JOHN SPELLMAN
Governor

Industry

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504 • (206) 753-2800

Knutt
Howard
Brot
File
Diane

TO: Merley McCall, E. Egbers, J. Neel

FROM: D. Huntamer

SUBJECT: Organic Analysis of American Crossarm and Conduit Sump Effluent.

DATE: May 14, 1982

One sample received from WDOE for analysis of acid, base-neutral and volatile organic compounds. A high concentration of Pentachlorophenol (PCP) was found in the sample along with much smaller amounts of naphthalene and phenanthrene. Due to the high PCP concentration the sample was diluted prior to analysis. This raised the detection limits for the other compounds by a factor of 10. Analyses results are attached.

EPA#	WDOE#	Received	
18540	82-2312	5/10/82	American Crossarm and Conduit Sump effluent.

ug/l

	Naptha	Phenanthrene	PCP	TCP	Akyl Naptha
X arm	85	46	7.3×10^5	4.4×10^4	
IPCO Wastewater	2800	340	1×10^3		

(Ecology + Mike have own copy,
730 mg/l Penta in effluent to grove
flow is quite sm
See my issues forthcoming.

Doc 3066

AR 1 6 0003

BASE/NEUTRAL COMPOUNDS

PROJECT: Am Cyanamid COMPILED BY: J M Blazevich DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: [illegible] DATE: 5-14-82

SAMPLE # :	18540							
UNITS :	µg/l							
LOQ :								
1. acenaphthene	7u							
2. benzidine	100u							
3. 1,2,4-trichlorobenzene	9u							
4. hexachlorobenzene	13u							
5. hexachloroethane	13u							
6. bis(2-chloroethyl) ether	5u							
7. 2-chloronapthalene	6u							
8. 1,2-dichlorobenzene	6u							
9. 1,3-dichlorobenzene	6u							
10. 1,4-dichlorobenzene	6u							
11. 3,3'-dichlorobenzidine	100u							
12. 2,4-dinitrotoluene	40u							
13. 2,6-dinitrotoluene	40u							
14. 1,2-diphenylhydrazine (as azobenzene)	3u							
15. fluroanthene	7u							
16. 4-chlorophenyl phenyl ether	13u							

BASE/NEUTRAL COMPOUNDS (continued)

PROJECT: Am Crossarm (DOE) COMPILED BY: J M Blazevich DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: GPB DATE: 5-14-82

SAMPLE # :		18540							
UNITS :		ug/l							
LOQ :									
17.	4-bromophenyl phenyl ether	20u							
18.	bis(2-chloroisopropyl) ether	3u							
19.	bis(2-chloroethoxy) methane	7u							
20.	hexachlorobutadiene	1u							
21.	hexachlorocyclopentadiene	100u							
22.	isophorone	3u							
23.	napthalene	85							
24.	nitrobenzene	10u							
25.	N-nitrosodimethylamine	30u							
26.	N-nitrosodiphenylamine	30u							
27.	N-nitrosodi-n-propylamine	60u							
28.	bis(2-ethyl hexyl) phthalate	6u							
29.	butyl benzyl phthalate	10u							
30.	di-n-butyl phthalate	2u							
31.	di-n-octyl phthalate	7u							
32.	diethyl phthalate	4u							
33.	dimethyl phthalate	6u							
34.	benzo(a)anthracene	20u							
35.	benzo(a)pyrene	100u							
36.	3,4-benzofluroanthene	100u							
37.	benzo(k)fluoranthene	100u							
38.	chrysene	80u							

BASE/NEUTRAL COMPOUNDS (continued)

PROJECT: Am. Crossarm DOE COMPILED BY: JM Glazerich DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: aes DATE: 5-14-82

SAMPLE # :	18540							
UNITS :	ug/l							
LOQ :								
39. acenaphthylene	3u							
40. anthracene	5u							
41. benzo(ghi)perylene	30u							
42. fluorene	7u							
43. phenanthrene	46							
44. dibenzo(a,h)anthracene	30u							
45. ideno(1,2,3-cd)pyrene	20u							
46. pyrene	6u							
47. TCDD	ND							

ND not detected

ACID COMPOUNDS

PROJECT: Am Cyanamid (DIE) COMPILED BY: J M Blegen DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: aph DATE: 5-14-82

SAMPLE # :	K540							
UNITS :	µg/l							
LOQ :								
1. 2,4,6-trichlorophenol	30µ							
2. p-chloro-m-cresol	13µ							
3. 2-chlorophenol	3µ							
4. 2,4-dichlorophenol	19µ							
5. 2,4-dimethyl phenol	100µ							
6. 2-nitrophenol	100µ							
7. 4-nitrophenol	100µ							
8. 2,4-dinitrophenol	1000µ							
9. 4,6-dinitro-o-cresol	1000µ							
10. pentachlorophenol	$7.3 \times 10^{+5}$							
11. phenol	5µ							

VOLATILES

PROJECT: Am. Cyanamid (DOE) COMPILED BY: JM Blagrid DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: ARB DATE: 5-14-82

SAMPLE # :	18540							
UNITS :	ug/l							
LOQ :								
1. acrolein	10 u							
2. acrylonitrile	5 u							
3. benzene	1 u							
4. carbon tetrachloride	↓							
5. chlorobenzene	↓							
6. 1,2-dichloroethane	↓							
7. 1,1,1-trichloroethane	↓							
8. 1,1-dichloroethane	↓							
9. 1,1,2-trichloroethane	↓							
10. 1,1,2,2-tetrachloroethane	↓							
11. chloroethane	↓							
12. 2-chloroethylvinyl ether	↓							
13. chloroform	1m							
14. 1,1-dichloroethylene	1 u							
15. 1,2-trans-dichloroethylene	↓							
16. 1,2-dichloropropane	↓							
17. 1,3-dichloropropylene	↓							
18. ethylbenzene	1.5							
19. methylene chloride	1 u							
20 methyl chloride	↓							
21. methyl bromide	↓							
22. bromoform	↓							

VOLATILES (Continued)

PROJECT: Am Cyanamid (DOE) COMPILED BY: J M Blegen DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: APS DATE: 5-14-82

SAMPLE # :	18540							
UNITS :	ug/l							
LOQ :								
23. dichlorobromomethane	1u							
24. trichlorofluoromethane	↓							
25. dichlorodifluoromethane	↓							
26. chlorodibromomethane	↓							
27. tetrachloroethylene	↓							
28. toluene	2.4							
29. trichloroethylene	1u							
30. vinyl chloride	↓							

TENTATIVELY IDENTIFIED COMPOUNDS

PROJECT: Am Gossom (DOE) COMPILED BY: J M Blazevich DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: [illegible] DATE: 5-14-82

ACID FRACTION B/N SAMPLE # :	18540							
CAS # NAME	4/18							
575 naphthalene,	Fit	893						
1.-41-7 1,3- dimethyl-	$1.7 \times 10^{+3}$	ug/l (estimate)						
939 naphthalene,	Fit =	886						
2.-27-5 2-ethyl-	$2.4 \times 10^{+3}$	ug/l (estimate)						
91 naphthalene,	Fit =	872						
3.-57-6 2-methyl-	580	ug/l (estimate)						
58 phenol,	Fit =	904						
4.-90-2 2,3,4,6-tetrachloro-	$4.4 \times 10^{+4}$	ug/l (estimate)						
5.								
6.								
7.								
8.								
9.								
10.								

TENTATIVELY IDENTIFIED COMPOUNDS

PROJECT: Am. Crossarm (DOE) COMPILED BY: JM Blazevich DATE: 5-13-82

LABORATORY: EPA Region X REVIEWED BY: ABS DATE: 5-14-82

VOA FRACTION: SAMPLE # :	18540							
CAS # NAME	7/15							
75 1.-08-1 ethanethiol	+							
67 2.-64-1 acetone	+							
78 3.-93-3 methylethylketone	+							
78 4.-92-2 2-butanal	+							
691 5.-37-2 4-methyl-1-pentene	+							
1077 6.-87-9 2-pentanone	+							
95 7.-47-6 xylene	+							
8.								
9.								
10.								

+ = present