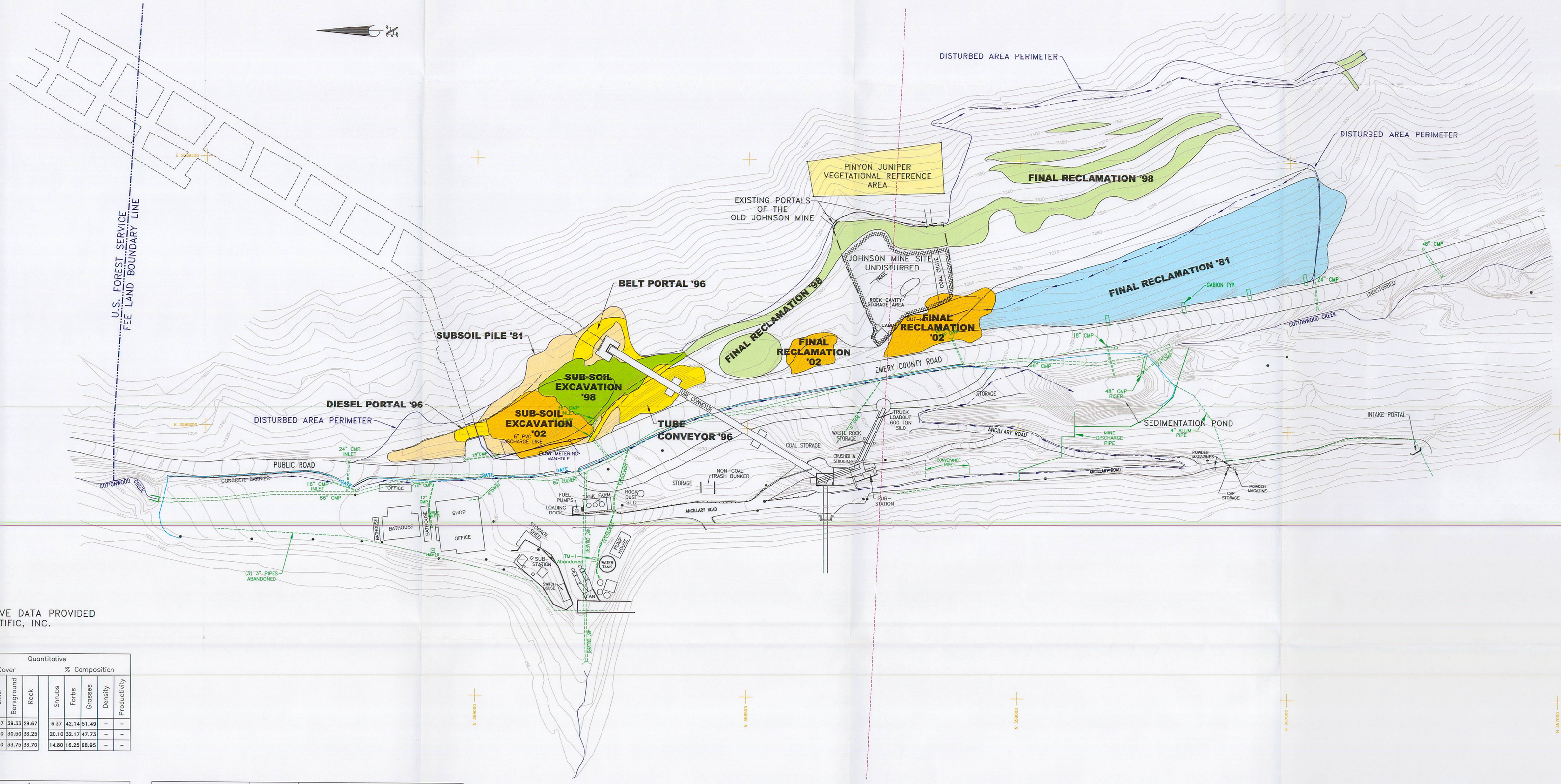

NOTE:
QUALITATIVE AND QUANTITATIVE DATA PROVIDED BY MT. NEBO SCIENTIFIC, INC.

Site Name: RECLAIMED SLOPE (FINAL) '98 — FINAL RECLAMATION '98 — Exposure: SW		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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	–	–

Site Name: DIESEL PORTAL '96 — Exposure: SW		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

Site Name: BELT PORTAL '96 — Exposure: SSW		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

Site Name: SUBSOIL PILE '81 — Exposure: V		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

Site Name: FAN PORTAL RECLAIMED SLOPE — FINAL RECLAMATION '81 — Exposure: W		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

Site Name: TUBE CONVEYOR -96 — Exposure: W,N,S		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

Site Name: FAN PORTAL REFERENCE AREA — Exposure: W		Qualitative			Quantitative									
					Cover				% Composition					
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	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				

LICENSED PROFESSIONAL ENGINEER JOHN CHRISTENSEN No. 165651 STATE OF UTAH

John Christensen 3/20/03
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.

CAD FILE NAME/DISK#: USERS\KJL\VEGMAPS\KS1689D.DWG

DATE	REVISIONS	BY	CHK
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
2002 VEGETATION MONITORING

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