MOSES LAKE MAINTENANCE FACILITY RIFS
CENTRAL PORTION SOURCE AREA SOIL
POLYNUCLEAR AROMATIC HYDROCARBON RESULTS

Location					TP-04		TP-05				TP-06		MW-16	
Sample Identifier					0TP04-2.2,3.0,4.2,4.5 Comp.		0TP05-3.0,3.9 Comp.		1TP05-3.0, 3.9 Comp.		0TP06-4.0, 4.5 Comp.		0MW06-4.5 to 6.0	
Sample Type					N	Q	N	Q	Dup	Q	N	Q	N	Q
Analyte	Method	MTCA Cleanup Levels For Unrestricted Use (mg/kg)[a]	Toxicity Equivalency Factor (TEF)	Ecological Concerns Criteria WAC 173-340 Table 749-2 (mg/kg)	Concentration (mg/kg)									
Polynuclear Aromatic Hydrocarbons														
Naphthalene	EPA 8270C	5	NA	NSA	0.39		2		1.00		0.011	U	0.11	J
2-Methylnaphthalene	EPA 8270C	NSA	NA	NSA	1.40		10		5.80		0.011	U	0.24	J
1-Methylnaphthalene	EPA 8270C	NSA	NA	NSA	2.70		7.1		4.10		0.011	U	0.71	J
Acenaphthylene	EPA 8270C	NSA	NA	NSA	0.10		0.20		0.18	U	0.011	U	0.010	UJ
Acenaphthene	EPA 8270C	4,800[b]	NA	d	0.26		0.39		0.29		0.011	U	0.057	J
Fluorene	EPA 8270C	3,200[b]	NA	NSA	0.76		1.5		0.95		0.011	U	0.12	J
Phenanthrene	EPA 8270C	NSA	NA	NSA	0.62		1.1		0.70		0.011	U	0.14	J
Anthracene	EPA 8270C	24,000[b]	NA	NSA	0.10	U	0.18	U	0.18	U	0.011	U	0.01	UJ
Fluoranthene	EPA 8270C	3,200[b]	NA	NSA	0.10	U	0.49	U	0.31		0.018		0.092	J
ene	EPA 8270C	2,400[b]	NA	NSA	0.15		0.27		0.18	U	0.021		0.140	J
nzo[a]anthracene[c]	EPA 8270C	0.1 / TEF*	0.100	NSA	0.10	U	0.18	U	0.18	U	0.011	U	0.027	J
Chrysene[c]	EPA 8270C	0.1 / TEF*	0.010	NSA	0.10	U	0.18	U	0.18	U	0.017		0.073	J
Benzo[b]fluoranthene[c]	EPA 8270C	0.1 / TEF*	0.100	NSA	0.10	U	0.18	U	0.18	U	0.014		0.067	J
Benzo[k]fluoranthene[c]	EPA 8270C	0.1 / TEF*	0.140	NSA	0.10	U	0.18	U	0.18	U	0.011	U	0.01	UJ
Benzo[a]pyrene[c]	EPA 8270C	0.1 / TEF*	1.000	30	0.10	U	0.18	U	0.18	U	0.014		0.024	J
Indeno[1,2,3-cd]pyrene[c]	EPA 8270C	0.1 / TEF*	0.100	NSA	0.10	U	0.18	U	0.18	U	0.011	U	0.035	J
Dibenz[a,h]anthracene[c]	EPA 8270C	0.1 / TEF*	0.400	NSA	0.10	U	0.18	U	0.18	U	0.011	U	0.010	UJ
Benzo[g,h,i]perylene	EPA 8270C	NSA	NA	NSA	0.10	U	0.18	U	0.18	U	0.013		0.065	J
Total TEF cPAH concentration	-	0.1 / TEF*	-	-	NA		NA		NA		0.016		0.038	

Note:
N - Normal sample.
Q - Validated data qualifier.
NSA - No standard available.
Dup - Duplicate sample.
U - indicates that the analyte was not detected above its practical quantitation limit (PQL).
J - indicates concentration is an estimated value.
NA - Not Applicable.
a - Chapter 173-340 WAC Method A Cleanup Levels for unrestricted use unless otherwise noted.
b - Chapter 173-340 WAC Method B Cleanup Levels for unrestricted use.
c - Carcinogenic PAH.
d - Safe concentration has not yet been established by Ecology.
* - The MTCA Method A Cleanup level for cPAHs is based the total toxicity equivalence of benzo[a]pyrene that is 0.1 mg/Kg. The individual cPAHs are multiplied by their TEF, and the values summed to determine the total cPAH based on their toxicity equivalent factor (TEF). Reference WAC 173-340-708.

MOSES LAKE MAINTENANCE FACILITY RIFS
CENTRAL PORTION SOURCE AREA SOIL
VOLATILE ORGANIC COMPOUND RESULTS (DETECTS ONLY)

Location				TP-04		TP-05				TP-06		MW-16	
Sample Identifier				0TP04-2.2,3.0,4.2,4.5 Comp.		0TP05-3.0,3.9 Comp.		1TP05-3.0, 3.9 Comp.		0TP06-4.0, 4.5 Comp.		0MW-16-4.5 to 6.0	
Sample Type				N	Q	N	Q	Dup	Q	N	Q	N	Q
Analyte	Method	MTCA Cleanup Levels for Unrestricted Use (mg/kg)[a]	Ecological Concerns Criteria WAC 173-340 Table 749-2 (mg/kg)*	Concentration (mg/kg)									
Volatile Organic Compounds													
Acetone	EPA 8260B	8,000 [b]	NSA	0.12		0.1400		0.11		0.067		0.0092	J
Carbon Disulfide	EPA 8260B	8,000 [b]	NSA	0.0012	U	0.0052		0.0050		0.0014	U	0.0012	UJ
2-Butanone	EPA 8260B	48,000 [b]	NSA	0.040		0.20		0.065		0.015		0.0060	UJ
Benzene	EPA 8260B	0.03	NSA	0.0012	U	0.013		0.0069		0.0014	U	0.0012	UJ
Toluene	EPA 8260B	7 [b]	NSA	0.0015		0.0034		0.0032		0.0014	U	0.0012	UJ
Tetrachloroethene	EPA 8260B	19.6 [b]	NSA	0.0012	U	0.0015		0.0011	U	0.0014	U	0.0012	UJ
Chlorobenzene	EPA 8260B	1,600 [b]	NSA	0.0012	U	0.0270		0.0067		0.0014	U	0.0012	UJ
Ethylbenzene	EPA 8260B	6 [b]	NSA	0.053		0.053		0.027		0.0014	U	0.0012	UJ
-Xylene	EPA 8260B	9 [bc]	NSA	0.059		1.1		0.32		0.0027	U	0.0049	J
lene	EPA 8260B	9 [bc]	NSA	0.032	-	0.30		0.14		0.0014	U	0.0075	J
sopropylbenzene	EPA 8260B	NSA	NSA	0.059		0.33		0.16		0.0014	U	0.0019	J
n-Propylbenzene	EPA 8260B	NSA	NSA	0.15		1.0		0.53		0.0014	U	0.0048	J
1,3,5-Trimethylbenzene	EPA 8260B	NSA	NSA	0.46		0.21		1.40		0.0014	U	0.006	J
1,2,4-Trimethylbenzene	EPA 8260B	NSA	NSA	1.1		6		5.1		0.0014	U	0.03	UJ
sec-Butylbenzene	EPA 8260B	NSA	NSA	0.13		0.78		0.50		0.0014	U	0.0038	J
p-Isopropyltoluene	EPA 8260B	NSA	NSA	0.16		0.71		0.52		0.0014	U	0.0044	J
1,4-Dichlorobenzene	EPA 8260B	41.7 [b]	NSA	0.0012	U	0.0082		0.0026		0.0014	U	0.0012	UJ
1,2-Dichlorobenzene	EPA 8260B	7,200 [b]	NSA	0.0013		0.16		0.17		0.0014	U	0.0012	UJ
Naphthalene	EPA 8260B	5	NSA	0.0012	U	1.25		1.10		0.0014	U	0.0065	J

Note:
N - Normal sample.
Q - Validated data qualifier.
NSA - No standard available.
Dup - Duplicate sample.
U - indicates that the analyte was not detected above its practical quantitation limit (PQL).
J - indicates analytical value is estimated.
NA - Not Applicable.
a - Chapter 173-340 WAC Method A Cleanup Levels for unrestricted use.
* - Chapter 173-340-900 WAC Table 749-2 Priority Contaminants of Ecological Concern for Sites that Qualify for the Simplified Terrestrial Ecological Evaluation Procedure.
b - Chapter 173-340 WAC Method B Cleanup Levels for unrestricted use.
c - This is total value for all xylenes m,p-xylenes and o-xylene combined.