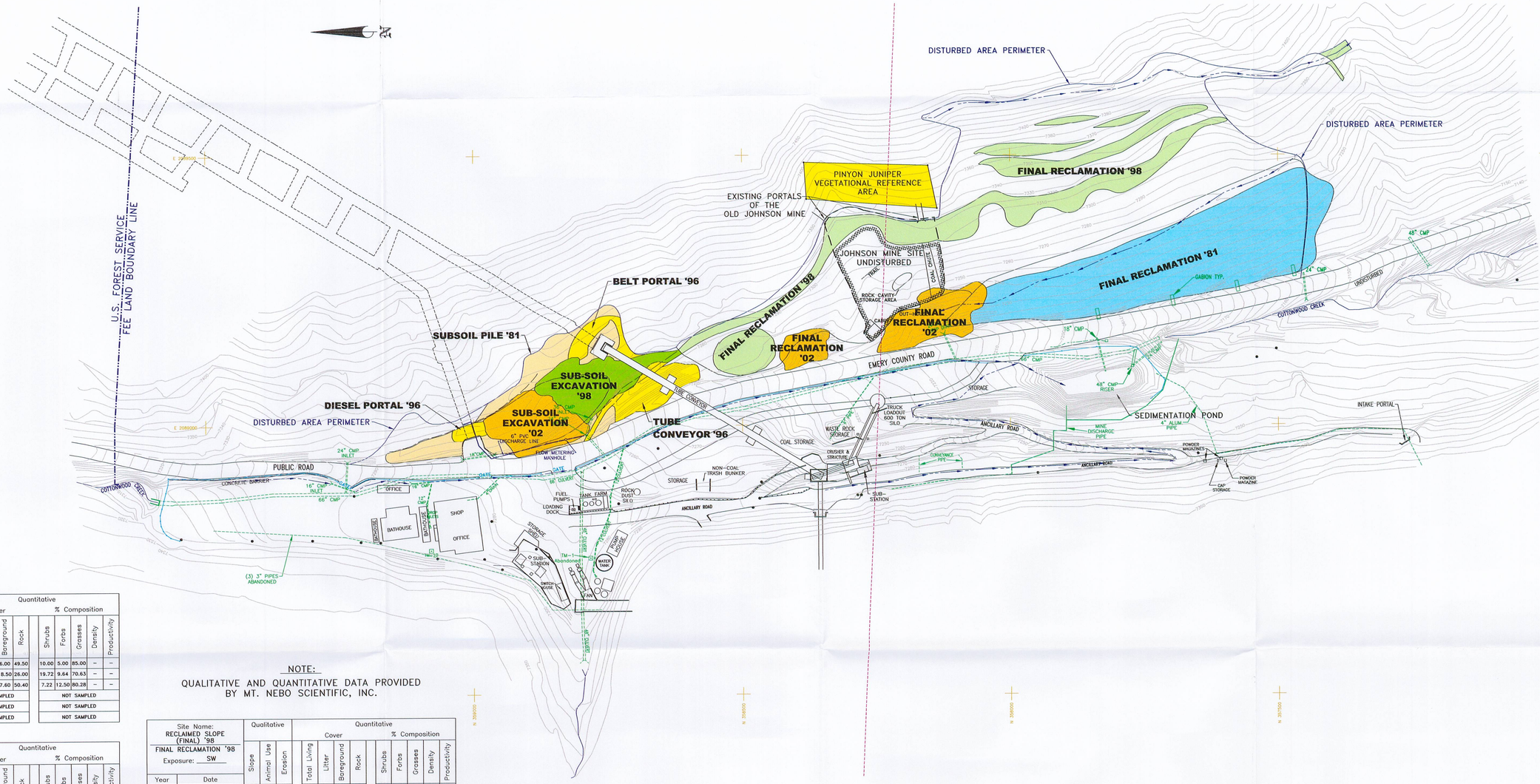

NOTE:

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

Site Name: BELT PORTAL '96 — Exposure: SSW

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	V	S	S	33.50	11.00	6.00	49.50	10.00	5.00	85.00	–	–
2000	AUG. 28–SEPT. 1	V	S	S	44.00	11.50	18.50	26.00	19.72	9.64	70.63	–	–
2001	AUG. 27–AUG. 31	V	S	S	36.10	5.90	7.60	50.40	7.22	12.50	80.28	–	–
2002	SEPT. 2–6	V	S	N	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	V	S	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	V	S	N	NOT SAMPLED				NOT SAMPLED				

Site Name: DIESEL PORTAL '96 — Exposure: SW

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	43°	S	S	38.33	10.00	9.17	42.50	0.00	14.04	85.96	–	–
2000	AUG. 28–SEPT. 1	43°	S	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 27–AUG. 31	43°	S	N	38.33	9.17	5.83	46.67	2.08	14.38	83.53	–	–
2002	SEPT. 2–6	43°	S	N	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	43°	S	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	43°	S	N	NOT SAMPLED				NOT SAMPLED				

Site Name: SUBSOIL PILE '81 — Exposure: V

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	35°	N	S	31.00	8.05	39.50	21.45	12.08	39.94	47.98	–	–
2000	AUG. 28–SEPT. 1	35°	N	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 27–AUG. 31	35°	N	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 2–6	35°	N	N	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	35°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	35°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: TUBE CONVEYOR -96 — Exposure: W,N,S

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	28°	N	N	47.50	6.50	28.00	18.00	0.00	66.15	33.85	–	–
2000	AUG. 28–SEPT. 1	28°	N	N	40.50	7.50	31.00	21.00	11.67	49.55	38.78	–	–
2001	AUG. 27–AUG. 31	28°	N	N	42.00	7.70	29.30	21.00	28.85	32.94	38.21	–	–
2002	SEPT. 2–6	28°	N	N	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	28°	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	28°	N	N	NOT SAMPLED				NOT SAMPLED				

Site Name: RECLAIMED SLOPE (FINAL) '98 — FINAL RECLAMATION '98 — Exposure: SW

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
2000	AUG. 28–SEPT. 1	V	S	N	23.33	7.67	39.33	29.67	6.37	42.14	51.49	–	–
2001	AUG. 27–AUG. 31	V	S	N	29.75	6.50	30.50	33.25	20.10	32.17	47.73	–	–
2002	SEPT. 2–6	V	S	N	25.75	6.80	33.75	33.70	14.80	16.25	68.95	–	–
2003	OCT. 13–18	V	S	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	V	S	N	NOT SAMPLED				NOT SAMPLED				
2005	OCT. 10–13	V	S	N	NOT SAMPLED				NOT SAMPLED				

Site Name: FAN PORTAL RECLAIMED SLOPE — FINAL RECLAMATION '81 — Exposure: W

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	35°	S–M	S	46.50	8.50	7.25	37.75	36.12	14.30	49.58	–	–
2000	AUG. 28–SEPT. 1	35°	S–M	S	41.25	18.00	12.50	28.00	41.71	10.60	47.69	–	–
2001	AUG. 27–AUG. 31	35°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 2–6	35–41°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	35–41°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	35–41°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2005	OCT. 10–13	35–40°	S–M	S	NOT SAMPLED				NOT SAMPLED				

Site Name: FAN PORTAL REFERENCE AREA — Exposure: W

Year	Date	Qualitative: Slope	Animal Use	Erosion	Quantitative: Cover: Total Living	Litter	Bareground	Rock	% Composition: Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 20–24	33°	S–M	S	30.50	16.75	10.00	42.75	24.08	4.50	71.42	–	–
2000	AUG. 28–SEPT. 1	33°	S–M	S	31.50	12.75	17.50	43.00	19.19	4.73	76.08	–	–
2001	AUG. 27–AUG. 31	33°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 2–6	33°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2003	OCT. 13–18	33°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20–25	33°	S–M	S	NOT SAMPLED				NOT SAMPLED				
2005	OCT. 10–13	33°	S–M	S	NOT SAMPLED				NOT SAMPLED				

LICENSED PROFESSIONAL ENGINEER
JOHN CHRISTENSEN
No. 165651
STATE OF UTAH

John Christensen 3/29/06
JOHN CHRISTENSEN NO. 165651 DATE

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.

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DATE	REVISIONS	BY	CHK
3-29-06	ADDED QUANTITATIVE AND QUALITATIVE DATA FOR 2005	KJL	
9-22-05	REVISED PINYON JUNIPER VEGETATIONAL REFERENCE AREA	KJL	
5-16-05	ADDED QUANTITATIVE AND QUALITATIVE DATA FOR 2004	KJL	
3-20-03	ADDED QUANTITATIVE AND QUALITATIVE DATA FOR 2002 REMOVED SEDIMENT PONDS, ADDED SUB-SOIL PILES 2002	KJL	
4-4-02	ADDED QUANTITATIVE AND QUALITATIVE DATA FOR 2001	KJL	
3-23-00	ADDED QUANTITATIVE AND QUALITATIVE DATA	KJL	
4-2-97	ADDED PINYON JUNIPER REFERENCE AREA AND REVISED TO REFLECT EXISTING CONDITIONS	KJL	
4-24-95	ADDED JOHNSON MINE SITE	KJL	

ENERGY WEST MINING COMPANY
HUNTINGTON, UTAH 84528

COTTONWOOD MINE
COTTONWOOD FAN PORTAL
2005 VEGETATION MONITORING

DRAWN BY: K. LARSEN
SCALE: 1" = 100'
DATE: JANUARY 22, 1999
DRAWING #: KS1689D
SHEET 1 OF 1
REV.