



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. 13-0874

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0874-01	Sample ID: R 94077 Sample Type: Seawater	Time Collected: 10/15/2013 12:51	Sampling Point: SONGS A	
K-40	EPA 901.1	356 +/- 17.2	56.4	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamali Rubera

Date Received: 10-11-13
Lab No. (Leave Blank): 13-0874
Date & Time Sampled: 10/15/13 1251
Serial Number: R 94077

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH - RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A
System No.:

Billing Agency

Checkboxes for billing agencies: DWFOB, DWTPB, EMB, RHB, FDB, Other, RWQCB, DWR, DTSC, CDFG

TYPE OF SAMPLE (Check all applicable boxes)

Checkboxes for sample types: Drinking Water, Raw, Treated, Air Filters, Seawater, Sludge, etc.

COMMENTS: (Cautions, etc.):

Field Treatment, Field Measurement, Rush/Priority checkboxes and input fields.

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

Checkboxes for analysis types: Gross Alpha, Total Uranium, Gamma Scan, etc.

CHAIN OF CUSTODY

Table with columns for Date, Name, Organization, Signature, and Time Custody Received/Released for three entries.

LABORATORY REMARKS (Leave Blank)

Checkboxes for laboratory remarks: Condition at Time of Receipt, Preservatives/Carriers, etc.



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. 13-0875

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0875-01	Sample ID: R 94078	Time Collected: 10/15/2013 12:51	Sampling Point: SONGS A	
	Sample Type: Seawater			
Tritium	EPA 906.0	-77.1 +/- 162	281	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received

11/07/13

Lab No. (Leave Blank)

1310873

Date & Time Sampled

10/15/13 1251

Serial Number

R194078

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A

Billing Agency

DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB Other (Specify) _____

System No.:

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted
- Air Filters Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time: _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³): _____ 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 (³H) 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: 10/15/13 Time Custody Received: 1251	Name (Print): Jenny Smith Organization: MBC	Signature: [Signature]	Date: 10/16/13 Time Custody Released: 1700
2.	Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3.	Date: 10-17-13 Time Custody Received: 10:00	Name (Print): UIA Organization: DWRLB	Signature: [Signature]	Date: _____ 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. 13-0876

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0876-01	Sample ID: R 94079 Sample Type: Seawater	Time Collected: 10/15/2013 13:02	Sampling Point: SONGS B	
K-40	EPA 901.1	347 +/- 22.2	80.6	pCi/L

- (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 510-620-2913 510-620-2911 Attn: Shiyamale Rubera	Date Received 10-17-13	Lab No. (Leave Blank) 18-0876
	Date & Time Sampled 10/15/13 1302	Serial Number R 94079

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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)

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 (M³) _____ 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 (³H) 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 10/15/13	Name (Print) Jenny Smith	Signature 	Date 10/15/13
	Time Custody Received 1302	Organization MBC		Time Custody Released 1700
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 10-17-13	Name (Print) UA	Signature 	Date
	Time Custody Received 10:00	Organization DWRLB	Signature	Time Custody Released

LABORATORY REMARKS (Leave Blank)

< 0.01 MR/HR

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. 13-0877

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0877-01	Sample ID: R 94080 Sample Type: Seawater	Time Collected: 10/15/2013 13:02	Sampling Point: SONGS B	
Tritium	EPA 906.0	51.5 +/- 173	294	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 10-17-13	Lab No. (Leave Blank) 13-0877
	Date & Time Sampled 10/15/13 1302	Serial Number R 94080
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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)

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Date/Time _____ Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Milk Soil/Sediment
 Starting: _____ Wipes Biota (Type): _____
 Net (M³) _____ 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 (³H) 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 10/15/13	Name (Print) Jenny Smith	Signature 	Date 10/16/13
	Time Custody Received 1302	Organization MBC		Time Custody Released 1700
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 10-17-13	Name (Print) JA	Signature 	Date
	Time Custody Received 10:00	Organization DWRLB		Time Custody Released

LABORATORY REMARKS (Leave Blank)

40.01 MR/HR

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. 13-0878

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0878-01	Sample ID: R 94066 Sample Type: Seawater	Time Collected: 10/15/2013 12:57	Sampling Point: SONGS C	
K-40	EPA 901.1	335 +/- 20.7	77.8	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shivamale Rubera	Date Received 10-17-13	Lab No. (Leave Blank) 13-0898
	Date & Time Sampled 10/15/13 1257	Serial Number R 94066

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-741A MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-1940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

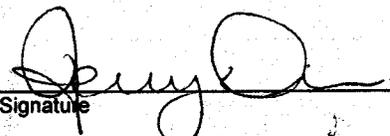
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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: 10/15/13	Name (Print): Jenny Smith	Signature: 	Date: 10/16/13
Time Custody Received: 1257	Organization: MBC		Time Custody Released: 1700
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 10-17-13	Name (Print): VA	Signature: 	Date: _____
Time Custody Received: 10:00	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: ≤ 0.01 MR/HR

<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. Preservatives/Carriers:

<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. 13-0879

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0879-01	Sample ID: R 94067 Sample Type: Seawater	Time Collected: 10/15/2013 12:57	Sampling Point: SONGS C	
Tritium	EPA 906.0	-89.1 +/- 168	292	pCi/L

- (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 510-620-2930 510-620-2911 <i>Attn: Shiyamalie Rubera</i>	Date Received <i>10-17-13</i>	Lab No. (Leave Blank) <i>13-0879</i>
	Date & Time Sampled <i>10/15/13 1257</i>	Serial Number R 94067
Collector Information Name: <i>Jenny Smith</i> Dept./Branch: <i>MBC Applied Environmental Science</i> Address: <i>3000 Red Hill Ave. Costa Mesa, CA 92626</i> Telephone No.: <i>714-850-4830</i>	Reporting Information Name: <i>Steve Hsu</i> Dept./Branch: <i>CDPH-R14B</i> Address: <i>PO Box 99-7414 MS 7610 Sacramento, CA 95899</i> Telephone No.: <i>916-440-7940</i>	
Sample Information System Name / Facility: <i>SONGS</i> Sampling Point (s): <i>C</i> System No.: _____	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time _____	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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: <i>10/15/13</i>	Name (Print): <i>Jenny Smith</i>	Signature: <i>Jenny Smith</i>	Date: <i>10/16/13</i>
Time Custody Received: <i>1257</i>	Organization: <i>MBC</i>	Signature: _____	Time Custody Released: <i>1700</i>
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: <i>10-17-13</i>	Name (Print): <i>VA</i>	Signature: <i>Victoria M. Ali</i>	Date: _____
Time Custody Received: <i>10:00</i>	Organization: <i>DWR/CRB</i>	Signature: _____	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

< 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0880

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0880-01	Sample ID: R 94068 Sample Type: Seawater	Time Collected: 10/15/2013 11:00	Sampling Point: SONGS D	
K-40	EPA 901.1	253 +/- 18.5	72.7	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 510-620-2930 Attn: Shiyamalie Rubera	Date Received 10-17-13	Lab No. (Leave Blank) 13-0880
	Date & Time Sampled 10/15/13 1100	Serial Number R 94068
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 901-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<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 (³ 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: 10/15/13	Name (Print): James Nuñez	Signature:	Date: 10/15/13
Time Custody Received: 1100	Organization: MBC Applied Environmental Sciences	Signature:	Time Custody Released: 10/16/13
2. Date: 10/15/13	Name (Print): Jenny Smith	Signature:	Date: 10/16/13
Time Custody Received: 1630	Organization: MBC	Signature:	Time Custody Released: 1700
3. Date: 10-17-13	Name (Print): DWRLB	Signature:	Date: _____
Time Custody Received: 10:00	Organization: UA	Signature: _____	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

≤ 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0881

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / October 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0881-01	Sample ID: R 94072 Sample Type: Seawater	Time Collected: 10/15/2013 11:00	Sampling Point: SONGS D	
Tritium	EPA 906.0	103 +/- 174	294	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyemalie Rubera	Date Received 10-17-13	Lab No. (Leave Blank) 13-0881
	Date & Time Sampled 10/15/13 1100	Serial Number R 94072
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 90-7414 MS 7010 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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: 10/15/13	Name (Print): James Nuñez	Signature:	Date: 10/15/13
Time Custody Received: 1100	Organization: MBC Applied Environmental Sciences	Signature:	Time Custody Released: 1630
2. Date: 10/15/16	Name (Print): Jenny Smith	Signature:	Date: 10/16/13
Time Custody Received: 1630	Organization: MBC	Signature:	Time Custody Released: 1700
3. Date: 10-17-13	Name (Print): VA	Signature:	Date: _____
Time Custody Received: 10:00	Organization: DWRLB	Signature: _____	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) ≤ 0.01 mR/hr

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0698

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0698-01	Sample ID: R 94016 Sample Type: Seawater	Time Collected: 9/16/2013 11:51	Sampling Point: Songs A	
K-40	EPA 901.1	355 +/- 17.3	57.2	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received

9-18-13

Lab No. (Leave Blank)

13-0698

Date & Time Sampled

9/16/13 1151

Serial Number

R 94016

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3200 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve #5U
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7440

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A
System No.:

Billing Agency

- DWFOB () RHB RWQCB () DTSC
- DWTPB FDB DWR CDFG
- EMB 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

- Air Filters Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³): _____ Radon Canister Other: _____
- Air Charcoal Cartridge

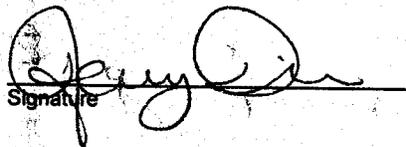
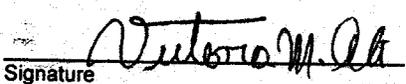
COMMENTS: (Cautions, etc.):

- 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 (³H) 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: 9/16/13 Time Custody Received: 1151	Name (Print): Jenny Smith Organization: MBC	Signature: 	Date: 9/17/13 Time Custody Released: 1500
2.	Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3.	Date: 9-18-13 Time Custody Received: 9:20	Name (Print): JIA Organization: DWRLP	Signature: 	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

- ≤ 0.01 MR/HR
- 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. 13-0699

Investigator: Jenny Smith MBC Applied Environmental Science, 3000 Costa Mesa CA 92626 Phone Number: 714-850-4830	RHB	Requestor: Roger Lupo CDPH - RHB, 1500 Capitol Av., MS 7610 Sacramento CA 95814-5006 Phone Number: 916-440-7955	RHB
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0699-01 Sample ID: R 94018 Sample Type: Seawater		Time Collected: 9/16/2013 11:51	Sampling Point: SONGS A	
Tritium	EPA 906.0	167 +/- 168	281	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 9/18/13	Lab No. (Leave Blank) 13-0699
	Date & Time Sampled 9/16/13 1151	Serial Number R 94018
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (3H)	<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: 9/16/13 Time Custody Received: 1151	Name (Print): Jenny Smith Organization: MBC	Signature:	Date: 9/17/13 Time Custody Released: 1500
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 9-18-13 Time Custody Received: 9:20	Name (Print): UA Organization: DWRLB	Signature:	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) S.O.B. MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0700

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0700-01	Sample ID: R 94019 Sample Type: Seawater	Time Collected: 9/16/2013 12:06	Sampling Point: Songs B	
K-40	EPA 901.1	347 +/- 20.5	75.6	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 9-18-13	Lab No. (Leave Blank) 13-0700
	Date & Time Sampled 9/16/13 1206	Serial Number R 94019
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-1940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<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 (³ 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: 9/16/13	Name (Print): Jenny Smith	Signature:	Date: 9/17/13
Time Custody Received: 1206	Organization: MBC		Time Custody Released: 1500
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 9-18-13	Name (Print): UA	Signature:	Date: _____
Time Custody Received: 9:20	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: = 0.01 MR/HR
 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. 13-0701

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0701-01	Sample ID: R 94020 Sample Type: Seawater	Time Collected: 9/16/2013 12:06	Sampling Point: SONGS B	
Tritium	EPA 906.0	-16.8 +/- 159	274	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 9-16-13	Lab No. (Leave Blank) 13-0701
	Date & Time Sampled 9/16/13 1206	Serial Number R 94020
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Services Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 997414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7448	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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)

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Date/Time _____ Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Milk Soil/Sediment
 Starting: _____ Wipes Biota (Type): _____
 Net (M³): _____ 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 (3H) 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 9/16/13	Name (Print) Jenny Smith	Organization MBC	Signature 	Date 9/17/13	Time Custody Released 1500
2.	Date	Name (Print)	Organization	Signature	Date	Time Custody Released
3.	Date 9-18-13	Name (Print) JA	Organization DWRLB	Signature 	Date	Time Custody Released

LABORATORY REMARKS (Leave Blank)

1 ≤ 0.01 MCK/HR

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. 13-0702

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0702-01	Sample ID: R 94021 Sample Type: Seawater	Time Collected: 9/16/2013 12:00	Sampling Point: Songs C	
K-40	EPA 901.1	239 +/- 18.4	73.5	pCi/L

- (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 510-620-2930
 510-620-2911 Attn: Shiyamalie Rubera

Date Received 9-16-13	Lab No. (Leave Blank) 13-0702
Date & Time Sampled 9/16/13 1200	Serial Number R 94021

Collector Information

Name: Jenny Smith
 Dept./Branch: MBC Applied Environmental Sciences
 Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
 Telephone No.: 714-850-4830

Reporting Information

Name: Steve HSU
 Dept./Branch: CDPH-RHB
 Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899
 Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
 Sampling Point (s): C
 System No.:

Billing Agency

- DWFOB () RHB RWQCB () DTSC
- DWTPB FDB DWR CDFG
- EMB 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

- Air Filters Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time: _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³): _____ 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 (3H) 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 9/16/13	Name (Print) Jenny Smith	Signature 	Date 9/17/13
Time Custody Received 1200	Organization MBC		Time Custody Released 1500
2. Date	Name (Print)	Signature	Date
Time Custody Received	Organization		Time Custody Released
3. Date 9-16-13	Name (Print) VA	Signature	Date
Time Custody Received 9:20	Organization DWRLB	Signature Victorio-M.../ll	Time Custody Released

LABORATORY REMARKS (Leave Blank)

- 50.01 mR/HR
- 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



State of California - Health and Human Services Agency

California Department of Public Health

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. 13-0703

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0703-01	Sample ID: R 94026	Time Collected: 9/16/2013 12:00	Sampling Point: SONGS C	
	Sample Type: Seawater			
Tritium	EPA 906.0	86.3 +/- 162	274	pCi/L

- (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 510-620-2930
 510-620-2911 Attn: Shiyamalie Rubera

Date Received: 9-18-13
 Date & Time Sampled: 9/16/13 1200
 Lab No. (Leave Blank): 13-07023
 Serial Number: R 94026

Collector Information
 Name: Jenny Smith
 Dept./Branch: 3000 Red Hill Ave. Costa Mesa, CA 92626
 Address: 92626
 Telephone No.: 714-850-4830

Reporting Information
 Name: Steve ASU
 Dept./Branch: CDPH-RHB
 Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
 Telephone No.: 916-440-7940

Sample Information
 System Name / Facility: SONGS
 Sampling Point (s): C

Billing Agency
 DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB Other (Specify) _____

System No.:

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time: _____
 Milk Soil/Sediment
 Starting: _____
 Wipes Biota (Type): _____
 Net (M³): _____
 Radon Canister Other: _____

Air Charcoal Cartridge

COMMENTS: (Cautions, etc.): _____

Field Treatment: Preservatives added: _____ Ice/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 510-620-2944)

Gross Alpha Gross Beta Gamma Scan
 Total Uranium Total Beta (LSC) NORM (Gamma)
 Total Radium Tritium (3H) 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: 9/16/13 Time Custody Received: 1200	Name (Print): Jenny Smith Organization: MBC	Signature:	Date: 9/17/13 Time Custody Released: 1500
2.	Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3.	Date: 9/18-13 Time Custody Received: 9:20	Name (Print): VA Organization: DWRLB	Signature:	Date: _____ 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

0.01 mR/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. 13-0704

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0704-01	Sample ID: R 94027 Sample Type: Seawater	Time Collected: 9/16/2013 11:15	Sampling Point: Songs D	
K-40	EPA 901.1	349 +/- 17.0	56.0	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 9-16-13	Lab No. (Leave Blank) 13-0004
	Date & Time Sampled 9/16/13 1115	Serial Number R 94027
Collector Information Name: Wayne Dossett Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-446-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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)

- 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted
- Air Filters Date/Time _____ Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³) _____ Radon Sanister 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 (³H) 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 9/16/13 1115	Name (Print) Wayne Dossett MBC	Signature <i>Wayne Dossett</i>	Date 9/16/13 1445
2.	Time Custody Received 9/16/13	Organization MBC	Signature <i>[Signature]</i>	Time Custody Released 9/17/13
	Date 1445	Name (Print) Jenny Smith	Signature <i>[Signature]</i>	Date 1500
	Time Custody Received 9-16-13	Organization UA	Signature <i>[Signature]</i>	Time Custody Released
3.	Date 9:20	Name (Print) DWR/LB	Signature <i>[Signature]</i>	Date
	Time Custody Received	Organization	Signature	Time Custody Released

LABORATORY REMARKS (Leave Blank)

- 5001 MR/HR
- 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. 13-0705

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / September 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 9/18/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0705-01	Sample ID: R 94028 Sample Type: Seawater	Time Collected: 9/16/2013 11:15	Sampling Point: SONGS D	
Tritium	EPA 906.0	-8.81 +/- 164	281	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 9-14-13	Lab No. (Leave Blank) 13-0705
	Date & Time Sampled 9/16/13 1115	Serial Number R 94028
Collector Information Name: Wayne Dossett Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH -RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: Sampling Point (s): SONGS D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input checked="" 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 checked="" type="checkbox"/> Tritium (³ 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: 9/16/13 1115	Name (Print): Wayne Dossett Organization: MBC	Signature: [Signature]	Date: 9/16/13 1445	Time Custody Released: 9/17/13
2.	Date: 9/16/13 1445	Name (Print): Jenny Smith Organization: MBC	Signature: [Signature]	Date: 9/17/13 1500	Time Custody Released: _____
3.	Date: 9-18-13 -9:20	Name (Print): VA Organization: DWRLB	Signature: [Signature]	Date: _____	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) C 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0609

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0609-01	Sample ID: R 96398 Sample Type: Seawater	Time Collected: 8/15/2013 11:26	Sampling Point: Songs A	
K-40	EPA 901.1	338 +/- 17.0	56.9	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
Richmond, CA 94804
510-620-2911

510-620-2930

Attn: Shiyamalie Rubera

Date Received 8-16-13	Lab No. (Leave Blank) 13-0609
Date & Time Sampled 8/15/13 1126	Serial Number R 96398

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A
System No.:

Billing Agency

- DWFOB ()
- RHB
- RWQCB ()
- DTSC
- DWTPB
- FDB
- DWR
- CDFG
- EMB
- Other (Specify) _____

TYPE OF SAMPLE (Check all applicable boxes)

- Drinking Water
- Raw
- Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxizone / Fluoridated / Coagulated / pH Adjusted
- Groundwater
- Water Treatment Plant (WTP)
- Surface Water
- Distribution System
- Wastewater
- Point of Use (POU)
- Air Filters
- Finishing: _____ Date/Time _____
- Starting: _____ Date/Time _____
- Net (M³): _____
- Air Charcoal Cartridge
- Seawater
- Milk
- Wipes
- Radon Canister
- Sludge (Semi-solid Samples)
- Soil/Sediment
- Biota (Type): _____
- 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
- 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
- Iron-55

CHAIN OF CUSTODY

1.	Date 8/15/13	Name (Print) Jenny Smith	Organization MBC	Signature 	Date 8/15/13	Time Custody Released 1700
2.	Date 1126	Name (Print)	Organization	Signature	Date	Time Custody Released
3.	Date 8-16-13	Name (Print) VA	Organization DWRCB	Signature 	Date	Time Custody Released

LABORATORY REMARKS (Leave Blank)

- ≤ 0.01 mR/hr
- 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. 13-0610

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0610-01	Sample ID: R 96399 Sample Type: Seawater	Time Collected: 8/15/2013 11:26	Sampling Point: SONGS A	
Tritium	EPA 906.0	-84.6 +/- 168	292	pCi/L

- (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 Alt: 510-620-2930 Attn: Shiyamalie Rubera	Date Received 8-16-13	Lab No. (Leave Blank) 13-0610
	Date & Time Sampled 8/15/13 1126	Serial Number R 96399
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7414 ms 7010 Sacramento, Ca 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

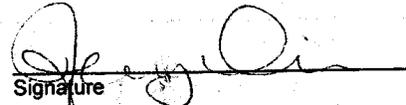
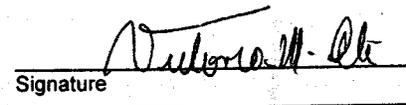
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 checked="" type="checkbox"/> Tritium (³ 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 8/15/13	Name (Print) Jenny Smith	Signature 	Date 8/15/13
	Time Custody Received 1126	Organization MBC		Time Custody Released 1700
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 8-16-13	Name (Print) UA	Signature 	Date
	Time Custody Received 14:00	Organization DWRLB		Time Custody Released

LABORATORY REMARKS (Leave Blank) ≤ 0.01 MFC/LR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0611

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0611-01	Sample ID: R 96400 Sample Type: Seawater	Time Collected: 8/15/2013 11:40	Sampling Point: Songs B	
K-40	EPA 901.1	303 +/- 21.5	80.5	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 S_b 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 510-620-2930 510-620-2911 Attn: Shiyamalie Robera	Date Received 8-16-13	Lab No. (Leave Blank) 13-0611
	Date & Time Sampled 8/15/13 1140	Serial Number R 96400

Collector Information Name: Jenny Smith Dept./Branch: MBE Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7740
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): System No.:	Billing Agency <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 checked="" type="checkbox"/> Milk	<input type="checkbox"/> Soil/Sediment
Starting: _____	_____	<input checked="" type="checkbox"/> Wipes	<input type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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 (³ H)	<input checked="" 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 8/15/13	Name (Print) Jenny Smith	Signature 	Date 8/15/13
	Time Custody Received 1140	Organization ABC		Time Custody Released 1700
2.	Date 8-16-13	Name (Print) VA	Signature 	Date 8-16-13
	Time Custody Received 11:00	Organization DWR/LB	Signature 	Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: ≤ 0.01 MK/HR
 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. 13-0612

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0612-01	Sample ID: R 94001 Sample Type: Seawater	Time Collected: 8/15/2013 11:40	Sampling Point: SONGS B	
Tritium	EPA 906.0	-2.12 +/- 155	256	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shyamalie Rubera	Date Received 8-16-13	Lab No. (Leave Blank) 13-0612
	Date & Time Sampled 8/15/13 1140	Serial Number R 94001
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92620 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

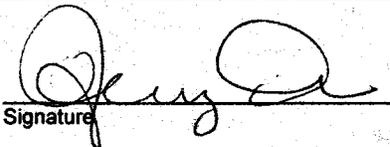
COMMENTS: (Cautions, etc.):

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 checked="" type="checkbox"/> Tritium (³ 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: 8/15/13	Name (Print): Jenny Smith	Signature: 	Date: 8/15/13
	Time Custody Received: 1140	Organization: MBC		Date: 1700
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3.	Date: 8-16-13	Name (Print): UA	Signature: _____	Date: _____
	Time Custody Received: 1400	Organization: DWR LB		Date: _____

LABORATORY REMARKS (Leave Blank)

S O.D.M.R./M.R.

A. Condition at Time of Receipt:			
<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. Preservatives/Carriers:			
<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. 13-0613

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: DWRLB	Samples Received by Lab:	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0613-01	Sample ID: R 94002 Sample Type: Seawater	Time Collected: 8/15/2013 11:34	Sampling Point: Songs C	
K-40	EPA 901.1	235 +/- 18.2	72.4	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 Attn: Shyamalie Rubera	Date Received 8-16-13	Lab No. (Leave Blank) 13-0613
	Date & Time Sampled 8/15/13 1134	Serial Number R 94002

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940
--	---

Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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)

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

<input type="checkbox"/> Air Filters Finishing: _____ Starting: _____ Net (M ³): _____	Date/Time: _____ _____ _____	<input type="checkbox"/> Seawater <input type="checkbox"/> Milk <input type="checkbox"/> Wipes <input type="checkbox"/> Radon Canister	<input type="checkbox"/> Sludge (Semi-solid Samples) <input type="checkbox"/> Soil/Sediment <input type="checkbox"/> Biota (Type): _____ <input type="checkbox"/> 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)

<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 (³ 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: 8/15/13	Name (Print): Jenny Smith	Signature:	Date: 8/15/13
	Time Custody Received: 1134	Organization: MBC		Time Custody Released: 1700
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 8-16-13	Name (Print): VA	Signature:	Date: _____
	Time Custody Received: 11:00	Organization: DUPLB	Signature:	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0614

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0614-01	Sample ID: R 94003 Sample Type: Seawater	Time Collected: 8/15/2013 11:34	Sampling Point: SONGS C	
Tritium	EPA 906.0	-75.7 +/- 168	292	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 8/16-13	Lab No. (Leave Blank) B-0614
	Date & Time Sampled 8/15/13 1134	Serial Number R 94003
Collector Information Name: Jenny Smith Dept./Branch: NBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

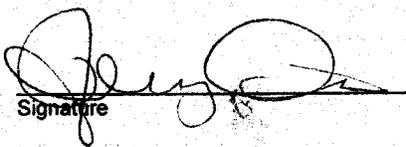
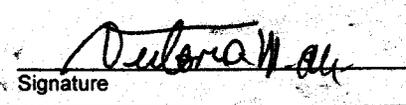
COMMENTS: (Cautions, etc.): _____

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 checked="" type="checkbox"/> Tritium (³ 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: 8/15/13	Name (Print): Jenny Smith	Signature: 	Date: 8/15/13
	Time Custody Received: 1134	Organization: NBC		Time Custody Released: 1700
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 8-16-13	Name (Print): VA	Signature: 	Date: _____
	Time Custody Received: 14:00	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:			
<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. Preservatives/Carriers:			
<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. 13-0615

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA	95814-5006
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0615-01	Sample ID: R 94004 Sample Type: Seawater	Time Collected: 8/15/2013 10:00	Sampling Point: Songs D	
K-40	EPA 901.1	316 +/- 16.0	53.6	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 510-620-2930 510-620-2911 Affn: Shiyamalie Roxera	Date Received 8-16-13	Lab No. (Leave Blank) 13-0615
	Date & Time Sampled 8/15/13 1000	Serial Number R 94004

Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca. 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Telephone No.: 916-440-7940
---	---

Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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)

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time _____
 Milk Soil/Sediment
 Starting: _____
 Wipes Biota (Type): _____
 Net (M³) _____
 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)

<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 (³ 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: 8/15/13	Name (Print): James Nuñez	Signature: [Signature]	Date: 8/15/13
Time Custody Received: 1000	Organization: MBC Applied Environmental Sciences	Signature: [Signature]	Time Custody Released: 1500
2. Date: 8/15/13	Name (Print): Eddy Smith	Signature: [Signature]	Date: 8/15/13
Time Custody Received: 1500	Organization: MBC	Signature: [Signature]	Time Custody Released: 1700
3. Date: 8-16-13	Name (Print): UA	Signature: [Signature]	Date: _____
Time Custody Received: 14:00	Organization: DWRI B	Signature: [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

c 0.01 uR/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. 13-0616

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA	95814-5006
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / August 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 8/16/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0616-01	Sample ID: R 94005 Sample Type: Seawater	Time Collected: 8/15/2013 10:00	Sampling Point: SONGS D	
Tritium	EPA 906.0	-80.6 +/- 153	256	pCi/L

- (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
510-620-2930
Attn: Shiyamalie Rubera

Date Received: 8-16-13
Date & Time Sampled: 8/15/13 1000

Lab No. (Leave Blank): 13-0616
Serial Number: R 94005

Collector Information
Name: James Nunez
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7910

Sample Information
System Name / Facility: SONGS
Sampling Point (s): D
System No.:

Billing Agency
DWFOB ()
DWTPB
EMB
RHB (checked)
FDB
Other (Specify)

TYPE OF SAMPLE (Check all applicable boxes)
Drinking Water, Raw, Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxizone / Fluoridated / Coagulated / pH Adjusted
Groundwater, Water Treatment Plant (WTP)
Surface Water, Distribution System
Wastewater, Point of Use (POU)
Air Filters, Seawater, Sludge (Semi-solid Samples)
Milk, Soil/Sediment
Wipes, Biota (Type):
Radon Canister, Other:

COMMENTS: (Cautions, etc.):
Field Treatment: Preservatives added:
Field Measurement: mR/hr
Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)
Gross Alpha, Total Uranium, Total Radium, Radium-226, Radium-228, Radon-222, Other (Specify):
Gross Beta, Total Beta (LSC), Tritium (3H) (checked), Carbon-14, Iodine-131, Strontium-89, 90, Nickel-63
Gamma Scan, NORM (Gamma), Isotopic Americium / Curium, Isotopic Plutonium, Isotopic Thorium, Isotopic Uranium, Iron-55

CHAIN OF CUSTODY
1. Date: 8/15/13, Time Custody Received: 1000, Name (Print): James Nunez, Organization: MBC Applied Environmental Sciences, Signature: [Signature], Date: 8/15/13, Time Custody Released: 1500
2. Date: 8/15/13, Time Custody Received: 1500, Name (Print): Emily Smith, Organization: MBC, Signature: [Signature], Date: 8/15/13, Time Custody Released: 1700
3. Date: 8-16-13, Time Custody Received: 14:00, Name (Print): [Blank], Organization: DWRLB, Signature: [Signature], Date: [Blank], Time Custody Released: [Blank]

LABORATORY REMARKS (Leave Blank)
A. Condition at Time of Receipt:
Acceptable (checked), 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
< 0.01 MCK/HR



State of California - Health and Human Services Agency

California Department of Public Health



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. 13-0544

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0544-01	Sample ID: R 95989 Sample Type: Seawater	Time Collected: 7/16/2013 11:43	Sampling Point: SONGS A	
K-40	EPA 901.1	266 +/- 18.6	72.4	pCi/L

- (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 510-620-2911 Alt: Shiyamalie Rubeta	Date Received 7/17/13	Lab No. (Leave Blank) 13-0544-01
	Date & Time Sampled 7/16/13 1143	Serial Number R 95989
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99 - 7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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)

- Drinking Water
- Raw
- Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- Groundwater
- Water Treatment Plant (WTP)
- Surface Water
- Distribution System
- Wastewater
- Point of Use (POU)
- Air Filters
- Finishing: _____ Date/Time _____
- Starting: _____
- Net (M³) _____
- Seawater
- Milk
- Wipes
- Radon Canister
- Sludge (Semi-solid Samples)
- Soil/Sediment
- Biota (Type): _____
- 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
- 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
- Iron-55

CHAIN OF CUSTODY

1.	Date 7/16/13	Name (Print) Jenny Smith	Signature 	Date 7/16/13
	Time Custody Received 1143	Organization MBC		Time Custody Released 1730
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 7/17/13	Name (Print) A. Tan	Signature 	Date
	Time Custody Received 13:40	Organization DWRIB	Signature 	Time Custody Released

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt: <0.01MR/hr
- 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. 13-0545

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA ₉₅	Units
Lab No: 13-0545-01	Sample ID: R 95990 Sample Type: Seawater	Time Collected: 7/16/2013 11:43	Sampling Point: SONGS A	
Tritium	EPA 906.0	-78.5 +/- 153	265	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalee Rubera		Date Received 7/17/13	Lab No. (Leave Blank) 13-0545-01
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-856-4830		Date & Time Sampled 7/16/13 1143	Serial Number R 95990
Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940			
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:		Billing Agency <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)

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 / Peroxozone / Fluoridated / Coagulated / pH Adjusted

Air Filters Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time _____
 Starting: _____
 Net (M³) _____
 Air Charcoal Cartridge

Milk Soil/Sediment
 Wipes Biota (Type): _____
 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 (³H) 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: 7/16/13	Name (Print): Jenny Smith	Signature:	Date: 7/16/13
	Time Custody Received: 1143	Organization: MBC		Time Custody Released: 1730
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 7/17	Name (Print): A Tan	Signature:	Date: _____
	Time Custody Received: 1340	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: < 0.01 MR/hr
 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. 13-0546

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0546-01	Sample ID: R 95991 Sample Type: Seawater	Time Collected: 7/16/2013 11:56	Sampling Point: SONGS B	
K-40	EPA 901.1	349 +/- 20.4	74.5	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 7/17/13	Lab No. (Leave Blank) 13-0546-01
	Date & Time Sampled 7/16/13 1156	Serial Number R 95991
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

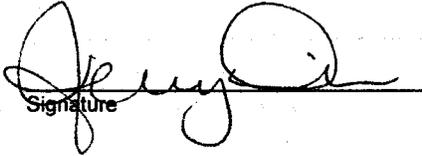
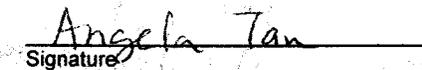
COMMENTS: (Cautions, etc.): _____

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 (³ 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: 7/16/13	Name (Print): Jenny Smith	 Signature	Date: 7/16/13
	Time Custody Received: 1156	Organization: MBC		Time Custody Released: 1730
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3.	Date: 7/17/13	Name (Print): A. Tan	 Signature	Date: _____
	Time Custody Received: 13:40	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

20.01 MR/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. 13-0547

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0547-01	Sample ID: R 95992 Sample Type: Seawater	Time Collected: 7/16/2013 11:56	Sampling Point: SONGS B	
Tritium	EPA 906.0	8.48 +/- 155	256	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 7/17/13	Lab No. (Leave Blank) 13-0547-01
	Date & Time Sampled 7/16/13 1156	Serial Number R 95992
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave - Castaldessa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO BOX 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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. <u>7/16/13</u> Date	<u>Jenny Smith</u> Name (Print)	<u>[Signature]</u> Signature	<u>7/16/13</u> Date
<u>1156</u> Time Custody Received	<u>MBC</u> Organization		<u>1730</u> Time Custody Released
2. _____ Date	_____ Name (Print)	_____ Signature	_____ Date
_____ Time Custody Received	_____ Organization		_____ Time Custody Released
3. <u>7/17</u> Date	<u>A. Tan</u> Name (Print)	<u>[Signature]</u> Signature	_____ Date
<u>12:40</u> Time Custody Received	<u>DWR RB</u> Organization	<u>Angela Tan</u> Signature	_____ Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0548

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0548-01	Sample ID: R 95993 Sample Type: Seawater	Time Collected: 7/16/2013 11:49	Sampling Point: SONGS C	
K-40	EPA 901.1	229 +/- 18.1	72.7	pCi/L

- (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 Attn: Shiyamile Rubera	Date Received 7/17/13	Lab No. (Leave Blank) 13-0548
	Date & Time Sampled 7/16/13 1149	Serial Number R 95993
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 991-744 MS 7100 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			

<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

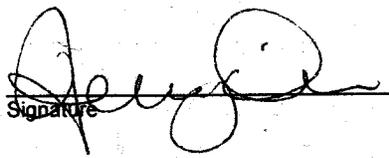
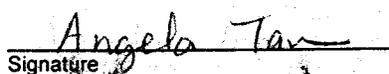
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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: 7/16/13	Name (Print): Jenny Smith	Signature: 	Date: 7/16/13
	Time Custody Received: 1149	Organization: MBC		Time Custody Released: 1730
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 7/17/13	Name (Print): A. Tan	Signature: 	Date: _____
	Time Custody Received: 113:40	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: *LO. 01 MR/hr.*

<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. Preservatives/Carriers:

<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. 13-0549

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0549-01	Sample ID: R 95994 Sample Type: Seawater	Time Collected: 7/16/2013 11:49	Sampling Point: SONGS C	
Tritium	EPA 906.0	44.5 +/- 156	265	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamatu Rober		Date Received 7/17/13	Lab No. (Leave Blank) 13-0549-01
		Date & Time Sampled 7/16/13 1149	Serial Number R 95994
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3020 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830		Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-714 MS 7010 Sacramento, CA 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): C		Billing Agency <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 checked="" type="checkbox"/> Other (Specify) _____	
System No.: _____			

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time _____	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.): _____

Field Treatment: Preservatives added: _____ Ice/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 checked="" type="checkbox"/> Tritium (³ 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: 7/16/13	Name (Print): Jenny Smith	Signature:	Date: 7/16/13
	Time Custody Received: 1149	Organization: MBC		Time Custody Released: 1730
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 7/17/13	Name (Print): A. Tan	Signature:	Date: _____
	Time Custody Received: 113:40	Organization: DWR 113		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0550

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0550-01	Sample ID: R 95995 Sample Type: Seawater	Time Collected: 7/16/2013 10:45	Sampling Point: SONGS D	
K-40	EPA 901.1	356 +/- 17.6	58.6	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911 Attn: Shiyamalie Rubera	Date Received 7/17/13	Lab No. (Leave Blank) 13-0550-01
	Date & Time Sampled 7/16/13 1045	Serial Number R 95995
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7410 Sacramento, CA 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____ |
| Net (M ³): _____ | _____ | <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 (³ 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: 7/16/13	Name (Print): James Nuñez	Signature:	Date: 7/16/13
	Time Custody Received: 1045	Organization: MBC Applied Environmental Sciences		Time Custody Released: 1500
2.	Date: 7/16/13	Name (Print): Jenny Smith	Signature:	Date: 7/16/13
	Time Custody Received: 1500	Organization: MBC		Time Custody Released: 1730
3.	Date: 7/17/13	Name (Print): A. Tan	Signature:	Date: _____
	Time Custody Received: 13:40	Organization: DWR/RLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**
- | | | | |
|--|--|--|---|
| <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. Preservatives/Carriers:**
- | | | | |
|---|--|------------------------------------|---|
| <input type="checkbox"/> Added While Sampling | <input type="checkbox"/> Added in Laboratory | <input type="checkbox"/> Not Added | <input type="checkbox"/> Not Applicable |
|---|--|------------------------------------|---|
- < 0.01 MRP/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. 13-0551

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / July 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 7/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0551-01	Sample ID: R 95996 Sample Type: Seawater	Time Collected: 7/16/2013 10:45	Sampling Point: SONGS D	
Tritium	EPA 906.0	93.3 +/- 157	265	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 7/17/13	Lab No. (Leave Blank) 13-0551-01
	Date & Time Sampled 7/16/13 1045	Serial Number R 95996
Collector Information Name: James Nuñez Dept./Branch: MBE Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: State HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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 7/16/13	Name (Print) James Nuñez	Signature 	Date 7/16/13
	Time Custody Received 1045	Organization MBE Applied Environmental Sciences		Time Custody Released 1500
2.	Date 7/16/13	Name (Print) Jenny Smith	Signature 	Date 7/16/13
	Time Custody Received 1500	Organization MBE	Signature 	Time Custody Released 1730
3.	Date 7/17/13	Name (Print) A. Tan	Signature 	Date 7/17/13
	Time Custody Received 13:40	Organization DWR RIB	Signature Angela Tan	Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:			
<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. Preservatives/Carriers:			
<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. 13-0477

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0477-01	Sample ID: R 95905 Sample Type: Seawater	Time Collected: 6/17/2013 11:15	Sampling Point: SONGS A	
K-40	EPA 901.1	361 +/- 17.5	57.5	pCi/L

- (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 510-620-2930
510-620-2911

Attn: Shiyamalie Rubera

Date Received

6-20-13

Lab No. (Leave Blank)

13-0477

Date & Time Sampled

6/17/13 1115

Serial Number

R 95905

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental
Address: 3000 Red Hill Ave.
Costa Mesa, ca 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH - RHB
Address: PO Box 99-7414 MS 7610
Sacramento, ca 95899
Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONG'S
Sampling Point (s): A

Billing Agency

- DWFOB ()
- RHB
- RWQCB ()
- DTSC
- DWTPB
- FDB
- DWR
- CDFG
- EMB
- Other (Specify) _____

System No.:

TYPE OF SAMPLE (Check all applicable boxes)

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

- Air Filters
- Finishing: _____ Date/Time _____
- Starting: _____ Date/Time _____
- Net (M³) _____
- Air Charcoal Cartridge
- Seawater
- Milk
- Wipes
- Radon Canister
- Sludge (Semi-solid Samples)
- Soil/Sediment
- Biota (Type): _____
- 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
- 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
- Iron-55

CHAIN OF CUSTODY

1.	6/17/13	Jenny Smith	MBC		6/18/13
	1115	Name (Print)	Organization	Signature	Date
	Time Custody Received				Time Custody Released
2.					
	Date	Name (Print)	Organization	Signature	Date
	Time Custody Received				Time Custody Released
3.	6-20-13	UA	DWRLB		
	9:00	Name (Print)	Organization	Signature	Date
	Time Custody Received				Time Custody Released

LABORATORY REMARKS (Leave Blank)

- 500 MPR/HR
- 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. 13-0478

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0478-01	Sample ID: R 95906 Sample Type: Seawater	Time Collected: 6/17/2013 11:15	Sampling Point: SONGS A	
Tritium	EPA 906.0	-122 +/- 146	257	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 6-20-13	Lab No. (Leave Blank) 13-0478
	Date & Time Sampled 6/17/13 1115	Serial Number R 95906
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-744 MS 7010 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			

<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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: 6/17/13	Name (Print): Jenny Smith	Signature:	Date: 6/18/13
Time Custody Received: 1115	Organization: MBC		Date: 1700
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3. Date: 6-20-13	Name (Print): VA	Signature: _____	Date: _____
Time Custody Received: 9:00	Organization: DWRLB	Signature:	Date: _____
			Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: $\leq 0.005 \text{ mR/hr}$

<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. Preservatives/Carriers:

<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. 13-0479

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0479-01 Sample ID: R 95907 Sample Type: Seawater		Time Collected: 6/17/2013 11:28	Sampling Point: SONGS B	
K-40	EPA 901.1	259 +/- 19.3	76.6	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamaku Rubera	Date Received 6-20-13	Lab No. (Leave Blank) 13-0479
	Date & Time Sampled 6/17/13 1128	Serial Number R 95907
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input checked="" type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.): _____

Field Treatment: Preservatives added: _____ Iced/Frozen: _____ Other: _____

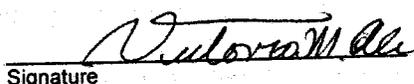
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (3H)	<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: 6/17/13	Name (Print): Jenny Smith	Signature: 	Date: 6/18/13
Time Custody Received: 1128	Organization: MBC		Time Custody Released: 1200
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 6-20-13	Name (Print): UA	Signature: 	Date: _____
Time Custody Received: 9:00	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) ≤ 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0480

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0480-01	Sample ID: R 95908 Sample Type: Seawater	Time Collected: 6/17/2013 11:28	Sampling Point: SONGS B	
Tritium	EPA 906.0	16.0 +/- 150	257	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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
510-620-2930
Attn: Shiyamalee Rubera

Date Received: 6-20-13
Lab No. (Leave Blank): 13-0480
Date & Time Sampled: 6/17/13 1128
Serial Number: R 95908

Collector Information
Name: Jenny Smith
Dept./Branch: NBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPIH - R4B
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
[] DWFOB [x] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted
[] Air Filters Date/Time [x] Seawater [] Sludge (Semi-solid Samples)
[] Finishing: [] Milk [] Soil/Sediment
[] Starting: [] Wipes [] Biota (Type):
[] Net (M^3) [] 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 [x] Tritium (3H) [] 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: 6/17/13 Name (Print): Jenny Smith Signature: [Signature] Date: 6/18/13
Time Custody Received: 1128 Organization: MBC Signature: [Signature] Time Custody Released: 1700
2. Date: Name (Print): Organization: Signature: Date:
Time Custody Received: Organization: Signature: Time Custody Released:
3. Date: 6-20-13 Name (Print): UA Signature: [Signature] Date:
Time Custody Received: 9:00 Organization: DURIB Signature: [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
4.00 MR/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. 13-0481

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0481-01	Sample ID: R 95915 Sample Type: Seawater	Time Collected: 6/17/2013 11:22	Sampling Point: SONGS C	
K-40	EPA 901.1	298 +/- 16.3	57.4	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 6-20-13	Lab No. (Leave Blank) 13-0461
	Date & Time Sampled 6/17/13 1122	Serial Number R 95915
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - R4B Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

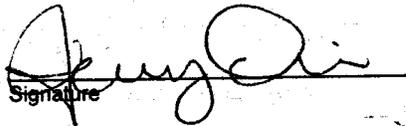
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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: 6/17/13	Name (Print): Jenny Smith	Signature: 	Date: 6/18/13
Time Custody Received: 1122	Organization: MBC		Time Custody Released: 1700
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 6-20-13	Name (Print): VA	Signature: 	Date: _____
Time Custody Received: 9:00	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

E.P.O. MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0482

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0482-01	Sample ID: R 95916 Sample Type: Seawater	Time Collected: 6/17/2013 11:22	Sampling Point: SONGS C	
Tritium	EPA 906.0	-64.1 +/- 148	257	pCi/L

- (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 510-620-2930 510-620-2911 <i>Attn: Shiyumalie Rubera</i>	Date Received 6-20-13	Lab No. (Leave Blank) 13-0482
	Date & Time Sampled 6/17/13 1122	Serial Number R 95916
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - R11B Address: PO BOX 99-7414 MS 76 RD Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.: _____	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

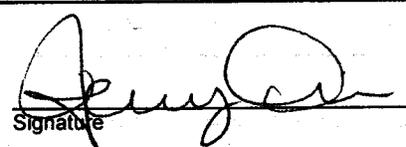
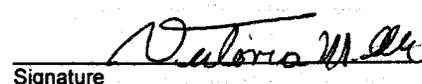
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 checked="" type="checkbox"/> Tritium (³ 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 6/17/13	Name (Print) Jenny Smith	Signature 	Date 6/18/13
	Time Custody Received 1122	Organization MBC		Time Custody Released 1700
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 6-20-13	Name (Print) UA	Signature 	Date
	Time Custody Received 9:00	Organization DWRLB		Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<input type="checkbox"/> Added While Sampling	<input type="checkbox"/> Added in Laboratory	<input type="checkbox"/> Not Added	<input type="checkbox"/> Not Applicable
---	--	------------------------------------	---

Handwritten notes: E 001 MK/HR, 1-12



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. 13-0483

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0483-01	Sample ID: R 95917 Sample Type: Seawater	Time Collected: 6/17/2013 09:40	Sampling Point: SONGS D	
K-40	EPA 901.1	357 +/- 23.1	85.2	pCi/L

- (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 510-620-2930 510-620-2911 Alt: Shiyamalie Ribera	Date Received 6-20-13	Lab No. (Leave Blank) 13-0483
	Date & Time Sampled 6/17/13 0940	Serial Number R 95917
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-R111B Address: PO Box 917414 MS 7010 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<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 (³ 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 6/17/13 0940	Name (Print) James Nuñez MBC Applied Environmental Sciences	Signature 	Date 6/17/13 1415	Time Custody Released 1415
2.	Date 6/17/13 1415	Name (Print) Jenny Smith MBC	Signature 	Date 6/18/13 1700	Time Custody Released 1700
3.	Date 6-20-13 9:00	Name (Print) UA DWR LB	Signature 	Date	Time Custody Released

LABORATORY REMARKS (Leave Blank)

0.01 MR/HR

A. Condition at Time of Receipt:	<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. Preservatives/Carriers:	<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. 13-0484

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / June 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 6/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0484-01	Sample ID: R 95919 Sample Type: Seawater	Time Collected: 6/17/2013 09:40	Sampling Point: SONGS D	
Tritium	EPA 906.0	32.0 +/- 150	257	pCi/L

- (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 510-620-2930 510-620-2911 <i>Attn: Shiyamalie Rubera</i>	Date Received <i>6-20-13</i>	Lab No. (Leave Blank) <i>13-0484</i>
	Date & Time Sampled <i>6/17/13 0940</i>	Serial Number R 95919
Collector Information Name: <i>James Nuñez</i> Dept./Branch: <i>MBC Applied Environmental Sciences</i> Address: <i>3000 Red Hill Ave. Costa Mesa, Ca 92626</i> Telephone No.: <i>714-850-4830</i>	Reporting Information Name: <i>Steve Hsu</i> Dept./Branch: <i>CDPH - RHB</i> Address: <i>PO Box 99-7414 MS 7610 Sacramento, Ca 95899</i> Telephone No.: <i>916-440-7940</i>	
Sample Information System Name / Facility: <i>SONGS</i> Sampling Point (s): <i>D</i> System No.: _____	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³H)	<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: <i>6/17/13</i>	Name (Print): <i>James Nuñez</i>	Signature: _____	Date: <i>6/17/13</i>
Time Custody Received: <i>0940</i>	Organization: <i>MBC Applied Environmental Sciences</i>	Signature: _____	Date: <i>1415</i>
2. Date: <i>6/17/13</i>	Name (Print): <i>Jenny Smith</i>	Signature: _____	Time Custody Released: <i>6/18/13</i>
Time Custody Received: <i>1415</i>	Organization: <i>MBC</i>	Signature: _____	Date: <i>1700</i>
3. Date: <i>6-20-13</i>	Name (Print): <i>UA</i>	Signature: <i>Victoria M. Ah...</i>	Time Custody Released: _____
Time Custody Received: <i>9:00</i>	Organization: <i>DWR/B</i>	Signature: _____	Date: _____
			Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

400.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0384

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0384-01	Sample ID: R 96053 Sample Type: Seawater	Time Collected: 5/16/2013 11:40	Sampling Point: SONGS A	
K-40	EPA 901.1	242 +/- 18.7	74.7	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 5-17-13	Lab No. (Leave Blank) 13-03-44
	Date & Time Sampled 5/16/13 1140	Serial Number R 96053

Collector Information Name: Wayne Dossett Dept./Branch: MBC SONGS Applied Environmental Address: 3000 Red Hill Ave. Costa Mesa, Ca. 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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)

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 Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time: _____
 Milk Soil/Sediment
 Starting: _____
 Wipes Biota (Type): _____
 Net (M³): _____
 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 (³H) 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: 5/16/13	Name (Print): Wayne Dossett	Signature: [Signature]	Date: 5/16/13
	Time Custody Received: 1140	Organization: MBC		Time Custody Released: 1700
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 5-17-13	Name (Print): UA	Signature: [Signature]	Date: _____
	Time Custody Received: 1340	Organization: DURIB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

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

≤ 0.01 MR/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. 13-0385

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0385-01	Sample ID: R 96054 Sample Type: Seawater	Time Collected: 5/16/2013 11:40	Sampling Point: SONGS A	
Tritium	EPA 906.0	86.1 +/- 152	257	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shyamalie Rubera	Date Received 5-17-13	Lab No. (Leave Blank) 13-0385
	Date & Time Sampled 5/16/13 1140	Serial Number R 96054

Collector Information Name: Wayne Dossett Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave, Costa Mesa, CA 92626 Telephone No.: 949-440-7940	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7010 Sacramento, CA 95899 Telephone No.: 916-440-7940
---	--

Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.):

<input type="checkbox"/> Field Treatment: Preservatives added: _____	iced/Frozen: _____	Other: _____
<input type="checkbox"/> Field Measurement: _____ mR/hr	<input type="checkbox"/> Radionuclide(s), if known: _____	
<input type="checkbox"/> 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 checked="" type="checkbox"/> Tritium (³ 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: 5/16/13	Name (Print): Wayne Dossett	Date: 5/16/13
	Time Custody Received: 1140	Organization: MBC	Time Custody Released: 1700
2.	Date: _____	Name (Print): _____	Date: _____
	Time Custody Received: _____	Organization: _____	Time Custody Released: _____
3.	Date: 5-17-13	Name (Print): UA	Date: _____
	Time Custody Received: 13:40	Organization: DWRLB	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

0.01 MR/HR

A. Condition at Time of Receipt:			
<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. Preservatives/Carriers:			
<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. 13-0386

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0386-01	Sample ID: R96057 Sample Type: Seawater	Time Collected: 5/16/2013 11:52	Sampling Point: SONGS B	
K-40	EPA 901.1	251 +/- 18.7	74.0	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamale Rubera	Date Received 5-17-13	Lab No. (Leave Blank) 13-0386
	Date & Time Sampled 5/16/13 1152	Serial Number R 96057

Collector Information Name: Wayne Dossett Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940
---	--

Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" type="checkbox"/> Seawater	<input type="checkbox"/> Sludge (Semi-solid Samples)
Finishing: _____	_____	<input type="checkbox"/> Milk	<input type="checkbox"/> Soil/Sediment
Starting: _____	_____	<input checked="" type="checkbox"/> Wipes	<input type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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 (³ 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: 5/16/13 Time Custody Received: 1152	Name (Print): Wayne Dossett Organization: MBC	Signature: [Signature]	Date: 5/16/13 Time Custody Released: 1700
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 5-17-13 Time Custody Received: 13:40	Name (Print): VA Organization: DWRLB	Signature: [Signature]	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) ≤ 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0387

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0387-01	Sample ID: R 96058 Sample Type: Seawater	Time Collected: 5/16/2013 11:52	Sampling Point: SONGS B	
Tritium	EPA 906.0	12.0 +/- 150	257	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 5-17-13
Lab No. (Leave Blank) 13-0387
Date & Time Sampled 5/16/13 1152
Serial Number R 96058

Collector Information
Name: Wayne Dosselt
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-2830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7010 Sacramento, CA 95899
Telephone No.: 916-440-7000

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
DWFOB () RHB RWQCB () DTSC
DWTPB FDB DWR CDFG
EMB 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)
Milk Soil/Sediment
Wipes Biota (Type):
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 (3H) 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 5/16/13 Name (Print) Wayne Dosselt Date 5/16/13
Time Custody Received 1152 Organization MBC Signature Wayne Dosselt Time Custody Released 1700
2. Date Name (Print) Signature Date
Time Custody Received Organization Signature Time Custody Released
3. Date 5-17-13 Name (Print) VA Signature Date
Time Custody Received 13:40 Organization DWRLB Signature Date 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 Nbt 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. 13-0388

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0388-01	Sample ID: R 96059 Sample Type: Seawater	Time Collected: 5/16/2013 11:46	Sampling Point: SONGS C	
K-40	EPA 901.1	358 +/- 17.8	59.9	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamali Rubera

Date Received

5-17-13

Lab No. (Leave Blank)

13-0388

Date & Time Sampled

5/16/13 1146

Serial Number

R 96059

Collector Information

Name: Wayne Dossett
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve HSU
Dept./Branch: CDPH - RHB
Address: PO Box 99 - 7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-1940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): C

Billing Agency

- Checkboxes for billing agency: DWFOB, DWTPB, EMB, RHB, FDB, Other, RWQCB, DWR, DTSC, CDFG

System No.:

TYPE OF SAMPLE (Check all applicable boxes)

- Checkboxes for sample type: Drinking Water, Raw, Treated (Chlorinated, etc.), Groundwater, Water Treatment Plant (WTP), Surface Water, Distribution System, Wastewater, Point of Use (POU)

- Checkboxes for collection method: Air Filters, Seawater, Sludge, Milk, Wipes, Radon Canister, etc.

COMMENTS: (Cautions, etc.):

- Checkboxes for comments: Field Treatment, Field Measurement, Rush/Priority, etc.

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

- Checkboxes for analysis requested: Gross Alpha, Total Uranium, Total Radium, Radium-226, Radium-228, Radon-222, Other, 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, Iron-55

CHAIN OF CUSTODY

Table with 4 columns: Step, Date, Name (Print), Organization, Signature, Date, Time Custody Released. Includes handwritten entries for Wayne Dossett and Victoria M. Ph...

LABORATORY REMARKS (Leave Blank)

- Checkboxes for laboratory remarks: Condition at Time of Receipt (Acceptable, Broken Container, etc.), Preservatives/Carriers (Added While Sampling, etc.)



State of California - Health and Human Services Agency

California Department of Public Health

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. 13-0389

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA ₉₅	Units
Lab No: 13-0389-01	Sample ID: R 96060 Sample Type: Seawater	Time Collected: 5/16/2013 11:46	Sampling Point: SONGS C	
Tritium	EPA 906.0	-22.0 +/- 149	257	pCi/L

- (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
Attn: Shiyamalie Rubera

Date Received

5-17-13

Lab No. (Leave Blank)

13-0389

Date & Time Sampled

5/16/13 1146

Serial Number

R 96060

Collector Information

Name:
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-744 MS 7010 Sacramento, CA 95899
Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): C

Billing Agency

DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB Other (Specify) _____

System No.:

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 Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³) _____ 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 (3H) 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: 5/16/13	Name (Print): Wayne Dosselt	Signature: [Signature]	Date: 5/16/13
	Time Custody Received: 1146	Organization: MBC		Time Custody Released: 1700
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 5-17-13	Name (Print): UA	Signature: [Signature]	Date: _____
	Time Custody Received: 13:40	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

0.05 mR/hr

7.17



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. 13-0390

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0390-01	Sample ID: R 96061 Sample Type: Seawater	Time Collected: 5/16/2013 12:55	Sampling Point: SONGS D	
K-40	EPA 901.1	362 +/- 18.4	63.4	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shyamalie Rubera	Date Received 5-17-13	Lab No. (Leave Blank) 13-0390
	Date & Time Sampled 5/16/13 1255	Serial Number R 96061
Collector Information Name: James Nuñez Dept./Branch: WBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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: _____

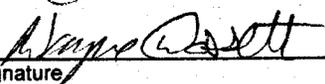
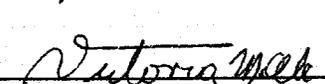
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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 5/16/13	Name (Print) James Nuñez	Signature 	Date 5/16/13
	Time Custody Received 1255	Organization WBC Applied Environmental Sciences		Time Custody Released 1700
2.	Date 5/16/13	Name (Print) Wayne D. Scott	Signature 	Date 5/16/13
	Time Custody Received 1355	Organization MBC		Time Custody Released 1700
3.	Date 5-17-13	Name (Print) UA	Signature 	Date 5-17-13
	Time Custody Received 13:40	Organization DWRLB	Signature 	Time Custody Released

LABORATORY REMARKS (Leave Blank) ±0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0391

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / May 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 5/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0391-01	Sample ID: R 96062 Sample Type: Seawater	Time Collected: 5/16/2013 12:55	Sampling Point: SONGS D	
Tritium	EPA 906.0	124 +/- 153	257	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalu Rebera	Date Received 5-17-13	Lab No. (Leave Blank) 13-0391
	Date & Time Sampled 5/16/13 1255	Serial Number R 96062
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO BOX 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7440	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (3H)	<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: 5/16/13 Time Custody Received: 1255	Name (Print): James Nuñez Organization: MBC Applied Environmental Sciences	Signature:	Date: 5/16/13 Time Custody Released: 1355
2. Date: 5/16/13 Time Custody Received: 1355	Name (Print): Wayne Dossert Organization: MBC	Signature:	Date: 5/16/13 Time Custody Released: 1700
3. Date: 5-17-13 Time Custody Received: 13:40	Name (Print): J A Organization: DWALD	Signature:	Date: _____ 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

257-12
 ≤ 0.01 MR/LR



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. 13-0288

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0288-01	Sample ID: R 96034 Sample Type: Seawater	Time Collected: 4/18/2013 11:22	Sampling Point: SONGS A	
K-40	EPA 901.1	418 +/- 18.9	60.8	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911 Attn: Shiyamalee Rukera	Date Received 4-19-13	Lab No. (Leave Blank) 13-0248
	Date & Time Sampled 4/18/13 1122	Serial Number R 96034
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95877 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 (³ 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 4/18/13	Name (Print) Jenny Smith	Signature 	Date 4/18/13
	Time Custody Received 1122	Organization MBC		Time Custody Released 1700
2.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 4-19-13	Name (Print) UA	Signature	Date
	Time Custody Received 13:30	Organization DWRLB	Signature Victoria M. Ali	Time Custody Released

LABORATORY REMARKS (Leave Blank)

≤ 0.01 mR / HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0289

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA ₉₅	Units
Lab No: 13-0289-01	Sample ID: R 96035 Sample Type: Seawater	Time Collected: 4/18/2013 11:22	Sampling Point: SONGS A	
Tritium	EPA 906.0	-63.2 +/- 152	264	pCi/L

- (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
Alt: Shiyamatie Rubera

Date Received: 4-19-13
Lab No. (Leave Blank): 13-0249
Date & Time Sampled: 4/18/13 1122
Serial Number: R 96035

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH - RHB
Address: PO Box 99-7414 MS 760
Sacramento, CA 95899
Telephone No.: 916-440-7910

Sample Information
System Name / Facility: SONGS
Sampling Point (s): A
System No.:

Billing Agency
DWFOB ()
DWTPB
EMB
RHB (checked)
FDB
Other (Specify)

TYPE OF SAMPLE (Check all applicable boxes)
Drinking Water
Raw
Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters
Air Charcoal Cartridge
Seawater (checked)
Milk
Wipes
Radon Canister
Sludge (Semi-solid Samples)
Soil/Sediment
Biota (Type):
Other:

COMMENTS: (Cautions, etc.):
Field Treatment: Preservatives added:
Field Measurement: mR/hr
Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)
Gross Alpha
Total Uranium
Total Radium
Radium-226
Radium-228
Radon-222
Other (Specify):
Gross Beta
Total Beta (LSC)
Tritium (3H) (checked)
Carbon-14
Iodine-131
Strontium-89, 90
Nickel-63
Gamma Scan
NORM (Gamma)
Isotopic Americium / Curium
Isotopic Plutonium
Isotopic Thorium
Isotopic Uranium
Iron-55

CHAIN OF CUSTODY
1. Date: 4/18/13, Time Custody Received: 1122, Name (Print): Jenny Smith, Organization: MBC, Signature: [Signature], Date: 4/18/13, Time Custody Released: 1700
2. Date: , Name (Print): , Organization: , Signature: , Date: , Time Custody Released:
3. Date: 4-19-13, Time Custody Received: 13:30, Name (Print): UA, Organization: DWRLB, Signature: [Signature], Date: , Time Custody Released:

LABORATORY REMARKS (Leave Blank)
A. Condition at Time of Receipt:
Acceptable (checked)
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. 13-0290

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0290-01	Sample ID: R 96038 Sample Type: Seawater	Time Collected: 4/18/2013 11:33	Sampling Point: SONGS B	
K-40	EPA 901.1	374 +/- 23.2	84.4	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 510-620-2930
510-620-2911 Attn: Shiyamaltee Rubera

Date Received 4-19-13 Lab No. (Leave Blank) 13-0290
Date & Time Sampled 4/18/13 1133 Serial Number R 96038

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7140

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
DWFOB () RHB RWQCB () DTSC
DWTPB FDB DWR CDFG
EMB 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^3) Milk Soil/Sediment
Wipes Biota (Type):
Radon Canister Other:

COMMENTS: (Cautions, etc.):
Field Treatment: Preservatives added: Cooled/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 (3H) 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 4/18/13 Name (Print) Jenny Smith Signature
Time Custody Received 1133 Organization MBC
2. Date 13:02:49 Name (Print) Signature
Time Custody Received Organization UA
3. Date 4-19-13 Name (Print) DWRLB Signature
Time Custody Received 13:30 Organization

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. 13-0291

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0291-01	Sample ID: R 96039 Sample Type: Seawater	Time Collected: 4/18/2013 11:33	Sampling Point: SONGS B	
Tritium	EPA 906.0	-151 +/- 150	264	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 4-19-13
Lab No. (Leave Blank) 13-0291
Date & Time Sampled 4/18/13 1133
Serial Number R 96039

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7441ms 7612 Sacramento, CA 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
[] DWFOB () [x] RFB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 [x] Seawater [] Sludge (Semi-solid Samples)
Finishing: [] Milk [] Soil/Sediment
Starting: [] Wipes [] Biota (Type):
Net (M³) [] 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 [x] Tritium (³H) [] 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 4/18/13 Name (Print) Jenny Smith Signature [Signature] Date 4/18/13
Time Custody Received 1133 Organization MBC Time Custody Released 1200
2. Date Name (Print) Signature Date
Time Custody Received Organization Signature Time Custody Released
3. Date 4-19-13 Name (Print) UA Signature Date
Time Custody Received 13:30 Organization DWRLB Signature Victoria M. [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

≤ 0.01 MR/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. 13-0292

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0292-01	Sample ID: R 96044 Sample Type: Seawater	Time Collected: 4/18/2013 11:28	Sampling Point: SONGS C	
K-40	EPA 901.1	377 +/- 18.2	60.6	pCi/L

- (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 510-620-2930 510-620-2911 <i>Att: Shiyamalie Rubera</i>	Date Received <i>4-19-13</i>	Lab No. (Leave Blank) <i>13-0292</i>
	Date & Time Sampled <i>4/18/13 1128</i>	Serial Number R 96044
Collector Information Name: <i>Jenny Smith</i> Dept./Branch: <i>MBC Applied Environmental Sciences</i> Address: <i>3000 Red Hill Ave. Costa Mesa, Ca 92626</i> Telephone No.: <i>714-850-4830</i>	Reporting Information Name: <i>Steve HSU</i> Dept./Branch: <i>CDPH - RHB</i> Address: <i>PO Box 99-7414 MS 7010 Sacramento, Ca 95899</i> Telephone No.: <i>916-440-7940</i>	
Sample Information System Name / Facility: <i>SONGS</i> Sampling Point (s): <i>C</i> System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 (³ 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: <i>4/18/13</i>	Name (Print): <i>Jenny Smith</i>	Signature: <i>[Signature]</i>	Date: <i>4/18/13</i>
Time Custody Received: <i>1128</i>	Organization: <i>MBC</i>		Time Custody Released: <i>1700</i>
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3. Date: <i>4-19-13</i>	Name (Print): <i>VIA</i>	Signature: <i>[Signature]</i>	Date: _____
Time Custody Received: <i>13:30</i>	Organization: <i>DWRLB</i>		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

≤ 0.01 MR/HR

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



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. 13-0293

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 3013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0293-01 Sample ID: R 96047 Sample Type: Seawater		Time Collected: 4/18/2013 11:28	Sampling Point: SONGS C	
Tritium	EPA 906.0	-112 +/- 151	264	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 4-19-13	Lab No. (Leave Blank) 13-0293
Date & Time Sampled 4/18/13 1128	Serial Number R 96047

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH-RHB-
Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899
Telephone No.: 916-440-7140

Sample Information

System Name / Facility: SONGS
Sampling Point (s): C

Billing Agency

- DWFOB () RHB RWQCB () DTSC
- DWTPB FDB DWR CDFG
- EMB Other (Specify) _____

System No.:

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 Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³) _____ 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 (³H) 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: 4/18/13 Time Custody Received: 1128	Name (Print): Jenny Smith Organization: MBC	Signature:	Date: 4/18/13 Time Custody Released: 1700
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 4-19-13 Time Custody Received: 13:30	Name (Print): UA Organization: DWRLB	Signature:	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

- ≤ 0.01 MR/HR
- 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. 13-0294

Investigator: Robert Moore	MBC	Requestor: Roger Lupo	RHB
	CA	CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	Phone Number: 916-440-7955
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0294-01	Sample ID: R 96049 Sample Type: Seawater	Time Collected: 4/18/2013 13:00	Sampling Point: SONGS D	
K-40	EPA 901.1	333 +/- 16.9	57.0	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 4-19-13 Lab No. (Leave Blank) 13-0294
Date & Time Sampled 4/18/13 1300 Serial Number R 96049

Collector Information
Name: Robert Moore
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 914-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): D
System No.:

Billing Agency
[] DWFOB () [x] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 / Peroxozone / Fluoridated / Coagulated / pH Adjusted
[] Air Filters Date/Time [x] Seawater [] Sludge (Semi-solid Samples)
[] Air Charcoal Cartridge [] Milk [] Soil/Sediment
[] Wipes [] Biota (Type):
[] Radon Canister [] Other:

COMMENTS: (Cautions, etc.):

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

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

- [] Gross Alpha [] Gross Beta [x] Gamma Scan
[] Total Uranium [] Total Beta (LSC) [] NORM (Gamma)
[] Total Radium [] Tritium (3H) [] 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

Table with 4 columns: Step, Date, Name (Print), Organization, Signature, Date, Time Custody Released. Contains handwritten entries for Robert Moore, Jenny Smith, and Victoria M. De... with dates and times.

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. 13-0295

Investigator: Robert Moore	MBC	Requestor: Roger Lupo	RHB
	CA	CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / April 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/19/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0295-01	Sample ID: R 96050 Sample Type: Seawater	Time Collected: 4/18/2013 13:00	Sampling Point: SONGS D	
Tritium	EPA 906.0	-149 +/- 150	264	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 4-19-13	Lab No. (Leave Blank) 13-0295
	Date & Time Sampled 4/18/13 1:30P	Serial Number R 96050
Collector Information Name: Robert Moore Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: STEVE HSU Dept./Branch: CDPH - R4B Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899 Telephone No.: 916-440-7040	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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 4/18/13	Name (Print) Robert Moore	Signature 	Date 4/18/13
	Time Custody Received 1:30P	Organization MBC		Time Custody Released 1:30P
2.	Date 4/18/13	Name (Print) Jenny Smith	Signature 	Date 4/18/13
	Time Custody Received 1:30P	Organization MBC		Time Custody Released 1:30P
3.	Date 4-19-13	Name (Print) VA	Signature 	Date
	Time Custody Received 1:30P	Organization DWRLB	Signature 	Time Custody Released

LABORATORY REMARKS (Leave Blank)

50.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0203

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0203-01	Sample ID: R 96019 Sample Type: Seawater	Time Collected: 3/18/2013 11:37	Sampling Point: SONGS A	
K-40	EPA 901.1	340 +/- 17.5	59.7	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
Richmond, CA 94804
510-620-2911
Attn: Shiyamalie Rubera

Date Received: 3-20-13
Lab No. (Leave Blank): 13-0203
Date & Time Sampled: 3/18/13 1137
Serial Number: R 96019

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-890-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH - R4B
Address: PO Box 99-744 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-1940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A
System No.:

Billing Agency

DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB 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 Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³) _____ 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 (3H) 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: 3/18/13 Name (Print): Jenny Smith Signature: [Signature] Date: 3/19/13
Time Custody Received: 1137 Organization: MBC Signature: [Signature] Time Custody Released: 1700
2. Date: _____ Name (Print): _____ Signature: _____ Date: _____
Time Custody Received: _____ Organization: _____ Signature: _____ Time Custody Released: _____
3. Date: 3-20-13 Name (Print): VA Signature: [Signature] Date: _____
Time Custody Received: 11:30 Organization: DWRLB Signature: [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. 13-0204

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0204-01	Sample ID: R 96020 Sample Type: Seawater	Time Collected: 3/18/2013 11:37	Sampling Point: SONGS A	
Tritium	EPA 906.0	81.6 +/- 152	264	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received

3-20-13

Lab No. (Leave Blank)

13-0204

Date & Time Sampled

3/18/13 1137

Serial Number

R 96020

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave - Costa Mesa, CA 92626

Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH - RHB
Address: PO Box 99-744, MS 71010
Sacramento, CA 95819

Telephone No.: 916-440-7440

Sample Information

System Name / Facility: SONGS
Sampling Point (s): A

System No.:

Billing Agency

- DWFOB ()
- RHB
- RWQCB ()
- DTSC
- DWTPB
- FDB
- DWR
- CDFG
- EMB
- Other (Specify) _____

TYPE OF SAMPLE (Check all applicable boxes)

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

Air Filters

Finishing: _____ Date/Time _____
Starting: _____
Net (M³) _____

Air Charcoal Cartridge

Seawater

- Seawater
- Milk
- Wipes
- Radon Canister

Sludge (Semi-solid Samples)

- Sludge (Semi-solid Samples)
- Soil/Sediment
- Biota (Type): _____
- 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
- 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
- Iron-55

CHAIN OF CUSTODY

1.	3/18/13 Date	Jenny Smith Name (Print)		3/19/13 Date
	1137 Time Custody Received	MBC Organization		1700 Time Custody Released
2.	_____ Date	_____ Name (Print)	_____ Signature	_____ Date
	_____ Time Custody Received	_____ Organization	_____ Signature	_____ Time Custody Released
3.	3-20-13 Date	VA Name (Print)		_____ Date
	1130 Time Custody Received	DIWRLB Organization		_____ Time Custody Released

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
- ≤ 0.01 mR/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. 13-0205

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0205-01	Sample ID: R 96023 Sample Type: Seawater	Time Collected: 3/18/2013 11:51	Sampling Point: SONGS B	
K-40	EPA 901.1	367 +/- 21.1	77.3	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911
Attn: Shiyamalie Rubera

Date Received: 3-20-13
Lab No. (Leave Blank): 13-0205
Date & Time Sampled: 3/18/13 1151
Serial Number: R 96023

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7440

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
[] DWFOB () [x] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 [x] Seawater [] Sludge (Semi-solid Samples)
[] Air Charcoal Cartridge [] Milk [] Soil/Sediment
[] Wipes [] Biota (Type):
[] 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 [x] Gamma Scan
[] Total Uranium [] Total Beta (LSC) [] NORM (Gamma)
[] Total Radium [] Tritium (3H) [] 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

Table with 3 rows and 4 columns: Step, Date, Name (Print), Organization, Signature, Date, Time Custody Released. Includes handwritten entries for Jenny Smith (MBC) and Victor M. Ali (DWR/LB).

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. 13-0206

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0206-01	Sample ID: R 96024 Sample Type: Seawater	Time Collected: 3/18/2013 11:51	Sampling Point: SONGS B	
Tritium	EPA 906.0	-130 +/- 150	264	pCi/L

- (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
Attn: Shiyamalie Rubera

Date Received: 3-20-13
Lab No. (Leave Blank): 13-0206
Date & Time Sampled: 3/18/13 1151
Serial Number: R 96024

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPH - RHB
Address: PO Box 971 - 7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-7440

Sample Information
System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency
[] DWFOB () [X] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 [X] Seawater [] Sludge (Semi-solid Samples)
Finishing: _____ [] Milk [] Soil/Sediment
Starting: _____ [] Wipes [] Biota (Type): _____
Net (M³) _____ [] 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 [X] Tritium (³H) [] 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: 3/18/13 Name (Print): Jenny Smith Signature: [Signature] Date: 3/19/13
Time Custody Received: 1151 Organization: MBC Signature: [Signature] Time Custody Released: 1700
2. Date: _____ Name (Print): _____ Signature: _____ Date: _____
3. Date: 3-20-13 Name (Print): UA Signature: _____ Date: _____
Time Custody Received: 11:30 Organization: DWRLB Signature: [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
Handwritten: <= 0.01 MR/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. 13-0207

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0207-01	Sample ID: R 96028 Sample Type: Seawater	Time Collected: 3/18/2013 11:45	Sampling Point: SONGS C	
K-40	EPA 901.1	352 +/- 17.6	59.1	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911

Attn: Shiyamalie Rubera

Date Received

3-20-13

Lab No. (Leave Blank)

13-0207

Date & Time Sampled

3/18/13 1145

Serial Number

R 96028

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626

Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899

Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): C

System No.:

Billing Agency

- DWFOB () RHB RWQCB () DTSC
- DWTPB FDB DWR CDFG
- EMB 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 Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³) _____ 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 (T₃H) 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 3/18/13 Time Custody Received 1145	Name (Print) Jenny Smith Organization MBC	Signature 	Date 3/19/13 Time Custody Released 1700
2.	Date _____ Time Custody Received _____	Name (Print) _____ Organization _____	Signature _____	Date _____ Time Custody Released _____
3.	Date 3-20-13 Time Custody Received 11:30	Name (Print) UA Organization DWRLB	Signature 	Date _____ Time Custody Released _____

LABORATORY REMARKS (Leave Blank)

- 5.001 MR/HR
- 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. 13-0208

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0208-01	Sample ID: R 96029 Sample Type: Seawater	Time Collected: 3/18/2013 11:45	Sampling Point: SONGS C	
Tritium	EPA 906.0	-110 +/- 151	264	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Sriyamale Rubera

Date Received 3-20-13
Lab No. (Leave Blank) 13-0206
Date & Time Sampled 3/18/13 1145
Serial Number R 96029

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): C
System No.: 0-18-6

Billing Agency
DWFOB () RHB RWQCB () DTSC
DWTPB FDB DWR CDFG
EMB 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
Starting: Wipes Soil/Sediment
Net (M³) Radon Canister Biota (Type):
Air Charcoal Cartridge Other:

COMMENTS: (Cautions, etc.):
Field Treatment: Preservatives added:
Field Measurement: mR/hr
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 (³H) 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 3/18/13 Name (Print) Jenny Smith Signature [Signature] Date 3/19/13
Time Custody Received 1145 Organization MBC Signature [Signature] Time Custody Released 1700
2. Date Name (Print) Signature Date
Time Custody Received Organization Signature Time Custody Released
3. Date 3-20-13 Name (Print) UA Signature Date
Time Custody Received 11:30 Organization DWRLB Signature [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. 13-0209

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / SONGS D			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0209-01	Sample ID: R 96030 Sample Type: Seawater	Time Collected: 3/18/2013 11:20	Sampling Point: SONGS D	
K-40	EPA 901.1	294 +/- 20.4	79.3	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 3-20-13	Lab No. (Leave Blank) 13-0209
	Date & Time Sampled 3/18/13 1120	Serial Number R 96030

Collector Information Name: Wayne Dosssett Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940
---	---

Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 (³ 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: 3/18/13	Name (Print): Wayne Dosssett	Signature:	Date: 3/18/13
Time Custody Received: 1120	Organization: MRC	Signature: _____	Time Custody Released: 1500
2. Date: 3/18/13	Name (Print): Jenny Smith	Signature:	Date: 3/19/13
Time Custody Received: 1500	Organization: MBC	Signature: _____	Time Custody Released: 1700
3. Date: 3-20-13	Name (Print): UA	Signature:	Date: _____
Time Custody Received: 11:30	Organization: DWRLB	Signature: _____	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

≤ 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0210

Investigator: Wayne Dossett	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Sciences, 30		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / March 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 3/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0210-01	Sample ID: R 96031 Sample Type: Seawater	Time Collected: 3/18/2013 11:20	Sampling Point: SONGS D	
Tritium	EPA 906.0	-151 +/- 150	264	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 3-20-13	Lab No. (Leave Blank) 13-0210
	Date & Time Sampled 3/18/13 1120	Serial Number R 96031
Collector Information Name: Wayne Dossett Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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 3/18/13	Name (Print) Wayne Dossett	Signature <i>Wayne Dossett</i>	Date 3/18/13
	Time Custody Received 1120	Organization MBC		Time Custody Released 1500
2.	Date 3/18/13	Name (Print) Jenny Smith	Signature <i>Jenny Smith</i>	Date 3/19/13
	Time Custody Received 1500	Organization MBC		Time Custody Released 1700
3.	Date 3-20-13	Name (Print) UA	Signature <i>Victoria M. Chi</i>	Date
	Time Custody Received 11:30	Organization DWRLB		Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0140

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0140-01	Sample ID: R 96001 Sample Type: Seawater	Time Collected: 2/15/2013 11:27	Sampling Point: SONGS A	
K-40	EPA 901.1	361 +/- 17.7	59.0	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 510-620-2930 Attn: Shiyamaliz Robera	Date Received 2-20-13	Lab No. (Leave Blank) 13-0140
	Date & Time Sampled 2/15/13 1127	Serial Number R 96001

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 checked="" 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³): _____	_____	<input type="checkbox"/> Radon Canister	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Air Charcoal Cartridge			

COMMENTS: (Cautions, etc.):

Field Treatment: Preservatives added: _____

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 (³ 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: 2/15/13 Time Custody Received: 1127	Name (Print): Jenny Smith Organization: MBC	Signature:	Date: 2/15/13 Time Custody Released: 1800
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 2-20-13 Time Custody Received: 14:30	Name (Print): VA Organization: DWRLB	Signature:	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

C. 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0141

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0141-01	Sample ID: R 96004 Sample Type: Seawater	Time Collected: 2/15/2013 11:27	Sampling Point: SONGS A	
Tritium	EPA 906.0	10.04 +/- 150.28	257.65	pCi/L

- (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 Attn: Shiyamalie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 13-1480 0141
	Date & Time Sampled 2/15/13 1127	Serial Number R 96004

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4930	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940
---	--

Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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)

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time: _____
 Milk Soil/Sediment
 Starting: _____
 Wipes Biota (Type): _____
 Net (M³): _____
 Radon Canister Other: _____
 Air Charcoal Cartridge

COMMENTS: (Cautions, etc.): _____

Field Treatment: Preservatives added: _____ Cooled/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 (³H) 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: 2/15/13	Name (Print): Jenny Smith	Signature:	Date: 2/15/13
Time Custody Received: 1127	Organization: MBC	Signature: _____	Time Custody Released: 1800
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 2-20-13	Name (Print): UA	Signature: _____	Date: _____
Time Custody Received: 14:30	Organization: DWRLB	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

≤ 0.01 MR/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. 13-0142

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0142-01	Sample ID: R 96005 Sample Type: Seawater	Time Collected: 2/15/2013 11:42	Sampling Point: SONGS B	
K-40	EPA 901.1	332 +/- 22.2	82.1	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyannlie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 13-0142
	Date & Time Sampled 2/15/13 1142	Serial Number R 96005
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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 (³H)	<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: 12/15/13	Name (Print): Jenny Smith	Signature: [Signature]	Date: 12/15/13 JNS
Time Custody Received: 1142	Organization: MBC	Signature: [Signature]	Time Custody Released: 1800
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 1/2-20-13	Name (Print): VA	Signature: [Signature]	Date: _____
Time Custody Received: 14:30	Organization: DWRLB	Signature: [Signature]	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0143

Investigator: Jenny Smith MBC Applied Environmental Science, 300 Costa Mesa CA 92626 Phone Number: 714-850-4830	RHB	Requestor: Roger Lupo CDPH - RHB, 1500 Capitol Av., MS 7610 Sacramento CA 95814-5006 Phone Number: 916-440-7955	RHB
Site/Project Name: San Onofre NPP / February 2013		Samples Received by Lab: 2/20/2013	
System No:	Billing Agency: RHB		

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0143-01	Sample ID: R 96008 Sample Type: Seawater	Time Collected: 2/15/2013 11:42	Sampling Point: SONGS B	
Tritium	EPA 906.0	0.00 +/- 150.02	257.65	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received: 2-20-13
Lab No. (Leave Blank): 13-0143
Date & Time Sampled: 2/15/13 1142
Serial Number: R 96008

Collector Information

Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, CA 92626
Telephone No.: 714-850-4830

Reporting Information

Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899
Telephone No.: 916-440-1940

Sample Information

System Name / Facility: SONGS
Sampling Point (s): B
System No.:

Billing Agency

DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB 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 Seawater Sludge (Semi-solid Samples)
- Finishing: _____ Date/Time: _____ Milk Soil/Sediment
- Starting: _____ Wipes Biota (Type): _____
- Net (M³): _____ 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 (³H) 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: 2/15/13	Name (Print): Jenny Smith	Signature: [Signature]	Date: 2/15/13 JMS
	Time Custody Received: 1142	Organization: MBC		Time Custody Released: 1800
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 2-20-13	Name (Print): UA	Signature: [Signature]	Date: _____
	Time Custody Received: 14:30	Organization: DWRLB		Time Custody Released: _____

≤ 0.01 MR/HR

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. 13-0144

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0144-01	Sample ID: R 96009 Sample Type: Seawater	Time Collected: 2/15/2013 11:36	Sampling Point: SONGS C	
K-40	EPA 901.1	377 +/- 23.2	83.8	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911 Attn: Sniyamalie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 130140
	Date & Time Sampled 2/15/13 1136	Serial Number R 96009
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7140	
Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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 (³ 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: 2/15/13	Name (Print): Jenny Smith	Signature:	Date: 2/15/13 JNS
	Time Custody Received: 1136	Organization: MBC		Time Custody Released: 1800
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 2-20-13	Name (Print): UA	Signature:	Date: _____
	Time Custody Received: 14:30	Organization: DWRLB	Signature:	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank) ≤ 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0145

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0145-01	Sample ID: R 96010 Sample Type: Seawater	Time Collected: 2/15/2013 11:36	Sampling Point: SONGS C	
Tritium	EPA 906.0	-28.10 +/- 149.30	257.65	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 13-0145-
	Date & Time Sampled 2/15/13 1136	Serial Number R 96010

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, CA 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, CA 95899 Telephone No.: 916-440-7040
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): C System No.:	Billing Agency <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)

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Date/Time _____ Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Milk Soil/Sediment
 Starting: _____ Wipes Biota (Type): _____
 Net (M³) _____ 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 (³H) 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: 2/15/13	Name (Print): Jenny Smith	Signature: [Signature]	Date: 2/15/13 JMS
	Time Custody Received: 1136	Organization: MBC		Time Custody Released: 1800
2.	Date: _____	Name (Print): _____	Signature: _____	Date: _____
	Time Custody Received: _____	Organization: _____		Time Custody Released: _____
3.	Date: 2-20-13	Name (Print): UA	Signature: [Signature]	Date: _____
	Time Custody Received: 14:30	Organization: DWRLB	Signature: Victoria M. Eli	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. 13-0146

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0146-01	Sample ID: R 96012 Sample Type: Seawater	Time Collected: 2/15/2013 11:10	Sampling Point: SONGS D	
K-40	EPA 901.1	349 +/- 20.7	76.4	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shyamalie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 13-0146
	Date & Time Sampled 2/15/13 1110	Serial Number R 96012

Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95879 Telephone No.: 916-440-7940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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 (3H)	<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: 2/15/13	Name (Print): James Nuñez	Signature: [Signature]	Date: 2/15/13
Time Custody Received: 1110	Organization: MBC Applied Environmental Sciences	Signature: [Signature]	Time Custody Released: 1520
2. Date: 2/15/13	Name (Print): Jenny Smith	Signature: [Signature]	Date: 2/19/13
Time Custody Received: 1520	Organization: MBC	Signature: [Signature]	Time Custody Released: 1800
3. Date: 2-20-13	Name (Print): VA	Signature: [Signature]	Date: _____
Time Custody Received: 14:30	Organization: DWRLB	Signature: Antonia M. [Signature]	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0147

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / February 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 2/20/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0147-01	Sample ID: R 96014 Sample Type: Seawater	Time Collected: 2/15/2013 11:10	Sampling Point: SONGS D	
Tritium	EPA 906.0	34.12 +/- 150.89	257.65	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 2-20-13	Lab No. (Leave Blank) 13-0147
	Date & Time Sampled 2/15/13 1110	Serial Number R 96014
Collector Information Name: James Nuñez Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve HSU Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610, Sacramento, ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): D System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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 checked="" type="checkbox"/> Tritium (³ 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: 2/15/13	Name (Print): James Nuñez	Signature:	Date: 2/15/13
Time Custody Received: 1110	Organization: MBC applied environmental sciences		Time Custody Released: 1520
2. Date: 2/15/13	Name (Print): Jenny Smith	Signature:	Date: 2/19/13 JNS
Time Custody Received: 1520	Organization: MBC		Time Custody Released: 1800
3. Date: 2-20-13	Name (Print): VA	Signature:	Date: _____
Time Custody Received: 1-1:30	Organization: DWRLB	Signature:	Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: ≤ 0.01 MR/HR

<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. Preservatives/Carriers:

<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. 13-0037

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0037-01	Sample ID: R 96118 Sample Type: Seawater	Time Collected: 1/15/2013 12:04	Sampling Point: SONGS A	
K-40	EPA 901.1	347 +/- 17.7	60.3	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamake Robera	Date Received 1-17-13	Lab No. (Leave Blank) 13-00336 13-0037
	Date & Time Sampled 1/15/13 1204	Serial Number R 96118
Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Science Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____		<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: _____

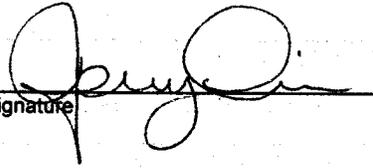
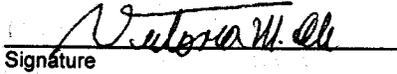
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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. <u>1/15/13</u> Date	<u>Jenny Smith</u> Name (Print)	 Signature	<u>1/15/13</u> Date
<u>1204</u> Time Custody Received	<u>MBC</u> Organization		<u>1700</u> Time Custody Released
2. _____ Date	_____ Name (Print)	_____ Signature	_____ Date
_____ Time Custody Received	_____ Organization		_____ Time Custody Released
3. <u>1-17-13</u> Date	<u>UA</u> Name (Print)	 Signature	_____ Date
<u>1:30</u> Time Custody Received	<u>DWR L B</u> Organization		_____ Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: ≤ 0.01 MR/HR

<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. Preservatives/Carriers:

<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. 13-0038

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0038-01	Sample ID: R 96121 Sample Type: Seawater	Time Collected: 1/15/2013 12:04	Sampling Point: SONGS A	
Tritium	EPA 906.0	-58.21 +/- 148.52	257.65	pCi/L

- (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 510-620-2930 510-620-2911 Attn: Shiyamahe Rubera		Date Received 1-17-13	Lab No. (Leave Blank) 13-0038
Collector Information Name: Jenny Smith Dept./Branch: SONGS Address: 3000 Red Hill Ave Costa Mesa, Ca 92626 Telephone No.: 714-850-4830		Date & Time Sampled 1/15/13 1204	Serial Number R 96121
Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-744 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-1940		Billing Agency <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) _____	
Sample Information System Name / Facility: SONGS Sampling Point (s): A System No.: A			

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 Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time _____
 Starting: _____
 Net (M³) _____
 Air Charcoal Cartridge

Milk Soil/Sediment
 Wipes Biota (Type): _____
 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 (³H) 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: 1/15/13 Time Custody Received: 1204	Name (Print): Jenny Smith Organization: MBC	Signature: [Signature]	Date: 1/16/13 Time Custody Released: 1700
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 1-17-13 Time Custody Received: 13:30	Name (Print): UA Organization: DWRLB	Signature: [Signature]	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

Condition at Time of Receipt: ≤ 0.01 MK/HR

Acceptable Broken Container Leaked in Transit Improper Container
 Holding Time Exceeded Sample Not Cooled Insufficient Sample

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. 13-0039

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0039-01	Sample ID: R 96123 Sample Type: Seawater	Time Collected: 1/15/2013 12:18	Sampling Point: SONGS B	
K-40	EPA 901.1	339 +/- 17.1	57.6	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2930 510-620-2911 Attn: Shiyamalie Rubera	Date Received 11/17/13	Lab No. (Leave Blank) 13-0039
	Date & Time Sampled 1/15/13 1218	Serial Number R 96123

Collector Information Name: Jenny Smith Dept./Branch: MBC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH-RHB Address: PO Box 99-7914 MS 7410 Sacramento, Ca 95899 Telephone No.: 916-440-7940
--	--

Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted			
<input type="checkbox"/> Air Filters	Date/Time	<input checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

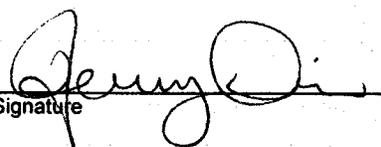
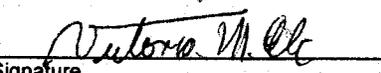
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 (³ 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. 1/15/13 Date	Jenny Smith Name (Print)		1/16/13 Date
1218 Time Custody Received	MBC Organization		1700 Time Custody Released
2. _____ Date	_____ Name (Print)	_____ Signature	_____ Date
_____ Time Custody Received	_____ Organization	_____ Signature	_____ Time Custody Released
3. 1-17-13 Date	VA Name (Print)		_____ Date
13:30 Time Custody Received	DWRCB Organization		_____ Time Custody Released

LABORATORY REMARKS (Leave Blank)

A. Condition at Time of Receipt: ≤ 0.01 MR/HR

<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. Preservatives/Carriers:

<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. 13-0040

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0040-01	Sample ID: R 96125 Sample Type: Seawater	Time Collected: 1/15/2013 12:18	Sampling Point: SONGS B	
Tritium	EPA 906.0	-44.16 +/- 148.88	257.65	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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 510-620-2930 510-620-2911 Atn: Shiyamalie Robera	Date Received 1-17-13	Lab No. (Leave Blank) 13-00310
	Date & Time Sampled 1/15/13 1218	Serial Number R 96125
Collector Information Name: Jenny Smith Dept./Branch: ABC Applied Environmental Sciences Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626 Telephone No.: 714-850-4830	Reporting Information Name: Steve Hsu Dept./Branch: CDPH - RHB Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899 Telephone No.: 916-440-7940	
Sample Information System Name / Facility: SONGS Sampling Point (s): B System No.:	Billing Agency <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 checked="" 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 type="checkbox"/> Biota (Type): _____
Net (M ³) _____	_____	<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: _____

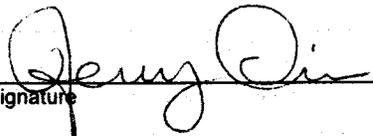
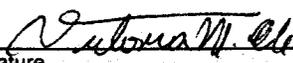
Field Measurement: _____ mR/hr Radionuclide(s), if known: _____

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 checked="" type="checkbox"/> Tritium (³ 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: 1/15/13	Name (Print): Jenny Smith	Signature: 	Date: 1/16/13
Time Custody Received: 1218	Organization: ABC		Time Custody Released: 1700
2. Date: _____	Name (Print): _____	Signature: _____	Date: _____
Time Custody Received: _____	Organization: _____	Signature: _____	Time Custody Released: _____
3. Date: 1-17-13	Name (Print): VA	Signature: 	Date: _____
Time Custody Received: 13:30	Organization: DWRLB		Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

< 0.01 MR/HR

A. Condition at Time of Receipt:

<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. Preservatives/Carriers:

<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. 13-0041

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0041-01	Sample ID: R 96129 Sample Type: Seawater	Time Collected: 1/15/2013 12:10	Sampling Point: SONGS C	
K-40	EPA 901.1	342 +/- 18.3	63.8	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 1-17-13 Lab No. (Leave Blank) 13-0041
Date & Time Sampled 1/15/13 1210 Serial Number R 96129

Collector Information
Name: Jenny Smith
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 ms 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): C
System No.:

Billing Agency
[] DWFOB () [X] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 [X] Seawater [] Sludge (Semi-solid Samples)
[] Finishing: [] Milk [] Soil/Sediment
[] Starting: [] Wipes [] Biota (Type):
[] Net (M³) [] 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 [X] Gamma Scan
[] Total Uranium [] Total Beta (LSC) [] NORM (Gamma)
[] Total Radium [] Tritium (³H) [] 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 02/15/13 Name (Print) Jenny Smith Signature [Signature] Date 01/16/13 JNS 1/16/13
Time Custody Received 1210 Organization MBC Signature [Signature] Time Custody Released 1700
2. Date Name (Print) Signature Date
Time Custody Received Organization Signature Time Custody Released
3. Date 1-17-13 Name (Print) UA Signature Date
Time Custody Received 13:30 Organization DWRLB Signature [Signature] Time Custody Released

LABORATORY REMARKS (Leave Blank) < 0.01 MR/HR
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. 13-0042

Investigator: Jenny Smith	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science, 300		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA 92626		Sacramento CA 95814-5006	
Phone Number: 714-850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0042-01	Sample ID: R 96130 Sample Type: Seawater	Time Collected: 1/15/2013 12:10	Sampling Point: SONGS C	
Tritium	EPA 906.0	4.01 +/- 150.12	257.65	pCi/L

- Precision criteria for these method were determined to be acceptable.
- 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.
- 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)

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, G164
 Richmond, CA 94804 510-620-2930
 510-620-2911 Attn: Shiyamalie Rubera

Date Received 1-17-13	Lab No. (Leave Blank) 13-0042
Date & Time Sampled 1/15/13 1210	Serial Number R 96130

Collector Information

Name: Jenny Smith
 Dept./Branch: MBC Applied Environmental Sciences
 Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
 Telephone No.: 714-850-4830

Reporting Information

Name: Steve Hsu
 Dept./Branch: CDPH-RHB
 Address: PO Box 99-7414 MS 7010 Sacramento, Ca 95899
 Telephone No.: 916-440-7940

Sample Information

System Name / Facility: SONGS
 Sampling Point (s): C

Billing Agency

- DWFOB () RHB RWQCB () DTSC
 DWTPB FDB DWR CDFG
 EMB Other (Specify) _____

System No.:

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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

- Air Filters Seawater Sludge (Semi-solid Samples)
 Finishing: _____ Date/Time _____
 Starting: _____
 Net (M³) _____
 Air Charcoal Cartridge Milk Soil/Sediment
 Wipes Biota (Type): _____
 Radon Canister Other: _____

COMMENTS: (Cautions, etc.):

- Field Treatment: Preservatives added: _____
 Field Measurement: _____ mR/hr
 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 (3H) 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: 02/15/13 Time Custody Received: 1210	Name (Print): Jenny Smith Organization: MBC	Signature: [Signature]	Date: 01/16/13 Time Custody Released: 1700
2. Date: _____ Time Custody Received: _____	Name (Print): _____ Organization: _____	Signature: _____	Date: _____ Time Custody Released: _____
3. Date: 1-17-13 Time Custody Received: 13:30	Name (Print): VA Organization: DWRLB	Signature: [Signature]	Date: _____ Time Custody Released: _____

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt: < 0.01 MR/HR
- 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. 13-0043

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA 95814-5006	
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0043-01	Sample ID: R 96131 Sample Type: Seawater	Time Collected: 1/15/2013 10:05	Sampling Point: SONGS D	
K-40	EPA 901.1	342 +/- 20.6	76.4	pCi/L

- (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 510-620-2930
510-620-2911 Attn: Shiyamalie Rubera

Date Received 1-17-13
Date & Time Sampled 1/15/13 1005

Lab No. (Leave Blank) 130043
Serial Number R 96131

Collector Information
Name: James Nuñez
Dept./Branch: MBC Applied Environmental Sciences
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve HSU
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610
SACRAMENTO, Ca 95899
Telephone No.: 916-440-7440

Sample Information
System Name / Facility: SONGS
Sampling Point (s): D
System No.:

Billing Agency
DWFOB () RHB RWQCB () DTSC
DWTPB FDB DWR CDFG
EMB 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

Air Filters Date/Time Seawater Sludge (Semi-solid Samples)
Milk Soil/Sediment
Starting: Wipes Biota (Type):
Net (M³) 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 (³H) 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. 1/15/13 Date James Nuñez Name (Print)
1005 Time Custody Received MBC Applied Environmental Sciences Organization Signature
2. 1/15/13 Date Jenny Smith Name (Print)
1500 Time Custody Received MBC Organization Signature
3. 1-17-13 Date UA Name (Print)
13:30 Time Custody Received DWRLB Organization Signature

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. 13-0044

Investigator: James Nunez	RHB	Requestor: Roger Lupo	RHB
MBC Applied Environmental Science 3000		CDPH - RHB, 1500 Capitol Av., MS 7610	
Costa Mesa CA		Sacramento CA	95814-5006
Phone Number: 714 850-4830		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / January 2013			
System No:	Billing Agency: RHB	Samples Received by Lab: 1/17/2013	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 13-0044-01	Sample ID: R 96132 Sample Type: Seawater	Time Collected: 1/15/2013 10:05	Sampling Point: SONGS D	
Tritium	EPA 906.0	-4.01 +/- 149.92	257.65	pCi/L

- (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)

Drinking Water and Radiation Laboratory Branch
850 Marina Bay Parkway, G164
Richmond, CA 94804 510-620-2930
510-620-2911

Date Received: 1-17-13
Lab No. (Leave Blank): 13-0043 447
Date & Time Sampled: 1/15/13 1005
Serial Number: R 96132

Collector Information
Name: James Nuñez
Dept./Branch: MBC Applied Environmental Science
Address: 3000 Red Hill Ave. Costa Mesa, Ca 92626
Telephone No.: 714-850-4830

Reporting Information
Name: Steve Hsu
Dept./Branch: CDPH-RHB
Address: PO Box 99-7414 MS 7610 Sacramento, Ca 95899
Telephone No.: 916-440-7940

Sample Information
System Name / Facility: SONGS
Sampling Point (s): D
System No.:

Billing Agency
DWFOB () [X] RHB [] RWQCB () [] DTSC
[] DWTPB [] FDB [] DWR [] CDFG
[] EMB [] 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 / Peroxizone / Fluoridated / Coagulated / pH Adjusted

[] Air Filters Date/Time [X] Seawater [] Sludge (Semi-solid Samples)
Finishing: [] Milk [] Soil/Sediment
Starting: [] Wipes [] Biota (Type):
Net (M³) [] 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 [X] Tritium (³H) [] 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. 1/15/13 Date James Nuñez Name (Print)
1005 Time Custody Received MBC Applied Environmental Science Organization
2. 1/15/13 Date Jenny Smith Name (Print)
1500 Time Custody Received MBC Organization
3. 1-17-13 Date UN Name (Print)
13:30 Time Custody Received DWR/RB Organization

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