

START

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11825-WES-1121

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TELEDYNE
ISOTOPIES

50 VAN BUREN AVENUE

PO BOX 1235

WESTWOOD NJ 07675-1235

(201) 664-7070

WESTON/WESTINGHOUSE/HANFORD

Case Narrative/Cover Sheet for Reports of Analysis and Lab Data

Date 4/29/93

TI #'s 11825 - 11826

WO # 4-1187

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Comments:

There were no unusual occurrences with these samples. The required QC sample analyses were reported as WWH (Blank) & WWH (Spike) samples which represent the Teledyne Isotopes in house Quality Assurance samples. WWH (spike) target values are reported on table on page numbers 25 & 26.

Contents:

	<u>Procedure #'s</u>	<u>Bench & Work Sheet Pages</u>	<u>Calibration Pages</u>	<u>Tracers/ Carrier Pages</u>
Reports of Analysis		<u>3</u>		
Gamma	PRO-042-5	<u>6</u>	<u>7</u>	
C-O-C		<u>1</u>		
Other	TIQA Spikes	<u>2</u>		



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TELEDYNE ISOTOPES

REPORT OF ANALYSIS

RUN DATE 04/28/93

WORK ORDER NUMBER

CUSTOMER P.O. NUMBER

DATE RECEIVED

DELIVERY DATE

PAGE 1

MRS JOSIE EDWARDS
 WESTON/WESTINGHOUSE/HANFORD
 208 WELSH POOL ROAD
 PICKERING CREEK INDUSTRIAL PARK
 LIONVILLE PA 19341-1313

4-1187

LL-1140-F4

04/22/93

04/30/93

S O I L

TELEDYNE SAMPLE NUMBER	CUSTOMER'S IDENTIFICATION	STA NUM	COLLECTION-DATE		NUCLIDE	ACTIVITY (PCI/GM DRY)	NUCL-UNIT-% U/M *	MID-COUNT TIME		VOLUME - UNITS ASH-WGHT-% *	LAB.
			START DATE	STOP DATE				DATE	TIME		
11825	9304L213-001	B01980	04/13		9E-7	L.T. 2. E-01		04/26		4	
					BE-7 -	2.2 +-10.8E-02		04/26		4	
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2007-05-27

WESTON/WESTINGHOUSE/HANFORD**Case Narrative/Cover Sheet for Reports of Analysis and Lab Data**Date 4/29/93TI #'s 11825 - 11826WO # 4-1187

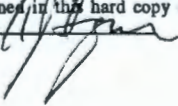
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LL-1140-F4

04/22/93

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VALIDATION SUMMARY

TELEDYNE ISOTOPES

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					CS-137	L.T. 2. E-02		04/28		4
					BA-140	L.T. 4. E-02		04/28		4
					BA-140 -	1.5 +-2.4 E-02		04/28		4
					CE-141	L.T. 3. E-02		04/28		4
					CE-141	1.0 +-2.1 E-02		04/28		4
					CE-144	L.T. 1. E-01		04/28		4
					CE-144 -	9.8 +-7.0 E-02		04/28		4
					FU-152	L.T. 5. E-02		04/28		4
					EU-152 -	3.3 +-0.4 E-01		04/28		4
					EU-154	L.T. 6. E-02		04/28		4
					EU-154 -	1.5 +-3.5 E-02		04/28		4
					EU-155	L.T. 6. E-02		04/28		4
					EU-155	5.2 +-3.7 E-02		04/28		4
					RA-226	1.12+-0.28E 00		04/28		4
					RA-226	L.T. 4. E-01		04/28		4
					TH-228	6.60+-0.66E-01		04/28		4
					TH-228	L.T. 5. E-02		04/28		4
					TH-234	L.T. 4. E-01		04/28		4
					TH-234 -	7.5 +-230.E-03		04/28		4

LAST PAGE OF REPORT

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2 - GAS LAB.

3 - RADIO CHEMISTRY LAB.

4 - GE(LI) GAMMA SPEC LAB.

5 - TRITIUM GAS/L.S. LAB.

6 - ALPHA SPEC LAB.

TELEDYNE ISOTOPES

REPORT OF ANALYSIS

RUN DATE 04/28/93

WORK ORDER NUMBER

CUSTOMER P.O. NUMBER

DATE RECEIVED

DELIVERY DATE

PAGE 1

MRS JOSIE EDWARDS
WESTON/WESTINGHOUSE/HANFORD
208 WELSH POOL ROAD
PICKERING CREEK INDUSTRIAL PARK
LIONVILLE PA 19341-1313

4-1187

LL-1140-F4

04/22/93

04/30/93

S O I L

TELEDYNE SAMPLE NUMBER	CUSTOMER'S IDENTIFICATION	STA NUM	COLLECTION-DATE		NUCLIDE	ACTIVITY (PCI/GM DRY)	NUCL-UNIT-% U/M *	MID-COUNT TIME		VOLUME - UNITS ASH-WGHT-% *	LAB.
			START DATE	STOP TIME				DATE	TIME		
11825	9304L213-001	B01980	04/13		9E-7	L.T. 2. E-01	R ↓	04/26			4
					BE-7 -	2.2 +-10.8E-02		04/26			4
					K-40	1.38+-0.14E 01		04/26			4
					K-40	L.T. 1. E 00		04/26			4
					MN-54	L.T. 2. E-02		04/26			4
					MN-54 -	2.5 +-13.6E-03		04/26			4
					CO-58	L.T. 2. E-02		04/26			4
					CO-58 -	1.3 +-1.4 F-02		04/26			4
					FE-59	L.T. 5. E-02		04/26			4
					FE-59 -	1.0 +-3.0 E-02		04/26			4
					CO-60	L.T. 2. E-02		04/26			4
					CO-60 -	1.4 +-11.9E-03		04/26			4
					ZN-65	L.T. 5. E-02		04/26			4
					ZN-65 -	1.6 +-3.0 E-02		04/26			4
					ZR-95	L.T. 2. E-02		04/26			4
					ZR-95	8.8 +-14.6E-03		04/26			4
					RU-103	L.T. 2. E-02		04/26			4
					RU-103 -	2.8 +-13.4E-03		04/26			4
					RU-106	L.T. 2. E-01		04/26			4
					RU-106	9.9 +-119.E-03		04/26			4
					I-131	L.T. 6. E-02		04/26			4
					I-131	1.1 +-3.4 E-02		04/26			4
					CS-134	L.T. 3. E-02		04/26			4
					CS-134	2.1 +-1.5 E-02		04/26			4
					CS-137	7.47+-1.59E-02		04/26			4
					CS-137	L.T. 3. E-02		04/26			4
					BA-140	L.T. 4. E-02		04/26			4
					BA-140	2.2 +-21.1E-03		04/26			4
					CE-141	L.T. 3. E-02		04/26			4
					CE-141 -	3.7 +-20.2E-03		04/26			4
					CF-144	L.T. 1. E-01		04/26			4
					CE-144 -	6.8 +-7.3 E-02		04/26			4

RJS
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TELEDYNE ISOTOPIES
REPORT OF ANALYSIS

RUN DATE 04/28/93

WORK ORDER NUMBER	CUSTOMER P.O. NUMBER	DATE RECEIVED	DELIVERY DATE	PAGE
4-1187	LL-1140-F4	04/22/93	04/30/93	2

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WESTON/WESTINGHOUSE/HANFORD
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LIONVILLE PA 19341-1313

S O I L

TELEDYNE SAMPLE NUMBER	CUSTOMER'S IDENTIFICATION	STA NUM	COLLECTION-DATE START DATE TIME STOP DATE TIME	NUCLIDE	ACTIVITY (PCI/GM DRY)	NUCL-UNIT-% U/M *	MID-COUNT TIME DATE TIME	VOLUME - UNITS ASH-WGHT-% *	LAB.
11825	9304L213-001	B01980	04/13	EU-152	L.T. 6. E-02	R ↓	04/26		4
				EU-152 -	4.3 +-0.5 E-01		04/26		4
				EU-154	L.T. 7. E-02		04/26		4
				EU-154 -	6.5 +-45.5E-03		04/26		4
				FU-155	L.T. 7. E-02		04/26		4
				EU-155	1.4 +-4.2 E-02		04/26		4
				RA-226	9.69+-2.25E-01		04/26		4
				RA-226	L.T. 4. E-01		04/26		4
				TH-228	5.88+-0.59E-01		04/26		4
				TH-228	L.T. 6. E-02		04/26		4
				TH-234	L.T. 4. E-01		04/26		4
				TH-234	9.9 +-25.6E-02		04/26		4
11826	9304L213-001DP	B01980	04/13	BE-7	L.T. 2. E-01			04/28	
				BE-7 -	1.2 +-9.1 E-02		04/28		4
				K-40	1.41+-0.14E 01		04/28		4
				K-40	L.T. 9. E-01		04/28		4
				MN-54	L.T. 2. E-02		04/28		4
				MN-54	1.5 +-9.6 E-03		04/28		4
				CO-58	L.T. 2. E-02		04/28		4
				CO-58 -	5.9 +-10.2E-03		04/28		4
				FE-59	L.T. 4. E-02		04/28		4
				FE-59 -	1.2 +-2.6 E-02		04/28		4
				CO-60	L.T. 2. E-02		04/28		4
				CO-60	7.9 +-10.2E-03		04/28		4
				ZN-65	L.T. 4. E-02		04/28		4
				ZN-65	5.0 +-251.E-04		04/28		4
				ZR-95	L.T. 2. E-02		04/28		4
				ZR-95	2.6 +-1.2 E-02		04/28		4
				RU-103	L.T. 2. E-02		04/28		4
				RU-103 -	5.5 +-11.4E-03		04/28		4
				RU-106	L.T. 1. E-01		04/28		4

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TELEDYNE ISOTOPES

REPORT OF ANALYSIS

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04/22/93

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S O I L

TELEDYNE SAMPLE NUMBER	CUSTOMER'S IDENTIFICATION	STA NUM	COLLECTION-DATE		NUCLIDE	ACTIVITY (PCI/GM DRY)	NUCL-UNIT-% U/m *	MID-COUNT TIME		VOLUME - UNITS ASH-WGHT-% *	LAR.
			START DATE	STOP DATE				DATE	TIME		
11826	9304L213-0010P 801980		04/13		RU-106 -	2.0 +-8.6 E-02		04/28			4
					I-131	L.T. 5. E-02		04/28			4
					I-131 -	2.3 +-3.1 E-02		04/28			4
					CS-134	L.T. 2. E-02		04/28			4
					CS-134	3.7 +-1.1 E-02		04/28			4
					CS-137	7.79+-1.28E-02		04/28			4
					CS-137	L.T. 2. E-02		04/28			4
					BA-140	L.T. 4. E-02		04/28			4
					BA-140 -	1.5 +-2.4 E-02		04/28			4
					CE-141	L.T. 3. E-02		04/28			4
					CE-141	1.0 +-2.1 E-02		04/28			4
					CE-144	L.T. 1. E-01		04/28			4
					CE-144 -	9.8 +-7.0 E-02		04/28			4
					EU-152	L.T. 5. E-02		04/28			4
					EU-152 -	3.3 +-0.4 E-01		04/28			4
					EU-154	L.T. 6. E-02		04/28			4
					EU-154 -	1.5 +-3.5 E-02		04/28			4
					EU-155	L.T. 6. E-02		04/28			4
					EU-155	5.2 +-3.7 E-02		04/28			4
					RA-226	1.12+-0.28E 00		04/28			4
					RA-226	L.T. 4. E-01		04/28			4
					TH-228	6.60+-0.66E-01		04/28			4
					TH-228	L.T. 5. E-02		04/28			4
					TH-234	L.T. 4. E-01		04/28			4
					TH-234 -	7.5 +-230.E-03		04/28			4

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