NRC FORM 304 (8-1997) U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET

LABORATORY – [X] REGION I [ ] REGION III

LABORATORY CONTROL NUMBER: 301932

[X] ROUTINE [ ] URGENT | DATE REQUIRED:

SAMPLE LOCATION: SECOR | DATE ANALYSIS BEGAN: | DATE COMPLETED: 10-9-97 | ANALYZED BY: | DATE:

COLLECTED BY: J. MURRAY | DIVISION: DNMS | TELEPHONE: 5268 | CONTACT NOTIFIED: | DATE: | APPROVED BY: JOK | DATE: 10-9-97

SAMPLE NO	SAMPLE DATE	SAMPLE HOUR	SAMPLE DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED grams	DATE COUNTED	COUNT TIME seconds	GROSS COUNT	BACK GROUND	NET COUNT	Radio-nuclide	RESULT* pCi/g (dry wt.)
1	9/24	1200	SOIL #1	γ scan	#2	405.2	10/6	60,000				Pa-234m	51.2 ± 0.9
												U-235	2.38 ± 0.03
2	9/24	1030	SOIL #2	γ scan	#1	402.9	10/5	60,000				Pa-234m	93.6 ± 1.5
												U-235	4.20 ± 0.06
3	9/24	1032	SOIL #3	γ scan	#2	363.9	10/7	60,000				Pa-234m	13.2 ± 0.8
												U-235	0.58 ± 0.03
4	9/24	1050	SOIL #4	γ scan	#2	373.3	10/5	60000				Pa-234m	317 ± 2
												U-235	9.78 ± 0.06
5	9/24	1100	SOIL #5	γ scan	#1	399.8	10/2	60,000				Pa-234m	5.6 ± 0.7
												U-235	0.25 ± 0.02
6	9/24	1110	SOIL #6	γ scan	#1	444.2	10/1	60,000				Pa-234m	13.0 ± 0.7
												U-235	0.54 ± 0.03

B/31

NRC FORM 304 (8-1997)

* Random uncertainties as reported. [X] ± 1σ [ ] ± 2σ. Small negative and other results ≤ 2σ are interpreted as including "zero" or as not detected. If appropriate, estimates of possible systematic errors are reported in parentheses.

INSPECTION

NRC FORM 304A (8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET (Continued)

LABORATORY CONTROL NUMBER: 301932

SAMPLE NO	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK GROUND	NET COUNT	Radionuclide	RESULT* uCi/ml
7	9/24	1020	WATER - FILTERED	γ scan	#1	250ml	10/8	60,000s				Pa-234m	<2E-6
												U-235	<8E-8

NRC FORM 304A (8-1997)

* Random uncertainties as reported: ☐ ± 1 σ ☐ ± 2 σ. Small negative and other results ≤ 2 σ are interpreted as including "zero" or as "not detected". If appropriate, estimates of possible systematic errors are reported in parentheses.

INSPECTION

Region I FORM 303
(8-88)

U.S. NUCLEAR REGULATORY COMMISSION

REQUEST FOR ANALYSIS

Region I Laboratory

LABORATORY USE ONLY

CONTROL NUMBER 301932

SAMPLE LOCATION (LICENSEE): SECOR (FORMER TENNECO)

LICENSE NO.:

DOCKET NO.:

SAMPLES SUBMITTED

#(TOTAL)	TYPE	VOLUME	WEIGHT
1	Liquid (mostly)		
6	Soils		

DATE SAMPLES SUBMITTED: 9/24/97

PRIORITY: X ROUTINE / URGENT ***

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START	9	24	97	1015
STOP	9	24	97	1115

INSPECTOR RESPONSIBLE:

PHONE EXT.:

	ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)		OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
	GROSS ALPHA				
	GROSS BETA				
X	GAMMA SPEC				
	TRITIUM				
	CARBON-14				
	IODINE-125				

REMARKS

* See me ASAP on analysis to be performed - [illegible]

NOTE: Samples will be discarded after analysis unless reasons are noted above in Remarks.

*** **FOR URGENT USE ONLY**— Signature Blocks below must be filled out by the Inspector's appropriate Section Chief and by the Chief, Effluents Radiation Protection Section BEFORE submitting this form to the Region I Laboratory.

SIGNATURE — APPROPRIATE NUCLEAR MATERIALS SAFETY SECTION CHIEF | DATE

SIGNATURE — CHIEF, EFFLUENTS RADIATION PROTECTION SECTION | DATE

(yellow) 3. LOG

Region I FORM 303
(8-88)

U.S. NUCLEAR REGULATORY COMMISSION

REQUEST FOR ANALYSIS

Region I Laboratory

LABORATORY USE ONLY

CONTROL NUMBER

SAMPLE LOCATION (LICENSEE): SECOR (FORMER TENNECO)

LICENSE NO.:

DOCKET NO.:

SAMPLES SUBMITTED

#(TOTAL)	TYPE	VOLUME	WEIGHT
1	LIQUID (MOSTLY)		
6	SOILS		

DATE SAMPLES SUBMITTED: 9/21/97

PRIORITY: X ROUTINE / URGENT ***

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START	9	21	97	1015
STOP	9	21	97	1115

INSPECTOR RESPONSIBLE:

PHONE EXT.:

	ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)		OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
	GROSS ALPHA				
	GROSS BETA				
X	GAMMA SPEC				
	TRITIUM				
	CARBON-14				
	IODINE-125				

REMARKS

* See me ASAP on analysis to be performed - [illegible]

NOTE: Samples will be discarded after analysis unless reasons are noted above in Remarks.

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SIGNATURE — APPROPRIATE NUCLEAR MATERIALS SAFETY SECTION CHIEF | DATE

SIGNATURE — CHIEF, EFFLUENTS RADIATION PROTECTION SECTION | DATE

(pink) 2. INSPECTOR

9/24/97 SECOR

SS7, SS8, SS9, SS11, SS12, SS15, SS16,

Samples Taken

Split (1) H_2O (surface) sample from pit ⇒ excavated pit ~~ground~~ H_2O

100 (93.6) U235 4.2

Split 2) (1) Moist auger sample from pit → dry

Split 3) (2) Soil sample from "contaminated" excavated dirt pile

4) (3) Soil sample from "clean" excavated dirt pile

5) (4) Soil sample (auger) from gritted yard ([redacted]5; 67.5 17.5)

36 μR/h cont.

27 μR/h 1 meter

2221 & 449 probe 2111 cpm in hole

6) Soil sample CPR East wall 04.5

7) Soil sample from clean pile ~ Bldg 31 BATCH, 3-15 (NOT analyzed yet)

Th 234 [redacted]7±2 pCi/gm → MDA = 1.9 pCi/gm

Pr 234m < 25 pCi/gm

Th 234 457 pCi/gm

Pr 234m 547 pCi/gm

U 235 11.05