

**REVEGETATION SURVEY REPORT
KINSLEY EXPLORATION PROJECT
ELKO COUNTY, NEVADA**

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LIST OF ACRONYMS & ABBREVIATIONS

BLM	Bureau of Land Management
EA	Environmental Assessment
JBR	JBR Environmental Consultants, Inc.
NDEP	Nevada Division of Environmental Protection
NRCS	Natural Resources Conservation Service
Pilot Gold project	Pilot Gold (USA) Inc. Kinsley Exploration Project
RA	Reclamation Area
UTM	Universal Transverse Mercator

**REVEGETATION SURVEY REPORT
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ELKO COUNTY, NEVADA**

1.0 INTRODUCTION

Pilot Gold (USA) Inc. (Pilot Gold) plans to expand mineral exploration activities at the Kinsley Exploration Project (project) in the southeastern portion of Elko County, Nevada, located approximately 52 miles south of West Wendover, Nevada (Figure 1). From West Wendover, the project can be reached by traveling south for 37 miles on United States Highway 93-Alternate, then turning southeast on Kinsley Mountain Mine Road and traveling south for 11 miles to the turnoff for the Kinsley Mountain Mine.

The project is located in the Kinsley Mountains on public land managed by the Bureau of Land Management, Elko District Office, Wells Field Office (BLM) in Section 36, Township 27 North (T. 27N), Range 67 East (R. 67E); Sections 31 and 32, T. 27N, R. 68E; Sections 1 and 12, T. 26N, R. 67E; and Sections 5, 6, 7, and 8, T. 26N, R. 68E, Mount Diablo Base and Meridian (project area) (Figure 2). The project area equals approximately 2,830 acres and elevations in the project area range 6,200 to 7,725 feet above mean sea level. The Kinsley Mountains are situated on a northeastern spur of the Antelope Range and are bound by Kinsley Draw to the west and by Antelope Valley to the east. Past mining activities have occurred in the project area, associated with the closed and reclaimed Kinsley Mountain Mine.

Pilot Gold is currently performing mineral exploration in the project area under Notice of Intent NVN-090386, which authorizes up to 4.97 acres of surface disturbance. Pilot Gold plans to expand their exploration drilling program, which would result in additional surface disturbance. As a result of the proposed expansion and additional surface disturbance, BLM will require the preparation of an Environmental Assessment (EA). In compliance with BLM Instruction Memorandum No. NV-2011-004, dated November 5, 2010, Pilot Gold is implementing biological baseline surveys prior to submittal of the Plan of Operations/Reclamation Permit. JBR Environmental Consultants, Inc. (JBR) has been retained by Pilot Gold to gather floristic data from the areas that were revegetated during reclamation that was performed by the BLM in the project area. The data collected will be used during the environmental review process for the project.

The *Nevada Guidelines for Successful Revegetation, Attachment B* (NDEP, 1998) outlines the following two reclamation goals for mining-related disturbances: 1) stabilize the site; and 2) establish a productive community based on the applicable land use plan and designated post-mining land uses. In an effort to meet these reclamation goals, the BLM performed reclamation by reseeding areas disturbed by the mine during the 1990s. Additional reseeding was performed

in 2010. Based on information gathered during a site visit conducted by the BLM to determine the revegetation success of the reclaimed Kinsley Mountain Mine, the BLM assigned three categories to the reclaimed area. Category 1 includes successful reclamation. Category 2 includes areas that have been recontoured; however, revegetation was not successful. Category 3 includes areas that have not been recontoured, nor revegetated.

Per BLM's request, JBR selected seven Reclamation Areas (RAs) within Category 1 to determine the reclamation success in the project area. This information will be utilized in the preparation of the EA as well as satisfying reclamation goals defined by the Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation.

2.0 EXISTING ENVIRONMENT

The project area is located within the Intermountain Region, Great Basin Division, Calcareous Mountains Section floristic zone (Cronquist et al., 1972). The Calcareous Mountains Section contains high limestone-capped mountains and sagebrush-covered valleys. Vegetation within the project area is typical of the high peak and valley areas of the Great Basin. Vegetation in the project area includes a mixture of native and non-native species. The project area is located in the Antelope Range directly south of the Dolly Varden Mountains, east of the Shell Creek Range, and west of the Kern Mountains Range.

2.1 ENVIRONMENTAL SETTING

The project area includes a combination of native vegetation and disturbance in the form of past reclamation, two-track roads, existing improved roads, old mine workings, and an exploration office and equipment staging area. The native vegetation within the project area is categorized into three primary vegetation communities in concurrence with the Southwest Regional Gap Analysis Project (USGS, 2007) mapped land cover communities and the Nevada Wildlife Action Plan (NDOW, 2006). The vegetation communities within the project area include Intermountain Basins Mixed Salt Desert Scrub, Great Basin Pinyon-Juniper Woodland, and Great Basin Xeric Mixed Sagebrush Shrubland.

Category 1 reclamation is categorized into three discrete vegetation communities based on species dominance and includes the following: (1) Perennial Grasses; (2) Forage Kochia; and (3) Rabbitbrush. The majority of the RAs occur on a matrix of gravely mine-waste material with the exception of few occurrences of native soil types.

The Perennial Grasses community is composed of primarily of crested wheatgrass (*Agropyron cristatum*) and Indian ricegrass (*Achnatherum hymenoides*) with the following shrubs and forbs in lower numbers: rubber rabbitbrush (*Ericameria nauseosa*); yellow rabbitbrush (*Chrysothamnus viscidiflorus*); shadscale saltbush (*Atriplex confertifolia*); and forage kochia (*Bassia prostrata*). The grass community occurs on north and northeast aspects of the project area.

The Forage Kochia community is dominated by forage kochia with scattered yellow rabbitbrush, Douglas' dustymaiden (*Chaenactis douglasii*), Sandberg bluegrass (*Poa secunda*), Indian ricegrass, and crested wheatgrass. The Forage Kochia community occurs on north, east, and southeast aspects of the project area.

The Rabbitbrush community is dominated by yellow rabbitbrush with antelope bitterbrush (*Purshia tridentata*), rubber rabbitbrush, forage kochia, Douglas' dustymaiden, squirreltail

(*Elymus elymoides*), Sandberg bluegrass, cheatgrass (*Bromus tectorum*), and Indian ricegrass. The Rabbitbrush community occurs on east and northeast aspects of the project area.

2.2 SOILS

Soils in the project area include a combination of native soils and soils composed of post-mining material. The native soils in Elko County have been mapped by the Natural Resources Conservation Service (NRCS) and are described in the Soil Survey of Elko County, Nevada, Southeast Part (NRCS, 2002). The native soils in the project area are typical of the north-south trending mountain ranges and valleys of the north-central Great Basin and are located on geographical features including hills, fan remnants, and mountains (Figure 3). Slopes vary from gentle valley fans to steep mountain slopes. According to the NRCS, the following six soil associations occur within the project area:

- Soil Map Unit 69 Zimbob-Hyzen-Rock outcrop association;
- Soil Map Unit 421 Palinor-Automal association;
- Soil Map Unit 426 Palinor-Automal-Wintermute association;
- Soil Map Unit 575 Pookaloo-Cavehill-Rock outcrop association;
- Soil Map Unit 691 Tarnach-Wesfil association; and
- Soil Map Unit 1430 Pookaloo-Tecomar-Rock outcrop association.

The Kinsley Mountain Mine was operated between 1985 and 1999. Prior to mining, topsoil was scraped and salvaged in a stockpile for post-mining use in reclamation. The topsoil salvaged for reclamation has been mixed and in many cases will not have the same physical properties as undisturbed topsoil. This affects the plant species composition, cover, and density in the reclaimed areas.

The BLM recontoured, reseeded, and reclaimed the area disturbed by mining-related activities between 2000 and 2010 after the operator of the mine filed for bankruptcy. Topsoil was not applied during the initial stages of reclamation, so post-mining material in the form of rock fragments was utilized as soil. BLM evaluated the success of the reclamation in 2010 and concluded that the vegetation in the reclamation area lacked species diversity. In an attempt to diversify the vegetation in the reclaimed area, BLM applied topsoil from the existing stockpile at the mine in the northern and eastern portions of the reclaimed area. Then these areas were aerial seeded and harrowed. This report presents the results of the reclamation success.

3.0 FIELD METHODOLOGY

Vegetation data within each of the seven RAs was surveyed for using the linear layout of the Line Intercept Method as described in *Sampling Vegetation Attributes: Interagency Technical Reference 1734-4* (which supersedes 4400-4) (BLM, 1999). RAs were selected on different slope aspects and degrees within Category 1 as outlined by BLM because Category 1 is considered successful reclamation. The RAs were established during peak vegetative phenology to ensure accurate results of the existing conditions.

The start point and end point of each transect were randomly selected and the Universal Transverse Mercator (UTM) coordinates recorded with a Trimble Geo XT hand-held global positioning system receiver with sub-meter accuracy for relocation at later dates (Table 1 and Figure 2). A single piece of two-foot tall rebar was hammered into the ground at the start and end points to permanently mark the location of each RA transect. JBR botanists stretched a measuring tape between the start and end points of each transect for a distance of 100 meters. The 100-meter tape was installed at an angle to the slope to best capture the character of the stand and to eliminate any bias in favor of accumulated moisture that might occur on the slope contour if slightly benched. Photographs of the start and end points of each RA transect are included in Appendix A.

Table 1 UTM Coordinates of Reclamation Area Transects

UTM Coordinates (North American Datum 1983, Mount Diablo Base & Meridian, Zone 11)			
Reclamation Area Transects		Northing (m)	Easting (m)
T-1	start	726098	4447914
	end	726104	4448013
T-2	start	726142	4448107
	end	726241	4448107
T-3	start	726502	4448282
	end	726590	4448235
T-4	start	726440	4448090
	end	726537	4448096
T-5	start	726725	4448082
	end	726725	4447983
T-6	start	726401	4447669
	end	726449	4447757
T-7	start	727061	4447586
	end	727146	4447634

3.1 COVER

Starting at zero on the tape, and thus the beginning of each transect, the cover of each species was measured along the tape to the closest centimeter. JBR botanists compiled a complete inventory of species occurring along each transect. Foliar cover was recorded for shrubs and perennial herbaceous plants. Basal cover was recorded for perennial grasses. Annual vegetative cover coinciding with transects was recorded as well. Percent cover of bare ground and gravel were calculated by subtracting the total amount of plant cover from 100 percent. Gravel is defined as ground cover of an unconsolidated mixture of rock fragments or pebbles measuring between two millimeters to ten inches in size (BLM, 1999).

3.2 DENSITY

In addition to collecting data using the Line Intercept Method, JBR utilized the Density Method, as outlined in *Sampling Vegetation Attributes: Interagency Technical Reference 1734-4* (BLM, 1999), to collect data reflecting the abundance of certain species within the project area. This was done by laying a one-meter by one-meter square frame along the 100-meter transect in ten-meter intervals. The side of the tape on which the square frame was placed, alternated with every ten-meter interval. For example, if the square frame was placed on the left side of the tape at zero meters, it would be placed on the right side of the tape at ten meters, and so on, for a total of ten density sampling areas. Within the square frame, the number of individual species was recorded and tallied throughout the ten density sampling areas, then divided by ten square meters. This calculation yields the number of individuals of a certain species per square meter, providing an indication of the relative abundance of individuals of each species between transects.

3.3 COMPOSITION

Composition data was collected for each RA transect as well, providing an indication of the relative proportion of ground cover each species occupies to the total ground cover of the whole community. This was done by summing the amount of ground cover of each individual species, then dividing the sum by the total ground cover observed in that transect. This calculation reflects the relative contribution of ground cover each species composes with regard to the whole community.

4.0 BASELINE VEGETATION SURVEY RESULTS

JBR established seven RA transects located entirely within Category 1. Due to the slight variability of species encountered throughout the communities, RAs were chosen in order to provide an indication of the differences in ground cover and species densities that occur throughout the reclaimed portion of the project area. Data collected at RA transects 1 through 4, 6, and 7 included the percent of vegetation ground cover, the density of individual species (expressed as the number of individuals per square meter), the species composition of vegetation cover (expressed as a percent of total vegetation cover), as well as the dominant and common species present within each transect. Data was not collected from Transect 5 due to lack of vegetation maturity. The species composition data can be used to evaluate the success of the prescribed reclamation seed mix specific to individual vegetation communities. The growth success of the reclaimed vegetation can be assessed by comparing the percent of vegetation cover and the density of individual species to the data collected at each RA transect.

Plants species encountered by JBR during the survey include Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), antelope bitterbrush, yellow rabbitbrush, rubber rabbitbrush, shadscale, forage kochia, Douglas' dustymaiden, squirreltail, Sandberg bluegrass, cheatgrass, Indian ricegrass, crested wheatgrass, western yarrow (*Achillea millefolium* var. *occidentalis*), sweetclover (*Melilotus officinalis*), and basin wildrye (*Leymus cinereus*).

4.1 COVER

Percent cover by each plant species recorded along each of the seven RA transects is listed in Table 2. The data collected at the six RA transects indicates that the total average vegetation cover cumulatively throughout the reclamation areas equals approximately 38.2 percent. The remaining 61.8 percent is composed of bare ground and gravel.

In the Perennial Grasses community, approximately 65.7 percent of the vegetation cover consists of grasses, with crested wheatgrass being the most dominant species with scattered of Indian ricegrass. Shrubs and forbs account for the other 34.3 percent and include a combination of rubber rabbitbrush, yellow rabbitbrush, shadscale, forage kochia.

In the Forage Kochia community, approximately 68.9 percent of the vegetation cover consists of forbs with forage kochia being the most dominant species with scattered Douglas' dustymaiden. Grasses and shrubs account for the remaining 31.1 percent and include a combination of yellow rabbitbrush, Sandberg bluegrass, Indian ricegrass, and crested wheatgrass.

Table 2 Kinsley Exploration Project – Community Ground Cover Data

Reclamation RA Transect Data	Forage Kochia			Rabbitbrush	Perennial Grasses	Rabbitbrush	Perennial Grasses
	T-1	T-2	T-3	T-4	T-5	T-6	T-7
Average Vegetation Cover Per Transect	58.46 meters	20.62 meters	24.8 meters	54.56 meters	-	29.07 meters	41.74 meters
Average Percent Vegetation Cover	58.46	20.62	24.8	54.56	-	29.07	41.74
Percent Vegetation Cover – Grasses	0.54	0.61	0.17	6.59	-	3.17	27.43
Percent Vegetation Cover – Forbs	35.20	18.20	18.15	4.10	-	1.69	2.45
Percent Vegetation Cover – Shrubs	5.80	1.81	6.48	43.87	-	24.21	10.63
Vegetation Ground Cover – Shrub Species							
Wyoming big sagebrush	-	-	-	-	-	1.1	-
Antelope bitterbrush	-	-	-	2.26	-	-	-
Rubber rabbitbrush	-	-	-	10.60	-	21.43	0.88
Yellow rabbitbrush	5.80	1.81	6.48	31.01	-	1.68	9.75
Shadscale saltbush	-	-	-	-	-	-	1.23
Vegetation Ground Cover – Forb Species							
Forage kochia	35.20	18.20	16.75	3.00	-	1.69	2.45
Douglas dustymaiden	-	-	1.40	1.10	-	-	-
Vegetation Ground Cover – Grass Species							
Squirreltail	-	-	-	0.20	-	0.21	-
Sandberg bluegrass	0.13	0.61	0.17	0.42	-	2.5	-
Cheatgrass	-	-	-	1.87	-	-	-
Indian ricegrass	0.18	-	-	4.10	-	0.46	0.03
Crested wheatgrass	0.23	-	-	-	-	-	27.40

For the Rabbitbrush community, shrub species coverage is approximately 81.4 percent. Rubber rabbitbrush is the dominant species. Less dominate shrub species include yellow rabbitbrush, Wyoming big sagebrush, and antelope bitterbrush. Forbs and grasses account for the remaining 18.6 percent and include forage kochia, Douglas dustymaiden, squirreltail, Sandberg bluegrass, cheatgrass, and Indian ricegrass.

4.2 DENSITY

The density of each plant species recorded in the meter square along each of the seven RA transects is listed in Table 3. The average density of shrub species encountered throughout the reclaimed community is approximately 1.8 individuals per square meter. The average density of grass species encountered throughout Category 1 is approximately 9.8 individuals per square meter. The average density of forb species encountered throughout the reclaimed community is approximately 45 individuals per square meter. The most dense shrub species in the reclamation area is yellow rabbitbrush and the most dense grass species is crested wheatgrass. Forage kochia is the most dense forb species in the reclamation area.

Table 3 Kinsley Exploration Project – Community Density Data

Reclamation RA Transect Data	Forage Kochia			Rabbitbrush	Perennial Grasses	Rabbitbrush	Perennial Grasses
	T-1	T-2	T-3	T-4	T-5	T-6	T-7
Vegetation Density (ind/m²) – Shrub Species							
Wyoming big sagebrush	-	-	-	-	-	-	-
Antelope bitterbrush	-	-	-	-	-	-	-
Rubber rabbitbrush	-	-	-	1.3	-	1.7	-
Yellow rabbitbrush	0.8	0.2	2.0	2.0	-	2.7	0.1
Shadscale saltbush	-	-	-	-	-	-	-
Total Shrub Density	0.8	0.2	2.0	3.3	-	4.4	0.1
Vegetation Density (ind/m²) – Forb Species							
Forage kochia	8.7	11.0	13.0	0.5	-	3.7	-
Douglas’ dustymaiden	-	0.2	6.8	-	-	0.2	0.9
Total Forb Density	8.7	11.2	19.8	0.5	-	3.9	0.9
Vegetation Density (ind/m²) – Grass Species							
Squirreltail	-	-	2.3	1.5	-	0.5	-
Sandberg bluegrass	0.6	0.4	-	0.2	-	0.1	-
Western yarrow	-	-	0.2	-	-	-	-
Sweetclover	-	-	-	-	-	-	0.1
Basin wildrye	-	-	-	0.1	-	-	-
Winterfat	-	0.6	-	-	-	-	-
Cheatgrass	-	0.1	3.2	27.7	-	1.2	1.0
Indian ricegrass	-	0.2	-	2.2	-	0.1	-
Crested wheatgrass	-	-	-	-	-	0.1	10.4
Total Grass Density	0.6	1.3	5.7	37.4	-	2.0	11.5

4.3 COMPOSITION

The composition of each plant species recorded along each of the seven RA transects is listed in Table 4. Species composition is based on the percent cover of the various plants species encountered along each of the six RA transects. In RA transect T-1, the total shrub composition is 14 percent; the total forb composition is 84.7 percent; and the total grass composition is 1.3 percent. In RA transect T-2, the total shrub composition is 8.8 percent; the total forb composition is 88.3 percent; and the total grass composition is 2.9 percent. In RA transect T-3, the total shrub composition is 27.5 percent; the total forb composition is 71.6 percent; and the total grass composition is 0.9 percent. In RA transect T-4, the total shrub composition is 78 percent; the total forb composition is 7 percent; and the total grass composition is 15 percent. In RA transect T-6, the total shrub composition is 89.9 percent; the total forb composition is 6.5 percent; and the total grass composition is 3.6 percent. In RA transect T-7, the total shrub composition is 28.4 percent; the total forb composition is 5.9 percent; and the total grass composition is 65.7 percent.

Shrubs and forbs account for the majority of the species composition in Category 1, while grasses have minimal composition. However, in T-7 the soils mimic native soil and total grass composition is much higher than that of other RAs where soils are composed primarily of post-mining material.

Table 4 Kinsley Exploration Project – Community Composition Data

Reclamation RA Transect Data	Forage Kochia			Rabbitbrush	Perennial Grasses	Rabbitbrush	Perennial Grasses
	T-1	T-2	T-3	T-4	T-5	T-6	T-7
Vegetation Composition Data – Shrub Species							
Wyoming big sagebrush	-	-	-	-	-	0.4	-
Antelope bitterbrush	-	-	-	5.1	-	-	-
Rubber rabbitbrush	-	-	-	2.4	-	83.0	2.1
Yellow rabbitbrush	14.0	8.8	27.5	70.5	-	6.5	23.4
Shadscale saltbush	-	-	-	-	-	-	2.9
Total Shrub Composition	14.0	8.8	27.5	78.0	-	89.9	28.4
Vegetation Composition Data – Forb Species							
Forage kochia	84.7	88.3	71.0	6.7	-	6.5	5.9
Douglas’ dustymaiden	-	-	0.6	0.3	-	-	-
Total Forb Composition	84.7	88.3	71.6	7.0	-	6.5	5.9
Vegetation Composition Data – Grass & Forb Species							
Squirreltail	-	-	0.2	0.5	-	0.8	-
Sandberg bluegrass	0.3	2.9	0.7	1.0	-	1.0	-
Cheatgrass	-	-	-	4.3	-	-	-
Indian ricegrass	0.4	-	-	9.2	-	1.8	0.1
Crested wheatgrass	0.6	-	-	-	-	-	65.6
Total Grass Composition	1.3	2.9	0.9	15.0	-	3.6	65.7

5.0 CONCLUSIONS AND RECOMMENDATIONS

According to the *Guidelines for Successful Revegetation for the Nevada Division of Environmental Protection* (NDEP, 1998), revegetation release criteria for reclaimed mine sites would be to achieve as close to 100 percent of the perennial plant cover of RAs as possible. RAs must have a reasonable chance for success on the mine site. Therefore, all reclaimed vegetation must meet the requirement of at least 21.7 percent total vegetation cover in all areas disturbed by project-related activities.

At the request of BLM, JBR conducted vegetation transect surveys within the project area that had previously been revegetated to determine the success of the reseeding project. As indicated in the results the approximate total vegetation cover in surveyed areas within Category 1 is 38.2 percent which is above the requirement of at least 21.7 percent as outlined by NDEP.

JBR recommends that final reclamation of all constructed roads, sumps, drill pads, and all other newly disturbed areas will consist of recontouring all disturbances to their approximate original contour and reseeding in the fall immediately following completion of all reclamation earthwork similar to those performed in areas categorized as Category 1. It is recommended that all seed be certified as “weed free.” Broadcast seeding is typically the preferred method of application, and should be performed during the late fall or early winter months.

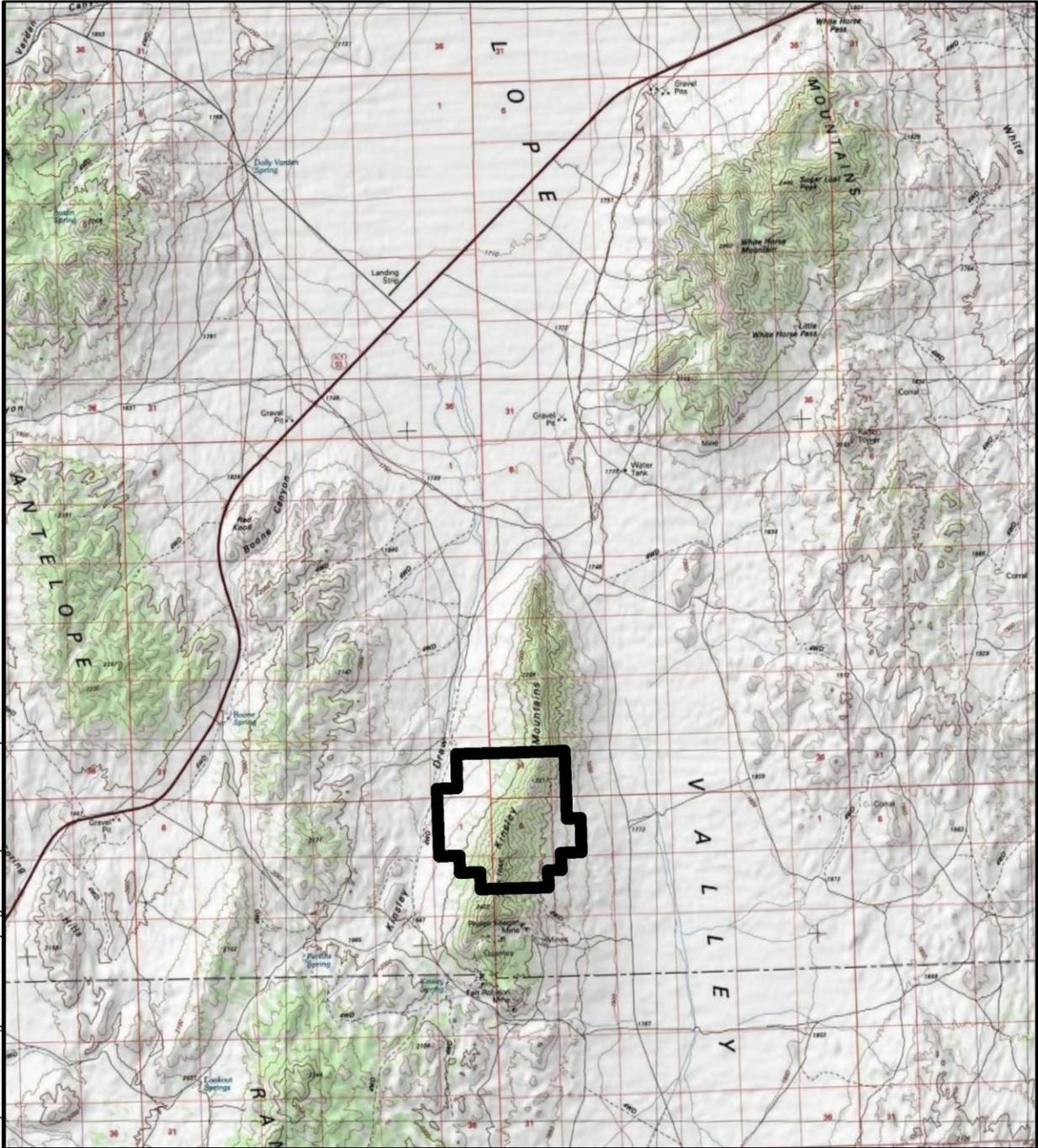
JBR recommends using a seed mix with species composition comparable to the percentages outlined in Table 4, as well as, those used in the revegetation project performed in the reclamation area previously by the BLM. The seed mixes could vary on different slope aspects according to the results of this survey. For example, forbs successfully grew on north-, east-, and southeast-facing slopes. Shrubs grew successfully on east- and northeast-facing slopes and perennial grasses grew on south- and northeast-facing slopes. Lastly, the reclamation procedures should include topsoil application, seeding, and then harrowing because the most successful reclamation in the reclaimed area included these procedures.

6.0 REFERENCES

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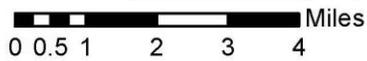
FIGURES

File Path: G:\GIS\Project_Files\PilotGold\Kinsley\GIS\MXD\Vegetation_Survey\Figure1_Project_Location_Map.mxd



BASE MAP: ESRI\NGS Topo US 2D

 PROJECT AREA - 2,830 acres

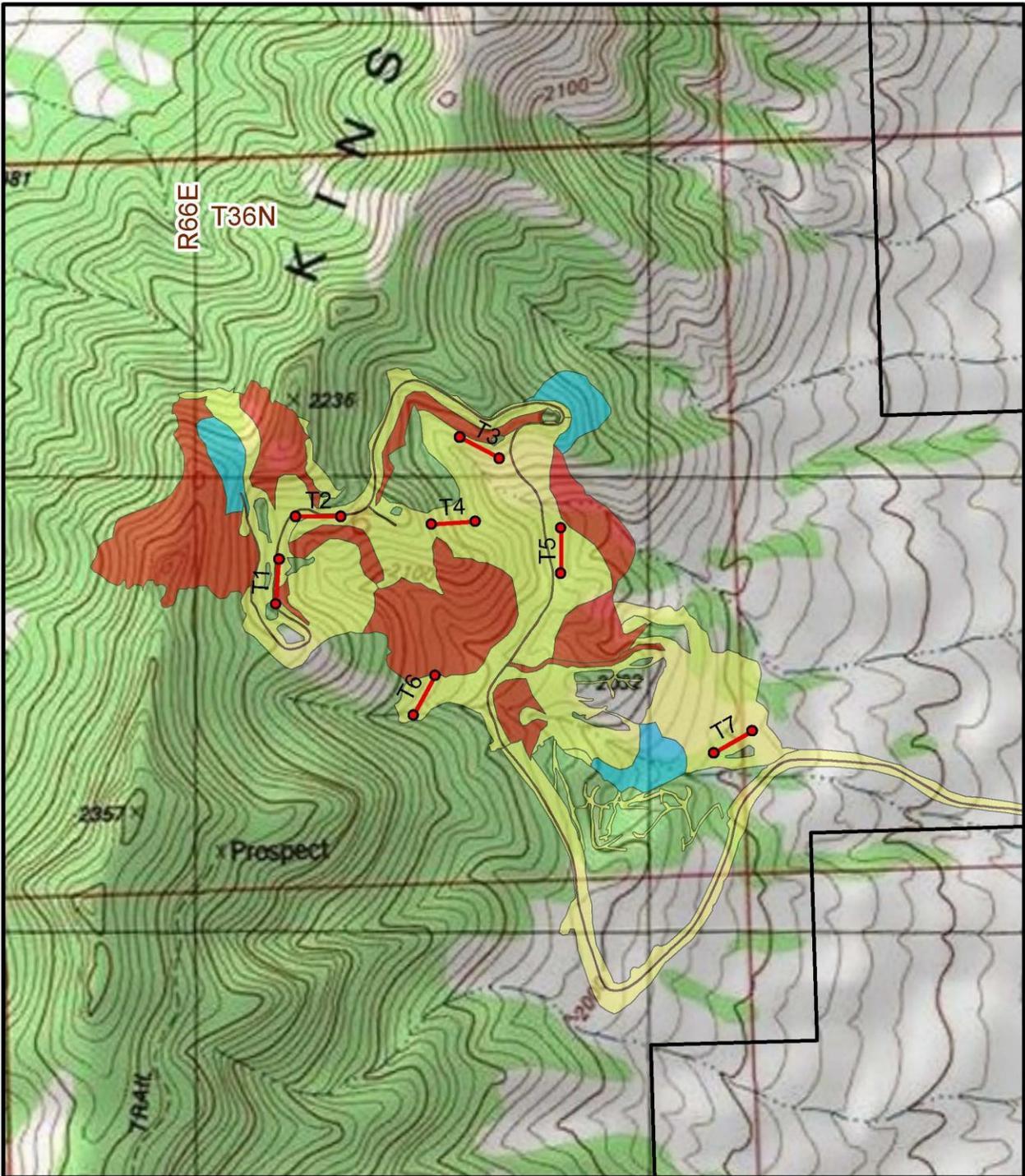


**PILOT GOLD (USA) INC.
KINSLEY EXPLORATION PROJECT
REVEGETATION SURVEY REPORT**

**FIGURE 1
PROJECT LOCATION**



DRAWN BY	KHB	DATE DRAWN	08/13/12
SCALE	1 in = 2 miles		
PROJECT #	B.A12183.00		

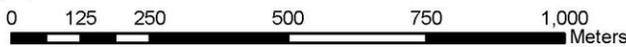


BASE MAP: ESRI NGS Topo US 2D

-  Project Area - 2,830 acres
-  Revegetation Transects (T1-T7)

Reclamation Status

-  Category 1
-  Category 2
-  Category 3



PILOT GOLD (USA) INC.
KINSELY EXPLORATION PROJECT
REVEGETATION SURVEY REPORT

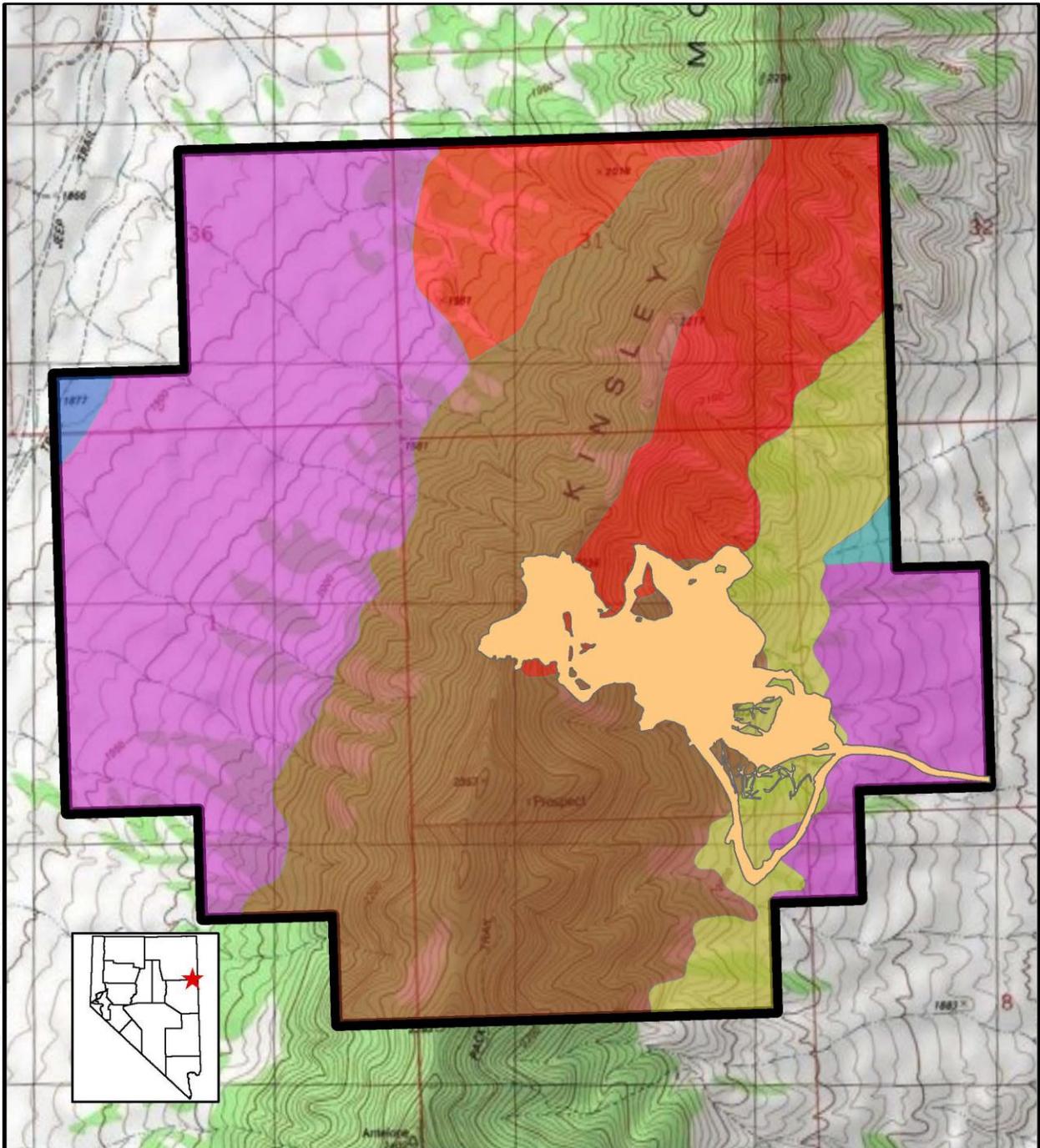
FIGURE 2
TRANSECT LOCATIONS



DRAWN BY	KHB	DATE DRAWN	08/13/12
SCALE	1 in = 305 meters		
PROJECT #	B.A12183.00		

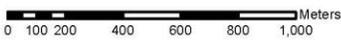
File Path: G:\GIS\Project_Files\PilotGold\Kinsley_GIS\MXD\Vegetation_Survey\Kinsley_F2_Reveg\TransectSurvey.mxd

File Path: G:\GIS\Project_Files\PilotGold\Kinsley\GIS\MXD\Vegetation_Survey\Figure3_Soils.mxd



BASE MAP: ESRI\INGS Topo US 2D

	PROJECT AREA - 2,830 acres
	Palinor-Automal association - 11 acres
	Tarnach-Wesfil association - 15 acres
	Zimbob-Hyzen-Rock outcrop association - 220 acres
	Pookaloo-Tecomar-Rock outcrop association - 433 acres
	Palinor-Automal-Wintermute association - 1,011 acres
	Pookaloo-Cavehill-Rock outcrop association - 957 acres
	Mine Disturbance - 183 acres



PILOT GOLD (USA) INC.
KINSLEY EXPLORATION PROJECT
REVEGETATION SURVEY REPORT

FIGURE 3
SOILS



DRAWN BY	KHB	DATE DRAWN	08/14/12
SCALE	1 in = 588 meters		
PROJECT #	B.A12183.00		

APPENDIX A

Reclamation Area Transect Photographs



Photograph 1 – Reclamation Area Transect 1 – Start 0-100 Meters Facing North



Photograph 2 – Reclamation Area Transect 1 – End 100-0 Meters Facing South



Photograph 3 – Reclamation Area Transect 2 – Start 0-100 Meters Facing East



Photograph 4 – Reclamation Area Transect 2 – End 100-0 Meters Facing West



Photograph 5 – Reclamation Area Transect 3 – Start 0-100 Meters Facing Southeast



Photograph 6 – Reclamation Area Transect 3 – End 100-0 Meters Facing Northwest



Photograph 7 – Reclamation Area Transect 4 – Start 0-100 Meters Facing East



Photograph 8 – Reclamation Area Transect 4 – End 100-0 Meters Facing West



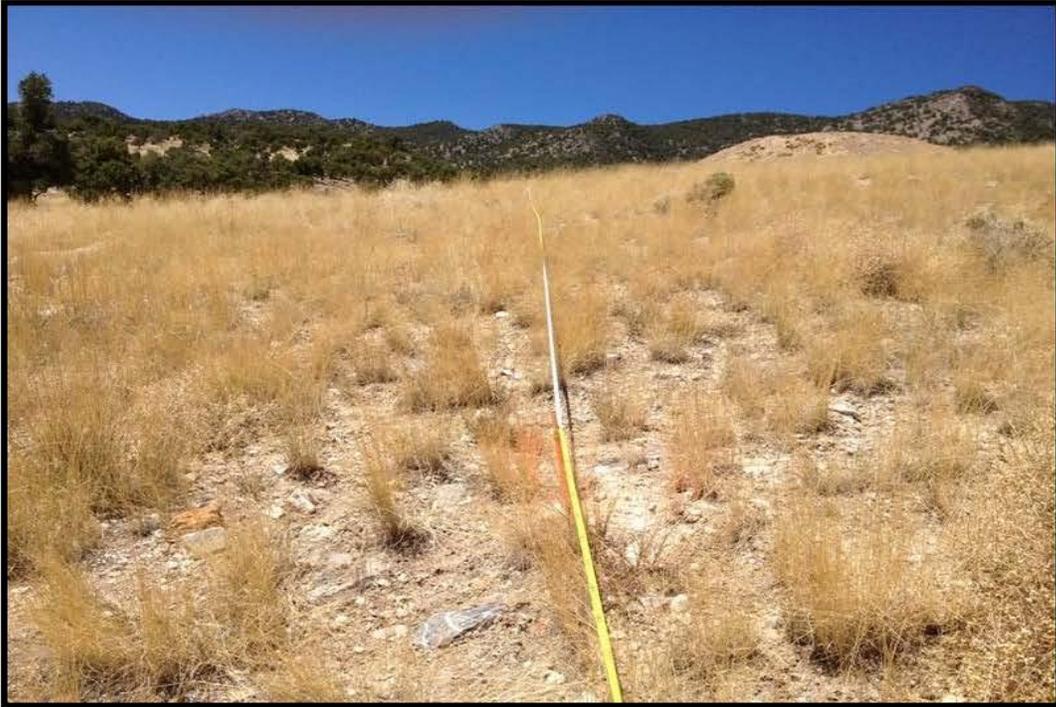
Photograph 9 – Reclamation Area Transect 5 – Start 0-100 Meters Facing South



Photograph 10 – Reclamation Area Transect 6 – Start 0-100 Meters Facing Northeast



Photograph 11 – Reclamation Area Transect 7 – Start 0-100 Meters Facing Northeast



Photograph 12 – Reclamation Area Transect 7 – End 100-0 Meters Facing Southwest

APPENDIX B

Field Data

Forage Kochia DENSITY

6/6/2012

B.A12183
Pilot Gold
Kinsley Project

Start 190 191 N End 192 193 S

(TI)

<p>0m Kochia Wheat Grass</p> <p>45% Bare ground</p>	<p>50m Kochia 10% Chrysothamnus 10%</p> <p>80% Bare ground</p>
<p>10m Kochia 25% Chrysothamnus 1%</p> <p>74% Bare ground</p>	<p>60m Kochia 35% Chrysothamnus 1%</p> <p>64% Bare ground</p>
<p>20m Kochia 89% Blue Grass 19% Chrysothamnus 1%</p> <p>90% Bare ground</p>	<p>70m Kochia 30%</p> <p>70% Bare ground</p>
<p>30m Kochia 25%</p> <p>75% Bare ground</p>	<p>80m Kochia 49% Chrysothamnus 80% Blue grass 1%</p> <p>15% Bare ground</p>
<p>40m Kochia 5%</p> <p>95% Bare ground</p>	<p>90m Kochia 38% Chrysothamnus 59% Blue grass 2%</p> <p>55% Bare ground</p>

3 4/5
7
38

DENSITY

6/16/12
 (TZ)
 B.A 12183
 Pilot + Gold - Kinsley

Start ¹⁹⁴ 195 E End ¹⁹⁶ 197 W

<p>0m</p> <p>Kochia II 90%</p> <p>10% bare ground</p>	<p>50m →</p> <p>Kochia 20%</p> <p style="margin-left: 100px;"> </p> <p style="margin-left: 100px;"> =</p> <p>80% Bareground</p>
<p>10m</p> <p>Kochia I 1%</p> <p>99% bareground</p>	<p>60m ←</p> <p>Kochia 37%</p> <p>Indian Rice grass 1%</p> <p>Cheat grass 1%</p> <p>Chrysothamnus 1%</p> <p>60% bare ground</p>
<p>20m</p> <p>Kochia 1%</p> <p>Chrysothamnus 18%</p> <p>Bluegrass 1%</p> <p>80% bare ground</p>	<p>70m ←</p> <p>Kochia I 50%</p> <p>50% bare ground</p>
<p>30m</p> <p>Kochia 10%</p> <p>90% bare ground</p>	<p>80m →</p> <p>Kochia I 4%</p> <p>winter fat I 1%</p> <p>95% bare ground</p>
<p>40m ←</p> <p>Kochia 20%</p> <p>80% Bare ground</p>	<p>90m ←</p> <p>Kochia 14%</p> <p>Chenectis douglassii 1%</p> <p>85% bareground</p>

DENSITY

6/6/12
 (T3)
 B.A12183
 Pilot Gold - Kinley

Start 198 SE Encl 202 NW
 199 203

<p>0m →</p> <p>Chrysothamnus 5%</p> <p>Chenectis douglassii 1%</p> <p>Sern II 1%</p> <p>L(photo 153, 154) (rocky soils) (does not like) <small>Competition</small></p> <p>93% Bareground</p>	<p>← 50m</p> <p>Kochia 20%</p> <p>Chrysothamnus 3%</p> <p>Elymus elmoides 1%</p> <p>Cheat grass 1%</p> <p>75% Bareground</p>
<p>← 10m</p> <p>Cheatgrass 1%</p> <p>Chenectis douglassii 1%</p> <p>Kochia 1%</p> <p>97% Bareground</p>	<p>100m</p> <p>Kochia - 1%</p> <p>Chenectis douglassii - 4%</p> <p>95% bare ground</p>
<p>→ 20m</p> <p>Cheatgrass 1%</p> <p>Chenectis douglassii 1%</p> <p>Kochia 1%</p> <p>Elymus elmoides 1%</p> <p>96% Bareground</p>	<p>→ 70m</p> <p>Kochia 2%</p> <p>Chenectis 1%</p> <p>97% Bareground</p>
<p>← 30m</p> <p>Chenectis douglassii 1%</p> <p>Kochia 1%</p> <p>98% bareg</p>	<p>← 80m</p> <p>Kochia 1%</p> <p>Elymus elmoides 3%</p> <p>Cheatgrass 1%</p> <p>Chenectis 1%</p> <p>89% bareground</p>
<p>→ 40m</p> <p>Kochia 12%</p> <p>Chenectis douglassii 1%</p> <p>97% Bareground</p>	<p>→ 90m</p> <p>Chenectis 1%</p> <p>Kochia 30%</p> <p>Elymus elmoides 1%</p> <p>68% bareground</p>

9
 +20
 13
 45

9
 +20
 13
 45

B.A12183
Pilot Gold-Kinsley
6.7.12

DENSITY

(TS) Start 209 S
210

Forage grasses

add zeros
line 23 → 27

0m

50m

Charactis	11	190
Kochia	1	190
Spurge	1	190
Indian Rice grass	(38)	290

95% Bare ground

10m

60m

Indian Rice grass	(25)	990
Cheat grass	(25)	990
Kochia	1	190
Bluegrass	1	190

80% bare ground

Clear
Contents
of file

20m

70m

30m

80m

g rasses to immature to identify

40m

90m

Rabbit brush

DENSITY

6.7.12

B.A 12183

Pilot Gold Kinley

(T6)

Start ²¹¹ NE End

<p>0m 212</p> <p>Ericameria 111 17%</p> <p>Elymus elonoides 1 1%</p> <p>Cheat grass 1 1%</p> <p>wheat grass 1 1%</p> <p>80% bare ground</p>	<p>50m</p> <p>Kochia (10) 9%</p> <p>ericameria (1) 1%</p> <p>90% bare ground</p>
<p>10m</p> <p>Chrysanthamus (22) 4%</p> <p>Cheat grass (3) 1%</p> <p>50% bare ground</p>	<p>60m</p> <p>Kochia (12) 15%</p> <p>85% bare ground</p>
<p>20m</p> <p>Chrysanthamus (5) 34%</p> <p>Cheat grass (16) 19%</p> <p>65% Bare ground</p>	<p>70m</p> <p>Kochia (1) 14%</p> <p>ericameria (3) 1%</p> <p>Cheat grass (1) 1%</p> <p>elymus (1) 1%</p> <p>90% bare ground</p>
<p>30m</p> <p>ericameria (1) 77%</p> <p>blue grass (1) 3%</p> <p>20% bare ground</p>	<p>80m</p> <p>ericameria (5) 8%</p> <p>elymus (3) 1%</p> <p>Chanactis (1) 1%</p> <p>90% bare ground</p>
<p>40m</p> <p>Indian rice grass (1) 3%</p> <p>Kochia (8) 13%</p> <p>ericameria (4) 4%</p> <p>80% bare ground</p>	<p>90m</p> <p>Kochia (1) 2%</p> <p>Chanactis (1) 1%</p> <p>Cheat grass (1) 1%</p> <p>96% bare ground</p>

DENSITY Forage
(Grass)

B.A 12183
6.7.12
Pilot Gald-Kinsley
(T7)

Start ²¹⁵ 210 NE End ²¹³ 214 (SW)

0m Wheat grass (8) 11% Spurge (1) 1% Cheat grass (5) 1% Koracis (3) 2%	50m Wheat grass (10) 20%
85% Bare ground	80% Bare ground
10m Wheat grass (7) 14% Koracis (4) 1%	60m Wheat grass (18) 24% Cheat grass (3) 1%
85% Bare ground	75% Bare ground
20m Wheat grass 8% (4) Cheat grass 1% (2) Koracis 1% (2)	70m Wheat grass (15) 15%
90% Bare ground	85% Bare ground
30m Wheat grass (16) 20%	80m Wheat grass (7) 15%
80% Bare ground	85% Bare ground
40m Wheat grass (11) 10%	90m Wheat grass (6) 25% Chrysothamnus (1) 5%
90% Bare ground	70% Bare ground