Department of Energy

Ohio Field Office
Fernald Environmental Management Project
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NOV 01 2002

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0070-03

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF RESPONSES TO THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT PROJECT SPECIFIC PLAN FOR INVESTIGATION OF SOIL STAGED IN QUONSET HUT NO. 1

References:
1. Letter, J. Saric to J. Reising, "Quonset Hut PSP," dated October 3, 2002
2. Letter, DOE-0011-03, J. Reising to J. Saric and T. Schneider, "Transmittal of Responses to Ohio Environmental Protection Agency Comments and the Revised Project Specific Plan for Investigation of Soil Staged in Quonset Hut No. 1," dated October 7, 2002
3. Letter, T. Schneider to J. Reising, "Approval-Responses to OEPA Comments on the Revised PSP for Investigation of Soil Staged in Quonset Hut No. 1," dated October 22, 2002

Enclosed for your approval are responses to the United States Environmental Protection Agency (USEPA) comments and the draft Project Specific Plan (PSP) for Investigation of Soil Staged in Quonset Hut No. 1. Prior to receipt of these USEPA comments, the Department of Energy (DOE) transmitted the revised version of this PSP, which incorporated DOE's responses to the Ohio Environmental Protection Agency (OEPA) comments (see above references). The DOE believes that the concerns identified in the USEPA comments have been adequately addressed in the revised PSP, or as noted, in the comment responses. Therefore, no additional document revision is necessary.

Recycled and Recyclable

If you have any questions or need further information, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny Reising

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R.J. Janke

Enclosure: As Stated

cc w/ enclosure:
R. J. Janke, OH/FEMP
T. Schneider, OEPA-Dayton (three copies of enclosure)
M. Cullerton, Tetra Tech
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
R. Greenberg, EM-31/CLOV
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./MS2
J. Chiou, Fluor Fernald, Inc./MS64
T. Hagen, Fluor Fernald, Inc./MS9
E. Kroger, Fluor Fernald, Inc./MS64
F. Miller, Fluor Fernald, Inc./MS64
ECDC/MS52-7

RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY TECHNICAL REVIEW COMMENTS ON THE DRAFT PROJECT SPECIFIC PLAN FOR INVESTIGATION OF SOIL STAGED IN QUONSET HUT NO. 1 (20803-PSP-0001, REVISION A)

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Not Applicable (NA) Page #: NA Line #: NA
Original General Comment #: 1

Comment: The project specific plan (PSP) does not provide the depth of the soil pile at each soil sampling location. This information should be provided to show that the samples collected are representative of the entire depth of the piles at each sampling location.

Response: The depths of the pile at each sampling location could not be provided in the PSP because they were not known at the time it was drafted (the locations were field located, per Section 2.1). However, the sampling was planned to be representative of the entire depth of the pile by collecting them at three depths (1 foot from surface, 1 foot from the floor, and a sample at the mid-point between the other two samples). Subsequent samples collected from soil staged in the Quonset Hut will also be field located, and will also be collected at depths to be representative of conditions throughout the pile.

Action: None.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA
Original General Comment #: 2

Comment: Soil samples SW-6-L, SW-11-L, and NW-10-L contained total tetrachloroethylene (PCE) at 17.11, 19.76, and 14.86 parts per million (ppm), respectively. At these total PCE concentrations, toxicity characteristic leaching procedure (TCLP) PCE concentrations may exceed the regulatory limit of 0.7 ppm. Therefore, additional samples should be collected from sampling locations SW-6, SW-11, and NW-10 and analyzed for TCLP PCE.

Response: The purpose of the sample collection described in Revision A of the PSP was to evaluate total PCE, TCE and DCE (1,1 and 1,2) concentrations throughout the pile, and based on those results, take further action through PSP revision or Variance/Field Change Notice. Based on the PCE results identified in the comment, it is appropriate to run TCLP analyses of these three soil samples.

Action: Revise the PSP to document re-collection of soil from locations SW-6, SW-11, and NW-10 for TCLP analysis.

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Commenting Organization: U.S. EPA Commentor: Sarfc

Section #: NA Page #: NA Line #: NA

Original General Comment #: 3

Comment: The analytical data spreadsheet contains results for initial calibration standards (ICAL) and laboratory control samples (LCS). However, these ICAL and LCS results cannot be evaluated without calibration response factors and percent recovery values, respectively. The PSP should either be revised to include this information or to refer to another report that contains this information.

Response: This spreadsheet was submitted as an informational summary of the results obtained under Rev. A of the PSP and was not intended to be used as the single source document for evaluation. The spreadsheet does include the percent recovery values, but not the calibration response values, which are only present on the raw data sheets. Both the spreadsheet and the response factors for all data obtained in the analytical batch are attached for your information.

Action: None.

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Quonset Hut Sample Analyses - 08-01-02

Analysis/ Calculation Record for *Voyager* Field GC

	sample ID	Column	Date	Time analyzed	mass of soil or volume of water	volume water added to sample in vial (use "20" for soil and water)	uL injected	ppm from instrument readout	add'l dilution factors, if any (use "1" for none)
1	ICAL	C	08/01/2002	0824	20	20	200	2.00	1
2	ICAL	C	08/01/2002	0824	20	20	200	2.00	1
3	ICAL	C	08/01/2002	0824	20	20	200	2.00	1
4	ICAL	B	08/01/2002	0837	20	20	200	2.00	1
5	ICAL	B	08/01/2002	0837	20	20	200	2.00	1
6	LCS	C	08/01/2002	0850	20	20	200	2.51	1
7	LCS	C	08/01/2002	0850	20	20	200	2.39	1
8	LCS	C	08/01/2002	0850	20	20	200	1.84	1
9	LCS	B	08/01/2002	0903	20	20	200	1.95	1
10	LCS	B	08/01/2002	0903	20	20	200	2.16	1
11	MBLK	C	08/01/2002	0917	20	20	200	0.00	1
12	MBLK	C	08/01/2002	0917	20	20	200	0.00	1
13	MBLK	C	08/01/2002	0917	20	20	200	0.00	1
14	MBLK	B	08/01/2002	0930	20	20	200	0.00	1
15	MBLK	B	08/01/2002	0930	20	20	200	0.00	1
16	QHUT-SE-2-L	C	08/01/2002	0946	4.99	20	200	0.00	1
17	QHUT-SE-2-L	C	08/01/2002	0946	4.99	20	200	0.00	1
18	QHUT-SE-2-L	C	08/01/2002	0946	4.99	20	200	0.00	1
19	QHUT-SE-2-L	B	08/01/2002	1000	4.99	20	200	0.00	1
20	QHUT-SE-2-L	B	08/01/2002	1000	4.99	20	200	0.01	1
21	QHUT-SE-8-L	C	08/01/2002	1016	4.91	20	200	0.00	1
22	QHUT-SE-8-L	C	08/01/2002	1016	4.91	20	200	0.00	1
23	QHUT-SE-8-L	C	08/01/2002	1016	4.91	20	200	0.00	1
24	QHUT-SE-8-L	B	08/01/2002	1028	4.91	20	200	0.00	1
25	QHUT-SE-8-L	B	08/01/2002	1028	4.91	20	200	0.02	1
26	QHUT-SE-14-L	C	08/01/2002	1043	4.91	20	200	0.00	1
27	QHUT-SE-14-L	C	08/01/2002	1043	4.91	20	200	0.00	1
28	QHUT-SE-14-L	C	08/01/2002	1043	4.91	20	200	0.00	1
29	QHUT-SE-14-L	B	08/01/2002	1057	4.91	20	200	0.00	1
30	QHUT-SE-14-L	B	08/01/2002	1057	4.91	20	200	0.01	1
31	QHUT-NE-2-L	C	08/01/2002	1111	4.98	20	200	0.00	1
32	QHUT-NE-2-L	C	08/01/2002	1111	4.98	20	200	0.00	1
33	QHUT-NE-2-L	C	08/01/2002	1111	4.98	20	200	0.00	1
34	QHUT-NE-2-L	B	08/01/2002	1124	4.98	20	200	0.00	1
35	QHUT-NE-2-L	B	08/01/2002	1124	4.98	20	200	0.03	1
36	QHUT-NE-7-L	C	08/01/2002	1140	4.95	20	200	0.00	1
37	QHUT-NE-7-L	C	08/01/2002	1140	4.95	20	200	0.00	1
38	QHUT-NE-7-L	C	08/01/2002	1140	4.95	20	200	0.00	1

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Quonset Hut Sample Analyses - 08-01-02

	sample ID	Column	Date	Time analyzed	mass of soil or volume of water	volume water added to sample in vial (use "20" for soil and water)	uL injected	ppm from instrument readout	add'l dilution factors, if any (use "1" for none)
39	QHUT-NE-7-L	B	08/01/2002	1154	4.95	20	200	0.00	1
40	QHUT-NE-7-L	B	08/01/2002	1154	4.95	20	200	0.10	1
41	QHUT-NE-13-L	C	08/01/2002	1206	5.08	20	200	0.00	1
42	QHUT-NE-13-L	C	08/01/2002	1206	5.08	20	200	0.00	1
43	QHUT-NE-13-L	C	08/01/2002	1206	5.08	20	200	0.01	1
44	QHUT-NE-13-L	B	08/01/2002	1220	5.08	20	200	0.01	1
45	QHUT-NE-13-L	B	08/01/2002	1220	5.08	20	200	0.24	1
46	QHUT-NW-2-L	C	08/01/2002	1236	4.96	20	200	0.00	1
47	QHUT-NW-2-L	C	08/01/2002	1236	4.96	20	200	0.00	1
48	QHUT-NW-2-L	C	08/01/2002	1236	4.96	20	200	0.01	1
49	QHUT-NW-2-L	B	08/01/2002	1250	4.96	20	200	0.01	1
50	QHUT-NW-2-L	B	08/01/2002	1250	4.96	20	200	0.75	1
51	QHUT-NW-2-L-D	C	08/01/2002	1304	4.96	20	200	0.00	1
52	QHUT-NW-2-L-D	C	08/01/2002	1304	4.96	20	200	0.00	1
53	QHUT-NW-2-L-D	C	08/01/2002	1304	4.96	20	200	0.00	1
54	QHUT-NW-2-L-D	B	08/01/2002	1319	4.96	20	200	0.01	1
55	QHUT-NW-2-L-D	B	08/01/2002	1319	4.96	20	200	1.22	1
56	QHUT-NW-6-L	C	08/01/2002	1333	5.89	20	200	0.01	1
57	QHUT-NW-6-L	C	08/01/2002	1333	5.89	20	200	0.00	1
58	QHUT-NW-6-L	C	08/01/2002	1333	5.89	20	200	0.01	1
59	QHUT-NW-6-L	B	08/01/2002	1347	5.89	20	200	0.04	1
60	QHUT-NW-6-L	B	08/01/2002	1347	5.89	20	200	1.18	1
61	QHUT-NW-10-L	C	08/01/2002	1402	5.18	20	200	0.02	1
62	QHUT-NW-10-L	C	08/01/2002	1402	5.18	20	200	0.00	1
63	QHUT-NW-10-L	C	08/01/2002	1402	5.18	20	200	0.03	1
64	QHUT-NW-10-L	B	08/01/2002	1416	5.18	20	200	0.10	1
65	QHUT-NW-10-L	B	08/01/2002	1416	5.18	20	200	3.85	1
66	CCV1	C	08/01/2002	1430	20	20	200	1.39	1
67	CCV1	C	08/01/2002	1430	20	20	200	1.61	1
68	CCV1	C	08/01/2002	1430	20	20	200	1.33	1
69	CCV1	B	08/01/2002	1442	20	20	200	1.84	1
70	CCV1	B	08/01/2002	1442	20	20	200	1.74	1
71	CCB1	C	08/01/2002	1455	20	20	200	0.00	1
72	CCB1	C	08/01/2002	1455	20	20	200	0.00	1
73	CCB1	C	08/01/2002	1455	20	20	200	0.00	1
74	CCB1	B	08/01/2002	1507	20	20	200	0.00	1
75	CCB1	B	08/01/2002	1507	20	20	200	0.00	1
76	QHUT-SW-2-L	C	08/01/2002	1520	4.93	20	200	0.00	1
77	QHUT-SW-2-L	C	08/01/2002	1520	4.93	20	200	0.00	1
78	QHUT-SW-2-L	C	08/01/2002	1520	4.93	20	200	0.00	1

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Quonset Hut Sample Analyses - 08-01-02

	sample ID	Column	Date	Time analyzed	mass of soil or volume of water	volume water added to sample in vial (use "20" for soil and water)	uL injected	ppm from instrument readout	add'l dilution factors, if any (use "1" for none)
79	QHUT-SW-2-L	B	08/01/2002	1533	4.93	20	200	0.00	1
80	QHUT-SW-2-L	B	08/01/2002	1533	4.93	20	200	0.36	1
81	QHUT-SW-6-L	C	08/01/2002	1546	5.05	20	200	0.01	1
82	QHUT-SW-6-L	C	08/01/2002	1546	5.05	20	200	0.00	1
83	QHUT-SW-6-L	C	08/01/2002	1546	5.05	20	200	0.04	1
84	QHUT-SW-6-L	B	08/01/2002	1558	5.05	20	200	0.05	1
85	QHUT-SW-6-L	B	08/01/2002	1558	5.05	20	200	4.32	1
86	QHUT-SW-11-L	C	08/01/2002	1611	4.97	20	200	0.08	1
87	QHUT-SW-11-L	C	08/01/2002	1611	4.97	20	200	0.01	1
88	QHUT-SW-11-L	C	08/01/2002	1611	4.97	20	200	0.15	1
89	QHUT-SW-11-L	B	08/01/2002	1623	4.97	20	200	0.15	1
90	QHUT-SW-11-L	B	08/01/2002	1623	4.97	20	200	4.91	1
91	CCV2	C	08/01/2002	1636	20	20	190	0.34	1
92	CCV2	C	08/01/2002	1636	20	20	190	0.50	1
93	CCV2	C	08/01/2002	1636	20	20	190	0.27	1
94	CCV2	B	08/01/2002	1649	20	20	200	2.24	1
95	CCV2	B	08/01/2002	1649	20	20	200	2.30	1
96	CCB2	C	08/01/2002	1701	20	20	200	0.00	1
97	CCB2	C	08/01/2002	1701	20	20	200	0.00	1
98	CCB2	C	08/01/2002	1701	20	20	200	0.00	1
99	CCB2	B	08/01/2002	1713	20	20	200	0.00	1
100	CCB2	B	08/01/2002	1713	20	20	200	0.00	1

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Quonset Hut Sample Analyses - 08-01-02

	sample ID	Column	ANALYTE	FINAL RESULT ppm in sample	analyst initials	comments	QC calculations QC true value ppm	QC % Rec.
1	ICAL	C	11-DCE	2.00	BM	chg septum	2.00	**100.00**
2	ICAL	C	t12DCE	2.00	BM	heater block=57.5	2.00	**100.00**
3	ICAL	C	c12DCE	2.00	BM		2.00	**100.00**
4	ICAL	B	TCE	2.00	BM		2.00	**100.00**
5	ICAL	B	PCE	2.00	BM		2.00	**100.00**
6	LCS	C	11-DCE	2.51	BM		2.00	**125.50**
7	LCS	C	t12DCE	2.39	BM		2.00	119.50
8	LCS	C	c12DCE	1.84	BM		2.00	92.00
9	LCS	B	TCE	1.95	BM		2.00	97.50
10	LCS	B	PCE	2.16	BM		2.00	108.00
11	MBLK	C	11-DCE	0.00	BM			
12	MBLK	C	t12DCE	0.00	BM			
13	MBLK	C	c12DCE	0.00	BM			
14	MBLK	B	TCE	0.00	BM			
15	MBLK	B	PCE	0.00	BM			
16	QHUT-SE-2-L	C	11-DCE	0.00	BM			
17	QHUT-SE-2-L	C	t12DCE	0.00	BM			
18	QHUT-SE-2-L	C	c12DCE	0.00	BM			
19	QHUT-SE-2-L	B	TCE	0.00	BM			
20	QHUT-SE-2-L	B	PCE	0.04	BM			
21	QHUT-SE-8-L	C	11-DCE	0.00	RA			
22	QHUT-SE-8-L	C	t12DCE	0.00	RA			
23	QHUT-SE-8-L	C	c12DCE	0.00	RA			
24	QHUT-SE-8-L	B	TCE	0.00	RA			
25	QHUT-SE-8-L	B	PCE	0.08	RA			
26	QHUT-SE-14-L	C	11-DCE	0.00	RA			
27	QHUT-SE-14-L	C	t12DCE	0.00	RA			
28	QHUT-SE-14-L	C	c12DCE	0.00	RA			
29	QHUT-SE-14-L	B	TCE	0.00	RA			
30	QHUT-SE-14-L	B	PCE	0.04	RA			
31	QHUT-NE-2-L	C	11-DCE	0.00	RA			
32	QHUT-NE-2-L	C	t12DCE	0.00	RA			
33	QHUT-NE-2-L	C	c12DCE	0.00	RA			
34	QHUT-NE-2-L	B	TCE	0.00	RA			
35	QHUT-NE-2-L	B	PCE	0.12	RA			
36	QHUT-NE-7-L	C	11-DCE	0.00	RA			
37	QHUT-NE-7-L	C	t12DCE	0.00	RA			
38	QHUT-NE-7-L	C	c12DCE	0.00	RA			

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Quonset Hut Sample Analyses - 08-01-02

	sample ID	Column	ANALYTE	FINAL RESULT: ppm in sample	analyst initials	comments	QC true value ppm	QC % Rec.
39	QHUT-NE-7-L	B	TCE	0.00	RA			
40	QHUT-NE-7-L	B	PCE	0.40	RA			
41	QHUT-NE-13-L	C	11-DCE	0.00	BM			
42	QHUT-NE-13-L	C	t12DCE	0.00	BM			
43	QHUT-NE-13-L	C	c12DCE	0.04	BM			
44	QHUT-NE-13-L	B	TCE	0.04	BM			
45	QHUT-NE-13-L	B	PCE	0.94	BM			
46	QHUT-NW-2-L	C	11-DCE	0.00	BM			
47	QHUT-NW-2-L	C	t12DCE	0.00	BM			
48	QHUT-NW-2-L	C	c12DCE	0.04	BM			
49	QHUT-NW-2-L	B	TCE	0.04	BM			
50	QHUT-NW-2-L	B	PCE	3.02	BM			
51	QHUT-NW-2-L-D	C	11-DCE	0.00	BM	DUPLICATE		
52	QHUT-NW-2-L-D	C	t12DCE	0.00	BM	DUPLICATE		
53	QHUT-NW-2-L-D	C	c12DCE	0.00	BM	DUPLICATE		
54	QHUT-NW-2-L-D	B	TCE	0.04	BM	DUPLICATE		
55	QHUT-NW-2-L-D	B	PCE	4.92	BM	DUPLICATE		
56	QHUT-NW-6-L	C	11-DCE	0.03	BM			
57	QHUT-NW-6-L	C	t12DCE	0.00	BM			
58	QHUT-NW-6-L	C	c12DCE	0.03	BM			
59	QHUT-NW-6-L	B	TCE	0.14	BM			
60	QHUT-NW-6-L	B	PCE	4.01	BM			
61	QHUT-NW-10-L	C	11-DCE	0.08	BM			
62	QHUT-NW-10-L	C	t12DCE	0.00	BM			
63	QHUT-NW-10-L	C	c12DCE	0.12	BM			
64	QHUT-NW-10-L	B	TCE	0.39	BM			
65	QHUT-NW-10-L	B	PCE	14.86	BM			
66	CCV1	C	11-DCE	1.39	RA			
67	CCV1	C	t12DCE	1.61	RA			
68	CCV1	C	c12DCE	1.33	RA			
69	CCV1	B	TCE	1.84	RA			
70	CCV1	B	PCE	1.74	RA			
71	CCB1	C	11-DCE	0.00	RA			
72	CCB1	C	t12DCE	0.00	RA			
73	CCB1	C	c12DCE	0.00	RA			
74	CCB1	B	TCE	0.00	RA			
75	CCB1	B	PCE	0.00	RA			
76	QHUT-SW-2-L	C	11-DCE	0.00	RA			
77	QHUT-SW-2-L	C	t12DCE	0.00	RA			
78	QHUT-SW-2-L	C	c12DCE	0.00	RA			

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Quonset Hut Sample Analyses - 08-01-02

	sample ID	Column	ANALYTE	FINAL RESULT: ppm in sample	analyst initials	comments	QC true value ppm	QC % Rec.
79	QHUT-SW-2-L	B	TCE	0.00	RA			
80	QHUT-SW-2-L	B	PCE	1.46	RA			
81	QHUT-SW-6-L	C	11-DCE	0.04	RA			
82	QHUT-SW-6-L	C	t12DCE	0.00	RA			
83	QHUT-SW-6-L	C	c12DCE	0.16	RA			
84	QHUT-SW-6-L	B	TCE	0.20	RA			
85	QHUT-SW-6-L	B	PCE	17.11	RA			
86	QHUT-SW-11-L	C	11-DCE	0.32	RA			
87	QHUT-SW-11-L	C	t12DCE	0.04	RA			
88	QHUT-SW-11-L	C	c12DCE	0.60	RA			
89	QHUT-SW-11-L	B	TCE	0.60	RA			
90	QHUT-SW-11-L	B	PCE	19.76	RA			
91	CCV2	C	11-DCE	0.36	RA	INJECTED 190uL	2.00	17.89
92	CCV2	C	t12DCE	0.53	RA	INJECTED 190uL	2.00	26.32
93	CCV2	C	c12DCE	0.28	RA	INJECTED 190uL	2.00	14.21
94	CCV2	B	TCE	2.24	RA		2.00	112.00
95	CCV2	B	PCE	2.30	RA		2.00	115.00
96	CCB2	C	11-DCE	0.00	RA			
97	CCB2	C	t12DCE	0.00	RA			
98	CCB2	C	c12DCE	0.00	RA			
99	CCB2	B	TCE	0.00	RA			
100	CCB2	B	PCE	0.00	RA			

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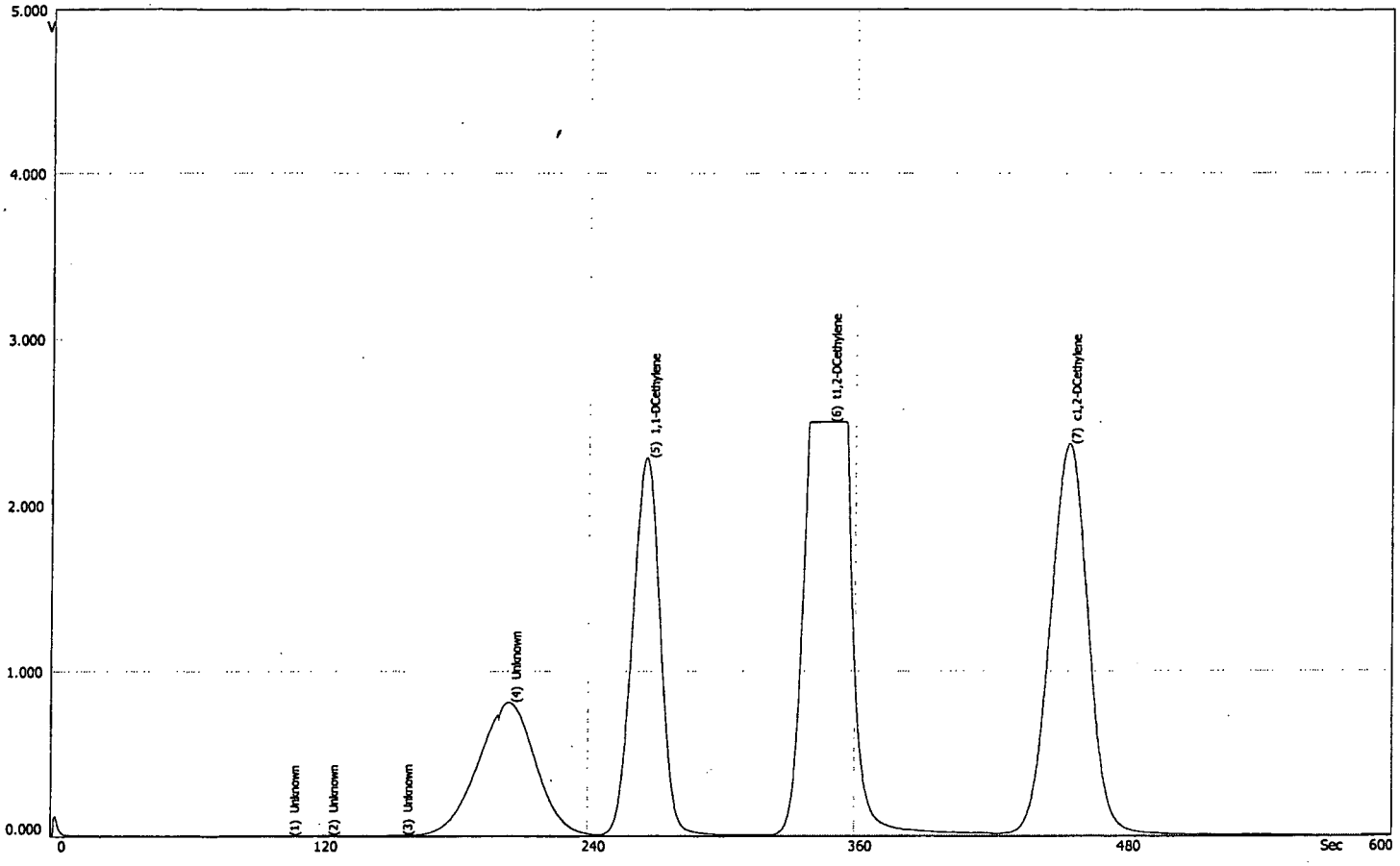
Limits for LCS and CCVs: (aqueous)

compound	lower limit (% R)	upper limit (%R)
TCE	74	123
PCE	76	146
1,1-DCE	79	129
t-1,2-DCE	62	131
c-1,2-DCE	56	136

based on 1.0 ppm CCV/LCS

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	08:24:22	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	7	
Tag	ICAL	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

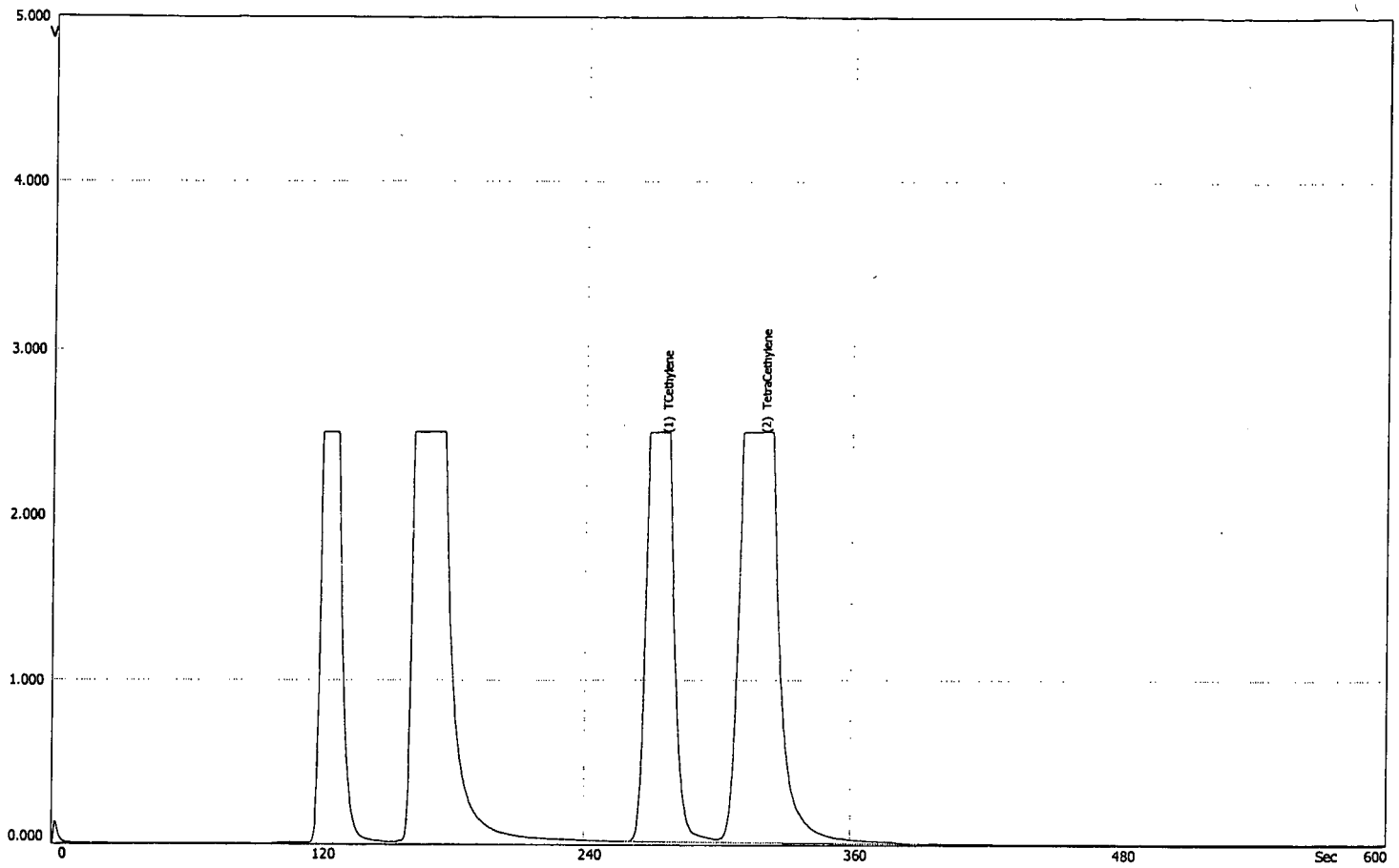
SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		8.441	1.215	105.5	
2	Unknown		58.8	3.439	122.9	
3	Unknown		51.6	5.543	155.6	
4	Unknown		24311	810	204.0	
5	1,1-DCethylene	2.000	33068	2280	265.6	Cal
6	t1,2-DCethylene	2.000	93048	2494	347.0	Cal
7	c1,2-DCethylene	2.000	47451	2354	454.8	Cal

Date: 02/08/01 08:36

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	08:37:03	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	9	
Tag	ICAL	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

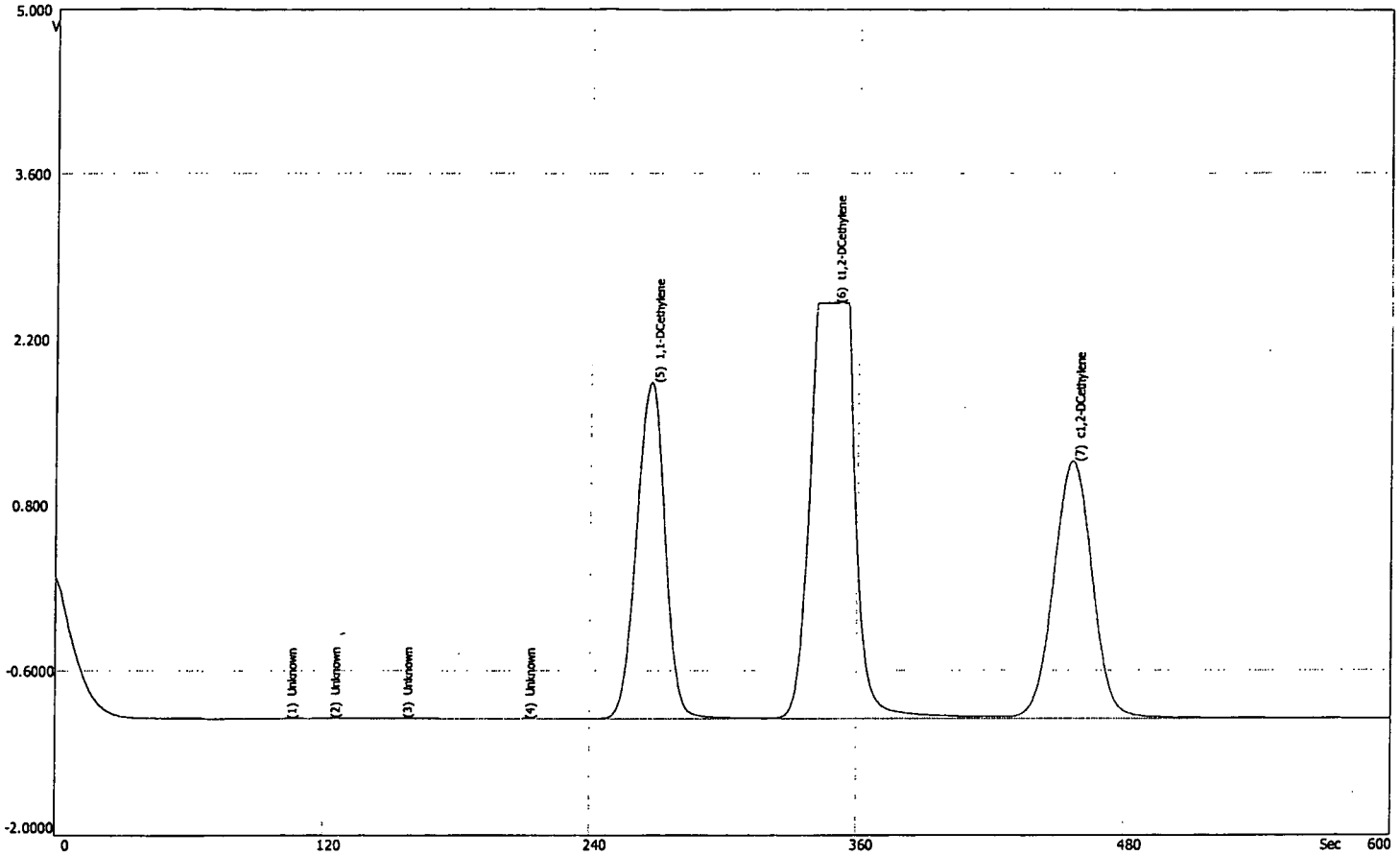
Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	2.000	54848	2481	272.5	Cal
2	TetraCethylene	2.000	88215	2468	317.3	Cal

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	08:49:57	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	11	
Tag	LCS	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

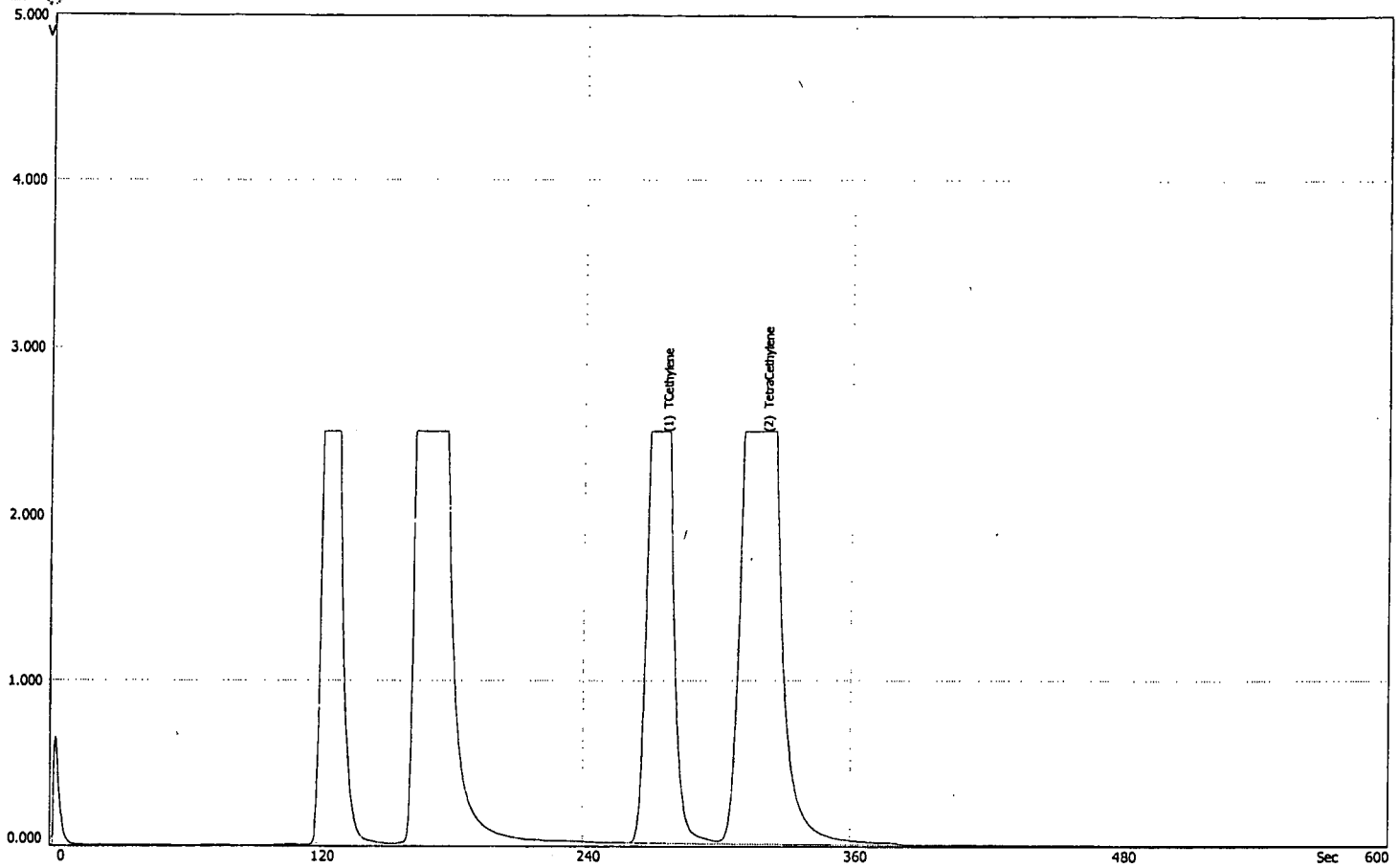
SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		6.835	1.190	102.7	
2	Unknown		99.1	4.883	122.0	
3	Unknown		110	5.493	154.6	
4	Unknown		26.5	1.831	209.8	
5	1,1-DCethylene	2.505	41415	2840	266.4	
6	t1,2-DCethylene	2.394	111364	3505	348.0	
7	c1,2-DCethylene	1.840	43648	2157	456.0	

Date: 02/08/01 09:01

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	09:02:37	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	13	
Tag	LCS	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

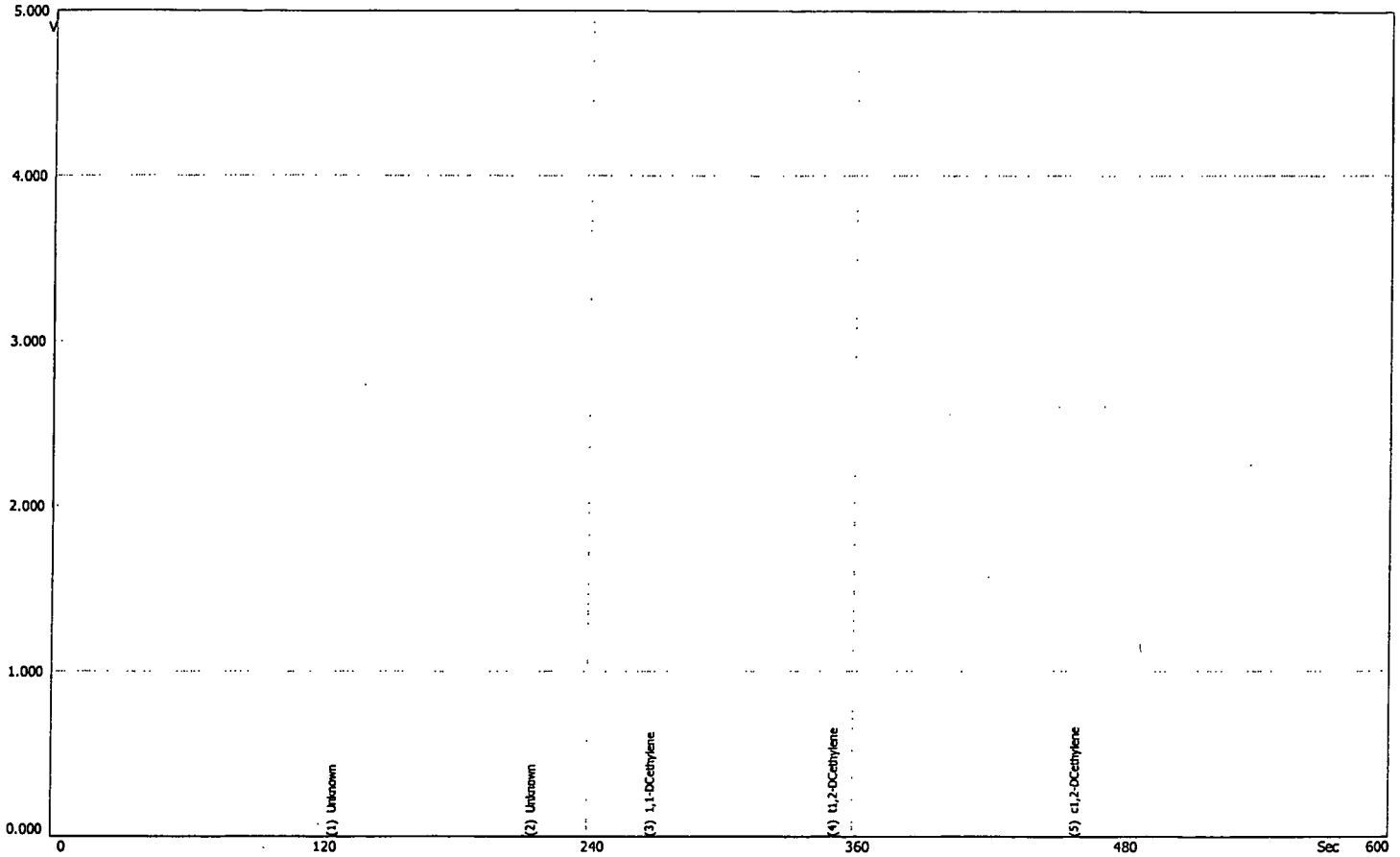
SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	1.951	53504	2482	273.6	
2	TetraCethylene	2.163	95395	2470	318.4	

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002	
Time	09:16:30	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	15	
Tag	MBLK	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

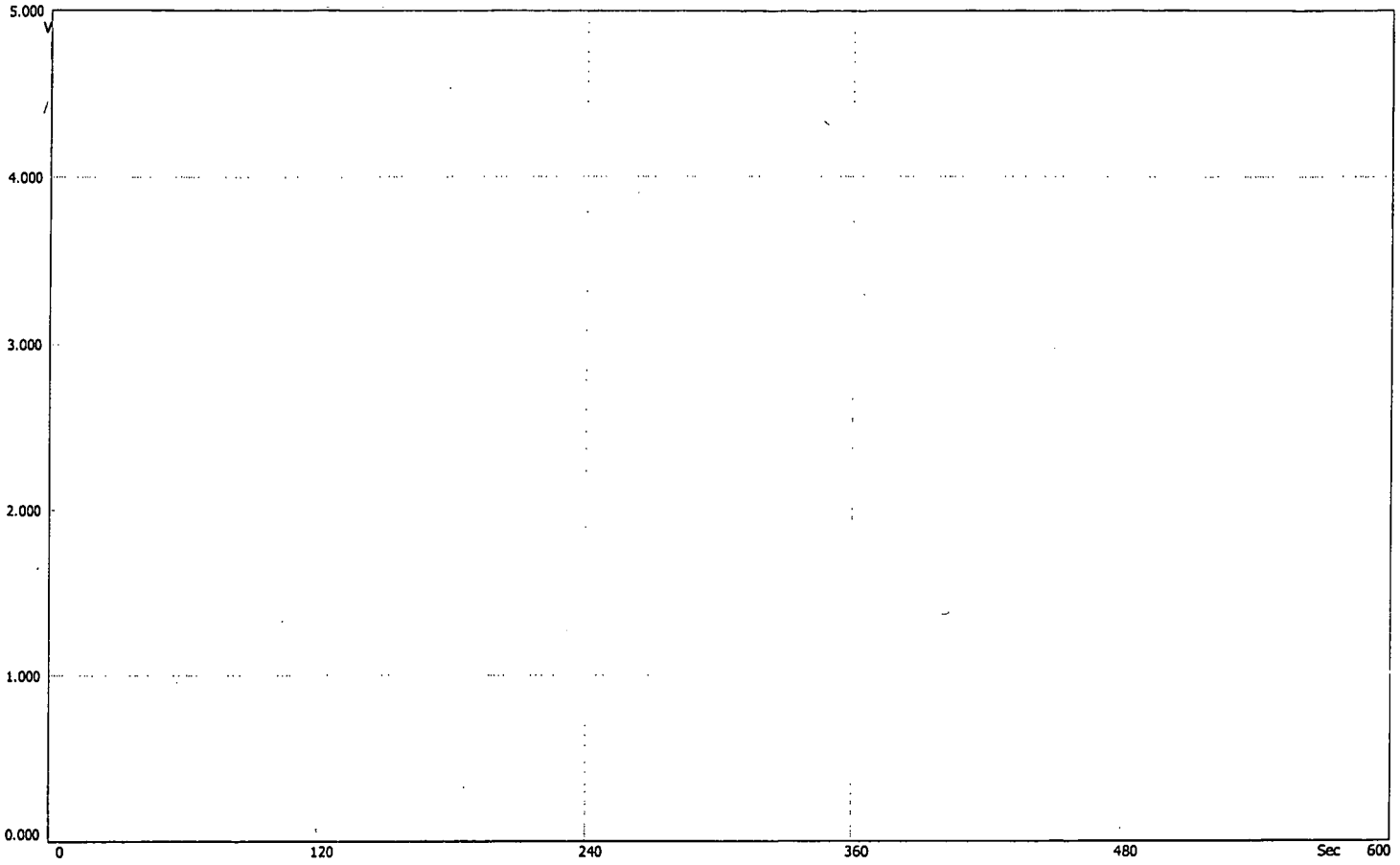
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		11.2	1.431	122.3	
2	Unknown		26.7	2.046	211.2	
3	1,1-DCethylene		14.6	0.907	265.1	
4	t1,2-DCethylene		44.4	2.903	347.7	
5	c1,2-DCethylene	0.001	29.0	0.796	456.0	

000016

Date: 02/08/01 09:28

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	09:29:46	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	17	
Tag	MBLK	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

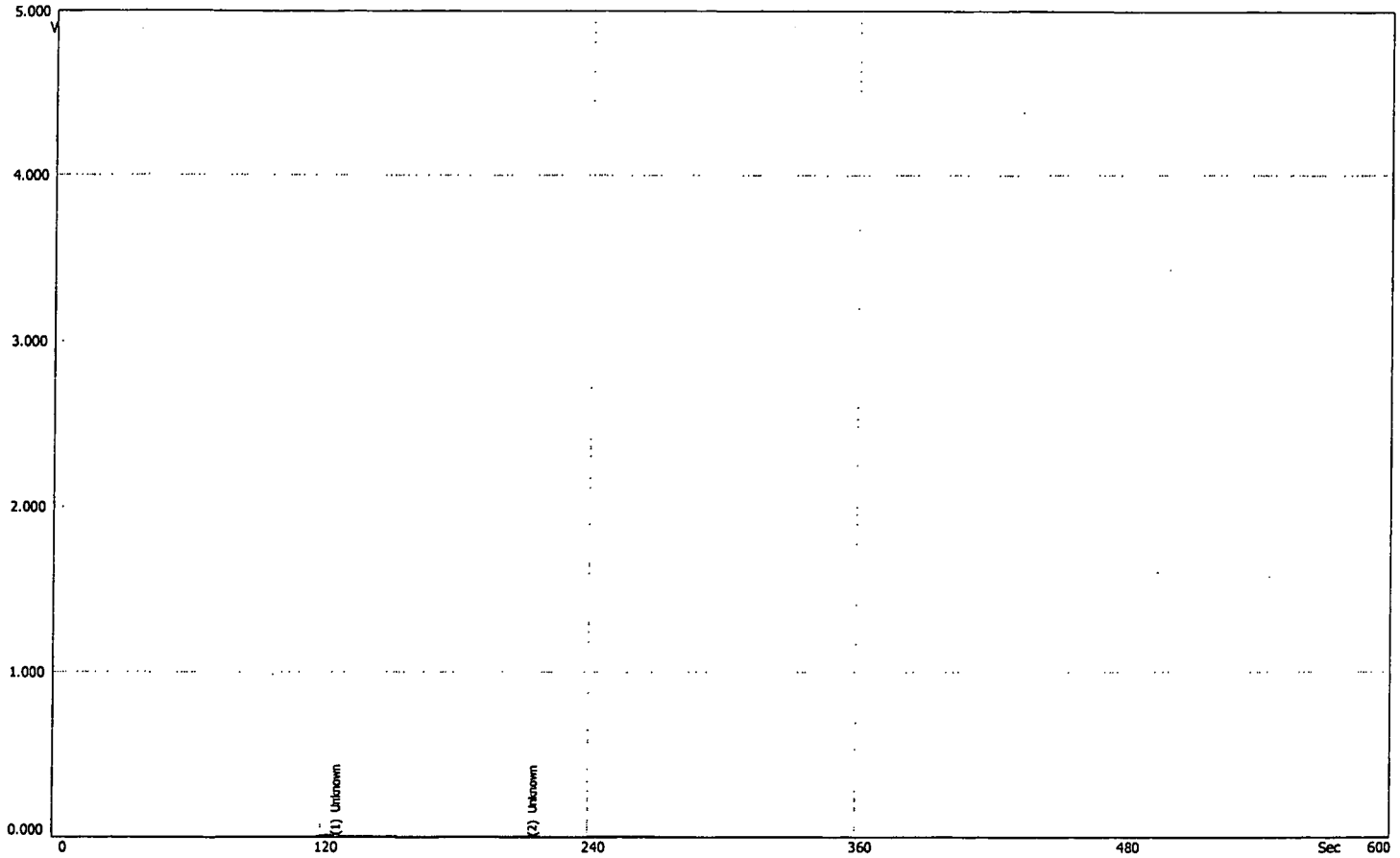
Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

000017

Date: 02/08/01 09:41

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	11:10:35
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	31
Tag	QHUT-NE2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	33.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

PEAK REPORT:

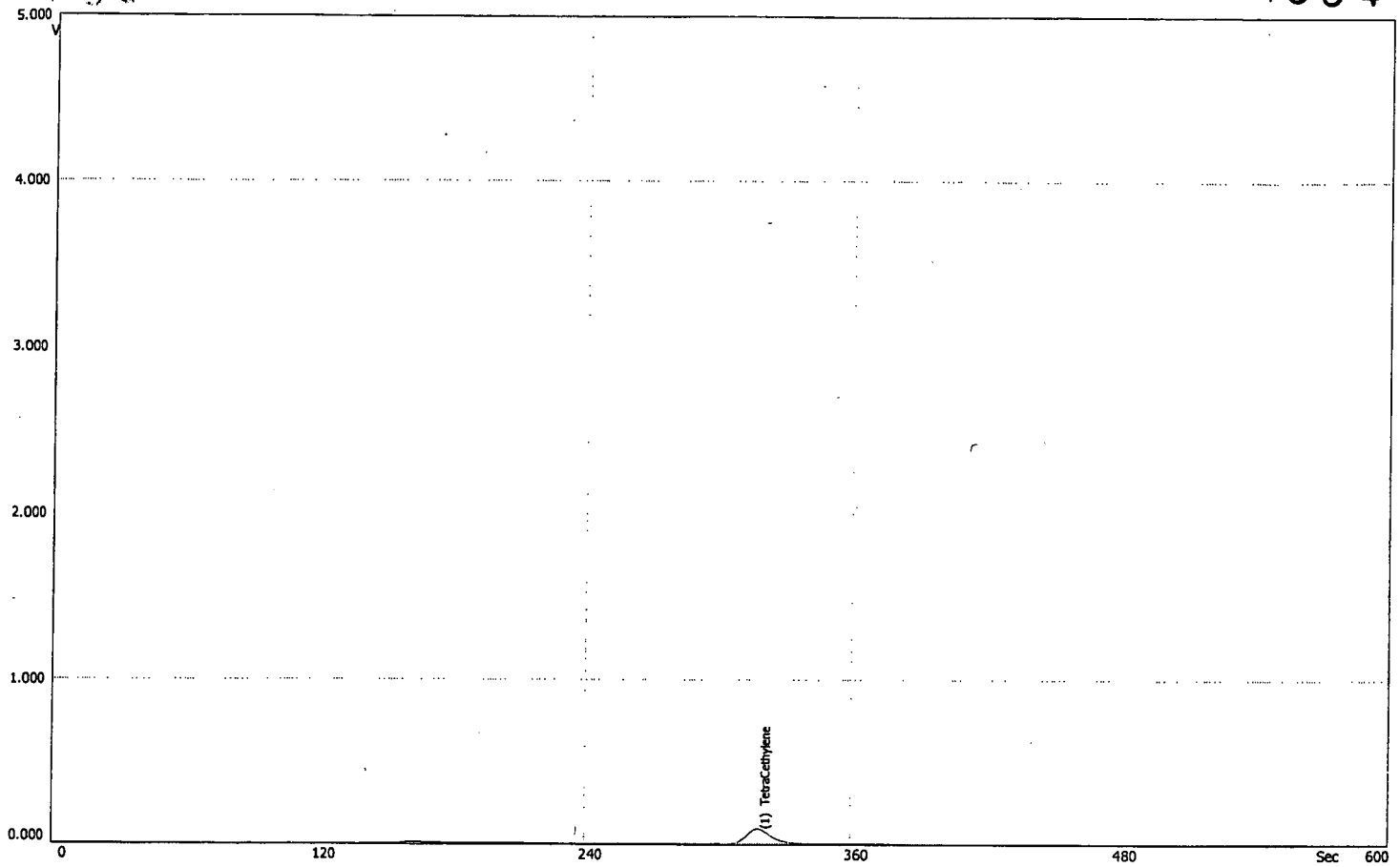
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		181	9.793	123.5	
2	Unknown		31.6	2.001	212.2	

000018

Date: 02/08/01 11:22

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	11:23:33
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	33
Tag	QHUT-NE2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	34.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

PEAK REPORT:

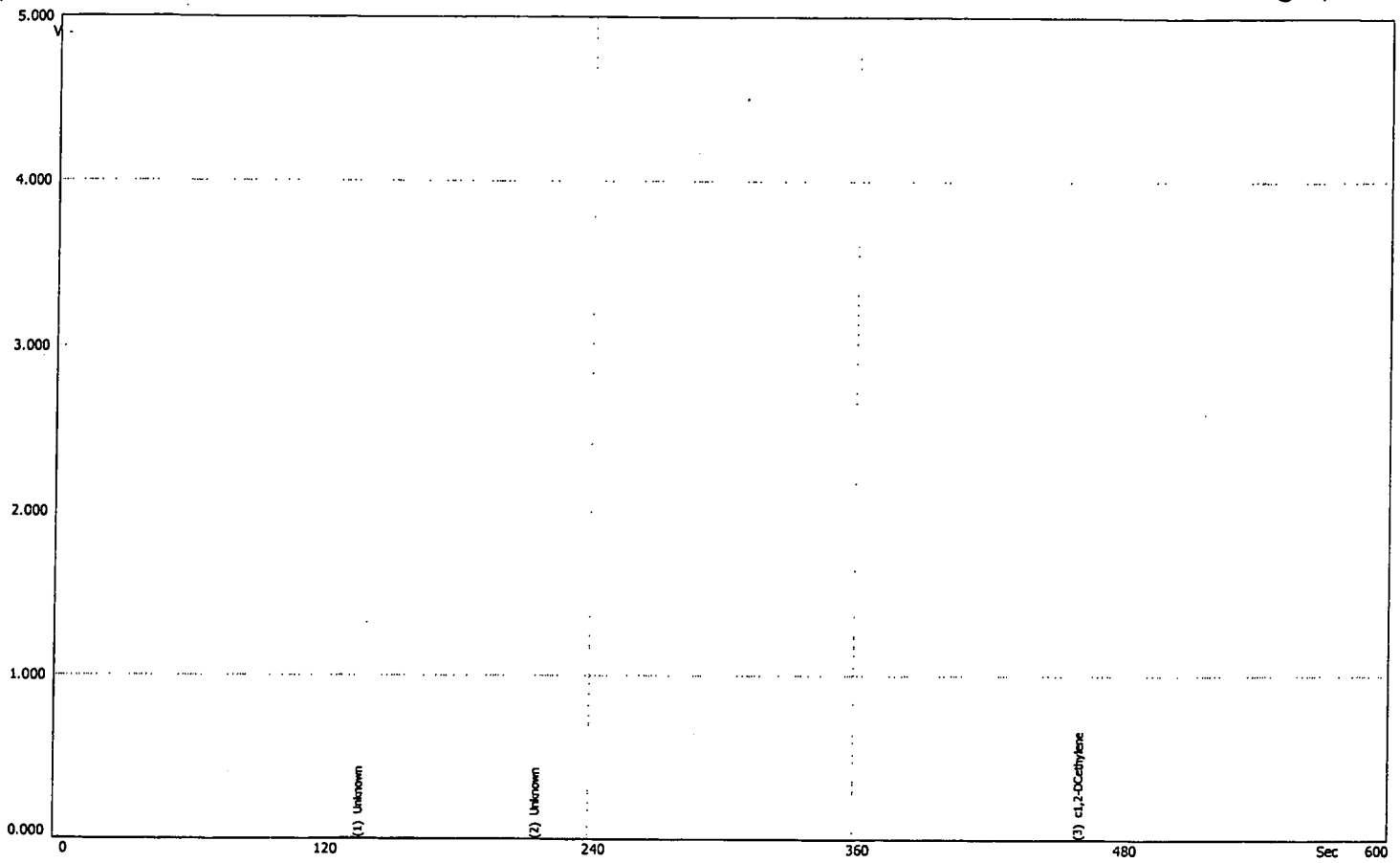
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TetraCethylene	0.028	1226	90.0	317.9	

000019

Date: 02/08/01 11:34

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	11:40:03
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	35
Tag	QHUT-NE7L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	35.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

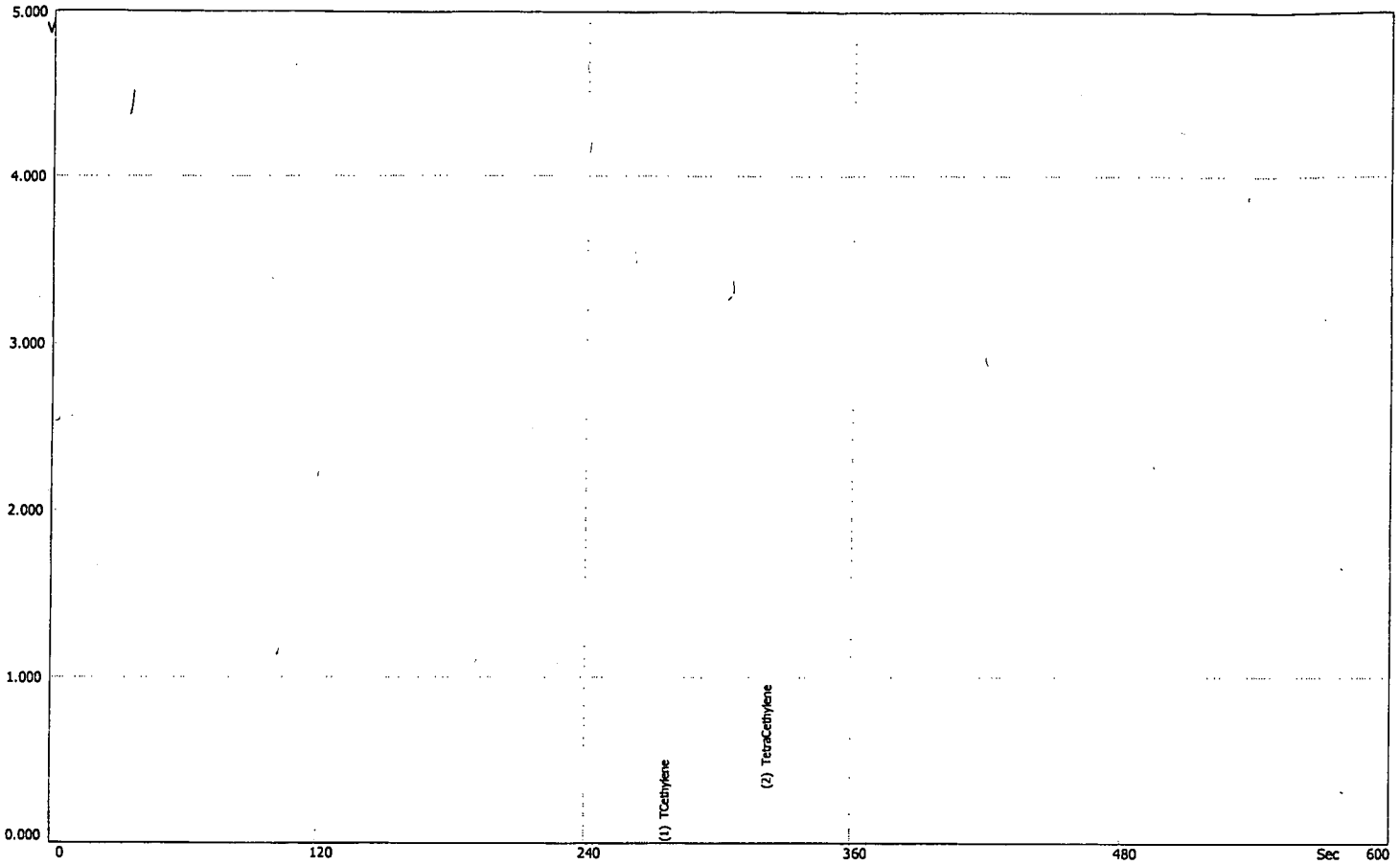
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		156	7.044	133.6	
2	Unknown		18.4	1.026	212.8	
3	c1,2-DCethylene	0.003	64.8	2.952	458.0	

000020

Date: 02/08/01 11:51

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	11:53:19
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	37
Tag	QHUT-NE7L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	36.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

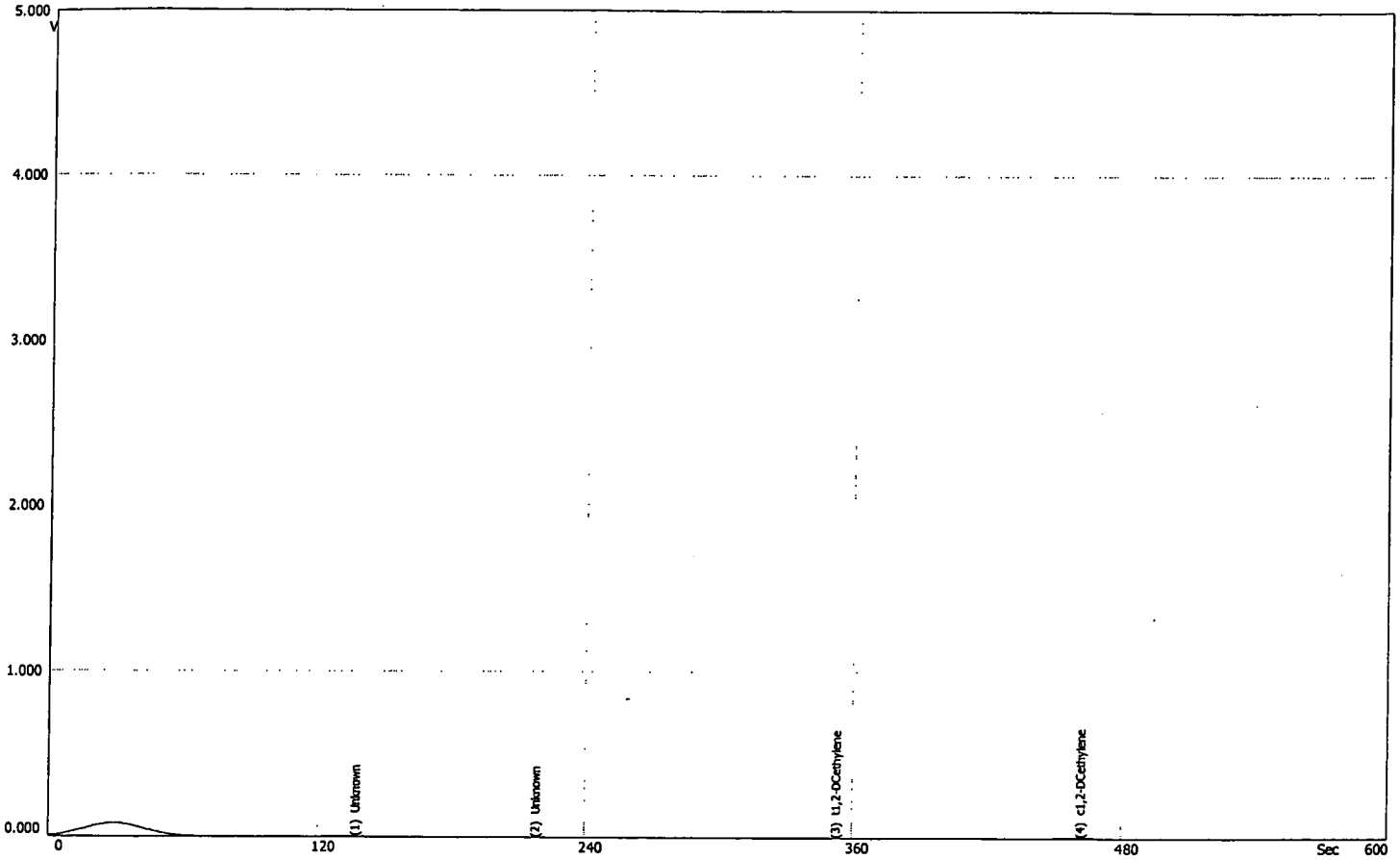
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.003	80.9	7.635	273.3	
2	TetraCethylene	0.103	4553	330	318.7	

000021

Date: 02/08/01 12:02

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	12:05:44
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	39
Tag	QHUT-NE13L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	36.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

PEAK REPORT:

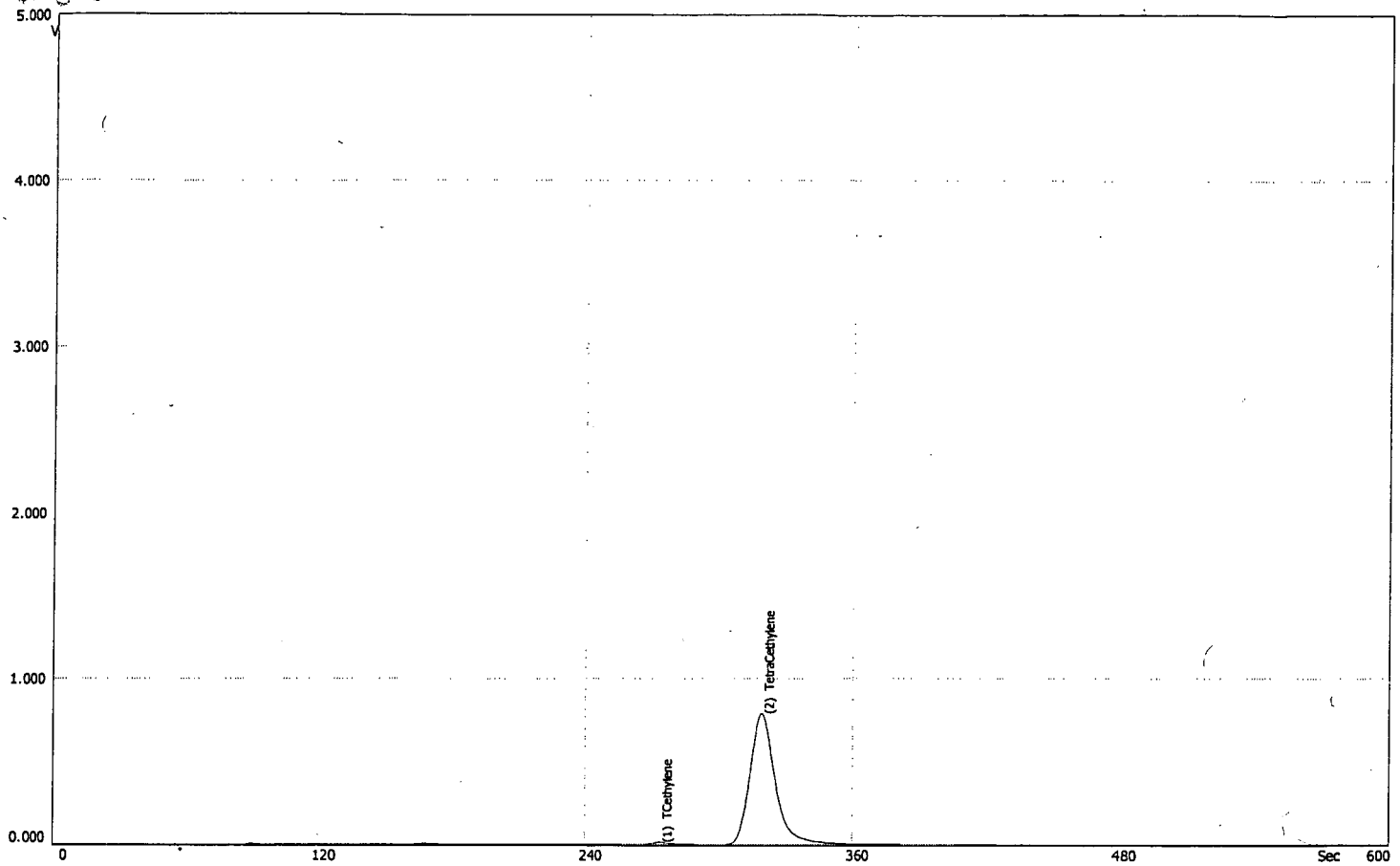
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		120	5.638	133.3	
2	Unknown		18.0	0.941	214.4	
3	t1,2-DCethylene		11.1	0.918	349.3	
4	c1,2-DCethylene	0.005	126	5.808	458.4	

000022

Date: 02/08/01 12:17

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	12:20:19
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	41
Tag	QHUT-NE13L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	36.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

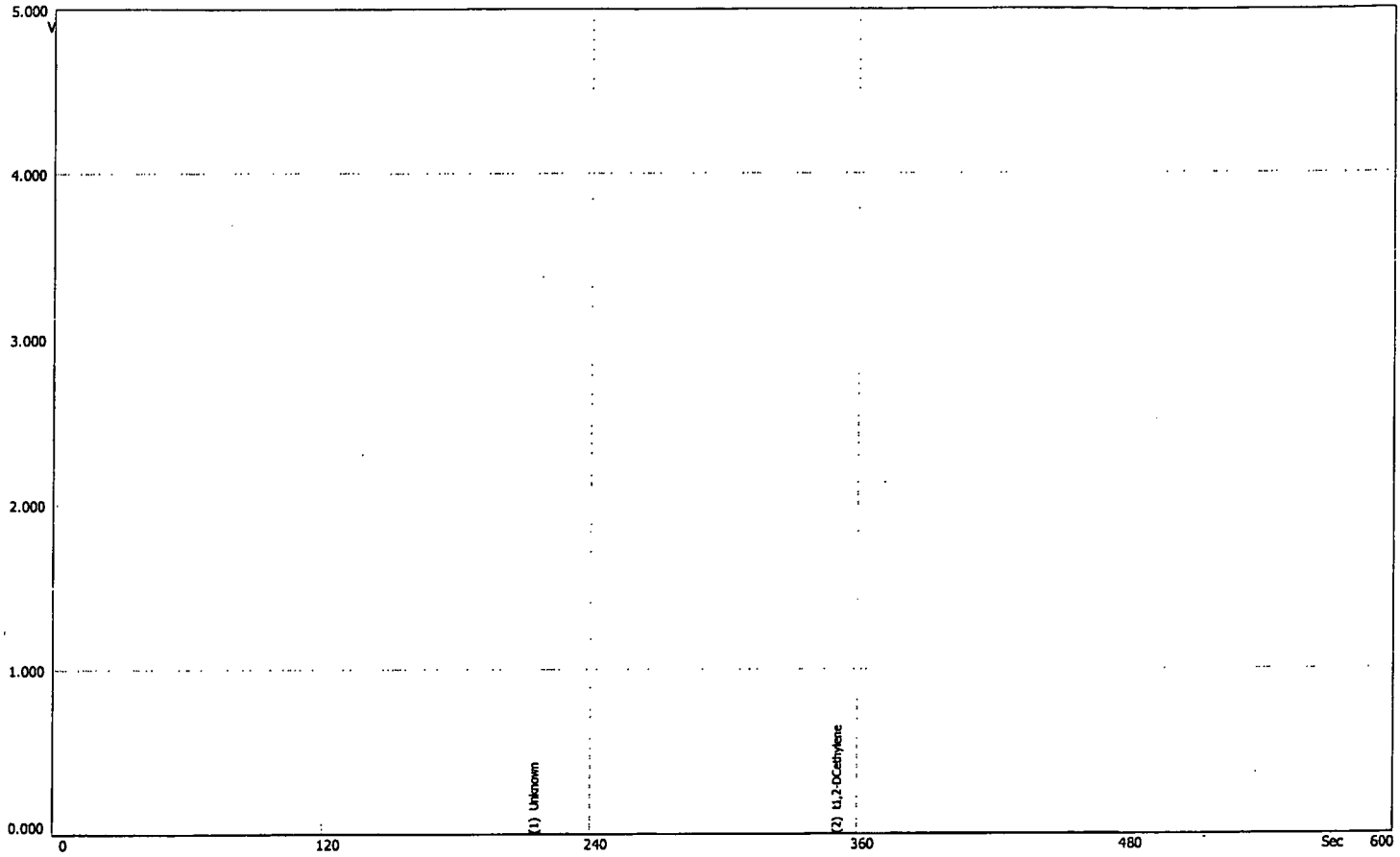
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.006	167	14.5	273.9	
2	TetraCethylene	0.236	10413	786	319.2	

000023

Date: 02/08/01 12:32

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	09:46:15
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	19
Tag	QHUT-SE2L
Column Temp	59.0 C
Det Temp	59.0 C
Ambient Temp	31.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

PEAK REPORT:

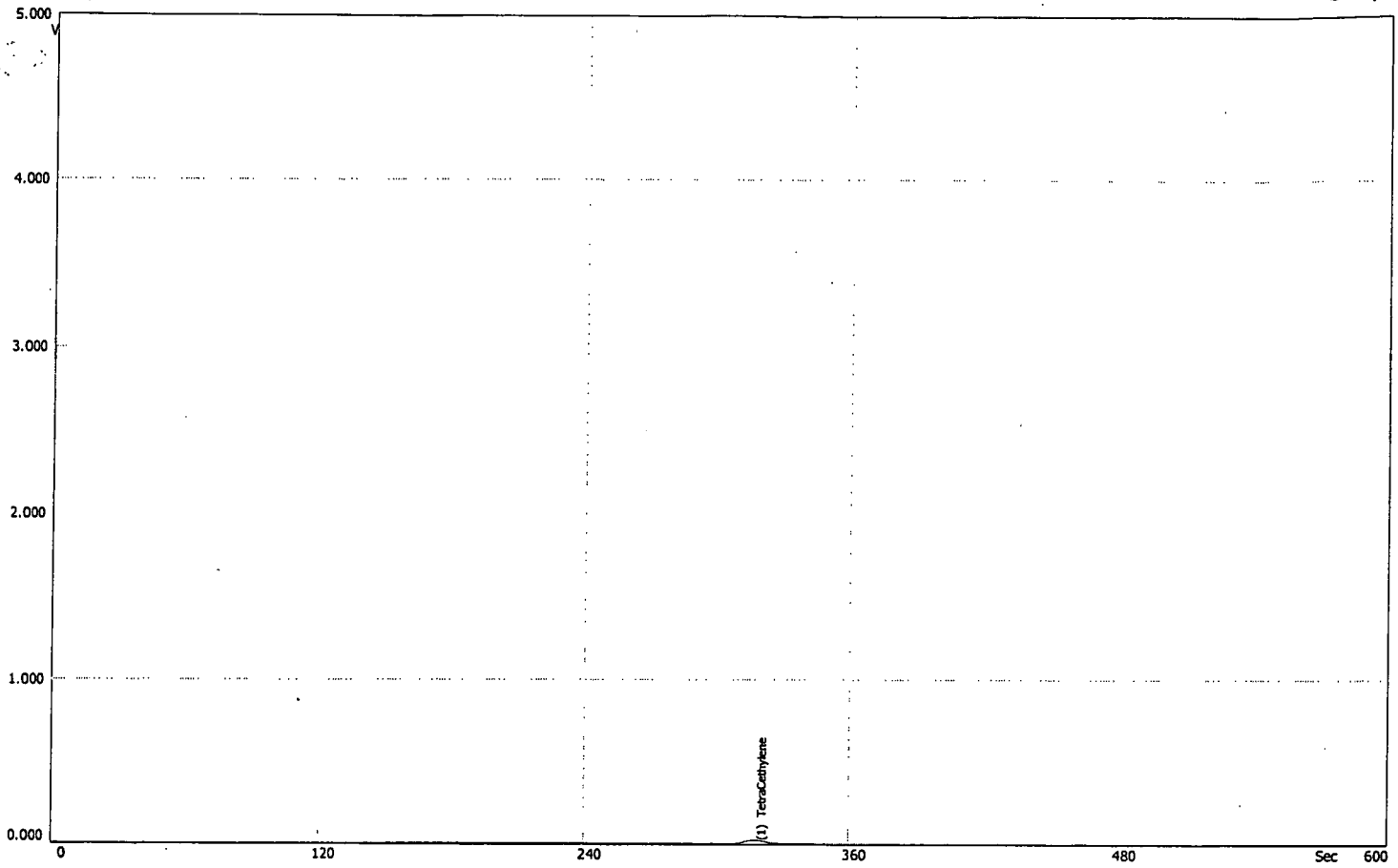
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		9.204	0.752	211.4	
2	t1,2-DCethylene		8.474	0.656	347.3	

000024

Date: 02/08/01 09:57

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	09:59:40
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	21
Tag	QHUT-SE2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	31.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

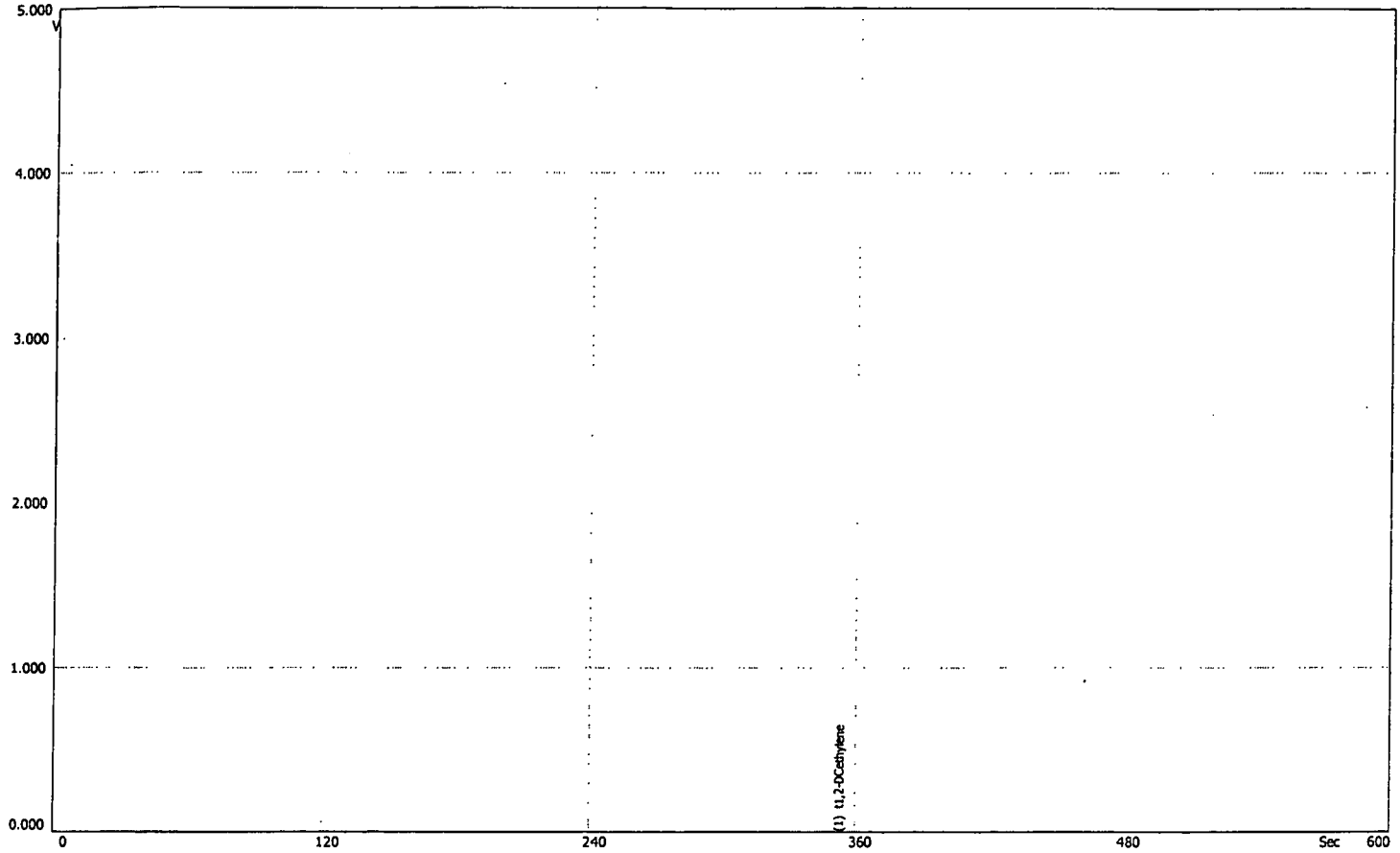
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TetraCethylene	0.007	316	22.4	317.1	

000025

Date: 02/08/01 10:11

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	10:15:36
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	23
Tag	QHUT-SE8L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	32.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

PEAK REPORT:

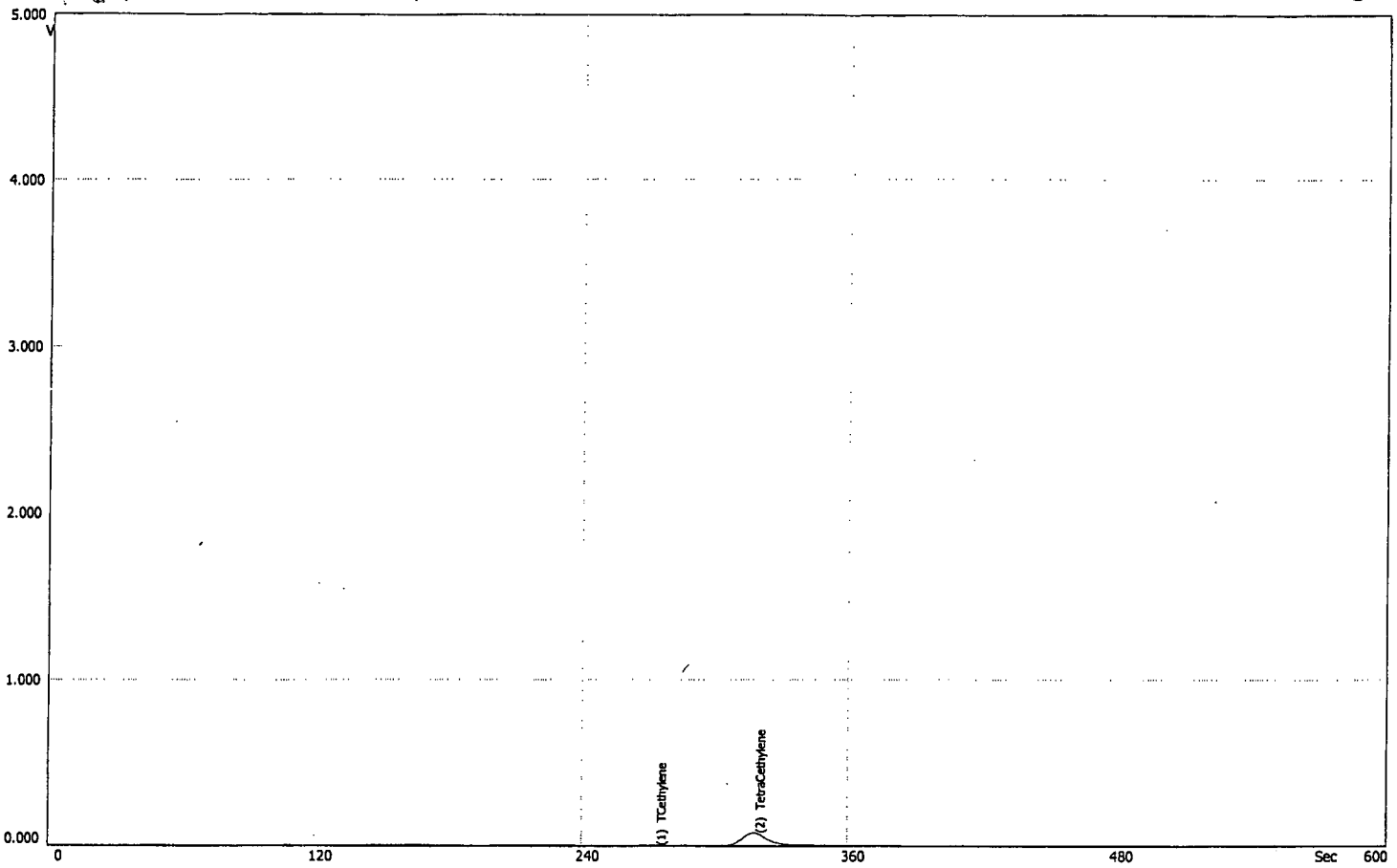
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	t1,2-DCethylene		9.326	0.539	349.3	

000026

Date: 02/08/01 10:26

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	10:28:17
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	25
Tag	QHUT-SE8L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	32.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

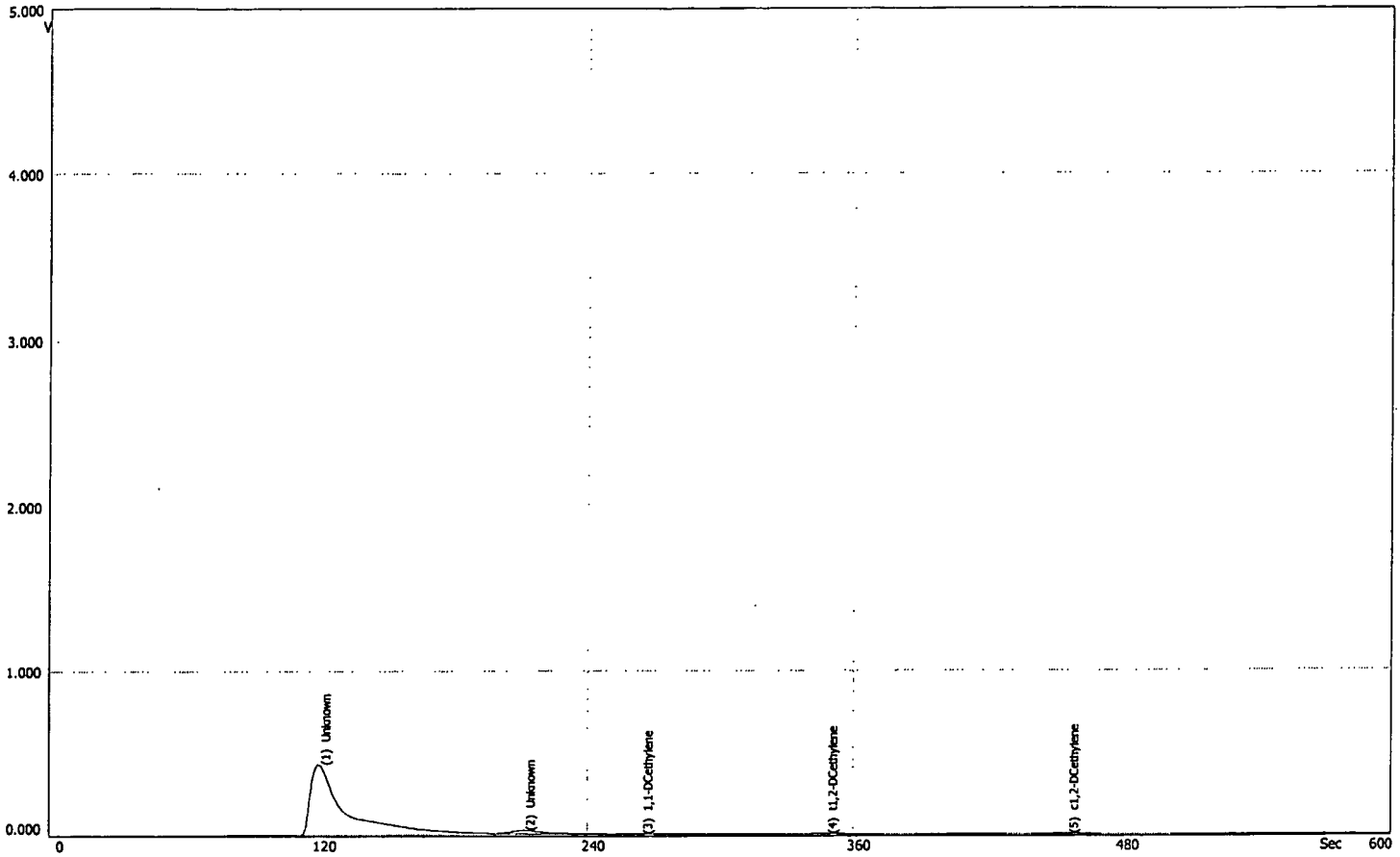
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene		13.2	0.616	272.8	
2	TetraCethylene	0.024	1076	76.5	317.3	

000027

Date: 02/08/01 10:39

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	10:42:45
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	27
Tag	QHUT-SE14L
Column Temp	59.0 C
Det Temp	59.0 C
Ambient Temp	33.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

PEAK REPORT:

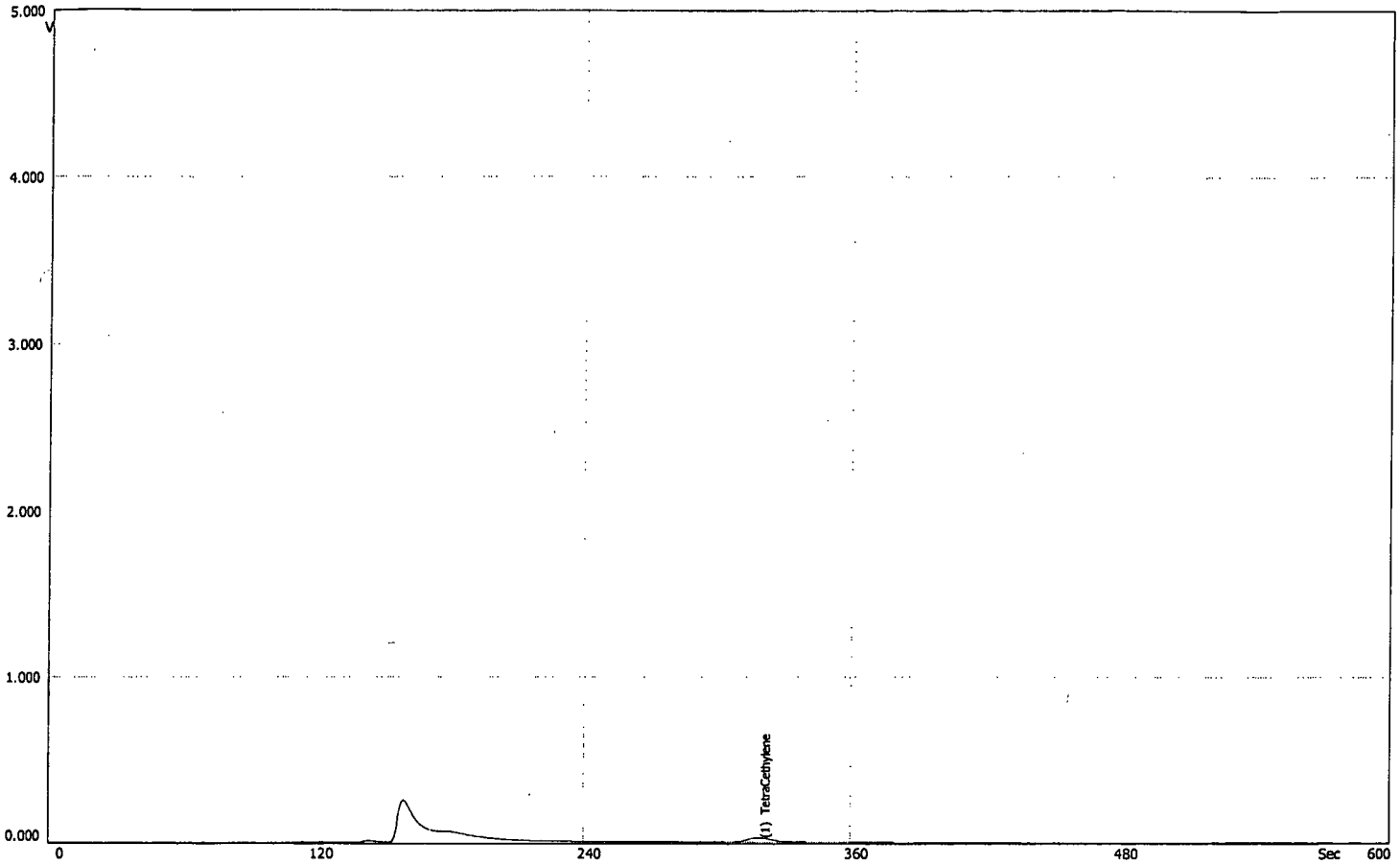
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		8246	430	119.7	
2	Unknown		248	15.7	211.2	
3	1,1-DCethylene		6.712	0.212	264.0	
4	t1,2-DCethylene	0.002	72.0	3.891	347.3	
5	c1,2-DCethylene	0.004	97.7	3.681	454.8	

000028

Date: 02/08/01 10:54

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002	
Time	10:55:48	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	29	
Tag	QHUT-SE14L	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	33.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

PEAK REPORT:

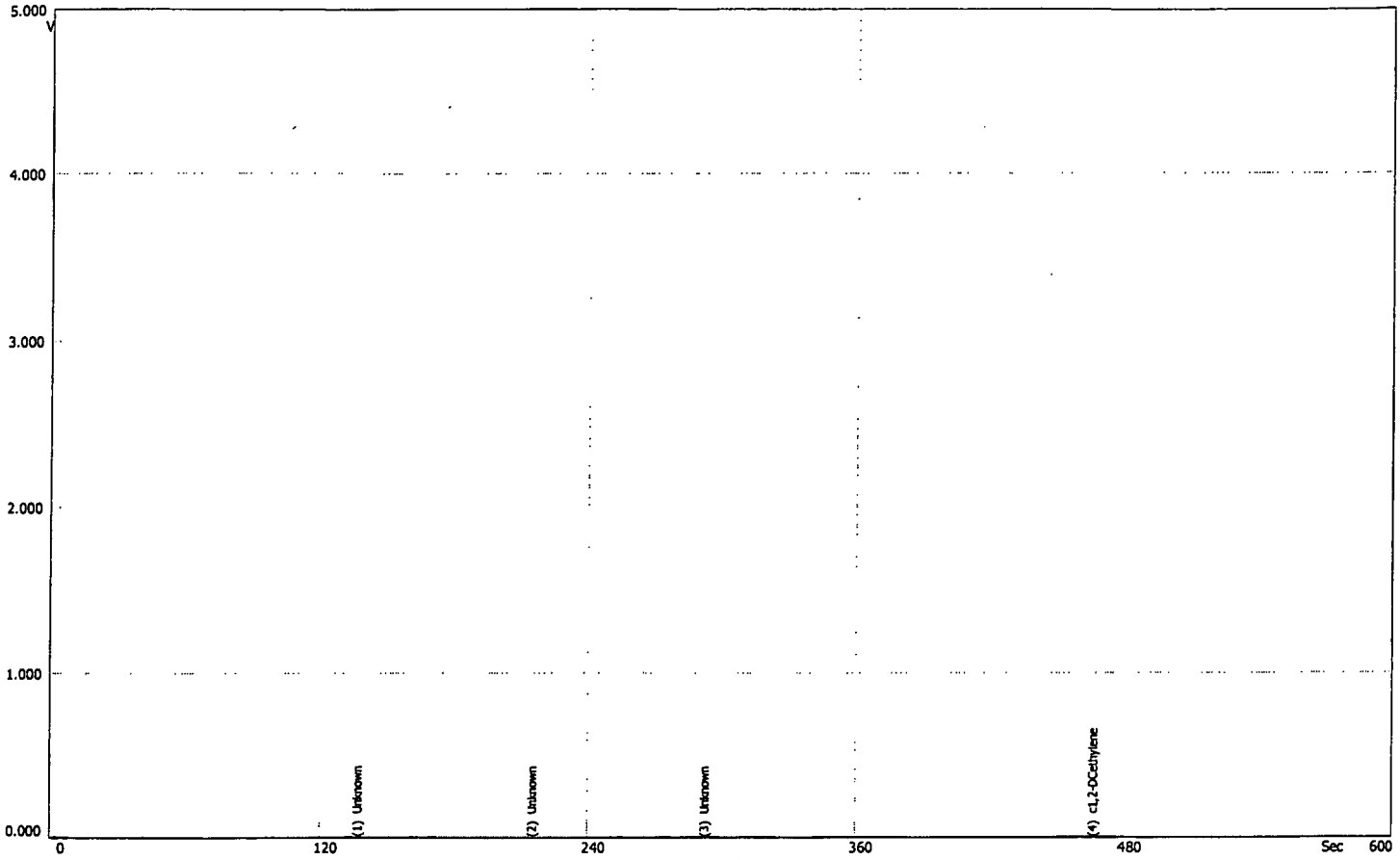
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TetraCethylene	0.007	330	23.6	318.1	

000029

Date: 02/08/01 11:07

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	15:20:02
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	67
Tag	QHUT-SW2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

PEAK REPORT:

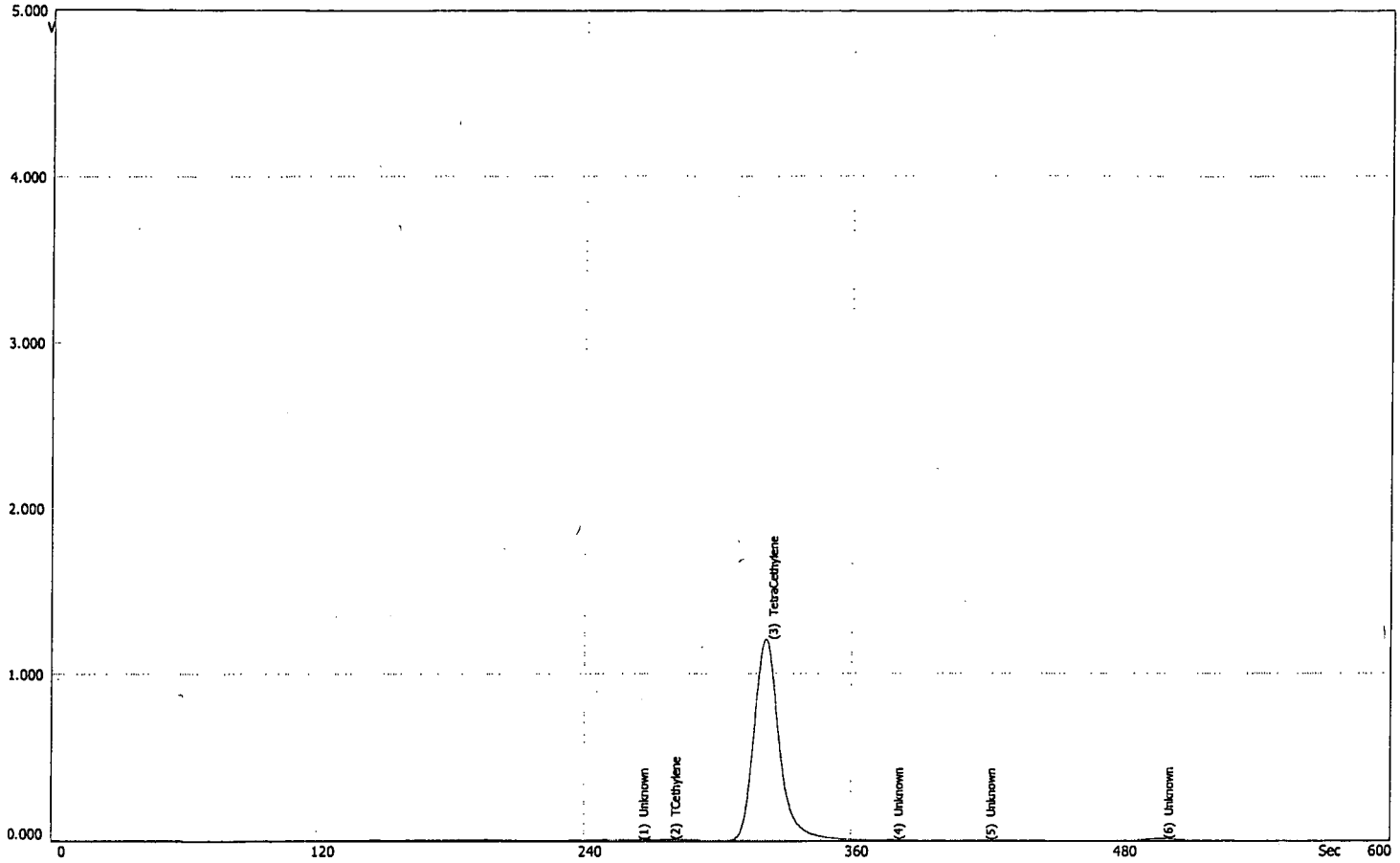
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		122	5.030	133.6	
2	Unknown		15.0	0.961	211.8	
3	Unknown		6.910	0.683	289.3	
4	c1,2-DCethylene	0.001	24.8	1.077	462.8	

000030

Date: 02/08/01 15:31

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	15:32:37
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	69
Tag	QHUT-SW2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

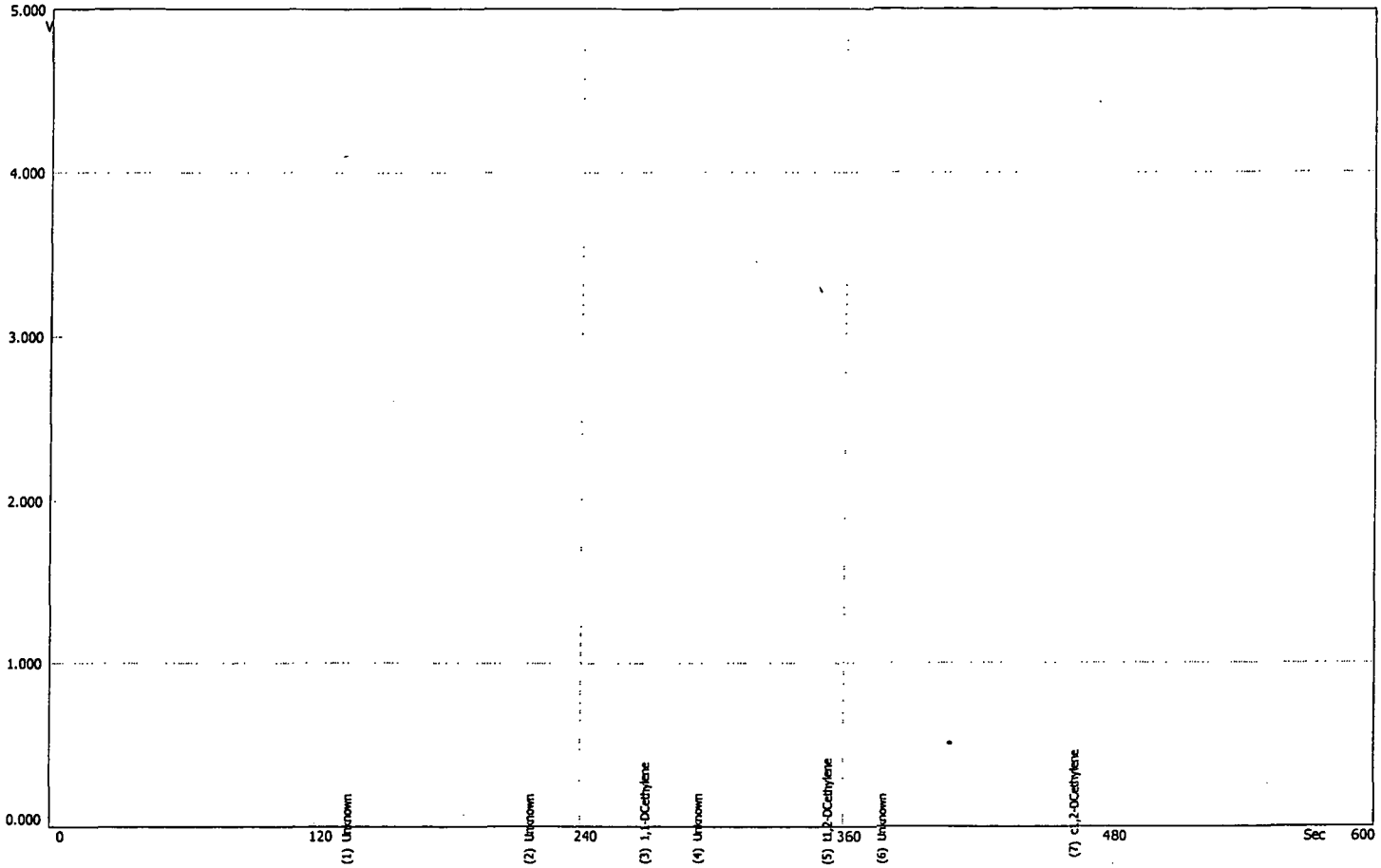
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		10.8	0.580	263.5	
2	TCethylene	0.004	107	4.800	278.1	
3	TetraCethylene	0.362	15978	1202	321.3	
4	Unknown		22.9	0.290	377.7	
5	Unknown		45.0	1.670	418.8	
6	Unknown		255	12.1	498.0	

000031

Date: 02/08/01 15:44

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	15:45:46
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	71
Tag	QHUT-SW6L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

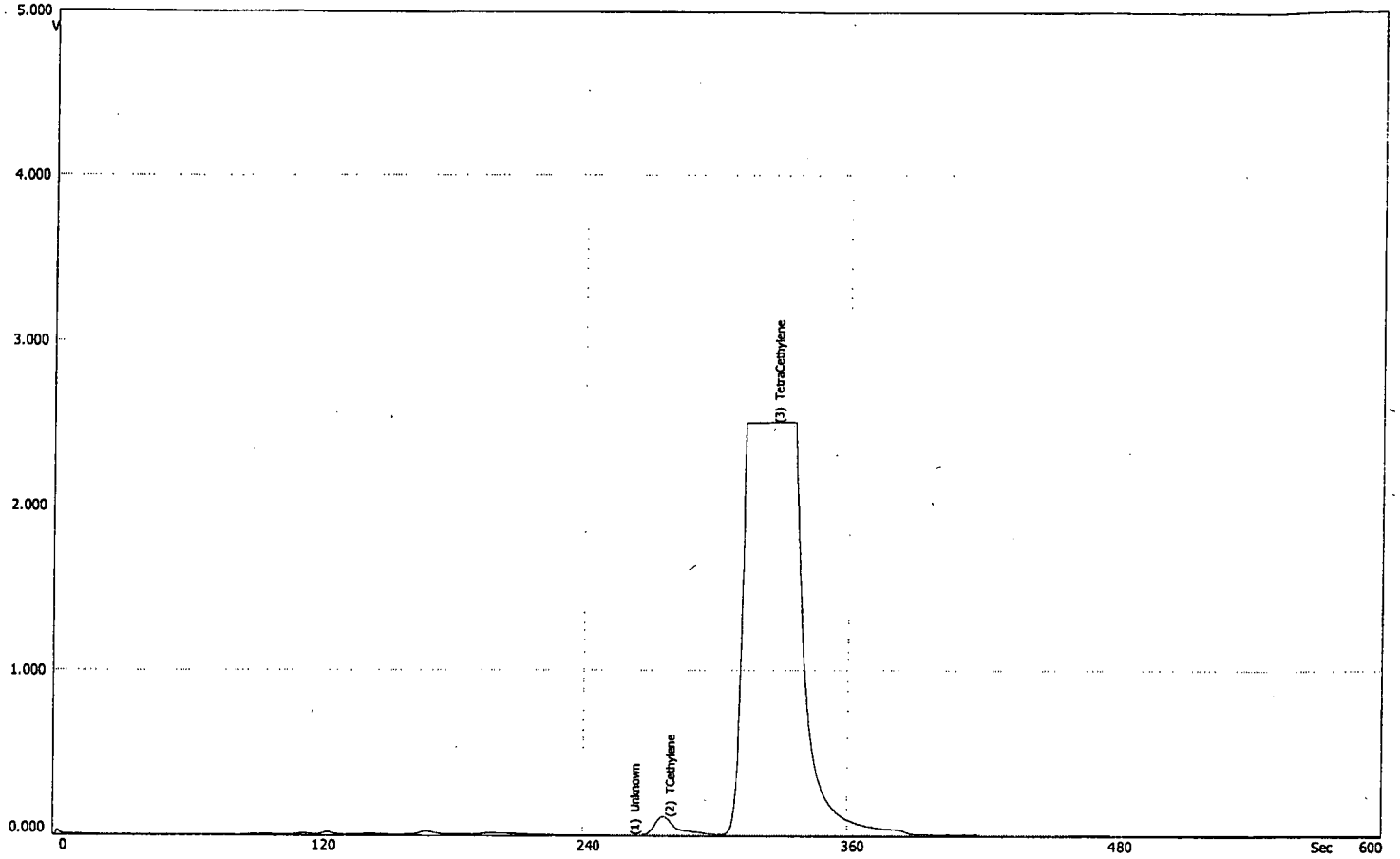
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		107	5.127	130.9	
2	Unknown		33.6	1.526	213.8	
3	1,1-DCethylene	0.005	86.8	6.073	266.1	
4	Unknown		152	8.362	290.1	
5	t1,2-DCethylene	0.001	67.7	4.852	349.3	
6	Unknown		2.249	0.305	374.0	
7	c1,2-DCethylene	0.039	917	43.9	460.8	

000032

Date: 02/08/01 15:56

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	15:58:11
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	73
Tag	QHUT-SW6L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

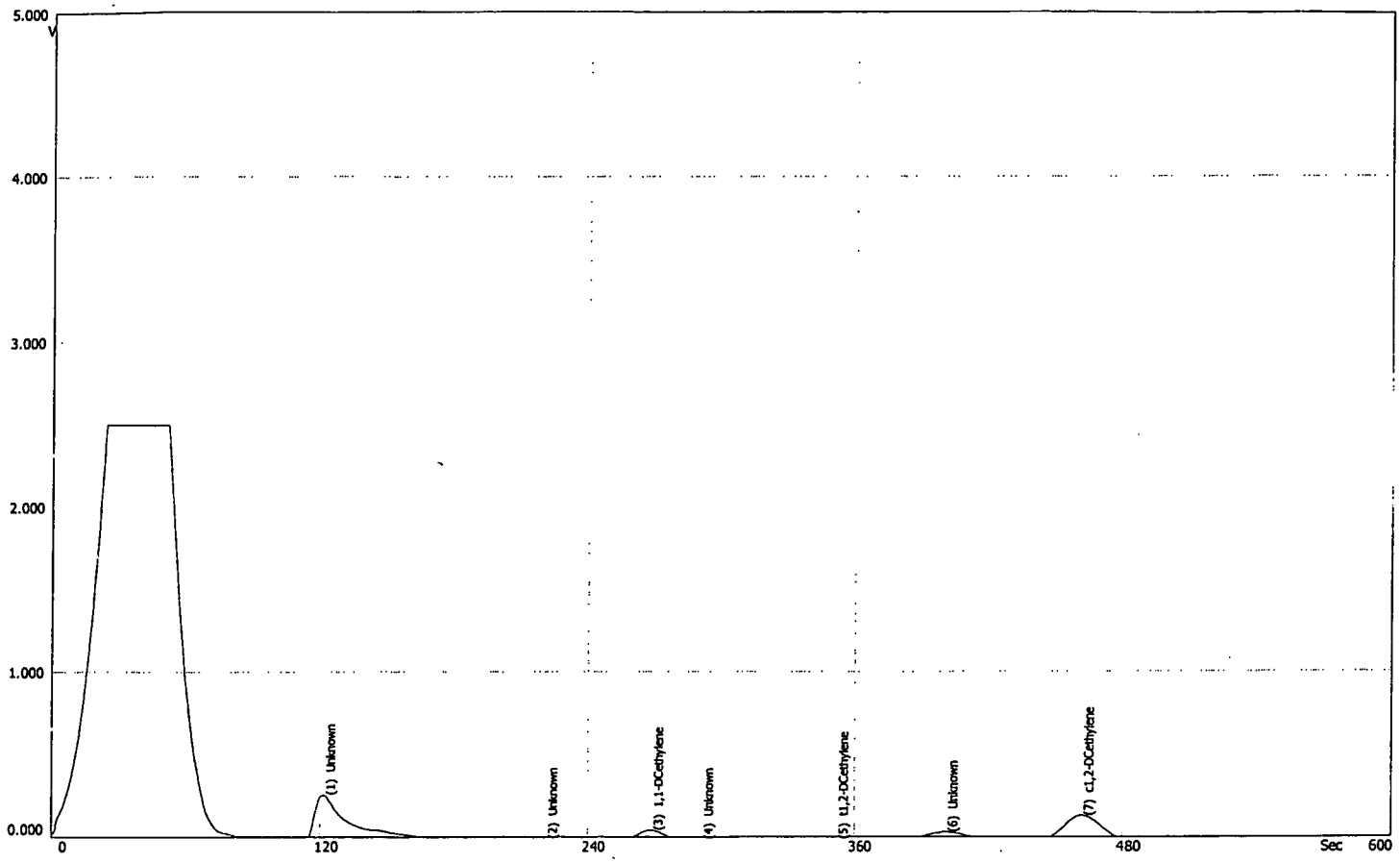
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		0.982	0.207	260.0	
2	TCethylene	0.047	1299	113	276.0	
3	TetraCethylene	4.322	190638	2491	324.0	

000033

Date: 02/08/01 16:09

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002	
Time	16:10:37	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	75	
Tag	QHUT-SW11L	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

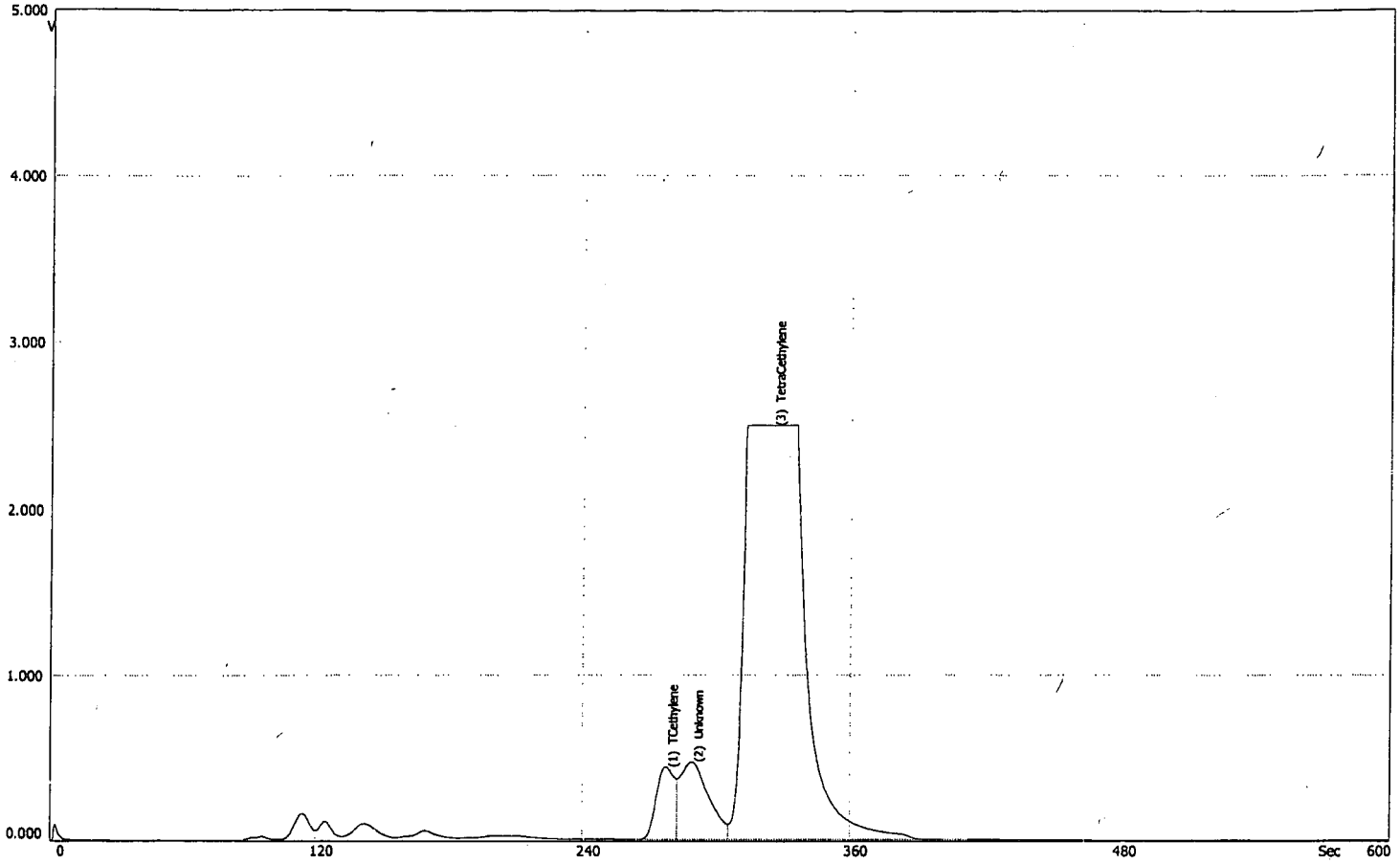
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		6050	286	121.1	
2	Unknown		660	12.7	221.0	
3	1,1-DCethylene	0.075	1232	64.5	268.3	
4	Unknown		409	5.983	290.9	
5	t1,2-DCethylene	0.009	435	18.0	351.7	
6	Unknown		1800	52.4	400.7	
7	c1,2-DCethylene	0.149	3528	161	461.6	

000034

Date: 02/08/01 16:21

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	16:23:30
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	77
Tag	QHUT-SW11L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

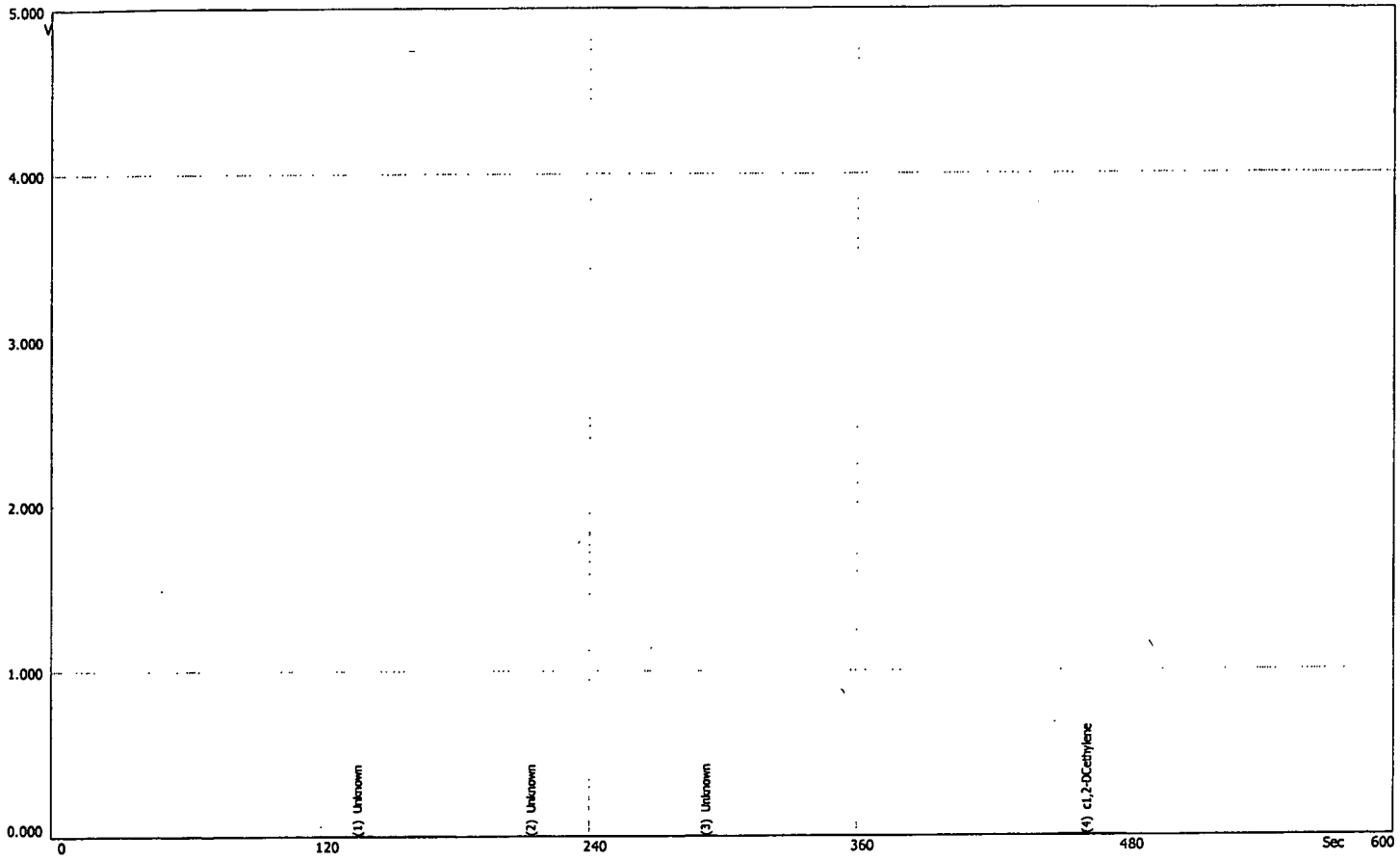
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.145	3975	440	276.8	
2	Unknown		7231	469	288.5	
3	TetraCethylene	4.906	216386	2398	324.0	

000035

Date: 02/08/01 16:34

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002
Time	12:36:08
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	43
Tag	QHUT-NW2L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	37.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

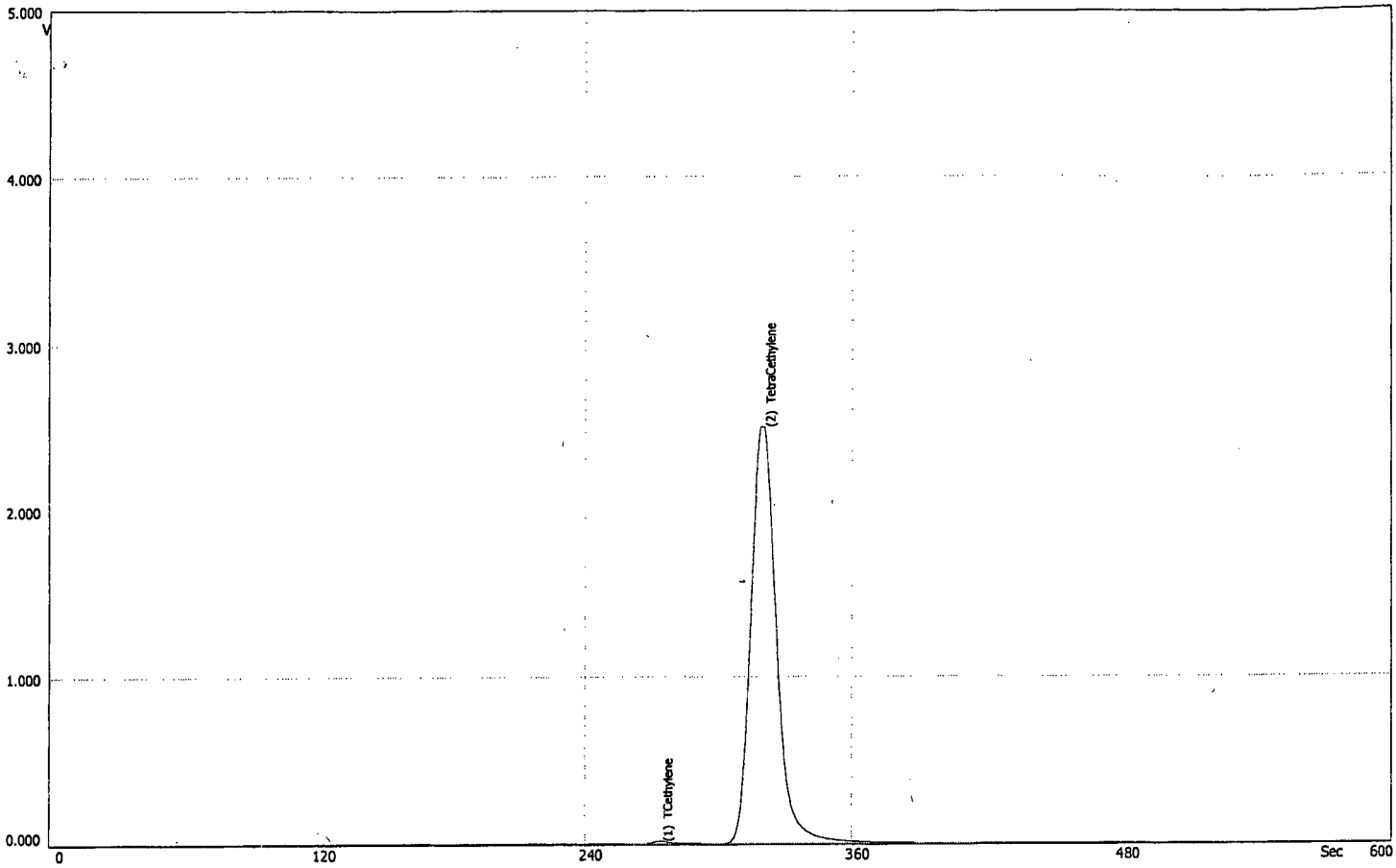
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		72.4	4.466	133.1	
2	Unknown		12.9	0.935	210.4	
3	Unknown		13.3	0.930	289.1	
4	c1,2-DCethylene	0.005	128	5.993	458.8	

000036

Date: 02/08/01 12:48

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	12:49:36
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	45
Tag	QHUT-NW2L
Column Temp	59.0 C
Det Temp	59.0 C
Ambient Temp	37.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

PEAK REPORT:

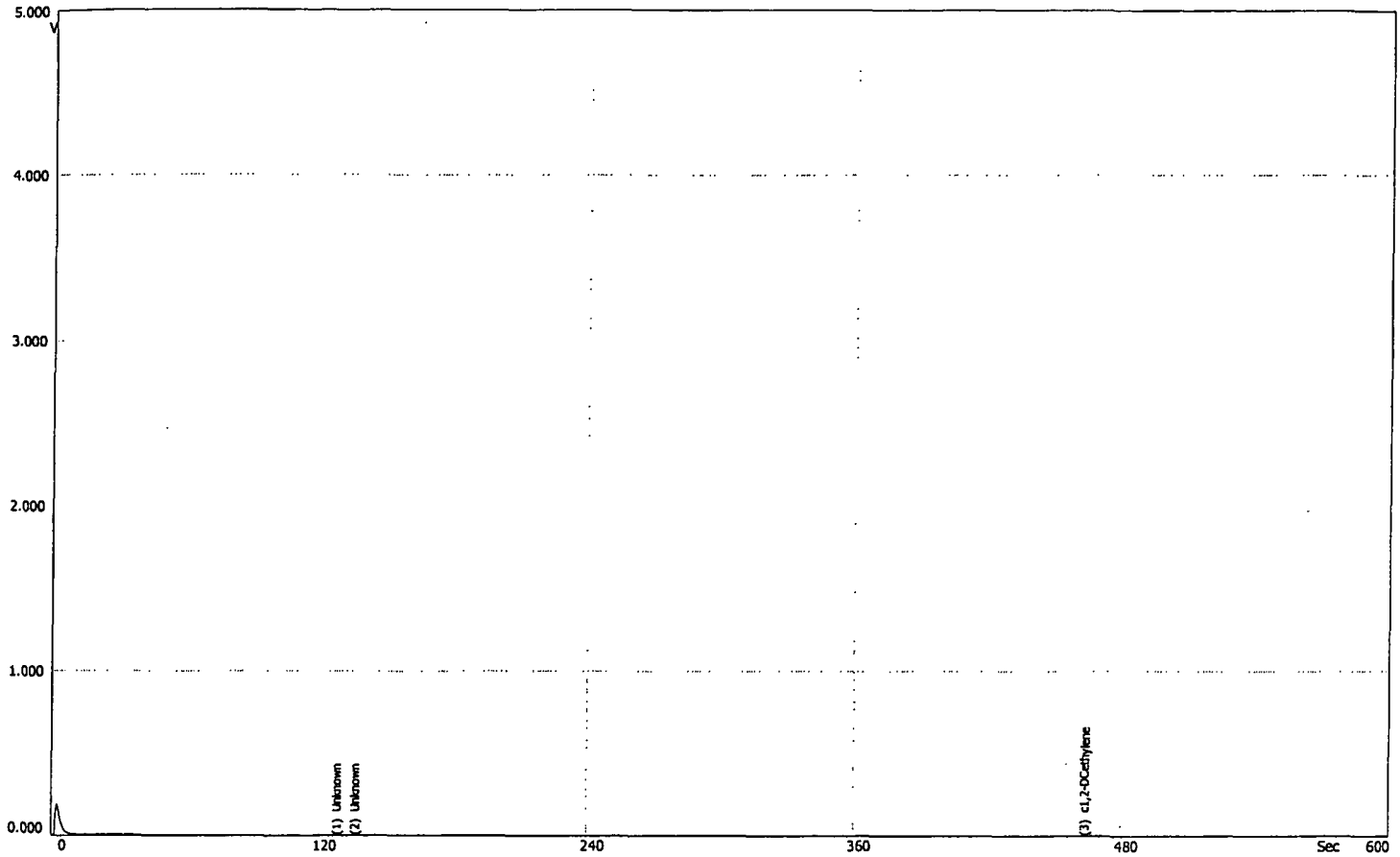
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.007	187	16.8	273.9	
2	TetraCethylene	0.748	33011	2496	319.5	

000037

Date: 02/08/01 13:01

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002	
Time	13:03:45	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	47	
Tag	QHUT-NW2LD	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	37.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

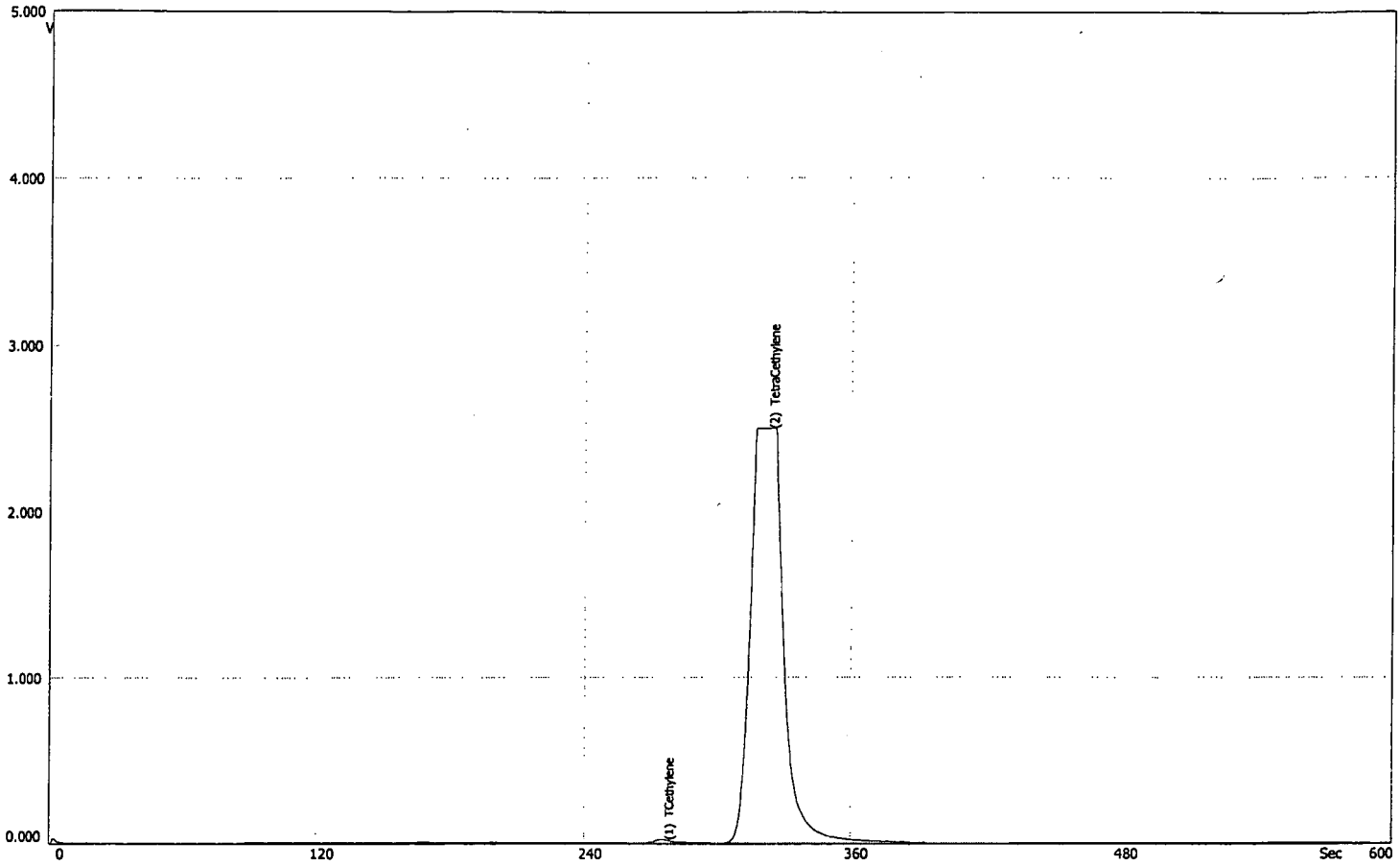
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		6.056	1.286	124.7	
2	Unknown		19.7	1.302	132.8	
3	c1,2-DCethylene	0.002	41.5	1.923	460.4	

000038

Date: 02/08/01 13:17

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	13:19:03
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	49
Tag	QHUT-NW2LD
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	37.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

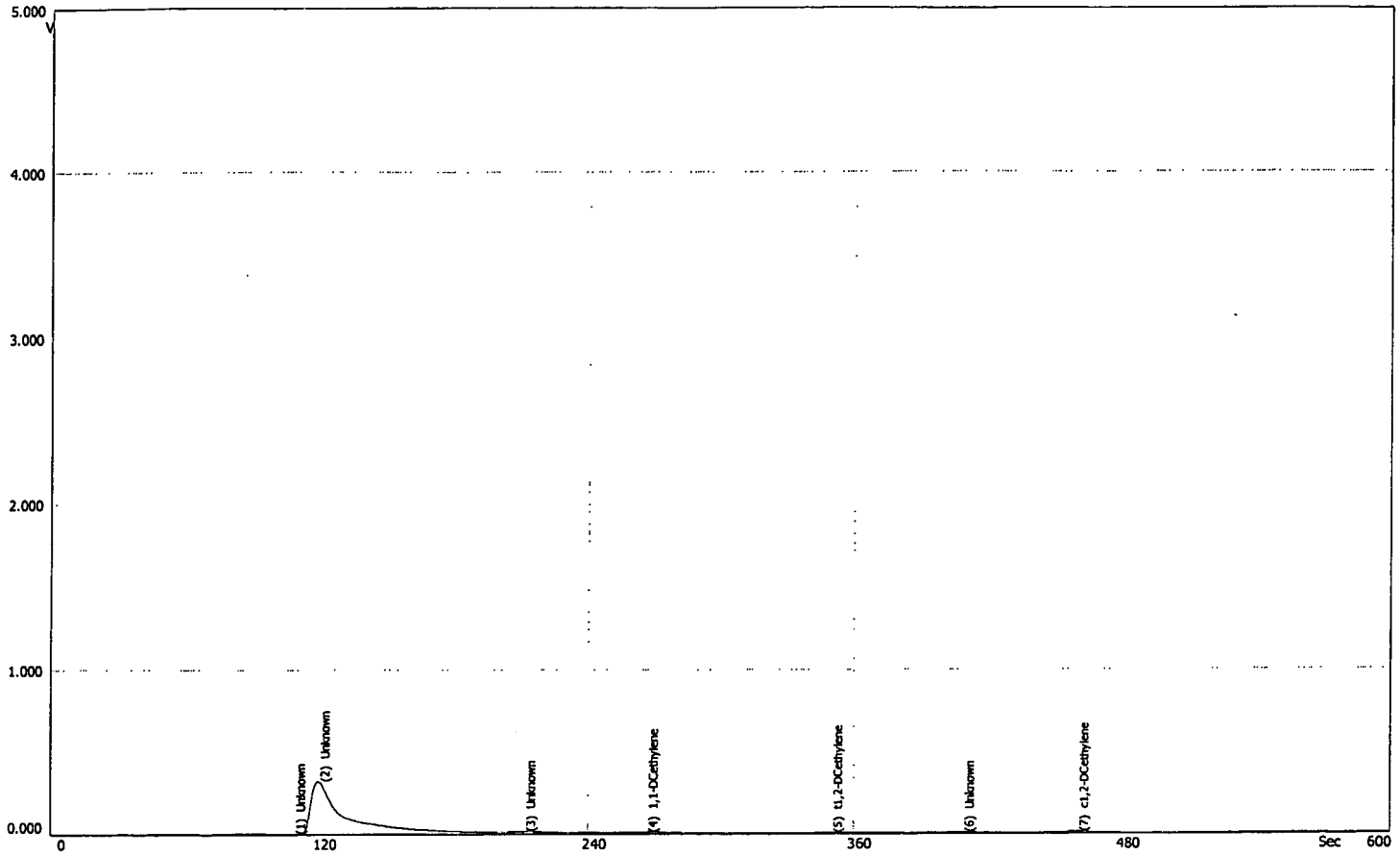
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.009	239	20.5	274.9	
2	TetraCethylene	1.220	53826	2496	321.1	

000039

Date: 02/08/01 13:31

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	13:33:09
Instrument	FGJM303
Detector	PID
Column	C
Analysis#	51
Tag	QHUT-NW6L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	37.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	100 Sec

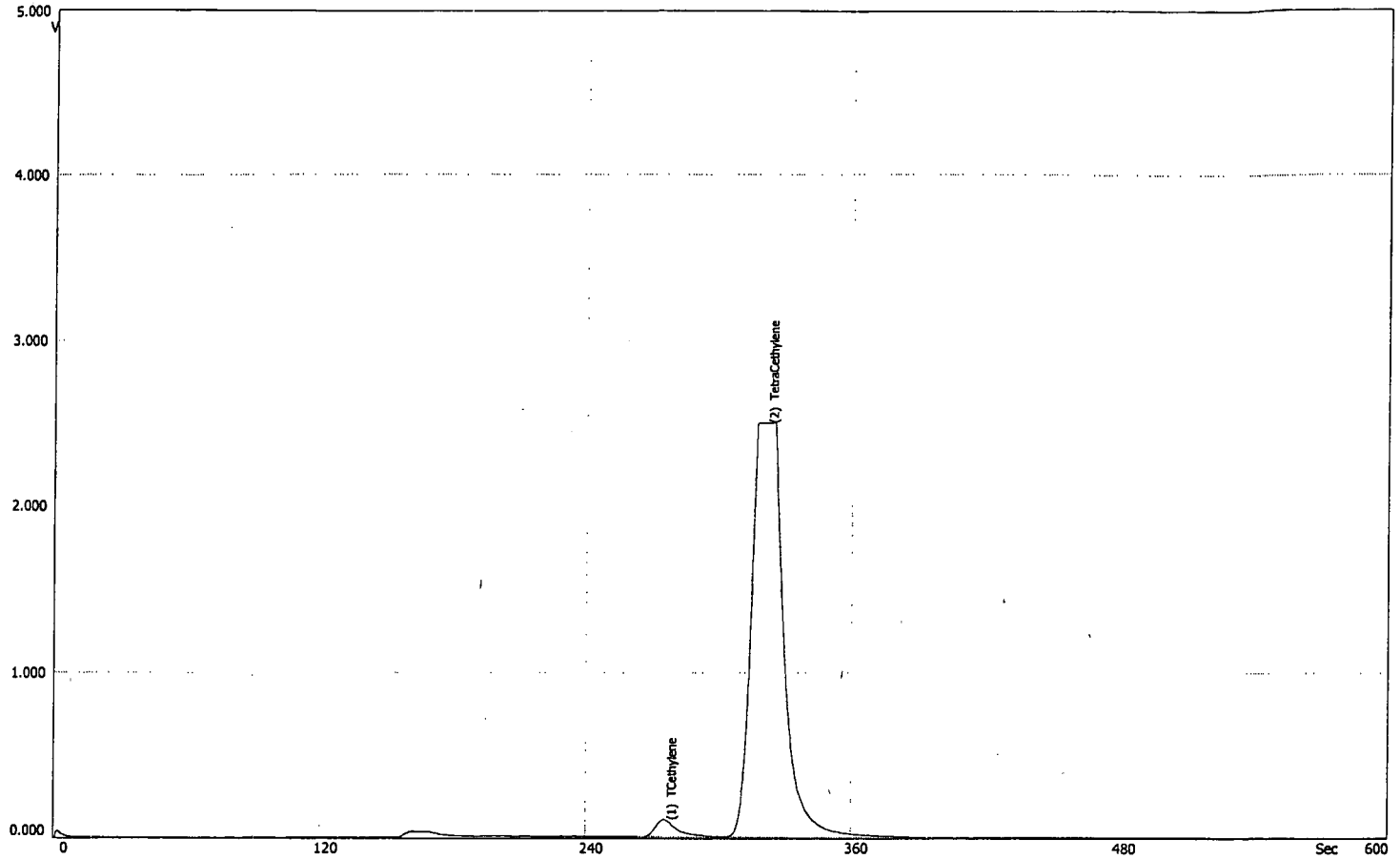
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		0.054	0.079	108.3	
2	Unknown		6849	320	119.3	
3	Unknown		74.6	4.833	211.4	
4	1,1-DCethylene	0.006	99.1	2.482	265.9	
5	t1,2-DCethylene	0.001	57.9	2.782	349.3	
6	Unknown		126	5.732	408.0	
7	c1,2-DCethylene	0.008	192	8.898	459.2	

000040

Date: 02/08/01 13:44

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	13:46:51
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	53
Tag	QHUT-NW6L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

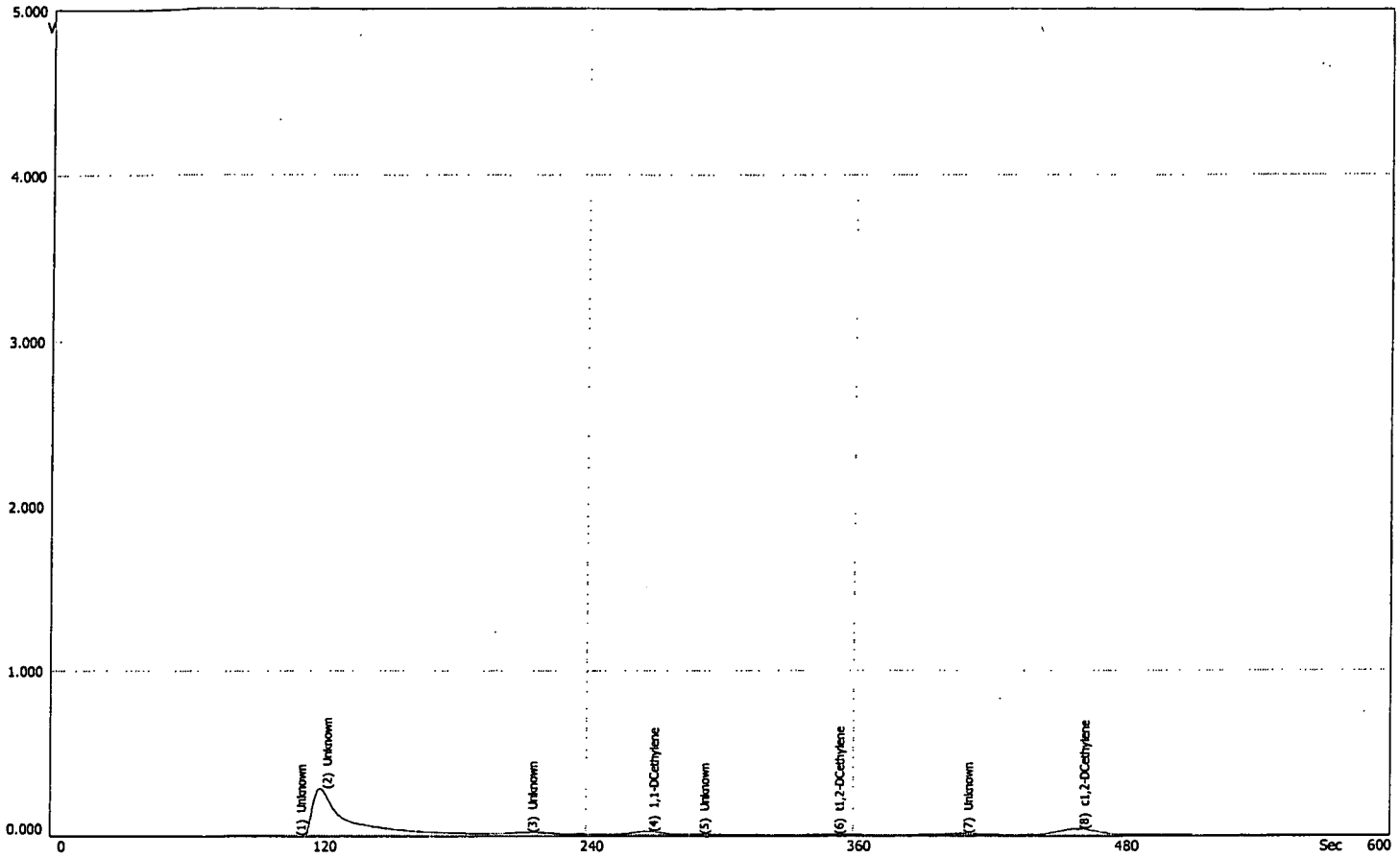
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.044	1220	105	275.7	
2	TetraCethylene	1.181	52073	2491	320.8	

000041

Date: 02/08/01 13:58

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	14:01:54	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	55	
Tag	QHUT-NW10L	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		1.045	0.346	108.7	
2	Unknown		6208	284	120.1	
3	Unknown		156	7.046	212.4	
4	1,1-DCethylene	0.015	255	15.4	266.9	
5	Unknown		59.2	1.437	289.6	
6	t1,2-DCethylene	0.002	84.8	4.649	350.3	
7	Unknown		187	7.754	408.0	

000042

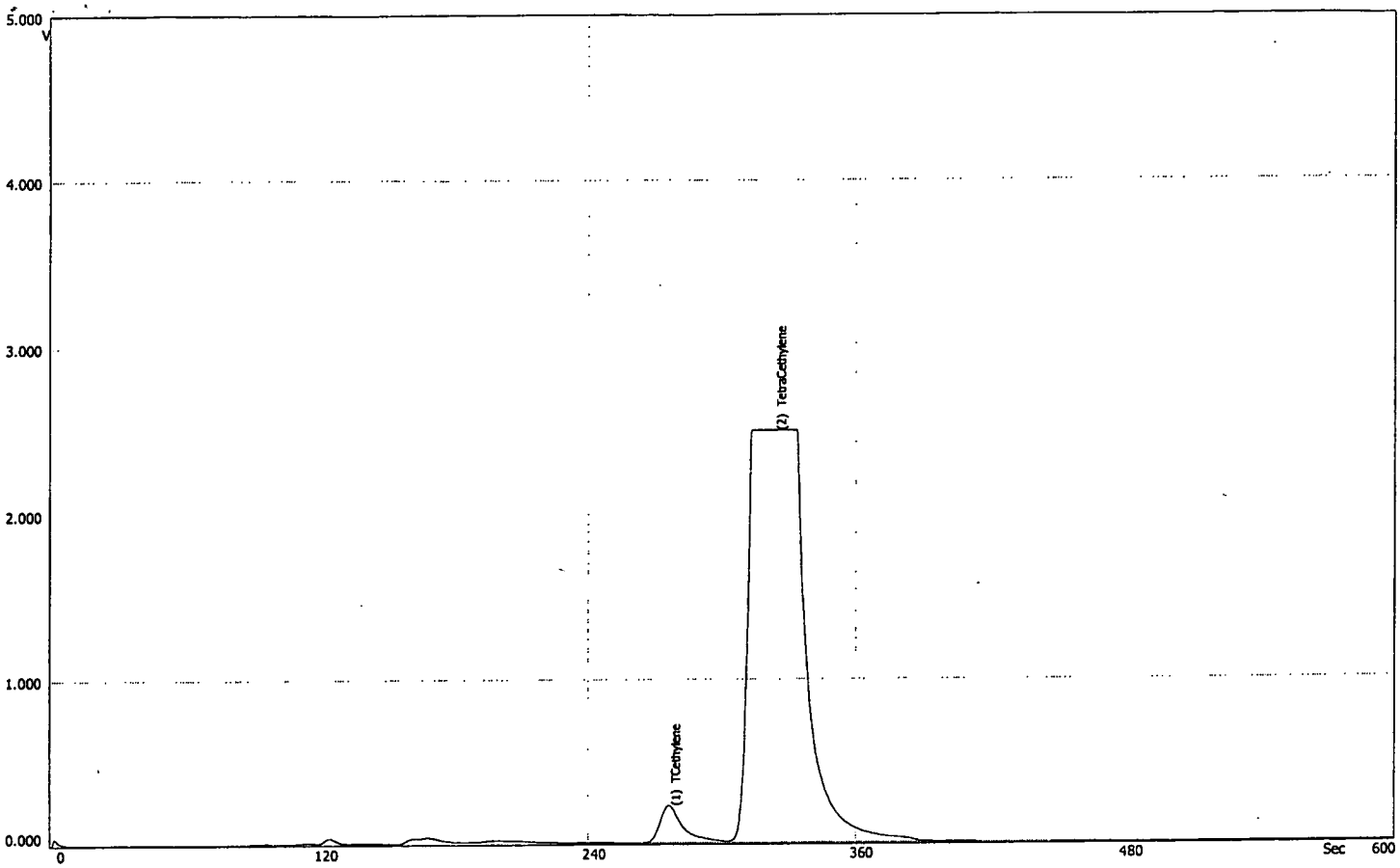
Date: 02/08/01 14:13

4584

8 c1,2-DCethylene	0.031	746	34.3	460.0

000043

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	14:15:37
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	57
Tag	QHUT-NW10L
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

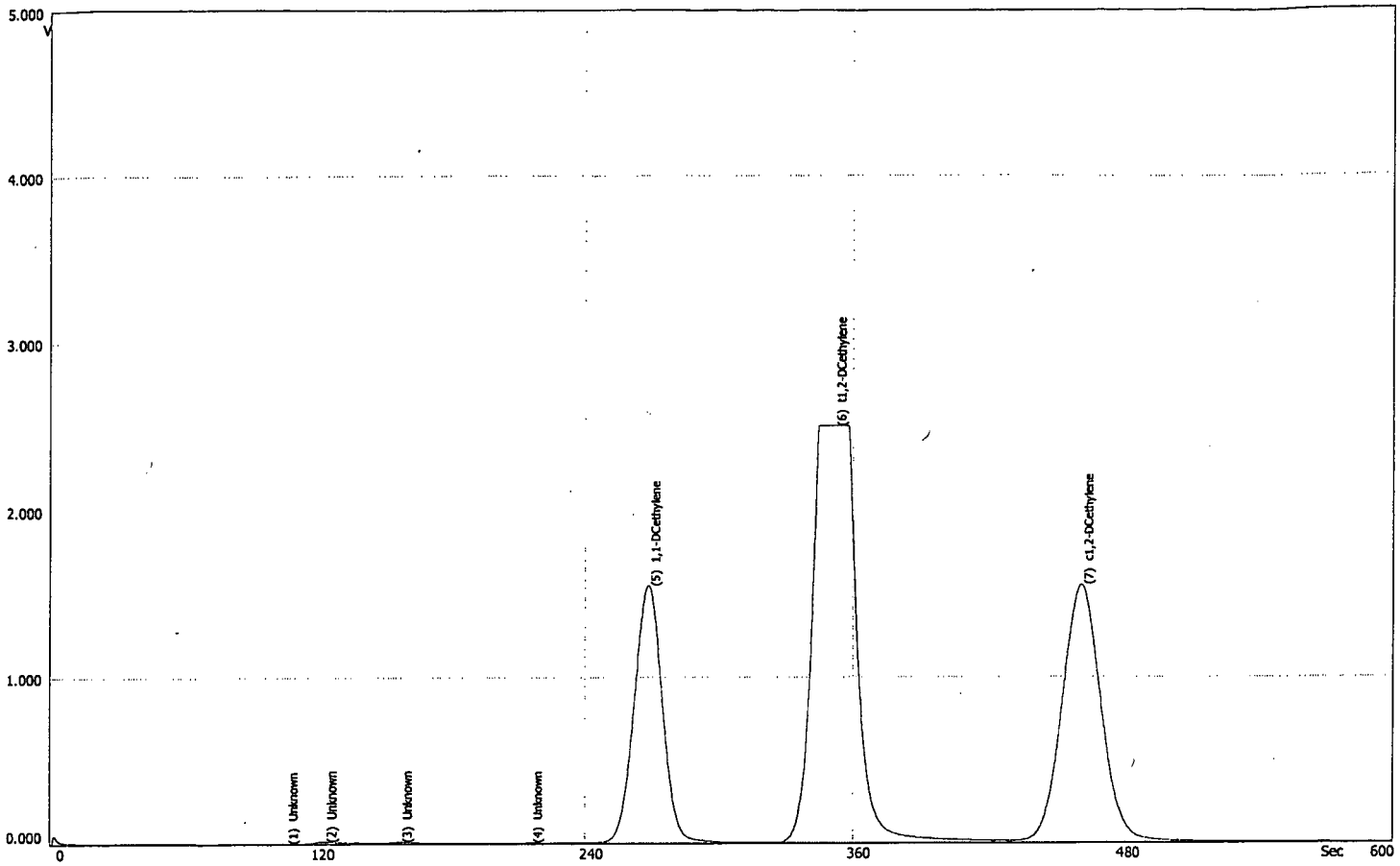
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	0.098	2684	227	276.0	
2	TetraCethylene	3.848	169711	2485	323.2	

000044

Date: 02/08/01 14:26

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	14:30:04	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	59	
Tag	CCV	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

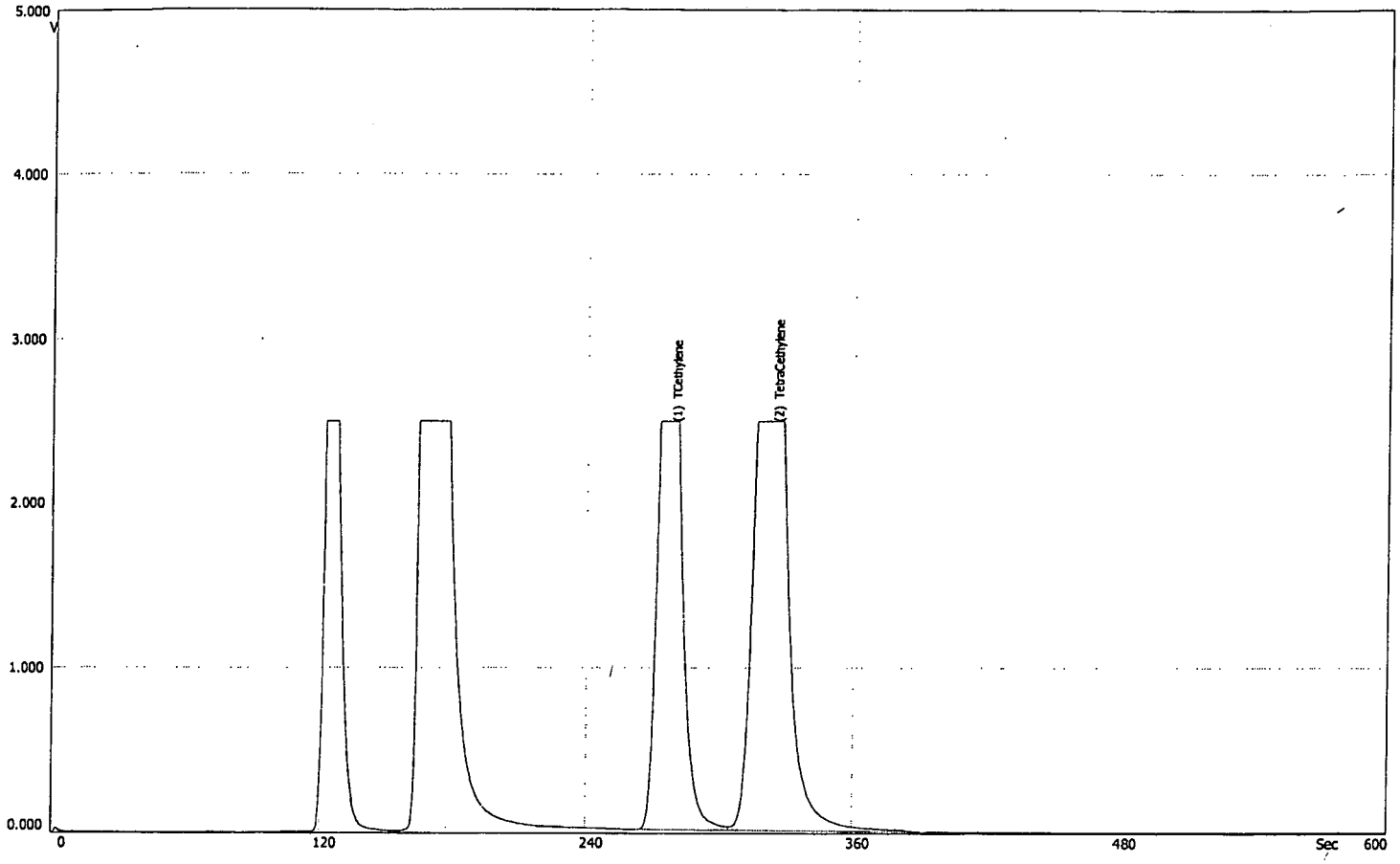
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		5.493	0.858	106.0	
2	Unknown		257	12.6	123.2	
3	Unknown		238	5.379	156.8	
4	Unknown		78.3	2.189	215.2	
5	1,1-DCethylene	1.390	22987	1548	268.0	
6	t1,2-DCethylene	1.605	74677	2496	351.3	
7	c1,2-DCethylene	1.330	31559	1539	461.6	

000045

Date: 02/08/01 14:41

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	14:42:25	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	61	
Tag	CCV	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

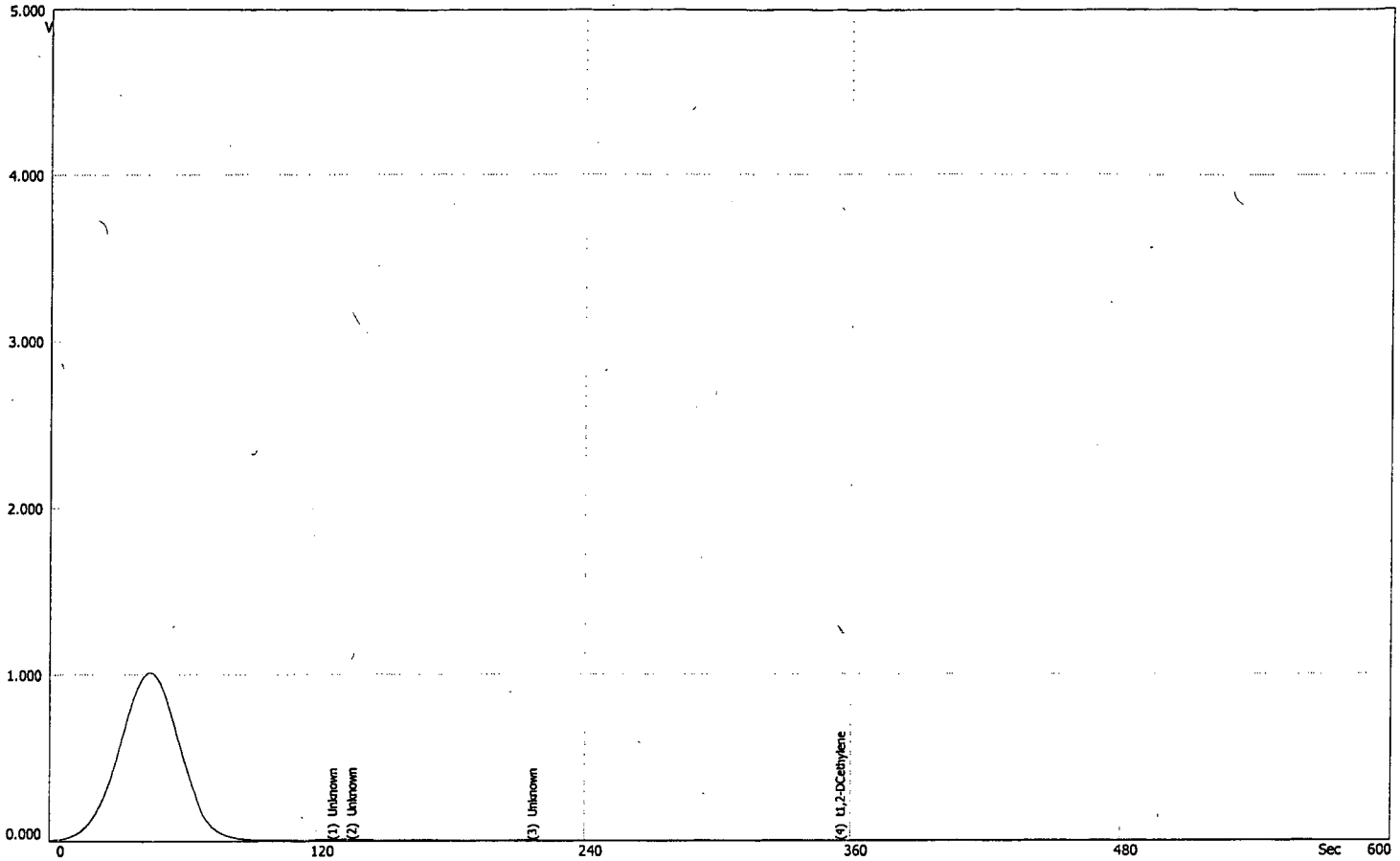
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	1.841	50492	2479	276.5	
2	TetraCethylene	1.739	76701	2464	321.9	

000046

Date: 02/08/01 14:53

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	14:54:42	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	63	
Tag	CCB1	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

PEAK REPORT:

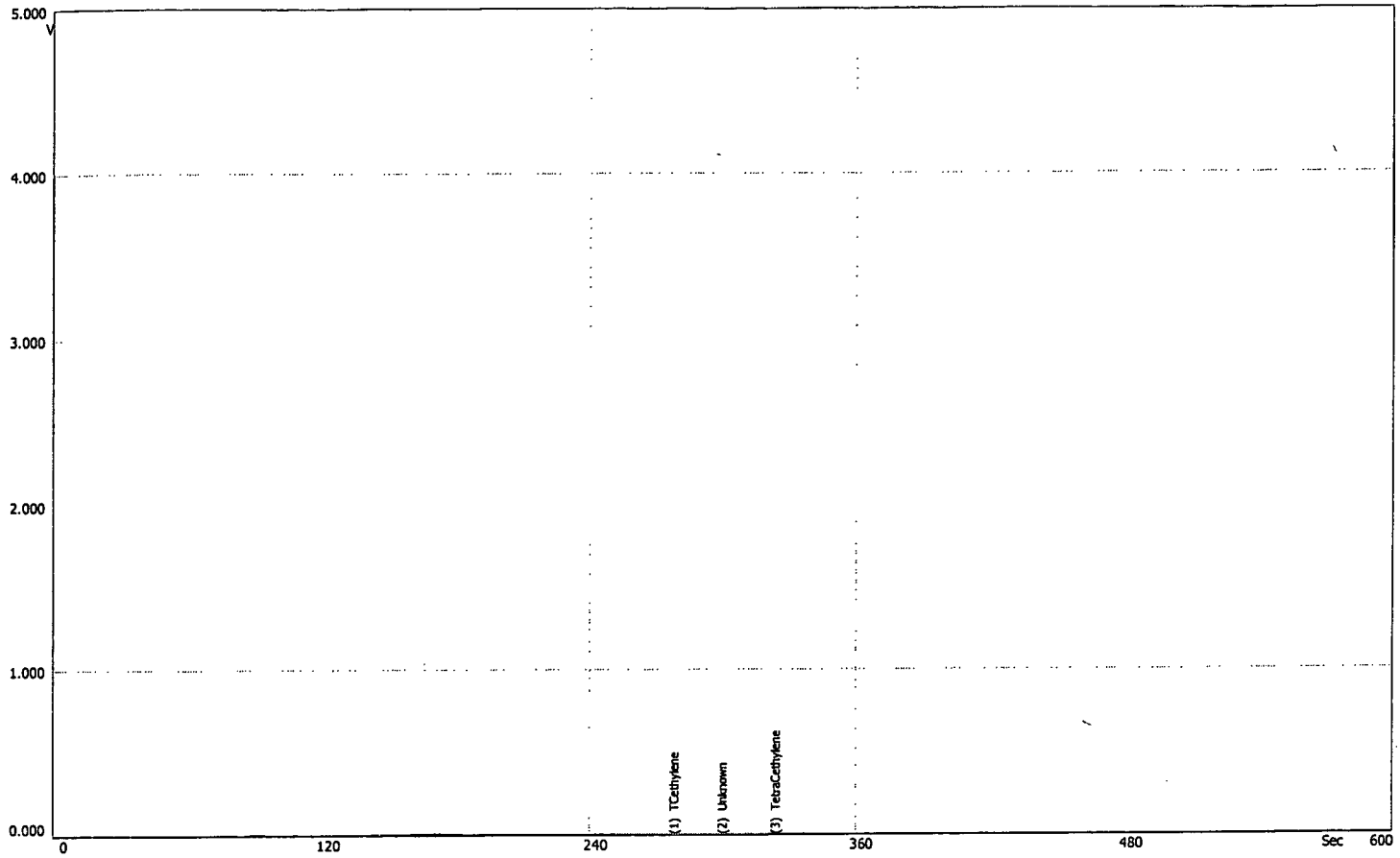
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		55.0	5.776	123.9	
2	Unknown		125	6.462	132.5	
3	Unknown		16.9	0.896	213.0	
4	t1,2-DCethylene		23.6	1.732	352.0	

000047

Date: 02/08/01 15:05

SiteChart Analysis Report

4584



RESULTS:

Date	Aug 01, 2002	
Time	15:06:58	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	65	
Tag	CCB1	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

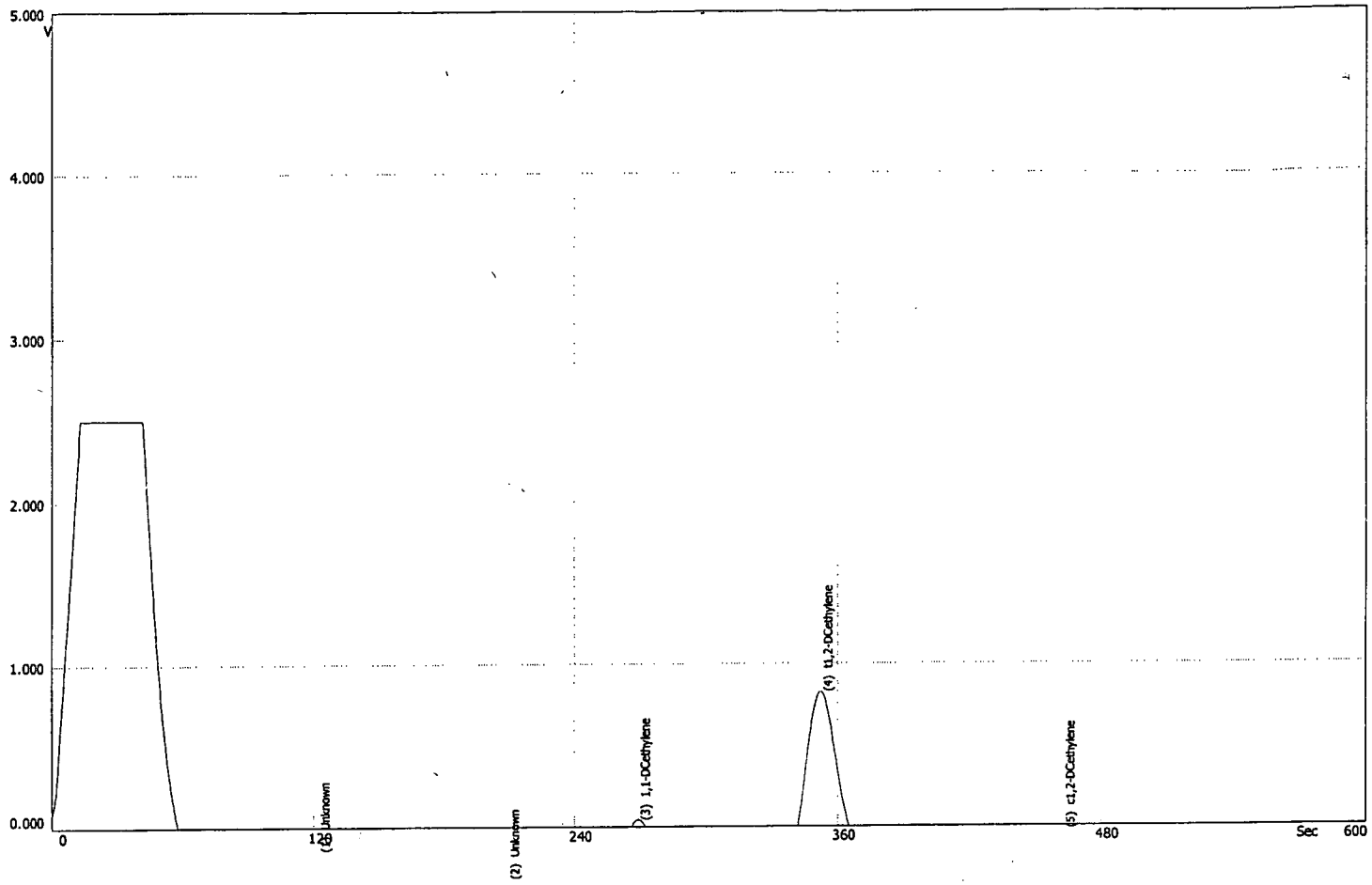
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene		22.7	0.860	274.4	
2	Unknown		0.327	0.113	296.3	
3	TetraCethylene		16.2	1.228	320.3	

000048

Date: 02/08/01 15:18

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	16:36:06	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	79	
Tag	CCV2	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

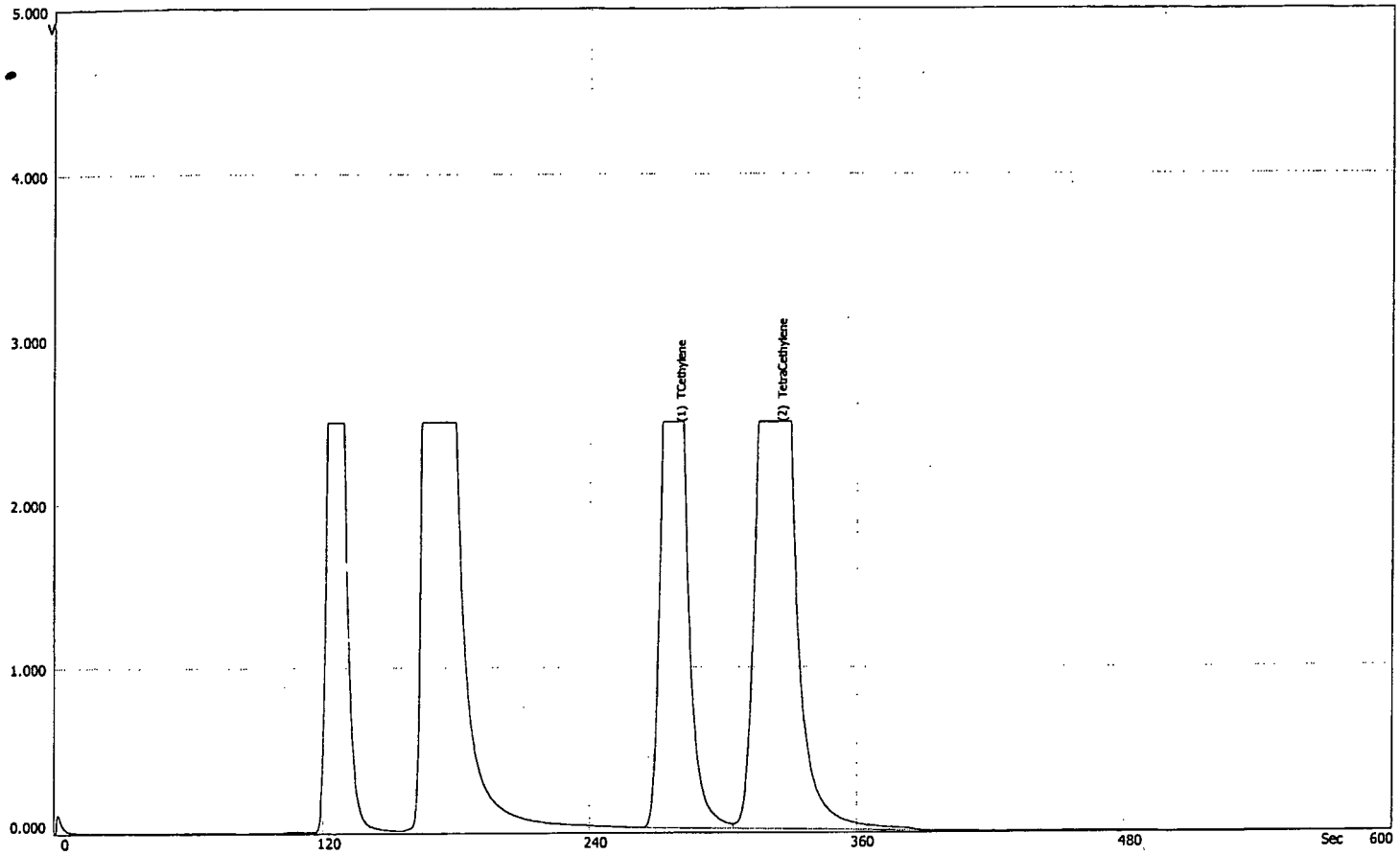
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		3473	178	121.5	
2	Unknown		6.344	0.153	208.8	
3	1,1-DCethylene	0.344	5693	366	268.5	
4	t1,2-DCethylene	0.499	23212	1151	352.0	
5	c1,2-DCethylene	0.269	6393	301	462.4	

000049

Date: 02/08/01 16:47

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002
Time	16:48:40
Instrument	FGJM303
Detector	PID
Column	B
Analysis#	81
Tag	CCV2
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	38.0 C

METHOD:

Analysis Time	600.0 S
PumpTime	20.0 S
Back Flush	200.0 S
Temperature	60.0 C
Pressure	8.0 psi
Inject	Syringe, 200.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1 mV/S
SlopeDown	0.1 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	251 Sec

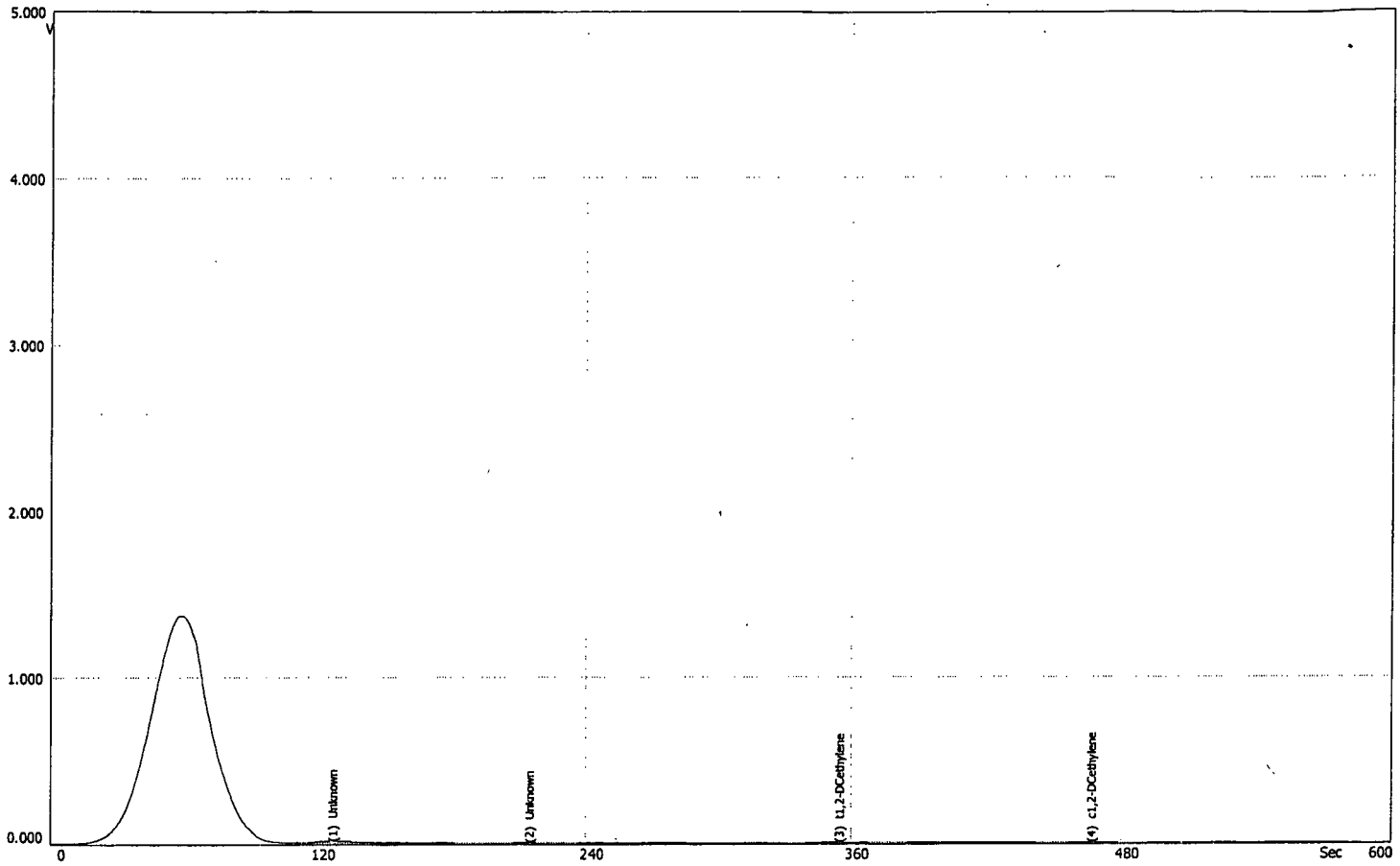
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene	2.244	61537	2471	277.3	
2	TetraCethylene	2.303	101600	2450	322.4	

000050

Date: 02/08/01 16:59

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	17:00:46	
Instrument	FGJM303	
Detector	PID	
Column	C	
Analysis#	83	
Tag	CCB2	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	100 Sec	

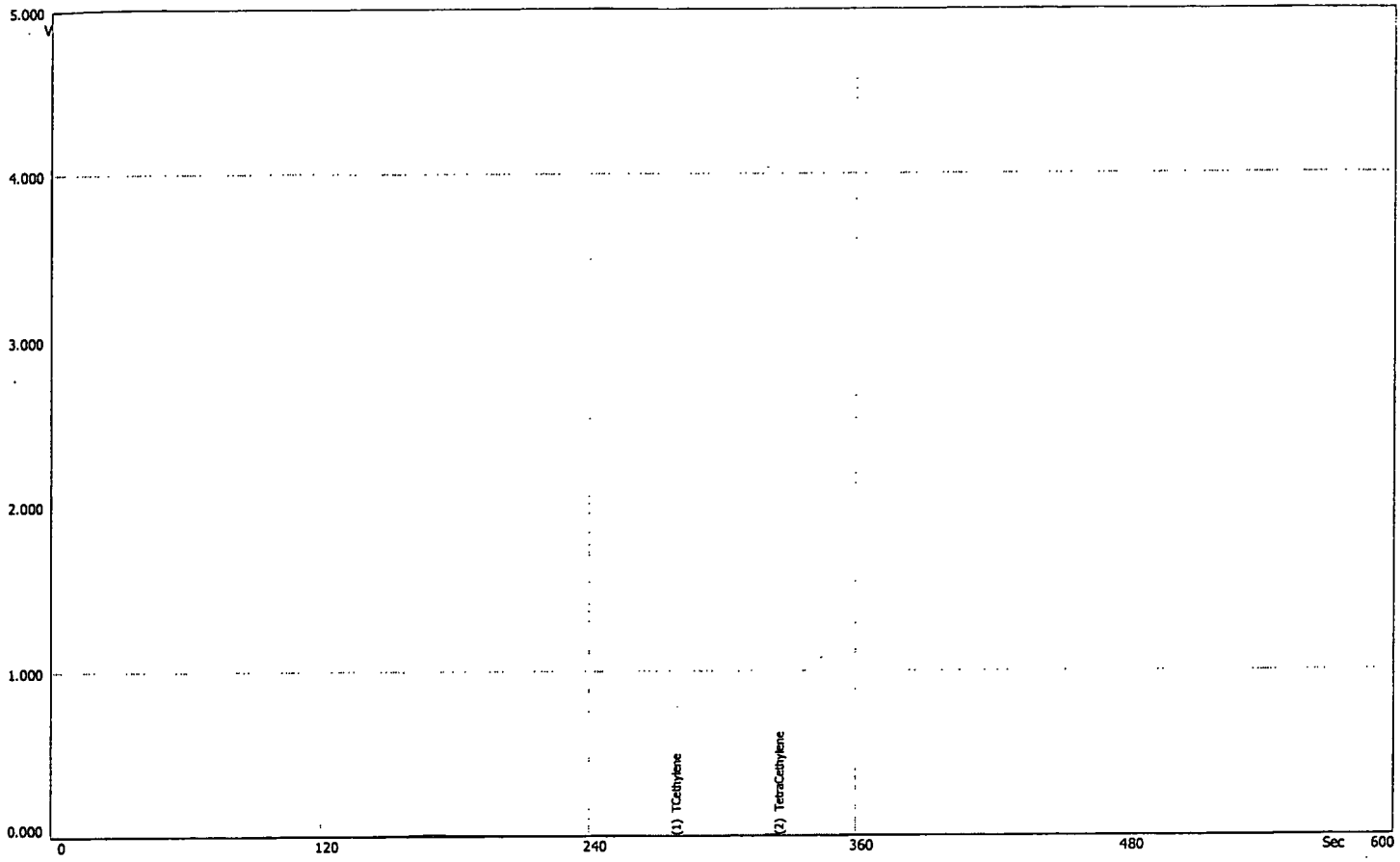
PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		310	10.7	123.5	
2	Unknown		17.9	1.006	211.8	
3	t1,2-DCethylene	0.001	54.1	3.437	351.3	
4	c1,2-DCethylene	0.001	31.8	1.006	463.2	

000051

Date: 02/08/01 17:11

SiteChart Analysis Report



RESULTS:

Date	Aug 01, 2002	
Time	17:12:41	
Instrument	FGJM303	
Detector	PID	
Column	B	
Analysis#	85	
Tag	CCB2	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	38.0	C

METHOD:

Analysis Time	600.0	S
PumpTime	20.0	S
Back Flush	200.0	S
Temperature	60.0	C
Pressure	8.0	psi
Inject	Syringe, 200.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	251 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	TCethylene		20.3	0.929	275.5	
2	TetraCethylene		33.4	2.407	321.9	

000052

Date: 02/08/01 17:23