Site Name: REFERENCE AREA		Qualitative			Quantitative								
Exposure: V					Cover				% Composition				
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	Shrubs	Forbs	Grasses	Density	Productivity
1999	SEPT. 23-27	10-20%	M	N	–	–	–	–	–	–	–	–	–
2000	AUG. 21-25	10-20%	M	N	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-23	10-20%	M	N	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	10-20%	M	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20-25	10-20%	M	M	NOT SAMPLED				NOT SAMPLED				

Site Name: ACCESS ROAD SLOPES '89		Qualitative			Quantitative								
Exposure: V					Cover				% Composition				
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	Shrubs	Forbs	Grasses	Density	Productivity
1999	AUG. 23-27	20-25%	N	V	–	–	–	–	–	–	–	–	–
2000	AUG. 21-25	20-25%	N	V	NOT SAMPLED				NOT SAMPLED				
2001	AUG. 19-23	20-25%	N	S	NOT SAMPLED				NOT SAMPLED				
2002	SEPT. 9-14	20-25%	N	S	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20-25	20-25%	N	S-M	NOT SAMPLED				NOT SAMPLED				

Site Name: PHASE I BERM '89		Qualitative			Quantitative								
Exposure: V					Cover				% Composition				
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	Shrubs	Forbs	Grasses	Density	Productivity
1999	AUG. 23-27	0-29%	N	N	–	–	–	–	–	–	–	–	–
2000	AUG. 21-25	0-29%	N	N	21.80	5.27	62.00	10.93	29.06	29.25	41.69	–	–
2001	AUG. 19-23	0-29%	N	M	21.67	4.53	68.27	5.53	18.16	25.89	55.95	–	–
2002	SEPT. 9-14	0-29%	S	M	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20-25	0-29%	S	M	NOT SAMPLED				NOT SAMPLED				

Site Name: PHASE I DIVERSION '89		Qualitative			Quantitative								
Exposure: V					Cover				% Composition				
Year	Date	Slope	Animal Use	Erosion	Total Living	Litter	Bareground	Rock	Shrubs	Forbs	Grasses	Density	Productivity
1999	AUG. 23-27	5%	N	N	40.83	5.25	45.42	8.50	17.31	6.02	76.68	–	–
2000	AUG. 21-25	5%	N	N	35.33	4.60	51.67	8.40	25.89	18.89	55.22	–	–
2001	AUG. 19-23	5%	N	N	31.00	5.73	57.33	5.93	35.78	17.85	46.37	–	–
2002	SEPT. 9-14	5%	N	N	NOT SAMPLED				NOT SAMPLED				
2004	SEPT. 20-25	5%	N	N	NOT SAMPLED				NOT SAMPLED				

NOTE:

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

ASCA LEGEND

ASCA 1– ACCESS ROAD .69 ACRES { Reveg. area = .58 Ac. / Silt fence areas = .11 Ac.

ASCA 2– BERM OUTSLOPE 1.72 ACRES

N 381,000 E 2,123,500 N 381,500 E 2,124,000 N 382,000 E 2,124,500 N 382,500 E 2,125,000 N 383,000 E 2,125,500

E 2,123,500 N 380,500 E 2,124,000 N 380,000 E 2,124,500 N 379,500

PHASE I DIVERSION '89
EP-82-4 △ 6336.3
BARBED WIRE FENCE
SILT FENCE
SEDIMENT POND W.L. 6318
PHASE I BERM '89
PHASE I DIVERSION '89
PERMIT BOUNDARY LINE
T. 16 S., R. 8 E.
T. 17 S., R. 8 E.
GARDNER SALTBUSH/MAT SALTBUSH REFERENCE AREA
ASCA 2 1.72 ACRES
18" DIA. CULVERT
EP-2A △ 6267.5
ASCA 1 .69 ACRES
REVEGETATION– PRIMARY EROSION CONTROL
TYP. 18" DIA. CULVERT SEE DWG. NO. DS1000C FOR DETAILS
ACCESS ROAD
ACCESS ROAD SLOPES '89
(2) 12' GATES
PERMIT BOUNDARY LINE
ALSO REPRESENTS FENCE LINE
EVERY 5TH POST TO BE PAINTED SAFETY YELLOW
SEE PROPERTY DESCRIPTION
31/32

CONTOUR INTERVAL = 5 FOOT

I LICENSED PROFESSIONAL ENGINEER JOHN CHRISTENSEN No. 165651 STATE OF UTAH

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 NO. 165651 DATE

RECEIVED JUN 10 2005 DIV. OF OIL, GAS & MINING

DATE	REVISIONS	BY	CHK.
5-16-05	ADDED QUALITATIVE DATA FOR 2004 AND CURRENT TOPOGRAPHY LINES	KJL	
4-4-02	ADDED QUALITATIVE AND QUANTITATIVE DATA FOR 2002	KJL	
4-4-02	ADDED QUALITATIVE AND QUANTITATIVE DATA FOR 2001	KJL	
2-23-00	ADDED QUALITATIVE AND QUANTITATIVE DATA	KJL	
4-30-97	ADDED SILT FENCES ALONG ACCESS ROAD	KJL	
8-28-95	REVISED DRAINAGE, ADDED BERMS & 2:1 NOTATIONS	KJL	
1-22-91	ADDED 4" WET WEATHER SEEP DRAIN PIPE	KJL	
1-11-90	ADDED ASCA AREAS 1 & 2 AND ASCA LEGEND	KJL	
5-19-89	ADDED WATER MONITORING WELL	KJL	
12-6-88	REVISED PERMIT BOUNDARY LINE	KJL	
8-25-88	REVISED AREA BOUNDARY FENCE	JRG	
6-6-88	ADDED EMERGENCY SPILLWAY TO SEDIMENT POND	KJL	

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

ENERGY WEST MINING COMPANY
HUNTINGTON, UTAH 84528

DEER CREEK COAL MINE
WASTE ROCK STORAGE FACILITY
2004 VEGETATION MONITORING

DRAWN BY: T. DAVIS
SCALE: 1"=100'
DATE: FEBRUARY 3, 2000
DRAWING #: DCWRSVEG
SHEET 1 OF 1 REV. ___