

**Hylebos Waterway Fish Injury Studies
Individual Data and Quality Assurance Results
CASE NARRATIVE**

**Juvenile Salmon Injury
DNA Adducts**

Performance Evaluation

The PPL performance standard met ³²P-labeling criteria.

Calibration

There were no deviations from the QA/SOP calibration criteria. All the calibration data that were used to quantitate DNA adducts met the initial and continuing criteria detailed in the “Commencement Bay Quality Assurance Plan” (QA Plan).

Method Blank

The acceptance criteria were met for the method blank.

Sample Duplicates

Three samples were processed and analyzed in duplicate. The relative percent differences (RPD) for all analytes, were less than 50%.

Commentary on Samples:

Missing sample analyses:

One sample (143-30) was lost because the chromatogram was not quantifiable.

Values reported that are less than 10 nmol/mol:

If the storage phosphor images of the radioactivity distribution on the chromatograms are sufficiently clean and distinct, then values less than 10 nmols DNA adducts/mol DNA for the large diagonal radioactive zone containing adducts derived from polycyclic aromatic compounds can be obtained. For the chromatography standards, the limit of detection for a single, well resolved spot is 0.1 nmol DNA adduct/mol DNA.

Juvenile Salmon Injury
DNA Adducts

ppi#	composite #	1994 capture date	capture site	species	nmol DNA adducts/mol DNA bases
143-01	C1	11-May	PTH	chum	CNQ*
143-02	C2	11-May	PTH	chum	<7
143-03	C3	11-May	PTH	chum	<5
143-04	C4	12-May	PTH	chum	<5
143-05	C5	13&16-May	SKO	chum	<5
143-06	C6	16-May	SKO	chum	<5
143-07	C7	25&26-May	HYL	chum	<5
143-08	C8	25-May	HYL	chum	6
143-09	C9	25-May	HYL	chum	13
143-10	C10	1-Jun	HYL	chum	<5
143-11	C11	1-Jun	HYL	chum	6
143-12	C12	1-Jun	HYL	chinook	6
143-13	C13	2-Jun	HYL	chum	12
143-14 replicate a	C14	2-Jun	HYL	chum	8
replicate b	"	"	"	"	9
143-15	C15	2-Jun	HYL	chinook	<5
143-16	C16	8-Jun	HYL	chum	9
143-17	C17	8-Jun	HYL	chum	11
143-18	C18	8&9-Jun	HYL	chinook	<5
143-19	C19	9-Jun	HYL	chum	<5
143-20	C20	9-Jun	HYL	chum	8
143-21	C21	13-Jun	PSH	chinook	<5
143-22	C22	13-Jun	PSH	chinook	<5
143-23	C23	13-Jun	PSH	chinook	9
143-24	C24	13-Jun	PSH	chinook	6
143-25	C25	13-Jun	PSH	chinook	7
143-26	C26	15&16-Jun	HYL	chum	16
143-27 replicate a	C27	15&16-Jun	HYL	chinook	12
replicate b	"	"	"	"	8
143-28	C28	16-Jun	HYL	chinook	<10
143-29	C29	22-Jun	HYL	chinook	11
143-30	C30	23-Jun	HYL	chinook	<10
143-31	C31	29-Jun	HYL	chinook	6
143-32	C32	9-May	NisH	chinook	9
143-33	C33	13-May	NisH	chinook	9
143-34	C34	13-May	NisH	chinook	7
143-35	C35	18-May	NisE	chinook	8
143-36	C36	20-May	NisE	chinook	<10
143-37 replicate a	C37	31-May	NisE	chinook	<10
replicate b	"	"	"	"	<10
salmon sperm DNA blank					<5
Benzo[a]pyrene-DNA adduct standard 10 uL					2
Benzo[a]pyrene-DNA adduct standard 10 uL					3
Benzo[a]pyrene-DNA adduct standard 5 uL					1
Benzo[a]pyrene-DNA adduct standard 5 uL					1
Hyl=Hylebos		NisH=Nisqually Hatchery		PTH= Puyallup Tribal Hatchery	
NisE=Nisqually Estuary		PSH=Puyallup State Hatchery		SKO=Skokomish Estuary	
*CNQ = chromatogram not quantifiable					