



# DESERADO MINE

BLUE MOUNTAIN ENERGY

3607 County Rd. 65  
Rangely, CO 81648  
(970)675-4300  
fax (970)675-4399

February 15, 2018

Mr. Brock Bowles  
Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, CO 80203

**RE:   Annual Reclamation Report 2017**  
**Deserado Mine, Permit No. C-1981-018**

Dear Brock:

Enclosed is the annual reclamation report for 2017. Along with this form is a detailed summary of the acres reclaimed and status of disturbances for the year. Also enclosed are the results with summary of the 2017 Revegetation Survey conducted this past summer.

Sincerely,

Scott Wanstedt  
Environmental Engineer  
[swanstedt@deserado.com](mailto:swanstedt@deserado.com)

cc:     Jeff Dubbert

enc:

# Colorado Division of Reclamation, Mining and Safety

## Annual Reclamation Report for the Year \_\_\_\_\_

\_\_\_\_\_ mine name \_\_\_\_\_ permit # \_\_\_\_\_ Permittee

Address: \_\_\_\_\_

This report, required by Rule 2.04.13, is due by February 15 of each year, or other date, as agreed upon by the Division. It should include text, discussion, and maps, at a minimum, in addition to any other reclamation monitoring data as required by the approved permit. The location of the acreage reported under each land status category and year of seeding (if applicable) should be clearly and accurately identified on a map included with the report.

Land Status Category	Last Years Cumulative Total		This Calendar Year		Cumulative Total <sup>1</sup>
Acres disturbed		+		=	
Acres backfilled and graded		+		=	
Acres topsoiled		+		=	

Seeding typically begins the minimum 10-year reclamation liability period. Please report the acres for each category below. Do not include acres that have achieved final, Phase III release.

	Last Years Cumulative Total		This Calendar year		Cumulative Total <sup>1</sup>		10 years or less		Greater than 10 years <sup>1</sup>
Acres seeded*		+		=		=		+	

\*include, if necessary, a description of any augmented seeding or cultural practices

**For the Entire Life of Mine,** the total number of acres disturbed \_\_\_\_\_ and the total number of acres:

Phase I released \_\_\_\_\_ Phase II released \_\_\_\_\_ Phase III released \_\_\_\_\_

### **For Mines in Permanent Cessation:**

Total acreage in facilities subject to reclamation but yet to be completed \_\_\_\_\_

### **For Government Performance and Results Act**

Acreage in long-term mining or reclamation facilities <sup>2</sup> \_\_\_\_\_

Acreage in active mining areas <sup>3</sup> \_\_\_\_\_

<sup>1</sup> (exclude acres where Phase III release has been achieved)

<sup>2</sup> Includes haul and access roads; temporary dams and impoundments; permanent dams and impoundments; diversion and collector ditches, water and air monitoring sites; topsoil stockpiles; overburden stockpiles; repair, storage and construction areas; office area, repair shops, and parking; coal stockpiles, loading, and processing areas; railroads; coal conveyors; nonbackfilled and graded areas of refuse piles, coal mine waste impoundments, head-of-hollow fills, and valley fills; ventilation shafts and entryways; and noncoal waste disposal area (garbage dumps and coal combustion by-products disposal areas).

<sup>3</sup> Includes pits, topsoil stripped areas in advance of pits, and spoil not backfilled and graded

## 2017 Annual Reclamation Report Data

### 2017 DISTURBANCE

<u>Site</u>	<u>Rev.</u>	<u>Permitted Disturb</u>	<u>Actual Disturbed</u>	<u>Pad Area</u>	<u>Road Area</u>	<u>Notes</u>
B-seam dewatering #2	Notes	11.35	7.29			TR70+MR169+MR170 = 11.35 ac.
						7.49 acres total disturbed through 2017
310117-2	MR171	0.30	0.30	0.3	0.00	Plugged
310117-3	MR171	0.44	0.44	0.3	0.14	Not drilled
310117-4	MR171	0.43	0.43	0.3	0.13	Plugged
310118-7	MR171	0.49	0.49	0.3	0.19	Plugged
310118-8	MR171	0.73	0.73	0.3	0.43	Plugged
310118-9	MR171	0.69	0.39	0.3	0.39	Road only
310118-10	MR171	0.43	0.43	0.3	0.13	Plugged
310120-16	MR171	0.54	0.54	0.3	0.24	Plugged
310120-17	MR171	0.30	0.30	0.3	0.00	Plugged
310120-18	MR171	0.38	0.38	0.3	0.08	Not drilled
310120-19	MR171	0.30	0.00	0.3	0.00	Not constructed
310120-20	MR171	0.42	0.42	0.3	0.12	Plugged
310122-9 (remove)	MR171	-0.30		-0.3	0.00	from MR167
310123-2	MR171	0.00	0.00	0	0.00	Not constructed
310126-13	MR171	0.30	0.00	0.3	0.00	Not constructed
310126-14	MR171	0.59	0.00	0.3	0.29	Not constructed
N13-11	MR171	0.30	0.30	0.3	0.00	
N13-21	MR171	0.59	0.59	0.3	0.29	
N13-33	MR171	0.30	0.30	0.3	0.00	
N13-47	MR171	0.39	0.39	0.3	0.09	
N13-59	MR171	0.51	0.51	0.3	0.21	
LWB15-1	MR171	0.46	0.46	0.3	0.16	
LWB15-2	MR171	0.30	0.30	0.3	0.00	
LWB15-3	MR171	0.35	0.35	0.3	0.05	
LWB15-4	MR171	0.33	0.33	0.3	0.03	
LWB15-5	MR171	0.30	0.30	0.3	0.00	
RS-13L	MR171	0.60	0.60	0.6	0.00	
<b>TOTAL</b>		<b>21.82</b>	<b>16.57</b>			
SH-4 test pits	MR169	1.00	0.20			2016 disturbance converted to LTMRF
<b>Long-term mining or reclamation facilities (LTMRF)</b>				<b>8.09</b>	Total LTMRF	

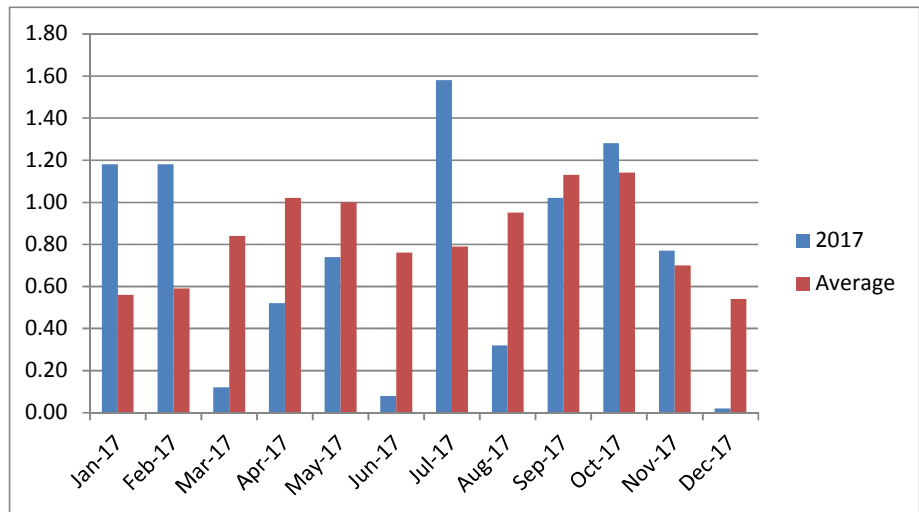
### 2017 RECLAMATION

<u>Site</u>	<u>Seeded Acres</u>	<u>Graded Acres</u>	<u>Topsoiled Acres</u>	<u>Pad Acres</u>	<u>Road Acres</u>	<u>Road Length</u>	<u>Notes</u>
No permanent reclamation in 2017. Only interim reclamation of firelines and dewatering pond area.							
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>	

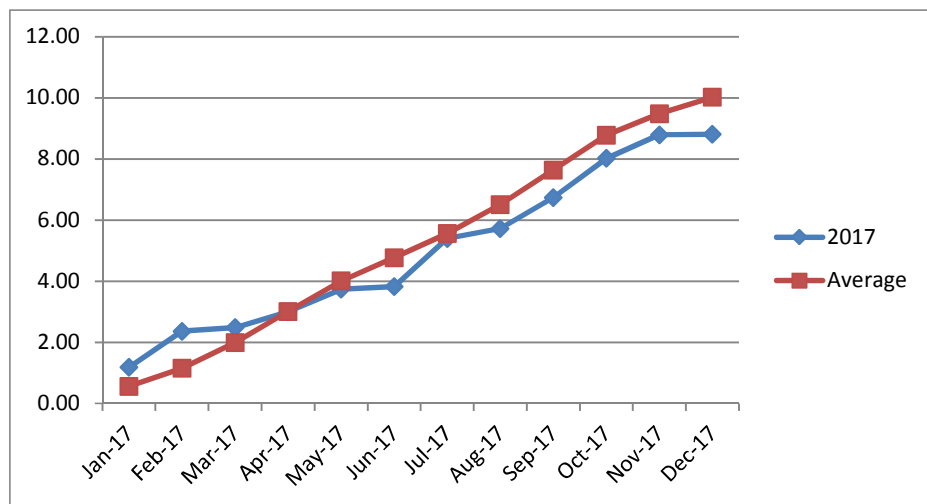
### Total number of acres re-seeded

	<u>Total</u>	<u>10 years or less</u>	<u>Over 10 years</u>
Drill sites	98.14	42.99	55.15
Laydown areas	32.34	0	32.34
East Portal	2.86	0	2.86
RP #1 + 0.5 Haul Rd.	14.50	0	14.50
Halandras Landfill	11.30	0	11.30
Other	3.60	0	3.60
<b>TOTAL</b>	<b>162.74</b>	<b>42.99</b>	<b>119.75</b>

	Precip Inches	Average
Jan-17	1.18	0.56
Feb-17	1.18	0.59
Mar-17	0.12	0.84
Apr-17	0.52	1.02
May-17	0.74	1.00
Jun-17	0.08	0.76
Jul-17	1.58	0.79
Aug-17	0.32	0.95
Sep-17	1.02	1.13
Oct-17	1.28	1.14
Nov-17	0.77	0.70
Dec-17	0.02	0.54
<b>TOTAL</b>	<b>8.81</b>	<b>10.02</b>



	Cumulative Totals	
	2017	Average
Jan-17	1.18	0.56
Feb-17	2.36	1.15
Mar-17	2.48	1.99
Apr-17	3.00	3.01
May-17	3.74	4.01
Jun-17	3.82	4.77
Jul-17	5.40	5.56
Aug-17	5.72	6.51
Sep-17	6.74	7.64
Oct-17	8.02	8.78
Nov-17	8.79	9.48
Dec-17	<b>8.81</b>	<b>10.02</b>



Dec 1-2 2017

Granite Seed - Denver  
From 490 East 76th Ave., Unit A  
Denver, CO 80229

Mix Name Interim/Drill/Roads

3-33342

Mix # 183170

Interim/Drill/Roads

% Pure	Common Name	Variety	G + D or H	Origin
14.17	WESTERN WHEAT GRASS	Rosana	91 + 0 = 91	MT
13.30	SLENDER WHEAT GRASS	Pryor	97 + 0 = 97	CAN
11.12	SALT BUSH, FOURWING	VNS	58 -TZ	NM
8.06	SALT BUSH, SHADSCALE	VNS	20 -TZ	UT
6.72	WILDRYE, RUSSIAN	Swift	92 + 4 = 96	CAN
5.15	SIBERIAN WHEAT GRASS	Vavilov II	94 + 0 = 94	WA
4.99	CRESTED WHEAT GRASS	Nordan	97 + 0 = 97	MT
3.47	BLUEBUNCH, WHEAT GRASS	Goldar	93 -TZ	WA
3.47	PUBESCENT WHEAT GRASS	Luna	93 + 0 = 93	MT
3.32	THICKSPIKE WHEAT GRASS	Critana	97 + 0 = 97	MT
3.32	BLUEBUNCH, WHEAT GRASS BEARDLESS	Whitmar	97 -TZ	WA
3.26	MILKVETCH, CICER	Lutana	99 -TZ	MT
2.04	WILDRYE, CANADA	Mandan	95 -TZ	MT
2.04	WILDRYE, GREAT BASIN	Trailhead	81 + 14 = 95	MT
1.97	GREEN NEEDLEGRASS	Loderm	2 + 96 = 98	MT
1.52	BLUE FLAX	Appar	58 + 39 = 97	WA
1.32	INDIAN RICEGRASS	Rimrock	98 + 0 = 98	WA
0.76	FESCUE, SHEEP	Azure	85 + 0 = 85	WA
0.71	BLUEGRASS, CANBY	Canbar	24 + 67 = 91	ID
0.69	PRAIRIE JUNEGRASS	VNS	93 -TZ	WA
0.68	BOTTLEBRUSH SQUIRRELTAIL	Wapiti	95 -TZ	CO
0.67	BLUEGRASS, SANBERG	UP/Colorado Plateau	64 + 32 = 96	WA
0.42	SAGEBRUSH, WYOMING BIG	VNS	77 -TZ	ID
0.37	PENSTEMON, PALMER	VNS	88 -TZ	UT
0.35	ALKALI SACATON	VNS	40 + 51 = 91	OK
0.34	YARROW, WESTERN	Eagle	94 -TZ	WA

0.00 Other Crop

Date Tested: 22-Dec-16

0.06 Inert Matter

Hard Seed: 0.04

0.00 Weed Seed

Noxious Weed: NONE FOUND

Net Weight

24.50 Lbs PLS

31.01 Lbs Bulk

Coverage: 1.000 Acre

## NOTICE TO BUYER LIMITATIONS OF WARRANTIES AND REMEDIES

Crop yield and quality are dependent upon many factors beyond the control of the labeled seller and NO WARRANTY is made for crop yield and quality. The labeled seller warrants that all seed sold has been labeled as required under applicable state and federal seed law and that the seed conforms to the label description, within recognized tolerances. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE LABEL.

No claim shall be asserted against the labeled seller unless Buyer reports to the labeled seller within a reasonable period after discovery (not to exceed thirty days), any condition that might lead to a complaint. BUYER'S EXCLUSIVE REMEDY FOR ANY CLAIM OR LOSS RESULTING FROM BREACH OF WARRANTY, BREACH OF CONTRACT OR NEGLIGENCE (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES) SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE.

By acceptance of the seed, Buyer agrees the terms and conditions stated above are a benefit to the bargain and constitute the entire agreement between Buyer and the labeled seller. Buyer shall return the original unopened seed package to the labeled seller within twenty days of receipt for a refund of the purchase price if not accepted under these terms.

## NOTICE: REQUIRED ARBITRATION / CONCILIATION / MEDIATION

The seed laws of several states including Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Minnesota, Mississippi, Montana, North Dakota, South Carolina (Section 46-21-260), South Dakota, Texas and Washington require arbitration, conciliation or mediation of disputes involving alleged defective seed before certain legal actions may be maintained against a seller. North Carolina offers an alternative to court action that allows claims to be investigated and heard before the Special Seed Board. A complaint (sworn for AR, CO, FL, IL, IN, MN, MS, MT, NC, SC, TX, WA; signed only, CA, GA, ID, ND, SD) must be filed with the Department of Agriculture or Seed Commissioner (IN) or State Plant Board (AR) or Commissioner of Agriculture

## PLANTING SPECIFICATION SHEET

SITE DESCRIPTION AND LOCATION B-seam dewatering #2

PLANTING DATE 12-02-2017

SEED APPLICATION METHOD: Drill \_\_\_\_\_, Broadcast ATV

MULCH TREATMENT NA

FERTILIZER TREATMENT NA

SUMMER FALLOW TECHNIQUE harrow

### NOTES ON:

SURFACE PREPARATION

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FENCING Yes

OTHER REMARKS:

SEED MIX USED (*Attach seed tags and provide rates and other details below*)  
Interim & Drill Roads Fall 2017 as per tag.

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SPECIAL TREATMENTS

OTHER NOTES (moisture conditions, temp., contractor used, type of equip., problems encountered, problems anticipated, source for mulch, soils, seedbed condition, weeds present, weeds on topsoil stockpile used, etc.)

Area seeded this spring. Some weak seedlings noted. Entire area reseeded.

## PLANTING SPECIFICATION SHEET

SITE DESCRIPTION AND LOCATION Area to west of prior disturbance west of Slot Storage. Topsoil stockpile "TS4" SW of railroad loop.

PLANTING DATE 12-01-2017

SEED APPLICATION METHOD: Drill \_\_\_\_\_, Broadcast ATV

MULCH TREATMENT NA

FERTILIZER TREATMENT NA

SUMMER FALLOW TECHNIQUE harrow

### NOTES ON:

SURFACE PREPARATION

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FENCING None

OTHER REMARKS:

SEED MIX USED (*Attach seed tags and provide rates and other details below*)  
Interim & Drill Roads Fall 2017 as per tag. Added Antelope bitterbrush and Sand dropseed for sandy areas.

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### SPECIAL TREATMENTS

OTHER NOTES (moisture conditions, temp., contractor used, type of equip., problems encountered, problems anticipated, source for mulch, soils, seedbed condition, weeds present, weeds on topsoil stockpile used, etc.)

Also seeded some of the undisturbed burn area. Primarily concentrated on sandy areas with no sign of significant perennial recovery.

## PLANTING SPECIFICATION SHEET

SITE DESCRIPTION AND LOCATION Area to west of Slot Storage where fire line was cut on prior disturbance.

PLANTING DATE 12-02-2017

SEED APPLICATION METHOD: Drill \_\_\_\_\_, Broadcast ATV

MULCH TREATMENT NA

FERTILIZER TREATMENT NA

SUMMER FALLOW TECHNIQUE harrow

### NOTES ON:

SURFACE PREPARATION Drug with harrow while seeding.

FENCING None

OTHER REMARKS:

SEED MIX USED (*Attach seed tags and provide rates and other details below*)  
Interim & Drill Roads Fall 2017 as per tag.

### SPECIAL TREATMENTS

OTHER NOTES (moisture conditions, temp., contractor used, type of equip., problems encountered, problems anticipated, source for mulch, soils, seedbed condition, weeds present, weeds on topsoil stockpile used, etc.)



## **2017 Revegetation Survey**

### **Introduction**

Visual surveys of the referenced sites were made. Each site was walked or ridden with an ATV to assess the site. Observations were then recorded on an inspection form for future reference (see Appendix). The intent of the inspections was to:

1. Assess the effectiveness of past revegetation practices.
2. Identify potential problems that exist that may warrant further attention.
3. Provide insight to future revegetation efforts.
4. Provide information to help develop strategies to correct potential deficiencies.

During 2017 we saw initially a wetter than normal winter turning to a dry spring. Dry conditions continued until July when we received twice the normal precipitation. August was dry followed by a return to near normal precipitation. Overall, 2017 had below average precipitation with 8.81 inches compared to the average annual precipitation of 10.02 inches.

No storm events of unusually high intensity were noted.

Cheatgrass was moderate with a dry spring causing early maturation.

Moisture carry over from the 2016 helped produce moderate seedling establishment and growth in 2017. Generally drier conditions the remainder of the year may adversely impact vegetation in 2018.

### **Fall 2016 Reclamation**

The first growing season reclamation did very well. We saw good seedling establishment and vigor from a diverse array of species. Some perennial species were even able to produce seed their first year.

### **2015 and Spring 2016 Drill Site Reclamation**

These sites generally showed good seedling establishment. Cheatgrass were an issue on a few sites but the perennial vegetation continues to mature with generally good densities.

Pad site 310122-5 is located on very dense clay. Seedling establishment is not as good as other sites of this era with weed problems involving halogeton and cheatgrass. Reseeding may be necessary.

### **2014 Drill Site Reclamation and B-seam Dewatering Expansion Area**

These sites generally showed good seedling establishment. Cheatgrass continued to be an issue on some sites where the adjacent undisturbed ground is dominated by this weed. However, the perennial vegetation continues to mature with generally good densities.

Erosion/sedimentation was not an issue on any of the sites. The surface roughness created during reclamation adequately retained precipitation and sediment on the sites.

### **2017 Dead Dog Fire**

The Dead Dog Fire started on June 11<sup>th</sup> during a period of high winds and hot dry temperatures. It rapidly spread due to winds gusting to 70 mph. The north western portion of the mine permit area was burned as a result. Both chemical and mechanical fire lines were constructed to protect the overland belts and railroad structures.

The fast moving nature of this fire consumed mainly cheatgrass and sagebrush. Reclaimed areas generally faired quite well with limited burning of perennial vegetation. Often the cheatgrass would be completely consumed while the perennial grasses were just singed.

Dense sagebrush and juniper on the native lands didn't fare as well. Neither of these species is adapted to survive fires and burned aggressively. Many areas had little perennial understory and may lead to hydrologic, sedimentation, and weed issues in the future.

The BLM plans to reseed much of the area if funds are found to apply the seed.

### **Other Observations**

Concerns were previously expressed over the potential for forage kochia spreading and becoming more aggressive than desired. Observations in 2017 indicate that this species continues to behaving well. It is showing little signs of spreading beyond the intended sites and does not appear to be forcing other perennial vegetation out. It is, however, competing well with cheatgrass and has become established on Refuse Pit #1 where cheatgrass has been a long term problem. It has also established well on the very severe south-facing slopes at the East Portal area.

### **Recommendations**

The reclaimed areas appear hydrologically stable and generally in good condition. Cheatgrass and other annuals and winter annuals continues to be a cyclical problem impacting long term vegetation success at many of the sites. Further investigation into means for long term control of cheatgrass is warranted not only for this mine site but for many lands throughout the arid West. In general, the reclaimed sites are in better condition that the adjacent native vegetation.

### **Anticipated Reclamation Activities for 2018**

Final and interim reclamation will be limited to any new disturbances that occur during the year and exploration sites remaining from 2017. The 2017 exploration sites will be reclaimed in the spring.

## **APPENDIX**

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: RS-116

Inspected By: SM

Location: \_\_\_\_\_

Year Reclaimed: <sup>Full</sup> 2016

Seed Mix: 2016 Interim / Well Fed

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agropyrum</u>	<u>Artichoke</u>
<u>Agrimonia</u>	<u>Flax</u>
<u>Agrostis</u>	<u>Aster</u>
<u>Agropyrum</u>	<u>Aster</u>
	<u>Yarrow</u>

Weed Problems: Brite Russian thistle

General Health: good

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17 Site/Map #: N10-62, RS-6 Inspected By: SP

Location: \_\_\_\_\_

Year Reclaimed: Fall 2016 Seed Mix: 2016

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Ag sm</u>	<u>dotr</u>
<u>Agdc</u>	<u>yellow</u>
<u>Ag sp</u>	<u>Flap</u>
<u>Ag tr</u>	

Weed Problems: some BtE Russian Thistle

General Health: good

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

N10-38

Date: 6-27-17

Site/Map #: LWB13-3

Inspected By: SA

Location: \_\_\_\_\_

Year Reclaimed: 2016

Seed Mix: 2016 Interim/Fall

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agde

Artr (heavy)

Agss

Aice

Agin

Yarrow

Flap

Weed Problems: Brite

General Health: good-excellent

Erosion/Site Stabilization: stable

Notes: make to native

Expell Artr

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017

Site/Map #: 310122-5

Inspected By: SW

Location: \_\_\_\_\_

Year Reclaimed: Spring 2016

Seed Mix: 2016 Interior/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agde

Artu

Agsm

Atco

Agsp

Weed Problems: Brte, halcyon

General Health: Fair, dense soils, may need to reseed

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated



# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017

Site/Map #: 310122-8

Inspected By: Sch

Location: \_\_\_\_\_

Year Reclaimed: Spring 2016

Seed Mix: 2016 Interior/Rail

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agde</u>	<u>Artr</u>
<u>Agsm</u>	
<u>Elju</u>	
<u>Agtr</u>	

Weed Problems: Brte

General Health: Good - young

Erosion/Site Stabilization: stable

Notes: - on steepness dominates flat

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017

Site/Map #: 310121-15

Inspected By: SM

Location: \_\_\_\_\_

Year Reclaimed: 2015

Seed Mix: 2015 Interior/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agsm

Artr

Agde

Atca

Agsp

Yarrow

Elje

flap

Agtr

Weed Problems: good

General Health: Excellent

Erosion/Site Stabilization: good

Notes: 20% burn

- need new marker - current marker has  
to be buried

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: 310121-17

Inspected By: SPV

Location: \_\_\_\_\_

Year Reclaimed: 2015

Seed Mix: 2015 Interm/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Ag sm</u>	<u>Ar tr</u>
<u>Ag de</u>	<u>At la</u>
<u>Ag tr</u>	<u>At co</u>
<u>Ag sp</u>	<u>LL F/la</u>
	<u>Fla rd</u>

Weed Problems: good

General Health: Excellent

Erosion/Site Stabilization: good

Notes: Need to cut grass

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017

Site/Map #: 310121-19

Inspected By: JN

Location: \_\_\_\_\_

Year Reclaimed: 2015

Seed Mix: 2015 Intermix/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agsm

Atr

Agdr

Atco

Atca

Flax

Weed Problems: good

General Health: Excellent

Erosion/Site Stabilization: stable

Notes: - need to find markers

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: 31621-20

Inspected By: SL

Location: \_\_\_\_\_

Year Reclaimed: 2015

Seed Mix: 2015 Interim/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agsm

Yarrow

Agde

Flax

Elca

Artr

Agsp

Atce

Artr

Weed Problems: good

General Health: Exc

Erosion/Site Stabilization: good

Notes: 30% Lumn

- need to find markers

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: 310121-14

Inspected By: EM

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: 2014 Intermix/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agro

Artr

Agsm

Asci

Agtr

Flax

Weed Problems: some Bort

General Health: Good

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

## RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017 Site/Map #: 310128-13 Inspected By: SN

Location: \_\_\_\_\_

Year Reclaimed: 2014 Seed Mix: 2014 Exterior/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agsm</u>	<u>Atco</u>
<u>Agtr</u>	<u>Atca</u>
	<u>Artr</u>

Weed Problems: some Barte

General Health: good

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-2017

Site/Map #: 310128-14

Inspected By: SA

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: 2014 Intersq/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agsm

globe mallow

Agtr

yellow

Elje

flax

Agde

Agtr

Weed Problems: Brite willow problem

General Health: good

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated



# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: LUBI2-1

Inspected By: SM

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: 2014 Interior/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agdc

Artr

Agsw

Atca

Agsp

Flax

Agin

globemuller

Agtr

Orhy

Weed Problems: some Russian Thistles

General Health: good / excellent

Erosion/Site Stabilization: \_\_\_\_\_

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17 Site/Map #: LW312-2 N2-38 Inspected By: SW

Location: \_\_\_\_\_

Year Reclaimed: 2014 Seed Mix: 2014 Interm/drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agde</u>	<u>Artr</u>
<u>Agsm</u>	<u>Atca</u>
<u>Agtr</u>	<u>Flax</u>
<u>Feov</u>	<u>Yarrow</u>
	<u>globeamallow</u>

Weed Problems: some Brte

General Health: good/sfc

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17 Site/Map #: LWSB12-3  
N9-2E Inspected By: JA

Location: \_\_\_\_\_

Year Reclaimed: 2014 Seed Mix: 2014 Interior/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agdc</u>	<u>Artr</u>
<u>Agsm</u>	<u>Flax</u>
<u>Agsp</u>	<u>penstemon</u>
<u>Artr</u>	<u>yellow</u>
<u>Feov</u>	

Weed Problems: some Brte

General Health: excellent

Erosion/Site Stabilization: stable

Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated  
Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: LW1312-4

Inspected By: SK

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: 2014 Interim/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agde

Artr

Agsm

globe mallow

Weed Problems:

Brt2 / Purple milkweed

General Health:

fair / good

Erosion/Site Stabilization:

Stable

Notes:

adjacent native area or similar  
weed problem

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: <sup>N9-12</sup>LLB12-5

Inspected By: see

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: 2014 Interim/Drill

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

<u>Agde</u>	<u>Flax</u>
<u>Agm</u>	<u>Arma</u>
<u>Agtr</u>	

Weed Problems: Brt e

General Health: good

Erosion/Site Stabilization: stable

Notes: still problems w/ Brt e

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

# RECLAMATION VISUAL INSPECTION FORM

Date: 6-27-17

Site/Map #: NG-57

Inspected By: SM

Location: \_\_\_\_\_

Year Reclaimed: 2014

Seed Mix: \_\_\_\_\_

Dominant Vegetation: (include grasses, forbs, shrubs, warm season grasses, etc. by spp.)

Agave

Artis

Agave

Atca

Elju

globemallow

Agin

Flop

Yarrow

Weed Problems: some Breximble mustard

General Health: good

Erosion/Site Stabilization: stable

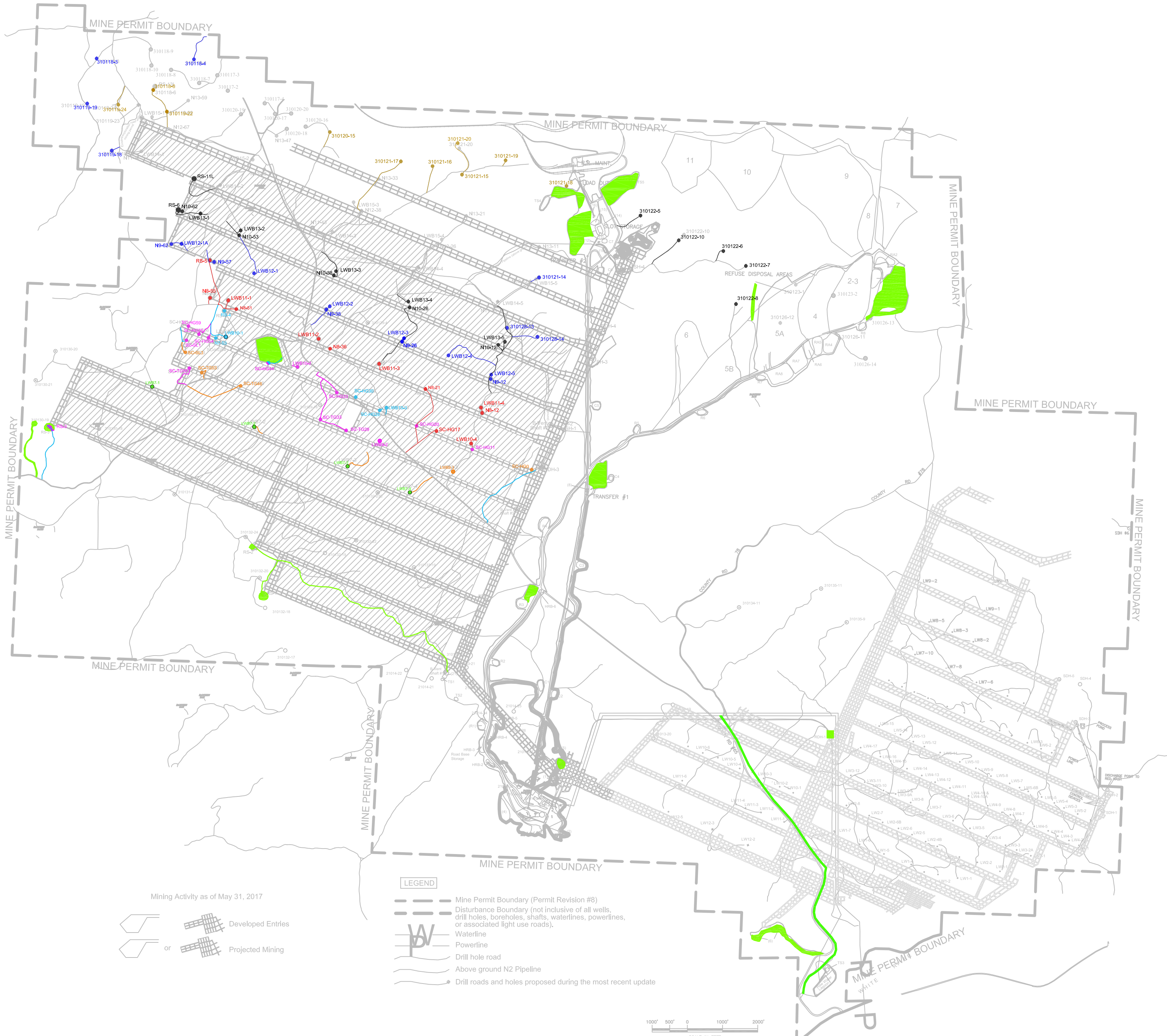
Notes: \_\_\_\_\_

Recommendations: \_\_\_\_\_

SAE Designation: Drill Hole: ☐ Typical ☐ Flat ☐ Well Vegetated

Soil Pile: ☐ Typical ☐ Large ☐ Well Vegetated

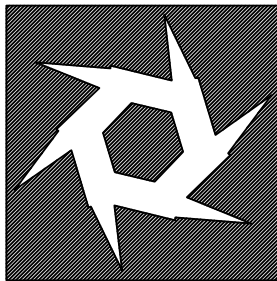




Permanent Reclamation

- |                    |      |      |
|--------------------|------|------|
| Various - Pre-2007 | 2010 | 2015 |
| 2008               | 2012 | 2016 |
| 2009               | 2014 |      |

NOTE: Most drill sites and associated roads reclaimed on various dates from 1992 to present.



BLUE MOUNTAIN ENERGY, INC.			
DESERADO MINE		RANGELY, COLORADO	
2017 Annual Reclamation Map			
Dwg. by: SCW		Dwg. File Name: Reclamation-years.dwg	
Chk. by:		Appr. by:	
Scale: 1" = 2000'		Date: 2-15-2018	