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

Case 628

Sample Number
E0760

11/20/81 CAB

11/12/81

# ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME ENERGY RESOURCES CO. INC.

LAB SAMPLE ID NO. 25-171

QC REPORT NO. 9

Blank 82MR01 S18
MARK HUTSON 145808
FOS-8104-05
CHEMICAL RECOVERY

| ACID COMPOUNDS | | ug/l |
|---|---|---|
| 21A | 2,4,6- trichlorophenol | 10 |
| 22A | p-chloro-m-cresol | 10 |
| 24A | 2- chlorophenol | 10 |
| 31A | 2,4-dichlorophenol | * |
| 34A | 2,4- dimethylphenol | 10 |
| 57A | 2- nitrophenol | 10 |
| 58A | 4- nitrophenol | 10 |
| 59A | 2,4- dinitrophenol | 10 |
| 60A | 4,6- dinitro-o-cresol | 10 |
| 64A | pentachlorophenol | 10 |
| 65A | phenol | * |

| BASE/NEUTRAL COMPOUNDS | | ug/l |
|---|---|---|
| 1B | acenaphthene | 10 |
| 5B | benzidine | 10 |
| 8B | 1,2,4- trichlorobenzene | 10 |
| 9B | hexachlorobenzene | 10 |
| 12B | hexachloroethane | 10 |
| 18B | bis(2-chloroethyl)ether | 10 |
| 20B | 2-chloronaphthalene | 10 |
| 25B | 1,2-dichlorobenzene | * |
| 26B | 1,3-dichlorobenzene | 10 |
| 27B | 1,4-dichlorobenzene | 10 |
| 28B | 3,3'-dichlorobenzidine | 10 |
| 35B | 2,4- dinitrotoluene | 10 |
| 36B | 2,6- dinitrotoluene | 10 |
| 37B | 1,2- diphenylhydrazine (as azobenzene) | 10 |
| 39B | fluoranthene | 10 |
| 40B | 4- chlorophenyl phenyl ether | 10 |
| 41B | 4-bromophenyl phenyl ether | 10 |
| 42B | bis (2-chloroisopropyl) ether | 10 |
| 43B | bis (2-chloroethoxy) methane | 10 |
| 52B | hexachlorobutadiene | 10 |
| 53B | hexachlorocyclopentadiene | 10 |
| 54B | isophorone | 10 |
| 55B | naphthalene | 10 |
| 56B | nitrobenzene | 10 |
| 61B | N-nitrosodimethylamine | 10 |
| 62B | N-nitrosodiphenylamine | 10 |
| 63B | N-nitrosodi-n-propylamine | 10 |
| 66B | bis (2-ethylhexyl) phthalate | * |
| 67B | butyl benzyl phthalate | 10 |
| 68B | di-n-butyl phthalate | 10 |
| 69B | di-n-octyl phthalate | 10 |
| 70B | diethyl phthalate | * |
| 71B | dimethyl phthalate | 10 |
| 72B | benzo(a)anthracene | 10 |
| 73B | benzo(a)pyrene | 10 |
| 74B | 3,4-benzofluoranthene | 10 |
| 75B | benzo(k)fluoranthene | 10 |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |

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ORGANICS ANALYSIS DATA SHEET - Page 2

BORATORY NAME ENERGY RESOURCES CO. INC.

B SAMPLE ID NO. 25-171

REPORT NO. 9

| | VOLATILES | ug/l |
|---|---|---|
| | acrolein | ND |
| | acrylonitrile | ND |
| | benzene | ND |
| | carbon tetrachloride | ND |
| | chlorobenzene | ND |
| V | 1,2-dichloroethane | ND |
| V | 1,1,1-trichloroethane | ND |
| V | 1,1-dichloroethane | ND |
| V | 1,1,2-trichloroethane | ND |
| V | 1,1,2,2-tetrachloroethane | ND |
| V | chloroethane | ND |
| V | 2-chloroethylvinyl ether | ND |
| V | chloroform | ND |
| V | 1,1-dichloroethylene | ND |
| V | 1,2-trans-dichloroethylene | ND |
| V | 1,2-dichloropropane | ND |
| V | 1,3-dichloropropylene | ND |
| V | ethylbenzene | ND |
| V | methylene chloride | 25 |
| V | methyl chloride | ND |
| V | methyl bromide | ND |
| V | bromoform | ND |
| V | dichlorobromomethane | ND |
| V | trichlorofluoromethane | ND |
| V | dichlorodifluoromethane | ND |
| V | chlorodibromomethane | ND |
| V | tetrachloroethylene | ND |
| V | toluene | ND |
| V | trichloroethylene | ND |
| V | vinyl chloride | ND |

| | PESTICIDES | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | α -endosulfan | ND |
| 96P | β -endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | α -BHC | ND |
| 103P | β -BHC | ND |
| 104P | δ -BHC | ND |
| 105P | γ -BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

| | DIOXINS | |
|---|---|---|
| 129B | 2,3,7,8-tetrachlorodibenzo-p-dioxin | ND |

*Less than 10 ug/l
(pesticides less than 0.1 ug/l)

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ND = Not detected

Lab Name: ENERGY RESOURCES CO. INC.

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## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | % Recovery |
|---|---|---|---|---|
| $d_6$-phenol | Acid | 40. | 100. | 40% |
| fluorophenol | Acid | 80. | 100. | 80% |
| $d_5$-nitrobenzene | B/N | 115. | 100. | 115% |
| $d_8$-naphthalene | B/N | 103. | 100. | 103% |
| $d_5$-pyridine | B/N | 114. | 100. | 114% |
| $d_6$-benzene | VOA | 68. | 100. | 68% |
| $d_8$-toluene | VOA | 66. | 100. | 66% |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | Fraction | % Maximum Score Attained Mass Matching Routine: (specify) |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
| 15. | | | | |
| 16. | | | | |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. | | | 118 | |

11/5/81

CHEMICAL RECOVERY 11/6/81 CAB

U.S. ENVIRONMENTAL PROTECTION AGENCY - HWI Sample Management Office
P.O. Box 818 - Alexandria, Virginia 22313 - 703/ 557-2490/FTS-8-557-2490 FGS-8104-05

# INORGANICS ANALYSIS DATA SHEET

MARK HUTSON

82 MRM S 518 Blank

585-210

LABORATORY NAME VERSAR SAMPLE NO. ME 8339

LAB SAMPLE ID NO. 6414 QC REPORT NO.

## TASK 1 (Elements to be identified and measured)

| | | ug/l | | | ug/l |
|---|---|---|---|---|---|
| 1. | Aluminum | <50. | 10. | Nickel | <20. |
| 2. | Chromium | <10. | 11. | Manganese | <10. |
| 3. | Barium | <10. | 12. | Zinc | <10. |
| 4. | Beryllium | <2. | 13. | Boron | <10. |
| 5. | Cadmium | <5. | 14. | Vanadium | <10. |
| 6. | Cobalt | <10. | 15. | Calcium | <100. |
| 7. | Copper | <20. | 16. | Magnesium | <100 |
| 8. | Iron | <20. | 17. | Sodium | <100. |
| 9. | Lead | <40. | | | |

## TASK 2 (Elements to be identified and measured)

| | | ug/l | | | ug/l |
|---|---|---|---|---|---|
| 1. | Arsenic | <10. | 5. | Mercury | <1. |
| 2. | Antimony | <20. | 6. | Tin | <20 |
| 3. | Selenium | <10. | 7. | Silver | <20. |
| 4. | Thallium | <10. | | | |

## TASK 3 (Elements to be identified and measured)

| | | | | | |
|---|---|---|---|---|---|
| 1. | Ammonia | mg/l | 4. | Cyanide | mg/l |
| 2. | Fluoride | mg/l | 5. | pH | Units |
| 3. | Sulfide | mg/l | 6. | TOC | mg/l |

COMMENTS:

a) with a detection limit of
b) with a detection limit of
c) with a detection limit of
d) analyzed on a sample aliquot preserved with HCl from F/pH sample bottle
e) average of two replicate determinations
f) insufficient sample aliquot