

**From:** "Lavera, Ronald" <RLavera@entergy.com>  
**To:** <jjk@nrc.gov>  
**Date:** 06/07/2006 2:44:28 PM  
**Subject:** Sample Analysis Reports - Part 3

<<Entergy L28455.pdf>> <<Entergy L28500 partial.pdf>> <<Entergy  
L28405.pdf>> <<Entergy L28502 partial.pdf>>

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

D-5

**Mail Envelope Properties (44871E0E.F97 : 21 : 36759)**

**Subject:** Sample Analysis Reports - Part 3  
**Creation Date** 06/07/2006 2:39:37 PM  
**From:** "Lavera, Ronald" <[RLavera@entergy.com](mailto:RLavera@entergy.com)>

**Created By:** [RLavera@entergy.com](mailto:RLavera@entergy.com)

**Recipients**

nrc.gov  
kp1\_po.KP\_DO  
JJK (James Kottan)

**Post Office**  
kp1\_po.KP\_DO

**Route**  
nrc.gov

Files	Size	Date & Time
MESSAGE	450	06/07/2006 2:39:37 PM
TEXT.htm	1620	
Entergy L28455.pdf	713328	
Entergy L28500 partial.pdf	873183	
Entergy L28405.pdf	1500722	
Entergy L28502 partial.pdf	659232	
Mime.822	5132319	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled



**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**

05/24/2006

LIMS #: L28455

Project ID#: EN002-3P50IP3-04

Received: 05/01/2006

Delivery Date: 05/08/2006

P.O. #: 4500539361

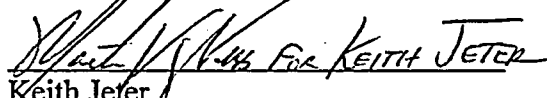
Release #:

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)
IP3-06-085	L28455-1	MW-U3-4D

# Report of Analysis

05/24/06 15:39

**L28455**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-085					Collect Start: 04/26/2006 14:20					Matrix: Ground Water					(WG)				
Station: MW-U3-4D					Collect Stop:					Volume:									
Description:					Receive Date: 05/01/2006					% Moisture:									
LIMS Number: L28455-1																			
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values						
H-3	2010	5.75E+02	1.46E+02	1.87E+02	pCi/L		10	ml		05/09/06	60	M	+						
SR-90	2019	-1.48E-01	4.07E-01	7.91E-01	pCi/L		450	ml	04/26/06 14:20	05/24/06	400	M	U						
TOTAL SR	2018	-1.10E-01	4.68E-01	7.78E-01	pCi/L		450	ml	04/26/06 14:20	05/17/06	400	M	U						
BE-7	2007	1.99E+01	4.91E+01	8.36E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
K-40	2007	3.22E+01	5.88E+01	7.31E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		Yes				
CR-51	2007	-4.43E+01	5.68E+01	8.60E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
MN-54	2007	1.45E+00	4.64E+00	8.02E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CO-57	2007	4.88E-01	4.72E+00	7.88E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CO-58	2007	-2.59E+00	5.81E+00	9.06E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
FE-59	2007	-3.12E+00	1.14E+01	1.80E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CO-60	2007	-3.10E+00	5.47E+00	8.71E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
ZN-65	2007	1.59E+01	1.29E+01	2.27E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
NB-94	2007	2.83E+00	4.89E+00	8.56E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
NB-95	2007	2.46E+00	5.64E+00	9.68E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
ZR-95	2007	-6.47E+00	1.08E+01	1.62E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
MO-99	2007	-2.96E+02	7.35E+02	1.13E+03	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
RU-103	2007	2.84E+00	5.99E+00	1.03E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
RU-106	2007	2.96E+01	4.43E+01	7.82E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
AG-110M	2007	8.85E-01	5.30E+00	8.87E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
SB-124	2007	-8.14E+00	7.67E+00	8.95E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
SB-125	2007	-4.78E+00	1.52E+01	2.43E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
I-131	2007	-2.96E+00	1.51E+01	2.48E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CS-134	2007	1.80E+00	6.99E+00	1.01E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CS-137	2007	-3.01E-01	5.58E+00	9.11E+00	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
BA-140	2007	8.06E+00	3.08E+01	5.15E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
LA-140	2007	8.57E-01	1.19E+01	1.97E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CE-141	2007	-5.55E+00	1.07E+01	1.70E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				
CE-144	2007	-6.22E+00	3.72E+01	6.08E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U		No				

## 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

# Report of Analysis

05/24/06 15:39

**L28455**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-085		Collect Start: 04/26/2006 14:20				Matrix: Ground Water				(WG)			
Station: MW-U3-4D		Collect Stop:				Volume:							
Description:		Receive Date: 05/01/2006				% Moisture:							
LIMS Number: L28455-1													
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
EU-154	2007	-4.13E+00	9.69E+00	1.57E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U No
RA-226	2007	-4.27E+01	1.27E+02	2.06E+02	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U No
TH-228	2007	-8.73E+00	1.18E+01	1.65E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U No
TH-232	2007	9.10E+00	2.09E+01	3.80E+01	pCi/L		3584.48	ml	04/26/06 14:20	05/08/06	3600	Sec	U No
Comment: I Count to Enviromental LLDs; RUSH													

## 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  
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**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

L28455  
P-8C.

L28455  
P-8C.

L28455  
P-8C.

Received by:

**IP3**

**Count to Envirmental LLDs;  
Count H3 to 200 pCi/L**

### Rush sample results

WMG, Inc.		RADIOACTIVE MATERIAL MANIFEST		5. SHIPPER - NAME AND FACILITY Entergy Nuclear Northeast Indian Point Energy Center 450 Broadway, Suite 1 P.O. Box 249 Buchanan, NY 10511-0249		7. PAGE 1 OF 1 PAGE(S)		8. SHIPMENT NUMBER (Use this number on all continuation pages) 06 - 128	
SHIPPING PAPER				SHIPPER LICENSE NO. DPR-26		SHIPPER ID NUMBER DPR-26		9. CONSIGNEE - Name and Facility Address Teledyne Brown Engineering 2508 Quality Lane Knoxville, TN 37931-3133	
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) (914) 734-5028, 5029				CONTACT William Scholtens		TELEPHONE NUMBER (Include Area Code) (914) 734-5405		CONTACT Rebecca Charles	
ORGANIZATION Control Room				6. CARRIER - Name and Address Federal Express		EPA ID NUMBER N/A		TELEPHONE NUMBER (Include Area Code) (865) 690-6819	
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 1		SHIPPING DATE 04/27/2006		SIGNATURE - Authorized consignee acknowledging receipt N/A	
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				EPA MANIFEST NUMBER N/A		CONTACT N/A		DATE	
If "Yes," provide Manifest Number				SIGNATURE - Authorized carrier acknowledging material receipt N/A		TELEPHONE NUMBER (Include Area Code) (800) 463-3339		FEDERAL CERTIFICATION: "This is to certify that the herein-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation."	
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL N/A		13. RAD LEVEL mSv/hr Contact 0.0005 0.05		14. PHYSICAL AND CHEMICAL FORM Liquid/ Metal Oxides	
Radioactive material, excepted package-limited quantity of material, 7, UN2910, MW-U3-4D Well Sample				N/A		N/A		15. INDIVIDUAL RADIONUCLIDES MBq (mCi) H-3 4.53E-04 (1.22E-05) Package Total: 4.53E-04 (1.22E-05) Shipment Total: 4.53E-04 (1.22E-05)	
								16. CONTAINER TYPE Box	
								17. LSA/SCO CLASS N/A	
								18. TOTAL WEIGHT OR VOLUME (Use appropriate units) 4.1 Kg 9.0 Lbs	
								19. IDENTIFICATION NUMBER OF PACKAGE 06 - 128	



**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

**PRELIMINARY**

**Report of Analysis/Certificate of Conformance**

05/24/2006

LIMS #: L28500

Project ID#: EN002-3P50IP3-04

Received: 05/03/2006

Delivery Date: 05/17/2006

P.O. #: 4500539361

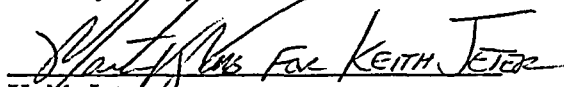
Release #:

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)
IP3-06-083	L28500-1	HUDSON R. MH1
IP3-06-084	L28500-2	SHORESED MH1

# Report of Analysis

05/24/06 15:39

**L28500**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-083

Station: HUDSON R. MH1

Description:

LIMS Number: L28500-1

Collect Start: 04/18/2006 13:30

Collect Stop:

Receive Date: 05/03/2006

Matrix: River Water

(WR)

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
H-3	2010	1.52E+02	1.09E+02	1.72E+02	pCi/L	R1	10	ml		05/24/06	140	M	U
TOTAL SR	2018	2.53E-01	4.62E-01	7.44E-01	pCi/L		450	ml	04/18/06 13:30	05/19/06	400	M	U
BE-7	2007	3.26E+00	3.09E+01	5.16E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
K-40	2007	4.35E+01	4.15E+01	8.28E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CR-51	2007	-7.46E+00	4.16E+01	6.66E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
MN-54	2007	3.20E+00	3.14E+00	5.56E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CO-57	2007	1.75E+00	2.47E+00	4.24E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CO-58	2007	-1.96E+00	3.68E+00	5.75E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
FE-59	2007	-3.97E-01	7.90E+00	1.30E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CO-60	2007	-4.76E-01	3.23E+00	5.28E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
ZN-65	2007	8.97E+00	6.86E+00	1.24E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
NB-94	2007	-2.05E+00	2.92E+00	4.59E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
NB-95	2007	-7.77E-02	3.51E+00	5.72E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
ZR-95	2007	-1.81E+00	6.16E+00	9.86E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
MO-99	2007	-7.79E+02	6.75E+03	1.10E+04	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
RU-103	2007	3.51E+00	4.10E+00	7.13E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
RU-106	2007	-4.56E+00	2.72E+01	4.36E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
AG-110M	2007	-1.52E+00	3.01E+00	4.82E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
SB-124	2007	-1.23E+01	5.20E+00	5.64E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
SB-125	2007	3.76E+00	8.16E+00	1.37E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
I-131	2007	-6.49E+00	1.80E+01	2.92E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CS-134	2007	7.81E-01	3.58E+00	5.01E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CS-137	2007	2.10E+00	3.07E+00	5.31E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
BA-140	2007	-5.01E+00	3.37E+01	5.49E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
LA-140	2007	3.71E+00	1.05E+01	1.80E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CE-141	2007	-1.29E+00	7.53E+00	1.06E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
CE-144	2007	2.98E+00	2.20E+01	3.18E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U
EU-154	2007	2.93E+00	4.98E+00	8.52E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	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

# Report of Analysis

05/24/06 15:39

**L28500**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-083			Collect Start: 04/18/2006 13:30			Matrix: River Water			(WR)		
Station: HUDSON R. MH1			Collect Stop:			Volume:					
Description:			Receive Date: 05/03/2006			% Moisture:					
LIMS Number: L28500-1											

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values	
RA-226	2007	1.43E+00	6.38E+01	1.07E+02	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U	No
TH-228	2007	1.15E-01	5.23E+00	8.98E+00	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U	No
TH-232	2007	2.44E+00	1.07E+01	1.87E+01	pCi/L		3181.33	ml	04/18/06 13:30	05/11/06	9354	Sec	U	No

## Flag Values

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MDC - Minimum Detectable Concentration

# Report of Analysis

05/24/06 15:39

**L28500**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-084		Collect Start: 04/18/2006 13:30				Matrix: Soil				(S)					
Station: SHORESED MH1		Collect Stop:				Volume:									
Description:		Receive Date: 05/03/2006				% Moisture: 3.62									
LIMS Number: L28500-2															
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values		
H-3	2003	7.71E-01	2.30E-01	3.41E-01	pCi/g	R1	5.0738	g wet		05/24/06	140	M	+		
TOTAL SR	2018	-4.35E-03	5.11E-02	8.44E-02	pCi/g		5.0717	g dry	04/18/06 13:30	05/19/06	400	M	U		
BE-7	2007	3.37E-01	3.50E-01	6.08E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
K-40	2007	8.39E+00	9.90E-01	4.77E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	+		Yes
CR-51	2007	6.46E-02	4.47E-01	7.46E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
MN-54	2007	2.18E-02	3.45E-02	6.05E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CO-57	2007	4.94E-03	2.61E-02	4.39E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CO-58	2007	2.32E-02	4.23E-02	7.36E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
FE-59	2007	2.16E-03	9.77E-02	1.60E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CO-60	2007	-1.81E-02	3.64E-02	5.59E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
ZN-65	2007	6.98E-02	8.93E-02	1.56E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
NB-94	2007	1.66E-02	3.33E-02	5.66E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
NB-95	2007	-5.04E-03	4.01E-02	6.42E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
ZR-95	2007	1.26E-02	7.55E-02	1.25E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
MO-99	2007	5.32E+01	1.14E+02	1.93E+02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
RU-103	2007	-2.05E-03	4.32E-02	7.17E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
RU-106	2007	9.80E-02	3.04E-01	5.13E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
AG-110M	2007	-1.12E-03	3.35E-02	5.48E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
SB-124	2007	4.29E-03	4.86E-02	6.84E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
SB-125	2007	6.46E-02	9.49E-02	1.62E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
I-131	2007	4.43E-02	2.35E-01	3.92E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CS-134	2007	4.25E-02	4.27E-02	6.55E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CS-137	2007	-3.81E-03	3.32E-02	5.38E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
BA-140	2007	3.29E-02	3.81E-01	6.35E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
LA-140	2007	-5.16E-02	1.13E-01	1.72E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CE-141	2007	-3.57E-02	6.96E-02	1.13E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
CE-144	2007	-7.76E-02	1.99E-01	3.25E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No
EU-154	2007	3.78E-04	5.21E-02	8.70E-02	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U		No

## Flag Values

- U = Compound/Analyte not detected or less than 3 sigma
- 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

05/24/06 15:39

**L28500**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-084		Collect Start: 04/18/2006 13:30				Matrix: Soil		(S)						
Station: SHORESED MH1		Collect Stop:				Volume:								
Description:		Receive Date: 05/03/2006				% Moisture: 3.62								
LIMS Number: L28500-2														
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values	
RA-226	2007	4.64E-01	6.64E-01	1.14E+00	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U	No
TH-228	2007	1.29E-01	6.12E-02	1.09E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U*	No
TH-232	2007	1.83E-01	1.17E-01	2.08E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U	Yes

## 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

05/08/06 13:56

Teledyne Brown Engineering  
Sample Receipt Verification/Variance Report

SR #: SR08193

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

LIMS #: L28500

Initiated By: PMARSHALL

Init Date: 05/05/06 Receive Date: 05/03/06

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)			N	
Samples are designated as environmental for LLD purposes only. Samples were accompanied by rad paperwork.				

# Report of Analysis

05/24/06 15:39

**L28500**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-084				Collect Start: 04/18/2006 13:30				Matrix: Soil				(S)		
Station: SHORESED MH1				Collect Stop:				Volume:						
Description:				Receive Date: 05/03/2006				% Moisture: 3.62						
LIMS Number: L28500-2														
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values	
RA-226	2007	4.64E-01	6.64E-01	1.14E+00	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U	No
TH-228	2007	1.29E-01	6.12E-02	1.09E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U*	No
TH-232	2007	1.83E-01	1.17E-01	2.08E-01	pCi/g Dry		375.9	g dry	04/18/06 13:30	05/12/06	6000	Sec	U	Yes

## 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

05/08/06 13:56

Teledyne Brown Engineering  
Sample Receipt Verification/Variance Report

SR #: SR08193

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

LIMS #: L28500

Initiated By: PMARSHALL

Init Date: 05/05/06 Receive Date: 05/03/06

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) N

Samples are designated as environmental for LLD purposes only. Samples were accompanied by rad paperwork.

Indian Point Energy Center

**Entergy Nuclear Operations, Inc.**  
Sample Collection/Receipt Sheet

L28500  
p8c

unit yr id# format (IPX-XX.XXX)Teledyne Sample #	Sample ID	Sample Type	Start date	Start time	Stop date	Stop time	Volume or Area	Analysis	Comments	Sample Size Units	Plant Code
IP3-06-083	Hudson River at MH-1	WR	18-Apr-06	13:30			1.000E+00	SR-90, H-3, GELI, SR-FAST	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-084	Sediment of shoreline at MH-1	SH	18-Apr-06	13:30			5.000E+02	SR-90, H-3, GELI, SR-FAST	Count to Enviromental LLDs; RUSH	ML	EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04

Collected by:  
Shipped by:  
Received by: *Pat Marshall*

Count to Envirmental LLDs;  
Count H3 to 200 pCi/L

**IP3**

Rush sample results



**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**

05/19/2006

LIMS #: L28405

Project ID#: EN002-3P50IP3-04

Received: 04/25/2006

Delivery Date: 05/09/2006

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)
IP3-06-075	L28405-1	MW-41 63 FT DEPTH
IP3-06-076	L28405-2	MW-41 41 FT DEPTH
IP3-06-077	L28405-3	MW-43 28 FT DEPTH
IP3-06-078	L28405-4	MW-43 62 FT DEPTH
IP3-06-079	L28405-5	MW-46 30 FT DEPTH
IP3-06-080	L28405-6	U2 MANHOLE 5

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-075		Collect Start: 04/12/2006 14:45				Matrix: Ground Water				(WG)					
Station: MW-41 63 FT DEPTH		Collect Stop:				Volume:									
Description:		Receive Date: 04/25/2006				% Moisture:									
LIMS Number: L28405-1															
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values		
H-3	2010	7.01E+02	1.35E+02	1.53E+02	pCi/L		10	ml		05/08/06	60	M	+		
SR-90	2019	5.49E+00	1.47E+00	1.60E+00	pCi/L		450	ml	04/12/06 14:45	05/10/06	100	M	+		
BE-7	2007	7.47E+00	1.43E+01	2.38E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
K-40	2007	8.38E+00	2.10E+01	3.62E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CR-51	2007	-1.30E+01	1.85E+01	2.97E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
MN-54	2007	1.29E+00	1.41E+00	2.40E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CO-57	2007	-6.14E-01	1.27E+00	2.09E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CO-58	2007	1.10E-01	1.62E+00	2.69E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
FE-59	2007	5.68E+00	3.53E+00	6.20E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CO-60	2007	-3.89E-02	1.79E+00	2.78E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
ZN-65	2007	1.33E+01	4.06E+00	6.58E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U*		No
NB-94	2007	9.30E-01	1.38E+00	2.30E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
NB-95	2007	3.82E+00	1.99E+00	2.98E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U*		No
ZR-95	2007	-1.50E-01	2.98E+00	4.60E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
MO-99	2007	-1.84E+02	1.32E+03	2.14E+03	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
RU-103	2007	1.90E+00	1.90E+00	3.18E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
RU-106	2007	-4.71E+00	1.30E+01	2.09E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
AG-110M	2007	-1.09E-01	1.41E+00	2.31E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
SB-124	2007	-1.10E+00	3.78E+00	2.72E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
SB-125	2007	-9.30E-02	3.94E+00	6.48E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
I-131	2007	-2.46E+00	7.01E+00	1.16E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CS-134	2007	1.17E+01	2.74E+00	3.18E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U*		No
CS-137	2007	6.98E-01	1.51E+00	2.52E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
BA-140	2007	4.50E+00	1.36E+01	2.23E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
LA-140	2007	4.37E+00	4.75E+00	8.12E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CE-141	2007	9.82E-01	3.67E+00	5.21E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
CE-144	2007	-9.02E+00	1.17E+01	1.63E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No
EU-154	2007	-3.69E+00	2.58E+00	4.20E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U		No

## Flag Values

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

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04

Floyd Hood, Chem



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Sample ID: IP3-06-075						Collect Start: 04/12/2006 14:45				Matrix: Ground Water				(WG)	
Station: MW-41 63 FT DEPTH						Collect Stop:				Volume:					
Description:						Receive Date: 04/25/2006				% Moisture:					
LIMS Number: L28405-1															
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values		
RA-226	2007	2.81E+01	3.36E+01	5.08E+01	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U	Yes	
TH-228	2007	3.40E+00	2.40E+00	3.84E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U	Yes	
TH-232	2007	2.49E+00	6.48E+00	9.28E+00	pCi/L		3163.44	ml	04/12/06 14:45	05/01/06	54463	Sec	U	No	
Comment: 1 Count to Enviromental LLDs; RUSH															

## 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

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-076		Collect Start: 04/12/2006 15:00				Matrix: Ground Water		(WG)					
Station: MW-41 41 FTDEPTH		Collect Stop:				Volume:							
Description:		Receive Date: 04/25/2006				% Moisture:							
LIMS Number: L28405-2													
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.26E+02	1.38E+02	1.56E+02	pCi/L		10	ml		05/08/06	60	M	+
SR-90	2019	2.63E+00	1.16E+00	1.58E+00	pCi/L		450	ml	04/12/06 15:00	05/10/06	100	M	+
BE-7	2007	-8.28E+00	1.74E+01	2.82E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
K-40	2007	1.63E+01	3.05E+01	2.53E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CR-51	2007	-2.40E+01	2.21E+01	3.51E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
MN-54	2007	-1.03E+00	1.72E+00	2.75E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CO-57	2007	-4.83E-01	1.64E+00	2.68E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CO-58	2007	-9.88E-01	2.00E+00	3.20E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
FE-59	2007	5.90E+00	4.07E+00	7.04E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CO-60	2007	-7.58E-01	1.70E+00	2.74E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
ZN-65	2007	1.87E+01	4.61E+00	7.67E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U*
NB-94	2007	-1.45E-01	1.58E+00	2.60E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
NB-95	2007	2.52E-01	1.97E+00	3.24E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
ZR-95	2007	-1.03E+00	3.51E+00	5.69E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
MO-99	2007	-1.03E+03	1.61E+03	2.59E+03	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
RU-103	2007	2.76E+00	2.35E+00	3.95E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
RU-106	2007	-8.78E+00	1.56E+01	2.51E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
AG-110M	2007	3.83E-01	1.68E+00	2.80E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
SB-124	2007	-2.24E+00	4.86E+00	3.30E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
SB-125	2007	-2.54E+00	4.62E+00	7.53E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
I-131	2007	-3.51E-01	8.59E+00	1.43E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CS-134	2007	1.35E+01	3.09E+00	3.78E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U*
CS-137	2007	2.91E+00	1.75E+00	3.03E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
BA-140	2007	2.00E+01	1.67E+01	2.82E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
LA-140	2007	4.19E+00	5.46E+00	9.25E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CE-141	2007	-7.21E-01	4.78E+00	6.61E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
CE-144	2007	-1.23E+01	1.49E+01	2.04E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U
EU-154	2007	2.16E-01	3.29E+00	5.40E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U

## Flag Values

- U = Compound/Analyte not detected or less than 3 sigma
- +
- 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

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-076				Collect Start: 04/12/2006 15:00				Matrix: Ground Water				(WG)	
Station: MW-41 41 FTDEPTH				Collect Stop:				Volume:					
Description:				Receive Date: 04/25/2006				% Moisture:					
LIMS Number: L28405-2													

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
RA-226	2007	2.40E+01	4.22E+01	6.24E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U Yes
TH-228	2007	3.40E+00	2.74E+00	4.88E+00	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U Yes
TH-232	2007	-8.66E-01	7.17E+00	1.13E+01	pCi/L		3294.93	ml	04/12/06 15:00	05/01/06	54470	Sec	U No

Comment: 1 Count to Enviromental LLDs; RUSH

## 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

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-077		Collect Start: 04/12/2006 12:45				Matrix: Ground Water				(WG)			
Station: MW-43 28 FT DEPTH		Collect Stop:				Volume:							
Description:		Receive Date: 04/25/2006				% Moisture:							
LIMS Number: L28405-3													
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.46E+02	1.19E+02	1.59E+02	pCi/L		10	ml		05/08/06	60	M	+
SR-90	2019	9.40E-02	4.93E-01	8.06E-01	pCi/L		450	ml	04/12/06 12:45	05/19/06	800	M	U
BE-7	2007	-1.03E+01	1.51E+01	2.42E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
K-40	2007	4.71E+01	2.77E+01	2.22E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	+
CR-51	2007	-2.33E+01	1.87E+01	2.98E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
MN-54	2007	4.02E-01	1.52E+00	2.51E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CO-57	2007	-1.32E+00	1.33E+00	2.19E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CO-58	2007	-1.73E+00	1.67E+00	2.67E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
FE-59	2007	5.26E+00	3.66E+00	6.32E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CO-60	2007	1.56E+00	1.49E+00	2.56E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
ZN-65	2007	8.14E+00	3.98E+00	6.04E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U*
NB-94	2007	-1.43E+00	1.46E+00	2.32E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
NB-95	2007	4.17E+00	1.75E+00	3.09E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U*
ZR-95	2007	-3.09E+00	3.04E+00	4.91E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
MO-99	2007	-4.37E+02	1.48E+03	2.34E+03	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
RU-103	2007	1.32E+00	1.98E+00	3.27E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
RU-106	2007	-1.07E+01	1.40E+01	2.22E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
AG-110M	2007	-2.43E-01	1.45E+00	2.37E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
SB-124	2007	6.17E-01	3.71E+00	2.79E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
SB-125	2007	-1.32E+00	4.08E+00	6.66E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
I-131	2007	1.48E+00	7.41E+00	1.24E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CS-134	2007	5.45E+00	2.71E+00	2.74E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U*
CS-137	2007	-1.44E+00	1.68E+00	2.54E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
BA-140	2007	-1.69E+00	1.36E+01	2.26E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
LA-140	2007	2.57E+00	4.72E+00	7.99E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CE-141	2007	5.66E+00	3.79E+00	5.55E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
CE-144	2007	-3.81E+00	1.16E+01	1.72E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U
EU-154	2007	-1.50E+00	2.67E+00	4.42E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U

## Flag Values

- U = Compound/Analyte not detected or less than 3 sigma
- +
- U\* = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- High = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
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- 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

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04

Floyd Hood, Chem



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Sample ID: IP3-06-077					Collect Start: 04/12/2006 12:45					Matrix: Ground Water					(WG)	
Station: MW-43 28 FT DEPTH					Collect Stop:					Volume:						
Description:					Receive Date: 04/25/2006					% Moisture:						
LIMS Number: L28405-3																
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
RA-226	2007	2.35E+01	4.43E+01	5.13E+01	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U	Yes		
TH-228	2007	1.04E+01	2.58E+00	4.00E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	+	Yes		
TH-232	2007	4.32E+00	3.86E+00	8.56E+00	pCi/L		3302.13	ml	04/12/06 12:45	05/01/06	54474	Sec	U	Yes		
Comment: 1 Count to Enviromental LLDs; RUSH																

## 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

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MDC - Minimum Detectable Concentration

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-078		Collect Start: 04/12/2006 11:55				Matrix: Ground Water				(WG)			
Station: MW-43 62 FT DEPTH		Collect Stop:				Volume:							
Description:		Receive Date: 04/25/2006				% Moisture:							
LIMS Number: L28405-4													
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.00E+02	1.10E+02	1.58E+02	pCi/L		10	ml		05/08/06	60	M	+
SR-90	2019	4.34E-01	3.09E-01	4.83E-01	pCi/L		450	ml	04/12/06 11:55	05/19/06	800	M	U
BE-7	2007	1.54E+01	2.19E+01	3.67E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
K-40	2007	2.18E+01	3.25E+01	3.31E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CR-51	2007	-2.22E+01	2.89E+01	4.70E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
MN-54	2007	2.29E-01	2.07E+00	3.43E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CO-57	2007	-1.33E-01	2.34E+00	3.87E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CO-58	2007	1.45E+00	2.40E+00	4.01E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
FE-59	2007	4.33E+00	4.85E+00	8.24E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CO-60	2007	1.82E+00	2.06E+00	3.47E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
ZN-65	2007	6.42E+01	6.59E+00	1.19E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U*
NB-94	2007	2.25E+00	1.91E+00	3.19E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
NB-95	2007	1.40E+01	2.63E+00	4.83E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U*
ZR-95	2007	-1.93E+00	4.57E+00	6.73E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
MO-99	2007	-3.38E+02	1.99E+03	3.29E+03	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
RU-103	2007	1.21E+00	2.78E+00	4.63E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
RU-106	2007	8.32E+00	1.94E+01	3.08E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
AG-110M	2007	3.07E-01	2.36E+00	3.25E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
SB-124	2007	-5.00E+00	6.34E+00	4.13E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
SB-125	2007	2.40E+00	6.15E+00	1.01E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
I-131	2007	8.64E+00	1.13E+01	1.88E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CS-134	2007	7.22E+01	5.76E+00	6.73E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U*
CS-137	2007	3.27E+00	2.70E+00	3.73E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
BA-140	2007	1.10E+01	2.02E+01	3.36E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
LA-140	2007	-6.20E+00	6.49E+00	1.03E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CE-141	2007	2.38E+00	6.77E+00	9.54E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
CE-144	2007	4.58E+00	2.12E+01	2.99E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U
EU-154	2007	-1.97E+00	4.73E+00	7.81E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U

## Flag Values

- U = Compound/Analyte not detected or less than 3 sigma
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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

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04

Floyd Hood, Chem



**TELEDYNE**  
BROWN ENGINEERING, INC.  
A Teledyne Technologies Company

Sample ID: IP3-06-078					Collect Start: 04/12/2006 11:55					Matrix: Ground Water					(WG)	
Station: MW-43 62 FT DEPTH					Collect Stop:					Volume:						
Description:					Receive Date: 04/25/2006					% Moisture:						
LIMS Number: L28405-4																
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values			
RA-226	2007	1.05E+01	5.60E+01	8.86E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U	Yes		
TH-228	2007	1.97E+00	3.98E+00	6.70E+00	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U	Yes		
TH-232	2007	5.34E+00	4.53E+00	1.20E+01	pCi/L		3264.48	ml	04/12/06 11:55	05/01/06	54494	Sec	U	Yes		
Comment: 1 Count to Enviromental LLDs; RUSH																

## 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

# Report of Analysis

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-079		Collect Start: 04/12/2006 17:15				Matrix: Ground Water (WG)									
Station: MW-46 30 FT DEPTH		Collect Stop:				Volume:									
Description:		Receive Date: 04/25/2006				% Moisture:									
LIMS Number: L28405-5															
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values		
H-3	2010	1.38E+03	1.87E+02	1.76E+02	pCi/L		10	ml		05/08/06	46.46	M	+		
SR-90	2019	6.24E-01	3.21E-01	4.89E-01	pCi/L		450	ml	04/12/06 17:15	05/19/06	800	M	+		
BE-7	2007	4.47E-01	1.92E+01	3.12E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
K-40	2007	1.86E+02	2.55E+01	5.20E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U*		No
CR-51	2007	-3.79E+00	2.34E+01	3.86E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
MN-54	2007	2.15E+00	1.81E+00	3.13E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CO-57	2007	6.53E-01	1.75E+00	2.92E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CO-58	2007	1.12E+00	2.10E+00	3.55E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
FE-59	2007	2.66E-01	4.45E+00	7.27E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CO-60	2007	-5.36E-01	1.78E+00	2.89E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
ZN-65	2007	5.77E+00	4.28E+00	7.35E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
NB-94	2007	2.17E-01	1.77E+00	2.90E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
NB-95	2007	6.72E-01	2.18E+00	3.58E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
ZR-95	2007	1.79E+00	3.81E+00	6.29E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
MO-99	2007	6.97E+02	1.70E+03	2.80E+03	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
RU-103	2007	3.78E+00	2.52E+00	4.35E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
RU-106	2007	-2.19E+01	1.72E+01	2.71E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
AG-110M	2007	-1.06E-01	1.87E+00	3.06E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
SB-124	2007	-3.42E+00	5.08E+00	3.45E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
SB-125	2007	1.80E+00	5.27E+00	8.66E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
I-131	2007	-3.52E+00	9.36E+00	1.53E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CS-134	2007	3.95E+00	2.94E+00	3.22E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CS-137	2007	9.28E-01	1.99E+00	3.31E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
BA-140	2007	1.38E+01	1.74E+01	2.96E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
LA-140	2007	3.29E+00	5.68E+00	9.73E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CE-141	2007	2.43E+00	4.87E+00	6.95E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
CE-144	2007	6.33E+00	1.50E+01	2.22E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No
EU-154	2007	-1.13E-01	3.74E+00	5.89E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U		No

## Flag Values

- U = Compound/Analyte not detected or less than 3 sigma
- +
- U\* = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- High = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- Spec = 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

05/19/06 11:24

**L28405**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: <b>IP3-06-079</b> Station: <b>MW-46 30 FT DEPTH</b> Description: LIMS Number: <b>L28405-5</b>						Collect Start: <b>04/12/2006 17:15</b> Collect Stop: Receive Date: <b>04/25/2006</b>				Matrix: <b>Ground Water</b> (WG) 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
RA-226	2007	7.20E+00	4.62E+01	7.20E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U No
TH-228	2007	3.79E+00	3.58E+00	5.15E+00	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U Yes
TH-232	2007	-5.32E-01	7.55E+00	1.15E+01	pCi/L		3360.42	ml	04/12/06 17:15	05/01/06	54509	Sec	U No
Comment: 1 Count to Enviromental LLDs; RUSH													
Sample ID: <b>IP3-06-080</b> Station: <b>U2 MANHOLE 5</b> Description: LIMS Number: <b>L28405-6</b>						Collect Start: <b>04/17/2006 13:00</b> Collect Stop: Receive Date: <b>04/25/2006</b>				Matrix: <b>Ground Water</b> (WG) 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	1.92E-02	3.30E-01	5.43E-01	pCi/L		450	ml	04/17/06 13:00	05/19/06	800	M	U
Comment: 1 Count to Enviromental LLDs; RUSH													

## 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

04/28/06 08:17

Teledyne Brown Engineering  
Sample Receipt Verification/Variance Report

SR #: SR08046

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

LIMS #: L28405

Initiated By: PMARSHALL

Init Date: 04/26/06    Receive Date: 04/25/06

Notification of Variance

Person Notified: *Floyd Hood*Contacted By: *P. Charles*Notify Date: *5/1/06*Notify Method: *email w/ Acknowledgement*

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 IP3-06-080		N		Time on sheet 13:00 and time on container 13:30. Also, container says prior to outage.
8 Sample(s) properly preserved and in appropriate container(s)			NA	
9 Other (Describe)			NA	

Indian Point Energy Center

**Entergy Nuclear Operations, Inc.**  
Sample Collection/Receipt Sheet

L28405  
P-4D

unit yr id# format (IPX-XX-XXXX) Teledyne Sample #	Sample ID	Sample Type	Start date	Start time	Stop date	Stop time	Volume or Area	Analysis	Comments	Sample Size Units	Plant Code
IP3-06-075	MW-41, 63' depth	WG	12-Apr-06	14:45			1.000E+00	SR-90, H-3, GELI	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-076	MW-41, 41' depth	WG	12-Apr-06	15:00			1.000E+00	SR-90, H-3, GELI	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-077	MW-43, 28' depth	WG	12-Apr-06	12:45			1.000E+00	SR-90, H-3, GELI	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-078	MW-43, 62' depth	WG	12-Apr-06	11:55			1.000E+00	SR-90, H-3, GELI	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-079	MW-46, 30' depth	WG	12-Apr-06	17:15			1.000E+00	SR-90, H-3, GELI	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
IP3-06-080	u2 manhole #5, curtain drain out	WG	17-Apr-06	13:00			1.000E+00	SR-90	Count to Enviromental LLDs; RUSH	GAL	EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04
											EN002-3P50IP3-04

Collected by:

Shipped by:

Received by:

IP3

*Pat Marshall*  
4/25/06

Count to Envirmental LLDs;  
Count H3 to 500 pCi/L

Rush sample results

Indian Point Energy Center  
Radiological Survey Sheet

Unit: ☐ 1  
☒ 2  
☐ 3

Survey Type: ☒ Dose rate ☒ Contamination ☐ Hot particle ☐ Airborne

Reason: ☐ Pre-job ☐ Weekly ☐ Pre-decon. ☐ Routine  
☐ Job coverage ☐ Monthly ☐ Post-decon. ☐ RWP Update  
☐ Post-Job ☐ Quarterly ☐ Annual ☒ Other SHIPPING

Location: 11-2

Component: WATER SAMPLES FROM  
VARIOUS MONITORING WELLS

Date: 4-16-06 Time: 1330

RWP No: 06-2001 Rx Power 100%

Instrument	Serial No.	Cal. due	Source check
PRM-7	5304	7-12-06	Sat <input checked="" type="checkbox"/> N/A
RM-14	5425	6-14-06	<input checked="" type="checkbox"/>
AC-4	5223	6-6-06	<input checked="" type="checkbox"/>
SAC-4	1077	5-3-06	<input checked="" type="checkbox"/>

Area ☐ RCA ☐ Radiation ☐ High Rad Area ☐ LHRA ☐ REA ☐ VHRA ☐ Posting: ☐ Yes (if yes see below)  
Posting: ☐ Contam. ☐ High Contam. ☐ Hot Particle ☐ Airborne ☒ Radioactive Materials ☐ Changed? ☐ No (for IV signature)

Smears:	$\gamma$	$\beta$	$n$	Hot Part.	Adhesive	Contam.	Airborne (DAC)	Contamination Results
General levels	5	N	N	N	N	MDA	MDA	MDA/BCA <u>100</u>
Maximum levels	6	T	T	T	T	MDA	MDA	MDA/SAC4 <u>14</u>

1) SURVEY OF 17 1GAL SAMPLE BOTTLES FROM VARIOUS MONITORING WELLS;

2) NO DETECTABLE ABOVE BKG WITH PRM-7 MICRO R METER.

3) DIRECT FRISK OF BOTTLES SHOWS NO DETECTABLE ABOVE BKG WITH RM-14

4) ALL SMEARS LMDA FOR  $\beta$  &  $\alpha$

**COPY**

Remarks / Work in progress: SHIP WATER SAMPLES FROM VARIOUS  
MONITORING WELLS, TO NPC & TELEDYNE  
RM-14 BKG = 60-80 CPM PRM-7 BKG = 5-6 MICRO R/HR

Independent Verification Name: N/A Print N/A Signature

Name: J. HALCOMB  
Surveyor Name Print

Name: J. HALCOMB  
Reviewed by Watch H.P. Print

Name: CHRISTOPHER  
Reviewed by H.P. Supervisor Print

Page

1 of 1

Survey #:

AL2-2290



**TELEDYNE  
BROWN ENGINEERING, INC.**

A Teledyne Technologies Company  
2508 Quality Lane  
Knoxville, TN 37931-3133

**PRELIMINARY**

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**

05/23/2006

LIMS #: L28502

Project ID#: EN002-3P50IP3-04

Received: 05/03/2006

Delivery Date: 06/02/2006

P.O. #: 4500539361

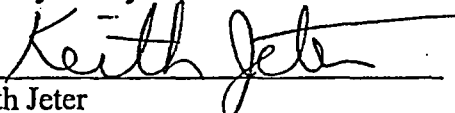
Release #:

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)
IP3-06-091	L28502-1	BU SFP HX SPILL

# Report of Analysis

05/23/06 15:21

**L28502**

Entergy Nuclear Northeast

EN002-3P50IP3-04

Floyd Hood, Chem

Sample ID: IP3-06-091		Collect Start: 04/21/2006 19:00				Matrix: Soil (S)							
Station: BU SFP HX SPILL		Collect Stop:				Volume:							
Description:		Receive Date: 05/03/2006				% Moisture: 4.13							
LIMS Number: L28502-1													
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2003	7.00E-02	2.55E-01	4.16E-01	pCi/g		5.0247	g dry		05/19/06	135	M	U
TOTAL SR	2018	-3.00E-02	3.25E-02	5.56E-02	pCi/g Dry		5.3907	g dry	04/21/06 19:00	05/19/06	400	M	U
BE-7	2007	1.32E-01	3.55E-01	5.96E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
K-40	2007	9.41E+00	9.18E-01	4.59E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	+
CR-51	2007	-1.60E-01	4.03E-01	6.46E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
MN-54	2007	6.85E-03	3.52E-02	5.82E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CO-57	2007	5.42E-03	2.44E-02	4.07E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CO-58	2007	-3.53E-03	3.95E-02	6.40E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
FE-59	2007	-1.07E-03	1.00E-01	1.64E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CO-60	2007	1.13E-01	3.78E-02	6.01E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	+
ZN-65	2007	4.75E-02	1.17E-01	1.67E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
NB-94	2007	2.72E-02	3.03E-02	5.32E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
NB-95	2007	1.19E-02	4.01E-02	6.72E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
ZR-95	2007	2.55E-02	6.72E-02	1.14E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
MO-99	2007	2.54E+01	4.41E+01	7.57E+01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
RU-103	2007	-1.42E-02	4.16E-02	6.69E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
RU-106	2007	1.40E-01	3.01E-01	5.10E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
AG-110M	2007	1.96E-01	4.83E-02	8.80E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U*
SB-124	2007	1.95E-02	4.83E-02	6.85E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
SB-125	2007	4.17E-02	9.07E-02	1.54E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
I-131	2007	-4.32E-02	1.78E-01	2.86E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CS-134	2007	9.36E-02	4.66E-02	7.35E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U*
CS-137	2007	2.32E-01	5.04E-02	5.35E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	+
BA-140	2007	-1.02E-01	3.24E-01	5.18E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
LA-140	2007	-4.10E-02	9.73E-02	1.51E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CE-141	2007	-4.45E-02	6.42E-02	1.03E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
CE-144	2007	4.72E-02	1.92E-01	3.21E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U
EU-154	2007	2.78E-02	4.87E-02	8.25E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U

## Flag Values

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

# Report of Analysis

05/23/06 15:21

**L28502**

Entergy Nuclear Northeast

EN002-3P50IP3-04



**TELEDYNE  
BROWN ENGINEERING, INC.**  
A Teledyne Technologies Company

Floyd Hood, Chem

Sample ID: IP3-06-091				Collect Start: 04/21/2006 19:00				Matrix: Soil				(S)		
Station: BU SFP HX SPILL				Collect Stop:				Volume:						
Description:				Receive Date: 05/03/2006				% Moisture: 4.13						
LIMS Number: L28502-1														
Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values	
RA-226	2007	1.54E+00	8.08E-01	1.03E+00	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	+	Yes
TH-228	2007	2.56E-01	5.35E-02	9.00E-02	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	+	Yes
TH-232	2007	1.37E-01	1.23E-01	2.69E-01	pCi/g Dry		358.36	g dry	04/21/06 19:00	05/12/06	6000	Sec	U	Yes

## 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

05/08/06 13:56

Teledyne Brown Engineering  
Sample Receipt Verification/Variance Report

SR #: SR08195

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

LIMS #: L28502

Initiated By: PMARSHALL

Init Date: 05/05/06 Receive Date: 05/05/06

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)			N	

Samples are designated as environmental for LLD purposes only. Samples were accompanied by rad paperwork.

## Entergy Nuclear Operations, Inc.

### Sample Collection/Receipt Sheet

L28502  
7-84

[illegible]

Received by:

# IP3