HARDING LAWSON ASSOCIATES

# CHAIN OF CUSTODY RECORD

| PROJ NO. | PROJECT NAME | NO. OF CON-TAINERS | |
|---|---|---|---|
| 47588-4000 | CASMALIA | | Lab: BCL |
| SAMPLER (Signature) CH/RL/PW | | | Shipped on: 11/13/2001 |

| Sample ID | Sample Date | Sample Time | Matrix | Station Location | NO. OF CON-TAINERS | Analyses | TAT | Comments |
|---|---|---|---|---|---|---|---|---|
| 18573 | 11/12/2001 | 9:20 | Liquids | SP-Runoff-1-01 | 7 | 8260; 8270; 8150; 9012 ; Metals (Tot) | 1 wk | |
| 18574 | 11/12/2001 | 13:30 | Liquids | A5D-Runoff-1-01 | 7 | 8260; 8270; 8150; 9012 ; Metals (Tot) | 1 wk | |
| 18575 | 11/12/2001 | 16:00 | Liquids | SP-Runoff-1-04 | 1 | 8260 | 1 wk | |

| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
|---|---|---|---|---|---|
| Cameron Hegel | 11-13-01 / 1320 | Jerry Mar | | | |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| | | | | | |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Relinquished by: (Signature) | Date / Time | Received by: (Signature) |
| | | | | | |

BC Laboratories, Inc.



Volatile Organic Analysis
(EPA Method 8260) 1 of 3

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 12/12/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Project Number: 47588-4000
Sampling Location: CASMALIA
Sample ID: A5D-RUNOFF-1-01
Sample Matrix: Water
Sample Collected By: CH/RL/PW

A-5 Div. 11/12/01

Date Collected: 11/12/2001 @ 13:30
Date Extracted: 11/19/2001
Date Analyzed: 11/19/2001 @ 22:57
Analyst: JES
Dilution Used: 1
Instrument ID: MS-V4

| Constituents | Analysis Results | Reporting Units | Method P.Q.L. | Method Detection Level | |
|---|---|---|---|---|---|
| Benzene | None Detected | µg/L | 0.5 | 0.080 | |
| Bromobenzene | None Detected | µg/L | 0.5 | 0.071 | |
| Bromochloromethane | None Detected | µg/L | 0.5 | 0.087 | |
| Bromodichloromethane | None Detected | µg/L | 0.5 | 0.060 | |
| Bromoform | None Detected | µg/L | 0.5 | 0.049 | |
| Bromomethane | None Detected | µg/L | 1. | 0.12 | *03 |
| n-Butylbenzene | None Detected | µg/L | 0.5 | 0.10 | |
| sec-Butylbenzene | None Detected | µg/L | 0.5 | 0.091 | |
| tert-Butylbenzene | None Detected | µg/L | 0.5 | 0.11 | |
| Carbon tetrachloride | None Detected | µg/L | 0.5 | 0.039 | |
| Chlorobenzene | None Detected | µg/L | 0.5 | 0.082 | |
| Chloroethane | None Detected | µg/L | 0.5 | 0.13 | |
| 2-Chloroethylvinyl ether | None Detected | µg/L | 10. | 1.6 | * |
| Chloroform | None Detected | µg/L | 0.5 | 0.098 | |
| Chloromethane | None Detected | µg/L | 0.5 | 0.11 | |
| 2-Chlorotoluene | None Detected | µg/L | 0.5 | 0.13 | |
| 1,2-Dibromo-3-Chloropropane | None Detected | µg/L | 1. | 0.29 | |
| 1,2-Dibromoethane | None Detected | µg/L | 0.5 | 0.073 | |
| Dibromomethane | None Detected | µg/L | 0.5 | 0.068 | |
| 1,2-Dichlorobenzene | None Detected | µg/L | 0.5 | 0.074 | |
| 1,3-Dichlorobenzene | None Detected | µg/L | 0.5 | 0.075 | |
| 1,4-Dichlorobenzene | None Detected | µg/L | 0.5 | 0.075 | |
| Dichlorodifluoromethane | None Detected | µg/L | 0.5 | 0.12 | |
| 1,1-Dichloroethane | None Detected | µg/L | 0.5 | 0.089 | |
| 1,2-Dichloroethane | None Detected | µg/L | 0.5 | 0.065 | |
| 1,1-Dichloroethene | None Detected | µg/L | 0.5 | 0.060 | |
| cis-1,2-Dichloroethene | None Detected | µg/L | 0.5 | 0.058 | |
| trans-1,2-Dichloroethene | None Detected | µg/L | 0.5 | 0.060 | |
| 1,2-Dichloropropane | None Detected | µg/L | 0.5 | 0.066 | |
| cis-1,3-Dichloropropene | None Detected | µg/L | 0.5 | 0.066 | |
| trans-1,3-Dichloropropene | None Detected | µg/L | 0.5 | 0.050 | |
| Ethyl Benzene | None Detected | µg/L | 0.5 | 0.075 | |
| Hexachlorobutadiene | None Detected | µg/L | 0.5 | 0.17 | |
| Isopropylbenzene | None Detected | µg/L | 0.5 | 0.066 | |
| p-Isopropyltoluene | None Detected | µg/L | 0.5 | 0.071 | |
| Methylene Chloride | None Detected | µg/L | 1. | 0.17 | |
| Naphthalene | None Detected | µg/L | 0.5 | 0.042 | |
| n-Propylbenzene | None Detected | µg/L | 0.5 | 0.081 | |
| Styrene | None Detected | µg/L | 0.5 | 0.053 | |

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BC Laboratories, Inc.



Volatile Organic Analysis
(EPA Method 8260)

A-5 2 of 3

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 12/12/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Sample Description: 47588-4000, CASMALIA, ASD-RUNOFF-1-01, 11/12/2001 @ 13:30, CH/RL/PW

| Constituents | Analysis Results | Reporting Units | Method P.Q.L. | Method Detection Level | |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | None Detected | µg/L | 0.5 | 0.072 | |
| 1,1,2,2-Tetrachloroethane | None Detected | µg/L | 0.5 | 0.079 | |
| Tetrachloroethene | None Detected | µg/L | 0.5 | 0.089 | |
| Toluene | None Detected | µg/L | 0.5 | 0.077 | |
| 1,2,3-Trichlorobenzene | None Detected | µg/L | 0.5 | 0.074 | |
| 1,2,4-Trichlorobenzene | None Detected | µg/L | 0.5 | 0.065 | |
| 1,1,1-Trichloroethane | None Detected | µg/L | 0.5 | 0.065 | |
| 1,1,2-Trichloroethane | None Detected | µg/L | 0.5 | 0.074 | |
| Trichloroethene | None Detected | µg/L | 0.5 | 0.073 | |
| Trichlorofluoromethane | None Detected | µg/L | 0.5 | 0.054 | |
| 1,2,3-Trichloropropane | None Detected | µg/L | 1. | 0.11 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.42 | µg/L | 0.5 | 0.060 | *02 |
| 1,2,4-Trimethylbenzene | None Detected | µg/L | 0.5 | 0.088 | |
| 1,3,5-Trimethylbenzene | None Detected | µg/L | 0.5 | 0.081 | |
| Vinyl Chloride | None Detected | µg/L | 0.5 | 0.15 | |
| Total Xylenes | None Detected | µg/L | 1. | 0.22 | |
| o-Xylene | None Detected | µg/L | 0.5 | 0.069 | |
| Acetone | None Detected | µg/L | 20. | 18. | |
| Acetonitrile | None Detected | µg/L | 20. | 9.0 | |
| Acrolein | None Detected | µg/L | 50. | 11. | |
| Acrylonitrile | None Detected | µg/L | 20. | 3.5 | |
| Carbon Disulfide | None Detected | µg/L | 1. | 0.99 | |
| 2-Chloro-1,3-butadiene | None Detected | µg/L | 5. | 0.93 | |
| Chlorodibromomethane | None Detected | µg/L | 0.5 | 0.081 | |
| 3-Chloropropylene | None Detected | µg/L | 5. | 0.89 | |
| Cyclohexanone | None Detected | µg/L | 200. | 23. | *03 |
| trans-1,4-Dichloro-2-butene | None Detected | µg/L | 5. | 2.8 | |
| 1,4-Dioxane | None Detected | µg/L | 300. | 88. | |
| Ethanol | None Detected | µg/L | 1000. | 180. | |
| 2-Hexanone | None Detected | µg/L | 20. | 7.8 | *03 |
| Iodomethane | None Detected | µg/L | 2. | 1.3 | |
| Isobutyl alcohol | None Detected | µg/L | 50. | 19. | |
| Isopropyl alcohol | None Detected | µg/L | 100. | 33. | |
| Methacrylonitrile | None Detected | µg/L | 10. | 5.7 | |
| Methyl Ethyl Ketone | None Detected | µg/L | 20. | 13. | |
| Methyl Isobutyl Ketone | None Detected | µg/L | 20. | 7.1 | *03 |
| Methyl Methacrylate | None Detected | µg/L | 5. | 2.6 | |
| Pentachloroethane | None Detected | µg/L | 10. | 1.6 | |
| Propionitrile | None Detected | µg/L | 20. | 19. | |
| Tetrahydrofuran | None Detected | µg/L | 20. | 15. | |
| Vinyl acetate | None Detected | µg/L | 20. | 12. | |

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BC Laboratories, Inc.



Volatile Organic Analysis
(EPA Method 8260) A-5 3543

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 12/12/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Sample Description: 47588-4000, CASMALIA, ASD-RUNOFF-1-01, 11/12/2001 @ 13:30, CH/RL/FW

Quality Control Data

| Surrogates | % Recovery | Control Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 | 95. | 76-114 |
| Toluene-d8 | 99. | 88-110 |
| 4-Bromofluorobenzene | 99. | 86-115 |

Flag Explanations:
* = Initial calibration linearity criteria not met.
ICV criteira not met.
*02 = Sample result is between the MDL and PQL.
*03 = CCV recovery not within method limits.
California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.



Base Neutral and Acid Extractables
Organic Analysis
(EPA Method 8270)

SOGS A-5 1 of 4 11/12/01

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 11/29/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Project Number: 47588-4000
Sampling Location: CASMALIA
Sample ID: ASD-RUNOFF-1-01
Sample Matrix: Water
Sample Collected By: CH/RL/PW

Date Collected: 11/12/2001 @ 13:30
Date Extracted: 11/14/2001
Date Analyzed: 11/20/2001 @ 19:45
Analyst: SKC
Dilution Used: 1.1

| Constituents | Analysis Results | Reporting Units | P.Q.L. | M.D.L. | |
|---|---|---|---|---|---|
| Acenaphthene | None Detected | µg/L | 2. | 0.99 | |
| Acenaphthylene | None Detected | µg/L | 2. | 1.1 | |
| Aniline | None Detected | µg/L | 5. | 0.76 | |
| Anthracene | None Detected | µg/L | 2. | 1.1 | |
| Benzo (a) anthracene | None Detected | µg/L | 2. | 0.90 | |
| Benzo (b) fluoranthene | None Detected | µg/L | 2. | 1.1 | |
| Benzo (k) fluoranthene | None Detected | µg/L | 2. | 1.1 | |
| Benzo (a) pyrene | None Detected | µg/L | 2. | 0.90 | |
| Benzo (ghi) perylene | None Detected | µg/L | 2. | 0.49 | |
| Benzoic Acid | None Detected | µg/L | 11. | 11. | |
| Benzyl alcohol | None Detected | µg/L | 2. | 0.85 | |
| bis(2-chloroethyl)ether | None Detected | µg/L | 2. | 0.99 | |
| bis(2-chloroethoxy)methane | None Detected | µg/L | 2. | 1.1 | |
| bis(2-chloro-1-methylethyl) | None Detected | µg/L | 2. | 0.96 | |
| bis(2-ethylhexyl)phthalate | 1.8 | µg/L | 5. | 1.0 | *02 |
| 4-Bromophenyl phenyl ether | None Detected | µg/L | 2. | 1.0 | |
| 4-Chloroaniline | None Detected | µg/L | 2. | 0.89 | |
| 2-Chloronaphthalene | None Detected | µg/L | 2. | 1.1 | |
| 4-Chlorophenyl phenyl ether | None Detected | µg/L | 2. | 1.2 | |
| Chrysene | None Detected | µg/L | 2. | 1.1 | |
| Dibenzo (a,h) anthracene | None Detected | µg/L | 3. | 0.47 | |
| Dibenzofuran | None Detected | µg/L | 2. | 1.1 | |
| Di-n-butyl phthalate | None Detected | µg/L | 2. | 1.1 | |
| 3,3-Dichlorobenzidine | None Detected | µg/L | 10. | 0.65 | |
| Diethyl phthalate | None Detected | µg/L | 2. | 1.1 | |
| Dimethyl phthalate | None Detected | µg/L | 2. | 0.88 | |
| 2,4-Dinitrotoluene | None Detected | µg/L | 2. | 0.87 | |
| 2,6-Dinitrotoluene | None Detected | µg/L | 2. | 0.91 | |
| Di-n-octylphthalate | None Detected | µg/L | 2. | 0.84 | |
| Fluoranthene | None Detected | µg/L | 2. | 1.3 | |
| Fluorene | None Detected | µg/L | 2. | 1.1 | |
| Hexachlorobenzene | None Detected | µg/L | 2. | 1.1 | |
| Hexachlorocyclopentadiene | None Detected | µg/L | 2. | 0.91 | |
| Hexachloroethane | None Detected | µg/L | 2. | 0.98 | |
| Indeno (1,2,3-cd) pyrene | None Detected | µg/L | 2. | 0.53 | |
| Isophorone | None Detected | µg/L | 2. | 1.1 | |
| 2-Methylnaphthalene | None Detected | µg/L | 2. | 1.2 | |
| 2-Naphthylamine | None Detected | µg/L | 20. | 1.4 | |

All result listed in this report are for the exclusive use of the submitting party, BC Laboratories, Inc. assumes no responsibility for report alteration, detachment or third party interpretation.
4100 Atlas Court * Bakersfield, CA 93308 * (661)327-4911 * Fax(661)327-1918 * www.bclabs.com

**BC Laboratories, Inc.**



A-5 2 of 4 11/12/01

Base Neutral and Acid Extractables
Organic Analysis
(EPA Method 8270)

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 11/29/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Sample Description: 47588-4000, CASMALIA, ASD-RUNOFF-1-01, 11/12/2001 @ 13:30, CH/RL/PW

| Constituents | Analysis Results | Reporting Units | P.Q.L. | M.D.L. | |
|---|---|---|---|---|---|
| 2-Nitroaniline | None Detected | µg/L | 2. | 0.86 | |
| 3-Nitroaniline | None Detected | µg/L | 2. | 0.80 | |
| 4-Nitroaniline | None Detected | µg/L | 5. | 0.81 | |
| Nitrobenzene | None Detected | µg/L | 2. | 0.98 | |
| n-Nitrosodimethylamine | None Detected | µg/L | 3. | 1.2 | |
| n-Nitrosodiphenylamine | None Detected | µg/L | 2. | 1.1 | |
| N-Nitrosodi-n-propylamine | None Detected | µg/L | 2. | 0.97 | |
| Phenanthrene | None Detected | µg/L | 2. | 1.1 | |
| Pyrene | None Detected | µg/L | 2. | 0.95 | |
| 4-Chloro-3-methylphenol | None Detected | µg/L | 5. | 0.91 | |
| 2-Chlorophenol | None Detected | µg/L | 2. | 0.82 | |
| 2,4-Dichlorophenol | None Detected | µg/L | 2. | 0.84 | |
| 2,4-Dimethylphenol | None Detected | µg/L | 2. | 0.92 | |
| 2,4-Dinitrophenol | None Detected | µg/L | 10. | 2.5 | |
| 2-Nitrophenol | None Detected | µg/L | 2. | 0.89 | |
| 4-Nitrophenol | None Detected | µg/L | 2. | 0.32 | |
| Pentachlorophenol | None Detected | µg/L | 10. | 0.79 | |
| Phenol | None Detected | µg/L | 2. | 0.52 | |
| 2,4,5-Trichlorophenol | None Detected | µg/L | 5. | 0.89 | |
| 2,4,6-Trichlorophenol | None Detected | µg/L | 5. | 0.97 | |
| Acetophenone | None Detected | µg/L | 10. | 0.14 | |
| 2-Acetylaminofluorene | None Detected | µg/L | 10. | 0.51 | |
| 4-Aminobiphenyl | None Detected | µg/L | 20. | 0.19 | |
| Aramite | None Detected | µg/L | 10. | 0.57 | |
| n-butyl benzyl phthalate | None Detected | µg/L | 2. | 1.2 | |
| Chlorobenzilate | None Detected | µg/L | 10. | 0.33 | |
| o-Cresol | None Detected | µg/L | 2. | 0.83 | |
| m- & p-Cresol | None Detected | µg/L | 2. | 1.6 | |
| Diallate | None Detected | µg/L | 10. | 1.8 | |
| 2,6-Dichlorophenol | None Detected | µg/L | 10. | 0.19 | |
| Dimethoate | None Detected | µg/L | 20. | 3.2 | *40 |
| Dimethylaminoazobenzene | None Detected | µg/L | 10. | 0.074 | |
| 7,12-Dimethylbenz (a) anthracene | None Detected | µg/L | 10. | 0.12 | |
| 3,3'-Dimethylbenzidine | None Detected | µg/L | 20. | 0.28 | |
| a,a-Dimethylphenethylamine | None Detected | µg/L | 20. | 4.0 | |
| m-Dinitrobenzene | None Detected | µg/L | 10. | 0.11 | |
| 4,6-Dinitro-2-methylphenol | None Detected | µg/L | 10. | 1.9 | |
| Diphenylamine | None Detected | µg/L | 10. | 0.090 | |
| Disulfoton | None Detected | µg/L | 10. | 0.29 | |
| Ethyl methacrylate | None Detected | µg/L | 10. | 0.063 | |
| Ethyl methanesulfonate | None Detected | µg/L | 10. | 0.19 | |
| Famphur | None Detected | µg/L | 20. | 1.5 | |
| Hexachlorophene | None Detected | µg/L | 200. | 32. | |
| Hexachloropropene | None Detected | µg/L | 20. | 0.16 | |
| Isodrin | None Detected | µg/L | 10. | 0.14 | |

All result listed in this report are for the exclusive use of the submitting party, BC Laboratories, Inc. assumes no responsibility for report alteration, detachment or third party interpretation

**BC Laboratories, Inc.**



Base Neutral and Acid Extractables
Organic Analysis
(EPA Method 8270)

A-5 3044 11/12/01

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 11/29/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Sample Description: 47588-4000, CASMALIA, A5D-RUNOFF-1-01, 11/12/2001 @ 13:30, CH/RL/PW

| Constituents | Analysis Results | Reporting Units | P.Q.L. | M.D.L. | |
|---|---|---|---|---|---|
| Isosafrole | None Detected | µg/L | 10. | 0.40 | |
| Kepone | None Detected | µg/L | 20. | 1.5 | |
| Methapyrilene | None Detected | µg/L | 10. | 0.96 | *40 |
| 3-Methylcholanthrene | None Detected | µg/L | 10. | 0.17 | |
| Methyl methanesulfonate | None Detected | µg/L | 10. | 0.15 | |
| Methyl parathion | None Detected | µg/L | 10. | 1.4 | *40 |
| 1,4-Napthoquinone | None Detected | µg/L | 20. | 0.52 | |
| 1-Napthylamine | None Detected | µg/L | 20 | 0.20 | |
| 5-Nitro-o-toluidine | None Detected | µg/L | 10. | 0.069 | |
| Nitroquinoline-1-oxide | None Detected | µg/L | 20. | 0.94 | |
| n-Nitrosodibutylamine | None Detected | µg/L | 10. | 0.21 | |
| n-Nitrosodiethylamine | None Detected | µg/L | 10. | 0.22 | |
| n-Nitrosomethylethylamine | None Detected | µg/L | 10. | 0.28 | |
| n-Nitrosomorpholine | None Detected | µg/L | 10. | 0.21 | |
| n-Nitrosopiperidine | None Detected | µg/L | 10. | 0.20 | |
| n-Nitrosopyrrolidine | None Detected | µg/L | 10. | 0.18 | |
| Parathion | None Detected | µg/L | 10. | 0.12 | |
| Pentachlorobenzene | None Detected | µg/L | 10. | 0.14 | |
| Pentachloronitrobenzene | None Detected | µg/L | 10. | 0.19 | |
| Phenacetin | None Detected | µg/L | 10. | 0.14 | |
| 1,4-Phenylenediamine | None Detected | µg/L | 20. | 0.54 | |
| Phorate | None Detected | µg/L | 10. | 0.16 | |
| 2-Picoline | None Detected | µg/L | 10. | 0.29 | |
| Pronamide | None Detected | µg/L | 10. | 0.15 | |
| Pyridine | None Detected | µg/L | 10. | 0.46 | |
| Safrole | None Detected | µg/L | 10. | 0.21 | |
| 1,2,4,5-Tetrachlorobenzene | None Detected | µg/L | 10. | 0.22 | |
| 2,3,4,6-Tetrachlorophenol | None Detected | µg/L | 10. | 0.27 | |
| Tetraethyldithiopyro-phosphate | None Detected | µg/L | 10. | 0.14 | |
| Thionazin | None Detected | µg/L | 10. | 0.18 | |
| o-Toluidine | None Detected | µg/L | 10. | 0.080 | |
| 0,0,0-Triethyl phosphorothioate | None Detected | µg/L | 10. | 0.20 | |
| 1,3,5-Trinitrobenzene | None Detected | µg/L | 10. | 0.065 | |

Quality Control Data

| Surrogates | % Recovery | Control Limits |
|---|---|---|
| 2-Fluorophenol | 61. | 21-100 |
| Phenol-d5 | 43. | 10-94 |
| Nitrobenzene-d5 | 86. | 35-114 |
| 2-Fluorobiphenyl | 68. | 43-116 |
| 2,4,6-Tribromophenol | 78. | 10-123 |

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**BC Laboratories, Inc.**



A-5 4 of 4 1/12/01

Base Neutral and Acid Extractables
Organic Analysis
(EPA Method 8270)

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 11/29/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Sample Description: 47588-4000. CASMALIA, A5D-RUNOFF-1-01, 11/12/2001 @ 13:30, CH/RL/PW

Quality Control Data

| Surrogates | % Recovery | Control Limits |
|---|---|---|
| d14-Terphenyl | 81. | 33-141 |

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).
M.D.L. = Method Detection Limit

Flag Explanations:
*02 = Sample result is between the MDL and PQL.
*40 = Initial calibration linearity criteria not met.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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**BC Laboratories, Inc.**



## Chlorinated Herbicides
## (EPA Method 8150)

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 11/20/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Project Number: 47588-4000
Sampling Location: CASMALIA
Sample ID: ASD-RUNOFF-1-01
Sample Matrix: Water
Sample Collected By: CH/RL/PW

Date Collected: 11/12/2001 @ 13:30
Date Extracted: 11/15/2001
Date Analyzed: 11/17/2001 @ 14:39
Analyst: KMS
Dilution Used: 1

| Constituents | Analysis Results | Reporting Units | P.Q.L. | M.D.L. | |
|---|---|---|---|---|---|
| 2,4-D | None Detected | µg/L | 0.4 | 0.16 | *03 |
| Dicamba | None Detected | µg/L | 0.08 | 0.020 | |
| Dichloroprop | None Detected | µg/L | 0.5 | 0.12 | |
| Dinoseb | None Detected | µg/L | 0.2 | 0.052 | |
| 2,4,5-T | None Detected | µg/L | 0.09 | 0.032 | |
| 2,4,5-TP (Silvex) | None Detected | µg/L | 0.07 | 0.024 | |

### Quality Control Data

| Surrogates | % Recovery | Control Limits |
|---|---|---|
| 2,4-Dichlorophenylacetic acid | 77. | 40-115 |

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).
M.D.L. = Method Detection Limit

Flag Explanations:
*03 = CCV recovery not within method limits.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.



WATER ANALYSIS
(METALS)

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 12/17/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

Project Number: 47588-4000
Sampling Location: CASMALIA
Sample ID: A5D-RUNOFF-1-01
Sampling Date/Time: 11/12/2001 @ 13:30
Sample Collected By: CH/RL/FW

| Constituents | | Results | Units | P.Q.L. | M.D.L. | Method | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Antimony | | 3.7 | µg/L | 5.0 | 0.60 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Arsenic | | 25. | µg/L | 5.0 | 0.85 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Barium | | 350. | µg/L | 50. | 5. | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Beryllium | *01 | None Detected | µg/L | 50 | 1.6 | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Cadmium | *01 | None Detected | µg/L | 50 | 20 | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Chromium | | 70. | µg/L | 50. | 20. | EPA-6010 | 11/16/01 | 11/27/01 |
| Total Cobalt | *06 | 10. | µg/L | 250. | 7. | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Copper | | 50. | µg/L | 50. | 20. | EPA-6010 | 11/16/01 | 11/26/01 |
| Total Lead | | 11. | µg/L | 5.0 | 0.67 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Mercury | | None Detected | µg/L | 0.2 | 0.10 | EPA-7470 | 11/20/01 | 11/20/01 |
| Total Molybdenum | *06 | 30. | µg/L | 250. | 20. | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Nickel | | 100. | µg/L | 50. | 20. | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Selenium | | 70 | µg/L | 5.0 | 1.3 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Silver | *01 | None Detected | µg/L | 50. | 20. | EPA-6010 | 11/16/01 | 11/19/01 |
| Total Tin | *06 | 2.1 | µg/L | 5.0 | 0.27 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Thallium | *06 | 3.1 | µg/L | 5.0 | 0.28 | EPA-200.8 | 12/03/01 | 12/03/01 |
| Total Vanadium | *04 | 60. | µg/L | 50. | 20. | EPA-6010 | 11/16/01 | 11/27/01 |
| Total Zinc | *06 | 190. | µg/L | 250. | 4.5 | EPA-6010 | 11/16/01 | 11/19/01 |

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).
M.D.L. = Method Detection Limit

Flag Explanations:
*01 = Note: PQL's and MDL's are raised due to matrix interferences.
*04 = Sample specific matrix spike recovery(s) are not within QC limits. Accuracy verified through LCS.
*06 = Note: PQL and MDL are raised due to matrix interferences. Sample result is between the MDL and PQL.

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Dan Schultz
Laboratory Director

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BC Laboratories, Inc.



# WATER ANALYSIS
## (GENERAL CHEMISTRY)

HARDING LAWSON ASSOCIATES
10265 ROCKINGHAM DRIVE
SUITE 150
SACRAMENTO, CA 95827
Attn: GREG FASIANO 916-364-0793

Date Reported: 12/05/2001
Date Received: 11/13/2001
Laboratory No.: 01-13010-2

A-5 11/12/01
Cyanide

Project Number: 47588-4000
Sampling Location: CASMALIA
Sample ID: ASD-RUNOFF-1-01
Sampling Date/Time: 11/12/2001 @ 13:30
Sample Collected By: CH/RL/PW

| Constituents | | Results | Units | P.Q.L. | M.D.L. | Method | Date Prepared | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Cyanide | | 0.027 | mg/L | 0.02 | 0.0063 | SW-9012 | 11/20/01 | 11/20/01 |
| Cyanide Amenable to Chlorination | * | 0.027 | mg/L | 0.02 | 0.0063 | SW-9012 | 11/28/01 | 11/29/01 |

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).
M.D.L. = Method Detection Limit

Flag Explanations:
* = Chlorinated sample necessary to calculate amenable cyanide was analyzed past holding time on 11/29/01.

California D.O.H.S. Cert./#1186

M. Atencio

Marna Atencio
Department Supervisor

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