



Shell Oil Company
Interoffice Memorandum

PLAINTIFF'S EXHIBIT

SH-1442

MARCH 31, 1988

FROM: R. E. GREEN, STAFF INDUSTRIAL HYGIENIST, HS&E/S&IH
TO: DISTRIBUTION LIST
SUBJECT: 1987 IH MONITORING SUMMARY

Attached is a summary of the 1987 industrial hygiene monitoring data for your location. The tables contain information on the number of peak, task and TWA samples taken. The type of operation (normal or other) is indicated for TWAs and type of task for peak and task samples. The format has been modified from that used in past years to show all types of samples for each job grouped together. A summary of noise samples is also included, if any were submitted.

Please let us know if you have any questions.

REG:lfw

Attachment

cc: (w/attachment)
C. F. Phillips
J. D. Ransdell
P. J. Snyder
HS&E-AS (2)

LAM 024049

CAS8809001

ABS-007231

REPORT OF
H.S. & E. SUPPORT
ADMIN. SERVICES
MAR 31 3 18 PM '88

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LAM 024050

ANACORTES
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT
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ASBESTOS

EA0100631	MECH-BUILDERS SKILLS CRAFT-MTC	21	REMOVING INSULATION	0	0	2	0
EA9500500	CONTR-PLT	35	OTHER MECHANICAL WORK	0	1	1	0
*TOTAL	ASBESTOS			0	1	3	0

LAM 024051

ABS-007233

DEER PARK
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT
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ASBESTOS

EH0090620	INSUL LUBE/PHENOL ACETONE MTC	08	OTHER	0	0	0	2
		21	REMOVING INSULATION	0	0	2	0
EH0090920	INSUL-OLEFINS-W. OPRNS MAINT.	21	REMOVING INSULATION	0	0	2	0
EH0091110	EQ OPER-CMPLX-MTC N.	01	NORMAL	0	0	0	4
		05	SHUTDOWN/TURNAROUND	0	0	0	1
EH0099638	INSUL-PROLER-UTILS DIST	08	OTHER	0	0	0	12
EH0099639	INSUL-DERK HARMSEN CONS.-EPON I	21	REMOVING INSULATION	0	0	4	0
EH0099641	INSUL-TIPCO-DPMC CMPLX	06	MAINTENANCE	0	0	0	4
		21	REMOVING INSULATION	0	0	2	0
EH0099649	HVY EQ OPER-CHRISTENSEN-DPMC CMPLX	36	OTHER OPERATING TASKS	0	1	0	0
EH0099657	LBR-PRC COMPANY-CMPLX	21	REMOVING INSULATION	0	0	6	0
910422	AREA-DPMC N.	08	OTHER	1	0	0	0
910425	AREA-CAT XING & GAS-OPRNS E.	01	NORMAL	2	0	0	0
		05	SHUTDOWN/TURNAROUND	3	0	0	0
910427	AREA-GAS REC-E. OPRNS	05	SHUTDOWN/TURNAROUND	8	0	0	0

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LAM 024052

ABS-007234

DEER PARK
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT

ASBESTOS						
910433	LUBE B-LUBE-PHENOL/ACETON OPRNS	01 NORMAL	1	0	0	0
910435	AREA-BPA-CHEM OPRNS RESINS	08 OTHER	5	0	0	0
910439	AREA-CA	08 OTHER	3	0	0	0
910459	AREA-LUBE LOGISTICS LUBE/PHENOL ACE	08 OTHER	2	0	0	0
		21 REMOVING INSULATION	1	0	0	0
910461	AREA-G-CHEM OPRNS	08 OTHER	6	0	0	0
		21 REMOVING INSULATION	4	0	0	0
910479	AREA-UTILS-DIST	06 MAINTENANCE	4	0	0	0
		08 OTHER	4	0	0	0
		21 REMOVING INSULATION	2	0	0	0
*TOTAL	ASBESTOS		46	1	16	23

0

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LAM 024053

ABS-007235

GEISMAR
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA	PEAK	TASK	TWA
			COUNT	COUNT	COUNT	COUNT

ASBESTOS						
E60021504	PROC TECH-Z. A, ED/EG 1 & 2 INSIDE-	01	NORMAL	0	0	1
E60033505	PROC TECH-ETHOXY ROVER-CDC/ETHOXY	05	SHUTDOWN/TURNAROUND	0	0	1
E60061512	MTC TECH-MULTI-SKILL-AG/ID	23	BREAKING INTO A LINE	0	1	0
E60061518	MTC TECH-MULTI-SKILL K-1, M, EGE	23	BREAKING INTO A LINE	0	1	0
E60091001	CONTR	06	MAINTENANCE	0	0	4
		35	OTHER MECHANICAL WORK	0	4	0
910138	ED EG	21	REMOVING INSULATION	1	0	0
910156	AREA-K1	05	SHUTDOWN/TURNAROUND	2	0	0
		06	MAINTENANCE	3	0	0
*TOTAL	ASBESTOS		6	0	6	6

LAM 024054

ABS-007236

MARIETTA
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT

0 ASBESTOS						
EX0088000	GENL CONTRACTORS	06 MAINTENANCE	0	0	0	3
		21 REMOVING INSULATION	0	0	2	0
910090	GENL PLT	35 OTHER MECHANICAL WORK	1	0	0	0
910099	MS-1	01 NORMAL	2	0	0	0
		08 OTHER	4	0	0	0
*TOTAL	ASBESTOS		7	0	2	3

LAM 024055

ABS-007237

MARTINEZ
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT
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0

ASBESTOS

EM0022500	CEMENTMEN-SOFT CRAFTS-ENG FIELD	21	REMOVING INSULATION	0	0	2	0
		36	OTHER OPERATING TASKS	0	0	3	0
910000	AREA-CMPLX MMC	35	OTHER MECHANICAL WORK	3	0	0	0
910002	AREA-QUAD A MMC	21	REMOVING INSULATION	5	0	0	0
*TOTAL	ASBESTOS			8	0	5	0

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LAM 024056

ABS-007238

NORCO
SUMMARY OF 1967 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1968

JEP CODE	JOB TITLE	OPCODE	AREA	PEAK	TASK	TWA
			COUNT	COUNT	COUNT	COUNT

ASBESTOS						
EN0000109	CONTR INSUL	08	OTHER	0	0	3
EN0000121	CONTR LBR/GENL HELPER	08	OTHER	0	0	36
		35	OTHER MECHANICAL WORK	0	0	0
		53	HANDLING/DISPOSAL OF	0	1	0
EN0011565	P/F SHOP-MTC-E. SITE-SHOP	35	OTHER MECHANICAL WORK	0	0	0
EN0011720	B/M-MTC E.-SHOP	35	OTHER MECHANICAL WORK	0	0	0
910570	AREA-E. SITE	35	OTHER MECHANICAL WORK	2	0	0
910571	ALKY	08	OTHER	24	0	0
910575	AREA-HYDROPROC (HCU, H2, CR-2)	01	NORMAL	1	0	0
910587	COKING/NHT/CR-1	01	NORMAL	4	0	0
910588	AREA-DU-4	01	NORMAL	6	0	0
*TOTAL	ASBESTOS			37	1	39

LAM 024057

ABS-007239

WILMINGTON
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT
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0	ASBESTOS					
EK0033700	CONTR-SUPPLEMENTAL LBR-DONINGUEZ MT 01	NORMAL	0	0	0	2

LAM 024058

ABS-007240

WILMINGTON
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT	

ASBESTOS							
EK0033700	CONTR-SUPPLEMENTAL LBR-DOMINGUEZ MT	05	SHUTDOWN/TURNAROUND	0	0	0	8
		06	MAINTENANCE	0	0	0	6
		08	OTHER	0	0	0	1
		21	REMOVING INSULATION	0	0	10	0
		54	APPLYING INSULATION	0	0	1	0
*TOTAL	ASBESTOS			0	0	11	17

LAM 024059

ABS-007241

WOOD RIVER
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT
ASBESTOS						
EW0072621	B/M/WELDER-LUBE OPNS-MTC	21	REMOVING INSULATION	0	0	4
EW0072676	INSUL-LT OIL PROC-MTC	03	UPSET	0	0	0
		06	MAINTENANCE	0	0	0
		21	REMOVING INSULATION	0	0	12
EW0072677	INSUL-DISP-MTC	01	NORMAL	0	0	0
EW0072680	INSUL-HYDROPROC-MTC	21	REMOVING INSULATION	0	0	9
		35	OTHER MECHANICAL WORK	0	0	3
EW0072685	INSUL-SHOPS-MTC	06	MAINTENANCE	0	0	0
		21	REMOVING INSULATION	0	1	4
EW0072692	LBR-DISP-MTC	01	NORMAL	0	0	0
EW0072695	LBR-HYDROPROC-MTC	35	OTHER MECHANICAL WORK	0	0	2
EW0072696	LBR-LUBE OPNS-MTC	35	OTHER MECHANICAL WORK	0	0	2
EW0072771	TINNER-MTC	01	NORMAL	0	0	0
EW0072776	GARAGE MECHANIC-MTC	35	OTHER MECHANICAL WORK	0	0	8
EW0072777	TRUCK DRIVER-MTC	17	COLLECTING SAMPLE	0	0	1
		50	FILLING CONTAINER(S)	0	0	1
910180	AREA-REF.	01	NORMAL	6	0	0
		06	MAINTENANCE	12	0	0
		21	REMOVING INSULATION	2	0	0
		37	CLEANING EQUIPMENT	1	0	0
910182	AREA-ALKY	35	OTHER MECHANICAL WORK	2	0	0
910188	AREA-SATS GAS/CAT REFORM 1	21	REMOVING INSULATION	2	0	0
910189	AREA-HYDRO-X	01	NORMAL	1	0	0

LAM 024060

ABS-007242

WOOD RIVER
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT

ASBESTOS						
910199	AREA-DISTL 1	01 NORMAL	4	0	0	0
		21 REMOVING INSULATION	1	0	0	0
910200	AREA-DISTL 2	03 UPSET	2	0	0	0
910205	AREA-GASO TRTR	21 REMOVING INSULATION	1	0	0	0
910206	AREA-STABILIZERS/VOLATILE TRTR	21 REMOVING INSULATION	4	0	0	0
910208	AREA-CAT CRACKER 1	06 MAINTENANCE	2	0	0	0
910210	AREA-CAT FEED HT	06 MAINTENANCE	1	0	0	0
910214	AREA-LDNG RACKS	01 NORMAL	3	0	0	0
910218	AREA-LUBE F & E/LHT	06 MAINTENANCE	2	0	0	0
		21 REMOVING INSULATION	2	0	0	0
		35 OTHER MECHANICAL WORK	2	0	0	0
910228	AREA-MACHN	06 MAINTENANCE	4	0	0	0
910232	AREA-PIPE	21 REMOVING INSULATION	3	0	0	0
910236	AREA-SHOP 3-BOILER/TIN	01 NORMAL	2	0	0	0
		21 REMOVING INSULATION	2	0	0	0
910237	AREA-AUTO-GARAGE	01 NORMAL	3	0	0	0
910244	AREA-BOILER HOUSE	01 NORMAL	11	0	0	0
*TOTAL	ASBESTOS		75	1	46	15

LAM 024061

ABS-007243

WOODBURY
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

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MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT

ASBESTOS						
EJ0010512	PROC TECH-POLY PROC-OPRNS	01 NORMAL	0	0	0	2
EJ0031581	SR MTC TECH-SMG-OPRNS	01 NORMAL	0	0	0	2
910071	AREA POLY UNIT	01 NORMAL	2	0	0	0
910072	AREA SVCS UNIT	01 NORMAL	2	0	0	0
*TOTAL	ASBESTOS		4	0	0	4

PRODUCTS DISTRIBUTION
CLEVELAND PLANT
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

MARCH 28, 1986

JEP CODE	JOB TITLE	QPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT	

ASBESTOS							
601140500	AUTO MECH	35	OTHER MECHANICAL WORK	0	0	1	0
911213	GARAGE	35	OTHER MECHANICAL WORK	2	0	0	0
*TOTAL ASBESTOS			2	0	1	0	
*TOTAL PLAC CLEVELAND PLANT			2	0	1	0	

LAM 024063

ABS-007245

PRODUCTS DISTRIBUTION
DETROIT PLANT
SUMMARY OF 1987 INDUSTRIAL HYGIENE MONITORING

PAGE 4

MARCH 28, 1988

JEP CODE	JOB TITLE	OPCODE	AREA COUNT	PEAK COUNT	TASK COUNT	TWA COUNT

ASBESTOS						
601340500	AUTO MECH	35	0	0	1	0
911231	GARAGE	35	2	0	0	0
*TOTAL ASBESTOS			2	0	1	0
*TOTAL PLACE DETROIT PLANT			2	0	1	0

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LAM 024064

ABS-007246