SURVEY REQUEST FORM

SR NUMBER	SR-11	**DATE ISSUED**	1/17/06
TYPE OF SR	☐ FSS ☒ CHARACTERIZATION ☐ OTHER:		
AREA / LOCATION	Plum Brook Stream Bed from the end of Section B to Bogart Road (Section C Phase 2)		
PURPOSE / SCOPE	Collect biased samples based on scan survey data to characterize the contiguous banks on both sides of the Plum Brook stream bed. For the purposes of this SR, the stream bed is considered to be sixteen (16) feet wide, measuring eight (8) feet in each direction from the stream centerline. Phase 1 sampling identified this stream section to be approximately 2,275 linear feet in length encompassing 36,400 ft^2.		
SURVEY DESIGN NUMBER	N/A		
SURVEY UNIT NUMBERS	N/A	**GRID NUMBERS**	N/A

SAMPLE TYPE

☒ **SURFACE SOIL SAMPLE:**	See Page 3 of this SR for specific instructions.
☒ **SUB-SURFACE SOIL SAMPLE:**	See Page 3 of this SR for specific instructions.
☐ **SMEAR SAMPLE:**	
☐ **SEDIMENT SAMPLE:**	
☐ **CORE SAMPLE:**	
☐ **WATER SAMPLE:**	
☐ **OTHER:**	

SURVEY TYPE

SURFACE SCAN	☐ BETA ☒ GAMMA ☐ ALPHA	**INST. TYPE** **PROBE TYPE**	Ludlum 2350-1 44-10 Cs-137 window	**SCAN RATE & DETECTOR DISTANCE FROM SURFACE**	Detector shall be held within 4 inches from the surface and moved in a serpentine pattern at a speed not to exceed 10 inches per second.
SURFACE SCAN	☐ BETA ☐ GAMMA ☐ ALPHA	**INST. TYPE** **PROBE TYPE**		**SCAN RATE & DETECTOR DISTANCE FROM SURFACE**	
STATIC MEASURE-MENT	☐ BETA ☒ GAMMA ☐ ALPHA	**INST. TYPE** **PROBE TYPE**	Ludlum 2350-1 44-10 Cs-137 window	**COUNT TIME & DETECTOR DISTANCE FROM SURFACE**	Detector shall be held within 2 ½ inches from the surface. Count time shall be 1 minute.
STATIC MEASURE-MENT	☐ BETA ☐ GAMMA ☐ ALPHA	**INST. TYPE** **PROBE TYPE**		**COUNT TIME & DETECTOR DISTANCE FROM SURFACE**	
OTHER					

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SURVEY REQUEST FORM

SR NUMBER	SR-11	AREA / LOCATION	Plum Brook Stream Bed from the end of Section B to Bogart Road (Section C Phase 2)

SPECIFIC SAMPLING & SURVEYING INSTRUCTIONS / COMMENTS

Prerequisites and Special Instructions

1. Notification to the Ohio Department of Health (ODH) must precede the start of survey and sample activities. Inform the RSO of the anticipated start date for this SR to enable time for the required notification.
2. An initial pre-job briefing is required with FSS/Characterization Technicians, D&D Technicians and FSS/Characterization Supervisor before the start of any surveying or sampling activities. Subsequent briefings will be at the discretion of the FSS/Characterization Supervisor.
3. Review the JSA and adhere to all precautionary requirements.
4. Scanning or static measurement activities shall not be performed when the ambient air temperature is below 32 degrees Fahrenheit.
5. Additional surveying and sampling may be performed at the discretion of the FSS/Characterization Manager provided the work is performed in accordance with instructions provided by this Survey Request (SR).

Quality Control (QC) Samples

A minimum of 5% of all scan and static measurements will be duplicated or repeated using identical methodology contained in this SR. (Document as separate surveys. Be sure to reference download number on the survey form.) QC scan and static measurement should be performed with 24 hours of the original survey.

A minimum of 5% of all samples collected shall be fully homogenized, split, and submitted for independent analyses. To obtain a QC sample, thoroughly mix the sample material obtained from the selected sample point and divide into two equal samples. Clearly label one of the samples as the QC sample.

APPROVAL SIGNATURES

FSS/CHARACTERIZATION SUPERVISOR	R. Marquette	DATE	1/16/06
FSS/CHARACTERIZATION MANAGER	W. Stoner	DATE	1/17/06
NASA PROJECT RSO	W. Stoner	DATE	1/17/06

SR CLOSURE

FSS/CHARACTERIZATION SUPERVISOR	R. Marquette	DATE	4.14.06
FSS/CHARACTERIZATION MANAGER	W. Stoner	DATE	4/27/06
NASA PROJECT RSO	W. Stoner	DATE	4/27/06

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SURVEY REQUEST CONTINUATION SHEET

SR NUMBER	SR-11	AREA / LOCATION	Plum Brook Stream Bed from the end of Section B to Bogart Road (Section C Phase 2)

SPECIFIC SAMPLING & SURVEYING INSTRUCTIONS / COMMENTS

Scanning with a Ludlum 2350-1 and a 44-10 2X2 NaI detector with a Cs-137 Window

1. Section "C" begins at the point due south of Taylorbrook Lane at the end point of Section B and runs to the west side of the Bogart Road overpass.
2. Perform a 100% scan of the bank area beginning at the stream edge and extending a minimum of three feet out on both sides of the stream.
3. The scan investigation level for this survey shall be ≥ **300 gross CPM**. This investigation level is based on studies performed to establish similar criteria for the Pentolite Ditch Characterization. (Reference Survey Package Number A2300 101P4, Appendix B, Support Documentation.)
4. In areas where the stream is unusually narrow, extend the scanning area to encompass any portion of the stream bank needed to meet the "8 feet from the centerline" model of the stream bed. Note these exceptions on a Survey Request Continuation Sheet.
5. In areas where the stream bank is unusually flat, expand the scan to include any area that displays obvious, regular sediment deposition. Note these exceptions on a Survey Request Continuation Sheet.
6. Areas indicating activity ≥ **300 gross CPM** shall be investigated in accordance with Step 4.3.4.4 of Procedure CS-01, "Survey Methodology to Support PBRF License Termination."
7. Be sure to obtain sufficient static measurements in accordance with Step 4.3.5 to adequately bound and provide follow-up sampling locations if required.

Surface/Subsurface Soil Sampling

1. Observe the "Prerequisites and Special Instructions" on Page 2 of this SR.
2. Sample locations shall be determined in the following manner:
   a. For each 100 foot stretch of stream bank between Phase 1 sample points, submit all scanning survey data to the FSS/Characterization Supervisor that indicate activity above the investigation level. Supervisor will determine locations and number of samples to be obtained.

~~b.~~ wl 1/12/06

3. Locate the sample point identified above.
4. Collect a surface sample in accordance with Section 4.2.2 of procedure CS-01.
5. After the surface sample has been obtained, collect subsurface samples at depths of 6 to 15 inches and 15 to 24 inches in accordance with Step 4.2.6.5 of procedure CS-01, or 4.2.3 as applicable. 1/23/06 zm
6. Label each sample in accordance with Step 4.2.1.3 of procedure CS-01 and include the sample point number (e.g., P2C-1, P2C-2, etc.) and sample depth (e.g., 0-6", 6-15", or 15-24").

   NOTE: If refusal occurs prior to reaching the 24 inch mark, contact the FSS/Characterization Supervisor for guidance.

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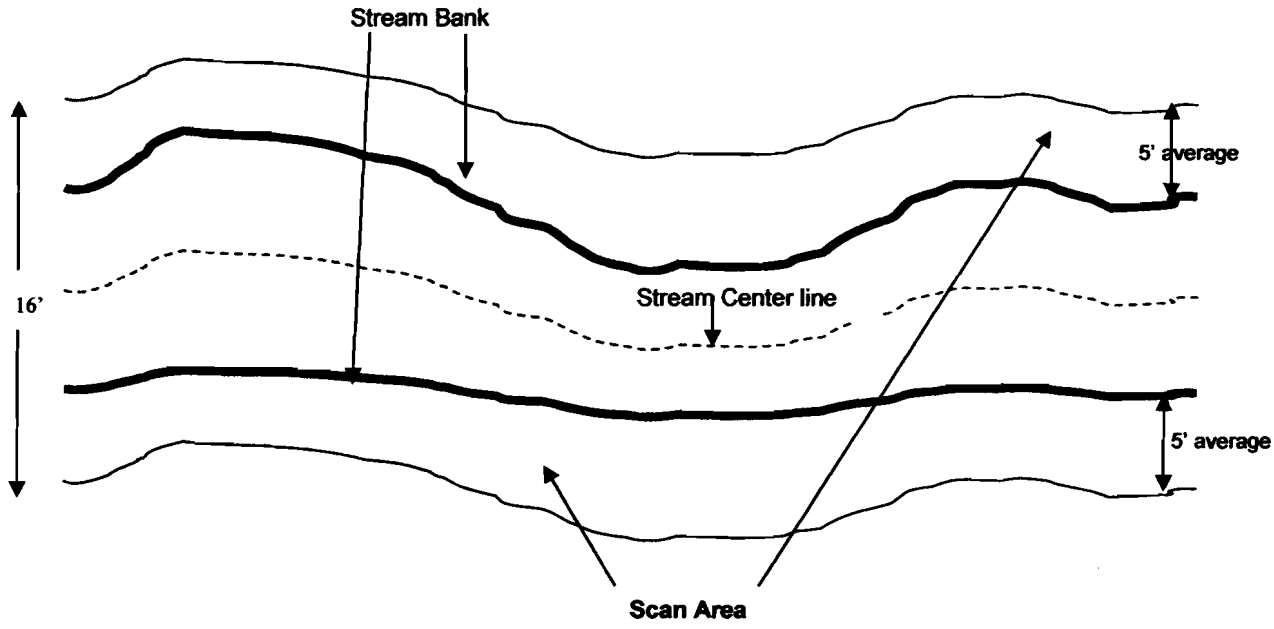
SURVEY REQUEST CONTINUATION SHEET

SR NUMBER	SR-11	AREA / LOCATION	Plum Brook Stream Bed from the end of Section B to Bogart Road (Section C Phase 2)

SPECIFIC SAMPLING & SURVEYING INSTRUCTIONS / COMMENTS

Example of Scan Area



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SURVEY REQUEST SAMPLE ANALYSIS SHEET

SR NUMBER	SR-11	AREA / LOCATION	Plum Brook Stream Bed from the end of Section B to Bogart Road (Section C Phase 2)

REQUESTED SAMPLE ANALYSIS

SAMPLE TYPE	RADIONUCLIDE	REQUIRED COUNTING SYSTEM MDA	COMMENTS / ADDITIONAL INSTRUCTIONS
Soil	Cs-137	0.2 pCi/g	Other analyses (e.g., TRU or HTD) may be performed as requested by the FSS/Characterization Manager.
Soil	Co-60	0.2 pCi/g	
			Form CS-01/3 Rev 0

Table 3-1 Job Safety Analysis Form

WORK PLACE DESCRIPTION/LOCATION: Plum Brook Creek

ACTIVITY: Survey and Sampling PREPARED BY/DATE: R. Marquette 11/7/05 REVIEWED BY/DATE: 11-10-05

CERTIFICATION OF HAZARD ASSESSMENT AND REQUIRED PERSONAL PROTECTIVE EQUIPMENT

(NAME/DATE): 11-7-05

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS	REQUIRED PERSONAL PROTECTIVE EQUIPMENT
Access to sample locations	**HIGHWAY HAZARD:** Access to sample areas is adjacent to highways.	Park vehicles off highway. Observe all highway signs and laws. Be vigilant for moving traffic while working near or when crossing roads.	High visibility vests
All	**SLIP, TRIP, FALL HAZARDS:** Survey areas are located in the Plum Brook Creek bed. Access is via steep sides that are overgrown and/or rock covered.	Sturdy hiking boots should be worn. Waterproof footwear is recommended.	Safety toe durable boots meeting ANSI Z41, when foot hazards exist. TDG 11/17/05
All	**EYE HAZARDS:** Thick undergrowth at access points and in creek bed.	Proceed carefully through brush areas. Some areas may require brush clearing prior to entry.	ANSI Z87 safety glasses
Performing survey and sampling activities	**MATERIAL HANDLING AND HAND HAZARDS:** Sharp objects and tools	Exercise caution when moving stones and performing digging (sampling) operations.	Wear leather (or Kevlar) gloves when digging and handling sharp objects
Performing survey and sampling activities	**BIOLOGICAL HAZARDS:** Bees, Wasps, Spiders, poison ivy, etc.	Use insecticide where appropriate. Avoid using perfumes, aftershave lotions, scented soaps, etc. that may attract insects.	Appropriate light colored clothing i.e. work gloves, long sleeved shirt and pants.

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS	REQUIRED PERSONAL PROTECTIVE EQUIPMENT
All	**CHEMICAL EXPOSURE HAZARDS**	MSDSs will be obtained and kept on file at the project for any chemical used. HMIS labels will be on all chemical containers.	Any recommended PPE from MSDSs.
Performing survey and sampling activities	**WILDLIFE HAZARDS:** Snakes, small animals, etc.	Do not intentionally disturb any wildlife. Notify the FSS/characterization supervisor if work activities cannot be performed due to the presence of wildlife.	None
All	**Communication Difficulties**	A communication device, such as a cell phone, shall be used. The "Buddy System" is required.	None
Breaking the soil surface during sampling activities.	**Underground utilities hazard**	Ensure excavation permit is in place prior to sampling on Plum Brook Station property. Verify through excavation competent person that proper notification has been made and that utilities have been identified prior to performing sampling activities on non-Plum Brook Station properties.	None

List of Equipment to be used:	Training:	Inspections:
Survey instrumentation and equipment necessary for soil sample collection.	RCTs shall be qualified to use survey instruments required by the SR. RCTs shall be trained on sample collection techniques.	See CS-1

SURVEY REQUEST CONTINUATION SHEET			
SR NUMBER	SR-11	**AREA / LOCATION**	Plum Brook Stream Bed Phase 2 Section C

SPECIFIC SAMPLING AND SURVEYING INSTRUCTIONS / COMMENTS

SURVEY REQUEST CLOSE-OUT SUMMARY

Background:

Survey Request # 11 is the 7th of eight (8) SRs generated to perform characterization of the Plum Brook stream bed from Pentolite Road to the overpass of Route 250 (Milan Rd.) in order to determine the impact from PBRF Licensed activities. The stream is divided into four sections designated as Sections A, B, C, and D to facilitate the survey process. This is the second part of a two-phase survey. Phase 1 required the collection of random (non-biased) samples. Phase 2 incorporates scanning the banks of the stream in order to locate areas of elevated activity from which additional samples may be obtained. Prior surveys of the streambed indicated the presence of residual activity at various locations.

The first 4 SRs, (5,6,7, and 8) address random sampling of the streambed and adjoining banks based on a triangular grid pattern in each of the four sections. SRs 9,10, 11, and 12 allow for the collection of biased samples based on scanning activities along the banks of the stream.

The purpose of this Survey Request was to scan the banks of the third section of the stream and collect samples based on areas indicating elevated activity. Identified as Section "C", it is 2,275 feet in length and encompasses approximately 36,400 sq. feet.

Number and types of surveys / samples taken:

SR-11 required a 100% surface scan of both sides of the stream bed utilizing a Ludlum 2350-1 with a 44-10 NaI detector in the Cs-137 window configuration. A one (1) minute static measurement was obtained at each sample point prior to collecting the sample. Scanning the sample location after the collection of the sample was also required in order to determine the potential for sub-surface activity.

A total of 151 soil/sediment samples were obtained from 48 locations identified during scanning activities. Samples were obtained at depths of 0" to 6", 6" to 15', and 15" to 24". This included 12 QC samples which represents 8.6% of the total samples obtained.

Summary of Soil Sample Results:

A total of 150 of the collected samples indicated the presence of Cs-137 while 47 of the samples were positive for Co-60. The maximum Cs-137 concentration was 26.1 pCi/g located in the 6"- 15" layer of sample point # 4. Activity in the 0"- 6" layer was 9.12 pCi/g, and the 15"-24" layer indicated activity at 6.54 pCi/g. Co-60 activity at Sample Point # 4 was <MDA, 0.482 and 0.297 pCi/g respectively for the three sample depths.

A total of six (6) samples had concentrations exceeding the DCGL at six (6) of the sample locations. (Sample points 2, 4, 7, 30, 34, and 48). None of the samples obtained indicated Co-60 activity in excess of the DCGL. (Maximum activity for Co-60 was 0.67 at Sample Point # 10.) Additionally, five (5) other samples indicated activity at 90% of the DCGL or greater at Sample Points 3, 30, 39, and 44.

Of the 48 sample points, activity was highest on the surface at 35 locations while the highest concentration was found in the 6'- 15" layer at 13 locations.

5 of the samples indicated activity for U-235. In each case, the 2σ value was close to the activity level, and the concentration reported is only slightly above the MDA and could be identified as background.

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SURVEY REQUEST CONTINUATION SHEET			
SR NUMBER	SR-11	**AREA / LOCATION**	Plum Brook Stream Bed Phase 2 Section C

SPECIFIC SAMPLING AND SURVEYING INSTRUCTIONS / COMMENTS

SURVEY REQUEST CLOSE-OUT SUMMARY (continued)

The average Cs-137 concentration for this section of the streambed was 4.34 pCi/g. The average MDA was 0.036 pCi/g.

The average Co-60 concentration for this section of the streambed was 0.02 pCi/g. The average MDA was 0.076 pCi/g.

The average RPD for the sample set was 9.69% for Cs-137 and 27.44% for Co-60.

The highest deposition of material appears in the start of Section C, approximately located between the 40 to 170 foot section of the East bank of the stream. Sample points 2, 3, 4, and 7 are located in this section of the stream with sample point 4 containing the highest concentration of Cs-137. (26.1 pCi/g in the 6"- 15" layer, 9.12 pCi/g in the surface layer, and 6.54 pCi/g in the 15" – 24" layer.). Another area of higher activity occurs at the 1900 to 2020 foot section of the West bank of the stream. Sample points 29, 30, 33, 34, 35, and 36 are located in this section with sample point 34 containing the highest concentration of Cs-137. (17.6 pCi/g in the surface layer, and 1.53 pCi/g in the 6"-15" layer.)

See the attached "SR-11 Sample Results" for a complete list of all samples and sample analysis results.

Summary of Scan and/or Static Measurements:

Scanning along the east and west banks of the stream indicated an average gross activity between 140 and 400 gross CPM with the highest recorded scan at about 1040 gross CPM. The highest static measurement (1074 gross CPM) was detected at sample point 7. Surface activity was 13.1 pCi/g of Cs-137 and the 6"- 15" layer contained a concentration of 7.54 pCi/ g of Cs-137. (The surface layer also contained Co-60 activity at 0.30 pci/g.)

Problems encountered during surveying/sampling:

The first problem concerned the type of material available for sampling in and around the streambed. Within the streambed itself, the vast majority of available material is rock. Penetration of the rock is extremely difficult, and in areas where the rock could be pulverized, more rock existed below the surface layer. This material does not meet the required sample matrix. As a result, it was frequently necessary to relocate a sample to a point along the stream bank in order to acquire the sample material.

The second major problem encountered was the significant amount of debris and obstructions within and around the streambed. Fallen trees, areas of dense undergrowth, and the build-up of natural and human debris made traversing the bed extremely difficult, and in some places, hazardous. The stream banks are extremely steep, are covered with underbrush and saplings, and as a result limit the access points available for entering the stream itself.

Summary of QC survey and sample results, including corrective actions taken when acceptance criteria are not met.

All QC surface scans met the acceptance criteria of section 4.5.2.4.

A total of 48 static measurements were required for this survey. Four (4) QC static measurements were obtained as well, representing 8.3 % of the total measurements. All QC static measurement met the acceptance criteria of section 4.5.2.4.

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SURVEY REQUEST CONTINUATION SHEET			
SR NUMBER	SR-11	**AREA / LOCATION**	Plum Brook Stream Bed Phase 2 Section C

SPECIFIC SAMPLING AND SURVEYING INSTRUCTIONS / COMMENTS

SURVEY REQUEST CLOSE-OUT SUMMARY (continued)

Comparison of survey verification results versus the area classification

This section of the Plum Brook streambed does not meet the criteria for a non-impacted area and may require remediation prior to Final Status Survey.

Conclusion / Reccommendations:

Additional sub-surface sampling to a depth of 36 inches should be performed at locations identified as having activity in the 15" to 24" layer in order to properly characterize the extent of radionuclide distribution in the streambed. Refer to SR-6 for areas previously identified as requiring sub-surface sampling and potential remediation.

R.L. Marquette C.E. Stott — 4-25-06

FSS/Characterization Supervisor (print/sign) — **Date**

L.A. Stoner — 4/26/06

FSS/Characterization Manager (print/sign) — **Date**

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SURVEY DATA VERIFICATION AND VALIDATION FORM

Survey Unit Number or Location Description	Plum Brook Stream Bed from Pentolite Road to Clark Road (Section C Phase 2)	**Survey Request Number**	SR-11

Check the appropriate answer for each question below.	**Yes**	**No**	**N/A**
1. Was each radiological instrument capable of detecting the radiation of interest at or below the investigation level? If not, acceptable compensatory measures have been taken.	X		
2. Did each radiological instrument have a current calibration traceable to NIST standards?	X		
3. Were radiological instruments source checked daily (before and after use) and did the instruments successfully pass?	X		
4. Were survey team personnel properly trained in the applicable survey techniques and was the training adequately documented?	X		
5. Were the MDCs and the assumptions used to develop them appropriate for the instruments and survey methods used to collect the data?	X		
6. Were the survey methods appropriate for the media and types of radiation being measured?	X		
7. Were the samples adequately tracked from their collection point and through the analysis process in accordance with the sample chain-of-custody requirements?	X		
8. Were the samples/surveys collected in accordance with the Survey Request (SR) package?	X		
9. Were the samples/surveys representative of current site conditions?	X		
10. If SR investigation levels were exceeded, was appropriate action taken?	X		
11. Were at least 5% of all survey and/or sample points re-sampled and/or re-surveyed using identical methodology contained in the SR per Section 4.5.2?	X		
12. Were the samples analyzed in accordance with requirements contained in the SR Sample Analysis Sheet (Exhibit 3) and did the analyses meet the required MDAs (minimum 10% of the DCGL)?	X		
13. Were all static and scan measurement data and sample point locations properly documented?	X		
14. Has a summary of surveying/sampling results been developed per Step 4.6.4?	X		

NOTE: If the question does not apply to the SR, check the N/A (not applicable) box. If a "No" answer is obtained above, the FSS/Characterization Supervisor should initiate corrective action in accordance with site procedures. Document actions taken and/or justifications in the "Comments" section below. Attach additional sheets as necessary.

Comments:

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FSS/Characterization Supervisor (print/sign)	R Marquette	Date	4-25-06

SR-11 Sample Data

Sample Log #	Sample #	Location	Field Measurement cpm	Weight (g)	Cs-137 DCGL(eff) pCi/g	11.71 2s	Co-60 DCGL pCi/g	3.8 2s	% Unity	Cs:Co	Cs-137 MDA pCi/g	Co-60 MDA pCi/g	U-235 pCi/g	U-235 2σ
PB06-00908	SR-11-01	P2-C1-A	375	401	4.33E+00	3.22E-01	<MDA		37%	N/A		5.62E-02		
PB06-00909	SR-11-02	P2-C1-B		412	5.19E-01	9.81E-02	<MDA		4%	N/A		5.47E-02		
PB06-00910	SR-11-03	P2-C1-C		393	4.57E-01	1.08E-01	<MDA		4%	N/A		5.67E-02		
PB06-00911	SR-11-04	P2-C2-A	648	434	1.26E+01	5.81E-01	2.80E-01	6.67E-02	115%	45.00				
PB06-00912	SR-11-05	P2-C2-B		412	9.58E+00	5.07E-01	1.99E-01	5.29E-02	87%	48.14				
PB06-00913	SR-11-06	P2-C2-C		394	1.83E+00	2.08E-01	<MDA		16%	N/A		7.13E-02		
PB06-00916	SR-11-07	P2-C3-A	738	432	1.04E+01	5.09E-01	2.05E-01	7.64E-02	94%	50.73				
PB06-00917	SR-11-08	P2-C3-B		429	1.02E+01	5.23E-01	3.22E-01	6.66E-02	96%	31.68				
PB06-00918	SR-11-09	P2-C3-C		460	4.24E+00	2.92E-01	1.84E-01	5.26E-02	41%	23.04				
PB06-00920	SR-11-10	P2-C4-A	862	411	9.12E+00	4.87E-01	<MDA		78%	N/A		5.42E-02		
PB06-00922	SR-11-11	P2-C4-B		430	2.61E+01	9.96E-01	4.82E-01	9.13E-02	236%	54.15				
PB06-00923	SR-11-12	P2-C4-C		409	6.54E+00	3.87E-01	2.97E-01	6.54E-02	64%	22.02				
PB06-00924	SR-11-13	P2-C5-A	357	417	2.97E+00	2.65E-01	1.06E-01	3.86E-02	28%	28.02				
PB06-00925	SR-11-13Q	P2-C5-A-QC		414	3.05E+00	2.62E-01	1.85E-01	7.40E-02	31%	16.49				
PB06-00893	SR-11-14	P2-C5-B		427	3.12E+00	2.50E-01	<MDA		27%	N/A		5.27E-02		
PB06-00894	SR-11-14Q	P2-C5-B-QC		416	3.03E+00	2.70E-01	<MDA		26%	N/A		5.94E-02		
PB06-00895	SR-11-15	P2-C5-C		458	4.73E-01	9.84E-02	<MDA		4%	N/A		4.86E-02		
PB06-00896	SR-11-15Q	P2-C5-C-QC		456	4.01E-01	9.69E-02	<MDA		3%	N/A		4.94E-02		
PB06-00897	SR-11-16	P2-C6-A	340	419	2.77E+00	2.57E-01	<MDA		24%	N/A		5.89E-02		
PB06-00898	SR-11-17	P2-C6-B		436	3.53E+00	2.80E-01	1.25E-01	5.89E-02	33%	28.24				
PB06-00899	SR-11-18	P2-C7-A	1074	406	1.31E+01	6.02E-01	3.02E-01	6.63E-02	120%	43.38				
PB06-00900	SR-11-19	P2-C7-B		406	7.54E+00	4.96E-01	<MDA		64%	N/A		1.28E-01		
PB06-00902	SR-11-20	P2-C8-A	448	410	4.67E+00	3.35E-01	<MDA		40%	N/A		5.43E-02		
PB06-00903	SR-11-21	P2-C8-B		395	3.59E+00	2.84E-01	<MDA		31%	N/A		5.70E-02		
PB06-00904	SR-11-22	P2-C9-A	382	423	3.44E+00	2.93E-01	<MDA		29%	N/A		8.89E-02		
PB06-00905	SR-11-23	P2-C9-B		430	2.81E+00	2.42E-01	<MDA		24%	N/A		5.23E-02		
PB06-00906	SR-11-24	P2-C9-C		416	3.43E-01	1.02E-01	<MDA		3%	N/A		5.93E-02		
PB06-00996	SR-11-25	P2-C10-A	474	405	6.66E+00	3.99E-01	1.66E-01	5.12E-02	61%	40.12				
PB06-00997	SR-11-26	P2-C10-B		396	5.64E+00	4.11E-01	6.68E-01	1.08E-01	66%	8.44			5.30E-01	4.06E-01
PB06-00998	SR-11-27	P2-C10-C		438	1.42E+00	1.64E-01	<MDA		12%	N/A		5.09E-02		
PB06-00978	SR-11-28	P2-C11-A	447	403	6.42E+00	3.95E-01	2.50E-01	6.05E-02	61%	25.68				
PB06-00979	SR-11-29	P2-C11-B		398	5.43E+00	3.98E-01	<MDA		46%	N/A		1.01E-01	5.02E-01	3.52E-01
PB06-00980	SR-11-30	P2-C11-C		422	2.70E+00	2.50E-01	<MDA		23%	N/A				
PB06-00982	SR-11-31	P2-C12-A	588	417	8.48E+00	5.37E-01	<MDA		72%	N/A		5.92E-02	7.34E-01	4.53E-01
PB06-00983	SR-11-32	P2-C12-B		438	4.85E+00	3.36E-01	1.58E-01	5.09E-02	46%	30.70				
PB06-00984	SR-11-33	P2-C12-C		430	2.13E+00	2.16E-01	<MDA		18%	N/A		5.23E-02		
PB06-00985	SR-11-34	P2-C13-A	326	400	3.04E+00	2.78E-01	<MDA		26%	N/A				
PB06-00986	SR-11-35	P2-C13-B		397	5.80E+00	3.77E-01	<MDA		50%	N/A		7.46E-02		
PB06-00987	SR-11-36	P2-C13-C		431	2.55E+00	2.21E-01	<MDA		22%	N/A		5.73E-01		
PB06-00988	SR-11-37	P2-C14-A	359	436	3.89E+00	3.12E-01	<MDA		33%	N/A		5.66E-02		
PB06-00989	SR-11-38	P2-C14-B		424	1.48E+00	1.81E-01	<MDA		13%	N/A				
PB06-00990	SR-11-39	P2-C14-C		434	1.46E+00	1.76E-01	<MDA		12%	N/A		5.18E-02		
PB06-00991	SR-11-40	P2-C15-A	330	410	4.32E+00	3.39E-01	<MDA		37%	N/A		1.15E-01		
PB06-00992	SR-11-40Q	P2-C15-A-QC		387	3.93E+00	3.05E-01	<MDA		34%	N/A		5.75E-02		
PB06-00999	SR-11-41	P2-C15-B		393	4.21E+00	3.10E-01	1.68E-01	5.09E-02	40%	25.06				
PB06-01000	SR-11-41Q	P2-C15-B-QC		419	3.79E+00	2.92E-01	<MDA		32%	N/A		9.69E-02		
PB06-01002	SR-11-42	P2-C15-C		396	1.00E+00	1.55E-01	<MDA		9%	N/A		5.62E-02		
PB06-01003	SR-11-42Q	P2-C15-C-QC		352	2.81E+00	2.86E-01	<MDA		24%	N/A		1.02E-01		

SR-11 Sample Data

Sample Log #	Sample #	Location	Field Measurement cpm	Weight (g)	Cs-137 DCGL(eff) pCi/g	11.71 2s	Co-60 DCGL pCi/g	3.8 2s	% Unity 0%	Cs:Co	Cs-137 MDA pCi/g	Co-60 MDA pCi/g	U-235 pCi/g	U-235 2σ
PB06-01004	SR-11-43	P2-C16-A	439	426	4.62E+00	3.15E-01	<MDA		39%	N/A		5.28E-02		
PB06-01005	SR-11-44	P2-C16-B		428	2.12E-01	6.18E-02	<MDA		2%	N/A		5.76E-02		
PB06-01006	SR-11-45	P2-C16-C		419	2.05E-01	6.20E-02	<MDA		2%	N/A		5.30E-02		
PB06-01007	SR-11-46	P2-C17-A	395	387	5.26E+00	3.58E-01	<MDA		45%	N/A		1.04E-01		
PB06-01008	SR-11-47	P2-C17-B		372	9.13E-01	1.46E-01	<MDA		8%	N/A		6.62E-02		
PB06-01009	SR-11-48	P2-C17-C		386	2.43E-01	7.03E-02	<MDA		2%	N/A		5.76E-02		
PB06-01010	SR-11-49	P2-C18-A	310	396	4.32E+00	3.13E-01	1.08E-01	5.77E-02	40%	40.00				
PB06-01011	SR-11-50	P2-C18-B		406	6.91E+00	4.65E-01	1.89E-01	5.51E-02	64%	36.56				
PB06-01012	SR-11-51	P2-C18-C		387	7.11E-01	1.21E-01	<MDA		6%	N/A		5.75E-02		
PB06-01013	SR-11-52	P2-C19-A	349	409	2.91E+00	2.50E-01	<MDA		25%	N/A		5.50E-02		
PB06-01030	SR-11-53	P2-C19-B		422	8.74E+00	4.59E-01	<MDA		75%	N/A		5.34E-02		
PB06-01031	SR-11-54	P2-C19-C		414	4.33E+00	3.38E-01	1.46E-01	5.82E-02	41%	29.66				
PB06-01032	SR-11-55	P2-C20-A	423	410	6.85E+00	4.09E-01	1.65E-01	5.44E-02	63%	41.52				
PB06-01033	SR-11-56	P2-C20-B		395	8.00E-01	1.52E-01	<MDA		7%	N/A		5.70E-02		
PB06-01034	SR-11-57	P2-C20-C		398	2.02E-01	7.92E-02	<MDA		2%	N/A		6.20E-02		
PB06-01035	SR-11-58	P2-C21-A	375	401	5.43E+00	3.70E-01	1.83E-01	5.65E-02	51%	29.67				
PB06-01036	SR-11-59	P2-C21-B		414	1.52E+00	1.75E-01	<MDA		13%	N/A		5.43E-02		
PB06-01037	SR-11-60	P2-C21-C		427	3.89E-01	9.00E-02	<MDA		3%	N/A		5.77E-02	6.41E-01	4.55E-01
PB06-01038	SR-11-61	P2-C23-A	465	404	5.05E+00	3.55E-01	<MDA		43%	N/A		5.44E-02		
PB06-01039	SR-11-62	P2-C23-B		427	7.52E-01	1.37E-01	<MDA		6%	N/A		5.27E-02		
PB06-01040	SR-11-63	P2-C23-C		392	8.51E-02	4.87E-02	<MDA		1%	N/A		6.29E-02		
PB06-01042	SR-11-64	P2-C22-A	362	398	3.80E+00	2.98E-01	1.34E-01	5.10E-02	36%	28.36				
PB06-01043	SR-11-65	P2-C22-B		412	7.02E-01	1.32E-01	<MDA		6%	N/A		5.46E-02		
PB06-01044	SR-11-66	P2-C22-C		387	3.05E-01	9.07E-02	<MDA		3%	N/A		5.82E-02		
PB06-01015	SR-11-67	P2-C24-A	405	422	5.06E+00	3.33E-01	1.71E-01	5.93E-02	48%	29.59				
PB06-01016	SR-11-68	P2-C24-B		375	1.59E+00	2.01E-01	<MDA		14%	N/A		6.58E-02		
PB06-01017	SR-11-69	P2-C24-C		406	2.41E+00	2.38E-01	1.55E-01	5.88E-02	25%	15.55				
PB06-01018	SR-11-70	P2-C25-A	502	376	7.57E+00	4.40E-01	1.99E-01	5.76E-02	70%	38.04				
PB06-01019	SR-11-71	P2-C25-B		392	6.41E+00	4.48E-01	<MDA		55%	N/A		1.37E-01		
PB06-01020	SR-11-72	P2-C26-A	422	410	6.20E+00	3.94E-01	2.02E-01	6.01E-02	58%	30.69				
PB06-01022	SR-11-73	P2-C26-B		405	1.90E+00	2.09E-01	<MDA		16%	N/A		6.09E-02		
PB06-01023	SR-11-74	P2-C26-C		417	6.81E-01	1.23E-01	<MDA		6%	N/A		5.26E-02		
PB06-01024	SR-11-75	P2-C27-A	448	394	7.93E+00	4.47E-01	<MDA		68%	N/A		5.70E-02		
PB06-01025	SR-11-76	P2-C27-B		410	1.75E+00	2.02E-01	<MDA		15%	N/A		6.02E-02		
PB06-01026	SR-11-77	P2-C27-C		421	2.28E-01	7.65E-02	<MDA		2%	N/A		5.28E-02		
PB06-01027	SR-11-78	P2-C28-A	302	393	2.41E+00	2.27E-01	<MDA		21%	N/A		5.65E-02		
PB06-01028	SR-11-79	P2-C28-A-QC		377	2.30E+00	2.36E-01	1.41E-01	5.36E-02	23%	16.31				
PB06-01029	SR-11-80	P2-C28-B		429	8.09E+00	4.50E-01	<MDA		69%	N/A		5.12E-02		
PB06-01049	SR-11-81	P2-C28-B-QC		427	7.72E+00	4.23E-01	<MDA		66%	N/A		5.20E-02		
PB06-01050	SR-11-82	P2-C28-C		418	1.64E+00	1.94E-01	<MDA		14%	N/A		5.91E-02		
PB06-01051	SR-11-83	P2-C28-C-QC		430	2.35E+00	2.21E-01	<MDA		20%	N/A		5.25E-02		
PB06-01052	SR-11-84	P2-C29-A	408	400	6.41E+00	3.86E-01	<MDA		55%	N/A		5.63E-02		
PB06-01053	SR-11-85	P2-C29-B		439	7.39E+00	4.22E-01	1.85E-01	4.99E-02	68%	39.95				
PB06-01054	SR-11-86	P2-C29-C		415	5.70E-01	1.19E-01	<MDA		5%	N/A		6.42E-02		
PB06-01059	SR-11-87	P2-C30-A	490	406	1.11E+01	5.51E-01	2.51E-01	6.12E-02	101%	44.22				
PB06-01060	SR-11-88	P2-C30-B		417	1.06E+01	5.37E-01	2.72E-01	6.58E-02	98%	38.97				
PB06-01062	SR-11-89	P2-C30-C		423	1.07E+00	1.46E-01	<MDA		9%	N/A		8.09E-02		
PB06-01063	SR-11-90	P2-C31-A	451	392	3.80E+00	2.92E-01	1.13E-01	4.19E-02	35%	33.63				
PB06-01064	SR-11-91	P2-C31-B		417	9.64E+00	5.07E-01	1.71E-01	5.61E-02	87%	56.37				

SR-11 Sample Data

Sample Log #	Sample #	Location	Field Measurement cpm	Weight (g)	Cs-137 DCGL(eff) pCi/g	11.71 2s	Co-60 DCGL pCi/g	3.8 2s	% Unity 0%	Cs:Co	Cs-137 MDA pCi/g	Co-60 MDA pCi/g	U-235 pCi/g	U-235 2σ
PB06-01065	SR-11-92	P2-C31-C		472	1.52E+00	1.73E-01	<MDA		13%	N/A		4.77E-02		
PB06-01066	SR-11-93	P2-C32-A	451	420	5.50E+00	3.64E-01	1.68E-01	4.82E-02	51%	32.74				
PB06-01067	SR-11-94	P2-C32-B		434	8.08E-02	1.34E-01	<MDA		1%	N/A		5.19E-02		
PB06-01068	SR-11-95	P2-C32-C		428	3.92E-01	1.11E-01	<MDA		3%	N/A		6.35E-02		
PB06-01072	SR-11-96	P2-C33-A	402	365	4.96E+00	3.48E-01	1.60E-01	5.71E-02	47%	31.00				
PB06-01073	SR-11-97	P2-C33-B		370	2.82E-01	1.06E-01	<MDA		2%	N/A		6.01E-02		
PB06-01075	SR-11-98	P2-C33-C		376	2.13E-01	7.80E-02	<MDA		2%	N/A		6.89E-02		
PB06-01074	SR-11-99	P2-C34-A	869	355	1.76E+01	7.71E-01	<MDA		150%	N/A		6.33E-02		
PB06-01076	SR-11-100	P2-C34-B		319	1.53E+00	1.98E-01	<MDA		13%	N/A		9.30E-02		
PB06-01086	SR-11-101	P2-C34-C		354	3.82E-01	9.05E-02	<MDA		3%	N/A		6.37E-02		
PB06-01087	SR-11-102	P2-C35-A	389	358	7.77E+00	4.77E-01	1.25E-01	4.49E-02	70%	62.16				
PB06-01088	SR-11-103	P2-C35-B		325	2.52E+00	2.66E-01	1.69E-01	5.50E-02	26%	14.91				
PB06-01089	SR-11-104	P2-C35-C		393	5.58E-01	1.19E-01	<MDA		5%	N/A		8.29E-02		
PB06-01090	SR-11-105	P2-C36-A	614	311	9.38E+00	5.34E-01	<MDA		80%	N/A		7.24E-02		
PB06-01091	SR-11-106	P2-C36-B		312	1.43E+00	2.02E-01	<MDA		12%	N/A		7.14E-02		
PB06-01093	SR-11-107	P2-C36-C		349	3.19E-01	1.22E-01	<MDA		3%	N/A		6.46E-02		
PB06-01094	SR-11-108	P2-C37-A	595	366	1.01E+01	5.56E-01	<MDA		86%	N/A		6.00E-02		
PB06-01095	SR-11-109	P2-C37-B		344	2.72E-01	7.74E-02	<MDA		2%	N/A		6.55E-02		
PB06-01096	SR-11-110	P2-C37-C		387	1.69E-01	7.71E-02	<MDA		1%	N/A		5.75E-02		
PB06-01097	SR-11-111	P2-C38-A	660	369	1.03E+01	5.31E-01	<MDA		88%	N/A		6.11E-02		
PB06-01098	SR-11-112	P2-C38-B		377	6.03E+00	3.99E-01	<MDA		51%	N/A		8.07E-02	5.21E-01	3.75E-01
PB06-01100	SR-11-113	P2-C38-C		387	9.12E-01	1.49E-01	9.52E-02	3.84E-02	10%	9.58				
PB06-01101	SR-11-114	P2-C39-A	534	351	1.14E+01	5.87E-01	<MDA		97%	N/A		1.35E-01		
PB06-01109	SR-11-115	P2-C39-B		415	6.26E-01	1.12E-01	<MDA		5%	N/A		5.42E-02		
PB06-01110	SR-11-116	P2-C39-C		391	<MDA		<MDA		0%	N/A	3.56E-02	6.32E-02		
PB06-01111	SR-11-117	P2-C40-A	513	368	5.99E+00	3.95E-01	<MDA		51%	N/A		9.02E-02		
PB06-01112	SR-11-118	P2-C40-B		384	2.56E+00	2.47E-01	<MDA		22%	N/A		9.26E-02		
PB06-01113	SR-11-119	P2-C40-C		401	9.42E-01	1.39E-01	<MDA		8%	N/A		6.07E-02		
PB06-01114	SR-11-120	P2-C41-A	438	366	5.30E+00	3.75E-01	<MDA		45%	N/A		6.08E-02		
PB06-01115	SR-11-121	P2-C41-B		396	1.44E+00	1.79E-01	<MDA		12%	N/A		7.18E-02		
PB06-01116	SR-11-122	P2-C41-C		356	9.56E-01	1.56E-01	<MDA		8%	N/A		6.26E-02		
PB06-01117	SR-11-123	P2-C42-A	503	367	5.37E+00	3.67E-01	2.40E-01	6.19E-02	52%	22.38				
PB06-01118	SR-11-124	P2-C42-B		410	5.02E+00	3.49E-01	1.48E-01	4.58E-02	47%	33.92				
PB06-01119	SR-11-125	P2-C42-C		421	3.44E+00	2.70E-01	<MDA		29%	N/A		5.36E-02		
PB06-01120	SR-11-126	P2-C43-A	405	371	4.54E+00	3.39E-01	1.51E-01	4.86E-02	43%	30.07				
PB06-01122	SR-11-127	P2-C43-B		404	9.14E+00	4.98E-01	1.66E-01	5.79E-02	82%	55.06				
PB06-01123	SR-11-128	P2-C43-C		413	6.04E+00	3.71E-01	2.22E-01	8.12E-02	57%	27.21				
PB06-01079	SR-11-126Q	P2-C43-A-QC		363	4.74E+00	3.47E-01	<MDA		40%	N/A		6.19E-02		
PB06-01080	SR-11-127Q	P2-C43-B-QC		413	9.13E+00	4.90E-01	2.30E-01	5.80E-02	84%	39.70				
PB06-01082	SR-11-128Q	P2-C43-C-QC		399	5.78E+00	3.82E-01	1.77E-01	5.88E-02	54%	32.66				
PB06-01153	SR-11-129	P2-C44-A	444	366	4.55E+00	3.44E-01	<MDA		39%	N/A		6.01E-02		
PB06-01154	SR-11-130	P2-C44-B		413	1.06E+01	5.26E-01	<MDA		91%	N/A		5.45E-02		
PB06-01155	SR-11-131	P2-C44-C		414	6.30E+00	3.97E-01	<MDA		54%	N/A		1.67E-01		
PB06-01156	SR-11-132	P2-C45-A	530	376	5.86E+00	3.85E-01	<MDA		50%	N/A		6.00E-01		
PB06-01157	SR-11-133	P2-C45-B		416	6.00E+00	3.80E-01	<MDA		51%	N/A		5.35E-02		
PB06-01158	SR-11-134	P2-C45-C		416	2.99E+00	2.53E-01	2.00E-01	6.68E-02	31%	14.95				
PB06-01159	SR-11-135	P2-C46-A	414	412	3.81E+00	3.14E-01	<MDA		33%	N/A		9.14E-02		
PB06-01160	SR-11-136	P2-C46-B		420	9.09E-01	1.57E-01	<MDA		8%	N/A		6.70E-02		
PB06-01162	SR-11-137	P2-C46-C		430	3.97E-01	9.74E-02	<MDA		3%	N/A		5.74E-02		

SR-11 Sample Data

Sample Log #	Sample #	Location	Field Measurement cpm	Weight (g)	Cs-137 DCGL(eff) pCi/g	11.71 2s	Co-60 DCGL pCi/g	3.8 2s	% Unity	Cs:Co	Cs-137 MDA pCi/g	Co-60 MDA pCi/g	U-235 pCi/g	U-235 2σ
PB06-01163	SR-11-138	P2-C47-A	616	410	7.09E+00	4.22E-01	<MDA		61%	N/A		5.43E-02		
PB06-01164	SR-11-139	P2-C47-B		420	1.51E+00	1.69E-01	<MDA		13%	N/A		5.36E-02		
PB06-01165	SR-11-140	P2-C47-C		417	4.24E-01	1.06E-01	<MDA		4%	N/A		5.92E-02		
PB06-01166	SR-11-141	P2-C48-A	488	361	9.06E+00	5.07E-01	3.52E-01	7.57E-02	87%	25.74				
PB06-01167	SR-11-142	P2-C48-B		348	1.19E+01	6.12E-01	4.40E-01	8.60E-02	113%	27.05				
Number				151.0	1.50E+02	1.50E+02	4.70E+01	4.70E+01	47.0	47.0	1	101	5	5
Max				472.0	2.61E+01	9.96E-01	6.68E-01	1.08E-01	2.4	62.2	3.56E-02	6.00E-01	7.34E-01	4.55E-01
Avg				401.80	4.34E+00	2.98E-01	2.11E-01	5.98E-02	0.60	32.50	3.56E-02	7.66E-02	5.86E-01	4.08E-01
SD				28.17	3.89E+00	1.61E-01	1.05E-01	1.32E-02	37%	12				
Conf int +/-				1.55	2.14E-01	8.88E-03	1.03E-02	1.30E-03	4%	1				

= >50% Unity

######## >100% Unity

13 + 1Q

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By:	SoRG / R. MoRiN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	* HpGe Number
SR-11-01	P2 C1 - A	Soil	1/23/06	0934	1L		PB06- 00908
SR-11-02	P2 C1 - B			0936			PB06- 00909
SR-11-03	P2 C1 - C			0938			PB06- 00910
SR-11-04	P2 C2 - A			0940		COPY	PB06- 00911
SR-11-05	P2 C2 - B			0942			PB06- 00912
SR-11-06	P2 C2 - C			0944			PB06- 00913
SR-11-07	P2 C3 - A			1000			PB06- 00916
SR-11-08	P2C3 - B			1002			PB06-00917
SR-11-09	P2C3 - C			1004			PB06-00918
SR-11-10	P2C4 - A			1024			PB06-00920
SR-11-11	P2C4 - B			1026			PB06-00922
SR-11-12	P2C4 - C			1028			PB06-00923
SR-11-13	P2C5 - A			1032			PB06-00924
SR-11-13 Q	P2C5 - A			1032			PB06-00925

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MoRiN / R. Morin	CONEX / R. MoRiN R. Morin	1/23/06	1440	SAMPLE PROC TRLR
J GRAHAM /	A. HUFF / A. Huff	3/2/06	0800	Count Room
A. NUFF / A. NUFF	J GRAHAM	3-2-06	1310	SAMPLE STORAGE CONEX

* A = 0-6" B = 6-15" C = 15-24"

11 + 2Q

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	SORG / R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-14	P2C5-B	SOIL	1/23/06	1035	1 L		PB06-00893
SR-11-14Q	P2C5-B			1035			PB06-00894
SR-11-15	P2C5-C			1038			PB06-00895
SR-11-15Q	P2C5-C			1038			PB06-00896
SR-11-16	P2C6-A			1100		COPY	PB06-00897
SR-11-17	P2C6-B			1103			PB06-00898
SR-11-18	P2C7-A			1255			PB06-00899
SR-11-19	P2C7-B			1300			PB06-00900
SR-11-20	P2C8-A			1307			PB06-00902
SR-11-21	P2C8-B			1310			PB06-00903
SR-11-22	P2C9-A			1348			PB06-00904
SR-11-23	P2C9-B			1350			PB06-00905
SR-11-24	P2C9-C			1352			PB06-00906
~~SR-11~~ cm 1/23/06		N/A					

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	CONEP / R. MORIN R. Morin	1/23/06	1440	SAMPLE PROC TRLR
J GRAHAM /	A. NUFF / A.	3/2/06	0800	COUNT ROOM
A. NUFF / A.	J GRAHAM /	3-2-06	1310	SAMPLE STORAGE CONEX

A = 0-6" B = 6-15" C = 15-24"

Form CS-01/5 Rev 0

Field Sample Collection & Chain of Custody Form

Samples Collected By	R MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-25	P2C10-A	Soil	1/24/06	1029	1L		PB06-00996
SR-11-26	P2C10-B	↓	↓	1032	↓		PB06-00997
SR-11-27	P2C10-C	↓	↓	1034	↓		PB06-00998

COPY

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	J. SORG /	1-24-06	1115	ARCHIVE CONEX
J GRAHAM /	A. HUFF / A. Huff	3/6/06	0800	COUNT ROOM
A. HUFF / A. Huff	J GRAHAM /	3-7-06	0800	SAMPLE STORAGE CONEX

A = 0-6" B = 6-15" C = 15-24"

13 +1

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-28	PZC11-A	Soil	1-30-06	0800	1L		PB06-00978
-29	PZC11-B			0805		COPY	PB06-00979
-30	PZC11-C			0809			PB06-00980
-31	PZC12-A			0811			PB06-00982
-32	PZC12-B			0813			PB06-00983
-33	PZC12-C			0815			PB06-00984
-34	PZC13-A			0820			PB06-00985
-35	PZC13-B			0823			PB06-00986
-36	PZC13-C			0825			PB06-00987
-37	PZC14-A			0828			PB06-00988
-38	PZC14-B			0830			PB06-00989
-39	PZC14-C			0833			PB06-00990
-40	PZC15-A			0850			PB06-00991
-40Q	PZC15-A			0850			PB06-00992

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	RJ REHEARD / RJ Reheard	1/30/06	1445	Soil Prep
J GRAHAM /	N. HUFF / A. Huff	3/6/06	0800	Count Room
N. HUFF / A. Huff	J GRAHAM /	3-7-06	0800	SAMPLE STORAGE CONEX

A = ~~BG~~ PM 0-6" B = 6-15" C = 15-24"

12 + 2

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	R. MoRiN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-41	PZC15-B	Soil	1/30/06	0855	1L		PB06-00999
-41Q	PZC15-B			0855		COPY	PB06-01000
-42	PZC15-C			0858			PB06-01002
-42Q	PZC15-C			0858			PB06-01003
-43	PZC16-A			0918			PB06-01004
-44	PZC16-B			0921			PB06-01005
-45	PZC16-C			0925			PB06-01006
-46	PZC17-A			1020			PB06-01007
-47	PZC17-B			1023			PB06-01008
-48	PZC17-C			1025			PB06-01009
-49	PZC18-A			1030			PB06-01010
-50	PZC18-B			1033			PB06-01011
-51	PZC18-C			1036			PB06-01012
-52	PZC19-A			1042			PB06-01013

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MoRiN / R. Morin	RJ REHEARD / RJ Reheard	1/30/06	1445	Soil Proc
J GRAHAM /	M. HUFF /	3/6/06	0800	Count Room
M. HUFF /	J GRAHAM /	3-7-06	0800	SAMPLE STORAGE CONEX

A = 0-6"
B = 6-15"
C = 15-24"

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Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	R. MoRiN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-53	P2C19-B	Soil	1/30/06	1045	1L		PB06-01030
-54	P2C19-C			1048			PB06-01031
-55	P2C20-A			1320			PB06-01032
-56	P2C20-B			1322			PB06 01033
-57	P2C20-C			1325			PB06-01034
-58	P2C21-A			1327			PB06 01035
-59	P2C21-B			1329			PB06-01036
-60	P2C21-C			1332			PB06-01037
-61	P2C23-A			1336		COPY	PB06-01038
-62	P2C23-B			1340			PB06-01039
-63	P2C23-C			1342			PB06-01040
-64	P2C22-A			1345			PB06-01042
-65	P2C22-B			1347			PB06-01043
-66	P2C22-C			1350			PB06-01044

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	RJ REHEARD / RJ Reheard	1/30/06	1445	Soil Proc
J GRAHAM /	A NUFF /	3/7/06	0755	Count Room
A. NUFF /	J GRAHAM /	3-9-06	0820	SAMPLE STORAGE CONEX

A = 0-6"
B = 6-15"
C = 15-24"

17 TOTAL

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	D ZVONAR	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR11-67	P2C24-A	Soil	1-31-06	1105	1L		PB06-01015
SR11-68	P2C24-B			1110			PB06-01016
SR11-69	P2C24-C			1115			PB06-01017
SR11-70	P2C25-A			1245			PB06-01018
SR11-71	P2C25-B			1250			PB06-01019
SR11-72	P2C26-A			1300			PB06-01020
SR11-73	P2C26-B			1305			PB06-01022
SR11-74	P2C26-C			1310		COPY	PB06-01023
SR11-75	P2C27-A			1315			PB06-01024
SR11-76	P2C27-B			1320			PB06-01025
SR11-77	P2C27-C			1325			PB06-01026
SR11-78	P2C28-A			1330			PB06-01027
SR11-79	P2C28-A Q			1330		Q.C.	PB06-01028
SR11-80	P2C28-B			1335			PB06-01029

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R DZVONAR RD	RJ REHEARD / RJ Reheard	1-31-06	1430	SOIL PROCESS
J GRAHAM /	A HUFF / A. Huff	3/7/06	0755	COUNT ROOM
A. HUFF / A. Huff	J GRAHAM /	3-9-06	0820	SAMPLE STORAGE CONEX

A = 0-6" B = 6-15" C = 15-24"

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	D'ZVONAR	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR11-81	P2C28-B Q	SOIL	1-31-06	1335	1 L	QC	P806-01049
SR11-82	P2C28-C			1340			P806-01050
SR11-83	P2C28-C Q			1340		QC	P806-01051
SR11-84	P2C29-A			1345			P806-01052
SR11-85	P2C29-B			1350			P806-01053
SR11-86	P2C29-C			1355			P806-01054

COPY

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R DZVONAR RD	RJ REHEARD / RJ Reheard	1-31-06	1430	Soil Process
J GRAHAM / C Graham	N. NUFF / N. Nuff	3/9/06	0815	Count Room
N. NUFF / N. Nuff	J GRAHAM / C Graham	3-9-06	1320	SAMPLE STORAGE COOLER

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

14

Samples Collected By	~~D ZVONAR~~ PM 2-1-06 R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR11-87	P2C30-A	Soil	2-1-06	0822	1L		PB06-01059
-88	-B			0825			PB06-01060
-89	-C			0830			PB06-01062
-90	P2C31-A			0845 ~~0835~~ PM			PB06-01063
-91	-B			0850			PB06-01064
-92	-C			0857			PB06-01065
-93	P2C32-A			0908			PB06-01066
-94	-B			0910			PB06-01067
-95	-C			0912			PB06-01068
-96	P2C33-A			0915			PB06-01072
-97	-B			0917			PB06-01073
-98	-C			0919			PB06-01075
-99	P2C34-A			0925			PB06-01074
-100	-B			0927			PB06-01076

COPY

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	Reheard / RJ Reheard	2/1/06	1455	Soil Prep
J GRAHAM /	N. NUFF /	3/9/06	0815	Count Room
N. NUFF /	J GRAHAM /	3-9-06	1320	SAMPLE STORAGE CONEX
M STOCK /	N NUFF /	3/10/06	1046	Count Room

A = 0-6" B = 6-15" C = 15-24"

pg 1 of

Form
CS-01/5
Rev 0

Field Sample Collection & Chain of Custody Form

Sample Collected By	R. MORIN	SR Number	SR-11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	Media Number

SEE PAGE #1

COPY

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
A. HOFF A. Hoff	J. SORA/	3-16-06	0815	ARCHIVE CONEX

2

Field Sample Collection & Chain of Custody Form

COPY

Form
CS-01/5
Rev 0

Samples Collected By	~~DZVONAR~~ RM 2-1-06 R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR11-101	P2C34 - C	SOIL	2-1-06	0930	1 L		PB06-01086
-102	P2C35 - A			0933			PB06 01087
-103	- B			0936			PB06-01088
-104	- C			0940			PB06-01089
-105	P2C36 - A			1020			PB06-01090
106	- B			1023			PB06-01091
107	- C			1025			PB06-01093
-108	P2C37 - A			1027			PB06-01094
-109	- B			1029			PB06-01095
-110	- C			1031			PB06-01096
-111	P2C38 - A			1033			PB06-01097
-112	- B			1035			PB06-01098
-113	- C			1037			PB06-01100
-114	P2C39 - A			1040			PB06-01101

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	Rehaard / R Rehaard	2/1/06	1455	Soil [illegible]
J. GRAHAM / [illegible]	A. HUFF / A. Huff	3/9/06	1315	Count Room
A. HUFF / A. Huff	~~J. GRAHAM / [illegible] SAMPLE STORAGE CONEX~~	3-10-06	1250	SAMPLE STORAGE CONEX

A = 0-6" B = 6-15" C = 15-24"

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

14

Samples Collected By	R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-115	P2C39 - B	Soil	2/1/06	1045	12		PBD6-01109
-116	↓ - C			1049			PBD6-01110
-117	P2C40 - A			1300			PBD6 01111
-118	↓ - B			1305			PBD6-01112
-119	↓ - C			1307			PBD6-01113
-120	P2C41 - A			1310			PBD6-01114
-121	↓ - B			1315			PBD6-01115
-122	↓ - C			1317		COPY	PBD6-01116
-123	P2C42 - A			1323			PBD6-01117
-124	↓ - B			1327			PBD6-01118
-125	↓ - C			1331			PBD6-01119
-126	P2C43 - A *			1335			PBD6-01120
-127	↓ - B *			1340			PBD6-01122
-128	↓ - C *			1345			PBD6-01123

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. Morin / R. Morin	Reheard / Reheard	2-2-06	1455	Soil Process
J GRAHAM /	A. NUFF /	3/9/06	1315	Count Room
A. NUFF /	J GRAHAM /	3-13-06 3-1015	1015	Sample Storage Cooler

* SR-11-126 to 128 used for QC. QC's are documented on next page.

b

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	R. MORIN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-126Q	PZ043 - A	Soil	2-1-06	1335	1L	COPY	PD06-01079
-127Q	- B			1340			PD06-01080
-128Q	- C			1345			PD06-01082
N/A							
							N/A

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R. MORIN / R. Morin	Released / [illegible]	2-1-06	1455	Soil process
J GRAHAM / [signature]	A. NUFF / A. NUFF	3/9/06	1315	Court Room
A. NUFF / A. [signature]	J GRAHAM / [signature]	3-10-06	1250	SAMPLE STORAGE CONEX

3

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Samples Collected By	R. MeRiN	SR Number	11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Comments	HpGe Number
SR-11-129	PZC44-A	Soil	2-2-06	1310	1L		PB06-01153
-130	-B			1312			PB06-01154
-131	-C			1314			PB06-01155
-132	PZC45-A			1318			PB06-01156
-133	-B			1320			PB06-01157
-134	-C			1321			PB06-001158
-135	PZC46-A			1325			PB06-01159
-136	-B			1327			PB06-01160
-137	-C			1329			PB06-01162
-138	PZC47-A			1335			PB06-01163
-139	-B			1337			PB06-01164
-140	-C			1340		COPY	PB06-01165
-141	PZC48-A			1345			PB06-01166
-142	-B			1348			PB06-01167

Relinquished By (Print/Sign)	Received By (Print/Sign)	Date	Time	Location Transferred To (as applicable)
R MeRiN / R Merin	B Reheard / B Reheard	2-2-06	1416	ARCHIVE CONEX
T GRAHAM /	A. Huff / A. Huff	3/13/06	1010	Count Room
N. Huff /	J. SORC /	3-14-06	0910	ARCHIVE CONEX

A = 0-6" B = 6-15" C = 15-24"

Field Sample Collection & Chain of Custody Form

Form CS-01/5 Rev 0

Sampler Collected By	R. MORIN	QR Number	SR-11

Sample Number	Sample Location/Description	Sample Matrix	Sample Date	Sample Time	Sample Volume or Weight	Contents	Hydac Number
SR-11-57	P2C20-C	SOIL	1-30-16	1325	1 L		P806-01034

N A

Relinquished By (print/sign)	Received By (print/sign)	Date	Time	Location Transferred To (as applicable)
J. SARG/ Joe Sarg	J. SARG/ Joe Sarg	3-23-06	1432	ARCHIVE CONEX
J. SARG/ Joe Sarg	A. Huff/ A. Huff	3-23-06	1445	COUNT LAB
A. NUFF/ A Huff	J GRAHAM/ C Graham	3-24-06	1044	SAMPLE STORAGE CONEX

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 36

Location: SRII SECTION C PHASE 2

RWP: PB-06- N/A

Date: 1-23-06

Time: 1400

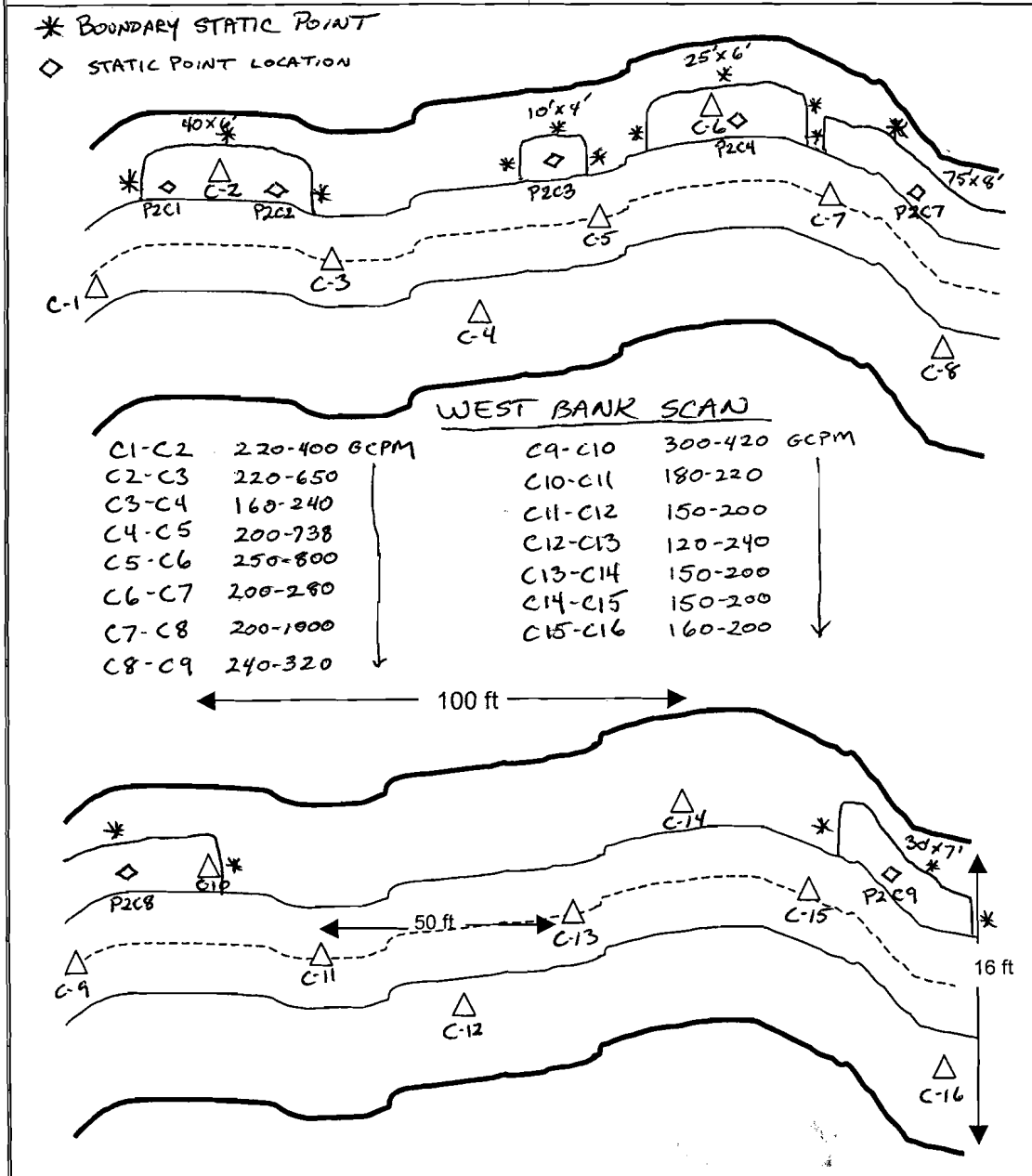
Survey #: NASA-06- 221

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350 / 44-10	203443 / 220132	10-14-06 / 10-14-06	48	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☒ Other: CHARACTERIZATION

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in µr/hr unless otherwise noted
☒ N/A

Smear # & Location	Contamination (dpm/100cm²) βγ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12	A	
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		



Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RDZVONAR 1-23-06

Reviewed by: (sign/date)
RLCase 1/26/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

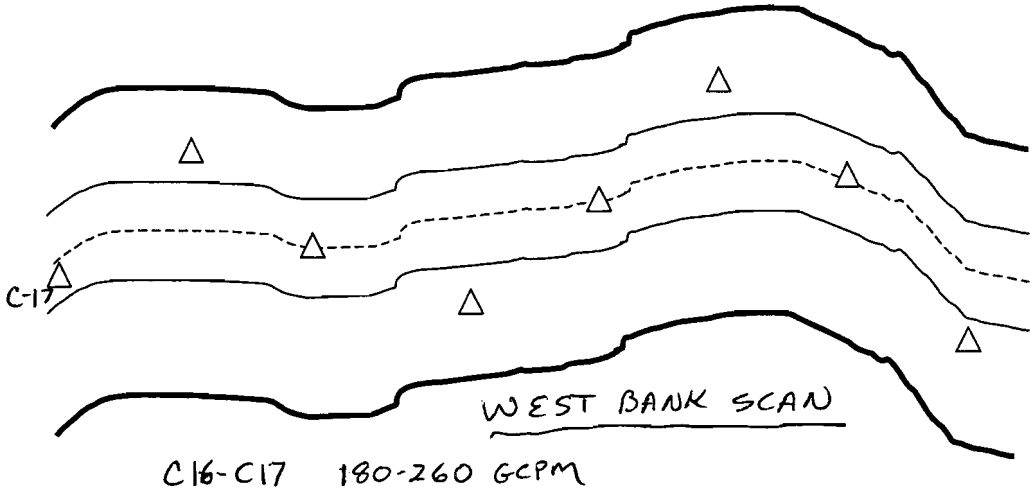
DOWNLOAD #36

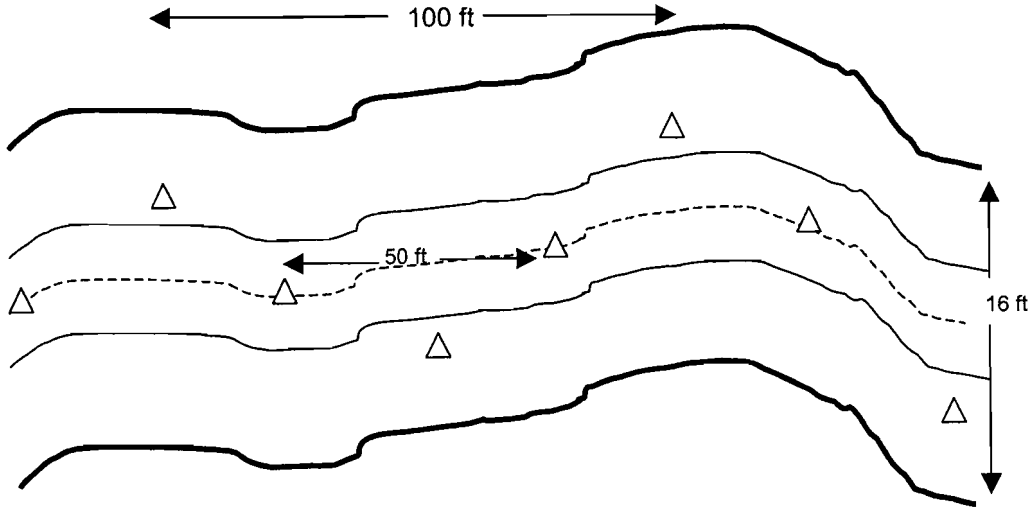
Location: SR 11 SECTION C PHASE 2					RWP: PB-06- N/A
Instrument(s)					Date: 1-23-06
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm	Time: 1400
2350/44-10	203443/220132	10-14-06/10-14-06	48	N	Survey #: NASA-06- 221
N	N	N	N		
A	A	A	A	A	

Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☒ Other: CHARACTERIZATION

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in μr/hr unless otherwise noted
☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12	A	
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		





Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RD ZUNAR
1-23-06

Reviewed by: (sign/date)
Case 1/24/06

SR Number	SR- 11	Instrument #	203443	Technician(s):	RD6589	Survey Number	NASA-06-221

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/23/2006	8:28	5	48	60	SCL	
1	PRE SRC	1/23/2006	8:31	5	6529	60	SCL	
2	SR11 SECC	1/23/2006	8:33	5	1174	0	RAT	
3	C1W P2C1	1/23/2006	9:11	5	375	60	SCL	
4	C1W BND	1/23/2006	9:19	5	268	60	SCL	
5	C2W P2C2	1/23/2006	9:26	5	648	60	SCL	
6	C2W BND	1/23/2006	9:34	5	251	60	SCL	
7	C2W BND	1/23/2006	9:37	5	295	60	SCL	
8	P2C4W BND	1/23/2006	9:50	5	277	60	SCL	
9	P2C4W BND	1/23/2006	9:54	5	189	60	SCL	
10	P2C4W BND	1/23/2006	9:56	5	263	60	SCL	
11	P2C4W P2C3	1/23/2006	9:58	5	738	60	SCL	
12	P2C5W BND	1/23/2006	10:12	5	220	60	SCL	
13	P2C5W BND	1/23/2006	10:17	5	229	60	SCL	
14	C6W BND	1/23/2006	10:20	5	243	60	SCL	
15	C5W P2C4	1/23/2006	10:25	5	862	60	SCL	
16	C5W BND	1/23/2006	11:03	5	246	60	SCL	
17	C5W BND	1/23/2006	11:06	5	276	60	SCL	
18	C7W P2C7	1/23/2006	11:10	5	1074	60	SCL	
19	C8W BND	1/23/2006	12:55	5	270	60	SCL	
20	C9W P2C8	1/23/2006	13:04	5	448	60	SCL	
21	C10W BND	1/23/2006	13:16	5	265	60	SCL	
22	C9W BND	1/23/2006	13:19	5	250	60	SCL	
23	C15W P2C9	1/23/2006	13:46	5	382	60	SCL	
24	C15W BND	1/23/2006	13:55	5	234	60	SCL	
25	C15W BND	1/23/2006	14:01	5	274	60	SCL	
26	POST BKG	1/23/2006	14:31	5	66	60	SCL	
27	POST SRC	1/23/2006	14:33	5	6623	60	SCL	

2350 – 4410 detector 5 Cs – 137 setup

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#W = Phase 1 location of Section C on the west bank; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement

Performed by R. Dzvonar. Download by R. Reheard

RW 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK CREEK SR-11 P2 D/L - 37

RWP: PB-06- N/A

Date: 1-23-06

Time: 0830

Survey #: NASA-056322

Instrument(s)

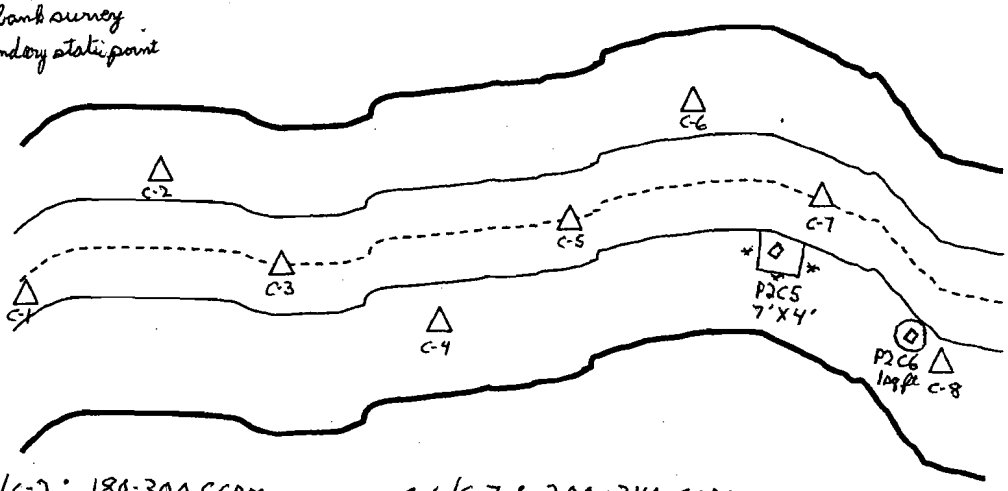
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350	203477	10-14-06	59	N/A
4410	220136	10-14-06	59	N/A

Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☐ Other:_____

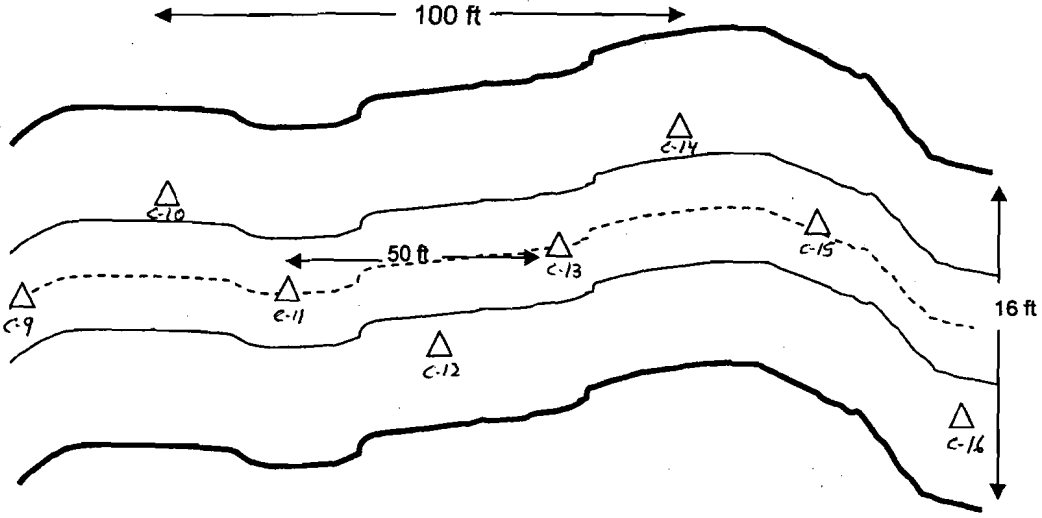
☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in μr/hr unless otherwise noted
☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11		A
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

East bank survey
* boundary station point



C1/C-2 : 180-300 GCPM
C-2/C-3 : 180-260 GCPM
C-3/C-4 : 180-300 GCPM
C-4/C-5 : 180-240 GCPM
C-5/C-6 : 160-240 GCPM
C-6/C-7 : 200-340 GCPM
C-7/C-8 : 160-340 GCPM
C-8/C-9 : 180-260 GCPM
C-9/C-10 : 150-210 GCPM
C-10/C-11 : 140-200 GCPM
C-11/C-12 : 140-200 GCPM
C-12/C-13 : 150-200 GCPM
C-13/C-14 : 150-230 GCPM
C-14/C-15 : 160-280 GCPM
C-15/C-16 : 160-230 GCPM
C-16/C-17 : 180-260 GCPM



Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RJ REHEARD
RJ Reheard 1-24-06

Reviewed by: (sign/date)
R. Case 1/26/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK CREEK SR11 P2 D/L - 37

RWP: PB-086 N/A

Date: 1-23-06

Time: 0830

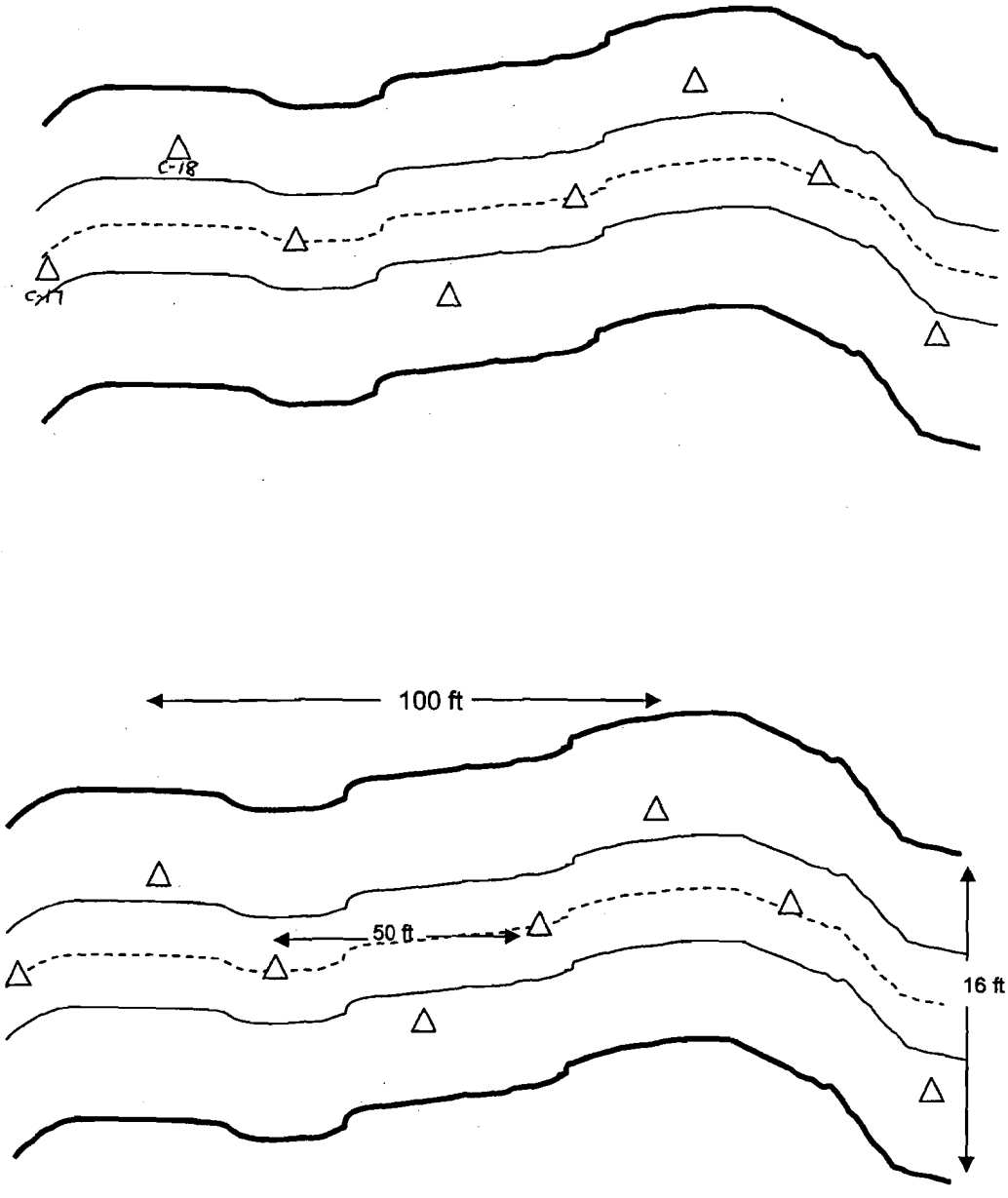
Survey #: NASA-086-022

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350	203477	10-14-06	59	N/A
4410	220136	10-14-06	59	N/A
		N		
		A		

Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☐ Other:_____

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in μr/hr unless otherwise noted
☒ N/A



Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11		A
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RJ REMEARA 1-24-06
Rg Remeara

Reviewed by: (sign/date)
1/26/06

SR Number	SR- 11	Instrument #	203477	Technician(s):	RR9291	Survey Number	NASA-06-222

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/23/2006	8:24	5	59	60	SCL	
1	PRE SRC	1/23/2006	8:28	5	6793	60	SCL	
2	SR11 SECC	1/23/2006	8:30	5	1786	0	RAT	
3	C6E P2C5	1/23/2006	10:14	5	357	60	SCL	
4	C6E BNDS	1/23/2006	10:18	5	209	60	SCL	
5	C6E BNDE	1/23/2006	10:19	5	221	60	SCL	
6	C6E BNDN	1/23/2006	10:21	5	221	60	SCL	
7	C7E P2C6	1/23/2006	10:58	5	340	60	SCL	
8	POST BKG	1/23/2006	14:29	5	52	60	SCL	
9	POST SRC	1/23/2006	14:32	5	6501	60	SCL	

2350 / 4410 Detector 5 has Cs – 137 setup

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#E = Phase 1 location of Section C on the east bank; P2C# = Phase 2 static measurement and sample location; BND = boundary static measurement w/ direction, S = south, E = east, N = north

Performed by and downloaded by R. Reheard R J Reheard

R/U 4·25·06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK CREEK SR-11QC P2 D/L - 38

RWP: PB-036 N/A

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350	203443	10-14-06	48	N/A
4410	220132	10-14-06	48	N/A

Date: 1-23-06

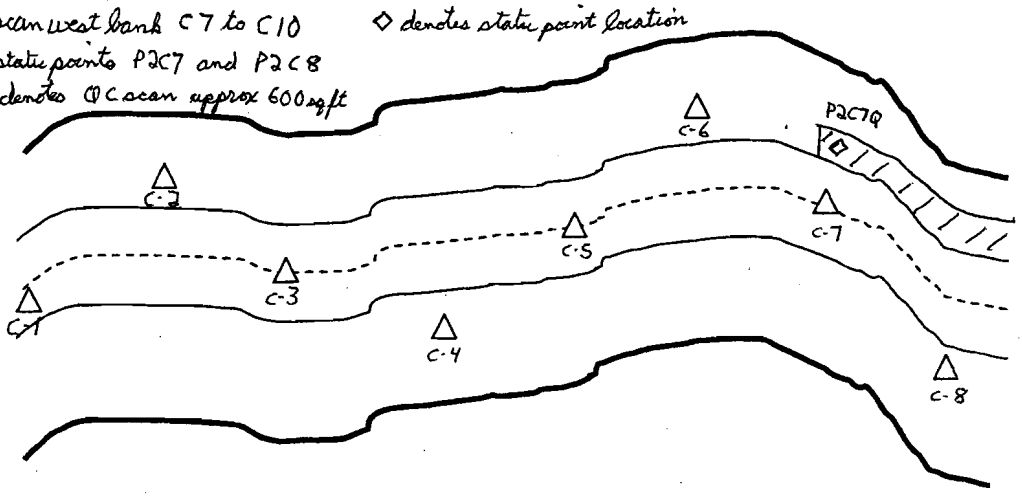
Time: 0833

Survey #: NASA-036-223

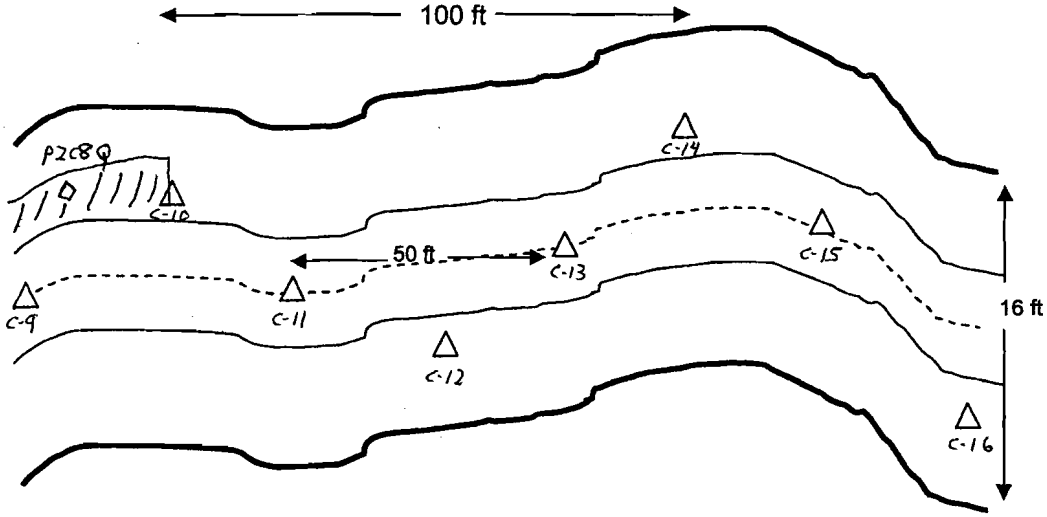
Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☐ Other:_____

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in µr/hr unless otherwise noted
☒ N/A

QC scan west bank C7 to C10 ◇ denotes static point location
QC static points P2C7 and P2C8
▨ denotes QC scan approx 600 sq ft



QC scan results 220 - 1040 GCPM



Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12		A
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RJ REHEARD RJ Reheard 1.24.06

Reviewed by: (sign/date)
[illegible] 1/26/06

Download #: 38

SR Number	SR- 11	Instrument #	203443	Technician(s):	RR9291	Survey Number	NASA-06- 223

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/23/2006	8:28	5	48	60	SCL	
1	PRE SRC	1/23/2006	8:31	5	6529	60	SCL	
2	SR11 SECC	1/23/2006	8:33	5	1174	0	RAT	
3	RR P2C7Q	1/23/2006	12:50	5	1083	60	SCL	
4	RRC9W P2C8Q	1/23/2006	13:08	5	420	60	SCL	
5	POST BKG	1/23/2006	14:31	5	66	60	SCL	
6	POST SRC	1/23/2006	14:33	5	6623	60	SCL	

2350 / 4410 Detector 5 has Cs – 137 SETUP

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#W = Phase 1 location of Section C on the west bank; P2C# Q= Phase 2 static measurement and sample Quality Control location; RR = Technician initials

Performed and downloaded by R. Reheard R Reheard

R/W 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 39

Location: SR11 SECTION C PHASE 2

RWP: PB-06- N/A

Date: 1-24-06

Time: 1400

Survey #: NASA-06-243

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203443/220132	10-14-06/10-14-06	59	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) βγ	Contamination (dpm/100cm²) α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11	A	
12		
13		
14		
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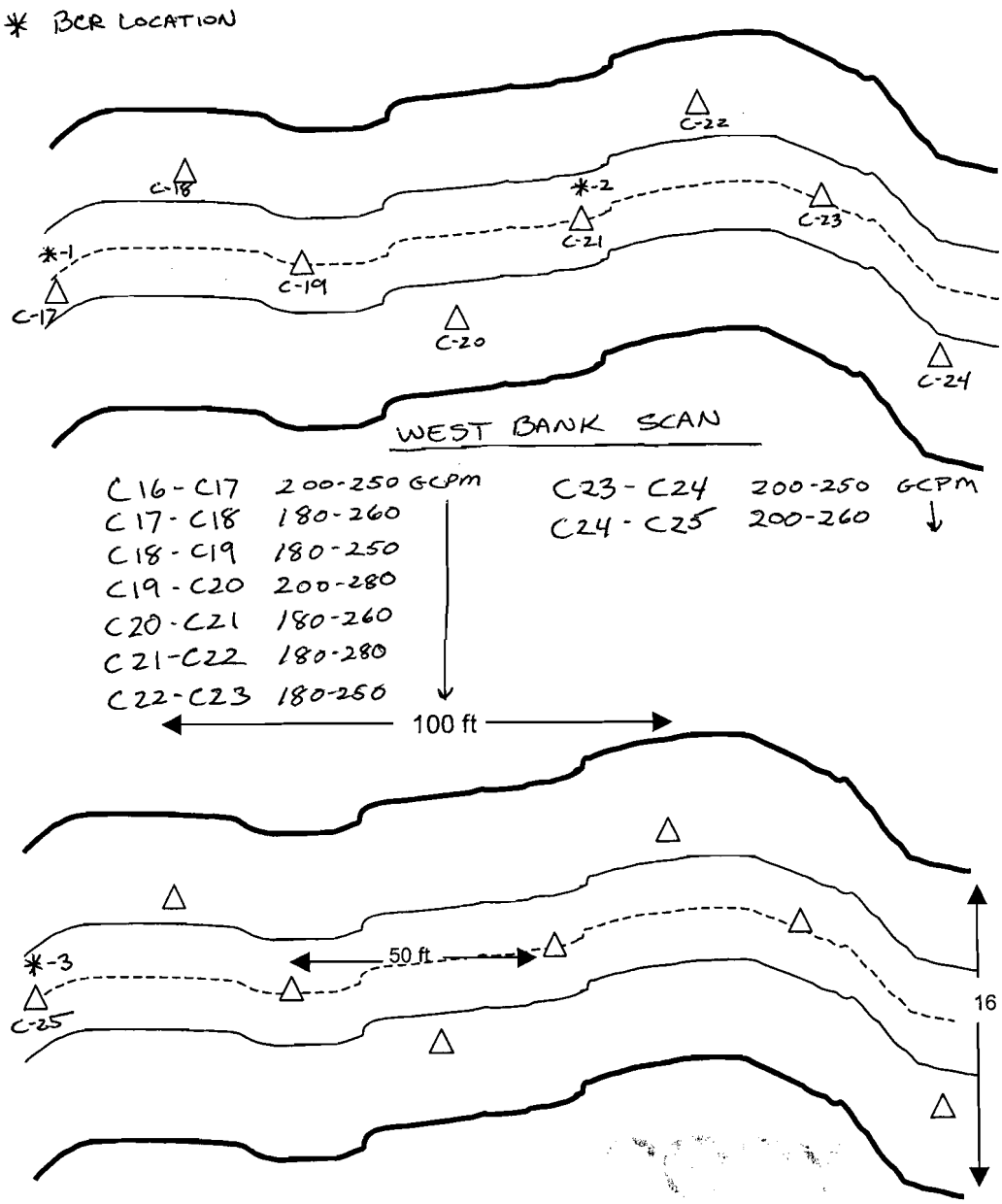
22		
23		
24		
25		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
RDZONAR
RDm 1-24-06

Reviewed by: (sign/date)
1/26/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 39

Location: SR11 SECTION C PHASE 2

RWP: PB-06- N/A

Date: 1-24-06

Time: 1400

Survey #: NASA-06- 243

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203443/220132	10-14-06/10-14-06	59	N
N	N	N	N	
/A	/A	/A	/A	/A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in μr/hr unless otherwise noted
☒ ~~N/A~~

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12		
13	A	
14		
15		
16		
17		
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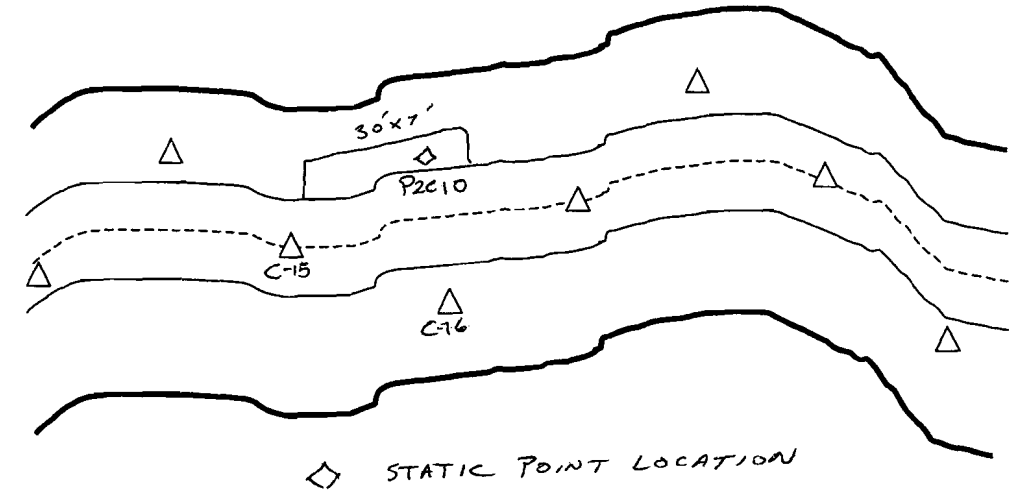
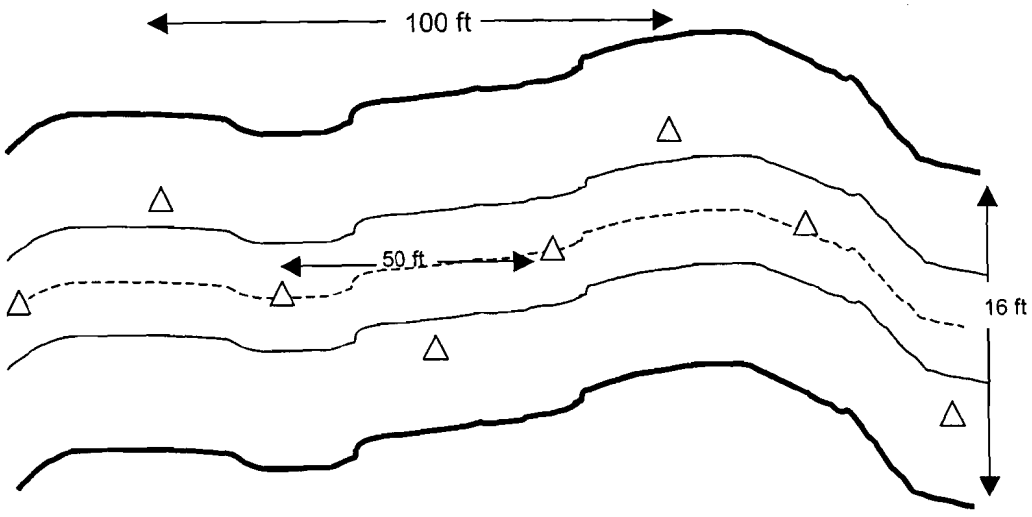
21		
22		
23		
24		
25		





Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DAVONNE
RD 1-24-06

Reviewed by: (sign/date)
B. Case 1/26/06

SR Number	SR-11	Instrument #	203443	Technician(s):	RJD6589	Survey Number	NASA-06-243

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/24/2006	8:17	5	59	60	SCL	
1	PRE SRC	1/24/2006	8:21	5	6394	60	SCL	
2	SR11 SECC	1/24/2006	10:10	5	60	0	RAT	
3	C15W P2C10	1/24/2006	10:24	5	474	60	SCL	
4	C17 BKG1	1/24/2006	10:32	5	104	60	SCL	
5	C21 BKG2	1/24/2006	10:55	5	70	60	SCL	
6	C25 BKG3	1/24/2006	11:16	5	80	60	SCL	
7	POST BKG	1/24/2006	13:20	5	70	60	SCL	
8	POST SRC	1/24/2006	13:30	5	6465	60	SCL	

2350 44-10 detector # 5 Cs-137 window

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#W = Phase 1 location of Section C on the west bank; P2C# = Phase 2 static measurement and sample location; C# = Phase 1 location of Section C

Survey performed and downloaded by R. Dzvonar

RJW 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK CREEK SR-11 P2 D/L - 40

RWP: PB-056 - N/A

Date: 1-24-06

Time: 1007

Survey #: NASA-056244

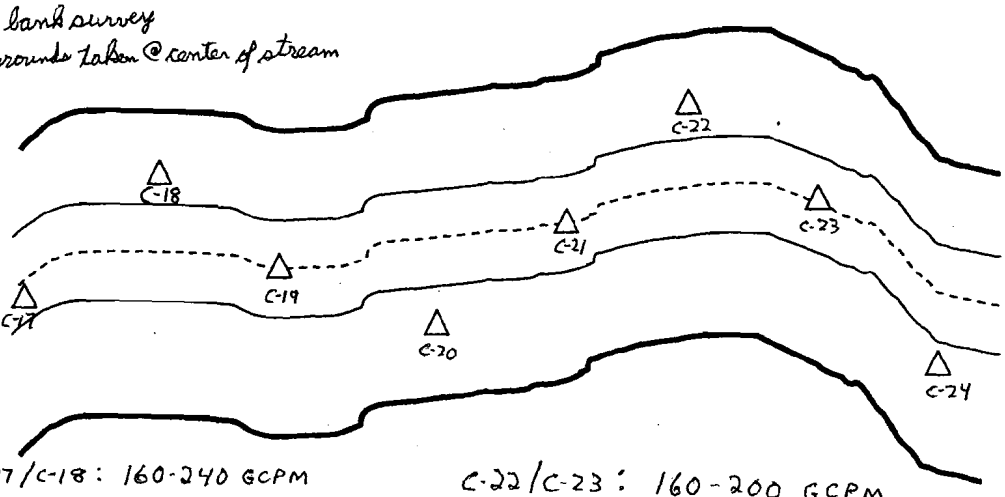
Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350	203477	10-14-06	59	N/A
4410	220136	10-14-06	59	N/A

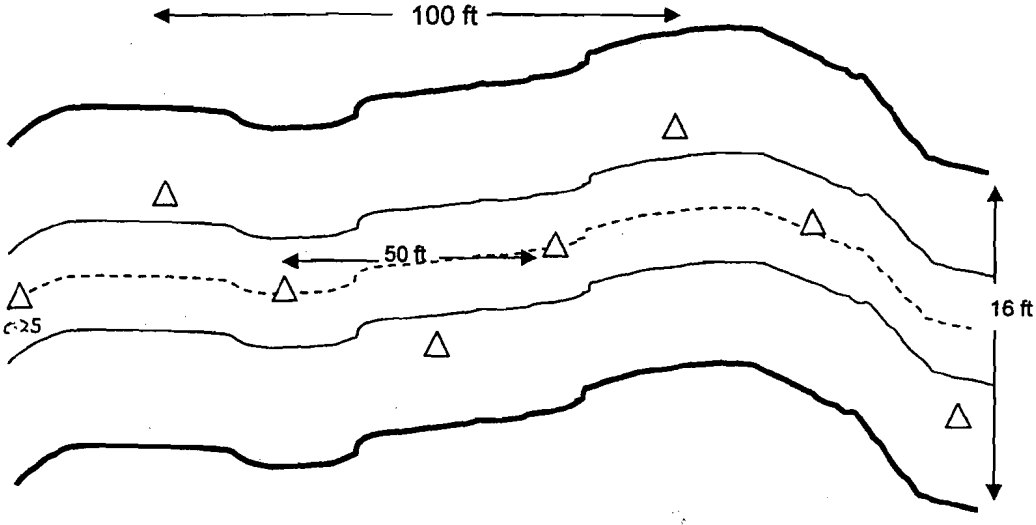
Reason for Survey:
☐ Daily ☐ Job Coverage
☐ Weekly ☐ Other:_____

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in μr/hr unless otherwise noted
☒ N/A

East bank survey
Backgrounds taken @ center of stream



C-17/C-18 : 160-240 GCPM
C-18/C-19 : 160-220 GCPM
C-19/C-20 : 150-230 GCPM
C-20/C-21 : 180-240 GCPM
C-21/C-22 : 180-240 GCPM
C-22/C-23 : 160-200 GCPM
C-23/C-24 : 150-200 GCPM
C-24/C-25 : 140-200 GCPM



Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12		A
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Legend
xxxx - Radiological boundary
x-x-x- Contaminated area
- General area dose rate
*Contact/30cm dose rates
O - Smear location
LAS - Large area smear
- Direct frisk
A/S - Air sampler location

Performed by: (print/sign/date)
RJ REHEARD
RJ Reheard 1-24-06

Reviewed by: (sign/date)
Release

Download #: 40

SR Number	SR-11	Instrument #	203477	Technician(s):	RR9291	Survey Number	NASA-06-244

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/24/2006	8:13	5	59	60	SCL	
1	PRE SRC	1/24/2006	8:17	5	6518	60	SCL	
2	SR11 SECC	1/24/2006	10:07	5	66	0	RAT	
3	C17 BKG1	1/24/2006	10:18	5	72	60	SCL	
4	C21 BKG2	1/24/2006	10:55	5	65	60	SCL	
5	C25 BKG3	1/24/2006	11:13	5	71	60	SCL	
6	POST BKG	1/24/2006	13:23	5	70	60	SCL	
7	POST SRC	1/24/2006	13:26	5	6545	60	SCL	

2350/44-10 detector # 5 CS-137 window

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C

Survey performed by B. Reheard and downloaded by R Dzvonar RJ Reheard

R/W 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUM BROOK SECTION C SR-11 DL#42

RWP: PB-06- ~~281~~ NA

Date: 1-26-06

Time: 1343

Survey #: NASA-06- 281

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203477/220136	10-14-06	58	NA

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

☐ Dose rates in mr/hr unless otherwise noted
☐ Dose rates in µr/hr unless otherwise noted
☒ N/A

Smear # & Location	Contamination (dpm/100cm²) βγ	Contamination (dpm/100cm²) α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	NA	NA
12		
13		
14		
15		
16		
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18		
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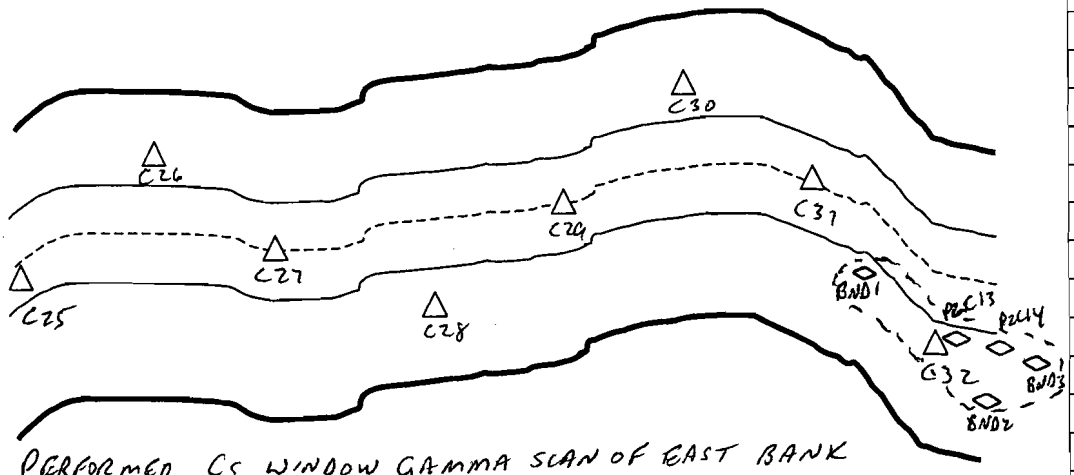
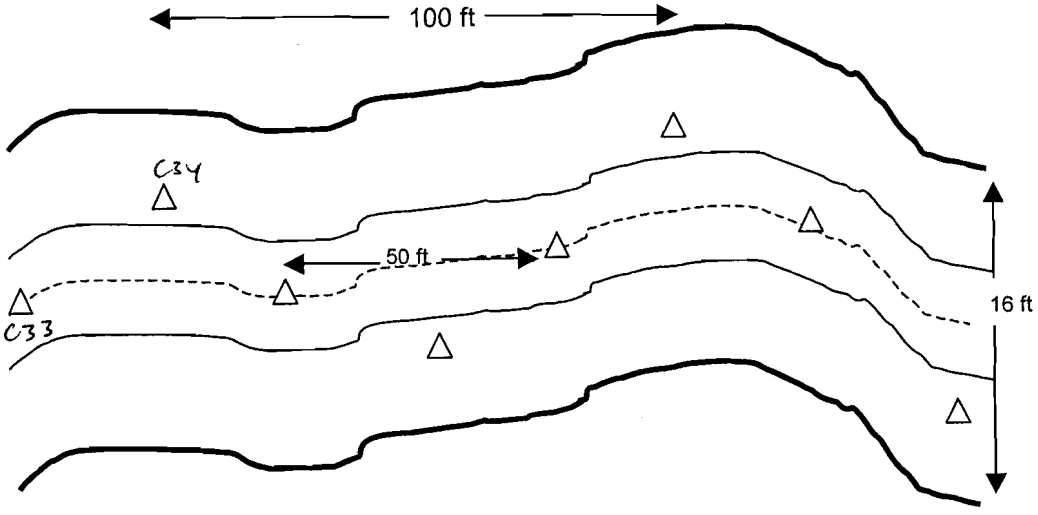
21		
22		
23		
24		
25		



PERFORMED Cs WINDOW GAMMA SCAN OF EAST BANK FROM C25 THRU C33. SCAN RANGED FROM 140-400 gcpm. SEE DOWNLOAD FOR DIRECT COUNT RESULTS.

◇ - INDICATES DIRECT MEASUREMENT LOCATION.



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R. REHGARD 11-26-06
RJ Rehgard

Reviewed by: (sign/date)
B. Case 2/1/06

Download #: 42

SR Number	SR-11	Instrument #	203477	Technician(s):	RR9291	Survey Number	NASA-06-281

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/26/2006	9:17	5	58	60	SCL	
1	PRE SRC	1/26/2006	9:34	5	6617	60	SCL	
2	SR11 SECC	1/26/2006	13:43	5	108	0	RAT	
3	SR11 SCN	1/26/2006	13:45	5	78	0	RAT	
4	C31 BND	1/26/2006	14:54	5	243	60	SCL	
5	C32 P2C13	1/26/2006	15:00	5	326	60	SCL	
6	C32 P2C14	1/26/2006	15:03	5	359	60	SCL	
7	C32 BND	1/26/2006	15:06	5	297	60	SCL	
8	C32 BND	1/26/2006	15:07	5	283	60	SCL	
9	SR11 SCN	1/26/2006	15:27	5	44	0	RAT	
10	POST BKG	1/26/2006	15:28	5	56	60	SCL	
11	POST SRC	1/26/2006	15:32	5	6555	60	SCL	

Detector #5 is 44-10 w/ Cs-137 window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Survey performed by R. Reheard. Download performed by J. Sorg. R J Reheard

R/U 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUM BROOK SECTION C SR-11 OL#43

RWP: PB-06- NA

Instrument(s)

Date: 1-26-06

Time: 1347

Survey #: NASA-06-282

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203473/196943	3-24-06	51	NA
~~2350/44-10~~ Hand		N		
			A	

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12	N/A	
13		
14		
15		
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20		
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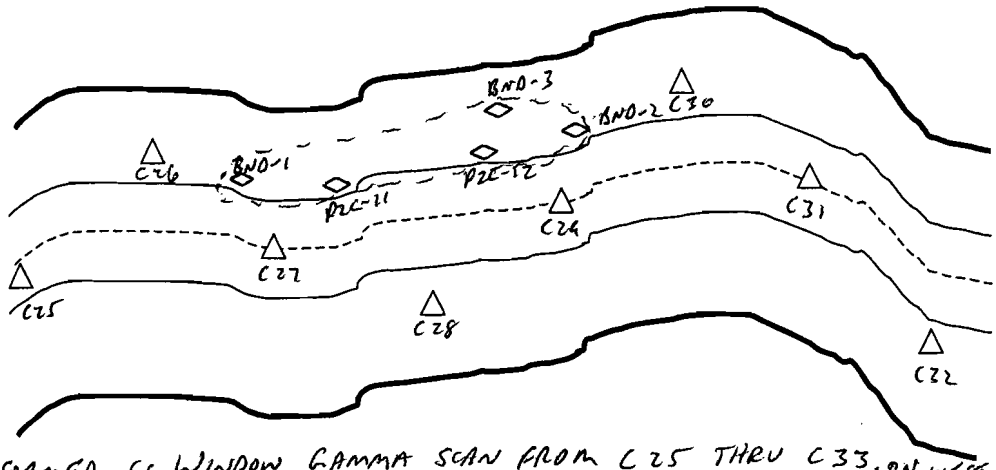
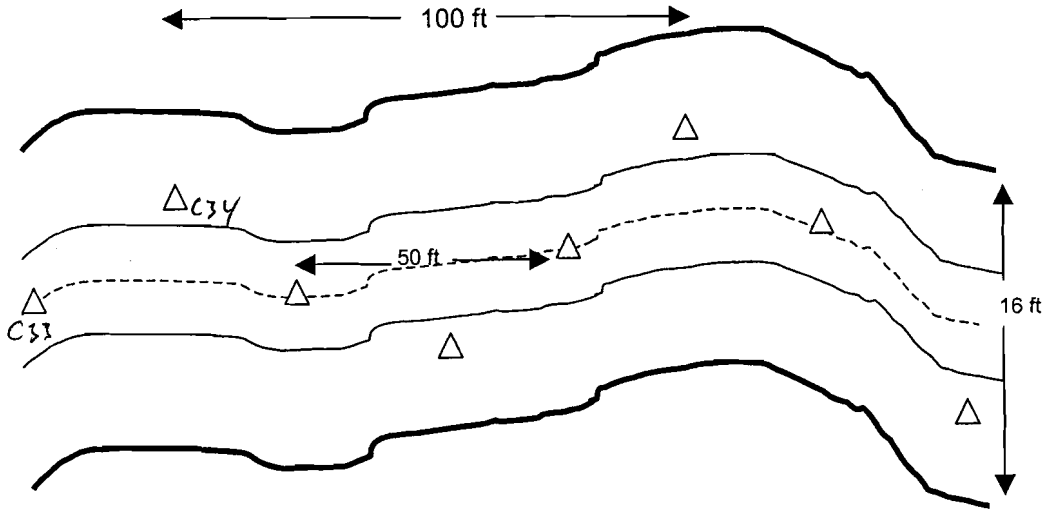
22		
23		
24		
25		



PERFORMED Cs WINDOW GAMMA SCAN FROM C25 THRU C33, ON WEST BANK. SCAN RANGED FROM 150-590 gCPM. SEE DOWNLOAD FOR DIRECT COUNT RESULTS.

◇ - INDICATES DIRECT COUNT LOCATIONS.



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
J. Case/ Joe G 1-26-06

Reviewed by: (sign/date)
R. Case 2/1/06

Download #: 43

SR Number	SR-11	Instrument #	203473	Technician(s):	JGS8492	Survey Number	NASA-06-282

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/26/2006	9:19	5	51	60	SCL	
1	PRE SRC	1/26/2006	9:34	5	6553	60	SCL	
2	SR11 SECC	1/26/2006	13:47	5	108	0	RAT	
3	SR11 SCN	1/26/2006	13:47	5	111	0	RAT	
4	C27 BND1	1/26/2006	14:13	5	295	60	SCL	
5	C29 BND2	1/26/2006	14:29	5	295	60	SCL	
6	C28 BND3	1/26/2006	14:32	5	285	60	SCL	
7	C27 P2C11	1/26/2006	14:35	5	447	60	SCL	
8	C28 P2C12	1/26/2006	14:38	5	588	60	SCL	
9	SR11 SCN	1/26/2006	15:12	5	131	0	RAT	
10	POST BKG	1/26/2006	15:31	5	49	60	SCL	
11	POST SRC	1/26/2006	15:35	5	6870	60	SCL	

Detector #5 is the 44-10 w/ CS window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Survey and download performed by J. Sorg. Joe Sorg R/W 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK CREEK SR-11 P2 D/L - 44

RWP: PB-06- N/A

Date: 1-27-06

Time: 1038

Survey #: NASA-06- ~~394~~ 29

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350	203477	10-14-06	56	N/A
4410	220136	10-14-06	56	N/A
		N		
		A		

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: SCOPING

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in µr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9	N	
10		A
11		
12		
13		
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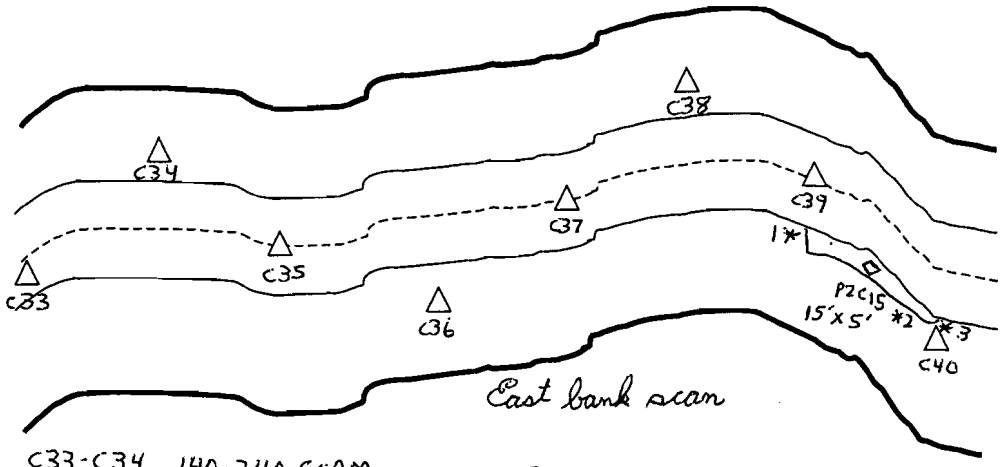
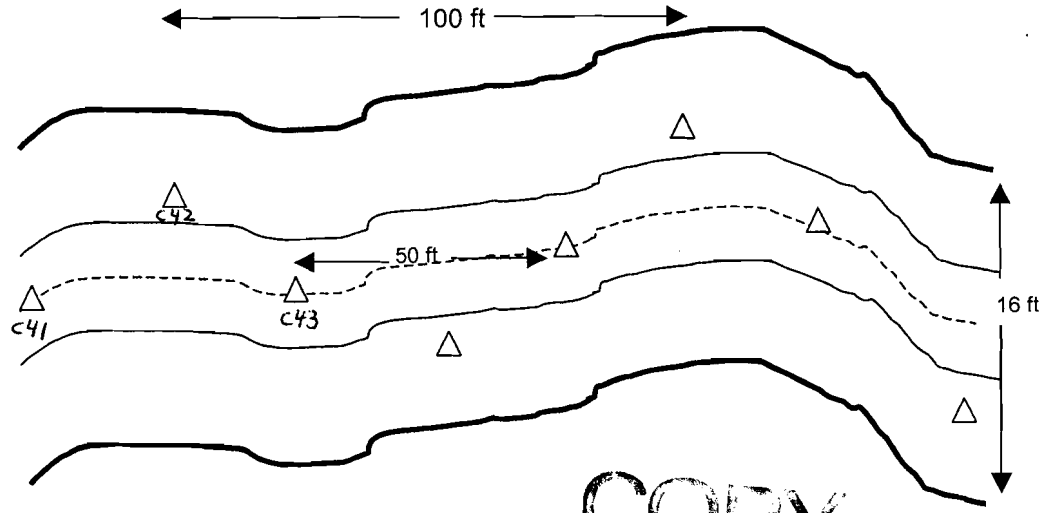
25		



C33-C34	140-240 GCPM	C38-C39	140-200 GCPM
C34-C35	160-240 GCPM	C39-C40	180-400 GCPM
C35-C36	180-260 GCPM	C40-C41	160-220 GCPM
C36-C37	140-220 GCPM	C41-C42	160-230 GCPM
C37-C38	140-220 GCPM	C42-C43	140-220 GCPM



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
RJ REHEARD 1-27-06
RJ Reheard

Reviewed by: (sign/date)
2-7-06
RJ Warnet

Download #: 44

SR Number	SR- 11	Instrument #	203477	Technician(s):	RR9291	Survey Number	NASA-06-293 RR 4-24-06

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/27/2006	7:41	5	48	60	SCL	
1	PRE SRC	1/27/2006	7:46	5	6542	60	SCL	
2	SR11 SECC	1/27/2006	10:38	5	83	0	RAT	
3	C33 SCAN	1/27/2006	10:38	5	33	0	RAT	
4	C39 P2C15	1/27/2006	12:52	5	330	60	SCL	
5	C39 BND1	1/27/2006	13:07	5	286	60	SCL	
6	C39 BND2	1/27/2006	13:09	5	287	60	SCL	
7	C39 BND3	1/27/2006	13:11	5	277	60	SCL	
8	C42E SCAN	1/27/2006	14:05	5	38	0	RAT	
9	POST BKG	1/27/2006	14:16	5	56	60	SCL	
10	POST SRC	1/27/2006	14:20	5	6530	60	SCL	

2350 Detector 5 has Cesium 137 window setup

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCAN = Scan survey

Survey and download performed by R. J. Reheard RJ Reheard

RJW 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 48

Location: SR-11 PLUM BROOK SECTION C PHASE 2

RWP: PB-06- N/A

Date: 1-27-06

Time: 1430

Survey #: NASA-06- 293

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350 / 4410 (2350/203473 RD 1-27-06)	203473 / 196943	3-24-06 / 3-24-06	70	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11	A	
12		
13		
14		
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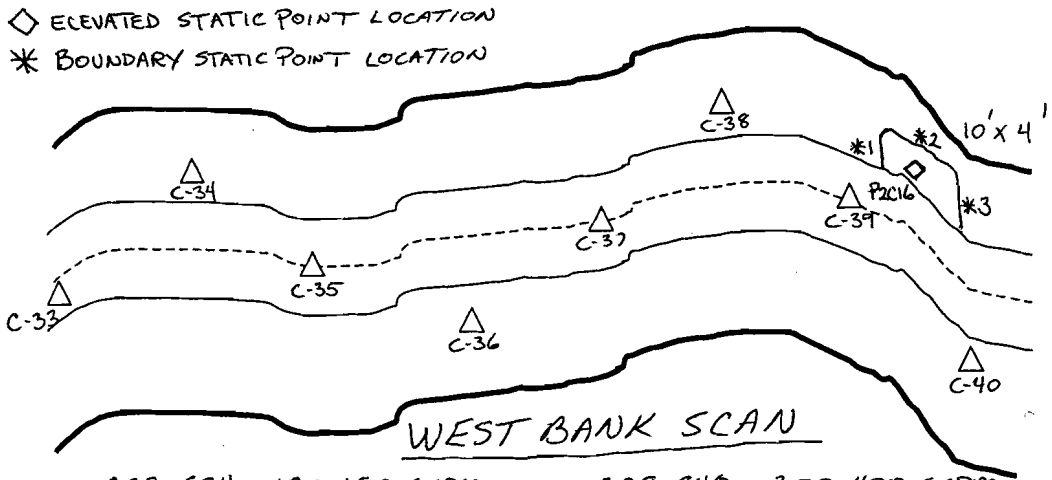
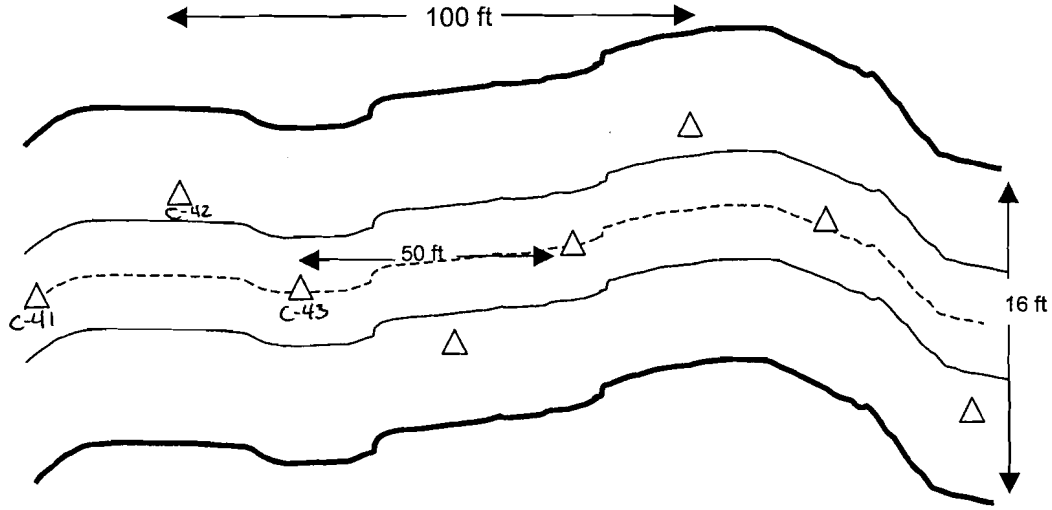
25		

◇ ELEVATED STATIC POINT LOCATION
✳ BOUNDARY STATIC POINT LOCATION



WEST BANK SCAN

C33-C34	120-180 GCPM	C39-C40	200-400 GCPM
C34-C35	130-200	C40-C41	180-250
C35-C36	180-240	C41-C42	160-200
C36-C37	160-200	C42-C43	160-200
C37-C38	160-220		
C38-C39	180-220		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DZVONAR
1-27-06

Reviewed by: (sign/date)
R. Case 2/1/06

Download #: 48

SR Number	SR-11	Instrument #	203473	Technician(s):	RJD6589	Survey Number	NASA-06-293

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/27/2006	7:44	5	52	60	SCL	
1	PRE SRC	1/27/2006	7:47	5	6486	60	SCL	
2	SR11 SECC	1/27/2006	10:41	5	53	0	RAT	
3	C33W SCAN	1/27/2006	10:42	5	69	0	RAT	
4	C39W BND1	1/27/2006	13:02	5	275	60	SCL	
5	C39W BND2	1/27/2006	13:04	5	312	60	SCL	
6	C39W BND3	1/27/2006	13:11	5	275	60	SCL	
7	C39W P2C16	1/27/2006	13:16	5	439	60	SCL	
8	C42W SCAN	1/27/2006	14:08	5	38	0	RAT	
9	POST BKG	1/27/2006	14:20	5	71	60	SCL	
10	POST SRC	1/27/2006	14:24	5	6681	60	SCL	

Detector # 5 44-10 C-137 Window

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#W= Phase 1 location of Section C on west bank; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCAN = Scan survey

Survey performed and downloaded by R. Dzvonar R Dzvonar

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 49

Location: SR11 PLUMBROOK SECT C PHASE 2

RWP: PB-06- N/A

Date: 1-30-06

Time: 1500

Survey #: NASA-06- 311

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	180731/18834	12-28-06/12-28-06	52	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in µr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11	A	
12		
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14		
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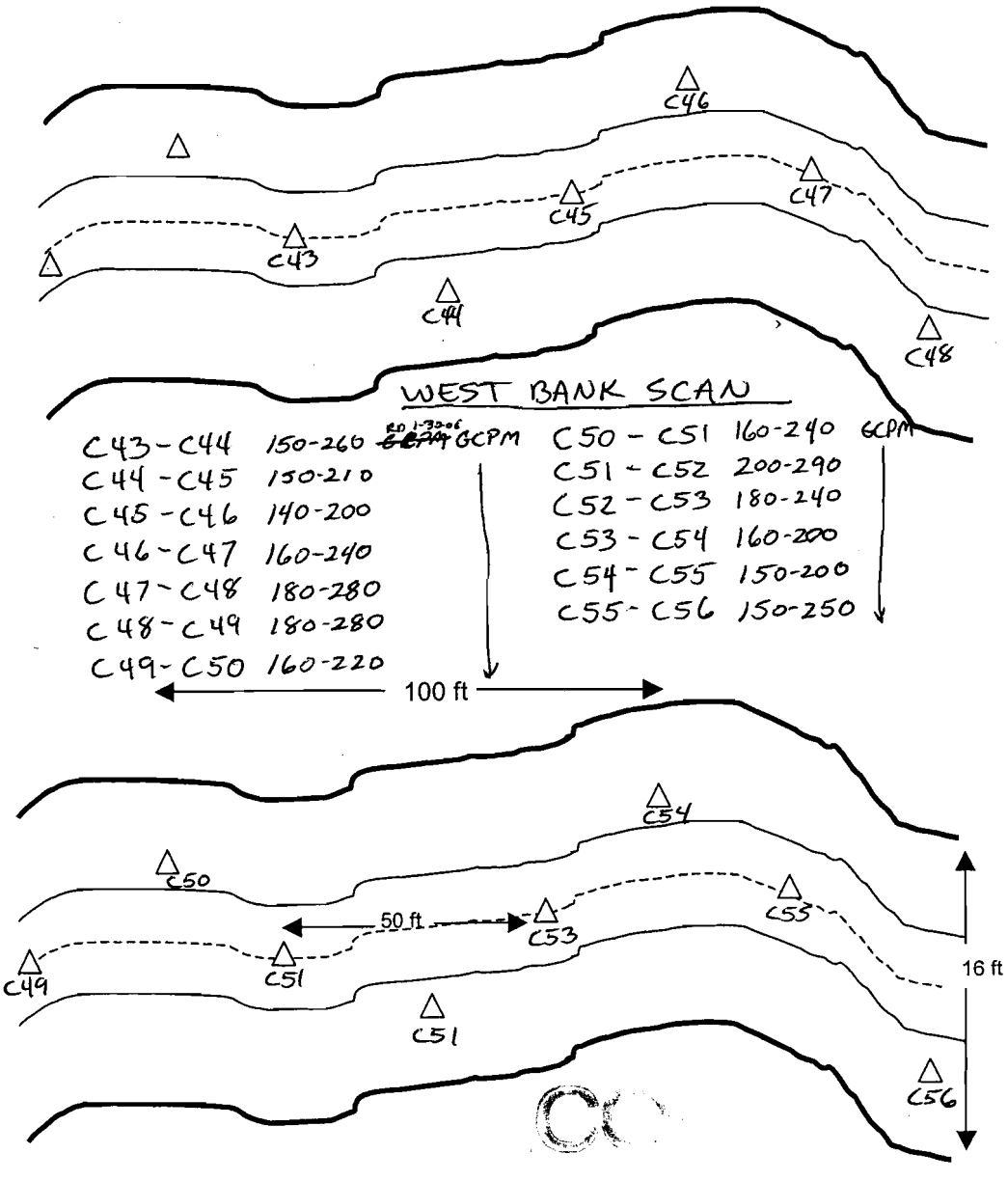
23		
24		
25		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DZVONAR 1-30-06
R Dzvonar

Reviewed by: (sign/date)
R. Case 2/1/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD #49

Location: SRII PLUMBROOK SECT C PHASE 2

RWP: PB-06- N/A

Date: 1-30-06

Time: 1500

Survey #: NASA-06- 311

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350 / 44-10	180731 / 18834	12-28-06 / 12-28-06	52	N
N	N	N	N	
N/A	N/A	N/A	N/A	N/A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ ~~N/A~~

Smear # & Location	Contamination (dpm/100cm²) βγ	α
1		
2		
3		
4		
5		
6		
7		
8		
9	N	
10	A	
11		
12		
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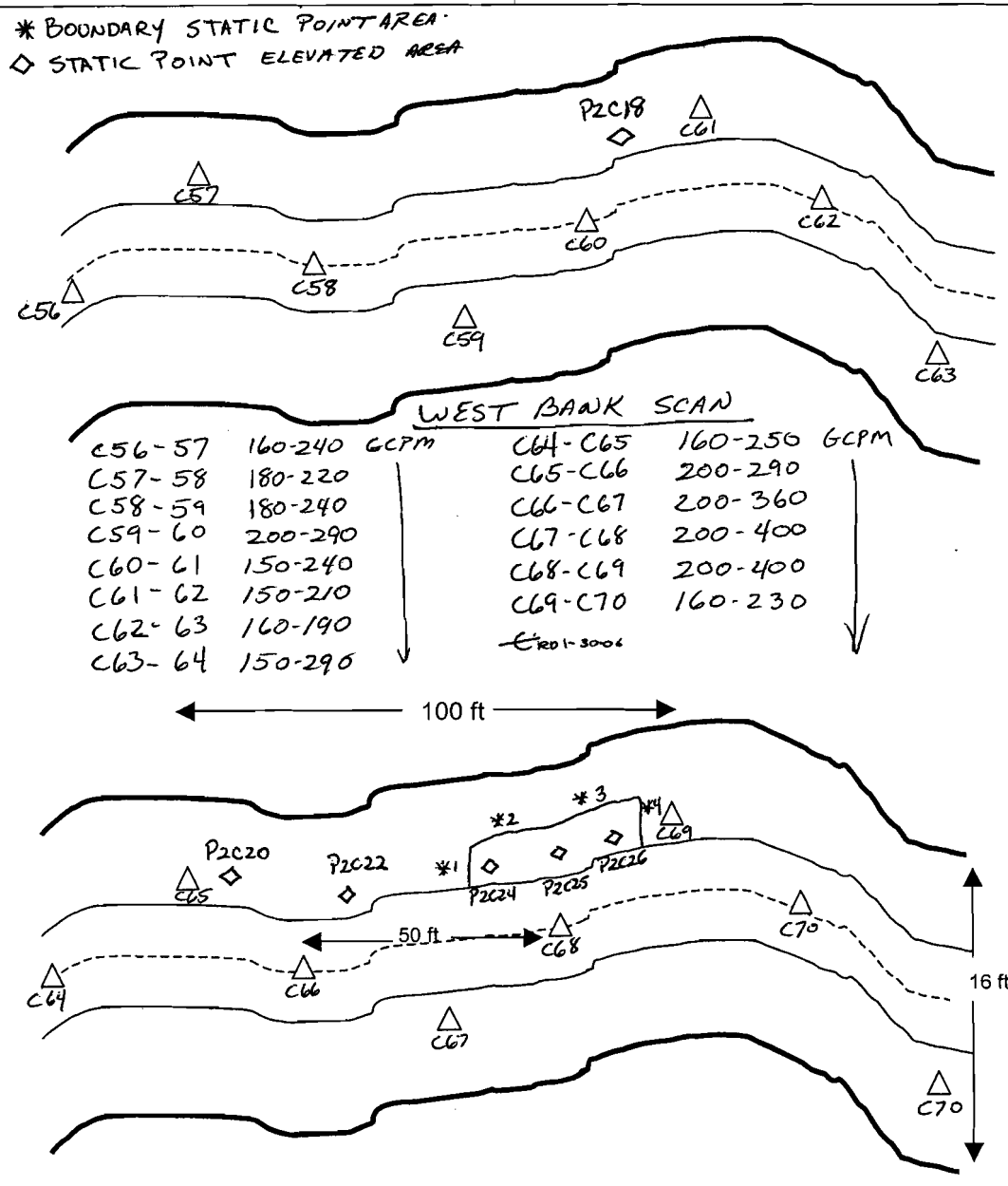
23		
24		
25		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DZVONAR
RDmr 1.30.06

Reviewed by: (sign/date)
M. Case 2/1/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 49

Location: SR11 PLUMBROOK SECT C PHASE 2

RWP: PB-06- N/A

Date: 1.30.06

Time: 1500

Survey #: NASA-06- 31

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	180731/188834	12-28-06/12-28-06	52	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in µr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	
11	A	
12		
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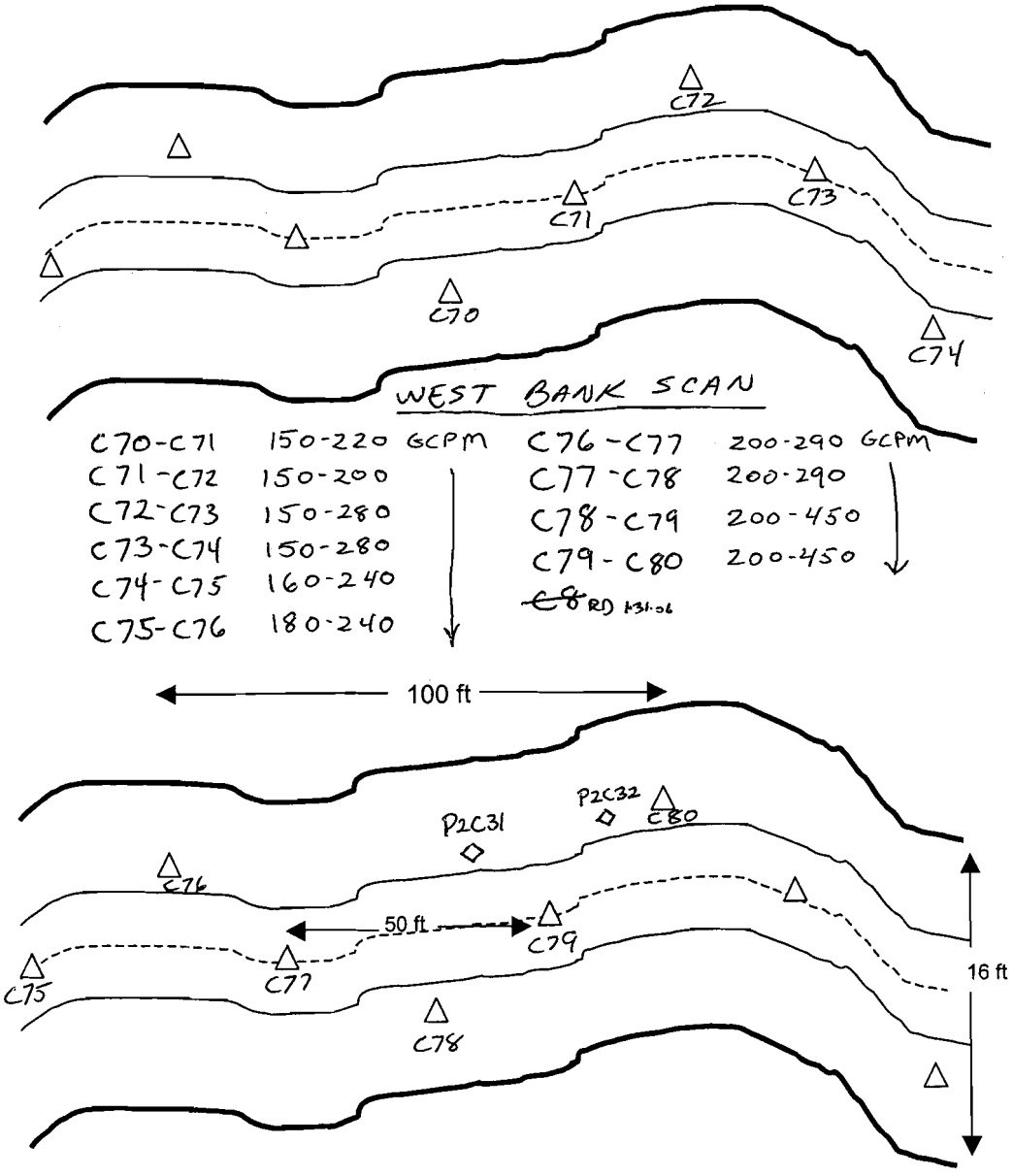

Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DZVONAR
1.30.06

Reviewed by: (sign/date)
R. Case 2/1/06

Download #: 49

SR Number	SR-11	Instrument #	180731	Technician(s):	RJD6589	Survey Number	NASA-06-311

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/30/2006	7:17	5	52	60	SCL	
1	PRE SRC	1/30/2006	7:19	5	6344	60	SCL	
2	SR11 SECC	1/30/2006	7:37	5	56	0	RAT	
3	SR11 SCN	1/30/2006	8:01	5	45	0	RAT	
4	C60 P2C18	1/30/2006	9:28	5	310	60	SCL	
5	C65 P2C20	1/30/2006	10:18	5	423	60	SCL	
6	C66 P2C22	1/30/2006	10:33	5	362	60	SCL	
7	C67 BND1	1/30/2006	10:48	5	267	60	SCL	
8	C67 BND2	1/30/2006	10:51	5	267	60	SCL	
9	C67 BND3	1/30/2006	10:54	5	293	60	SCL	
10	C67 BND4	1/30/2006	10:58	5	288	60	SCL	
11	C67 P2C24	1/30/2006	11:06	5	405	60	SCL	
12	C67 P2C25	1/30/2006	11:10	5	502	60	SCL	
13	C68 P2C26	1/30/2006	11:13	5	422	60	SCL	
14	C78 P2C31	1/30/2006	13:37	5	451	60	SCL	
15	C79 P2C32	1/30/2006	13:50	5	451	60	SCL	
16	SR11 SCN	1/30/2006	14:11	5	198	0	RAT	
17	POST BKG	1/30/2006	14:34	5	31	60	SCL	
18	POST SRC	1/30/2006	14:38	5	6344	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Download performed by J. Sorg. Survey performed by R. Dzvonar. RDzv

RJW 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK SR-11 OL# 51

RWP: PB-06- NA

Date: 1-30-06

Time: 0738

Survey #: NASA-06- 313

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/4410	203470/196941	12-28-06	51	NA
		N		
			NA	

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
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12		
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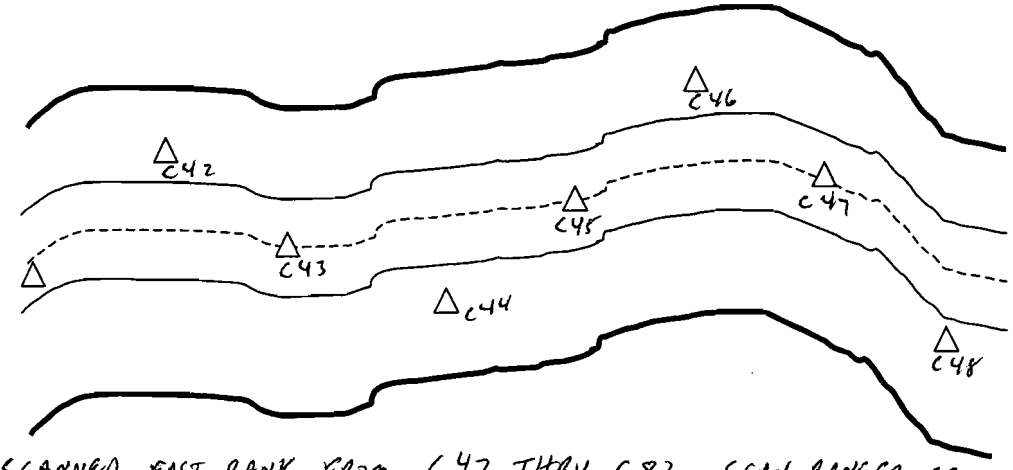
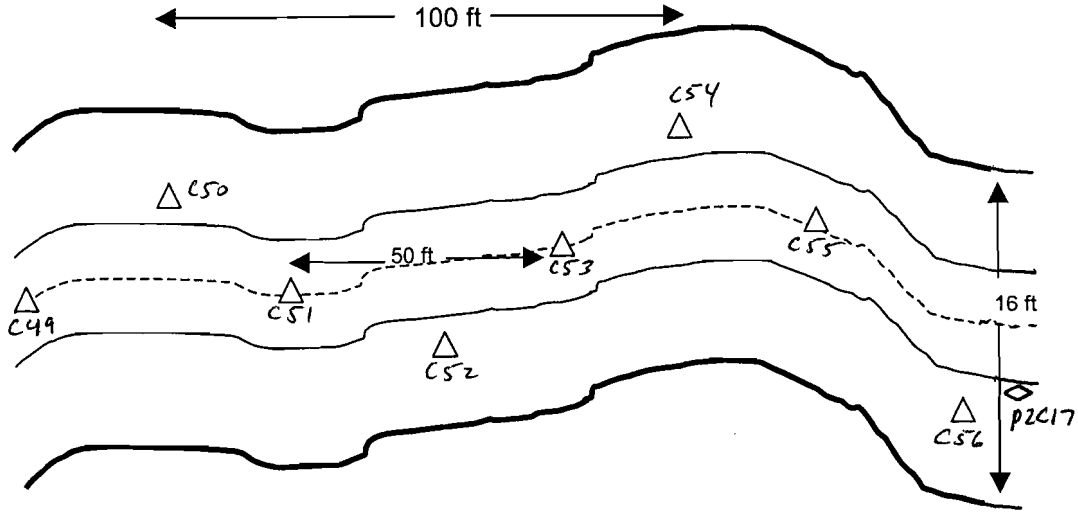
Reason for Survey:
- ☐ Daily
- ☐ Weekly
- ☐ Job Coverage
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A



SCANNED EAST BANK FROM C42 THRU C82. SCAN RANGED FROM 140 TO 1000 cpm. SEE OL FOR RESULTS OF DIRECT READINGS.

◇ INDICATES DIRECT READINGS.



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
SORG, J. 1-30-06

Reviewed by: (sign/date)
P. Case 2/1/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK SECTION C SR-11 DL #51

RWP: PB-06- NA

Date: 1-30-06

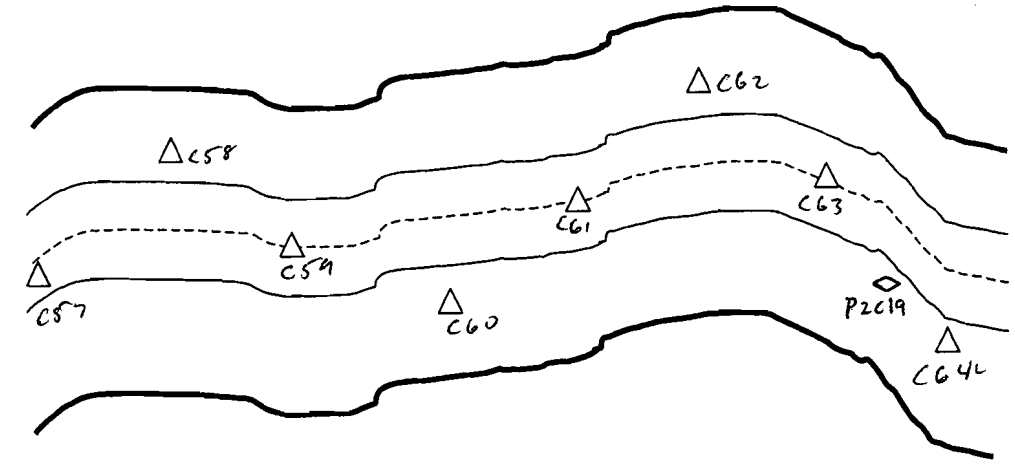
Time: 0738

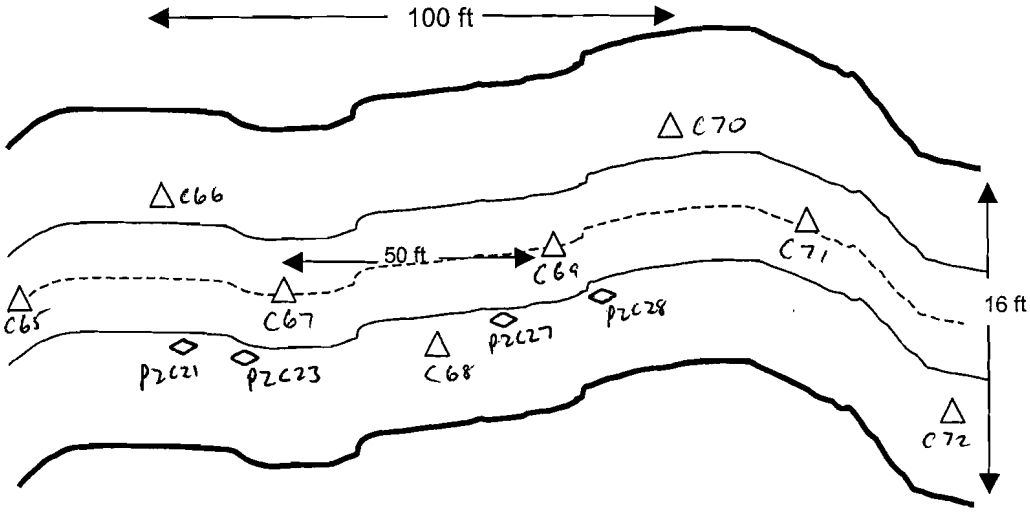
Survey #: NASA-06- 313

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
SEE	PAGE	#	1	

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in µr/hr unless otherwise noted
- ☒ N/A





Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12	N	A
13		
14		
15		
16		
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22		
23		
24		
25		

Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
J. Sacc [illegible] 1-30-06

Reviewed by: (sign/date)
[illegible] Case 2/1/06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: PLUMBROOK SECTION C SR-11 OL # 51

RWP: PB-06- NA

Date: 1-30-06

Time: 0738

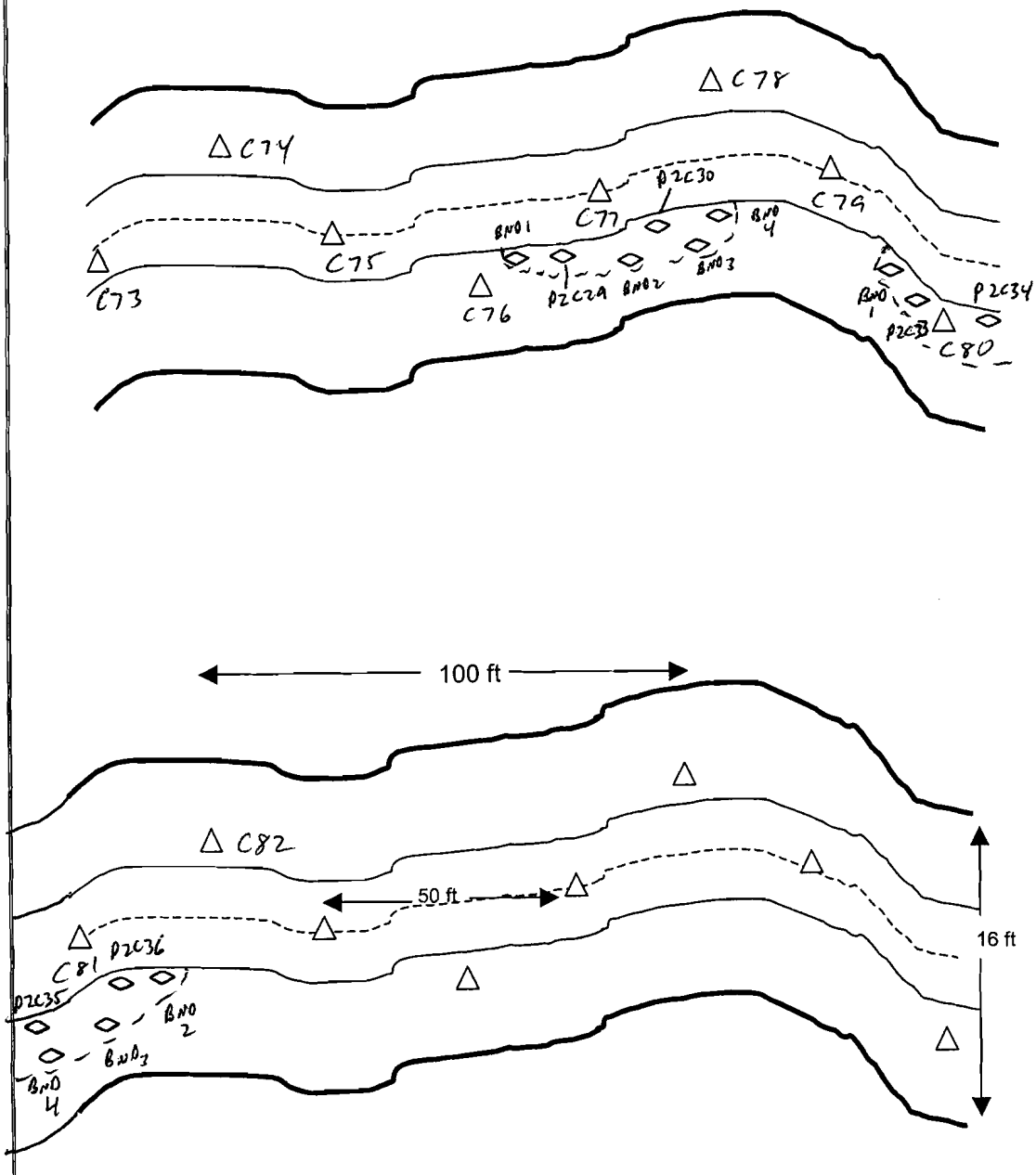
Survey #: NASA-06- 313

Instrument(s)				
Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
SEE PAGE # 1				

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	A
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
S. SIZE / [signature] / 1-30-06

Reviewed by: (sign/date)
[signature] 2/1/06

Download #: 51

SR Number	SR-11	Instrument #	203470	Technician(s):	JGS8492	Survey Number	NASA-06-313

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/30/2006	7:17	5	51	60	SCL	
1	PRE SRC	1/30/2006	7:21	5	6350	60	SCL	
2	SR11 SECC	1/30/2006	7:38	5	28	0	RAT	
3	SR11 SCN	1/30/2006	8:01	5	15	0	RAT	
4	C56 P2C17	1/30/2006	9:03	5	395	60	SCL	
5	C63 P2C19	1/30/2006	9:43	5	349	60	SCL	
6	C66 P2C21	1/30/2006	10:28	5	375	60	SCL	
7	C66 P2C23	1/30/2006	10:35	5	465	60	SCL	
8	C68 P2C27	1/30/2006	10:58	5	448	60	SCL	
9	C69 P2C28	1/30/2006	11:09	5	302	60	SCL	
10	C76 BND1	1/30/2006	13:16	5	272	60	SCL	
11	C77 BND2	1/30/2006	13:22	5	294	60	SCL	
12	C77 BND3	1/30/2006	13:25	5	307	60	SCL	
13	C77 BND4	1/30/2006	13:27	5	280	60	SCL	
14	C76 P2C29	1/30/2006	13:31	5	408	60	SCL	
15	C77 P2C30	1/30/2006	13:33	5	490	60	SCL	
16	C77 BND1	1/30/2006	13:44	5	316	60	SCL	
17	C77 BND2	1/30/2006	13:54	5	321	60	SCL	
18	C77 BND3	1/30/2006	13:56	5	321	60	SCL	
19	C77 BND3	1/30/2006	13:58	5	305	60	SCL	
20	C77 BND4	1/30/2006	14:00	5	289	60	SCL	
21	C79 P2C33	1/30/2006	14:02	5	402	60	SCL	
22	C80 P2C34	1/30/2006	14:04	5	869	60	SCL	
23	C80 P2C35	1/30/2006	14:07	5	389	60	SCL	
24	C81 P2C36	1/30/2006	14:09	5	614	60	SCL	
25	SR11 SCN	1/30/2006	14:10	5	432	0	RAT	
26	POST BKG	1/30/2006	14:34	5	45	60	SCL	
27	POST SRC	1/30/2006	14:41	5	6200	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Download and survey performed by J. Sorg. Joe Sorg

RJW 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD # 50

Location: SR11 PLUMBROOK SECT C PHASE 2

RWP: PB-06- N/A

Date: 1.30.06

Time: 1037

Survey #: NASA-06- 312

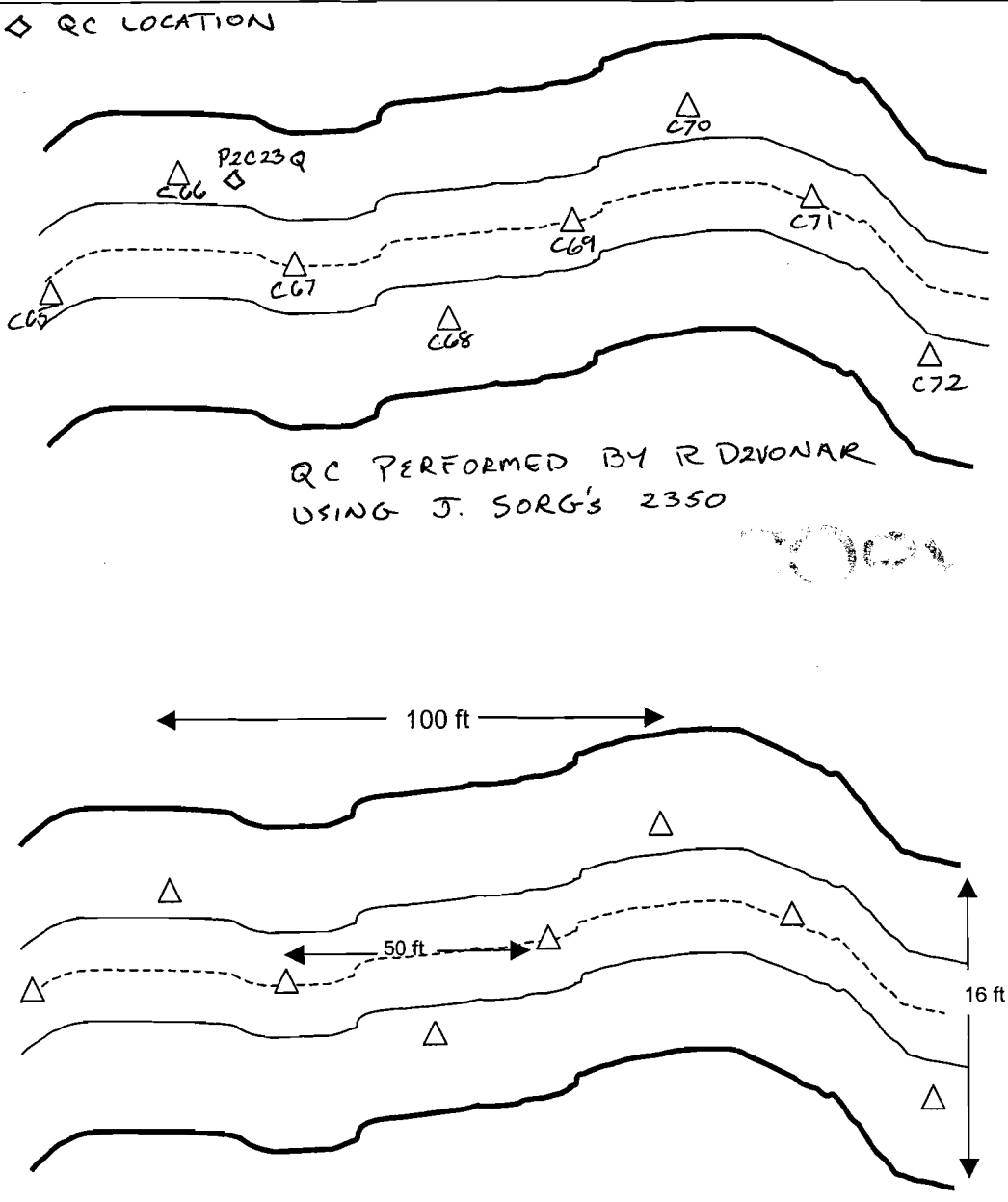
Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350 / 44.10	203470 / 196941	12-28-06 / 12-28-06	51	N
N	N	N	N	
A	A	A	A	A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in µr/hr unless otherwise noted
- ☒ ~~N~~/A

Smear # & Location	Contamination (dpm/100cm²) βγ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12		A
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DZVONAR 1.30.06

Reviewed by: (sign/date)
R. Case 2/1/06

SR Number	SR-11	Instrument #	203470	Technician(s):	RJD6589	Survey Number	NASA-06-312

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	1/30/2006	7:17	5	51	60	SCL	
1	PRE SRC	1/30/2006	7:21	5	6350	60	SCL	
2	RJD C23Q	1/30/2006	10:37	5	446	60	SCL	
3	POST BKG	1/30/2006	14:34	5	45	60	SCL	
4	POST SRC	1/30/2006	14:41	5	6200	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SCL = Scalar count; C# Q= Phase 2 location of Section C Quality Control static measurement; RJD = Technician initials

Download performed by J. Sorg. Survey performed by R. Dzvonar. RDz

APPENDIX A
RADIATION PROTECTION SURVEY FORM

DOWNLOAD #56

Location: SR-11 PLUMBROOK SECTION C PHASE 2

RWP: PB-06- N/A

Date: 2-1-06

Time: 0814

Survey #: NASA-06- 353

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203473/196943	3-24-06/3-24-06	54	N/
N/	N/	N/	N/	
/A	/A	/A	/A	/A

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: CHARACTERIZATION

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12	A	
13		
14		
15		
16		
17		
18		
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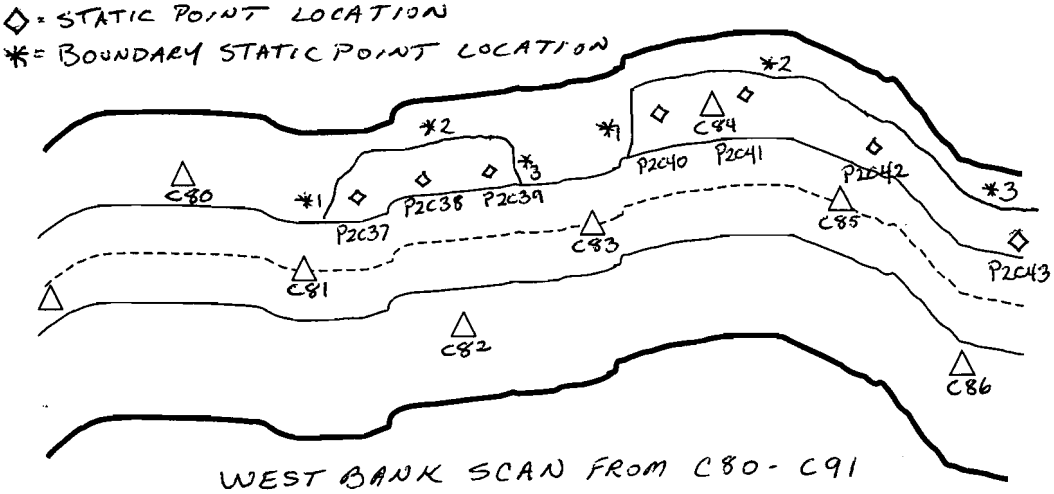
20		
21		
22		
23		
24		
25		

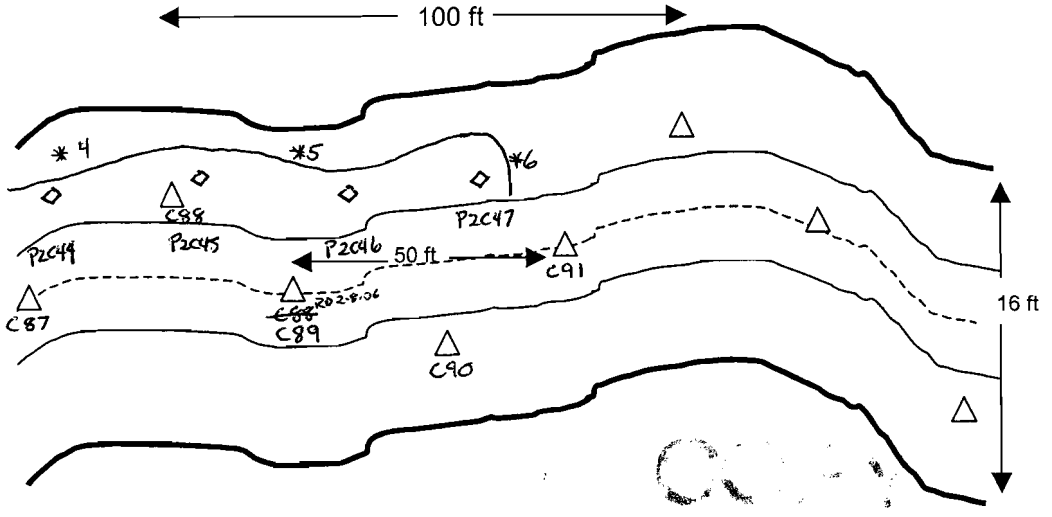
◇ = STATIC POINT LOCATION

✱ = BOUNDARY STATIC POINT LOCATION



WEST BANK SCAN FROM C80 - C91

SCAN RANGE: 150 - 600 GCPM



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- ~~✱Contact/30cm dose rates~~ 2-1-06
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
R DAVONAR
2-1-06

Reviewed by: (sign/date)
2/8/06

SR Number	SR-11	Instrument #	203473	Technician(s):	RJD6589	Survey Number	NASA-06-353

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	2/1/2006	7:06	5	54	60	SCL	
1	PRE SRC	2/1/2006	7:27	5	6652	60	SCL	
2	SR11 SECC	2/1/2006	8:14	5	101	0	RAT	
3	SR11 SCN	2/1/2006	8:14	5	104	0	RAT	
4	C81 BND1	2/1/2006	8:33	5	318	60	SCL	
5	C81 BND2	2/1/2006	8:37	5	280	60	SCL	
6	C82 BND3	2/1/2006	8:39	5	302	60	SCL	
7	C82 BND4	2/1/2006	8:40	5	286	60	SCL	
8	C81 P2C37	2/1/2006	8:43	5	595	60	SCL	
9	C81 P2C38	2/1/2006	8:45	5	660	60	SCL	
10	C82 P2C39	2/1/2006	8:47	5	534	0	RAT	
11	C83 BND1	2/1/2006	9:17	5	291	60	SCL	
12	C83 BND2	2/1/2006	9:19	5	288	60	SCL	
13	C85 BND3	2/1/2006	9:22	5	304	60	SCL	
14	C87 BND4	2/1/2006	9:28	5	309	60	SCL	
15	C88 BND5	2/1/2006	9:33	5	296	60	SCL	
16	C90 BND6	2/1/2006	9:41	5	268	60	SCL	
17	C83 P2C40	2/1/2006	10:23	5	513	60	SCL	
18	C84 P2C41	2/1/2006	10:30	5	438	60	SCL	
19	C85 P2C42	2/1/2006	10:33	5	503	60	SCL	
20	C86 P2C43	2/1/2006	10:38	5	405	60	SCL	
21	C87 P2C44	2/1/2006	10:44	5	444	60	SCL	
22	C88 P2C45	2/1/2006	10:49	5	530	60	SCL	
23	C89 P2C46	2/1/2006	10:52	5	414	60	SCL	
24	C90 P2C47	2/1/2006	10:56	5	616	60	SCL	
25	POST BKG	2/1/2006	14:16	5	50	60	SCL	
26	POST SRC	2/1/2006	14:22	5	6653	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Survey downloaded by J. Sorg and performed by R. Dzvonar. R Dzvonar

RJW 7.25.06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: Plum Brook, Section: C Phase: 2 Download #: 57 SR-11

RWP: PB-06- NA

Date: 2-1-06

Time: 0810

Survey #: NASA-06- 351

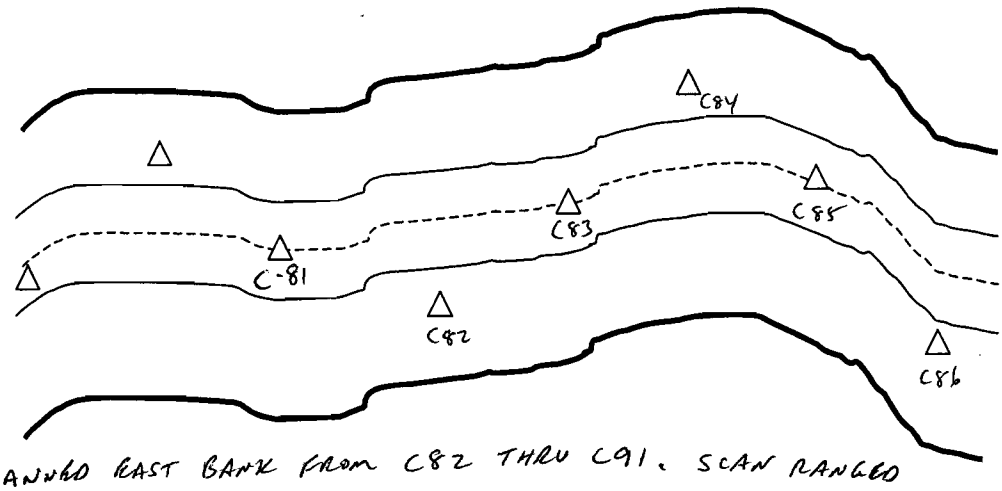
Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203470/196941	12-28-06	46	NA
		N		
			A	

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	A
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

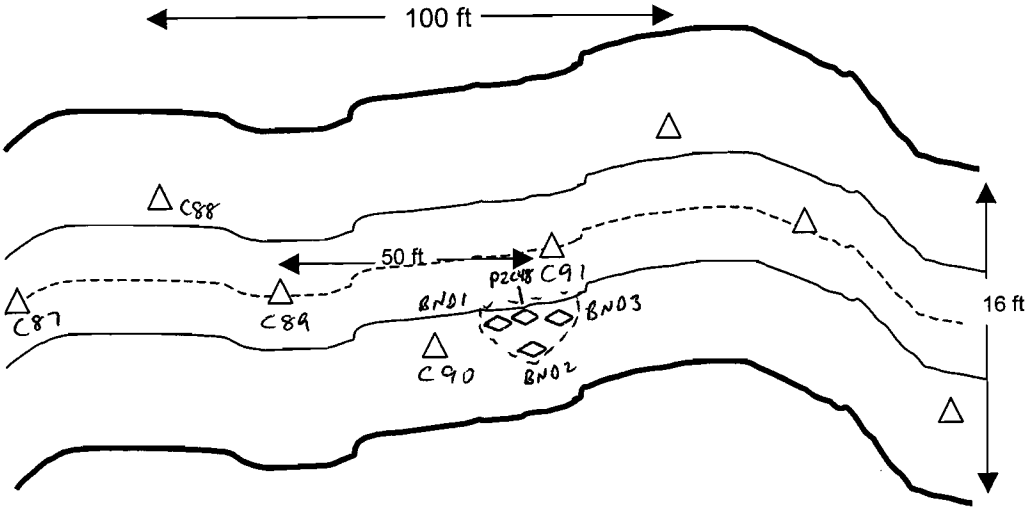
Reason for Survey:
- ☐ Daily
- ☐ Weekly
- ☐ Job Coverage
- ☒ Other: Characterization

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A



SCANNED EAST BANK FROM C82 THRU C91. SCAN RANGED FROM 140 - 400 gcpm.

◇ INDICATES DIRECT READING AT ELEVATED AREA/BOUNDARY.



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
S. Sorg/[illegible] 2-1-06

Reviewed by: (sign/date)
R Warnick 2-7-06

Download #: 57

SR Number	SR-11	Instrument #	203470	Technician(s):	JGS8492	Survey Number	NASA-06-351

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	2/1/2006	7:02	5	46	60	SCL	
1	PRE SRC	2/1/2006	7:21	5	6365	60	SCL	
2	SR11 SECC	2/1/2006	8:10	5	83	0	RAT	
3	SR11 SCN	2/1/2006	8:10	5	66	0	RAT	
4	C90 BND1	2/1/2006	10:38	5	282	60	SCL	
5	C90 BND2	2/1/2006	10:40	5	290	60	SCL	
6	C90 BND3	2/1/2006	10:42	5	287	60	SCL	
7	C90 P2C48	2/1/2006	10:44	5	488	60	SCL	
8	POST BKG	2/1/2006	14:13	5	32	60	SCL	
9	POST SRC	2/1/2006	14:21	5	6003	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location; BND = Boundary static measurement; SCN = Scan survey

Survey downloaded and performed by J. Sorg. Joe Sorg

R/W 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: Plum Brook, Section: C Phase: 2 Download #: 55 SR-11

RWP: PB-06- NA

Date: 2-1-06

Time: 0851

Survey #: NASA-06-352

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203473/196943	3-24-06	54	NA
		N		
			A	

Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☒ Other: Characterization

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☒ N/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	N	A
11		
12		
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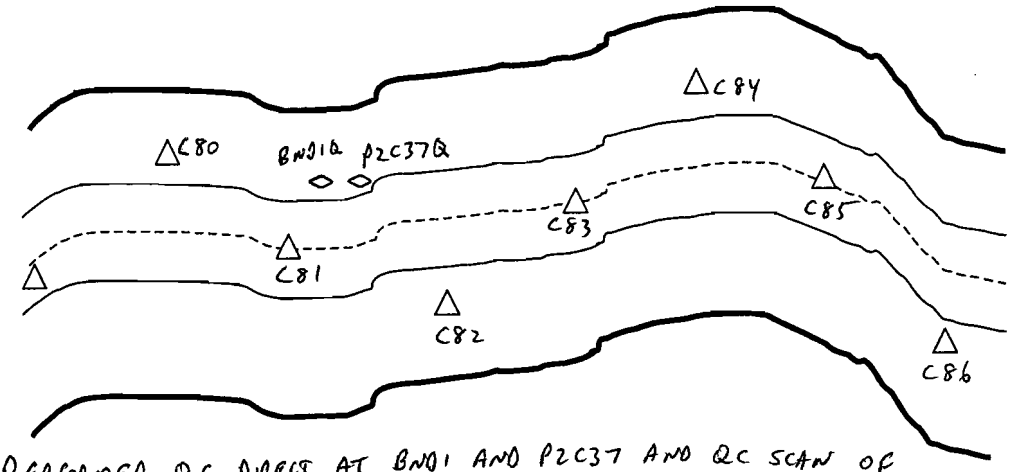
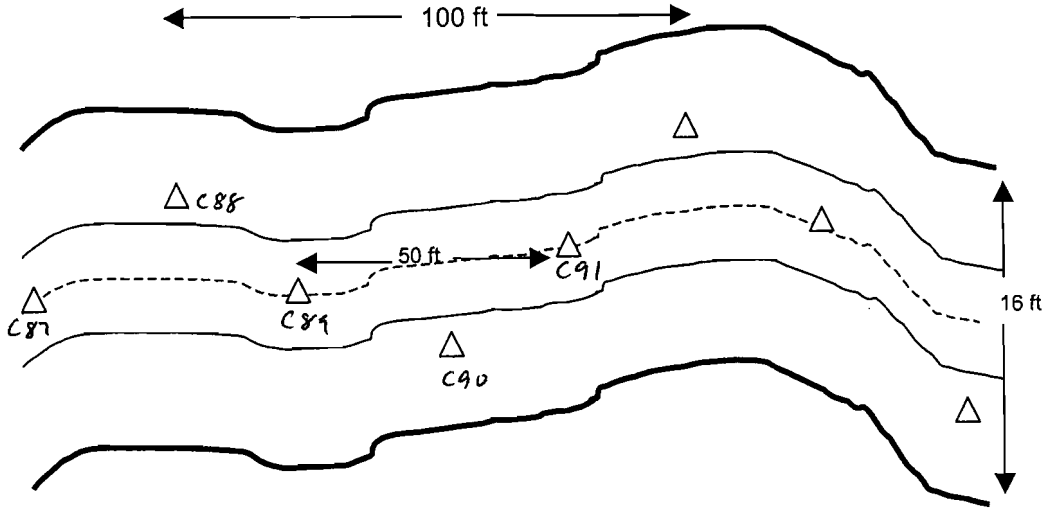
23		
24		
25		



PERFORMED QC DIRECT AT BN01 AND P2C37 AND QC SCAN OF WEST BANK FROM C80 TO C91. SCAN RANGED FROM 150-600 gcpm.

◇ INDICATES DIRECT READING

COPY



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
S. Scott Jones 2-1-06

Reviewed by: (sign/date)
RJ Warnet 2-7-06

SR Number	SR-11	Instrument #	203473	Technician(s):	JGS8492	Survey Number	NASA-06-352

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	2/1/2006	7:06	5	54	60	SCL	
1	PRE SRC	2/1/2006	7:27	5	6652	60	SCL	
2	SR11 SECC	2/1/2006	8:14	5	101	0	RAT	
3	JGS BND1Q	2/1/2006	8:51	5	289	60	SCL	
4	JGS C37Q	2/1/2006	8:52	5	511	60	SCL	
5	JGS SCNQ	2/1/2006	12:16	5	27	0	RAT	
6	JGS SCNQ	2/1/2006	12:56	5	47	0	RAT	
7	POST BKG	2/1/2006	14:16	5	50	60	SCL	
8	POST SRC	2/1/2006	14:22	5	6653	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C#Q = Phase 2 location of Section C quality control static measurement; SCNQ = Quality control scan survey; JGS = Technician initials; BND#Q = Quality control boundary static measurement

Download and survey performed by J. Sorg. Joe Sorg

R/W 4-25-06

APPENDIX A
RADIATION PROTECTION SURVEY FORM

Location: Plum Brook, Section: C Phase: 2 SR#: 11 Download #: 63

RWP: PB-06- N/A

Date: 2-2-06

Time: 1112

Survey #: NASA-06- 366

Instrument(s)

Model	S/N	Cal. Due	Bkg / cpm	MDA / dpm
2350/44-10	203473/196943	3-24-06/3-24-06	63	N/
N/	N/	N/	N/	
/A	/A	/A	/A	/A

Smear # & Location	Contamination (dpm/100cm²) β γ	α
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	N	
12	A	
13		
14		
15		
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22		
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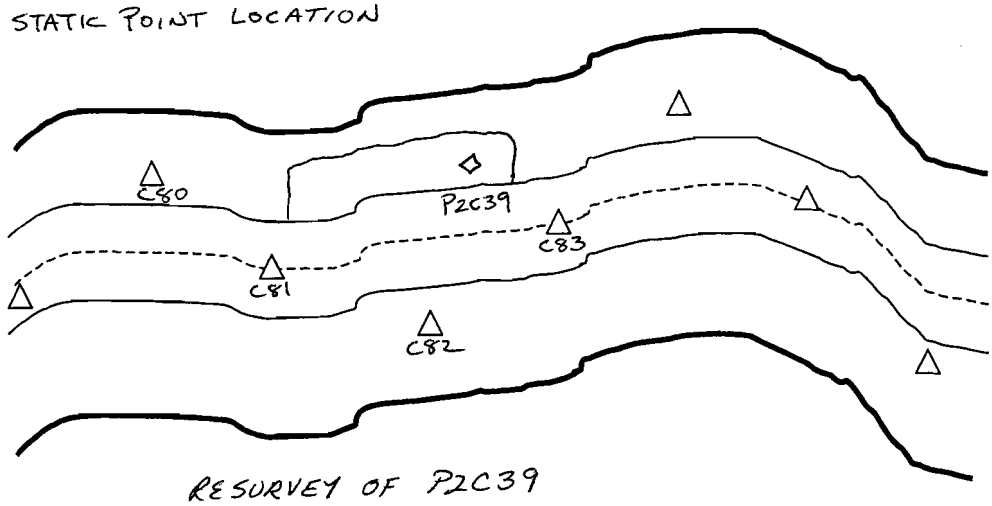
24		
25		

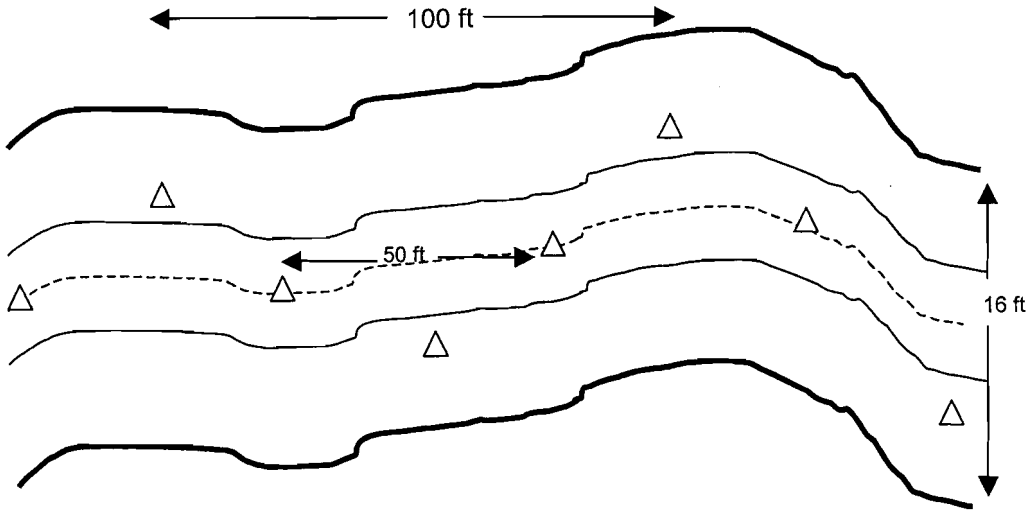
Reason for Survey:
- ☐ Daily
- ☐ Job Coverage
- ☐ Weekly
- ☐ Other: Characterization

- ☐ Dose rates in mr/hr unless otherwise noted
- ☐ Dose rates in μr/hr unless otherwise noted
- ☐ N/A

◇ STATIC POINT LOCATION



RESURVEY OF P2C39
(INADVERTENTLY PUSHED Q0 INSTEAD OF Q1)
REFER TO DOWNLOAD #56



Legend
- xxxx - Radiological boundary
- x-x-x- Contaminated area
- # - General area dose rate
- *Contact/30cm dose rates
- O - Smear location
- LAS - Large area smear
- # - Direct frisk
- A/S - Air sampler location

Performed by: (print/sign/date)
RD ZVONAR
RDZ 2-2-06

Reviewed by: (sign/date)
RJ Warnock 2-7-06

SR Number	SR-11	Instrument #	203473	Technician(s):	RJD6589	Survey Number	NASA-06-366

Log #	Location	Date	Time	Det. #	Measurement	Count Time	Type	Comments
0	PRE BKG	2/2/2006	7:31	5	63	60	SCL	
1	PRE SRC	2/2/2006	7:41	5	6466	60	SCL	
2	SR11 SECC	2/2/2006	11:06	5	54	0	RAT	
3	C82 P2C39	2/2/2006	11:12	5	509	60	SCL	
4	POST BKG	2/2/2006	12:48	5	51	60	SCL	
5	POST SRC	2/2/2006	12:57	5	6487	60	SCL	

Detector #5 is 44-10 w/ Cs window.

BKG = Background; SRC = Source; SR = Survey Request; RAT = Rate count; SCL = Scalar count; SECC = Plumbrook Section C; C# = Phase 1 location of Section C; P2C# = Phase 2 static measurement and sample location

Survey downloaded by J. Sorg and performed by R. Dzvonar.

Pre-Job Briefing Attendance Form

Job/Task Description	Date/Time	1/23/06 0710
Plum Brook - Section C Phase 2	Work Document #	SR-11
	Revision #	0
	Document Type	SR.
	RWP #	NA

ATTENDANCE INFORMATION		
Name (Print/Sign)	Last 5 Digits of SSN	Company
JOE SORG / Joe Sorg	48492	MOTA
R. MORIN / R. Morin	21109	MOTA
J. Hartman / Jason W. Hartman	40706	MOTA
R DZVONAK R D	26589	MOTA
G. Struck / Greg Struck	C7978	MOTA
RJ REHEARD / RJ Reheard	69291	MOTA
Jeff Musser / Jeff Musser	879641	MOTA
F. MacDonald / Fred MacDonald	59862	MOTA
Catherine JENSEN / Catherine Jensen	87404	MOTA

Pre-Job Briefing Checklist

Date / Time 1/23/06 0710

Job/Task Description Plum Brook Section C Sampling and Scanning

Location Plum Brook - From Then end of Section B To Bogart Rd.

Work Document # SR-11 Revision # 8 Document Type SR RWP # N/A

	Items to be considered	Circle One	Comments
1	Has a review of the entire job procedure by key parties been performed?	(Y) N N/A	
	Is a delineation of each individual's specific involvement and responsibility understood?	(Y) N N/A	
	Do affected parties understand the expected results or performance; including limitations, hold points, emergency action(s) to be taken if contingencies arise?	(Y) N N/A	
2	Has notification been made to other needed Support Departments (i.e., Safety, Radwaste, Dosimetry, D&D, etc)?	Y N (N/A)	
3	Does everyone understand the interface and communication required with each other?	(Y) N N/A	
4	Are there any Industrial Safety Hazards involved and have they been discussed (i.e., Switching & Tagging, Confined Space, etc)?	(Y) N N/A	
5	Have the work document requirements been discussed?	(Y) N N/A	
6	Have the ALARA Review requirements been discussed?	Y N (N/A)	
7	Have the RWP requirements been discussed?	Y N (N/A)	
8	Have the radiological conditions of the area(s) been discussed?	Y N (N/A)	
9	Are the necessary ALARA engineering controls in place (i.e., portable ventilation systems, containments, shielding, system flushes or draining, discrete particle controls, access controls, etc.)?	Y N (N/A)	
10	If needed, are special tools and/or equipment ready and available (i.e., communication devices, audio visual aids, long handled tools, robotics, special instrumentation including radiological instrumentation, special dosimetry, lighting, breathing air, service air, electric power, etc)?	(Y) N N/A	
11	Does decontamination need performed at any point?	Y (N) N/A	
12	Does everyone understand their anticipated individual dose to complete the task?	Y N (N/A)	
13	Have STAR self check points been discussed?	(Y) N N/A	
14	Other items/issues:		

Briefing Conducted By: [signature]

Job/Task Supervisor (print/sign)