#### LIST OF FIGURES

1	
1	3
	Ľ,

**FIGURE** 

### <u>PAGE</u>

1.3-1	Site Location Map 1-14
1.3-2	One Mile Radius City Location Map 1-20
1.3-3	One Mile Radius Land Use Map 1-22
1.3-4	Typical Design of an Existing Gas Migration Control Well 1-30
1.3-5	Typical Design of an Existing Drilled Gas Recovery Well 1-31
1.3-6	Typical Design of an Existing Pile-Driven Gas Recovery Well 1-33
1.3-7	Typical Design of an Existing Active Trench 1-44
1.3-8	Typical Design of a Passive Trench 1-46
1.3-9	Typical Design of an Existing Gas Monitoring Probe 1-50
1.3-10	Typical Design of an Existing Deep Gas Monitoring Probe 1-52
2.2-1	Radioactive Material License
2.2-2	Packer Permeability Testing Schematic 2-91
2.2-3	Schematic Diagram of Aquifer Test Equipment 2-94
2.2-4	Monitoring Well and Lysimeter Design Schematic for Downgradient and Upgradient
	Hydrogeologic Field Program
2.2-5	Monitoring Well Schematic Diagram for the Additional Downgradient Hydrogeologic
	Field Program 2-104
3.1-1	Comparison of Upwind Methylene Chloride Concentrations from the Original and
	Additional Ambient Air Sampling Programs 3-40
3.1-2	Comparison of Downwind Methylene Chloride Concentrations from the Original and
	Additional Ambient Air Sampling Programs
3.1-3	Comparison of Upwind Chloroform Concentrations from the Original and Additional
	Ambient Air Sampling Programs 3-42
3.1-4	Comparison of Downwind Chloroform Concentrations from the Original and
	Additional Ambient Air Sampling Programs
3.1-5	Comparison of Upwind 1, 1, 1-Trichloroethane Concentrations from the Original and
	Additional Ambient Air Sampling Programs
3.1-6	Comparison of Downwind 1, 1, 1-Trichloroethane Concentrations from the Original
	and Additional Ambient Air Sampling Programs 3-45
3.1-7	Comparison of Upwind Carbon Tetrachloride Concentrations from the Original and
	Additional Ambient Air Sampling Programs
3.1-8	Comparison of Downwind Carbon Tetrachloride Concentrations from the Original
	and Additional Ambient Air Sampling Programs 3-47
3.1-9	Comparison of Upwind Trichloroethylene Concentrations from the Original and
	Additional Ambient Air Sampling Programs
3.1-10	Comparison of Downwind Trichloroethylene Concentrations from the Original and
	Additional Ambient Air Sampling Programs 3-49



-

. .

4

<u>FIGU</u>	<u>PAGE</u>
3.1-11	Comparison of Upwind Tetrachloroethylene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-12	Comparison of Downwind Tetrachloroethylene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-13	Comparison of Upwind Vinyl Chloride Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-14	Comparison of Downwind Vinyl Chloride Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-15	Comparison of Upwind Benzene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-16	Comparison of Downwind Benzene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-17	Comparison of Upwind Toluene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-18	Comparison of Downwind Toluene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-19	Comparison of Upwind Xylenes Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-20	Comparison of Downwind Xylenes Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-21	Comparison of Upwind Dichlorobenzenes Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-22	Comparison of Downwind Dichlorobenzenes Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-23	Comparison of Upwind and Downwind Benzene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-24	Comparison of Upwind and Downwind Toluene Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-25	Comparison of Upwind and Downwind Xylenes Concentrations from the Original and Additional Ambient Air Sampling Programs
3.1-26	Methane Concentration Versus Time for Surface Gas Monitoring 3-91
3.1-27	TOC As Methane Versus Time for Boundary Probe BS13 3-155
3.1-28	TOC As Methane Versus Time for Boundary Probe BC11 3-159
3.1-29	TOC As Methane Versus Time for Boundary Probe MN05 3-162
3.1-30	TOC As Methane Versus Time for Boundary Probe MN31 3-164
3.1-31	TOC As Methane Versus Time for Boundary Probe MN38 3-165
3.1-32	TOC As Methane Versus Time for Boundary Probe MN48 3-167
3.1-33	TOC As Methane Versus Time for Boundary Probe MN53 3-168
3.1-34	TOC As Methane Versus Time for Boundary Probe MN60 3-170
3.1-35	TOC As Methane Versus Time for Boundary Probe MC08 3-173

# **FIGURE**

.

3.1-36	TOC As Methane Versus Time for Boundary Probe MC18	3-174
3.1-37	TOC As Methane Versus Time for Boundary Probe MC22	3-176
3.1-38	TOC As Methane Versus Time for Boundary Probe MC23	3-177
3.1-39	TOC As Methane Versus Time for Boundary Probe MC29	3-178
3.2-1	Location of Major PVLF Storm Drains and the Subsurface Barrier	3-262
3.2-2	Typical Views of Hawthorne Boulevard Storm Drain System and Subsurface	
	Barrier	3-264
3.2-3	South Coast Botanic Garden Lake and Stream Channel	3-285
3.3-1	Regional Geologic Setting	3-311
3.3-2	Regional Geologic Cross Section	3-365
3.3-3	Geologic Data Points Within the Study Area	3-393
3.3-4	Geologic Data Points Within the Study Area (Enlarged Area)	3-395
3.3-5	Index Map to Site Geologic Cross Sections	3-411
3.3-6	Legend for Geologic Cross Sections	3-413
3.3-7A	Geologic Cross Section A-A'	3-415
3.3-7B	Geologic Cross Section B-B'	3-417
3.3-7C	Geologic Cross Section C-C'	3-419
3.3-7D	Geologic Cross Section D-D'	3-421
3.3-7E	Geologic Cross Section E-E'	3-423
3.3-7F	Geologic Cross Section F-F'	3-425
3.3-7G	Geologic Cross Section G-G'	3-427
3.3-7H	Geologic Cross Section H-H'	3-429
3.3-7I	Geologic Cross Section I-I'	3-431
3.3-7J	Geologic Cross Section J-J'	3-433
3.3-7K	Geologic Cross Section K-K'	3-435
3.3-7L	Geologic Cross Section L-L'	3-437
3.3-7M	Geologic Cross Section M-M'	3-439
3.3-7N	Geologic Cross Section N-N'	3-441
3.3-70	Geologic Cross Section O-O'	3-443
3.3-7P	Geologic Cross Section P-P'	3-445
3.3-7Q	Geologic Cross Section Q-Q'	3-447
3.3-7R	Geologic Cross Section R-R'	3-449
3.4-1	West Coast Basin Aquifer System	3-497
3.4-2	Cross Sections Through West Coast Basin	3-498
3.4-3	Problem Definition - Test Case	3-536
3.4-4	Plan View of Model Grid	3-541
3.4-5	Vertical Model Grid - Slice 14	3-543
3.4-6	Model Area Recharge Zones	3-545
3.4-7	Ground Water Elevations for the Calibrated Model	3-551





.

٠,

xxvii

FIGU	<u>PAGE</u>
3.4-8	Distribution of Horizontal Velocities and Contours of Ground Water Elevations (Top
_	Layer, Calibrated Model) 3-557
3.4-9	Ground Water Elevations and Particle Pathways for the Calibrated Model - 2,000
	Years Travel Time
3.4-10	Summary Statistics from Sensitivity/Uncertainty Analysis
3.4-11	Scatter Diagram of Particle Pathways - 400 Years Travel Time 3-569
3.4-12	Scatter Diagram of Particle Pathways - 2,000 Years Travel Time 3-571
3.4-13	Ground Water Elevations and Particle Paths Between the PVLF and the Model
	Boundary (Calibrated Model) 3-573
3.4-14	Envelope of Particle Paths Between the PVLF and the Model Boundary 3-575
3.4-15	Particle Pathways Between the PVLF and Model Boundary and Contours of Ground
	Water Heads (Slice 14, Calibrated Model) 3-577
4.2-1	Index Map to Geologic Cross Sections With Chemical Data 4-25
4.2-2	Legend for Geologic Cross Sections With Chemical Data 4-27
4.2-3a	Geologic Cross Section a-a' With Chemical Data
4.2-3b	Geologic Cross Section b-b' With Chemical Data
4.2-3c	Geologic Cross Section c-c' With Chemical Data 4-33
4.2-3d	Geologic Cross Section d-d' With Chemical Data
4.2-3e	Geologic Cross Section e-e' With Chemical Data
4.2-3f	Geologic Cross Section f-f' With Chemical Data
4.2-3g	Geologic Cross Section g-g' With Chemical Data
4.2-3h	Geologic Cross Section h-h' With Chemical Data
4.2-3i	Geologic Cross Section i-i' With Chemical Data
4.2-3j	Geologic Cross Section j-j' With Chemical Data
4.2-3k	Geologic Cross Section k-k' With Chemical Data
4.2-31	Geologic Cross Section I-I' With Chemical Data
4.2-3m	Geologic Cross Section m-m' With Chemical Data
4.2-3n	Geologic Cross Section n-n' With Chemical Data
4.2-30	Geologic Cross Section o-o' With Chemical Data
4.2-3p	Geologic Cross Section p-p' With Chemical Data
4.2-3q	Geologic Cross Section q-q' With Chemical Data
4.2-3r	Geologic Cross Section r-r' With Chemical Data
4.2-3s	Geologic Cross Section s-s' With Chemical Data
4.2-3t	Geologic Cross Section t-t' With Chemical Data
	· · · · · · · · · · · · · · · · · · ·
5.2-1	Comparison Between MT3D and Analytical Solution, Linear Scale
5.2-2	Comparison Between MT3D and Analytical Solution, Semi-Logarithmic Scale 5-6
5.4-1	Distribution of Potential Sources Used in the Model 5-11
5.8-1	Locations of Potential Ground Water Receptors



xxviii

PAGE

#### FIGURE Predicted Breakthrough Curves of Nitrate Concentration at Potential Receptors, 5.8-2 Predicted Breakthrough Curves of Nitrate Concentration at Potential Receptors, 5.8-3 5.8-4 Predicted Breakthrough Curves of Nitrate Concentration at Potential Receptors, 5.8-5 Predicted Breakthrough Curves of Vinyl Chloride Concentration at Potential Predicted Breakthrough Curves of Vinyl Chloride Concentration at Potential 5.8-6 Predicted Breakthrough Curves of Vinyl Chloride Concentration at Potential 5.8-7 Scatter Diagram of Maximum Concentrations of Vinyl Chloride From Sensitivity 5.9-1 Analysis Cases at Receptor 2, Layer 2 ..... 5-50 Scatter Diagram of Maximum Concentrations of Vinyl Chloride From Sensitivity 5.9-2 Analysis Cases at Receptor 5, Layer 2 ..... 5-51 6.1-1 6.1-2

xxix