



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504 • (206) 753-2353

M E M O R A N D U M
July 23, 1984

To: Roger Stanley
From: Art Johnson *AJ*
Subject: Organics Data on Kaiser Ditch Water Samples

Attached are the results of analysis for EPA priority pollutants/hazardous substances on Kaiser Ditch water samples collected near the mouth by Dale Norton on February 14 and April 17, 1984. Both samples were composite of four one-quart grabs collected over the period indicated. The February composite was split in the field to make duplicate samples for QA purposes.

The April sample (J3456) marks the first time PCB has been detected in WDOE samples of discharges to Commencement Bay waterways.

The following conventional water quality data were also collected:

| <u>February 17, 1984</u> | | <u>April 17, 1984</u> | |
|--------------------------|-----|------------------------|------|
| Flow (cfs) | 2.8 | Flow (cfs) | 2.97 |
| pH (S.U.) | -- | pH (S.U.) | 7.4 |
| Spec. Cond. (umhos/cm) | -- | Spec. Cond. (umhos/cm) | 707 |
| TSS (mg/L) | -- | TSS (mg/L) | 140 |
| TOC (mg/L) | 16 | TOC (mg/L) | 24 |

AJ:cp

Attachment

cc: Jim Krull
Dale Norton

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. BOX 816, Alexandria, Virginia 22313 - 703/557-2490

ATA PREP/RELEASE BY: CC / MM

SAMPLE NO: J 3433 KAISER PITCH MOUTH
1912 - 2150 HOURS
FEB 14, 1984

ORGANICS ANALYSIS DATA SHEET

LABORATORY: California Analytical Labs, Inc.
AB SAMPLE NO: 54047

CASE NO: 2354/730J
QC REPORT NO: RED 730J-4
CONTRACT NO: 68-01-6763

DATE SAMPLE REC'D: 2/16/84
SAMPLE MATRIX: WATER
PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

U = NOT DETECTED AT LIMIT OF DETECTION
M = DETECTED BUT NOT QUANTIFIED AT LIMIT OF QUANTIFICATION

SEMIVOLATILE COMPOUNDS


CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2/20/84
DATE ANALYZED: 3/13/84

| PP# | CAS # | | ug/L | PP# | CAS # | | ug/L |
|-----|------------|------------------------------|-------|------|----------|----------------------------|-------|
| 1A | 88-06-2 | 2,4,6-trichlorophenol | 1.0 U | 528 | 87-68-3 | hexachlorobutadiene | 1.0 U |
| 2A | 59-50-7 | p-chloro-m-cresol | 1.0 U | 538 | 77-47-4 | hexachlorocyclopentadiene | 1.0 U |
| 4A | 95-57-8 | 2-chlorophenol | 1.0 U | 548 | 78-59-1 | isophorone | 1.0 U |
| 1A | 120-83-2 | 2,4-dichlorophenol | 1.0 U | 558 | 91-28-5 | naphthalene | 1.0 U |
| 4A | 105-67-9 | 2,4-dimethylphenol | 1.0 U | 568 | 98-95-3 | nitrobenzene | 1.0 U |
| 7A | 88-75-5 | 2-nitrophenol | 1.0 U | 628 | 86-30-6 | N-nitrosodiphenylamine | 1.0 U |
| 8A | 100-02-7 | 4-nitrophenol | 1.0 U | 638 | 621-64-7 | N-nitrosodipropylamine | 1.0 U |
| 9A | 51-28-5 | 2,4-dinitrophenol | 1.0 U | 668 | 117-81-7 | bis(2-ethylhexyl)phthalate | 1.0 U |
| 1A | 534-52-1 | 4,6-dinitro-o-cresol | 1.0 U | 678 | 85-68-7 | benzyl butyl phthalate | 1.0 U |
| 4A | 87-86-5 | pentachlorophenol | 1.0 U | 688 | 84-74-2 | di-n-butyl phthalate | 2.8 M |
| 5A | 108-95-2 | phenol | 1.0 U | 698 | 117-84-0 | di-n-octyl phthalate | 1.0 U |
| L1 | 65-85-0 | benzoic acid | 1.0 U | 708 | 84-66-2 | diethyl phthalate | 1.0 U |
| L2 | 95-48-7 | 2-methylphenol | 1.0 U | 718 | 131-11-3 | dimethyl phthalate | 1.0 U |
| L3 | 108-39-4 | 4-methylphenol | 1.0 U | 728 | 56-55-3 | benzo(a)anthracene | 0.1 U |
| L4 | 95-95-4 | 2,4,5-trichlorophenol | 1.0 U | 738 | 50-32-8 | benzo(a)pyrene | 1.0 |
| 1B | 83-32-9 | acenaphthene | 0.2 M | 748 | 205-99-2 | benzo(b)fluoranthene | 2.0 |
| 5B | 92-87-5 | benzidine | 1.0 U | 758 | 207-08-9 | benzo(k)fluoranthene | 2.0 |
| 8B | 120-82-1 | 1,2,4-trichlorobenzene | 1.0 U | 768 | 218-01-9 | chrysene | 2.2 |
| 9B | 118-74-1 | hexachlorobenzene | 1.0 U | 778 | 208-96-8 | acenaphthylene | 0.1 U |
| 2B | 67-72-1 | hexachloroethane | 1.0 U | 788 | 120-12-7 | anthracene | 0.5 M |
| 8B | 111-44-4 | bis(2-chloroethyl)ether | 1.0 U | 798 | 191-24-2 | benzo(ghi)perylene | 0.1 U |
| 0B | 91-58-7 | 2-chloronaphthalene | 1.0 U | 808 | 86-73-7 | fluorene | 0.1 U |
| 5B | 95-50-1 | 1,2-dichlorobenzene | 1.0 U | 818 | 85-01-8 | phenanthrene | 2.8 |
| 6B | 541-73-1 | 1,3-dichlorobenzene | 1.0 U | 828 | 53-70-3 | dibenzo(a,h)anthracene | 0.1 U |
| 7B | 106-46-7 | 1,4-dichlorobenzene | 1.0 U | 838 | 193-39-5 | indeno(1,2,3-cd)pyrene | 0.1 U |
| 8B | 91-94-1 | 3,3'-dichlorobenzidine | 1.0 U | 848 | 129-00-0 | pyrene | 5.8 |
| 5B | 121-14-2 | 2,4-dinitrotoluene | 1.0 U | CL5 | 62-53-3 | aniline | 1.0 U |
| 5B | 606-20-2 | 2,6-dinitrotoluene | 1.0 U | CL6 | 100-51-6 | benzyl alcohol | 1.0 U |
| 7B | 122-66-7 | 1,2-diphenylhydrazine | 1.0 U | CL7 | 106-47-8 | 4-chloroaniline | 1.0 U |
| 9B | 206-44-0 | fluoranthene | 4.6 | CL8 | 132-64-9 | dibenzofuran | 0.6 |
| 0B | 7005-72-3 | 4-chlorophenyl phenyl ether | 1.0 U | CL9 | 91-57-6 | 2-methylnaphthalene | 1.0 U |
| 1B | 101-55-3 | 4-bromophenyl phenyl ether | 1.0 U | CL10 | 88-74-4 | 2-nitroaniline | 1.0 U |
| 2B | 39638-32-9 | bis(2-chloroisopropyl) ether | 1.0 U | CL11 | 99-09-2 | 3-nitroaniline | 1.0 U |
| 3B | 111-91-1 | bis(2-chloroethoxy) methane | 1.0 U | CL12 | 100-01-6 | 4-nitroaniline | 1.0 U |

3N COMPOUNDS - FS

OR DATA REPORTING QUALIFIERS SEE COVER LETTER

ATA IS HELD FOR A MINIMUM OF 90 DAYS THEN SENT TO NEIC FOR EVIDENCE AUDITING

 7/2/84

DATA PREP/RELEASE BY: jaw, MEM

SAMPLE NO: J 3433

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME: California Analytical Labs, Inc.
LAB SAMPLE NO: 54047

CASE NO: 2354/730J
QC REPORT NO: RED 730J-4
CONTRACT NO: 68-01-6763

DATE SAMPLE REC'D: 02/16/84
SAMPLE MATRIX: WATER
PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE ANALYZED: 2/21/84

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2/17/84
DATE ANALYZED: 03/12/84

| PP# | CAS # | ug/L |
|-----|------------|-------------------------------|
| 2V | 107-02-8 | acrolein 10 U |
| 3V | 107-13-1 | acrylonitrile 10 U |
| 4V | 71-43-2 | benzene 1 U |
| 6V | 56-23-5 | carbon tetrachloride 1 U |
| 7V | 108-90-7 | chlorobenzene 1 U |
| 0V | 107-06-2 | 1,2-dichloroethane 1 U |
| 1V | 71-55-6 | 1,1,1-trichloroethane 1 U |
| 3V | 75-34-3 | 1,1-dichloroethane 1 U |
| 4V | 79-00-5 | 1,1,2-trichloroethane 1 U |
| 5V | 79-34-5 | 1,1,2,2-tetrachloroethane 1 U |
| 6V | 75-00-3 | chloroethane 1 U |
| 9V | 110-75-8 | 2-chloroethylvinyl ether 10 U |
| 3V | 67-66-3 | chloroform 12 U |
| 9V | 75-35-4 | 1,1-dichloroethene 1 U |
| 0V | 156-60-5 | trans-1,2-dichloroethene 1 U |
| 2V | 78-87-5 | 1,2-dichloropropane 1 U |
| 3V | 10061-02-6 | trans-1,3-dichloropropene 1 U |
| 3V | 10061-01-5 | cis-1,3-dichloropropene 1 U |
| 8V | 100-41-4 | ethylbenzene 1 U |
| 4V | 75-09-2 | methylene chloride 1 U |
| 5V | 74-87-3 | chloromethane 1 U |
| 6V | 74-83-9 | bromomethane 1 U |
| 7V | 75-25-2 | bromoform 1 U |
| 8V | 75-27-4 | bromodichloromethane 1 U |
| 9V | 75-69-4 | fluorotrichloromethane 1 U |
| 0V | 75-71-8 | dichlorodifluoromethane 1 U |
| 1V | 124-48-1 | chlorodibromomethane 1 U |
| 5V | 127-18-4 | tetrachloroethene 1 U |
| 5V | 108-88-3 | toluene 1 U |
| 7V | 79-01-6 | trichloroethene 1 U |
| 3V | 75-01-4 | vinyl chloride 1 U |
| 13 | 67-64-1 | acetone 5 U |
| 14 | 78-93-3 | 2-butanone 5 U |
| 15 | 75-15-0 | carbendisulfide 1 U |
| 16 | 519-78-6 | 2-hexanone 5 U |
| 17 | 108-10-1 | 4-methyl-2-pentanone 5 U |
| 18 | 100-42-5 | styrene 1 U |
| 19 | 108-05-4 | vinyl acetate 5 U |
| 20 | 95-47-6 | total xylenes 4 U |

| PP# | CAS # | ug/L |
|------|------------|---------------------------|
| 89P | 309-00-2 | aldrin 0.05 U |
| 90P | 60-57-1 | dieldrin 0.05 U |
| 91P | 57-74-9 | chlordan 0.50 U |
| 92P | 50-29-3 | 4,4'-DDT 0.10 U |
| 93P | 72-55-9 | 4,4'-DDE 0.05 U |
| 94P | 72-54-8 | 4,4'-DDD 0.10 U |
| 95P | 115-29-7 | a-endosulfan 0.05 U |
| 96P | 115-29-7 | b-endosulfan 0.05 U |
| 97P | 1031-07-8 | endosulfan sulfate 0.10 U |
| 98P | 72-20-8 | endrin 0.05 U |
| 99P | 7421-93-4 | endrin aldehyde 0.10 U |
| 100P | 76-44-8 | heptachlor 0.05 U |
| 101P | 1024-57-3 | heptachlor epoxide 0.05 U |
| 102P | 319-84-6 | a-BHC 0.05 U |
| 103P | 319-85-7 | b-BHC 0.05 U |
| 104P | 319-86-8 | d-BHC 0.05 U |
| 105P | 58-89-9 | g-BHC (lindane) 0.05 U |
| 106P | 53469-21-9 | PCB-1242 0.50 U |
| 107P | 11097-69-1 | PCB-1254 1.0 U |
| 108P | 11104-28-2 | PCB-1221 1.0 U |
| 109P | 11141-16-5 | PCB-1232 1.0 U |
| 110P | 12672-29-6 | PCB-1248 1.0 U |
| 111P | 11096-82-5 | PCB-1260 2.0 U |
| 112P | 12674-11-2 | PCB-1016 0.50 U |
| 113P | 8001-35-2 | toxaphene 10 U 2.0 U jaw |

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2/17/84
DATE ANALYZED: 3/13/84

| PP# | CAS # | ug/L |
|--------------------------|-----------|---|
| 1298 | 1746-01-6 | 2,3,7,8-tetrachloro-dibenzo-p-dioxin 0.03 U |
| DIOXINS-FS <u>7/2/84</u> | | |

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
 P.O. BOX 818, Alexandria, Virginia 22313 - 703/557-2490

DATA PREP/RELEASE BY: CC / MSB

SAMPLE NO: J 3434 DUPLICATE OF J3433

ORGANICS ANALYSIS DATA SHEET

LABORATORY: California Analytical Labs, Inc.
 LAB SAMPLE NO: S4048

CASE NO: 2354/730J
 QC REPORT NO: RED 730J-4
 CONTRACT NO: 68-01-6763

DATE SAMPLE REC'D: 2/16/84
 SAMPLE MATRIX: WATER
 PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE EXTRACTED/PREPARED: 2/20/84
 DATE ANALYZED: 3/13/84

| # | CAS # | ug/L | PP# | CAS # | ug/L |
|-----|------------|------------------------------|-------|---------------|----------------------------------|
| A | 88-06-2 | 2,4,6-trichlorophenol | 1.0 U | 528 87-68-3 | hexachlorobutadiene 1.0 U |
| 2A | 59-50-7 | p-chloro-m-cresol | 1.0 U | 538 77-47-4 | hexachlorocyclopentadiene 1.0 U |
| 3A | 95-57-8 | 2-chlorophenol | 1.0 U | 548 78-59-1 | isophorone 1.0 U |
| 4A | 120-83-2 | 2,4-dichlorophenol | 1.0 U | 558 91-28-5 | naphthalene 1.0 U |
| 5A | 105-67-9 | 2,4-dimethylphenol | 1.0 U | 568 98-95-3 | nitrobenzene 1.0 U |
| 6A | 88-75-5 | 2-nitrophenol | 1.0 U | 628 86-30-6 | N-nitrosodiphenylamine 1.0 U |
| 7A | 100-02-7 | 4-nitrophenol | 1.0 U | 638 621-64-7 | N-nitrosodipropylamine 1.0 U |
| 8A | 51-28-5 | 2,4-dinitrophenol | 1.0 U | 668 117-81-7 | bis(2-ethylhexyl)phthalate 1.0 U |
| 9A | 534-52-1 | 4,6-dinitro-o-cresol | 1.0 U | 678 85-68-7 | benzyl butyl phthalate 1.0 U |
| 10A | 87-86-5 | pentachlorophenol | 1.0 U | 688 84-74-2 | di-n-butyl phthalate 1.0 U |
| 11A | 108-95-2 | phenol | 1.0 U | 698 117-84-0 | di-n-octyl phthalate 1.0 U |
| 12 | 65-85-0 | benzoic acid | 1.0 U | 708 84-66-2 | diethyl phthalate 1.0 U |
| 13 | 95-48-7 | 2-methylphenol | 1.0 U | 718 131-11-3 | dimethyl phthalate 1.0 U |
| 14 | 108-39-4 | 4-methylphenol | 1.0 U | 728 56-55-3 | benzo(a)anthracene 0.1 U |
| 15 | 95-95-4 | 2,4,5-trichlorophenol | 1.0 U | 738 50-32-8 | benzo(a)pyrene 0.1 M |
| 16 | 83-32-9 | acenaphthene | 0.3 M | 748 205-99-2 | benzo(b)fluoranthene 0.4 M |
| 17 | 92-87-5 | benzidine | 1.0 U | 758 207-08-9 | benzo(k)fluoranthene 0.4 M |
| 18 | 120-82-1 | 1,2,4-trichlorobenzene | 1.0 U | 768 218-01-9 | chrysene 1.2 |
| 19 | 118-74-1 | hexachlorobenzene | 1.0 U | 778 208-96-8 | acenaphthylene 0.1 U |
| 20 | 67-72-1 | hexachloroethane | 1.0 U | 788 120-12-7 | anthracene 0.1 U |
| 21 | 111-44-4 | bis(2-chloroethyl)ether | 1.0 U | 798 191-24-2 | benzo(ghi)perylene 0.1 U |
| 22 | 91-58-7 | 2-chloronaphthalene | 1.0 U | 808 86-73-7 | fluorene 0.1 U |
| 23 | 95-50-1 | 1,2-dichlorobenzene | 1.0 U | 818 85-01-8 | phenanthrene 2.4 |
| 24 | 541-73-1 | 1,3-dichlorobenzene | 1.0 U | 828 53-70-3 | di benzo(a,h)anthracene 0.1 U |
| 25 | 106-46-7 | 1,4-dichlorobenzene | 1.0 U | 838 193-39-5 | indeno(1,2,3-cd)pyrene 0.1 U |
| 26 | 91-94-1 | 3,3'-dichlorobenzidine | 1.0 U | 848 129-00-0 | pyrene 1.8 |
| 27 | 121-14-2 | 2,4-dinitrotoluene | 1.0 U | CL5 62-53-3 | aniline 1.0 U |
| 28 | 606-20-2 | 2,6-dinitrotoluene | 1.0 U | CL6 100-51-6 | benzyl alcohol 1.0 U |
| 29 | 122-66-7 | 1,2-diphenylhydrazine | 1.0 U | CL7 106-47-8 | 4-chloroaniline 1.0 U |
| 30 | 206-44-0 | fluoranthene | 3.2 | CL8 132-64-9 | dibenzofuran 0.8 |
| 31 | 7005-72-3 | 4-chlorophenyl phenyl ether | 1.0 U | CL9 91-57-6 | 2-methylnaphthalene 1.0 U |
| 32 | 101-55-3 | 4-bromophenyl phenyl ether | 1.0 U | CL10 88-74-4 | 2-nitroaniline 1.0 U |
| 33 | 39638-32-9 | bis(2-chloroisopropyl) ether | 1.0 U | CL11 99-09-2 | 3-nitroaniline 1.0 U |
| 34 | 111-91-1 | bis(2-chloroethoxy) methane | 1.0 U | CL12 100-01-6 | 4-nitroaniline 1.0 U |

NON-SEMIVOLATILE COMPOUNDS - FS

FOR DATA REPORTING QUALIFIERS SEE COVER LETTER

THIS DATA IS HELD FOR A MINIMUM OF 90 DAYS THEN SENT TO NEIC FOR EVIDENCE AUDITING

~~MSB~~ 7/2/84

REP/RELEASE BY: juw / 1 11/21/84

SAMPLE NO: J 3434

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME: California Analytical Labs, Inc.
 LAB SAMPLE NO: S4048

CASE NO: 2354/730J DATE SAMPLE REC'D: 02/16/84
 QC REPORT NO: RED 730J-4 SAMPLE MATRIX: WATER
 CONTRACT NO: 68-01-6763 PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

VOLATILES

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE ANALYZED: 2/22/84

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE EXTRACTED/PREPARED: 2/17/84
 DATE ANALYZED: 03/12/84

| PP# | CAS # | ug/L |
|-----|------------|---------------------------|
| 2V | 107-02-8 | acrolein |
| 3V | 107-13-1 | acrylonitrile |
| 4V | 71-43-2 | benzene |
| 5V | 56-23-5 | carbon tetrachloride |
| 7V | 108-90-7 | chlorobenzene |
| 8V | 107-06-2 | 1,2-dichloroethane |
| 1V | 71-55-6 | 1,1,1-trichloroethane |
| 5V | 75-34-3 | 1,1-dichloroethane |
| 4V | 79-00-5 | 1,1,2-trichloroethane |
| 5V | 79-34-5 | 1,1,2,2-tetrachloroethane |
| 5V | 75-00-3 | chloroethane |
| 8V | 110-75-8 | 2-chloroethylvinyl ether |
| 3V | 67-66-3 | chloroform |
| 3V | 75-35-4 | 1,1-dichloroethene |
| 3V | 156-60-5 | trans-1,2-dichloroethene |
| 2V | 78-87-5 | 1,2-dichloropropane |
| 3V | 10061-02-6 | trans-1,3-dichloropropene |
| 3V | 10061-01-5 | cis-1,3-dichloropropene |
| 3V | 100-41-4 | ethylbenzene |
| 4V | 75-09-2 | methylene chloride |
| 5V | 74-87-3 | chloromethane |
| 5V | 74-83-9 | bromomethane |
| 7V | 75-25-2 | bromoform |
| 3V | 75-27-4 | bromodichloromethane |
| 3V | 75-69-4 | fluorotrichloromethane |
| 3V | 75-71-8 | dichlorodifluoromethane |
| 1V | 124-48-1 | chlorodibromomethane |
| 5V | 127-18-4 | tetrachloroethene |
| 5V | 108-88-3 | toluene |
| 7V | 79-01-6 | trichloroethene |
| 3V | 75-01-4 | vinyl chloride |
| .13 | 67-64-1 | acetone |
| .14 | 78-93-3 | 2-butanone |
| .15 | 75-15-0 | carbonyl disulfide |
| .16 | 519-78-6 | 2-hexanone |
| .17 | 108-10-1 | 4-methyl-2-pentanone |
| .18 | 100-42-5 | styrene |
| .19 | 108-05-4 | vinyl acetate |
| .20 | 95-47-6 | total xylenes |

| PP# | CAS # | ug/L |
|------|------------|--------------------|
| 89P | 309-00-2 | aldrin |
| 90P | 60-57-1 | dieldrin |
| 91P | 57-74-9 | chlordane |
| 92P | 50-29-3 | 4,4'-DDT |
| 93P | 72-55-9 | 4,4'-DDE |
| 94P | 72-54-8 | 4,4'-DDD |
| 95P | 115-29-7 | a-endosulfan |
| 96P | 115-29-7 | b-endosulfan |
| 97P | 1031-07-8 | endosulfan sulfate |
| 98P | 72-20-8 | endrin |
| 99P | 7421-93-4 | endrin aldehyde |
| 100P | 76-44-8 | heptachlor |
| 101P | 1024-57-3 | heptachlor epoxide |
| 102P | 319-84-6 | a-BHC |
| 103P | 319-85-7 | b-BHC |
| 104P | 319-86-8 | d-BHC |
| 105P | 58-89-9 | g-BHC (lindane) |
| 106P | 53469-21-9 | PCB-1242 |
| 107P | 11097-69-1 | PCB-1254 |
| 108P | 11104-28-2 | PCB-1221 |
| 109P | 11141-16-5 | PCB-1232 |
| 110P | 12672-29-6 | PCB-1248 |
| 111P | 11096-82-5 | PCB-1260 |
| 112P | 12674-11-2 | PCB-1016 |
| 113P | 8001-35-2 | toxaphene |

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE EXTRACTED/PREPARED: 2/17/84
 DATE ANALYZED: 3/13/84

| PP# | CAS # | ug/L |
|------|-----------|--------------------------------------|
| 129B | 1746-01-6 | 2,3,7,8-tetrachloro-dibenzo-p-dioxin |

DIOXINS-FS

(89) 2/2/84

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
 P.O. BOX 818, Alexandria, Virginia 22313 - 703/557-2490

DATA PREP/RELEASE BY: Key, JDM

SAMPLE NO: J 3456 KAISER DITCH MOUTH
 1000 - 1400 HOURS
 APRIL 17, 1984

ORGANICS ANALYSIS DATA SHEET

LABORATORY: California Analytical Labs, Inc.
 LAB SAMPLE NO: 54285

CASE NO: 2622/730J
 QC REPORT NO: RED 730J-5
 CONTRACT NO: 68-01-6763

DATE SAMPLE REC'D: 4/18/84
 SAMPLE MATRIX: WATER
 PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE EXTRACTED/PREPARED: 4/20/84
 DATE ANALYZED: 5/23/84
 CONC. FACTOR: 1L/2ml

| PP# | CAS # | ug/L | PP# | CAS # | ug/L | |
|-----|------------|------------------------------|------|----------|----------------------------|-------|
| 21A | 88-06-2 | 2,4,6-trichlorophenol | 528 | 87-68-3 | hexachlorobutadiene | 1.0 U |
| 22A | 59-50-7 | p-chloro-m-cresol | 538 | 77-47-4 | hexachlorocyclopentadiene | 1.0 U |
| 24A | 95-57-8 | 2-chlorophenol | 549 | 78-59-1 | isophorone | 1.0 U |
| 31A | 120-83-2 | 2,4-dichlorophenol | 558 | 91-28-5 | naphthalene | 1.0 U |
| 34A | 105-67-9 | 2,4-dimethylphenol | 568 | 98-95-3 | nitrobenzene | 1.0 U |
| 57A | 88-75-5 | 2-nitrophenol | 618 | 62-75-9 | N-nitrosodimethylamine | 1.0 U |
| 58A | 100-02-7 | 4-nitrophenol | 628 | 86-30-6 | N-nitrosodiphenylamine | 1.0 U |
| 59A | 51-28-5 | 2,4-dinitrophenol | 638 | 621-64-7 | N-nitrosodipropylamine | 1.0 U |
| 60A | 534-52-1 | 4,6-dinitro-o-cresol | 668 | 117-81-7 | bis(2-ethylhexyl)phthalate | 1.0 U |
| 64A | 87-86-5 | pentachlorophenol | 678 | 85-68-7 | benzyl butyl phthalate | 1.0 U |
| 65A | 109-95-2 | phenol | 688 | 84-74-2 | di-n-butyl phthalate | 1.0 U |
| CL1 | 65-85-0 | benzoic acid | 698 | 117-84-0 | di-n-octyl phthalate | 1.0 U |
| CL2 | 95-48-7 | 2-methylphenol | 708 | 84-65-2 | diethyl phthalate | 1.0 U |
| CL3 | 108-39-4 | 4-methylphenol | 718 | 131-11-3 | dimethyl phthalate | 1.0 U |
| CL4 | 95-95-4 | 2,4,5-trichlorophenol | 728 | 56-55-3 | benzo(a)anthracene | 0.5M |
| 1B | 83-32-9 | acenaphthene | 738 | 50-32-8 | benzo(a)pyrene | 0.1M |
| 5B | 92-87-5 | benzidine | 748 | 205-99-2 | benzo(b)fluoranthene | 2.8 |
| 8B | 120-82-1 | 1,2,4-trichlorobenzene | 758 | 207-08-9 | benzo(k)fluoranthene | 2.8 |
| 9B | 118-74-1 | hexachlorobenzene | 768 | 218-01-9 | chrysene | 2.8 |
| 12B | 67-72-1 | hexachloroethane | 778 | 208-96-8 | acenaphthylene | 0.1 U |
| 18B | 111-44-4 | bis(2-chloroethyl)ether | 788 | 120-12-7 | anthracene | 0.2M |
| 20B | 91-58-7 | 2-chloronaphthalene | 798 | 191-24-2 | benzo(ghi)perylene | 0.3M |
| 25B | 95-50-1 | 1,2-dichlorobenzene | 808 | 86-73-7 | fluorene | 0.1 U |
| 26B | 541-73-1 | 1,3-dichlorobenzene | 818 | 85-01-8 | phenanthrene | 0.5M |
| 27B | 105-46-7 | 1,4-dichlorobenzene | 828 | 53-70-3 | dibenzo(a,h)anthracene | 0.1 U |
| 28B | 91-94-1 | 3,3'-dichlorobenzidine | 838 | 193-39-5 | indeno(1,2,3-cd)pyrene | 0.3M |
| 35B | 121-14-2 | 2,4-dinitrotoluene | 848 | 129-00-0 | pyrene | 3.2 |
| 36B | 605-20-2 | 2,6-dinitrotoluene | CL5 | 62-53-3 | aniline | 1.0 U |
| 37B | 122-66-7 | 1,2-diphenylhydrazine | CL6 | 100-51-6 | benzyl alcohol | 1.0 U |
| 39B | 206-44-0 | fluoranthene | CL7 | 106-47-8 | 4-chloroaniline | 1.0 U |
| 40B | 7005-72-3 | 4-chlorophenyl phenyl ether | CL8 | 132-64-9 | dibenzofuran | 0.1 U |
| 41B | 101-55-3 | 4-bromophenyl phenyl ether | CL9 | 91-57-6 | 2-methylnaphthalene | 1.0 U |
| 42B | 39638-32-9 | bis(2-chloroisopropyl) ether | CL10 | 88-74-4 | 2-nitroaniline | 1.0 U |
| 43B | 111-91-1 | bis(2-chloroethoxy) methane | CL11 | 99-09-2 | 3-nitroaniline | 1.0 U |
| | | | CL12 | 100-01-6 | 4-nitroaniline | 1.0 U |

ABN COMPOUNDS - FS
 FOR DATA REPORTING QUALIFIERS SEE COVER LETTER

AD 2/1/84 01

PREP/RELEASE BY: Ky, MM

SAMPLE NO: J 3456

ORGANICS ANALYSIS DATA SHEET

LABORATORY NAME: California Analytical Labs, Inc.
 LAB SAMPLE NO: 54286

CASE NO: 2622/730J
 QC REPORT NO: RED 730J-5
 CONTRACT NO: 68-01-6763

DATE SAMPLE REC'D: 4/16/84
 SAMPLE MATRIX: WATER
 PERCENT MOISTURE:

COVER LETTER IS AN INTEGRAL PART OF THIS REPORT - PLEASE READ

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE ANALYZED: 4/25/84

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
 DATE EXTRACTED/PREPARED: 4/19/84
 DATE ANALYZED: 5/08/84
 CONC FACTOR: 1000ml/5ml

| PP# | CAS # | ug/L | PP# | CAS # | ug/L |
|------|------------|---------------------------|------|------------|--------------------|
| 2V | 107-02-8 | acrolein | 89P | 309-00-2 | aldrin |
| 3V | 107-13-1 | acrylonitrile | 90P | 60-57-1 | dieldrin |
| 4V | 71-43-2 | benzene | 91P | 57-74-9 | chlordane |
| 6V | 56-23-5 | carbon tetrachloride | 92P | 50-29-3 | 4,4'-DDT |
| 7V | 108-90-7 | chlorobenzene | 93P | 72-55-9 | 4,4'-DDE |
| 10V | 107-06-2 | 1,2-dichloroethane | 94P | 72-54-8 | 4,4'-DDD |
| 11V | 71-55-6 | 1,1,1-trichloroethane | 95P | 115-29-7 | a-endosulfan |
| 13V | 75-34-3 | 1,1-dichloroethane | 96P | 115-29-7 | b-endosulfan |
| 14V | 79-00-5 | 1,1,2-trichloroethane | 97P | 1031-07-8 | endosulfan sulfate |
| 15V | 79-34-5 | 1,1,2,2-tetrachloroethane | 98P | 72-20-8 | endrin |
| 16V | 75-00-3 | chloroethane | 99P | 7421-93-4 | endrin aldehyde |
| 19V | 110-75-8 | 2-chloroethylvinyl ether | 100P | 76-44-8 | heptachlor |
| 23V | 67-66-3 | chloroform | 101P | 1024-57-3 | heptachlor epoxide |
| 29V | 75-35-4 | 1,1-dichloroethene | 102P | 319-84-6 | a-BHC |
| 30V | 156-60-5 | trans-1,2-dichloroethene | 103P | 319-85-7 | h-BHC |
| 32V | 78-87-5 | 1,2-dichloropropane | 104P | 319-86-8 | d-BHC |
| 33V | 10061-02-6 | trans-1,3-dichloropropene | 105P | 58-89-9 | g-BHC (lindane) |
| | 10061-01-5 | cis-1,3-dichloropropene | 106P | 53469-21-9 | PCB-1242 |
| 38V | 100-41-4 | ethylbenzene | 107P | 11097-69-1 | PCB-1254 |
| 44V | 75-09-2 | methylene chloride | 108P | 11104-28-2 | PCB-1221 |
| 45V | 74-87-3 | chloromethane | 109P | 11141-16-5 | PCB-1232 |
| 46V | 74-83-9 | bromomethane | 110P | 12672-29-6 | PCB-1248 |
| 47V | 75-25-2 | bromoform | 111P | 11096-82-5 | PCB-1260 |
| 48V | 75-27-4 | bromodichloromethane | 112P | 12674-11-2 | PCB-1016 |
| 49V | 75-69-4 | fluorotrichloromethane | 113P | 8001-35-2 | toxaphene |
| 50V | 75-71-8 | dichlorodifluoromethane | | | |
| 51V | 124-48-1 | chlorodibromomethane | | | |
| 65V | 127-18-4 | tetrachloroethene | | | |
| 65V | 108-88-3 | toluene | | | |
| 87V | 79-01-6 | trichloroethene | | | |
| 89V | 75-01-4 | vinyl chloride | | | |
| CL13 | 67-64-1 | acetone | | | |
| CL14 | 78-93-3 | 2-butanone | | | |
| CL15 | 75-15-0 | carbonyl disulfide | | | |
| CL16 | 519-78-6 | 2-hexanone | | | |
| CL17 | 108-10-1 | 4-methyl-2-pentanone | | | |
| CL18 | 100-42-5 | styrene | | | |
| CL19 | 103-05-4 | vinyl acetate | | | |
| CL20 | 95-47-6 | total xylenes | | | |

88 7/2/84