers, including diethylene glycol monobutyl ether (CASRN 112-34-5) and 2-butoxyethanol (CASRN 111-76-2). MSDSs for similar urinal deodorant products ("block and toilet bowl rim hanger, pink cherry flavor") indicate these products contain p-dichlorobenzene. In addition, field staff observed a "mothball" odor in the third floor area. In addition, the third floor janitorial closet contained cans of spray lubricant ("WD40") and spray adhesives. The types of VOCs in these aerosol products include petroleum distillates (Stoddard solvent), acetone, and hexane.

Pressurization Survey

Overall, this building was neutral to slightly negatively pressurized relative to outdoors. This evaluation is based on the following observations:

Basement: pressure measurements indicate this area is neutral to negatively pressurized (see Table 8 and Figure 6). Indoor depressurization became more significant at the times when the natural gas furnace in the basement operated.

Potential penetrations in the basement floor included a small sump in the northeastern corner, a water pipe penetrating the east wall near the floor at the southeastern corner, and unsealed floor-wall seams along the south and west walls. Air flowed into the basement from the wall penetration when the natural gas furnace operated, when tested with an air current tube; slight air flow into the basement was observed from the sump when tested using an air current tube; no air flow was observed from the floor-wall seams.

Potential penetrations were observed in the basement ceiling. "Daylight" was not observed in these, so it is not confirmed if these transmit air to the first floor. However, there was a slight indication of smoke moving into one penetration when tested using an air current tube.

Interior spaces: utility rooms accessible from the hallway were entered on the 2nd and 3rd floors. These rooms contained conduit for telecommunications equipment, running vertically and penetrating the floors in each room. The penetrations in the floors were not sealed, and air flowed into each utility room from the floor beneath when tested with an air current tube. These utility rooms were slightly negatively pressurized relative to the floor below. However, the 3rd floor utility room was neutral to positively pressurized relative to outdoor air (see Tables 9 and 10, and Figures 6 and 7).

The hallways and atriums in both the 2nd and 3rd floors were slightly negatively pressurized relative to the floors below (see Tables 9 and 10, Figures 6 and 7). The 2nd floor hallway was negatively pressurized relative to outdoors. The 3rd floor hallway and tenant space (Vigonia

and Vigonia Architects) was neutral to slightly positively pressurized relative to outdoors (see Table 10, Figure 7).

Elevator shaft: observation of the elevator shaft showed it was concrete lined along the sides and bottom. The concrete appeared to be in good condition, with no observable penetrations or cracks (see the photographs in the Photographic Log, Attachment A).

Building 12

Product Inventory

A relatively limited product inventory, consisting of office supplies (including adhesives, correction fluids, cleaners, and dry-erase markers) was observed during the survey of Suite 1205 in Building 12. Types of VOCs that might be present in office supplies include alcohols (ethanol and isopropanol), acetone, and ethyl acetate.

Pressurization Survey

Overall, this building was neutral to slightly negatively pressurized relative to outdoors. The following observations were made in Building 12:

- Building 12 is elevated above the parking lot. Therefore, with the exception of brick-lined structural members around the periphery of the building, the building footprint is not in contact with the ground.
- Indoor pressures measured while the air conditioning system was operating were slightly positive relative to the outdoors; indoor pressures measured while the air conditioning system was off ranged from slightly negative to positive relative to the outdoors (see Table 11 and Figure 9).

Summary of the Investigation of Potential Vapor Intrusion Pathways

The results from the updated products survey and pressurization survey conducting during this site visit were evaluated along with the results from indoor air sampling conducted in March and July 2006. The following sections characterize the potential vapor intrusion pathways in the surveyed buildings.

Building 7

Few indoor products were identified as potential emission sources for VOCs that were detected in indoor air samples. As described previously, this building was neutral to negatively pressurized relative to outdoor air, which could result in leaking of air into the building. However, observations in Building 7 (or the underlying basement) did not identify penetrations that could allow the entry of soil gas into the indoor space. The indoor air sampling data indicates that VOC concentrations in Building 7 were consistently lower than in the other buildings surveyed (such as Buildings 8, 9 and 10). It is possible that a subsurface vapor intrusion pathway is not present in Building 7, and that VOC concentrations detected in indoor air are the result of intrusion from outdoor air.

Building 8

Indoor products were identified in Building 8 that could be potential emission sources for VOCs detected in indoor air samples. Janitorial products containing p-dichlorobenzene were observed throughout the building (i.e., in the basement and hallway janitorial closets in the 2nd and 3rd floors). The presence of these products could explain the concentrations of p-dichlorobenzene detected in indoor air during the July 2006 sampling event. Naphthalene was detected in indoor air in this building during both the March and July 2006 sampling events; though, there were no asphalt products (such as Karnak) observed stored in this building.

Several floor penetrations were observed in the basement floor (including sumps, drains, floor-wall seams and seepage through the floor). In addition, the basement was neutral to negatively pressurized. These observations suggest that a potential driving force for vapor intrusion might have been present in the basement underneath Building 8 during this survey. However, air sampling results in the Building 8 basement (July 2006) were not consistently higher compared with indoor air sample results from other areas in the 115 River Road complex. For example, concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) in the Building 8 basement were not appreciably greater than BTEX concentrations in Building 12, which is elevated above the ground surface; the driving force for vapor intrusion pathways is unlikely to be present in Building 12. Naphthalene in air in the Building 8 basement was higher (4.8 ug/m^3 in the basement versus 0.48 to 0.84 ug/m^3 in Building 12). While the indoor basement concentration of naphthalene was higher than the BTEX indoor concentrations, the subslab concentration of naphthalene conversely was lower than subslab concentrations of BTEX, so it is not apparent that a vapor intrusion pathway is present in this basement. The building envelope was neutral to slightly negatively pressurized, both relative to outdoor air and to the lower floors, indicating that air from ground level might flow into the upper (2nd and 3rd) floors of the building, under the conditions observed during this survey; those included measurements under heating season conditions and with exterior doors and windows remaining closed.

Building 9

Several products containing substances that could emit VOCs were observed to be stored and used in Building 9; however, these would emit relatively few of the VOCs detected in air samples collected from the building. Penetrations through the floor were not observed; however, this building appeared to be negatively pressurized relative to outdoor air. While it is uncertain if there is a vapor intrusion pathway into this building, the negative pressurization could result in leakage of air into the building.

Building 10

Indoor products were identified in Building 10 that could be potential emission sources for VOCs detected in indoor air samples. Janitorial products containing p-dichlorobenzene were observed throughout the building (in the hallway janitorial closets in the 2nd and 3rd floors). In addition, the field team observed a "moth ball" odor while on the 3rd floor of the building. The presence of these products could explain the concentrations of p-dichlorobenzene detected in indoor air during the July 2006 sampling event.

Naphthalene was detected in indoor air in this building during both the March and July 2006 sampling events. A container of asphalt roofing product (Karnak) was observed stored in the basement. However, higher concentrations of naphthalene were detected in the 2nd and 3rd floor samples, compared to the basement. The 2nd floor was neutral to slightly negatively pressurized, while the 3rd floor was neutral to slightly positively pressurized relative to outdoor air. However, these floors were neutral to slightly negatively pressurized relative to the lower floors.

Few floor penetrations were observed in the basement floor (including one sump and a pipe intrusion through the wall near the floor). The basement was neutral to slightly negatively pressurized; these observations suggest that a potential vapor intrusion pathway might have been present in the basement underneath Building 10 during this survey, however to a lesser extent than observed in the Building 8 basement. In addition, the building envelope is relatively neutrally pressurized compared to outdoor air. However, it is slightly negatively pressurized relative to the lower floors, indicating that air from ground level could flow into the upper (2nd and 3rd) floors of the building. Therefore, it is not apparent that a vapor intrusion pathway is present in this building.

According to the building owner, large portions of the Buildings 12 and 8 roofs (located approximately 100 feet or less from Building 10) were coated with the asphalt-based aluminum reflective coating in the summer of 2006, prior to the July sampling event. There is a possibility that indoor naphthalene concentrations (which are higher in the upper floors of Building 10) are a result of volatilization from the roofing compound. While the 3rd floor, was neutral to slightly positively pressurized during the pressurization survey, the possibility existing of naphthalene concentrations emitted from asphalt-based roofing compound migrating indoors from outside air through an open window, producing the detectable concentrations in the 3rd floor air sample during July 2006.

Building 12

Few indoor products were identified as potential emission sources for VOCs that were detected in indoor air samples. Pressurization measurements indicated that the building was neutrally to negatively pressurized relative to outdoor air; however, the building was neutrally to positively pressurized when the air conditioning system was in operation. The building is not in contact with the ground surface. All of these factors suggest that a vapor intrusion pathway is not present in Building 12.

Updated Conceptual Site Model of Vapor Intrusion Pathways

A preliminary conceptual model of the potential vapor intrusion pathway at the 115 River Road building was originally presented in the vapor intrusion work plan approved by EPA (CH2M HILL, 2006b). This conceptual model was refined using the data collected during the March and July 2006 sampling events. These sampling results are combined with the results from this survey to update the conceptual model of potential vapor intrusion pathways in the 115 River Road building.

The results from the pressure mapping did not identify substantial depressurized conditions throughout the 115 River Road buildings that would create migration pathways

into inhabited spaces.[2] With the exception of one portion of the second floor of Building 8, most pressure measurements were neutral to only slightly negative. The results from the pressure mapping identified paths for air flows between floors in Buildings 8 and 10, and very slight flows from lower to upper floors. However, observations in the basements did not identify conduits for the migration of air from the basements into the inhabited spaces.

In addition, according to NJDEP's vapor intrusion guidance (NJDEP, 2007), if vapor intrusion from contaminated ground water or subsurface soil is the main source, the highest concentrations should be in the basement (or lowest floor) and decrease from the first or second floor. Higher concentrations found in upper floors, particularly as observed in the July 2006 sampling event (for example, naphthalene detected on the 3rd floor of Building 10), might indicate a background source unrelated to vapor intrusion. Also, volatile organic compounds (such as BTEX and naphthalene)[3] were detected in portions of the 115 River Road building which are not in contact with the ground surface; for example, concentrations were detected in the Pier building (over the Hudson River), and in Building 12, which is elevated over the ground surface. In many cases, the VOCs in the Pier building and Building 12 were detected at similar levels compared with those detected in Buildings located over basements (i.e. Buildings 8, 9 and 10) that were in proximity to constituents in soil and groundwater.

The results from the pressure mapping, which shows relatively little pressure differences throughout the surveyed buildings, are consistent with the results from the indoor air sampling conducted in March and July 2006. Those indoor air sampling results show for most analytes, relatively little difference in concentrations between the different buildings in the 115 River Road complex (including buildings not in contact with the ground surface and with no potential vapor intrusion pathways). The pressure mapping results collected during the April 6 & 7 site visit do not show the presence of a driving force for vapor intrusion at the 115 River Road buildings. These studies do not conclusively show that a significant driving force for vapor intrusion pathways is present from VOCs in soil and groundwater to the occupied spaces in the 115 River Road buildings.

Conclusions

The site visit conducted at the 115 River Road building is part of the ongoing activities to address potential vapor intrusion pathways at this building. This survey was intended to reduce uncertainties in the understanding of the potential vapor intrusion pathway, as described in the responses to comments from EPA (CH2M HILL, 2007a). The results from this site visit are as follows:

- The pressure mapping did not identify substantial depressurized conditions throughout the 115 River Road buildings that would create migration pathways into inhabited spaces. The results from this survey are consistent with the indoor air sampling data collected during March and July 2006. The indoor air sampling data collected during

[2] Substantial depressurization is defined as consistent and widespread indoor pressure measurements of greater than -6 to -9 Pascals relative to outdoors (see Table 1 for further discussion of the evaluation of pressure measurements).

[3] BTEX and naphthalene are discussed here, because they are representative coal tar constituents, and have been detected in groundwater near the 115 River Road building.

March and July 2006 does not show a potential exposure pathway from VOCs in soil and groundwater to indoor air in the 115 River Road buildings.

- Indoor storage of janitorial supplies (urinal deodorizers containing p-dichlorobenzene) was observed in buildings where indoor concentrations of p-dichlorobenzene were detected. P-dichlorobenzene has not been detected in soil or groundwater at the adjoining Site. Therefore, this constituent is not associated with impacts at the Site.
- Storage and use of asphalt roofing tar (which contains naphthalene) was observed in the building. This may produce emissions of naphthalene to the air that could have been detected in indoor air samples. However, the presence of these indoor sources does not fully explain the occurrence of naphthalene in indoor air in July 2006. It is possible that emissions during roofing activities conducted earlier in the summer might have resulted in detectable concentrations of naphthalene in indoor air samples.
- In Building 7 (location for the day care center), observations did not identify penetrations through the floor that could transport air from the subsurface and underlying basement into the building. Therefore, it is unlikely that a potential exposure pathway for vapor intrusion is present in this building.

Recommendations

Further steps are proposed here to address potential vapor intrusion issues. The vapor intrusion sampling results from 2006 (CH2M HILL, 2006), along with the results from this survey, do not point to an apparent vapor intrusion pathway in the 115 River Road buildings. It is unlikely that further indoor air sampling would resolve questions concerning the potential presence or absence of potential vapor intrusion pathways in these buildings. However, these further steps are proposed to respond to potential vapor intrusion issues in the near-term, as well as for the long-term:

- There is evidence that naphthalene soil vapor concentrations below Building 8 slab (115 River Road) are above conservative screening levels. The available data does not indicate that the concentrations under the slab are producing indoor air impacts in the habitable spaces of the building. However, a precautionary measure to prevent potential future migration pathways into inhabited spaces may be to increase ventilation in the basements. Increasing ventilation in the basement would involve upgrading existing wall fans or installing additional fans. The objective of increasing ventilation would be to slightly increase the air exchange rate in the basements. This might further limit potential air exchange between the basements and inhabited spaces.
- As a part of the Feasibility Study (FS) for the Site, a remedial alternative is being evaluated to prevent potential future migration pathways into inhabited spaces in the building. This would involve use of existing slab-on-grade portions of building foundation for controlling potential migration, and installation of a single-layer engineered impermeable cap in the existing basements.

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Tables

Table 1
Interpretation of Pressure Level Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Condition	Description	Comments
Positively Pressurized	Consistent pressure measurements of > 6 to 9 Pa relative to outdoors.	Based on the pressure difference needed to prevent soil gas intrusion in a structure with combined heating and appliance or fan operation effects (0.025 to 0.35 in water, based on USEPA, 1993).
Neutral to Positively Pressurized	Consistent pressure measurements of <2 to 5 Pa relative to outdoors. OR Highly variable pressure measurements greater than zero.	Minimum acceptable pressurse difference needed to prevent in a structure with either heating effects OR appliance/fan effects (0.01 to 0.02 in water, based on USEPA, 1993).
Neutral to Negatively Pressurized	Consistent pressure measurements of -5 to <2 Pa relative to outdoors. OR Highly variable pressure measurements <5 Pa	Range of depressurization that could occur either from heating effects OR appliance/fan effects (0.01 to 0.02 in water, based on USEPA, 1993).
Negatively Pressurized	Consistent pressure measurements of > -6 to -9 Pa relative to outdoors.	Range of depressurization that could occur from heating effects and appliance/fan effects (0.025 to 0.035 in water, based on USEPA, 1993).

Note: 1 inch of water = 249.08 Pa

Table 2
Temperature Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Location	Temperature (degrees F)
Interior Temperatures	
Building 12, Suite 1205	63
Building 7	62
Building 10, 3rd Floor (Vigonia and Vigonia Architects)	62
Building 10 basement (natural gas-fired burner operating)	70
Building 8, 3rd Floor (Omni Store Office)	63
Building 8 basement (doors open to the outside)	56
Outdoor Temperatures	
Measured temperatures ranged between 43 and 45 degrees	
Actual temperatures in Edgewater, NJ for April 6th and 7th ranged from 31 to 42 degrees F (average 37 degrees). Source: www.wunderground.com for Zip Code 07020.	

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	2	Clorox Bleach	1-gal	Utility closet	Sodium hydroxide Sodium hypochlorite	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=3027057&query=bleach&searchas=TblProduct
10	2	Prime Source Leeno pine cleaner	1-gal	Utility closet	Isopropanol Pine oil	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=2019001&query=pine+cleaner&searchas=TblProduct
10	2	Zimick Bro Pro/Glass Cleaner	4	Utility closet		
10	2	EZ Brite no rinse neutral cleaner	1-gal (empty)	Utility closet		
10	2	Zimick Bro Pro/Bathroom Cleaner	4	Utility closet	Tetrasodim EDTA Isopropanol	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=1023001&query=glass+cleaner&searchas=TblProduct
10	2	Zimick Bro Pro/Lemon furntiture polish	1	Utility closet	Propane Isobutane Naptha, petroleum, hydrotreated heavy	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=18001020&query=lemon+furniture+polish&searchas=TblProduct
10	2	Pink urinal cakes	3 - loose	Utility closet		
10	2	Day Mark restroom high acid bowl cleaner	3	Utility closet	Hydrochloric Acid (5-10%)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=5005017&query=acid+bowl+cleaner&searchas=TblProduct
10	2	Paint		under stairs		
10	2	Blue Urinal cake	1	Women's bathroom		
10	2	Pink urinal cake	1	Men's bathroom		
10	2	Blue cake	2	Men's bathroom - toilet		

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	3	Spectracide - Immunox Plus Insect & Disease Control		Utility closet	Piperonyl butoxide (0.20%) Pyrethrum (0.02%)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=19020012&query=Immunox+plus&searchas=TblProduct
10	3	WD-40		Utility closet	Carbon dioxide (2-3%) Stoddard Solvent (60-70%) Distillates, petroleum, solvent-dewaxed heavy paraffinic (15-20% Non-hazardous ingredients (<10%)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=23007001&query=WD&searchas=TblProduct
10	3	3M Spuer 77 Spray Adhesive	(2) 16-oz	Utility closet	Acetone (15-20%) Hexane (20-30%) Dimethyl ether (50-55%) Resin (unspecified) (5-10%)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=13010021&query=spray+adhesive&searchas=TblProduct
10	3	Scotch Spray-Mount Art Adhesive	11-oz	Utility closet	MSDS-Proprietary or trade secret additive/ingredient	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=3002&query=spray-mount&searchas=TblProduct
10	3	Noxon 7 metal polish	1-gal can	Utility closet	Fatty acids (unspecified) Thiol alkane (unspecified) Isopropanol Kaolin clay Ammonium hydroxide Aluminum oxide Aliphatic petroleum distillate(s) (unspecified)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=23003002&query=metal+polis&searchas=TblProduct

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	3	Benjamin Moore Regal Latex		Near women's bathroom	Ethylene glycol (2.0%) Calcium carbonate (32.9%) Carbon black (1.2%) Inorganic constituents	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=2023037
10	3	Industrial Coating Safety Zone Marking Latex	2 gals	Near women's bathroom	Butyl Carbitol (5%) Ethylene Glycol (5%) Inorganic constituents	http://www.benjaminmoore.com/msds/1033/mM58.pdf
10	3	Blue cakes	2	Women's bathroom - toilets		
10	3	Air fresheners	2	Women's bathroom - table top and can		
10	3	Bluu cakes	3	Men's bathroom - 2 toilet; 1 urinal		
10	3	Benjamin Moore Regal Interior Latex		Utility Closet - 18 gallons of paint including those listed	Ethylene glycol (2.0%) Calcium carbonate (32.9%) Carbon black (1.2%) Inorganic constituents	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=2023037
10	3	Benjamin Moore professional coating Super Hide latex flat		Utility Closet - 18 gallons of paint including those listed	Calcium carbonate (33.2%) Kaolin clay (11.0%) Titanium dioxide (14.1%) Quartz (0.2%) Kieselguhr (4.0%) [cas no 061790-53-2, diotamaceous earth]	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=2023017&query=benjamin+moore&searchas=TblProduct
10	3	Palph Lauren River Rock tinting base		Utility Closet - 18 gallons of paint including those listed		

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	3	Minwax wood finish		Utility Closet - 18 gallons of paint including those listed	Carbon black Titanium dioxide Talc (non-fibrous) Naptha, petroleum, heavy distillate Hydroteated heavy napthenic distillate solvent extract Hydrotreated light napthenic distillate solvent extract Solvent naphta, petroleum, medium aliphatic	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=13018104&query=minwax&searchas=TblProduct
10	3	Dap plaster wall patch		Utility Closet - 18 gallons of paint including those listed	Calcium carbonate Attapulgite [clay]	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=4008034&query=DAP&searchas=TblProduct
10	3	Recordsol Paint thinner	1 gal	Utility Closet - 18 gallons of paint including those listed	Petroleum distillate (aliphatic hydrocarbons - solvent)	https://nt9.magma.ca/recochem/consumers/index.html
10	3	Hany Klenz Nytro kleen no rinse neutral floor cleaner	1 gal	Utility Closet - 18 gallons of paint including those listed	Water Polyethoxylated Alcohol Sodium carbonate Non-ionic surfactant Fragrance Dye	http://www.dillonchem.com/productspecs/LF4.pdf
10	3	Rel kem 99	5 gal bucket	Utility Closet - 18 gallons of paint including those listed	2-Aminoethanol	MSDS available from Diamond Chemical Company. Telephone (201) 935-4300
10	3	Clorox bleach	1 gal	Utility Closet - 18 gallons of paint including those listed		

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	3	Zimick Bros Pro/Glass & Mirror Cleaner	(8) 19-oz	Utility Closet - 18 gallons of paint including those listed		
10	3	Zimick Bros Pro/Crazy Clean All purfpose cleaner	(3) 19-oz	Utility Closet - 18 gallons of paint including those listed	D-Limonene (1-5%) Liquified Petroleum Gas (1-10%)	http://www.fastenal.com/web/msds/getmsds.ex?sku=620467
10	3	AJAX oxygen bleach cleaner	(4) 21-oz	Utility Closet - 18 gallons of paint including those listed	Calcium carbonate (90-95%)	http://www.instaoffice.com/msds/cpm14278.pdf
10	3	Prime source oxygen bleach cleaner	21-oz	Utility Closet - 18 gallons of paint including those listed		
10	3	Skyline urinal deodorant - Block & toilet bowl rim hanger - pink cherry flavor	2 boxes	Utility Closet - 18 gallons of paint including those listed		Skyline Professional ProCleaning Solutions urinal deodorant block". The product packaging noted: "100% pure paradichlorobenzene. AS#106-46-7.
10	3	Zimick Bros Pro/Bathroom cleaner	(1) 13-oz	Utility Closet - 18 gallons of paint including those listed		
10	3	Signature lotion cream soap	7 boxes; 1000 ml	Utility Closet - 18 gallons of paint including those listed		
10	Basement	Old Steel 250 gal oil tank		Utility Closet - 18 gallons of paint including those listed		
10	Basement	Paslode Impulse Fuel cell (Paslode)		Utility Closet - 18 gallons of paint including those listed	Compressed flammable gases: Propylene (60-90%) Butylene (10-40%) Propane (<3%)	http://www.paslode.com/customerhelp/msds/cordless_fuel_cell.pdf

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	Deck & seal setting agent (DFC Company)	1/2-gal	Utility Closet - 18 gallons of paint including those listed	Diethylene glycol dibenzoate Dipropylene Glycol Dibenzoate Titanium Dioxide Limestone Bisphenol A/Epichlorohydrin Resin Dimethylbenzyl Hydroperoxide	http://www.deckoseal.com/msds/4703022.pdf
10	Basement	Benjamin Moore Low Lustre Metal & Wood Enamel	1/2-gal	Utility Closet - 18 gallons of paint including those listed	Ethyl Benzene Stoddard Solvent Zinc Phosphate Aluminum Phosphate Zinc Oxide Titanium Dioxide Talc Methyl Ethyl Ketoxime Iron Oxide C.I. Pigment Black 7 **[alternatively]** Ethylene Glycol Diethylene Glycol Monomethyl Ether Titanium Dioxide Hydrous Alum Silicates Ethylene Glycol Mono-2-Ethylhexyl Ether Dibutyl Phthalate Iron Oxide C.I. Pigment Black 7	http://www.benjaminmoore.com/msds/1033/m363.pdf http://www.benjaminmoore.com/msds/1033/m163.pdf
10	Basement	DAP, Durabond Plaster of Paris	4-lbs	Utility Closet - 18 gallons of paint including those listed	Calcium Carbonate Calcium Sulfate Crystalline Silica	http://www.dap.com/docs/msds/english/00071008E.pdf

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Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	NO. 46 Anti-Wear Hydraulic oil	30-gal drum	Utility Closet - 18 gallons of paint including those listed	Highly refined petroleum oils Additives	http://www.equivashellmsds.com/getsinglemsds.asp?ID=148783
10	Basement	Deck-o-seal	1-gal	Utility Closet - 18 gallons of paint including those listed	Dipropylene Glycol Dibenzoate Diethylene Glycol Dibenzoate Titanium Dioxide Barium Peroxide Talc	http://www.wrmeadows.com/MSDS-PDF/4705002.pdf
10	Basement	Trowel-able Titebond multi-purpose construction adhesive	1-gal	Utility Closet - 18 gallons of paint including those listed	hexane	http://franklini.com/ProductMsdsViewCO.asp?Prod=5156++++++++++++++++++++++++&Selection=View
10	Basement	Benjamin Moore flat Finish Wall Satin	1-gal	Utility Closet - 18 gallons of paint including those listed	Titanium Dioxide (25%) Silica, Amorphous Diatomaceous Earth Crystalline silica Carbon black Hydrous Aluminum Silicates Calcium Carbonate (35%)	http://www.benjaminmoore.com/msds/1033/coast/W215%20MSDS.pdf
10	Basement	Cabot Pro.V.T. Solid color stain (0801 white base)	3-gal	Utility Closet - 18 gallons of paint including those listed	Silica, amorphous (10-15%) Propietary pigment (1-5%)	http://www.hardwarestore.com/media/msds/111801.pdf
10	Basement	5-gal gas can		Utility Closet - 18 gallons of paint including those listed		
10	Basement	McCloskey Man-o-War Patio and Stone Sealer	1-gal	Utility Closet - 18 gallons of paint including those listed	ETHYLENE GLYCOL (1-5%) DIBUTYL PHTHALATE (1-5%)	UPC: 0-12027-70852-4: http://www.valsparglobal.com/val/resident/msds.jsp

Table 3

Product Inventory

Vapor Intrusion Site Visit, 115 River Road Building

Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	Henry 430 Premium vinyl tile adhesive	1-gal	Utility Closet - 18 gallons of paint including those listed	Solvent naptha, petroleum, light aliphatic (2-3%)	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=8008021&query=clearpro&searchas=TblProduct
10	Basement	Laticrete Tri-Poly Fortified Unsanded grout 1660 Ser??	(2) 8-lb	Utility Closet - 18 gallons of paint including those listed	Portland Cement Dolomitic Limestone	http://www.laticrete.com/portals/0/msds/1600.pdf
10	Basement	TEC Latex Mortar	(2) 50-lb	Utility Closet - 18 gallons of paint including those listed	Crystalline silica Portland cement Iron oxide Calcium sulfate Calcium carbonate Gypsum Calcium oxide, CaO Magnesium Oxide Nickel compounds	http://www.tecspecialty.com/product_detail.asp?prodId=33
10	Basement	NP1 polyurethane sealant Sonneborn Deguser Bldg. Systems.	300 ml.	Utility Closet - 18 gallons of paint including those listed	Calcium oxide Limestone titanium dioxide Talc Silica, quartz Mineral spirits (Stoddard type) (10%)	http://www.chemrex.com/documents/np1_msd.PDF
10	Basement	TEC Sanded floor grout interior/exterior - portland cement, silical sand, titanium dioxide	9.75 lbs - 1/2 full	South East Corner		
10	Basement	Flourescent light fixtures	no bulbs	East		
10	Basement	Filpro superior quartz filtration media	(2) 50-lb bags	center North		

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	Karnak Aluminum 97 asphalt exterior coating - professional use only	5-gal full	Center	Asphalt (50-90%) Aliphatic Hydrocarbons (10-50%) Stoddard Aromatic Petroleum Distillates (10-50%) Aluminum Pigment Diatomaceous Earth Mineral Fibers Additives	http://www.karnakcorp.com/msds/Fibered%20Aluminum%20Asphalt%20Coatings.pdf
10	Basement	Johns Manville Ultra Gard EPDM Bonding Cement	5-gal full	Center	Toluene (35-75%) Heptane (5-30%) Acetone (5-10%) Phenolic Binder (>3%) Polychloroprene (>3%) [CAS 9010-98-4] Magnesium oxide Xylene (<2%)	http://www.jm.com/msds/EN3106.pdf
10	Basement	Benjamin Moore Moor Glo Soft Gloss fortified acrylic house paint exterior	5-gal full	Center	Polyethylene Glycol Octylphenol Ether (1.5%) Inorganic constituents	http://pages.slc.edu/~aschultz/chemical_hygiene/MSDS/all%20msds/PAINT%20LATEX%20HOUSE%20MOORGLO.pdf
10	Basement	Benjamin Moore Moor Glo Soft Gloss fortified acrylic house paint pastel base exterior	1-gal	Center	Polyethylene Glycol Octylphenol Ether (1.5%) Inorganic constituents	http://pages.slc.edu/~aschultz/chemical_hygiene/MSDS/all%20msds/PAINT%20LATEX%20HOUSE%20MOORGLO.pdf
10	Basement	Benjamin Moore Super Spec Urethane Alkyd gloss enamel rust preventative coating	(5) 1-gal	Center	Xylene (1.3%) Ethylbenzene (0.2%) Stoddard Solvent (42.2%) Methyl Ethyl Ketoxime (0.2%)	http://pages.slc.edu/~aschultz/chemical_hygiene/MSDS/all%20msds/URETHANE%20GLOSS%20ENAMEL%20BM.pdf

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	Benjamin Moore Industrial maintenance coatings - DTM Acrylic semi-gloss ultrabase M29 4B	(2) 1-gal	Center	Propylene Glycol (5%) Ethylene Glycol (5%) Diethylene Glycol Monomethyl Ether (5%) Ethylene Glycol Mono-2-Ethylhexyl Ether (5%) Dibutyl Phthalate (5%) Inorganic constituents	http://www.benjaminmoore.com/msds/1033/mM29.pdf
10	Basement	Benjamin Moore Impervex latex high gloss metal and wood enamel	1-gal	Center	Ethylene Glycol (4.6%) Inorganic constituents	http://www.benjaminmoore.com/msds/1033/m309.pdf
10	Basement	Benjamin Moore Low Luster metal and wood enamel Iron Clad latex	1-gal	Center	Ethyl Benzene Stoddard Solvent Zinc Phosphate Aluminum Phosphate Zinc Oxide Titanium Dioxide Talc Methyl Ethyl Ketoxime Iron Oxide C.I. Pigment Black 7 **[alternatively]** Ethylene Glycol Diethylene Glycol Monomethyl Ether Titanium Dioxide Hydrous Alum Silicates Ethylene Glycol Mono-2-Ethylhexyl Ether Dibutyl Phthalate Iron Oxide C.I. Pigment Black 7	http://www.benjaminmoore.com/msds/1033/m363.pdf http://www.benjaminmoore.com/msds/1033/m163.pdf

Table 3

Product Inventory

Vapor Intrusion Site Visit, 115 River Road Building

Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
10	Basement	Benjamin Moore Impervo Alkyd high gloss metal and wood enamel	1-gal	Center	Xylene (1.5%) Ethyl benzene (0.2%) Stoddard Solvent (40.2%) Methyl Ethyl Ketoxime (0.3) Inorganic constituents	http://www.benjaminmoore.com/msds/1033/m133.pdf
10	Basement	Industrial Maintenance coatings safety zone marking latex	(2) 1-gal	Center	Butyl Carbitol (5%) Ethylene Glycol (5%) Inorganic constituents	http://www.benjaminmoore.com/msds/1033/mM58.pdf
10	Basement	Coastal - Coastal R&O Hydraulic Oil is blended from highly refined naphthenic base oils and an additive package that offers protection from rust, corrosion, and foaming. Part No 46009	5-gal ~2/3 full	Center	Distillates, Petroleum, Heavy Naphthenic [CAS 64741-53-3] Light Naphthenic Vacuum Distillates (petroleum) [CAS 64741-52-2]	http://www.warrenoil.com/msds/gbro.pdf
10	Basement	Super Stone Concrete Sealer	5-gal	Center	"Contains toluene"	http://www.superstone.com/sealer.cfm
10	Basement	Hydroment black top #90210	6-gal	Center	ETHYLENE GLYCOL (0.5-1.5%)	http://www.bostikfindley-us.com/hsedoc/docs/archives/msds/default/02573401.pdf
8	3	Cigar Smoke Smell		Entire Floor		
8	3	EZ Brite No Rinse Industrial Cleaner	1gal	Utility Closet		
8	3	Prime Source Econo Pine	1gal	Utility Closet		
8	3	Clorox Bleach	3 gal	Utility Closet		
8	2	Skyline rim hangers (toilet deodorizers?)	1-doz	utility room		
8	2	Chlorox Bleach	1-gal	utility room		
8	1	latex paint	3 cans	under stairwell, 1st floor		

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
8	Basement	Deck-o-Seal Base	1-gal	Main office	Dipropylene Glycol Dibenzoate (5-10%) Dimethylaminophenol (1-5%) Diethylene Glycol Dibenzoate (5-10%) Titanium Dioxide 1-5%) Limestone (15-20%)	http://www.deckoseal.com/msds.htm
8	Basement	Deck-o-Seal Setting Agent	1/2-gal	Main office	Dipropylene Glycol Dibenzoate (10-15%) Diethylene Glycol Dibenzoate (10-15%) Titanium Dioxide (5-10%) Limestone (45-50%) BisphenolA/Epichlorohydrin Resin (5-10%) Eimethylbenzyl Hydroperoxide (5-10%)	http://www.deckoseal.com/msds.htm
8	Basement	SC Johnson Wax Spray Maintainer (Trailblazer) 03884	1-gal	Main office	Isoparaffinic Hydrocarbons (Naphtha Petroleum) Diethylene Glycol Ethyl Ether Nonylphenoxypoly-(Ethyleneoxy) Ethanol Triethanolamine *95-1*	http://kauai.hawaii.edu/msds/files/bwv/bwvpn.html
8	Basement	Pyraseal Furnace and Retort Cement	(1) 6 lb	Main office		
8	Basement	Dyna Blue Heavy Duty Cable Lubricant	1-gal	Main office		
8	Basement	Moorecraft Super Hide Latex Flat Ultra Base	1 gal	Main office		
8	Basement	Concord Special Mirror Mastic Stock no. 336-8126	1-gal	Main office		
8	Basement	Earl's 63ol Emulsion Bowl Cleaner	1-quart	Main office		

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Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
8	Basement	Trim-Tex 847 Spray Adhesive	(1) 16.5 oz	Main office		
8	Basement	R-M Metal Treatment-801 Metal Conditioner	1-quart	Main office		
8	Basement	Oatey Purple Primer Cleaner	(1) 32 oz	Main office	Acetone (60-100%) Methyl Ethyl Ketone (0-20%) Tetrahydrofuran (0-20%) Cyclohexanone (3-10%)	http://www.elchem.com/msds/UW730E5.pdf
8	Basement	Oatey Medium, Clear PVC Cement	(1) 32 oz	Main office	Methyl Ethyl Ketone (10-50%) Tetrahydrofuran (25-50%) PVC Resin (12-20%) Acetone (0-20%) Amorphous fumed silica (1-5%)	http://www.oatey.com/usenglish_msds/CEM030E5.pdf
8	Basement	3M Sc.tch Kote 413/215 PC Patch Compound Part A	(2) 254g	Main office		
8	Basement	3M Sc.tch Kote 413/215 PC Patch Compound Part B	(1) 335g	Main office		
8	Basement	Trimtex 847 Spray Adhesive	(1) 16.5 oz	Security/ File Room		
8	Basement	Relkem "99" all purpose industrial super cleaner	(1) 5gal	Entrance	2-Aminoethanol	MSDS available from Diamond Chemical Company. Telephone (201) 935-4300
8	Basement	SuperStore, Inc. Release Powder (Gray)	(1) 5gal	Entrance		
8	Basement	Dryvit Prime Adhesive	(1) 5gal	Entrance	Encapsulated Sand Water Acrylic Latex Polymer/Binder Crystaline Silica	http://www.dryvit.com/fileshare/doc/us/msds/msds007.pdf

Table 3

Product Inventory

Vapor Intrusion Site Visit, 115 River Road Building

Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
8	Basement	Concord Special Mirror Mastic Stock no. 336-8126	1gal	Entrance	Ethanol/SD Alcohol 40 Toluene Hexane Quartz Solvent napthta, petroleum, light aliphatic	http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?tbl=brands&id=15005012
8	Basement	bag unscented cat litter	(1) 10lb	Entrance		
8	Basement	Sarogram TSP-Trisodium Phosphate	(1) 16lb	Entrance		
8	Basement	SC Johnson Trailblazer Spray Maintainer	2gal	workbench area	Isoparaffinic Hydrocarbons (Naphtha Petroleum) Diethylene Glycol Ethyl Ether Nonylphenoxypoly-(Ethyleneoxy) Ethanol Triethanolamine *95-1*	http://kauai.hawaii.edu/msds/files/bwv/bwvpn.html
8	Basement	True Value Acetone	32 floz	shelf in central storage area	Acetone	
8	Basement	Static Guard	5.5oz	shelf in central storage area	SD Alcohol 40 Ditallowdimonium Chloride Isopropyl Alcohol Ammonium Acetate Isobutane Propane Chloromethane	http://www2.itap.purdue.edu/msds/docs/1559.pdf
8	Basement	TileLab Onestep Cleaner & Resealer	1gal	shelf in central storage area	None	http://www.jamoinc.com/documents/msds/TileLabOneStep.pdf
8	Basement	Spic&Span Institutional Floor Cleaner	1gal	shelf in central storage area	Sodium carbonate sodium sulfate sodium silicates Linear alkyk sulfonate	http://www.spicnspan.com/msds.htm

Table 3
Product Inventory
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
8	Basement	409 Degreaser/Disinfectant	2gal	shelf in central storage area	Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chlorides [CAS 68424-85-1] (0.3%) 2-Butoxyethanol [CAS 111-76-2] (3-7%)	http://www.thecloroxcompany.com/products/msds/commercialsolutions/commercialsolutionsformula409cleanerdegreaserdisinfectant3-05.pdf
8	Basement	pb Hardwood Floor Polish	32oz	shelf in central storage area		
8	Basement	Capture Carpet and Rug Cleaner	16oz	shelf in central storage area		
8	Basement	Old English Furniture Polish	12.5oz	shelf in central storage area	Mineral oil (90-100%)	http://www.biosci.ohio-state.edu/safety/MSDS/OLD%20ENGLISH%20FURNITURE%20POLISH.html
8	Basement	alS Hi-Shine Woodcleaner & Scratch remover	14.5oz	shelf in central storage area		
8	Basement	Sherwin Williams xylene	1gal	shelf in central storage area	Xylene	
8	Basement	Krylon Metallics spray paint	12oz	shelf in central storage area		
8	Basement	Krylon Semi-flat Interior-Exterior Spray Paint	12oz	shelf in central storage area		
8	Basement	Zinsser BIN Primer Sealer Stain Killer	13oz	shelf in central storage area		
8	Basement	Rust-Oleum Marking Paint	15oz	shelf in central storage area		
8	Basement	GardenTech Sevin Concentrate Bug Killer	32oz	shelf in central storage area	Carbaryl [CAS 63-25-2] Ethanol Propylene glycol	http://www.hardwarestore.com/media/msds/274191.pdf
8	Basement	Rustoleum gloss spray paint	12oz	shelf in central storage area		

Table 3

Product Inventory

Vapor Intrusion Site Visit, 115 River Road Building

Quanta Resources Site, Edgewater, NJ

Building	Floor within the Building	Product	Quantity	Comments - See Figures to assist identifying specific locations	Constituent Ingredients	Link to MSDS
8	Basement	Valley High Acid Bowl Cleaner	32oz	shelf in central storage area	Phosphoric acid (32%) Hydrochloric acid (3%) Proprietary organic acid (5%) Proprietary nonionic surfactant (5%)	http://msds.ogden.disa.mil/msds/owa/web_msds.display?imsdsnr=195958
8	Basement	Zinsser Bulls Eye Shellac Finish & Sealer	1quart	shelf in central storage area	Ethyl alcohol Isopropyl alcohol Methyl Isobutyl Ketone	http://www.zinsser.com/products_pdf.asp?ProductID=31
8	Basement	Professional Extra Strength clay based wall covering adhesive	1quart	shelf in central storage area	Sodium Nitrate	http://www.romanadhesives.com/pdfs/msds732.pdf
8	Basement	Relkem "99"	5 gal	shelf in central storage area	2-Aminoethanol	MSDS available from Diamond Chemical Company. Telephone (201) 935-4300

Table 4
Building 7 Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Pressure differences measured relative to outdoors (through closed exterior window). One set of measurements was made with the fans on. Measurements are reported from east to west.

Conditions in Room	**Pressure (Pa)**		**Comments**
	Mininum	**Maximum**	
Infant room, east end of building	-2	-0.5	
Toddler room	-3	4	
Lower pre-school	-3.5	-2	
Upper pre-school	-0.2	2	
Upper pre-school (upstairs)	-4	-2.5	
Upper pre-school (upstairs) - further west	-4	-3	
Utility area	-2.5	-1	
Passageway to outdoors (south door)	-4	-3	

Condition: Neutral to Negatively Pressurized (see Table 1 for description of pressurization conditions)

Table 5
Building 8 Basement Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Conditions in Room	Pressure Relative to Outdoors (Pa)		Comments
	Mininum	Maximum	
Northwest corner (basement entrance)	0.3	0.3	
Southwest corner	-1.5	0	
Southwest corner, storeroom outside of entrance to office space	-1.5	-0.5	
Office Space	-2	0.5	
File room, south of office space	-2	-1	
Central storage area, outside of entrance to office space	-0.5	1.5	
Central storage area, 10 feet east of office space	-2	-0.5	
Central storage area, south end	-2	-1.5	
In front of east end entrance (door open)	0	0	
20 feet south of east end entrance	-0.3	-0.2	
Northeast corner	-0.6	-0.2	
Southeast corner	-0.5	0.5	

Condition: Neutral to Negatively Pressurized (see Table 1 for description of pressurization conditions)
Note: measurements made from west to east

Table 6
Building 8 2nd Floor Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

2nd Floor Atrium: pressure differences measured relative to 1st floor (through penetration in hallway floor) and relative to outdoors (through closed exterior window).

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
South end of the atrium (outside the Hirsch firm) - indoor pressure measured relative to 1st floor	-6	-2.7	Reference pressure tap of micromanometer inserted through the slab penetration in utility room
East side of atrium, in front of D3 office - indoor pressure measured relative to 1st floor	-2.6	-1.8	
Central-west side of atrium (around the corner from the elevator) - indoor pressure measured relative to 1st floor	-2.4	-2.1	
West side of atrium, in front of True 9 office - indoor pressure measured relative to 1st floor	-3	-2.3	
South end of the atrium (outside the Hirsch firm) - indoor pressure measured relative to outdoors	-1.7	-1	Reference pressure tap of micromanometer inserted through closed exterior window
East side of atrium, in front of D3 office - indoor pressure measured relative to outdoors	-5.2	-3.5	
Central-west side of atrium (around the corner from the elevator) - indoor pressure measured relative to outdoors	-5.1	-3.2	
West side of atrium, in front of True 9 office - indoor pressure measured relative to outdoors	-4.3	-2.1	

Condition: Neutral to Negatively Pressurized (see Table 1 for description of pressurization conditions)

Table 7
Building 8 3rd Floor Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

3rd Floor Atrium: pressure differences measured relative to outdoors (through closed exterior window). Note: utility room was locked and not accessible. Pressure measurements relative to 2nd floor are not available.

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
South end of atrium (in front of elevator) - indoor pressure relative to outdoors	-5.8	-4.1	
Central portion of the atrium - indoor pressure relative to outdoors	-3.4	-0.8	
Northwest end of atrium (in front of Omni Store office) - indoor pressure relative to outdoors	0	1.8	

3rd Floor Office Space, west end of Building 8: pressure differences measured under following conditions:
1) Fan on - relative to atrium
2) Fan on - relative to outdoors
3) Fan off - relative to atrium
4) Fan off - relative to outdoors

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
Fan on - relative to atrium			
Office entry way	0.5	1.5	
Hallway transects, east to west			
0 feet	0.6	1.3	
10 feet	0.6	1.7	
20 feet	1	1.8	
30 feet	-0.1	2.1	
Empty office	1.7	3	
Fan off - relative to atrium			
Office entry way	-1	0.5	
Hallway transects, east to west			

0 feet	-1.4	0	
10 feet	0	0.4	
20 feet	-0.6	0	
30 feet	-0.4	0.4	
Empty office	0	0.3	
Fan on - relative to outdoors			
Office entry way	-1	1	
Hallway transects, east to west			
0 feet	0	1	
10 feet	-8	-2	
20 feet	-2	8	
30 feet	-8	-4.2	
Empty office	-5.7	2.6	
Fan off - relative to outdoors			
Office entry way	-1.5	1.4	
Hallway transects, east to west			
0 feet	-16	-8.5	
10 feet	-7.2	-4.1	
20 feet	-17	-9	
30 feet	-14	-10	
Empty office	1.7	3.4	

Condition: Neutral to Negatively Pressurized (see Table 1 for description of pressurization conditions)

Table 8
Building 10 Indoor Pressure Measurements in Basement
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Location of Measurements	Pressure Relative to Outdoors (Pa)		Comments
	Mininum	Maximum	
At the exterior doorway to Building 10 basement	1	2	Outside door open
At inner doorway to main basement area (10 feet from exterior doorway)	0.2	1.8	Interior door to main basement area closed
Approximate center of basement, 10 feet north of natural gas-fired furnace along south wall of basement	-6	1	Basement depressurizes about -5 Pa when the furnace is in operation.
Northeast corner of basement near door to pipe chase room	-1	-1	
South-central portion of basement	-1.5	-0.3	
Southeast corner of basement	-2	-1	

Condition: Neutral to negatively pressurized (possibly significantly depressurized when natural gas furnace is operating) (see Table 1 for description of pressurization conditions)

Table 9
Building 10 2nd Floor Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

2nd Floor Utility Closet: pressure differences measured relative to 1st floor (through penetrations in utility room) and relative to outdoors (through closed exterior window).

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
Indoor pressure measured relative to 1st floor - Door open	-1	-0.3	Reference pressure tap of micromanometer inserted through the slab penetration
Indoor pressure measured relative to 2nd floor - Door closed	-2	-1	
Indoor pressure measured relative to outdoors - Door closed	-5	-4	Reference pressure tap of micromanometer inserted through closed exterior window
Indoor pressure measured relative to outdoors - Door open	-7	-4	

2nd Floor Atrium: pressure differences measured relative to 1st floor (through penetrations in utility room) and relative to outdoors (through closed exterior window).

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
South end of the atrium - indoor pressure measured relative to 1st floor	-1.8	-1.2	Measurements made approximately 1-2 hours after pressure measurements on the 3rd floor. Reference pressure tap of micromanometer inserted through the slab penetration in utility room
East side of atrium, in front of Suite 828 - indoor pressure measured relative to 1st floor	-1.8	-0.8	
West end of atrium, in front of Teamsters office - indoor pressure measured relative to 1st floor	-3.2	-2.1	
Center of atrium (in front of elevator) - indoor pressure measured relative to 1st floor	-2.4	-2.2	

South end of the atrium - indoor pressure measured relative to outdoors	-3.5	-2.2	Reference pressure tap of micromanometer inserted through closed exterior window
East side of atrium, in front of Suite 828 - indoor pressure measured relative to outdoors	-3	-1.2	
West end of atrium, in front of Teamsters office - indoor pressure measured relative to outdoors	-3.9	-2.1	
Center of atrium (in front of elevator) - indoor pressure measured relative to outdoors	-9.7	-5.4	Anomalous measurement - not considered representative of pressure conditions in the building.

Condition: slightly Negatively Pressurized (basis for this assessment is that all of the measurements were negative relative to outdoors or 1st floor) See Table 1 for description of pressurization conditions.

Table 10
Building 10 3rd Floor Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

3rd Floor Utility Closet: electrical conduits penetrated the concrete floor of the utility room. Penetrations through the slab around the conduits were not sealed. Air movement could occur through these penetrations

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
Indoor pressure measured relative to 2nd floor - Door open	-1.1	-0.6	Reference pressure tap of micromanometer inserted through the slab penetration in utility room
Indoor pressure measured relative to 2nd floor - Door closed	-1.6	-1.4	
Indoor pressure measured relative to outdoors - Door closed	1.2	1.5	Reference pressure tap of micromanometer inserted through closed exterior window

3rd Floor Men's Restroom: pressure differences relative to hallway and outdoors measured with restroom fan on and off

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
Indoor pressure measured relative to hallway, fan off	0	0	Reference pressure tap of micromanometer inserted under closed restroom door into hallway.
Indoor pressure measured relative to hallway, fan on	-0.2	0	
Indoor pressure measured relative to outdoors, fan off	0.7	2.5	Reference pressure tap of micromanometer inserted through closed exterior window
Indoor pressure measured relative to outdoors, fan on	1.3	1.5	

3rd Floor Atrium: pressure differences measured relative to 2nd floor (through penetrations in utility room) and relative to outdoors (through closed exterior window).

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
North side of atrium outside of DM2 office - indoor pressure measured relative to 2nd floor	-0.6	-0.6	
Center of atrium - indoor pressure measured relative to 2nd floor	-1.1	-1.1	
South side of atrium, outside of Vigoda Architects Entrance - indoor pressure measured relative to 2nd floor	-0.7	-0.7	
North side of atrium outside of DM2 office - indoor pressure measured relative to outdoors	1.8	2	
Center of atrium - indoor pressure measured relative to outdoors	1.3	2	
South side of atrium, outside of Vigoda Architects Entrance - indoor pressure measured relative to outdoors	0.2	1	
3rd Floor Office Space (Vigoda Architects): pressure differences measured relative to outdoors and relative to the hallway			
Conditions in Room	**Pressure (Pa)**		**Comments**
	Mininum	**Maximum**	
Note: measurements made from east to west in this office space, approximately 10 feet apart.			
Indoor pressure measured relative to the hallway - air handling system off	0.1		This measurement made in atrium outside of main entrance
	-0.2	0	
	-0.2	0	
	-0.4	0	
Indoor pressure measured relative to outdoors - air handling system off	1.3	1.9	This measurement made in atrium outside of main entrance
	1.5	1.6	
	3	4.4	
	2.4	3.1	

Condition: Neutral to Positively Pressurized (see Table 1 for description of pressurization conditions)

Table 11
Building 12 Indoor Pressure Measurements
Vapor Intrusion Site Visit, 115 River Road Building
Quanta Resources Site, Edgewater, New Jersey

Suite1205: pressure differences measured relative to outdoors (through closed exterior window). Measurements were made from west to east of the suite. One set of measurements was made with the fans off. A second set was made with the fans on.

Conditions in Room	Pressure (Pa)		Comments
	Mininum	Maximum	
Fans off			
West end of the suite	-0.2	1.4	
15 feet from west end	-0.2	1.2	
30 feet from west end	-0.3	6	
45 feet from west end	-0.9	0	
Office on northwest corner of suite	0.2	0.9	
File room, north side, center of suite	0	1.3	
Storage room, northeast corner of suite	2.4	7.1	
Fans on			
West end of the suite	0.7	1.5	
15 feet from west end	0.9	1.8	
30 feet from west end	1.6	2.9	
45 feet from west end	3	5.8	
Office on northwest corner of suite	1.7	2.4	
File room, north side, center of suite	0.2	1.4	
Storage room, northeast corner of suite	3.5	4.2	

Condition: Neutral to Negatively Pressurized (see Table 1 for description of pressurization conditions)

Figures

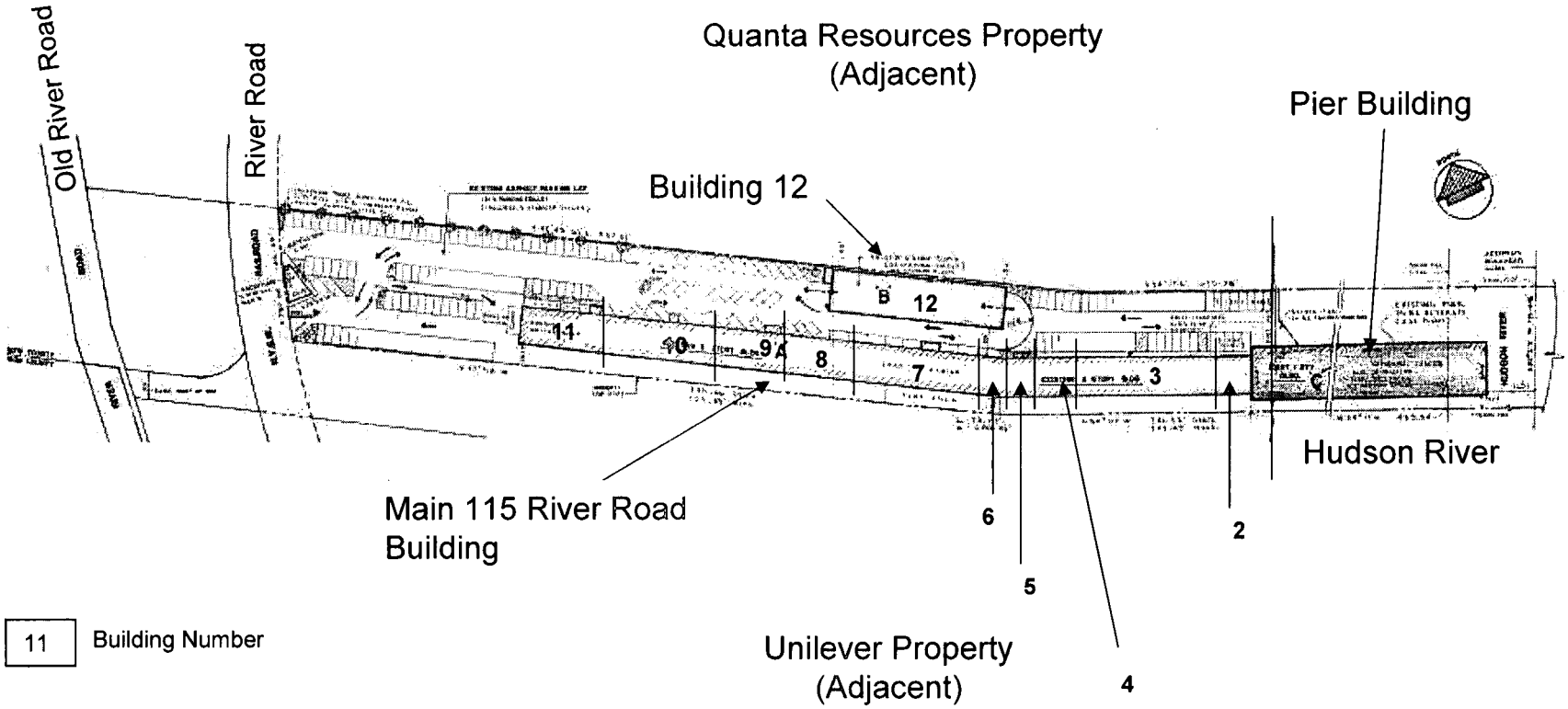
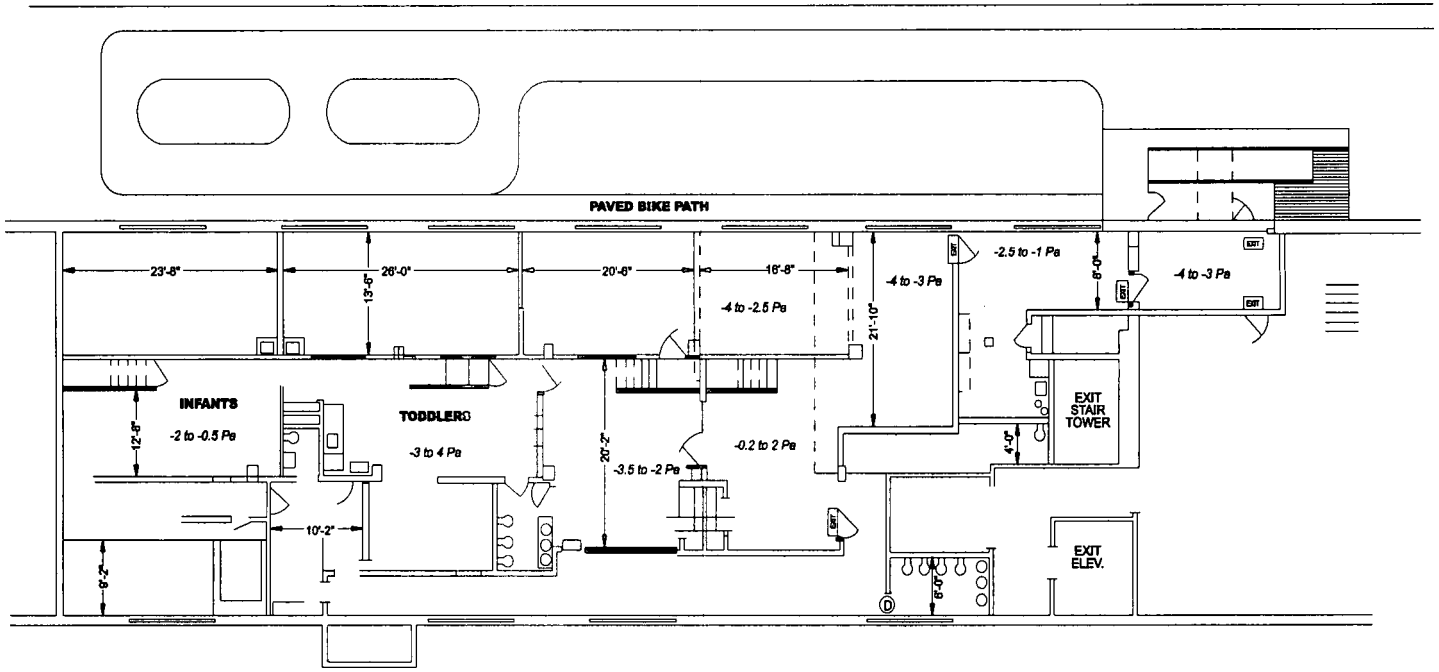
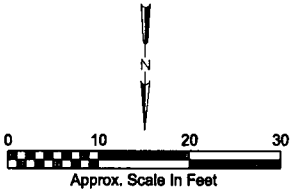


Figure 1
Plan View—115 River Road Buildings
Quanta Resources Site, Edgewater, NJ





Note: Pressure measurements were made with the air conditioning fans operating.

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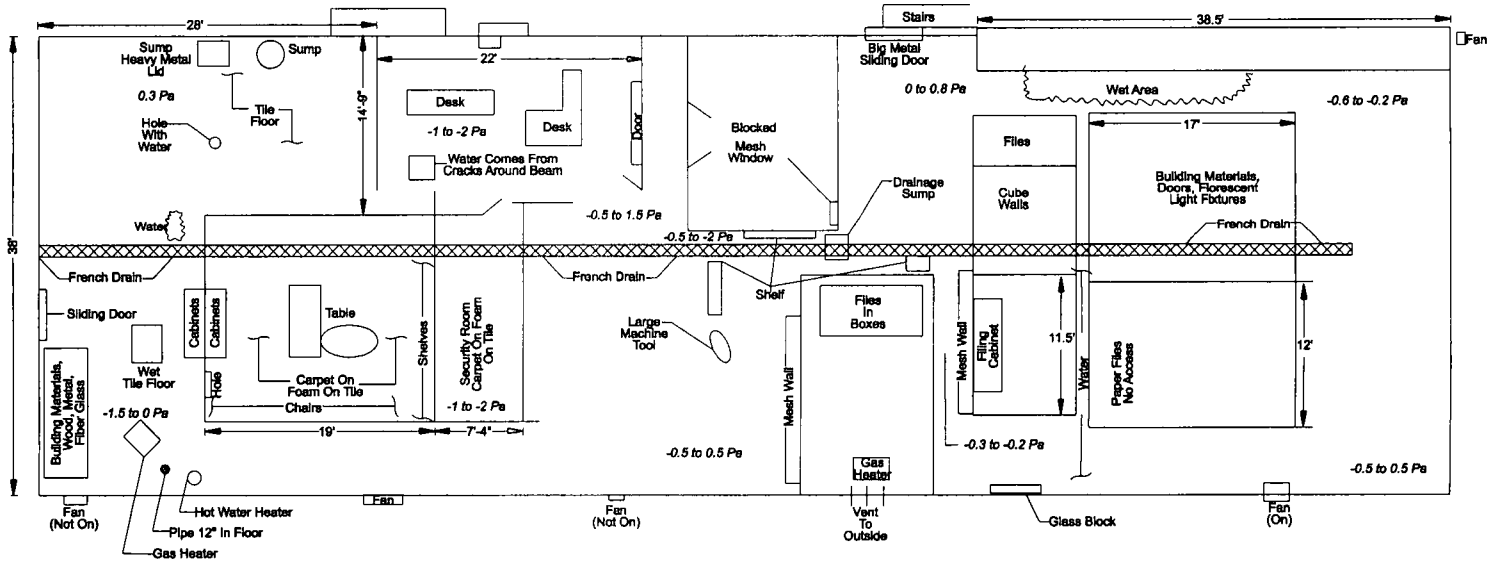
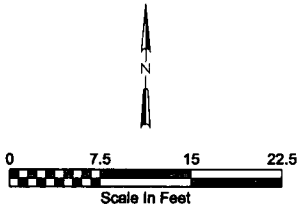
Figure 2
Floor Plan and Pressure Map
Building 7

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 7.dgn





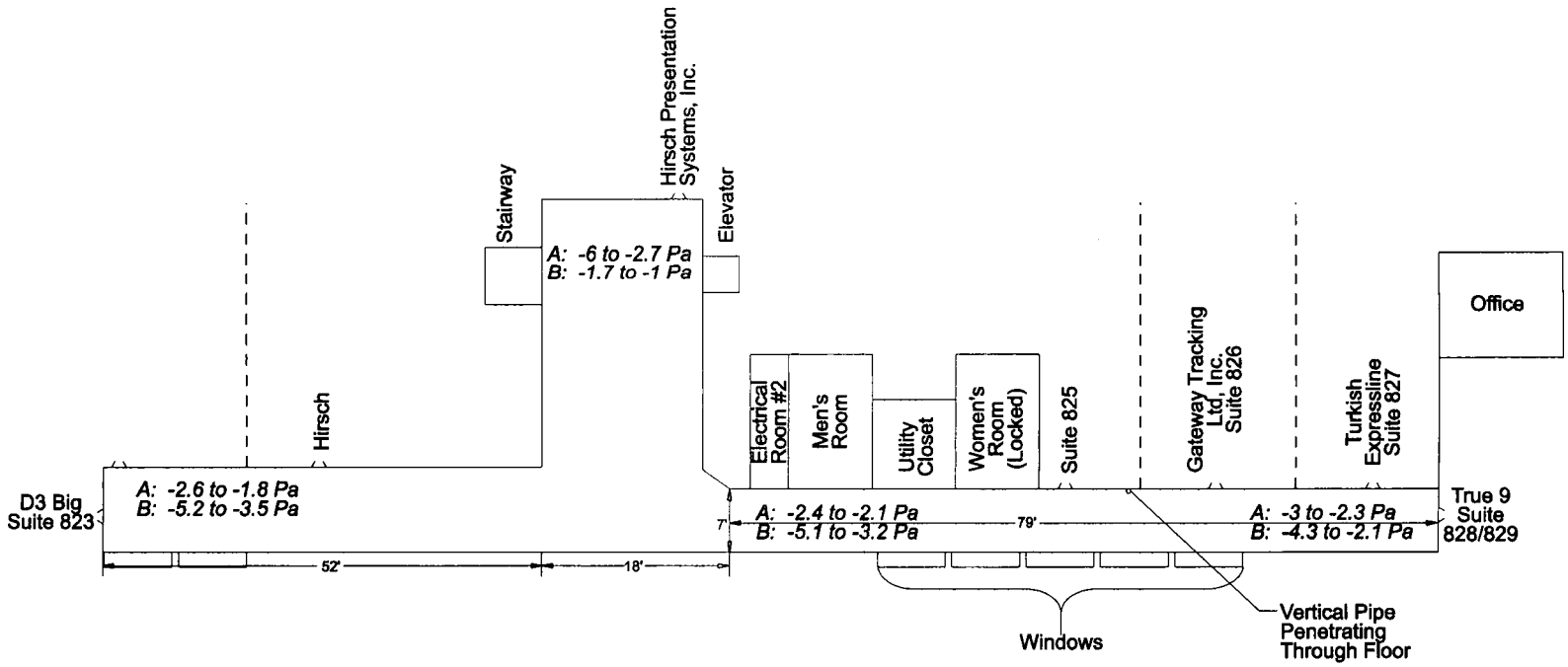
CH2MHILL

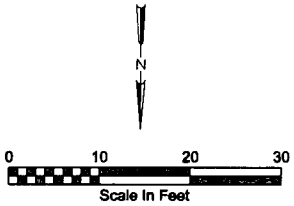
Figure 3

Floor Plan and Pressure Map
Building 8, Basement

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 8-basement.dgn





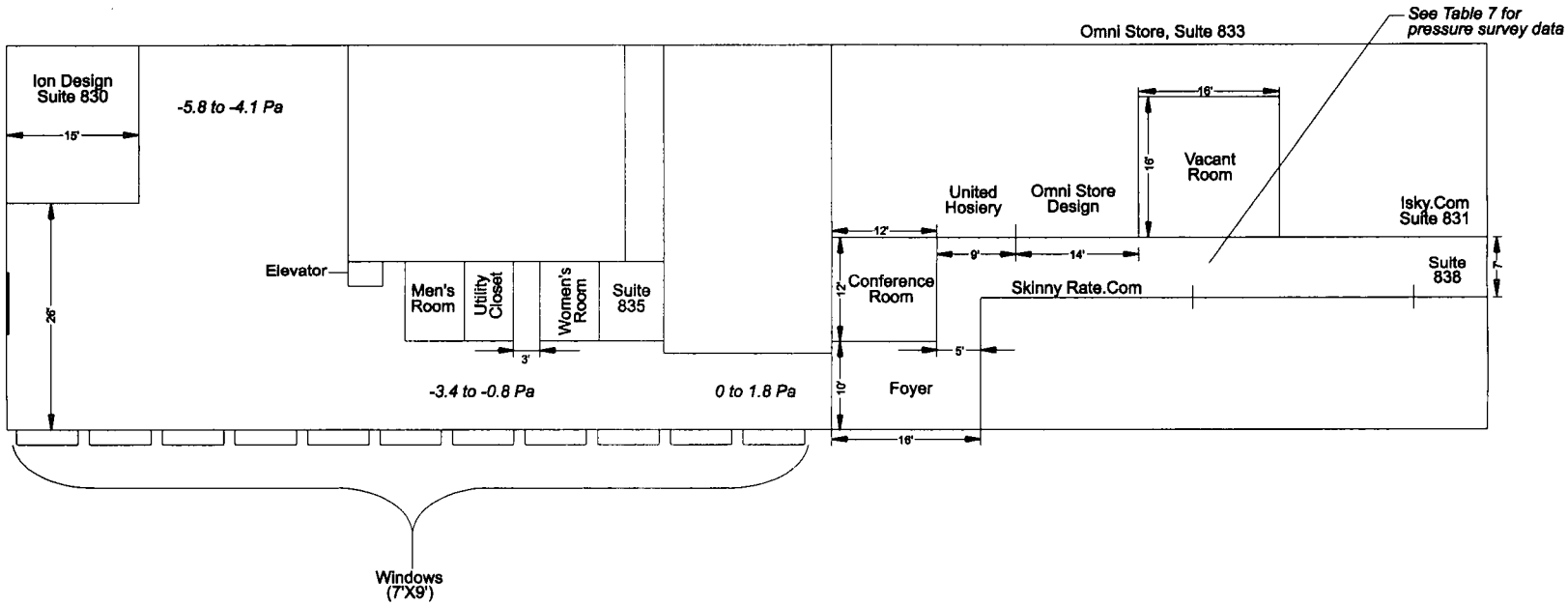
Notes:
A - Pressure measurements relative to 1st floor
B - Pressure measurements relative to downstairs

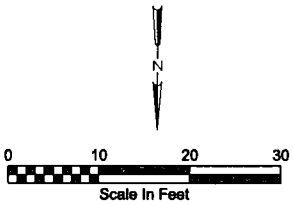
CH2MHILL

Figure 4
Floor Plan and Pressure Map
Building 8, 2nd Floor

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 8-2nd floor.dgn





Notes:
Pressure measurements with fan off. Measurements relative to outdoors.

CH2MHILL

Figure 5
Floor Plan and Pressure Map
Building 8, 3rd Floor
Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007	File Name bldg 8-3rd floor.dgn

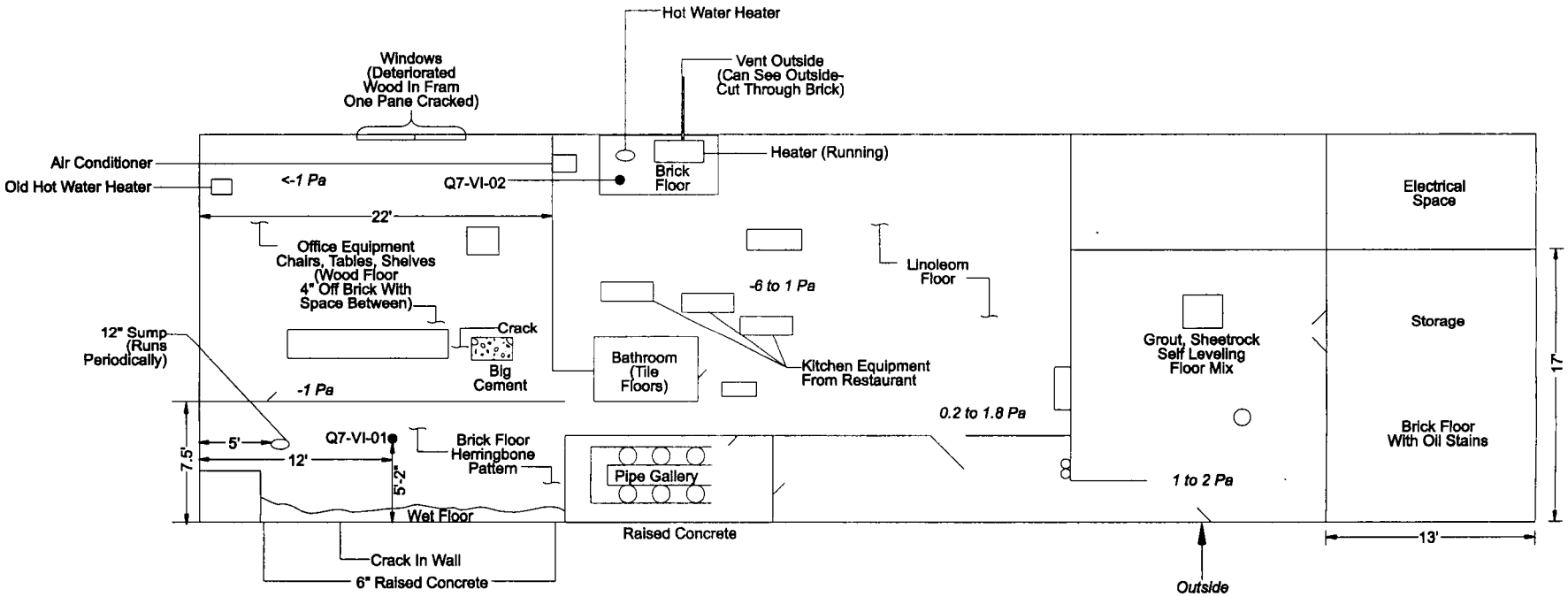


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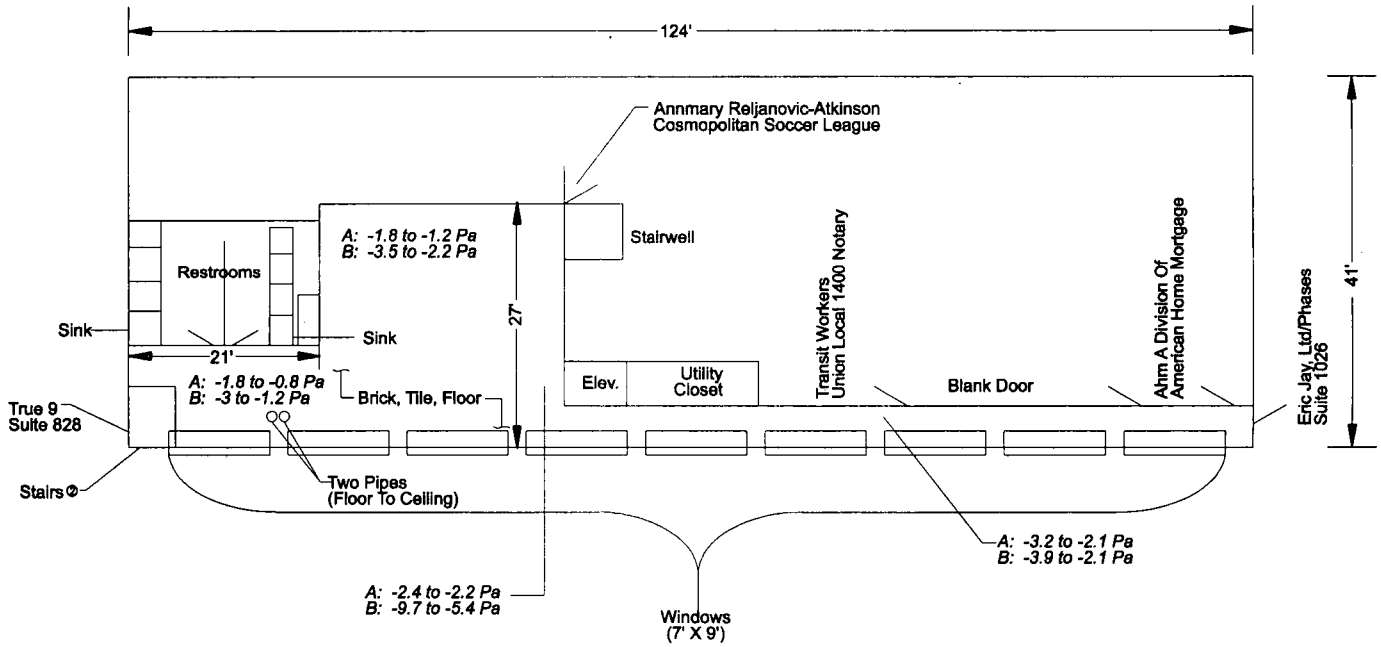
Figure 6
Floor Plan and Pressure Map
Building 10, Basement

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 10-basement.dgn



N

0 10 20 30
Scale In Feet

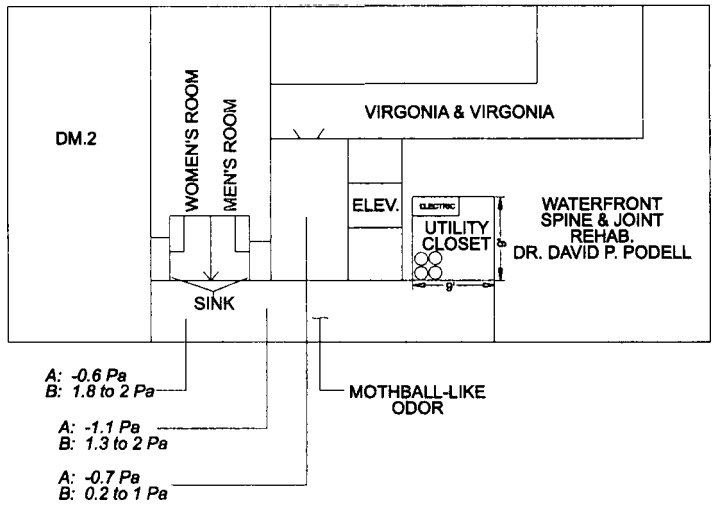
Notes:
A - Pressure measurements relative to 1st floor
B - Pressure measurements relative to outdoors

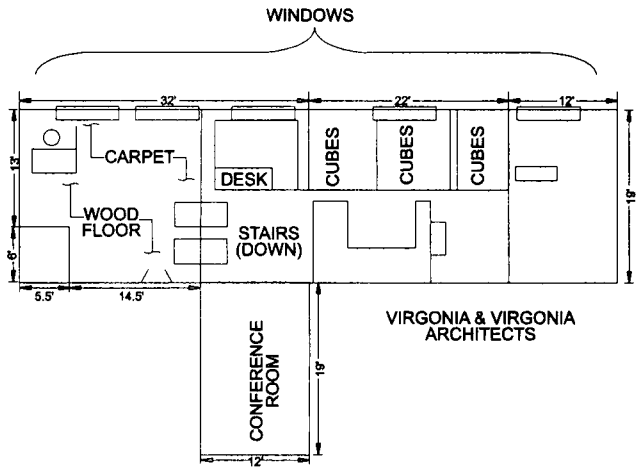
CH2MHILL

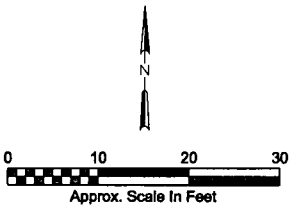
Figure 7
Floor Plan and Pressure Map
Building 10, 2nd Floor

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 10-2nd floor.dgn







Notes:

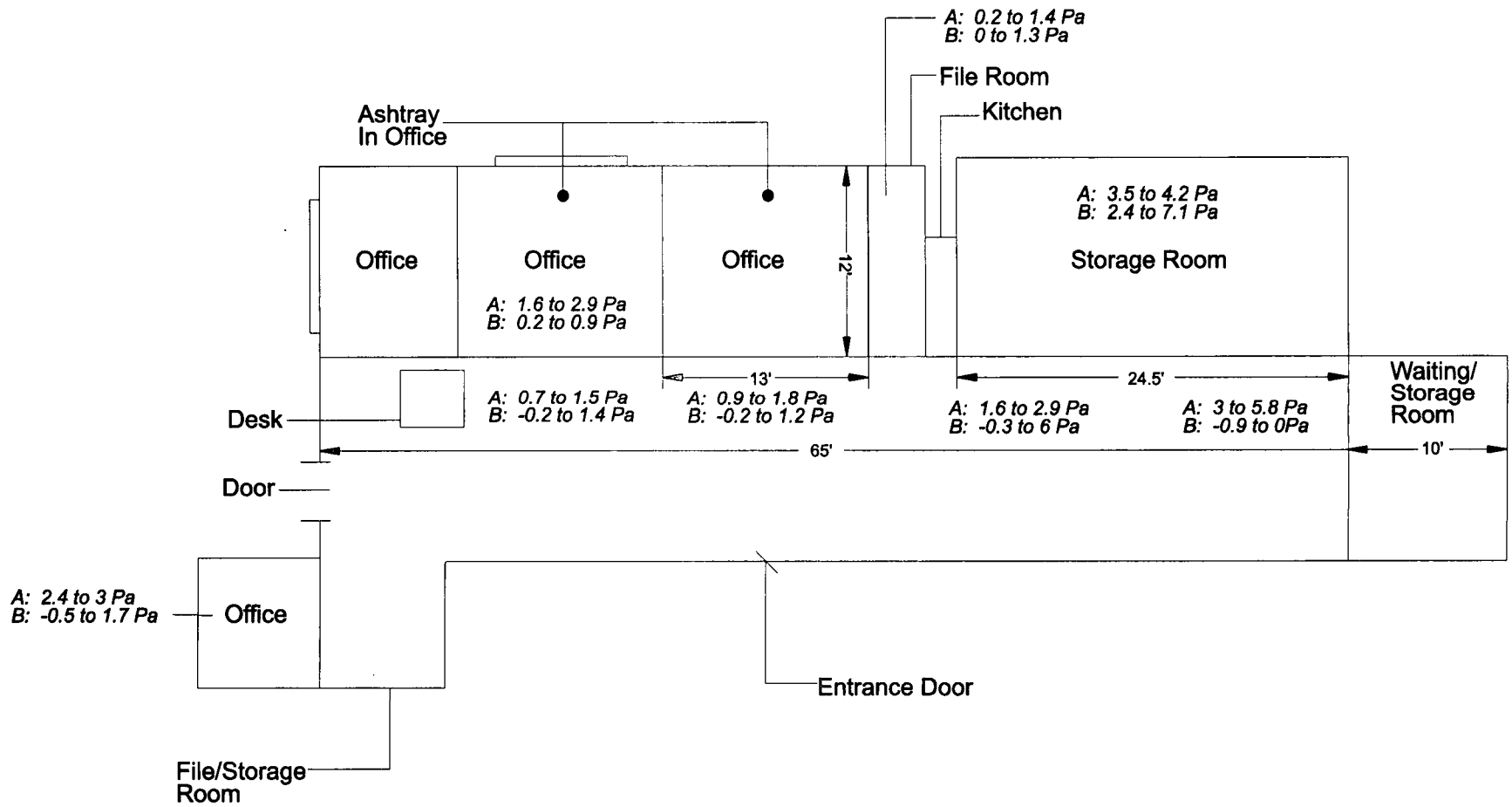
A - Pressure measurements relative to 2nd Floor
B - Pressure measurements relative to outdoors
See Table 10 for additional data.

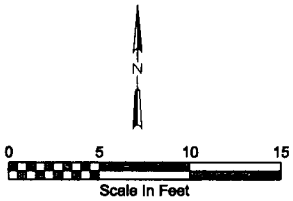
CH2MHILL

Figure 8
Floor Plan and Pressure Map
Building 10, 3rd Floor

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 10-3rd floor.dgn





Notes:
A - Pressure measurements made with air conditioning fan on.
B - Pressure measurements made with air conditioning fan off.

CH2MHILL

Figure 9
Floor Plan and Pressure Map
Building 12, Suite 1205

Quanta Resources Site
115 River Road Building
Edgewater, New Jersey

May 2007 | File Name bldg 12.dgn

Attachment A

Photographic Logs

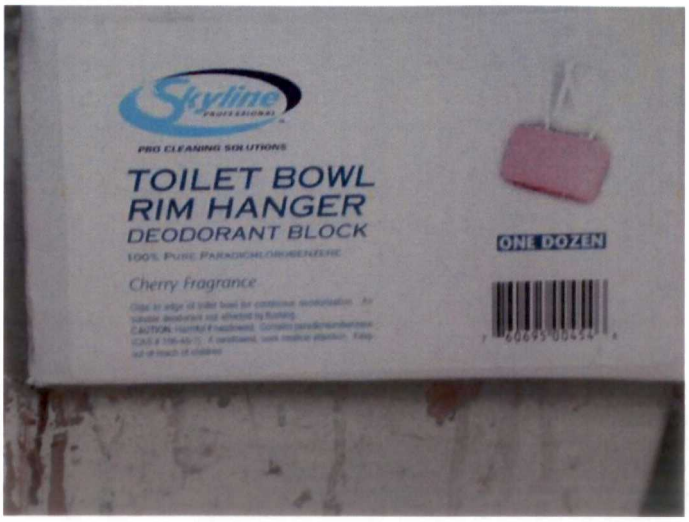
Photographic Log – Building 8, 2nd Floor

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

1. Building 8, 2nd floor, drain pipe. Note penetration through the floor. Air flows in from 2nd floor through intrusion when tested using air current tube.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

2. Building 8, 2nd floor, utility closet. Conduit penetrating through floor. Note penetrations that allow entry of air into 3rd floor. Air flows into 3rd floor from 2nd floor when tested using air current tube.



3. Building 8, 2nd floor, janitorial closet. Detail of urinal deodorizer containing para-dichlorobenzene.

Photographic Log – Building 8 Basement

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

2. 36" diameter sump pump on Northwest side of Building 8 Basement.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

3. Possible sump in Northwest side of Building 8 Basement. Heavy steel lid shown.

4. Example of product storage, West side of Building 8 Basement.

5. Old iron generator on West side of Building 8 Basement.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

9. Shallow drain on West side of Building 8 Basement floor.

10. West side of Building 8 Basement, looking West. Seepage through the floor tiles observed here. Door in the background is entrance to another basement area (locked during the April 6-7 visit; was accessed April 11th).

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

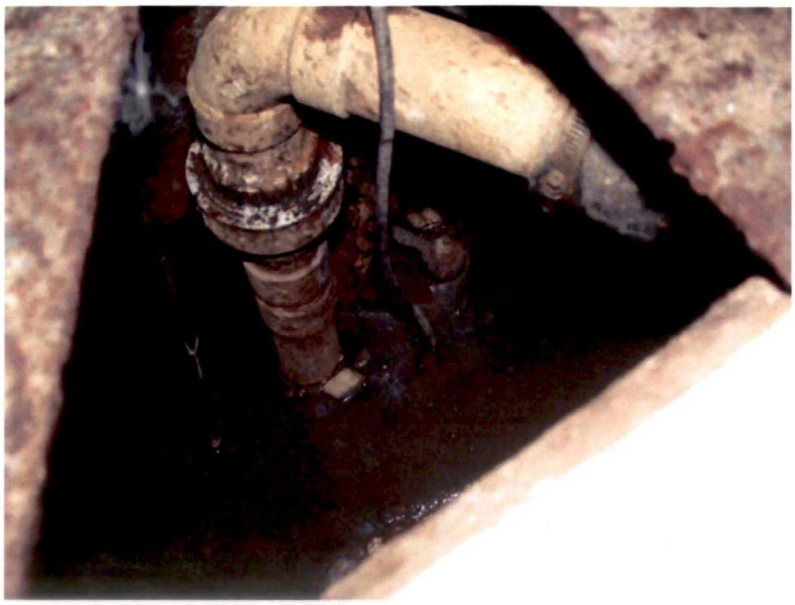
17. Former office area in Building 8 Basement, looking West.

19. Storage area on West side of Building 8 Basement, looking South.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

27. Shallow drain on East side of Building 8 Basement.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

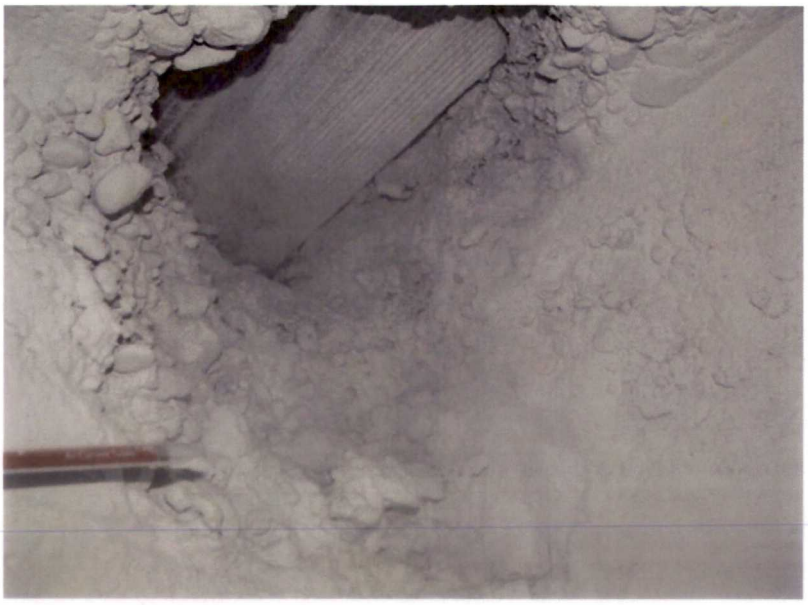


54. Building 8 Basement drainage sump, located in the center of the shallow floor drain. Sump pump and standing water visible in the bottom.

55. Steel plates covering Building 8 Basement sump located in the center of the basement.

Photographic Log – Building 10 Basement

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

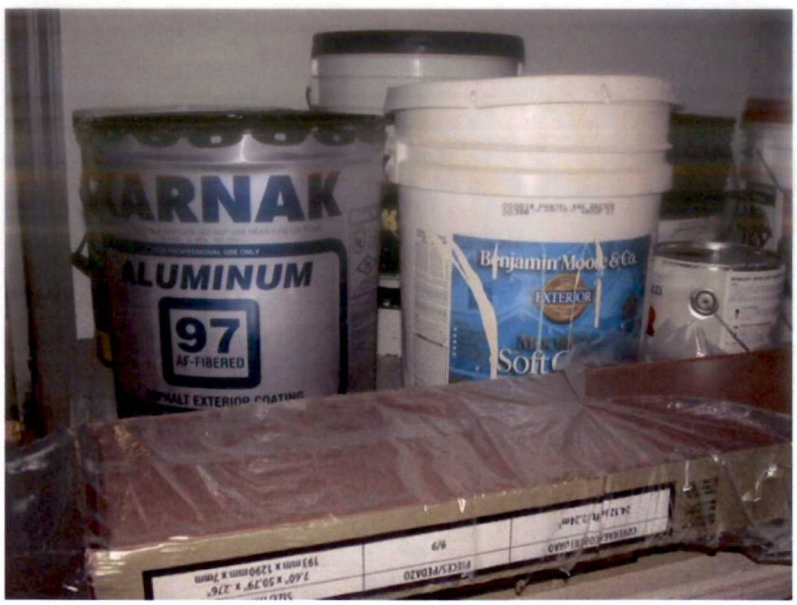


1. Building 10 basement – example of penetration observed in ceiling – could not determine if it penetrated through to the first floor.

2. Building 10 basement – example of penetration observed in ceiling.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

3. Building 10 basement – penetration in eastern wall, southeastern corner of basement. Air flow into basement from this penetration when tested with an air current tube.



4. Building 10 basement. Building supplies stored in basement. Note "Karnak" roofing compound (contains asphalt, identified as possible indoor source for naphthalene emissions).

Photographic Log – Building 10, 3rd Floor

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

1. Building 10, 3rd floor. Utility room. Note vertical conduits in the background. These penetrate the floor. Air flows into the room from 2nd floor through the penetrations, when tested with an air current tube.

2. Building 10, 3rd floor. Detail of penetrations through floor in utility room.

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

3. Building 10, 3rd floor janitorial closet. Note the box of urinal deodorizers that contain para-dichlorobenzene.

Photographic Log – Building 10 Elevator Shaft

Site Location: Quanta Resources Site
Date: 4/6/07 – 4/7/07

1. Building 10 elevator shaft – note concrete-lined.

2. Building 10 elevator shaft – detail of the concrete floor.

Evaluation of Potential Air Exposure Pathways at the Quanta Resources Site, Edgewater, New Jersey

PREPARED FOR: Richard Ho/USEPA Region 2

PREPARED BY: CH2M HILL

Cc: Tim Metcalf/Honeywell
Richard Kampf/ELM on behalf of Edgewater Site Administrative Group
Robert Hayton/NJDEP

DATE: December 21, 2006

This memorandum has been prepared in response to the request from U.S. Environmental Protection Agency (EPA), Region 2 for ambient air monitoring for arsenic at the Quanta Resources Site ("Quanta Site"). In an e-mail dated November 16, 2006 from Richard Ho/EPA Region 2 to Tim Metcalf/Honeywell International, Inc., EPA has raised concerns about potential air exposure pathways from surface soil at the Quanta Site; specifically, potential exposure to arsenic from wind-blown dust from the Site. EPA has requested that Honeywell establish an ambient air monitoring program and install 5 perimeter air samplers. The EPA requested installing 3 samplers at the fence line between the Quanta Resources property and 115 River Road building and 2 samplers in the play area for the day care center at the River Road building. The EPA also requested that sampling be conducted on a monthly basis approximately over the next year.

The purpose for this memorandum is to provide an evaluation of conditions at the Quanta Site using EPA's Superfund guidance (EPA, 1992) for an air pathway analysis. An initial step in EPA's approach is an evaluation of site data to determine if a potential air exposure pathway is present, and to identify the approach and level of detail needed for the air pathway analysis. The results from this air pathway analysis suggests that the air monitoring program, as requested by EPA Region 2 in its November 16, 2006 e-mail would not be necessary based on its guidance. Further steps for evaluating the potential air pathway that are consistent with EPA's approach for an air pathway analysis are proposed in this memorandum.

Background

An air pathway analysis is a systematic approach using a combination of modeling and monitoring methods to assess actual or potential exposure to air contaminants (EPA, 1992). The primary components of an air pathway analysis are:

- Characterization of air emission sources (including estimating emission fluxes if needed).
- Evaluation of the effects of atmospheric processes on the potential exposure pathway (evaluation of dispersion, dilution and transport of contaminants in air).

- Evaluation of receptor exposure potential (i.e., what concentrations in air could be expected at receptor locations of interest for various exposure periods).

As specified by EPA's guidance (EPA, 1992), an air pathway analysis is conducted in a tiered manner, first using a screening assessment and followed if necessary with an in-depth assessment. A screening assessment is typically based on predictive modeling; conservative predictive models can be used to determine if a site does not have a significant emissions potential and that no further air pathway analysis is required. Predictive modeling can also be used for an in-depth air pathway analysis, if appropriate and representative soil characterization data are used with appropriate models. Other in-depth methods, such as fenceline monitoring, can be used if predictive modeling indicates that a more detailed characterization of emissions is warranted.

Evaluation of Site Data

Distribution of Arsenic Concentrations in Surface Soil

The distribution of arsenic concentrations in surface and shallow soils is described in the Preliminary Site Characterization Report (CH2M HILL, 2006). Based on the data presented in that report as well as more recent data collected in October 2006 as part of the Supplemental Remedial Investigation (RI) activities, elevated concentrations of arsenic have been detected in limited areas in soils from 0 to 1 feet in the northwestern corner of the Quanta Site and on Block 93 (Lots 1, 2, and 3). The extent of elevated concentrations in surface soil, estimated using 100 mg/kg and 1,000 mg/kg isoconcentrations, is shown in Figure 1. The isoconcentration contours presented in the attached Figure 1 have been updated to include recent surface soil data collected as part of the Supplemental RI Activities, as well as other historical soil sampling data.[1]

As you know, the Edgewater property, located to the north of the Quanta Resources property, was redeveloped in 2002 at which time the removal of arsenic hot spots, the construction of an impermeable liner and the placement of fill, pavement, and landscaped areas was completed. As part of the liner installation and redevelopment at the Edgewater property portions of the access roadway associated with the Edgewater property that runs east to west were extended onto portions of the Quanta Resources property in order to accommodate the development. At the same time the arsenic liner was extended to the south in these areas. Subsequently, a concrete berm extending beyond the liner in these areas was installed along the boundary of the Quanta Resources property between the Edgewater property access road and River Road where the elevation drop towards the south is as much as 12 feet. As shown in the figure, an area with elevated arsenic concentrations approximately 40 feet by 250 feet (less than 0.25 acres) exists immediately to the south of the Edgewater property, adjacent to the arsenic liner and outside of the area covered by the concrete berm.

[1] The highest concentrations detected in the northwest corner of the Quanta Resources property were from samples collected in the Spring of 2002 by other consultants as part of environmental investigations being performed at the Edgewater property. These data were presented in the Final Soil Remedial Investigation Report (Dan Raviv Associates, Inc., July 29, 2002) for the Former Celotex Industrial Park. While these data are presented on the attached Figure 1, the sampling and analysis methodologies are unknown and quality assurance/quality control information for these data is not available for review. Also, these data have not undergone data validation according to Superfund protocols, as required for the Remedial Investigation for this Site.

An additional area of elevated arsenic concentrations approximately 30 feet by 100 feet is located on Block 93 (Lots 1, 2, and 3). The area of elevated arsenic concentrations on the Block 93 parcel is in a partially vegetated area containing rubble piles and broken bituminous concrete. This area does not appear to be used on a regular basis as redevelopment of this property is pending. Concentrations of arsenic in surface soil throughout the remainder of the Site generally were below 13.2 mg/kg, which is the average concentration in historic fill in New Jersey (Appendix D, NJAC 7:26E, Technical Requirements for Site Remediation, 2005).

Comparison with Screening Levels

A screening level for arsenic in surface soil was calculated based on potential emissions of fugitive dust and inhalation exposure by residents. Based on USEPA's equation for calculating particulate emission factors (PEF) and standard default inhalation exposure factors for residential land use, the arsenic concentration in soil corresponding to a target cancer risk of 1×10^{-6} is 924 mg/kg. The PEF calculation and inhalation exposure factors were drawn from EPA's *Soil Screening Guidance* (1996). The screening level is based on the assumption that 924 mg/kg is the average concentration within 0.5 acre (21,780 ft^2, or square area 147 feet in length on each side). The particulate emission factor was calculated using an "unlimited reservoir" emissions model. This emissions model assumes that the surface material consists of dry finely divided soils. Emissions were calculated using the assumption that very little vegetation (i.e., 1 percent vegetative cover) or non-erodible elements (such as rocks, pebbles or large soil particles) are present on the site surface. These assumptions are highly conservative, and probably significantly overstate the potential for dust emissions from surface soils at the site. The calculations were performed using the Soil Screening Level calculation available from Oak Ridge National Laboratory (http://rais.ornl.gov/calc_start.shtml). The assumptions used in calculating the soil screening level are presented in Attachment 1.

Characterization of Potential Air Pathway

Under current conditions, arsenic concentrations in surface soil over most of the Site resemble average concentrations in historic fill in New Jersey (13.2 mg/kg). Therefore, emissions of particulates into the air, if any, would produce concentrations of arsenic in air that are no different than other urban areas in New Jersey. Higher concentrations of arsenic have been detected in surface soil in limited areas of the site (i.e., an approximate 0.25-acre area in the northwestern corner adjacent to the arsenic liner on the Edgewater property and a 100 ft by 100 ft area on Block 93

Higher concentrations may be present in subsurface soil (i.e. below 1 foot in depth elsewhere at the Site. However, if soils at the site remain undisturbed (i.e., there are no invasive activities such as excavation or grading), emissions to the air would occur only from the surface soils.

A conservative (i.e. health-protective) screening level in soil based on potential emissions of fugitive dust and inhalation exposure by residents is 924 mg/kg. This screening level represents the average concentration in soil within a 0.5-acre area corresponding to a concentration in air that represents an inhalation risk of 1×10^{-6}. This screening level is based on the assumption that surface soil consists of dry, finely-divided (powdery) soils

with very little non-erodible elements (rocks, sticks or vegetation) in the soil.[2] As stated previously, these assumptions are highly conservative, and probably significantly overstate the potential for dust emissions from surface soils at the site. It also assumes that emissions from soil occur continuously, and that an individual might be exposed to air concentrations of arsenic resulting from these emissions 350 days per year for a 30 year period. As described previously, there is a limited area on the Quanta Resources property, approximately 0.25 acre, where concentrations possibly might be higher than this health-protective screening level. The highest arsenic concentration in surface soil is located in limited area on Block 93 (913 mg/kg) and is lower than the health-protective screening level of 924 mg/kg. Therefore, further evaluation is not needed of the potential air pathway in the vicinity of Block 93.

The presence of concentrations higher than the screening level by itself does not warrant performing a fenceline air monitoring program. However, further evaluation of the emissions potential in the limited area with elevated arsenic concentrations in surface soil may be warranted. Recommendations are presented below for the further steps that may be needed in the air pathway analysis.

Conclusions and Recommendations

EPA Region 2 has requested that a 1-year fenceline air monitoring program be initiated for potential emissions of arsenic in wind-blown dust from the Quanta Site. Based on an evaluation of the Site, using methods for air pathway analysis developed by EPA, we do not believe that a fenceline air monitoring program is warranted at this time. While a baseline fenceline air monitoring is not warranted, air monitoring activities would be conducted as part of remedy implementation, to assure protection of human health during construction or remediation activities that might involve disturbance of soils at the Quanta Site.

An appropriate next step for further analyzing the potential air pathway would involve more detailed characterization of the surface conditions in soil at the Site. The approach for this more detailed characterization is described in EPA's *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination* (EPA, 1985), and involves the following steps:

- Estimating the aerodynamic size distribution mode (ASDM) of particles in surface soil; this soil parameter is used to develop a more refined estimate of the threshold friction velocity for dust emissions.
- Estimating the fraction of non-erodible elements in surface soil; this parameter is used to refine the estimated threshold friction velocity.
- Estimating the fraction of vegetation covering the surface.

The data used to estimate these parameters could be collected during a site survey. These data can be combined with a more refined air dispersion model (such as Industrial Source Complex Short-Term [ISCST]) to estimate calculate site-specific arsenic concentrations in air.

[2] In addition, portions of this area are covered with water at various times of the year, which further reduces the potential for dust emissions.

In addition to this site survey, six surface soil samples (from 0 - 6" in depth, or shallower, if feasible) could be collected and analyzed for arsenic, to better define the surface area with elevated concentrations, with respect to potential air pathways from suspension of wind-blown dust.

Based on the available information, collection of these kinds of data to characterize the dust emissions potential is consistent with EPA's approach for air pathway analysis. Ambient air monitoring is not warranted at this time to evaluate potential arsenic emissions to the air from surface soils at the Quanta Site.

References

CH2M HILL. 2006. Preliminary Site Characterization Report Operable Unit 1. Quanta Resources Site, Edgewater, New Jersey.

U.S. Environmental Protection Agency (USEPA). 1985. *Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination*. EPA/600/8-85/002. Office of Health and Environmental Assessment, Washington, DC.

U.S. Environmental Protection Agency (USEPA). 1992. *Overview of Air Pathway Assessments for Superfund Sites (Revised)*. EPA-450/1-89-001a. November 1992.

U.S. Environmental Protection Agency. 1996. *Superfund Soil Screening Guidance: User's Guide, Second Edition*. Office of Solid Waste and Emergency Response, Publication 9355.4-35. Washington, DC.

Attachment 1. Calculation of Soil Screening Level for Inhalation of Fugitive Dust (http://rais.ornl.gov/calc_start.shtml)

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Equation Values for Inhalation of Fugitive Dust

Particulate Emission Factor Parameter	Value	Noncarcinogenic Parameter	Value	Carcinogenic Parameter	Value
Surface Area (acres)	0.5	Target Hazard Quotient (unitless)	1	Target Risk (unitless)	1.0E-6
City (climate zone)	Philadelphia (VIII)	Exposure Duration (yr)	30	Exposure Duration (yr)	30
Q/C (g/m^2-s per kg/m^3)	87.36898	Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350
Fraction of vegetative cover (unitless)	0.01			Average Lifetime (yr)	70
Mean annual windspeed (m/s)	4.29				
Equivalent threshold value of windspeed at 7m (m/s)	11.32				
Function dependent on U_m/U_t (unitless)	0.0993				

Soil Screening Levels for Inhalation of Fugitive Dust (mg/kg)

Analyte	Cas Number	Inhalation RfC	Inhalation Unit Risk	Particulate Emission Factor	Noncarcinogenic	Carcinogenic
Arsenic, Inorganic	7440382	/epa/toxicity_fnote.htm	4.3E-03 [a]	1.63E+09		9.24E+02

a Source: Integrated Risk Information System (IRIS)

This site is maintained and operated through a cooperative agreement between the EPA Office of Superfund and Oak Ridge National Laboratory.

For questions or comments please contact Dave Crawford at the Office of Superfund.

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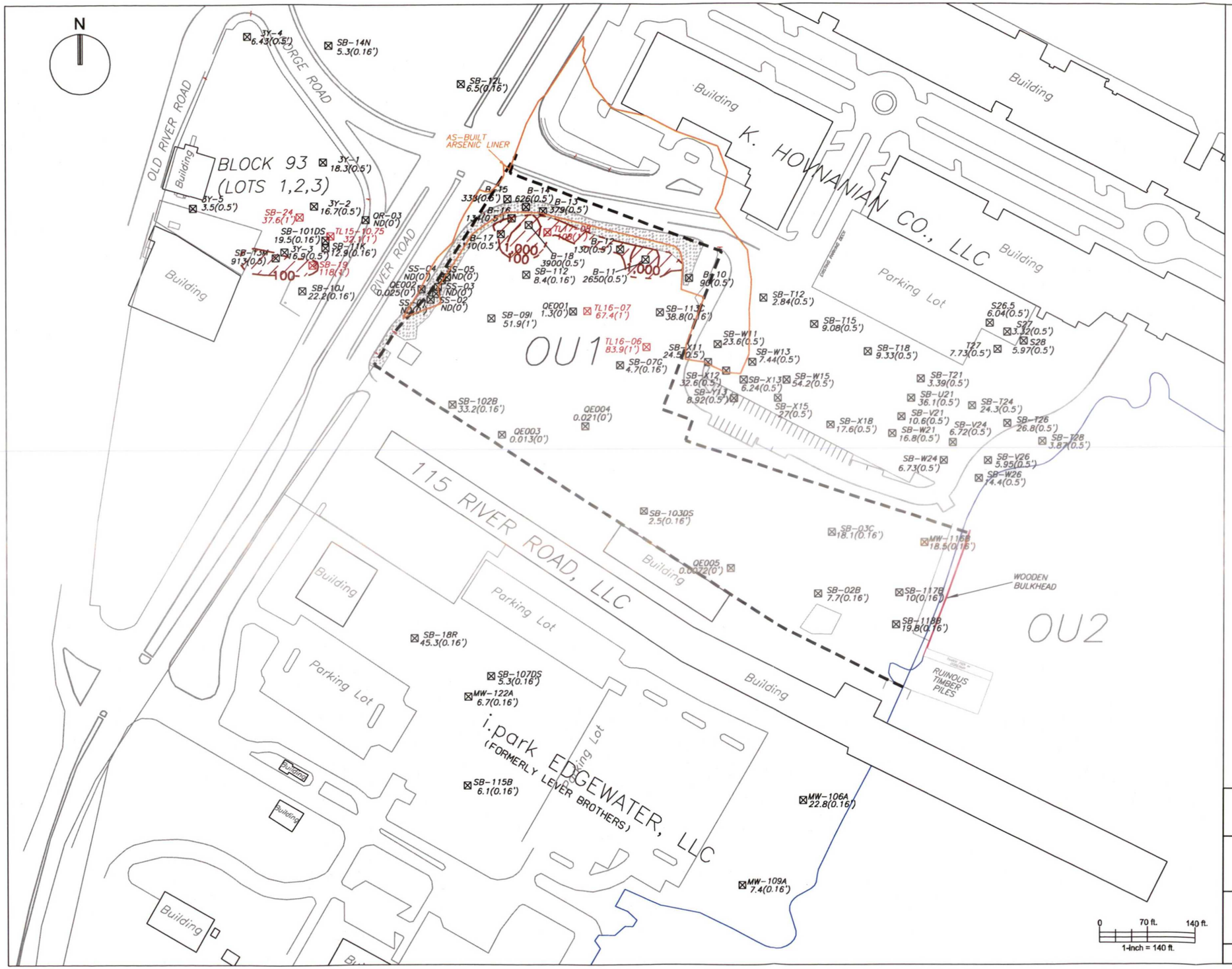
Last updated on Tuesday, October 24th, 2006
URL: http://rais.ornl.gov/cgi-bin/epa/ssl2.cgi



LEGEND

- SB-V21 167(0.5') — SOIL SAMPLING LOCATION WITH SOIL CONCENTRATION (mg/kg) & DEPTH (FT.)
- TL16-07 167(0.5') — SUPPLEMENTAL RI SAMPLING LOCATION WITH SOIL CONCENTRATION (mg/kg) & DEPTH (FT.)
- CURRENT PROPERTY BOUNDARY
- SOIL ISOCONCENTRATION CONTOUR (mg/kg)
- ARSENIC CONCENTRATIONS IN SOIL>100 mg/kg & <1 FT. BELOW GRADE
- COVERED CONCRETE BERM

NOTES:

1. Lowest soil criteria for arsenic = 0.39 mg/kg [USEPA Region 9 PRG, residential (direct contact)]. The average concentration for arsenic in Historic Fill in New Jersey is 13.2 mg/kg (Appendix D of N.J.A.C. 7:26E, Technical Requirements for Site Remediation, 2005)
2. Soil sampling and analysis methodologies for soil samples collected at select locations in the northwest corner of the Quanta Resources property (B-10 thru B-18) were not available for review. These data were taken from maps prepared by Dan Raviv Associates as part of their letter to the NJDEP regarding remedial efforts at the Edgewater property entitled "Arsenic Hot Spot Removal" and dated September 27, 2002. These data have not been validated and are used only to illustrate potential soil concentrations in these areas.
3. ND = not detected
4. Available historic soil data for the K. Hovnanian Companies, LLC property to the north of the Quanta Resources property is shown but not contoured. These data do not necessarily represent current conditions because of significant filling and disturbances in this area as a result of remedial efforts and redevelopment activities. Soil at this property is being evaluated and addressed with oversight from the NJDEP as part of ongoing redevelopment activities
5. Unvalidated data collected at the K. Hovnanian, LLC property has been included herein for comparative purposes.
6. Depiction of properties adjacent to OU1 does not neccessarily mean that site-related constituents have migrated there.

DRAFT

CH2MHILL

SOIL ISOCONCENTRATION CONTOURS

ARSENIC (0 - 1 ft.)

Quanta Resources Site
Edgewater, New Jersey

NOVEMBER 30, 2006 | FIGURE 1

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CH2MHILL

January 31, 2007

Mr. Richard Ho, RPM / OSC
U.S. Environmental Protection Agency—Region 2
Emergency and Remedial Response Division
290 Broadway, Floor 19
New York, New York 10007-1866

Subject: Quanta Resources Site, OU1
Edgewater, New Jersey
Response to USEPA/NJDEP Comments on the Vapor Intrusion Evaluation Technical Memorandum

Dear Mr. Ho:

Attached are responses to comments from EPA Region 2 and NJDEP on the *Technical Memorandum: Results from the Vapor Intrusion Evaluation at 115 River Road Building, Edgewater, New Jersey, Operable Unit 1 of the Quanta Resources Superfund Site,* submitted October 6, 2006. In addition to these responses, we have prepared a memorandum outlining next steps for addressing the potential vapor intrusion pathway based on the regulatory agency comments. Also, as a part of the response to comments, we have prepared a memorandum providing further information concerning possible indoor sources for emissions of naphthalene within the building.

We look forward to an opportunity to discuss with you the next steps in evaluating potential vapor intrusion pathways at the 115 River Road building. If you have any questions or concerns, please feel free to contact me at 215-640-9087 or Tim Metcalf of Honeywell at 973-455-4107.

Sincerely,

CH2M HILL

Stephen J. Zarlinski , P.E.
Project Manager

R. Scott Stoldt, C.P.G.
OU1 Lead

Attachments:
VI Report Comment Response Summary Table
Evaluation of Potential Sources of Naphthalene in Indoor Air
Further Activities for Evaluation of the Potential Vapor Intrusion Pathway

Cc: Timothy Metcalf (Honeywell)
Robert Hayton (NJDEP)
Richard Kampf (ESAG)

Response to Agency Comments on
Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
	COMMENTS FROM USEPA, REGION 2, NOVEMBER 3, 2006	
1.	The report should include a table of contents which describes the tables and figures in the appendices. There is much information presented in the document that is not in the body of the report, and there is no place which lists what information is included and where it is.	An expanded table of contents will be provided in the revised version of the vapor intrusion technical memorandum. Note that the revised vapor intrusion technical memorandum will be submitted as an appendix to the Remedial Investigation (RI) report for the Quanta Site.
2.	The report should include the EPA Region 2 document "Developing Indoor Air Decision Matrices for Screening and Interim Actions". This document, which has been provided to CH2MHill in the past and is attached, is the process by which EPA Region 2 has evaluated indoor air vapor intrusion investigations at sites throughout the region. The decisions presented in this report should be consistent with the guidance.	The decision matrices previously provided by EPA Region 2 are already included in the report as Tables 3a, 3b, 4a, and 4b. These tables have been used to screen the constituents of interest in terms of EPA Region 2's decision approach. In addition to the guidance provided by EPA Region 2, the vapor intrusion data were further evaluated to determine of the weight of evidence supported either the presence of absence of a potential vapor intrusion pathway. This data evaluation approach reflects more recent regulatory guidance developed for vapor intrusion sites, such as NJDEP's October 2005 guidance document (and related tables and updates). This more detailed evaluation of the evidence does not indicate the clear presence of a potential vapor intrusion pathway, and identifies potential emission sources that could also influence the detected indoor air concentrations. As EPA has commented below, further evaluation will be provided for these sources unrelated to vapor intrusion. Additional discussion of the EPA's decision matrix and the weight of evidence will be provided in the revised technical memorandum, along with a decision that is consistent with the evidence as well as the EPA's guidance. As mentioned in the response to Comment 1, the revised vapor intrusion technical memorandum will be submitted as an appendix to the RI report.
3.	Page 2: The first bullet should be revised to read, "Indoor air sampling results did not exceed the available NJDEP Rapid Action Levels (RAL) and Health Department Notification Levels (HDNL). Based on this comparison, there is no need for notification of state or local health departments, and no need to implement Interim Remedial Measures under state guidelines and criteria."	This will be reworded as requested.

Response to Agency Comments on Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
4.	Page 2, Last bullet: The text should be revised to state that when the naphthalene concentrations are evaluated with respect to the EPA Region 2 matrices, the concentrations of the subslab soil gas and the indoor air concentrations, appropriate actions will be recommended. For example, during the July 2006 sampling event, naphthalene was detected in SS-03 at 860 ug/m^3, and in 2 of 21 indoor air samples at concentrations of 8.3 ug/m^3 (IA-01) and 4.6 ug/m^3 (IA-21). The concentration consistent with a hazard quotient (HQ) of 1 is 3.3 ug/m^3. Other indoor air concentrations that approach this concentration are 2.1 ug/m^3 (IA-02), 2.3 ug/m^3 (IA-06), 2.8 ug/m^3 (IA-07), 3.1ug/m^3 (IA-14), 2.65 ug/m^3 (IA-15). When evaluating these concentrations with respect to the EPA Region 2 decision matrix for naphthalene, the decision point would be to pursue remediation (for the subslab at SS-01 and the 2 indoor air concentrations) and to monitor or pursue remediation (for the subslab at SS-01 and the other 5 indoor air samples cited). EPA acknowledges that confounding sources of naphthalene may be present; however, the report does not specifically identify specific potential confounding sources near the locations where indoor air samples yielded concentrations near or exceeding the HQ of 1 level. Therefore, the report should present recommendations for remedial or interim action that are consistent with EPA matrices. For these data, with consideration of the issue of possible confounding sources inside the building or near the building, additional investigation of these sources is recommended, and a complete product inventory in areas where summa canisters are located is necessary. In addition, due to the significantly elevated levels of naphthalene, a site-related contaminant, in the subslab soil gas, additional monitoring is necessary. EPA recommends that another sampling effort, which would include subslab, indoor air, and ambient air, be conducted during this heating season. The results of this effort will be evaluated in conjunction with previous results to determine future actions. All other sections of the report which present an interpretation of the results or discuss future action at the site must be revised to include this information.	As EPA has noted in other comments, further evaluation should be provided of potential indoor sources identified in the vapor intrusion technical memorandum. Note that naphthalene falls into the category in the decision matrix of 'MONITOR <u>or</u> PURSUE REMEDIATION". Based on the available data including consideration that naphthalene has been detected in background samples, further monitoring for naphthalene would be more appropriate at this time. Further vapor intrusion evaluation activities, including monitoring, will be proposed to better characterize this compound with regard to potential vapor intrusion. These proposed activities have been identified and are described in a separate memorandum that has been submitted to EPA. These proposed activities may include the following: additional indoor air and subslab sampling; development of a higher-resolution product inventory; evaluation of the building envelope to identify potential conduits and depressurized conditions that could provide a driving force for entry of soil gas from the subsurface to indoor spaces, and mitigation measures in the basements to seal conduits from the subsurface to the basements. These proposed activities are described in further detail in a separate memorandum.[1] In addition, analytical results from the two rounds of indoor air sampling conducted in 2006 will be incorporated into the human health risk assessment for the 115 River Road property to characterize potential current human health risks associated with detected concentrations in indoor air. Chemicals detected in indoor air samples not clearly associated with vapor intrusion (i.e., detected at concentrations that are consistent background levels) will be addressed separately in the Risk Characterization section, and will be discussed in Uncertainty Analysis section of the HHRA. If additional indoor air sampling events are conducted in the future, analytical results will be incorporated as an addendum to the HHRA if additional chemicals are detected or indoor air concentrations are significantly higher than those detected in 2006.

[1] CH2M HILL. 2007. *Memorandum: Further Activities for Evaluation of the Potential Vapor Intrusion Pathway, 115 River Road Building, Edgewater New Jersey.* January 31, 2007

Response to Agency Comments on Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
5.	Page 6: The rationale for discounting TCE as a PCOI should also include historical information regarding site activities, groundwater, and soil data collected from the RI and previous investigations, and other site-specific information that would suggest that TCE is or is not a PCOI.	This information will be incorporated into the revised version of the technical memorandum.
6.	Page 7: The chemicals which are flagged with an asterisk are identified as not being detected in shallow groundwater near the 115 River Road building. However, due to the presence of underground conduits that lead to the building and run through areas of site-related contamination, it may be possible that vapors from site-related contaminants are migrating from elsewhere on the Quanta Resources Superfund site and traveling along these preferential pathways to the building. The report should more clearly identify whether any of these chemicals were detected elsewhere on the Quanta site, and would therefore need to be retained for further evaluation.	Honeywell feels that the flagged constituents are detected infrequently in soil or groundwater at the Quanta Resources Site, and that the likelihood is small that a source is present for migration from elsewhere at the Site through preferential pathways. However, the conceptual model of the subsurface conditions as it pertains to potential vapor intrusion pathways will be refined in the technical memorandum, to further discuss this issue. In addition, further evaluation of the available data concerning preferential pathways will be conducted to the extent that is feasible, to identify pathways between the Site and the 115 River Road building. This additional information will be incorporated into the updated conceptual model of the potential vapor intrusion pathway
7.	Page 11: In the first full paragraph on this page, the discussion of naphthalene in the indoor air in the July 2006 sampling event focuses on the possibility of a confounding source from the roof, which had recently been re-sealed using a product with called "Tarnak". It would be helpful if the report contained product information on Tarnak to determine if naphthalene is a constituent of this roofing material, and how significant is the amount of naphthalene in Tarnak. Also, the building inventory should identify where Tarnak was stored, and if any conduits exist from those areas to areas with the higher naphthalene detections. Since naphthalene was detected in the subslab soil gas vapor at concentrations associated with an HQ greater than 10, and indoor air concentrations are associated with an HQ of greater than 1, there is potential for some contribution to indoor air from subslab. If other confounding sources are proposed to be the significant source of indoor air concentrations, then more information is necessary to support this. Based on current site data, the naphthalene concentrations suggest that additional measures are necessary. Please see Comment 4 for EPA's recommendations on what specific actions are necessary.	Additional product information for "Karnak™" is presented in a separate memorandum[2] (the product name was relayed incorrectly initially). This product was applied to the roof prior to the sampling event, according to the building owners. Additional information will be obtained to determine if any leftover roofing material is being stored at building. In addition, the product information will be incorporated into the revised vapor intrusion technical memorandum.

[2]CH2M HILL. 2007. *Technical Memorandum: Evaluation of Potential Indoor Sources of Naphthalene in Air at 115 River Road Building*, January 31, 2007

Response to Agency Comments on Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
8.	Page 12: The last paragraph suggests confounding sources of 1,4-dichlorobenzene in the building and these sources are identified as toilet deodorant blocks and "some institutional sanitizers." Do the institutional sanitizers and toilet blocks used at 115 River Road contain 1,4-dichlorobenzene? Please be specific when identifying possible confounding sources.	Interview information obtained from the building owners provided the details concerning the sources for 1,4-dichlorobenzene in air. Note that the absence of this substance in groundwater or subslab samples points strongly to an indoor products source.
9.	Page 14, "Subslab Data": The text presents simple modeling of naphthalene fate and transport from groundwater to subslab soil gas to suggest that actual groundwater concentrations are not consistent with modeled concentrations which are back-calculated from subslab soil gas concentrations using Henry's Law Constant. However, this simple exercise does not take into account other issues such as site-specific factors including pressure differentials associated with the building, actual temperatures at the interface, and contributions to subslab soil gas concentrations from preferential pathways such as underground utilities, to name a few. The text should either be eliminated or be revised to more accurately reflect conditions which may influence the subslab soil gas concentrations relative to the groundwater concentrations.	This text will be removed from the revised vapor intrusion technical memorandum. Further evaluation of the building envelope will be conducted to identify depressurized areas, if any, that could represent driving forces for potential vapor intrusion, as described in the response to Comment 4.
10.	Page 15: The first paragraph of this page suggests that the higher concentrations of naphthalene detected in the upper level of 115 River Road are not indicative of a typical vapor intrusion profile. While this is correct, the presence of preferential pathways such as sewer and water pipes to upper floors would allow for vapors to migrate in a way that is not typical. It is premature to discount the subslab soil gas concentrations as a source of the indoor air concentrations without further evaluation. Also, the last sentence of this paragraph suggests that confounding sources may be present; yet no product inventory of these areas is provided to support this claim. Please remove this sentence unless specific inventories of products in these locations support this suggestion.	See the response to Comment 6 regarding potential subsurface conduits; see the response to Comments 4 and 7 with regard to additional product information.
11.	Page 16: The first bullet should be revised to state, "...at the 115 RR River Road Property, and are likely associated...."	See the response to comment 4 with regard to proposed revision to the conclusions of the vapor intrusion technical memorandum.

Response to Agency Comments on
Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
	COMMENTS FROM NJDEP, DECEMBER 5, 2006	
1a.	Evaluation of Spatial Distribution in Indoor and Outdoor Air: it is stated on page 9 that there is "no apparent gradient of decreasing concentration from the basement to the first floor to the upper floors as would be expected under a vapor intrusion scenario". It should be noted that there is not always an apparent concentration gradient in all vapor intrusion scenarios. The design of the heating, ventilation and air conditioning (HVAC) system may impact the distribution and mixing of vapors on various floors. In addition, it should be noted that in the March sampling event, no indoor air samples were collected from the basement or 1st floors of Building # 8. This is the building that had the highest concentrations of site related contaminants in the subslab samples. In the July sampling event, only one indoor air sample (IA-21) was collected from the basement of Building 8 and none from the first floor. This basement sample (IA-21) had the highest concentration of benzene (1.8 ug/m^3) and the second highest concentration of naphthalene (4.60 ug/m^3) of all indoor air samples collected.	Additional discussion will be added to the revised vapor intrusion technical memorandum, to characterize the uncertainty associated with the conclusion concerning vertical gradient in indoor air. As discussed in response to EPA's Comment 4, Honeywell proposes conducting a further evaluation of air flows and pressurization within the 115 River Road building, including evaluation of the HVAC system.
1b.	It is stated on page 10, that the concentrations in outdoor air samples appear to be fairly uniform with little spatial variability between background locations and the site. This is generally true, however, it must be noted that in the July 06 sampling event, the concentration of naphthalene was detected at 7.3 ug/m^3. This is an order of magnitude higher than any other outdoor air sample. This suggests a potential site related impact in outside air on the northeast portion of the Quanta site.	Honeywell does not agree that one elevated result indicates a potential emissions source from the Quanta site. However, the revised vapor intrusion technical memorandum will include a discussion of the available site characterization data for naphthalene (soil and groundwater data), to evaluate the potential influence of naphthalene detected in the site on outdoor air results.
1c.	The first paragraph of page 11 discusses some of the possible reasons for the elevated concentrations of naphthalene detected during the July 06 sampling event. The discussion mentions warmer ambient temperatures causing increased volatilization of naphthalene from varied sources including: "recent" resealing of the roof and volatilization of paint, which was apparently applied at an unspecified location in a March. It must be noted that since coal tar product and related constituents are present throughout the site soils, sediment, groundwater and surface water, it is highly plausible that the elevated concentrations of naphthalene detected in July are caused by increased volatilization of naphthalene from contaminated media at the site. To reduce the uncertainty associated with "other potential sources", it is recommended that another sampling round be conducted at a time when there is no recent painting or roof resealing operations occurring at the site.	As discussed in the response to EPA's Comment 4, Honeywell has proposed further vapor intrusion evaluation activities to reduce uncertainties, prior to initiating any additional air sampling events. These activities include developing an updated inventory of potential building-related sources of emissions to indoor air. Honeywell will coordinate with the building owners to temporarily discontinue painting or roof maintenance activities (to the extent that cooperation can feasibly be achieved) prior to conducting another indoor air sampling event.

Response to Agency Comments on
Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
2.	Subslab Data: In March and in July 06, three sub slab soil gas samples were collected from 3 sample locations each. Other attempted sample locations were abandoned due to high groundwater or other reasons. The limited sub slab data from both data sets shows exceedances of the NJDEP Soil Gas Screening Levels (SGSL) for coal tar related constituents of concern (BTEX compounds - especially benzene that was detected at concentrations up to 4900 ug/m^3 in SS-03). Naphthalene was also detected at its highest concentration (860 ug/m^3) in this same sample. Naphthalene was also elevated in a sub slab sample collected during the March sampling event (120 ug/m^3 in sample SS-06). (NJDEP has no soil gas screening criteria for this compound). In addition, the 2 sub slab sample locations from the basement of Building 8 had the most number of detected constituents in excess of screening criteria. The report must clearly state that data from July sub slab sample VI-03 and the March and July 2006 data from VI-06 all indicate that site related contaminant vapors are likely collecting beneath the basement. Figure 3 indicates that these 2 sub slab gas samples were collected from the basement of Building 8, which also extends partially below Building 7, where the daycare center is located. It is also mentioned on page 11, that elevated VOCs readings (measured with a PID) were detected at several borehole locations during sub slab sampling after penetration of the basement slab. PID readings in Building 8 stayed above background levels for an unspecified period of time. This information should all be summarized in the conclusion section on page 16.	The revised vapor intrusion evaluation technical memorandum will include a discussion that site-related contaminants could be present under the basement slabs.
3.	Figures: An additional figure should be provided showing sub slab data.	A figure depicting only the subslab results will be added to the revised vapor intrusion technical memorandum.
4.	Field notes: It is noted in Attachment A-2b that someone moved the canister for sample IA-04 from a bookshelf to the floor during the 24-hour test. Also the backdoor was open near IA-10 during sample collection. In addition, odors were detected in the rooms during collection of indoor air samples IA-6, IA-7 and IA 17. It is not clear what impact these field conditions may have on the sample data.	The revised vapor intrusion technical memorandum will include discussion of how these observations potentially influence the indoor air sampling results. These occurrences are not likely to have adversely affected overall data quality of the indoor air sampling.

Response to Agency Comments on Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

	Agency Comment	Response
5.	Conclusions and Recommendations: The report makes the following three general conclusions regarding this study: 1) Indoor air sample results do not exceed available NJDEP RAL and HDNL. Therefore, it is stated that there is no need for immediate action or implementation of remedial measures and no need to notify state and local health departments. 2) The report asserts that most of the constituents detected in indoor air samples at the site (including the chlorinated VOCs, 1,4 dichlorobenzene, acrylonitrile and 1,3-butadiene) have not been detected in soil or groundwater at the 115 River Road property and are associated with background sources and/ or materials used in the buildings and are not associated with potential vapor intrusion from the site. 3) BTEX constituents and naphthalene have been detected in the site soil and groundwater as well as in the indoor air and subslab samples. The report concludes that it is possible that this indicates a potential vapor intrusion pathway. However, the report makes the general conclusion that if a vapor intrusion pathway for these constituents is present, the influence of it on concentrations in indoor air is not readily discernable from the influences of ambient outdoor concentrations or emission sources from indoor products. The first two conclusions are generally acceptable at this time. However, the last conclusion is incomplete. The report makes no conclusion regarding the subslab gas sampling results. The report must conclude that the data indicates that site related contaminant vapors are likely collecting beneath the basement of the 115 River Road Building. There also appears to be some site related contaminant migration into the basement of Building 8 (naphthalene). In addition, there is a data gap due to the fact that no subslab samples have been collected from the basement of Building 10. It should be noted that benzene and naphthalene were both detected at some of their highest concentrations in the indoor air samples from Building 10 (benzene at 1.1 ug/m^3, naphthalene at 8.3 ug/m^3). However, as the report indicates, current indoor air data has not determined that this is causing unacceptable concentrations of site related constituents within the Building.	As discussed in the response to NJDEP's Comment 2, the revised vapor intrusion evaluation technical memorandum will include a discussion that site-related contaminants could be present under the basement slabs. Honeywell does not agree with NJDEP's conclusion that having no subslab data from the Building 10 basement represents a data gap that affects decision-making with regard to vapor intrusion pathways (note that subslab sampling was attempted in the Building 10 basement; gas samples could not be collected because the probes either flooded or drew excessive vacuum). As discussed in the response to EPA's Comment 4, Honeywell proposes to seal conduits in the basements, primarily to reduce a potential source of uncertainty prior to conducting another indoor and subslab sampling event in the 115 River Road building. Honeywell also does not agree with NJDEP's characterization of the indoor air and subslab sampling data that the concentrations of benzene and naphthalene are an indication of a potentially complete pathway in Building 10. The approach of examining individual sampling results does not account for the weight of evidence which leaves open the possible explanation that vapor intrusion, if occurring in the 115 River Road building, is not discernable from background influences. The revised vapor intrusion technical memorandum will better synthesize the weight of evidence (including any additional data collected) to better characterize the potential for vapor intrusion at the 115 River Road building. In addition, as discussed in the responses to EPA's Comment 4 and NJDEP's Comment 1a, Honeywell will survey of building pressurization and airflow conditions to determine if a driving force is present for a vapor intrusion pathway (as discussed in regulatory guidance, depressurization of indoor spaces is an important factor in determining the presence or absence of a vapor intrusion pathway). Finally, as discussed in the response to EPA's Comment 7, the occurrence of naphthalene in indoor air could be related to sources other than site-related constituents in the subsurface. Honeywell will update the product inventory in the building to better characterize the presence of background influences on indoor air concentrations.

Response to Agency Comments on Vapor Intrusion Evaluation for 115 River Road Building

Quanta Resources Superfund Site—Operable Unit 1

Agency Comment	Response
Recommendation: The data indicates that site related contaminant vapors are collecting beneath the basement of the buildings and there is some potential contaminant migration into the basement areas. N.J.A.C. 7:26E-1.11 states that the first priority during remediation is to ensure that "contaminants in all media should be contained and/or stabilized to prevent contaminant exposure to receptors and to prevent further movement of contaminants through any pathway." Due to the presence of a sensitive receptor population at the day care center located in Building 7, it is important that all conclusions be as conservative and accurate as feasible. Therefore, it is recommended that an additional round of indoor air sampling be conducted. Mitigation should be considered to eliminate / reduce the contaminant vapors that are collecting beneath the building.	As described in the response to NJDEP's Comment 5, Honeywell proposes to conduct further activities that are intended to reduce uncertainties in the evaluation of the vapor intrusion pathway and provide further information for interpreting indoor air sampling results. Note that remedial measures for eliminating or reducing the potential sources underlying the building will be evaluated as part of the Feasibility Study for the Quanta Resources Site. The near-term measures proposed here will focus on controlling potential pathways into the building. These activities, including sealing potential conduits in the basements, will be completed prior to conducting any further air or subslab sampling at the 115 River Road building.

Further Activities for Evaluation of the Potential Vapor Intrusion Pathway, 115 River Road Building, Edgewater, New Jersey

PREPARED FOR: Richard Ho/EPA Region 2

COPIES: Timothy Metcalf/Honeywell
Robert Hayton/NJDEP
Rich Kampf/ ESAG

PREPARED BY: CH2M HILL

DATE: January 31, 2007

This memorandum describes proposed activities to further address the potential vapor intrusion pathways at the 115 River Road building next to the Quanta Resources Superfund Site (the Site) in Edgewater, New Jersey. The technical approach and proposed activities presented in this memorandum are based on the results from the vapor intrusion evaluation technical memorandum, submitted in October 2006, and the U.S. Environmental Protection Agency (EPA) Region 2's comments on that technical memorandum. The purpose for this memorandum is to summarize these proposed activities, discuss their role in addressing potential vapor intrusion pathways at the 115 River Road building, and present a proposed schedule for conducting the activities and reporting the outcome to EPA Region 2.

1.1.1 Background

Honeywell submitted a vapor intrusion technical memorandum presenting the results from two sampling events, conducted at the 115 River Road building in March and July 2006. Those sampling events were conducted in accordance with a work plan approved by EPA Region 2.[1] In comments recently submitted on this technical memorandum, EPA Region 2 has noted that concentrations of naphthalene were detected in some subslab and indoor air samples. Those concentrations, when compared with thresholds defined in the vapor intrusion decision matrix used by EPA Region 2, indicate that remediation or further monitoring should be performed for naphthalene. In its comments, EPA Region 2 stated that the vapor intrusion evaluation technical memorandum should present recommendations for remedial or interim action that are consistent with EPA matrices. In addition, EPA Region 2 recommended that another sampling effort, which would include subslab, indoor air, and ambient air, be conducted during the upcoming heating season. EPA Region 2 stated that the results of this effort would be evaluated in conjunction with previous results to determine future actions.

[1] CH2M HILL. 2006. *Technical Memorandum: Vapor Intrusion Evaluation at the 115 River Road Building, Edgewater, New Jersey.* Draft, October 6, 2006.

1.1.2 Technical Approach

As described previously, naphthalene was detected in subslab, indoor, and ambient air samples during the July 2006 sampling event in the 115 River Road building. Naphthalene is a coal-tar constituent, and has been detected in groundwater at the Site. However, naphthalene is a common constituent in other sources potentially present at the 115 River Road building including cigarette smoke, hydrocarbon fuels, motor vehicle emissions, and asphalt roofing material. The presence of these other sources create significant uncertainty about whether or not the detected concentrations in indoor air are the result of vapor intrusion or outdoor/indoor sources unrelated to vapor intrusion. Resolving this uncertainty is an important step prior to determining what remedial measures, if any, are needed to address the potential vapor intrusion pathway.

The primary objectives of the activities listed below are to reduce uncertainties in the understanding of the potential vapor intrusion pathway, and to initiate some feasible measures to mitigate potential pathways into the building. In particular, Honeywell believes these activities should be completed prior to performing additional sampling, if any, in the building. These activities include the following:

- **Update the inventory and locations of indoor products/sources that could emit constituents in indoor air (e.g., asphalt roofing compound, deodorizer blocks, etc.).** The results from this survey will be incorporated into the revised vapor intrusion evaluation technical memorandum.
- **Survey portions of the building envelope to identify if depressurized conditions are present that promote vapor intrusion.** Conduits from the subsurface into the basements and inhabited spaces will be examined using a digital micromanometer. These measurements will be used to identify areas where the inhabited spaces are depressurized relative to the outdoors, hence relative to the subsurface. Also the pressure relationships relative to the basements will be examined. In addition, the building air-handling systems will be observed during this walk-through survey to identify the quantity of outside air being supplied by them. The results of this survey and any recommendations for mitigation will be documented in a technical memorandum and provided to EPA.
- **Seal observed conduits and cracks in the floors of the two basements.** Honeywell will work with the building owners to evaluate the presence of conduits and cracks in the floors of the two basements. Based on the this survey, mitigations measures could be recommended including assistance to temporarily relocate the contents of each basement, seal and/or vent observed sumps, seal observed floor cracks and seams, and if appropriate, clean the floors and apply an epoxy coating. A technical memorandum and summary of any recommended mitigation will be developed and provided to EPA. Photographic documentation will be collected during these activities and incorporated into a memorandum.
- **Evaluate and identify additional feasible measures that might be used to address potential vapor intrusion pathways, if needed.** These could include:

- Evaluate ways to improve the air exchange rate in the basements (e.g., by installing additional fans). The intent of this measure would be to increase ventilation in the basements, and depressurize the basements relative to overlying indoor spaces.
- Recommend to the building owners to have a mechanical contractor evaluate the air handling units to increase intake of outside air (which might improve pressurization within the building).
- Evaluate the feasibility of mitigation measures such as subslab depressurization under conditions of a shallow water table underlying the building.

1.1.3 Schedule

These activities will be completed over the next two months. Coordination will be maintained with EPA regarding the progress of these activities. Approximate dates for these activities are as follows:

- **Updated indoor product/source inventory:** Survey conducted in mid-February; submit a technical memorandum to EPA in early March.
- **Building envelope and air-handling system survey:** Survey conducted in mid-February; submit a technical memorandum and recommendations to EPA in early to mid-March.
- **Basement sealing activities:** Survey completed in mid-February; submit a technical memorandum and recommendations to EPA in early March. A schedule for implementation for any recommended mitigation will be dependent on access negotiations with property owner.

Evaluation of Potential Sources of Naphthalene in Indoor Air at the 115 River Road Building, Edgewater, New Jersey

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COPIES: Timothy Metcalf/Honeywell
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Rich Kampf/ESAG

PREPARED BY: CH2M HILL

DATE: January 31, 2007

The purpose for this memorandum is to provide to the U.S. Environmental Protection Agency (EPA) Region 2 additional information for characterizing potential sources of naphthalene in indoor air at the 115 River Road building, adjacent to the Quanta Resources Site.

Based on the results of this evaluation, roofing products recently applied to the 115 River Road building roof contain constituents (asphalt) that could be a source of naphthalene detected in indoor vapor samples. As further discussed below, these products cannot be ruled out as sources for the naphthalene concentrations detected in indoor air samples.

Background

Naphthalene was detected both in indoor air and subslab samples collected during the second vapor intrusion sampling event, conducted on July 29 and 30, 2006. The concentrations of naphthalene detected in the indoor air samples were higher than the concentrations detected during the first vapor intrusion sampling event, conducted in March 2006. A possible cause for the elevated naphthalene concentrations in air discussed in the vapor intrusion evaluation technical memorandum[1] was the use of a roofing product around the same period of time, as reported by the building owners.

Site Visit Results

A site visit was conducted at the 115 River Road building on September 26, 2006, with the purpose of obtaining further information about the roofing activities that took place that may have affected naphathalene concentrations detected in the indoor air samples collected on July 29 and 30, 2006.

According to Mr. Scott Heagney, the building owner, Karnak™ silver coating was applied to the entire Building 12 roof and approximately 50 percent of the other building roofs just before the start of the summer (i.e., approximately two to three months before sampling).

[1] CH2M HILL. 2006. Technical Memorandum: *Vapor Intrusion Evaluation at the 115 River Road Building, Edgewater, New Jersey.* Draft. October 6, 2006.

Mr. Heagney does not recall the exact dates when the roofing activities took place. The work was performed by the 115 River Road building maintenance crew; they did not hire a roofing contractor.

Mr. Heagney mentioned that the maintenance crew is constantly patching roof leaks with either Gardener® roof cement or Karnak™ roof cement. However, storage of these products was not observed at the 115 River Road building at the time of this site visit.

Mr. Heagney also reported that in December 2005, Sprint Nextel put cell phone equipment on the roof, and that Sprint Nextel had their own roofing contractor do work on the roof.

Product Review

Material safety data sheets (MSDS) for Karnak™ and Gardener® products were reviewed to identify potential ingredients that could emit naphthalene. MSDSs for two Karnak™ products (http://www.karnakcorp.com/msds_view.html) and a Gardener® product were reviewed as discussed below:

- **Fibered Aluminum Asphalt Coating (Asbestos-Free):** This material contains from 50 to 90 percent asphalt, 10 to 50 percent aliphatic hydrocarbons, and 10 to 50 percent Stoddard solvent. A product data sheet and MSDS for this product can be found here: http://www.karnakcorp.com/pro_rp_rc.html. As discussed below, naphthalene is a constituent in asphalt.
- **Asphalt Cement/Coatings:** These products typically contain from 30 to 80 percent asphalt, and 3 to 40 percent aliphatic hydrocarbons. Product data sheets and MSDSs for these products can be found here: http://www.karnakcorp.com/pro_rp_ad.html.
- The specific Gardner roof cement product was not identified by the building owner. However, an MSDS for a Gardener® roof cement product (Gardner® Wet R Dry Surface Roof Cement) was found in the National Library of Medicine Household Products Database (http://householdproducts.nlm.nih.gov/cgi-bin/household/brands?-tbl=brands&id=7010003). According to this MSDS, this product contains <40 percent asphalt and <20 percent heavy hydrotreated petroleum naphtha.

Evaluation of Constituents

Napthalene is a constituent of the asphalt in roofing material recently applied at the building. A search of EPA's WebFIRE emissions factor database (http://cfpub.epa.gov/-oarweb/index.cfm?action=fire.main) identified emission factors for naphthalene from processes producing asphalt products (note: search for 'asphalt AND naphthalene').

Many studies in the open literature have documented exposures of roofing workers to naphthalene.[2] These exposures have been measured during application of heated asphalt. However while naphthalene has a low vapor pressure (0.085 millimeters at 25 degrees

[2] National Institute for Occupational Safety and Health (NIOSH). 2000. *Hazard Review: Health Effects of the Occupational Exposure to Asphalt.* http://www.cdc.gov/niosh/01-110pd.html.

Celsius)[3], airborne concentrations of naphthalene vapor from solid matrices have been noted under ambient temperature conditions, for example, from the use of mothballs.[4]

Summary and Conclusions

Naphthalene was detected at higher concentrations in indoor air samples during the July 2006 air sampling event in comparison to the March 2006 indoor air sampling event. Following the July 2006 sampling event, a site visit was conducted to determine if the elevated indoor air concentrations could have been due to chemical sources unrelated to the Quanta Site. During that site visit, the building owner indicated that an asphalt roofing compound had been used for repairs before the start of the summer. Naphthalene is a constituent of asphalt roofing materials. Available information suggests that it is possible for naphthalene to volatilize at room temperature.

The asphalt roofing compound had been applied a few months prior to the July 2006 air sampling event. Therefore, trace emissions of naphthalene from fresh asphalt material on the roof could have occurred prior to and during the sampling event. The outside air intakes for the air conditioning units at the 115 River Road building are located on the roof, and may have impacted indoor air by transferring ambient air concentrations on the rooftop (potentially affected by the asphalt roofing compound) to indoor air.

Therefore, the roofing products applied at the 115 River Road building roof are likely a potential source of naphthalene detected in low concentrations in the indoor vapor.

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[3] National Library of Medicine (NLM), Hazardous Substances Data Bank (HSDB). http://toxnet.nlm.nih.gov/cgi-bin/sis/-htmlgen?HSDB. Accessed December 8, 2006.

[4] U.S. Environmental Protection Agency (EPA). 1998. *Toxicological Review of Naphthalene.* http://www.epa.gov/iris/-toxreviews/0436-tr.pdf.

Laboratory Data Usability

Historic Analytical Data

Historical data for this site was obtained and evaluated for usability. Two criteria were used for judging usability. First, laboratory reports (if available) were evaluated. Data supported by laboratory quality control data were considered usable and of known quality unless the review of the data revealed a reason to reject the data due to quality control issues. Second, data was considered usable if no laboratory quality control data was available, but the data had been reported previously to and reviewed by USEPA.

RI Analytical Data

All analytical data collected to date has been validated following the process outlined in the QAPP. The review of the analytical data was performed in accordance with USEPA National Functional Guidelines and SW846 methodology. Twenty-six soil sample delivery groups and fifty-two water sample delivery groups were evaluated.

Soil samples were analyzed for the following: VOCs by EPA SW846 Method 8260B, SVOCs by SW846 Method 8270C, Pesticides by SW846 Method 8081B, PCBs by SW846 Method 8082, metals by SW846 Method 6010B, hexavalent chromium by SW846 Method 7196, mercury by SW846 Method 7471, ammonia by EPA Method 350.2, total organic carbon by SW846 Method 9060, and cyanide by SW846 Method 9012.

Water samples were analyzed for the following: VOCs by SW846 Method 8260B, SVOCs by SW846 Method 8270C, Pesticides by SW846 Method 8081B, PCBs by SW846 Method 8082, metals by SW846 Method 6020, ammonia by USEPA Method 350.2, inorganic arsenic speciation (Arsenic III and V) by SW846 Method 7063, organic arsenic speciation (DMA and MMA) by SW846 Method 6800, and total kjeldahl nitrogen by EPA Method 351.2..

Quality control criteria that were evaluated for all samples include the following as appropriate for each analytical method: laboratory blanks, field blanks, field duplicates, laboratory duplicates, laboratory control samples, matrix spikes and matrix spike duplicates (MS/MSDs), initial and continuing calibrations, instrument tuning, internal standards, surrogates, confirmation, degradation, holding times, and sample preservation.

An overall evaluation of the data indicates that the sample handling, shipment, and analytical procedures have been adequately completed, and that the analytical results should be considered accurate. The analytical data had minor quality control concerns; however, it did not affect data usability for those specific results. The validation review demonstrated that the analytical systems were generally in control and the data results can be used in the decision making process. Data management procedures included the phases described below.

Data Collection and Tracking

The data collection and data-tracking phase includes the following:

- Preparing all sample bottle labels and chain-of-custody forms
- Documenting all required data in the field log book
- Performing daily data entry of the sampling information into the sample tracking system and the field data electronic data deliverable (EDD) templates
- Entering survey data into the appropriate field data EDD template
- Quality assurance/quality control reviews of all data entry
- Comparing all chain-of-custody forms to the sampling event's project instructions

Laboratory Analysis

The laboratory analysis phase includes the following:

- Regular communication between the laboratory and the project chemist
- Reviewing the laboratory's sample receipt acknowledgement form
- Documenting the project's progress in the sample tracking system
- Laboratory preparation of the Honeywell EIM EDD specifications and producing error-free EDDs using the EDD Checker provided by Locus
- Submission of the preliminary data and hardcopy reports to CH2M HILL for data loading, verification, and validation

EDD Verification

The EDD verification phase includes the following:

- Running the EDDs through the EIM "Input" module to verify correct format and that the laboratory meets valid values and data integrity
- Comparing the chain-of-custody forms to the hardcopy-EDD content
- Performing a 10 percent random hardcopy-EDD comparison
- Resolving hardcopy-EDD discrepancies with the laboratory

Data Loading

The data loading phase includes the following:

- Loading all field data EDDs into the database

- Loading verified EDD into the project database
- Resolving any data loading issues
- Creating a post load report for content review
- Notifying the project chemist when EDDs are available in EIM for validation

Data Verification and Validation

The data verification/validation phase includes the following:

- Verifying and validating data according to project specifications and QAPP
- Inserting appropriate data qualification flags and final results into the database as required by the validation level
- Rejecting or excluding those results that are redundant or unusable duplicates
- Generating a data verification/validation report
- Submitting the report to the project database manager, field team leader, and project files

Data Visualization and Analysis

The data visualization and analysis phase includes the initial data review by the project team and the production of data queries and draft reports to dissect and digest the data. This phase was accomplished through the use of query tools and preformatted reports in EIM.