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Comment Letter Butte Priority Soils Operable Unit (BPSOU) Grove Gulch Sedimentation Bay 95% Remedial Design (dated September 22, 2023)

Nikia Greene

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8, MONTANA OFFICE**

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Ref: 8MO

November 3, 2023

Mr. Josh Bryson
Liability Manager
Atlantic Richfield Company
317 Anaconda Road
Butte, Montana 59701

**Re: Comment Letter Butte Priority Soils Operable Unit (BPSOU) Grove Gulch
Sedimentation Bay 95% Remedial Design (dated September 22, 2023)**

Dear Josh:

The U. S. Environmental Protection Agency (EPA), in consultation with the Montana Department of Environmental Quality (DEQ), has reviewed and is providing comments for the *Butte Priority Soils Operable Unit (BPSOU) Grove Gulch Sedimentation Bay 95% Remedial Design (dated September 22, 2023)*. Please incorporate these comments and submit a final design for EPA, in consultation with DEQ, for approval.

Construction QAPP

1. **Section 1.2, QAPP Scope, Purpose, and Schedule:** In previous comments, EPA requested that the QAPP be updated annually. AR has expressed reluctance to update the QAPP annually and has stated that the "...QAPP will only be updated as necessary and will be assumed to stay the same from year to year through the short duration of the project." However, it is stated in this section that the project was expected "...to extend through 2028". Given this 4-5-year timeframe, it is very unlikely that no changes to the QAPP will be needed. Add the following paragraph to the end of Section 1.2: "This QAPP will be reviewed annually AR (typically in the winter off-season) and the results of this review communicated to EPA via email. Based on this communication and, if necessary, its own review of the QAPP, EPA will 1) concur with AR that no QAPP revision is necessary for that year, 2) request that minor revisions for the year be documented via a change request process (such as the Request for Information [or RFI] process), or 3) request that major revisions be documented via a revised QAPP submitted for EPA review and approval."
2. **Section 4.1.1, pg. 4-1 et seq.:** A goal is needed to document as-built soil metals concentrations at the bottom of excavation at the site. This will include a Step 2 goal, Step 3 data collection, Step 5 parameters, Step 7 plan for as-built sampling.
3. **Table 3 Engineered Cap/Cover Systems Material Suitability Criteria (from FRESOW Table 3) (pg. 79):** This Table has been modified from the BPSOU CD, Attachment C and as such is not

representative of the location-specific requirements of the BPSOU CD. Specifically, the table changed in the footnotes (Footnotes 5 and 6 in the BPSOU CD, Footnotes 1 and 2 in the QAPP) that reference the BPSOU CD figures that show where these caps are to be placed. Please correct or remove.

4. **Section 4.1.1, Step 3:** Modify the last bullet to read: “Air quality samples (total respirable for personnel, PM-2.5, PM-10, and lead for ambient) to provide ongoing assessment of personal, background, and perimeter air quality.”
5. **Section 4.1.1.2, pg. 4-8:** This section indicates that effluent conveyed to BTL must be free of hydrocarbons. What is the source of that requirement? How do the RBSL criteria relate to this requirement?
6. **Section 4.1.1.4, Step 5:** In the last bullet, remove “for PM-10” from the first sentence. PM-10 is not the only air sampling analyte for this project.
7. **Section 4.1.1.4, Air Quality Monitoring:** Modify the first sentence of the first paragraph to read: “...the EPA defined National Ambient Air Quality Standards (NAAQS) 24-hour PM-10 criteria of 150 $\mu\text{g}/\text{m}^3$ and PM-2.5 criteria of 35 $\mu\text{g}/\text{m}^3$ shall apply. In addition, the lead (Pb) standard of 0.15 $\mu\text{g}/\text{m}^3$ is also applicable.” The science regarding the health effects of particulate matter have evolved in the last 30 years and the NAAQS now incorporates PM-2.5 sampling. Thus, modify the last sentence of the first paragraph to read: “...thus, the NAAQS PM-10, PM-2.5, and lead standards are appropriate based...” See EPA’s comments on Section 4.2.6 for further information. The OSHA method for personal sampling is for total respirable dust, not PM-10. Please revise.
8. **Section 4.1.1.4, Step 7:** At the end of the last paragraph of this section, add the following: “...to a weekly frequency. Perimeter air monitoring will sample for particulates and lead to assure compliance with NAAQS with continued sampling, reduced sampling, or elimination of sampling subject to periodic evaluation of the sampling results. Personnel air sampling for total respirable particulates will be implemented in accordance with OSHA requirements.”
9. **Table 5:** The standards presented apply to groundwater. Look at the latest DEQ-7 and replace with standards for surface water, if different. Then change the table heading to reflect surface water standards.
10. **Step 4, pg. 4-2, Step 7, pg. 4-12, and Section 4.3.5.1, pg. 4-21:** Step 4 indicates that samples will be collected five days per week unless the COCs are less than 80% of temporary variance standards when sampling decreases to twice per week. Step 7 indicates the same as Step 2. Section 4.3.5.1 indicates daily samples for the first week followed by weekly samples. This is inconsistent. Revise Section 4.3.5.1 to match Steps 4 and 7.
11. **Section 4.3.1:** Modify the fourth sentence of the second paragraph to read: “Subsamples will be selected to obtain representative material through the entire one-foot interval, based on visual...”
12. **Section 4.3.1:** At the end of the first paragraph of this section, add the following: “...on representative analytical results. The 500 CY sample frequency applies to stockpiles as well as materials that are in-place. Prior to soil sampling, the volume of the stockpile or area of in-place soils (assuming a sample depth of 1 foot) must be calculated to determine the number of samples to be collected. Thus, a 1,200 CY stockpile would need 3 samples to meet the 500 CY rate (2

samples would be too few) and 1 acre in-place 1 foot deep would require 4 samples to meet the 500 CY rate.”

13. **Section 4.3.1: Sampling of Imported or Borrow Soil Materials:** This section references “imported or borrow soil materials.” What is the distinction between “borrow” and “imported” materials? For BPSOU CD Table 2-Fill and Table 3-Capping, the BPSOU CD does not use “borrow” and it is unclear what is meant. These terms may suggest that the sampling process applies to imported or onsite reused material. Other documents for this project indicate that no onsite material will be reused at Grove Gulch. “Borrow material” should be defined, or references to it should be removed if it refers to backfill generated onsite and will not be used in project construction.
14. **Section 4.3.3:** In the second paragraph it is stated that QA samples will be collected throughout the project “at a frequency of 10 percent.” Elsewhere in the document and in the third paragraph of this section note that one field duplicate samples will be collected for every 20 samples. Please clarify this discrepancy.
15. **Section 4.3.5.1, pg. 4-21:** The general permit requires turbidity grab samples at least three times per week for Category B. Please revise. If real-time monitoring with instrumentation indicates turbidity above 20 NTU, the corrective actions in Section C.3 of the permit are to be implemented and subsequent real-time sampling to confirm discharge compliance. Please revise Section 4.3.4 of the Grove Gulch 95% Design Report.
16. **Section 4.3.6, Air Monitoring:** As AR is aware, air quality and dust are significant concerns in the Butte area. To ameliorate these concerns, EPA proposed perimeter air monitoring during construction that would include analysis of BPSOU COCs so that area residents can be assured that site construction activities are not generating concerns related to dust. AR has declined to implement COC analyses and proposed the use of National Ambient Air Quality Standards (NAAQS) PM-10 standards. This alternative is acceptable to EPA; however, perimeter sampling and analysis for PM-2.5 particulate pollution and lead must also be included in addition to the PM-10 sampling and analysis. A table showing the NAAQS standards should be added here or another appropriate location. EPA suggests that the PM-2.5 and PM-10 24-hour levels and the rolling 3-month average for lead be applied. At the onset of RA disturbance activity, sampling should be conducted every other day for the first 14 days and then every 6th day schedule for the three months during construction. At the end of 3 ½ months, the PM-2.5, PM-10, and lead results will be assessed, site conditions considered, and the air monitoring program will be evaluated to determine if perimeter air monitoring should continue. At least three sample stations are proposed: upwind, between primary construction activities and nearest residential area, and downwind. The sample locations should be identified in the construction QAPP. The text in Section 4.3.6 should be modified to reflect these changes and an SOP for the operation of the BGI PQ200 particulate samplers for PM-2.5, PM-10, and lead analysis be added to the QAPP. In addition, Section 4.3.6 should retain the visual monitoring component (Section 4.3.6.1) for the life of the Grove Gulch project.
17. All references to soil re-use need to be removed from documents. (i.e., Section 4.3.3 of QAPP states “salvaged post construction excavation materials”).

18. **Appendix J:** This flow chart needs to do two things: determine sampling frequency and trigger the off-ramp to corrective actions based on COC concentrations. Change the title to reflect this purpose. A different flow chart is needed for turbidity/oil and grease. Change “If a single sample is greater than 50% of the variance standard...” to “If the four-day average exceeds the temporary variance standard or a single sample exceeds the standard by more than 50%, implement BMPs as indicated by the BMP implementation flow chart.”
19. **Appendix K:** There is an extra “no” path from the first decision box. Please delete the left “No” path. Following implementation of GAC treatment, the question “Does effluent meet requirements for discharge to stream? Needs to be asked again. If no, the action is add additional treatment steps, and/or modify dewatering rates/locations. If the action is to modify dewatering, the question on requirements needs to be asked again such that only water meeting discharge requirements can be discharged to the stream.

Quality Assurance Plan

20. **Section 3.1.1:** This section should include procedures for conducting As-built sampling of the excavation following vertical and horizontal design limit soil removal. This is to document post-construction soil conditions.

Materials Management Plan

21. The materials management plan (MPP) and its appendices are somewhat confusing and could be consolidated such that they apply only to Grove Gulch. For example, all soil will go to the mine waste repository unless it is municipal waste, hazardous waste, or other solid waste. This could all be simplified rather than the decision chart and sampling to identify waste covered by FRESOW Table 1. The Material Management Plan includes a section on excavation and disposal analysis, but this is a better fit in the Waste Management Plan which lacks pertinent details. The Waste Management Plan includes Municipal Waste Characterization and Management Plan and Contingency Waste Characterization and Management Plan. Please make each of these plans separate and self-contained or merge into a single document.
22. The MMP lacks detail in important areas, such as sampling, segregation of materials, and stockpile locations and management. EPA understands that onsite material will not be used as backfill. However, the material that is removed still needs to be properly characterized and sorted to ensure that materials are disposed of properly. Furthermore, imported backfill also needs to be characterized prior to use, especially for sources such as Helehan that exceed chemical criteria for some samples. Please provide additional details.
23. Ideally, the MMP should summarize information contained elsewhere within the design package and refer the reader to other locations for additional details. For instance, excavation volumes should be presented in the MMP (as required in the FRESOW) with reference made to Calculation Brief 14 for details.
24. **Figure 2 C2.0: Waste Excavation Grading Plan:** Please make sure all colors and hatching on the drawing are identified correctly in the legend. Please include a reference to estimated excavated and backfill soils are located.

25. **Figure 2 C2.0:** This figure states: Existing waterline protect in place except where waterline is to be relocated according to sheet C4.1. This waterline is property of BSB and has been determined to stay in place with no replacement or redundant line put in place. Revise text on figure.
26. **Figure 3:** Waste Characterization and Management Decision Flow Chart –Since all excavated materials will be removed from the site, much of this decision flow chart is unneeded. The only real decisions are determining if materials are municipal solid waste, hazardous waste, or other non-hazardous solid waste. Please simplify. Also, please indicate in the flow diagram what tests (i.e., visual observation, FPXRF, lab analyses, etc.) will be performed to make each decision. Revise Waste Characterization and Management Decision Flow Chart to accommodate current QAPP.
27. **Figure 3:** This decision tree does not explain how "material" will be "identified for excavation." Is it implied that they will be visually identified? Will they be identified by utilizing Figure 2? Contaminants cannot be identified by visual or accurately predicted by modeling without statistically determined confidence intervals.
28. **Appendix A: Waste Management Plan:** The plan needs to walk the reader through the screening process outlined in Figure 3 of the Materials Management Plan (flow chart), including the data inputs required to make each decision (visual, odor, PID, FPXRF, lab XRF, outside lab, etc.). Also, how and where will the segregation take place. Will there be stockpiles on site for each category? What will be the frequency of analysis for contingency materials and for borrow (once per truckload? One per x volume of material, etc.). The Construction Monitoring QAPP states that borrow will be sampled once per 500 cubic yards (yds). Assuming a truckload will consist of about 20 yds the sampling frequency would be once per 25 truckloads (500 yds/20 yds/truckload). Borrow sites such as Helehan where some soil has exceeded the Table 2 chemical criteria for imported fill should be sampled at a greater frequency than one sample per 25 truckloads. Please increase the sampling frequency to one sample per 100 yds (one sample per ~5 truckloads) and avoid using material located less than one foot below the ground surface. Please add this discussion to the Backfill Material Characterization and Reuse Plan and modify the Construction Monitoring QAPP.
29. **Appendix A: Waste Management Plan:** Will impacted stockpiles be covered to prevent potential windblown impacts to surrounding areas? EPA recognizes that unless unexpected waste types are encountered there will only be one material (i.e., mine waste-impacted material) that will all go to the selected repository. However, the plan on how materials will be segregated should be in place in the event that municipal waste, hazardous waste or other unexpected waste is encountered.
30. **Appendix B: Backfill Characterization and Reuse Plan:** Waste stockpiles that will be left on site for longer than 24 hours need to be wetted as needed to prevent wind erosion for weather conditions.
31. **Appendix B: Backfill Characterization and Reuse Plan: Section 2.1:** Should read: No material will be reused.
32. **Appendix B: Section 2.3 Excavation and Stockpiling:** Please include a description of the stockpiling and sampling process. Referring to the construction plan is unacceptable. The purpose

of the BMC&R plan is, in part, to describe how the segregation, sampling, and stockpiling will be performed.

33. **Appendix B: Section 2.4:** As-built sampling will not trigger any action due to the 3-year high groundwater elevation, but as-built sampling will need to be conducted post-excavation to document soil metals concentrations at the bottom and walls of the excavation before fill materials are put into place. Results will need to be reported in the As-built drawings.
34. **Appendix B: Section 3.1.1 Helehan Borrow Area:** How will the borrow area material be tested to ensure that impacted material for arsenic and copper is not used? Will it be assumed that deeper material will be clean? Please discuss.
35. **Appendix B: Section 3.1.1:** Helehan Borrow Area: Please confirm which imported borrow source is used for growth media and subgrade materials.
36. **Appendix B: 3.1.2 Butte Rock Quarry:** The text states that the material from the quarry is too coarse for use as general fill (<60% greater than 2mm). Provide a gradation table for all imported borrow aggregates.
37. Please spell out in the text that the material will not be used for general fill and will be used only for riprap, road subbase, and structural stabilization, if suitable.
38. **Appendix B: Section 3.3 Other Construction Aggregates:** Construction aggregate that has fine material (less than 2mm) needs to be tested for metals at a rate of 1 sample per aggregate source per 5,000 cubic yards or less of import. The metal results from this testing should be included in the submittals for each aggregate source. Please revise the text.
39. **Appendix B: Section 3.3 Other Construction Aggregates:** Please clarify how imported construction aggregate is tested and documented.

95% Construction Plan Set

40. **Hydraulic Profile:** Please re-check all calculations, as well as inlet and outlet elevations throughout the plan set. Concerns about hydraulic efficiency with high groundwater and slow base flow rates, and minimal elevation loss along flow path exist. Modify general notes to include geotechnical specification references for concrete structures.
41. **Excavation and Disposal:** All material removed from Grove Gulch will be transported to the existing mine waste repository. Please add a haul route and information on how the repository will account for the extra traffic and waste. Use consistency throughout report/drawings for callouts to the designated repository.
42. **Stakeholders:** Please provide documentation in the design report that all permits and approvals from MDT, BSB, Flood Plain Administrators have been obtained. BSB Public Works Department concurrence should be documented in the design report and needs to be obtained due to 12" waterline not being replaced or a redundant line not in place for future O&M.
43. Make a provision, such as a steel flared or concrete approach, to riprap channel to prevent undercutting to the arch culvert.
44. Please provide an additional electrical plan drawing or one-line diagram needs to be included to clarify low voltage, high voltage power distribution throughout the site.

45. Please provide consistency throughout drawings as it pertains to elevations, legends, color, hatching, and callouts/leaders.
46. Please add a reclamation plan for the construction staging area(s). Any area disturbed needs to have an 18" cap.
47. The forebay outlet weir details provided in CD1.5 do not match the proposed outlet plan design outlined in calculation brief GG-025.
48. Project area needs to be defined as a continuous area on plan set drawings. Note any area disturbed needs to be excavated to 18" with an 18" cap covering in place.
49. Drawing C3 indicates a dewatering area. This needs to be for a wetland not an upland. Note that if this is a disturbed area it will need an 18" cover.
50. Add cross-section detail showing different types of fill materials that are being placed along and adjacent to the channel.
51. **General Notes #38:** This comment needs to be removed from text. All removed sub-surface materials will be hauled to Mine Waste Repository site.
52. **C2.3:** Verify steel waterline diameter callouts are consistent (waterline goes from 36" on Section 12 and 12" diameter Sections 13-15). Please update drawings.
53. **C4.0:** Top of footing shows different elevation than the bottom of the culvert on the outlet side. Please clarify.
54. **C4.0:** Submit a cross section from Station 0+00 to 1+50 over and including the existing 12" steel waterline.
55. **CD1.4:** Three different D designated cross sections are shown and referenced on CD1.4 (two in the diversion bay and one in the forebay). They are referenced to drawing CD1.5. Please clarify and add additional cross section views.

Temporary Construction Surface Water Performance Standards Variance Request

56. **First Paragraph:** The variance is from the performance standards. The RE: line correctly indicates this. Revise the first paragraph to reflect this.
57. **First Table:** No variance is sought for aluminum, remove from this table.
58. **First and Second Tables:** The proposed variance standards are slightly off for cadmium, lead, silver, and zinc. The standards are correct in Table 4 of the Construction Monitoring QAPP. Please update using the values from Table 4.
59. **Flow Chart:** The General Permit for Construction Dewatering requires a grab sample for turbidity three times per week for Category B conditions. The grab sample shall be field analyzed for turbidity. See Table 10 of the Grove Gulch 95% Design Report. Please add to the flow chart.
60. **Flow Chart:** The General Permit for Construction Dewatering has a daily limit of 20 NTU and a monthly limit of 10 NTU. Please add the monthly limit to the flow chart.
61. **Flow Chart:** COC monitoring is effluent at the point of discharge. This flow chart should be consistent with Appendix J of the Construction Monitoring QAPP.

62. If discharge volume rates increase or decrease more than 50% of average flow, sampling frequency will increase/decrease with flowrates.

Grove Gulch 95% Design Report

63. Please add page numbers.
64. Please clarify how the 3-year high groundwater level was determined if only one year of data were collected. Please clarify the process. Also, please describe the reasoning as to why 18” removal of waste and an 18” cover is used in the design and how it relates to the FRESOW requirements.
65. **Section 5.1.6:** Last sentence on unnumbered page – Discharge monitoring will be in accordance with the Grove Gulch Construction Monitoring QAPP. Please revise.
66. **Section 5.2.9:** Second sentence – Change “BPSOU compliance.” to “BPSOU surface water points of compliance.”
67. **Section 5.1.3:** Design Report indicates riparian growth media will be at least 6”. In Drawing CD1.2, all of the channel sections growth media is shown to be 6”. C2.8 shows 18” riparian growth media not 6”. This discrepancy should be fixed. Section 4.0 of the FRESOW requires a minimum depth 18” caps meeting either criteria D or E for any disturbed areas.
68. **5.1.6 Groundwater Dewatering:** It is stated the contractor will provide a dewatering/diversion plan. Please include a detailed dewatering as well as a surface water diversion plan. This is a submittal that will require EPA, in consultation with DEQ, review and approval.

Calc Brief

69. **GG-003:** uses a width of 27.01’ and a length of 77’ to calculate the overflow rate for the forebay to calculate the rate of the sediment removal. Due to the presence of the ramp, the effective width of flow is 16’-4” rather than 27.01’. Does this discrepancy make the sediment removal calculations change?
70. **GG-014:** The headings are incorrect in this document. Please revise.
71. **GG-015:** The headings are incorrect in this document. Please revise.
72. **GG-016: Stoke’s Law Basin Sizing:** Iron hydroxide may not form to any extent without active agitation of the water to facilitate diffusion of oxygen into the water. The pH, based on available data, should be high enough to facilitate rapid iron oxidation, so the limiting process will likely be diffusion of oxygen into the water.

PDI Evaluation Report

73. The page numbering needs to be restarted at Section 1.
74. **Figures 2, 4 and 5:** Presumably, the dashed unlabeled gray or cyan line is the excavation limits. Revise this line and label it to match Figure 1 and Sheet C2.0 of the construction plan set.

RDWP

75. **Page 3-1, Section 3.2** and the defined terms of the RDWP uses the term “Metro Storm Drain.” Please replace this term with “Silver Bow Creek” in this location and elsewhere in the documents for this site and other FRESOW documents.

GW DSR

76. One of the DQOs was to determine the 3-year high groundwater elevation, but nowhere in the report is it stated what this is. EPA understands that this is a DSR, but a sentence is required that states where the 3-year high groundwater elevation can be found.
77. Total organic carbon (TOC) should be measured prior to discharge to SBC. TOC can cause algae growth and depletion of oxygen.
78. **Table 1 Groundwater Sampling Analytical List** – EPA Method 350.1 is for ammonia (NH₃ as N), not nitrate (as NH₃) as stated in the table. Method 353.2 is for nitrate/nitrite combined or 353.3 for nitrate-nitrite and nitrite alone. Please either correct the method or the analyte to be consistent with what was actually performed by the lab. The laboratory results and data validation indicate that ammonia was analyzed for but not nitrate, so the analyte name should be changed from “nitrate (as NH₃)” to “ammonia (as N)”.

Specification and Submittal Register

79. **Section 01 33 10:** Please include in SD-01, in the Preconstruction Submittals section, that AR Contractor shall submit to the EPA, a Submittal Register with appropriate information filled in, including approximate dates of forthcoming submittals as possible and appropriate. An updated Submittal Register shall be provided to the EPA at each weekly progress meeting.
80. Please review the submittal register and verify that it is site specific to Grove Gulch (i.e., remove USACE, Indiana Department of Environmental Management (IDEM), ECEMD, CSX, IDOT, Buckeye, NIPSCO, etc.). Furthermore, all submittals will be distributed to the EPA using a similar process as indicated Section 01 33 10 (3.4). Attached is the Submittal Register with the submittals that EPA, in consultation with DEQ, would like to review and approve prior to finalization by AR. These submittals that EPA would like to review and approve are labeled ‘GOVT’. All other submittals should be provided to EPA and DEQ for information only (FIO). In addition to the submittals outlined in Specification Section 01 33 10 1. (SD-01), please include the pre-construction submittals bulleted below for EPA review and approval: (If the following are already located elsewhere in the Submittal Register, please clarify.)
 - Test Reports (e.g., Testing Results, Analytical and Monitoring Data, Backfill Materials)**
 - Dust Control Plan**
 - Air Monitoring Plan**
 - Equipment and Recycle Material Decontamination Plan**
 - Site Security Plan*
 - Diversion and De-watering Plans*
 - Access Control Plan*
 - Design Changes **

*pre-construction, **as applicable

If you have any questions or concerns, please call me at (406) 457-5019.

Sincerely,

Nikia Greene
Remedial Project Manager

Attachment: Region 8 document review crosswalk and Submittal Register with EPA/DEQ comment

Butte File
Chris Greco / Atlantic Richfield
Josh Bryson / Atlantic Richfield
Mike Mc Anulty / Atlantic Richfield
Loren Burmeister / Atlantic Richfield
Dave Griffis / Atlantic Richfield
Jean Martin / Atlantic Richfield
Irene Montero / Atlantic Richfield
David A. Gratson / Environmental Standards
Mave Gasaway / DGS
Adam Cohen / DGS
Brienne McClafferty / Holland & Hart
Daryl Reed / DEQ
Logan Dudding / DEQ
Amy Steinmetz / DEQ
Dave Bowers / DEQ
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Ted Duaine / MBMG
Gary Icopini / MBMG
Becky Summerville / MR
John DeJong / UP
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John Gilmour / Kelley Drye
Leo Berry / BNSF
Robert Lowry / BNSF
Brooke Kuhl / BNSF
Lauren Knickrehm / BNSF
Doug Brannan / Kennedy Jenks
Matthew Mavrinac / RARUS
Harrison Roughton / RARUS
Brad Gordon / RARUS
Mark Neary / BSB

Eric Hassler / BSB
Brandon Warner / BSB
Abigail Peltomaa / BSB
Eileen Joyce / BSB
Sean Peterson/BSB
Josh Vincent / WET
Scott Bradshaw / W&C
Emily Stoick / W&C
Pat Sampson / Pioneer
Andy Dare / Pioneer
Karen Helfrich / Pioneer
Randa Colling / Pioneer
Scott Sampson / Pioneer
Ian Magruder/ CTEC
CTEC of Butte
Scott Juskiewicz / Montana Tech
David Shanight / CDM Smith
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