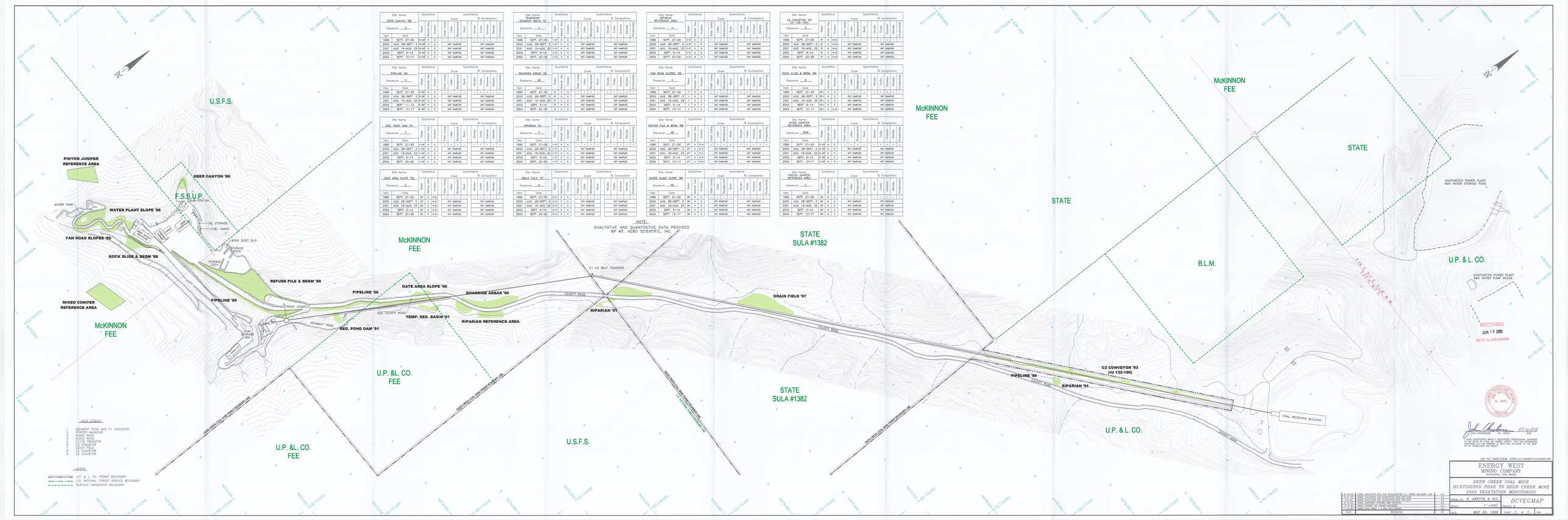

NOTE:
QUALITATIVE AND QUANTITATIVE DATA PROVIDED BY MT. NEBO SCIENTIFIC, INC.

Site Name: DEER CANYON '86 — Exposure: E

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	19-26°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	19-26°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	19-26°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	19-26°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	19-26°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: TEMPORARY SEDIMENT BASIN '91 — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	1-7°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: RIPARIAN REFERENCE AREA — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	2-7°	E	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	2-7°	E	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	2-7°	E	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	2-7°	W	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	2-7°	W	N	NOT SAMPLED				NOT SAMPLED				

Site Name: C2 CONVEYOR '93 (IU 132-190) — Exposure: E

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	8°	N	N-W	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	8°	N	N-W	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	8°	N	N-W	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	8°	N	N-W	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	8°	E	N-W	NOT SAMPLED				NOT SAMPLED				

Site Name: PIPELINE '86 — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	3-36°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	3-36°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	3-36°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 11-14	3-36°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	3-36°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: ROADSIDE AREAS '90 — Exposure: NE

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	9°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	9°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	9°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	9°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	9°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: FAN ROAD SLOPES '89 — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	V	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	V	N	S	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	V	N	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	V	N	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	V	N	S	NOT SAMPLED				NOT SAMPLED				

Site Name: ROCK SLIDE & BERM '88 — Exposure: W

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	15°+	N	S	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	15°+	N	S	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	15°+	N	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	15°+	N	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	15°+	N	S-W	NOT SAMPLED				NOT SAMPLED				

Site Name: SED. POND DAM '91 — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	7-19°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	7-19°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	7-19°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	7-19°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	7-19°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: RIPARIAN '91 — Exposure: V

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	1-7°	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	1-7°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: REFUSE PILE & BERM '88 — Exposure: NE

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	23°	N	N-S	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	23°	N	N-S	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	23°	N	N-S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	23°	N	N-S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	23°	N	N-S	NOT SAMPLED				NOT SAMPLED				

Site Name: MIXED CONIFER REFERENCE AREA — Exposure: WSW

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	19-36°	W	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	19-36°	W	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	19-36°	W	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	19-36°	W	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	19-36°	W	N	NOT SAMPLED				NOT SAMPLED				

Site Name: GATE AREA SLOPE '90 — Exposure: E

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	23°	N	S-W	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	23°	N	S-W	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	23°	N	S-W	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	23°	N	S-W	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	23°	N	S-W	NOT SAMPLED				NOT SAMPLED				

Site Name: DRAIN FIELD '97 — Exposure: N

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	2-7°	S	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	2-7°	S	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	2-7°	S	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	2-7°	S	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 22-25	2-7°	S	N	NOT SAMPLED				NOT SAMPLED				

Site Name: WATER PLANT SLOPE '88 — Exposure: NE

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	28°	W	S	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	28°	W	S	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	28°	W	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	28°	W	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	28°	W	S	NOT SAMPLED				NOT SAMPLED				

Site Name: PINYON JUNIPER REFERENCE AREA — Exposure: E

Year	Date	Slope	Aerial Use	Erosion	Cover: Total Living	Cover: Litter	Cover: Background	Cover: Rock	% Composition: Shrubs	% Composition: Forbs	% Composition: Grasses	% Composition: Density	% Composition: Productivity
1999	SEPT. 27-30	28°	W	N	–	–	–	–	–	–	–	–	–
2000	AUG. 28-SEPT. 3	28°	W	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-AUG. 23	28°	W	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	28°	W	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 13-17	28°	W	N	NOT SAMPLED				NOT SAMPLED				

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DIV OF OIL, GAS & MINING

I, JOHN CHRISTENSEN, BEING A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF UTAH, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS DRAWING IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

John Christensen 5/16/05
JOHN CHRISTENSEN, UTAH REGISTERED NO. 165301 — DATE

CAD FILE NAME/DISK#: U:\DEER\LAS\MISMAP\DCVEGMAP.DWG

5-16-05	ADDED BOUNDARY LINE FOR EXPANSION AREA	KJL
5-12-05	ADDED BOUNDARY AND EXPANSION AREA TEXT	KJL
5-10-05	ADDED CHANGE OF AREA ANNOTATION	KJL
5-9-05	CHANGED TO STATE PLANE COORDS	KJL
DATE	DESCRIPTION OF MAP REVISIONS	BY

ENERGY WEST MINING COMPANY
HUNTINGTON, UTAH 84528

DEER CREEK COAL MINE
HUNTINGTON POND TO DEER CREEK MINE
2004 VEGETATION MONITORING

DRAWN BY: K. ARRIETA & K.J.L.
SCALE: 1" =200'
DATE: MAY 20, 1998
DRAWING #: DCVEGMAP
SHEET 1 OF 1 REV: 0