# OXBOW MINING, LLC



3737 Hwy 133 P.O. Box 535, Somerset, Colorado 81434 USA Tel (970)929-5122 Fax (970) 929-5177

January 30, 2020

Mr. Leigh Simmons
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re:

Oxbow Mining, LLC., Permit C-1981-022

2019 Annual Reclamation Report

Dear Mr. Simmons:

The following information is submitted as the 2019 Annual Reclamation Report for the Oxbow Mining, LLC, Sanborn Creek and Elk Creek Mines. The contents of this report are submitted to satisfy the requirements of CDMG Rule 2.04.13 Annual Reclamation Reports. Also included is an executed *CDRMS*, *Annual Reclamation Report for Calendar Year 2019* form.

Location and numbers of acres disturbed during 2019: 0.00 acres

Location and number of acres of areas backfilled and graded during 2019: 0.00 acres

Basically, all that remains to complete demolition, backfill and grading for the property are the dams that remain at the bottom of the refuse piles, (Pond C and Pond E), and the reclamation of the West Valley II lower access road. This activity is anticipated to occur after Phase 2 surety release of the refuse piles is achieved.

Surety Release 01 (SL-01) for the Elk Creek facilities area was completed during 2019. SL-01 included 19.4 acres of phase 1 bond release in areas known as the Middle and Lower Pads. A 1.3 acre area composed of a two foot barrier surrounding the reclaimed Elk Creek was not included in the release, but will be eligible for phase 3 release in 2028.

#### Seed Purchases:

No seed was purchased during 2019. Minimal "supplemental" spreading of Oxbow Table 3 seed mix occurred on the Middle and Lower Pad areas during 2019. No seed mix was spread on USFS lands. No seed mix was spread on BLM lands.

#### Weed Control

Scattered thistles, hounds tongue, white top and other noxious weeds were sprayed by Oxbow employees. *Curtail* and *Escort* herbicides were used in accordance with the labels. Areas sprayed included general disturbance areas such as road cuts, reclaimed areas, warehouse storage areas, pond out slopes, reclaimed borehole roads and borehole pad sites, etc.

### Rill and Gully Survey

The Lower Hubbard Creek site, the Bear Creek site, the reclaimed areas of the II West and West Valley fill coal refuse disposal area and East Yard coal refuse disposal area and the reclaimed degas wells sites, etc. were inspected for the formation of rills and gullies deeper than nine inches. No such gullies were encountered which would require follow-up repair and seeding.

### Reclamation Map

As in years past, included with this report is an updated: EXHIBIT 1 – SUMMARY OF DISTURBANCE/ SEEDED AREAS summarizing the OMLLC disturbance and reclaimed areas. It is implied that the areas noted as reclaimed include applicable backfilling, grading, topsoil spreading, and seeding activities.

Light use drill roads requested to remain un-reclaimed, are marked on EXHIBIT 1 as HR ROAD LEFT, with a yellow background. Acreages of locations marked as partially reclaimed are not included in seeded areas amounts.

Please contact me at 970-929-6034 if you have questions or need additional information.

Sincerely,

Doug A. Smith Chief Engineer

Attachments

Xc: Mike Ludlow (OMLLC)

Dory a. Smith

files

### Exhibit 1 - Summary of Disturbance/ Seeded Areas

### **DISTURBED AREAS** (Note 1)

Existing Facilities	Acres	<u>Status</u>
Temporary conveyor Elk Creek	0.30	Reclaimed
Rock dust site – Elk Creek	0.50	Existing
Elk Creek facilities area	39.00	Existing
Sanborn Creek mine, SC-1	4.10	Remains as industrial post mining use
West Valley Fill and haul road	12.90	Partially Reclaimed
Elk Creek mine surface facilities	24.20	Reclaimed some remains industrial
II West Coal Mine Waste Facility (initial)	3.33	Partially Reclaimed
Sanborn Creek Portal Borrow area	0.43	Reclaimed
subtotal	84.76	•
Satellite Facilities		
Upper Hubbard Creek	3.30	Existing
Lower Hubbard Creek	2.60	Reclaimed
Power line road, Hubbard Creek	0.7	Existing
Bear Creek fan area (U.S. Steel)	3	Reclaimed
Water treatment plant area	1.5	Existing
Sewage effluent absorption field	0.3	Existing
Substation No. 3 and ventilation shaft	1.6	Remains as industrial post mining use
Coal Gulch drill holes	0.4	Reclaimed
Power line road	17	Partially Reclaimed
Hubbard Fansite	3.2	Reclaimed
Bear Creek Fan and Shaft (2009)	2.3	Remains as industrial post mining use
subtotal	35.90	

### Degasification (Gob Vent Borehole) borehole sites and light use roads

Sanborn Creek Mine (#s 1-14)	6.10 Reclaimed
GVB-LW4-01 (1915' road and pad)	1.45 Reclaimed
GVB-LW3-01, GVB-LW4-03	
(4000' road and pads)	2.10 Reclaimed
GVB-LW3-02	0.54 Reclaimed
GVB-LW4-02	0.49 Reclaimed
Bear Creek Cutoff LU Road	2.10 Existing
GVB-LW6-02 (1600' road and pad)	0.93 Reclaimed
GVB-LW6-03 535' road and pad	0.63 Reclaimed
GVB-LW7-02 pad plus 600' road	0.73 Reclaimed
GVB-LW7-03	0.25 Reclaimed
GVB-LW7-04	0.20 Reclaimed
GVB-LW8-01	0.46 Reclaimed
GVB-LW8-02 pad plus 1425' road	1.41 Reclaimed
GVB-LW8-03	0.16 Reclaimed
GVB-LW8-04	0.14 Reclaimed

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GVB-LW9-01 pad plus 3500' road	1.70 Reclaimed
GVB-LW9-03 pad plus 132' road	0.40 Reclaimed
GVB-LW9-01B pad plus 5600' road	2.77 Reclaimed
GVB-LW9-02 pad	0.42 Reclaimed
GVB-LW9-04 pad	0.39 Reclaimed
GVB-LW9-05 pad plus 1300'road	1.15 Reclaimed
GVB-LW10-01 pad plus 1190' road	0.93 Reclaimed
GVB-LW10-02 pad	0.31 Reclaimed
GVB-LW10-03B C Pad	1.23 Reclaimed
GVB-LW10-04 pad	0.36 Reclaimed
GVB-LW10-05 pad plus 896' road	0.79 Reclaimed HR ROAD LEFT
GVB-LW11-01A pad	0.33 Reclaimed
GVB-LW11-01B pad	0.15 Reclaimed
GVB-LW11-02 pad along road	0.43 Reclaimed
GVB-LW12-01 pad plus 709' road	0.79 Reclaimed
GVB-LW12-02 pad along road	0.00 Reclaimed
GVB-LW12-03 pad along road	0.50 Reclaimed
GVB-LW12-03 - 2013' road	0.83 Reclaimed HR ROAD LEFT
GVB-LW11-03 pad along road	0.22 Reclaimed
GVB-LW15-02,01A, 01B pad	1.77 Reclaimed
GVB-LW15-03 pad + 5,500' road	3.89 Reclaimed
GVB-LW15-04 pad + 1,207' road	1.80 Reclaimed
GVB-LW15-05 pad + 2000' road	1.40 Reclaimed
GVB-LW15-06 pad + 830' road	1.20 Reclaimed
GVB-LW15-07 pad + 1,500' road	1.25 Reclaimed
GVB-LW15-08 pad + 200' road	0.91 Reclaimed
GVB-LW16-01,B,C,D, E (2 pads + 790' road) (lower pad)	2.54 Reclaimed HR ROAD LEFT
GVB-LW16-02 pad + 1,300'road	2.01 Reclaimed
GVB-LW16-03 pad + 333' road	1.54 Reclaimed
GVB-LW16-04 pad + 1100' road	1.98 Reclaimed HR ROAD LEFT
GVB-LW16-05 pad +1000'	1.50 Reclaimed HR ROAD LEFT
GVB-LW16-06 pad + 750' road	0.88 Reclaimed
GVB-LW16-07 pad + 600'road	0.83 Reclaimed
GVB-LW16-08 pad + 670' road	0.64 Reclaimed
GVB-LW17-01AB pad + 319'road	1.09 Reclaimed
GVB-LW17-01C pad	0.30 Reclaimed
GVB-LW17-02, 02B, 02C pad + 35'road	0.72 Reclaimed
GVB-LW17-03 pad + 180'road	0.86 Reclaimed
GVB-LW17-07 pad	0.43 Reclaimed
GVB-LW18-01A pilot -pad+1,500'	1.31 Reclaimed
GVB-LW18-03 pilot- pad + 569'	0.62 Reclaimed HR ROAD LEFT
GVB-LW18-07 pad + 1900'road	0.78 Reclaimed
GVB-LW18-08 pad + 600' road	0.90 Reclaimed
GVB-LW18-09 + 1600' road	1.65 Reclaimed
GVB-LW19-01A pilot- pad+ 440' (see HGBMP)	1.32 Reclaimed HR ROAD LEFT
GVB-LW19-03 pilot- pad+537' road	1.35 Reclaimed
GVB-LW19-07 + road 525'	1.00 Reclaimed

GVB-LW19-08 + road 1833'		1.89 Reclaimed
GVB-LW19-09 + road 755'		1.27 Reclaimed
VB-1S, B-1S, pad +800' road		0.43 Reclaimed
ECM-10-68 pad + 500' road		0.39 Reclaimed
ECM-10-69 pad + 770' road		0.46 Reclaimed
ECM-10-70 pad		0.25 Reclaimed
ECM-10-71 pad + 420' road		0.37 Reclaimed
ECM-10-72 pad + 370' road		0.35 Reclaimed
ECM-10-73 pad + 700' road		0.44 Reclaimed
ECM-10-74 pad + 1,360' road		0.62 Reclaimed
ECM-10-75 pad + 475' road		0.38 Reclaimed
ECM-10-76 pad + 225' road		0.31 Reclaimed
GVB-LW17-04, 04B, 04C		0.96 Reclaimed
GVB-LW17-05, 05B pad + 700' road		1.50 Reclaimed HR ROAD LEFT
GVB-LW17-06, 06B, 06C pad + 757'roa	ıd	1.17 Reclaimed
GVB-LW17-08, 08B pad + 1477'road		1.22 Reclaimed
GVB-LW17-09 pad + 517'road		1.19 Reclaimed
GVB - LW18-01B		0.65 Reclaimed HR ROAD LEFT
GVB-LW18-02 pad + 146 road		0.99 Reclaimed
GVB-LW18-02B + 417' road		0.97 Reclaimed HR ROAD LEFT
GVB-LW18-03B + 297' road		0.88 Reclaimed HR ROAD LEFT
GVB-LW18-04		0.54 Reclaimed
GVB-LW18- 04B +78' road		1.03 Reclaimed
GVB-LW18-04C + 371' road		0.76 Reclaimed HR ROAD LEFT
GVB-LW18-05 + 328' road		1.24 Reclaimed HR ROAD LEFT
GVB-LW18-06 + 100' road		0.75 Reclaimed
GVB-LW19-01B +116' road		0.74 Reclaimed
GVB-LW19-01C on road		0.69 Reclaimed
GVB-LW19-01D on road		0.90 Reclaimed
GVB-LW19-02 + 275' road		1.14 Reclaimed HR ROAD LEFT
GVB-LW19-02B + 450' road		0.84 Reclaimed HR ROAD LEFT
GVB-LW19-03B + 49' road		1.05 Reclaimed
GVB-LW19-04 on road		0.70 Reclaimed
GVB-LW19-04B + 52' road		1.13 Reclaimed HR ROAD LEFT
GVB-LW19-05 + 222' road		0.96 Reclaimed HR ROAD LEFT
GVB-LW19-06 + 1423' road		1.42 Reclaimed
TGBMPA +556' road		1.10 Reclaimed HR ROAD LEFT
HGBMP + (19-01A location)		0.00 Reclaimed HR ROAD LEFT
HGA		1.54 Reclaimed
TGA		0.76 Reclaimed
5B		0.79 Reclaimed
Dewater #1,#2 5082' road only		2.10 Reclaimed
Dewater #1,#2 pad only		1.60 Reclaimed
	subtotal	106.33

**Total Disturbance** 

226.99 acres

### SEEDED AREAS (Note 1)

<u>Area</u>			Acres Ye	ear Seeded
1. Lower H	ubbard Creek(Somerset Mine)		2.6	1996
	ek fan area (Somerset Mine)		3	1996
3. Power lin		17 ACRES	pai	rtially reclaimed
5. East Yard	d coal mine waste (gob) pile		1.1 200	02 and 2003
6. West Val			0.6	2002
7. West Val	lley Fill		0.53	2003
8. A-Gulch			5	2003
9. Sanborn	Creek Portal area		2.34	2003
10. GVB-LW	V3-01, GVB-LW4-03			
(road and page	ds)		2.1	2005
11. GVB-LV	W3-02		0.54	2005
12. GVB-LV	W4-01 (road and pad)		1.45	2005
13. GVB-LV	V4-02		0.49	2005
14. GVB-LV	W6-02 (road and pad)		0.93	2006
15. GVB-LV	V6-03 pad plus 535' road		0.63	2006
16. GVB-LV	V7-02 pad plus 600' road		0.73	2006
17. GVB-LV	V8-01		0.46 200	06 and 2007
18. GVB-LV	V7-03 pad		0.25	2007
19. GVB-LV	V12-01 (pad and 709' road)		0.79	2007
20. GVB-LV	V11-01B		0.15	2007
21. GVB-LV	V10-01 pad plus 1190' road		0.93	2007
22. TC1 and	TC2 wells		3	2007
23. GVB-LV	W9-01 pad + 3500'road		1.7	2008
24. GVB-LV	W11-01A pad		0.33	2008
25. GVB-LV	W12—03 pad		0.5	2008
26. GVB-LV	W9-01B pad +5600' road		2.77	2009
27. GVB-LV	W10-02 pad		0.31	2009
28. GVB-LV	W8-02 1,425' road only		1.41	2009
29. GVB-LV	W10-03BC pad		1.23	2009
30. GVB-LV	W9-03 pad		0.40	2009
31. II West	up to 6,100'		0.37	2009
32. GVB-LV	W8-02 pad and 1425' road		1.41	2010
33 GVB-LV	W8-03 pad only		0.16	2010
34. GVB-LV	W9-04 pad		0.39	2010
35. GVB-LV	W10-04 pad		0.36	2010
36. GVB-LV	W11-02 pad on road		0.43	2010
37. GVB-LV	W12-02 pad on road		0.00	2010
	01, B-1S-02 pad + 800' road		0.43	2010
39. II West -	- 6100' to 6113'		0.10	2010
40. ECM-10	-68 pad + 500' road		0.39	2010

### **OXBOW MINING, LLC**

### **2019 ARR**

41.	ECM-10-69 pad + 770' road	0.46	2010
42.	ECM-10-70 pad	0.25	2010
43.	ECM-10-71 pad + 420' road	0.37	2010
44.	ECM-10-72 pad + 370' road	0.35	2010
45.	ECM-10-73 pad + 700' road	0.44	2010
46.	ECM-10-74 pad + 1,360' road	0.25	2010
47.	ECM-10-75 pad + 475' road	0.38	2010
48.	ECM-10-76 pad + 225' road	0.31	2010
49.	GVB-15-03 pad + 5500' road	3.89	2011
50.	GVB-15-04 pad + 1,207' road	1.80	2011
51.	GVB-15-05 pad + 2,000' road	1.40	2011
52.	GVB-15-06 pad + 830' road	1.20	2011
53.	GVB-15-07 pad + 1,500' road	1.25	2011
55.	GVB-16-02, 02B, 02C pad +1,300' road	2.01	2011
56.	GVB-16-03 pad + 333' road	1.54	2011
57.	GVB-16-04, pad + 1100' road	1.98	2011 HR ROAD LEFT
GVE	3-LW16-05 pad +1000'	1.50	2011 HR ROAD LEFT
58.	GVB-16-06 pad + 750' road	0.88	2011
59.	GVB-16-07, 07B pad + 600' road	0.83	2011
60.	GVB-18-07 pad	0.78	2011
61.	Hubbard Fansite	3.20	2011
62.	GVB-LW18-01A pad + 1500' road	1.31	2011
63.	II West - 6113' to 6122'	0.10	2011
64.	GVB-LW17-01C pad	0.30	2011
65.	GVB-LW19-03 pilot- pad+537' road	1.35	2011
66.	II West - 6122' to 6128'	0.10	2012
67.	GVB-LW15-02,01A, 01B pad	1.77	2012
68.	GVB-LW15-08 pad + 200' road	0.91	2012
69.	GVB-LW17-01AB pad + 319'road	1.09	2012
	GVB-LW17-03 pad + 500'road	0.86	2012
71.	GVB-LW17-04, 04B, 04C	0.96	2012
72.	GVB-LW17-09 pad only	0.98	2012
73.	GVB-LW9-05 + 1300' road	1.15	2012
	-LW10-05 pad plus 896' road	0.79	2012 HR ROAD LEFT
	-LW12-03 - 2013' road	0.83	2012 HR ROAD LEFT
	-LW11-03 pad along road	0.22	2012
	II West - 6128' to 6141'	0.20	2013
	-LW18-07 pad + 1900'road	0.78	2016
	-LW18-08 pad + 600' road	0.90	2016
	-LW19-08 + road 1833'	1.89	2016
	ter #1,#2 5082' road only	2.10	2016
	ter #1,#2 pad only	1.60	2016
	egasification Boreholes (#s 1-14)	6.10	2017
	-LW7-04	0.20	2017
	-LW8-04	0.14	2017
	GVB-LW16-01,B,C,D, E (2 pads + 790' road) (lower r	2.54	2017 HR ROAD LEFT
GVB-	LW16-08 pad + 670' road	0.64	2017

### **OXBOW MINING, LLC**

### **2019 ARR**

	ZOIS ANN	
GVB-LW17-02, 02B, 02C pad + 35'road	0.72	2017
GVB-LW17-05, 05B pad + 700' road	1.50	2017 HR ROAD LEFT
GVB-LW17-06, 06B, 06C pad + 757'road	1.17	2017
GVB-LW17-07 pad	0.43	2017
GVB-LW17-08, 08B pad + 1477'road	1.22	2017
GVB-LW18-03 pilot- pad + 569'	0.62	2017
GVB-LW18-09 + 1600' road	1.65	2017 HR ROAD LEFT
GVB-LW19-01A pilot- pad+ 440' (see HGBMP)	1.32	2017
GVB-LW19-07 + road 525'	1.00	2017
GVB-LW19-09 + road 755'	1.27	2017
GVB-LW17-09 pad + 517'road	1.19	2017
GVB - LW18-01B	0.65	2017 HR ROAD LEFT
GVB-LW18-02 pad + 146 road	0.99	2017
GVB-LW18-02B + 417' road	0.97	2017 HR ROAD LEFT
GVB-LW18-03B + 297' road	0.88	2017 HR ROAD LEFT
GVB-LW18-04	0.54	2017
GVB-LW18- 04B +78' road	1.03	2017
GVB-LW18-04C + 371' road	0.76	2017 HR ROAD LEFT
GVB-LW18-05 + 328' road	1.24	2017 HR ROAD LEFT
GVB-LW18-06 + 100' road	0.75	2017
GVB-LW19-01B +116' road	0.74	2017 HR ROAD LEFT
GVB-LW19-01C on road	0.69	2017
GVB-LW19-01D on road	0.90	2017
GVB-LW19-02 + 275' road	1.14	2017 HR ROAD LEFT
GVB-LW19-02B + 450' road	0.84	2017 HR ROAD LEFT
GVB-LW19-03B + 49' road	1.05	2017
GVB-LW19-04 on road	0.70	2017
GVB-LW19-04B + 52' road	1.13	2017 HR ROAD LEFT
GVB-LW19-05 + 222' road	0.96	2017 HR ROAD LEFT
GVB-LW19-06 + 1423' road	1.42	2017
TGBMPA +556' road	1.10	2017 HR ROAD LEFT
HGBMP + (19-01A location)	0.00	2017 HR ROAD LEFT
HGA	1.54	2017
TGA	0.76	2017
5B	0.79	2017
Roads left @ land owners req. in 2017	-2.54	
Roads left @ land owners req. before 2017	-2.07	
Prior to 2018 Total Reclamation	124.24	

Upper Topsoil pile	1.40	2018
Middle Pad	5.40	2018
Lower Pad	15.00	2018
WVI Top	0.80	2018
WVI Topsoil pile	0.40	2018
WVII Upper Road	1.50	2018
WVII Top and Topsoil pile	3.10	2018

2018 Total Reclamation 27.60

**<u>Cumulative Total Reclamation</u>** 151.84

Note 1 - Disturbance and seeded area acreages were evaluated and adjusted after 2014 review of as-built roads and GVB drill pads.

yellow back ground denotes road left per land owners request (see MR108)

green background denotes reclaimed in 2018

Phase 1 (ac.) Ph. 2 (ac.) Ph. 3 (ac.)

19.4

SL-1

### Colorado Division of Reclamation, Mining and Safety

Annual Reclamation Report for Calendar Year - 2019

ELK CREEK MINE

C-1981-022

OXBOW MINING, LLC.

Mine Name

Permit Number

Permittee

P.O. BOX 535, SOMERSET, CO 81434

#### 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 identified on a map included with the report.

Land Catagoni	Last Year's Cumulative Total	This Cal	endar Year		Cumulative Total
Land Category	(from last year's ARR)	Acres Added (+)	Acres Subtracted (-)	Cumurative	Cumurative Total
Acreage in Active Mining Areas <sup>1</sup>	N/A			=	N/A

Land Catagoni	Last Year's Cumulative Total	This Calendar Year			Cumulative Total
Land Category	(from last year's ARR)	Acres Added (+)	Acres Subtracted (-)		Cumulative Total
Acres Disturbed <sup>2</sup>	226.9	0	0	=	226.9
Acres Backfilled and Graded	151.84	0	0	П	151.84
Acres Topsoiled	151.84	0	0	=	151.84

Acreage in Long-term	Last Year's Cumulative	This Calendar Year			Cumulative Total
Facilities <sup>3</sup>	Total (from last year's ARR)	Acres Added (+)	Acres Subtracted (-)		Cumulative Total
Non-Permanent Facilities	N/A			=	N/A
Permanent Facilities (permitted)	151.84	0	0	=	151.84
Totals	151.84			ш	151.84

Acres Seeded	Last Year's Cumulative Total	This Calendar Year			Cumulative Total
(permanent)			Acres Subtracted (-)		Cumulative rotal
9 Years and Less	121.69	0	6.49	=	115.2
10 Years and Greater	30.15	6.49	0	=	36.64
Totals	151.84			=	151.84

Bond Release	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			0 1
		Acres Added (+)	Acres Subtracted (-)		Cumulative Total
Phase I Released	0	19.4	0	=	19.4
Phase II Released	0			=	0
Phase III Released	0			=	0

<sup>&</sup>lt;sup>1</sup>Includes pits, topsoil stripped areas in advance of pits, and spoil not backfilled and graded

<sup>&</sup>lt;sup>2</sup>Surface Mine Acres Disturbed = B&G + Long-Term Facilities + Active Mining Areas; Underground Mine Acres Disturbed = B&G + Long-Term Facilities; Separately-permitted Loadouts = B&G + Long-Term Facilities

<sup>&</sup>lt;sup>3</sup>Includes haul, access and light-use 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; refuse piles and coal mine waste impoundments; head-of-hollow fills; valley fills; ventilation shafts and entryways; and non-coal waste disposal area (garbage dumps and coal combustion by-products disposal areas).