U.S. ENVIRONMENTAL PROTECTION AGENCY-HWI Sample Management Office
P.O. Box 818, Alexandria, VA 22313 - 703/683-0885

MARK HUTSON

Sample Number
E0767

11/20/81 OAB

ORGANICS ANALYSIS DATA SHEET - Page 1
CHEMICAL RECOVERY
FOS-8104-05

82MR01 S22 Sch. T
$7,513
#3

Laboratory Name Mead CompuChem

Case Number C#628

Lab Sample ID NO. 8056

QC Report No. 41-21, 42-21, 46-21

Signature of Person Authorized to Release Data: J.W. Russell Transmitted 11/19/81 by

| | ACID COMPOUNDS | ug/g |
|---|---|---|
| 88-06-2 | 2,4,6-trichlorophenol | 0.2U |
| 59-50-7 | p-chloro-m-cresol | 0.4U |
| 95-57-8 | 2-chlorophenol | 0.2U |
| 122-83-2 | 2,4-dichlorophenol | 0.2U |
| 105-67-9 | 2,4-dimethylphenol | 0.2U |
| 88-75-5 | 2-nitrophenol | 0.2U |
| 100-02-7 | 4-nitrophenol | 1.8U |
| 51-88-5 | 2,4-dinitrophenol | 0.8U |
| 534-52-1 | 4,6 dinitro-o-cresol | 0.4U |
| 87-86-5 | pentachlorophenol | 0.5U |
| 108-95-2 | phenol | .34 |

| | BASE/NEUTRAL COMPOUNDS | ug/g |
|---|---|---|
| 83-32-9 | acenaphthene | 0.2 K |
| 92-87-5 | benzidine | 0.5U |
| 120-82-1 | 1,2,4-trichlorobenzene | 0.2U |
| 118-74-1 | hexachlorobenzene | 0.2U |
| 67-72-1 | hexachloroethane | 0.2U |
| 111-44-4 | bis(2-chloroethyl)ether | 0.2U |
| 91-58-7 | 2-chloronaphthalene | 0.2U |
| 95-50-1 | 1,2-dichlorobenzene | .28 |
| 541-73-1 | 1,3-dichlorobenzene | 0.2U |
| 106-46-7 | 1,4-dichlorobenzene | 0.2U |
| 91-94-1 | 3,3'-dichlorobenzidine | 0.2U |
| 121-14-2 | 2,4-dinitrotoluene | 0.2U |
| 606-20-2 | 2,6-dinitrotoluene | 0.2U |
| | 1,2-diphenylhydrazine | 0.2U |
| 122-66-7 | (as azobenzene) | 0.2U |
| 206-44-0 | fluoranthene | 3.5 |
| 7005-72-3 | 4-chlorophenyl phenyl ether | 0.2U |

| | BASE/NEUTRAL COMPOUNDS | ug/g |
|---|---|---|
| 101-55-3 | 4-bromophenyl phenyl ether | 0.2U |
| 39638-32-9 | bis-(2-chloroisopropyl)ether | 0.2U |
| 111-91-1 | bis(2-chloroethoxy)methane | 0.2U |
| 87-68-3 | hexachlorobutadiene | 0.2U |
| 77-47-4 | hexachlorocyclopentadiene | 0.2U |
| 78-59-1 | isophorone | 0.2U |
| 91-20-3 | naphthalene | 0.64 |
| 98-95-3 | nitrobenzene | 0.2U |
| NA | N-nitrosodimethylamine | NA |
| 86-30-6 | N-nitrosodiphenylamine | 0.2U |
| 621-64-7 | N-nitrosodi-n-propylamine | 0.2U |
| 117-81-7 | bis(2-ethylhexyl)phthalate | 4.0 |
| 85-68-7 | butyl benzyl phthalate | 0.2 K |
| 84-74-2 | di-n-butyl phthalate | 0.2U |
| 117-84-0 | di-n-octyl phthalate | .22 |
| 84-66-2 | diethyl phthalate | 0.2U |
| 131-11-3 | dimethyl phthalate | 0.2U |
| 56-55-3 | benzo(a)anthracene | 4.8 |
| 50-33-8 | benzo(a)pyrene | 4.0 |
| 205-99-2 | 3,4-benzofluoranthene | 4.5 |
| 207-08-9 | benzo(k)fluoranthene | 4.5 |
| 318-01-9 | chrysene | 4.8 |
| 208-96-8 | acenaphthylene | 0.2U |
| 120-12-7 | anthracene | 3.0 |
| 181-24-2 | benzo(ghi)perylene | 3.0 |
| 86-73-7 | fluorene | 0.2 K |
| 85-01-8 | phenanthrene | 3.0 |
| 53-70-3 | dibenzo(a,h)anthracene | .68 |
| 183-39-5 | indeno(1,2,3-cd)pyrene | 2.3 |
| 129-00-0 | pyrene | 2.4 |

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Sample Number
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Laboratory Name Mead CompuChem

Case Number 628

Lab Sample ID NO. 8056

QC Report No. 41-21, 42-21, 46-21

| | VOLATILES | ug/g |
|---|---|---|
| 107-02-8 | acrolein | 0.10U |
| 107-13-1 | acrylonitrile | 0.10U |
| 71-43-2 | benzene | 0.01 |
| 56-23-5 | carbon tetrachloride | 0.01U |
| 108-90-7 | chlorobenzene | 0.01U |
| 107-06-2 | 1,2-dichloroethane | 0.01U |
| 71-55-6 | 1,1,1-trichloroethane | 1.8[A] |
| 75-34-3 | 1,1-dichloroethane | 0.59 |
| 79-00-5 | 1,1,2-trichloroethane | 0.01U |
| 79-34-5 | 1,1,2,2-tetrachloroethane | 0.01U |
| 75-00-3 | chloroethane | 0.13 |
| 110-75-8 | 2-chloroethylvinyl ether | 0.01U |
| 67-66-3 | chloroform | 0.01U |
| 75-35-4 | 1,1-dichloroethene | 0.02 |
| 156-60-5 | 1,2-trans-dichloroethene | 2.1 |
| 78-87-5 | 1,2-dichloropropane | 0.01U |
| 10061-0X-XX | 1,3-dichloropropiene | 0.01U |
| 100-41-4 | ethylbenzene | 4.6[1] |
| 75-09-2 | methylene chloride | 4.9[A,D] |
| 74-87-3 | chloromethane | 0.01U |
| 74-83-9 | bromomethane | 0.01U |
| 75-25-2 | bromoform | 0.01U |
| 75-27-4 | dichlorobromomethane | 0.01U |
| 75-69-4 | trichlorofluoromethane | 0.01 |
| 75-71-8 | dichlorodifluoromethane | 0.01U |
| 124-48-1 | chlorodibromomethane | 0.01U |
| 127-18-4 | tetrachloroethylene | 0.58 |
| 108-88-3 | toluene | 4.9[1] |
| 79-01-6 | trichloroethylene | 0.53[A] |
| 75-01-4 | vinyl chloride | 0.13 |

| | PESTICIDES | ug/g |
|---|---|---|
| 309-00-2 | aldrin | 0.01U |
| 60-57-1 | dieldrin | 0.01U |
| 57-74-9 | chlordane | 0.01U |
| 50-29-3 | 4,4'-DDT | 0.01U |
| 72-55-9 | 4,4'-DDE | 0.01U |
| 72-54-8 | 4,4'-DDD | 0.01U |
| 115-29-7 | endosulfan I | 0.01U |
| 115-29-7 | endosulfan II | 0.01U |
| 1031-07-8 | endosulfan sulfate | 0.01U |
| 78-20-8 | endrin | 0.01U |
| 7421-43-4 | endrin aldehyde | 0.01U |
| 76-44-8 | heptachlor | 0.01U |
| 1024-57-3 | heptachlor epoxide | 0.01U |
| 319-84-6 | BHC-Alpha | 0.01U |
| 319-85-7 | BHC-Beta | 0.01U |
| 319-86-8 | BHC-Delta | 0.01U |
| 58-89-9 | BHC-Gama | 0.01U |
| 53469-21-9 | PCB-1242 | 0.14** |
| 11097-69-7 | PCB-1254 | |
| 11104-28-2 | PCB-1221 | |
| 11141-16-5 | PCB-1232 | |
| 12672-24-6 | PCB-1248 | |
| 11096-82-5 | PCB-1260 | |
| 12674-11-2 | PCB-1016 | |
| 8001-35-2 | toxaphene | 0.04U |

| | DIOXINS | |
|---|---|---|
| 1746-01-6 | 2,3,7,8-tetrachlorodibenzo-p-dioxin | 0.01U |

*Less than 0.2 ug/l

(pesticides less than, 0.01 ug/l)

Lab Name: Mead CompuChem Case No: 628

Lab Sample I.D. No. 8056

QC Report No: 41-21, 42-21, 46-21

Sample Number
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A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc (ug/g) | (Surrogates only) Spike Added (ug/g) | % Recovery |
|---|---|---|---|---|
| d-$_6$-Benzene | VOA | 0.058 | 0.05 | 116 |
| d-$_8$-Toluene | VOA | 0.054 | 0.05 | 108 |
| Fluorophenol | A | 0.89 | 2.5 | 35 |
| d-$_6$-Phenol | A | 1.02 | 2.5 | 41 |
| Pentafluorophenol | A | 1.04 | 2.5 | 41 |
| d-$_5$-Nitrobenzene | BN | 0.19 | 2.5 | 7 |
| Fluorobiphenyl | BN | 1.51 | 2.5 | 61 |
| | | | | |
| | | | | |
| | | | | |

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

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Lab Name: Mead CompuChem Case No. 628

Lab Sample I.D. No. 8056

QC Report No: 41-21, 42-21, 46-21

| Sample Number |
|---|
| E0767 |

B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRAC-TION | % Pur. | Est. Conc. |
|---|---|---|---|---|---|
| 1 | 112-40-3 | Dodecane | BN | 85% | 1.1 J ug/g |
| 2 | 38234-82-1 | 1H-1,3,2-Benzodiphosphaxole, 2,3-Dihydro-2- | BN | | |
| 3 | | methyl-1,3-Diphenyl-, (1.Alp | BN | 54% | 13 J |
| 4 | 22478-83-7 | Olean-12-En-28-Oicacid, 3,16-Dioxo-, | BN | | |
| 5 | | methylester | BN | 85% | 16 J |
| 6 | 32319-065 | D-Norandrostan-16-One, (5.Alpha)- | BN | 58% | 0.75 J |
| 7 | | | BN | | |
| 8 | | | BN | | |
| 9 | | | BN | | |
| 10 | | | BN | | |
| 11 | 88-99-3 | 1,2-Benzenedicarboxylicacid | ACID | 70% | 0.23 J |
| 12 | 10544-50-0 | Sulfur, Mol. (S8) | ACID | 63% | 5.5 J |
| 13 | 57-10-3 | Hexadecanoicacid | ACID | 81% | 1.9 J |
| 14 | 57-10-3 | Hexadecanoicacid | ACID | 61% | 1.7 J |
| 15 | 27554-26-3 | 1,2-Benzenedicarboxylicacid, Diisooctylester | ACID | 78% | 0.55 J |
| 16 | | | ACID | | |
| 17 | | | ACID | | |
| 18 | | | ACID | | |
| 19 | | | ACID | | |
| 20 | | | ACID | | |
| 21 | 110-82-7 | Cyclohexane | VOA | 98% | 0.88 J |
| 22 | 96-37-7 | Cyclopentane, Methyl | VOA | 77% | 0.03 J |
| 23 | 108-87-2 | Cyclohexane, Methyl | VOA | 94% | 0.08 J |
| 24 | 591-78-6 | 2-Hexanone | VOA | 94% | 0.06 J |
| 25 | 26952-21-6 | Isooctanol | VOA | 84% | 0.03 J |
| 26 | 2613-66-3 | Cyclopentane, 1-Ethyl-3-Methyl-Cis | VOA | 89% | 0.06 J |
| 27 | 111-65-9 | Octane | VOA | 89% | 0.07 J |
| 28 | 98-82-8 | Benzene, (1-Methylethyl) | VOA | 89% | 0.07 J |
| 29 | 106-42-3 | Benzene, 1,4-Dimethyl | VOA | 67% | 0.85 J ? |
| 30 | 108-38-3 | Benzene, 1,3-Dimethyl | VOA | 72% | 0.61 J ? |