

ESN NORTHWEST CHEMISTRY LABORATORY

Andy Seitz  
PROJECT SILVERDALE  
Washington

ESN Northwest  
1210 Eastside Street SE Suite 200  
Olympia, WA 98501  
(360) 459-4670 (360) 459-3432 Fax  
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Water by Method NWTPH-Gx/8260

Sample Number	Date Analyzed	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Gasoline Range Organics (ug/L)	Surrogate Recovery (%)
Method Blank	3/12/2018	nd	nd	nd	nd	nd	78
LCS	3/12/2018	107%	99%	101%	90%	100%	97
DH-1	3/12/2018	3.6	86	3.9	20	580	95
TRIP BLANK	3/12/2018	nd	nd	nd	nd	nd	106
Reporting Limits		1.0	1.0	1.0	3.0	100	

"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromofluorobenzene) & LCS: 65% TO 135%

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**Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx**

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	3/12/2018	3/12/2018	147	nd	nd
LCS	3/12/2018	3/12/2018	97	138%	---
DH-1	3/12/2018	3/12/2018	143	nd	nd
Reporting Limits				250	500

"---" Indicates not tested for component.

"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

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**Analysis of Polynuclear Aromatic Hydrocarbons in Water by Method 8270**

Analytical Results

	Reporting	MTH BLK	LCS	DH-1
Date extracted	Limits	03/12/18	03/12/18	03/12/18
Date analyzed	(ug/L)	03/12/18	03/12/18	03/12/18
Naphthalene	0.1	nd	113%	nd
2-Methylnaphthalene	0.1	nd	98%	nd
1-Methylnaphthalene	0.1	nd	ns	nd
Acenaphthylene	0.1	nd	120%	nd
Acenaphthene	0.1	nd	128%	nd
Fluorene	0.1	nd	100%	nd
Phenanthrene	0.1	nd	103%	nd
Anthracene	0.1	nd	118%	nd
Fluoranthene	0.1	nd	110%	nd
Pyrene	0.1	nd	96%	nd
Benzo(a)anthracene*	0.1	nd	77%	nd
Chrysene*	0.1	nd	128%	nd
Benzo(b)fluoranthene*	0.1	nd	80%	nd
Benzo(k)fluoranthene*	0.1	nd	106%	nd
Benzo(a)pyrene*	0.1	nd	82%	nd
Indeno(1,2,3-cd)pyrene*	0.1	nd	100%	nd
Dibenzo(a,h)anthracene*	0.1	nd	133%	nd
Benzo(ghi)perylene	0.1	nd	103%	nd
Total Carcinogens				nd
<u>Surrogate recoveries:</u>				
2-Fluorobiphenyl		101%	121%	97%
p-Terphenyl-d14		139%	109%	135%

Data Qualifiers and Analytical Comments

\* - Carcinogenic Analyte

nd - not detected at listed reporting limits

ns - not spiked

Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%

# CHAIN-OF-CUSTODY RECORD

**CLIENT:** Setz (Andy)  
**ADDRESS:** 7415 Stigean Rd NW Olympia WA 98502  
**PHONE:** (360) 280 4707 (cell) **FAX:** \_\_\_\_\_

**DATE:** 3-8-18 **PAGE:** 1 **OF:** 1  
**PROJECT NAME:** Clearlake  
**LOCATION:** Clearlake WA  
**PROJECT MANAGER:** \_\_\_\_\_  
**COLLECTOR:** Dan Hendon / PS0.00 **DATE OF COLLECTION:** 3-8-18

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES																TOTAL NUMBER OF CONTAINERS	CHAIN OF CUSTODY SEALS Y/N/NA	SEALS INTACT? Y/N/NA	RECEIVED GOOD COND./COLD	LABORATORY NOTES:					
					TPH - HClD	TPH - Diesel & Oil	TPH - Gasoline	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos - PLM	GRO Suite	DRO Suite						WO Suite	Total Number of Containers	Laboratory Note Number		
1. 241	3 ft	1:00 PM	Water	Plastic	XX			XX				X																10		
2.																														
3.																														
4.																														
5.																														
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RELINQUISHED BY (Signature) \_\_\_\_\_ DATE/TIME \_\_\_\_\_  
RECEIVED BY (Signature) \_\_\_\_\_ DATE/TIME \_\_\_\_\_

RELINQUISHED BY (Signature) *Jack Wood* 3-8-18

RECEIVED BY (Signature) \_\_\_\_\_ DATE/TIME \_\_\_\_\_

TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SEALS Y/N/NA

SEALS INTACT? Y/N/NA

RECEIVED GOOD COND./COLD

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY  
E-Mail: info@esnmw.com

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