

App E –  
Sub-Area 4.3 - COC Forms

Page: _____ of _____ Project #: GEL Quote #: COC Number (1): PO Number:		<b>GEL Chain of Custody and Analytical Request</b> **See www.gel.com for GEL's Sample Acceptance SOP**				GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178																	
Client Name:		Phone #:		Sample Analysis Requested (5) (Fill in the number of containers for each test)																			
Project/Site Name:		Fax #:		Should this sample be considered											Preservative Type (6)								
Address:															Comments Note: extra sample is required for sample specific QC								
Collected by:		Send Results To:																					
Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (4)	Field Filtered (4)	Sample Matrix (4)	Radi active	TSC A Regulated	her of															
4.33.R.5.1	11-18-15																						
4.33.R.5.2	11-18-15																						
4.33.R.11.1	11-18-15																						
4.33.R.11.2	11-18-15																						
4.33.R.18.1	11-18-15																						
4.33.R.18.2	11-18-15																						
4.33.R.12.1	11-18-15																						
4.33.R.12.2	11-18-15																						
4.33.R.17.1	11-18-15																						
4.33.R.17.2	11-18-15																						
TAT Requested: Normal:		Rush:		Specify: (Subject to Surcharge)		Fax Results: Yes No		Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4															
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards														Sample Collection Time Zone Eastern Pacific Central Other Mountain									
Chain of Custody Signatures						Sample Shipping and Delivery Details																	
Relinquished By (Signed)			Date			Time			Received by (signed)			Date			Time			GEL PM:					
1									1									Method of Shipment:			Date Shipped		
2									2									Airbill #					
3									3									Airbill #					
1) Chain of Custody Number - (Sent Determined) 2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite 3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered 4) Matrix Codes: DW - Drinking Water, GW - Groundwater, SW - Surface Water, WW - Waste Water, W - Water, ML - Mix Liquid, SO - Soil, SD - Sediment, SL - Sludge, SS - Solid Waste, O - Oil, F - Filter, P - Wipe, U - Urine, F - Fecal, N - Nitrate 5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 8010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 8010B/7470A - 1) 6) Preservative Type: BA - Hydrochloric Acid, NI - Nitric Acid, SH - Sodium Hydroxide, SA - Sulfuric Acid, AA - Ascorbic Acid, HX - Hexane, ST - Sodium Thiosulfate. If no preservative is added - leave field blank														For Lab Receiving Use Only Custody Seal Intact? YES NO Cooler Temp. C									
WHITE = LABORATORY						YELLOW = FILE						PINK = CLIENT											



[illegible]

Page: _____ of _____ Project #: GEL Quote #: COC Number (1): PO Number:		<b>GEL Chain of Custody and Analytical Request</b> **See www.gel.com for GEL's Sample Acceptance SOP** <b>GEL Work Order Number:</b>			GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178												
Client Name:		Phone #:		Sample Analysis Requested (5) (Fill in the number of containers for each test)													
Project/Site Name:		Fax #:		Should this sample be considered _____?											Preservative Type (6)		
Address:															<b>Comments</b> Note: extra sample is required for sample specific QC		
Collected by:		Send Results To:		Radiation	TSC A	Regd	ber of										
Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (2)					Field Filtered (3)	Sample Matrix (4)								
4.3B.R.20.1	11-20-15																
4.3B.R.20.2	11-20-15																
4.3B.R.20.3	11-20-15																
4.3B.R.20.4	11-20-15																
4.3B.R.15.1	11-20-15																
4.3B.R.15.2	11-20-15																
4.3B.R.9.1	11-20-15																
4.3B.R.9.2	11-20-15																
4.3B.R.8.1	11-20-15																
4.3B.R.8.2	11-20-15																
TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surcharge)		Fax Results: Yes _____ No _____		Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4													
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards												Sample Collection Time Zone Eastern Pacific Central Other Mountain					
Chain of Custody Signatures						Sample Shipping and Delivery Details											
Relinquished By (Signed) _____ Date _____ Time _____			Received by (signed) _____ Date _____ Time _____			GEL PM: _____											
1			1			Method of Shipment _____			Date Shipped _____								
2			2			Airbill # _____											
3			3			Airbill # _____											
1) Chain of Custody Number - Client Determined 2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite 3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered 4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc. Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, L = Urine, F = Fecal, N = N/A 5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010D/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010D/7470A - 1) 6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added - leave field blank												For Lab Receiving Use Only Custody Seal Intact? YES _____ NO _____ Cooler Temp. C _____					
WHITE = LABORATORY				YELLOW = FILE				PINK = CLIENT									

[illegible]

Page: _____ of _____ Project #: GEL Quote #: COC Number <sup>(1)</sup> : PO Number:		<b>GEL Chain of Custody and Analytical Request</b> <b>**See www.gel.com for GEL's Sample Acceptance SOP**</b> <b>GEL Work Order Number:</b>				GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178						
Client Name:		Phone #:		Sample Analysis Requested <sup>(5)</sup> (Fill in the number of containers for each test)								
Project/Site Name:		Fax #:		Should this sample be considered	<div style="display: flex; justify-content: space-between;"> <div>           &lt;-- Preservative Type (6)             Comments            Note: extra sample is required for sample specific QC         </div> </div>							
Address:												
Collected by:		Send Results To:		<div style="display: flex; flex-direction: column;"> <div>           Radi            oacti            ve         </div> <div>           TSC            A            Regu            lated         </div> <div>           ber of         </div> </div>								
Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (n)		Field Filtered (n)	Sample Matrix (n)						
4.3B R.1.1	11/23/15											
4.3B R.1.2	11/23/15											
4.3B R.1.3	11/23/15											
4.3B R.1.4	11/23/15											
4.3B R.4.1	11/23/15											
4.3B R.4.2	11/23/15											
4.3B R.4.3	11/23/15											
4.3B R.4.4	11/23/15											
4.3B R.4.5	11/23/15											
4.3B R.4.6	11/23/15											
TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surcharge)		Fax Results: Yes _____ No _____		Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4								
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards									Sample Collection Time Zone Eastern _____ Pacific _____ Central _____ Other _____ Mountain _____			
Chain of Custody Signatures						Sample Shipping and Delivery Details						
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	GEL PM:						
1			1			Method of Shipment		Date Shipped:				
2			2			Airbill #:						
3			3			Airbill #:						
1) Chain of Custody Number - Client Determined 2) QC Codes: N - Normal Sample, TB - Trip Blank, FB - Field Duplicate, EB - Equipment Blank, MS - Matrix Spike Sample, MSD - Matrix Spike Duplicate Sample, G - Grab, C - Composite 3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered 4) Matrix Codes: DW - Drinking Water, GW - Groundwater, SW - Surface Water, WW - Waste Water, W - Water, ML - Misc Liquid, SO - Soil, SD - Sediment, SL - Sludge, SS - Solid Waste, O - Oil, F - Filter, P - Wipe, U - Urine, F - Fecal, N - 5) Sample Analysis Requested - Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 6) Preservative Type: HA - Hydrochloric Acid, NA - Nitric Acid, SH - Sodium Hydroxide, SA - Sulfuric Acid, AA - Ascorbic Acid, HX - Hexane, ST - Sodium Thiosulfate. If no preservative is added - leave field blank									For Lab Receiving Use Only Custody Seal Intact? YES _____ NO _____ Cooler Temp: C _____			

WHITE = LABORATORY

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Page: _____ of _____ Project #: _____ GEL Quote #: _____ COC Number <sup>(1)</sup> : _____ PO Number: _____		<b>GEL Chain of Custody and Analytical Request</b> **See www.gel.com for GEL's Sample Acceptance SOP** <b>GEL Work Order Number:</b> _____										GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178							
Client Name:				Phone #:				Sample Analysis Requested <sup>(5)</sup> (Fill in the number of containers for each test)											
Project/Site Name:				Fax #:				Should this sample be considered		--- Preservative Type (6)  <b>Comments</b> Note: extra sample is required for sample specific QC									
Address:																			
Collected by:				Send Results To:				Radi active  TSC A Regu lated  per of											
Sample ID				*Date Collected (mm-dd-yy) *Time Collected (Military) (hh:mm) QC Code (3) Field Filtered (1) Sample Matrix (4)															
* For composites - indicate start and stop date/time																			
4.3B.R.2.1				11-23-15															
4.3B.R.2.2				11-23-15															
4.3B.R.2.3				11-23-15															
4.3B.R.2.4				11-23-15															
4.3B.R.3.1				11-23-15															
4.3B.R.3.2				11-23-15															
4.3B.R.3.3				11-23-15															
4.3B.R.3.4				11-23-15															
4.3A.R.2.1				11-23-15															
4.3A.R.2.2				11-23-15															
TAT Requested: Normal / Rush / Specify: _____ (Subject to Surcharges)				Fax Results: Yes / No				Circle Deliverable: C of A / QC Summary: Level 1 / Level 2 / Level 3 / Level 4											
Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards												Sample Collection Time Zone Eastern Pacific Central Other Mountain							
Chain of Custody Signatures								Sample Shipping and Delivery Details											
Relinquished By (Signed)				Date				Received by (signed)				Date							
1								1				GEL PM:							
												Method of Shipment:							
2								2				Date Shipped:							
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3								3				Airbill #:							
1.) Chain of Custody Number - Client Determined 2.) QC Codes: N - Normal Sample, TB - Trip Blank, FD - Field Duplicate, EB - Equipment Blank, MS - Matrix Spike Sample, MSD - Matrix Spike Duplicate Sample, G - Grab, C - Composite 3.) Field Filtered - For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered 4.) Matrix Codes: DW - Drinking Water, GW - Groundwater, SW - Surface Water, WW - Waste Water, W - Water, ML - Mine Liquid, SO - Soil, SD - Sediment, SL - Sludge, SS - Solid Waste, O - Oil, F - Filter, P - Wipe, U - Urine, F - Fecal, N - N/A 5.) Sample Analysis Requested - Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 6.) Preservative Type: HA - Hydrochloric Acid, NI - Nitric Acid, SH - Sodium Hydroxide, SA - Sulfuric Acid, AA - Ascorbic Acid, HX - Hexane, ST - Sodium Thiosulfate, If no preservative is added - leave field blank												For Lab Receiving Use Only Custody Seal Intact? YES NO Cooler Temp C							
WHITE = LABORATORY				YELLOW = FILE				PINK = CLIENT											



Page: _____ of _____	<h2 style="text-align: center;">GEL Chain of Custody and Analytical Request</h2> <p style="text-align: center;">**See www.gel.com for GEL's Sample Acceptance SOP**</p>	GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171 Fax: (843) 766-1178
Project #:		
GEL Quote #:		
COC Number (1):		
PO Number:	GEL Work Order Number:	

Client Name:		Phone #:		Sample Analysis Requested (5) (Fill in the number of containers for each test)																		
Project/Site Name:		Fax #:		Should this sample be considered																	Preservative Type (6)	
Address:																						
Collected by:		Send Results To:		TSC A Regulated																	Comments Note: extra sample is required for sample specific QC	
Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (4)	Field Filtered (4)	Sample Matrix (4)	Radl oacti ve	ber of															
4.3A.R.2.3	11-23-15																					
4.3A.R.2.4	11-23-15																					
4.3B.R.14.1	11-23-15																					
4.3B.R.14.2	11-23-15																					
4.3A.R.1.1	11-23-15																					
4.3A.R.1.2	11-23-15																					
4.3A.R.1.3	11-23-15																					
4.3A.R.1.4	11-23-15																					
4.3A.R.1.5	11-23-15																					
4.3B.R.14.5	11-23-15																					

TAT Requested: Normal:	Rush:	Specify:	(Subject to Surcharges)	Fax Results:	Yes	No	Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4
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Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards	<u>Sample Collection Time Zone</u> Eastern Pacific Central Other Mountain
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Chain of Custody Signatures				Sample Shipping and Delivery Details	
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1			1		
2			2		
3			3		

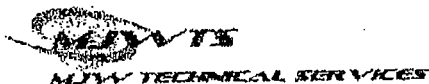
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WHITE = LABORATORY

YELLOW = FILE

PINK = CLIENT

App E –  
Sub-Area 4.3 - Instrument Field Sheets



Rev 1 10/18/15

### Instrument Field Response Check Log

#### 1. Instrument Information

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16  
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR 111127  
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

#### 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µCi Assay Date: 12/30/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 22926 net cpm -20% 15284  
 Source 2 Isotope: Cs-137 Serial No.: 87E13-48 Activity: 0.02 units: µCi Assay Date: 1/20/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 13375 net cpm -20% 8919

#### 3. Technician/Worker Performing Checks:

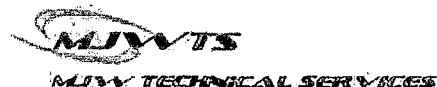
Name: STEVE KUSMAN Title: RCT Date: 11/18/15 Time: 1000

#### 4. Site or Location:

Site/Job: 4.3 Location Description: FIELD  
 GPS Coordinates (when required): X-Coord: N42°32.425 Y-Coord: W 79°02.930

Instrument Field Response <sup>1</sup>					Use Acceptance Criteria					Remarks
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: Inst. Condition, etc.)
temeter	1 MIN	8680	1 MIN	20839	Y	Y	Y	1000	57.7	Th232 SK
temeter	1 MIN	8680	1 MIN	12256	Y	Y	Y	1000	57.7	Cs137 SK
temeter	1 MIN	8533	1 MIN	20304	Y	Y	Y	1330	61.8	Th232 SK
temeter	1 MIN	8533	1 MIN	11946	Y	Y	Y	1330	61.8	Cs137 SK
temeter	1 MIN	8563	1 MIN	20124	Y	Y	Y	1540	60.2	Th232 SK
temeter	1 MIN	8563	1 MIN	12006	Y	Y	Y	1540	60.2	Cs137 SK
ron	NA	6	NA	17	Y	Y	Y	1000	57.7	Th232 SK
ron	NA	8	NA	18	Y	Y	Y	1330	61.8	Th232 SK
ron	NA	6	NA	17	Y	Y	Y	1540	60.2	Th232 SK

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



## Instrument Field Response Check Log

### 1. Instrument Information<sup>1</sup>

Ratemeter: Make/Model: Ludlum 2241-2 Serial No. 206098 Cal. Due Date: 09/01/16  
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642  
 Detector 2: Make/Model: \_\_\_\_\_ Serial No. \_\_\_\_\_

### 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 20.1 units: MC Assay Date: 12/24/10  
 Instrument Response Acceptance Range (source cpm - bkg +/- 20%): net cpm + 20% 53798 net cpm - 20% 35866

Source 2 Isotope: Cs-137 Serial No.: 119623-2 Activity: 0.02 units: uCi Assay Date: NA  
 Instrument Response Acceptance Range (source cpm - bkg +/- 20%): net cpm + 20% 3273 net cpm - 20% 8847

### 3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RC+

Date: 1008 Time: 1418/15

### 4. Site or Location:

Site/Job: Aren 43

Location Description: Woods

GPS Coordinates (when required): X-Coord: N 42° 52' 42" Y-Coord: W 71° 02' 42"

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria					Remarks
Det. No. (1/2)	Bkg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/- 20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l Info: temperature, Inst. Condition, etc.)
1	1 min	9765	—	—	—	Y	Y	1010	57.9°	JE
2	1 min	—	1 min	11466	Y	Y	Y	1013	59.9°	Th-232 JE Cs-137
1	1 min	—	1 min	46783	Y	Y	Y	1016	57.9°	Cs-137 JE Th-232
1	1 min	9956	—	46365	Y	Y	Y	1350	62.2°	JE
1	—	—	1 min	46365	Y	Y	Y	1358	62.0°	Th-232 JE
2	—	—	1 min	11694	Y	Y	Y	1341	62.6°	Cs-137 JE
1	1 min	—	—	9824	Y	Y	Y	1530	60.2°	JE
1	—	—	1 min	46665	Y	Y	Y	1538	60.0°	Th-232 JE
2	—	—	1 min	11838	Y	Y	Y	1543	60.0°	Cs-137 JE

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



MVT TECHNICAL SERVICES

Rev 1 10/18/15

## Instrument Field Response Check Log

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 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm +20% 13375 net cpm -20% 8919

## 3. Technician/Worker Performing Checks:

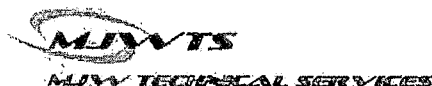
Name: STEVE KINSMAN Title: RCT Date: 11/19/15 Time: 0950

4. Site or Location: Site/Job: AREN 4.3Location Description: PARKING LOT

GPS Coordinates (when required): X-Coord: N 42° 32' 28.7 Y-Coord: W 078° 59' 51.2

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: Inst. Condition, etc.)
Ratemeter	1 MIN	7507	1 MIN	19866	Y	Y	Y	0950	63.5	Th232 SK
Ratemeter	1 MIN	7507	1 MIN	11046	Y	Y	Y	0950	63.5	Cs137 SK
Ratemeter	1 MIN	8111	1 MIN	20602	Y	Y	Y	1300	64.5	Th232 SK
Ratemeter	1 MIN	8111	1 MIN	11365	Y	Y	Y	1300	64.5	Cs137 SK
Ratemeter	1 MIN	7810	1 MIN	20272	Y	Y	Y	1515	67.4	Th232 SK
Ratemeter	1 MIN	7810	1 MIN	11300	Y	Y	Y	1515	67.4	Th232 SK Cs137
Bicron	NA	5	NA	18	Y	Y	Y	0950	63.5	Th232 SK
Bicron	NA	7	NA	17	Y	Y	Y	1300	64.5	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1515	67.4	Th232 SK

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



## Instrument Field Response Check Log

### 1. Instrument Information<sup>1</sup>

Ratemeter: Make/Model: Lyd/Lum 2241-2 Serial No. 206098  
 Detector 1: Make/Model: Lyd/Lum 44-10 Serial No. PR112642  
 Detector 2: Make/Model: \_\_\_\_\_ Serial No. \_\_\_\_\_

Cal. Due Date: 07/01/16

### 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 20.1 units: NC Assay Date: 12/5/10  
 Instrument Response Acceptance Range (source cpm - bkg +/-20%):  
 net cpm + 20% 53795 net cpm - 20% 35866

Source 2 Isotope: Cs-137 Serial No.: 119E2342 Activity: 0.02 units: MC Assay Date: NA  
 Instrument Response Acceptance Range (source cpm - bkg +/-20%):  
 net cpm + 20% 13273 net cpm - 20% 8849

### 3. Technician/Worker Performing Checks:

Name: J. Edwards Title: RCT

Date: 11/19/15 Time: 1000

### 4. Site or Location:

Site/Job: Aren 4.3

Location Description: woods

GPS Coordinates (when required): X-Coord: N 42° 32' 42.7 Y-Coord: W 79° 02' 92.6

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria					Remarks
Det. No. (1/2)	Bkg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/-20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l Info: temperature, inst. Condition, etc.)
1	1 min	9368	—	—	—	Y	Y	1005	62.9°	JE
1	—	—	1 min	47358	Y	Y	Y	1008	62.9°	Th-232 JE
1	—	—	1 min	11261	Y	Y	Y	1012	63.8°	Cs-137 JE
1	1 min	9200	—	—	Y	Y	Y	1308	64.9°	JE
1	—	—	1 min	15493	Y	Y	Y	1313	62.0°	Th-232 JE
1	—	—	1 min	11263	Y	Y	Y	1318	62.0°	Cs-137 JE
1	1 min	9258	—	—	Y	Y	Y	1518	65.3°	JE
1	—	—	1 min	46811	Y	Y	Y	1520	64.7°	Th-232 JE
1	—	—	1 min	11246	Y	Y	Y	1528	64.0°	Cs-137 JE

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



MINTS TECHNICAL SERVICES

Rev 1 10/18/15

## Instrument Field Response Check Log

1. Instrument Information<sup>1</sup>

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 252737 Cal. Due Date: 9/2/16  
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR111127  
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

## 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µCi Assay Date: 12/30/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 22926 net cpm -20% 15284

Source 2 Isotope: Cs-137 Serial No.: 87F13-48 Activity: 0.02 units: µCi Assay Date: 1/20/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 13375 net cpm -20% 8919

## 3. Technician/Worker Performing Checks:

Name: STEVE KINSMAN Title: RTE Date: 11/20/15 Time: 0930

4. Site or Location: Site/Job: 4.3Location Description: W-05

GPS Coordinates (when required): X-Coord: 47° 22' 28.3" Y-Coord: W 79° 02' 54.7"

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. condition, etc.)
Ratemeter	1 min	9100	1 min	21646	Y	Y	Y	0940	45.1	Th232 SK
Ratemeter	1 min	9100	1 min	12620	Y	Y	Y	0940	45.1	Cs137 SK
Ratemeter	1 min	7626	1 min	19986	Y	Y	Y	1300	44.2	Th232 SK
Ratemeter	1 min	7626	1 min	11304	Y	Y	Y	1300	44.2	Cs137 SK
Ratemeter	1 min	7797	1 min	19322	Y	Y	Y	1545	45.5	Th232 SK
Ratemeter	1 min	7797	1 min	11426	Y	Y	Y	1545	45.5	Cs137 SK
Bicron	NA	6	NA	18	Y	Y	Y	0940	45.1	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1300	44.2	Th232 SK
Bicron	NA	6	NA	17	Y	Y	Y	1545	45.5	Th232 SK

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



## Instrument Field Response Check Log

### 1. Instrument Information<sup>1</sup>

Ratemeter: Make/Model: Lv 16m 2241-2 Serial No. 206098  
 Detector 1: Make/Model: Lv 16m 44-10 Serial No. PR12642  
 Detector 2: Make/Model: \_\_\_\_\_ Serial No. \_\_\_\_\_

Cal. Due Date: 09/01/16

### 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 40.1 units: μCi Assay Date: 12/20/10  
 Instrument Response Acceptance Range (source cpm - bkg +/- 20%):  
 net cpm + 20% 52718 net cpm - 20% 35866

Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: μCi Assay Date: \_\_\_\_\_  
 Instrument Response Acceptance Range (source cpm - bkg +/- 20%):  
 net cpm + 20% 13273 net cpm - 20% 8849

### 3. Technician/Worker Performing Checks:

Name: J. Edwards

Title: RCT

Date: 11/20/15 Time: 0940

### 4. Site or Location:

Site/Job: Area 4.3

Location Description: woods

GPS Coordinates (when required): X-Coord: N 72° 32.427 Y-Coord: W 79° 02.926

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria					Remarks
Det. No. (1/2)	Bkg Cnt Time	Bkg (avg of 3) (cpm)	Source Cnt Time	Source Response (cpm - bkg) Net cpm	+/- 20% of source Net cpm (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (F)	Initials and Comments (add'l info: temperature, inst. Condition, etc.)
1	1min	9993	—	—	—	Y	Y	0944	48.1°	DE
1	—	—	1min	46849	Y	Y	Y	0949	52.7°	Th-232 DE
1	—	—	1min	11910	Y	Y	Y	0953	53.6°	Cs-137 DE
1	1min	9752	—	—	—	Y	Y	1114	47.6°	Th-232 DE
1	—	—	1min	46192	Y	Y	Y	1118	47.4°	Cs-137 Th-232 DE
1	—	—	1min	11798	Y	Y	Y	1124	47.4°	Cs-137 DE
1	1min	9815	—	—	—	Y	Y	1549	44.9°	DE
1	—	—	1min	45538	Y	Y	Y	1553	44.7°	Th-232 DE
1	—	—	1min	11689	Y	Y	Y	1556	44.7°	Cs-137 DE

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability.



### Instrument Field Response Check Log

#### 1. Instrument Information

Ratemeter: Make/Model: LUDLUM 2241-2 Serial No. 262737 Cal. Due Date: 9/2/16  
 Detector 1: Make/Model: LUDLUM 44-10 Serial No. PR 111127  
 Bicron MicroRem Meter: Serial No. A224U Cal. Due Date: 8/4/16

#### 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 116 Activity: <0.1 units: µCi Assay Date: 12/30/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% uRem/hr -20% net cpm + 20% 22926 net cpm -20% 15284  
 Source 2 Isotope: Cs-137 Serial No.: 87F13-48 Activity: 0.02 units: µCi Assay Date: 1/20/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% uRem/hr -20% net cpm + 20% 13375 net cpm -20% 8919

#### 3. Technician/Worker Performing Checks:

Name: Koe Brown Title: RCT Date: 11-23-15 Time: 10:00

#### 4. Site or Location: Site/Job: 4.3

Location Description: \_\_\_\_\_

GPS Coordinates (when required): X-Coord: N 74° 02' 55.6" Y-Coord: N 42° 32' 25.5"

Instrument Field Response <sup>1</sup>					Use Acceptance Criteria					Remarks
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l Info: Inst. Condition, etc.)
Ratemeter	1	7954	1	20631	Y	Y	Y	1000	37.0	Th-232 SK
Ratemeter	1	7954	1	11485	Y	Y	Y	1000	37.0	Cs-137 SK
Ratemeter	1min	7639	1min	20249	Y	Y	Y	1330	37.5	Th-232 SK
Ratemeter	1min	7639	1min	11450	Y	Y	Y	1330	37.5	Cs-137 SK
Ratemeter	1min	7658	1min	19888	Y	Y	Y	1545	37.2	Th-232 SK
Ratemeter	1min	7658	1min	11424	Y	Y	Y	1545	37.2	Cs-137 SK
Bicron	NA	3	NA	17	Y	Y	Y	1000	37.0	Th-232 SK
Bicron	NA	3	NA	17	Y	Y	Y	1330	37.5	Th-232 SK
Bicron	NA	4	NA	17	Y	Y	Y	1545	37.2	Th-232 SK

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

### Instrument Field Response Check Log

**1. Instrument Information<sup>1</sup>**

Ratemeter: Make/Model: LC Meter 2241-2 Serial No. 286098 Cal. Due Date: 09/01/16  
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642  
 Bicron MicroRem Meter: Serial No. 1487 Cal. Due Date: 6/18/16

**2. Check Source Information:**

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 0.01 units: uCi Assay Date: 6/24/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 53798 net cpm -20% 35966  
 Source 2 Isotope: Cs-137 Serial No.: 119523-12 Activity: 0.02 units: uCi Assay Date: NA  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 13023 net cpm -20% 8849

**3. Technician/Worker Performing Checks:**

Name: J. Edwards Title: RCT Date: 11/23/15 Time: 1000

**4. Site or Location:**

Site/Job: Area 4.3 Location Description: Woods  
 GPS Coordinates (when required): X-Coord: N 42° 52.427 Y-Coord: W 74° 02.926

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: Inst. Condition, etc.)
Ratemeter	1min	10172cpm	1min	46597cpm	Y	Y	Y	1009	37.4°	Th-232 DE
Ratemeter		1197	1min	11970cpm	Y	Y	Y	1015	37.7°	Cs-137 DE
Ratemeter	1min	9841	1min	46371cpm	Y	Y	Y	1349	35.9°	Th-232 DE
Ratemeter			1min	11841cpm	Y	Y	Y	1345	36.8°	Cs-137 DE
Bicron	NA	5 uRem	NA	40 uRem/hr	Y	Y	Y	1005	37.2°	Th-232 DE
Bicron	NA	9 uRem	NA	30 uRem/hr	Y	Y	Y	1540	37.0°	Th-232 DE
Bicron	NA		NA	11/23/15 DE						
Bicron	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

# Instrument Field Response Check Log

## 1. Instrument Information<sup>1</sup>

Ratemeter: Make/Model: Lin 110in 2241-2

Serial No. 206098

Cal. Due Date: 20/01/16

Detector 1: Make/Model: Lin 44-10

Serial No. PR112647

Cal. Due Date: 06/18/16

Bicron MicroRem Meter:

Serial No. 1487

## 2. Check Source Information:

Source 1 Isotope: Th-232 Serial No.: 111

Activity: 40.1 units: MC

Assay Date: 12/30/10

Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_

uRem/hr -20% \_\_\_\_\_

net cpm + 20% 5374.8 net cpm -20% 3505.6

Source 2 Isotope: Cs-137 Serial No.: 119E23-12

Activity: 0.02 units: MC

Assay Date: NA

Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_

uRem/hr -20% \_\_\_\_\_

net cpm + 20% 1327.3 net cpm -20% 889.9

## 3. Technician/Worker Performing Checks:

Name: J. Edwards

Title: RCT

Date: 11/23/15 Time: 1545

## 4. Site or Location:

Site/Job: Area 4.3

Location Description: woods

GPS Coordinates (when required): X-Coord: N42°32'42.7"

Y-Coord: W 79°02'42.6"

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. Condition, etc.)
Ratemeter	1 min	9855 cpm	1 min	46724 cpm	Y	Y	Y	1553	37.7°	Th-232 DE
Ratemeter			1 min	11834 cpm	Y	Y	Y	1557	37.5°	Cs-137 DE
Ratemeter										
Ratemeter										
Bicron	NA	6 uRem/hr	NA	30 uRem/hr	Y	Y	Y	1548	37.5°	Th-232 DE
Bicron	NA		NA	11/23/15 DE						
Bicron	NA		NA							
Bicron	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

### Instrument Field Response Check Log

**1. Instrument Information<sup>1</sup>**

Ratemeter: Make/Model: Ludlum 2241-2 Serial No. 206098 Cal. Due Date: 09/01/16  
 Detector 1: Make/Model: Ludlum 44-10 Serial No. PR112642  
 Bicron MicroRem Meter: Serial No. \_\_\_\_\_ Cal. Due Date: \_\_\_\_\_

**2. Check Source Information:**

Source 1 Isotope: Th-232 Serial No.: 111 Activity: 0.01 units: MC Assay Date: 12/21/10  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 53798 net cpm -20% 35566  
 Source 2 Isotope: Cs-137 Serial No.: 119E23-12 Activity: 0.02 units: MC Assay Date: NA  
 Response Acceptance Range (+/-20%): uRem/hr +20% \_\_\_\_\_ uRem/hr -20% \_\_\_\_\_ net cpm + 20% 13273 net cpm -20% 8849

**3. Technician/Worker Performing Checks:**

Name: J. Edwards Title: RCT Date: 11/24/15 Time: 0953

**4. Site or Location:**

Site/Job: Area 4.3 Location Description: gravel piles  
 GPS Coordinates (when required): X-Coord: N 42° 32' 28.1" Y-Coord: W 079° 03' 04.7"

Instrument Field Response <sup>2</sup>					Use Acceptance Criteria				Remarks	
Meter	Bkg Cnt Time	Bkg Counts (cpm) or uRem/hr	Source Cnt Time	Source Response (gross cpm or uRem/hr)	+/- 20% source gross cpm or uRem/hr (Y/N)	Inst. Calib. current (Y/N)	Battery Check (Y/N)	Time Of check	Ambient Temp. (°F)	Initials and Comments (add'l info: inst. Condition, etc.)
Ratemeter	1min	9246cpm	1min	4666.9cpm	Y	Y	Y	0937	41.1°	Th-232 JE
Ratemeter			1min	11067cpm	Y	Y	Y	0947	41.0°	Cs-137 JE
Ratemeter	1min	9726cpm	1min	46309cpm	Y	Y	Y	1114	40.2°	Th-232 JE
Ratemeter			1min	11729cpm	Y	Y	Y	1126	40.0°	Cs-137 JE
Ratemeter	1min	9562cpm	1min	45652cpm	Y	Y	Y	1450	44.4°	Th-232 JE
Ratemeter			1min	11514cpm	Y	Y	Y	1457	43.8°	Cs-137 JE
Bicron	NA		NA							
Bicron	NA		NA							
Bicron	NA		NA							

- Instrument designated check source is listed on calibration sticker. Record check source response (net cpm) prior to field deployment for all check sources being used.
- Source and Background count rate should be determined from the average of three static counts at the same location. Repeat counts should be within 20%. If count rate diverges significantly, perform additional counts to evaluate instrument stability

App E –  
Sub-Area 4.3 - Sample Data Sheets



NWTS TECHNICAL SERVICES

## SAMPLE LOCATION DATA SHEET

Date: 11/23/15 Project: W4SERDH Name: J. BrownWeather: cloudy, windy 36s

## 1. Sample Area (SA):

SA Designation: 4.3.A Description: Wooded lot  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3.A.1 Matrix: SoilLocation Coord: 79° 02' 42° 32'

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) \_\_\_\_\_ Y Dist. from Origin: \_\_\_\_\_

Site Sketch Attached (Yes) (NO)

Sample Location Description: level ground, partially wooded, ground brushCanopy Type: partially open Land Use: hiking, etc. Soil Moisture (Wet, dry, etc.): damp

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
	8942	8575	5	5	NH
	9184	8616			NH

## 4. Sample Information:

Sample Area ID: 4.3.A.1.R1-R4

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	topsoil	dark brown	4.3.A.1.R.1	
15-30	topsoil	brown	4.3.A.1.R.2	some roots
30-60	topsoil	brown	4.3.A.1.R.3	some roots
60-100	topsoil	brown	4.3.A.1.R.4	

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

## SAMPLE LOCATION DATA SHEET

Date: 11-23-15 Project: MYSEBDA Name: Tai Brown

Weather: cold, cloudy, 30°F

### 1. Sample Area (SA):

SA Designation: 4.317 Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.317.2 Matrix: Soil

Location Coord: W 74° 02' N 42° 32'

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7791	7571	5	4	N/A
1	8190	7439			N/A

### 4. Sample Information:

Sample Area ID: 4.3A.R.2.1-4

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	SD-1	Brown	4.3A.R.2.1	N/A
15-30	SD-1/clay	Brown	4.3A.R.2.2	N/A
30-60	SD-1/clay	Brown	4.3A.R.2.3	N/A
60-100	SD-1/clay	Brown	4.3A.R.2.4	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

# SAMPLE LOCATION DATA SHEET

Date: 11-20-15 Project: NYSERDA Name: Tori Brown

Weather: cal, sunny

## 1. Sample Area (SA):

SA Designation: 4.3A Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3A.3 Matrix: Soil  
Location Coord: N 42° 38' 28.67" W 79° 02' 26.41"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods, leaves

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

Count time (min)	2x2 NaI (cpm)		Bicron (uRem/hr)		Notes
	1 cm	1m	1 cm	1m	
1	7932	7625	6	5	N/A
1	7954	7362			N/A

## 4. Sample Information:

Sample Area ID: 4.3A.R.3.1-2

### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3A.R.3.1	N/A
15-30	Soil	Brown	4.3A.R.3.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)





NJW TECHNICAL SERVICES

## SAMPLE LOCATION DATA SHEET

Date: 11-20-15 Project: NYSDA Name: Toni BrownWeather: COOL, sunny

## 1. Sample Area (SA):

SA Designation: 4.3A Description: Woods  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3A.4 Matrix: soilLocation Coord: N 42° 32' 28.78" W 79° 02' 27.15"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/ASite Sketch Attached (Yes) (NO)Sample Location Description: Woods, heavy brushCanopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7996	7370	4	6	N/A
1	7891	7396			N/A

## 4. Sample Information:

Sample Area ID: 4.3A.R.4.1-2, 5-6

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3A.R.4.1	N/A
15-30	Soil	Brown	4.3A.R.4.2	N/A
0-15	Soil	Brown	4.3A.R.4.5	N/A
15-30	Soil	Brown	4.3A.R.4.6	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

10/20/15



NJW TECHNICAL SERVICES

## SAMPLE LOCATION DATA SHEET

Date: 11-23-15 Project: NYSE-RDA Name: J. BrownWeather: Sunny, cool 30°F

## 1. Sample Area (SA):

SA Designation: 4.3B Description: Woods  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3B.1 Matrix: SoilLocation Coord: N42°32' W79°02'

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/ASite Sketch Attached (Yes) ☒ NOSample Location Description: partially wooded, ground brush and weedsCanopy Type: partially open Land Use: hiking, etc. Soil Moisture (Wet, dry, etc.): damp, no water

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	10,526	9302	7	6	N/A
1	10,261	9806			N/A

## 4. Sample Information:

Sample Area ID: 4.3B.R.1.1-4

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	topsoil	brown	4.3B.R.1.1	few roots
15-30	topsoil	brown	4.3B.R.1.2	more roots
30-60	topsoil	brown	4.3B.R.1.3	few roots
60-100	topsoil	brown	4.3B.R.1.4	few roots

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11-23-15 Project: NYSE RDA Name: Tom Brown

Weather: cool, sunny, 30°

**1. Sample Area (SA):**

SA Designation: 4.3B Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.3B 2 Matrix: Soil

Location Coord: N 42° 32' 23.47" W 75° 02' 24.44"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods, Brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8768	7766	6	3	N/A
1	8668	7835			N/A

**4. Sample Information:**

Sample Area ID: 4.3B.22.1-4

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.2.1	N/A
15-30	Soil	Brown	4.3B.R.2.2	N/A
30-60	soil/sand	Brown	4.3B.R.2.3	very loose, sand
60-100	sand	Brown	4.3B.R.2.4	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

## SAMPLE LOCATION DATA SHEET

Date: 11-23-15 Project: NYSERTSA Name: Toni Brown

Weather: cool, cloudy, 30°

### 1. Sample Area (SA):

SA Designation: 4.3B Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3B.3 Matrix: soil

Location Coord: N 42° 32' 23.80" W 75° 02' 22.63"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ (No) ☐

Sample Location Description: Woods, along trail, heavy bush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8503	8121	5	3	N/A
1	8491	8077			N/A

### 4. Sample Information:

Sample Area ID: 4.3B.2.3.1-4

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org, clay, sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-5	soil	Brown	4.3B.2.3.1	N/A
15-30	soil	Brown	4.3B.2.3.2	N/A
30-60	soil/sand	Brown	4.3B.2.3.3	N/A
60-100	sand	Brown	4.3B.2.3.4	N/A

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)



MNV TECHNICAL SERVICES

## SAMPLE LOCATION DATA SHEET

Date: 11/23/15 Project: NY SERDA Name: J. BrownWeather: sunny, cool, 30's

## 1. Sample Area (SA):

SA Designation: 4.3 B.R.4 Description: wooded lot  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3 B.R.4 Matrix: SoilLocation Coord: N 42° 32.420' W 79° 02.378'

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) \_\_\_\_\_ Y Dist. from Origin: \_\_\_\_\_

Site Sketch Attached (Yes) (NO)

Sample Location Description: flat area next to creek bank, ground scrub, weeds

Canopy Type: mostly open Land Use: hiking, etc. Soil Moisture (Wet, dry, etc.): damp, no water

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	9331	7403	7	7	Dist
1	9266	8107			N

## 4. Sample Information:

Sample Area ID: 4.3 B.R.4.1-6

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	topsoil	brown	4.3 B.R.4.1	few roots
15-30	topsoil	brown	4.3 B.R.4.2	
30-60	topsoil	brown	4.3 B.R.4.3	large root
60-90	topsoil	brown	4.3 B.R.4.4	
90-120	topsoil	brown	4.3 B.R.4.5	large root
120-150	topsoil	brown	4.3 B.R.4.6	

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11/18/15 Project: NYSERDA Name: Tori Brown

Weather: Windy, cool, cloudy

**1. Sample Area (SA):**

SA Designation: 4.3B Description: Wooded Trails  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.3B.5 Matrix: Soil

Location Coord: N 42° 32' 24.91" W 79° 02' 24.57"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) MA Y Dist. from Origin: MA

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods, side of hill, brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8307	7659	10	5	N/A
1	8415	7828			N/A

**4. Sample Information:**

Sample Area ID: 4.3B.R.5.1-2

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	soil	brown	4.3B.R.5.1	<del>1/4" Loney</del>
15-30	soil	light brown	4.3B.R.5.2	Loney

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

## SAMPLE LOCATION DATA SHEET

Date: 11/20/15 Project: NYSERDA Name: J. Brown

Weather: PIT sunny, 40s, windy

### 1. Sample Area (SA):

SA Designation: 4.3B Description: wooded lot  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3BR6 Matrix: Soil  
 Location Coord: 42° 32' 26.62" N 79° 2' 22.28" W

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) \_\_\_\_\_ Y Dist. from Origin: \_\_\_\_\_

Site Sketch Attached (Yes) (NO)

Sample Location Description: Partially wooded, ground scrub brush, dead leaves (cleared)

Canopy Type: Partially open Land Use: hiking Soil Moisture (Wet, dry, etc.): damp

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	9320	8599	4	3	N/A
1	9515	8833			

### 4. Sample Information:

Sample Area ID: 4.3BR.6.1-2

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	top soil	brown	4.3B.R.6.1	few roots
15-30	top soil	brown	4.3B.R.6.2	some roots

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11-20-15 Project: NYSEDA Name: Terry Brown

Weather: cool, cloudy

**1. Sample Area (SA):**

SA Designation: 4.3B Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.3B.7 Matrix: Soil

Location Coord: N 42° 32' 28.22" W 79° 02' 24.59"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods, leaves

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7711	7324	7	4	N/A
1	7821	7129			N/A

**4. Sample Information:**

Sample Area ID: 4.3B.R.7.1-2

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.7.1	N/A
15-30	Soil	Brown	4.3B.R.7.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)



## SAMPLE LOCATION DATA SHEET

Date: 11-20-15 Project: NYSERDA Name: Tori Brown

Weather: Cool, Sunny

### 1. Sample Area (SA):

SA Designation: 4.3B Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3B.8 Matrix: Soil  
Location Coord: N 42° 32' 27.84" W 79° 02' 21.49"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Wooded, leaves, young trees

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7797	7564	6	5	N/A
1	7725	7289			N/A

### 4. Sample Information:

Sample Area ID: 4.3B.R.8.1-2

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.8.1	N/A
15-30	Soil	Brown	4.3B.R.8.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11-20-15 Project: NYSERDA Name: Ta. Brown

Weather: Coa, sunny

**1. Sample Area (SA):**

SA Designation: 4.38 Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.38.9 Matrix: Soil  
Location Coord: N 42° 32' 28.77" W 79° 02' 21.57"

Alternate Location Measurements (distance from SA origin and Local Coord.)  
X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ (No)

Sample Location Description: Wooded, leaves

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8382	7437	7	5	N/A
1	8340	7557			N/A

**4. Sample Information:**

Sample Area ID: 4.38.2.9.1-2

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.38.2.9.1	N/A
15-30	Soil	Brown	4.38.2.9.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)



## SAMPLE LOCATION DATA SHEET

Date: 11/19/15 Project: NY SERDA Name: Tori Brown

Weather: Warm

### 1. Sample Area (SA):

SA Designation: 4.3B Description: Wooded  
 SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
 SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3B.10 Matrix: Soil  
 Location Coord: N 42° 32' 22.8" W 079° 02' 25.8"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ (NO)

Sample Location Description: Woods, light brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8927	8525	6	6	N/A
1	9029	8402			N/A

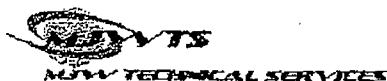
### 4. Sample Information:

Sample Area ID: <sup>TB 11/15</sup> 4.3B.10 4.3B.R.10.1-2

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.10.1	N/A
15-30	Soil	Brown	4.3B.R.10.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)



## SAMPLE LOCATION DATA SHEET

Date: 11/18 Project: NYSEDA Name: Toni BrownWeather: Cool, Cloudy

## 1. Sample Area (SA):

SA Designation: 4.3B Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3B.11 Matrix: SoilLocation Coord: W 79° 2' 23.68" N 42° 32' 24.35"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/ASite Sketch Attached (Yes) ☒ (NO)Sample Location Description: Wooded, brush, flatCanopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8569	7853	6	5	N/A
1	8612	7700			N/A

## 4. Sample Information:

Sample Area ID: 4.3B.R.11.1-2

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.11.1	Low
15-30	Soil	Brown	4.3B.R.11.2	Low

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)



## SAMPLE LOCATION DATA SHEET

Date: 11/18/15 Project: NYSERDA Name: Toni BrownWeather: Cool, Cloudy

## 1. Sample Area (SA):

SA Designation: 4.38 Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.38.12 Matrix: SoilLocation Coord: N 42° 32' 26.75" W 79° 02' 24.53"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/ASite Sketch Attached (Yes) ☒ (NO)Sample Location Description: Woods, light brushCanopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7877	7389	5	5	MA
1	7869	7557			MA

## 4. Sample Information:

Sample Area ID: 4.38.R.12.1-2

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.38.R.12.1	N/A
15-30	Soil	Brown	4.38.R.12.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11/20/15 Project: NY5ERGA Name: J. Brown

Weather: Part cloudy, 40's, windy

**1. Sample Area (SA):**

SA Designation: 4.3.B.R.13 Description: \_\_\_\_\_  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.3.B.R.13 Matrix: Soil  
Location Coord: 42°32'27.55" N 77°2'23.90" W

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) \_\_\_\_\_ Y Dist. from Origin: \_\_\_\_\_

Site Sketch Attached (Yes) (NO)

Sample Location Description: partially wooded, heavy scrub brush, dead leaves (cleared)

Canopy Type: partially open Land Use: hiking etc. Soil Moisture (Wet, dry, etc.): damp

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	9255	8725	6	7	N/A
1	9349	8589			

**4. Sample Information:**

Sample Area ID: 4.3.B.R.131-2

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org, clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	topsoil	brown	4.3.B.R.13.1	few roots
15-30	topsoil	brown	4.3.B.R.13.2	some roots

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

**SAMPLE LOCATION DATA SHEET**

Date: 11-23-15 Project: NYSE RDA Name: Tai Brown

Weather: cool, sunny, 30°F

**1. Sample Area (SA):**

SA Designation: 4.3B Description: Woods  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

**2. Sample Location Data:**

Sample Area ID: 4.3B.14 Matrix: Soil  
Location Coord: N 42° 32' 28.43" W 79° 02' 23.22"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Woods, Brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

**3. Location Radiation Readings:**

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8035	7441	5	4	N/A
1	8155	7531			N/A

**4. Sample Information:**

Sample Area ID: 4.3B.14.1-2

**Description by Depth:**

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.14.1	N/A
15-30	Soil	Brown	4.3B.14.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

## SAMPLE LOCATION DATA SHEET

Date: 11-20-15 Project: NYSERDA Name: Tori Braun

Weather: cool, sunny

### 1. Sample Area (SA):

SA Designation: 4.3B Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3B.15 Matrix: Soil  
Location Coord: N 42° 32' 29.49" W 079° 02' 19.79"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ (NO) ☐

Sample Location Description: Wooded, Brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8052	7471	7	4	N/A
1	8248	7295			N/A

### 4. Sample Information:

Sample Area ID: 4.3B. R. 15. 1-2

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.R.15.1	N/A
15-30	Soil	Brown	4.3B.R.15.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) ☐ (N)



# SAMPLE LOCATION DATA SHEET

Date: 11/19/15 Project: NYSERDA Name: Tori Brown

Weather: Warm, sunny

## 1. Sample Area (SA):

SA Designation: 4.33 Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.33 1c Matrix: Soil  
Location Coord: N 42° 32' 22.10" W 79° 02' 24.61"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ NO

Sample Location Description: Woods, No brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

Count time (min)	2x2 NaI (cpm)		Bicron (uRem/hr)		Notes
	1 cm	1m	1 cm	1m	
1	8671	8149	6	6	N/A
1	8570	8021			N/A

## 4. Sample Information:

Sample Area ID: 4.33.R-1c.1-2

### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.33.R-1c.1	N/A
15-30	Soil	Brown	4.33.R-1c.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)



MOUNTAIN TECHNICAL SERVICES

## SAMPLE LOCATION DATA SHEET

Date: 11/18/15 Project: NYSEERDA Name: Tori BrownWeather: Cool, cloudy

## 1. Sample Area (SA):

SA Designation: 4.3B Description: Wooded

SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_

SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3B.17 Matrix: SoilLocation Coord: N 42° 32' 25.52" W 79° 02' 23.67"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/ASite Sketch Attached (Yes) (NO)Sample Location Description: wooded brushCanopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	8786	7889	7	6	N/A
1	8220	7593			N/A

## 4. Sample Information:

Sample Area ID: 4.3B. R. 17.1-2

## Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B. R. 17.1	N/A
15-30	Soil	Brown	4.3B. R. 17.2	Large root

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

# SAMPLE LOCATION DATA SHEET

Date: 11/18/15 Project: NYSEROA Name: Ton Brown

Weather: cool, windy, cloudy

## 1. Sample Area (SA):

SA Designation: 4.3B Description: Next to trail, brush  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3B.18 Matrix: Soil

Location Coord: W 79° 02' 21.82" N 42° 32' 24.38"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) ☒ (NO)

Sample Location Description: Brush next to trail

Canopy Type: Open Land Use: H. King Soil Moisture (Wet, dry, etc.): Dry

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	7902	7536	6	8	N/A
1	7858	7577			N/A

## 4. Sample Information:

Sample Area ID: 4.3B.18.1-2

### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.18.1	N/A
15-30	Soil	Brown	4.3B.18.2	N/A

Sample Recorded on Laboratory COC form and Container Labeled: ☒ (Y) (N)

# SAMPLE LOCATION DATA SHEET

Date: 11/20/15 Project: MUSERDA Name: J. Brown

Weather: Sunny, cool - 40's, windy

## 1. Sample Area (SA):

SA Designation: 4.3B Description: wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

## 2. Sample Location Data:

Sample Area ID: 4.3BR19 Matrix: Soil  
Location Coord: 42°32'26.73" N 79°2'21.17" W

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) \_\_\_\_\_ Y Dist. from Origin: \_\_\_\_\_

Site Sketch Attached (Yes) (NO)

Sample Location Description: trees, scrub brush, leaves on ground (cleared)

Canopy Type: partially closed Land Use: hiking Soil Moisture (Wet, dry, etc.): damp

## 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	9381	8726	6	6	N/A
1	9388	8743			

## 4. Sample Information:

Sample Area ID: 4.3BR191-2

### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	topsoil	brown	4.3BR19.1	
15-30	topsoil	brown	4.3BR19.2	some roots

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)

## SAMPLE LOCATION DATA SHEET

Date: 11-20-15 Project: MYSEROA Name: Tan Brown

Weather: Cold, sunny

### 1. Sample Area (SA):

SA Designation: 4.3B Description: Wooded  
SA Origin Location: \_\_\_\_\_ Coord. System: \_\_\_\_\_  
SA Land Mark Description: \_\_\_\_\_ Coord: \_\_\_\_\_

### 2. Sample Location Data:

Sample Area ID: 4.3B.20 Matrix: Soil  
Location Coord: W 79° 02' 20.06" N 42° 32' 30.46"

Alternate Location Measurements (distance from SA origin and Local Coord.)

X Dist. from Origin (0,0) N/A Y Dist. from Origin: N/A

Site Sketch Attached (Yes) (NO)

Sample Location Description: Wooded, Brush

Canopy Type: Open Land Use: Hiking Soil Moisture (Wet, dry, etc.): Dry

### 3. Location Radiation Readings:

2x2 NaI (cpm)			Bicron (uRem/hr)		Notes
Count time (min)	1 cm	1m	1 cm	1m	
1	80826	7351	6	4	N/A
1	78416	7420			N/A

### 4. Sample Information:

Sample Area ID: 4.3B.220-1-2, 5-6

#### Description by Depth:

Depth Interval (cm)	Soil Type (Org; clay; sand, etc.)	Soil Color	Sample ID	Sampling Description (Surface litter type/depth, sample depth retention, refusal, stone or rock, topography, erosion features)
0-15	Soil	Brown	4.3B.220.1	N/A
15-30	Soil	Brown	4.3B.220.2	some sand @ 30 cm
0-15	Soil	Brown	4.3B.220.5	N/A
15-30	Soil	Brown	4.3B.220.6	some sand @ 30 cm

Sample Recorded on Laboratory COC form and Container Labeled: (Y) (N)