

Appendix 3D
Visual Contrast Rating Worksheet

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: August 2, 2012

District/ Field Office: Ely/ Egan

Resource Area:

Activity (program): Minerals

SECTION A. PROJECT INFORMATION

1. Project Name PAN MINE	4. Location Township: 17N	5. Location Sketch: KOP 1 is located on the south should of U.S. Highway 50, just east of its intersection with State Route 379.
2. Key Observation Point KOP 1	Range: 54E	
3. VRM Class: III (note that characteristic landscape visible from KOP contains Class III and IV areas)	Section: 3	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in foreground, rolling hills/topography in the middle ground.	Lumpy (shrubs) and spiky (grasses) in foreground; form of vegetation indistinct in middle ground and background areas.	Flat and wide form associated with U.S. Highway 50 in the foreground area. Fence posts act as delineators.
LINE	Strong horizontal, irregular line at skyline. Irregular flowing line associated with rolling hills in middle ground area.	Broken, short lines in foreground. Subtle horizontal lines in middle ground due to color patterns of vegetation.	Strong curvilinear lines from U.S. Highway 50. Short vertical lines from fence posts.
COLOR	See vegetation color.	Vegetation along road shoulders is bright green-transitions to brown, gold, and red away from road. Fields in foreground are bright green. Vegetation in middle ground area is dark brown. Vegetation in background is shades of blue due to distance from KOP.	Gray, white and yellow colors associated with U.S. Highway 50 in foreground. Dark color, almost black, associated with fence posts.
TEX-TURE	See vegetation color.	Coarse, stippled in foreground. Mostly indistinct in middle ground and background area.	Surface of U.S. Highway 50 is stippled with smooth-textured painted white and yellow lines. Structure textures occur in foreground area.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in middle ground area due to proposed heap leach and waste rock disposal facility.	Forms introduced by the proposed project would not be vegetated during operations.	Thin and horizontal forms in the middle ground area associated with proposed access road.
LINE	Near horizontal and regular lines in the middle ground area.	Removal of vegetation from the proposed access road would create a very thin line due to the absence of vegetation from the road surface.	Very thin line associated with proposed access road in the middle ground area.
COLOR	The heap leach pad would appear gold to light orange-brown. Waste rock disposal site would appear brown. The color of the heap leach pad and the waste rock facility would be the effect of an absence of vegetation cover during operations.	The proposed heap leach and waste rock disposal facility would be visible from the KOP and would not be vegetated during operation. A section of access road would be visible and not vegetated.	Very light-brown and light-tan colors associated with associated with proposed access road.
TEX-TURE	None.	None.	Indistinct texture.

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1.	DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side) 3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side) Evaluator's Names: George Dix (JBR Environmental Consultants, Inc.) Date: October 22, 2012
		LAND/WATER BODY				VEGETATION				STRUCTURES				
		(1)				(2)				(3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
		FORM	X								X			
ELEMENTS	LINE	X							X					
	CCLOR		X						X					
	TEXTURE	X								X				

SECTION D. (Continued)

Comments from item 2.

The proposed heap leach pad that would be visible from KOP 1 is located in an area designated as VRM Class IV. The moderate degree of contrast that the proposed heap leach pad would have with the form, line, and color elements of the features of the existing landscape conforms with the management objectives of VRM Class IV. The waste rock disposal site visible from the KOP would be located in an area that is designated as VRM Class III. The moderate to minor degree of contrast that it would have with the existing landscape features does not conflict with the management objectives of VRM Class III. The waste rock disposal site would attract attention, but the minor degree of contrast between its color and the color of surrounding middle-ground area would prevent it from dominating the casual observer's view from KOP 1.

The section of the proposed access road that would be visible from KOP 1 would be located within an area designated as VRM Class III. The degree of contrast that the proposed access road would have with the existing landscape would not exceed moderate. The access road would attract attention but not dominate the casual observer's view from KOP 1. The proposed access road would resemble the nearly vertical lines formed by color patterns in vegetation cover in the most distant areas of the foreground. Accordingly, the visual contrast of the proposed access road would be compliant with the management objectives of VRM Class III.

Additional Mitigating Measures (See item 3)

No additional mitigating measures are recommended.

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Date: August 2, 2012

District/ Field Office: Ely/ Egan

Resource Area:

Activity (program): Minerals

SECTION A. PROJECT INFORMATION

1. Project Name PAN MINE	4. Location Township: 17N	5. Location Sketch: KOP 2 is located at the intersection of U.S. Highway 50 and State Route 892.
2. Key Observation Point KOP 2	Range: 55E	
3. VRM Class: III (note that characteristic landscape visible from KOP contains Class III and IV areas)	Section: 6	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in foreground, rolling hills/topography in the middle ground and background. Background also has tall rugged forms from mountains beyond rolling hills.	Lumpy (shrubs) and spiky (grasses) in foreground. Globular form associated with foliage of group of black cotton wood trees in foreground. Tree trunks have tall form. Form indistinct in middle ground and background areas.	Bold linear form associated with U.S. Highway 50 in the foreground. Flat patch form associated with gravel clearing in foreground. Low flat form associated with concrete platform located at gravel clearing. Sign posts in foreground area have thin vertical forms.
LINE	Horizontal lines associated with flat forms in foreground. Flowing line associated with rolling hills in middle ground and background. Strong irregular line where mountains meet skyline.	Broken, short lines in foreground. Subtle vertical lines associated with tree trunks in foreground area. Subtle horizontal lines in middle ground due to color patterns of vegetation.	Strong curvilinear lines from road striping on U.S. Highway 50. Sign posts contribute strong vertical lines to foreground. Horizontal lines associated with edges of concrete platform and railing at gravel clearing in foreground. Short vertical lines from fence posts in middle ground area.
COLOR	See vegetation color.	Vegetation along road shoulders is bright green, and transitions to brown, tan, and gold away from road. Foliage on black cottonwood trees contribute a lush, dark green color to foreground. Fields in middle ground are bright green. Vegetation on rolling hills in middle ground and background is dark brown. Vegetation in background mountains is shades of blue due to distance from KOP.	Gray, white and yellow colors associated with U.S. Highway 50 in foreground. Gray color associated with gravel clearing. Red, white and yellow associated with concrete platform and railing at gravel clearing. Dark color, almost black, associated with fence posts in middle ground. Sign posts are white, yellow, and flat silver (signs).
TEXTURE	See vegetation color.	Brushy, patch, and coarse in foreground. Mostly indistinct in middle ground and background area.	Surface of U.S. Highway 50 is finely-stippled. Road striping has smooth texture.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in middle ground area due to proposed heap leach and waste rock disposal facility.	Forms introduced by the proposed project would not be vegetated during operations.	Thin and horizontal forms in the middle ground area associated with proposed access road. Tall vertical forms would be introduced to the foreground and closer regions of middle ground from proposed power poles.
LINE	Near horizontal and regular lines in the middle ground area.	Removal of vegetation from the proposed access road would create a very thin line due to the absence of vegetation from the road surface.	Very thin line associated with proposed access road in the middle ground area. Proposed power poles would add tall, vertical lines with bold edges to foreground and closer areas of middle ground. Proposed overhead conductors of power line would add thin, curvilinear lines to foreground.
COLOR	The heap leach pad would appear gold to light orange-brown. Waste rock disposal site would appear brown. The color of the heap leach pad and the waste rock facility would be the effect of an absence of vegetation cover during operations.	The proposed heap leach and waste rock disposal facility would be visible from the KOP and would not be vegetated during operation. A section of access road would be visible and not vegetated.	Very light-brown and light-tan colors associated with proposed access road. Power poles would be light-brown to brown, and non-reflective. Overhead conductors would appear gray in color. Poles and conductors would become lighter in color with distance from KOP.
TEXTURE	None.	None.	Proposed power poles would have a smooth texture. Indistinct texture associated with access road and overhead conductors of power line.

SECTION D. CONTRAST RATING SHORT TERM X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <u> X </u> Yes <u> </u> No (Explain on reverses side) 3. Additional mitigating measures recommended <u> </u> Yes <u> X </u> No (Explain on reverses side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
ELEMENTS	FORM	X							X				Evaluator's Names: George Dix (JBR Environmental Consultants, Inc.) Date: October 22, 2012	
	LINE	X						X						
	CCLOR		X						X					
	TEXTURE	X								X				

SECTION D. (Continued)

Comments from item 2.

The proposed heap leach pad that would be visible from KOP 2 is located in an area designated as VRM Class IV. The moderate degree of contrast that the proposed heap leach pad would have with the form, line, and color elements of the features of the existing landscape conforms with the management objectives of VRM Class IV. The waste rock disposal site visible from the KOP would be located in an area that is designated as VRM Class III. The moderate to minor degree of contrast that it would have with the existing landscape features does not conflict with the management objectives of VRM Class III. The waste rock disposal site would attract attention, but the minor degree of contrast between its color and the color of surrounding middle-ground area would prevent it from dominating the casual observer's view from KOP 2.

The section of the proposed access road that would be visible from KOP 2 would be located within an area designated as VRM Class III. The degree of contrast that the proposed access road would have with the existing landscape would not exceed moderate. The access road would attract attention but not dominate the casual observer's view from KOP 2. The proposed access road would resemble the nearly vertical lines formed by color patterns in vegetation cover in the most distant areas of the foreground. Accordingly, the visual contrast of the proposed access road would be compliant with the management objectives of VRM Class III.

The proposed power line visible from KOP 2 would be located within an area designated as VRM Class III. There are several existing power pole structures visible in the foreground area of the existing landscape that contribute line, color, and texture elements that are similar to those that would be introduced from the power line. There are also road signs and several trees visible in the foreground, which contribute tall, vertical lines to the foreground area. The addition of the proposed power line would only increase the quantity and frequency of which these elements appear in the foreground. The degree of contrast would be moderate to strong because of the increased quantity and frequency of tall, vertical lines, and the addition of thin, subtle curvilinear lines. The power line would not be expected to dominate the view of the casual observer, but may attract their attention. The visual contrast resulting from the proposed power line would be in compliant with objectives of BLM VRM Class III.

Additional Mitigating Measures (See item 3)

No additional mitigating measures are recommended.

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Resource Area:

Activity (program): Minerals

SECTION A. PROJECT INFORMATION

1. Project Name PAN MINE	4. Location Township: 17N	5. Location Sketch: KOP 3 is located along the east shoulder of State Route 379, about 1.6 miles south of its intersection with U.S. Highway 50.
2. Key Observation Point KOP 3	Range: 54E	
3. VRM Class: IV (note that characteristic landscape visible from KOP contains Class III and IV areas)	Section: 8	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in foreground, rolling hills/topography in the middle ground. Tall rugged forms in background from mountains.	Lumpy shrubs and grasses in foreground. Few low trees in foreground contribute globular form to foreground from foliage. Form of vegetation indistinct in middle ground and background areas.	Structures do not appear landscape, including State Route 379. Road would be seen by observers, however, because the KOP is directly beside it. Road has flat and bold form.
LINE	Strong horizontal, irregular line at skyline and rugged mountains in background. Irregular flowing line from rolling hills in middle ground.	Broken, short lines in foreground. Subtle horizontal lines in middle ground due to color patterns of vegetation.	Strong curvilinear lines from edge of road surface of State Route 379.
COLOR	See vegetation color.	Foreground vegetation mostly dark-green muted by gray overtones. Foreground trees foliage is lush green. Yellow flowers on rabbitbrush next to State Route 379. Bright green fields in middle ground, but other vegetation in middle ground is dark brown. Vegetation in background is blue shades.	Surface of State Route 379 is pale gray.
TEXTURE	See vegetation color.	Coarse, stippled in foreground. Mostly indistinct in middle ground and background area.	Surface of State Route 379 is finely-stippled.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat form in middle ground area due to proposed heap leach and waste rock disposal facility.	Forms introduced by the proposed project would not be vegetated during operations.	Structures would not be visible.
LINE	Near horizontal and regular lines in the middle ground area.	Removal of vegetation from the proposed access road would create a very thin line due to the absence of vegetation from the road surface.	Structures would not be visible.
COLOR	The heap leach pad would appear gold to light orange-brown. Waste rock disposal site would appear brown. The color of the heap leach pad and the waste rock facility would be the effect of an absence of vegetation cover during operations.	The proposed heap leach and waste rock disposal facility would be visible from the KOP and would not be vegetated during operation. A section of access road would be visible and not vegetated.	Structures would not be visible.
TEXTURE	None.	None.	Structures would not be visible.

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1.	DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side) 3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side) Evaluator's Names: George Dix (JBR Environmental Consultants, Inc.) Date: October 22, 2012
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
ELEMENTS	FORM	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
	LINE		X								X			
	COLOR			X							X			
	TEXTURE		X									X		

SECTION D. (Continued)

Comments from item 2.

The proposed heap leach pad that would be visible from KOP 3 is located in an area designated as VRM Class IV. The moderate degree of contrast that the proposed heap leach pad would have with the form, line, and color elements of the features of the existing landscape conforms with the management objectives of VRM Class IV. The waste rock disposal site visible from the KOP would be located in an area that is designated as VRM Class III. The moderate to minor degree of contrast that it would have with the existing landscape features does not conflict with the management objectives of VRM Class III. The waste rock disposal site would attract attention, but the minor degree of contrast between its color and the color of surrounding middle-ground area would prevent it from dominating the casual observer's view from KOP 3.

Additional Mitigating Measures (See item 3)

No additional mitigating measures are recommended.

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Resource Area:

Activity (program): Minerals

SECTION A. PROJECT INFORMATION

1. Project Name PAN MINE	4. Location Township: 17N	5. Location Sketch: KOP 4 is located along the south shoulder of U.S. Highway 50, north of the project area.
2. Key Observation Point KOP 4	Range: 54E	
3. VRM Class: III	Section: 8	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, wide form in foreground that is also simple. Gently rolling hills/topography in the middle ground. Tall irregularly-shaped, rugged forms in background from mountains.	Form of vegetation in foreground is globular to irregular (shrubs) and spiked (grasses). Foreground vegetation form transitions to lumpy near the middle ground area. Vegetation in the middle ground is mostly indistinct, but patchy forms are visible due to color patterns. Vegetation in background has no distinct form.	Thin vertical forms in foreground from fence posts.
LINE	Weak and soft horizontal line where flat topography of foreground gives way to rolling topography of middle ground. Irregular bold line where background mountains meet skyline.	Lines in foreground transition with distance from complex and irregular to subtle and horizontal due to color patterns. Color patterns create subtle horizontal lines a margin of foreground and middle ground. Vegetation in the middle ground and background has no distinct lines.	Narrow, bold vertical lines in foreground from fence posts. Very weak horizontal lines in foreground from fence wire strands.
COLOR	See vegetation color.	Foreground vegetation is equal parts light grayish-green and light brown. Middle ground vegetation is light brown to brown. Isolated evergreen trees in middle ground are dark green to dark gray. Vegetation in background is shades of blue due to distance from KOP.	Fence posts are very dark brown and wire stands are light gray.
TEXTURE	See vegetation color.	Vegetation has an uneven, random coarse texture near U.S. Highway 50, but transitions to dense medium texture with distance. Texture is indistinct in middle ground and background.	Texture of fence posts is uniform and smooth. Texture of wire strands is indiscernible.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Proposed heap leach, waste rock disposal site, or other land alterations would not be visible from KOP.	Removal of vegetation from road surface would create a patch form associated with absence of vegetation after removal.	Tall vertical forms would be introduced to foreground from proposed power poles. Linear form would be introduced to foreground from proposed access road.
LINE	Proposed heap leach, waste rock disposal site, or other land alterations would not be visible from KOP.	Removal of vegetation from the proposed access road would create straight and/or curvilinear lines at edges of road surface.	Tall vertical lines with bold edges in foreground from proposed power poles. Thin, curvilinear lines in foreground from overhead conductors for proposed power line. Straight and/or curvilinear lines from edge of road surface on proposed access road.
COLOR	Proposed heap leach, waste rock disposal site, or other land alterations would not be visible from KOP.	Vegetation would be removed from proposed access road surface. Removal of vegetation would also remove the color associated with it. Color of road surface would contrast.	Power poles would be light-brown to brown, and non-reflective. Overhead conductors would appear gray in color. Poles and conductors would become lighter in color with distance from KOP. Very light-brown and light-tan colors associated with proposed access road.
TEXTURE	Proposed heap leach, waste rock disposal site, or other land alterations would not be visible from KOP.	None.	Texture of proposed power poles is smooth. Overhead conductors have no distinguishable texture. Surface of access road would be gravel and have a coarse, stippled texture.

SECTION D. CONTRAST RATING SHORT TERM X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <u> X </u> Yes <u> </u> No (Explain on reverses side) 3. Additional mitigating measures recommended <u> X </u> Yes <u> </u> No (Explain on reverses side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
ELEMENTS	FORM			X				X		X			Evaluator's Names: George Dix (JBR Environmental Consultants, Inc.) Date: October 22, 2012	
	LINE			X		X				X				
	CCLOR			X		X				X				
	TEXTURE			X				X		X				

SECTION D. (Continued)

Comments from item 2.

The visual contrast resulting from the sections of the proposed power line and access road that would be visible from KOP 4 would not exceed moderate, and would be compliant with the management objectives of BLM VRM Class III. The scenic quality of the existing landscape may be altered, but generally retained as the project components would not be expected to dominate the view of the casual observer.

The power line would have a moderate degree of contrast with the features in the existing landscape because there are very few vertical lines, and any that do occur are generally not tall. There are other bold lines in the foreground area associated with edge of pavement on U.S. Highway 50, and road signs next to the highway. The visibility of these lines would be expected to prevent the proposed power line from dominating the view of the casual observer at KOP 4.

The form and line elements associated with the proposed access road would attract the attention and be readily apparent to casual observers travelling on U.S. Highway 50. Colors and textures that contrast with the existing vegetation that would remain on either side of the road would be created. The degree of contrast would be moderate near the KOP, and moderate to negligible farther from the KOP. The presence of U.S. Highway 50 and several other paved and unpaved roads would be expected to prevent the proposed access road from dominating the view of the casual observer.

Additional Mitigating Measures (See item 3)

A visual simulation of the proposed project was not prepared for KOP 4; thus, it is unknown whether ancillary facilities associated with the proposed project would be visible from this KOP. If any ancillary facilities are visible, the exterior surfaces of these facilities would introduce color elements that do not repeat and adversely contrast with the color elements common to the characteristic landscape. In order to reduce the visual contrast, the exterior surfaces of any ancillary facilities visible from KOP 4 should be painted shale green if located in pinyon-juniper vegetation or shadow gray if located in shrublands or other open areas. Other non-reflective colors of paint, as determined by the BLM, may be used in place of shale green or shadow gray.