SOUTHWEST RESEARCH INSTITUTE
CLIENT: URS
WORK ORDER: 20908
SDG: 167680
VTSR: September 19, 2001
PROJECT: 04014.05.002

SAMPLE DATA

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Sample wt. (g): 1.0140
Level: LOW
GPC Cleanup: N

Client Sample ID: US-001
System ID: 167680
Filename: Y0921121
pH: NA
Conc. Ext. Vol. (uL): 2000
% Moisture: 1.9
Decanted: N

Project Number: 04014.05.002
Instrument: Y-MD800
Date Received: 09/19/2001
Date Extracted: Sep 20, 2001
Date Analyzed: Sep 21 2001 8:10PM
Dilution Factor: 1
Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	80 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

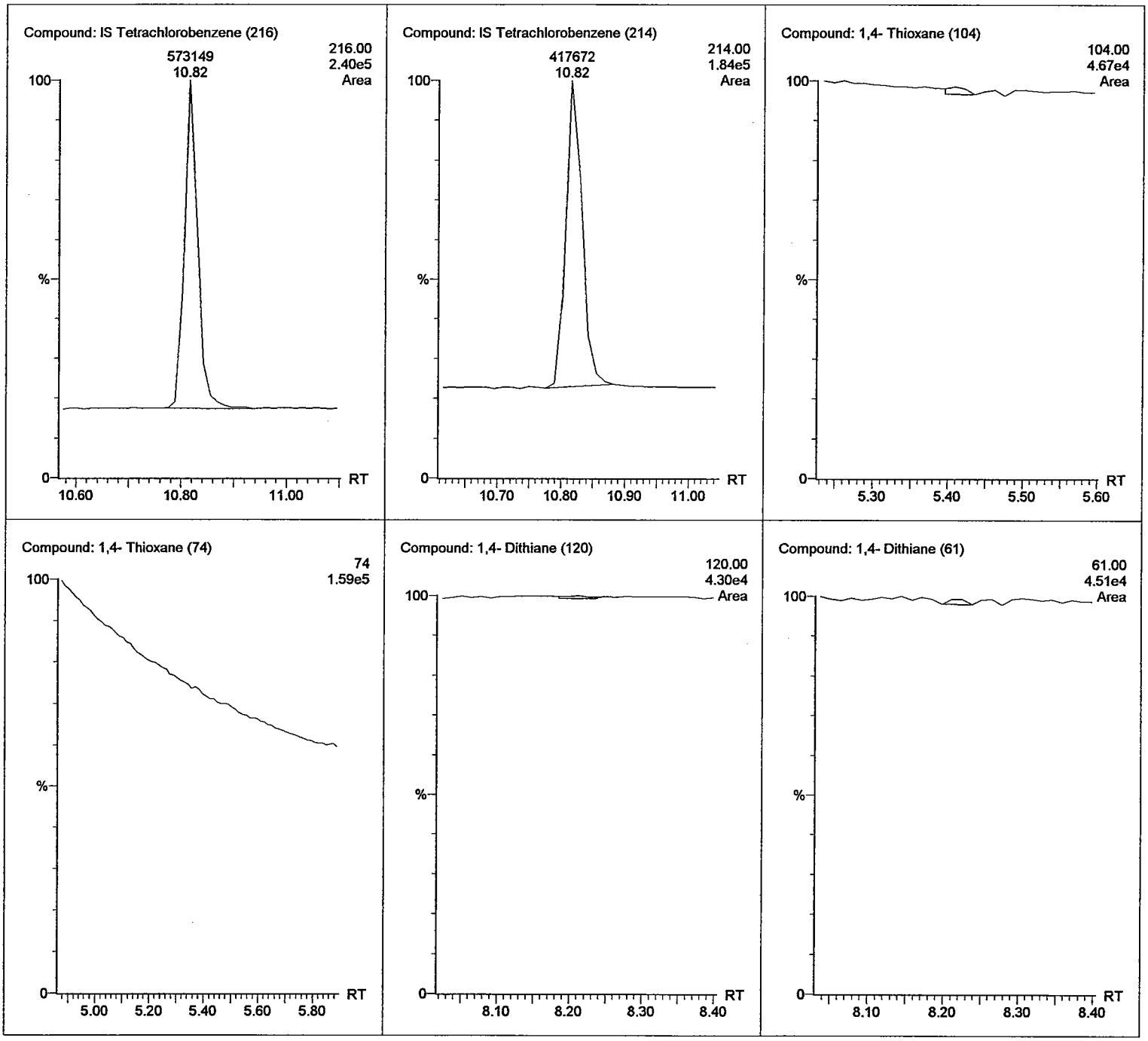
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020009

Filename: C:\MASSLAB\DATA\Y0921121.RAW
Sample ID: 2uL 167680 (US-001)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 20:10:38
Instrument: Y-MD800



Peak List Information - Y0921121

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.816	IS	573149	198154	0.1000
2	IS Tetrachlorobenzene (2	10.816	IS	417672	141866	0.1000
3	1,4- Thioxane (104)	5.408	T	2474	858	0.0005
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.211	T	1105	313	0.0006
6	1,4- Dithiane (61)	8.224	T	1624	624	0.0014

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS	Client Sample ID: US-002	Project Number: 04014.05.002
Case: URS	System ID: 167681	Instrument: Y-MD800
SDG: 167680	Filename: Y0921122	Date Received: 09/19/2001
Matrix: SOIL	pH: NA	Date Extracted: Sep 20, 2001
Sample wt. (g): 1.0395	Conc. Ext. Vol. (uL): 2000	Date Analyzed: Sep 21 2001 8:34PM
Level: LOW	% Moisture: 2.1	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	79 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

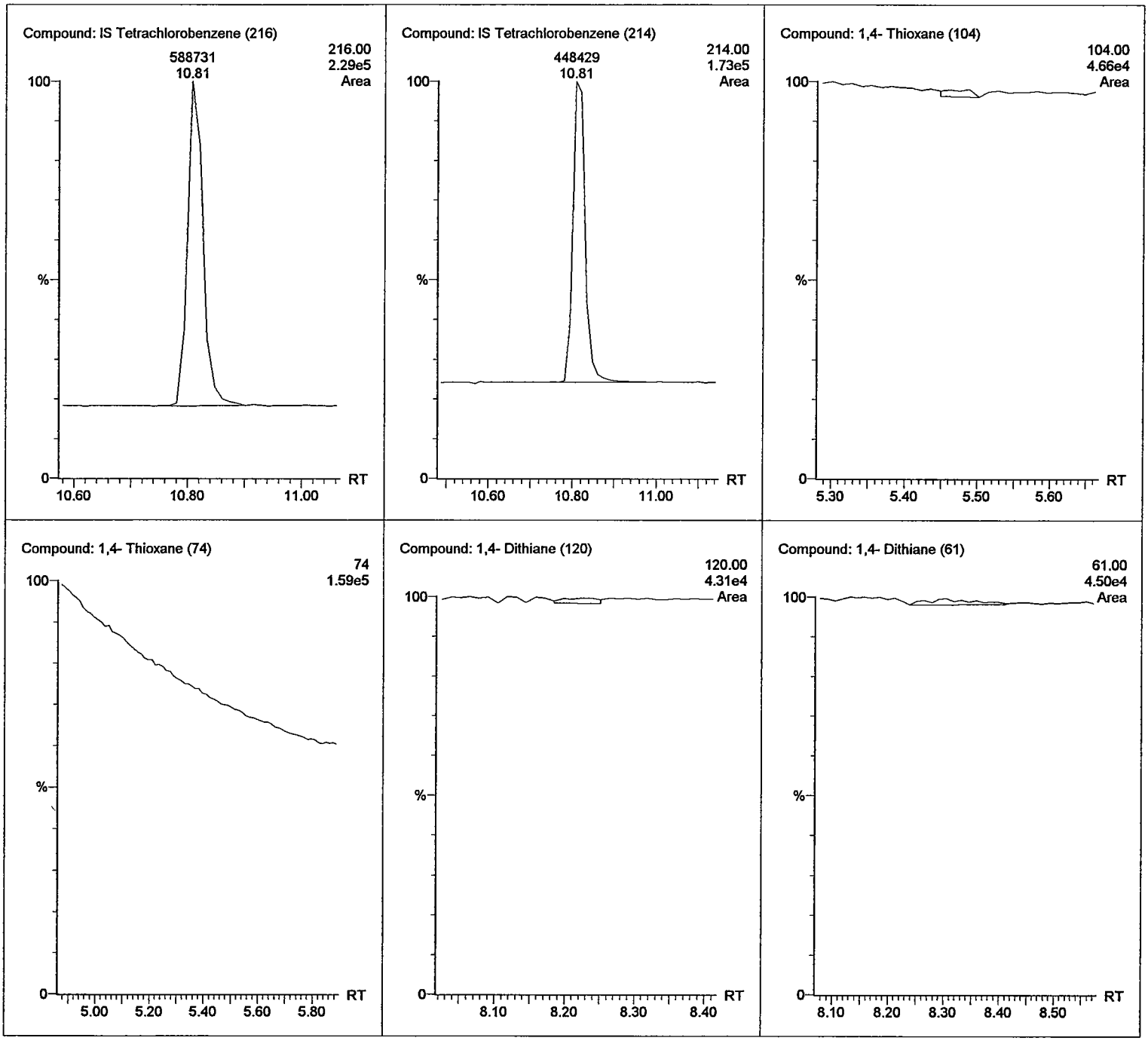
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020011

Filename: C:\MASSLAB\DATA\Y0921122.RAW
Sample ID: 2uL 167681 (US-002)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 20:34:35
Instrument: Y-MD800



Peak List Information - Y0921122

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.807	IS	588731	187341	0.1000
2	IS Tetrachlorobenzene (2	10.807	IS	448429	130689	0.1000
3	1,4- Thioxane (104)	5.488	T	3512	909	0.0007
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.224	T	3150	541	0.0017
6	1,4- Dithiane (61)	8.304	T	6740	705	0.0056

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS	Client Sample ID: US-003	Project Number: 04014.05.002
Case: URS	System ID: 167682	Instrument: Y-MD800
SDG: 167680	Filename: Y0921126	Date Received: 09/19/2001
Matrix: SOIL	pH: NA	Date Extracted: Sep 20, 2001
Sample wt. (g): 1.0437	Conc. Ext. Vol. (uL): 2000	Date Analyzed: Sep 21 2001 10:09PM
Level: LOW	% Moisture: 1.8	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	78 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

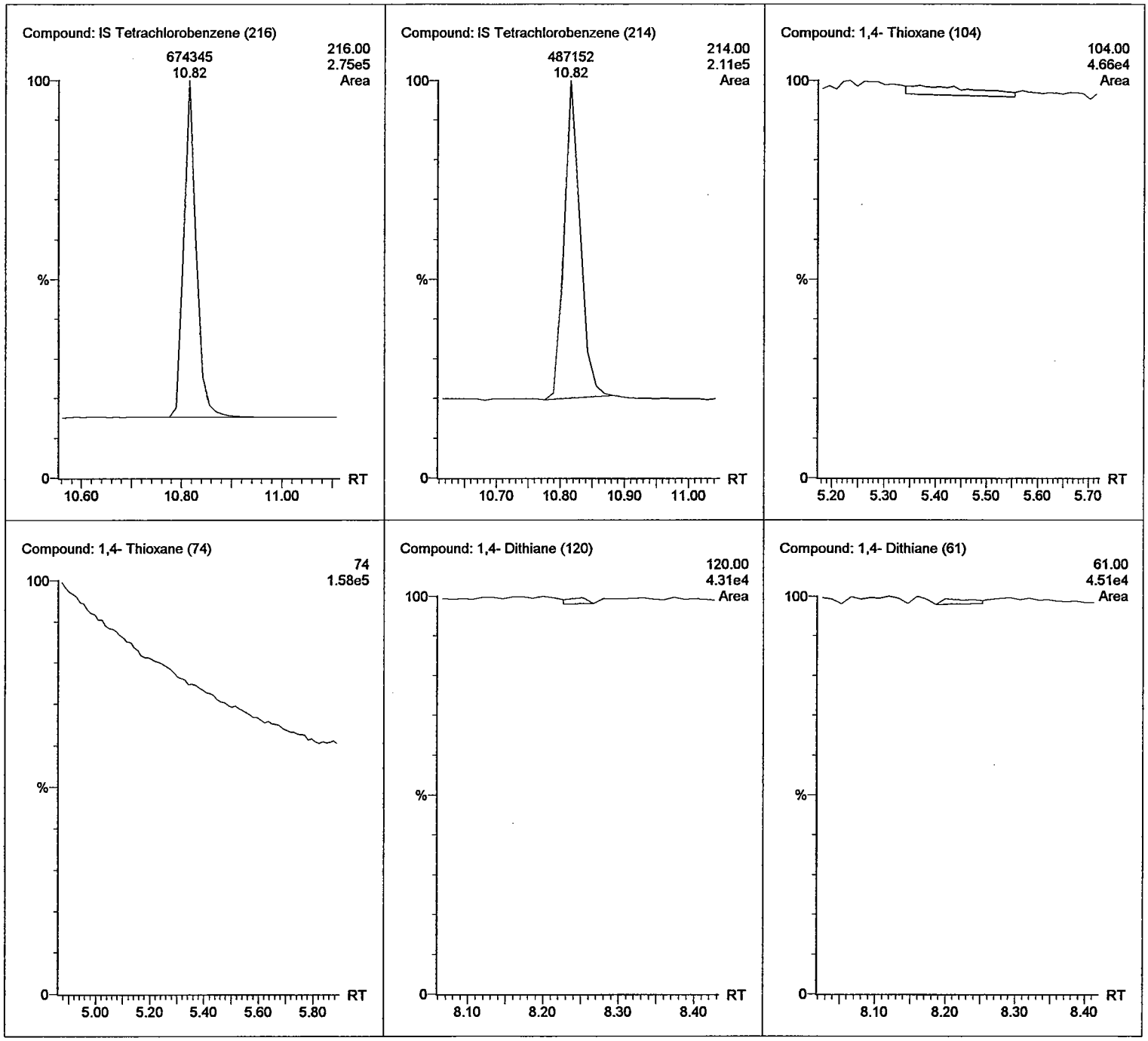
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020013

Filename: C:\MASSLAB\DATA\Y0921126.RAW
Sample ID: 2uL 167682 (US-003)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 22:09:43
Instrument: Y-MD800



Peak List Information - Y0921126

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.816	IS	674345	233076	0.1000
2	IS Tetrachlorobenzene (2	10.816	IS	487152	168596	0.1000
3	1,4- Thioxane (104)	5.368	T	17074	1040	0.0030
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.253	T	1953	668	0.0009
6	1,4- Dithiane (61)	8.199	T	3002	642	0.0022

020014

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS	Client Sample ID: US-004	Project Number: 04014.05.002
Case: URS	System ID: 167683	Instrument: Y-MD800
SDG: 167680	Filename: Y0921123	Date Received: 09/19/2001
Matrix: SOIL	pH: NA	Date Extracted: Sep 20, 2001
Sample wt. (g): 1.03	Conc. Ext. Vol. (uL): 2000	Date Analyzed: Sep 21 2001 8:58PM
Level: LOW	% Moisture: 1.7	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	79 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

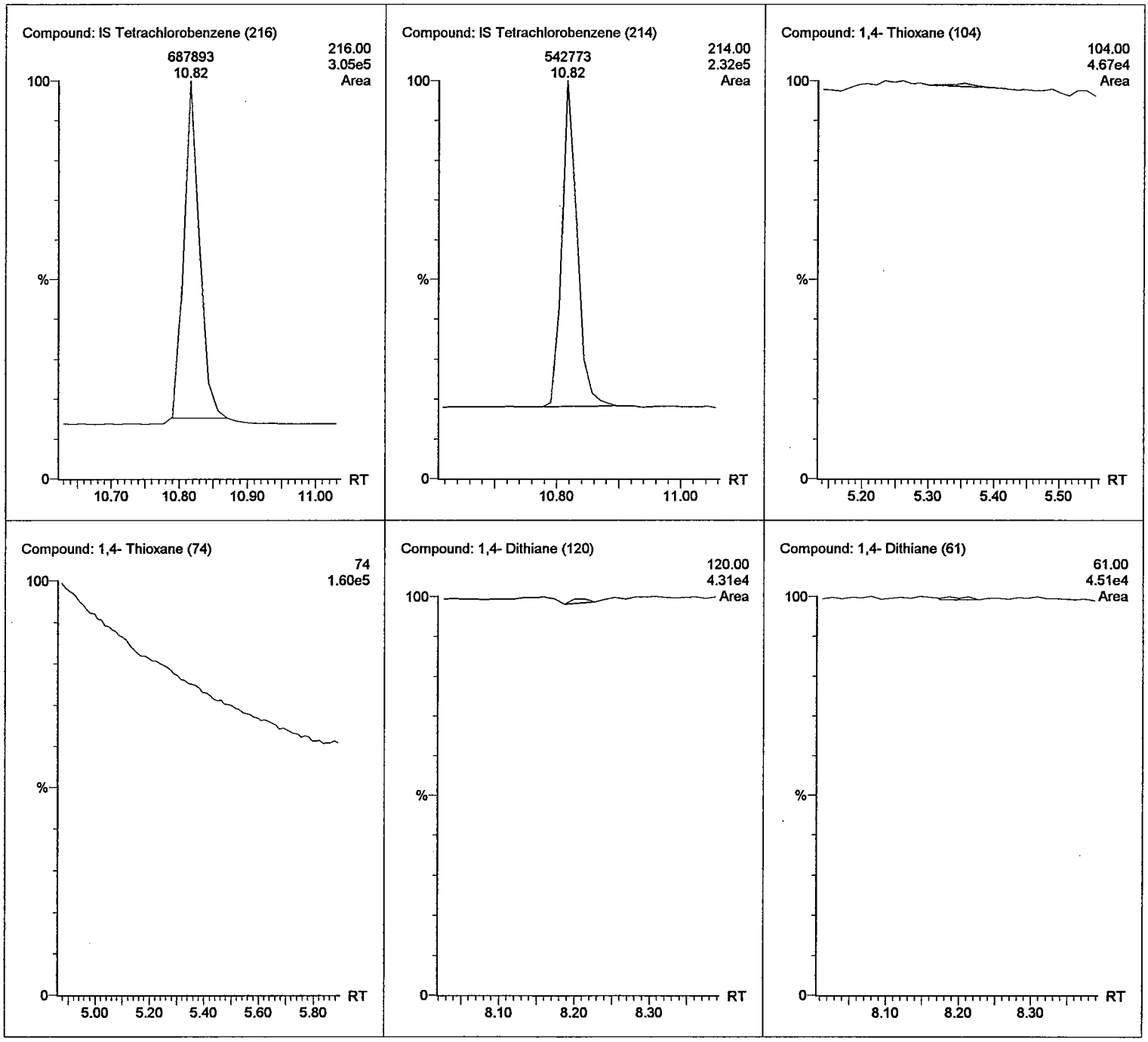
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020015

Filename: C:\MASSLAB\DATA\Y0921123.RAW
Sample ID: 2uL 167683 (US-004)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 20:58:21
Instrument: Y-MD800



Peak List Information - Y0921123

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.817	IS	687893	258418	0.1000
2	IS Tetrachlorobenzene (2	10.817	IS	542773	189723	0.1000
3	1,4- Thioxane (104)	5.354	T	1239	379	0.0002
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.200	T	1218	496	0.0006
6	1,4- Dithiane (61)	8.186	T	1069	283	0.0008

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS	Client Sample ID: US-005	Project Number: 04014.05.002
Case: URS	System ID: 167684	Instrument: Y-MD800
SDG: 167680	Filename: Y0921124	Date Received: 09/19/2001
Matrix: SOIL	pH: NA	Date Extracted: Sep 20, 2001
Sample wt. (g): 1.0422	Conc. Ext. Vol. (uL): 2000	Date Analyzed: Sep 21 2001 9:22PM
Level: LOW	% Moisture: 1.6	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	78 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

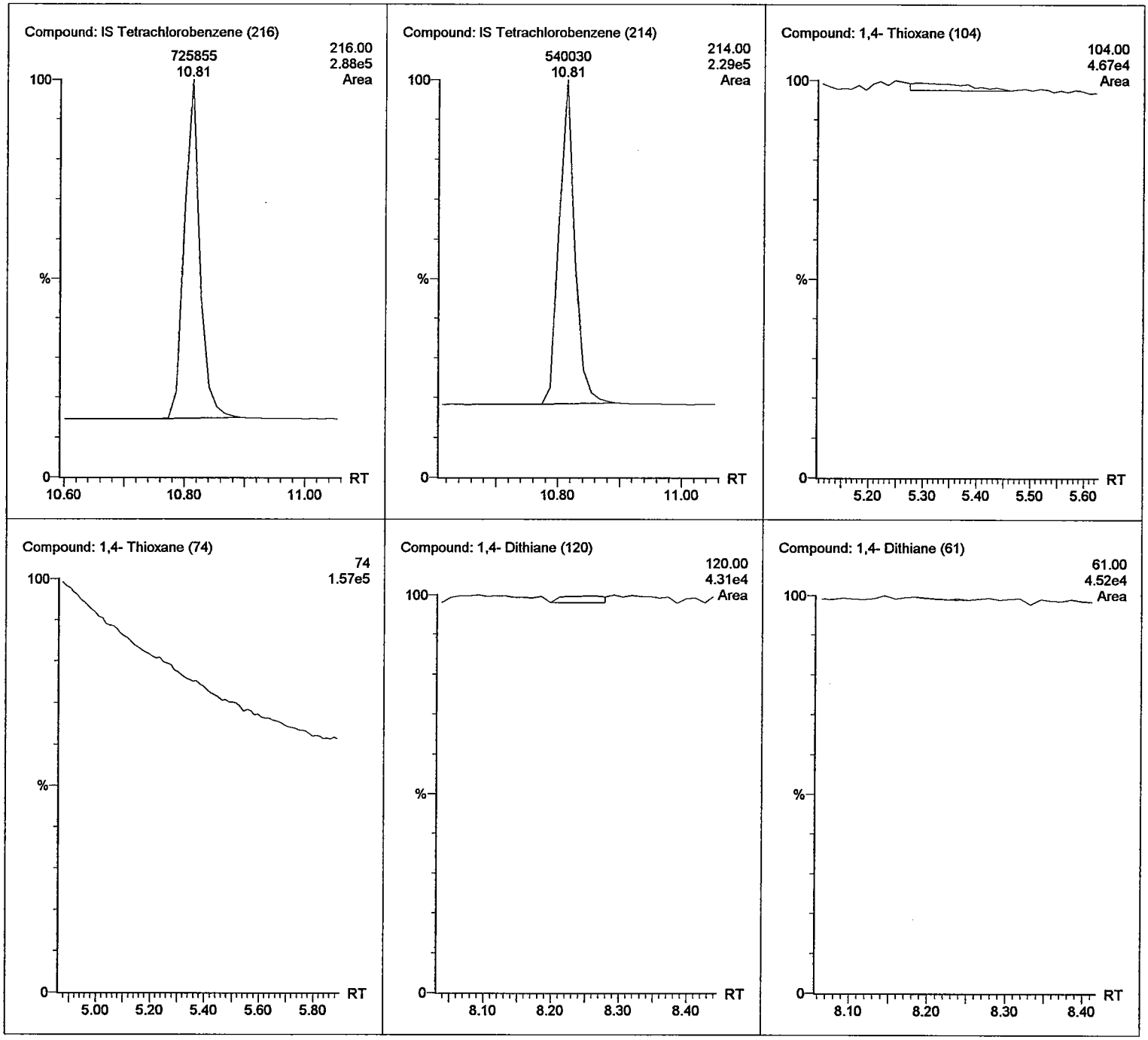
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020017

Filename: C:\MASSLAB\DATA\Y0921124.RAW
Sample ID: 2uL 167684 (US-005)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 21:22:12
Instrument: Y-MD800



Peak List Information - Y0921124

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.814	IS	725855	245434	0.1000
2	IS Tetrachlorobenzene (2	10.814	IS	540030	186725	0.1000
3	1,4- Thioxane (104)	5.301	T	10372	893	0.0017
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.251	T	4997	759	0.0022
6	1,4- Dithiane (61)	8.238	T	222	155	0.0002

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS	Client Sample ID: US-304	Project Number: 04014.05.002
Case: URS	System ID: 167685	Instrument: Y-MD800
SDG: 167680	Filename: Y0921125	Date Received: 09/19/2001
Matrix: SOIL	pH: NA	Date Extracted: Sep 20, 2001
Sample wt. (g): 1.0332	Conc. Ext. Vol. (uL): 2000	Date Analyzed: Sep 21 2001 9:45PM
Level: LOW	% Moisture: 1.6	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound	ug/Kg
15980-15-1	Oxathiane	79 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

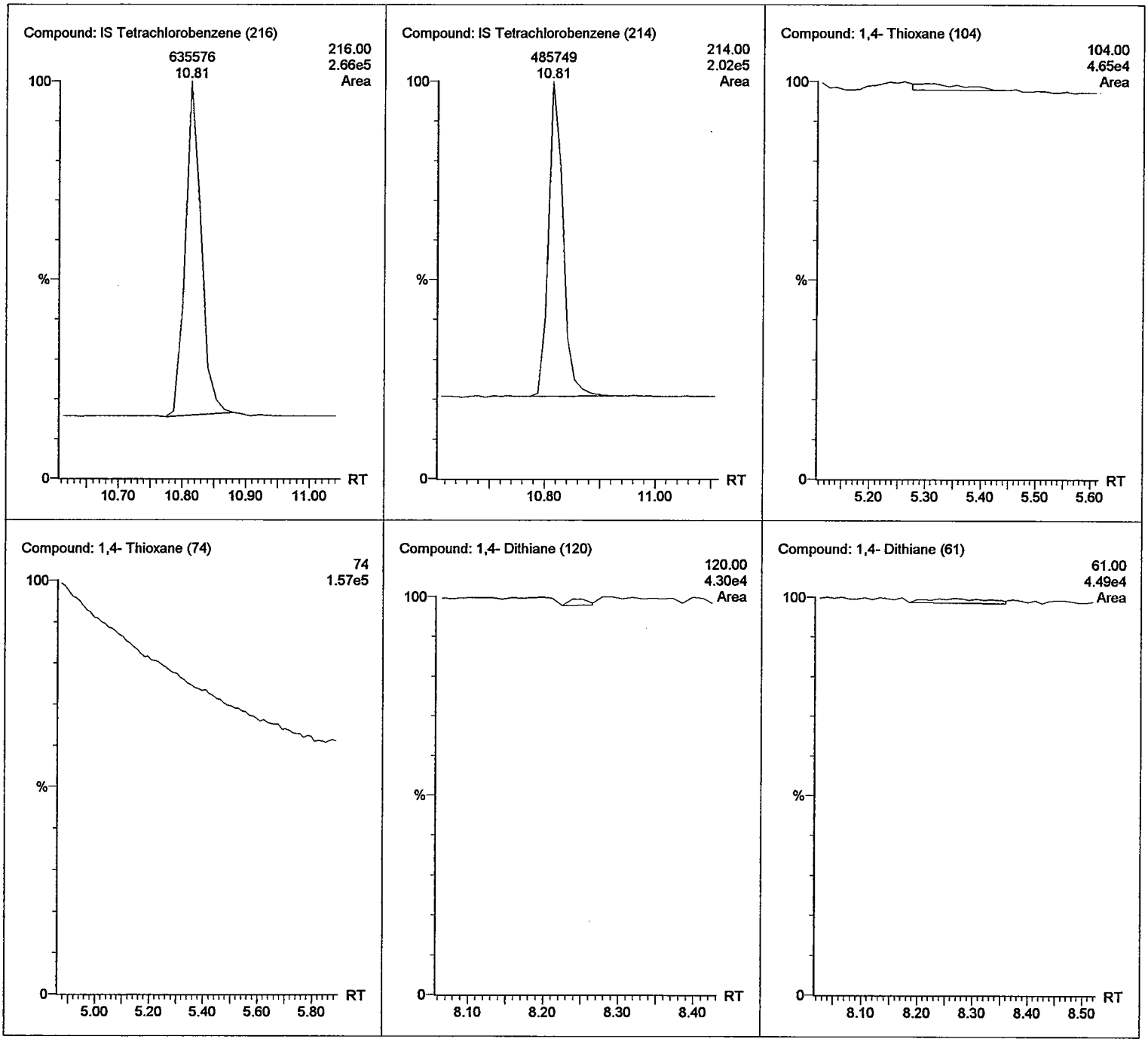
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020019

Filename: C:\MASSLAB\DATA\Y0921125.RAW
Sample ID: 2uL 167685 (US-304)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 21:45:53
Instrument: Y-MD800



Peak List Information - Y0921125

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.814	IS	635576	223861	0.1000
2	IS Tetrachlorobenzene (2	10.814	IS	485749	159799	0.1000
3	1,4- Thioxane (104)	5.301	T	7227	706	0.0013
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.251	T	1941	678	0.0010
6	1,4- Dithiane (61)	8.264	T	6709	544	0.0052

SOUTHWEST RESEARCH INSTITUTE

Semi-volatile Organics Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: WATER
Sample wt. (mL): 1
Level: LOW
GPC Cleanup: N

Client Sample ID: US-603
System ID: 167686
Filename: Y0921120
pH: NA
Conc. Ext. Vol. (uL): 2000

Decanted: N

Project Number: 04014.05.002
Instrument: Y-MD800
Date Received: 09/19/2001
Date Extracted: Sep 20, 2001
Date Analyzed: Sep 21 2001 7:46PM
Dilution Factor: 1
Injection Volume (uL): 2.0

CAS No.	Compound	ug/L
15980-15-1	Oxathiane	80 U
505-29-3	Dithiane	20 U

DATA REPORTING QUALIFIERS

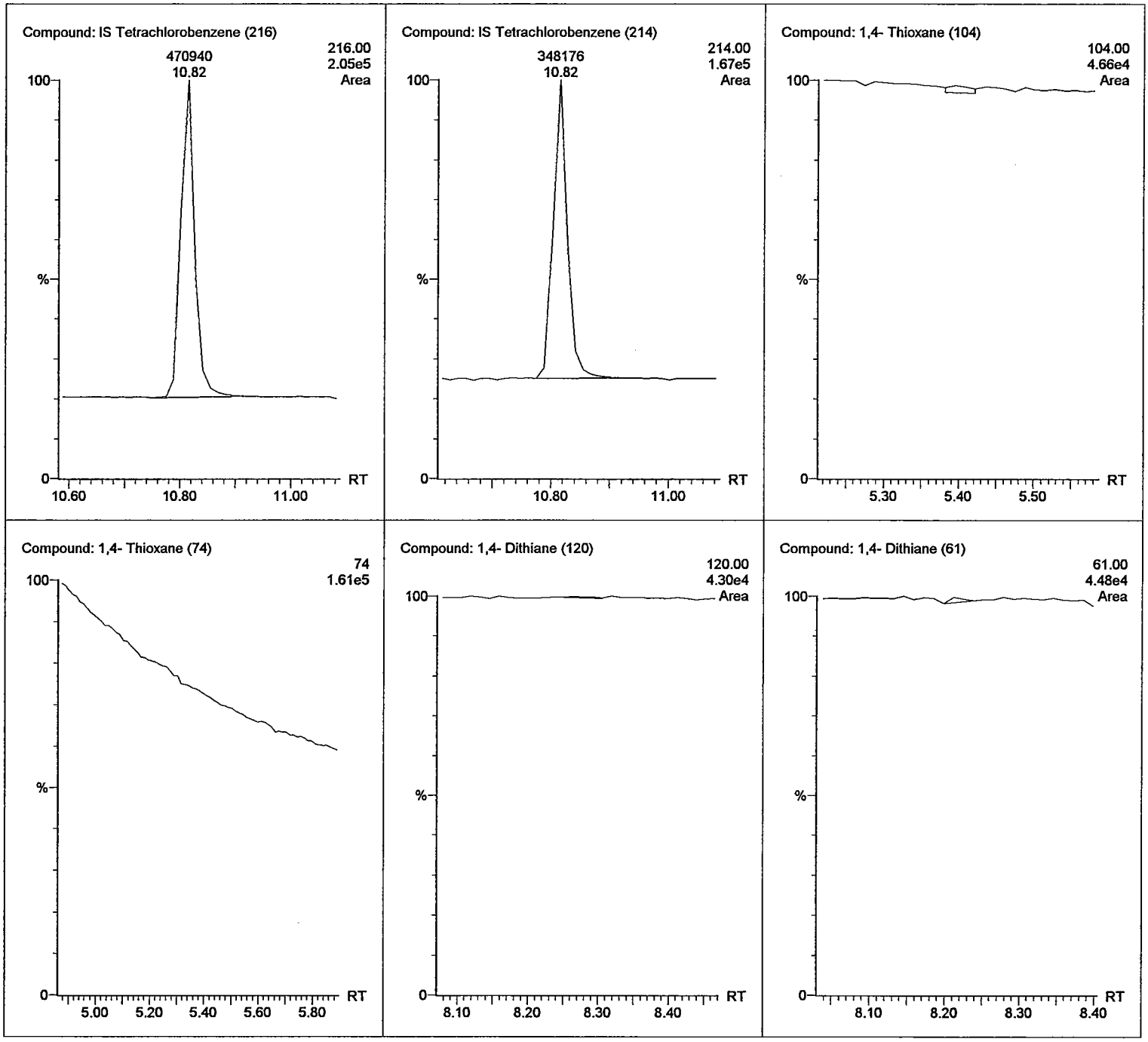
- B This flag is used when the analyte is found in the blank as well as the sample.
- D Concentration value is from dilution analysis.
- E This flag indicates compounds whose concentrations exceed the calibration range.
- J Indicates an estimated value.
- U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Southwest Research Institute
Quantitation Report

020021

Filename: C:\MASSLAB\DATA\Y0921120.RAW
Sample ID: 2uL 167686 (US-603)
Conditions: 70C|3MIN|15C/M|265C|2M INJ=225

Date Aquired: 21-Sep-2001 at 19:46:45
Instrument: Y-MD800



Peak List Information - Y0921120

Entry	Name	RT	Flags	Area	Height	Found Conc (ng/uL)
1	IS Tetrachlorobenzene (2	10.815	IS	470940	162917	0.1000
2	IS Tetrachlorobenzene (2	10.815	IS	348176	124835	0.1000
3	1,4- Thioxane (104)	5.395	T	2765	818	0.0007
4	1,4- Thioxane (74)	5.380	T	0	0	0.0000
5	1,4- Dithiane (120)	8.265	T	535	125	0.0004
6	1,4- Dithiane (61)	8.212	T	1206	597	0.0013

SOUTHWEST RESEARCH INSTITUTE
CLIENT: URS
WORK ORDER: 20908
SDG: 167680
VTSR: September 19, 2001
PROJECT: 04014.05.002

SAMPLE DATA
METHOD 8270

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS	Client Sample ID: US-603	Project Number: 01.04014.05.002
Case: URS	System ID: 167686	Instrument: FINN8
SDG: 167680	Filename: 81004105	Date Received: 09/19/01
Matrix: WATER	pH: 6.1	Date Extracted: 09/20/01
Sample Volume (mL): 500	Concentrated Extract Volume (uL): 500	Date Analyzed: 10/04/01
Level: LOW	% Moisture: 100	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/L	Flag
	Diisopropylaminoethane thiol	10	U
	bis-(diisopropylaminoethane) disulfide	10	U
	bis-diisopropylaminosulfide	10	U
	other isopropylaminoethane compounds	10	U

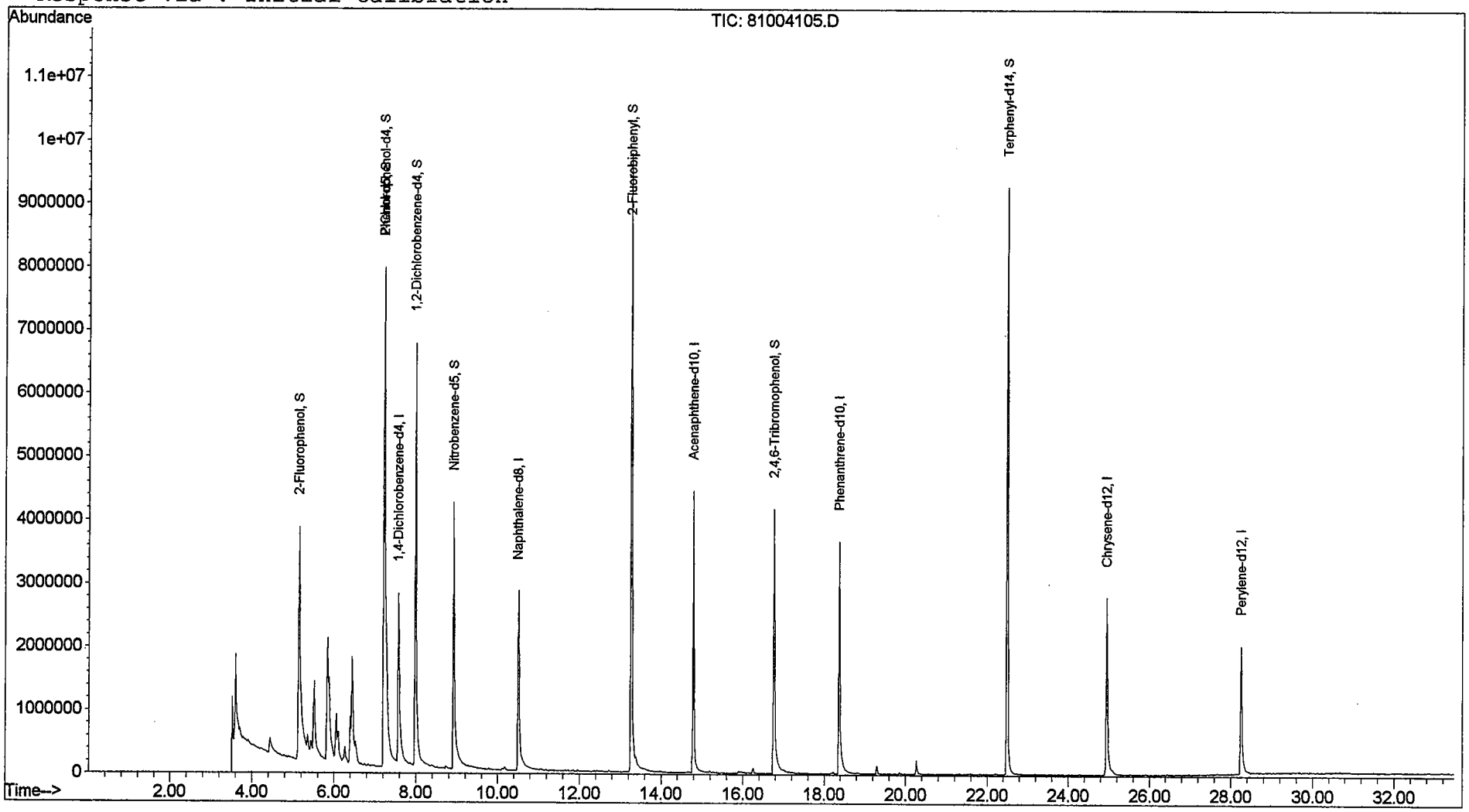
DATA REPORTING QUALIFIERS

B	This flag is used when the analyte is found in the blank as well as the sample.
D	Concentration value is from dilution analysis.
E	This flag indicates compounds whose concentrations exceed the calibration range.
J	Indicates an estimated value.
U	Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004105.D Vial: 7
Acq On : 4 Oct 2001 22:09 Operator: SQ
Sample : SWRI FINN8 167686 Inst : FINN8
Misc : URS SDG=167680: US-603 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:06 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



010015

Quantitation Report

010016

Data File : C:\ELINK\FINN8\DATA\100401\81004105.D Vial: 7
Acq On : 4 Oct 2001 22:09 Operator: SQ
Sample : SWRI FINN8 167686 Inst : FINN8
Misc : URS SDG=167680: US-603 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:06 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.57	152	1493321	40.00 NG	-0.02 78.76%
18) Naphthalene-d8	10.50	136	5074923	40.00 NG	-0.03 74.23%
33) Acenaphthene-d10	14.78	164	2884007	40.00 NG	-0.02 68.40%
53) Phenanthrene-d10	18.37	188	3691272	40.00 NG	-0.02 80.58%
65) Chrysene-d12	24.95	240	2599269	40.00 NG	-0.02 91.80%
73) Perylene-d12	28.25	264	1890900	40.00 NG	-0.02 80.34%
System Monitoring Compounds					
2) 2-Fluorophenol	5.15	112	4776838m	107.00 NG	-0.02
4) Phenol-d5	7.22	99	4613578m	70.23 NG	-0.02
6) 2-Chlorophenol-d4	7.22	132	5916652	116.93 NG	0.00
10) 1,2-Dichlorobenzene-d4	7.98	152	3150776	85.72 NG	-0.02
19) Nitrobenzene-d5	8.92	82	3901572	81.99 NG	-0.02
37) 2-Fluorobiphenyl	13.27	172	8183419	89.87 NG	-0.02
56) 2,4,6-Tribromophenol	16.77	330	1105730	121.28 NG	0.00
67) Terphenyl-d14	22.50	244	7744587	101.08 NG	0.00
Target Compounds					Qvalue
51) Diethylphthalate	16.23	149	49328	0.74 NG	78
63) Di-n-butylphthalate	20.27	149	317502	2.61 NG	96

10/9/01

REVIEWED BY: Joseph C. Pan
DATE: 10/9/2001

Anuradha Quadera
10/9/01

(#) = qualifier out of range (m) = manual integration
81004105.D 8270.M Mon Oct 08 21:40:10 2001

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS	Client Sample ID: US-001	Project Number: 01.04014.05.002
Case: URS	System ID: 167680	Instrument: FINN8
SDG: 167680	Filename: 81004106	Date Received: 09/19/01
Matrix: SOIL	pH: NA	Date Extracted: 09/26/01
Sample Volume (g): 30.43	Concentrated Extract Volume (uL): 1000	Date Analyzed: 10/04/01
Level: LOW	% Moisture: 1.9	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

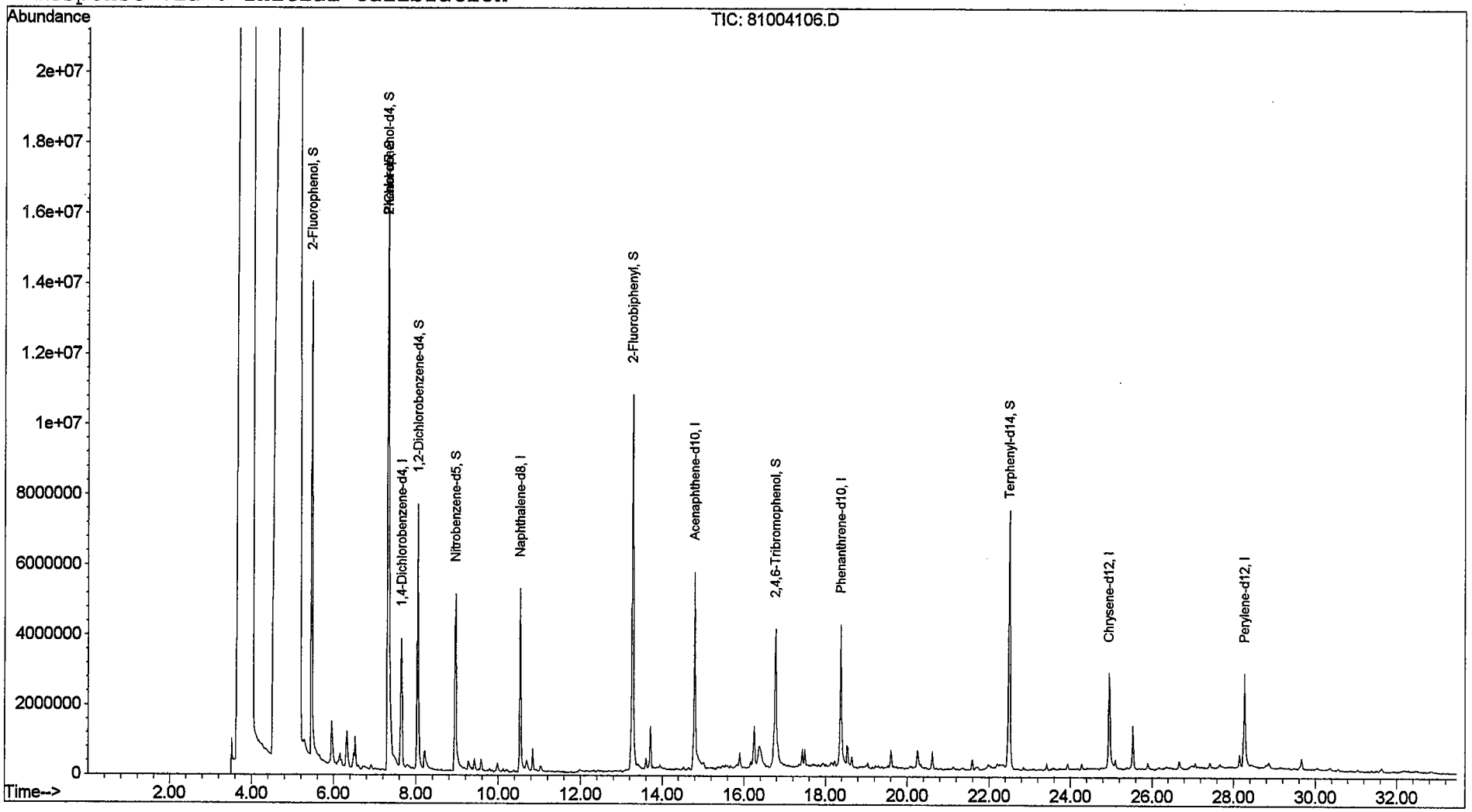
DATA REPORTING QUALIFIERS

B	This flag is used when the analyte is found in the blank as well as the sample.
D	Concentration value is from dilution analysis.
E	This flag indicates compounds whose concentrations exceed the calibration range.
J	Indicates an estimated value.
U	Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004106.D Vial: 8
Acq On : 4 Oct 2001 22:48 Operator: SQ
Sample : SWRI FINN8 167680 Inst : FINN8
Misc : URS SDG=167680: US-001 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:08 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



01018

Quantitation Report

010019

Data File : C:\ELINK\FINN8\DATA\100401\81004106.D Vial: 8
Acq On : 4 Oct 2001 22:48 Operator: SQ
Sample : SWRI FINN8 167680 Inst : FINN8
Misc : URS SDG=167680: US-001 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:08 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.65	152	1853105	40.00 NG	0.07 97.73%
18) Naphthalene-d8	10.53	136	6483694	40.00 NG	0.00 94.84%
33) Acenaphthene-d10	14.80	164	3752634	40.00 NG	0.00 89.00%
53) Phenanthrene-d10	18.38	188	4588018	40.00 NG	0.00 100.15%
65) Chrysene-d12	24.95	240	3007577	40.00 NG	-0.02 106.22%
73) Perylene-d12	28.27	264	2573611	40.00 NG	0.00 109.35%
System Monitoring Compounds					
2) 2-Fluorophenol	5.47	112	7897164	142.56 NG	0.30
4) Phenol-d5	7.32	99	10346167	126.91 NG	0.08
6) 2-Chlorophenol-d4	7.32	132	7528705	119.90 NG	0.10
10) 1,2-Dichlorobenzene-d4	8.05	152	3440538	75.43 NG	0.05
19) Nitrobenzene-d5	8.97	82	4622969	76.05 NG	0.03
37) 2-Fluorobiphenyl	13.28	172	9550494	80.60 NG	0.00
56) 2,4,6-Tribromophenol	16.78	330	1589610	140.28 NG	0.02
67) Terphenyl-d14	22.50	244	8230980	92.85 NG	0.00
Target Compounds					Qvalue
12) Benzyl alcohol	8.35	108	29845	0.65 NG	91
51) Diethylphthalate	16.22	149	110141	1.27 NG	90
63) Di-n-butylphthalate	20.27	149	197887	1.31 NG	96
68) Butylbenzylphthalate	23.93	149	122718	1.81 NG	94
72) bis(2-Ethylhexyl)phthalate	25.53	149	769121	8.49 NG	97

Shwetha Gunder 10/9/01

(#) = qualifier out of range (m) = manual integration
81004106.D 8270.M Mon Oct 08 21:40:18 2001

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS	Client Sample ID: US-002	Project Number: 01.04014.05.002
Case: URS	System ID: 167681	Instrument: FINN8
SDG: 167680	Filename: 81004107	Date Received: 09/19/01
Matrix: SOIL	pH: NA	Date Extracted: 09/26/01
Sample Volume (g): 30.57	Concentrated Extract Volume (uL): 1000	Date Analyzed: 10/04/01
Level: LOW	% Moisture: 2.1	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

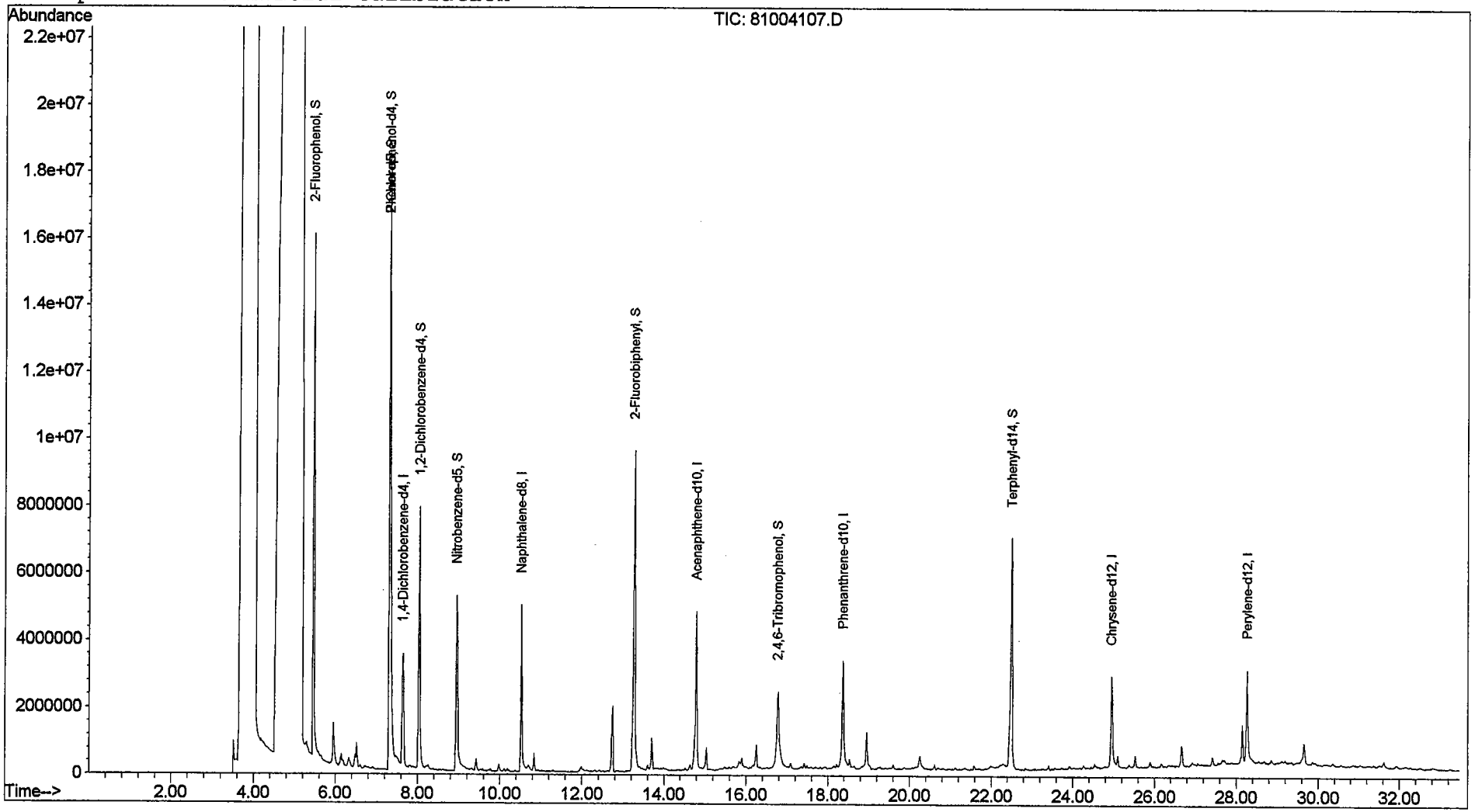
DATA REPORTING QUALIFIERS

B	This flag is used when the analyte is found in the blank as well as the sample.
D	Concentration value is from dilution analysis.
E	This flag indicates compounds whose concentrations exceed the calibration range.
J	Indicates an estimated value.
U	Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004107.D Vial: 9
Acq On : 4 Oct 2001 23:27 Operator: SQ
Sample : SWRI FINN8 167681 Inst : FINN8
Misc : URS SDG=167680: US-002 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:11 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



010021

Quantitation Report

010022

Data File : C:\ELINK\FINN8\DATA\100401\81004107.D Vial: 9
Acq On : 4 Oct 2001 23:27 Operator: SQ
Sample : SWRI FINN8 167681 Inst : FINN8
Misc : URS SDG=167680: US-002 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:11 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.63	152	1867231	40.00 NG	0.05 98.48%
18) Naphthalene-d8	10.52	136	6565969	40.00 NG	-0.02 96.04%
33) Acenaphthene-d10	14.80	164	3643684	40.00 NG	0.00 86.42%
53) Phenanthrene-d10	18.37	188	4372571	40.00 NG	-0.02 95.45%
65) Chrysene-d12	24.95	240	2995199	40.00 NG	-0.02 105.79%
73) Perylene-d12	28.27	264	2621670	40.00 NG	0.00 111.39%
System Monitoring Compounds					
2) 2-Fluorophenol	5.47	112	8458707	151.54 NG	0.30
4) Phenol-d5	7.32	99	10841976	131.99 NG	0.08
6) 2-Chlorophenol-d4	7.32	132	8155696	128.90 NG	0.10
10) 1,2-Dichlorobenzene-d4	8.05	152	3742915	81.44 NG	0.05
19) Nitrobenzene-d5	8.95	82	4754567	77.23 NG	0.02
37) 2-Fluorobiphenyl	13.28	172	9925775	86.28 NG	0.00
56) 2,4,6-Tribromophenol	16.78	330	1249893	115.74 NG	0.02
67) Terphenyl-d14	22.50	244	8185451	92.72 NG	0.00
Target Compounds					Qvalue
51) Diethylphthalate	16.22	149	127032	1.51 NG	82
63) Di-n-butylphthalate	20.27	149	199496	1.39 NG	95
68) Butylbenzylphthalate	23.93	149	60258	0.89 NG	95
72) bis(2-Ethylhexyl)phthalate	25.53	149	272561	3.02 NG	82

10/9/01

(#) = qualifier out of range (m) = manual integration

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Sample Volume (g): 30.40
Level: LOW
GPC Cleanup: N

Client Sample ID: US-003
System ID: 167682
Filename: 81004108
pH: NA
Concentrated Extract Volume (uL): 1000
% Moisture: 1.8
Decanted: N

Project Number: 01.04014.05.002
Instrument: FINN8
Date Received: 09/19/01
Date Extracted: 09/26/01
Date Analyzed: 10/05/01
Dilution Factor: 1
Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

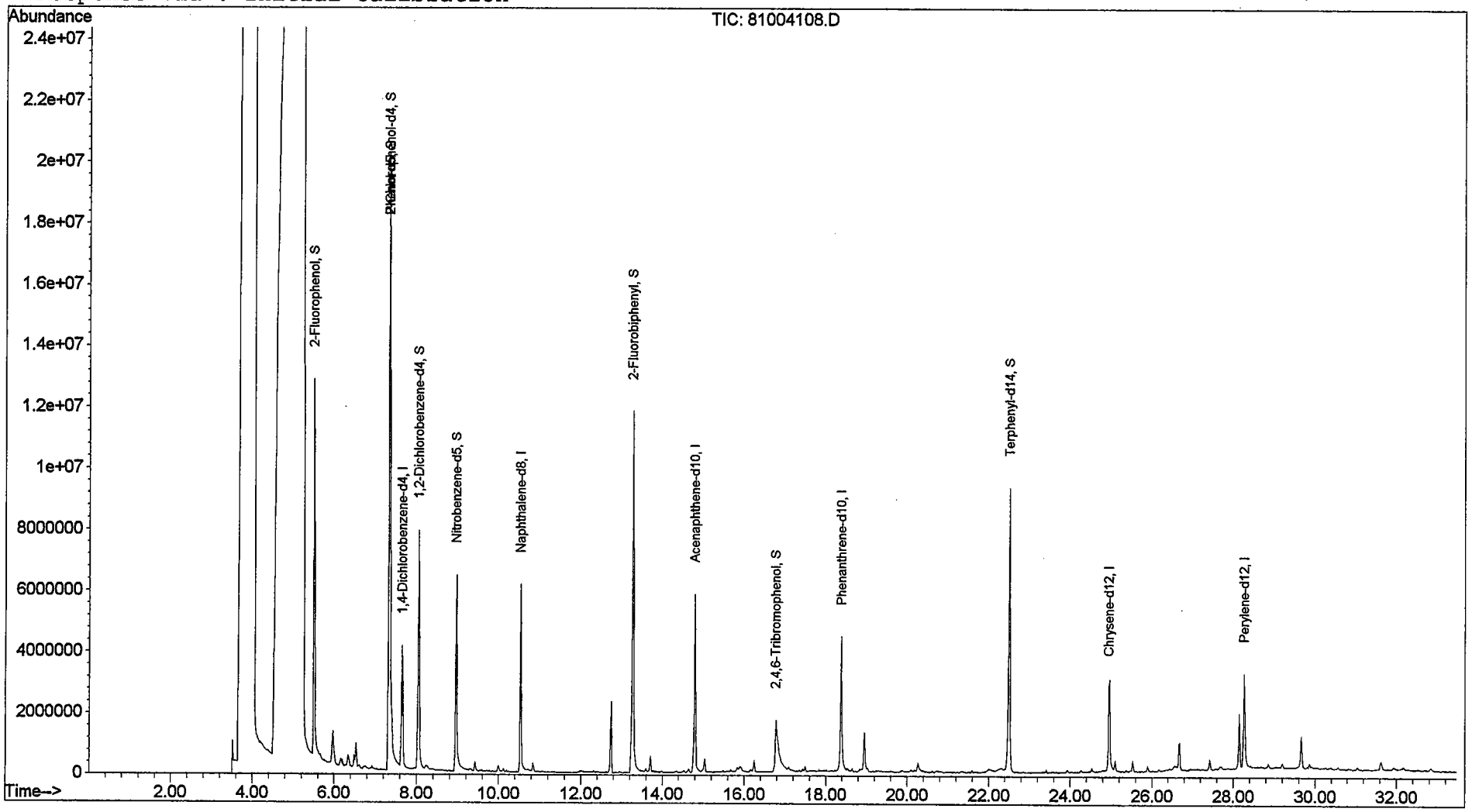
DATA REPORTING QUALIFIERS

B This flag is used when the analyte is found in the blank as well as the sample.
D Concentration value is from dilution analysis.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004108.D Vial: 10
Acq On : 5 Oct 2001 00:07 Operator: SQ
Sample : SWRI FINN8 167682 Inst : FINN8
Misc : URS SDG=167680: US-003 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:16 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



010024

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004108.D Vial: 10 010025
Acq On : 5 Oct 2001 00:07 Operator: SQ
Sample : SWRI FINN8 167682 Inst : FINN8
Misc : URS SDG=167680: US-003 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:16 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.65	152	1930494	40.00	NG	0.07 101.82%
18) Naphthalene-d8	10.53	136	6829825	40.00	NG	0.00 99.90%
33) Acenaphthene-d10	14.80	164	3787925	40.00	NG	0.00 89.84%
53) Phenanthrene-d10	18.38	188	4702896	40.00	NG	0.00 102.66%
65) Chrysene-d12	24.95	240	3242849	40.00	NG	-0.02 114.53%
73) Perylene-d12	28.27	264	2834932	40.00	NG	0.00 120.45%
System Monitoring Compounds						
2) 2-Fluorophenol	5.50	112	7200619	124.77	NG	0.33
4) Phenol-d5	7.33	99	11572720	136.27	NG	0.10
6) 2-Chlorophenol-d4	7.33	132	8167749	124.86	NG	0.12
10) 1,2-Dichlorobenzene-d4	8.05	152	3900325	82.08	NG	0.05
19) Nitrobenzene-d5	8.97	82	4867870	76.02	NG	0.03
37) 2-Fluorobiphenyl	13.28	172	10144102	84.82	NG	0.00
56) 2,4,6-Tribromophenol	16.78	330	1269677	109.31	NG	0.02
67) Terphenyl-d14	22.52	244	8953773	93.67	NG	0.02
Target Compounds						Qvalue
51) Diethylphthalate	16.22	149	69955	0.80	NG	95
63) Di-n-butylphthalate	20.27	149	162621	1.05	NG	93
68) Butylbenzylphthalate	23.93	149	60531	0.83	NG	88
72) bis(2-Ethylhexyl)phthalate	25.53	149	260361	2.66	NG	90

Thomas Quander 10/9/01

(#) = qualifier out of range (m) = manual integration
81004108.D 8270.M Mon Oct 08 21:40:35 2001

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS	Client Sample ID: US-004	Project Number: 01.04014.05.002
Case: URS	System ID: 167683	Instrument: FINN8
SDG: 167680	Filename: 81004109	Date Received: 09/19/01
Matrix: SOIL	pH: NA	Date Extracted: 09/26/01
Sample Volume (g): 30.76	Concentrated Extract Volume (uL): 1000	Date Analyzed: 10/05/01
Level: LOW	% Moisture: 1.7	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

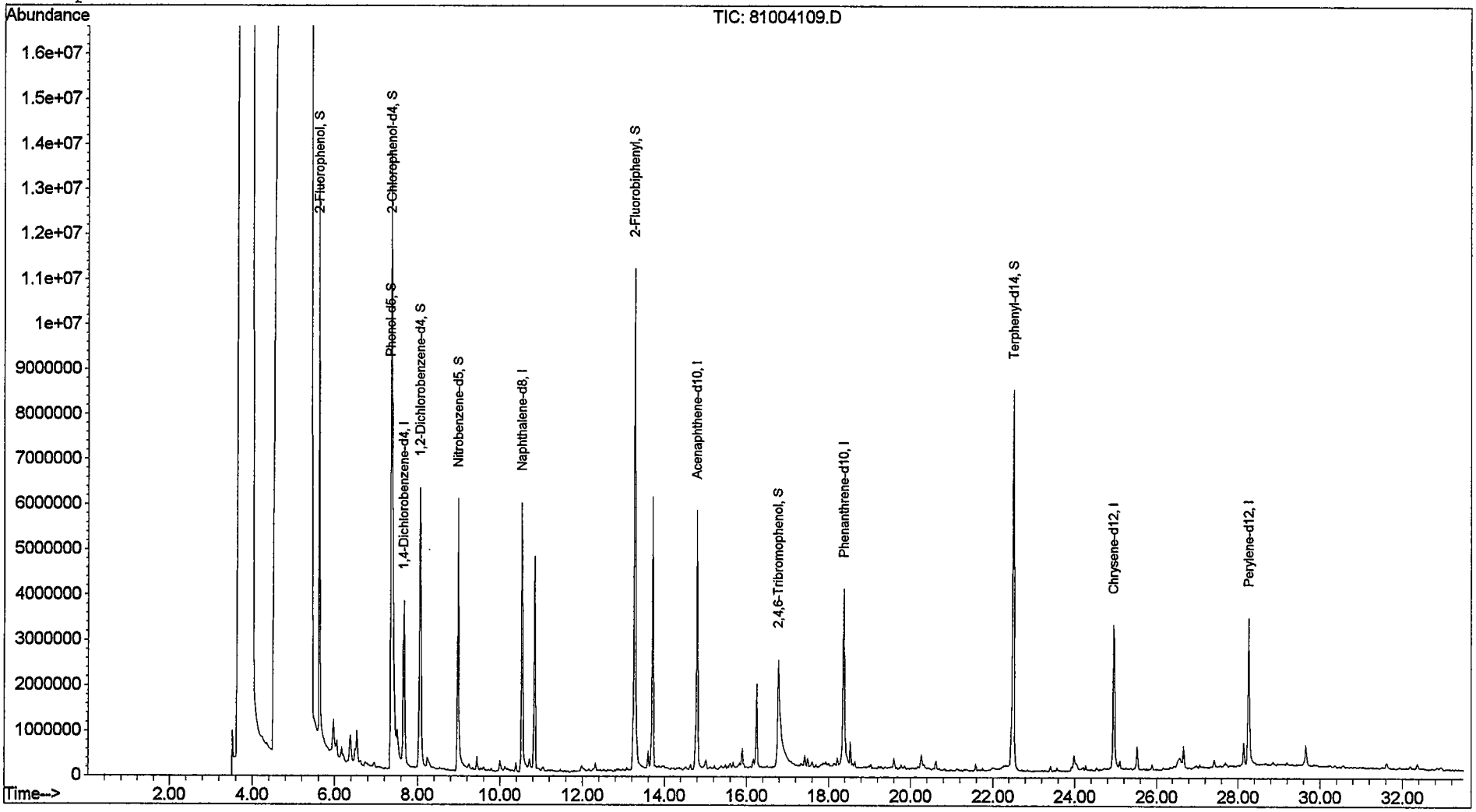
DATA REPORTING QUALIFIERS

B This flag is used when the analyte is found in the blank as well as the sample.
D Concentration value is from dilution analysis.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004109.D Vial: 11
Acq On : 5 Oct 2001 00:46 Operator: SQ
Sample : SWRI FINN8 167683 Inst : FINN8
Misc : URS SDG=167680: US-004 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:18 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



010027

Quantitation Report

010028

Data File : C:\ELINK\FINN8\DATA\100401\81004109.D Vial: 11
Acq On : 5 Oct 2001 00:46 Operator: SQ
Sample : SWRI FINN8 167683 Inst : FINN8
Misc : URS SDG=167680: US-004 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:18 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.67	152	2020382	40.00	NG	0.08 106.56%
18) Naphthalene-d8	10.53	136	6911342	40.00	NG	0.00 101.09%
33) Acenaphthene-d10	14.80	164	3781908	40.00	NG	0.00 89.70%
53) Phenanthrene-d10	18.38	188	4796155	40.00	NG	0.00 104.70%
65) Chrysene-d12	24.95	240	3378254	40.00	NG	-0.02 119.32%
73) Perylene-d12	28.27	264	2913916	40.00	NG	0.00 123.81%
System Monitoring Compounds						
2) 2-Fluorophenol	5.62	112	6490998m	107.47	NG	0.45
4) Phenol-d5	7.35	99	10214333	114.92	NG	0.12
6) 2-Chlorophenol-d4	7.37	132	7568575	110.55	NG	0.15
10) 1,2-Dichlorobenzene-d4	8.07	152	3394405	68.25	NG	0.07
19) Nitrobenzene-d5	8.98	82	4779899	73.76	NG	0.05
37) 2-Fluorobiphenyl	13.28	172	9466106	79.27	NG	0.00
56) 2,4,6-Tribromophenol	16.78	330	1601376	135.19	NG	0.02
67) Terphenyl-d14	22.52	244	9192687	92.32	NG	0.02
Target Compounds						Qvalue
51) Diethylphthalate	16.22	149	133762	1.53	NG	85
63) Di-n-butylphthalate	20.27	149	143705	0.91	NG	97
68) Butylbenzylphthalate	23.92	149	66514	0.88	NG	98
72) bis(2-Ethylhexyl)phthalate	25.52	149	392766	3.86	NG	92

10/9/01

10/9/01

(#) = qualifier out of range (m) = manual integration
81004109.D 8270.M Mon Oct 08 21:40:43 2001

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Sample Volume (g): 30.58
Level: LOW
GPC Cleanup: N

Client Sample ID: US-005
System ID: 167684
Filename: 81004110
pH: NA
Concentrated Extract Volume (uL): 1000
% Moisture: 1.6
Decanted: N

Project Number: 01.04014.05.002
Instrument: FINN8
Date Received: 09/19/01
Date Extracted: 09/26/01
Date Analyzed: 10/05/01
Dilution Factor: 1
Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

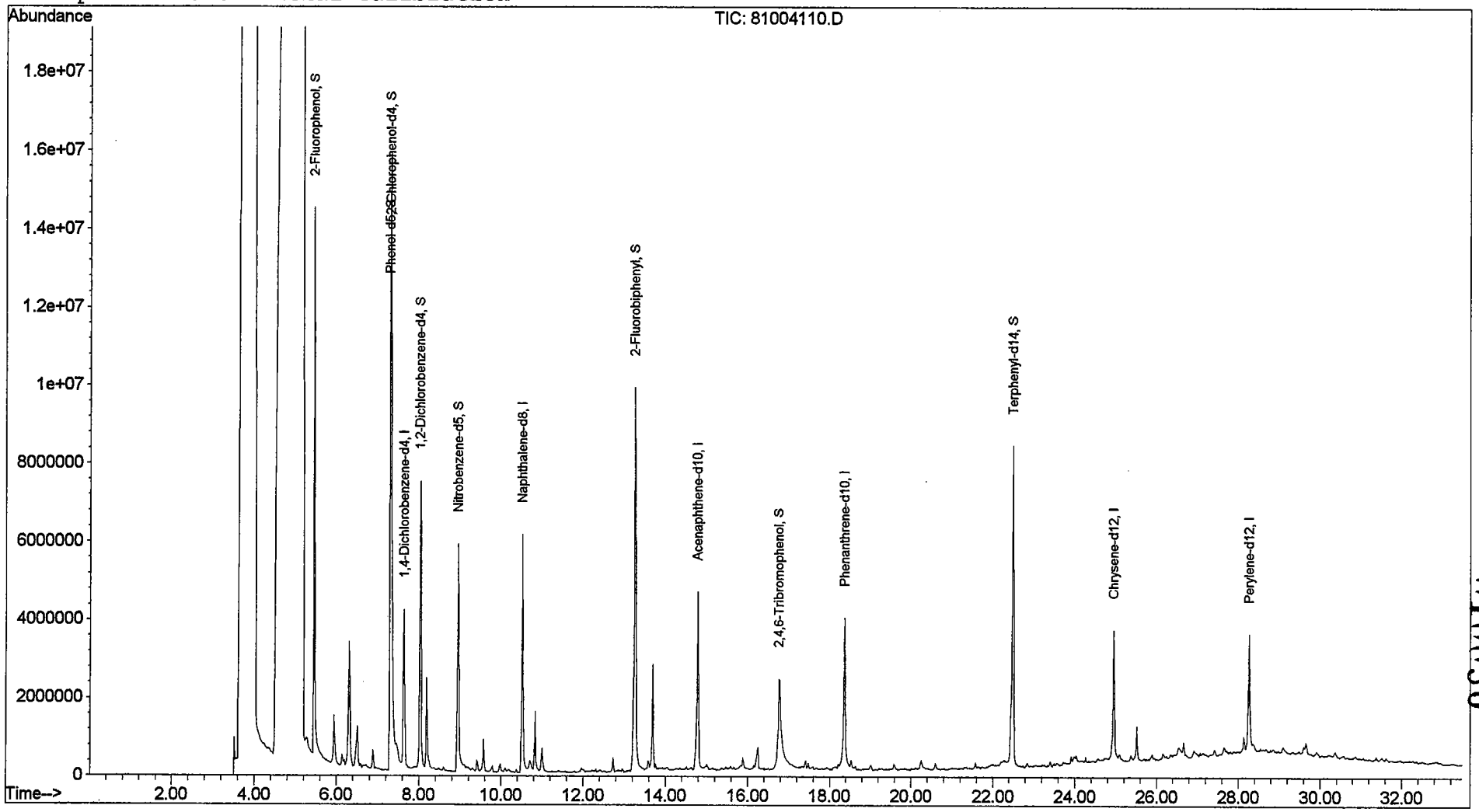
DATA REPORTING QUALIFIERS

B This flag is used when the analyte is found in the blank as well as the sample.
D Concentration value is from dilution analysis.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004110.D Vial: 12
Acq On : 5 Oct 2001 01:25 Operator: SQ
Sample : SWRI FINN8 167684 Inst : FINN8
Misc : URS SDG=167680: US-005 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:19 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



010030

Quantitation Report

010031

Data File : C:\ELINK\FINN8\DATA\100401\81004110.D Vial: 12
Acq On : 5 Oct 2001 01:25 Operator: SQ
Sample : SWRI FINN8 167684 Inst : FINN8
Misc : URS SDG=167680: US-005 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:19 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.63	152	2018004	40.00	NG	0.05 106.43%
18) Naphthalene-d8	10.52	136	7001959	40.00	NG	-0.02 102.42%
33) Acenaphthene-d10	14.78	164	3700135	40.00	NG	-0.02 87.76%
53) Phenanthrene-d10	18.37	188	4671471	40.00	NG	-0.02 101.98%
65) Chrysene-d12	24.95	240	3353538	40.00	NG	-0.02 118.44%
73) Perylene-d12	28.27	264	2700717	40.00	NG	0.00 114.75%
System Monitoring Compounds						
2) 2-Fluorophenol	5.45	112	7595817	125.91	NG	0.28
4) Phenol-d5	7.30	99	10568850	119.05	NG	0.07
6) 2-Chlorophenol-d4	7.32	132	7818174	114.33	NG	0.10
10) 1,2-Dichlorobenzene-d4	8.03	152	3656034	73.60	NG	0.03
19) Nitrobenzene-d5	8.95	82	4582937	69.81	NG	0.02
37) 2-Fluorobiphenyl	13.27	172	9601588	82.19	NG	-0.02
56) 2,4,6-Tribromophenol	16.77	330	1734665	150.35	NG	0.00
67) Terphenyl-d14	22.50	244	8498526	85.98	NG	0.00
Target Compounds						Qvalue
51) Diethylphthalate	16.20	149	217289	2.55	NG	88
63) Di-n-butylphthalate	20.27	149	129566	0.84	NG	92
68) Butylbenzylphthalate	23.92	149	103872	1.38	NG	98
72) bis(2-Ethylhexyl)phthalate	25.52	149	534572	5.29	NG	97

Ahmad Khan Quader
10/9/01

(#) = qualifier out of range (m) = manual integration

SOUTHWEST RESEARCH INSTITUTE

VX-Thiols, Organosulfur, and Amine Compounds Data Reporting Form

Client: URS	Client Sample ID: US-304	Project Number: 01.04014.05.002
Case: URS	System ID: 167685	Instrument: FINN8
SDG: 167680	Filename: 81004111	Date Received: 09/19/01
Matrix: SOIL	pH: NA	Date Extracted: 09/26/01
Sample Volume (g): 30.59	Concentrated Extract Volume (uL): 1000	Date Analyzed: 10/05/01
Level: LOW	% Moisture: 1.6	Dilution Factor: 1
GPC Cleanup: N	Decanted: N	Injection Volume (uL): 2.0

CAS No.	Compound Name	Detection Limit ug/Kg	Flag
	Diisopropylaminoethane thiol	330	U
	bis-(diisopropylaminoethane) disulfide	330	U
	bis-diisopropylaminosulfide	330	U
	other isopropylaminoethane compounds	330	U

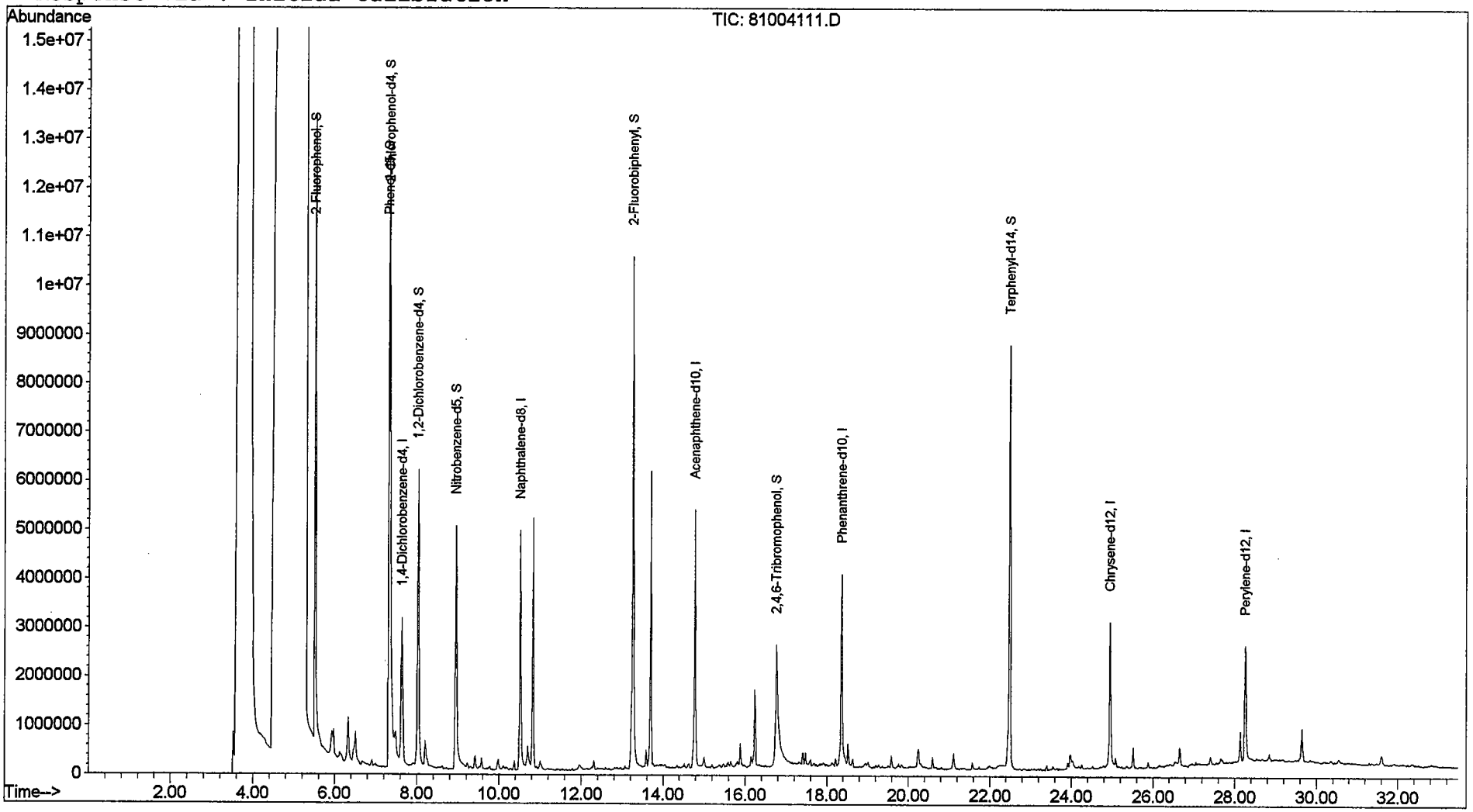
DATA REPORTING QUALIFIERS

B This flag is used when the analyte is found in the blank as well as the sample.
D Concentration value is from dilution analysis.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. t OU) based on necessary concentration dilution action (This is not necessarily the instrument detection limit).

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004111.D Vial: 13
Acq On : 5 Oct 2001 02:05 Operator: SQ
Sample : SWRI FINN8 167685 Inst : FINN8
Misc : URS SDG=167680: US-304 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct· 7 10:21 19101 Quant Results File: 8270.RES

Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration



01003

Quantitation Report

Data File : C:\ELINK\FINN8\DATA\100401\81004111.D Vial: 13 010034
Acq On : 5 Oct 2001 02:05 Operator: SQ
Sample : SWRI FINN8 167685 Inst : FINN8
Misc : URS SDG=167680: US-304 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 7 10:21 19101 Quant Results File: 8270.RES

Quant Method : C:\ELINK\FINN8\QUANT\8270.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Sun Oct 07 09:55:01 2001
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : C:\ELINK\FINN8\DATA\100401\810041S2.D (4 Oct 2001 17:23)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	7.63	152	1636635	40.00 NG	0.05 86.32%
18) Naphthalene-d8	10.52	136	5765503	40.00 NG	-0.02 84.33%
33) Acenaphthene-d10	14.78	164	3248531	40.00 NG	-0.02 77.05%
53) Phenanthrene-d10	18.37	188	4038478	40.00 NG	-0.02 88.16%
65) Chrysene-d12	24.95	240	2749366	40.00 NG	-0.02 97.10%
73) Perylene-d12	28.25	264	2288443	40.00 NG	-0.02 97.23%
System Monitoring Compounds					
2) 2-Fluorophenol	5.52	112	7319430m	149.60 NG	0.35
4) Phenol-d5	7.32	99	9369912	130.14 NG	0.08
6) 2-Chlorophenol-d4	7.33	132	7110353	128.21 NG	0.12
10) 1,2-Dichlorobenzene-d4	8.03	152	3111825	77.24 NG	0.03
19) Nitrobenzene-d5	8.95	82	4091897	75.69 NG	0.02
37) 2-Fluorobiphenyl	13.27	172	8539283	83.25 NG	-0.02
56) 2,4,6-Tribromophenol	16.77	330	1470478	147.43 NG	0.00
67) Terphenyl-d14	22.50	244	7865387	97.06 NG	0.00
Target Compounds					Qvalue
51) Diethylphthalate	16.20	149	116318	1.55 NG	91
63) Di-n-butylphthalate	20.25	149	211335	1.59 NG	96
68) Butylbenzylphthalate	23.92	149	93118	1.51 NG	95
72) bis(2-Ethylhexyl)phthalate	25.52	149	250000	3.02 NG	91

10/9/01

10/9/01

(#) = qualifier out of range (m) = manual integration
81004111.D 8270.M Mon Oct 08 21:40:59 2001

SOUTHWEST RESEARCH INSTITUTE
CLIENT: URS
SDG: 167680
SwRI Project Number: 04014.05.002
SwRI Work Order No.: 20908
VTSR: September 19, 2001

SAMPLE DATA

SOUTHWEST RESEARCH INSTITUTE

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

030006

Client: URS
Case: URS
SDG: 167680
Matrix: Liquid
Filename: 09240112
Filename (MPA): 09250121
Injection Vol (uL): 50
Ext.Vol.: 1 mL

System ID: 167686
Client Sample ID: US-603
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: N/A
Date Analyzed: 09/24/01

CAS No.	Compound	ug/mL	
111-48-8	Thiodiglycol	0.064	U
1832-53-7	Ethylmethyl-phosphonic acid	0.063	U
993-13-59	Methyl Phosphonic acid	0.200	U
73207-98-4	EA-2192	0.005	U
1445-75-6	Diisopropyl methylphosphonate	0.063	U
1832-54-8	Isopropyl methylphosphonic acid	0.250	U

Data Reporting Qualifiers

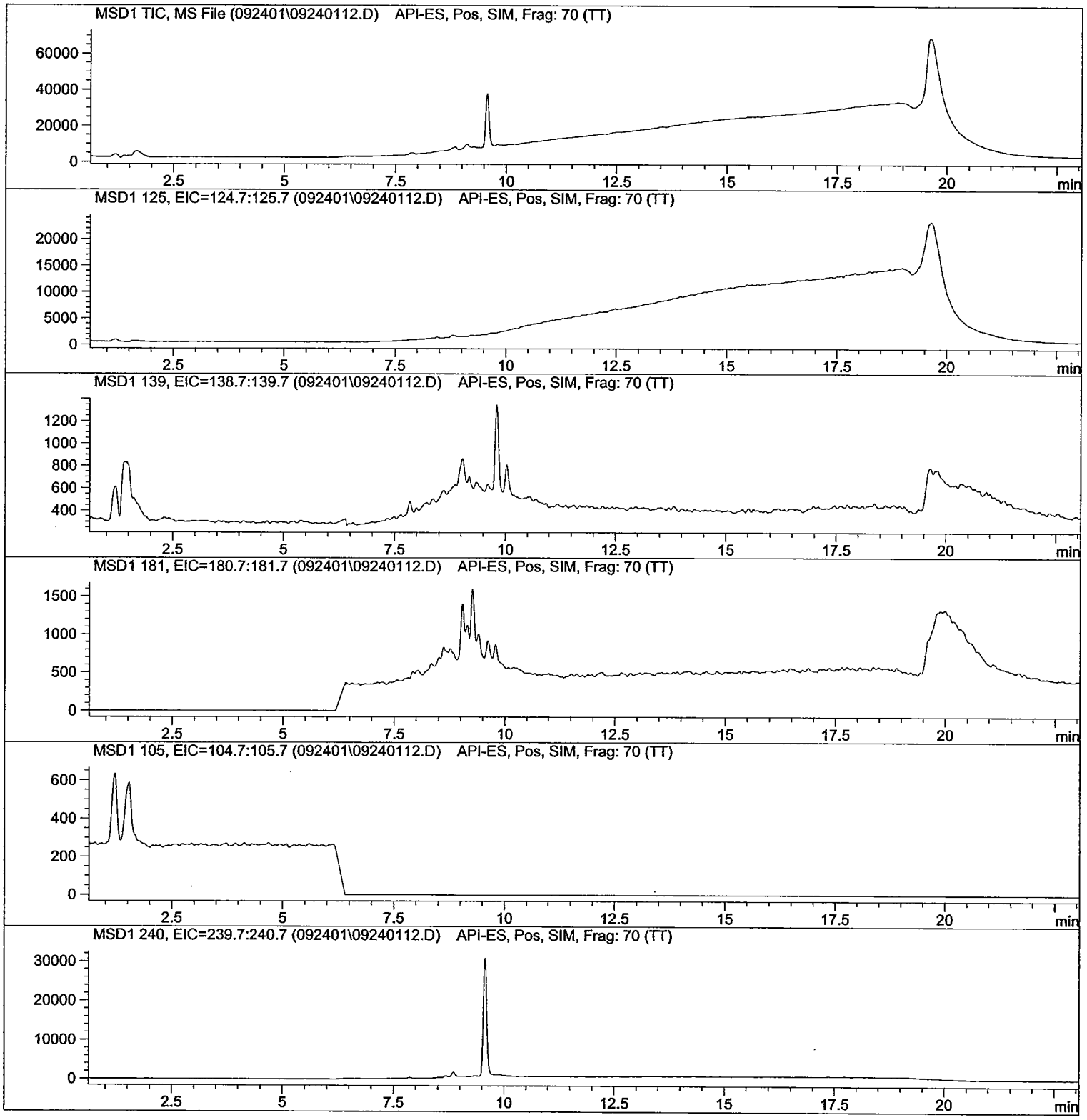
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Data File C:\HPCHEM\1\DATA\092401\09240112.D

Sample Name: 167686

030007

Injection Date	: 9/24/2001 3:04:13 PM	Seq. Line :	12
Sample Name	: 167686	Location :	Vial 12
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	Inj prog
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 9/21/2001 4:21:15 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 10/2/2001 3:41:19 PM (modified after loading)		



030008

```
==================================================================
Injection Date  : 9/24/2001 3:04:13 PM          Seq. Line :  12
Sample Name     : 167686                         Location : Vial 12
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      10/2/2001 3:41:16 PM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                0.00000
```

030009

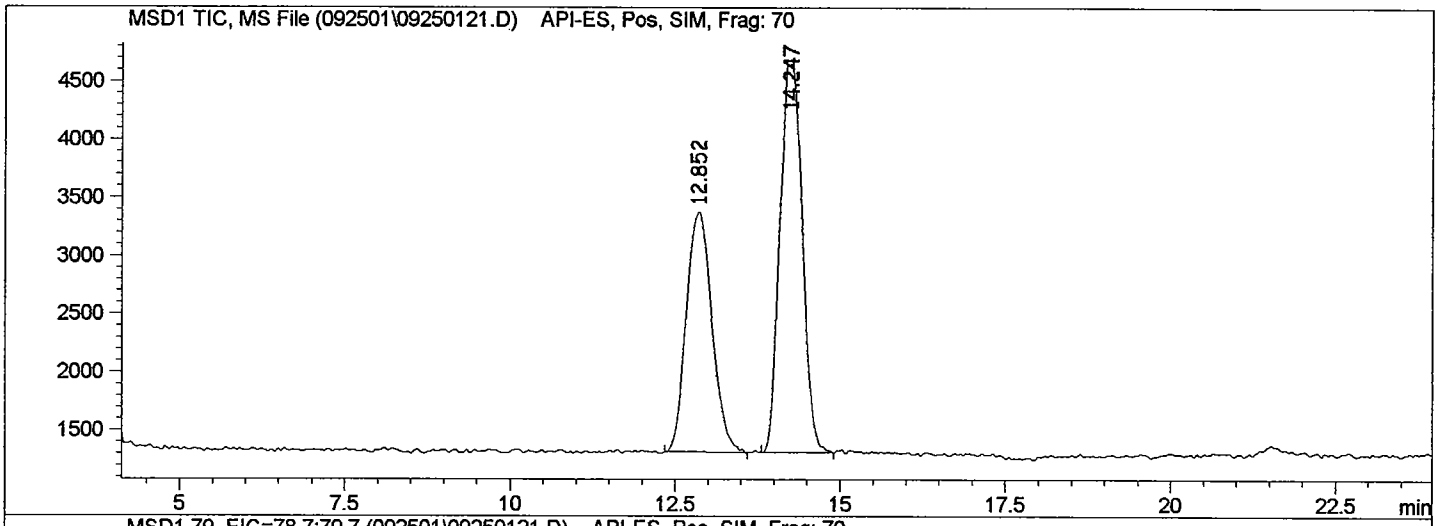
```
==================================================================
Injection Date  : 9/24/2001 3:04:13 PM          Seq. Line :  12
Sample Name     : 167686                         Location : Vial 12
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -         EA-2192

Totals :                                0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                        Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                      0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                      0.00000   0.0000

Uncalibrated Peaks:
```

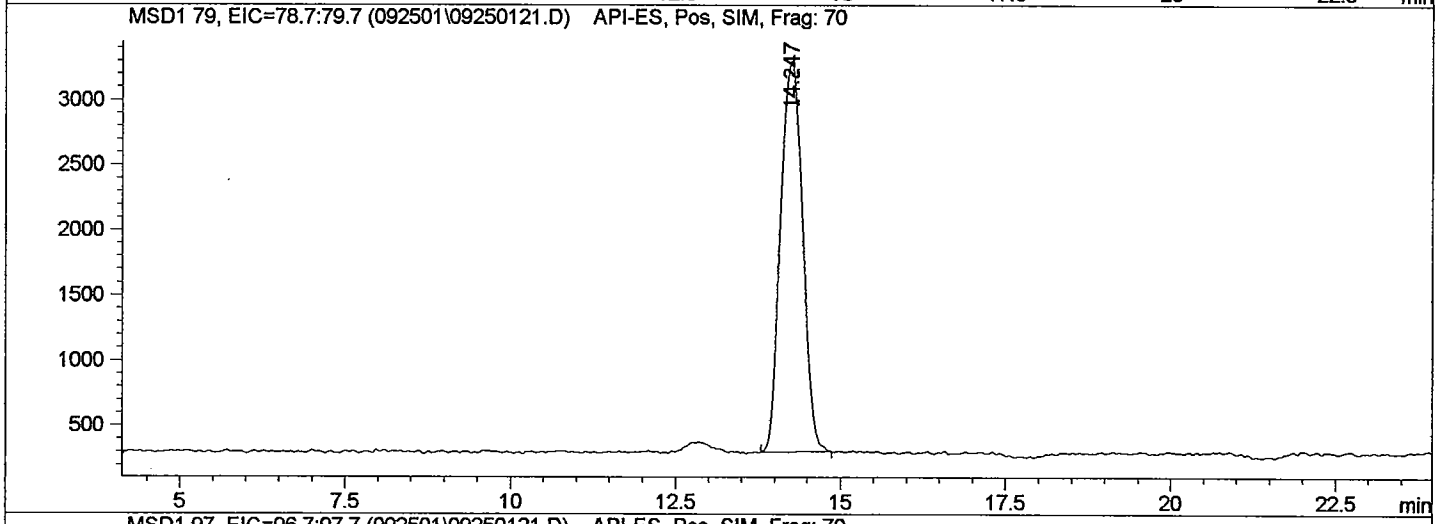
Data File C:\HPCHEM\1\DATA\092501\09250121.D Sample Name: 167686

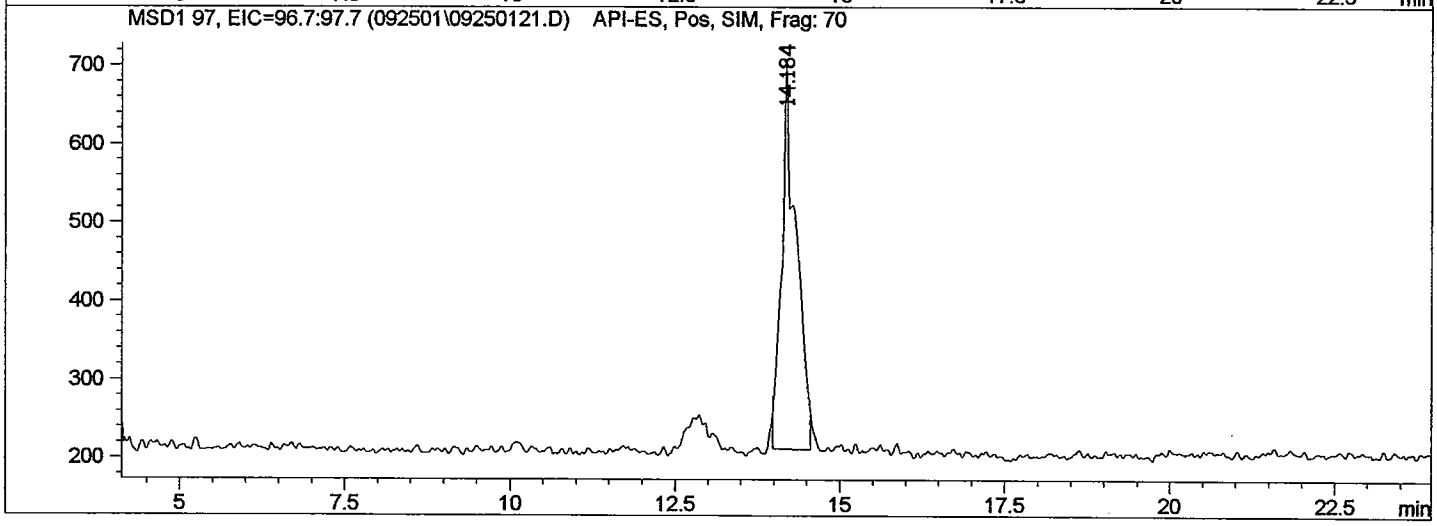
030010

Injection Date	: 9/25/2001 9:20:57 PM	Seq. Line :	12
Sample Name	: 167686	Location :	Vial 12
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)







030011

Injection Date : 9/25/2001 9:20:57 PM
Sample Name : 167686
Acq. Operator : GAA
Seq. Line : 12
Location : Vial 12
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.852	BP	0.3452	5.63440e4	41.6441	?
2	14.247	BP	0.3025	7.89547e4	58.3559	?

Uncalib. totals : 1.35299e5 100.0000

030012

Injection Date : 9/25/2001 9:20:57 PM
Sample Name : 167686
Acq. Operator : GAA

Seq. Line : 12
Location : Vial 12
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.247	BB	0.3292	6.99723e4	100.0000	?

Uncalib. totals : 6.99723e4 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.184	BB	0.1942	7550.59717	100.0000	?

Uncalib. totals : 7550.59717 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

SOUTHWEST RESEARCH INSTITUTE

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

030013

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240116
Filename (MPA): 09250125
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 98.1

System ID: 167680
Client Sample ID: US-001
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.01
Sample Wt. {MPA only} (g) : 2.01

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.130	U
1832-53-7	Ethylmethyl-phosphonic acid	0.128	U
993-13-59	Methyl Phosphonic acid	0.406	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.128	U
1832-54-8	Isopropyl methylphosphonic acid	0.507	U

Data Reporting Qualifiers

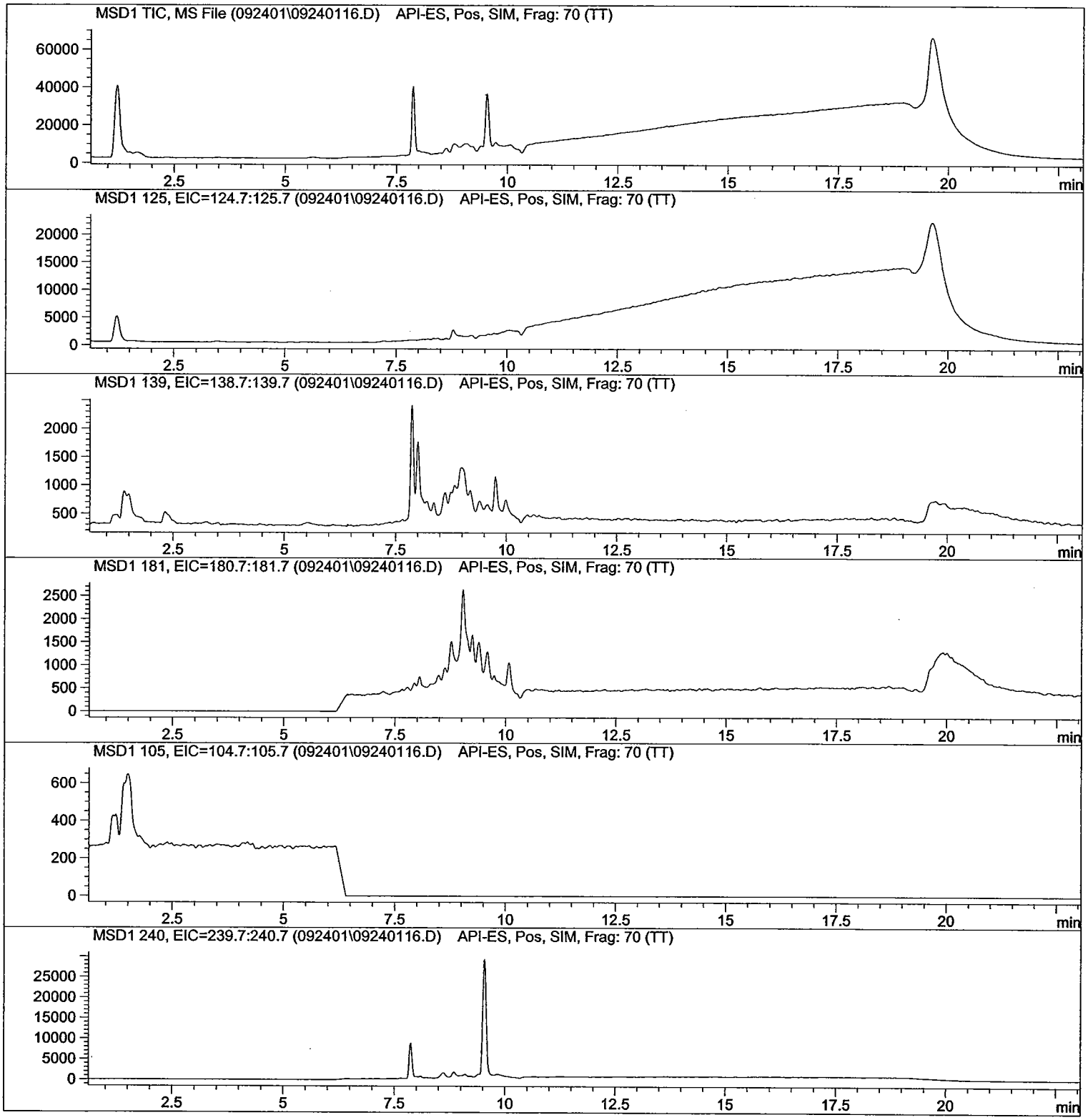
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Data File C:\HPCHEM\1\DATA\092401\09240116.D

Sample Name: 167680

030014

Injection Date	: 9/24/2001 4:53:56 PM	Seq. Line	: 16
Sample Name	: 167680	Location	: Vial 16
Acq. Operator	: GAA	Inj	: 1
		Inj Volume	: Inj prog
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 9/21/2001 4:21:15 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 10/2/2001 3:41:19 PM (modified after loading)		



030015

```
==================================================================
Injection Date  : 9/24/2001 4:53:56 PM          Seq. Line :  16
Sample Name     : 167680                         Location : Vial 16
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                 0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                 0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                 0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                 0.00000
```

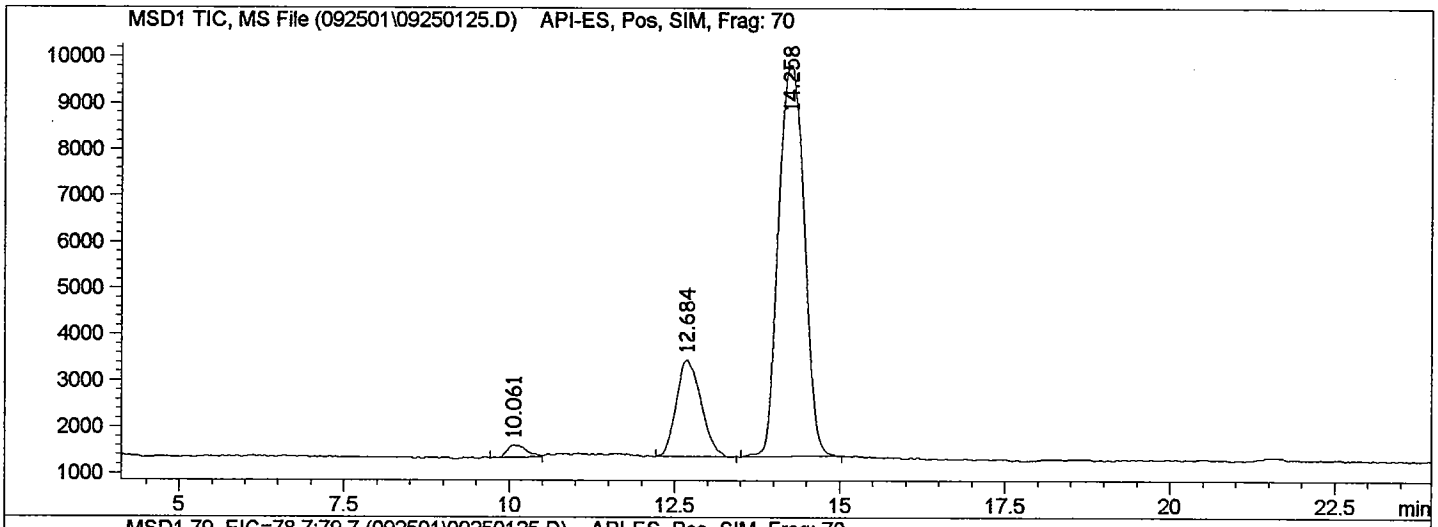
030016

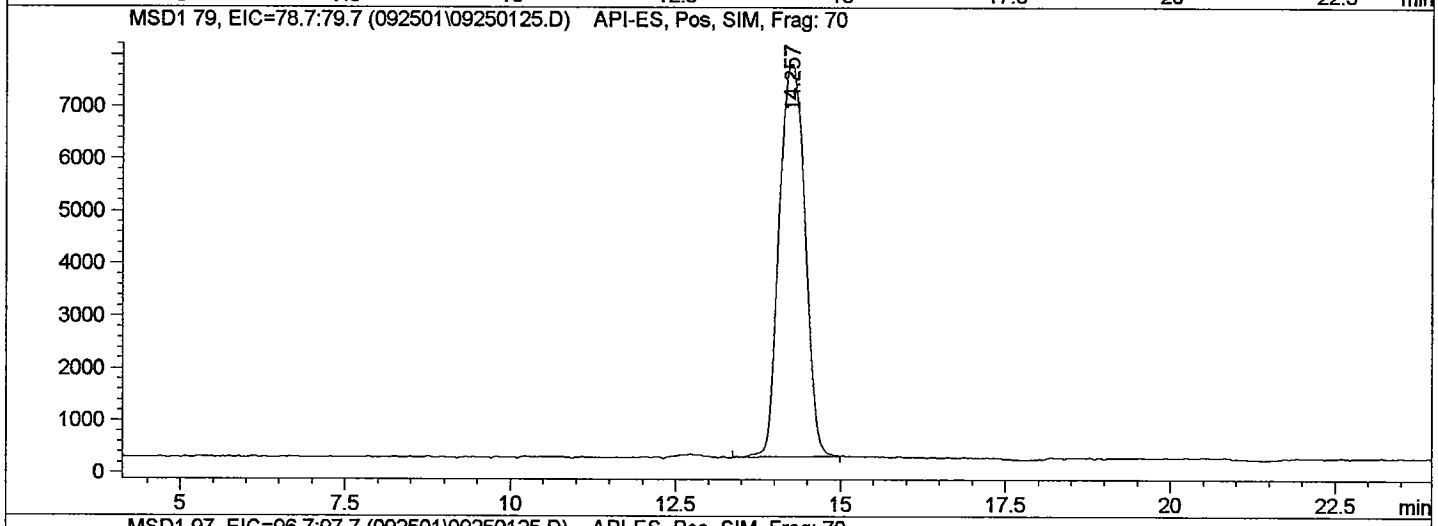
```
==================================================================
Injection Date  : 9/24/2001 4:53:56 PM          Seq. Line :  16
Sample Name     : 167680                         Location : Vial 16
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -          EA-2192

Totals :                                0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                         Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                      0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                      0.00000   0.0000

Uncalibrated Peaks:
```

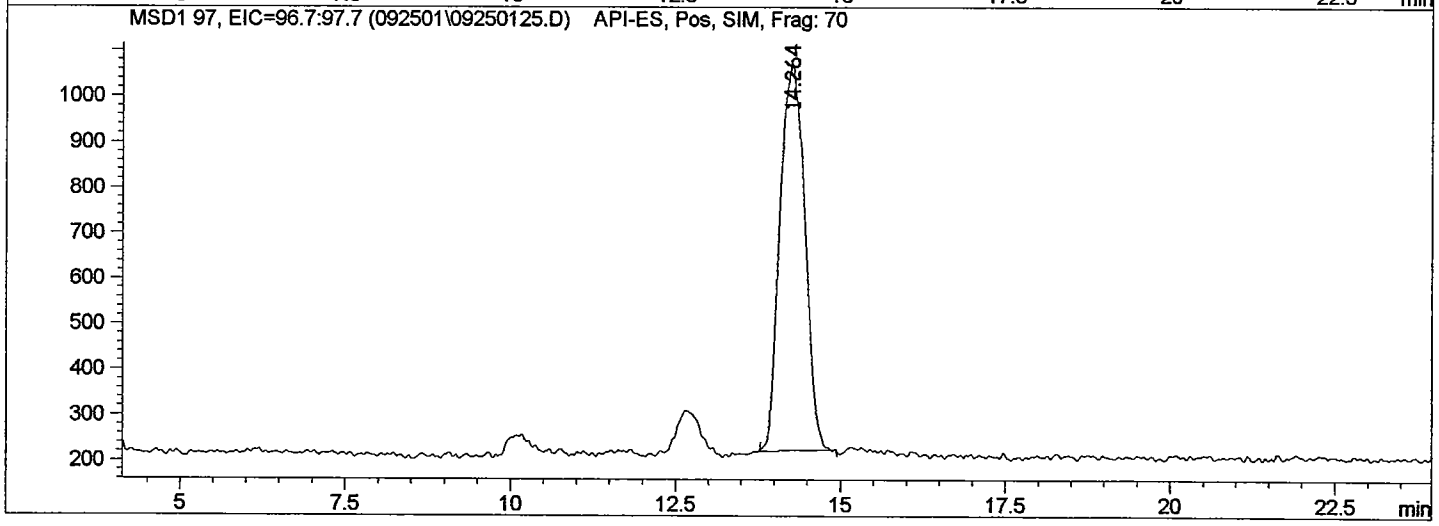
Data File C:\HPCHEM\1\DATA\092501\09250125.D Sample Name: 167680

Injection Date	: 9/25/2001 11:03:49 PM	Seq. Line :	16
Sample Name	: 167680	Location :	Vial 16
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	50 µl
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/25/2001 4:27:38 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/26/2001 8:39:17 AM by GAA (modified after loading)		

030017







030018

Injection Date : 9/25/2001 11:03:49 PM
Sample Name : 167680
Acq. Operator : GAA

Seq. Line : 16
Location : Vial 16
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	10.061	VV	0.2612	5693.87061	1.9641	?
2	12.684	BB	0.3471	5.51057e4	19.0086	?
3	14.258	PB	0.3338	2.29100e5	79.0273	?

Uncalib. totals : 2.89899e5 100.0000

030019

Injection Date : 9/25/2001 11:03:49 PM
Sample Name : 167680
Acq. Operator : GAA

Seq. Line : 16
Location : Vial 16
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.257	PB	0.3352	2.04690e5	100.0000	?

Uncalib. totals : 2.04690e5 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.264	BP	0.3325	2.22634e4	100.0000	?

Uncalib. totals : 2.22634e4 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

SOUTHWEST RESEARCH INSTITUTE

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

030020

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240117
Filename (MPA): 09250126
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 97.9

System ID: 167681
Client Sample ID: US-002
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.01
Sample Wt. {MPA only} (g) : 1.99

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.130	U
1832-53-7	Ethylmethyl-phosphonic acid	0.128	U
993-13-59	Methyl Phosphonic acid	0.411	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.128	U
1832-54-8	Isopropyl methylphosphonic acid	0.508	U

Data Reporting Qualifiers

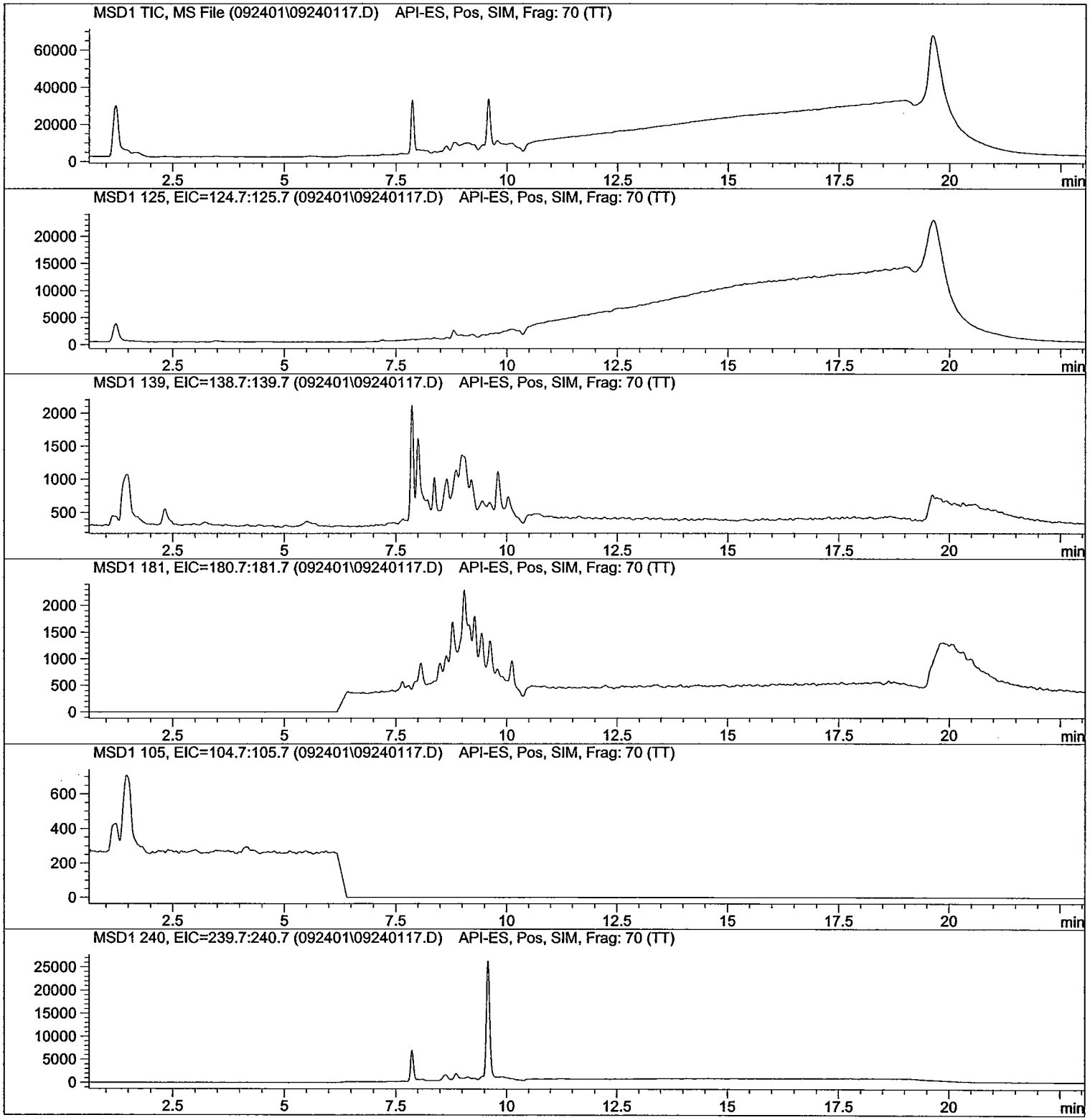
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Injection Date : 9/24/2001 5:21:25 PM
Sample Name : 167681
Acq. Operator : GAA

Seq. Line : 17
Location : Vial 17
Inj : 1
Inj Volume : Inj prog

030021

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed : 10/2/2001 3:41:19 PM
(modified after loading)



030022

```
==================================================================
Injection Date  : 9/24/2001 5:21:25 PM          Seq. Line :  17
Sample Name     : 167681                         Location : Vial 17
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                0.00000
```

030023

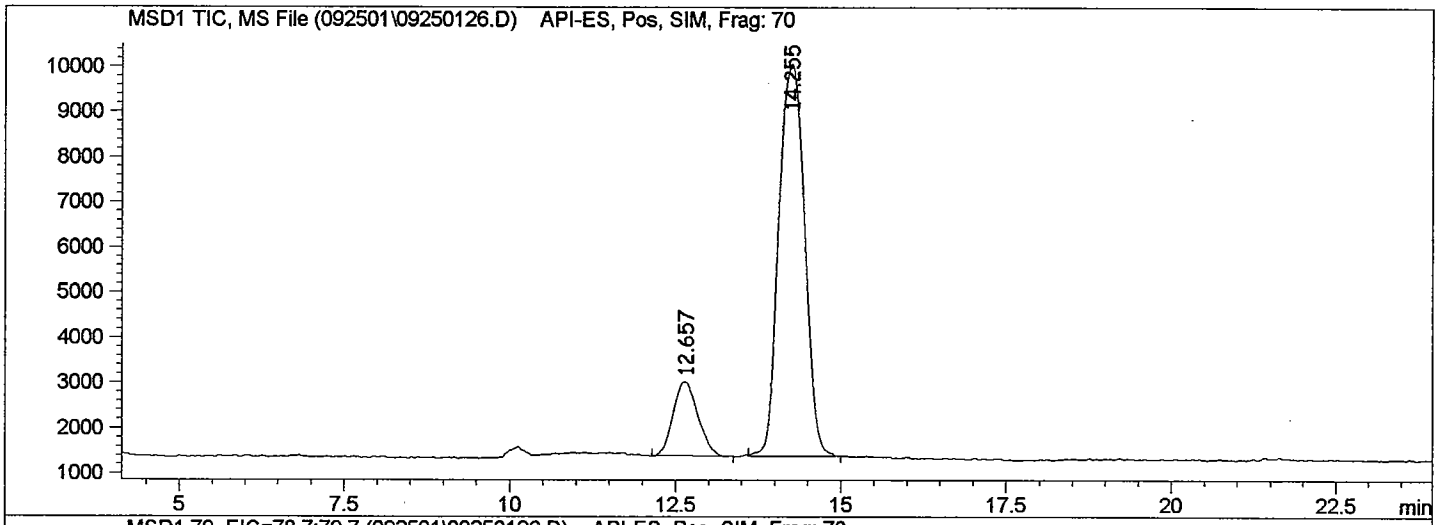
```
==================================================================
Injection Date  : 9/24/2001 5:21:25 PM          Seq. Line :  17
Sample Name     : 167681                         Location : Vial 17
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -         EA-2192

Totals :                                0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                        Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaks:
```

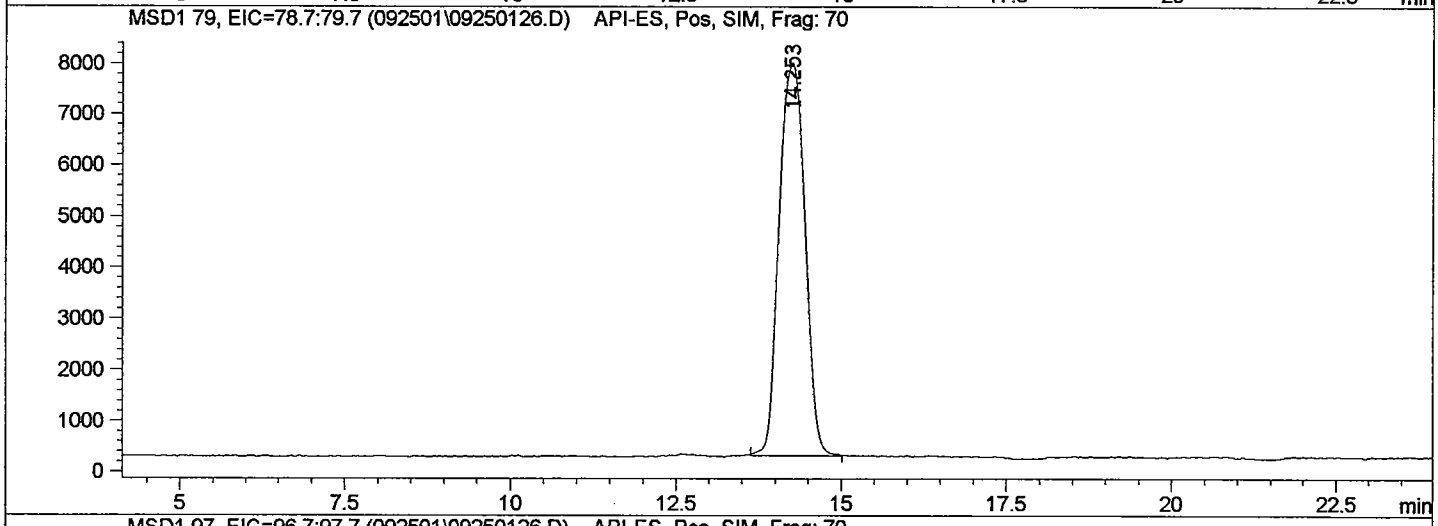
Data File C:\HPCHEM\1\DATA\092501\09250126.D Sample Name: 167681

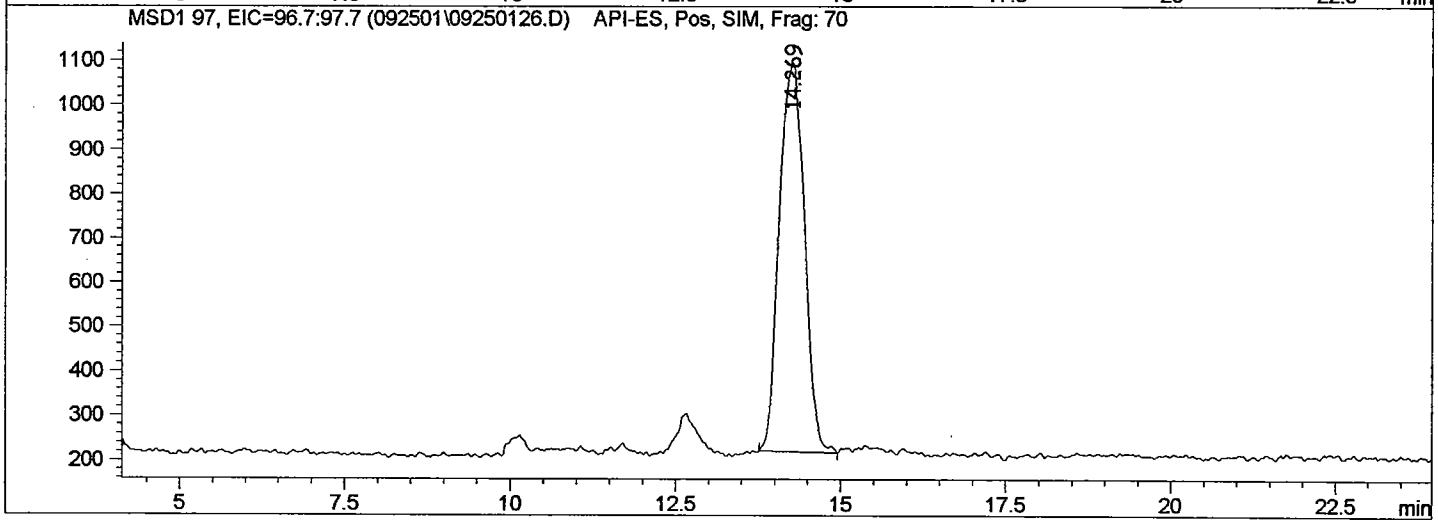
Injection Date	: 9/25/2001 11:29:29 PM	Seq. Line :	17
Sample Name	: 167681	Location :	Vial 17
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	50 µl

030024

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)







Injection Date : 9/25/2001 11:29:29 PM Seq. Line : 17
Sample Name : 167681 Location : Vial 17
Acq. Operator : GAA Inj : 1
Inj Volume : 50 µl

030025

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.657	PP	0.3249	4.29513e4	15.3591	?
2	14.255	BB	0.4285	2.36697e5	84.6409	?

Uncalib. totals : 2.79648e5 100.0000

030026

Injection Date : 9/25/2001 11:29:29 PM
Sample Name : 167681
Acq. Operator : GAA

Seq. Line : 17
Location : Vial 17
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.253	BB	0.4054	2.10374e5	100.0000	?

Uncalib. totals : 2.10374e5 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.269	BP	0.3484	2.31980e4	100.0000	?

Uncalib. totals : 2.31980e4 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

SOUTHWEST RESEARCH INSTITUTE

030027

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240115
Filename (MPA): 09250124
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 98.2

System ID: 167682
Client Sample ID: US-003
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.00
Sample Wt. {MPA only} (g) : 1.99

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.130	U
1832-53-7	Ethylmethyl-phosphonic acid	0.128	U
993-13-59	Methyl Phosphonic acid	0.409	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.128	U
1832-54-8	Isopropyl methylphosphonic acid	0.509	U

Data Reporting Qualifiers

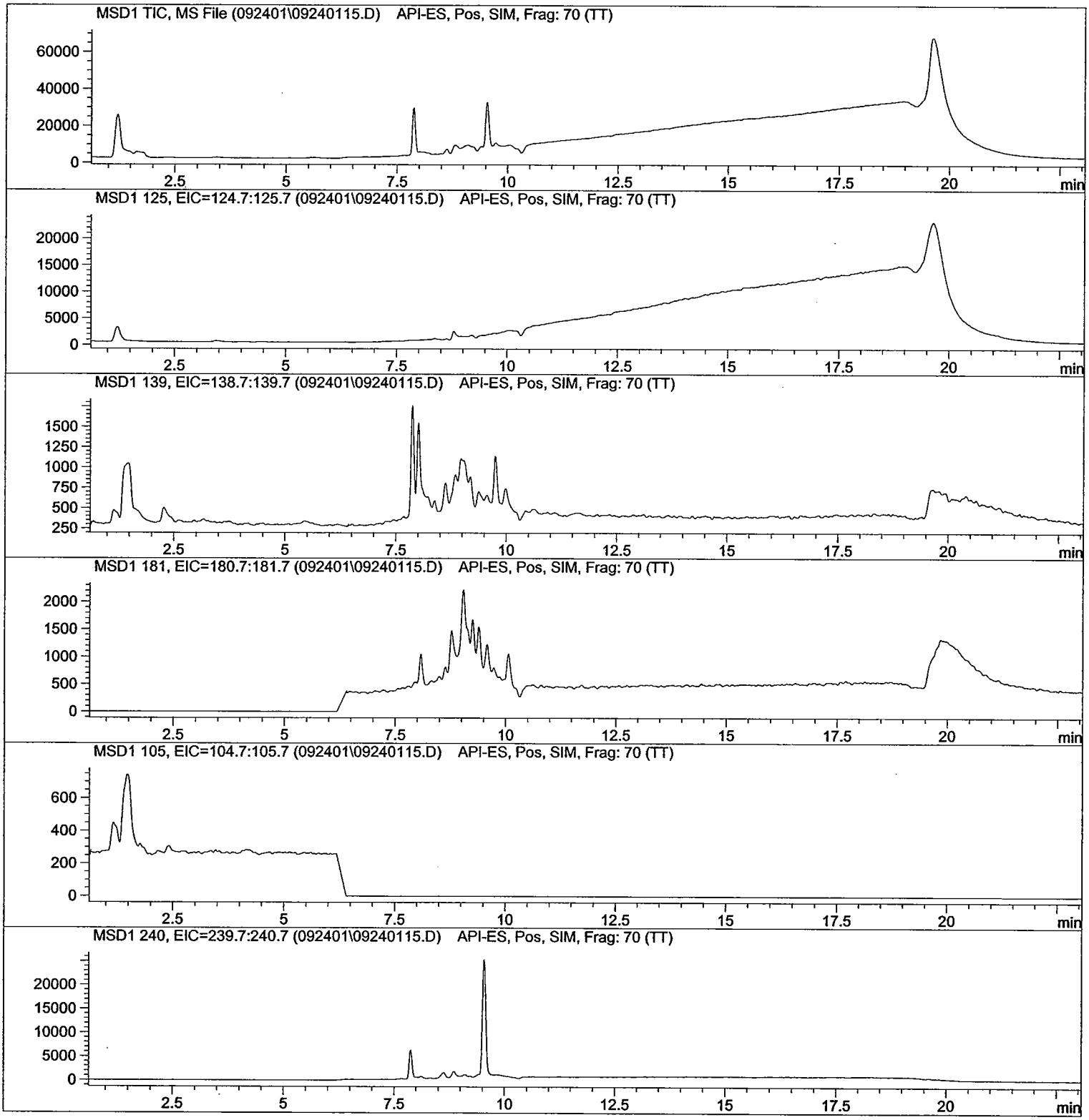
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Data File C:\HPCHEM\1\DATA\092401\09240115.D

Sample Name: 167682

030028

Injection Date	: 9/24/2001 4:26:28 PM	Seq. Line :	15
Sample Name	: 167682	Location :	Vial 15
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	Inj prog
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 9/21/2001 4:21:15 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 10/2/2001 3:41:19 PM (modified after loading)		



030029

```
==================================================================
Injection Date  : 9/24/2001 4:26:28 PM          Seq. Line :  15
Sample Name     : 167682                         Location : Vial 15
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                0.00000
```

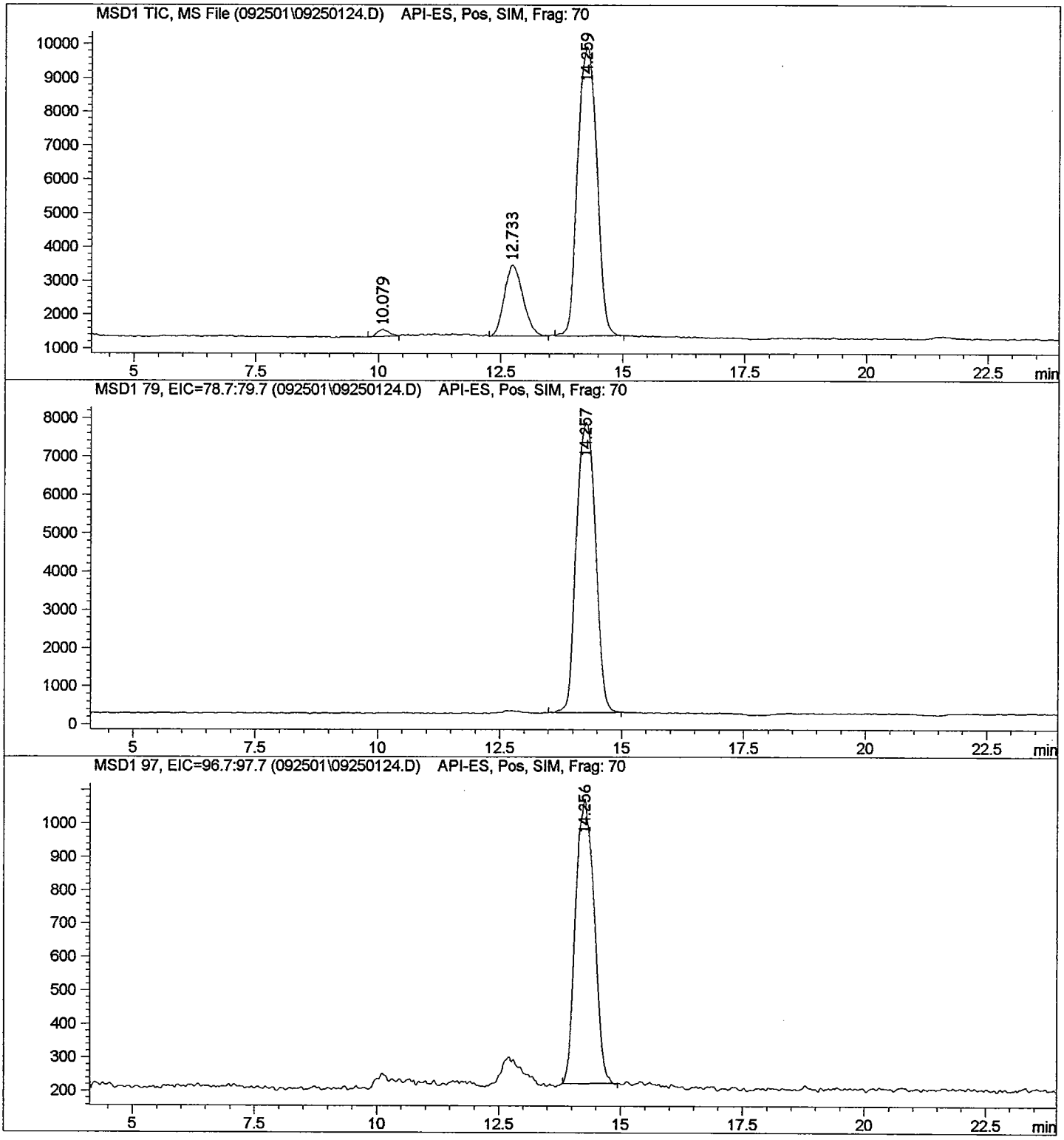
030030

```
==================================================================
Injection Date  : 9/24/2001 4:26:28 PM          Seq. Line :  15
Sample Name     : 167682                         Location : Vial 15
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -          EA-2192

Totals :                                0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                         Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaks:
```

Data File C:\HPCHEM\1\DATA\092501\09250124.D Sample Name: 167682

Injection Date	: 9/25/2001 10:38:06 PM	Seq. Line :	15
Sample Name	: 167682	Location :	Vial 15
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	50 µl
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/25/2001 4:27:38 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/26/2001 8:39:17 AM by GAA (modified after loading)		

030031



030032

Injection Date : 9/25/2001 10:38:06 PM
Sample Name : 167682
Acq. Operator : GAA

Seq. Line : 15
Location : Vial 15
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	10.079	PV	0.2145	3572.92993	1.2206	?
2	12.733	VB	0.3476	5.63643e4	19.2552	?
3	14.259	VB	0.3833	2.32786e5	79.5242	?

Uncalib. totals : 2.92723e5 100.0000

030033

```
==================================================================
Injection Date  : 9/25/2001 10:38:06 PM          Seq. Line :  15
Sample Name     : 167682                          Location : Vial 15
Acq. Operator   : GAA                                  Inj :   1
                                                 Inj Volume : 50 µl
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed    : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed    : 9/26/2001 8:39:17 AM by GAA
                  (modified after loading)


==================================================================


Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:
Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|---------------------
   1  14.257 BB      0.4143 2.06937e5  100.0000 ?

Uncalib. totals :           2.06937e5  100.0000


Signal 3: MSD1 97, EIC=96.7:97.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|---------------------
   1  12.640         0.0000    0.00000   0.0000 MPA

Totals :                      0.00000   0.0000

Uncalibrated Peaks:
Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|---------------------
   1  14.256 BB      0.3297 2.25074e4  100.0000 ?

Uncalib. totals :           2.25074e4  100.0000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
                          *** End of Report ***
```

SOUTHWEST RESEARCH INSTITUTE

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

030034

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240118
Filename (MPA): 09250127
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 98.3

System ID: 167683
Client Sample ID: US-004
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.01
Sample Wt. {MPA only} (g) : 2.00

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.130	U
1832-53-7	Ethylmethyl-phosphonic acid	0.128	U
993-13-59	Methyl Phosphonic acid	0.407	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.128	U
1832-54-8	Isopropyl methylphosphonic acid	0.506	U

Data Reporting Qualifiers

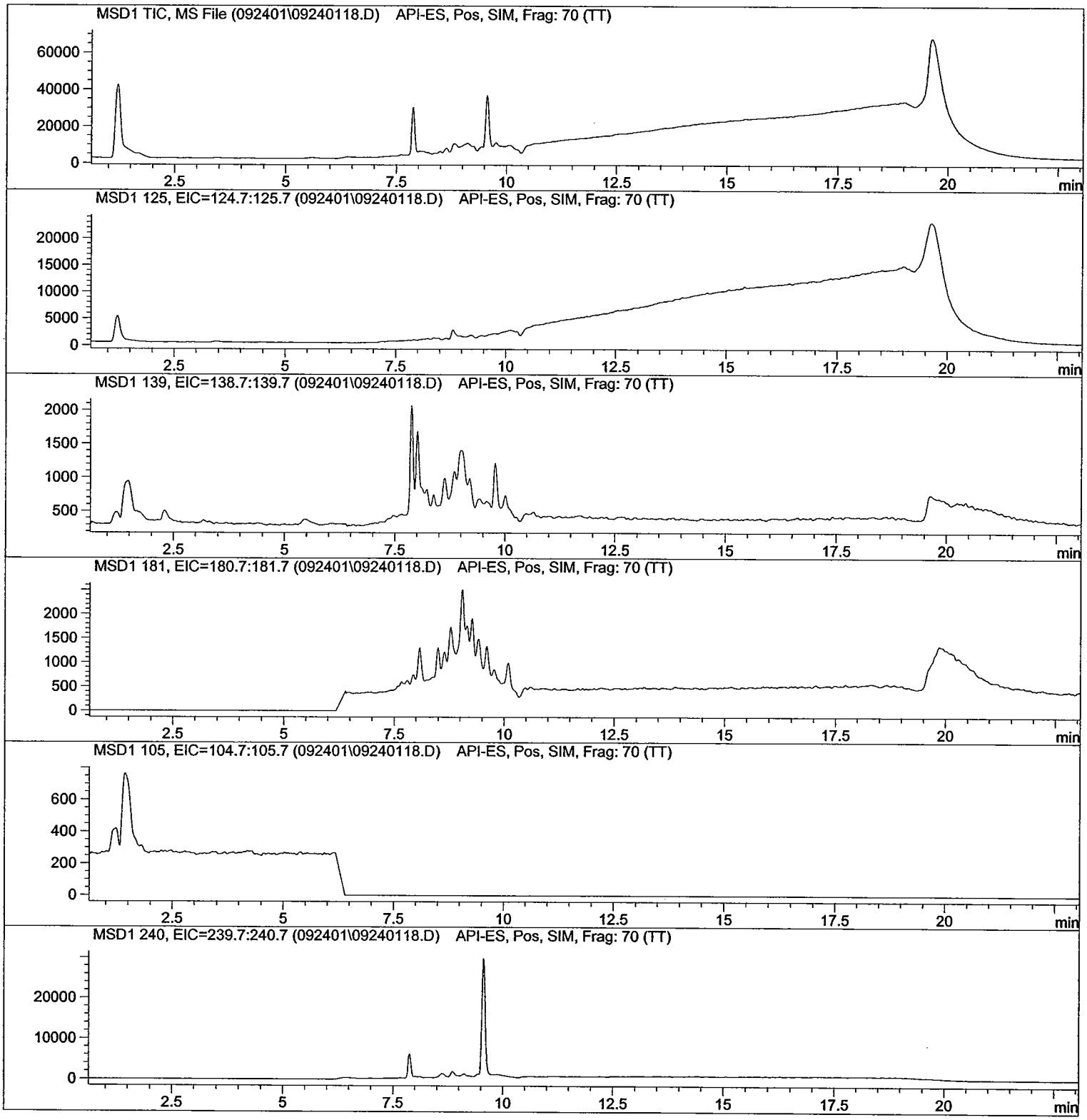
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Data File C:\HPCHEM\1\DATA\092401\09240118.D

Sample Name: 167683

030035

Injection Date	: 9/24/2001 5:48:51 PM	Seq. Line	: 18
Sample Name	: 167683	Location	: Vial 18
Acq. Operator	: GAA	Inj	: 1
		Inj Volume	: Inj prog
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 9/21/2001 4:21:15 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 10/2/2001 3:41:19 PM (modified after loading)		



030036

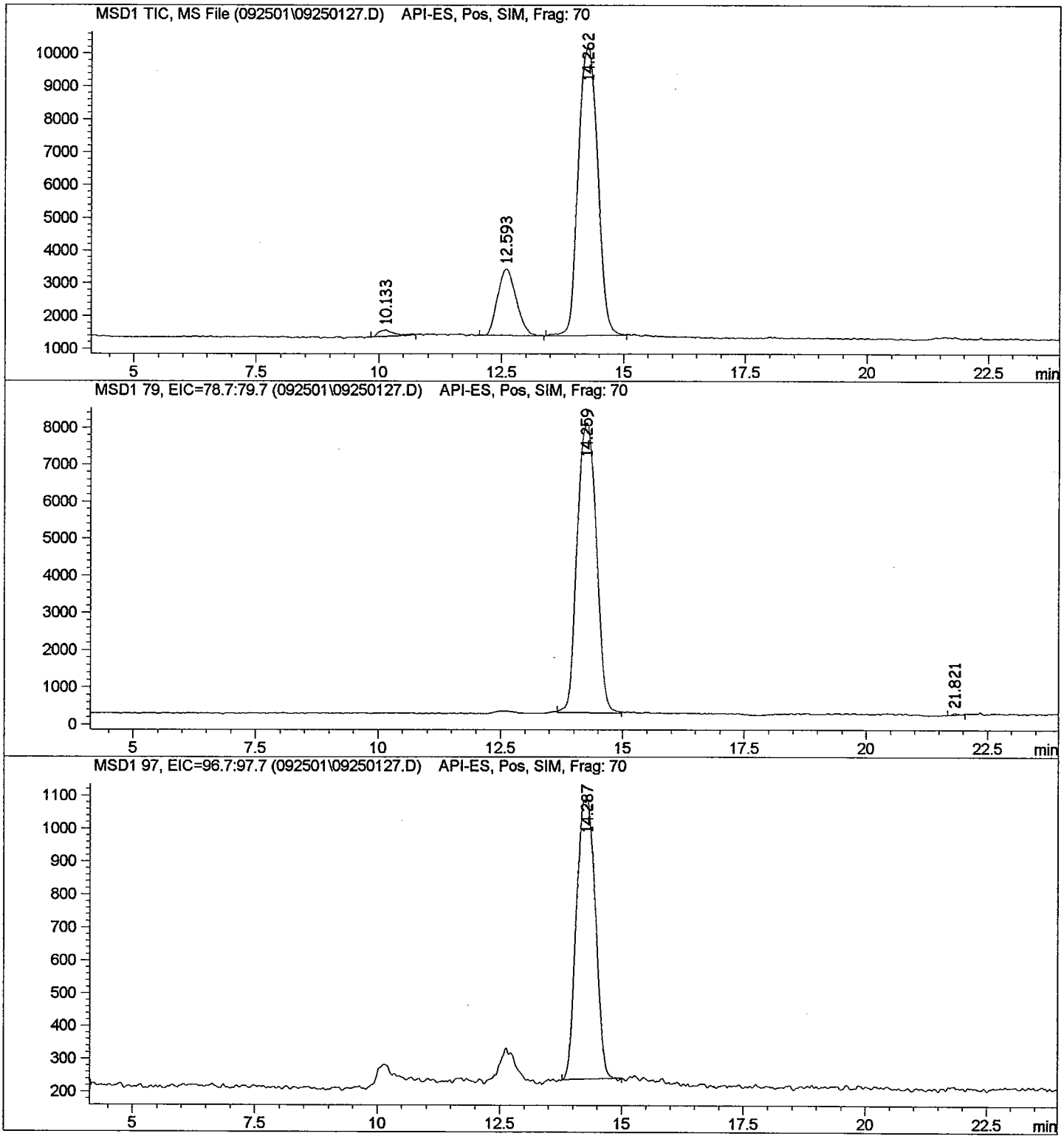
```
==================================================================
Injection Date  : 9/24/2001 5:48:51 PM          Seq. Line :  18
Sample Name     : 167683                         Location : Vial 18
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                0.00000
```

030037

```
==================================================================
Injection Date  : 9/24/2001 5:48:51 PM          Seq. Line :  18
Sample Name     : 167683                         Location : Vial 18
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -         EA-2192

Totals :                                0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                         Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaks:
```

Injection Date	: 9/25/2001 11:55:09 PM	Seq. Line	: 18
Sample Name	: 167683	Location	: Vial 18
Acq. Operator	: GAA	Inj	: 1
		Inj Volume	: 50 µl
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/25/2001 4:27:38 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/26/2001 8:39:17 AM by GAA (modified after loading)		

030038



Injection Date : 9/25/2001 11:55:09 PM Seq. Line : 18
Sample Name : 167683 Location : Vial 18
Acq. Operator : GAA Inj : 1
Inj Volume : 50 µl

030039

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	10.133	BB	0.2824	4638.95361	1.5261	?
2	12.593	BP	0.3766	5.41361e4	17.8098	?
3	14.262	BB	0.4446	2.45194e5	80.6641	?

Uncalib. totals : 3.03969e5 100.0000

Injection Date : 9/25/2001 11:55:09 PM
Sample Name : 167683
Acq. Operator : GAA

Seq. Line : 18
Location : Vial 18
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

030040

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.259	BB	0.4096	2.14304e5	99.8065	?
2	21.821	BB	0.1367	415.49054	0.1935	?

Uncalib. totals : 2.14720e5 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.287	PP	0.3356	2.29610e4	100.0000	?

Uncalib. totals : 2.29610e4 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

SOUTHWEST RESEARCH INSTITUTE

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

030041

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240119
Filename (MPA): 09250128
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 98.4

System ID: 167684
Client Sample ID: US-005
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.01
Sample Wt. {MPA only} (g) : 2.00

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.129	U
1832-53-7	Ethylmethyl-phosphonic acid	0.127	U
993-13-59	Methyl Phosphonic acid	0.407	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.127	U
1832-54-8	Isopropyl methylphosphonic acid	0.506	U

Data Reporting Qualifiers

B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

==========

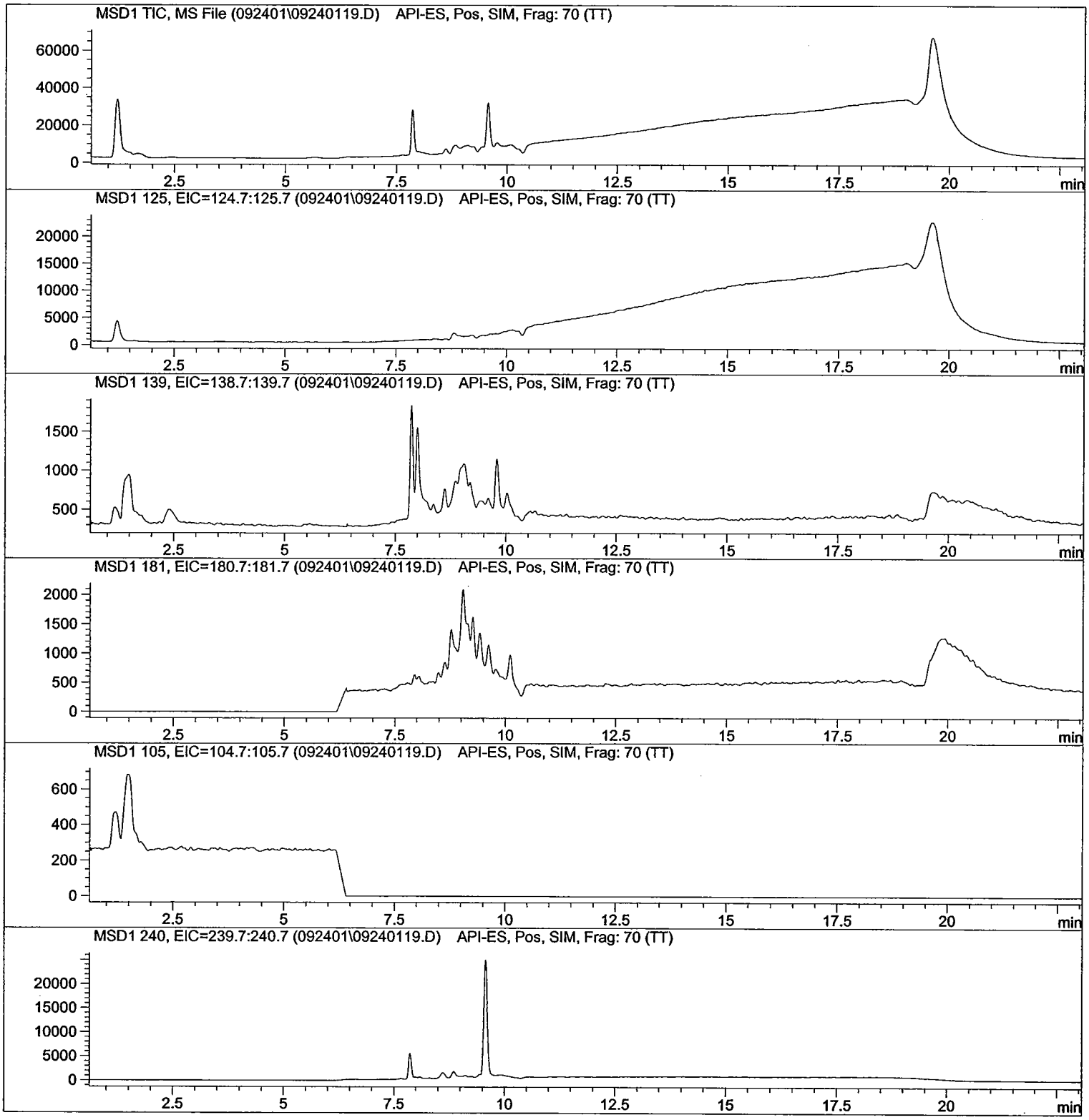
Injection Date : 9/24/2001 6:16:13 PM
Sample Name : 167684
Acq. Operator : GAA

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : Inj prog

030042

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed : 10/2/2001 3:41:19 PM
(modified after loading)

==========



030043

```
==================================================================
Injection Date  : 9/24/2001 6:16:13 PM          Seq. Line :  19
Sample Name     : 167684                         Location : Vial 19
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                 0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                 0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                 0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                 0.00000
```

030044

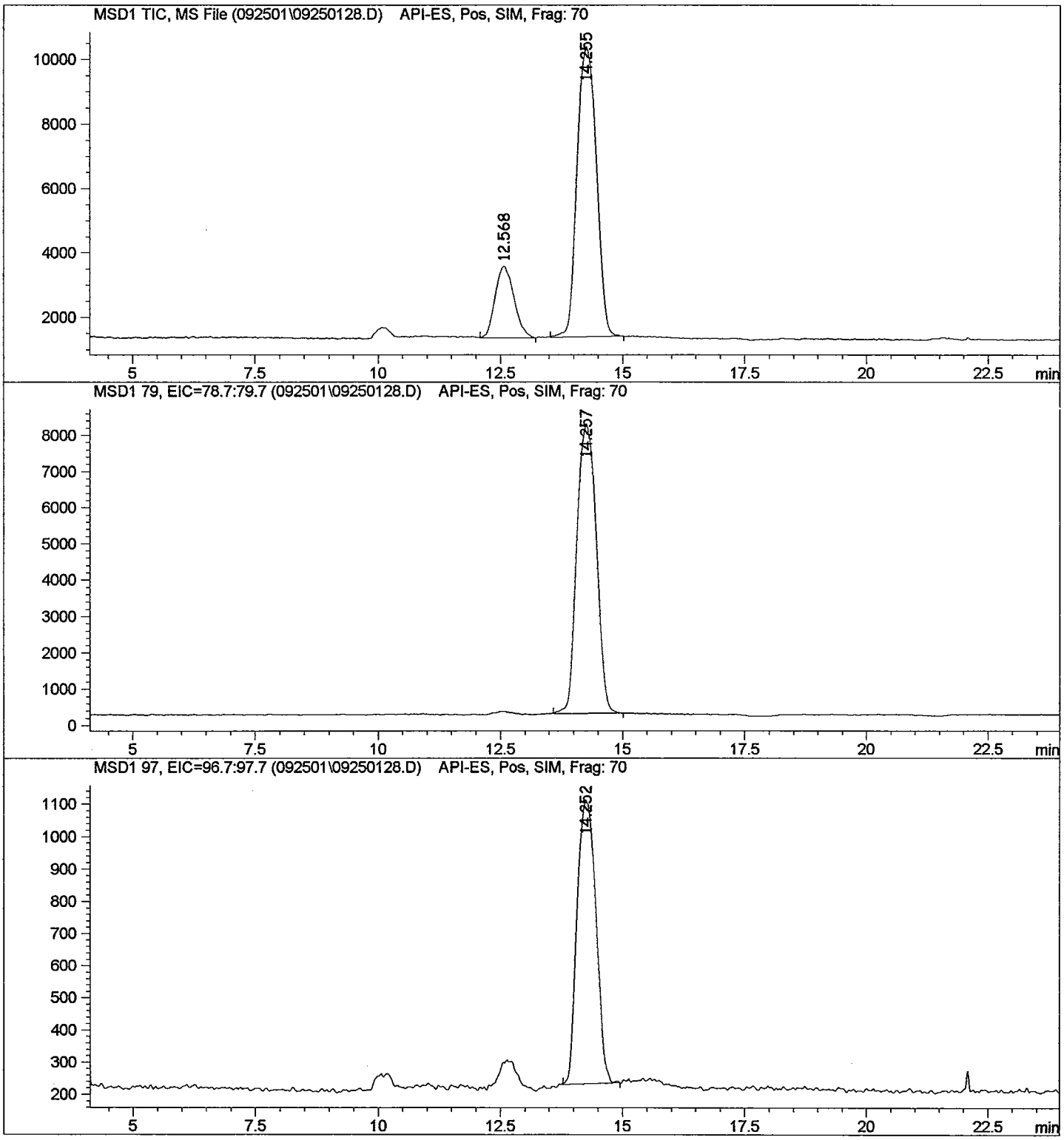
```
==================================================================
Injection Date  : 9/24/2001 6:16:13 PM          Seq. Line :  19
Sample Name     : 167684                         Location : Vial 19
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -          EA-2192

Totals :                                 0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                        Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaksn.a.


Signal 3: MSD1 139, EIC=138.7:139.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   5.334         0.0000    0.00000   0.0000 IMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaks:
```

Injection Date : 9/26/2001 12:20:49 AM
Sample Name : 167684
Acq. Operator : GAA

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : 50 µl

030045

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)



030046

Injection Date : 9/26/2001 12:20:49 AM
Sample Name : 167684
Acq. Operator : GAA

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.568	BP	0.3680	5.98988e4	19.4598	?
2	14.255	BB	0.4351	2.47909e5	80.5402	?

Uncalib. totals : 3.07808e5 100.0000

Injection Date : 9/26/2001 12:20:49 AM
Sample Name : 167684
Acq. Operator : GAA

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

030047

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.257	BB	0.3418	2.20268e5	100.0000	?

Uncalib. totals : 2.20268e5 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.252	BP	0.3725	2.35832e4	100.0000	?

Uncalib. totals : 2.35832e4 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***

SOUTHWEST RESEARCH INSTITUTE

030048

Thiodiglycol,MPA & IMPA acids Results Data Reporting Form

Client: URS
Case: URS
SDG: 167680
Matrix: SOIL
Filename: 09240120
Filename (MPA): 09250129
Injection Vol (uL): 50
Ext.Vol.: 4 mL
% Dry : 98.4

System ID: 167685
Client Sample ID: US-304
Project Number: 01.04014.05.002
Instrument: LCMS1
Date Received: 09/19/01
Date Extracted: 09/20/01
Date Analyzed: 09/24/01
Sample Wt. (g) : 2.00
Sample Wt. {MPA only} (g) : 2.00

CAS No.	Compound	mg/Kg	
111-48-8	Thiodiglycol	0.130	U
1832-53-7	Ethylmethyl-phosphonic acid	0.128	U
993-13-59	Methyl Phosphonic acid	0.407	U
73207-98-4	EA-2192	0.010	U
1445-75-6	Diisopropyl methylphosphonate	0.128	U
1832-54-8	Isopropyl methylphosphonic acid	0.508	U

Data Reporting Qualifiers

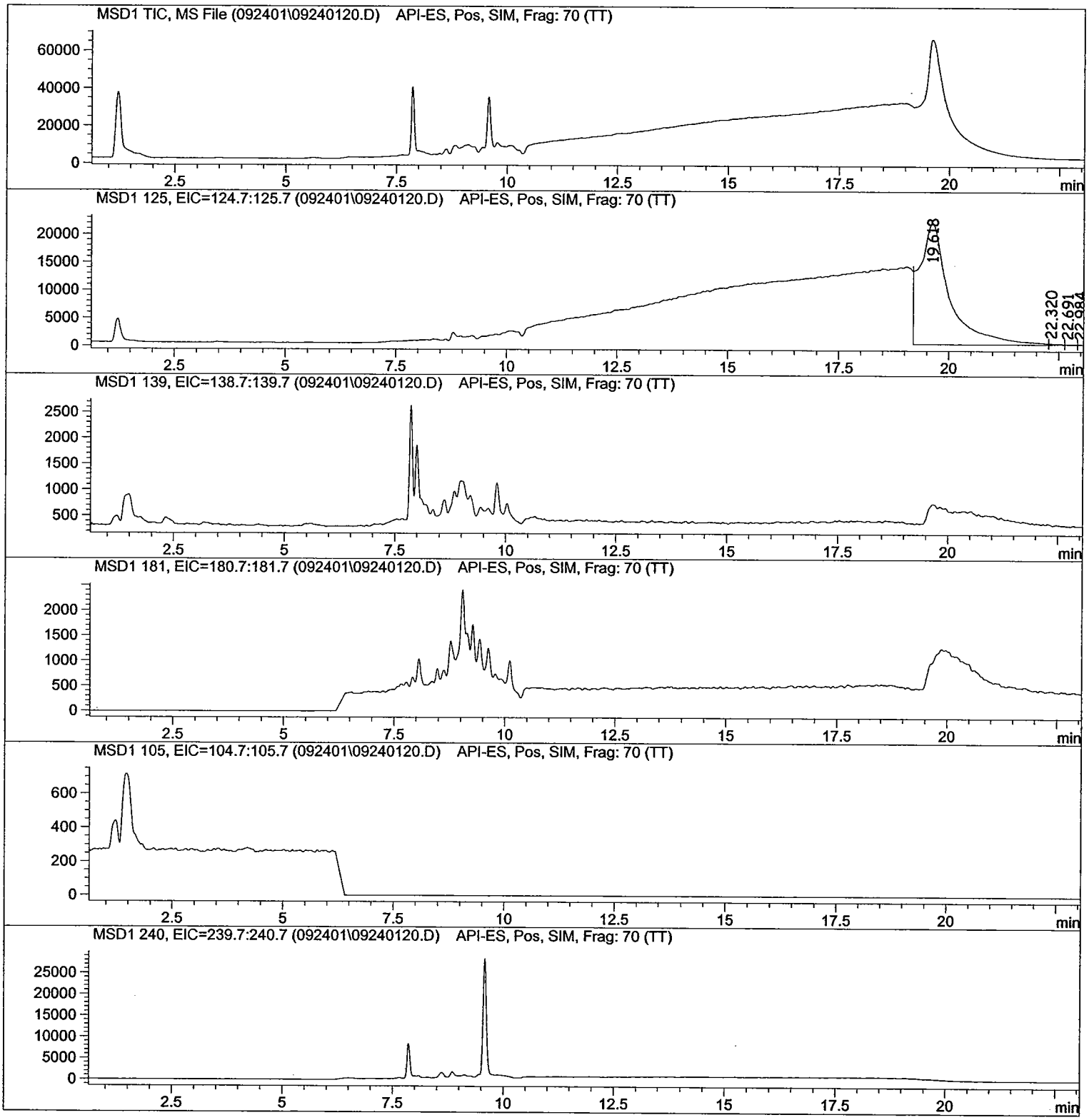
B This flag is used when the analyte is found in the blank as well as in the sample.
E This flag indicates compounds whose concentrations exceed the calibration range.
J Indicates an estimated value.
U Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with U (e.g. 10U) based on necessary concentration dilution action.

Data File C:\HPCHEM\1\DATA\092401\09240120.D

Sample Name: 167685

030049

Injection Date	: 9/24/2001 6:43:37 PM	Seq. Line :	20
Sample Name	: 167685	Location :	Vial 20
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	Inj prog
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 9/21/2001 4:21:15 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND3.M		
Last changed	: 10/2/2001 3:41:19 PM (modified after loading)		



030050

```
==================================================================
Injection Date  : 9/24/2001 6:43:37 PM          Seq. Line :  20
Sample Name     : 167685                         Location : Vial 20
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================

==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 2: MSD1 125, EIC=124.7:125.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  2.595            -          -          -         EMPA

Totals :                                0.00000


Signal 3: MSD1 139, EIC=138.7:139.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  5.334            -          -          -         IMPA

Totals :                                0.00000


Signal 4: MSD1 181, EIC=180.7:181.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  8.901            -          -          -         DIMP

Totals :                                0.00000


Signal 5: MSD1 105, EIC=104.7:105.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  3.705            -          -          -         TDG

Totals :                                0.00000
```

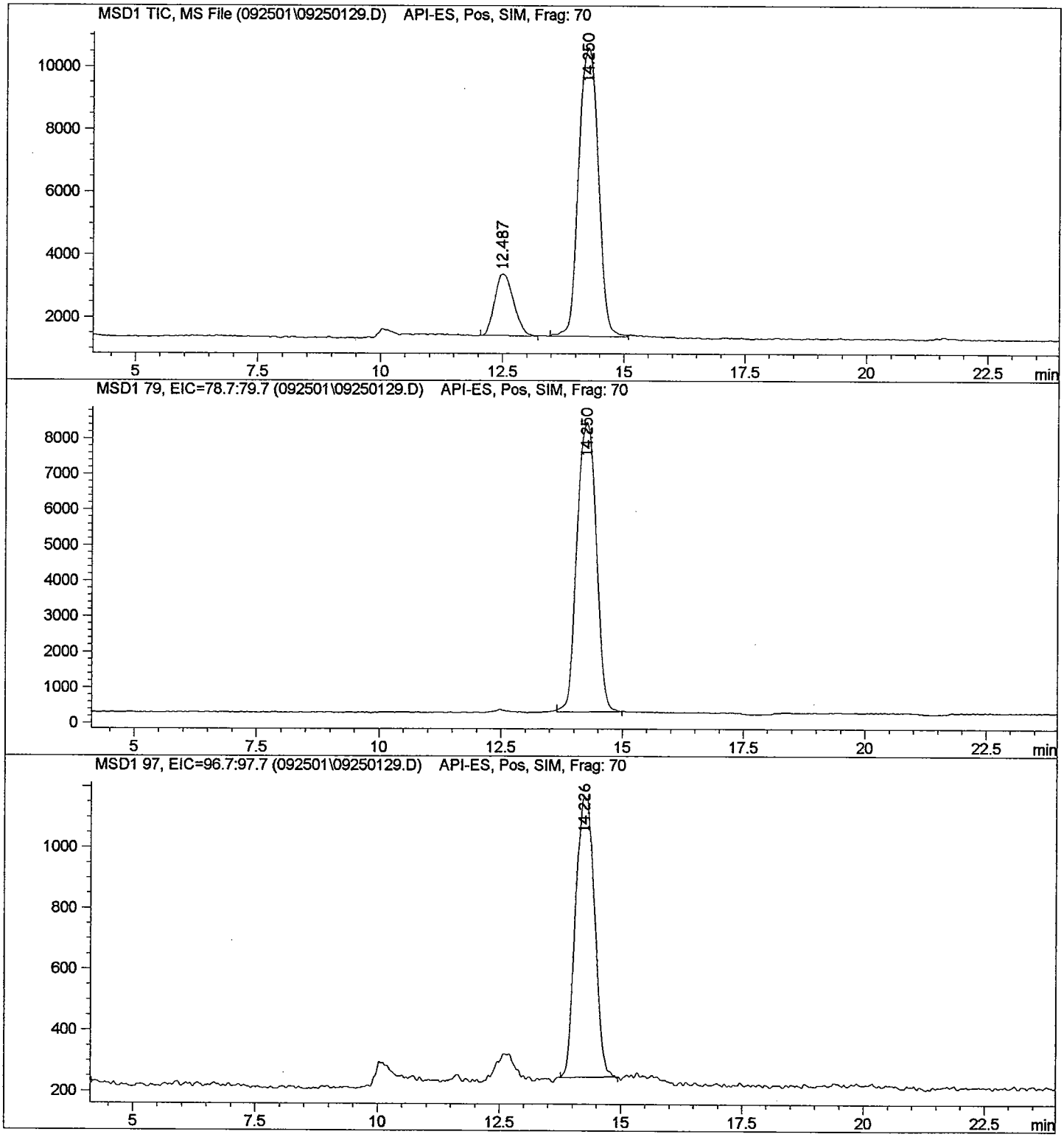
030051

```
==================================================================
Injection Date  : 9/24/2001 6:43:37 PM          Seq. Line :  20
Sample Name     : 167685                         Location : Vial 20
Acq. Operator   : GAA                                 Inj :   1
                                               Inj Volume : Inj prog
Acq. Method     : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 9/21/2001 4:21:15 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND3.M
Last changed    : 10/2/2001 3:41:19 PM
                  (modified after loading)


==================================================================


Signal 6: MSD1 240, EIC=239.7:240.7

RetTime  Type     Area     Amt/Area    Amount   Grp   Name
 [min]                                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  7.353            -          -          -          EA-2192

Totals :                                 0.00000


1 Warnings or Errors :

Warning : Calibrated compound(s) not found

==================================================================
==================================================================
                         Area Percent Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      10/2/2001 3:41:16 PM
Multiplier            :      1.0000
Dilution              :      1.0000


Signal 1: MSD1 TIC, MS File

Uncalibrated Peaksn.a.

Signal 2: MSD1 125, EIC=124.7:125.7

Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1   2.595         0.0000    0.00000   0.0000 EMPA

Totals :                       0.00000   0.0000

Uncalibrated Peaks:
Peak RetTime  Type   Width     Area      Area    Name
  #   [min]          [min]                 %
----|-------|------|-------|----------|--------|--------------------
   1  19.618 VV      0.6558 1.04141e6   99.3915 ?
   2  22.320 VV      0.2131 3903.64062   0.3726 ?
   3  22.691 VV      0.1813 1795.72583   0.1714 ?
   4  22.984 VBA     0.1153  676.79584   0.0646 ?

Uncalib. totals :            1.04778e6  100.0000
```

Data File C:\HPCHEM\1\DATA\092501\09250129.D Sample Name: 167685

Injection Date	: 9/26/2001 12:46:38 AM	Seq. Line :	20
Sample Name	: 167685	Location :	Vial 20
Acq. Operator	: GAA	Inj :	1
		Inj Volume :	50 µl
Acq. Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/25/2001 4:27:38 PM by GAA		
Analysis Method	: C:\HPCHEM\1\METHODS\SIMFIND8.M		
Last changed	: 9/26/2001 8:39:17 AM by GAA (modified after loading)		

030052



030053

Injection Date : 9/26/2001 12:46:38 AM
Sample Name : 167685
Acq. Operator : GAA

Seq. Line : 20
Location : Vial 20
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

External Standard Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Signal 2: MSD1 79, EIC=78.7:79.7

Signal 3: MSD1 97, EIC=96.7:97.7

RetTime [min]	Type	Area	Amt/Area	Amount [ug/mL]	Grp	Name
12.640		-	-	-		MPA

Totals : 0.00000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

Area Percent Report

Sorted By : Signal
Calib. Data Modified : 9/26/2001 8:39:15 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: MSD1 TIC, MS File

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.487	BB	0.4075	5.35957e4	17.0109	?
2	14.250	BB	0.4563	2.61472e5	82.9891	?

Uncalib. totals : 3.15068e5 100.0000

030054

Injection Date : 9/26/2001 12:46:38 AM
Sample Name : 167685
Acq. Operator : GAA

Seq. Line : 20
Location : Vial 20
Inj : 1
Inj Volume : 50 µl

Acq. Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/25/2001 4:27:38 PM by GAA
Analysis Method : C:\HPCHEM\1\METHODS\SIMFIND8.M
Last changed : 9/26/2001 8:39:17 AM by GAA
(modified after loading)

Signal 2: MSD1 79, EIC=78.7:79.7

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.250	BB	0.4321	2.26550e5	100.0000	?

Uncalib. totals : 2.26550e5 100.0000

Signal 3: MSD1 97, EIC=96.7:97.7

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	12.640		0.0000	0.00000	0.0000	MPA

Totals : 0.00000 0.0000

Uncalibrated Peaks:

Peak #	RetTime [min]	Type	Width [min]	Area	Area %	Name
1	14.226	BP	0.3447	2.51778e4	100.0000	?

Uncalib. totals : 2.51778e4 100.0000

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

*** End of Report ***