



Rio Blanco Oil Shale Company

REVEGETATION PROGRAM 1978 ANNUAL REPORT

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Gulf Oil Corporation / Standard Oil Company (Indiana)
A General Partnership

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U. S. DEPARTMENT OF INTERIOR
OIL SHALE
ENVIRONMENTAL ADVISORY PANEL
Denver Federal Center

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APPENDIX B. DATA AND ASSOCIATED ANALYSIS OF VARIANCE FOR THE
REVEGETATION EXPERIMENTS INITIATED IN 1976 LOCATION
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U. S. DEPARTMENT OF INTERIOR
OIL SHALE
ENVIRONMENTAL ADVISORY PANEL
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LIST OF COMPUTER CODES FOR THE PLANT SPECIES INCLUDED IN THE ANALYSIS OF VARIANCE

<u>Computer Code</u>	<u>Scientific Name</u>
AGR TRI	<u>Agropyron trichophorum</u>
AGR SMI	<u>Agropyron smithii</u>
AGR RIP	<u>Agropyron riparium</u>
AGR SPP	<u>Agropyron spp.</u>
ORY HYM	<u>Oryzopsis hymenoides</u>
STI VIR	<u>Stipa viridula</u>
BRO INE	<u>Bromus inermis</u>
BRO TEC	<u>Bromus tectorum</u>
BRO SP	<u>Bromus sp.</u>
SIT HYS	<u>Sitanion hystrrix</u>
AGR CRI	<u>Agropyron cristatum</u>
UNK GRA	Unknown grass
PHL PRA	<u>Phleum pratense</u>
POA SP	<u>Poa sp.</u>
KOE SP	<u>Koeleria sp.</u>
LIN LEW	<u>Linum lewisii</u>
AST CIC	<u>Astragalus cicer</u>
HED UTA	<u>Hedysarum utahensis</u>
MEL OFF	<u>Melilotus officinalis</u>
PEN STR	<u>Penstemon strictus</u>
SPH COC	<u>Sphaeralcea coccinea</u>
SAL KAL	<u>Salsola kali</u>
CHE SP	<u>Chenopodium sp.</u>
SEN MUL	<u>Senecio multilobatus</u>
PHY FLO	<u>Physaria floribunda</u>
CHA DOU	<u>Chaenactis douglasii</u>
KOC SCO	<u>Kochia scoparia</u>
TAR OFF	<u>Taraxacum officinale</u>
AST SP	<u>Astragalus sp.</u>
AST TEG	<u>Astragalus tegetarius</u>
CRY SER	<u>Cryptantha sericea</u>
HAL GLO	<u>Halogeton glomeratus</u>
HAP NUT	<u>Haplopappus nuttali</u>
UNK SPP	Unknown forbs
ART TRI	<u>Artemisia tridentata</u>
CHR SPP	<u>Chrysanthemus spp.</u>
PUR TRI	<u>Purshia tridentata</u>
CER MON	<u>Cercocarpus montanus</u>
ATR CAN	<u>Atriplex canescens</u>
EUR LAN	<u>Eurotia lanata</u>
CHR VIS	<u>Chrysanthemus viscidiflorus</u>
KOC PRO	<u>Kochia prostrata</u>
ATR BON	<u>Atriplex bonnevillensis</u>
CAM MON	<u>Camphorosma monspeliacaca</u>
ATR GAR	<u>Atriplex gardneri</u>
CHR NAU	<u>Chrysanthemus nauseosus</u>
GRASS P	Grasses - Planted
GRASS I	Grasses - Invaded

LIST OF COMPUTER CODES (Continued)

<u>Computer Code</u>	<u>Scientific Name</u>
FORBS P	Forbs - Planted
FORBS I	Forbs - Invaded
Shrubs P	Shrubs - Planted
TOTAL	Total plant species
PLANTED	Planted species
INVADED	Invaded species

NOTE: Data is rounded off to whole numbers and a rounding error may be reflected in the total.

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES OCCURRING ON THE RBOSC
REVEGETATION PLOT R₃ DURING SEPTEMBER, 1978

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBDSP REVETEMENT PLOTS DURING SEPTEMBER, 1978

SPECIES	SUBPLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
<i>AGROPYRON TRICOPHORUM</i>	5.0	0.0	2.0	2.0	3.0	4.0
<i>AGROPYRON SPP.</i>	5.0	7.0	3.0	6.0	4.0	13.0
<i>ORYZOPSIS HYMENOIDES</i>	1.0	1.0	2.0	1.0	0.0	1.0
<i>STIPA VIRIDULA</i>	0.0	1.0	0.0	0.0	0.0	0.2
<i>AROMIS INERMIS</i>	1.0	5.0	1.0	1.0	2.0	3.0
SUBTOTAL						12.5
FURPS - PLANTED						
<i>LINUM LEWISII</i>	0.0	1.0	0.0	0.0	0.0	0.0
<i>ASTRAGALUS CICER</i>	1.0	0.0	1.0	2.0	0.0	0.0
<i>MELilotus officinalis</i>	6.0	4.0	8.0	2.0	4.0	0.0
<i>PENstemon strictus</i>	1.0	0.0	1.0	0.0	0.0	0.0
SUBTOTAL						5.2
FORBS - INVADED						
<i>SALSOLA KALI</i>	0.0	0.0	0.1	2.0	2.0	0.0
<i>PHYSARIA FLORIRUNDA</i>	0.0	0.0	2.0	0.0	0.0	0.0
SUBTOTAL						1.0
SHRUBS - PLANTED						
<i>KUCHIA PRUSTRATA</i>	4.0	0.0	0.0	0.0	0.0	0.0
<i>ATRIPLEX BONNEVILLENSIS</i>	0.0	4.0	0.0	0.0	0.0	0.0
<i>ATRIPLEX CANESCENS</i>	2.0	2.0	3.0	3.0	0.0	1.0
<i>EUOTIA LANATA</i>	2.0	3.0	3.0	6.0	1.0	3.0
SUBTOTAL						6.2
PLANTED						23.8
INVADED						1.0
GRAND TOTAL						24.8

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

SPECIES	1	2	SUBPLOT			TREATMENT PLOT AVERAGE
			3	4	5	
GRASSES - PLANTED						
AGROPYRON TRICOPHORUM	3.0	0.0	3.0	0.0	2.0	0.0
AGROPYRON SPP.	6.0	7.0	3.0	7.0	10.0	3.0
ORYZOPSIS HYMENOIDES	2.0	1.0	0.0	6.0	4.0	1.0
STIPA VIRIDULA	0.0	0.0	1.0	0.0	0.0	0.2
BROMUS INERMIS	2.0	3.0	0.0	0.0	2.0	2.0
SUBTOTAL						11.8
GRASSES - INVADED						
BROMUS TECTORUM	0.0	0.0	0.0	0.0	1.0	0.2
AGROPYRON CRISTATUM	3.0	0.0	2.0	0.0	0.0	0.8
SUBTOTAL						1.0
FORBS - PLANTED						
ASTRAGALUS CICER	0.0	0.0	1.0	0.0	0.0	0.3
MELLITUS OFFICINALIS	2.0	12.0	6.0	2.0	2.0	4.0
PENSTEMON STRICTUS	0.0	0.0	0.0	0.0	1.0	0.2
SUBTOTAL						4.5
FORBS - INVADED						
ASTRAGALUS TEGETARIUS	0.0	0.0	3.0	0.0	0.0	0.5
SALSOLA KALI	0.1	0.0	0.0	7.0	1.0	1.5
PHYSARIA FLORIBUNDA	0.1	0.0	0.0	0.0	0.0	0.0
UNKNOWN FORB	0.0	2.0	0.0	0.0	0.0	0.3
SUBTOTAL						2.4
SHRUBS - PLANTED						
PURSHIA TRIDENTATA	0.0	0.1	0.0	0.0	0.0	0.0
AIRYPLIX CANIFLSCENS	0.0	7.0	2.0	0.0	1.0	3.2
EURUTIA LANATA	9.0	3.0	4.0	0.0	7.0	3.8
SUBTOTAL						7.0
PLANTED						23.3
INVADED						3.4
GRAND TOTAL						26.7

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING IN THE RBUSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 1 NO PROCESS SHALE
TREATMENT -- MULCH - NAME SEEDED MEDIUM

SPECIES	SUBPLOT			TREATMENT PLOT AVERAGE		
	1	2	3	4	5	6
GRASSES - PLANTED						
<i>AGROPYRON TRICHOPHORUM</i>	2.0	4.0	6.0	1.0	4.0	0.0
<i>AGROPYRON SPP.</i>	14.0	17.0	2.0	8.0	6.0	2.0
<i>ORYZOPSIS HYMENOIDES</i>	0.0	1.0	0.0	0.0	0.0	0.5
<i>STIPA VIRIDULA</i>	0.0	0.0	0.0	0.0	1.0	0.0
<i>BROMUS INERMIS</i>	3.0	3.0	1.0	0.0	1.0	1.8
SUBTOTAL						13.5
GRASSES - INVADED						
<i>SITANIA Hystrix</i>	0.0	0.0	0.0	0.0	0.0	0.0
SUBTOTAL						0.3
FORBS - PLANTED						
<i>LINUM LEWISII</i>	0.0	0.0	0.0	0.0	1.0	0.3
<i>ASTRAGALUS CICER</i>	1.0	1.0	0.0	3.0	1.0	2.0
<i>MELilotus officinalis</i>	4.0	3.0	8.0	13.0	8.0	7.0
SUBTOTAL						7.2
FORBS - INVADED						
<i>SALSOLA KALI</i>	0.0	0.0	1.0	0.0	0.0	0.0
<i>PHYSARIA FLORIRUNA</i>	0.0	0.0	0.0	1.0	0.1	0.2
<i>CRYPTANTHA SERICEA</i>	1.0	0.0	0.0	0.0	0.0	0.2
SUBTOTAL						0.7
SHRUBS - PLANTED						
<i>ARTEMISIA TRIOENTATA</i>	0.0	1.0	0.0	0.0	0.0	0.0
<i>ATRIPLEX GARONERI</i>	1.0	0.0	0.0	0.0	0.0	0.2
<i>PURSHIA TRIOENTATA</i>	1.0	0.0	0.0	0.0	1.0	0.7
<i>CERCOCARPUS MONTANUS</i>	0.0	0.0	0.0	0.0	0.1	0.0
<i>ATRIPLEX CANESCENS</i>	3.0	1.0	2.0	0.0	5.0	1.8
<i>EUROTIA LANATA</i>	6.0	3.0	4.0	8.0	1.0	4.2
SUBTOTAL						7.0
PLANTED INVADED GRANO TOTAL						
						29.3
						1.0
						30.4

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RENOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - #3 SUBSTRATE - 2 PROCESS SHALE
TREATMENT -- MULCH - NONE SEEDED MEDIUM

SPECIES	SUBPLOT						TREATMENT PLOT AVERAGE
	1	2	3	4	5	6	
GRASSES - PLANTED							
<i>AGropyron trichophorum</i>	3.0	4.0	0.0	0.0	1.0	3.0	1.8
<i>Agropyron spp.</i>	11.0	10.0	6.0	7.0	5.0	6.0	7.5
<i>Oryzopsis hymenoides</i>	3.0	2.0	8.0	4.0	7.0	15.0	6.5
<i>Stipa viridula</i>	0.0	0.0	0.0	2.0	0.0	0.0	0.7
<i>Bromus inermis</i>	4.0	4.0	0.0	3.0	6.0	8.0	4.2
SUBTOTAL							20.7
FORBS - PLANTED							
<i>Linum lewisii</i>	0.0	1.0	0.0	1.0	1.0	1.0	0.7
<i>Astragalus cicer</i>	0.1	0.0	1.0	1.0	2.0	0.0	0.7
<i>Melilotus officinalis</i>	2.0	2.0	4.0	3.0	3.0	2.0	2.7
SUBTOTAL							4.0
FORBS - INVADED							
<i>Astragalus vegetarius</i>	0.0	1.0	0.0	1.0	0.0	0.0	0.3
<i>Salsola kali</i>	0.0	0.0	3.0	0.0	0.0	0.0	0.5
SUBTOTAL							0.8
SHRUBS - PLANTED							
<i>Camphorosma monspeliacana</i>	0.0	0.0	3.0	0.0	0.0	0.0	0.5
<i>Chrysanthemus spp.</i>	0.0	1.0	0.0	0.0	0.0	0.0	0.2
<i>Purshia tridentata</i>	0.1	0.0	0.0	0.0	0.0	0.0	0.0
<i>Atriplex canescens</i>	2.0	0.0	0.0	0.0	2.0	8.0	2.0
<i>Eurotia lanata</i>	5.0	7.0	0.0	4.0	6.0	2.0	4.0
SUBTOTAL							6.7
PLANTED							
INVADED							31.4
GRAND TOTAL							32.2

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 1 NO PROCESS SHALE
TREATMENT -- MULCH - NONE SEEDED HIGH

SPECIES	1	2	3	SUBPLOT 4	5	6	TREATMENT PLOT AVERAGE
							1
GRASSES - PLANTED							
AGROPYRON TRICHOPOHORUM	3.0	7.0	4.0	4.0	0.1	2.0	3.3
AGROPYRON SPP.	5.0	8.0	6.0	9.0	5.0	6.0	6.5
ORYZOPSIS HYMENOIDES	5.0	4.0	5.0	3.0	2.0	2.0	3.5
STIPA VIRIDULA	0.0	0.0	0.0	0.1	0.0	0.0	0.0
BROMUS INFERIUS	7.0	2.0	7.0	4.0	2.0	2.0	4.0
SUBTOTAL							17.4
GRASSES - INVADED							
BROMUS TECTORUM	0.0	0.0	0.0	0.0	0.0	2.0	0.3
SUBTOTAL							0.3
FORBS - PLANTED							
LINUM LEWISII	0.0	1.0	0.0	0.0	1.0	2.0	0.7
ASTRAGALUS CICER	0.0	0.1	0.0	1.0	0.1	0.1	0.2
MELilotus officinalis	2.0	3.0	2.0	1.0	0.0	0.0	1.3
PENstemon strictus	0.0	0.0	0.0	0.1	0.0	0.0	0.0
SUBTOTAL							2.2
FORBS - INVADED							
SALSICLA KALI	0.0	0.0	0.0	1.0	0.1	0.0	0.2
SUBTOTAL							0.2
SHRUBS - PLANTED							
PURSHIA TRIOENTATA	0.0	0.0	0.1	0.1	0.0	0.0	0.0
ATRIPLEX CANESCENS	2.0	3.0	3.0	3.0	2.0	4.0	2.8
EUROTIA LANATA	4.0	5.0	8.0	7.0	8.0	8.0	6.7
SUBTOTAL							9.5
PLANTED							
INVADED							
GRAND TOTAL							29.6

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBDSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE - 2 PROCESS SHALE
TREATMENT -- MULCH - NONE SEEDED HIGH

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
<i>AGROFYRON TRICHOPODUM</i>	2.0	1.0	0.0	2.0	3.0	4.0
<i>AGROFYRON SPP.</i>	5.0	4.0	10.0	10.0	6.0	7.5
<i>ORYZOPSIS HYMENOIDES</i>	5.0	6.0	7.0	5.0	6.0	6.2
<i>BROMUS INERMIS</i>	4.0	2.0	5.0	6.0	4.0	4.2
SUBTOTAL						19.8
FORBS - PLANTED						
<i>LINUM LEWISII</i>	2.0	0.0	0.0	0.0	0.0	0.3
<i>ASTRAGALUS CICER</i>	1.0	0.1	0.0	0.0	0.0	0.2
<i>MELILOTUS OFFICINALIS</i>	1.0	0.1	1.0	0.0	0.1	0.4
SUBTOTAL						0.9
FORBS - INVADED						
<i>ASTRAGALUS TEGETARIUS</i>	0.0	0.0	0.0	1.0	0.0	0.2
<i>SALSOLA KALI</i>	0.0	0.0	0.1	0.0	0.0	0.0
SUBTOTAL						0.2
SHRUBS - PLANTED						
<i>PURSHIA TRIDENTATA</i>	0.1	0.0	0.1	0.1	0.0	1.0
<i>ATRIPLEX CANESCENS</i>	5.0	3.0	2.0	1.0	2.0	2.5
<i>EUROTIA LANATA</i>	4.0	6.0	8.0	5.0	4.0	5.3
SUBTOTAL						8.0
PLANTED						
INVADED						28.8
GRAND TOTAL						28.9

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBUSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	SUBPLOT 4	5	6
GRASSES - PLANTED						
<i>AGROPYRON TRICHOPODUM</i>	1.0	2.0	3.0	0.0	1.0	5.0
<i>AGROPYRON SPP.</i>	5.0	0.0	0.0	2.0	3.0	2.0
<i>ORYZOPSIS HYMENOIDES</i>	1.0	0.0	4.0	1.0	0.0	0.0
<i>STIPA VIRIDULA</i>	0.0	2.0	3.0	1.0	1.0	1.0
<i>BROMUS INERMIS</i>	1.0	3.0	0.1	3.0	0.0	1.3
SUB TOTAL						8.0
GRASSES - INVADED						
<i>BROMUS TECTORUM</i>	0.0	1.0	0.0	0.0	0.0	0.2
<i>AGROPYRON CRISTATUM</i>	0.0	0.0	2.0	0.0	1.0	0.5
SUB TOTAL						0.7
FOLIAGE - PLANTED						
<i>ASTRAGALUS CICERIFER</i>	0.1	1.0	0.0	0.0	0.0	0.7
<i>MELLITUS OFFICINALIS</i>	6.0	6.0	1.0	5.0	5.0	2.0
SUB TOTAL						4.2
FOLIAGE - INVADED						
<i>SALSOLA KALI</i>	0.0	1.0	4.0	1.0	2.0	1.5
<i>PHYSARIA FLORIBUNDA</i>	0.1	0.0	0.0	0.0	0.0	0.0
<i>CRYPTANTHA SERICEA</i>	0.0	0.0	0.0	0.0	1.0	0.2
SUB TOTAL						1.7
SHRUBS - PLANTED						
<i>ATRIPLEX BONNEVILLENSIS</i>	0.0	0.0	6.0	0.0	0.0	1.0
<i>CHRYSOTHAMNUS SPP.</i>	0.0	0.0	0.0	0.0	1.0	0.2
<i>PURSHIA TRIDENTATA</i>	1.0	0.0	0.0	0.0	1.0	0.3
<i>ATRIPLEX CANESCENS</i>	2.0	6.0	0.0	0.0	5.0	2.2
SUB TOTAL						3.7
PLANTED						
INVADED						16.5
GRAND TOTAL						18.9

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBDSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 2 PROCESS SHALE
TREATMENT -- MULCH - HYDRO SEEDED LOW

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
AGROPYRON TRICHOPOHORUM	6.0	3.0	3.0	4.0	2.0	2.0
AGROPYRON SPP.	7.0	6.0	5.0	8.0	6.0	6.0
ORYZOPSIS HYMENOIDES	2.0	3.0	3.0	1.0	2.0	1.0
STIPA VIRIDULA	2.0	2.0	0.0	1.0	0.0	1.0
BROMUS INERMIS	2.0	3.0	1.0	3.0	1.0	2.0
SUBTOTAL						14.0
FOLIAGE - PLANTED						
ASTRAGALUS CICER	1.0	2.0	1.0	1.0	0.0	0.0
MELLITOTUS OFFICINALIS	1.0	2.0	4.0	2.0	5.0	2.7
PENSTEMON STRICTUS	0.0	1.0	0.0	0.0	0.0	0.2
SUBTOTAL						3.7
FOLIAGE - INVADERS						
SALSOLA KALI	3.0	0.0	1.0	0.0	2.0	0.0
PHYSARIA FLORIBUNDA	0.0	0.0	0.0	0.1	0.0	0.0
UNKNOWN FOLIAGE	0.0	0.0	0.0	0.0	1.0	0.2
SUBTOTAL						1.2
SHRUBS - PLANTED						
ARTEMISIA TRIOFENATA	0.0	0.0	3.0	0.0	0.0	0.0
KOCHIA PROSTRATA	0.0	0.0	0.0	6.0	0.0	0.0
CHRYSOTHAMNUS SPP.	0.0	0.0	0.0	0.0	2.0	0.3
ATRIPLEX CANESCENS	0.0	0.0	0.0	0.0	2.0	0.3
EUROTIA LANATA	0.0	5.0	4.0	0.0	2.0	3.2
SUBTOTAL						5.3
PLANTED INVADER GRAND TOTAL						
PLANTED						23.0
INVADER						1.2
GRAND TOTAL						24.2

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

SPECIES	SUBPLOT					TREATMENT PLOT AVERAGE
	1	2	3	4	5	
GRASSES - PLANTED						
<i>AGROPYRON TRICHOPODUM</i>	6.0	2.0	3.0	0.0	1.0	0.0
<i>AGROPYRON SPP.</i>	10.0	4.0	5.0	5.0	7.0	2.0
<i>ORYZOPSIS HYMENOIDES</i>	1.0	1.0	1.0	1.0	1.0	5.7
<i>STIPA VIRIOULA</i>	0.0	0.0	0.1	1.0	0.0	1.0
<i>BROMUS INERMIS</i>	6.0	2.0	2.0	0.0	0.0	0.2
SUBTOTAL						11.0
FORB - PLANTED						
<i>LINUM LEWISII</i>	0.0	1.0	0.0	1.0	0.0	0.3
<i>ASTRAGALUS CICER</i>	1.0	1.0	2.0	2.0	0.0	1.0
<i>MELILOTUS OFFICINALIS</i>	8.0	17.0	8.0	14.0	12.0	11.5
<i>PENSTEMON STRICTUS</i>	0.0	0.0	0.0	0.0	1.0	0.2
SUBTOTAL						13.0
FORB - INVADED						
<i>ASTRAGALUS TEGETARIUS</i>	0.0	0.0	3.0	0.0	0.0	0.0
<i>SALSOLA KALI</i>	0.0	0.1	0.0	0.0	1.0	0.5
<i>CRYPTANTHA SERICEA</i>	0.0	0.0	0.0	1.0	0.0	0.2
SUBTOTAL						0.8
SHRUBS - PLANTED						
<i>KUCHIA PROSTRATA</i>	0.0	0.0	0.0	0.0	0.0	0.0
<i>CAMPHOROSMA MONSPLEIACA</i>	0.0	0.0	0.0	1.0	0.0	0.5
<i>PURSHIA TRIOFENTATA</i>	0.0	1.0	2.0	0.1	0.0	0.2
<i>CERCOCARPUS MONTANUS</i>	0.0	0.0	0.0	0.1	0.1	0.5
<i>ATRIPLEX CANESCENS</i>	1.0	0.0	5.0	2.0	0.0	0.0
<i>EUROTIA LANATA</i>	6.0	6.0	7.0	14.0	6.0	7.3
SUBTOTAL						9.9
PLANTED						
INVADeD						33.9
GRAND TOTAL						34.8

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBUSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
<i>AGROPYRON TRICHOPODUM</i>	2.0	3.0	0.0	6.0	3.0	2.0
<i>AGROPYRUN SPP.</i>	7.0	10.0	4.0	14.0	7.0	8.7
<i>DRYOPSIDIS HYMENOIDES</i>	3.0	2.0	1.0	1.0	3.0	2.3
<i>BROMUS INFERIUS</i>	4.0	4.0	8.0	5.0	3.0	4.5
SUBTOTAL						18.3
FORBS - PLANTED						
<i>LINUM LEWISII</i>	1.0	0.0	0.0	0.0	1.0	0.3
<i>ASTRAGALUS CICER</i>	1.0	0.0	1.0	2.0	0.1	0.8
<i>MELilotus OFFICINALIS</i>	3.0	3.0	4.0	5.0	6.0	4.2
SUBTOTAL						5.3
FORBS - INVADED						
<i>ASTRAGALUS VEGETARIUS</i>	0.0	0.0	0.0	0.0	0.0	0.2
<i>SALSOLA KALI</i>	0.0	0.0	0.1	0.0	0.0	0.0
SUBTOTAL						0.2
SHRUBS - PLANTED						
<i>ATRIPLEX GARDNERI</i>	0.0	0.0	0.0	0.0	0.1	0.0
<i>ATRIPLEX CANESCENS</i>	4.0	1.0	3.0	0.0	0.0	2.0
<i>EURUTIA LANATA</i>	7.0	0.0	5.0	2.0	4.0	3.5
SUBTOTAL						5.5
PLANTED						
INVADED						
GRAND TOTAL						
						29.4

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE REOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

SPECIES	SUBSTRATE			TREATMENT PLOT AVERAGE		
	1 NO PROCESS SHALE	2 MULCH - HYDRO SEEDED HIGH	3 SUBPLOT	4	5	6
GRASSES - PLANTED						
<i>AGROPYRON TRICHOPOHORUM</i>	2.0	2.0	4.0	2.0	4.0	2.7
<i>AGROPYRON SPP.</i>	7.0	5.0	8.0	16.0	14.0	10.0
<i>ORYZOPSIS HYMENIOIDES</i>	1.0	2.0	2.0	1.0	3.0	1.7
<i>STIPA VIRIDULA</i>	0.0	0.0	0.0	0.0	0.1	0.0
<i>BROMUS INERMIS</i>	2.0	5.0	3.0	4.0	6.0	4.3
SUBTOTAL						18.7
FORBS - PLANTED						
<i>ASTRAGALUS CICER</i>	0.1	0.0	0.0	2.0	1.0	0.5
<i>MELilotus officinalis</i>	4.0	3.0	2.0	4.0	1.0	3.3
SUBTOTAL						3.8
FORBS - INVADERS						
<i>ASTRAGALUS TEGETARIUS</i>	0.0	2.0	1.0	0.0	0.0	0.5
<i>SALSICLA KALI</i>	1.0	0.0	0.0	0.0	0.0	0.2
<i>PHYSARIA FLORIBUNDA</i>	0.0	0.0	1.0	0.0	0.0	0.3
SUBTOTAL						1.0
SHRUBS - PLANTED						
<i>PURSHIA TRIDENTATA</i>	2.0	1.0	1.0	1.0	0.0	0.8
<i>CERCOCARPUS MONTANUS</i>	0.1	0.0	0.0	0.1	0.0	0.0
<i>TRIPLEX CANESCENS</i>	5.0	2.0	5.0	3.0	4.0	3.5
<i>EUROTIA LANATA</i>	6.0	5.0	5.0	5.0	7.0	6.7
SUBTOTAL						11.0
PLANTED						33.6
INVADER						1.0
GRAND TOTAL						34.6

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBSRP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 2 PROCESS SHALE
TREATMENT -- MULCH - HYDRO SEEDDED HIGH

SPECIES	SUBPLOT			TREATMENT PLOT AVERAGE		
	1	2	3	4	5	6
GRASSES - PLANTED						
AGROPYRON TRICHOPODRUM	3.0	2.0	5.0	4.0	2.0	4.0
AGROPYRON SPP.	4.0	7.0	7.0	5.0	9.0	10.0
ORYZOPSIS HYMENOIDES	3.0	7.0	3.0	4.0	4.0	4.2
BROMUS INERMIS	3.0	8.0	3.0	4.0	5.0	1.0
SUBTOTAL						18.5
FORBS - PLANTED						
LINUM LEWISII	0.0	0.1	0.0	0.0	0.0	0.0
ASTRAGALUS CICER	2.0	0.1	0.0	1.0	0.1	0.5
MELilotus officinalis	0.0	0.0	3.0	1.0	0.1	0.7
PENstemon strictus	0.1	0.0	0.0	0.0	0.1	0.0
SUBTOTAL						1.3
SHRUBS - PLANTED						
KUCHIA PROSTRATA	0.0	5.0	0.0	0.0	0.0	0.8
PURSHIA TRIDENTATA	0.1	0.1	0.1	0.0	0.1	0.1
CERCOCARPUS MONTANUS	0.0	0.0	0.0	0.1	0.0	0.3
TRIPLIX CANESCENS	4.0	4.0	13.0	6.0	2.0	5.3
EUROTIA LANATA	2.0	3.0	5.0	5.0	3.0	3.5
SUBTOTAL						10.1
PLANTED						29.9
INVADED						0.0
GRAND TOTAL						29.9

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 1 NC PROCESS SHALE
TREATMENT -- MULCH - STRAW SEEDED LOW

SPECIES	SUBPLOT				TREATMENT PLOT AVERAGE
	1	2	3	4	
GRASSES - PLANTED					
AGROPYRON TRICHOPHORUM	3.0	0.0	4.0	2.0	2.0
AGROPYRON SPP.	5.0	4.0	6.0	7.0	4.0
ORYZOPSIS HYMENOIDES	0.0	1.0	6.0	2.0	0.0
BRIMELLS INERMIS	5.0	4.0	3.0	2.0	1.0
SUB TOTAL					12.5
GRASSES - INVADED					
KOELERIA SP.	0.0	0.0	0.0	0.0	0.0
AGROPYRON CRISTATUM	0.0	0.1	0.0	0.0	0.0
SUB TOTAL					0.7
FORBS - PLANTED					
LINUM LEWISII	0.0	0.0	2.0	1.0	0.0
ASTRAGALUS CICER	0.0	1.0	0.0	2.0	3.0
MELLITOTUS OFFICINALIS	5.0	7.0	6.0	7.0	6.0
PENSTEMON STRICTUS	0.0	0.0	0.0	1.0	0.0
SUB TOTAL					8.5
FORBS - INVADED					
SALSOLA KALI	0.0	0.0	0.0	0.0	1.0
CRYPTANTHA SERICEA	0.0	0.0	1.0	0.0	0.0
SUB TOTAL					0.5
SHRUBS - PLANTED					
CAMPHOROSMA MONSPELIACA	0.0	1.0	0.0	0.0	0.0
TRIPLEX BONNEVILLENSIS	0.0	0.0	0.0	5.0	0.0
CHRYSOTHAMNUS SPP.	0.0	0.0	3.0	0.0	0.0
PURSHIA TRIDENTATA	0.0	0.1	0.0	0.0	0.0
TRIPLEX CANESCENS	0.0	1.0	4.0	3.0	1.0
EUROTIA LANATA	2.0	1.0	0.0	1.0	0.0
SUB TOTAL					4.3
PLANTED					25.3
INVADED					1.2
GRANO TOTAL					26.5

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RUST REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE - 2 PROCESSED SHALE
TREATMENT -- MULCH - STRAW SEEDED LOW

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
AGROPYRON TRICHOPODUM	0.0	1.0	2.0	0.0	4.0	0.0
AGROPYRON SPP.	3.0	6.0	5.0	16.0	5.0	5.0
ORYZOPSIS HYMENOIDES	0.0	4.0	3.0	3.0	1.0	0.0
STIPA VIRIDULA	2.0	0.0	2.0	1.0	0.0	0.0
BROMUS INERMIS	0.0	1.0	4.0	4.0	8.0	14.0
SUBTOTAL						16.2
GRASSES - INVADERS						
KOELERIA SP.	3.0	2.0	1.0	0.0	0.0	1.0
AGROPYRON CRISTATUM	1.0	1.0	0.0	1.0	2.0	0.0
SUBTOTAL						0.8
FORBS - PLANTED						
ASTRAGALUS CICER	1.0	0.0	0.0	1.0	2.0	1.0
MELLITUTUS OFFICINALIS	4.0	3.0	5.0	1.0	2.0	4.0
SUBTOTAL						4.0
FORBS - INVADERS						
SALSOLA KALI	1.0	0.0	0.0	0.0	0.0	0.0
SUBTOTAL						0.2
SHRUBS - PLANTED						
CHRYSOTHAMNUS SPP.	0.0	0.0	6.0	0.0	0.0	0.0
PURSHIA TRIDENTATA	0.1	0.0	2.0	2.0	0.0	0.0
ATRIPLICA CANESCENS	1.0	0.0	0.0	0.0	5.0	2.0
EUROTIA LANATA	0.0	0.0	0.0	0.0	0.0	1.0
SUBTOTAL						3.2
PLANTED						23.3
INVADERS						2.0
GRAND TOTAL						25.3

APPENDIX B-1 PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBDSR REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 1 NO PROCESS SHALE
TREATMENT -- MULCH - STRAW SEEDED MEDIUM

SPECIES	1	2	3	SUBPLOT 4	5	6	TREATMENT	PLUT	AVERAGE
GRASSES - PLANTED									
AGROPYRON TRICHOPODUM	2.0	0.0	3.0	4.0	5.0	1.0	2.5		
AGRIFYRON SPP.	10.0	8.0	9.0	11.0	17.0	4.0	9.8		
ORYZOPHYSIS HYMENOIDES	1.0	2.0	0.0	4.0	3.0	4.0	2.3		
STIPA VIRIOUMLA	0.0	0.0	0.0	0.0	1.0	0.0	0.2		
BROMUS INERMIS	5.0	2.0	2.0	7.0	3.0	5.0	4.0		
SUBTOTAL							18.8		
GRASSES - INVADED									
BROMUS TECTORUM	0.0	0.0	0.0	0.0	0.0	1.0	0.2		
AGRIFYRON CRISTATUM	0.0	2.0	0.0	0.0	0.0	0.0	0.3		
SUBTOTAL							0.5		
FOLIAGE - PLANTED									
LINUM LEWISII	0.0	0.0	1.0	0.0	0.0	2.0	0.5		
ASTRAGALUS CICER	1.0	0.0	2.0	1.0	2.0	2.0	1.3		
MELilotus officinalis	3.0	3.0	3.0	4.0	6.0	10.0	4.8		
SUBTOTAL							6.7		
FOLIAGE - INVADED									
SALSOLA KALI	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
CRYPTANTHA SERICEA	0.0	0.0	0.0	2.0	0.0	0.0	0.3		
SUBTOTAL							0.3		
SHRUBS - PLANTED									
CHRYSOTHAMNUS SPP.	0.0	0.0	0.0	0.0	2.0	0.0	0.3		
PURSHIA TRIDENTATA	0.1	0.0	0.0	0.1	1.0	0.0	0.2		
ATRIPLEX CANESCENS	1.0	3.0	0.0	3.0	4.0	0.0	1.8		
EUROTIA LANATA	3.0	7.0	3.0	4.0	2.0	5.0	4.0		
SUBTOTAL							6.4		
PLANTED							31.9		
INVADED							0.8		
GRAND TOTAL							32.7		

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE RBOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 2 PROCESS SHALE
TREATMENT -- MULCH - STRAW SEEDED MEDIUM

SPECIES	TREATMENT PLOT AVERAGE					
	1	2	3	4	5	6
GRASSES - PLANTED						
<i>AGROFYRON TRICHOPHORUM</i>	5.0	0.0	6.0	0.0	3.0	0.0
<i>AGROPYRON SPP.</i>	8.0	5.0	3.0	7.0	5.0	6.0
<i>ORYZOPSIS HYMENOIDES</i>	2.0	0.0	2.0	2.0	2.0	2.0
<i>BROMUS INERMIS</i>	6.0	4.0	2.0	2.0	6.0	4.0
SUBTOTAL						13.7
GRASSES - INVADERS						
<i>AGROPYRUN CRISTATUM</i>	0.0	7.0	3.0	0.0	0.0	0.0
SUBTOTAL						1.7
FORBS - PLANTED						
<i>LINUM LEWISII</i>	0.0	0.0	0.0	0.0	1.0	0.0
<i>ASTRAGALUS CICER</i>	0.0	0.0	0.0	0.1	2.0	1.0
<i>MELilotus OFFICINALIS</i>	2.0	1.0	6.0	7.0	10.0	5.0
<i>PENstemon strictus</i>	0.0	1.0	0.0	0.0	0.0	0.0
SUBTOTAL						6.3
FORBS - INVADERS						
<i>SALSOLA KALI</i>	0.0	0.0	1.0	0.0	0.0	0.0
SUBTOTAL						0.2
SHRUBS - PLANTED						
<i>ARTEMISIA TRIDENTATA</i>	0.0	1.0	0.0	0.0	0.0	0.0
<i>KUCHIA PROSTRATA</i>	0.0	0.0	0.0	0.0	3.0	0.0
<i>PURSHIA TRIDENTATA</i>	0.1	0.0	0.0	0.0	0.0	0.0
<i>TRIPLEX CANESCENS</i>	0.0	3.0	0.0	1.0	4.0	9.0
<i>EUROTIA LANATA</i>	6.0	0.0	0.0	7.0	3.0	5.0
SUBTOTAL						7.0
PLANTED						27.0
INVADER						1.8
GRAND TOTAL						28.9

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCURRING ON THE RBOSP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 1 NO PROCESS SHALE
TREATMENT -- MULCH - STRAW SEEDED HIGH

SPECIES	SUBPLOT				TREATMENT PLOT AVERAGE
	1	2	3	4	
GRASSES - PLANTED					
<i>AGROPYRON TRICHOPOHORUM</i>	4.0	2.0	1.0	8.0	3.0
<i>AGROPYRON SPP.</i>	8.0	6.0	8.0	12.0	10.0
<i>ORYZOPSIS HYMENOIDES</i>	4.0	4.0	3.0	1.0	4.0
<i>BROMUS INERMIS</i>	7.0	3.0	6.0	3.0	2.0
SUBTOTAL					19.0
GRASSES - INVADED					
<i>KOELLERIA SP.</i>	0.0	0.0	2.0	0.0	0.0
SUBTOTAL					0.3
FORB - PLANTED					
<i>LINUM LEWISII</i>	0.0	0.0	2.0	0.0	0.0
<i>ASTRAGALUS CICER</i>	0.0	1.0	0.0	0.0	0.0
<i>HEOSARUM UTAHENSISS</i>	0.0	0.0	0.0	0.1	0.0
<i>MELilotus officinalis</i>	2.0	1.0	3.0	2.0	4.0
SUBTOTAL					5.0
FORBS - INVADED					
<i>SALSOLA KALI</i>	0.1	0.0	0.0	0.0	0.0
<i>PHYSARIA FLORIBUNDA</i>	0.0	1.0	0.0	0.0	0.0
SUBTOTAL					0.2
SHRUBS - PLANTED					
<i>KOCHIA PROSTRATA</i>	0.0	0.0	4.0	0.0	0.0
<i>PURSHIA TRIDENTATA</i>	1.0	1.0	0.0	0.0	1.0
<i>ATRIPLEX CANESCENS</i>	9.0	3.0	4.0	2.0	3.0
<i>EUROTIA LANATA</i>	5.0	3.0	1.0	3.0	7.0
SUBTOTAL					7.0
PLANTED					9.5
INVADED					32.0
GRAND TOTAL					32.5

APPENDIX B-1. PERCENT COVER OF PLANT SPECIES
OCCURRING ON THE R60SP REVEGETATION PLOTS DURING SEPTEMBER, 1978

LOCATION - R3 SUBSTRATE 2 PRUCESS SHALE
TREATMENT -- MULCH - STRAW SEEDED HIGH

SPECIES	SUBPLOT				TREATMENT PLOT AVERAGE	
	1	2	3	4		
GRASSES - PLANTED						
AGROPYRON TRICHOPHORUM	3.0	8.0	5.0	3.0	2.0	5.0
AGROPYRON SMITHII	2.0	0.0	2.0	0.0	0.0	0.7
AGROPYRON SPP.	7.0	10.0	12.0	6.0	16.0	5.0
ORYZOPSIS HYMENOIDES	6.0	7.0	7.0	6.0	3.0	5.3
BROMUS TINERVIS	6.0	3.0	7.0	3.0	4.0	4.3
SUBTOTAL						24.0
GRASSES - INVADED						
UNKNOWN GRASS	0.0	0.0	0.0	0.0	1.0	0.0
SUBTOTAL						0.2
TREES - PLANTED						
ASTRAGALUS CICER	0.1	0.0	1.0	1.0	1.0	2.0
HEDYSARUM UTAHENSISS	0.1	0.0	0.0	0.0	0.0	0.0
MELILLOCTUS OFFICINALIS	0.0	0.1	2.0	0.0	1.0	1.7
SUBTOTAL						2.5
TREES - INVADED						
PHYSARIA FLORIBUNDA	0.0	0.0	0.0	0.0	1.0	0.0
SUBTOTAL						0.2
SHRUBS - PLANTED						
PURSHIA TRIDENTATA	0.1	1.0	0.0	1.0	1.0	0.1
ATRIPLAX CANESCENS	0.0	1.0	2.0	4.0	2.0	5.0
EUROTIA LANATA	3.0	3.0	3.0	6.0	4.0	8.0
SUBTOTAL						7.4
PLANTED						
INVADED						
GRAND TOTAL						34.2
UNKNOWN						33.9
GRAN TOTAL						0.3

APPENDIX B-2. COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN THE TWO SUBSTRATE TREATMENTS.

APPENDIX B-2. COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN THE
TWO SUBSTRATE TREATMENTS.

Treatment: No Mulch
Medium Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	1.8	2.8
<u>Agropyron</u> spp.	7.5	8.2
<u>Oryzopsis hymenoides</u>	6.5	0.5
<u>Stipa viridula</u>	0.7	0.2
<u>Bromus inermis</u>	4.2	1.8
<u>Sitanion hystrix</u>	-	0.3
Subtotal	20.7	13.8
FORBS		
<u>Linum lewisii</u>	0.7	0.3
<u>Astragalus cicer</u>	0.7	1.3
<u>Melilotus officinalis</u>	2.7	7.2
<u>Astragalus tegetarius</u>	0.3	-
<u>Salsola kali</u>	0.5	0.3
<u>Physaria floribunda</u>	-	0.2
<u>Cryptantha sericea</u>	-	0.2
Subtotal	4.9	9.5
SHRUBS		
<u>Artemesia tridentata</u>	-	0.2
<u>Chrysothamnus</u> spp.	.2	-
<u>Purshia tridentata</u>	+	0.7
<u>Cercocarpus montanus</u>	-	+
<u>Atriplex canescens</u>	2.0	1.8
<u>Eurotia lanata</u>	4.0	4.2
Subtotal	6.2	6.9
TOTAL	31.8	30.2

+ Indicates Presence

APPENDIX B-2 COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: No Mulch
Low Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	1.3	2.7
<u>Agropyron</u> spp.	6.0	6.3
<u>Oryzopsis hymenoides</u>	2.3	1.0
<u>Stipa viridula</u>	0.2	0.2
<u>Bromus inermis</u>	2.0	2.3
<u>Bromus tectorum</u>	0.2	-
<u>Agropyron cristatum</u>	0.8	-
Subtotal	12.8	12.5
FORBS		
<u>Linum lewisii</u>	-	0.2
<u>Astragalus cicer</u>	0.3	0.7
<u>Melilotus officinalis</u>	4.0	4.0
<u>Penstemon strictus</u>	0.2	0.3
<u>Astragalus tegetarius</u>	0.5	-
<u>Salsola kali</u>	1.5	0.7
<u>Physaria floribunda</u>	+	0.3
Unknown forb	0.3	-
Subtotal	6.8	6.2
SHRUBS		
<u>Kochia prostrata</u>	-	0.7
<u>Atriplex bonnevillensis</u>	-	0.7
<u>Purshia tridentata</u>	+	-
<u>Atriplex canescens</u>	3.2	1.8
<u>Eurotia lanata</u>	3.8	3.0
Subtotal	7.0	6.2
TOTAL	26.6	24.9

+ Indicates presence

APPENDIX B-2. COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: Hay
Low Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	1.2	1.8
<u>Agropyron spp.</u>	6.7	5.7
<u>Oryzopsis hymenoides</u>	2.3	1.8
<u>Stipa viridula</u>	0.8	-
<u>Bromus inermis</u>	5.2	3.2
<u>Koeleria sp.</u>	1.0	0.7
<u>Agropyron cristatum</u>	0.8	+
Subtotal	18.0	13.2
FORBS		
<u>Linum lewisii</u>	-	0.5
<u>Astragalus cicer</u>	0.8	1.2
<u>Melilotus officinalis</u>	3.2	6.5
<u>Penstemon strictus</u>	-	0.3
<u>Salsola kali</u>	0.2	0.3
<u>Cryptantha sericea</u>	-	0.2
Subtotal	4.2	9.0
SHRUBS		
<u>Chrysothamnus spp.</u>	1.0	0.5
<u>Purshia tridentata</u>	0.7	+
<u>Atriplex canescens</u>	1.3	1.5
<u>Eurotia lanata</u>	0.2	1.3
Subtotal	3.2	3.3
TOTAL	25.4	25.5

+ Indicates Presence

APPENDIX B-2 . COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatments: Hay
Medium Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	2.3	2.5
<u>Agropyron spp.</u>	5.7	9.8
<u>Oryzopsis hymenoides</u>	1.7	2.3
<u>Stipa viridula</u>	-	0.2
<u>Bromus inermis</u>	4.0	4.0
<u>Bromus tectorum</u>	-	0.2
<u>Agropyron cristatum</u>	1.7	0.3
Subtotal	15.4	19.3
FORBS		
<u>Linum lewisii</u>	0.2	0.5
<u>Astragalus cicer</u>	0.5	1.3
<u>Melilotus officinalis</u>	5.5	4.8
<u>Penstemon strictus</u>	0.2	-
<u>Salsola kali</u>	0.2	+
<u>Cryptantha sericea</u>	-	0.3
Subtotal	6.6	6.9
SHRUBS		
<u>Artemesia tridentata</u>	0.2	-
<u>Chrysothamnus spp.</u>	-	0.3
<u>Purshia tridentata</u>	+	0.2
<u>Atriplex canescens</u>	2.8	1.8
<u>Eurotia lanata</u>	3.5	4.0
Subtotal	6.5	6.3
TOTAL	28.5	32.5

+ Indicates Presence

APPENDIX B-2 COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN THE TWO SUBSTRATE TREATMENTS.

Treatment: Hay
High Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophyllum</u>	4.3	3.5
<u>Agropyron smithii</u>	0.7	8.7
<u>Agropyron spp.</u>	9.3	-
<u>Oryzopsis hymenoides</u>	5.3	3.0
<u>Bromus inermis</u>	4.3	3.8
<u>Koeleria sp.</u>	-	0.3
Unknown grass	0.2	-
Subtotal	24.1	19.3
FORBS		
<u>Linum lewisii</u>	-	0.3
<u>Astragalus cicer</u>	0.8	0.3
<u>Hedysarum utahensis</u>	+	+
<u>Melilotus officinalis</u>	1.7	2.8
<u>Salsola kali</u>	-	+
<u>Physaria floribunda</u>	0.2	0.2
Subtotal	2.7	3.6
SHRUBS		
<u>Purshia tridentata</u>	0.5	0.5
<u>Atriplex canescens</u>	2.3	4.0
<u>Eurotia lanata</u>	4.5	4.3
Subtotal	7.3	8.3
TOTAL	34.1	31.7

+ Indicates Presence

APPENDIX B-2. COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: Hydromulch
Low Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	3.3	2.0
<u>Agropyron spp.</u>	5.7	2.0
<u>Oryzopsis hymenoides</u>	2.0	1.0
<u>Stipa viridula</u>	1.0	1.7
<u>Bromus inermis</u>	2.0	1.3
<u>Bromus tectorum</u>	-	0.2
<u>Agropyron cristatum</u>	-	0.5
Subtotal	14.0	8.7
FORBS		
<u>Astragalus cicer</u>	0.8	0.7
<u>Melilotus officinalis</u>	2.7	4.2
<u>Penstemon strictus</u>	0.2	-
<u>Salsola kali</u>	1.0	1.5
<u>Physaria floribunda</u>	+	+
<u>Cryptantha sericea</u>	-	0.2
Unknown forb	0.2	-
Subtotal	4.9	6.6
SHRUBS		
<u>Artemisia tridentata</u>	0.5	-
<u>Chrysothamnus spp.</u>	0.3	0.2
<u>Purshia tridentata</u>	-	0.3
<u>Atriplex canescens</u>	0.3	2.2
<u>Eurotia lanata</u>	3.2	-
Subtotal	4.3	2.7
TOTAL	23.2	18.0

+ Indicates Presence

APPENDIX B-2. COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: Hydromulch
Medium Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	2.8	2.0
<u>Agropyron spp.</u>	8.7	5.7
<u>Oryzopsis hymenoides</u>	2.3	1.0
<u>Stipa viridula</u>	-	0.2
<u>Bromus inermis</u>	4.5	2.2
Subtotal	18.3	11.1
FORBS		
<u>Linum lewisii</u>	0.3	0.3
<u>Astragalus cicer</u>	0.8	1.0
<u>Melilotus officinalis</u>	4.2	11.5
<u>Penstemon strictus</u>	-	0.2
<u>Astragalus tegetarius</u>	0.2	0.5
<u>Salsola kali</u>	+	0.2
<u>Cryptantha sericea</u>	-	0.2
Subtotal	5.5	13.9
SHRUBS		
<u>Purshia tridentata</u>	-	0.5
<u>Cercocarpus montanus</u>	-	+
<u>Atriplex canescens</u>	2.0	1.3
<u>Eurotia lanata</u>	3.5	7.3
Subtotal	5.5	9.1
TOTAL	29.3	34.1

+ Indicates Presence

APPENDIX B-2 COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: Hydromulch
High Seeding

<u>Plant Species</u>	<u>Processed Shale</u>	<u>No Processed Shale</u>
GRASSES		
<u>Agropyron trichophorum</u>	3.3	2.7
<u>Agropyron</u> spp.	7.0	10.0
<u>Oryzopsis hymenoides</u>	4.2	1.7
<u>Stipa viridula</u>	-	+
<u>Bromus inermis</u>	4.0	4.3
Subtotal	18.5	18.7
FORBS		
<u>Linum lewisii</u>	+	-
<u>Astragalus cicer</u>	0.5	0.5
<u>Melilotus officinalis</u>	0.7	3.3
<u>Penstemon strictus</u>	+	-
<u>Astragalus tegetarius</u>	-	0.5
<u>Salsola kali</u>	-	0.2
<u>Physaria floribunda</u>	-	0.3
Subtotal	1.2	4.8
SHRUBS		
<u>Purshia tridentata</u>	0.1	0.8
<u>Cercocarpus montanus</u>	0.3	+
<u>Atriplex canescens</u>	5.3	3.5
<u>Eurotia lanata</u>	3.5	6.7
Subtotal	9.2	11.0
TOTAL	28.9	34.5

+ Indicates Presence

APPENDIX B-2 COMPARISON OF PERCENT COVER OF PLANT SPECIES BETWEEN TWO SUBSTRATE TREATMENTS.

Treatment: No Mulch
High Seeding

Plant Species	Processed Shale	No Processed Shale
GRASSES		
<u>Agropyron trichophorum</u>	2.0	3.3
<u>Agropyron</u> spp.	7.5	6.5
<u>Oryzopsis hymenoides</u>	6.2	3.5
<u>Stipa viridula</u>	-	+
<u>Bromus inermis</u>	4.2	4.0
<u>Bromus tectorum</u>	-	0.3
Subtotal	19.9	17.6
FORBS		
<u>Linum lewisii</u>	0.3	0.7
<u>Astragalus cicer</u>	0.2	0.2
<u>Melilotus officinalis</u>	0.4	1.3
<u>Penstemon strictus</u>	-	+
<u>Astragalus tegetarius</u>	0.2	-
<u>Salsola kali</u>	+	0.2
Subtotal	1.1	.2.4
SHRUBS		
<u>Purshia tridentata</u>	0.2	+
<u>Atriplex canescens</u>	2.5	2.8
<u>Eurotia lanata</u>	5.3	6.7
Subtotal	8.0	9.5
TOTAL	29.0	29.5

+ Indicates Presence

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER AT THE RBOSC
REVEGETATION SITE R₃

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: GRASS_F

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	1706.42046296	100.37767429	3.73	0.0001	0.413078	32.3928
ERROR	90	2424.57166667	26.93968519			STD DEV	GRASS_P MEAN
ADJUSTED TOTAL	107	4130.99212963				5.19034538	16.02314815

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	218.16898148	8.10	0.0055
MULCH	2	122.22907407	2.27	0.1093
SUBSTRATE*MULCH	2	46.52907407	0.86	0.4251
SEEDING	2	897.48962963	16.66	0.0001
SUBSTRATE*SEEDING	2	2.3851852	0.04	0.9568
SEEDING*MULCH	4	49.51253259	0.46	0.7653
SUBSTRATE*SEEDING*MULCH	4	370.11259259	3.43	0.0116

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	122.22907407	2.63	0.2757
SEEDING	2	897.48962963	377.33	0.0026

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	897.48962963	377.33	0.0026
STEDING	4	49.51253259	0.13	0.9615

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	122.22907407	2.63	0.2757
SEEDING	2	897.48962963	377.33	0.0026
STEDING	4	49.51253259	0.13	0.9615
SUBSTRATE	1	218.16898148	8.10	0.0055
SUBSTRATE*MULCH	2	46.52907407	0.86	0.4251
SUBSTRATE*SEEDING	2	2.3851852	0.04	0.9568
SUBSTRATE*SEEDING*MULCH	4	370.11259259	3.43	0.0116

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: FORBS_P		DF	SUM OF SQUARES	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE							
MUDEL	1	17	884.97740741	52.05749455	0.0001	0.559834	56.0878
ERROR	90		695.80666667	7.73118519			FORBS_P MEAN
ADJUSTED TOTAL	107		1580.78407407				4.95740741

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM		DF	ANOVA SS	F VALUE	PR > F
SOURCE					
SUBSTRATE	1		192.00000000	24.83	0.0001
MULCH	2		25.44574074	1.65	0.1986
SUBSTRATE*MULCH	2		17.72166667	1.15	0.3225
SEEDING	2		447.82907407	28.96	0.0001
SUBSTRATE*SEEDING	2		35.4205556	2.29	0.1071
SEEDING*MULCH	4		72.17092593	2.33	0.0616
SUBSTRATE*SEEDING*MULCH	4		94.38944444	3.05	0.0208

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM		DF	ANOVA SS	F VALUE	PR > F
SOURCE					
MULCH	2		25.44574074	1.64	0.4105

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM		DF	ANOVA SS	F VALUE	PR > F
SOURCE					
SEEDING	2		447.82907407	12.64	0.0733

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM		DF	ANOVA SS	F VALUE	PR > F
SOURCE					
SEEDING*MULCH	4		72.17092593	0.76	0.5995

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R3.

DEPENDENT VARIABLE: FORBS_1		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE	OF							
MODEL	1	40.42666667	2.37803922	2.61	0.0018	0.330526	146.7449	
ERROR	90	81.88133333	0.90981481					
CORRECTED TOTAL	107	122.31000000					0.95384213	0.65000000

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.48000000	0.53	0.4695
MULCH	2	8.46888889	4.65	0.0119
SUBSTRATE*MULCH	2	6.74888889	3.71	0.0283
SEEDING	2	14.56166667	8.00	0.0006
SUBSTRATE*SEEDING	2	1.31055556	0.72	0.4894
SEEDING*MULCH	4	6.34277778	1.74	0.1475
SUBSTRATE*SEEDING*MULCH	4	2.51388889	0.69	0.6002

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	8.46888889	1.25	0.4435

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	14.56166667	11.11	0.0826

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	6.34277778	2.52	0.1960

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE B₃.

DEPENDENT VARIABLE: SHRUB_P					
SOURCE	OF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	521.2100000	30.65941176	2.73	0.0011
ERROR	90	1009.0100000	11.21122222		SIG DEV
CORRECTED TOTAL	107	1530.2200000			

SOURCE	OF	ANOVA SS	F VALUE	PR > F
SUBSTRAT	1	17.76333333	1.58	0.2114
MULCH	2	35.12888889	1.57	0.2164
SUBSTRAT*MULCH	2	3.72666667	0.17	0.8471
SEEING	2	336.55722222	16.92	0.0001
SUBSTRAT*SEEING	2	21.60388889	0.96	0.3855
SEEING*MULCH	4	54.52222222	1.22	0.3097
SUBSTRAT*SEEING*MULCH	4	53.90777776	1.20	0.3155

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	OF	ANOVA SS	F VALUE	PR > F
MULCH	2	35.12888889	9.43	0.0959

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEING AS AN ERROR TERM

SOURCE	OF	ANOVA SS	F VALUE	PR > F
SEEING	2	334.55722222	15.49	0.0607

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEING*MULCH AS AN ERROR TERM

SOURCE	OF	ANOVA SS	F VALUE	PR > F
SEEING*MULCH	4	54.52222222	1.01	0.4957

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSS REVEGETATION SITE R₃.

DEPARTMENT VARIANCE : INVADED					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	74.53157407	4.38421024	2.36	0.0048
ERROR	90	166.92500000	1.85472222		0.308675
CORRECTED TOTAL	107	241.45657407			1.36168187

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.12675926	0.07	0.7944
MULCH	2	1.07907407	0.29	0.7493
SUBSTRATE*MULCH	2	13.81574074	3.74	0.0275
SEEDING	2	37.00685185	10.14	0.0091
SUBSTRATE*SEEDING	2	6.19129630	1.67	0.1942
SUBSTRATE*MULCH	4	5.42481481	0.73	0.5730
SUBSTRATE*SEEDING*MULCH	4	10.22703704	1.38	0.2477

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	1.07907407	0.08	0.9278

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	37.00685185	6.07	0.1414

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	5.42481481	0.53	0.7229

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: PLANTED	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE							
MODEL	1	2263.00416667	133.11769216	3.38	0.0001	0.389533	22.3550
ERRUP	90	3546.52500000	39.40583333				PLANTED MEAN
CORRECTED TOTAL	107	5809.52916667				6.27740658	26.06055556
SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F		
SUBSTRATE	1	10.89342593	10.89342593	0.28	0.6003		
MULCH	2	38.55166667	19.02500000	0.49	0.6168		
SUBSTRATE*MULCH	2	18.70796296	9.38888889	0.24	0.7892		
SEEDING	2	1650.53888889	825.00000000	20.94	0.0001		
SUBSTRATE*SEEDING	2	66.41907407	33.00000000	0.86	0.4339		
SEEDING*MULCH	4	234.9444644	58.61111111	1.49	0.2116		
SUBSTRATE*SEEDING*MULCH	4	242.90370310	60.58333333	1.54	0.1971		

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F		
MULCH	2	38.55166667	19.02500000	2.06	0.3267		
SEEDING	2	1650.53888889	825.00000000	24.85	0.0397		
SEEDING	2	1650.53888889	825.00000000	24.85	0.0397		

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F		
SEEING*MULCH	4	234.9444644	58.61111111	0.97	0.5124		
SEEING*MULCH	4	234.9444644	58.61111111	0.97	0.5124		
SEEING*MULCH	4	234.9444644	58.61111111	0.97	0.5124		

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: TOTAL		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE								
MODEL		11	1792.16296296	105.42135076	3.23	0.0002	0.379027	19.5956
ERROR		90	2936.16666667	32.62407407				TOTAL MEAN
CORRECTED TOTAL		107	4728.37962963					29.14814815

DEPENDENT VARIABLE: TOTAL		DF	ANOVA SS	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE							
SUBSTRATE		1	8.6700000	0.27	0.6075		
MULCH		2	43.94962963	0.67	0.5124		
SUBSTRATE*MULCH		2	34.16222222	0.52	0.5942		
SEEDING		2	1208.67574074	18.52	0.0001		
SUBSTRATE*SEEDING		2	95.45722222	1.46	0.2370		
SEEDING*MULCH		4	223.18092593	1.71	0.1546		
SUBSTRATE*SEEDING*MULCH		4	178.06722222	1.36	0.2526		

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	43.94962963	1.29	0.4374
SUBSTRATE	1	8.6700000	0.27	0.6075

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	1208.67574074	12.66	0.0732
SUBSTRATE	1	8.6700000	0.27	0.6075

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	4	223.18092593	1.25	0.4160
SUBSTRATE	1	8.6700000	0.27	0.6075

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: AGR-TRI

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	69.0416667	69.0416667	1.14	0.3312	0.177042	74.1622
ERROR	90	321.1750000	3.56861111			STO DEV	AGR-TRI MEAN
CORRECTED TOTAL	107	390.26916667				1.88907679	2.54722222

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.24083333	0.07	0.7956
MULCH	2	2.53166667	0.35	0.7024
SUBSTRATE*MULCH	2	21.35388889	2.99	0.0552
SEEDING	2	24.01500000	3.48	0.0351
SUBSTRATE*SEEDING	2	0.33722222	0.05	0.9539
SEEDING*MULCH	4	15.69666667	1.10	0.3617
SUBSTRATE*SEEDING*MULCH	4	4.11886889	0.29	0.8847

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	2.53166667	0.12	0.8940
SEEDING	2	24.01500000	73.59	0.0134

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	24.01500000	73.59	0.0134
MULCH	2	0.24083333	0.07	0.7956

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	15.69666667	3.03	0.1117
SEEDING	2	24.01500000	73.59	0.0134
MULCH	2	0.24083333	0.07	0.7956

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: AGR_SPP		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE								
MODEL		17	382.60185185	22.50599129	2.13	0.0117	0.287073	4.6.1124
ERROR		90	950.16666667	10.55740741				AGR_SPP MEAN
CORRECTED TOTAL		107	1332.76851852				3.24921643	7.04629630

SOURCE		DF	ANOVA SS	F VALUE	PR > F
SUBSTRAT		1	0.45370370	0.04	0.8362
MULCH		2	23.46296296	1.11	0.3336
SUBSTRAT*MULCH		2	19.24074074	0.91	0.4057
SEEDING		2	154.46296296	7.32	0.0011
SUBSTRAT*SEEDING		2	23.6296296	1.11	0.3336
SEEDING*MULCH		4	49.25925926	1.17	0.3310
SUBSTRAT*SEEDING*MULCH		4	112.25925926	2.66	0.0378

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRAT*MULCH AS AN ERROR TERM				
SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	23.46296296	1.22	0.4506
SUBSTRAT	1	0.45370370	0.04	0.8362

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRAT*SEEDING AS AN ERROR TERM				
SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	154.46296296	7.32	0.0011
SUBSTRAT	1	0.45370370	0.04	0.8362

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SURSTRAT*SEEDING*MULCH AS AN ERROR TERM				
SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	4	49.25925926	1.17	0.3310
SUBSTRAT	1	0.45370370	0.04	0.8362

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R3.

DEPENDENT VARIABLE: DRY-HYM		SUM OF SQUARES		MEAN SQUARE		PR > F		R-SQUARE		C.V.	
SOURCE	DF			F VALUE							
MODEL	17	322.18516519	18.95206972	6.17		0.0001		0.5388304		64.8091	
ERROR	90	276.33333333	3.07037037							DRY-HYM MEAN	
CURFECTED TOTAL	107	598.51851852						1.75224723		2.70370370	

SOURCE	DF	ANOVA SS		F VALUE		PR > F		R-SQUARE		C.V.	
				F VALUE							
SUBSTRATE	1	96.33333333	31.38	0.0001							
MULCH	2	30.79629630	5.02	0.0056							
SUBSTRATE*MULCH	2	31.72222222	5.17	0.0075							
SEEDING	2	94.24074074	15.35	0.0001							
SEEDING*SEEDING	2	12.38888869	2.02	0.1390							
SEEDING*MULCH	4	16.98146148	1.38	0.2463							
SUBSTRATE*SEEDING*MULCH	4	39.72222222	3.23	0.0158							

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F		R-SQUARE		C.V.	
				F VALUE							
MULCH	2	30.79629630	0.97	0.5074							

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F		R-SQUARE		C.V.	
				F VALUE							
SEEDING	2	94.24074074	7.61	0.1162							

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F		R-SQUARE		C.V.	
				F VALUE							
SEEDING*MULCH	4	16.98146148	0.43	0.7867							

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R-3.

DEPENDENT VARIABLE: STI-VIR		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
STRUCTURE		1	21.4708333	1.28651961	4.51	0.0001	0.460156	190.3155
MULCH		1	25.6563333	0.28509259			STI-VIR MEAN	
SEEDING		4					0.5339463	0.28055556
STRUCTURE + MULCH + SEEDING		4	47.52916667					
SOURCE		DF	ANOVA SS	F VALUE	PR > F	R-SQUARE	C.V.	
SUBSTRATE		1	0.02675926	0.09	0.7600			
MULCH		2	2.11722222	3.71	0.0282			
SUBSTRATE+MULCH		2	1.40240741	2.46	0.0912			
SEEDING		2	7.59500000	13.32	0.0001			
SUBSTRATE+SEEDING		2	0.02462963	0.04	0.9577			
SEEDING+MULCH		4	7.6061111	6.85	0.0001			
SUBSTRATE+SEEDING+MULCH		4	2.69870370	2.54	0.0451			

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	2.11722222	1.51	0.3995

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	7.59500000	308.37	0.0032

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+SEEDING+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
STRUCTURE+MULCH	4	7.6061111	2.69	0.1603

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R_3 .

ONE PERCENT VARIABLE: RBOSP-INF						C.V.					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	132.99416667	7.82318627	1.66	0.0657	0.238596	63.7131				
ERRUP	90	424.40833333	4.71564615			STD DEV					BRO-INN MEAN
CORRECTED TOTAL	107	557.40250000									3.40833333
SUMMARY						ANOVA SS	DF	ANOVA SS	DF	ANOVA SS	DF
SUBSTRATE	1	17.84453704	3.78	0.0569							
MULCH	2	24.61500000	2.61	0.0791							
SUBSTRATE+MULCH	2	0.12240741	0.01	0.9871							
SEEDING	2	37.48166667	3.97	0.0222							
SUBSTRATE+SEEDING	2	9.4112630	1.00	0.3727							
SEEDING+MULCH	4	23.46333333	1.24	0.2981							
SUBSTRATE+SEEDING+MULCH	4	20.05592593	1.06	0.3794							

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	24.61500000	201.09	0.0049

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	37.48166667	3.98	0.2007

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+SEEDING+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING+MULCH	4	23.46333333	1.17	0.4514

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: LIN-LIN					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	5.69416667	0.33495098	1.26	0.2399
ERRCP	90	24.00033333	0.26675926		
CORRECTED TOTAL	107	29.7050000			
SOURCE	DF	ANOVA SS	F VALUE	PR > F	
SUBSTRATE	1	0.57707037	2.17	0.1446	
MULCH	2	1.10388889	2.07	0.1323	
SUBSTRATE*MULCH	2	0.61129630	1.52	0.2241	
SEEDING	2	1.40388889	2.63	0.0775	
SUBSTRATE*SEEDING	2	0.28907407	0.54	0.5816	
SEEDING*MULCH	4	1.01688889	0.95	0.4333	
SUBSTRATE*SEEDING*MULCH	4	0.48925926	0.46	0.7659	

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	1.10388889	1.36	0.4236

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	1.40388889	4.86	0.1708

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	1.01688889	2.03	0.2474

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEGREES OF FREEDOM		VARIABLE: ASY-CIC	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE		MULCH	1	12.28151407	0.72244553	1.11	0.3561	0.173461	112.6630
		FEEDING	5	58.52166667	0.65024074				ASY-CIC MEAN
		CULTIVATED TOTAL	10	70.80374674				0.80637506	0.71574074
SOURCE			DF	ANOVA SS	F VALUE	PR > F			
SOURCE		MULCH	1	0.87120370	1.34	0.2591			
		SUBSTRATE	2	1.31574074	1.03	0.3622			
		MULCH	2	0.56462963	0.43	0.6492			
		SUBSTRATE + MULCH	2	4.77629630	3.67	0.0293			
		SEEDING	2	2.27629630	1.75	0.1796			
		SEEDING + MULCH	4	1.29203704	0.50	0.3391			
		SUBSTRATE + SEEDING + MULCH	4	1.16537037	0.45	0.7735			

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE + MULCH AS AN ERROR TERM

DEGREES OF FREEDOM		ANOVA SS	F VALUE	PR > F
SOURCE	DF			
MULCH	2	1.33574074	2.37	0.2971

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE + SEEDING AS AN ERROR TERM

DEGREES OF FREEDOM		ANOVA SS	F VALUE	PR > F
SOURCE	DF			
SEEDING	2	4.77629630	2.10	0.3228

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE + SEEDING + MULCH AS AN ERROR TERM

DEGREES OF FREEDOM		ANOVA SS	F VALUE	PR > F
SOURCE	DF			
SEEDING + MULCH	4	1.29203704	1.11	0.4614

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: MEL-OFF					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MULCH	1	708.24601852	41.66153050	7.47	0.0001
SEEDLING	4	502.13500000	5.57927776		
BLOCK-FACT TOTAL	107	1210.3601852			
SOURCE	DF	ANOVA SS	F VALUE	PR > F	
SUBSTRATE	1	143.52083333	25.72	0.0001	
MULCH	2	25.96685165	2.33	0.1034	
SUBSTRATE*MULCH	2	32.41500000	2.90	0.0599	
SEEDLING	2	328.67129630	29.45	0.0001	
SUBSTRATE*SEEDLING	2	27.09722222	2.43	0.0939	
SEEDLING*MULCH	4	62.53370370	2.80	0.0304	
SUBSTRATE*SEEDLING*MULCH	4	88.04111111	3.95	0.0054	

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	25.96685185	0.80	0.5552

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDLING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDLING	2	328.67129630	12.13	0.0762

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDLING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDLING*MULCH	4	62.53370370	0.71	0.6258

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: PEN-SFR	SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
	MULCH	1.7	1.37046296	0.08061547	1.20	0.2770	0.185395	336.5757
	ERROR	9.0	6.0216667	0.06690741			PEN-SFR MEAN	
	CORRECTED TOTAL	10.7	7.39212963				0.25866466	0.07685185
SOURCE	D.F.		ANOVA SS	F VALUE	PR > F			
SUBSTRATE	1		0.03342593	0.50	0.4815			
MULCH	2		0.01351852	0.10	0.9040			
SUBSTRATE*MULCH	2		0.02907407	0.22	0.8051			
SEEDING	2		0.47574074	3.56	0.0327			
SUBSTRATE*SEEDING	2		0.07796296	0.58	0.5605			
SEEDING*MULCH	4		0.21037037	0.79	0.5372			
SUBSTRATE*SEEDING*MULCH	4		0.53037037	1.98	0.1040			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
MULCH	2	0.01351852	0.46	0.6826

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
SEEDING	2	0.47574074	6.10	0.1408

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	0.21037037	0.40	0.6036

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R_3 .

DEFINITION VARIABLE: ART-TRI

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
STRUCTURE	1	1.60185185	0.09422656	0.95	0.5479	0.148753	689.3475
ERROR	40	9.16666667	0.10185185				
CONFIDENCE TOTAL	107	10.7651852					
SOURCE	D.F.	ANOVA SS	F VALUE	PR > F			
STRUCTURE	1	0.08433333	0.82	0.3681			
MULCH	2	0.07407407	0.36	0.6962			
STRUCTURE*MULCH	2	0.22222222	1.09	0.3403			
SEEDLING	2	0.12962463	0.64	0.5316			
STRUCTURE*SEEDLING	2	0.16666667	0.82	0.4445			
STRUCTURE*MULCH*SEEDLING	4	0.48144148	1.18	0.3242			
STRUCTURE*SEEDLING*MULCH	4	0.44444444	1.09	0.3659			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATEMULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
MULCH	2	0.07407407	0.33	0.7500

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATESEEDLING AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
SEEDLING	2	0.12962463	0.78	0.5625

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATESEEDLING*MULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	PR > F
STRUCTURE*MULCH*SEEDLING	4	0.48144148	1.08	0.5700

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: CHR-SPP					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MULCH	1	7.083333333	0.41666667	0.82	0.6690
SEEDING	4	45.83333333	0.50925926		
CORRECTED TOTAL	107	52.91666667			0.71362403
SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F
SUBSTRATE	1	0.013333333	0.16	0.4668	
MULCH	2	1.555555556	0.53	0.2227	
SUBSTRATE*MULCH	2	0.000000000	0.00	1.0000	
SEEDING	2	2.166666667	2.13	0.1251	
SUBSTRATE*SEEDING	2	0.398888889	0.38	0.6837	
SEEDING*MULCH	4	2.111111111	0.4	0.3930	
SUBSTRATE*SEEDING*MULCH	4	0.777777778	0.38	0.8221	

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F
SEEDING	2	2.166666667	5.57	0.1522	
MULCH	2	1.555555556			

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F
SEEDING*MULCH	4	2.111111111	0.71	0.1794	
MULCH	2	1.555555556			

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEFINING VARIABLE	D.F.	SUM OF SQUARES	F VALUE	P R > F	R-SQUARE	C.V.
SUBSTRATE	1	8.56712963	0.50394880	2.5	0.0060	0.296453
MULCH	1	20.33166667	0.22590741			182.6765
SEEDING	90					
CORRECTED TOTAL	107	26.89879630				0.26010519

SUBJECT	D.F.	ANOVA SS	F VALUE	P R > F
SUBSTRATE	1	0.83564615	3.70	0.0576
MULCH	2	0.58016519	1.28	0.2819
SUBSTRATE*MULCH	2	2.2842963	5.06	0.0083
SEEDING	2	0.68574074	1.52	0.2248
SUBSTRATE*SEEDING	2	1.4757074	3.27	0.0427
SEEDING*MULCH	4	1.54703704	1.71	0.1542
SUBSTRATE*SEEDING*MULCH	4	1.15814815	1.28	0.2831

TESTS IF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SUBJECT	D.F.	ANOVA SS	F VALUE	P R > F
MULCH	2	0.58013519	0.25	0.7975

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SUBJECT	D.F.	ANOVA SS	F VALUE	P R > F
SEEDING	2	0.68574074	0.46	0.6827

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SUBJECT	D.F.	ANOVA SS	F VALUE	P R > F
SEEDING*MULCH	4	1.54703704	1.34	0.3929

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: CER-MCN	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
SOURCE							
MUDL	1	0.68740741	0.04043573	1.10	0.3668	0.171963	796.6052
FEMLP	90	3.31000000	0.03677778				
CUMULATED TOTAL	107	3.95740741				0.19177533	0.02407407

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.02370370	0.64	0.4242
MULCH	2	0.11129630	1.51	0.2258
SUBSTRATE*MULCH	2	0.05685185	0.77	0.4647
SEEDLING	2	0.08685185	1.18	0.3118
SUBSTRATE*SEEDLING	2	0.07907407	1.08	0.3456
SEEDLING*MULCH	4	0.18425926	1.25	0.2946
SUBSTRATE*SEEDLING*MULCH	4	0.14537037	0.99	0.4182

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	0.11129630	1.96	0.3381
SEEDLING	4			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDLING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDLING	2	0.08685185	1.10	0.4766
MULCH	4			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDLING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	4	0.10425926	1.27	0.4119
SEEDLING	4			

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

2	DEPENDENT VARIABLE: ATR_CAN	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
4	SOURCE	DF						
6	MODEL	1	1.32-1.8518519	.7-77559913	1.40	0.1567	0.208762	99.5363
8	ERUP	90	501-0.00000000	5.566666667				ATR_CAN MEAN
10	CORRECTED TOTAL	107	633-1.8518519					2.37037037
12	SOURCE	DF	ANOVA SS	F VALUE	PR > F			
14	SUBSTRAT	1	0-333333333	0.6	0.8072			
16	MULCH	2	0-35185185	0.13	0.9689			
18	SUBSTRATE MULCH	2	2-16666667	0.19	0.8235			
20	SEEDING	2	60-24074074	5.41	0.0060			
22	SUBSTRATE SEEDING	2	3-50000000	0.31	0.7310			
24	SEEDING MULCH	4	32-9259593	1.48	0.2153			
26	SUBSTRATE SEEDING MULCH	4	32-66666667	1.47	0.2186			
28	TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE MULCH AS AN ERROR TERM							
30	SOURCE	DF	ANOVA SS	F VALUE	PR > F			
32	MULCH	2	0.35185185	0.16	0.8603			
34	TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE SEEDING AS AN ERROR TERM							
36	SOURCE	DF	ANOVA SS	F VALUE	PR > F			
38	SEEDING	2	60-24074074	17.21	0.0269			
40	TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE SEEDING MULCH AS AN ERROR TERM							
42	SOURCE	DF	ANOVA SS	F VALUE	PR > F			
44	SEEDING MULCH	4	32-92592593	1.01	0.4970			
46								
48								
50								
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APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃*

DEPENDENT VARIABLE: EUR-LAN		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	4.03-66666667	23.74509804	4.50	0.0004	0.459234	59.9517	6
EUR-LAN	90	4.75-33333333	5.28148148				EUR-LAN MEAN	10
CORRECTED TOTAL	107	879.00000000						12
SOURCE	DF	ANOVA SS	F VALUE	PR > F				14
SUBSTRATE	1	12.00000000	2.27	0.1352				16
MULCH	2	44.05555556	4.17	0.0185				18
SUBSTRATE*MULCH	2	5.36888889	0.51	0.6021				20
SEEDING	2	208.50000000	19.74	0.0001				22
SUBSTRATE*SEEDING	2	35.05555556	3.32	0.0407				24
SEEDING*MULCH	4	34.44444444	1.63	0.1735				26
SUBSTRATE*SEEDING*MULCH	5	64.22222222	3.04	0.0212				28

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	44.05555556	8.18	0.1090

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	208.50000000	5.95	0.1439

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	34.44444444	0.54	0.7195

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: SIT-HYS		DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	C.V.
SOURCE							
MODEL	17		0.62962963	0.03703704	1.00	0.4661	0.158879
ERROR	90		3.33333333	0.03703704			SIT-HYS MEAN 0.01051852
CORRECTED TOTAL	107		3.96296296				0.19245009

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.03703704	1.00	0.3200
MULCH	2	0.07407407	1.00	0.3719
SUBSTRATE*MULCH	2	0.07407407	1.00	0.3719
SEEDING	2	0.07407407	1.00	0.3719
SUBSTRATE*SEEDING	2	0.07407407	1.00	0.3719
SEEDING*MULCH	4	0.14814815	1.00	0.4119
SUBSTRATE*SEEDING*MULCH	4	0.14814815	1.00	0.4119

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	0.07407407	1.00	0.5000

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	0.07407407	1.00	0.5000

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	0.14814815	1.00	0.5000

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: BRO-TEC

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	17	0.93518519	0.05501089	0.65	0.6344	0.138167	54.9.9091
ERROR	90	5.83333333	0.06481481			BRO-TEC MEAN	
CORRECTED TOTAL	107	6.76851852				0.25458754	0.04629630
SOURCE	DF	ANOVA SS	F VALUE	PR > F			
SUBSTRATE	1	0.08333333	1.29	0.2599			
MULCH	2	0.07407407	0.57	0.5668			
SUBSTRATE*MULCH	2	0.00000000	0.00	1.0000			
SEEING	2	0.01851852	0.14	0.8671			
SUBSTRATE*SEEING	2	0.05555556	0.43	0.6528			
SEEING*MULCH	4	0.25925926	1.00	0.4119			
SUBSTRATE*SEEING*MULCH	6	0.44666666	1.71	0.1537			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	0.07407407		

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEING	2	0.01851852	0.33	0.7500

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEING*MULCH	4	0.25925926	0.58	0.6928

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R_3 .

DEPENDENT VARIABLE: AGR_CRI

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	17	21.33490741	1.25649455	1.89	0.0291	0.262821	350.8574
ERROR	90	59.84166667	0.66490741			STD DEV	AGR_CRI MEAN
CORRECTED TOTAL	107	81.17657407				0.81541055	0.23240741
SOURCE	DF	ANOVA SS	F VALUE	PR > F			
SUBSTRATE	1	2.05564015	3.09	0.0821			
MULCH	2	3.23351052	2.43	0.0937			
SUBSTRATE*MULCH	2	3.51129630	2.64	0.0769			
SEEDING	2	2.93351052	2.21	0.1161			
SUBSTRATE*SEEDING	2	1.04462963	0.79	0.4590			
SEEDING*MULCH	4	5.0003037	1.88	0.1208			
SUBSTRATE*SEEDING*MULCH	4	3.55592593	1.34	0.2624			

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	3.23351052	0.92	0.5206

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	2.93351052	2.81	0.2626

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	5.0003037	1.41	0.3766

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R_3 .

DEPENDENT VARIABLE: UNK-CRA					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	0.15740741	0.00925926	1.00	0.4661
ERROR	90	0.43333333	0.00925926		
CORRECTED TOTAL	101	0.99074074			0.09622504
SOURCE	DF	ANOVA SS	ANOVA MS	F VALUE	PR > F
SUBSTRATE	1	0.00925926	0.00925926	1.00	0.3200
MULCH	2	0.01851652	0.01851652	1.00	0.3719
SUBSTRATE*MULCH	2	0.01851652	0.01851652	1.00	0.3719
SEEDING	2	0.01851652	0.01851652	1.00	0.3719
SUBSTRATE*SEEDING	2	0.01851652	0.01851652	1.00	0.3719
SEEDING*MULCH	4	0.03703704	0.03703704	1.00	0.4119
SUBSTRATE*SEEDING*MULCH	4	0.03703704	0.03703704	1.00	0.4119

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	ANOVA MS	F VALUE	PR > F
MULCH	2	0.01851652	0.01851652	1.00	0.5000
SEEDING	2	0.01851652	0.01851652	1.00	0.5000

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	ANOVA MS	F VALUE	PR > F
MULCH	4	0.03703704	0.03703704	1.00	0.5000
SEEDING*MULCH	4	0.03703704	0.03703704	1.00	0.5000

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: AST-TEG					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1	3.93518519	0.23148148	0.97	0.4994
ERROR	90	21.50000000	0.23886689		
CORRECTED TOTAL	107	25.43518519			
					0.40876261
					0.12037037

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SUBSTRATE	1	0.00925926	0.04	0.8444
MULCH	2	0.79629630	1.67	0.1967
SUBSTRATE*MULCH	2	1.68518519	3.53	0.0335
SEEDING	2	0.12962963	0.27	0.7630
SUBSTRATE*SEEDING	2	0.35185165	0.74	0.4817
SEEDING*MULCH	4	0.75925926	0.79	0.5318
SUBSTRATE*SEEDING*MULCH	4	0.20370370	0.21	0.9305

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	0.79629630	0.47	0.6791

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING	2	0.12962963	0.37	0.7308

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
SEEDING*MULCH	4	0.75925926	3.73	0.1153

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: SAL-KAL					
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F
MODEL	1 7	24.4333333	1.4375490	1.74	0.0490
ERROR	9 0	74.2333333	0.82481481		STD DEV
CORRECTED TOTAL	10 7	98.6666667			0.90819316
SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F
SUBSTRATE	1	0.00037037	0.00	0.9831	
MULCH	2	3.74888889	2.27	0.1089	
SUBSTRATE*MULCH	2	1.36965963	0.84	0.4340	
SEEDING	2	13.2538889	6.03	0.0006	
SUBSTRATE*SEEDING	2	0.17246741	0.10	0.9009	
SEEDING*MULCH	4	4.11222222	1.25	0.2971	
SUBSTRATE*SEEDING*MULCH	4	1.75592593	0.53	0.7124	

TESTS OF HYPOTHESES USING THE ANOVA MS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	MEAN SQUARE	F VALUE	PR > F
MULCH	2	3.74888889	2.27	0.2704	
SEEDING	2	13.2538889	6.03	0.0128	
SEEDING*MULCH	4	4.11222222	1.25	0.2150	

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSE REVERSION SITE R₃.

DEPENDENT VARIABLE: PHY-FLD		SUM OF SQUARES		MEAN SQUARE		F VALUE		PR > F		R-SQUARE		C.V.	
SOURCE	DF												
MODEL	1		1.36629630		0.06037037		1.01		0.4563		0.160120		411.8408
ERROR	9C		7.16666667		0.07962963								
CORRECTED TOTAL	107		8.53290296										0.06851652

SOURCE	DF	ANOVA SS		F VALUE		PR > F	
SUBSTRATE	1		0.23148168		2.91		0.0916
MULCH	2		0.02296296		0.14		0.8659
SUBSTRATE*MULCH	2		0.12962963		0.81		0.4463
SEEDING	2		0.11796296		0.74		0.4797
SUBSTRATE*SEEDING	2		0.01351852		0.08		0.9187
SEEDING*MULCH	4		0.49037037		1.54		0.1975
SUBSTRATE*SEEDING*MULCH	4		0.36037037		1.13		0.3468

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F	
MULCH	2		0.02296296		0.18		0.8495

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F	
SEEDING	2		0.11796296		8.73		0.1028

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS		F VALUE		PR > F	
SEEDING*MULCH	4		0.49037037		1.36		0.3863

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEPENDENT VARIABLE: CRY_SEED

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARE	F VALUE	P.R. > F	R-SQUARE	C.V.
MODEL	1 1	1.00000000	0.05882353	0.79	0.6959	0.130435	489.8979
ERROR	9 0	6.66666667	0.07407407			STD DEV	CRY-SEED MEAN
CORRECTED TOTAL	10 7	7.66666667				0.27216553	0.05555556

TTESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*MULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	P.R. > F	P.R. > F	R-SQUARE	C.V.
SUBSTRATE	1	0.33333333	4.50	0.0366			
MULCH	2	0.05555556	0.37	0.6894			
SUBSTRATE*MULCH	2	0.05555556	0.38	0.6884			
SEEDLING	2	0.22222222	1.50	0.2287			
SUBSTRATE*SEEDING	2	0.22222222	1.50	0.2287			
SEEDING*MULCH	4	0.05555556	0.19	0.9444			
SUBSTRATE*SEEDING*MULCH	4	0.05555556	0.19	0.9444			

TTESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	P.R. > F	P.R. > F	R-SQUARE	C.V.
MULCH	2	0.05555556	1.00	0.5000			
SEEDLING	2	0.22222222	1.00	0.5000			
SEEDING	4	0.05555556	1.00	0.5000			

TTESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE*SEEDING*MULCH AS AN ERROR TERM

SOURCE	D.F.	ANOVA SS	F VALUE	P.R. > F	P.R. > F	R-SQUARE	C.V.
SEEDLING	2	0.22222222	1.00	0.5000			
MULCH	4	0.05555556	1.00	0.5000			
SEEDING*MULCH	4	0.05555556	1.00	0.5000			

APPENDIX B-3. AN ANALYSIS OF VARIANCE FOR PERCENT COVER
AT THE RBOSP REVEGETATION SITE R₃.

DEFICIENT VARIABLE: UNK-FOR

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MULCH	1	0.7500000	0.04411765	0.95	0.5170	0.052542	774.5967
FEEDING	90	4.16666667	0.04629630			UNK-FOR MEAN	
CLERFECTED TUTIAL	107	4.91666667				0.02777778	

SOURCE DF ANOVA SS F VALUE PR > F

SUBSTRATE	1	0.08333333	1.80	0.1831
MULCH	2	0.05555556	0.60	0.5510
SUBSTRATE+MULCH	2	0.05555556	0.60	0.5510
SEEDING	2	0.16666667	1.80	0.1712
SUBSTRATE+SEEDING	2	0.16666667	1.80	0.1712
SEEDING+MULCH	4	0.11111111	0.60	0.6636
SUBSTRATE+SEEDING+MULCH	4	0.11111111	0.60	0.6636

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	2	0.05555556	1.00	0.5000
SEEDING	2	0.16666667	1.00	0.5000

TESTS OF HYPOTHESES USING THE ANOVAS FOR SUBSTRATE+SEEDING+MULCH AS AN ERROR TERM

SOURCE	DF	ANOVA SS	F VALUE	PR > F
MULCH	4	0.11111111	1.00	0.5000
SEEDING+MULCH	4	0.11111111	1.00	0.5000

APPENDIX B-4. HEIGHT AND DIAMETER (Inches) OF CONTAINERIZED SEEDLINGS
AT THE RBOSC REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER
OF 1978.

APPENDIX B-4 . SUMMARY OF AVERAGE HEIGHT (inches) AND AVERAGE DIAMETER (inches) OF THIRTEEN CONTAINERIZED PLANT SPECIES ON RBOSC REVEGETATION PLOT R₃ DURING JULY AND SEPTEMBER, 1978.

Sample Size	Control			July			Shale			Control			September		
	Height	Diameter	Sample Size	Height	Diameter	Sample Size	Height	Diameter	Sample Size	Height	Diameter	Sample Size	Height	Diameter	
<u>Atriplex canescens</u>	56	18.6	13.2	55	18.6	13.0	56	22.3	13.6	55	21.8	16.0			
<u>Eurotia lanata</u>	53	13.1	10.9	52	13.6	11.4	54	14.1	9.5	52	15.4	10.6			
<u>Purshia tridentata</u>	45	4.3	4.1	36	2.9	3.5	45	3.3	3.1	34	3.0	2.9			
<u>Pinus edulis</u>	2	2.0	1.5	6	1.3	1.0	1	1.0	1.0	2	1.0	1.0			
<u>Cercocarpus montanus</u>	33	2.8	2.2	21	2.1	1.6	22	2.0	1.8	15	1.7	1.6			
<u>Chrysothamnus nauseosus</u>	39	11.3	8.6	41	11.0	9.2	39	11.4	7.5	41	11.9	9.2			
<u>Atriplex bonnevilleensis</u>	15	11.7	9.6	17	13.7	10.1	15	13.3	9.9	17	14.2	10.7			
<u>Artemisia tridentata</u>	16	11.7	8.3	17	9.7	6.9	16	11.6	7.5	17	15.9	6.2			
<u>Kochia prostrata</u>	15	18.8	11.9	15	19.2	15.9	15	21.7	9.8	16	24.3	17.0			
<u>Rhus trilobata</u>	11	4.6	2.8	12	4.4	2.8	9	3.8	2.1	11	4.0	2.1			
<u>Atriplex gardneri</u>	6	6.0	2.8	3	1.0	2.0	5	2.0	2.4	5	1.2	1.8			
<u>Camphorosma monspeliaca</u>	13	2.9	4.9	13	2.2	3.9	14	2.3	4.3	12	2.8	3.9			
<u>Sphaeralcea coccinea</u>	12	10.0	5.3	13	9.4	9.4	11	9.1	3.4	13	7.5	3.9			

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 1

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity High

<u>Plant Species</u>	<u>Height</u>	<u>July</u>	<u>September</u>	
		<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. KOC PRO	17	10	29	28
2. CHR NAU	10	6	12	7
3. CAM MON	1*	1	1	2
4. PUR TRI		Dead		Dead
5. EUR LAN	10	4	13	5
6. ATR BON	12	11	11	10
7. CHR NAU	9	6	11	9
8. EUR LAN	6	3	12	6
9. PIN EDU		Dead		Dead
10. CER MON	2	2	2	1
11. CER MON	1	1	1	1
12. ART TRI	8	6	8	5
13. SPH COC	10	5	2	2*
14. PUR TRI		Dead		Dead
15. EUR LAN	7	6	7	8
16. PIN EDU		Dead		Dead
17. PUR TRI	2	1	3	1
18. CHR NAU	6	3	6	3
19. ATR CAN	13	5	14	7
20. PIN EDU		Dead		Dead
21. RHU TRI	1½	2	2	1*
22. ATR GAR		Dead		Dead
23. ATR CAN	14	8	18	9
24. CER MON		Dead		Dead
25. ATR CAN	12	6	13	7

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 2

Treatments: Substrate Shale

Mulch None

Seeding Intensity High

<u>Plant Species</u>	Height	July		September	
		Diameter	Height	Diameter	Height
1. ATR CAN	13	5	21	12	
2. SPH COC	11	2	10	2	
3. PIN EDU		Dead			Dead
4. CER MON	1*	1	1	1	
5. EUR LAN	14	6	13	8	
6. PIN EDU		Dead			Dead
7. CAM MON	3	3	4	3	
8. CER MON		Dead			Dead
9. RHU TRI		Dead			Dead
10. EUR LAN	10	8	10	8	
11. PUR TRI	2*	2	2	3	
12. ATR CAN	10	6	13	11	
13. PIN EDU	1	1			Dead.
14. ART TRI	7	4	7	4	
15. CHR NAU	7	6	7	7*	
16. KOC PRO	19	11	19	25	
17. EUR LAN	10	7	6	7	
18. PUR TRI	2½	1½	3	2	
19. ATR GAR	1*	2	1	2	
20. CHR NAU	8	6	9	8	
21. ATR BON	7	4	7	5	
22. ATR CAN	16	6	17	7	
23. PUR TRI	3	2	2	1	
24. CHR NAU		Dead			Dead
25. CER MON		Dead			Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 3

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity High

<u>Plant Species</u>	July		September	
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. CHR NAU		Dead		Dead
2. ATR CAN	21	7	24	11
3. CER MON	5	1		Dead
4. PIN EDU		Dead		Dead
5. PUR TRI		Dead		Dead
6. PUR TRI	2*	2	3	2
7. ATR CAN	19	14	22	17
8. CER MON	2*	2		Dead
9. CAM MON	3	5	4	5
10. PIN EDU		Dead		Dead
11. EUR LAN	12	9	16	9
12. ATR CAN	16	15	26	18
13. RHU TRI		Dead		Dead
14. CHR NAU	8	5	9	7
15. ART TRI	8	7	9	7
16. EUR LAN	7	6	9	7
17. EUR LAN	8	6	10	9
18. PIN EDU		Dead		Dead
19. ATR GAR	1*	3	1	4
20. KOC PRO	9	11	26	12
21. SPH COC	10	4	1	2*
22. ATR BON	13	11	17	15
23. CHR NAU	11	6	12	6
24. EUR LAN	12	6	10	7
25. CER MON		Dead		Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 4

Treatments: Substrate No Shale

Mulch None

Seeding Intensity High

Plant Species	Height	July		September	
		Diameter		Height	Diameter
1. EUR LAN	10	7		11	7
2. KOC PRO	9	7		4	8
3. ATR CAN	9*	6		12	7
4. PUR TRI	2*	2		2	2
5. CAM MON	1½	4		1	6
6. PUR TRI	2	1		2	2
7. CHR NAU	6	4		6	3
8. CHR NAU	8*	4		7	4
9. ATR CAN	17*	9		14	10
10. EUR LAN	11	6		11	6
11. CER MON	1½	1		Dead	
12. PUR TRI	3	2		Dead	
13. PIN EDU		Dead		Dead	
14. SPH COC	11	3		12	3
15. ATR GAR		Dead		Dead	
16. PIN EDU		Dead		Dead	
17. RHU TRI		Dead		Dead	
18. ATR CAN	16*	5		20	7
19. ATR BON	8	7		9	7
20. ART TRI	6	5		7	5
21. ATR CAN	11	7		17	9
22. CHR NAU		Dead		Dead	
23. PIN EDU		Dead		Dead	
24. CER MON	1	½		Dead	
25. CER MON		Dead		Dead	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER, 1978.

Plot No. 5

Treatments: Substrate No Shale

Mulch Hydromulch

Seeding Intensity High

	<u>Plant Species</u>	July		September	
		Height	Diameter	Height	Diameter
1.	ATR CAN	12	6	14	6
2.	KOC PRO	5	7	7	8
3.	PUR TRI	4	1	4	1
4.	EUR LAN	8	6	7	6
5.	CER MON	2	1	Dead	
6.	PIN EDU		Dead		Dead
7.	ATR GAR		Dead		Dead
8.	EUR LAN	8	3	7	4
9.	EUR LAN	-	-	12	5
10.	CHR NAU	8	3	8	4
11.	SPH COC	3	2	2	2*
12.	ART TRI	12	5	12	7
13.	ATR CAN	14	9	14	10
14.	ATR BON	6*	6	7	6
15.	ATR CAN	14	8	19	11
16.	PUR TRI	4*	2	4	2*
17.	PIN EDU		Dead		Dead
18.	EUR LAN	8	4	8	4
19.	CER MON	1	1	Dead	
20.	PUR TRI		Dead		Dead
21.	RHU TRI	6*	2	4	2
22.	PIN EDU		Dead		Dead
23.	CHR NAU	7	5	9	5
24.	CAM MON	3	5	3	6
25.	CHR NAU	8	5	8	5

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER, 1978.

Plot No. 6

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity High

	<u>Plant Species</u>	July		September	
		Height	Diameter	Height	Diameter
1.	CHR NAU	11	7	10	7
2.	PUR TRI		Dead		Dead
3.	CHR NAU		Dead		Dead
4.	PUR TRI		Dead		Dead
5.	CER MON		Dead		Dead
6.	PIN EDU		Dead		Dead
7.	ATR BON	6	4	8	4
8.	PIN EDU		Dead		Dead
9.	EUR LAN	16	8	18	8
10.	SPH COC		Dead		Dead
11.	CAM MON	3	4	2	3
12.	CER MON		Dead		Dead
13.	ATR CAN	13	7	17	9
14.	PIN EDU		Dead		Dead
15.	EUR LAN		Dead		Dead
16.	PUR TRI	5	6	5	3
17.	ART TRI	10	7	11	8
18.	RHU TRI	6*	3	3	3
19.	CER MON		Dead		Dead
20.	ATR GAR	2	3	2	3
21.	KOC PRO	18	10	30	12
22.	ATR CAN	19	12	28	20
23.	CHR NAU	11	7	14	11
24.	EUR LAN	10	8	12	9
25.	ATR CAN	22	21	24	26

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP ReveGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 7

Treatments: Substrate Shale

Mulch None

Seeding Intensity High

Plant Species	Height	July		September	
		Diameter	Height	Diameter	Height
1. CER MON		Dead		Dead	
2. ATR CAN	15	20	23	16	
3. PUR TRI	2*	7		Dead	
4. PIN EDU		Dead		Dead	
5. KOC PRO	24	15	33	21	
6. EUR LAN	12*	21	11	20	
7. ATR GAR		Dead		Dead	
8. RHU TRI		Dead		Dead	
9. CER MON		Dead		Dead	
10. EUR LAN	18	15	22	15	
11. ATR CAN	18	15½	22	20	
12. SPH COC	16	11	7*	3*	
13. PUR TRI	4*	5	5	4	
14. PUR TRI	2	4	3	5	
15. ART TRI	9	7	10	8	
16. CAM MON	1	3	1	3	
17. CER MON	4	1		Dead	
18. CHR NAU	8	5	8	4	
19. EUR LAN	10	7	12	8	
20. PIN EDU		Dead		Dead	
21. ATR BON	8	7	8	6	
22. ATR CAN	12	6	14	7	
23. PIN EDU	1	1	1	1	
24. CHR NAU	9	9	10	8	
25. CHR NAU	8	6	11	8	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER, 1978.

Plot No. 8

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity High

Plant Species	July Height	July		September	
		Diameter	Dead	Height	Diameter
1. PIN EDU			Dead		Dead
2. ATR CAN	17	12		24	20
3. RHU TRI	4*	2		Dead	
4. CER MON		Dead		Dead	
5. EUR LAN	19	17	25		22
6. CHR NAU	14	10	17		12
7. ATR CAN	21	20	28		20
8. ATR CAN	12	16	15		18
9. CHR NAU	11	15	13		18
10. PUR TRI		Dead		Dead	
11. CER MON		Dead		Dead	
12. SPH COC	10	11	2		4*
13. PUR TRI		Dead		Dead	
14. EUR LAN	18	16	28		20
15. CHR NAU	13	11	17		15
16. ATR BON	12	9	17		20
17. ATR GAR		Dead		Dead	
18. PUR TRI		Dead		Dead	
19. ATR CAN	14	10	17		12
20. ART TRI	6	4	7		4
21. CAM MON	1*	2	1		2
22. PIN EDU		Dead		Dead	
23. EUR LAN	7	7	8		8
24. CER MON	2	1		Dead	
25. PIN EDU		Dead		Dead	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 9

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity High

<u>Plant Species</u>	July		September	
	Height	Diameter	Height	Diameter
1. CAM MON	3	5	5	5
2. ATR BON	18	15	17	18
3. CER MON	1	1	Dead	
4. CER MON		Dead	Dead	
5. CHR NAU		Dead	Dead	
6. ATR CAN	24	17	26	20
7. CHR NAU	10	11	15	13
8. PUR TRI	3	5	3	5
9. KOC PRO	24	13	36	23
10. CER MON		Dead	Dead	
11. SPH COC*	20	10	16	8
12. PIN EDU		Dead	Dead	
13. EUR LAN	12	12½	24	17
14. ATR GAR		Dead	Dead	
15. PUR TRI*	4*	3	4	4
16. PUR TRI	3	4	3	4
17. ART TRI	8	6	9	6
18. RHU TRI		Dead	Dead	
19. EUR LAN	15	11	18	14
20. PIN EDU		Dead	Dead	
21. ATR CAN	16	9	23	15
22. EUR LAN	10	8	13	9
23. ATR CAN	20*	12	25	15
24. CHR NAU	11	9	11	10
25. PIN EDU		Dead	Dead	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 10

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity High

Plant Species	July Height	July		September	
		Diameter	Height	Diameter	Height
1. PUR TRI	3½	2		3	3
2. PIN EDU		Dead		Dead	
3. PIN EDU		Dead		Dead	
4. PIN EDU		Dead		Dead	
5. KOC PRO		Dead		Dead	
6. ART TRI	13	9	14	10	
7. ATR CAN	21	18	25	21	
8. CER MON		Dead		Dead	
9. ATR GAR		Dead		Dead	
10. ATR BON	14	17	16	20	
11. PUR TRI	3*	3	3	3	
12. ATR CAN	24*	23	32	30	
13. CER MON		Dead		Dead	
14. PUR TRI	3	4	3	3	
15. CAM MON		Dead		Dead	
16. EUR LAN	14	18	18	9	
17. SPH COC		Dead		Dead	
18. ATR CAN	20	12	25	16	
19. CER MON		Dead		Dead	
20. EUR LAN	8	6	11	8	
21. RHU TRI	2*	1		Dead	
22. CHR NAU		Dead		Dead	
23. CHR NAU	9	7	9	7	
24. CHR NAU		Dead		Dead	
25. EUR LAN	10	7	12	9	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 11

Treatments: Substrate No Shale
 Mulch Hydromulch
 Seeding Intensity High

Plant Species	July Height	July		September	
		Diameter	Height	Diameter	Height
1. PUR TRI	2	1	2	2	2
2. PIN EDU		Dead			Dead
3. CER MON	2	2	2	2	3
4. ATR CAN	21	11	26	16	
5. RHU TRI		Dead			Dead
6. EUR LAN	15	14	18	17	
7. ART TRI	13	10½	14	12	
8. PIN EDU		Dead			Dead
9. PUR TRI	2	7	3	7	
10. ATR BON	8	8	8	10	
11. SPH COC	9	6	10	6	
12. CAM MON	1	8	1	10	
13. CER MON	5	3	1	1	
14. CER MON	3	2		Dead	
15. CHR NAU		Dead		Dead	
16. KOC PRO	20	13	20	16	
17. CHR NAU	9	8	9	9	
18. ATR CAN	15*	8	16	12	
19. ATR CAN	12*	12	16	13	
20. EUR LAN	9	7	9	8	
21. ATR GAR		Dead		Dead	
22. CHR NAU		Dead		Dead	
23. EUR LAN	10	7	10	7	
24. PUR TRI	3	1	2	2	
25. PIN EDU		Dead		Dead	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 12

Treatments: Substrate No Shale

Mulch None

Seeding Intensity High

Plant Species	Height	July		September	
		Diameter	Height	Diameter	Height
1. CHR NAU	9	7		9	8
2. CHR NAU	11	11		14	11
3. CHR NAU	14	10		16	12
4. PIN EDU		Dead			Dead
5. CER MON	3	4		2	3
6. EUR LAN	17	18		24	17
7. EUR LAN	18	15		19	16
8. PUR TRI	1½	4		2	2
9. PUR TRI	-	-		5	1
10. PIN EDU		Dead			Dead
11. CER MON	3*	2		3	2
12. SPH COC	9	4		8	2
13. ATR CAN	19	11		24	16
14. PUR TRI		Dead			Dead
15. ATR CAN	17*	12		25	20
16. ATR CAN	21	16		23	15
17. EUR LAN	13	19		12	17
18. PIN EDU		Dead			Dead
19. KOC PRO	17	8		24	8
20. CER MON		Dead			Dead
21. ATR GAR	2½	4		3	3
22. ART TRI	7	6		6	6
23. CAM MON	6	5		9	5
24. ATR BON	13	9		18	8
25. ATR CAN	11	8		19	8

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 13

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity Medium

<u>Plant Species</u>	July		September	
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. ATR CAN		Dead		Dead
2. EUR LAN	8	9	10	9
3. ATR BON	17	14	18	13
4. RHU TRI	7*	5	8	3
5. CHR NAU	14	8	15	9
6. ATR CAN	19*	10	20	10
7. CER MON		Dead		Dead
8. PUR TRI	-	-	3	1
9. KOC PRO	20	21	29	14
10. PIN EDU		Dead		Dead
11. PUR TRI		Dead		Dead
12. PIN EDU		Dead		Dead
13. CHR NAU		Dead		Dead
14. PIN EDU		Dead		Dead
15. EUR LAN	16	15	18	14
16. ATR CAN	24*	12	26	10
17. CER MON	2	1		Dead
18. SPH COC *	8	5	7	3
19. ATR CAN	18	13	21	11
20. EUR LAN	10	8	10	5
21. CAM MON		Dead		Dead
22. ART TRI		Dead		Dead
23. CHR NAU		Dead		Dead
24. CER MON	2	1	1	1
25. PUR TRI		Dead		Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP ReveGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 14

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity Medium

<u>Plant Species</u>	<u>Height</u>	<u>July</u>	<u>Diameter</u>	<u>September</u>	<u>Diameter</u>
1. CHR NAU	9		9	12	8
2. ART TRI	14		9	14	5
3. CER MON		Dead			Dead
4. PUR TRI	1½		1½	1	1
5. ATR CAN	19*		13	22	13
6. PIN EDU		Dead			Dead
7. CHR NAU		Dead			Dead
8. PUR TRI		Dead			Dead
9. SPH COC		Dead			Dead
10. CER MON		Dead			Dead
11. RHU TRI	2		1	1	1
12. EUR LAN	14		12	16	10
13. ATR BON	17		8	20	7
14. CAM MON	1		2½	1	3
15. PIN EDU		Dead			Dead
16. ATR CAN	15*		10	20	8
17. PIN EDU		Dead			Dead
18. EUR LAN	9		8	10	6
19. ATR GAR	-		-	2	1
20. ATR CAN	19		12	23	10
21. ATR CAN	8*		4	20	7
22. CER MON		Dead			Dead
23. PUR TRI		Dead			Dead
24. KOC PRO		Dead			Dead
25. CHR NAU	13		11	14	10

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 15

Treatments: Substrate Shale

Mulch None

Seeding Intensity Medium

<u>Plant Species</u>	<u>July</u>		<u>September</u>	
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. PUR TRI	6	5	6	6
2. ART TRI	12	8	14	7
3. PUR TRI		Dead		Dead
4. PIN EDU		Dead		Dead
5. CER MON		Dead		Dead
6. RHU TRI	8	2	5	1
7. EUR LAN	15	9	16	6
8. ATR GAR		Dead		Dead
9. PIN EDU		Dead		Dead
10. CER MON	-	-	1	1
11. KOC PRO	19	19	26	12
12. CHR NAU	12	13	14	10
13. CER MON	1	1		Dead
14. ATR CAN	19	18	20	15
15. SPH COC	14	10	13	7
16. ATR BON	14	7	15	7
17. CHR NAU	10	6	11	6
18. PIN EDU		Dead		Dead
19. ATR CAN	16	8	18	9
20. PUR TRI	2	2	1	1
21. AIR CAN	18	10	20	9
22. EUR LAN	14	9	14	8
23. EUR LAN	13	11	16	10
24. CAM MON	3	6	2	5
25. CHR NAU	10	9	10	8

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 16

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity Medium

<u>Plant Species</u>	Height	July		September	
		Diameter		Height	Diameter
1. ATR CAN	17	11		21	13
2. EUR LAN	17	12		18	14
3. CER MON	2½*	1		2	2
4. KOC PRO	-	-		3	4
5. CER MON	-	-		1	1
6. CHR NAU	13	10		15	8
7. RHU TRI	4	3		3*	2
8. ATR CAN	7*	3		18	8
9. PIN EDU		Dead			Dead
10. ATR CAN	17*	14		22	15
11. PIN EDU		Dead			Dead
12. PIN EDU		Dead			Dead
13. ATR GAR		Dead			Dead
14. EUR LAN	6	8		5	7
15. ART TRI	9	7		10	6
16. CAM MON	-	-		1	2
17. CHR NAU	11	6		15	7
18. PUR TRI	4	3		3	2
19. CHR NAU		Dead			Dead
20. EUR LAN	11	7		12	7
21. SPH COC	10	6		1	1
22. PUR TRI	3	7		3	5
23. CER MON	3	3		2	2
24. PUR TRI	3	6		3	4
25. EUR LAN	15	12		17	14

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 17

Treatments: Substrate No Shale

Mulch None

Seeding Intensity Medium

	<u>Plant Species</u>	July		September	
		Height	Diameter	Height	Diameter
1.	PIN EDU	2	2	1	1
2.	ATR CAN	24	16	23	14
3.	RHU TRI	5	3	4	1
4.	CER MON	3	4	Dead	
5.	EUR LAN	13	15	11	13
6.	EUR LAN	12	10	12	7
7.	PIN EDU	Dead		Dead	
8.	ATR BON	16	13	17	10
9.	CER MON	Dead		Dead	
10.	CER MON	Dead		Dead	
11.	PUR TRI	6	6	4	4
12.	CHR NAU	12	9	12	6
13.	CAM MON	2	5	1	4
14.	ATR CAN	19	13	22	10
15.	CHR NAU	12	10	12	9
16.	ATR CAN	12*	10	10	10
17.	PUR TRI	3*	4	3	3
18.	ATR GAR	2	3	2	2
19.	PIN EDU	Dead		Dead	
20.	SPH COC	11	4	9	2
21.	KOC PRO	20	17	22	9
22.	ART TRI	13	7	11	4
23.	PUR TRI	2	2	2	1
24.	EUR LAN	11	13	13	12
25.	CHR NAU	9	11	8	9

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 18

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity Medium

Plant Species	Height	July	Diameter	September	Diameter
1. CHR NAU	8		6	10	7
2. ATR BON	18		17	20	18
3. ATR CAN	24		22	30	20
4. PIN EDU		Dead			Dead
5. PIN EDU		Dead			Dead
6. EUR LAN	15		15	21	15
7. PIN EDU		Dead			Dead
8. PUR TRI	6		7	6	5
9. ATR GAR		Dead			Dead
10. CER MON		Dead			Dead
11. CER MON		Dead			Dead
12. ATR CAN	26		19	31	17
13. SPH COC		Dead			Dead
14. CAM MON		Dead			Dead
15. KOC PRO	22		13	33	11
16. EUR LAN	11		8	12	6
17. PUR TRI	4		4	3	3
18. CER MON		Dead			Dead
19. EUR LAN	7		6	9	4
20. PUR TRI	4		5	3	4
21. ART TRI		Dead			Dead
22. ATR CAN	19		14	25	11
23. CHR NAU	11		8	11	7
24. RHU TRI		Dead			Dead
25. CHR NAU		Dead			Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 19

Treatments: Substrate Shale

Mulch None

Seeding Intensity Medium

<u>Plant Species</u>	July		September	
	Height	Diameter	Height	Diameter
1. PIN EDU		Dead		Dead
2. EUR LAN	16	17	18	15
3. ATR CAN	21	20	24	16
4. CHR NAU	12	8	12	8
5. PUR TRI	3*	5	4	5
6. CER MON	1	1	1	1
7. CAM MON		Dead		Dead
8. PUR TRI	2	2	2	1
9. SPH COC		Dead		Dead
10. CER MON	3	2	3	2
11. EUR LAN	13	14	14	12
12. PUR TRI	2	2	2	1
13. KOC PRO	28	22	32	17
14. CER MON		Dead		Dead
15. EUR LAN	22	15	20	14
16. ATR CAN	21	16	21	13
17. PIN EDU		Dead		Dead
18. CHR NAU	12	9	11	8
19. ART TRI	10	11	10	10
20. ATR BON	16	13	13	11
21. ATR GAR	-	-	1	1
22. RHU TRI	2	2	2	1
23. ATR CAN	16	15	16	11
24. PIN EDU	1	1		Dead
25. CHR NAU	12	10	14	9

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT: R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 20

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity Medium

	<u>Plant Species</u>	July		September	
		Height	Diameter	Height	Diameter
1.	CHR NAU		Dead		Dead
2.	KOC PRO	28	23	27	15
3.	ATR CAN	22	16	22	13
4.	RHU TRI	6	4	4	4
5.	CER MON	-	-	1	2
6.	PIN EDU		Dead		Dead
7.	ATR CAN	20	14	23	14
8.	EUR LAN	17	15	18	10
9.	ATR CAN	17	14	18	12
10.	PUR TRI	3	6	3	4
11.	EUR LAN	17	12	18	10
12.	ART TRI	15	10	14	7
13.	PIN EDU	3	1	1	1
14.	SPH COC *	10	7	1*	2
15.	EUR LAN	17	13	22	11
16.	CHR NAU		Dead		Dead
17.	ATR GAR		Dead		Dead
18.	CHR NAU	5	2	4	2
19.	ATR BON	5	4	4	4
20.	CAM MON	3	6	3	5
21.	PUR TRI	1	1		Dead
22.	PIN EDU		Dead		Dead
23.	PUR TRI	3	3	3	2
24.	CER MON	2½	2	2	2
25.	CER MON	2	1½	2	1

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 21

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity Medium

<u>Plant Species</u>	<u>Height</u>	<u>July</u>	<u>Diameter</u>	<u>September</u>	
				<u>Height</u>	<u>Diameter</u>
1. PUR TRI	4		4	4	4
2. PIN EDU		Dead			Dead
3. EUR LAN	14		18	18	14
4. CER MON		Dead			Dead
5. CHR NAU		Dead			Dead
6. PIN EDU		Dead			Dead
7. RHU TRI	6		4	5	3
8. CER MON		Dead			Dead
9. CHR NAU	13		14	14	11
10. ATR CAN	21		17	26	14
11. SPH COC*	17		11	13*	6*
12. ATR BON	17		12	21	16
13. PUR TRI		Dead			Dead
14. ATR GAR		Dead			Dead
15. PUR TRI		Dead			Dead
16. PIN EDU		Dead			Dead
17. CHR NAU	14		12	16	9
18. CAM MON		Dead			Dead
19. ATR CAN	24		14	28	15
20. EUR LAN		Dead			Dead
21. KOC PRO	10		10	9	8
22. CER MON	2		2	1	2
23. ATR CAN	24		13	29	14
24. ART TRI	11		8	11	7
25. EUR LAN	12		6	12	5

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 22

Treatments: Substrate No Shale

Mulch Hydromulch

Seeding Intensity Medium

	Plant Species	Height	July	Diameter	September	Diameter
					Height	
1.	ATR BON	14		12	12	10
2.	RHU TRI	6		6	7	3
3.	ATR CAN	25		23	30	20
4.	CER MON	4		3	3	1
5.	ATR CAN	19		16	25	15
6.	PIN EDU		Dead			Dead
7.	ART TRI	10		8	10	7
8.	ATR GAR		Dead			Dead
9.	PIN EDU		Dead			Dead
10.	CHR NAU	14		11	15	11
11.	EUR LAN	16		16	15	13
12.	PUR TRI	4		4	3	3
13.	PUR TRI	4		5	3	4
14.	PUR TRI	5		8	5	7
15.	SPH COC	19		9	19	4*
16.	EUR LAN	13		7	15	6
17.	CHR NAU	10		7	11	5
18.	KOC PRO	21		11	21	8
19.	PIN EDU		Dead			Dead
20.	CER MON	2		1½	2	1
21.	CAM MON	2		6	1	3
22.	CHR NAU	12		8	12	6
23.	CER MON	2½		2	1	2
24.	EUR LAN	19		11	21	8
25.	ATR CAN	18		9	20	9

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 23

Treatments: Substrate No Shale

Mulch Hydromulch

Seeding Intensity Medium

<u>Plant Species</u>	July		September	
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. PIN EDU		Dead		Dead
2. CER MON	3	4		Dead
3. EUR LAN	19	15	20	12
4. RHU TRI	3	3	3	2
5. ATR CAN	21	27	25	20
6. EUR LAN	13	10	13	7
7. EUR LAN	18	8	22	6
8. SPH COC*	14	11	14	7*
9. ART TRI	16	10	15	8
10. PUR TRI	4	3	3	2
11. PUR TRI	3	3	1*	1
12. ATR BON		Dead		Dead
13. PIN EDU		Dead		Dead
14. ATR CAN	24	18	26	13
15. CER MON	4	3	1	1
16. ATR GAR	3	2		Dead
17. CHR NAU	18	16	20	12
18. CER MON	3	2	2	1
19. CHR NAU	13	11	13	9
20. CHR NAU	16	9	11	8
21. CAM MON	4	5	4	3
22. ATR CAN	26	12	28	8
23. PIN EDU		Dead		Dead
24. PUR TRI	6	3	4	3
25. KOC PRO	20	13	27	9

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 24

Treatments: Substrate No Shale

Mulch None

Seeding Intensity Medium

<u>Plant Species</u>	<u>July</u> Height	<u>September</u>	
		<u>Height</u>	<u>Diameter</u>
1. RHU TRI	Dead		Dead
2. EUR LAN	5	4	5
3. PIN EDU	Dead		Dead
4. EUR LAN	11	9	10
5. PIN EDU	Dead		Dead
6. CER MON	6	3½	Dead
7. EUR LAN	9	11	11
8. CHR NAU	Dead		Dead
9. ATR CAN	16	9	20
10. PIN EDU	Dead		Dead
11. ART TRI	16	12½	18
12. PUR TRI	3	4	3
13. PUR TRI	2	3	2
14. ATR BON	6	5	8
15. ATR CAN	19	15	23
16. CER MON	Dead		Dead
17. CAM MON	2	4	2
18. SPH COC	Dead		Dead
19. EUR LAN	16	10	18
20. CHR NAU	Dead		Dead
21. CER MON	3	2	Dead
22. PUR TRI	Dead		Dead
23. ATR CAN	21	12	23
24. KOC PRO	20	9	18
25. CHR NAU	Dead		Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE
RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978. .8

Plot No. 25

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity Low

	Plant Species	July		September	
		Height	Diameter	Height	Diameter
1.	EUR LAN	18	13	19	12
2.	EUR LAN	15	13	15	11
3.	ART TRI	12	7	14	8
4.	CHR NAU	15	16	14	13
5.	SPH COC	15	10	5*	4*
6.	PIN EDU	Dead		Dead	
7.	PIN EDU	Dead		Dead	
8.	ATR CAN	19	11	23	13
9.	RHU TRI	5	4	5	3
10.	CAM MON	2	5	2	3
11.	PUR TRI	4	6	4	4
12.	ATR CAN	26	24	34	21
13.	PUR TRI	5	4	5	3
14.	CER MON	Dead		Dead	
15.	ATR GAR	Dead		Dead	
16.	ATR CAN	22	14	26	17
17.	KOC PRO	Dead		-	-
18.	EUR LAN	Dead		Dead	
19.	CHR NAU	Dead		Dead	
20.	CER MON	Dead		Dead	
21.	ATR BON	18	13	15	10
22.	CER MON	Dead		Dead	
23.	PIN EDU	Dead		Dead	
24.	CHR NAU	14	14	16	12
25.	PUR TRI	5	5	3	4

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 26

Treatments: Substrate Shale

Mulch Hay

Seeding Intensity Low

Plant Species	July		September	
	Height	Diameter	Height	Diameter
1. KOC PRO	13	13	17	10
2. ATR GAR	1	1	Dead	
3. PIN EDU	Dead		Dead	
4. EUR LAN	11	10	11	10
5. PIN EDU	Dead		Dead	
6. CER MON	Dead		Dead	
7. EUR LAN	12	9	12	10
8. CHR NAU	Dead		Dead	
9. ATR CAN	17	11	20	9
10. PIN EDU	Dead		Dead	
11. ATR BON	13	9	14	8
12. PUR TRI	Dead		Dead	
13. PUR TRI	2	1	1	2
14. RHU TRI	2½	2	3	1
15. ATR CAN	21*	12	22	12
16. CER MON	Dead		Dead	
17. CAM MON	Dead		Dead	
18. ART TRI	8	8	10	6
19. EUR LAN	11	8	12	7
20. CHR NAU	9	9	12	10
21. CER MON	Dead		Dead	
22. PUR TRI	4	4	3	4
23. ATR CAN	23	12	28	14
24. SPH COC	Dead		Dead	
25. CHR NAU	13	8	13	8

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 27

Treatments: Substrate Shale

Mulch None

Seeding Intensity Low

<u>Plant Species</u>	July		September	
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. EUR LAN	17	14	19	11
2. EUR LAN	14	18	14	16
3. KOC PRO	29	26	32	26
4. CHR NAU	16	13	20	12
5. ART TRI	13	7	13	6
6. PIN EDU	Dead		Dead	
7. PIN EDU	Dead		Dead	
8. ATR CAN	14*	12	18	12
9. CAM MON	6	7	9	7
10. ATR GAR	Dead		Dead	
11. PUR TRI	2	3	2	3
12. ATR CAN	13*	7	14	7
13. PUR TRI	4	4	4	4
14. CER MON	3	2	3	3
15. ATR BON	19	15	21	16
16. ATR CAN	17	18	19	14
17. RHU TRI	Dead		Dead	
18. EUR LAN	19	13	20	11
19. CHR NAU	9	12	8	10
20. CER MON	Dead		Dead	
21. SPH COC *	15	7	13	3
22. CER MON	1	1	Dead	
23. PIN EDU	1	1	Dead	
24. CHR NAU	10	7	12	7
25. PUR TRI	2	2	2	1

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 28

Treatments: Substrate No Shale

Mulch Hydromulch

Seeding Intensity Low

Plant Species	Height	July		September	
		Diameter		Height	Diameter
1. PUR TRI	4	5		4	4
2. ATR CAN	23	14		28	15
3. EUR LAN	17	12		20	11
4. CHR NAU	15	12		15	10
5. ATR GAR		Dead			Dead
6. RHU TRI	3½	1½		3	1
7. ART TRI	13	7		12	8
8. PIN EDU		Dead			Dead
9. CER MON	1	1		1	1
10. KOC PRO	21	10		32	11
11. CAM MON	1	4		1	4
12. SPH COC*	8	4		6	3
13. EUR LAN	9	6		16	10
14. PUR TRI	2½	2		2	2
15. PIN EDU		Dead			Dead
16. PUR TRI	6	7		5	5
17. ATR CAN	18*	9		19	12
18. ATR CAN	21	11		24	9
19. PIN EDU		Dead			Dead
20. CHR NAU	9	8		9	9
21. ATR BON	14	11		15	12
22. EUR LAN	16	13		19	11
23. CER MON	5	2		5	2
24. CER MON	5	4		4	4
25. CHR NAU	17	15		18	12

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 29

Treatments: Substrate No Shale

Mulch Hydromulch

Seeding Intensity Low

<u>Plant Species</u>	<u>July</u>	<u>September</u>		
	<u>Height</u>	<u>Diameter</u>	<u>Height</u>	<u>Diameter</u>
1. EUR LAN	20	18	18	13
2. PUR TRI	7	10	6	7
3. ATR CAN	24	24	31	20
4. EUR LAN	15	19	18	12
5. CER MON	3	3	2	3
6. CER MON	1	1	1	1
7. CHR NAU	16	13	19	12
8. CER MON	3	1	Dead	
9. ATR GAR		Dead	Dead	
10. PIN EDU		Dead	Dead	
11. PUR TRI	4	4	3	5
12. CAM MON		Dead	•	Dead
13. ATR CAN	23	18	26	16
14. CHR NAU		Dead	Dead	
15. PIN EDU		Dead	Dead	
16. SPH COC		Dead	Dead	
17. PIN EDU		Dead	Dead	
18. ATR CAN	25	17	27	15
19. ATR BON		Dead	Dead	
20. PUR TRI		Dead	Dead	
21. RHU TRI	4	3	2	2
22. KOC PRO	25	22	30	17
23. EUR LAN	18	15	18	12
24. ART TRI	16	13	16	9
25. CER MON	3	3	Dead	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 30

Treatments: Substrate No Shale

Mulch None

Seeding Intensity Low

Plant Species	July Height	July		September	
		Diameter	Height	Diameter	
1. ART TRI	13	9	11	7	
2. CER MON		Dead		Dead	
3. ATR CAN	25	16	26	14	
4. CAM MON		Dead		Dead	
5. EUR LAN	22	19	27	16	
6. CHR NAU	9	7	9	7	
7. PIN EDU		Dead		Dead	
8. CHR NAU	12	9	11	7	
9. SPH COC*	9	3	8	3	
10. RHU TRI		Dead		Dead	
11. EUR LAN	13	8	12	7	
12. CER MON		Dead		Dead	
13. PUR TRI	3	4	3	4	
14. PIN EDU		Dead		Dead	
15. EUR LAN	13	11	12	9	
16. PUR TRI	3	3	3	3	
17. PUR TRI	3	5	3	4	
18. KOC PRO	17	10	26	10	
19. ATR CAN	15	16	10	12	
20. ATR BON	14	9	12	9	
21. PIN EDU		Dead		Dead	
22. CER MON		Dead		Dead	
23. CHR NAU	11	10	11	8	
24. ATR GAR	1½	2	1	2	
25. ATR CAN	24	22	24	19	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 31

Treatments: Substrate Shale

Mulch None

Seeding Intensity Low

<u>Plant Species</u>	<u>July</u>	<u>Diameter</u>	<u>September</u>	
	<u>Height</u>		<u>Height</u>	<u>Diameter</u>
1. PUR TRI	3	5	3	4
2. PUR TRI	-	-	1	1
3. PIN EDU		Dead		Dead
4. PIN EDU		Dead		Dead
5. PIN EDU		Dead		Dead
6. EUR LAN	18	16	17	15
7. CHR NAU	12	9	11	9
8. ATR GAR		Dead		Dead
9. CAM MON	1	4	1	4
10. ATR CAN	14	13	15	10
11. ART TRI	8	7	6	6
12. ATR CAN	21	12	18	9
13. CER MON		Dead		Dead
14. RHU TRI	4	2	4	2
15. SPH COC*	18	9	13	5
16. CER MON	2	2	2	1
17. EUR LAN	18	14	18	12
18. PUR TRI	2	2		Dead
19. ATR BON	12	9	10	9
20. EUR LAN	15	12½	15	11
21. CER MON		Dead		Dead
22. ATR CAN	23	20	22	13
23. CHR NAU	10	8	10	7
24. KOC PRO	23	17	25	17
25. CHR NAU		Dead		Dead

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 32

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity Low

Plant Species	July Height	July		September	
		Diameter	Height	Diameter	
1. ATR CAN	32	21	33	20	
2. KOC PRO		-	7*	5*	
3. ATR CAN	23	14	27	13	
4. CER MON		Dead		Dead	
5. PIN EDU		Dead		Dead	
6. ATR GAR		Dead		Dead	
7. ATR CAN	22	17	24	17	
8. ATR BON	15	10	13	7	
9. CER MON	2½	2	2	2	
10. CHR NAU		Dead		Dead	
11. SPH COC		Dead		Dead	
12. EUR LAN	20	29	20	7	
13. PIN EDU		Dead		Dead	
14. PUR TRI	4	4	4	4	
15. CER MON	3	2½	3	3	
16. RHU TRI		Dead		Dead	
17. EUR LAN	13	11	14	7	
18. PIN EDU		Dead		Dead	
19. PUR TRI	3	5	3	3	
20. CHR NAU	15	9	14	9	
21. EUR LAN	10	5	17	12	
22. PUR TRI	3	2½	3	3	
23. ART TRI	9	7	9	6	
24. CAM MON		Dead		Dead	
25. CHR NAU	13	8	11	7	

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 33

Treatments: Substrate Shale

Mulch Hydromulch

Seeding Intensity Low

	<u>Plant Species</u>	July		September	
		Height	Diameter	Height	Diameter
1.	EUR LAN	18	15	23	13
2.	CER MON		Dead		Dead
3.	PIN EDU		Dead		Dead
4.	RHU TRI	5	3	5	3
5.	EUR LAN	23	17½	28	14
6.	PIN EDU		Dead		Dead
7.	CER MON		Dead		Dead
8.	ATR CAN	22	20	27	15
9.	CER MON	-	-	1	1
10.	ATR CAN	27	20	28	18
11.	PUR TRI	3*	3	4	3
12.	CHR NAU	12	15	10	11
13.	CAM MON	1	1		Dead
14.	SPH COC		Dead		Dead
15.	ATR GAR		Dead		Dead
16.	KOC PRO	23	12	26	11
17.	CHR NAU	11	9	12	8
18.	PUR TRI	2	4	2	3
19.	CHR NAU	11	17	11	11
20.	ATR BON		Dead		Dead
21.	ART TRI	7	5	6	4
22.	PUR TRI		Dead		Dead
23.	EUR LAN	14	8	13	7
24.	PIN EDU	1	1		Dead
25.	ATR CAN	14*	14	14	12

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 34

Treatments: Substrate No Shale

Mulch None

Seeding Intensity Low

<u>Plant Species</u>	Height	July		September	
		Diameter		Height	Diameter
1. PUR TRI	5	8		6	7
2. CHR NAU	13	13		10	11
3. PIN EDU		Dead			Dead
4. ATR BON	13	10		17	9
5. KOC PRO	28	19		29	12
6. PIN EDU	2	1			Dead
7. SPH COC*	11	7		11	4
8. CHR NAU	11	6		11	5
9. ATR CAN	14	7		15	8
10. ATR CAN	20	12		25	12
11. EUR LAN	17	21		18	16
12. CHR NAU	15	15		15	13
13. ATR GAR		Dead			Dead
14. EUR LAN	13	12		13	13
15. CER MON	2	2		2	1
16. PUR TRI		Dead			Dead
17. PIN EDU		Dead			Dead
18. ATR CAN	10	7		13	8
19. CER MON	3	2		3	2
20. CAM MON	5	8		3	6
21. ART TRI	10	10		10	8
22. RHU TRI	6	2		5	2
23. PUR TRI	2	3½		3	3
24. EUR LAN	11	12		11	9
25. CER MON	2	1½		2	1

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 35

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity Low

Plant Species	July		September	
	Height	Diameter	Height	Diameter
1. ATR CAN	20	21	23	20
2. ATR GAR	3	3	2	2
3. PUR TRI	5	6	4	4
4. CHR NAU	15	6	17	5
5. ATR CAN	18	10	22	11
6. EUR LAN	16	8	17	8
7. PIN EDU		Dead		Dead
8. PUR TRI		Dead		Dead
9. ART TRI	10	7	9	6
10. EUR LAN	15	10	12	7
11. CHR NAU	8	4	8	3
12. PUR TRI	5	4	5	3
13. PIN EDU		Dead		Dead
14. ATR CAN	18*	4	23	4
15. SPH COC		Dead		Dead
16. KOC PRO	19	10	21	6
17. PIN EDU		Dead		Dead
18. CER MON	2	2	1	2
19. ATR BON	9	7	10	5
20. CAM MON	5	3	2	2
21. CER MON	2	2		Dead
22. CHR NAU	13	8	11	8
23. CER MON	2	2	2	2
24. RHU TRI	5	3	4	3
25. EUR LAN	13	12	14	8

* Browsed

APPENDIX B-4. HEIGHT AND DIAMETER (INCHES) OF CONTAINERIZED SEEDLINGS AT THE RBOSP REVEGETATION PLOT R₃ IN JULY AND SEPTEMBER OF 1978.

Plot No. 36

Treatments: Substrate No Shale

Mulch Hay

Seeding Intensity Low

Plant Species	Height	July		September	
		Diameter	Height	Diameter	Height
1. CER MON		Dead		Dead	
2. ART TRI		Dead		Dead	
3. CER MON		Dead		Dead	
4. ATR CAN	29	25	33	21	
5. RHU TRI		Dead		Dead	
6. CHR NAU	11	9	10	7	
7. ATR CAN	21	13	27	16	
8. CHR NAU	-	-	17	12	
9. EUR LAN	13	11	13	9	
10. EUR LAN		Dead		Dead	
11. EUR LAN	13	11	13	8	
12. CAM MON	1½	2	1	3	
13. KOC PRO		Dead		Dead	
14. PIN EDU		Dead		Dead	
15. PIN EDU		Dead		Dead	
16. ATR BON	16	9	23	16	
17. CHR NAU		Dead		Dead	
18. SPH COC	6	4		Dead	
19. PUR TRI	5	6	4	4	
20. ATR CAN	16	10	26	13	
21. ATR GAR		Dead		Dead	
22. PIN EDU		Dead		Dead	
23. PUR TRI	4	4	2	3	
24. CER MON		Dead		Dead	
25. PUR TRI	2	2	4	3	

* Browsed

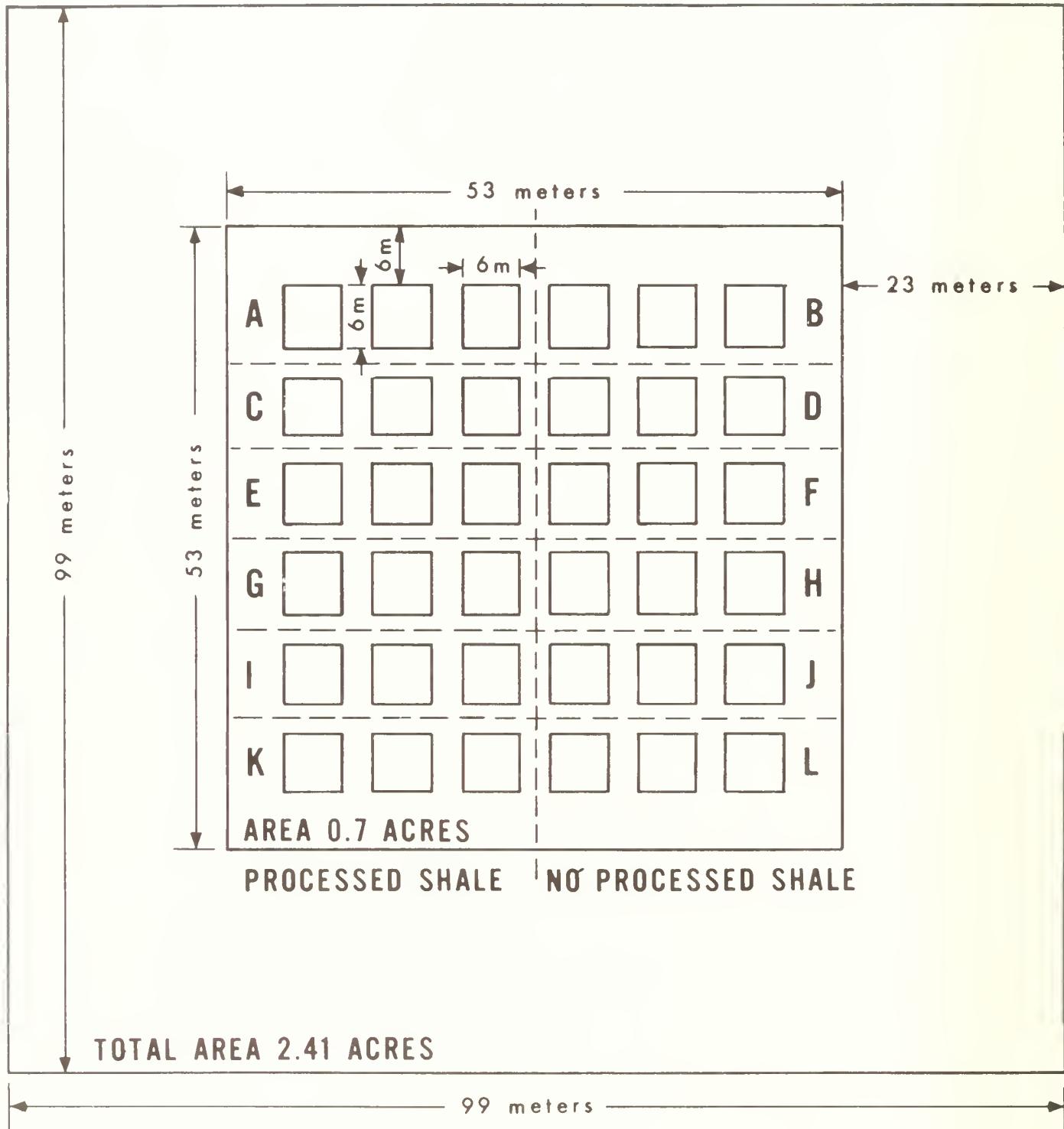
APPENDIX B-5. ELECTRICAL CONDUCTIVITY DATA OF THE SOILS SAMPLED AT
RBOSC REVEGETATION SITE R₃.

APPENDIX B-5. ELECTRICAL CONDUCTIVITY¹ OF SOILS SAMPLED AT THREE DEPTHS
 (0, 25, 50 cm) AT RBOSC REVEGETATION PLOT R₃ DURING FALL OF 1976, 1977,
 AND 1978.

Location ²	Depth								
	0 cm			25 cm			50 cm		
	1976	1977	1978	1976	1977	1978	1976	1977	1978
A	.32	.15	.23	.54	.34	.35	.50	.57	.55
B	.25	.20	.24	.34	.30	.28	.66	.78	.65
C	.29	.21	.28	.53	.30	.31	.56	.71	.56
D	.29	.25	.23	.43	.30	.29	.65	.60	.44
E	.29	.20	.23	.46	.25	.26	.59	.62	.33
F	.25	.20	.24	.28	.25	.25	.65	.46	.39
G	.24	.23	.28	.25	.23	.24	.41	.35	.31
H	.25	.20	.38	.26	.22	.25	.39	.58	.30
I	.26	.20	.19	.25	.22	.26	.34	.35	.32
J	.27	.17	.23	.28	.25	.28	.47	.50	.40
K	.25	.20	.35	.23	.23	.27	.31	.42	.32
L	.25	.20	.35	.27	.23	.28	.54	.49	.32

¹Ec equals $\mu\text{mhos}/\text{cm}$ of a 1:2 soil-water extract.

² See Attached Figure for Sampling Locations.



GENERALIZED PLOT LAYOUT FOR REVEGETATION PLOT (R₃) ON
OIL SHALE TRACT C-a, RIO BLANCO COUNTY, COLORADO
(INITIATED IN 1976).



Form 1279-3
(June 1984)

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