



**Drinking Water and Radiation Laboratory Branch**

850 Marina Bay Parkway, Richmond, CA 94804  
 Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 13-0896**

Investigator: Tom Hook P O Box 56 Avila Beach CA 93424 Phone Number: 805-545-4409	RHB	Requestor: Roger Lupo CDPH - RHB, 1500 Capitol Av., MS 7610 Sacramento CA 95814-5006 Phone Number: 916-440-7955	RHB
Site/Project Name: Diablo Canyon NPP / 4th Qtr 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/23/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0896-01	Sample ID: R 94053 Sample Type: Vegetation	Time Collected: 10/21/2013	Sampling Point: Kelp	
Dry Wt/Wet Wt		0.110		
K-40	HASL Ga-01-R	147 +/- 3.20	1.46	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the aquare root of the instrument background count rate.

REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Drinking Water and Radiation Laboratory Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 10-23-13	Lab No. (Leave Blank) 13-0696
	Date & Time Sampled 10-21-13	Serial Number R 94053

<b>Collector Information</b> Name: Dept./Branch: +H Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:
---	--

<b>Sample Information</b> System Name / Facility: DCCPREMP/ Sampling Point (s): DCM System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____
--	--

TYPE OF SAMPLE (Check all applicable boxes)

<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Surface Water	<input type="checkbox"/> Wastewater
<input type="checkbox"/> Raw	<input type="checkbox"/> Water Treatment Plant (WTP)	<input type="checkbox"/> Distribution System	<input type="checkbox"/> Point of Use (POU)
<input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input type="checkbox"/> Seawater	<input type="checkbox"/> Sludge (Semi-solid Samples)
Finishing: _____	_____	<input type="checkbox"/> Milk	<input type="checkbox"/> Soil/Sediment
Starting: _____	_____	<input type="checkbox"/> Wipes	<input checked="" type="checkbox"/> Biota (Type): <u>kelp</u>
Net (M <sup>3</sup> ) _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.):

Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_

Field Measurement: \_\_\_\_\_ mR/hr     Radionuclide(s), if known: \_\_\_\_\_

Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)

<input type="checkbox"/> Gross Alpha	<input type="checkbox"/> Gross Beta	<input type="checkbox"/> Gamma Scan
<input type="checkbox"/> Total Uranium	<input type="checkbox"/> Total Beta (LSC)	<input type="checkbox"/> NORM (Gamma)
<input type="checkbox"/> Total Radium	<input type="checkbox"/> Tritium ( <sup>3</sup> H)	<input type="checkbox"/> Isotopic Americium / Curium
<input type="checkbox"/> Radium-226	<input type="checkbox"/> Carbon-14	<input type="checkbox"/> Isotopic Plutonium
<input type="checkbox"/> Radium-228	<input type="checkbox"/> Iodine-131	<input type="checkbox"/> Isotopic Thorium
<input type="checkbox"/> Radon-222	<input type="checkbox"/> Strontium-89, 90	<input type="checkbox"/> Isotopic Uranium
<input type="checkbox"/> Other (Specify): _____	<input type="checkbox"/> Nickel-63	<input type="checkbox"/> Iron-55

CHAIN OF CUSTODY

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
3.	Date <u>10-23-13</u>	Name (Print) <u>UA</u>	Signature <u>[Signature]</u>	Date _____
	Time Custody Received <u>10:00</u>	Organization <u>DWRIB</u>	Signature _____	Time Custody Released _____

LABORATORY REMARKS (Leave Blank)

<b>A. Condition at Time of Receipt:</b>			
<input type="checkbox"/> Acceptable	<input type="checkbox"/> Broken Container	<input type="checkbox"/> Leaked in Transit	<input type="checkbox"/> Improper Container
<input type="checkbox"/> Holding Time Exceeded	<input type="checkbox"/> Sample Not Cooled	<input type="checkbox"/> Insufficient Sample	
<b>B. Preservatives/Carriers:</b>			
<input type="checkbox"/> Added While Sampling	<input type="checkbox"/> Added in Laboratory	<input type="checkbox"/> Not Added	<input type="checkbox"/> Not Applicable



**Drinking Water and Radiation Laboratory Branch**

850 Marina Bay Parkway, Richmond, CA 94804  
 Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 13-0863**

Investigator: Rick Treinen PO Box 56 Avila Beach CA 93424 Phone Number: 805-545-6481	RHB	Requestor: Roger Lupo CDPH - RHB, 1500 Capitol Av., MS 7610 Sacramento CA 95814-5006 Phone Number: 916-440-7955	RHB
Site/Project Name: Diablo Canyon NPP / REMP / Biota 4th Qtr 2013			
System No:		Billing Agency: RHB	Samples Received by Lab: 10/8/2013

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0863-01	Sample ID: R 94038 Sample Type: Vegetation	Time Collected: 10/7/2013 09:20	Sampling Point: Vegetation	
Dry Wt/Wet Wt		0.0657		
K-40	HASL Ga-01-R	66.6 +/- 1.49	1.30	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radionuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804
510-620-2911

Date Received: 10-8-13
Lab No. (Leave Blank): 13-0863
Date & Time Sampled: 10-7-13 9:20
Serial Number: R 94038

Collector Information

Name:
Dept./Branch: RT
Address:
Telephone No.:

Reporting Information

Name:
Dept./Branch:
Address:
Telephone No.:

Sample Information

System Name / Facility: DCPPREMP/761
Sampling Point (s):
System No.:

Billing Agency

- Checkboxes for DWFOB, RHB, RWQCB, DTSC, DWTPB, FDB, DWR, CDFG, EMB, and Other (Specify).

TYPE OF SAMPLE (Check all applicable boxes)

- Checkboxes for Drinking Water, Raw, Treated, Groundwater, Water Treatment Plant (WTP), Surface Water, Distribution System, Wastewater, Point of Use (POU), Air Filters, Seawater, Sludge, Milk, Wipes, Radon Canister, Soil/Sediment, Biota (Type: Vegetation), and Air Charcoal Cartridge.

COMMENTS: (Cautions, etc.):

- Field Treatment: Preservatives added, Iced/Frozen, Other.
Field Measurement: mR/hr, Radionuclide(s), if known.
Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- Checkboxes for Gross Alpha, Total Uranium, Total Radium, Radium-226, Radium-228, Radon-222, Other (Specify), Gross Beta, Total Beta (LSC), Tritium (3H), Carbon-14, Iodine-131, Strontium-89, 90, Nickel-63, Gamma Scan, NORM (Gamma), Isotopic Americium / Curium, Isotopic Plutonium, Isotopic Thorium, Isotopic Uranium, and Iron-55.

CHAIN OF CUSTODY

Table with 3 rows and 4 columns: Date, Name (Print), Organization, Signature, Date, Time Custody Received, Time Custody Released. Includes handwritten entries for 10-8-13 and 10:45, and signatures for UA and DWRLB.

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt: Acceptable, Holding Time Exceeded, Broken Container, Sample Not Cooled, Leaked in Transit, Insufficient Sample, Improper Container.
B. Preservatives/Carriers: Added While Sampling, Added in Laboratory, Not Added, Not Applicable.



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
 Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 13-0552**

Investigator: Tom Hook	RHB	Requestor: Roger Lupo	RHB
P O Box 56		CDPH - RHB, 1500 Capitol Av., MS 7610	
Avila Beach	CA 93424	Sacramento	CA 95814-5006
Phone Number: 805-545-4409		Phone Number: 916-440-7955	
Site/Project Name: Diablo Canyon NPP / Biota / 3rd Qtr 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0552-01	Sample ID: R 96094 Sample Type: Biota	Time Collected: 7/15/2013 09:00	Sampling Point: Kelp	
Dry Wt/Wet Wt		0.151		
K-40	HASL Ga-01-R	95.2 +/- 2.19	2.10	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

DCM

**REQUEST FOR SAMPLE ANALYSIS (Radiochemical)**

<b>Drinking Water and Radiation Laboratory Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 7/17/13	Lab No. (Leave Blank) 13-0552-01
	Date & Time Sampled 7/15/13 0900	Serial Number R 96094
<b>Collector Information</b> Name: JH. Dept./Branch: DCM Address:  Telephone No.:	<b>Reporting Information</b> Name: Roger Lupo Dept./Branch: Address:  Telephone No.:	
<b>Sample Information</b> System Name / Facility: DCM Sampling Point (s):  System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input checked="" type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

**TYPE OF SAMPLE (Check all applicable boxes)**

<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Surface Water	<input type="checkbox"/> Wastewater
<input type="checkbox"/> Raw	<input type="checkbox"/> Water Treatment Plant (WTP)	<input type="checkbox"/> Distribution System	<input type="checkbox"/> Point of Use (POU)
<input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input type="checkbox"/> Seawater	<input type="checkbox"/> Sludge (Semi-solid Samples)
Finishing: _____	_____	<input type="checkbox"/> Milk	<input type="checkbox"/> Soil/Sediment
Starting: _____	_____	<input type="checkbox"/> Wipes	<input checked="" type="checkbox"/> Biota (Type): Kelp
Net (M <sup>3</sup> ): _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

**COMMENTS: (Cautions, etc.):** \_\_\_\_\_

Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
 Field Measurement: \_\_\_\_\_ mR/hr     Radionuclide(s), if known: \_\_\_\_\_  
 Rush/Priority (should be prearranged and have supervisory approval)

**ANALYSIS REQUESTED (For questions, please call 510-620-2911)**

<input type="checkbox"/> Gross Alpha	<input type="checkbox"/> Gross Beta	<input checked="" type="checkbox"/> Gamma Scan
<input type="checkbox"/> Total Uranium	<input type="checkbox"/> Total Beta (LSC)	<input type="checkbox"/> NORM (Gamma)
<input type="checkbox"/> Total Radium	<input type="checkbox"/> Tritium ( <sup>3</sup> H)	<input type="checkbox"/> Isotopic Americium / Curium
<input type="checkbox"/> Radium-226	<input type="checkbox"/> Carbon-14	<input type="checkbox"/> Isotopic Plutonium
<input type="checkbox"/> Radium-228	<input type="checkbox"/> Iodine-131	<input type="checkbox"/> Isotopic Thorium
<input type="checkbox"/> Radon-222	<input type="checkbox"/> Strontium-89, 90	<input type="checkbox"/> Isotopic Uranium
<input type="checkbox"/> Other (Specify): _____	<input type="checkbox"/> Nickel-63	<input type="checkbox"/> Iron-55

**CHAIN OF CUSTODY**

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
3.	Date 7/17/13	Name (Print) A Tan	Signature Angela Tan	Date _____
	Time Custody Received 13:30	Organization DWRLB		Time Custody Released _____

**LABORATORY REMARKS (Leave Blank)**

**A. Condition at Time of Receipt:**  
 Acceptable     Broken Container     Leaked in Transit     Improper Container  
 Holding Time Exceeded     Sample Not Cooled     Insufficient Sample

**B. Preservatives/Carriers:**  
 Added While Sampling     Added in Laboratory     Not Added     Not Applicable

40.01MR/hr



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940

FINAL Analysis Results Report for Task ID. 13-0528

Investigator: Rick Treinen	RHB	Requestor: Roger Lupo	RHB
PO Box 56		CDPH - RHB, 1500 Capitol Av., MS 7610	
Avila Beach	CA 93424	Sacramento	CA 95814-5006
Phone Number: 805-545-6481		Phone Number: 916-440-7955	
Site/Project Name: Diablo Canyon NPP / REMP / Biota / 3rd Qtr 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/9/2013	

Parameter	Method	Result +/- CE	MDA <sub>95</sub>	Units
Lab No: 13-0528-01	Sample ID: R 96092 Sample Type: Biota	Time Collected: 7/7/2013 08:20	Sampling Point: Vegetation / 7G1	
Dry Wt/Wet Wt		0.0882		
K-40	HASL Ga-01-R	42.2 +/- 1.04	1.24	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA<sub>95</sub> is the sample specific minimum detectable activity at the 95% confidence level which is the LLD<sub>95</sub> divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radionuclide. LLD<sub>95</sub> is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Drinking Water and Radiation Laboratory Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 7/9/13	Lab No. (Leave Blank) 13-0528-01
	Date & Time Sampled 7/7/13 0820	Serial Number R 96092
<b>Collector Information</b> Name: Dept./Branch: RT D CPP Address:  Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address:  Telephone No.:	
<b>Sample Information</b> System Name / Facility: D CPP REMP Sampling Point (s): 7 G1  System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input checked="" type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

TYPE OF SAMPLE (Check all applicable boxes)

<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Surface Water	<input type="checkbox"/> Wastewater
<input checked="" type="checkbox"/> Raw	<input type="checkbox"/> Water Treatment Plant (WTP)	<input type="checkbox"/> Distribution System	<input type="checkbox"/> Point of Use (POU)
<input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input type="checkbox"/> Seawater	<input type="checkbox"/> Sludge (Semi-solid Samples)
Finishing: _____	_____	<input type="checkbox"/> Milk	<input type="checkbox"/> Soil/Sediment
Starting: _____	_____	<input type="checkbox"/> Wipes	<input checked="" type="checkbox"/> Biota (Type): <u>Vegetation</u>
Net (M <sup>3</sup> ) _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.):

Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
 Field Measurement: \_\_\_\_\_ mR/hr     Radionuclide(s), if known: \_\_\_\_\_  
 Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)

<input type="checkbox"/> Gross Alpha	<input type="checkbox"/> Gross Beta	<input checked="" type="checkbox"/> Gamma Scan
<input type="checkbox"/> Total Uranium	<input type="checkbox"/> Total Beta (LSC)	<input type="checkbox"/> NORM (Gamma)
<input type="checkbox"/> Total Radium	<input type="checkbox"/> Tritium ( <sup>3</sup> H)	<input type="checkbox"/> Isotopic Americium / Curium
<input type="checkbox"/> Radium-226	<input type="checkbox"/> Carbon-14	<input type="checkbox"/> Isotopic Plutonium
<input type="checkbox"/> Radium-228	<input type="checkbox"/> Iodine-131	<input type="checkbox"/> Isotopic Thorium
<input type="checkbox"/> Radon-222	<input type="checkbox"/> Strontium-89, 90	<input type="checkbox"/> Isotopic Uranium
<input type="checkbox"/> Other (Specify): _____	<input type="checkbox"/> Nickel-63	<input type="checkbox"/> Iron-55

CHAIN OF CUSTODY

1.	Date	Name (Print)		Date
	Time Custody Received	Organization	Signature	Time Custody Released
2.	Date	Name (Print)		Date
	Time Custody Received	Organization	Signature	Time Custody Released
3.	Date 7/9/10	Name (Print) A TAN	Signature <u>Angela Tan</u>	Date 7/9/10
	Time Custody Received 15:00	Organization DWRLB	Signature	Time Custody Released 15:00

LABORATORY REMARKS (Leave Blank)

<b>A. Condition at Time of Receipt:</b>			
<input type="checkbox"/> Acceptable	<input type="checkbox"/> Broken Container	<input type="checkbox"/> Leaked in Transit	<input type="checkbox"/> Improper Container
<input type="checkbox"/> Holding Time Exceeded	<input type="checkbox"/> Sample Not Cooled	<input type="checkbox"/> Insufficient Sample	
<b>B. Preservatives/Carriers:</b>			
<input type="checkbox"/> Added While Sampling	<input type="checkbox"/> Added in Laboratory	<input type="checkbox"/> Not Added	<input type="checkbox"/> Not Applicable



**Drinking Water and Radiation Laboratory Branch**

850 Marina Bay Parkway, Richmond, CA 94804  
 Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 13-0254**

Investigator: Rick Treinen PO Box 56 Avila Beach CA 93424 Phone Number: 805-545-6481	RHB	Requestor: Roger Lupo CDPH - RHB, 1500 Capitol Av., MS 7610 Sacramento CA 95814-5006 Phone Number: 916-440-7955	RHB
Site/Project Name: Diablo Canyon NPP / Biota / 2nd Qtr 2013		Samples Received by Lab: 4/9/2013	
System No:	Billing Agency: RHB		

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0254-01	Sample ID: R 92396 Sample Type: Vegetation	Time Collected: 4/8/2013 08:45	Sampling Point: Vegetation	
Dry Wt/Wet Wt		0.0994		
K-40	HASL Ga-01-R	1.76 +/- 0.232	0.989	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

**REQUEST FOR SAMPLE ANALYSIS (Radiochemical)**

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <b>4-9-13</b>	Lab No. (Leave Blank) <b>13-0254</b>
	Date & Time Sampled <b>4-8-13 8:45</b>	Serial Number <b>R 92396</b>
<b>Collector Information</b> Name: Dept./Branch: <b>RT</b> Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: <b>Roger Lupo</b> Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: <b>DOPP REM P</b> Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

**TYPE OF SAMPLE (Check all applicable boxes)**

Drinking Water     Groundwater     Surface Water     Wastewater  
 Raw     Water Treatment Plant (WTP)     Distribution System     Point of Use (POU)  
 Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

Air Filters    Date/Time \_\_\_\_\_     Seawater     Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_     Milk     Soil/Sediment  
 Starting: \_\_\_\_\_     Wipes     Biota (Type): **Vegetation**  
 Net (M<sup>3</sup>) \_\_\_\_\_     Radon Canister     Other: \_\_\_\_\_  
 Air Charcoal Cartridge

**COMMENTS: (Cautions, etc.):** \_\_\_\_\_

Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
 Field Measurement: \_\_\_\_\_ mR/hr     Radionuclide(s), if known: \_\_\_\_\_  
 Rush/Priority (should be prearranged and have supervisory approval)

**ANALYSIS REQUESTED (For questions, please call 510-620-2911)**

Gross Alpha     Gross Beta     Gamma Scan  
 Total Uranium     Total Beta (LSC)     NORM (Gamma)  
 Total Radium     Tritium (<sup>3</sup>H)     Isotopic Americium / Curium  
 Radium-226     Carbon-14     Isotopic Plutonium  
 Radium-228     Iodine-131     Isotopic Thorium  
 Radon-222     Strontium-89, 90     Isotopic Uranium  
 Other (Specify): \_\_\_\_\_     Nickel-63     Iron-55

**CHAIN OF CUSTODY**

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
3.	Date <b>4-9-13</b>	Name (Print) <b>VA</b>	Signature <b>[Signature]</b>	Date _____
	Date <b>9:20</b>	Name (Print) <b>DWRLB</b>	Signature <b>[Signature]</b>	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____

**LABORATORY REMARKS (Leave Blank)**

**A. Condition at Time of Receipt:**  
 Acceptable     Broken Container     Leaked in Transit     Improper Container  
 Holding Time Exceeded     Sample Not Cooled     Insufficient Sample

**B. Preservatives/Carriers:**  
 Added While Sampling     Added in Laboratory     Not Added     Not Applicable



**Drinking Water and Radiation Laboratory Branch**

850 Marina Bay Parkway, Richmond, CA 94804  
 Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 13-0051**

Investigator: Tom Hook	RHB	Requestor: Roger Lupo	RHB
P O Box 56		CDPH - RHB, 1500 Capitol Av., MS 7610	
Avila Beach CA 93424		Sacramento CA 95814-5006	
Phone Number: 805-545-4409		Phone Number: 916-440-7955	
Site/Project Name: Diablo Canyon NPP / Biota / 1st Qtr 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/23/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0051-01	Sample ID: R 92376 Sample Type: Vegetation	Time Collected: 1/22/2013 08:26	Sampling Point: Vegetation	
Dry Wt/Wet Wt		0.2078		
K-40	HASL Ga-01-R	17.8 +/- 0.449	0.679	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radionuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 1-23-13	Lab No. (Leave Blank) 13-0051
	Date & Time Sampled 1-22-13 8:26	Serial Number R 92376
<b>Collector Information</b> Name: Dept./Branch: Address: RT/TH Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): 76 / DCP System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

TYPE OF SAMPLE (Check all applicable boxes)

- Drinking Water                       Groundwater                       Surface Water                       Wastewater
  - Raw     Water Treatment Plant (WTP)     Distribution System               Point of Use (POU)
  - Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- 
- Air Filters                                      Date/Time                               Seawater                                       Sludge (Semi-solid Samples)
  - Finishing: \_\_\_\_\_                      \_\_\_\_\_                               Milk     Soil/Sediment
  - Starting: \_\_\_\_\_                              \_\_\_\_\_                               Wipes     Biota (Type): \_\_\_\_\_
  - Net (M<sup>3</sup>) \_\_\_\_\_                              \_\_\_\_\_                               Radon Canister                               Other: \_\_\_\_\_
  - Air Charcoal Cartridge

COMMENTS: (Cautions, etc.):

- Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_
- Field Measurement: \_\_\_\_\_ mR/hr                       Radionuclide(s), if known: \_\_\_\_\_
- Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- Gross Alpha                                       Gross Beta                                       Gamma Scan
- Total Uranium                                       Total Beta (LSC)                               NORM (Gamma)
- Total Radium                                       Tritium (<sup>3</sup>H)                                       Isotopic Americium / Curium
- Radium-226                                       Carbon-14                                       Isotopic Plutonium
- Radium-228                                       Iodine-131                                       Isotopic Thorium
- Radon-222                                       Strontium-89, 90                               Isotopic Uranium
- Other (Specify): \_\_\_\_\_                       Nickel-63                                       Iron-55

CHAIN OF CUSTODY

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
3.	Date 1-23-13	Name (Print) VA	Signature Victoria M. [Signature]	Date _____
	Time Custody Received 10:45	Organization DWRLB		Time Custody Released _____

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**
- Acceptable                                       Broken Container                               Leaked in Transit                               Improper Container
  - Holding Time Exceeded                       Sample Not Cooled                               Insufficient Sample
- B. Preservatives/Carriers:**
- Added While Sampling                       Added in Laboratory                               Not Added                                       Not Applicable



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940

FINAL Analysis Results Report for Task ID. 13-0045

Investigator: Tom Hook	RHB	Requestor: Roger Lupo	RHB
P O Box 56		CDPH - RHB, 1500 Capitol Av., MS 7610	
Avila Beach	CA 93424	Sacramento	CA 95814-5006
Phone Number: 805-545-4409		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 1st Qtr 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0045-01	Sample ID: R 92374 Sample Type: Vegetation	Time Collected: 1/14/2013 08:51	Sampling Point: Kelp	
Dry Wt/Wet Wt		0.112		
K-40	HASL Ga-01-R	139 +/- 3.00	1.97	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radionuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

**REQUEST FOR SAMPLE ANALYSIS (Radiochemical)**

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <b>1-17-13</b>	Lab No. (Leave Blank) <b>13-0045</b>
	Date & Time Sampled <b>1-14-13 8:51</b>	Serial Number <b>R 92374</b>
<b>Collector Information</b> Name: <b>FA</b> Dept./Branch: <b>DCPP/REMP</b> Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: <b>DCPP/REMP</b> Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

**TYPE OF SAMPLE (Check all applicable boxes)**

Drinking Water     Groundwater     Surface Water     Wastewater  
 Raw     Water Treatment Plant (WTP)     Distribution System     Point of Use (POU)  
 Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

Air Filters    Date/Time     Seawater     Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_ Starting: \_\_\_\_\_ Net (M<sup>3</sup>): \_\_\_\_\_  
 Air Charcoal Cartridge     Milk     Soil/Sediment  
 Wipes     Biota (Type): **Kelp**  
 Radon Canister     Other: \_\_\_\_\_

**COMMENTS: (Cautions, etc.):** \_\_\_\_\_

Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
 Field Measurement: \_\_\_\_\_ mR/hr     Radionuclide(s), if known: \_\_\_\_\_  
 Rush/Priority (should be prearranged and have supervisory approval)

**ANALYSIS REQUESTED (For questions, please call 510-620-2911)**

Gross Alpha     Gross Beta     Gamma Scan  
 Total Uranium     Total Beta (LSC)     NORM (Gamma)  
 Total Radium     Tritium (<sup>3</sup>H)     Isotopic Americium / Curium  
 Radium-226     Carbon-14     Isotopic Plutonium  
 Radium-228     Iodine-131     Isotopic Thorium  
 Radon-222     Strontium-89, 90     Isotopic Uranium  
 Other (Specify): \_\_\_\_\_     Nickel-63     Iron-55

**CHAIN OF CUSTODY**

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
3.	Date <b>1-17-13</b>	Name (Print) <b>VA</b>	Signature <b>[Signature]</b>	Date _____
	Date <b>1-30</b>	Name (Print) <b>DWRLB</b>	Signature <b>[Signature]</b>	Time Custody Released _____

**LABORATORY REMARKS (Leave Blank)**

**A. Condition at Time of Receipt:**  
 Acceptable     Broken Container     Leaked in Transit     Improper Container  
 Holding Time Exceeded     Sample Not Cooled     Insufficient Sample

**B. Preservatives/Carriers:**  
 Added While Sampling     Added in Laboratory     Not Added     Not Applicable