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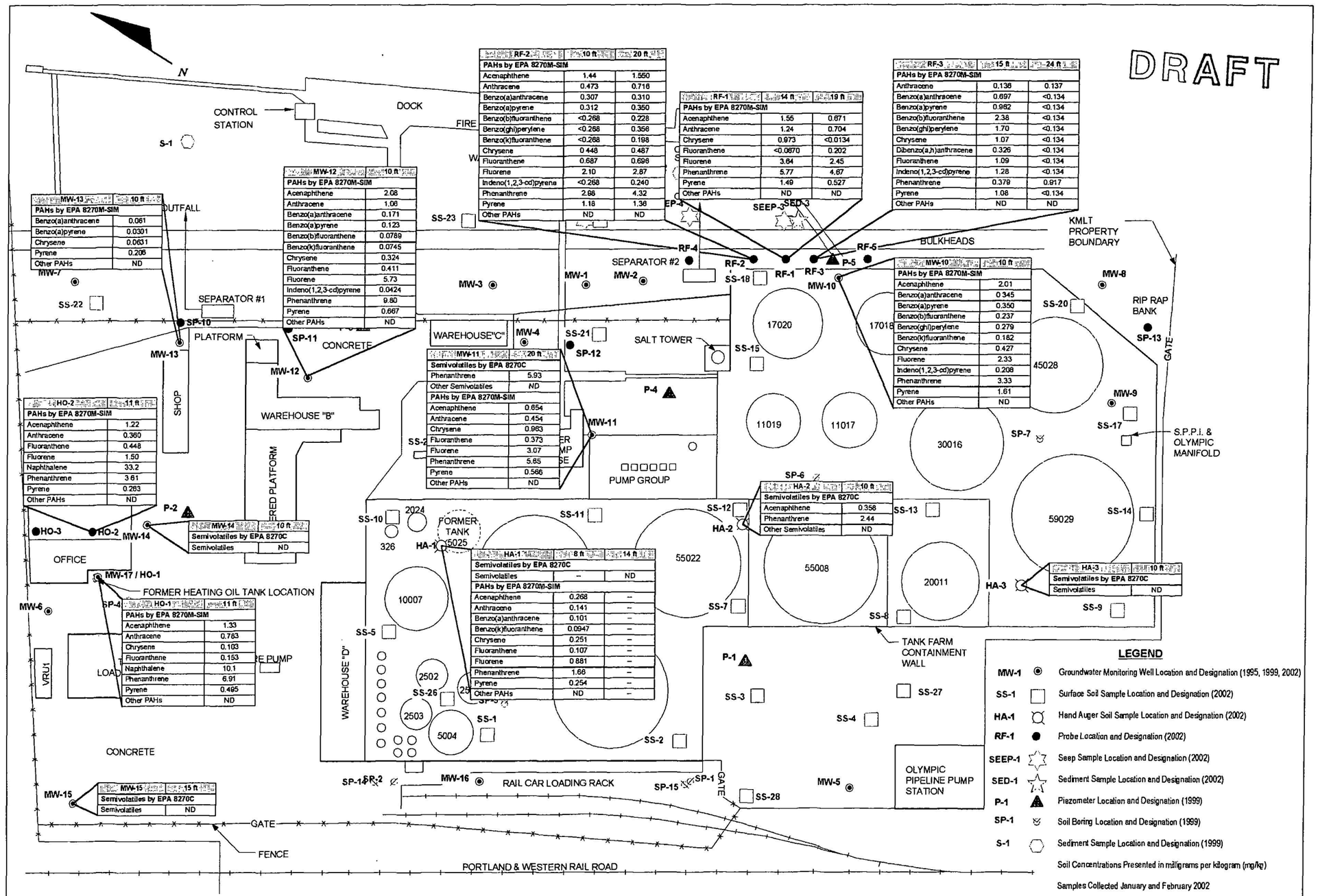

RF-2	10 ft	20 ft
PAHs by EPA 8270M-SIM		
Acenaphthene	1.44	1.550
Anthracene	0.473	0.716
Benzo(a)anthracene	0.307	0.310
Benzo(a)pyrene	0.312	0.350
Benzo(b)fluoranthene	<0.268	0.228
Benzo(ghi)perylene	<0.268	0.356
Benzo(k)fluoranthene	<0.268	0.198
Chrysene	0.448	0.487
Fluoranthene	0.687	0.698
Fluorene	2.10	2.87
Indeno(1,2,3-cd)pyrene	<0.268	0.240
Phenanthrene	2.98	4.32
Pyrene	1.18	1.36
Other PAHs	ND	ND

RF-1	14 ft	19 ft
PAHs by EPA 8270M-SIM		
Acenaphthene	1.55	0.671
Anthracene	1.24	0.704
Chrysene	0.973	<0.0134
Fluoranthene	<0.0670	0.202
Fluorene	3.64	2.45
Phenanthrene	5.77	4.67
Pyrene	1.49	0.527
Other PAHs	ND	ND

RF-3	15 ft	24 ft
PAHs by EPA 8270M-SIM		
Anthracene	0.136	0.137
Benzo(a)anthracene	0.697	<0.134
Benzo(a)pyrene	0.962	<0.134
Benzo(b)fluoranthene	2.38	<0.134
Benzo(ghi)perylene	1.70	<0.134
Chrysene	1.07	<0.134
Dibenzo(a,h)anthracene	0.326	<0.134
Fluoranthene	1.09	<0.134
Indeno(1,2,3-cd)pyrene	1.28	<0.134
Phenanthrene	0.379	0.917
Pyrene	1.08	<0.134
Other PAHs	ND	ND

MW-12	10 ft
PAHs by EPA 8270M-SIM	
Acenaphthene	2.08
Anthracene	1.06
Benzo(a)anthracene	0.171
Benzo(a)pyrene	0.123
Benzo(b)fluoranthene	0.0789
Benzo(k)fluoranthene	0.0745
Chrysene	0.324
Fluoranthene	0.411
Fluorene	5.73
Indeno(1,2,3-cd)pyrene	0.0424
Phenanthrene	9.80
Pyrene	0.667
Other PAHs	ND

MW-13	10 ft
PAHs by EPA 8270M-SIM	
Benzo(a)anthracene	0.061
Benzo(a)pyrene	0.0301
Chrysene	0.0631
Pyrene	0.208
Other PAHs	ND

MW-10	10 ft
PAHs by EPA 8270M-SIM	
Acenaphthene	2.01
Benzo(a)anthracene	0.345
Benzo(a)pyrene	0.350
Benzo(b)fluoranthene	0.237
Benzo(ghi)perylene	0.279
Benzo(k)fluoranthene	0.182
Chrysene	0.427
Fluorene	2.33
Indeno(1,2,3-cd)pyrene	0.208
Phenanthrene	3.33
Pyrene	1.61
Other PAHs	ND

MW-11	20 ft
Semivolatiles by EPA 8270C	
Phenanthrene	5.93
Other Semivolatiles	ND
PAHs by EPA 8270M-SIM	
Acenaphthene	0.654
Anthracene	0.454
Chrysene	0.963
Fluoranthene	0.373
Fluorene	3.07
Phenanthrene	5.65
Pyrene	0.566
Other PAHs	ND

HO-2	11 ft
PAHs by EPA 8270M-SIM	
Acenaphthene	1.22
Anthracene	0.360
Fluoranthene	0.448
Fluorene	1.50
Naphthalene	33.2
Phenanthrene	3.61
Pyrene	0.283
Other PAHs	ND

MW-14	10 ft
Semivolatiles by EPA 8270C	
Semivolatiles	ND

HA-2	10 ft
Semivolatiles by EPA 8270C	
Acenaphthene	0.358
Phenanthrene	2.44
Other Semivolatiles	ND

HA-1	8 ft	14 ft
Semivolatiles by EPA 8270C		
Semivolatiles	--	ND
PAHs by EPA 8270M-SIM		
Acenaphthene	0.268	--
Anthracene	0.141	--
Benzo(a)anthracene	0.101	--
Benzo(k)fluoranthene	0.0947	--
Chrysene	0.251	--
Fluoranthene	0.107	--
Fluorene	0.881	--
Phenanthrene	1.66	--
Pyrene	0.254	--
Other PAHs	ND	--

HA-3	10 ft
Semivolatiles by EPA 8270C	
Semivolatiles	ND

HO-1	11 ft
PAHs by EPA 8270M-SIM	
Acenaphthene	1.33
Anthracene	0.763
Chrysene	0.103
Fluoranthene	0.153
Naphthalene	10.1
Phenanthrene	6.91
Pyrene	0.495
Other PAHs	ND

MW-15	15 ft
Semivolatiles by EPA 8270C	
Semivolatiles	ND

LEGEND

- MW-1 — Groundwater Monitoring Well Location and Designation (1995, 1999, 2002)
- SS-1 — Surface Soil Sample Location and Designation (2002)
- HA-1 — Hand Auger Soil Sample Location and Designation (2002)
- RF-1 — Probe Location and Designation (2002)
- SEEP-1 — Seep Sample Location and Designation (2002)
- SED-1 — Sediment Sample Location and Designation (2002)
- P-1 — Piezometer Location and Designation (1999)
- SP-1 — Soil Boring Location and Designation (1999)
- S-1 — Sediment Sample Location and Designation (1999)

Soil Concentrations Presented in milligrams per kilogram (mg/kg)

Samples Collected January and February 2002

KHM ENVIRONMENTAL MANAGEMENT INC.

DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

CAPILLARY AND VADOSE SOIL ANALYTICAL RESULTS - SVOCS AND PAHS

Kinder Morgan Liquid Terminals LLC
Linnton Terminal
11400 NW St. Helens Road
Portland, Oregon

DATE 8/28/02 | PROJECT B30-01F | DRAWING 11

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