From: "Lavera, Ron" <RLavera@entergy.com>
To: "'jjk@nrc.gov'" <jjk@nrc.gov>, "Croulet, Donald" <dcroule@entergy.com>, "Mayer, Don" <DMayer1@entergy.com>, "Axelson, William L" <WAxelso@entergy.com>, "Jones, T. R." <tjones2@entergy.com>, "Wilson, Daniel" <DWilson@entergy.com>, "Hinrichs, Gary" <ghinric@entergy.com>, "Sandike, Steven" <SSandik@entergy.com>
Date: 2/22/06 12:42PM
Subject: Requested Sample Analysis Data

Mr. Kotton

Please see the attached files which contain the following information:

* MW-111 9-29-05
o HTO IPEC 10-06-05 & JAF-20053238
o GS JAF-20053238
o SR L26839-1

* MW-111 10-14-05
o HTO IPEC 10-23-05
o GS IPEC-74419
o SR None Taken

* MW-38 12-8-05
o HTO JAF-20054062
o GS JAF-20054062
o SR L27310-1

* MW-101 12-8-05
o HTO JAF-20054065
o GS JAF-20054065
o SR L27310-4

* MW-105 12-8-05
o HTO JAF-20054064
o GS JAF-20054064
o SR L27310-3

* MW-107 12-8-05
o HTO JAF-20054063
o GS JAF-20054063
o SR L27310-2

* MW-101 12-8-05
o HTO JAF-20054065
o GS JAF-20054065
o SR L27310-4

* Quarry 11-30-05
o HTO JAF-20053961
o GS JAF-20053961
o SR L27296-3

* Gypsum 11-30-05
o HTO JAF-20053960
o GS JAF-20053960
o SR L27296-1

A|75

o

* Algonquin 11-30-05
o HTO JAF-20053959
o GS JAF-20053959
o SR L27296-2
o

* 5th Street 11-30-05
o HTO JAF-20053962
o GS JAF-20053962
o SR L27296-4
o

* Lafarge Well 1 12-6-05
o HTO JAF-20054060
o GS JAF-20054060
o SR L27296-5

* Lafarge Well 3 12-6-05
o HTO JAF-20054061
o GS JAF-20054061
o SR L27296-6

<<L26839-1.pdf>> <<Entergy L27296.pdf>> <<Entergy L27310.pdf>>
<<IPEC_74419_mw-111_10-14-05-GS.txt>> <<IPEC-MW111-10-14-05-HTO.pdf>>
<<IPEC-MW111-HTO.pdf>> <<JAF-20053238.pdf>> <<JAF-20053238-B.pdf>>
<<JAF-20053238-GS.pdf>> <<JAF-MW38-MW101-MW105-MW107-LW1-LW3.pdf>>
<<JAF-Quarry-Gypsum-Algonquin-5th-GS.pdf>> <<JAF-Quarry-Gypsum-Algonquin-5th-HTO.pdf>>

Please let me know if you have any questions or comments.

Ron LaVera

RLaVera@entergy.com <mailto:RLaVera@entergy.com>
914-736-8433
914-736-8419 FAX
Indian Point 3
Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 3
P.O. Box 308
Buchanan, NY 10511-0308

Report of Analysis

10/27/05 15:19

L26839

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

MW-111 9-29-05

Entergy Nuclear Northeast

Floyd Hood, Chem

EN002-3P50IP3-04

Sample ID: **IP3-05-65**
Station:
Description:
LIMS Number: L26839-1

Collect Start: 09/29/2005 00:00
Collect Stop:
Receive Date: 10/17/2005

Matrix: Liquid Radwaste (LR)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
FE-55	2006	<		**3.11E-07**	uCi/ml		50	ml	09/29/05 00:00	10/26/05	10813		U		No	
GR-A	2008	<		**4.68E-08**	uCi/ml		10	ml		10/27/05	50	M	U			
GR-B	2008	<		**8.79E-08**	uCi/ml		10	ml		10/27/05	50	M	U			
NI-63	2013	<		**1.57E-07**	uCi/ml		10	ml		10/26/05	100	M	U			
SR-89	2019	<		**3.06E-08**	uCi/ml		100	ml	09/29/05 00:00	10/26/05	100	M	U			
SR-90	2019	_<		**1.50E-08**	uCi/ml		100	ml	09/29/05 00:00	10/26/05	15	M	U			

Flag Values
U = Compound/Analyte not detected or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma specturm
**** Results are reported on an as received basis unless otherwise noted

MDC - Minimum Detectable Concentration

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

Floyd Hood, Chem
Entergy Nuclear Northeast
Indian Point Energy Center
295 Broadway - Suite 3, P.O. Box 308
Buchanan NY 10511-0308

Report of Analysis/Certificate of Conformance

12/30/2005

LIMS #: L27296
Project ID#: EN002-3P50IP3-04
Received: 12/09/2005
Delivery Date: 12/23/2005
P.O. #: 4500539361
Release #:
SDG #:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID(if applicable)
IP3-05-80	L27296-1	GYPSUM PLNT
IP3-05-81	L27296-2	ALGONQUIN CREEK
IP3-05-82	L27296-3	TRAP ROCK QUARRY
IP3-05-83	L27296-4	5TH ST WELL
IP3-05-84	L27296-5	LEFARGE #1
IP3-05-85	L27296-6	LEFARGE #3

Report of Analysis

12/30/05 08:51

L27296

Entergy Nuclear Northeast

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

Floyd Hood, Chem

EN002-3P50IP3-04

Sample ID: **IP3-05-80**
Station: GYPSUM PLNT
Description:
LIMS Number: L27296-1

Collect Start: 11/30/2005 15:20
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**1.52E-08**	uCi/ml		100	ml	11/30/05 15:20	12/28/05	15	M	U			

Sample ID: **IP3-05-81**
Station: ALGONQUIN CREEK
Description:
LIMS Number: L27296-2

Collect Start: 11/30/2005 15:30
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**2.07E-08**	uCi/ml		100	ml	11/30/05 15:30	12/29/05	15	M	U			

Sample ID: **IP3-05-82**
Station: TRAP ROCK QUARRY
Description:
LIMS Number: L27296-3

Collect Start: 11/30/2005 15:50
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**2.07E-08**	uCi/ml		100	ml	11/30/05 15:50	12/28/05	15	M	U			

Sample ID: **IP3-05-83**
Station: 5TH ST WELL
Description:
LIMS Number: L27296-4

Collect Start: 11/30/2005 16:05
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**1.26E-08**	uCi/ml		100	ml	11/30/05 16:05	12/28/05	15	M	U			

Flag Values
U = Compound/Analyte not detected or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Results are reported on an as received basis unless otherwise noted

MDC - Minimum Detectable Concentration

Bolded text indicates reportable value.

Report of Analysis

12/30/05 08:51

L27296

Entergy Nuclear Northeast

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

Floyd Hood, Chem

EN002-3P50IP3-04

Sample ID: **IP3-05-84**
Station: LEFARGE #1
Description:
LIMS Number: L27296-5

Collect Start: 12/06/2005 11:10
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**1.48E-08**	uCi/ml		100	ml	12/06/05 11:10	12/28/05	15	M	U			

Sample ID: **IP3-05-85**
Station: LEFARGE #3
Description:
LIMS Number: L27296-6

Collect Start: 12/06/2005 09:55
Collect Stop:
Receive Date: 12/09/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
SR-90	2019	<		**1.36E-08**	uCi/ml		100	ml	12/06/05 09:55	12/28/05	15	M	U			

Flag Values
U = Compound/Analyte not detected or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Results are reported on an as received basis unless otherwise noted

MDC - Minimum Detectable Concentration

Bolded text indicates reportable value.

12/09/05 13:28

SR #: SR06132

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Entergy Nuclear Operations, Project #: EN002-3P50IP3-04 LIMS #: L27296

Initiated By: PMARSHALL
Init Date: 12/09/05 Receive Date: 12/09/05

Notification of Variance

Person Notified: Floyd Hood Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	Y	
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	Y	
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	N	
	IP3-05-080		Collection time on bottle is 15:20
	IP3-05-081		Collection time on bottle is 15:30
	IP3-05-082		Collection time on bottle is 15:50
	IP3-05-083		Collection time on bottle is 16:05
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	

L27296
P-7D

Teledyne Browne Engineering Environmental Services
Customer Sample Receipt Form

from:
Entergy - Nuclear Northeast
Indian Point 3

	collection period start MM-DD-YY HHHH	stop MM-DD-YY HHHH	volume or area	units	smp type								Notes
IP3 - 05 - 80	Gypsum Plant	11/30/05 1200	500	CC	SC		Sr^{90} only						Expidite
IP3 - 05 - 81	Algonquin Creek	11/30/05 1200	500	CC	SC		Sr^{90} only						
IP3 - 05 - 82	Trap Rock Quarry	11/30/05 1200	500	CC	SC		Sr^{90} only						
IP3 - 05 - 83	5th Street Well	11/30/05 1200	500	CC	SC		Sr^{90} only						
IP3 - 05 - 84	LEFARGE GYPSUM PLANT WELL 1	12/6/05 1110	500	CC	SC		SR90 ONLY						
IP3 - 05 - 85	LEFARGE GYPSUM PLANT WELL 3	12/6/05 0955	500	CC	SC		SR90 ONLY						
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													
IP3 - 05 -													

Shipped_____

Received Pat Marshall 12/9/05

Distributed_____

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

Floyd Hood, Chem
Entergy Nuclear Northeast
Indian Point Energy Center
295 Broadway - Suite 3, P.O. Box 308
Buchanan NY 10511-0308

DEC 3 0 2005

Report of Analysis/Certificate of Conformance

12/29/2005

LIMS #: L27310
Project ID#: EN002-3P50IP3-04
Received: 12/13/2005
Delivery Date: 12/27/2005
P.O. #: 4500539361
Release #:
SDG #:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID(if applicable)
IP3-05-86	L27310-1	MW-38
IP3-05-87	L27310-2	MW-107
IP3-05-88	L27310-3	MW-105
IP3-05-89	L27310-4	MW-101

Report of Analysis

12/29/05 13:12

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L27310

Entergy Nuclear Northeast

Floyd Hood, Chem

EN002-3P50IP3-04

Sample ID: **IP3-05-86**
Station: MW-38
Description:
LIMS Number: L27310-1

Collect Start: 12/08/2005 10:30
Collect Stop:
Receive Date: 12/13/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SR-90	2019	<		**1.25E-08**	uCi/ml		100	ml	12/08/05 10:30	12/28/05	15	M	U

Sample ID: **IP3-05-87**
Station: MW-107
Description:
LIMS Number: L27310-2

Collect Start: 12/08/2005 11:15
Collect Stop:
Receive Date: 12/13/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SR-90	2019	<		**1.33E-08**	uCi/ml		100	ml	12/08/05 11:15	12/28/05	15	M	U

Sample ID: **IP3-05-88**
Station: MW-105
Description:
LIMS Number: L27310-3

Collect Start: 12/08/2005 12:20
Collect Stop:
Receive Date: 12/13/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SR-90	2019	<		**1.93E-08**	uCi/ml		100	ml	12/08/05 12:20	12/28/05	15	M	U

Sample ID: **IP3-05-89**
Station: MW-101
Description:
LIMS Number: L27310-4

Collect Start: 12/08/2005 12:50
Collect Stop:
Receive Date: 12/13/2005

Matrix: Secondary Coolant (SC)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SR-90	2019	<		**1.25E-08**	uCi/ml		100	ml	12/08/05 12:50	12/28/05	15	M	U

Flag Values
U = Compound/Analyte not detected or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Results are reported on an as received basis unless otherwise noted

MDC - Minimum Detectable Concentration

12/13/05 14:20

SR #: SR06156

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Entergy Nuclear Operations, Project #: EN002-3P50IP3-04 LIMS #: L27310

Initiated By: PMARSHALL
Init Date: 12/13/05 Receive Date: 12/13/05

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	Y	
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	Y	
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	

L27310
P-7D

Teledyne Browne Engineering Environmental Services
Customer Sample Receipt Form

from:
Entergy - Nuclear Northeast
Indian Point 3

		/----collection period----\												
		start MM-DD-YY HHHH	stop MM-DD-YY HHHH	volume or area	units	smp type								Notes
IP3 - 05 - 86		MW-38	12/8/2005 1030	5.00E+02	CC	SC		Sr 90	only					expidite
IP3 - 05 - 87		MW-107	12/8/2005 1115	5.00E+02	CC	SC		Sr 90	only					expidite
IP3 - 05 - 88		MW-105	12/8/2005 1220	5.00E+02	CC	SC		Sr 90	only					expidite
IP3 - 05 - 89		MW-101	12/8/2005 1250	5.00E+02	CC	SC		Sr 90	only					expidite
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														
IP3 - 05 -														

Shipped_____

Received Pat Marshall 12/13/05

Distributed_____

```
*************************************************************************
*                                                                       *
*      CHEMISTRY GAMMA SPECTROSCOPY REPORT    22-FEB-2006 08:00:02.20   *
*                                                                       *
*************************************************************************
*   RE-ANALYZED        RE-ANALYZED        RE-ANALYZED        RE-ANALYZED  *
*************************************************************************
```

MW-111 10/14/5

```
*************************************************************************
Sample ID   :                74419  *  Sample Quant : 5.00000E+02      ml
Sample Type :           Poly Bottle  *  Efficiency   :                sgs40
Pl Live Time:        0 01:00:00.00  *  Geometry     :          on detector
Live Time   :        0 01:00:00.00  *  Real Time    :        0 01:00:05.60
Sample Time : 14-OCT-2005 12:00:00  *  Acquire Time : 18-OCT-2005 12:15:40
Decay Time  :        4 00:15:40.42  *  % Dead Time  :                 0.2%
*************************************************************************
Offset      :          3.81508E-01  *  FWHM offset  :          7.25239E-01
Slope       :          4.99804E-01  *  FWHM slope   :          3.17892E-02
Quad Coef   :          6.28117E-08  *  Pk Start Ch  :                   50
Calib Date  : 28-JUN-2005 02:12:29  *  Pk End Ch    :                 4050
*************************************************************************
Peak Search Sensitivity :   5.0000  *  Nuclide Library :            MASTER
Gaussian Sensitivity :    10.00000  *  No. of iterations :              10
Detector Name :              adc40  *   Eff Type    :                SPLIN
T 1/2 Ratio :             8.00000  *  Energy Tolerance :          1.25000
Library Based Eff :            No  *  Do Key Line Analysis :           Yes
Abund Limit :            70.00000  *  Analysts name :                 JFJ
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	92.74	50	57	1.02	184.78	180	11	1.40E-02	31.9	
2	0	510.78	49	24	0.91	1021.06	1015	12	1.36E-02	24.6	

Nuclide Line Activity Report

Flag: "*" = Keyline

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	92.74	50	57	1.02	184.78	180	11	1.40E-02	31.9	1.18E+00	T
0	510.78	49	24	0.91	1021.06	1015	12	1.36E-02	24.6	7.57E-01	

Flags: "T" = Tentatively associated

Rejected Report

Nuclide	Half-life	Half-Life Ratio	Energy	%Abund	Activity (uCi/ml)	1-Sigma %Error	Rejected by
GA-67	78.26H	1.24	93.31	38.30	3.953E-07	31.88	Abun.
			184.60	20.90	--- Not Found ---		
			300.20*	16.80	--- Not Found ---		
			393.50	4.70	--- Not Found ---		

% Abundances Found = 47.46 (Abn. Limit = 74.00%)

Flag: "*" = Keyline

Summary of Nuclide Activity

Total number of lines in spectrum	2	
Number of unidentified lines	1	
Number of lines tentatively identified by NID	1	50.00%

**** There are no nuclides meeting summary criteria ****

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Minimum Detectable Activity Report

Nuclide	Bckgnd Sum	Energy (keV)	MDA (uCi/ml)
BE-7	15.	477.60	4.0218E-07
NA-24	5.	1368.53	4.6677E-06
K-40	20.	1460.85	9.3873E-07
AR-41	0.	1293.64	Half-Life too short
SC-46	11.	889.20	5.8026E-08
CR-51	20.	320.08	3.8598E-07
MN-54	4.	834.83	3.5299E-08
MN-56	0.	1810.72	Half-Life too short
CO-57	33.	122.06	3.5005E-08
CO-58	12.	810.75	5.5455E-08
FE-59	4.	1099.22	7.9165E-08
CO-60	3.	1173.21	3.8156E-08
CU-64	11.	1345.90	2.9276E-03
NI-65	0.	1482.00	Half-Life too short
ZN-65	7.	1115.52	1.0731E-07
GA-67	18.	300.20	4.4490E-07
AS-76	15.	559.10	1.2517E-06
BR-84	0.	1213.30	Half-Life too short
KR-85	22.	513.99	1.1327E-05
KR-85M	0.	151.18	Half-Life too short
SR-85	22.	513.99	5.1852E-08
KR-87	0.	402.58	Half-Life too short
KR-88	0.	196.32	Half-Life too short
RB-88	0.	898.03	Half-Life too short
Y-88	3.	1836.04	5.3201E-08
RB-89	0.	1031.88	Half-Life too short
SR-91	0.	1024.30	Half-Life too short
Y-91	3.	1204.90	1.4282E-05
Y-91M	0.	555.63	Half-Life too short
SR-92	0.	430.56	Half-Life too short
Y-92	0.	934.50	Half-Life too short
NB-94	10.	871.10	5.1575E-08
NB-95	8.	765.80	4.5189E-08
ZR-95	10.	756.70	8.9125E-08
NB-97	0.	1268.63	Half-Life too short
ZR-97	21.	507.60	4.9477E-05
MO-99	16.	739.48	1.2458E-06
TC-99M	0.	140.51	Half-Life too short
RU-103	10.	497.08	4.2514E-08
RH-105	21.	318.90	1.2288E-06
RU-105	0.	469.40	Half-Life too short
RU-106	6.	1050.10	3.2870E-06
CD-109	41.	88.03	1.2460E-06
AG-110M	7.	657.70	3.8311E-08
SN-113	25.	391.70	6.8773E-08

SB-122	10.	692.60	3.2231E-06
TE-123M	38.	159.00	3.8005E-08
SB-124	2.	1691.02	9.5853E-08
SB-125	20.	427.90	1.3956E-07
SB-126	7.	666.30	4.5087E-08
XE-127	21.	374.96	2.4218E-07
TE-129	0.	1083.85	Half-Life too short

Minimum Detectable Activity Report (continued) Page : 2
Sample ID : 74419 Acquisition date : 18-OCT-2005 12:15:40

Nuclide	Bckgnd Sum	Energy (keV)	MDA (uCi/ml)
BA-131	11.	496.30	1.0127E-07
I-131	18.	364.48	6.2441E-08
XE-131M	37.	163.93	2.0333E-06
I-132	0.	667.69	Half-Life too short
TE-132	24.	228.16	8.1962E-08
BA-133	24.	356.00	6.3596E-08
I-133	11.	529.89	1.0746E-06
XE-133	24.	81.00	1.8526E-07
XE-133M	39.	233.18	1.3931E-06
CS-134	6.	795.84	4.4656E-08
I-134	0.	884.00	Half-Life too short
TE-134	30.	210.47	3.3724E-07
I-135	0.	1260.41	Half-Life too short
XE-135	0.	249.79	Half-Life too short
XE-135M	0.	526.57	Half-Life too short
CS-136	8.	1048.07	8.3116E-08
CS-137	13.	661.64	5.4431E-08
CS-138	0.	1435.86	Half-Life too short
XE-138	0.	258.31	Half-Life too short
CE-139	45.	165.85	4.3469E-08
BA-140	8.	537.30	1.6420E-07
LA-140	4.	1596.00	3.0089E-07
CE-141	33.	145.44	6.5066E-08
LA-142	0.	641.17	Half-Life too short
CE-144	35.	133.50	2.7862E-07
PR-144	0.	1489.15	Half-Life too short
ND-147	54.	91.11	2.2211E-07
EU-148	24.	611.30	3.1473E-07
PM-148	11.	1465.00	5.8695E-07
PM-148M	8.	1014.00	2.7495E-07
EU-152	12.	344.30	1.0753E-07
EU-154	6.	1004.70	2.5520E-07
EU-155	33.	105.30	1.5922E-07
EU-156	2.	1277.00	1.3700E-06
HF-181	8.	482.20	3.8395E-08
RE-182B	3.	1221.00	6.2836E-07
TA-182	7.	1189.00	3.4091E-07
W-187	10.	479.50	2.3446E-06
HG-203	29.	279.19	4.9183E-08
TL-208	0.	583.10	Half-Life too short
RA-226	31.	609.30	1.3887E-07
TH-228	13.	583.15	1.3946E-07
TH-232	43.	238.63	9.2423E-08
PU-233	0.	534.80	Half-Life too short
U-235	36.	143.80	2.8363E-07
AM-238	0.	918.70	Half-Life too short
NP-239	31.	106.13	4.5521E-07
AM-241	32.	59.54	3.4399E-07

VMS Nuclide Identification Report V2.9 Generated 22-FEB-2006 08:00:05

EBAR configuration 1 : DKA100:[CHEMTECH.TRASH]RECALL3.CNF;2

Average Energy Report

Nuclide	Hlife	Activity (uCi/ml)	1-Sigma %Error	Ave. Beta Energy	Ave. Gamma Energy

Total Activity 0.000E+00 (uCi/ml)
Average Gamma Energy 0.000E+00 MeV/dis
Average Beta Energy 0.000E+00 MeV/dis
Total Average Energy 0.000E+00 MeV/dis
Specific Activity Limit 0.000E+00 (uCi/ml)

Week 28A | Tritium Reduction | Data Processed: 10/ 7:17 AM

SAMPLE INFORMATION					ANALYSIS DATA	
S\N	Volume	Unit #	Sample ID	uCi/ml	CPM	Notes
1	2.50	3	Blank		6.96E+00	
2	2.50	3	Calibration Standard	4.51E-02	1.24E+05	
3	2.50	3	Control Standard	2.66E-03	7.31E+03	
4	2.50	IPEC	MW-111 10/14/05	6.82E-06	1.87E+01	
5	2.50	3	RAMS vent end 10/18/05	3.35E-06	9.21E+00	
6	2.50	3	VC #1 10/19/05 140 mls	1.26E-02	3.45E+04	
7	2.50	3	VC #2 10/19/05 186 mls	8.46E-04	2.32E+03	
8	2.50	3	VC#3 10/19/05 111 mls	7.67E-05	2.11E+02	
9	2.50	3	Strorm Drain A-4 10/19/05	<MDA	7.50E-01	
10	2.50	3	Strorm Drain B-8 10/19/05	8.41E-07	2.31E+00	
11	2.50	IPEC	MW-111 10/21/05 0940	2.84E-04	7.79E+02	
12	0.50	2	WDST M/E Sept '05	7.37E-02	4.05E+04	
13	2.50	3	blank	<MDA	0.00E+00	
14	2.50	3	Calibration Standard	4.51E-02	1.24E+05	
15	2.50	3	Control Standard	2.66E-03	7.30E+03	
16	2.50	2	SFDS M/E Sept '05	9.54E-07	2.62E+00	
17	2.50	2	NCD M/E Sept '05	1.29E-05	3.53E+01	
18	2.50	2	2 RWST 10/14/05	2.01E-01	5.51E+05	
19	2.50	2	2 S/G M/E Sept '05	2.88E-06	7.91E+00	
20	2.50	IPEC	MW-111 10/07/05 1030	1.88E-04	5.16E+02	
21	2.50	2	NCD influent 10/07/05	2.25E-05	6.19E+01	
22	0.50	2	2 RCS 10/09/05	1.42E+00	7.82E+05	
23	2.50	2	2 SFP 10/10/05	2.71E-02	7.43E+04	
24	2.50	2	MW-111 10/14	6.32E-06	1.74E+01	

CALIBRATION SOURCE DATA S/N 66838-40			Crit Level = 1.76E+00 cpm
Date of Source:	09/17/03	5.07E-02 uCi/ml	Efficiency= 49.47% cpm/dpm
Date & Time Sample Counted:	10/23/05 7:17	4.51E-02 uCi/ml	Background= 6.96 cpm

(NOTE: Background is automatically subtracted from sample counts)

Performed By: [signature]

Reviewed By: [signature] 10/25

Control Chart Updated: [initial] (initial)

SCINTILATOR USED:
[redacted] Tricarb 2900

SAMPLE INFORMATION					ANALYSIS DATA	
S\N	Volume	Unit #	Sample ID	uCi/ml	CPM	Notes
1	2.50	3	Blank		7.08E+00	
2	2.50	3	Calibration Standard	4.52E-02	1.27E+05	
3	2.50	3	Control Standard	2.65E-03	7.48E+03	
4	2.50	3	S/G Composite 10/5/5 00:05 550 deg F	8.01E-07	2.26E+00	
5	2.50	2	MW-1119/29/5 toray filtered	2.07E-04	5.84E+02	
6	2.50	2	MW-1119/29/5 unfiltered	2.05E-04	5.79E+02	

CALIBRATION SOURCE DATA S/N 66838-40			Crit Level = 1.76E+00 cpm
Date of Source:	09/17/03	5.07E-02 uCi/ml	Efficiency= 50.81% cpm/dpm
Date & Time Sample Counted:	10/6/05 10:34	4.52E-02 uCi/ml	Background= 7.08 cpm

(NOTE: Background is automatically subtracted from sample counts)

Performed By:

Reviewed By: 10/6

Control Chart Updated: (initial)

SCINTILATOR USED:
Beckman Tricarb 2900

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 39 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
IP 05-584 20053235		M/W 107	RR	WA	9/28/5		1 GAL	H-3, GB GSA
IP 05-581 20053236		M/W 108	RR	SL	9/29/5		1 GAL	GSA,H-3 GB
IP	98	BUCHANAN SEWAGE TREATMENT PLANT (Holdup Tank 2)	RR	SL			GAL	GSA
IP	99	ALGONQUIN OUTFALL	RR	WA			1 GAL	H-3 GSA GB
IP	100	GYPSUM PLANT STREAM	RR	WA			1 GAL	H-3 GSA GB
IP	102	TRAP ROCK QUARRY	RR	WA			1 GAL	H-3 GSA GB
IP 05-582 20053237		M/W 109	RR	WA	9/29/5		1 GAL	H-3 GSA GB
IP 05-583 20053236		M/W 111	RR	WA	9/29/5		1 GAL	H-3 GSA GB

REMARKS: INDIAN POINT SPECIALS - MONTHLY
RR = Regular Routine

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: Special Waters **REPORTING UNITS IN: pCi/L** **Oct-05**

ISOTOPE	MIN. REQ. CL*	MW-107 IP-05-584	MW-108 IP-05-581	MW-109 IP-05-582	MW-111 IP-05-583
Be-7		<31.17	<25.79	<31.1	<28.32
K-40		87.79±31.37	<29.8	187.6±39.82	249±52.56
Mn-54		<3.76	<3.09	<2.99	<4.56
Co-58		<3.76	<3.98	<3.38	<4.96
Fe-59		<8.42	<9.66	<7.65	<10.66
Co-60	(7.5*)	<4.51	<3.21	<3.19	<1.81
Zn-65		<5.44	<3.86	<10.97	<6.39
Zr-95		<6.08	<4.34	<4.57	<5.65
Nb-95		<3.01	<3.38	<3.65	<6.34
Ru-103		<3.58	<3.62	<3.64	<4.05
Ru-106		<34.64	<27.24	<44.24	<49.16
I-131		<5.43	<3.92	<4.14	<6.15
Cs-134	(7.5*)	<2.45	<2.09	<2.03	<4.17
Cs-137	(9.0*)	<3.86	<3.24	<3.74	<4.48
Ba/La-140		<5.01	<3.84	<3.84	<5.8
Ce-141		<7.24	<5.97	<5.03	<7.32
Ce-144		<29.70	<22.60	<26.60	<28.10
Ra-226		<97.94	<79.22	<76.69	<103.6
Ac-228		<10.78	<9.86	<12.96	<13.8
GROSS BETA		15.7 ± 0.9	18.8 ± 1.4	9.8 ± 0.7	12.5 ± 0.8
H-3		<420	<420	<420	211569 ± 753

Results reported as < are CL values

***Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)**

CL Values Verified By PITENGER/WPB

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-107			ELMS #:	20053235
Sample On Date / Time :	09/28/05	@	12:00	Client ID No.	IP 05-584
Sample Off Date / Time :	09/28/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	1260
Sample Count Time (minutes)	120
Sample CPM:	10.50
Sample Net CPM:	1.00
Sample DPM:	2.74
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 1.53
LLD value (pCi/L)	<420 ✓	Act/Error Ratio= 2.4

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	309	±	129

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 then the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W. Pitt — print / sign — Date: 10/5/05

Supervisor review: B. Gorman B. Gorman — print / sign — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-108			ELMS #:	20053236
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-581
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	1274
Sample Count Time (minutes)	120
Sample CPM:	10.62
Sample Net CPM:	1.12
Sample DPM:	2.95
sample volume (L)	0.004

Background Counting Efficiency	0.357		CL Ratio= 1.71
LLD value (pCi/L)	<420	✓	Act/Error Ratio= 2.6

Sample Counting Efficiency	0.359		
Sample Activity (pCi/L) ± 1 sigma	332	±	128

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/5/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-109			ELMS #:	20053237
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-582
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Data

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Data

Sample Gross counts:	1205.6
Sample Count Time (minutes)	120
Sample CPM:	10.05
Sample Net CPM:	0.55
Sample DPM:	1.37
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 0.84
LLD value (pCi/L)	<420	Act/Error Ratio= 1.2

Sample Counting Efficiency	0.359		
Sample Activity (pCi/L) ± 1 sigma	154	±	127

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — print / sign — Date: 10/5/05

Supervisor review: B. Gorman B. Gorman — print / sign — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-111			ELMS #:	20053238
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-583
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	82354.8
Sample Count Time (minutes)	120
Sample CPM:	686.29
Sample Net CPM:	676.79
Sample DPM:	1877.29
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 1034.14
LLD value (pCi/L)	<420	Act/Error Ratio= 281.1

Sample Counting Efficiency	0.361		
Sample Activity (pCi/L) ± 1 sigma	211569	±	753 ✓

Comments: REPORTABLE RESULTS 211,569 pCi/L.

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/5/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	QC STD			ELMS #:	NA
Sample On Date / Time :	03/14/02	@	12:00	Client ID No.	E3050
Sample Off Date / Time :	03/14/02	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	NO
Elapsed Time (count date to off date) yrs	3.56			Decay Factor:	0.8186

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	4300.8
Sample Count Time (minutes)	120
Sample CPM:	35.84
Sample Net CPM:	26.34
Sample DPM:	73.53
sample volume (L)	0.004

QC Check on sample run. using known standard

Background Counting Efficiency	0.357	CL Ratio=	40.25
LLD value (pCi/L)	<513	Act/Error Ratio=	42.8

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	10116	±	236

Comments: 10116 / 10026 = 1.01 % of known.
measured / known.

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: Pittenger / W Pittenger (print / sign) Date: 10/5/05

Supervisor review: B. Gorman B. Gorman (print / sign) Date: 10/05/05

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SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 107 9/28/05

Counting Start:	10/03/2005 10:09:36	Lab ID.	.20053235
Decay Time.	1.18E+02 Hrs	Client ID	IP-05-584
Sampling Stop . .	09/28/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/28/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:12:04	Eff. Calib. Date. .	10/14/2003 11:21:08
Real Time (hr:min:sec). . .	001:12:07	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 1

Energy(keV)= -0.16+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.91+ 0.012*En+ 3.98e-04*En^2 + 0.00e+00*En^3 09/29/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[6.43e-02*En^-2.76e+00 + 1.76e+02*En^ 7.65e-01] 10/14/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	8.78E+01	3.14E+01	----------	----------	----------	K-40
CO-57	----------	----------	4.05E+00	1.26E+01	8.48E+00	CO-57
CE-144	----------	----------	2.97E+01	9.28E+01	6.21E+01	CE-144
CE-141	----------	----------	7.24E+00	2.27E+01	1.52E+01	CE-141
RA-226	----------	----------	9.79E+01	3.05E+02	2.05E+02	RA-226
NP-239	----------	----------	1.01E+02	3.21E+02	2.16E+02	NP-239
SE-75	----------	----------	4.47E+00	1.41E+01	9.58E+00	SE-75
CR-51	----------	----------	3.63E+01	1.13E+02	7.74E+01	CR-51
EU-152	----------	----------	1.20E+01	3.75E+01	2.57E+01	EU-152
I-131	----------	----------	5.43E+00	1.72E+01	1.17E+01	I-131
AG-108M	----------	----------	3.19E+00	1.03E+01	6.97E+00	AG-108M
BE-7	----------	----------	3.12E+01	1.01E+02	6.81E+01	BE-7
RU-103	----------	----------	3.58E+00	1.15E+01	7.90E+00	RU-103
I-133	----------	----------	2.09E+02	6.54E+02	4.55E+02	I-133
CS-134	----------	----------	2.45E+00	8.31E+00	5.70E+00	CS-134
RU-106	----------	----------	3.46E+01	1.14E+02	7.73E+01	RU-106
CS-137	----------	----------	3.86E+00	1.19E+01	8.53E+00	CS-137
MO-99	----------	----------	8.34E+01	2.73E+02	1.88E+02	MO-99
ZR-95	----------	----------	6.08E+00	1.97E+01	1.37E+01	ZR-95
NB-95	----------	----------	3.01E+00	9.37E+00	6.92E+00	NB-95
CO-58	----------	----------	3.76E+00	1.21E+01	8.41E+00	CO-58
MN-54	----------	----------	3.76E+00	1.21E+01	8.39E+00	MN-54
AG-110M	----------	----------	4.47E+00	1.46E+01	1.02E+01	AG-110M
ACTH-228	----------	----------	1.08E+01	3.63E+01	2.49E+01	ACTH-228
I-132	----------	----------	5.06E+01	1.72E+02	1.16E+02	I-132
ZN-65	----------	----------	5.44E+00	1.77E+01	1.30E+01	ZN-65
FE-59	----------	----------	8.41E+00	2.74E+01	1.99E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	4.51E+00	1.44E+01	1.03E+01	CO-60
BALA-140	----------	----------	5.01E+00	1.68E+01	1.20E+01	BALA-140
SB-124	----------	----------	8.30E+00	2.82E+01	1.98E+01	SB-124

TOTAL MEASURED ACTIVITY: 8.78E+01 +- 3.14E+01 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 108 9/29/05

Counting Start:	10/03/2005 10:12:03	Lab ID.	.20053236
Decay Time.	9.42E+01 Hrs	Client ID	IP-05-581
Sampling Stop . .	09/29/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/29/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:00:01	Eff. Calib. Date. .	07/20/2004 12:40:07
Real Time (hr:min:sec). . .	001:00:17	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 8

Energy(keV)= 0.18+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.71+ 0.015*En+ 5.29e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[1.09e-01*En^-2.35e+00 + 1.67e+02*En^ 7.66e-01] 07/20/2004

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-57	----------	----------	2.96E+00	9.38E+00	6.31E+00	CO-57
CE-144	----------	----------	2.26E+01	7.09E+01	4.82E+01	CE-144
CE-141	----------	----------	5.97E+00	1.86E+01	1.27E+01	CE-141
RA-226	----------	----------	7.92E+01	2.51E+02	1.69E+02	RA-226
NP-239	----------	----------	7.20E+01	2.26E+02	1.56E+02	NP-239
SE-75	----------	----------	4.72E+00	1.46E+01	1.02E+01	SE-75
CR-51	----------	----------	2.86E+01	9.14E+01	6.25E+01	CR-51
EU-152	----------	----------	9.11E+00	2.95E+01	2.01E+01	EU-152
I-131	----------	----------	3.91E+00	1.29E+01	8.75E+00	I-131
AG-108M	----------	----------	2.94E+00	9.54E+00	6.55E+00	AG-108M
BE-7	----------	----------	2.58E+01	8.33E+01	5.81E+01	BE-7
RU-103	----------	----------	3.62E+00	1.14E+01	8.08E+00	RU-103
I-133	----------	----------	7.12E+01	2.36E+02	1.61E+02	I-133
CS-134	----------	----------	2.09E+00	7.06E+00	5.10E+00	CS-134
RU-106	----------	----------	2.72E+01	9.74E+01	6.37E+01	RU-106
CS-137	----------	----------	3.23E+00	1.06E+01	7.39E+00	CS-137
MO-99	----------	----------	6.44E+01	2.07E+02	1.48E+02	MO-99
ZR-95	----------	----------	4.34E+00	1.49E+01	1.04E+01	ZR-95
NB-95	----------	----------	3.38E+00	1.12E+01	7.75E+00	NB-95
CO-58	----------	----------	3.97E+00	1.26E+01	8.96E+00	CO-58
MN-54	----------	----------	3.09E+00	1.01E+01	7.17E+00	MN-54
AG-110M	----------	----------	4.09E+00	1.36E+01	9.62E+00	AG-110M
ACTH-228	----------	----------	9.86E+00	3.49E+01	2.35E+01	ACTH-228
I-132	----------	----------	2.69E+01	1.04E+02	6.78E+01	I-132
ZN-65	----------	----------	3.86E+00	1.48E+01	1.02E+01	ZN-65
FE-59	----------	----------	9.66E+00	3.17E+01	2.27E+01	FE-59
CO-60	----------	----------	3.21E+00	1.12E+01	7.84E+00	CO-60

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	----------	----------	2.98E+01	1.20E+02	7.37E+01	K-40
BALA-140	----------	----------	3.84E+00	1.37E+01	9.77E+00	BALA-140
SB-124	----------	----------	9.92E+00	3.33E+01	2.35E+01	SB-124

TOTAL MEASURED ACTIVITY: 0.00E+00 +- 0.00E+00 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 109 9/29/05

Counting Start:	10/03/2005 10:13:06	Lab ID.	.20053237
Decay Time.	9.42E+01 Hrs	Client ID	IP-05-582
Sampling Stop . .	09/29/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/29/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:00:07	Eff. Calib. Date. .	10/28/2003 11:01:26
Real Time (hr:min:sec). . .	001:00:09	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 3

Energy(keV)= -0.49+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 1.03+ -0.021*En+ 1.97e-03*En^2 + -2.09e-05*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[9.91e-02*En^-2.44e+00 + 1.77e+02*En^ 7.80e-01] 10/28/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.88E+02	3.98E+01	----------	----------	----------	K-40
CO-57	----------	----------	3.18E+00	9.99E+00	6.77E+00	CO-57
CE-144	----------	----------	2.66E+01	8.24E+01	5.63E+01	CE-144
CE-141	----------	----------	5.03E+00	1.66E+01	1.08E+01	CE-141
RA-226	----------	----------	7.67E+01	2.43E+02	1.64E+02	RA-226
NP-239	----------	----------	8.68E+01	2.69E+02	1.86E+02	NP-239
SE-75	----------	----------	4.55E+00	1.45E+01	9.86E+00	SE-75
CR-51	----------	----------	2.81E+01	8.96E+01	6.18E+01	CR-51
EU-152	----------	----------	9.59E+00	3.09E+01	2.12E+01	EU-152
I-131	----------	----------	4.14E+00	1.32E+01	9.23E+00	I-131
AG-108M	----------	----------	3.60E+00	1.13E+01	7.91E+00	AG-108M
BE-7	----------	----------	3.11E+01	9.81E+01	6.90E+01	BE-7
RU-103	----------	----------	3.64E+00	1.15E+01	8.14E+00	RU-103
I-133	----------	----------	6.62E+01	2.22E+02	1.52E+02	I-133
CS-134	----------	----------	2.03E+00	7.00E+00	5.02E+00	CS-134
RU-106	----------	----------	4.42E+01	1.39E+02	9.81E+01	RU-106
CS-137	----------	----------	3.74E+00	1.20E+01	8.45E+00	CS-137
MO-99	----------	----------	5.93E+01	1.87E+02	1.39E+02	MO-99
ZR-95	----------	----------	4.57E+00	1.55E+01	1.09E+01	ZR-95
NB-95	----------	----------	3.65E+00	1.19E+01	8.35E+00	NB-95
CO-58	----------	----------	3.38E+00	1.08E+01	7.81E+00	CO-58
MN-54	----------	----------	2.99E+00	1.05E+01	7.02E+00	MN-54
AG-110M	----------	----------	4.51E+00	1.48E+01	1.05E+01	AG-110M
ACTH-228	----------	----------	1.30E+01	4.27E+01	3.00E+01	ACTH-228
I-132	----------	----------	3.11E+01	1.11E+02	7.70E+01	I-132
ZN-65	----------	----------	1.10E+01	3.36E+01	2.45E+01	ZN-65
FE-59	----------	----------	7.65E+00	2.58E+01	1.89E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	3.19E+00	1.06E+01	7.88E+00	CO-60
BALA-140	----------	----------	3.84E+00	1.42E+01	9.90E+00	BALA-140
SB-124	----------	----------	8.12E+00	2.71E+01	2.01E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.88E+02 +- 3.98E+01 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 111 9/29/05

Counting Start: 10/03/2005 10:15:04
Decay Time. . . . . 9.43E+01 Hrs
Sampling Stop . . 09/29/2005 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 09/29/2005 12:00:00
Live Time (hr:min:sec). . . 001:12:04
Real Time (hr:min:sec). . . 001:12:07

Lab ID. 20053238
Client ID IP-05-583
Sample Size . . . . . 3.00e+00 L
Yield 1.0000
Geometry Code . . . . . 3_0MS0
Eff. Calib. Date. . 10/14/2003 12:51:25
Library File. . . . . .MASTER.LIB

REVIEWED BY: _____

Detector #: 4

Energy(keV)= 0.34+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.62+ 0.018*En+ 3.23e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[4.84e-02*En^-3.01e+00 + 2.74e+02*En^ 8.17e-01] 10/14/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	2.49E+02	5.26E+01	----------	----------	----------	K-40
CO-57	----------	----------	3.95E+00	1.24E+01	8.41E+00	CO-57
CE-144	----------	----------	2.81E+01	8.96E+01	6.01E+01	CE-144
CE-141	----------	----------	7.32E+00	2.31E+01	1.56E+01	CE-141
RA-226	----------	----------	1.04E+02	3.32E+02	2.20E+02	RA-226
NP-239	----------	----------	9.33E+01	3.00E+02	2.01E+02	NP-239
SE-75	----------	----------	5.52E+00	1.77E+01	1.20E+01	SE-75
CR-51	----------	----------	3.65E+01	1.18E+02	7.98E+01	CR-51
EU-152	----------	----------	1.26E+01	4.10E+01	2.77E+01	EU-152
I-131	----------	----------	6.15E+00	1.95E+01	1.35E+01	I-131
AG-108M	----------	----------	5.20E+00	1.61E+01	1.13E+01	AG-108M
BE-7	----------	----------	2.83E+01	9.68E+01	6.52E+01	BE-7
RU-103	----------	----------	4.05E+00	1.37E+01	9.19E+00	RU-103
I-133	----------	----------	9.80E+01	3.19E+02	2.21E+02	I-133
CS-134	----------	----------	4.17E+00	1.36E+01	9.55E+00	CS-134
RU-106	----------	----------	4.92E+01	1.56E+02	1.10E+02	RU-106
CS-137	----------	----------	4.48E+00	1.49E+01	1.02E+01	CS-137
MO-99	----------	----------	9.32E+01	2.97E+02	2.12E+02	MO-99
ZR-95	----------	----------	5.65E+00	1.98E+01	1.36E+01	ZR-95
NB-95	----------	----------	6.34E+00	1.97E+01	1.40E+01	NB-95
CO-58	----------	----------	4.96E+00	1.54E+01	1.13E+01	CO-58
MN-54	----------	----------	4.56E+00	1.51E+01	1.05E+01	MN-54
AG-110M	----------	----------	6.60E+00	2.26E+01	1.51E+01	AG-110M
ACTH-228	----------	----------	1.38E+01	4.73E+01	3.28E+01	ACTH-228
I-132	----------	----------	5.08E+01	1.74E+02	1.21E+02	I-132
ZN-65	----------	----------	6.39E+00	2.20E+01	1.61E+01	ZN-65
FE-59	----------	----------	1.07E+01	3.55E+01	2.60E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	1.81E+00	8.01E+00	5.57E+00	CO-60
BALA-140	----------	----------	5.80E+00	1.99E+01	1.45E+01	BALA-140
SB-124	----------	----------	6.19E+00	2.62E+01	1.75E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.49E+02 +- 5.26E+01 pCi/L

Results TRANSFERRED to ELMS.

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053237
Client Sample ID.....: IP-05-582
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 109.

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0742
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 18 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 4.9680 counts

Sample Parameters

Gross Sample Counts.....: 370 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.6800
Net Sample Counts.....: 3.7000 counts
Corrected Count Rate (beta - alpha)..: 2.8503 cpm

Analysis Results

Gross Beta Concentration +- Error....: 9.7588 +- 0.7263 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-109

LLD/CL Values Checked By: Pittenger / W Pitty Date: 10/5/05
Reviewed By: B. Gorman / B Gorman Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053236
Client Sample ID.....: IP-05-581
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 108

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0739
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.2500 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 25 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 6.9000 counts

Sample Parameters

Gross Sample Counts.....: 370 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.7000
Net Sample Counts.....: 3.7000 counts
Corrected Count Rate (beta - alpha)..: 2.8310 cpm

Analysis Results

Gross Beta Concentration +- Error....: 18.8315 +- 1.4111 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-108

LLD/CL Values Checked By: Pittenger / W Fitz Date: 10/5/05
Reviewed By: B. Gorman / B Luce Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053235
Client Sample ID.....: IP-05-584
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/28/05
Sample End Date.....: 09/28/05
Analysis Recount #.....: 0

M/W 107.

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0737
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 11 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 3.0360 counts

Sample Parameters

Gross Sample Counts.....: 542 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.6800
Net Sample Counts.....: 5.4200 counts
Corrected Count Rate (beta - alpha)..: 4.5896 cpm

Analysis Results

Gross Beta Concentration +- Error....: 15.7139 +- 0.8539 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-107

LLD/CL Values Checked By: Pittenger Date: 10/5/05
Reviewed By: B. Gorman / B. [illegible] Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053238
Client Sample ID.....: IP-05-583
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 111

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0745
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 16 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 4.4160 counts

Sample Parameters

Gross Sample Counts.....: 467 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.7100
Net Sample Counts.....: 4.6700 counts
Corrected Count Rate (beta - alpha)..: 3.8258 cpm

Analysis Results

Gross Beta Concentration +- Error....: 12.5453 +- 0.7669 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-111

LLD/CL Values Checked By: Pittenger/W Pitt Date: 10/5/05
Reviewed By: B. Gorman / B Gorman Date: 10/05/05

TRITIUM PROGRAM
Tritium Analysis Sample Run ID Sheet

Run No. 05-65 Plant Eff. ☐ Environmental ☐ Other ☐ Sample Count Date 10/5/2005

Background Count Time(min.) 30 Background (CPM) 9.38

Background Counting Eff. 0.356 Background (DPM) 26.32

[illegible] No.	Sample Identification	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2-5	QC STD	3/14/2002	12:00	NA	E3050	30	37.52	76.34	0.359	*10504 ± 479
2-7	MW-11 Reanalysis	9/29/2005	12:00	20053238	IP-05-583	30	684.64	1886.32	0.358	212620 ± 1514

* QC RESULTS ACCEPTABLE

Page 1 of 1 Completed By: B. Goeman Date: 10/06/05

JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-11 Reanalysis			ELMS #:	20053238
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP-05-583
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-65
Sample Count Date:	10/05/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	281.43
Background count time (minutes)	30
Background Counts, CPM:	9.38
Background DPM	26.32
Critical Level (CL) CPM	1.30

Sample Gross counts:	20539.3
Sample Count Time (minutes)	30
Sample CPM:	684.64
Sample Net CPM:	675.26
Sample DPM:	1886.32
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 519.07
LLD value (pCi/L)	<851	Act/Error Ratio= 140.4

Activity Calculation

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	212620	±	1514

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/6/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/06/05.

print / sign

p:\tritium program\tritium activity calc.xlt

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: Special Waters **REPORTING UNITS IN: pCi/L** **Oct-05**

ISOTOPE	MIN. REQ. CL*	MW-107 IP-05-584	MW-108 IP-05-581	MW-109 IP-05-582	MW-111 IP-05-583
Be-7		<31.17	<25.79	<31.1	<28.32
K-40		87.79±31.37	<29.8	187.6±39.82	249±52.56
Mn-54		<3.76	<3.09	<2.99	<4.56
Co-58		<3.76	<3.98	<3.38	<4.96
Fe-59		<8.42	<9.66	<7.65	<10.66
Co-60	(7.5*)	<4.51	<3.21	<3.19	<1.81
Zn-65		<5.44	<3.86	<10.97	<6.39
Zr-95		<6.08	<4.34	<4.57	<5.65
Nb-95		<3.01	<3.38	<3.65	<6.34
Ru-103		<3.58	<3.62	<3.64	<4.05
Ru-106		<34.64	<27.24	<44.24	<49.16
I-131		<5.43	<3.92	<4.14	<6.15
Cs-134	(7.5*)	<2.45	<2.09	<2.03	<4.17
Cs-137	(9.0*)	<3.86	<3.24	<3.74	<4.48
Ba/La-140		<5.01	<3.84	<3.84	<5.8
Ce-141		<7.24	<5.97	<5.03	<7.32
Ce-144		<29.70	<22.60	<26.60	<28.10
Ra-226		<97.94	<79.22	<76.69	<103.6
Ac-228		<10.78	<9.86	<12.96	<13.8
GROSS BETA		15.7 ± 0.9	18.8 ± 1.4	9.8 ± 0.7	12.5 ± 0.8
H-3		<420	<420	<420	211569 ± 753

Results reported as < are CL values

***Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)**

CL Values Verified By PITENCEL/WP

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 39 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
IP 05-584 20053235		M/W 107	RR	WA	9/28/5		1 GAL	H-3, GB GSA
IP 05-581 20053236		M/W 108	RR	SL	9/29/5		1 GAL	GSA,H-3 GB
IP	98	BUCHANAN SEWAGE TREATMENT PLANT (Holdup Tank 2)	RR	SL			GAL	GSA
IP	99	ALGONQUIN OUTFALL	RR	WA			1 GAL	H-3 GSA GB
IP	100	GYPSUM PLANT STREAM	RR	WA			1 GAL	H-3 GSA GB
IP	102	TRAP ROCK QUARRY	RR	WA			1 GAL	H-3 GSA GB
IP 05-582 20053237		M/W 109	RR	WA	9/29/5		1 GAL	H-3 GSA GB
IP 05-583 20053235		M/W 111	RR	WA	9/29/5		1 GAL	H-3 GSA GB

REMARKS: INDIAN POINT SPECIALS - MONTHLY
RR = Regular Routine

JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-11 Reanalysis			ELMS #:	20053238
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP-05-583
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-65
Sample Count Date:	10/05/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	281.43
Background count time (minutes)	30
Background Counts, CPM:	9.38
Background DPM	26.32
Critical Level (CL) CPM	1.30

Sample Gross counts:	20539.3
Sample Count Time (minutes)	30
Sample CPM:	684.64
Sample Net CPM:	675.26
Sample DPM:	1886.32
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 519.07
LLD value (pCi/L)	<851	Act/Error Ratio= 140.4

Activity Calculation

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	212620	±	1514

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 then the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/6/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/06/05.

print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-107			ELMS #:	20053235
Sample On Date / Time :	09/28/05	@	12:00	Client ID No.	IP 05-584
Sample Off Date / Time :	09/28/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	1260
Sample Count Time (minutes)	120
Sample CPM:	10.50
Sample Net CPM:	1.00
Sample DPM:	2.74
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 1.53
LLD value (pCi/L)	<420 ✓	Act/Error Ratio= 2.4

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	309	±	129

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W. Pittenger — Date: 10/5/05

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Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-108			ELMS #:	20053236
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-581
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	1274
Sample Count Time (minutes)	120
Sample CPM:	10.62
Sample Net CPM:	1.12
Sample DPM:	2.95
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 1.71
LLD value (pCi/L)	<420 ✓	Act/Error Ratio= 2.6

Sample Counting Efficiency	0.359		
Sample Activity (pCi/L) ± 1 sigma	332	±	128

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/5/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-109			ELMS #:	20053237
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-582
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	1205.6
Sample Count Time (minutes)	120
Sample CPM:	10.05
Sample Net CPM:	0.55
Sample DPM:	1.37
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 0.84
LLD value (pCi/L)	<420	Act/Error Ratio= 1.2

Sample Counting Efficiency	0.359		
Sample Activity (pCi/L) ± 1 sigma	154	±	127

Comments: REPORTABLE RESULTS < 420 pCi/L

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/5/05

print / sign

Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-111			ELMS #:	20053238
Sample On Date / Time :	09/29/05	@	12:00	Client ID No.	IP 05-583
Sample Off Date / Time :	09/29/05	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.01			Decay Factor:	0.9992

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	82354.8
Sample Count Time (minutes)	120
Sample CPM:	686.29
Sample Net CPM:	676.79
Sample DPM:	1877.29
sample volume (L)	0.004

Background Counting Efficiency	0.357	CL Ratio= 1034.14
LLD value (pCi/L)	<420	Act/Error Ratio= 281.1

Sample Counting Efficiency	0.361		
Sample Activity (pCi/L) ± 1 sigma	211569	±	753 ✓

Comments: REPORTABLE RESULTS 211,569 pCi/L.

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 10/5/05

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Supervisor review: B. Gorman B. Gorman — Date: 10/05/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	QC STD			ELMS #:	NA
Sample On Date / Time :	03/14/02	@	12:00	Client ID No.	E3050
Sample Off Date / Time :	03/14/02	@	12:00	Run No.	05-64
Sample Count Date:	10/04/05	@	12:00	Sample Distilled:	NO
Elapsed Time (count date to off date) yrs	3.56			Decay Factor:	0.8186

Background Gross counts:	1139.60
Background count time (minutes)	120
Background Counts, CPM:	9.50
Background DPM	26.60
Critical Level (CL) CPM	0.65

Sample Gross counts:	4300.8
Sample Count Time (minutes)	120
Sample CPM:	35.84
Sample Net CPM:	26.34
Sample DPM:	73.53
sample volume (L)	0.004

QC Check on sample run. using known standard

Background Counting Efficiency	0.357	CL Ratio=	40.25
LLD value (pCi/L)	<513	Act/Error Ratio=	42.8

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	10116	±	236

Comments: 10116 / 10026 = 1.01 % of known.
measured / known.

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: Pittenger / W Pitty Date: 10/5/05
print / sign

Supervisor review: B. Gorman B. Gorman Date: 10/05/05
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James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053237
Client Sample ID.....: IP-05-582
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 109.

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0742
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 18 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 4.9680 counts

Sample Parameters

Gross Sample Counts.....: 370 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.6800
Net Sample Counts.....: 3.7000 counts
Corrected Count Rate (beta - alpha)..: 2.8503 cpm

Analysis Results

Gross Beta Concentration +- Error....: 9.7588 +- 0.7263 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-109

LLD/CL Values Checked By: PITTENGER / W Pitty Date: 10/5/05
Reviewed By: B. GORMAN / B Gorman Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053236
Client Sample ID.....: IP-05-581
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 108

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0739
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.2500 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 25 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 6.9000 counts

Sample Parameters

Gross Sample Counts.....: 370 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.7000
Net Sample Counts.....: 3.7000 counts
Corrected Count Rate (beta - alpha)..: 2.8310 cpm

Analysis Results

Gross Beta Concentration +- Error....: 18.8315 +- 1.4111 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-108

LLD/CL Values Checked By: PITTENGER / W Fitz Date: 10/5/05
Reviewed By: B. GORMAN / B Gorman Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053235
Client Sample ID.....: IP-05-584
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/28/05
Sample End Date.....: 09/28/05
Analysis Recount #.....: 0

M/W 107.

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0737
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 11 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 3.0360 counts

Sample Parameters

Gross Sample Counts.....: 542 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.6800
Net Sample Counts.....: 5.4200 counts
Corrected Count Rate (beta - alpha)..: 4.5896 cpm

Analysis Results

Gross Beta Concentration +- Error....: 15.7139 +- 0.8539 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-107

LLD/CL Values Checked By: Pittenger Date: 10/5/05
Reviewed By: B. Gorman / B. [illegible] Date: 10/05/05

James A. Fitzpatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

Gross Beta Analysis
Analytical Results Data Sheet

Report Date: 10/05/05

Sample Identification

Lab Sample ID.....: 20053238
Client Sample ID.....: IP-05-583
Sample Location.....: MISC. UNSPECIFIED
Sample Start Date.....: 09/29/05
Sample End Date.....: 09/29/05
Analysis Recount #.....: 0

M/W 111

System Parameters

Sample/Background Counting Date.....: 10/04/05
Sample/Background Counting Time.....: 0745
Background Sample Counts.....: 80 counts
Background Count Time.....: 100 minutes
Counter Efficiency.....: 0.3870 cpm/dpm
Sample Quantity.....: 0.5000 L
---- Note: Alpha subtraction was used for this calculation. ----
Gross Alpha Counts.....: 16 counts
Alpha Cross Talk.....: 0.2760
Net Alpha Counts.....: 4.4160 counts

Sample Parameters

Gross Sample Counts.....: 467 counts
Sample Count Time.....: 100 minutes
Sample Yield/Self Absorption.....: 0.7100
Net Sample Counts.....: 4.6700 counts
Corrected Count Rate (beta - alpha)..: 3.8258 cpm

Analysis Results

Gross Beta Concentration +- Error....: 12.5453 +- 0.7669 pCi/L (1 sigma)

System Specifications

Instrument.....: LBC-A
Procedure Number.....: AM-03.07
Calibration Date.....: 06/20/05

Comments

MW-111

LLD/CL Values Checked By: Pittenger / W Pittenger Date: 10/5/05
Reviewed By: B. Gorman / B Gorman Date: 10/05/05

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 107 9/28/05

Counting Start: 10/03/2005 10:09:36
Decay Time. . . . . 1.18E+02 Hrs
Sampling Stop . . 09/28/2005 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 09/28/2005 12:00:00
Live Time (hr:min:sec). . . 001:12:04
Real Time (hr:min:sec). . . 001:12:07

Lab ID. 20053235
Client ID IP-05-584
Sample Size . . . . . 3.00e+00 L
Yield 1.0000
Geometry Code . . . . . 3_0MS0
Eff. Calib. Date. . 10/14/2003 11:21:08
Library File. . . . . .MASTER.LIB

REVIEWED BY: _____

Detector #: 1

Energy(keV)= -0.16+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.91+ 0.012*En+ 3.98e-04*En^2 + 0.00e+00*En^3 09/29/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[6.43e-02*En^-2.76e+00 + 1.76e+02*En^ 7.65e-01] 10/14/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	8.78E+01	3.14E+01	----------	----------	----------	K-40
CO-57	----------	----------	4.05E+00	1.26E+01	8.48E+00	CO-57
CE-144	----------	----------	2.97E+01	9.28E+01	6.21E+01	CE-144
CE-141	----------	----------	7.24E+00	2.27E+01	1.52E+01	CE-141
RA-226	----------	----------	9.79E+01	3.05E+02	2.05E+02	RA-226
NP-239	----------	----------	1.01E+02	3.21E+02	2.16E+02	NP-239
SE-75	----------	----------	4.47E+00	1.41E+01	9.58E+00	SE-75
CR-51	----------	----------	3.63E+01	1.13E+02	7.74E+01	CR-51
EU-152	----------	----------	1.20E+01	3.75E+01	2.57E+01	EU-152
I-131	----------	----------	5.43E+00	1.72E+01	1.17E+01	I-131
AG-108M	----------	----------	3.19E+00	1.03E+01	6.97E+00	AG-108M
BE-7	----------	----------	3.12E+01	1.01E+02	6.81E+01	BE-7
RU-103	----------	----------	3.58E+00	1.15E+01	7.90E+00	RU-103
I-133	----------	----------	2.09E+02	6.54E+02	4.55E+02	I-133
CS-134	----------	----------	2.45E+00	8.31E+00	5.70E+00	CS-134
RU-106	----------	----------	3.46E+01	1.14E+02	7.73E+01	RU-106
CS-137	----------	----------	3.86E+00	1.19E+01	8.53E+00	CS-137
MO-99	----------	----------	8.34E+01	2.73E+02	1.88E+02	MO-99
ZR-95	----------	----------	6.08E+00	1.97E+01	1.37E+01	ZR-95
NB-95	----------	----------	3.01E+00	9.37E+00	6.92E+00	NB-95
CO-58	----------	----------	3.76E+00	1.21E+01	8.41E+00	CO-58
MN-54	----------	----------	3.76E+00	1.21E+01	8.39E+00	MN-54
AG-110M	----------	----------	4.47E+00	1.46E+01	1.02E+01	AG-110M
ACTH-228	----------	----------	1.08E+01	3.63E+01	2.49E+01	ACTH-228
I-132	----------	----------	5.06E+01	1.72E+02	1.16E+02	I-132
ZN-65	----------	----------	5.44E+00	1.77E+01	1.30E+01	ZN-65
FE-59	----------	----------	8.41E+00	2.74E+01	1.99E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	4.51E+00	1.44E+01	1.03E+01	CO-60
BALA-140	----------	----------	5.01E+00	1.68E+01	1.20E+01	BALA-140
SB-124	----------	----------	8.30E+00	2.82E+01	1.98E+01	SB-124

TOTAL MEASURED ACTIVITY: 8.78E+01 +- 3.14E+01 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 108 9/29/05

Counting Start:	10/03/2005 10:12:03	Lab ID.	.20053236
Decay Time.	9.42E+01 Hrs	Client ID	IP-05-581
Sampling Stop . .	09/29/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/29/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:00:01	Eff. Calib. Date. .	07/20/2004 12:40:07
Real Time (hr:min:sec). . .	001:00:17	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 8

Energy(keV)= 0.18+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.71+ 0.015*En+ 5.29e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[1.09e-01*En^-2.35e+00 + 1.67e+02*En^ 7.66e-01] 07/20/2004

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-57	----------	----------	2.96E+00	9.38E+00	6.31E+00	CO-57
CE-144	----------	----------	2.26E+01	7.09E+01	4.82E+01	CE-144
CE-141	----------	----------	5.97E+00	1.86E+01	1.27E+01	CE-141
RA-226	----------	----------	7.92E+01	2.51E+02	1.69E+02	RA-226
NP-239	----------	----------	7.20E+01	2.26E+02	1.56E+02	NP-239
SE-75	----------	----------	4.72E+00	1.46E+01	1.02E+01	SE-75
CR-51	----------	----------	2.86E+01	9.14E+01	6.25E+01	CR-51
EU-152	----------	----------	9.11E+00	2.95E+01	2.01E+01	EU-152
I-131	----------	----------	3.91E+00	1.29E+01	8.75E+00	I-131
AG-108M	----------	----------	2.94E+00	9.54E+00	6.55E+00	AG-108M
BE-7	----------	----------	2.58E+01	8.33E+01	5.81E+01	BE-7
RU-103	----------	----------	3.62E+00	1.14E+01	8.08E+00	RU-103
I-133	----------	----------	7.12E+01	2.36E+02	1.61E+02	I-133
CS-134	----------	----------	2.09E+00	7.06E+00	5.10E+00	CS-134
RU-106	----------	----------	2.72E+01	9.74E+01	6.37E+01	RU-106
CS-137	----------	----------	3.23E+00	1.06E+01	7.39E+00	CS-137
MO-99	----------	----------	6.44E+01	2.07E+02	1.48E+02	MO-99
ZR-95	----------	----------	4.34E+00	1.49E+01	1.04E+01	ZR-95
NB-95	----------	----------	3.38E+00	1.12E+01	7.75E+00	NB-95
CO-58	----------	----------	3.97E+00	1.26E+01	8.96E+00	CO-58
MN-54	----------	----------	3.09E+00	1.01E+01	7.17E+00	MN-54
AG-110M	----------	----------	4.09E+00	1.36E+01	9.62E+00	AG-110M
ACTH-228	----------	----------	9.86E+00	3.49E+01	2.35E+01	ACTH-228
I-132	----------	----------	2.69E+01	1.04E+02	6.78E+01	I-132
ZN-65	----------	----------	3.86E+00	1.48E+01	1.02E+01	ZN-65
FE-59	----------	----------	9.66E+00	3.17E+01	2.27E+01	FE-59
CO-60	----------	----------	3.21E+00	1.12E+01	7.84E+00	CO-60

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	----------	----------	2.98E+01	1.20E+02	7.37E+01	K-40
BALA-140	----------	----------	3.84E+00	1.37E+01	9.77E+00	BALA-140
SB-124	----------	----------	9.92E+00	3.33E+01	2.35E+01	SB-124

TOTAL MEASURED ACTIVITY: 0.00E+00 +- 0.00E+00 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 109 9/29/05

Counting Start:	10/03/2005 10:13:06	Lab ID.	.20053237
Decay Time.	9.42E+01 Hrs	Client ID	IP-05-582
Sampling Stop . .	09/29/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/29/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:00:07	Eff. Calib. Date. .	10/28/2003 11:01:26
Real Time (hr:min:sec). . .	001:00:09	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 3

Energy(keV)= -0.49+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 1.03+ -0.021*En+ 1.97e-03*En^2 + -2.09e-05*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[9.91e-02*En^-2.44e+00 + 1.77e+02*En^ 7.80e-01] 10/28/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.88E+02	3.98E+01	----------	----------	----------	K-40
CO-57	----------	----------	3.18E+00	9.99E+00	6.77E+00	CO-57
CE-144	----------	----------	2.66E+01	8.24E+01	5.63E+01	CE-144
CE-141	----------	----------	5.03E+00	1.66E+01	1.08E+01	CE-141
RA-226	----------	----------	7.67E+01	2.43E+02	1.64E+02	RA-226
NP-239	----------	----------	8.68E+01	2.69E+02	1.86E+02	NP-239
SE-75	----------	----------	4.55E+00	1.45E+01	9.86E+00	SE-75
CR-51	----------	----------	2.81E+01	8.96E+01	6.18E+01	CR-51
EU-152	----------	----------	9.59E+00	3.09E+01	2.12E+01	EU-152
I-131	----------	----------	4.14E+00	1.32E+01	9.23E+00	I-131
AG-108M	----------	----------	3.60E+00	1.13E+01	7.91E+00	AG-108M
BE-7	----------	----------	3.11E+01	9.81E+01	6.90E+01	BE-7
RU-103	----------	----------	3.64E+00	1.15E+01	8.14E+00	RU-103
I-133	----------	----------	6.62E+01	2.22E+02	1.52E+02	I-133
CS-134	----------	----------	2.03E+00	7.00E+00	5.02E+00	CS-134
RU-106	----------	----------	4.42E+01	1.39E+02	9.81E+01	RU-106
CS-137	----------	----------	3.74E+00	1.20E+01	8.45E+00	CS-137
MO-99	----------	----------	5.93E+01	1.87E+02	1.39E+02	MO-99
ZR-95	----------	----------	4.57E+00	1.55E+01	1.09E+01	ZR-95
NB-95	----------	----------	3.65E+00	1.19E+01	8.35E+00	NB-95
CO-58	----------	----------	3.38E+00	1.08E+01	7.81E+00	CO-58
MN-54	----------	----------	2.99E+00	1.05E+01	7.02E+00	MN-54
AG-110M	----------	----------	4.51E+00	1.48E+01	1.05E+01	AG-110M
ACTH-228	----------	----------	1.30E+01	4.27E+01	3.00E+01	ACTH-228
I-132	----------	----------	3.11E+01	1.11E+02	7.70E+01	I-132
ZN-65	----------	----------	1.10E+01	3.36E+01	2.45E+01	ZN-65
FE-59	----------	----------	7.65E+00	2.58E+01	1.89E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	3.19E+00	1.06E+01	7.88E+00	CO-60
BALA-140	----------	----------	3.84E+00	1.42E+01	9.90E+00	BALA-140
SB-124	----------	----------	8.12E+00	2.71E+01	2.01E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.88E+02 +- 3.98E+01 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: M/W 111 9/29/05

Counting Start:	10/03/2005 10:15:04	Lab ID.	.20053238
Decay Time.	9.43E+01 Hrs	Client ID	IP-05-583
Sampling Stop . .	09/29/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	09/29/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:12:04	Eff. Calib. Date. .	10/14/2003 12:51:25
Real Time (hr:min:sec). . .	001:12:07	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 4

Energy(keV)= 0.34+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 10/03/2005

FWHM(keV) = 0.62+ 0.018*En+ 3.23e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[4.84e-02*En^-3.01e+00 + 2.74e+02*En^ 8.17e-01] 10/14/2003

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	2.49E+02	5.26E+01	----------	----------	----------	K-40
CO-57	----------	----------	3.95E+00	1.24E+01	8.41E+00	CO-57
CE-144	----------	----------	2.81E+01	8.96E+01	6.01E+01	CE-144
CE-141	----------	----------	7.32E+00	2.31E+01	1.56E+01	CE-141
RA-226	----------	----------	1.04E+02	3.32E+02	2.20E+02	RA-226
NP-239	----------	----------	9.33E+01	3.00E+02	2.01E+02	NP-239
SE-75	----------	----------	5.52E+00	1.77E+01	1.20E+01	SE-75
CR-51	----------	----------	3.65E+01	1.18E+02	7.98E+01	CR-51
EU-152	----------	----------	1.26E+01	4.10E+01	2.77E+01	EU-152
I-131	----------	----------	6.15E+00	1.95E+01	1.35E+01	I-131
AG-108M	----------	----------	5.20E+00	1.61E+01	1.13E+01	AG-108M
BE-7	----------	----------	2.83E+01	9.68E+01	6.52E+01	BE-7
RU-103	----------	----------	4.05E+00	1.37E+01	9.19E+00	RU-103
I-133	----------	----------	9.80E+01	3.19E+02	2.21E+02	I-133
CS-134	----------	----------	4.17E+00	1.36E+01	9.55E+00	CS-134
RU-106	----------	----------	4.92E+01	1.56E+02	1.10E+02	RU-106
CS-137	----------	----------	4.48E+00	1.49E+01	1.02E+01	CS-137
MO-99	----------	----------	9.32E+01	2.97E+02	2.12E+02	MO-99
ZR-95	----------	----------	5.65E+00	1.98E+01	1.36E+01	ZR-95
NB-95	----------	----------	6.34E+00	1.97E+01	1.40E+01	NB-95
CO-58	----------	----------	4.96E+00	1.54E+01	1.13E+01	CO-58
MN-54	----------	----------	4.56E+00	1.51E+01	1.05E+01	MN-54
AG-110M	----------	----------	6.60E+00	2.26E+01	1.51E+01	AG-110M
ACTH-228	----------	----------	1.38E+01	4.73E+01	3.28E+01	ACTH-228
I-132	----------	----------	5.08E+01	1.74E+02	1.21E+02	I-132
ZN-65	----------	----------	6.39E+00	2.20E+01	1.61E+01	ZN-65
FE-59	----------	----------	1.07E+01	3.55E+01	2.60E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	1.81E+00	8.01E+00	5.57E+00	CO-60
BALA-140	----------	----------	5.80E+00	1.99E+01	1.45E+01	BALA-140
SB-124	----------	----------	6.19E+00	2.62E+01	1.75E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.49E+02 +- 5.26E+01 pCi/L

Results TRANSFERRED to ELMS.

ATTACHMENT 7.12
PAGE 1 OF 1

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 49 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
20054062 IP 05-777		MW-38	RR	WA	12/8/5		1 GAL	H-3 GSA
20054063 IP 05-778		MW-107	RR	WA	12/8/5		1 GAL	H-3 GSA
20054064 IP 05-779		MW-105	RR	WA	12/8/5		1 GAL	H-3 GSA
20054065 IP 05-780		MW-101	RR	WA	12/8/5		1 GAL	H-3 GSA
IP			RR	WA			1 GAL	H-3 GSA
IP			RR	WA			1 GAL	H-3 GSA
IP			RR	WA			1 GAL	H-3 GSA
IP			RR	WA			1 GAL	H-3 GSA

REMARKS: INDIAN POINT SPECIALS - MONTHLY DEC 12 2005
RR = Regular Routine

ATTACHMENT 7.12
PAGE 1 OF 1

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 49 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
IP	14	WATER METER HOUSE	RR	WA			GAL	H-3, GB GSA I-131
IP	97	BUCHANAN SEWAGE TREATMENT PLANT (Recirc Tank 1)	RR	SL			1 liter	GSA
IP	98	BUCHANAN SEWAGE TREATMENT PLANT (Holdup Tank 2)	RR	SL			GAL	GSA
IP	99	ALGONQUIN OUTFALL	RR	WA			3 LITERS	H-3 GSA
IP	100	GYPSUM PLANT STREAM	RR	WA			3 LITERS	H-3 GSA
IP	102	TRAP ROCK QUARRY	RR	WA			3 LITERS	H-3 GSA
IP 05-775 20054060	104	GYPSUM PLANT WELL 1	RR	WA	12/6/5		3 LITERS	H-3 GSA
IP 05-776 20054061	105	GYPSUM PLANT WELL 3	RR	WA	12/6/5		3 LITERS	H-3 GSA

REMARKS: INDIAN POINT SPECIALS - MONTHLY
RR = Regular Routine

DEC 12 2005

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: MONITORING WELLS **REPORTING UNITS IN:** pCi/L **WEEK 50**

ISOTOPE	MIN. REQ. CL*	MW-105 IP 05-779	MW-101 IP 05-780		
Be-7		<34.87	<24.4		
K-40		<44.59	119.6±28.21		
Mn-54	7.5	<3.76	<2.95		
Co-58	7.5	<4.52	<2.64		
Fe-59	15	<10.84	<6.8		
Co-60	7.5	<4.43	<3.58		
Zn-65	15	<5.02	<3.88		
Zr-95	7.5	<5.94	<4.16		
Nb-95	7.5	<2.06	<3.2		
Ru-103		<3.76	<2.95		
Ru-106		<31.15	<28.24		
I-131	7.5	<5.75	<3.45		
Cs-134	7.5	<4.18	<3.04		
Cs-137	9.0	<4.07	<2.97		
Ba/La-140	7.5	<5.63	<4.26		
Ce-141		<6.4	<5.02		
Ce-144		<27.00	<20.20		
Ra-226		136.5±78.96	129.5±56.62		
Ac-228		<16.64	<9.04		
GROSS BETA		NA	NA		
H-3	3000	<454	<454		

GSA Results reported as < are CL values

*Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)

CL Values Verified By W Petty

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: MONITORING WELLS **REPORTING UNITS IN:** pCi/L **WEEK 50**

ISOTOPE	MIN. REQ. CL*	GYPSUM PLANT WELL #1 IP 05-775	GYPSUM PLANT WELL #3 IP 05-776	MW-38 IP 05-777	MW-107 IP-05-778
Be-7		<33.47	<27.85	<21.35	<37.7
K-40		361.9±46.06	<38.68	119±32.56	142.1±36.96
Mn-54	7.5	<3.34	<3.41	<2.94	<4.64
Co-58	7.5	<4.18	<3.24	<2.51	<2.78
Fe-59	15	<10.38	<9.42	<8.9	<9.83
Co-60	7.5	<4.02	<2.85	<2.99	<4.11
Zn-65	15	<4.94	<9.35	<3.13	<5.8
Zr-95	7.5	<6.1	<6.51	<4.93	<6.93
Nb-95	7.5	<2.83	<3.36	<3.71	<3.87
Ru-103		<4.52	<3.76	<3.62	<4.45
Ru-106		<34.08	<27.32	<32.69	<42.89
I-131	7.5	<5.88	<4.74	<4.1	<6.51
Cs-134	7.5	<3.83	<2.61	<3.26	<4.98
Cs-137	9.0	<4.17	<3.73	<2.93	<2.55
Ba/La-140	7.5	<6.03	<3.98	<3.37	<5.77
Ce-141		<7.63	<5.28	<4.84	<10.52
Ce-144		<30.50	<18.10	<21.60	<42.10
Ra-226		<99.02	<68.1	<72.56	<136
Ac-228		<13.44	<11.9	<8.64	<15.05
GROSS BETA		NA	NA	NA	NA
H-3	3000	<454	<454	985 ± 146	<454

GSA Results reported as < are CL values

*Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)

CL Values Verified By _____

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	GYPSUM PLANT WELL 1			ELMS #:	20054060
Sample On Date / Time :	12/06/05	@	12:00	Client ID No.	IP 05-775
Sample Off Date / Time :	12/06/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9988

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	942
Sample Count Time (minutes)	100
Sample CPM:	9.42
Sample Net CPM:	0.29
Sample DPM:	0.70
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 0.41 ✓
LLD value (pCi/L)	<454	Act/Error Ratio= 0.6 ✓

Activity Calculation

Sample Counting Efficiency	0.357		
Sample Activity (pCi/L) ± 1 sigma	79	±	136

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: D BAKER [signature] Date: 12/19/05
print / sign

Supervisor review: B. Gorman B. Gorman Date: 12/19/05
print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	GYPSUM PLANT WELL 2			ELMS #:	20054061
Sample On Date / Time :	12/06/05	@	12:00	Client ID No.	IP 05-776
Sample Off Date / Time :	12/06/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9988

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	949.33333
Sample Count Time (minutes)	100
Sample CPM:	9.49
Sample Net CPM:	0.36
Sample DPM:	0.98
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 0.51
LLD value (pCi/L)	<454	Act/Error Ratio= 0.8

Activity Calculation

Sample Counting Efficiency	0.356		
Sample Activity (pCi/L) ± 1 sigma	110	±	137

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: D BAKER [signature] Date: 12/14/05

print / sign

Supervisor review: B. Gorman B Gorman Date: 12/15/05

print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	IPEC MW-38			ELMS #:	20054062
Sample On Date / Time :	12/08/05	@	12:00	Client ID No.	IP 05-777
Sample Off Date / Time :	12/08/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	1228
Sample Count Time (minutes)	100
Sample CPM:	12.28
Sample Net CPM:	3.15
Sample DPM:	8.74
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 4.48
LLD value (pCi/L)	<454	Act/Error Ratio= 6.7

Activity Calculation

Sample Counting Efficiency	0.357		
Sample Activity (pCi/L) ± 1 sigma	985	±	146

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: DAVE BAKER [signature] Date: 12-16-05
print / sign

Supervisor review: B. Gorman [signature] Date: 12/19/05
print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-107			ELMS #:	20054063
Sample On Date / Time :	12/08/05	@	12:00	Client ID No.	IP 05-778
Sample Off Date / Time :	12/08/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	953.33333
Sample Count Time (minutes)	100
Sample CPM:	9.53
Sample Net CPM:	0.40
Sample DPM:	1.14
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 0.57 ✓
LLD value (pCi/L)	<454	Act/Error Ratio= 0.9 ✓

Activity Calculation

Sample Counting Efficiency	0.356		
Sample Activity (pCi/L) ± 1 sigma	128	±	137

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: DAVE BAKER [signature] Date: 12-16-05
print / sign

Supervisor review: B. Gorman [signature] Date: 12/19/05
print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-105			ELMS #:	20054064
Sample On Date / Time :	12/08/05	@	12:00	Client ID No.	IP 05-779
Sample Off Date / Time :	12/08/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	988.66667
Sample Count Time (minutes)	100
Sample CPM:	9.89
Sample Net CPM:	0.75
Sample DPM:	1.92
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 1.07 ✓
LLD value (pCi/L)	<454	Act/Error Ratio= 1.6 ✓

Activity Calculation

Sample Counting Efficiency	0.358		
Sample Activity (pCi/L) ± 1 sigma	216	±	137

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: DAVE BAKER [signature] Date: 12-16-05

print / sign

Supervisor review: B. Gorman [signature] Date: 12/19/05

print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	MW-101			ELMS #:	20054065
Sample On Date / Time :	12/08/05	@	12:00	Client ID No.	IP 05-780
Sample Off Date / Time :	12/08/05	@	12:00	Run No.	05-89
Sample Count Date:	12/14/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Data

Background Gross counts:	913.33
Background count time (minutes)	100
Background Counts, CPM:	9.13
Background DPM	26.19
Critical Level (CL) CPM	0.70

Sample Data

Sample Gross counts:	998.33333
Sample Count Time (minutes)	100
Sample CPM:	9.98
Sample Net CPM:	0.85
Sample DPM:	2.39
sample volume (L)	0.004

LLD Calculation

Background Counting Efficiency	0.356	CL Ratio= 1.21 ✓
LLD value (pCi/L)	<454	Act/Error Ratio= 1.9 ✓

Activity Calculation

Sample Counting Efficiency	0.356		
Sample Activity (pCi/L) ± 1 sigma	269	±	139

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: DAVE BAKER [signature] Date: 12-16-05
print / sign

Supervisor review: B. Gorman B. Gorman Date: 12/19/05
print / sign

p:\tritium program\tritium activity calc.xlt

Spectrum Storage ID #: 20054060G0.SPC Analyzed by sawyer on 12/12/2005 12:43:

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: GYPSUM WELL #1

Counting Start:	12/12/2005 10:58:18	Lab ID.	.20054060
Decay Time.	1.43E+02 Hrs	Client ID	IP 05-775
Sampling Stop . .	12/06/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	12/06/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:40:00	Eff. Calib. Date. .	10/13/2005 13:57:48
Real Time (hr:min:sec). . .	001:40:05	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 2

Energy(keV)= -0.03+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 1.07+ -0.016*En+ 1.68e-03*En^2 + -1.19e-05*En^3 10/07/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[7.08e-02*En^-2.61e+00 + 1.84e+02*En^ 7.74e-01] 10/13/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	3.62E+02	4.61E+01	----------	----------	----------	K-40
Co-57	----------	----------	3.94E+00	1.19E+01	8.13E+00	Co-57
Ce-144	----------	----------	3.05E+01	9.28E+01	6.29E+01	Ce-144
Ce-141	----------	----------	7.63E+00	2.34E+01	1.58E+01	Ce-141
Ra-226	----------	----------	9.90E+01	3.04E+02	2.05E+02	Ra-226
Np-239	----------	----------	1.47E+02	4.60E+02	3.08E+02	Np-239
Se-75	----------	----------	4.53E+00	1.42E+01	9.54E+00	Se-75
Cr-51	----------	----------	3.73E+01	1.14E+02	7.83E+01	Cr-51
Eu-152	----------	----------	1.18E+01	3.63E+01	2.49E+01	Eu-152
I-131	----------	----------	5.88E+00	1.82E+01	1.25E+01	I-131
Ag-108m	----------	----------	3.27E+00	1.01E+01	6.99E+00	Ag-108m
Be-7	----------	----------	3.35E+01	1.05E+02	7.13E+01	Be-7
Ru-103	----------	----------	4.52E+00	1.39E+01	9.61E+00	Ru-103
I-133	----------	----------	4.59E+02	1.43E+03	9.83E+02	I-133
Cs-134	----------	----------	3.83E+00	1.20E+01	8.27E+00	Cs-134
Ru-106	----------	----------	3.41E+01	1.08E+02	7.42E+01	Ru-106
Cs-137	----------	----------	4.17E+00	1.28E+01	8.95E+00	Cs-137
Mo-99	----------	----------	1.10E+02	3.41E+02	2.40E+02	Mo-99
Zr-95	----------	----------	6.10E+00	1.93E+01	1.34E+01	Zr-95
Nb-95	----------	----------	2.83E+00	8.61E+00	6.35E+00	Nb-95
Co-58	----------	----------	4.18E+00	1.30E+01	9.03E+00	Co-58
Mn-54	----------	----------	3.34E+00	1.09E+01	7.35E+00	Mn-54
Ag-110m	----------	----------	4.67E+00	1.50E+01	1.03E+01	Ag-110m
AcTh-228	----------	----------	1.34E+01	4.51E+01	2.94E+01	AcTh-228
I-132	----------	----------	7.49E+01	2.35E+02	1.64E+02	I-132

Spectrum Storage ID #: 20054060G0.SPC Analyzed by sawyer on 12/12/2005 12:43:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
Zn-65	----------	----------	4.94E+00	1.64E+01	1.15E+01	Zn-65
Fe-59	----------	----------	1.04E+01	3.30E+01	2.31E+01	Fe-59
Co-60	----------	----------	4.02E+00	1.31E+01	8.97E+00	Co-60
BaLa-140	----------	----------	6.03E+00	1.95E+01	1.36E+01	BaLa-140
Sb-124	----------	----------	9.42E+00	3.02E+01	2.13E+01	Sb-124

TOTAL MEASURED ACTIVITY: 3.62E+02 +- 4.61E+01 pCi/L

Error in Results Transfer to ELMS.

Spectrum Storage ID #: 20054061G0.SPC Analyzed by sawyer on 12/12/2005 13:27:

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: GYPSUM WELL #3

Counting Start:	12/12/2005 10:58:37	Lab ID.	.20054061
Decay Time.	1.43E+02 Hrs	Client ID	IP 05-776
Sampling Stop . .	12/06/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	12/06/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	002:13:20	Eff. Calib. Date. .	10/12/2005 09:18:44
Real Time (hr:min:sec). . .	002:13:26	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 7

Energy(keV)= -0.49+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 0.63+ 0.017*En+ 5.30e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[7.48e-02*En^-2.83e+00 + 3.77e+02*En^ 8.82e-01] 10/12/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-57	----------	----------	2.13E+00	6.81E+00	4.57E+00	CO-57
Ce-144	----------	----------	1.81E+01	5.64E+01	3.85E+01	Ce-144
Ce-141	----------	----------	5.28E+00	1.64E+01	1.12E+01	Ce-141
Ra-226	----------	----------	6.81E+01	2.18E+02	1.45E+02	Ra-226
Np-239	----------	----------	1.18E+02	3.68E+02	2.54E+02	Np-239
Se-75	----------	----------	3.44E+00	1.11E+01	7.51E+00	Se-75
Cr-51	----------	----------	2.51E+01	8.13E+01	5.52E+01	Cr-51
Eu-152	----------	----------	1.07E+01	3.33E+01	2.31E+01	Eu-152
I-131	----------	----------	4.74E+00	1.53E+01	1.05E+01	I-131
Ag-108m	----------	----------	2.57E+00	8.33E+00	5.76E+00	Ag-108m
Be-7	----------	----------	2.79E+01	8.85E+01	6.19E+01	Be-7
Ru-103	----------	----------	3.76E+00	1.21E+01	8.32E+00	Ru-103
I-133	----------	----------	3.08E+02	1.06E+03	7.08E+02	I-133
Cs-134	----------	----------	2.61E+00	8.47E+00	5.98E+00	Cs-134
Ru-106	----------	----------	2.73E+01	9.18E+01	6.35E+01	Ru-106
Cs-137	----------	----------	3.73E+00	1.19E+01	8.35E+00	Cs-137
Mo-99	----------	----------	1.02E+02	3.42E+02	2.34E+02	Mo-99
Zr-95	----------	----------	6.51E+00	2.08E+01	1.48E+01	Zr-95
Nb-95	----------	----------	3.36E+00	1.13E+01	7.73E+00	Nb-95
Co-58	----------	----------	3.24E+00	1.03E+01	7.49E+00	Co-58
Mn-54	----------	----------	3.41E+00	1.12E+01	7.82E+00	Mn-54
Ag-110m	----------	----------	4.47E+00	1.51E+01	1.04E+01	Ag-110m
AcTh-228	----------	----------	1.19E+01	4.18E+01	2.76E+01	AcTh-228
I-132	----------	----------	7.29E+01	2.39E+02	1.68E+02	I-132
Zn-65	----------	----------	9.35E+00	2.93E+01	2.12E+01	Zn-65

Spectrum Storage ID #: 20054061G0.SPC Analyzed by sawyer on 12/12/2005 13:27:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
Fe-59	----------	----------	9.42E+00	3.19E+01	2.25E+01	Fe-59
Co-60	----------	----------	2.85E+00	1.03E+01	7.18E+00	Co-60
K-40	----------	----------	3.87E+01	1.49E+02	9.23E+01	K-40
BaLa-140	----------	----------	3.97E+00	1.59E+01	1.05E+01	BaLa-140
Sb-124	----------	----------	1.22E+01	3.95E+01	2.85E+01	Sb-124

TOTAL MEASURED ACTIVITY: 0.00E+00 +- 0.00E+00 pCi/L

Error in Results Transfer to ELMS.

Spectrum Storage ID #: 20054062G0.SPC Analyzed by sawyer on 12/12/2005 12:37:

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: MW-38

Counting Start:	12/12/2005 11:11:57	Lab ID.	.20054062
Decay Time.	9.52E+01 Hrs	Client ID	IP 05-777
Sampling Stop . .	12/08/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	12/08/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:23:20	Eff. Calib. Date. .	09/27/2005 13:14:16
Real Time (hr:min:sec). . .	001:23:22	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 3

Energy(keV)= -0.46+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 0.84+ 0.011*En+ 4.55e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[7.51e-02*En^-2.55e+00 + 1.76e+02*En^ 7.65e-01] 09/27/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.19E+02	3.26E+01	----------	----------	----------	K-40
CO-57	----------	----------	2.81E+00	8.67E+00	5.91E+00	CO-57
CE-144	----------	----------	2.16E+01	6.68E+01	4.54E+01	CE-144
CE-141	----------	----------	4.84E+00	1.52E+01	1.02E+01	CE-141
RA-226	----------	----------	7.26E+01	2.29E+02	1.53E+02	RA-226
NP-239	----------	----------	6.76E+01	2.17E+02	1.44E+02	NP-239
SE-75	----------	----------	4.35E+00	1.33E+01	9.26E+00	SE-75
CR-51	----------	----------	2.36E+01	7.50E+01	5.13E+01	CR-51
EU-152	----------	----------	7.34E+00	2.42E+01	1.61E+01	EU-152
I-131	----------	----------	4.10E+00	1.29E+01	8.90E+00	I-131
AG-108M	----------	----------	2.35E+00	7.85E+00	5.21E+00	AG-108M
BE-7	----------	----------	2.14E+01	6.84E+01	4.77E+01	BE-7
RU-103	----------	----------	3.62E+00	1.11E+01	7.86E+00	RU-103
I-133	----------	----------	6.32E+01	2.02E+02	1.41E+02	I-133
CS-134	----------	----------	3.26E+00	1.04E+01	7.22E+00	CS-134
RU-106	----------	----------	3.27E+01	1.04E+02	7.23E+01	RU-106
CS-137	----------	----------	2.93E+00	9.42E+00	6.57E+00	CS-137
MO-99	----------	----------	6.72E+01	2.05E+02	1.49E+02	MO-99
ZR-95	----------	----------	4.93E+00	1.62E+01	1.12E+01	ZR-95
NB-95	----------	----------	3.71E+00	1.15E+01	8.19E+00	NB-95
CO-58	----------	----------	2.51E+00	8.11E+00	5.79E+00	CO-58
MN-54	----------	----------	2.94E+00	9.52E+00	6.64E+00	MN-54
AG-110M	----------	----------	3.75E+00	1.23E+01	8.59E+00	AG-110M
ACTH-228	----------	----------	8.64E+00	3.08E+01	2.02E+01	ACTH-228
I-132	----------	----------	3.81E+01	1.25E+02	8.69E+01	I-132

Spectrum Storage ID #: 20054062G0.SPC Analyzed by sawyer on 12/12/2005 12:37:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
ZN-65	----------	----------	3.13E+00	1.22E+01	8.13E+00	ZN-65
FE-59	----------	----------	8.90E+00	2.79E+01	2.04E+01	FE-59
CO-60	----------	----------	2.99E+00	1.01E+01	7.06E+00	CO-60
BALA-140	----------	----------	3.37E+00	1.21E+01	8.33E+00	BALA-140
SB-124	----------	----------	7.12E+00	2.36E+01	1.70E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.19E+02 +- 3.26E+01 pCi/L

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: MW-107

Counting Start: 12/12/2005 13:59:09
Decay Time. . . . . 9.80E+01 Hrs
Sampling Stop . . 12/08/2005 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 12/08/2005 12:00:00
Live Time (hr:min:sec). . . 002:00:05
Real Time (hr:min:sec). . . 002:00:11

Lab ID. 20054063
Client ID . . . . . IP 05-778
Sample Size . . . . . 3.00e+00 L
Yield 1.0000
Geometry Code . . . . . 3_0MS0
Eff. Calib. Date. . 09/27/2005 09:07:02
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 1

Energy(keV)= -0.20+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 0.90+ 0.013*En+ 3.85e-04*En^2 + 0.00e+00*En^3 10/07/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[4.93e-02*En^-2.90e+00 + 1.79e+02*En^ 7.60e-01] 09/27/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.42E+02	3.70E+01	----------	----------	----------	K-40
CO-57	----------	----------	5.77E+00	1.76E+01	1.18E+01	CO-57
CE-144	----------	----------	4.21E+01	1.29E+02	8.59E+01	CE-144
CE-141	----------	----------	1.05E+01	3.21E+01	2.15E+01	CE-141
RA-226	----------	----------	1.36E+02	4.16E+02	2.78E+02	RA-226
NP-239	----------	----------	1.22E+02	3.77E+02	2.52E+02	NP-239
SE-75	----------	----------	6.50E+00	1.98E+01	1.34E+01	SE-75
CR-51	----------	----------	4.38E+01	1.34E+02	9.05E+01	CR-51
EU-152	----------	----------	1.52E+01	4.70E+01	3.14E+01	EU-152
I-131	----------	----------	6.51E+00	1.97E+01	1.35E+01	I-131
AG-108M	----------	----------	4.45E+00	1.36E+01	9.26E+00	AG-108M
BE-7	----------	----------	3.77E+01	1.16E+02	7.89E+01	BE-7
RU-103	----------	----------	4.45E+00	1.38E+01	9.34E+00	RU-103
I-133	----------	----------	1.27E+02	3.90E+02	2.65E+02	I-133
CS-134	----------	----------	4.98E+00	1.56E+01	1.04E+01	CS-134
RU-106	----------	----------	4.29E+01	1.33E+02	9.07E+01	RU-106
CS-137	----------	----------	2.55E+00	8.25E+00	5.59E+00	CS-137
MO-99	----------	----------	9.20E+01	2.84E+02	1.95E+02	MO-99
ZR-95	----------	----------	6.93E+00	2.16E+01	1.48E+01	ZR-95
NB-95	----------	----------	3.87E+00	1.16E+01	8.27E+00	NB-95
CO-58	----------	----------	2.78E+00	8.65E+00	6.11E+00	CO-58
MN-54	----------	----------	4.64E+00	1.42E+01	9.81E+00	MN-54
AG-110M	----------	----------	6.14E+00	1.91E+01	1.31E+01	AG-110M
ACTH-228	----------	----------	1.51E+01	4.81E+01	3.22E+01	ACTH-228
I-132	----------	----------	5.53E+01	1.76E+02	1.18E+02	I-132
ZN-65	----------	----------	5.80E+00	1.88E+01	1.29E+01	ZN-65
FE-59	----------	----------	9.83E+00	3.12E+01	2.15E+01	FE-59

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	4.11E+00	1.33E+01	8.97E+00	CO-60
BALA-140	----------	----------	5.77E+00	1.92E+01	1.27E+01	BALA-140
SB-124	----------	----------	8.13E+00	2.66E+01	1.82E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.42E+02 +- 3.70E+01 pCi/L

Results TRANSFERRED to ELMS.

Spectrum Storage ID #: 20054064G0.SPC Analyzed by sawyer on 12/12/2005 13:54:

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: MW-105

Counting Start:	12/12/2005 11:52:15	Lab ID.	.20054064
Decay Time.	9.59E+01 Hrs	Client ID	IP 05-779
Sampling Stop . .	12/08/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	12/08/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:56:40	Eff. Calib. Date. .	10/17/2005 14:20:15
Real Time (hr:min:sec). . .	001:56:43	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 4

Energy(keV)= 0.30+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 0.73+ 0.003*En+ 9.45e-04*En^2 + -7.44e-06*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[5.91e-02*En^-2.90e+00 + 2.81e+02*En^ 8.17e-01] 10/17/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	1.36E+02	7.90E+01	----------	----------	----------	RA-226
Co-57	----------	----------	3.50E+00	1.09E+01	7.31E+00	Co-57
Ce-144	----------	----------	2.70E+01	8.31E+01	5.64E+01	Ce-144
Ce-141	----------	----------	6.40E+00	1.97E+01	1.34E+01	Ce-141
Np-239	----------	----------	9.38E+01	2.88E+02	1.97E+02	Np-239
Se-75	----------	----------	5.32E+00	1.64E+01	1.12E+01	Se-75
Cr-51	----------	----------	3.24E+01	1.02E+02	6.91E+01	Cr-51
Eu-152	----------	----------	1.07E+01	3.39E+01	2.29E+01	Eu-152
I-131	----------	----------	5.75E+00	1.79E+01	1.22E+01	I-131
Ag-108m	----------	----------	4.34E+00	1.31E+01	9.24E+00	Ag-108m
Be-7	----------	----------	3.49E+01	1.08E+02	7.52E+01	Be-7
Ru-103	----------	----------	3.76E+00	1.18E+01	8.20E+00	Ru-103
I-133	----------	----------	8.90E+01	2.83E+02	1.95E+02	I-133
Cs-134	----------	----------	4.18E+00	1.31E+01	9.12E+00	Cs-134
Ru-106	----------	----------	3.11E+01	1.04E+02	7.00E+01	Ru-106
Cs-137	----------	----------	4.07E+00	1.28E+01	8.91E+00	Cs-137
Mo-99	----------	----------	6.81E+01	2.20E+02	1.53E+02	Mo-99
Zr-95	----------	----------	5.94E+00	1.91E+01	1.34E+01	Zr-95
Nb-95	----------	----------	2.06E+00	6.79E+00	4.98E+00	Nb-95
Co-58	----------	----------	4.52E+00	1.38E+01	9.90E+00	Co-58
Mn-54	----------	----------	3.76E+00	1.22E+01	8.37E+00	Mn-54
Ag-110m	----------	----------	4.92E+00	1.67E+01	1.11E+01	Ag-110m
AcTh-228	----------	----------	1.66E+01	5.30E+01	3.66E+01	AcTh-228
I-132	----------	----------	3.84E+01	1.33E+02	8.90E+01	I-132
Zn-65	----------	----------	5.01E+00	1.70E+01	1.22E+01	Zn-65

Spectrum Storage ID #: 20054064G0.SPC Analyzed by sawyer on 12/12/2005 13:54:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
Fe-59	----------	----------	1.08E+01	3.45E+01	2.46E+01	Fe-59
Co-60	----------	----------	4.43E+00	1.44E+01	1.01E+01	Co-60
K-40	----------	----------	4.46E+01	1.63E+02	1.02E+02	K-40
BaLa-140	----------	----------	5.63E+00	1.87E+01	1.31E+01	BaLa-140
Sb-124	----------	----------	6.20E+00	2.32E+01	1.56E+01	Sb-124

TOTAL MEASURED ACTIVITY: 1.36E+02 +- 7.90E+01 pCi/L

Error in Results Transfer to ELMS.

Spectrum Storage ID #: 20054065G0.SPC Analyzed by sawyer on 12/12/2005 12:52:

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: MW-101

Counting Start:	12/12/2005 11:26:18	Lab ID.	.20054065
Decay Time.	9.54E+01 Hrs	Client ID	IP 05-780
Sampling Stop . .	12/08/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	12/08/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:23:20	Eff. Calib. Date. .	10/13/2005 13:05:49
Real Time (hr:min:sec). . .	001:23:24	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 8

Energy(keV)= 0.17+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/12/2005

FWHM(keV) = 0.80+ 0.008*En+ 6.41e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[2.28e-01*En^-2.04e+00 + 1.71e+02*En^ 7.76e-01] 10/13/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	1.30E+02	5.66E+01	----------	----------	----------	RA-226
K-40	1.20E+02	2.82E+01	----------	----------	----------	K-40
CO-57	----------	----------	2.48E+00	7.77E+00	5.26E+00	CO-57
CE-144	----------	----------	2.02E+01	6.20E+01	4.26E+01	CE-144
CE-141	----------	----------	5.02E+00	1.57E+01	1.06E+01	CE-141
NP-239	----------	----------	7.53E+01	2.31E+02	1.59E+02	NP-239
SE-75	----------	----------	3.36E+00	1.08E+01	7.25E+00	SE-75
CR-51	----------	----------	2.81E+01	8.64E+01	6.03E+01	CR-51
EU-152	----------	----------	7.76E+00	2.41E+01	1.69E+01	EU-152
I-131	----------	----------	3.45E+00	1.07E+01	7.58E+00	I-131
AG-108M	----------	----------	2.42E+00	7.92E+00	5.34E+00	AG-108M
BE-7	----------	----------	2.44E+01	7.68E+01	5.36E+01	BE-7
RU-103	----------	----------	2.95E+00	9.50E+00	6.50E+00	RU-103
I-133	----------	----------	7.10E+01	2.25E+02	1.57E+02	I-133
CS-134	----------	----------	3.04E+00	9.69E+00	6.76E+00	CS-134
RU-106	----------	----------	2.82E+01	8.88E+01	6.32E+01	RU-106
CS-137	----------	----------	2.97E+00	9.40E+00	6.62E+00	CS-137
MO-99	----------	----------	4.80E+01	1.61E+02	1.10E+02	MO-99
ZR-95	----------	----------	4.16E+00	1.41E+01	9.59E+00	ZR-95
NB-95	----------	----------	3.20E+00	1.04E+01	7.14E+00	NB-95
CO-58	----------	----------	2.63E+00	8.27E+00	6.01E+00	CO-58

Spectrum Storage ID #: 20054065G0.SPC Analyzed by sawyer on 12/12/2005 12:52:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
ZN-65	----------	----------	3.88E+00	1.31E+01	9.56E+00	ZN-65
FE-59	----------	----------	6.80E+00	2.29E+01	1.61E+01	FE-59
CO-60	----------	----------	3.58E+00	1.12E+01	8.20E+00	CO-60
BALA-140	----------	----------	4.26E+00	1.45E+01	1.01E+01	BALA-140
SB-124	----------	----------	7.34E+00	2.37E+01	1.74E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.49E+02 +- 8.48E+01 pCi/L

Results TRANSFERRED to ELMS.

ATTACHMENT 7.6
PAGE 1 OF 1

DRINKING WATER (MONTHLY)
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 48 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE	VOLUME (UNITS)	ANALYSIS TYPE
IP	07	CAMP FIELD RESERVOIR	TS	WA		2 gal	I-131 GSA GB
IP	08	CROTON RESERVOIR	RR	WA		2 gal	I-131 GSA GB
IP	85	AMICUS RESERVOIR	RR	WA		2 gal	I-131 GSA GB
20053962 IP 05-750	~~101~~ 12	5TH STREET WELL	RR	WA	11/30/5 Dec.	3 LITERS	GSA H3
IP		U3-4	RR	WA		1 LITER	H-3 GSA

REMARKS: MONTHLY SAMPLES – DRINKING WATER
TS = TECH SPECS RR = REGULAR ROUTINE

ATTACHMENT 7.12
PAGE 1 OF 1

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 48 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
IP	14	WATER METER HOUSE	RR	WA			GAL	H-3, GB GSA I-131
IP	97	BUCHANAN SEWAGE TREATMENT PLANT (Recirc Tank 1)	RR	SL			1 liter	GSA
IP	98	BUCHANAN SEWAGE TREATMENT PLANT (Holdup Tank 2)	RR	SL			GAL	GSA
X IP 05-~~748~~ 747 20053959	~~99~~ 04	ALGONQUIN OUTFALL	RR	WA	11/30/5		3 LITERS	H-3 GSA
X 20053960 IP 05-748	~~100~~ 11	GYPSUM PLANT STREAM	RR	WA	11/30/5		3 LITERS	H-3 GSA
X 20053961 IP 05-749	~~102~~ 13	TRAP ROCK QUARRY	RR	WA	11/30/5		3 LITERS	H-3 GSA
IP	104	GYPSUM PLANT WELL 1	RR	WA			GAL	H-3 GSA GB
IP	105	GYPSUM PLANT WELL PARKING LOT	SPECIAL	WA			GAL	H-3 GSA GB

REMARKS: INDIAN POINT SPECIALS - MONTHLY
RR = Regular Routine

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: Special Waters **REPORTING UNITS IN: pCi/L** **Nov-05**

ISOTOPE	MIN. REQ. CL*	ALGONQUIN OUTFALL IP 05-747	GYPSUM PLANT STREAM IP 05-748	TRAP ROCK QUARRY IP 05-749	5TH STREET WELL IP-05-750
Be-7		<29.24	<29.4	<16.93	<27.40
K-40		196.6±45.26	217±42.03	95.15±27.81	135 ± 31.0
Mn-54		<4.21	<3.13	<2	<2.76
Co-58		<4.33	<2.97	<2.69	<3.40
Fe-59		<9.76	<8.71	<5.43	<8.85
Co-60	(7.5*)	<4.54	<3.67	<2.2	<2.59
Zn-65		<10.63	<4.97	<5.56	<3.86
Zr-95		<6.27	<6.77	<3.42	<5.20
Nb-95		<3.7	<3.57	<2.43	<4.40
Ru-103		<3.56	<3.56	<3.24	<3.06
Ru-106		<33.64	<26.42	<26.9	<33.50
I-131		<6.51	<5.79	<3.59	<4.92
Cs-134	(7.5*)	<3.59	<3.3	<2.99	<2.98
Cs-137	(9.0*)	<3.38	<3.27	<2.01	<3.15
Ba/La-140		<4.69	<6.1	<5.01	<4.84
Ce-141		<6.05	<5.74	<3.99	<5.68
Ce-144		<21.50	<20.20	<15.60	<21.30
Ra-226		<78.33	<71.26	159.6±50.33	<76.60
Ac-228		<13.71	<12.39	<10.55	<9.35
GROSS BETA		NA	NA	NA	NA
H-3		<464	<464	<464	<464

Results reported as < are CL values

***Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)**

CL Values Verified By Pittenger/WPitt

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

Spectrum Storage ID #: 20053959G0.SPC Analyzed by sayer on 12/06/2005 12:52:

SEEKER GAMMA ANALYSIS RESULTS Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: ALGONQUIN OUTFALL

Counting Start: 12/06/2005 11:09:12
Decay Time. . . . . 1.43E+02 Hrs
Sampling Stop . . 11/30/2005 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 11/30/2005 12:00:00
Live Time (hr:min:sec). . . 001:23:20
Real Time (hr:min:sec). . . 001:23:22

Lab ID. 20053959
Client ID . . . . . IP 05-747
Sample Size . . . . . 3.00e+00 L
Yield 1.0000
Geometry Code . . . . . 3_OMS0
Eff. Calib. Date. . 10/17/2005 14:20:15
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 4

Energy(keV)= 0.30+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/06/2005

FWHM(keV) = 0.73+ 0.003*En+ 9.45e-04*En^2 + -7.44e-06*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[5.91e-02*En^-2.90e+00 + 2.81e+02*En^ 8.17e-01] 10/17/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.97E+02	4.53E+01	----------	----------	----------	K-40
CO-57	----------	----------	2.87E+00	9.25E+00	6.19E+00	CO-57
CE-144	----------	----------	2.15E+01	6.80E+01	4.65E+01	CE-144
CE-141	----------	----------	6.05E+00	1.90E+01	1.29E+01	CE-141
RA-226	----------	----------	7.83E+01	2.50E+02	1.68E+02	RA-226
NP-239	----------	----------	1.41E+02	4.45E+02	3.06E+02	NP-239
SE-75	----------	----------	4.59E+00	1.45E+01	1.00E+01	SE-75
CR-51	----------	----------	2.87E+01	9.39E+01	6.39E+01	CR-51
EU-152	----------	----------	1.01E+01	3.25E+01	2.25E+01	EU-152
I-131	----------	----------	6.51E+00	2.05E+01	1.43E+01	I-131
AG-108M	----------	----------	2.37E+00	8.35E+00	5.51E+00	AG-108M
BE-7	----------	----------	2.92E+01	9.57E+01	6.63E+01	BE-7
RU-103	----------	----------	3.56E+00	1.21E+01	8.12E+00	RU-103
I-133	----------	----------	3.21E+02	1.12E+03	7.56E+02	I-133
CS-134	----------	----------	3.59E+00	1.18E+01	8.25E+00	CS-134
RU-106	----------	----------	3.36E+01	1.10E+02	7.81E+01	RU-106
CS-137	----------	----------	3.38E+00	1.10E+01	7.84E+00	CS-137
MO-99	----------	----------	1.13E+02	3.72E+02	2.64E+02	MO-99
ZR-95	----------	----------	6.27E+00	2.12E+01	1.46E+01	ZR-95
NB-95	----------	----------	3.70E+00	1.25E+01	8.65E+00	NB-95
CO-58	----------	----------	4.33E+00	1.38E+01	9.90E+00	CO-58
MN-54	----------	----------	4.21E+00	1.33E+01	9.63E+00	MN-54
AG-110M	----------	----------	5.65E+00	1.85E+01	1.30E+01	AG-110M
ACTH-228	----------	----------	1.37E+01	4.62E+01	3.20E+01	ACTH-228
I-132	----------	----------	6.95E+01	2.25E+02	1.65E+02	I-132

Spectrum Storage ID #: 20053959G0.SPC Analyzed by sayer on 12/06/2005 12:52:2

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
ZN-65	----------	----------	1.06E+01	3.24E+01	2.43E+01	ZN-65
FE-59	----------	----------	9.76E+00	3.39E+01	2.38E+01	FE-59
CO-60	----------	----------	4.53E+00	1.52E+01	1.08E+01	CO-60
BALA-140	----------	----------	4.69E+00	1.71E+01	1.23E+01	BALA-140
SB-124	----------	----------	6.88E+00	2.77E+01	1.84E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.97E+02 +- 4.53E+01 pCi/L

Results TRANSFERRED to ELMS.

Spectrum Storage ID #: 20053960G0.SPC Analyzed by sayer on 12/06/2005 14:55:04

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: gypsum plant stream

Counting Start:	12/06/2005 11:09:51	Lab ID.	20053960
Decay Time.	1.43E+02 Hrs	Client ID	IP 05-748
Sampling Stop . .	11/30/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	11/30/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	002:46:40	Eff. Calib. Date. .	10/12/2005 09:18:44
Real Time (hr:min:sec). . .	002:46:43	Library File.	MASTER.LIB

REVIEWED BY: _____

Detector #: 7

Energy(keV)= -0.50+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/06/2005

FWHM(keV) = 0.63+ 0.017*En+ 5.30e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[7.48e-02*En^-2.83e+00 + 3.77e+02*En^ 8.82e-01] 10/12/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	2.17E+02	4.20E+01	----------	----------	----------	K-40
Co-57	----------	----------	2.67E+00	8.24E+00	5.59E+00	Co-57
Ce-144	----------	----------	2.02E+01	6.17E+01	4.23E+01	Ce-144
Ce-141	----------	----------	5.74E+00	1.77E+01	1.20E+01	Ce-141
Ra-226	----------	----------	7.13E+01	2.28E+02	1.50E+02	Ra-226
Np-239	----------	----------	1.20E+02	3.73E+02	2.55E+02	Np-239
Se-75	----------	----------	3.96E+00	1.24E+01	8.43E+00	Se-75
Cr-51	----------	----------	3.00E+01	9.56E+01	6.39E+01	Cr-51
Eu-152	----------	----------	1.11E+01	3.38E+01	2.35E+01	Eu-152
I-131	----------	----------	5.79E+00	1.80E+01	1.24E+01	I-131
Ag-108m	----------	----------	2.73E+00	8.59E+00	5.95E+00	Ag-108m
Be-7	----------	----------	2.94E+01	9.08E+01	6.38E+01	Be-7
Ru-103	----------	----------	3.56E+00	1.12E+01	7.76E+00	Ru-103
I-133	----------	----------	3.48E+02	1.13E+03	7.71E+02	I-133
Cs-134	----------	----------	3.30E+00	1.02E+01	7.22E+00	Cs-134
Ru-106	----------	----------	2.64E+01	8.77E+01	5.99E+01	Ru-106
Cs-137	----------	----------	3.27E+00	1.07E+01	7.25E+00	Cs-137
Mo-99	----------	----------	1.11E+02	3.57E+02	2.46E+02	Mo-99
Zr-95	----------	----------	6.77E+00	2.12E+01	1.49E+01	Zr-95
Nb-95	----------	----------	3.57E+00	1.18E+01	7.95E+00	Nb-95
Co-58	----------	----------	2.97E+00	9.96E+00	6.75E+00	Co-58
Mn-54	----------	----------	3.13E+00	1.03E+01	7.05E+00	Mn-54
Ag-110m	----------	----------	5.61E+00	1.78E+01	1.24E+01	Ag-110m
AcTh-228	----------	----------	1.24E+01	4.14E+01	2.78E+01	AcTh-228
I-132	----------	----------	6.59E+01	2.23E+02	1.49E+02	I-132
Zn-65	----------	----------	4.97E+00	1.62E+01	1.20E+01	Zn-65

Spectrum Storage ID #: 20053960G0.SPC Analyzed by sayer on 12/06/2005 14:55:04

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
Fe-59	----------	----------	8.71E+00	3.01E+01	2.03E+01	Fe-59
Co-60	----------	----------	3.67E+00	1.23E+01	8.53E+00	Co-60
BaLa-140	----------	----------	6.10E+00	1.98E+01	1.42E+01	BaLa-140
Sb-124	----------	----------	6.93E+00	2.43E+01	1.70E+01	Sb-124

TOTAL MEASURED ACTIVITY: 2.17E+02 +- 4.20E+01 pCi/L

Error in Results Transfer to ELMS.

Spectrum Storage ID #: 20053961G0.SPC Analyzed by sayer on 12/06/2005 13:06:2

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: TRAP ROCK QUARRY

Counting Start:	12/06/2005 11:10:54	Lab ID.	.20053961
Decay Time.	1.43E+02 Hrs	Client ID	IP 05-749
Sampling Stop . .	11/30/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	11/30/2005 12:00:00	Geometry Code	3_0M80
Live Time (hr:min:sec). . .	001:23:20	Eff. Calib. Date. .	10/13/2005 13:05:49
Real Time (hr:min:sec). . .	001:23:22	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 8

Energy(keV)= 0.17+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/06/2005

FWHM(keV) = 0.80+ 0.008*En+ 6.41e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[2.28e-01*En^-2.04e+00 + 1.71e+02*En^ 7.76e-01] 10/13/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	1.60E+02	5.03E+01	----------	----------	----------	RA-226
K-40	9.52E+01	2.78E+01	----------	----------	----------	K-40
CO-57	----------	----------	2.28E+00	7.12E+00	4.84E+00	CO-57
CE-144	----------	----------	1.56E+01	4.92E+01	3.34E+01	CE-144
CE-141	----------	----------	3.98E+00	1.27E+01	8.54E+00	CE-141
NP-239	----------	----------	1.16E+02	3.59E+02	2.48E+02	NP-239
SE-75	----------	----------	3.01E+00	9.87E+00	6.56E+00	SE-75
CR-51	----------	----------	2.28E+01	7.20E+01	4.97E+01	CR-51
EU-152	----------	----------	6.77E+00	2.16E+01	1.49E+01	EU-152
I-131	----------	----------	3.59E+00	1.14E+01	7.98E+00	I-131
AG-108M	----------	----------	2.35E+00	7.52E+00	5.19E+00	AG-108M
BE-7	----------	----------	1.69E+01	5.75E+01	3.88E+01	BE-7
RU-103	----------	----------	3.24E+00	9.91E+00	7.10E+00	RU-103
I-133	----------	----------	2.54E+02	8.41E+02	5.80E+02	I-133
CS-134	----------	----------	2.99E+00	9.48E+00	6.66E+00	CS-134
RU-106	----------	----------	2.69E+01	8.92E+01	6.05E+01	RU-106
CS-137	----------	----------	2.01E+00	6.92E+00	4.68E+00	CS-137
MO-99	----------	----------	7.28E+01	2.47E+02	1.69E+02	MO-99
ZR-95	----------	----------	3.42E+00	1.21E+01	8.13E+00	ZR-95
NB-95	----------	----------	2.43E+00	8.22E+00	5.63E+00	NB-95
CO-58	----------	----------	2.69E+00	8.65E+00	6.13E+00	CO-58
MN-54	----------	----------	2.00E+00	7.17E+00	4.73E+00	MN-54
AG-110M	----------	----------	3.29E+00	1.09E+01	7.64E+00	AG-110M
ACTH-228	----------	----------	1.06E+01	3.42E+01	2.39E+01	ACTH-228
I-132	----------	----------	5.13E+01	1.66E+02	1.18E+02	I-132

Spectrum Storage ID #: 20053961G0.SPC Analyzed by sayer on 12/06/2005 13:06:

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
ZN-65	----------	----------	5.56E+00	1.79E+01	1.29E+01	ZN-65
FE-59	----------	----------	5.43E+00	1.99E+01	1.34E+01	FE-59
CO-60	----------	----------	2.19E+00	7.80E+00	5.43E+00	CO-60
BALA-140	----------	----------	5.01E+00	1.62E+01	1.18E+01	BALA-140
SB-124	----------	----------	7.02E+00	2.25E+01	1.68E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.55E+02 +- 7.81E+01 pCi/L

Results TRANSFERRED to ELMS.

Spectrum Storage ID #: 20053962G0.SPC Analyzed by sayer on 12/06/2005 13:15:2

SEEKER GAMMA ANALYSIS RESULTS Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: 5TH STREET WELL

Counting Start:	12/06/2005 11:22:08	Lab ID.	.20053962
Decay Time.	1.43E+02 Hrs	Client ID	IP 05-750
Sampling Stop . .	11/30/2005 12:00:00	Sample Size	3.00e+00 L
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	11/30/2005 12:00:00	Geometry Code	3_0MS0
Live Time (hr:min:sec). . .	001:23:20	Eff. Calib. Date. .	09/27/2005 13:14:16
Real Time (hr:min:sec). . .	001:23:22	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 3

Energy(keV)= -0.46+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 12/06/2005

FWHM(keV) = 0.84+ 0.011*En+ 4.55e-04*En^2 + 0.00e+00*En^3 09/27/2005
Where En = Sqrt(Energy in keV)

Eff.=1/[7.51e-02*En^-2.55e+00 + 1.76e+02*En^ 7.65e-01] 09/27/2005

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	1.35E+02	3.10E+01	----------	----------	----------	K-40
CO-57	----------	----------	2.70E+00	8.45E+00	5.70E+00	CO-57
CE-144	----------	----------	2.13E+01	6.65E+01	4.49E+01	CE-144
CE-141	----------	----------	5.68E+00	1.77E+01	1.19E+01	CE-141
RA-226	----------	----------	7.66E+01	2.40E+02	1.61E+02	RA-226
NP-239	----------	----------	1.36E+02	4.19E+02	2.88E+02	NP-239
SE-75	----------	----------	3.99E+00	1.27E+01	8.54E+00	SE-75
CR-51	----------	----------	2.57E+01	8.12E+01	5.57E+01	CR-51
EU-152	----------	----------	8.71E+00	2.74E+01	1.89E+01	EU-152
I-131	----------	----------	4.92E+00	1.54E+01	1.07E+01	I-131
AG-108M	----------	----------	2.43E+00	7.93E+00	5.37E+00	AG-108M
BE-7	----------	----------	2.74E+01	8.59E+01	5.98E+01	BE-7
RU-103	----------	----------	3.06E+00	1.00E+01	6.77E+00	RU-103
I-133	----------	----------	3.46E+02	1.09E+03	7.66E+02	I-133
CS-134	----------	----------	2.98E+00	9.58E+00	6.66E+00	CS-134
RU-106	----------	----------	3.35E+01	1.06E+02	7.39E+01	RU-106
CS-137	----------	----------	3.15E+00	9.68E+00	6.99E+00	CS-137
MO-99	----------	----------	9.65E+01	3.12E+02	2.17E+02	MO-99
ZR-95	----------	----------	5.20E+00	1.63E+01	1.17E+01	ZR-95
NB-95	----------	----------	4.40E+00	1.36E+01	9.59E+00	NB-95
CO-58	----------	----------	3.40E+00	1.08E+01	7.59E+00	CO-58
MN-54	----------	----------	2.76E+00	8.90E+00	6.29E+00	MN-54
AG-110M	----------	----------	4.11E+00	1.34E+01	9.31E+00	AG-110M
ACTH-228	----------	----------	9.35E+00	3.06E+01	2.16E+01	ACTH-228
I-132	----------	----------	5.49E+01	1.76E+02	1.26E+02	I-132

Spectrum Storage ID #: 2005396260.SPC Analyzed by sayer on 12/06/2005 13:15:2

CONCENTRATIONs Units: pCi/L

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
ZN-65	----------	----------	3.86E+00	1.31E+01	9.59E+00	ZN-65
FE-59	----------	----------	8.85E+00	2.82E+01	2.04E+01	FE-59
CO-60	----------	----------	2.59E+00	8.99E+00	6.26E+00	CO-60
BALA-140	----------	----------	4.84E+00	1.62E+01	1.15E+01	BALA-140
SB-124	----------	----------	5.15E+00	1.92E+01	1.31E+01	SB-124

TOTAL MEASURED ACTIVITY: 1.35E+02 +- 3.10E+01 pCi/L

Results TRANSFERRED to ELMS.

ATTACHMENT 7.12
PAGE 1 OF 1

INDIAN POINT SPECIALS
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 48 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE/TIME		VOLUME (UNITS)	ANALYSIS TYPE
					FROM	TO		
IP	14	WATER METER HOUSE	RR	WA			GAL	H-3, GB GSA I-131
IP	97	BUCHANAN SEWAGE TREATMENT PLANT (Recirc Tank 1)	RR	SL			1 liter	GSA
IP	98	BUCHANAN SEWAGE TREATMENT PLANT (Holdup Tank 2)	RR	SL			GAL	GSA
IP 05-~~748~~ 747 20053959	~~99~~ 04	ALGONQUIN OUTFALL	RR	WA	11/30/5		3 LITERS	H-3 GSA
IP 05-748 20053960	~~100~~ 11	GYPSUM PLANT STREAM	RR	WA	11/30/5		3 LITERS	H-3 GSA
IP 05-749 20053961	~~102~~ 13	TRAP ROCK QUARRY	RR	WA	11/30/5		3 LITERS	H-3 GSA
IP	104	GYPSUM PLANT WELL 1	RR	WA			GAL	H-3 GSA GB
IP	105	GYPSUM PLANT WELL PARKING LOT	SPECIAL	WA			GAL	H-3 GSA GB

REMARKS: INDIAN POINT SPECIALS - MONTHLY
RR = Regular Routine

DRINKING WATER (MONTHLY)
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 48 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE	VOLUME (UNITS)	ANALYSIS TYPE
IP	07	CAMP FIELD RESERVOIR	TS	WA		2 gal	I-131 GSA GB
IP	08	CROTON RESERVOIR	RR	WA		2 gal	I-131 GSA GB
IP	85	AMICUS RESERVOIR	RR	WA		2 gal	I-131 GSA GB
20053962 IP 05-750	~~101~~ 12	5TH STREET WELL	RR	WA	11/30/5	3 LITERS	GSA H3
IP		U3-4	RR	WA		1 LITER	H-3 GSA

REMARKS: MONTHLY SAMPLES – DRINKING WATER
TS = TECH SPECS RR = REGULAR ROUTINE

TRITIUM PROGRAM
Tritium Analysis Sample Run ID Sheet

Run No. 05-87 Plant Eff. ☐ Environmental ☐ Other ☐ Sample Count Date 12/6/2005

Background Count Time(min.) 100 Background (CPM) 9.46

Background Counting Eff. 0.354 Background (DPM) 26.73

3-5	QC STD	3/14/2002	12:00	NA	E3050	100	36.25	75.28	0.355	10457 ± 264
5-1	ALGONQUIN OUTFALL	11/30/2005	12:00	20053959	IP-05-747	100	9.65	0.57	0.354	<464
5-2	GYPSUM PLANT STREAM	11/30/2005	12:00	20053960	IP-05-748	100	9.61	0.52	0.353	<464
5-3	TRAP ROCK QUARRY	11/30/2005	12:00	20053961	IP-05-749	100	9.20	-1.07	0.359	<464
5-4	5TH STREET WELL	11/30/2005	12:00	20053962	IP-05-750	100	9.29	-0.65	0.356	<464

Page _____ of _____ Completed By: _____ Date: _____

JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	GYPSUM PLANT STREAM			ELMS #:	20053960
Sample On Date / Time :	11/30/05	@	12:00	Client ID No.	IP-05-748
Sample Off Date / Time :	11/30/05	@	12:00	Run No.	05-87
Sample Count Date:	12/06/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	945.89
Background count time (minutes)	100
Background Counts, CPM:	9.46
Background DPM	26.73
Critical Level (CL) CPM	0.72

Sample Gross counts:	951
Sample Count Time (minutes)	100
Sample CPM:	9.61
Sample Net CPM:	0.15
Sample DPM:	0.52
sample volume (L)	0.004

Background Counting Efficiency	0.354	CL Ratio= 0.21
LLD value (pCi/L)	<464	Act/Error Ratio= 0.4

Sample Counting Efficiency	0.353		
Sample Activity (pCi/L) ± 1 sigma	59	±	140

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 12/8/05
print / sign

Supervisor review: B. Gorman B. Gorman — Date: 12/08/05
print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	ALGONQUIN OUTFALL			ELMS #:	20053959
Sample On Date / Time :	11/30/05	@	12:00	Client ID No.	IP-05-747
Sample Off Date / Time :	11/30/05	@	12:00	Run No.	05-87
Sample Count Date:	12/06/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	945.89
Background count time (minutes)	100
Background Counts, CPM:	9.46
Background DPM	26.73
Critical Level (CL) CPM	0.72

Sample Gross counts:	965.33333
Sample Count Time (minutes)	100
Sample CPM:	9.65
Sample Net CPM:	0.19
Sample DPM:	0.57
sample volume (L)	0.004

Background Counting Efficiency	0.354	CL Ratio= 0.27
LLD value (pCi/L)	<464	Act/Error Ratio= 0.5

Sample Counting Efficiency	0.354		
Sample Activity (pCi/L) ± 1 sigma	64	±	139

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 then the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 12/8/05
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Supervisor review: B. Gorman B. Gorman — Date: 12/08/05
print / sign

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	TRAP ROCK QUARRY			ELMS #:	20053961
Sample On Date / Time :	11/30/05	@	12:00	Client ID No.	IP-05-749
Sample Off Date / Time :	11/30/05	@	12:00	Run No.	05-87
Sample Count Date:	12/06/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	945.89
Background count time (minutes)	100
Background Counts, CPM:	9.46
Background DPM	26.73
Critical Level (CL) CPM	0.72

Sample Gross counts:	920.33333
Sample Count Time (minutes)	100
Sample CPM:	9.20
Sample Net CPM:	-0.26
Sample DPM:	-1.07
sample volume (L)	0.004

Background Counting Efficiency	0.354	CL Ratio= -0.36
LLD value (pCi/L)	<464	Act/Error Ratio= -0.9

Sample Counting Efficiency	0.359		
Sample Activity (pCi/L) ± 1 sigma	-121	±	136

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 then the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt print / sign Date: 12/8/05

Supervisor review: B. Gorman B. Gorman print / sign Date: 12/08/05

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JAF ENVIRONMENTAL LABORATORY

Tritium Activity Calculation

Sample ID	5TH STREET WELL			ELMS #:	20053962
Sample On Date / Time :	11/30/05	@	12:00	Client ID No.	IP-05-750
Sample Off Date / Time :	11/30/05	@	12:00	Run No.	05-87
Sample Count Date:	12/06/05	@	12:00	Sample Distilled:	YES
Elapsed Time (count date to off date) yrs	0.02			Decay Factor:	0.9991

Background Gross counts:	945.89
Background count time (minutes)	100
Background Counts, CPM:	9.46
Background DPM	26.73
Critical Level (CL) CPM	0.72

Sample Gross counts:	929.33333
Sample Count Time (minutes)	100
Sample CPM:	9.29
Sample Net CPM:	-0.17
Sample DPM:	-0.65
sample volume (L)	0.004

Background Counting Efficiency	0.354	CL Ratio= -0.23
LLD value (pCi/L)	<464	Act/Error Ratio= -0.5

Sample Counting Efficiency	0.356		
Sample Activity (pCi/L) ± 1 sigma	-73	±	137

Comments:

Note: If CL ratio is <1.0 OR Act/Error Ratio is <2.7 than the LLD value is reported as a "Less Than" Activity.

Technician: PITTENGER / W Pitt — Date: 12/8/05
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Supervisor review: B. Gorman B. Gorman — Date: 12/08/05
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