

SUBSIPAN LABORATORIES INC
4140 LITT ORFIVE
HILLSIDE ILLINOIS 60130

1015311 . 3 016 : 1751 12

9-7923

7/5

FINAL REPORT BY: FOR

Final
1:30:36
1:13

7/22/89

DATE RECEIVED

1000

Note: upon

... were observed

11
10
9
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7
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2
1

本報館在廣州府城內...

3

.....

... ..

[illegible]

United States

CONFIDENTIAL

1 Acrolein.....19

Acrylonitrile

Benzene. 100.0000

Бромдихлорэ

4. **Bromoform...**

From me: 1990

Carbor

Chlorobenzene

Chloroethane

2-Chloroethy

Chloroform.

Chloromethane

12. Dibromochloroethane

13. 1,2-Dichloro-

13-Dichloro-

13. 1,4-Dichloro-

1,1-Dichloroethane

1,2-Dichloroethane.

16. 1,1-Dichloro-

trans-1,2-

20. 1,2-Dichloro

37-1, 3-10-1

2000-1-1

2

PAGE TWO OF S-L 8-7022

24.	Ethyl benzene.....	1.00.....	100-41-41..	BDL
25.	Methylene chloride.....	1.00.....	75-09-2..	49.40 ✓
26.	1,1,2,2-Tetrachloroethane.....	1.00.....	79-34-5..	BDL
27.	Tetrachloroethane.....	1.00.....	127-18-4..	BDL
28.	Toluene.....	1.00.....	109-99-7..	BDL
29.	1,1,1-Trichloroethane.....	1.00.....	71-65-6..	BDL
30.	1,1,2-Trichloroethane.....	1.00.....	78-00-5..	BDL
31.	Trichloroethane.....	1.00.....	78-01-6..	BDL
32.	Methyl chloride.....	1.00.....	75-01-4..	BDL
33.	4-Bromofluorobenzene.....	1.00.....	74-97-5..	695.00

Surrogate Standard Recovery Study

34.	++Bromochloromethane.....	1.00.....	74-95-6..	NI
35.	++2-Bromo-1-chloropropane.....	1.00.....	3017-95-6..	NI
36.	++1,4-Dichlorobutane.....	1.00.....	110-56-5..	100%

*.....INTERNAL STANDARD NOTE: MULTIPLE INTERNAL STANDARDS USED

MDL...MINIMUM DETECTION LIMIT

BDL...BELOW DETECTION LIMIT

DETECTION LIMITS LISTED HEREIN ARE MATRIX DEPENDENT AND ARE PROVIDED FOR GUIDANCE, WHICH MAY NOT ALWAYS BE ACHIEVABLE.

*.....COMPOUND SCREENED

NI....SURROGATE NOT INJECTED

Rev. 8/88

QUANT REPORT

Operator ID: LOPEZ
 Output File: \U90911::D1
 Data File: \U90911::D3
 Name: S/L 8-7022 U-02
 Misc: SPB 1000 40-2700 8 D/M

Quant Rev: 6 Quant Time: 890803 18:20
 Injected at: 880727 19:29
 Dilution Factor: 1.00000

ID File: ID_UOA::PS
 Title: Volatile Organic Analysis
 Last Calibration: 880602 16:38

	Compound	R.T.	Scan#	Area	Conc	Units	g
1)	4-Bromofluorobenzene	29.16	947	26535	695.00	ug/l	94
21	Methylene chloride	6.62	212	1956	49.46	ug/l	97
31	(s-std)1,4-Dichlorobutane	21.67	703	12162	250.09	ug/l	94

* Compound is ISTD

ANALYSIS OF ORGANIC CHEMICAL COMPOUNDS BY GAS CHROMATOGRAPHY / MASS SPECTROMETRY FINAL REPORT

CLIENT: MR. F. WESTON

SAMPLE: " C-67 Style "

DATE RECEIVED: 7/22/88

Note: upon visual review of the Total Ion Chromatogram, unidentified peaks were observed outside of those parameters which are listed below.

[illegible]

COMPOUND	MOL ug/l	CAS NUMBER	SAMPLE CONC. ug/l
1. Acrolein.....		107-92-8..	*
2. Acrylonitrile.....		107-13-1..	*
3. Benzene.....	1.00	71-43-2..	BOL
4. Bromodichloromethane.....	1.00	75-27-4..	BOL
5. Bromoform.....	1.00	75-25-2..	BOL
6. Bromomethane.....	1.00	74-83-9..	BOL
7. Carbon tetrachloride.....	1.00	56-23-5..	BOL
8. Chlorobenzene.....	1.00	108-90-7..	BOL
9. Chloroethane.....	1.00	75-00-3..	BOL
10. 2-Chloroethylvinyl ether....	1.00	110-79-9..	BOL
11. Chloroform.....	1.00	67-66-3..	BOL
12. Chloromethane.....	1.00	74-87-3..	BOL
13. Dibromochloromethane.....	1.00	124-48-1..	BOL
14. 1,2-Dichlorobenzene.....	1.00	95-50-1..	BOL
15. 1,3-Dichlorobenzene.....	1.00	541-73-1..	BOL
16. 1,4-Dichlorobenzene.....	1.00	106-46-7..	BOL
17. 1,1-Dichloroethane.....	1.00	75-34-3..	BOL
18. 1,2-Dichloroethane.....	1.00	107-06-2..	BOL
19. 1,1-Dichloroethene.....	1.00	75-35-4..	BOL
20. trans-1,2-Dichloroethene....	1.00	156-60-5..	BOL
21. 1,2-Dichloropropane.....	1.00	78-87-5..	BOL
22. cis-1,3-Dichloropropene....	1.00	10061-01-5..	BOL
23. trans-1,3-Dichloropropene....	1.00	10061-02-6..	BOL

QUANT REPORT

Operator ID: LOPEZ
 Output File: 090901:01
 Data File: 090901:03
 Name: S/L 6-7023 U-01
 Misc: SPB 1000 40-2700 8 D/M

Quant Raw: 0 Quant Time: 980903 16:19
 Injected at: 980727 16:47
 Dilution Factor: 1.00000

ID File: ID_UCA::PS
 Title: Volatile Organic Analysis
 Last Calibration: 990802 16:38

Compound	R.T.	Scan#	Area	Conc	Units	g
1) *4-Bromofluorobenzene	29.13	946	27053	695.00	ug/l	99
31) (s-std)1,4-Dichlorobutane	21.67	703	11664	235.26	ug/l	90

* Compound is ISTO

24.	Ethyl benzene.....	1.00.....	100-41-4..	BDL
25.	Methylene chloride.....	1.00.....	75-09-2..	BDL
26.	1,1,2,2-Tetrachloroethane.....	1.00.....	79-34-5..	BDL
27.	Tetrachloroethene.....	1.00.....	127-19-4..	BDL
28.	Toluene.....	1.00.....	108-93-3..	BDL
29.	1,1,1-Trichloroethane.....	1.00.....	71-55-6..	BDL
30.	1,1,2-Trichloroethane.....	1.00.....	79-00-5..	BDL
31.	Trichloroethene.....	1.00.....	72-31-6..	BDL
32.	Vinyl chloride.....	1.00.....	75-01-4..	BDL
33.	4-Bromofluorobenzene.....	1.00.....	74-97-5..	695.00

Surrogate Standard Recovery Study

4.**Bromochloromethane.....	1.00.....	74-95-6..	NI
35.**2-Bromo-1-chloropropane.....	1.00.....	3017-95-4..	NI
36.**1,4-Dichlorobutane.....	1.00.....	110-56-5..	94%

*.....INTERNAL STANDARD NOTE: MULTIPLE INTERNAL STANDARDS USED

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*.....COMPOUND SCREENED

NI....SURROGATE NOT INJECTED

Rev. 8/88

ANALYSIS OF ORGANIC CHEMICAL COMPOUNDS BY
GAS CHROMATOGRAPHY / MASS SPECTROMETRY
FINAL REPORT

DATE RECEIVED: 7/22/98

Note: upon visual review of the Total Ion Chromatogram, unidentified peaks were observed outside of those parameters which are listed below.

>>>>>>>>>>>>>>>>>> VOLATILES METHOD 624 (CWA) <<<<<<<<<<<<<<<<<<

COMPOUND	MOL wt	CAS NUMBER	SAMPLE CONC. ug/l
1. Acrolein.....	58	107-02-9..	*
2. Acrylonitrile.....	53	107-13-1..	*
3. Benzene.....	78	71-43-2..	BOL
4. Bromodichloromethane.....	174	75-27-4..	BOL
5. Bromoform.....	174	75-25-2..	BOL
6. Bromomethane.....	94	74-83-9..	BOL
7. Carbon tetrachloride.....	154	96-23-5..	BOL
8. Chlorobenzene.....	92	108-90-7..	BOL
9. Chloroethane.....	64	75-00-3..	BOL
10. 2-Chloroethylvinyl ether.....	110	110-75-8..	BOL
11. Chloroform.....	119	67-66-3..	BOL
12. Chloromethane.....	50	74-87-3..	BOL
13. Dibromochloromethane.....	246	124-48-1..	BOL
14. 1,2-Dichlorobenzene.....	147	95-50-1..	BOL
15. 1,3-Dichlorobenzene.....	147	541-73-1..	BOL
16. 1,4-Dichlorobenzene.....	147	106-46-7..	BOL
17. 1,1-Dichloroethane.....	99	75-34-3..	BOL
18. 1,2-Dichloroethane.....	99	107-06-2..	BOL
19. 1,1-Dichloroethene.....	96	75-35-4..	BOL
20. trans-1,2-Dichloroethene.....	96	156-60-5..	BOL
21. 1,2-Dichloropropane.....	112	78-87-5..	BOL
22. cis-1,3-Dichloropropene.....	112	10061-01-5..	BOL
23. trans-1,3-Dichloropropene.....	112	10061-02-6..	BOL

24.	Ethyl benzene.....	1.00.....	100-41-4..	BDL
25.	Methylene chloride.....	1.00.....	75-09-2..	BDL
26.	1,1,1,2-Tetrachloroethane.....	1.00.....	79-34-5..	BDL
27.	Tetrachloroethene.....	1.00.....	127-18-4..	BDL
28.	Toluene.....	1.00.....	108-89-3..	BDL
29.	1,1,1-Trichloroethane.....	1.00.....	71-55-6..	BDL
30.	1,1,2-Trichloroethane.....	1.00.....	78-00-5..	BDL
31.	Trichloroethene.....	1.00.....	79-01-6..	BDL
32.	Vinyl chloride.....	1.00.....	75-01-4..	BDL
33.	-4-Bromofluorobenzene.....	1.00.....	74-97-5..	695.00

Surrogate Standard Recovery Study

4.	++Bromochloromethane.....	1.00.....	74-95-6..	NI
5.	++2-Bromo-1-chloropropane.....	1.00.....	3017-95-6..	NI
36.	++1,4-Dichlorobutane.....	1.00.....	110-56-5..	94%

*.....INTERNAL STANDARD NOTE: MULTIPLE INTERNAL STANDARDS USED

MDL...MINIMUM DETECTION LIMIT

BDL...BELOW DETECTION LIMIT

DETECTION LIMITS LISTED HEREIN ARE MATRIX DEPENDENT AND ARE PROVIDED FOR GUIDANCE, WHICH MAY NOT ALWAYS BE ACHIEVABLE.

*.....COMPOUND SCREENED

NI....SURROGATE NOT INJECTED

Rev. 8/88

QUANT REPORT

Operator ID: LOPEZ
 Output File: \U9093::D1
 Data File: \U9093::D3
 Name: S/L 8-7024 U-04
 Misc: SPB 1000 40-2700 8 O/M

Quant Rev: 6 Quant Time: 880803 13:27
 Injected at: 880727 20:53
 Dilution Factor: 1.00000

ID File: ID_VOA::PS
 Title: Volatile Organic Analysis
 Last Calibration: 880802 16:38

Compound	R.T.	Scan#	Area	Conc	Unit
1) *4-Bromofluorobenzene	29.16	947	28271	695.00	ug/l
31) (s-std)1,4-Dichlorobutane	21.64	702	12124	234.00	ug/l

* Compound is ISTD

STUBBSANALYZATORS INC
4140 LITT DRIVE
MILWAUKEE WISCONSIN 53212

ANALYSIS OF ORGANIC COMPOUNDS BY
GAS CHROMATOGRAPHY / MASS SPECTROMETRY
FINAL REPORT

[illegible]

QUESTIONS AND ANSWERS

2008-08-25

Section 10

RECEIVED BY: FOR

DATE RECEIVED: 7/22/88

Note: upon visual review of the Total Ion Chromatogram, unidentified peaks were observed outside of those parameters which are listed below.

~~~~~ VOLATILES METHOD 624 (CWA) ~~~~~

| CAS      | SAMPLE CONC. |
|----------|--------------|
| NUMBER   | ug/l         |
| MDL      |              |
| ug/l     |              |
| COMPOUND |              |

|     |                                |      |           |     |
|-----|--------------------------------|------|-----------|-----|
| 1.  | Acrylonitrile.....             | 1.00 | 107-02-9  | *   |
| 2.  | Acrylonitrile.....             | 1.00 | 107-13-1  | *   |
| 3.  | Benzene.....                   | 1.00 | 71-43-2   | BOL |
| 4.  | Bromodichloromethane.....      | 1.00 | 75-27-4   | BOL |
| 5.  | Bromoform.....                 | 1.00 | 75-29-2   | BOL |
| 6.  | Bromomethane.....              | 1.00 | 74-83-9   | BOL |
| 7.  | Carbon tetrachloride.....      | 1.00 | 56-23-5   | BOL |
| 8.  | Chlorobenzene.....             | 1.00 | 108-90-7  | BOL |
| 9.  | Chloroethane.....              | 1.00 | 75-00-3   | BOL |
| 10. | -2-Chloroethylvinyl ether..... | 1.00 | 110-75-8  | BOL |
| 11. | Chloroform.....                | 1.00 | 67-66-3   | BOL |
| 12. | Chloromethane.....             | 1.00 | 74-87-7   | BOL |
| 13. | Dibromochloromethane.....      | 1.00 | 124-48-1  | BOL |
| 14. | 1,2-Dichlorobenzene.....       | 1.00 | 95-50-1   | BOL |
| 15. | 1,3-Dichlorobenzene.....       | 1.00 | 541-73-1  | BOL |
| 16. | 1,4-Dichlorobenzene.....       | 1.00 | 105-46-7  | BOL |
| 17. | 1,1-Dichloroethane.....        | 1.00 | 75-34-3   | BOL |
| 18. | 1,2-Dichloroethane.....        | 1.00 | 107-06-2  | BOL |
| 19. | 1,1-Dichloroethene.....        | 1.00 | 75-35-4   | BOL |
| 20. | trans-1,2-Dichloroethene.....  | 1.00 | 156-60-5  | BOL |
| 21. | 1,2-Dichloropropane.....       | 1.00 | 78-87-5   | BOL |
| 22. | cis-1,3-Dichloropropane.....   | 1.00 | 1061-01-5 | BOL |
| 23. | trans-1,3-Dichloropropane..... | 1.00 | 1061-02-6 | BOL |

|                                 |           |            |     |
|---------------------------------|-----------|------------|-----|
| 01. n-pentane.....              | 1.00..... | 100-11-4.. | 501 |
| 02. n-hexane.....               | 1.00..... | 50-29-2..  | 501 |
| 03. 1,2-dichloroethane.....     | 1.00..... | 78-36-5..  | 501 |
| 04. 1,1,2-trichloroethane.....  | 1.00..... | 78-12-1..  | 501 |
| 05. Tetraethane.....            | 1.00..... | 100-82-3.. | 501 |
| 06. Toluene.....                | 1.00..... | 71-43-2..  | 501 |
| 07. 1,1,1-trichloroethane.....  | 1.00..... | 71-55-5..  | 501 |
| 08. 1,1,2-trichloroethane.....  | 1.00..... | 78-00-5..  | 501 |
| 09. 1,1,3-trichloroethane.....  | 1.00..... | 78-01-3..  | 501 |
| 10. 1,2,3-trichloroethane.....  | 1.00..... | 78-01-3..  | 501 |
| 11. 1,2,4-trichloroethane.....  | 1.00..... | 78-01-3..  | 501 |
| 12. 1,3,5-trichlorobenzene..... | 1.00..... | 71-55-5..  | 501 |
| 13. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 14. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 15. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 16. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 17. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 18. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 19. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 20. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 21. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 22. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 23. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 24. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 25. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 26. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 27. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 28. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 29. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 30. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 31. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 32. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 33. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 34. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 35. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 36. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 37. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 38. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 39. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 40. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 41. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 42. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 43. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 44. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 45. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 46. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 47. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 48. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 49. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 50. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 51. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 52. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 53. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 54. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 55. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 56. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 57. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 58. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 59. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 60. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 61. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 62. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 63. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 64. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 65. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 66. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 67. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 68. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 69. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 70. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 71. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 72. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 73. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 74. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 75. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 76. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 77. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 78. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 79. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 80. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 81. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 82. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 83. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 84. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 85. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 86. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 87. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 88. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 89. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 90. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 91. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 92. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 93. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 94. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 95. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 96. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 97. 1,4-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 98. 1,2-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 99. 1,3-Dichlorobenzene.....    | 1.00..... | 71-55-5..  | 501 |
| 100. 1,4-Dichlorobenzene.....   | 1.00..... | 71-55-5..  | 501 |

## Surrogate Standard Recovery Study

|                              |           |           |     |
|------------------------------|-----------|-----------|-----|
| 74. 1,2-Dichlorobenzene..... | 1.00..... | 74-95-6.. | NI  |
| 75. 1,3-Dichlorobenzene..... | 1.00..... | 75-95-6.. | NI  |
| 76. 1,4-Dichlorobenzene..... | 1.00..... | 76-95-6.. | 94% |

..... INTERNAL STANDARD NOTE: MULTIPLE INTERNAL STANDARDS USED

MDL... MINIMUM DETECTION LIMIT

501... BELOW DETECTION LIMIT

DETECTION LIMITS LISTED HEREIN ARE MATRIX DEPENDENT AND ARE PROVIDED FOR GUIDANCE, WHICH MAY NOT ALWAYS BE ACHIEVABLE.

\*..... COMPOUND SCREENED

NI..... SURROGATE NOT INJECTED

Rev. 8/98

ANALYSIS OF ORGANIC CHEMICAL COMPOUNDS BY  
GAS CHROMATOGRAPHY / MASS SPECTROMETRY  
FINAL 959081

SAMPLE: " S-02 Background "

DATE RECEIVED: 7/22/88

Note: upon visual review of the Total Ion Chromatogram, unidentified peaks were observed outside of those parameters which are listed below.

>>>>>>>>>>>>>> VOLATILES METHOD 624 (CWA) <<<<<<<<<<<<<<

| COMPOUND | MDL<br>ug/l | CAS<br>NUMBER | SAMPLE CONC.<br>ug/l |
|----------|-------------|---------------|----------------------|
|----------|-------------|---------------|----------------------|

|     |                                |              |     |
|-----|--------------------------------|--------------|-----|
| 1.  | Acrolein.....                  | 107-02-9..   | *   |
| 2.  | Acrylonitrile.....             | 107-13-1..   | *   |
| 3.  | Benzene.....                   | 71-43-2..    | BOL |
| 4.  | Bromodichloromethane.....      | 75-27-4..    | BOL |
| 5.  | Bromoform.....                 | 75-25-2..    | BOL |
| 6.  | Bromomethane.....              | 74-83-9..    | BOL |
| 7.  | Carbon tetrachloride.....      | 56-23-5..    | BOL |
| 8.  | Chlorobenzene.....             | 108-90-7..   | BOL |
| 9.  | Chloroethane.....              | 75-00-3..    | BOL |
| 10. | 2-Chloroethylvinyl ether.....  | 110-75-8..   | BOL |
| 11. | Chloroform.....                | 67-66-3..    | BOL |
| 12. | Chloromethane.....             | 74-87-3..    | BOL |
| 13. | Dibromochloromethane.....      | 124-48-1..   | BOL |
| 14. | 1,2-Dichlorobenzene.....       | 95-50-1..    | BOL |
| 15. | 1,3-Dichlorobenzene.....       | 541-73-1..   | BOL |
| 16. | 1,4-Dichlorobenzene.....       | 106-46-7..   | BOL |
| 17. | 1,1-Dichloroethane.....        | 75-34-3..    | BOL |
| 18. | 1,2-Dichloroethane.....        | 107-06-2..   | BOL |
| 19. | 1,1-Dichloroethene.....        | 75-35-4..    | BOL |
| 20. | trans-1,2-Dichloroethene.....  | 196-60-5..   | BOL |
| 21. | 1,2-Dichloropropene.....       | 78-87-5..    | BOL |
| 22. | cis-1,3-Dichloropropene.....   | 10061-01-5.. | BOL |
| 23. | trans-1,3-Dichloropropene..... | 10061-02-6.. | BOL |

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|     |                              |           |            |        |
|-----|------------------------------|-----------|------------|--------|
| 24. | Ethyl benzene.....           | 1.00..... | 100-41-4.. | BDL    |
| 25. | Methylene chloride.....      | 1.00..... | 75-09-3..  | BDL    |
| 26. | 1,1,2,2-Tetrachloroethane... | 1.00..... | 79-74-5..  | BDL    |
| 27. | Tetrachloroethene.....       | 1.00..... | 127-18-4.. | BDL    |
| 28. | Toluene.....                 | 1.00..... | 108-88-3.. | BDL    |
| 29. | 1,1,1-Trichloroethane.....   | 1.00..... | 71-55-6..  | BDL    |
| 30. | 1,1,2-Trichloroethane.....   | 1.00..... | 79-00-5..  | BDL    |
| 31. | Trichloroethene.....         | 1.00..... | 79-01-6..  | BDL    |
| 32. | Vinyl chloride.....          | 1.00..... | 75-01-4..  | BDL    |
| 33. | 4-Bromofluorobenzene.....    | 1.00..... | 74-97-5..  | 695.00 |

Surrogate Standard Recovery Study

|     |                              |           |             |     |
|-----|------------------------------|-----------|-------------|-----|
| 34. | 4-Bromochloromethane.....    | 1.00..... | 74-95-4..   | NI  |
| 35. | 2-Bromo-1-chloropropane..... | 1.00..... | 3017-95-6.. | NI  |
| 36. | 1,4-Dichlorobutane.....      | 1.00..... | 110-58-5..  | 97% |

\*.....INTERNAL STANDARD NOTE: MULTIPLE INTERNAL STANDARDS USED

MDL...MINIMUM DETECTION LIMIT

BDL...BELOW DETECTION LIMIT

DETECTION LIMITS LISTED HEREIN ARE MATRIX DEPENDENT AND ARE PROVIDED FOR GUIDANCE, WHICH MAY NOT ALWAYS BE ACHIEVABLE.

\*.....COMPOUND SCREENED

NI....SURROGATE NOT INJECTED

Rev. 8/88

# QUANT REPORT

Operator ID: LOPED  
 Output File: 009887:01  
 Data File: 009887:03  
 Name: S/L #9-7027 U-08  
 Misc: SPS 1000 40-2700 3 D/M

Quant Rev: 6 Quant Time: 880805 18:12  
 Injected at: 880727 23:01  
 Dilution Factor: 1.00000

ID File: ID\_UOA:PS  
 Title: Volatile Organic Analysis  
 Last Calibration: 880802 16:38

|     | Compound                  | R.T.  | Scan# | Area  | Conc   | Units | q  |
|-----|---------------------------|-------|-------|-------|--------|-------|----|
| 1)  | *4-Bromofluorobenzene     | 29.09 | 945   | 26518 | 695.00 | ug/l  | 93 |
| 31) | (s-std)1,4-Dichlorobutane | 21.64 | 702   | 11853 | 243.90 | ug/l  | 99 |

Compound is ISTD

ANALYSIS OF ORGANIC CHEMICAL COMPOUNDS BY  
GAS CHROMATOGRAPHY / MASS SPECTROMETRY  
FINAL REPORT

4TE RECEIVED: 7/22/89

Note: upon visual review of the Total Ion Chromatogram, unidentified peaks were observed outside of those parameters which are listed below.

>>>>>>>>>>>>>>> VOLATILES METHOD# 624 (CWA) <<<<<<<<<<<<<<

| COMPOUND                               | MOL<br>ug/l | CAS<br>NUMBER | SAMPLE CONC.<br>ug/l |
|----------------------------------------|-------------|---------------|----------------------|
| 1. Acrolein.....*                      |             | 107-02-9..    | *                    |
| 2. Acrylonitrile.....*                 |             | 107-13-1..    | *                    |
| 3. Benzene.....1.00                    |             | 71-43-2..     | SDL                  |
| 4. Bromodichloromethane.....1.00       |             | 75-27-4..     | SDL                  |
| 5. Bromoform.....1.00                  |             | 75-25-2..     | SDL                  |
| 6. Bromomethane.....1.00               |             | 74-83-9..     | SDL                  |
| 7. Carbon tetrachloride.....1.00       |             | 56-23-5..     | SDL                  |
| 8. Chlorobenzene.....1.00              |             | 108-90-7..    | SDL                  |
| 9. Chloroethane.....1.00               |             | 75-00-3..     | SDL                  |
| 10. 2-Chloroethylvinyl ether.....1.00  |             | 110-75-8..    | SDL                  |
| 11. Chloroform.....1.00                |             | 67-66-3..     | SDL                  |
| 12. Chloromethane.....1.00             |             | 74-87-3..     | SDL                  |
| 13. Dibromochloromethane.....1.00      |             | 124-48-1..    | SDL                  |
| 14. 1,2-Dichlorobenzene.....1.00       |             | 95-50-1..     | SDL                  |
| 15. 1,3-Dichlorobenzene.....1.00       |             | 541-73-1..    | SDL                  |
| 16. 1,4-Dichlorobenzene.....1.00       |             | 106-46-7..    | SDL                  |
| 17. 1,1-Dichloroethane.....1.00        |             | 75-34-3..     | SDL                  |
| 18. 1,2-Dichloroethane.....1.00        |             | 107-06-2..    | SDL                  |
| 19. 1,1-Dichloroethene.....1.00        |             | 75-35-4..     | SDL                  |
| 20. trans-1,2-Dichloroethene.....1.00  |             | 156-60-5..    | SDL                  |
| 21. 1,2-Dichloropropane.....1.00       |             | 78-87-5..     | SDL                  |
| 22. cis-1,3-Dichloropropene.....1.00   |             | 10061-01-5..  | SDL                  |
| 23. trans-1,3-Dichloropropene.....1.00 |             | 10061-02-6..  | SDL                  |