

JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division

DANIEL PINKSTON
Environment Defense Section
Environmental and Natural Resources Division
U.S. Department of Justice
999 18th Street
South Terrace, Suite 370
Denver, CO 80294
Phone: (303) 844-1804
Fax: (303) 844-1350
Email: daniel.pinkston@usdoj.gov

ATTORNEYS FOR PLAINTIFF

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO**

UNITED STATES OF AMERICA,

Plaintiff,

v.

VARCA VENTURES, INC., and
WILDCAT MINING CORPORATION,

Defendants.

CONSENT DECREE

This Consent Decree is entered into by Plaintiff United States of America and Defendants Varca Ventures, Inc. and Wildcat Mining Corporation, in order to settle the United States' claims against Defendants asserted in the Complaint in the above-captioned action.

I. RECITALS

A. On August 8, 2016, Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), filed the Complaint herein against Defendants Varca Ventures, Inc. (“Varca”) and Wildcat Mining Corporation (“Wildcat”).

B. The action arises from alleged unpermitted discharges of dredged and/or fill materials into waters of the United States at the approximately 274-acre May Day Idaho Mine Complex property located in Section 28, Township 36 North, Range 11 West, N.M.P.M., La Plata County, Colorado (the “Site”), from 2008 through the present and from an alleged failure to comply with an administrative order issued by EPA.

C. The Complaint asserts the following claims for relief against the Defendants:

(I) First Claim for Relief: The first claim for relief alleges that the Defendants discharged dredged and/or fill material, and/or controlled or caused the discharge of dredged or fill material, into waters of the United States at the Site without a permit issued by the United States Army Corps of Engineers (“Corps of Engineers”), in violation of Section 301(a) of the Clean Water Act (“CWA”), 33 U.S.C. § 1311(a).

(ii) Second Claim for Relief: The second claim for relief alleges that on April 9, 2012, pursuant to CWA Section 309(a), 33 U.S.C. § 1319(a), EPA Region 8 issued an “Administrative Order for Compliance” (“Order”) to the Defendants, requiring the Defendants, among other things, to cease all discharges of dredged and fill materials at the Site, to submit a restoration plan to EPA by June 8, 2012, and to complete all restoration work within 60 days of the EPA’s approval of that plan, and that the Defendants did not comply with the Order. The United States asserts that it is authorized to bring a civil action for civil penalties for violation of

the Order pursuant to CWA Section 309(b), 33 U.S.C. § 1319(b).

D. In the Complaint, the United States seeks civil penalties against the Defendants, pursuant to CWA Section 309, 33 U.S.C. § 1319, for alleged violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), by discharging dredged and fill material into waters of the United States without appropriate permits under CWA Section 404, 33 U.S.C. § 1344. The United States also seeks injunctive relief against the Defendants in the form of a court order requiring them not to violate the CWA, and an injunction requiring them to restore the Site.

E. The United States and Defendants agree that settlement of this case is in the public interest and that entry of this Consent Decree is the most appropriate means of resolving the United States' claims under the CWA against Defendants in this case.

F. The Court finds that this Consent Decree is a reasonable and fair settlement of the United States' claims against Defendants in this case, and that this Consent Decree adequately protects the public interest in accordance with the CWA and all other applicable federal law.

THEREFORE, in lieu of taking of any testimony upon the pleadings, without further adjudication of any issue of fact or law, and upon consent of the parties hereto by their authorized representatives, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

II. JURISDICTION AND VENUE

1. Court's Jurisdiction. This Court has jurisdiction over the subject matter of this action and over the parties pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 309(b) of the CWA, 33 U.S.C. § 1319(b).

2. Venue. Venue is proper in the District of Colorado pursuant to CWA Section 309(b), 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and (c), and 1395(a), because the Defendants

conduct business in this District, the subject property (previously defined as the “Site”) is located in this District, and the causes of action alleged in the Complaint arose in this District.

3. Claims for Relief. The Complaint states claims upon which relief may be granted pursuant to Sections 301 and 309 of the CWA, 33 U.S.C. §§ 1311 and 1319.

III. APPLICABILITY

4. Persons Bound. The obligations of this Consent Decree shall apply to and be binding upon Defendants, their officers, directors, agents, employees, and servants, and their successors and assigns, and any person, firm, association, or corporation who is, or will be, acting in concert or participation with either of the Defendants, whether or not such person has knowledge of this Consent Decree. In any action to enforce this Consent Decree against a Defendant, the Defendant shall not raise as a defense the failure of any of its officers, directors, agents, employees or servants, successors, or assigns or any person, firm, or corporation acting in concert or participation with the Defendant, to take any actions necessary to comply with the provisions hereof.

5. Transfer of Ownership. Any transfer of ownership or other interest in the Site shall not alter or relieve a Defendant of its obligation to comply with any applicable terms of this Consent Decree. Until such time as this Consent Decree is terminated, at least 15 days prior to any transfer of ownership or other interest in the real property upon which the Site is located, the party making such transfer shall provide written notice and a true copy of the Consent Decree to its successor(s) in interest and shall simultaneously notify EPA and the United States Department of Justice at the addresses specified in Section XII below that such notice has been given. As a condition to any such transfer, the transferring party shall reserve access rights to ensure

compliance with the Consent Decree and assure that the transfer does not impede compliance with the terms of this Consent Decree.

IV. SCOPE OF CONSENT DECREE

6. Settlement of Civil Claims. This Consent Decree shall constitute a complete and final settlement of all civil claims for injunctive relief and civil penalties alleged in the Complaint against Defendants under CWA Sections 301 and 309, 33 U.S.C. §§ 1311 and 1319.

7. Injunction Against Violation of CWA. Except as in accordance with this Consent Decree, Defendants and Defendants' agents, successors, and assigns are enjoined from discharging any pollutant into waters of the United States, unless such discharge complies with the provisions of the CWA and its implementing regulations and any applicable permits.

8. Joint and Several Obligation. Defendants' obligations under this Consent Decree are joint and several.

9. No Effect on Claims Against Non-Parties to the Consent Decree. This Consent Decree in no way affects the rights of the United States as against any person not a party to this Consent Decree.

10. Purpose of Meeting Objectives of CWA. The parties recognize that it is the express purpose of the United States in entering into this Consent Decree to further the objectives set forth in CWA Section 101, 33 U.S.C. § 1251, as well as regulations and permits issued pursuant to the CWA and to require the Defendants to make an agreed upon monetary payment to resolve their civil liability for a penalty. All plans, studies, construction, remedial maintenance, inspection, monitoring programs, and other obligations of this Consent Decree or resulting from the activities required by the Consent Decree shall have the objective of causing Defendants to

achieve and maintain full compliance with the CWA and to further the purposes of the CWA.

11. No Effect on Other Legal Obligations. This Consent Decree in no way affects or relieves Defendants of their responsibility to comply with any applicable federal, state, or local law, regulation, or permit.

12. No Warranty of Compliance with Other Legal Obligations. The United States does not, by its consent to entry of this Consent Decree, warrant in any manner that the Defendants' compliance with the Consent Decree will result in compliance with the provisions of applicable federal, state, or local laws, regulations or permit conditions. Notwithstanding the United States' review and approval of any data, reports, or plans formulated pursuant to this Consent Decree, the Defendants shall remain solely responsible for compliance with the CWA.

13. Consent Decree Not a Permit or Permit Modification. The Consent Decree is not and shall not be interpreted to be a permit or modification of any existing permit issued pursuant to Section 404 of the CWA, 33 U.S.C. § 1344. Nothing in this Consent Decree shall limit the ability of the Corps of Engineers to issue, modify, suspend, revoke, or deny any individual permit or any nationwide or regional general permit, nor shall this Consent Decree limit EPA's ability to exercise its authority pursuant to Section 404(c) of the CWA, 33 U.S.C. § 1344(c). The parties acknowledge that Nationwide Permit 32, 77 Fed. Reg. 10184, 10219-10220 (February 21, 2012), authorizes the discharge of dredged or fill material insofar as such discharge is (a) necessary to complete the work required to be performed pursuant to this Consent Decree and (b) in compliance with Nationwide Permit 32 and this Consent Decree.

14. No Admission of Fact or Law. Except with regard to Paragraphs 1 and 2 of this Consent Decree, nothing in this Consent Decree shall constitute an admission of any other fact or

law by any party.

V. CIVIL PENALTIES

15. Payment of Civil Penalties. Defendants shall pay a civil penalty of \$50,000 to the United States, to be paid within 30 days of the date of entry of this Consent Decree by the Court.

16. Method of Payment. Except as otherwise agreed by the parties, Defendants shall make the above-referenced payment by electronic funds transfer pursuant to instructions to be provided by the Financial Litigation Unit of the United States Attorney's Office, District of Colorado.

17. Notice of Payment. Upon payment of the amount required by Section V of this Consent Decree, Defendants shall provide written notice, at the addresses specified in Section XII of this Consent Decree, that such payment was made in accordance with Paragraph 16.

18. Penalties Not Tax-Deductible. Civil penalty payments pursuant to this Consent Decree (including stipulated penalties under Section X) are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), or of 26 C.F.R. § 1.162-21, and are not tax deductible expenditures for purposes of federal law.

VI. RESTORATION PROGRAM

19. Completion of Restoration Activities. Defendants shall perform restoration and mitigation projects under the terms and conditions stated in the Restoration and Compliance Plan ("Restoration Plan") that is attached hereto as Appendix A and incorporated herein by reference as an enforceable part of this Consent Decree. The EPA hereby approves the Restoration Plan.

20. Reporting Obligations. Defendants shall comply with all reporting, wetland success criteria, and other obligations set forth in the Restoration Plan. Defendants' obligations pursuant

to this Paragraph shall terminate when the success criteria are met and verified by EPA in writing.

21. Corrective Actions. Until this Consent Decree is terminated in accordance with Section XVI, Defendants shall provide the United States, at the addresses specified in Section XII of this Consent Decree, with annual monitoring reports pursuant to the Restoration Plan on or before December 1 of each year. If, during the monitoring period, the restoration project identified in the Restoration Plan fails to achieve the success criteria specified therein, Defendants shall propose corrective measures and a schedule for their implementation. Such corrective measures and schedule for the implementation shall be submitted to the United States within 60 days of the earlier of (a) Defendants' discovery of the failure to meet success criteria or (b) Defendants' receipt of the United States' written position that success criteria were not met. Defendants shall implement the corrective measures upon approval by the United States subject to seasonal limitations as to any planting of vegetation or construction of any features. All disputes arising under this Paragraph are subject to the dispute resolution procedures in Section VIII of this Consent Decree.

22. No Disturbance of Site. Upon completion of the terms and conditions of the Restoration Plan, Defendants shall not dredge, excavate, fill, dewater, plow, or drain any location identified in the Restoration Plan, except as approved by EPA and/or or as authorized by any permit issued by the Corps of Engineers.

23. Consent Decree to be Recorded. Defendants shall, within 15 days after entry of this Consent Decree by the Court, record a certified copy of this Consent Decree in the real property records in La Plata County, Colorado. Thereafter, each deed, title, or other instrument conveying

an interest in any property identified in the Restoration Plan shall contain a notice that the property is subject to this Consent Decree and shall reference the recorded location of the Consent Decree.

24. Certification. In all notices, documents, or reports submitted to the United States pursuant to this Consent Decree, the Defendants shall, by signature of a senior management official, certify such notices, documents, and reports as follows:

I certify under penalty of law that this document and all attachments were prepared at my direction or supervision in accordance with an effort designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who have obtained or produced the document and attachments, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

VII. RETENTION OF RECORDS AND RIGHT OF ENTRY

25. Retention of Records. Until five years after termination of this Consent Decree pursuant to Section XVI, Defendants shall preserve and retain all Records now in their possession or control or which come into their possession or control, regardless of any corporate or other organizational policy to the contrary. The term "Records" means any record, report, information, document, or photograph that relates in any way to the performance of the tasks in Section VI (Restoration Program). Defendants shall also instruct their contractors and agents to preserve all Records until five years after termination of this Consent Decree pursuant to Section XVI. At the conclusion of the document retention period, Defendants shall notify the United States at least 90 days prior to the destruction of any such Record, and, upon request by the United States, Defendants shall deliver any such Record(s) to EPA.

26. Claims of Privilege. Defendants may assert that any Records requested by the United States are privileged and confidential pursuant to the attorney-client privilege, attorney work product doctrine, or any other privilege recognized by federal law, and may assert that any requested Record is confidential business or government information pursuant to applicable state or federal law. If a Defendant asserts a privilege, that Defendant shall provide the United States with the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of the author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by the party. However, no document, report, or information required to be created or maintained by this Consent Decree shall be withheld on the ground that it is privileged.

27. Right of Entry.

A. Until termination of this Consent Decree, the Defendants agree that the United States and its authorized representatives and contractors shall have authority at all reasonable times to enter the Site to:

- i. Monitor the activities required by this Consent Decree.
- ii. Verify any data or information submitted to the United States.
- iii. At the sole cost of the United States, obtain samples from the Site and, upon request, splits or duplicates of any samples taken by either Defendant or any contractor or consultant engaged by either Defendant.
- iv. Inspect and evaluate Defendants' restoration and/or mitigation activities and compliance with law.

v. Inspect and review any Records required to be kept under the terms and conditions of this Consent Decree or the CWA.

B. This provision of the Consent Decree is in addition to, and in no way limits or otherwise affects, the statutory authorities of the United States to conduct inspections, require monitoring, and to obtain information from the Defendants as authorized by law.

VIII. DISPUTE RESOLUTION

28. Dispute Resolution Process. Any dispute that arises with respect to the meaning or requirements of this Consent Decree shall be, in the first instance, the subject of informal negotiations between the United States and the Defendant(s) affected by the dispute. The period for informal negotiations shall not extend beyond 30 days beginning with written notice by one party to the other affected party or parties that a dispute exists, unless agreed to in writing by those parties. If a dispute between the United States and either or both Defendants cannot be resolved by informal negotiations, then the position advanced by the United States shall be binding unless, within 30 days after the end of the informal negotiations period, one or more Defendants file a motion with the Court seeking resolution of the dispute. The motion shall set forth the nature of the dispute and a proposal for its resolution. The United States shall have 30 days to respond to the motion and to propose an alternative resolution. In resolving any such dispute brought before the Court, the Defendants shall bear the burden of proving by a preponderance of the evidence that the United States' position is not in accordance with the objectives of this Consent Decree and the CWA, and that position taken by the moving Defendant or Defendants better meets the terms and conditions of this Consent Decree and the objectives of the CWA.

29. Extension of Time to Meet Obligations Due to Dispute. The filing of a motion asking the Court to resolve a dispute shall not extend or postpone any obligation of either Defendant under this Consent Decree, except as provided in Paragraph 39 below regarding payment of stipulated penalties or as ordered by the Court upon filing of a motion for extension of time.

30. Shortening Dispute Resolution Period. If a party believes that (1) a dispute is not a good faith dispute, or (2) that a delay would pose or increase a threat of harm to the public or the environment, or (3) a demand made by the United States would cause irreparable harm to one or more Defendants, the party may move the Court for a resolution of the dispute prior to the expiration of the 30-day period for informal negotiations. The responding party shall have 14 days to respond to the motion and propose an alternative resolution.

IX. FORCE MAJEURE

31. Force Majeure Events. Defendants shall perform the actions required under this Consent Decree within the time limits set forth or approved herein, unless the performance is prevented or delayed solely by events which constitute a Force Majeure event. A Force Majeure event is defined as any event arising from causes beyond the control of Defendants, including their employees, agents, consultants, and contractors, which could not be overcome by due diligence and which delays or prevents the performance of an action required by this Consent Decree within the specified time period. A force majeure does not include, inter alia, increased costs of performance, changed economic circumstances, changed labor relations, normal precipitation or climate events, changed circumstances arising out of the sale, lease, or other transfer or conveyance of title or ownership or possession of the Site, or failure to obtain federal,

state, or local permits.

32. Notification of Force Majeure Event or Act of Plaintiff or its Agent Delaying or Preventing Compliance. If Defendants believe that a Force Majeure event has affected their ability to perform any action required under this Consent Decree, Defendants shall notify the United States in writing within 10 working days after the event or act has occurred at the addresses listed in Section XII. Such notice shall include a discussion of what action has been affected; the specific cause(s) of the delay or non-compliance; the length or estimated duration of any resulting delay; any measures taken or planned by the Defendants to prevent or minimize the delay; and a schedule for the implementation of such measures. Defendants may also provide to the United States any additional information that they deem appropriate to support their conclusion that a Force Majeure event has affected their ability to perform an action required under this Consent Decree. Failure to provide the foregoing information to the United States in a timely fashion shall constitute a waiver of any claim a Force Majeure event has delayed or prevented the Defendants' compliance with this Consent Decree.

33. Relief from Compliance or Extension of Deadline Due to Force Majeure Event. If the United States determines that the conditions constitute a Force Majeure event, then, at the discretion of the United States, subject to dispute by Defendants, the deadline for the affected action may be extended by the amount of time of the delay caused by the Force Majeure event, or the Defendants shall be relieved from completing the affected action. Defendants shall coordinate with the United States to determine when to begin or resume the operations that were affected by any Force Majeure event.

34. Dispute Resolution Regarding Force Majeure. If the parties are unable to agree

whether the conditions constitute a Force Majeure event or whether the length of time for fulfilling the provision of the Consent Decree at issue should be extended, any party may seek a resolution of the dispute under the procedures in Section VIII of this Consent Decree.

35. Proof of Force Majeure Event. Defendants shall bear the burden of proving by a preponderance of the evidence that (1) the noncompliance at issue was caused by circumstances entirely beyond the control of Defendants and any entity controlled by Defendants, including their contractors and consultants; (2) Defendants or any entity controlled by Defendants could not have foreseen and prevented such noncompliance; and (3) the number of days of noncompliance that were caused by such circumstances.

X. STIPULATED PENALTIES

36. Stipulated Penalties. After entry of this Consent Decree, if either Defendant fails to timely fulfill any requirement of the Consent Decree, Defendants shall pay a stipulated penalty to the United States for each violation of each requirement of this Consent Decree as follows:

- A. For Day 1 up to and including Day 30 of noncompliance, \$1,000 per day.
- B. For Day 31 up to and including Day 60 of noncompliance, \$2,000 per day.
- C. For Day 61 and beyond of noncompliance, \$3,000 per day.

Such payments shall be made by the Defendant(s) without demand by the United States on or before the last day of the month following the month in which the stipulated penalty accrued.

37. Disputes Regarding Stipulated Penalties. Any disputes concerning the amount of stipulated penalties, or the underlying violation that gives rise to the stipulated penalties, that cannot be resolved by the parties pursuant to the Dispute Resolution provisions in Section VIII and/or the Force Majeure provisions in Section IX shall be resolved upon motion to this

Court as provided in Paragraph 28 of this Consent Decree.

38. Stay of Stipulated Penalties Pending Dispute Resolution Process. The filing of a motion requesting that the Court resolve a dispute shall stay Defendants' obligation to pay any stipulated penalties with respect to the disputed matter pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall continue to accrue from the first day of any failure or refusal to comply with any term or condition of this Consent Decree. In the event a moving Defendant or Defendants prevail in the dispute, stipulated penalties for the period of time required to resolve the dispute need not be paid. In the event that the moving Defendant or Defendants do not prevail on the disputed issue, stipulated penalties shall continue to be due and payable by Defendants as provided in this Section.

39. Excuse for Force Majeure Events. To the extent Defendants demonstrate to the Court that a delay or other non-compliance was due to a Force Majeure event (as defined in Paragraph 31 above) or otherwise prevail on the disputed issue, the Court shall excuse the stipulated penalties for that delay or non-compliance.

40. Interest on Stipulated Penalties. In the event that a stipulated penalty payment is applicable and not made on time, interest will be charged on the stipulated penalty amount in accordance with the statutory judgment interest rate provided for in 28 U.S.C. § 1961. The interest shall be computed daily from the time the payment is due until the date the payment is made. The interest shall also be compounded annually.

41. Payment Instructions for Stipulated Penalties. Except as otherwise agreed by the parties, Defendants shall make the above-referenced payment by electronic funds transfer pursuant to instructions to be provided by the Financial Litigation Unit of the United States

Attorney's Office, District of Colorado. Further, upon payment of any stipulated penalties, the applicable Defendant shall provide written notice at the addresses specified in Section XII of this Consent Decree.

XI. RESERVATION OF RIGHTS

42. United States' Reservation of Rights. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit any right to obtain penalties or injunctive relief available to the United States under other federal, state, or local laws and regulations, except as expressly specified herein. This Consent Decree shall not be construed to limit the right of either Defendant to defend against any claim made by any third party or to seek legal or equitable relief from any third party or from another Defendant based upon or stemming from the alleged activities identified in the United States' Complaint filed in this action.

XII. ADDRESSES

43. Addresses for Notices Under the Consent Decree. All notices and communications required under this Consent Decree shall be made to the parties through each of the following persons and addresses, or to an alternative individual or entity, 30 days after the name and address of the alternative individual or entity has been sent to all other parties via U.S. Mail, return receipt requested :

A. TO EPA:

Kenneth M. Champagne, 8ENF-W
Section 404 Enforcement Program
United States Environmental Protection Agency
Region 8
1595 Wynkoop Street

Denver, CO 80202
champagne.kenneth@epa.gov

B. TO THE UNITED STATES DEPARTMENT OF JUSTICE:

Section Chief
Environmental Defense Section
Environment and Natural Resources Division
U.S. Department of Justice
601 D Street, NW
Washington, DC 20004

C. TO EITHER DEFENDANT:

Christopher Neumann, Esq.
Greenberg Traurig, LLP
1200 17th Street, Suite 2400
Denver, CO 80202

XIII. COSTS OF SUIT

44. Attorneys' Fees and Costs. Each party to this Consent Decree shall bear its own attorneys' fees and costs in this action. Should Defendants subsequently be determined by the Court to have violated the terms or conditions of the Consent Decree, Defendants shall be liable for any costs or attorney's fees incurred by the United States in any action against Defendants for noncompliance with or enforcement of the Consent Decree.

XIV. PUBLIC COMMENT

45. Public Notice of Proposed Consent Decree. The parties acknowledge that after the lodging and before the entry of this Consent Decree, final approval by the United States is subject to the requirements of 28 C.F.R. § 50.7, which provides that notice of the proposed consent decree be given to the public and that the public shall have at least 30 days to submit comments. The United States reserves the right to withhold or withdraw its consent to the entry

of this Consent Decree if the comments received disclose facts which lead the United States to conclude that the proposed judgment is inappropriate, improper, or inadequate. The Defendants agree not to withdraw from, oppose entry of, or to challenge any provision of this Consent Decree, unless the United States has timely notified the Defendants in writing that it no longer supports entry of the Consent Decree.

XV. CONTINUING JURISDICTION OF THE COURT

46. Court to Retain Jurisdiction. The Court shall retain jurisdiction over this action in order to enforce or modify this Consent Decree consistent with applicable law or to resolve all disputes arising hereunder as may be necessary or appropriate for construction or execution of this Consent Decree. During the pendency of the Consent Decree, any party may apply to the Court for any relief necessary to construe and effectuate the Consent Decree.

XVI. MODIFICATION AND TERMINATION OF CONSENT DECREE

47. Modification of Consent Decree Terms. Upon its entry by the Court, this Consent Decree shall have the force and effect of a final judgment. Any modification of the terms and conditions of this Consent Decree shall be in writing, and shall not take effect unless signed by both the United States and the Defendants and approved by the Court.

48. Termination of Consent Decree. Defendants may request the United States' consent to terminate this Consent Decree. In seeking such consent, Defendants shall demonstrate the following:

A. Defendants have satisfactorily completed all of the actions required by this Consent Decree;

B. Each Defendant has obtained and maintained compliance with all provisions

of this Consent Decree;

C. Defendants have paid all penalties and other monetary obligations hereunder and no penalties or other monetary obligations are outstanding or owed to the United States;

D. There are no unresolved matters subject to dispute resolution pending pursuant to the dispute resolution provisions of this Consent Decree; and

E. No enforcement action under this Consent Decree is pending.

49. Joint Stipulation for Termination or Dispute Resolution. If the United States agrees that the requirements of Paragraph 48 are satisfied, the parties shall submit, for the Court's approval, a joint stipulation terminating the Consent Decree. If the United States does not agree that the requirements of Paragraph 48 are satisfied, the Defendants may invoke the provisions of Section VIII (Dispute Resolution) and the Consent Decree shall remain in effect pending resolution of the dispute by the parties, or, ultimately, by the Court. In any dispute regarding termination of this Consent Decree, Defendants shall bear the burden of proving by a preponderance of the evidence that all conditions required for termination of this Consent Decree are satisfied.

50. Entire Agreement. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the parties with respect to the settlement embodied in this Consent Decree. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree.

51. Authority to Execute Consent Decree and Bind Party. By signing this Consent Decree, each signatory warrants that the signatory has full authority to act on behalf of the party

the signatory purports to represent.

IT IS SO ORDERED.

Dated and entered this _____ day of _____ 2016.

BY THE COURT:


United States District Judge

FOR THE PLAINTIFF, THE UNITED STATES
OF AMERICA:

JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division

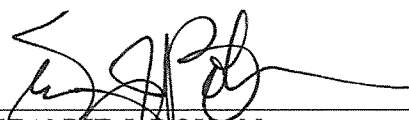
Dated: August 8, 2016

By:



DANIEL PINKSTON
Environmental Defense Section
Environment and Natural Resource Division
United States Department of Justice
999 18th Street
South Terrace, Suite 370
Denver, CO 80202
Phone: (303) 844-1804
Fax: (303) 844-1350
daniel.pinkston@usdoj.gov

Dated: 8/2/16




SUZANNE J. BOHAN
Assistant Regional Administrator
Office of Enforcement, Compliance
and Environmental Justice
Region 8
U.S. Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202

Of counsel:

Margaret J. (Peggy) Livingston
Enforcement Attorney
Office of Enforcement, Compliance and Environmental Justice
Region 8
U.S Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202
Phone: (303) 312-6858

Dated: 7/20/14

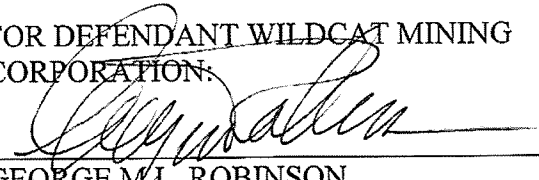
FOR DEFENDANT VARCA VENTURES, INC.:



GEORGE M.L. ROBINSON
President
Wildcat Mining Corporation
Varca Ventures, Inc.
3926 North State Highway 67
Sedalia, CO 80135

Dated: 7/20/16


FOR DEFENDANT WILDCAT MINING CORPORATION:



GEORGE M.L. ROBINSON
President
Wildcat Mining Corporation
Varca Ventures, Inc.
3926 North State Highway 67
Sedalia, CO 80135

Appendix



BIKIS
Water Consultants
a division of  **SGM**

**FINAL - RESTORATION AND COMPLIANCE PLAN
FOR MAY DAY IDAHO MINE COMPLEX
ADMINISTRATIVE ORDER FOR COMPLIANCE,
DOCKET No. CWA-08-2012-0011**

Prepared for:
George Robinson
R Squared, Inc.
3926 North State Hwy 67
Sedalia, CO 80135

Prepared by:
Bikis Water Consultants, a division of SGM
info@BikisWater.com
www.BikisWater.com

June 2016

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
 Administrative Order for Compliance, Docket No. CWA-08-2012-0011

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION/PURPOSE.....	1
1.1 Basis Of Plan	2
2.0 PROJECT DESCRIPTION	2
2.1 Section 404 Permitting History	3
3.0 SUMMARY OF ORDER FOR COMPLIANCE.....	4
4.0 RESTORATION AND COMPLIANCE PLAN - ACTIVITIES INCLUDED IN THE ORDER	5
4.1 Responsible Party	6
5.0 INFORMATION FOR REMOVAL AND RESTORATION PLAN.....	7
5.1 Existing Physical Conditions	7
5.1.1 Chief Portal Area	7
5.1.2 Mine Access Road	9
5.1.3 Wetland Mitigation Site	9
5.2 Wetland Delineation	10
5.3 Proposed Physical Conditions.....	10
5.3.1 Chief Portal Area	10
5.3.2 Mine Access Road	11
5.3.3 Wetland Mitigation	13
5.4 Implementation Plan	14
5.4.1 Site Protection	14
5.5 Actual Restored Physical Conditions.....	15
5.6 Success Criteria	15
6.0 COMPLIANCE WITH SECTION 404.....	16
7.0 MONITORING PLAN	16
7.1 Work At Chief Portal and Mine Access ROAD SITES.....	16
7.2 Wetland Mitigation Sites.....	16
7.3 Reporting	16
8.0 CONTINGENCY MEASURES	17
9.0 FUNDING AND IMPLEMENTATION.....	18
10.0 SCHEDULE.....	18

TABLES

Table 1.	Summary of Wetland Mitigation
Table 2.	Reclamation Seed Mix
Table 3.	Summary of Mitigation Requirements and Credits
Table 4.	Ecological Performance Standards for Additional Mitigation Sites

FIGURES

Figure 1.	Vicinity Map
Figure 2.	Locations of Areas in Restoration Plan
Figures 3a-3b.	Existing Conditions at Areas Addressed in Plan
Figure 4.	National Wetland Inventory Mapping
Figure 5.	Soils Map
Figure 6.	Chief Portal Grading Plan (CLC Associates)
Figure 7.	New Access Road Plan & Profile (CLC Associates)
Figure 8.	Wall Plan (CLC Associates)
Figures 9a-9b.	New Access Road Erosion Control Plan (CLC Associates)
Figure 10a.	Proposed Stormwater Management Pond (CLC Associates)
Figure 10b.	Pond Structure Details (CLC Associates)
Figure 11.	Additional Wetland Mitigation
Figure EXB1.	Detention Pond Alternatives Analysis (located in Appendix F)

APPENDICES

- Appendix A. As-built Drawing of Wetland Mitigation (see Figure 2 from October 24, 2008, As-built Summary Report by BWC).
- Appendix B. Photographs of Mitigation Areas (June 5, 2012) Constructed for NWP14 for Mine Access Road.
- Appendix C. Photographs of Existing Conditions at Chief Portal and Mine Access Road Areas
- Appendix D. Wetland Determination Data Forms for Chief Portal and Mine Access Road Sites
- Appendix E. Alternatives Analysis for Mine Egress Construction at the Chief Portal - Wildcat Mining Corporation (USEPA Order for Compliance Docket No. CWA-08-2012-0011), Memo to Kara Hellige, June 29, 2012
- Appendix F. Wildcat Mining As-built Survey for New Road, Retaining Walls, etc.
- Appendix G. Alternatives Analysis for Stormwater Management Pond (Including Figure EXB1)
- Appendix H. PCN for Work in Plan
- Appendix I. Photographs of the Areas for Additional Mitigation

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

1.0 INTRODUCTION/PURPOSE

This Restoration and Compliance Plan (Plan) was prepared to describe the removal of fill material and restoration of “waters of the United States” (Waters) as required by the “Administrative Order for Compliance, Docket No. CWA-08-2012-0011” (Order) issued to Wildcat Mining Corporation (Wildcat) by the U.S. Environmental Protection Agency (USEPA) on April 9, 2012, and to describe the proposed approach for meeting Section 404 permitting requirements for new, unavoidable impacts to wetlands at the May Day Idaho Mine complex. The purpose of the work described in this Plan is to restore the areas of unauthorized fill to their pre-impact condition and aquatic functions, and to provide additional mitigation to compensate for the new proposed impacts.

This Plan was prepared consistent with guidelines entitled “U.S. Environmental Protection Agency, Region 8 - Clean Water Act Section 404 Enforcement: Removal/Restoration Plans and Habitat Mitigation /Monitoring Proposals” and with the “404(b)(1) Guidelines” set forth in 40 CFR Part 230. This Plan was prepared consistent several conversations with Region VIII USEPA and U.S. Army Corps of Engineers (Corps) Durango Office staff in December 2012, January 2013, and May 2016 pertaining to the new proposed work and appropriate compensation. This plan also addresses the comments received from USEPA and the Corps on March 2013 draft Plan and Final Plan prepared in early June 2016.

The following information specified in the Order are also provided: 1) a detailed work plan and schedule; 2) a delineation of wetlands and Waters; 3) locations of existing natural features and improvements; 4) grading, planting, and monitoring plans; 5) success criteria for the mitigation; 6) drawings of the restoration work to be accomplished; and 7) a description of the costs to prepare and implement the Plan. In addition, the Plan includes measures to bring the compensatory mitigation into compliance with the March 4, 2008 authorization under Section 404 Nationwide Permit No. 14 (NWP 14) issued for impacts from the mine access road along the La Plata River.

This Plan is consistent with the Colorado Division of Reclamation Mining and Safety (DRMS) rules and regulations, Mine Safety and Health Administration (MSHA) and Occupational Safety and Health Administration (OSHA) standards, and the Colorado Water Quality Control Commission Rules and Regulations.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

1.1 BASIS OF PLAN

This Plan was prepared based on fieldwork completed at the subject areas in May and June 2012, which included observations of the extent and characteristics of the fills, the channels of Little Deadwood Gulch and the La Plata River, and the nature of adjacent wetlands. Observations on the wetlands included characterization of soils, vegetation, and hydrologic conditions. This Plan was also prepared based on review of existing information related to the sites including aerial photography, National Wetland Inventory (NWI) mapping, topographic mapping, and the proposed Work Plans for the two areas of interest which were submitted to the DRMS to support Technical Revisions to the Plan.

The mine area was also visited on May 17, 2016 to observe the additional work completed for the Mine Access Road, the conditions at the Chief Portal and the existing wetland mitigation sites.

Input for the work plan and restoration activities proposed was provided by the Durango office of the Corps, as requested by Region 8 USEPA staff.

The principal author of this Plan has more than 29 years of experience with wetlands and Section 404 permitting. This experience includes preparation of mitigation and restoration plans for a variety of projects, including mine sites, and implementation and follow-up monitoring of the plans.

2.0 PROJECT DESCRIPTION

The project is the development of the May Day Idaho Mine Complex (Mine) to enable the extraction of gold and other minerals, consistent with Colorado mining laws and regulations. Activities include construction of roads, pads, portals, and related facilities for the exploration and ultimate extraction of the minerals.

The Mine consists of approximately 275 acres of land located in Section 28, T. 36 N, R. 11 W of the New Mexico Prime Meridian in La Plata County, Colorado. Figure 1 is a vicinity map of the Mine. The Mine property is tributary to the Little Deadwood Gulch, an ephemeral stream, and the La Plata River, a perennial stream, both of which are tributary to the San Juan River.

The areas addressed in this Plan are referred to as the Chief Portal Area, which is on Little Deadwood Gulch, and the Mine Access Road, which is immediately adjacent to the La Plata

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

River. The compensatory mitigation constructed for the Mine Access Road impacts, as required by NWP 14 (March 4, 2008, authorization SPK-2007-980-DC), is located in the vicinity of the Mine Access Road. Figure 2 shows the Mine boundaries and relevant features, including the locations of the areas addressed in this Plan. The Mine Access Road is the main access to the Mine, as approved by DRMS in 2007. The Chief Portal is the required mine egress for emergency evacuation of underground mine workings.

2.1 SECTION 404 PERMITTING HISTORY

The previous owner of the Mine completed a wetland delineation for the Mine Access Road area. This delineation was verified by the Corps in a letter dated August 21, 2007. The delineation identified approximately 0.4 acre of jurisdictional wetlands within the Mine Access Road area. Filling of 0.02 acre of this wetland for construction of the access road was authorized under NWP 14 in the March 4, 2008 letter from the Corps. The authorization required the construction of 0.03 acre of wetlands at two areas for mitigation (a ratio of 1.5:1), along with planting of replacement native riparian trees at a ratio of 2:1, for a total of 60 trees. The mitigation plan included the following success criteria for the mitigation:

- 70 percent survival of shrubs in scrub-shrub wetland (no criteria for understory cover).
- 80 percent cover in the emergent wetland.
- Greater than 50 percent of the dominant species in the mitigation must be facultative or wetter.
- Wetland hydrology will be observed at the sites.

The March 4, 2008 authorization from the Corps required submittal of annual monitoring reports by December 1 of each year until the success criteria are met.

The original mitigation plan was prepared by Basin Hydrology, Inc. (September 20, 2007). A modified mitigation plan was prepared by Bikis Water Consultants, LLC (BWC) (October 14, 2008). This modified mitigation plan included a re-evaluation of the proposed alignment to further avoid wetland impacts. This evaluation found that the impacts were reduced from 0.02 acre to 0.011 acre.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

The wetland mitigation was constructed by the previous mine owner in the summer of 2008 with the exception of the native tree plantings which were not completed. An as-built summary of the mitigation work was completed by BWC on October 24, 2008. The as-built drawing of the work from this summary (see Figure 2. Wildcat Mining Plan View As-built Survey) is included in Appendix A of this report. As described in the 2008 summary, approximately 1,770 square-feet of mitigation wetlands were constructed, which represents a mitigation ratio of 3.7:1 based on 0.011 acre of impact.

The mitigation sites were observed by R Squared Inc. who then prepared a monitoring report dated September 28, 2010. This report indicated that the emergent wetland was in good condition with 75 percent cover consisting mostly of wetland species (rated facultative or wetter). However, the scrub-shrub wetland had only 54 percent survival of planted species with most plants exhibiting dieback and re-sprouting from the base. R Squared Inc. indicated that the hydrology of the scrub-shrub wetland may not be adequate. This report recommended that the required riparian trees (40 narrow-leaf cottonwoods and 20 blue spruce) be planted, and also that the hydrology of the scrub-shrub wetland be evaluated to determine if it is adequate.

The mitigation sites were observed by BWC on June 5, 2012. The percent cover of the emergent wetland site was approximately 80 percent, with all plants being wetland species and the non-vegetated area consisting of shallow open water. Photos 1 to 3 in Appendix B show the condition of the emergent wetland mitigation area. The survival rate for the scrub-shrub wetland was 79 percent, though most growth was basal re-sprouting. The understory of the scrub-shrub wetlands was sparse and consisted mainly of litter (see Photos 4 to 6 in Appendix B). The success criteria and observations of the mitigation site are summarized in Table 1. The observations indicate that the emergent wetland site has met the success criteria and, while the survival rate is relatively high, the growth of the willows at the scrub-shrub site is less than robust. A 2012 Annual Wetland Mitigation Monitoring Report was prepared by BWC and provided to the USEPA and Corps.

3.0 SUMMARY OF ORDER FOR COMPLIANCE

The Order alleges that construction of the access road was not completed according to the design authorized in NWP 14, and that the site lacked the required stormwater management controls. Subsequent inspections by the Corps found that material from the access road was being eroded into the La Plata River and that fill was stockpiled in the mitigation area.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

The Order states that the required wetland mitigation monitoring report dated December 30, 2009 was not complete. The version of NWP 14 which was authorized for this work expired on March 18, 2012. The new version of NWP 14, which is very similar to the prior version, went into effect on March 19, 2012.

The Order also alleges that fill was discharged into the channel of Little Deadwood Gulch in the spring of 2010 in association with construction of an access road to the Chief Portal. Observations of this area in May 2012 indicated that a road and pad were constructed at this location.

4.0 RESTORATION AND COMPLIANCE PLAN - ACTIVITIES INCLUDED IN THE ORDER

The Restoration Plan includes: 1) modification of the fill at the Chief Portal to construct a stable fill/culvert crossing, and 2) the reconstruction of the Mine Access Road and retaining wall, including removal of incidental soil and rock which have been discharged into the fringe of the wetland at this location. The plan for the access road also included construction of a stormwater detention pond.

It should be noted that the work on the Mine Access Road was completed in May-June of 2014. Work on the Chief Portal is planned to be completed early in the summer of 2016.

The basis for the work and detailed work plans are including in Section 5.3.

Existing conditions at the two areas are shown on Figures 3a and 3b. (The conditions shown on Figure 3a at the Mine Access Road were those that existed in 2010 prior to completion of the work on the road.) The following sequence of work applies to both areas:

1. Any required Best Management Practices for stormwater control will be installed and the limits of work and wetlands will be clearly marked in the field.
2. Earthwork will be completed, as specified in the plan for each area.
3. Any excess fill material will be transported using designated mine roads and disposed of in a designated stockpile area located in an upland away from any water bodies or wetlands.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

4. Revegetation will be completed, including for adjacent upland areas.
5. The work will be documented with as-built drawings and photos.
6. The areas will be observed periodically after completion of the work to note their progress and identify any deficiencies.
7. Follow-up monitoring will be completed to ensure the work was completed according to the plans.

4.1 RESPONSIBLE PARTY

The party responsible for completing the work included in this Plan is:

Wildcat Mining Corporation (R Squared Inc.)

George Robinson, CEO

3926 North State Highway 67

Sedalia, Colorado 80135

303-832-7664

georgerobinson@r2incorporated.com

This Plan was prepared by:

Dave Mehan, Professional Wetland Scientist

Bikis Water Consultants, a division of SGM

555 RiverGate Lane, Suite B4-82

Durango, Colorado 81301

970-385-2340

davem@sgm-inc.com

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

5.0 INFORMATION FOR REMOVAL AND RESTORATION PLAN

5.1 EXISTING PHYSICAL CONDITIONS

The following describes the physical conditions at the Chief Portal and Mine Access Road sites. Included is a description of wetlands at the sites, per a wetland delineation completed for the Mine Affected Area, as described in more detail in Section 5.2.

5.1.1 Chief Portal Area

The Chief Portal area is located along Little Deadwood Gulch approximately 3,200 feet upstream of the confluence with the La Plata River (see Figure 2). Little Deadwood Gulch is a high-gradient stream with a well-armored channel (see Photos 1 to 6 in Appendix C). Based on a longitudinal slope of 12 percent in the reach of the Chief Portal, the channel would be classified as an "Aa+ Stream Type" according to Rosgen 1996. This stream type is very steep (slope of greater than 10 percent), well entrenched with a low width/depth ratio and is totally confined. The channel consists of boulders and cobbles in the vicinity of the Chief Portal (see Photos 1, 2, and 5 in Appendix C). Further downstream where the slope of Deadwood Gulch is not as steep (less than 10 percent), Little Deadwood Gulch would be classified as an "A Stream Type" according to Rosgen 1996.

Little Deadwood Gulch is an intermittent stream, with flow primarily derived from snowmelt in the spring and periods of no or very little flow later in the year. Approximately 5 gallons per minute (gpm) of flow was observed upstream of the fill in the gulch in May 2012, but the gulch was dry in early June 2012. There are no springs or seeps in the Chief Portal area.

The channel of Little Deadwood Gulch consists primarily of cobble and boulder-sized material, with a thin, poorly developed soil matrix. Woody debris is evident in and near the channel. The aquatic resource value of the channel is relatively limited due to the lack of perennial water and wetlands. For example, a cursory survey in May 2012 did not find any macroinvertebrates or other aquatic life in the channel upstream or downstream of the portal. The channel of Little Deadwood Gulch at the Chief Portal site would be considered an active channel. Several measurements were taken of the limit of the ordinary high water mark (OHWM), as defined by the limit of large rock in the channel bottom, break in side slope, and limit of vegetation. The average of the field measurements of the OHWM is approximately 9 feet.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

There are no wetlands in the Chief Portal area, including along Little Deadwood Gulch, due to the lack of soil development, steep slopes, and a wetland water supply. NWI mapping for the area (see Figure 4) does not indicate any wetlands or other Waters in the area. Soil mapping (see Figure 5) shows the soil at the portal to be Nordicol very stony sandy loam, with 6 to 25 percent slopes. This is not a listed hydric soil. Photo 4 (see Appendix C) shows the soil in the area.

Vegetation in the Chief Portal area is mesic, mixed forest. The site is located in a cool, shaded forested area. BWC completed Wetland Determination Data Forms (WDDFs) from the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region" (Corps, May 2010) in the area (see Appendix D). As shown on these forms, dominant species include quaking aspen (*Populus tremula*), fir (*Abies spp*), dogwood (*Cornus spp*), willow (*Salix spp*), currant (*Ribes spp*), and elderberry (*Sambucus spp*), with an understory of mountain brome (*Bromus marginatus*), cow parsnip (*Heracleum lanatum*), bluebells (*Mertensia ciliata*), and false Solomon's seal (*Maiathenum racemosa*).

Fill material is thought to have been placed in the channel of Little Deadwood Gulch years ago (in the 1910s) to explore the May Day vein. Additional work was completed prior to 1926 to connect the Chief Portal to an underground shaft to the May Day Mine. Calculations indicate that around 315 cubic yards (CY) of soil and rock were placed in Little Deadwood Gulch from this early work. This included construction of a fill pad in the creek with a culvert. The remains of the old culvert still exist in the fill.

More recently, in 2009, the previous operator of the mine placed soil and rock from the area (scar) above the portal on top of the historic fill in piles. The footprint of the historic fill was not increased. The measured volume of the more recent fill corresponds well with the estimated volume of the scar above the portal (245 CY), which supports the piles as being from the scar. Therefore, the Chief Portal site consists of a pre-Section 404 fill in the drainage with more recent fill on top. The fill consists of soil and rock from the mine portal workings and this material is believed to be free of chemicals and pollutants.

The entrance to the portal itself is unstable and has collapsed partially. The old access road to the portal has become invaded by weeds but is still usable to small four-wheel drive vehicles.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

5.1.2 Mine Access Road

The portion of the Mine Access Road addressed in this Plan is located on the west side of the La Plata River adjacent to a wetland complex (see Figure 3a). The La Plata River in this area has a relatively moderate gradient and extensive floodplain with associated wetlands. The river channel is comprised of gravel and cobble materials and has moderate sinuosity.

Wetlands exist along the La Plata River and in association with an old beaver pond immediately adjacent to the Mine Access Road area (see Figure 3a). These wetlands were delineated in 2008 and were re-evaluated for this Plan (see Photos 7 to 11 in Appendix C). The wetlands are dominated by willows, dogwood, currant, field horsetail (*Equisetum arvense*), and sedges. Soils in portions of the wetlands contain old mining tailings, which are silty and lighter in color (Photo 12). Native soil is shown to be Pescar fine sandy loam and riverwash (see Figure 5). Hydric soil indicators in native soil include reduce matrix and gleyed soil (see Photo 13). Water is provided to the wetlands from the La Plata River and from shallow groundwater. Standing water and saturated soils were observed in the field on June 5, 2012 and May 17, 2016. The functions provided to the greatest extent by these wetlands include flood flow storage, wildlife habitat, and aquatic food chain support. The wetlands have relatively diverse, multi-layered vegetation and good connectivity to the La Plata River corridor. The wetlands appear to have a perennial water supply.

Riparian forest occurs to the north of the Mine access road area (see Figure 3a). Dominant species include narrow leaf cottonwood, dogwood, rose, and brome grass. In places, there is a sparse understory. Areas of riparian forest generally lack hydric soil indicators and evidence of a wetland water supply and do not meet the criteria for wetland. However, this area provides important wildlife habitat, including for birds, and is integrated into the La Plata River corridor.

WDDF's completed for the Mine Access Road area are included in Appendix D.

5.1.3 Wetland Mitigation Site

The two wetland mitigation areas (see Figure 2) were observed on June 5, 2012. The results of these observations are summarized with the mitigation success criteria in Table 1 and in the 2012 Annual Wetland Mitigation Monitoring Report (BWC March 2013). The emergent wetland mitigation site is fully functioning and provides groundwater discharge, flood flow attenuation, and wildlife habitat. The scrub-shrub mitigation site meets the success criteria in terms of

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

survival of willows, but the growth of the willows is less than robust which possibly indicates an inadequate water supply. A total of 0.04 acre of mitigation has been constructed.

None of the required native riparian trees (60 trees at a ratio of 2:1) have been planted.

5.2 WETLAND DELINEATION

Wetlands and other Waters were delineated at the Chief Portal and Mine Access Road sites. Wetlands were delineated following the methods in the “Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region” (Corps May 2010). The occurrence of plant species in wetlands was determined from recent (May 2012) update to the “National List of Plant Species That Occur in Wetlands: Region 8 (Intermountain)”. Fieldwork was completed on June 5, 2012, and included observations of vegetation communities, soils, and hydrologic conditions. The plant community was characterized based on the species present and their dominance. Pits were dug to observe soils, and soil colors were determined using Munsell Soil Color Charts (Kollmorgen Instruments 1988). Observations of surface and groundwater were made, and indicators of wetland hydrology were evaluated. Observations were recorded on WDDFs from the delineation manual, and photographs were taken to document conditions.

Wetland boundaries were marked in the field with pin flags and mapped using a survey-grade GPS. WDDFs are provided in Appendix D and photographs are included in Appendix C.

The results of the wetland delineation were described in Section 5.1.

5.3 PROPOSED PHYSICAL CONDITIONS

The proposed plans for each site were developed based on available alternatives and input from the Corps during a field meeting.

5.3.1 Chief Portal Area

An evaluation of potential alternatives for the Chief Portal was completed by BWC, as described in the June 29, 2012 memorandum to Kara Hellige, Corps (see Appendix E). Alternatives evaluated included: retaining wall design, fill/culvert plan, and knee-wall plan. The alternatives were evaluated in terms of their cost, logistics, technological considerations, and resource impacts. As described in detail in the memorandum in Appendix E, the preferred alternative is

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

the fill/culvert option. The Durango office of the Corps agreed with use of this alternative in a July 16, 2012 email; the USEPA concurred with the use of this alternative in an August 14, 2012 email.

The fill/culvert option, which is shown on Figure 6, entails the removal of all of the recent (2009) fill material and restoration of the hydrologic functions of the Little Deadwood Gulch channel. This plan meets the engineering and safety standards for the Mine. The culvert will be sized to pass up to the 100-year flood. The owner will commit to maintaining the culvert to minimize the potential for debris blockage.

5.3.2 Mine Access Road

A plan to correct the deficiencies with the Mine Access Road between La Plata County Road 124 and the La Plata River was submitted to the DRMS on April 10, 2012. The DRMS approved the plan in a letter dated May 23, 2012. The owner has obtained approval for the road from La Plata County. A variance was needed from the county since the road grade exceeds the county's standard of 12 percent.

The plan focused on the approximate 500-foot reach of the mine road constructed on the steep hillside adjacent to the La Plata River between Stations 18+00 and 20+00 on the plans. The design in this area was based on recommendations in a geotechnical study for the project. Figure 7 shows the proposed access road plan and profile in this reach. Figure 8 shows the retaining wall grading plan. The erosion control plan is shown on Figures 9a and 9b.

The plan for the Mine Access Road was completed in May-June of 2014. An as-built of the work in this area is included in Appendix F. BWC-SGM observed the work at the Mine Access Road on May 17, 2016 and also reviewed the plans and as-built drawing for the work, including the stormwater pond. Based on this, it appears that the work was completed generally consistent with the plans. It should be noted that the design for the retaining wall did change during the construction process, but these changes affected the height and nature of the wall and did not increase the footprint of the wall and road or increase the amount of wetland impact.

The scope of work for the new Mine Access Road was as follows:

- The limits of wetlands in the project area were marked in the field.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

- Erosion controls were installed (see Figures 9a and 9b), along with any safety features or controls required by DRMS or MSHA.
- The road was re-graded to meet the requirements of the geotechnical study.
- The new road has a typical section with a 12-foot wide drivable surface with a 1-foot deep swale for runoff and a 1-foot bench along the edge of the road opposite the swale.
- Six inches of gravel was placed on the drivable portion of the road.
- Runoff from the road was detained in a detention pond with a three-stage outlet structure prior to release to wetlands or the La Plata River (see Figure 7), as required by La Plata County.
- The existing timber retaining wall was removed and hauled off-site for disposal.
- A new mechanically stabilized earth (MSE) retaining wall was constructed with a maximum height of 10 feet (see Figure 8).
- Disturbed areas were graded and seeded with the approved seed mix in Table 2.

Any excess soil, subsoil, or rock was removed from the work area and disposed of in upland away from wetlands and any streams.

Required stormwater management pond. La Plata County requires that all new development associated with the New Access Road capture and detain stormwater in excess of the existing drainage for the area that is improved. The construction of the new Mine Access Road will increase run-off through the construction of a gravel surface. An engineering evaluation of alternatives to meet this requirement was completed (Appendix G) which determined that the only practicable alternative is the construction of a stormwater detention pond upgradient of the culvert under the road. Construction of the stormwater management pond, while providing water quality treatment which will benefit the adjacent wetlands and aquatic resources of La Plata River, will impact 0.028 acre of wetland. The location of the stormwater management pond is shown on Figures 2 and 3a. Figure 10a is a plan for the pond, and Figure 10b includes details of the pond. The pond was constructed in May-June of 2014 and an as-built of the pond is included in Appendix F

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

As discussed with the USEPA and Corps in January 2013, it is proposed to authorize the impact from the stormwater pond under Nationwide Permit (NWP) 32, since it is a required part of the new Mine Access Road, and provide additional mitigation to compensate for the impact. A Pre-Construction Notification (PCN) is included in Appendix H. The additional mitigation that is proposed to compensate for the impacts from the stormwater pond is described in the following section.

5.3.3 Wetland Mitigation

Existing mitigation. The native riparian trees will be planted, as required by the NWP 14 issued for the Mine Access Road. The trees will consist of a minimum of 2-gallon, containerized nursery stock; 60 narrow-leaf cotton woods and 40 blue spruce trees will be planted adjacent to the two existing mitigation sites (see Figure 2 in Appendix A).

Additional mitigation - summary of requirements. The mitigation requirements for existing and proposed impacts were discussed with the USEPA and the Corps on January 15, 2013 to determine the status of existing mitigation and the total amount of mitigation required. As discussed in Section 2.1, the only impact to Waters that has been authorized is the 0.011 acre of impact from the Mine Access Road. At the required mitigation ratio of 1.5:1, 0.017 acre of mitigation is needed. Per the January 15, 2013 conversation, it was determined by the USEPA that:

- a mitigation ratio of 1.5:1 is appropriate for all authorized or proposed impacts;
- a ratio of 3:1 is appropriate for unauthorized impacts;
- full credit would be given for the emergent wetland mitigation site; and,
- one-half credit would be given for the scrub-shrub mitigation site.

Additional impacts include 0.028 acre from construction of the required stormwater pond (see Appendix F). Unauthorized impacts include the 0.015-acre of fill to be retained from stabilization of the Chief Portal.

The mitigation requirements are summarized in Table 3, which shows the mitigation requirements and credits based on these assumptions, and shows that an additional 0.079 acre of wetland mitigation is needed. The additional mitigation will be provided at three areas in the

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

vicinity of the existing emergent mitigation site. The location of the mitigation is shown in Figure 11. Existing shallow ponding exists at the three areas (see the photographs in Appendix I). Each area will be planted 2-foot on center with containerized nursery stock of the same species used for the emergent wetland mitigation site. At least 20 five-gallon, containerized willows will also be planted. Additional information on the additional mitigation is provided in the PCN in Appendix H.

5.4 IMPLEMENTATION PLAN

It is proposed to complete the remaining work described in Section 5.3 in the early summer of 2016, pending approval of this plan and confirmation of authorization of the additional work under NWP 32, as proposed (the Mine Access Road work was completed in May-June of 2014). The plan for the Chief Portal site has been approved by the DRMS.

A pre-construction meeting will be held with the contractor selected for the work. The contractor will provide daily progress reports which will be reviewed by the field engineer. The field engineer will prepare regular construction quality assurance (CQA) reports. The CQA reports will be provided to the geotechnical engineer for review. Weekly status reports will be sent to DRMS. The work will also be observed by a wetland scientist to assure compliance with this plan.

A Construction Completion Report will be prepared at the end of the work that will include a description of the work conducted to stabilize the Chief Portal. The report will also include as-built drawings and photographic logs of the work. The Construction Completion Report will be prepared by a Professional Engineer.

Work on the additional mitigation will be observed by a qualified wetland scientist and documented with photographs.

5.4.1 Site Protection

The following measures will be used to ensure there are no inadvertent impacts to wetlands or drainages from the work:

1. The limits of channel for the Chief Portal site will be clearly marked in the field prior to beginning of the work.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

2. Sediment and erosion controls will be installed, per the Stormwater Management Plan for the mine.
3. Trucks and equipment will use designated access areas.
4. Areas for disposal of any excess soil and rock will be located in uplands away from any wetlands, Little Deadwood Gulch, and the La Plata River.
5. The work will be observed in the field by a qualified wetland scientist to ensure compliance with the plan.

5.5 ACTUAL RESTORED PHYSICAL CONDITIONS

Photographs will be taken of the work. Construction observations will be recorded on a standard form. An as-built drawing will be prepared for the Chief Portal site and submitted to the USEPA/Corps within six weeks of completion of the work in this Plan. The area of the additional mitigation will be measured and an as-built drawing prepared.

5.6 SUCCESS CRITERIA

The goal of the work at the Chief Portal is to stabilize the Little Deadwood Gulch channel while providing the required mine egress for safety.

The goal of the work at the Mine Access Road along the La Plata River was to stabilize the existing retaining wall and slope and re-construct the mine road according to the plan and engineering standards.

The goal of the mitigation is to replace the functions provided by the impacted wetlands. Success criteria for the existing mitigation sites, which are from the authorization for the March 4, 2008 NWP 14 Mitigation Plan, were provided in Section 2.1.

Performance Standards (also known as success criteria) for the additional 0.079 acre of emergent wetland to be created were developed from the South Pacific Division Uniform Performance Standards by the Corps and are shown in Table 4. The standards in Table 4 are generally consistent with the success criteria for the existing mitigation sites, and they address wetland soil, vegetation, and water supply.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

6.0 COMPLIANCE WITH SECTION 404

The existing impacts due to the Mine Access Road were authorized under NWP 14, as described in Section 2.1. It is proposed to authorize the following activities under NWP 32 for a total impact of 0.043 acre:

- 0.015 acre of impact to channel at the Chief Portal site,
- 0.028 acre of impact from the stormwater pond.

An additional 0.079 acre of mitigation will be provided, as documented in Table 3. The riparian tree plantings will also be completed.

7.0 MONITORING PLAN

7.1 WORK AT CHIEF PORTAL AND MINE ACCESS ROAD SITES

The work will be documented with photographs and observations by a Professional Engineer. A monitoring program will be implemented to measure the magnitude and rate of movement of along the mine access road and the retaining wall, as recommended in the geotechnical report.

The fill and culvert crossing at the Chief Portal will be maintained to prevent debris blockage. Woody material and other debris upgradient of the culvert will be routinely removed.

7.2 WETLAND MITIGATION SITES

A wetland mitigation monitoring report will be prepared and submitted by December 1, 2016 to document conditions at the wetland mitigation sites. This plan will include a description of the construction of the additional 0.079 acre of mitigation and an as-built drawing.

The native riparian tree plantings will be monitored for a minimum of three years to assess their success.

7.3 REPORTING

The Construction Completion Report will be provided to the USEPA within six weeks from completion of the work.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

The Mitigation Monitoring Report will be prepared by a wetland scientist and will meet the minimum standards described in Regulatory Guidance Letter 08-03 (EGL 08-03). The first report will be provided by December 1, 2016 and subsequent reports will be provided by December 1st of each year that monitoring is required. The Mitigation Rule and RGL 08-03 require compensatory mitigation areas to be monitored for a minimum of five full years following completion of the mitigation areas. USEPA may consider a written request to reduce the five year monitoring requirement following submittal of at least two consecutive annual monitoring reports which demonstrate that all final performance standards have been met, including verification through a USEPA/Corps inspection.

8.0 CONTINGENCY MEASURES

Deficiencies with the mitigation work could include:

- Lack of germination of seeded areas.
- Mortality of planted species.
- Invasion by noxious weeds.
- Predation by wildlife.
- Excessive erosion.
- Death of planted trees.

Potential measures to rectify deficiencies will depend on the specifics, but could include:

- Re-seeding.
- Re-planting of wetland species.
- Re-mulching and implementation of additional erosion control measures.
- Application of approved herbicides (in strict accordance with the label instructions).
- Re-planting of riparian trees.
- Fencing to limit access by wildlife.

Final - Restoration and Compliance Plan for May Day Idaho Mine Complex
Administrative Order for Compliance, Docket No. CWA-08-2012-0011

9.0 FUNDING AND IMPLEMENTATION

All of the land upon which the work described in this Plan will occur is on property owned by Wildcat, the responsible party.

The estimated cost for the work in the Plan is \$57,500. Wildcat has the financial capabilities to complete the work in this plan, and has a bond of \$204,000 with DRMS for mine reclamation, which includes the estimated cost of the work in this Plan.

10.0 SCHEDULE

The work included in this Plan will be completed by July 1, 2016, adverse weather or unusual conditions aside. The USEPA will be notified of the date of completion of the work, within two weeks after the work is done.

Reports will be submitted as detailed in Section 7.1.

P:\Project Files\189-14 Wildcat Mining R2\2016 Task 03\Restoration Plan 2016\FINAL RestorationPlan-2016-06-10.docx

Tables

**Table 1. Wetland Mitigation Site Success
May Day Mine**

Conditions	Emergent Mitigation Wetland		Scrub-Shrub Mitigation Wetland			
	Performance Standard*	2010 Observation by R ² Inc.	June 2012 Observation by BWC	Performance Standard*	2010 Observation by R ² Inc.	June 2012 Observation by BWC
Planted shrub survival rate (%)						79
Ground cover (%)	80	75	80		67	
Open water (%)		10	20			
Size (acre)	0.005		0.009** (400 sq ft)	0.025		0.031** (1,370 sq ft)

Notes:

BWC = Bikis Water Consultants, LLC
Total wetland created equals 0.04 acre.

Footnotes:

* In Basin Hydrology Plan (September 20, 2007) and BWC modified plan (October 14, 2008).
** In BWC as-built summary (October 14, 2008).

**Table 2. Reclamation Seed Mix
May Day Mine**

Species	Scientific Name	lbs PLS/acre
Arizona fescue	<i>Festuca arizonae</i>	0.5
Beardless wheatgrass	<i>Pseudoroegneria spicata</i>	1.2
Intermediate wheatgrass	<i>Agropyron intermedium</i>	20
Mountain brome	<i>Bromus marginatus</i>	2.6
Timothy grass	<i>Phleum pratense</i>	0.2

Note:

lbs PLS/acre = pounds of pure live seeds per acres. This is the approved seed mix for the Division of Reclamation Mining and Safety.

Table 3. Summary of Mitigation Requirements and Credits⁽¹⁾
May Day Mine

Mitigation Needed				
Action/Location	Acres Impact	Mitigation Ratio	Mitigation Needed (acres)	Notes
Access road under NWP 14	0.011	1.5:1	0.017	Already permitted
Chief portal stabilization	0.015	3:1	0.045	Unauthorized fill to be permitted
Stormwater pond	0.028	1.5:1	0.042	To be permitted
Total Mitigation Needed:			0.104	
Mitigation Credits				
Action/Location	Acres Impact	Mitigation Ratio	Mitigation Credits (acres)	
Emergent wetland mitigation	0.009	1:1	0.009	
Scrub/shrub mitigation	0.031	1:02	0.016	
Total Mitigation:			0.025	
Additional mitigation needed: 0.104 - 0.025 = 0.079 acre.				

Footnote:
 1) See text for explanation.

Table 4. Ecological Performance Standards for Additional Mitigation Sites⁽¹⁾
Wildcat Mining - R Squared, Inc.

PS No. ⁽²⁾	Type	Standard	Target	Measure
10	Hydric soil	Wetlands have/develop USDA NRCS indicators	Indicators present	Soil pits
21	Hydrologic	Saturated soil	≥ 90% of site has saturated soil ≥ 80% of growing season	Soil pits, visual
27	Vegetation	Dominance of hydrophytes	≥ 80% cover of hydrophytic species	Plots and transects
26	Vegetation	Tree and shrub survival	≥ 70% survival planted species	Counts
29	Vegetation	Weeds	< 10% cover is upland weeds.	Plots and transects

Notes:

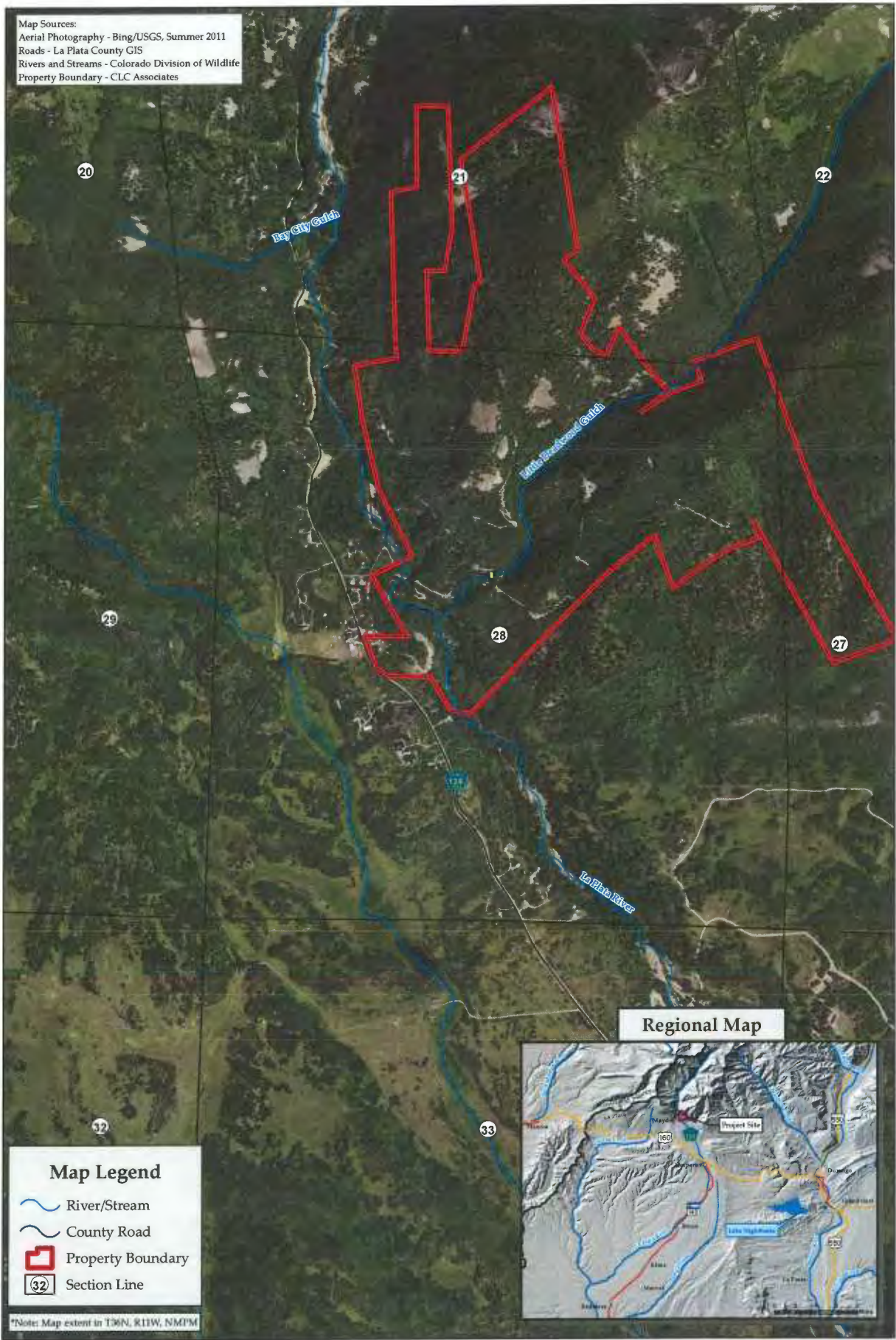
- USDA = U. S. Department of Agriculture
- NRCS = National Resources Conservation Service
- PS = Performance Standard
- FACWet = Functional Assessment of Colorado Wetlands

Footnotes:

- 1) As determined using the Regulatory Program Uniform Performance Standards Compensatory Mitigation Requirements (12505-SPD) for the South Pacific Division based on site characteristics. These standards apply to the 0.079 acres of additional mitigation provided in this plan.
- 2) Per attachment 12505.1.

Figures

Map Sources:
 Aerial Photography - Bing/USGS, Summer 2011
 Roads - La Plata County GIS
 Rivers and Streams - Colorado Division of Wildlife
 Property Boundary - CLC Associates



Map Legend

- River/Stream
- County Road
- Property Boundary
- Section Line



*Note: Map extent in T36N, R11W, N4PM

BIKIS
 Water Consultants
 a division of SGM

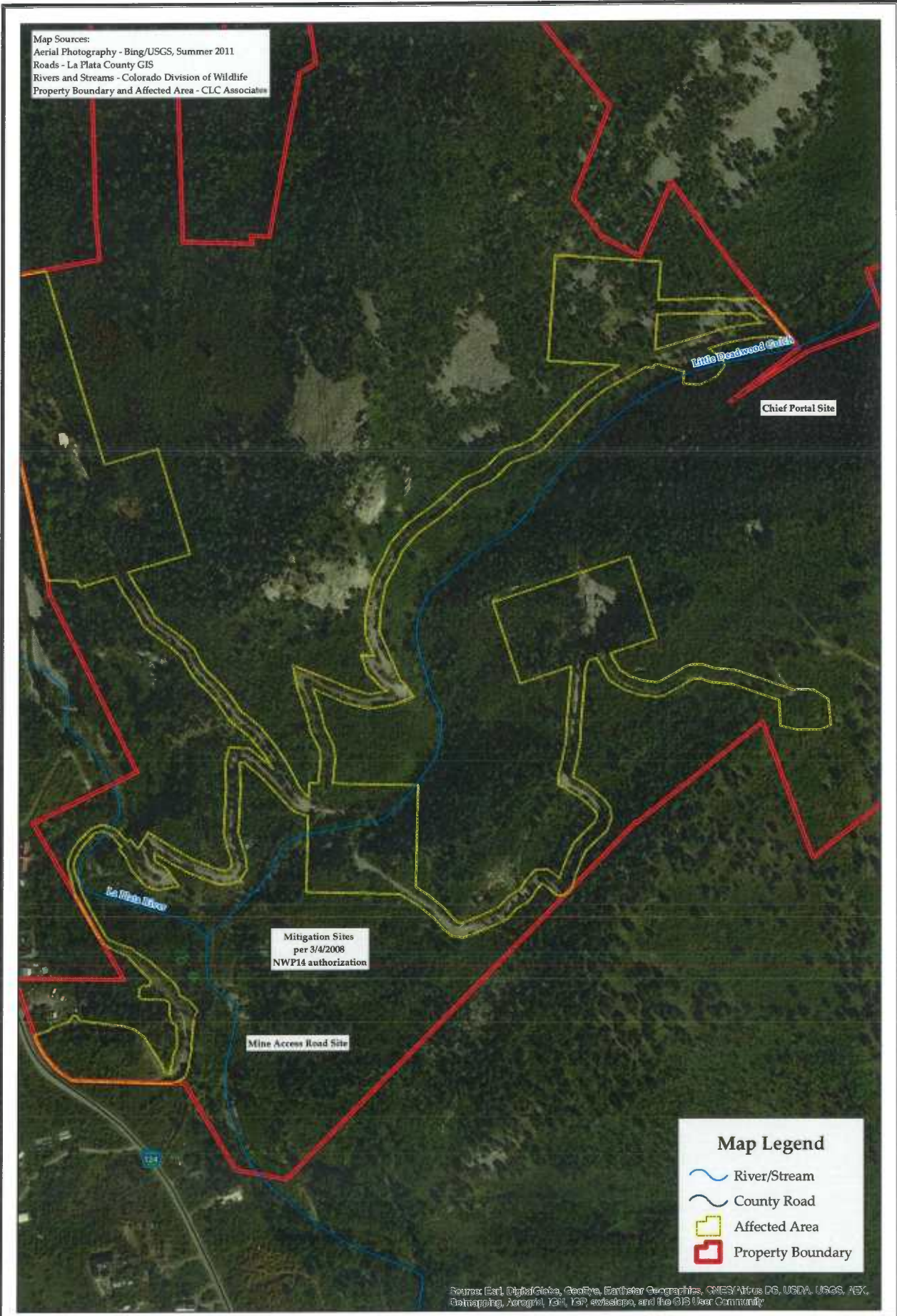
555 RiverGate Lane, Suite 84-82
 Durango, CO 81301
 970.251.2345 ext. 305-2341fx
 www.BikisWater.com

0 400 800 1,600 Feet
 1 inch = 800 feet

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:9,600

**May Day Mine
 Vicinity Map**

**Figure
 1**



Project File: \\s:\wildlife\mining\2016\GIS\2016\2016\Figure 2\Locations of Areas Addressed in Plan.docx

BIKIS
 Water Consultants
 a division of SGM

555 RiverGate Lane, Suite 84-82
 Durango, CO 81301
 (970) 385-2349 ext. 265-2341 fax
 www.bikiswater.com

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:3,600

May Day Mine
Location of Areas Addressed
In Restoration Plan

Figure
 2



Map Sources:
 Aerial Photography - Bing/USGS, Summer 2011
 Hydrography and Boundaries - CLC Associates
 Wetland Data - BWC GPS Data

Map Legend

- River/Stream
- Affected Area
- Property Boundary
- Scrub-Shrub Wetland Mitigation Site (=2,260 ft²)
- Emergent Wetland Mitigation Site (=400 ft²)
- Existing Wetland
- Fill In Waters of the US (=510 ft²)

Source: Esri, DigitalGlobe, GeoEye, Earthstar OpenStreetMap contributors, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, GEBCO, Swisstopo, and the GIS User Community

BIKIS Water Consultants, 555 RiverGate Lane, Suite B4-82, Durango, CO 81301, (970) 585-2349, www.BIKISWater.com

BIKIS
 Water Consultants
 a division of **ESGM**

555 RiverGate Lane, Suite B4-82
 Durango, CO 81301
 (970) 585-2349, 263-2341fx
 www.BIKISWater.com

0 50 100 200 Feet
 1 inch = 100 feet

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:1,200

May Day Mine
Existing Conditions At
Mine Access Road Site

Figure
3A



© 2016 by BIKIS Water Consultants, LLC. All Rights Reserved. BIKIS (CSD) MCD01-2016-10 Figure 3B Existing Conditions at Chief Portal Site

BIKIS
 Water Consultants
 a division of **SGM**

555 RiverCrest Lane, Suite 84-82
 Durango, CO 81301
 (970) 385-2340px, 385-2341fx
 www.BIKISWater.com

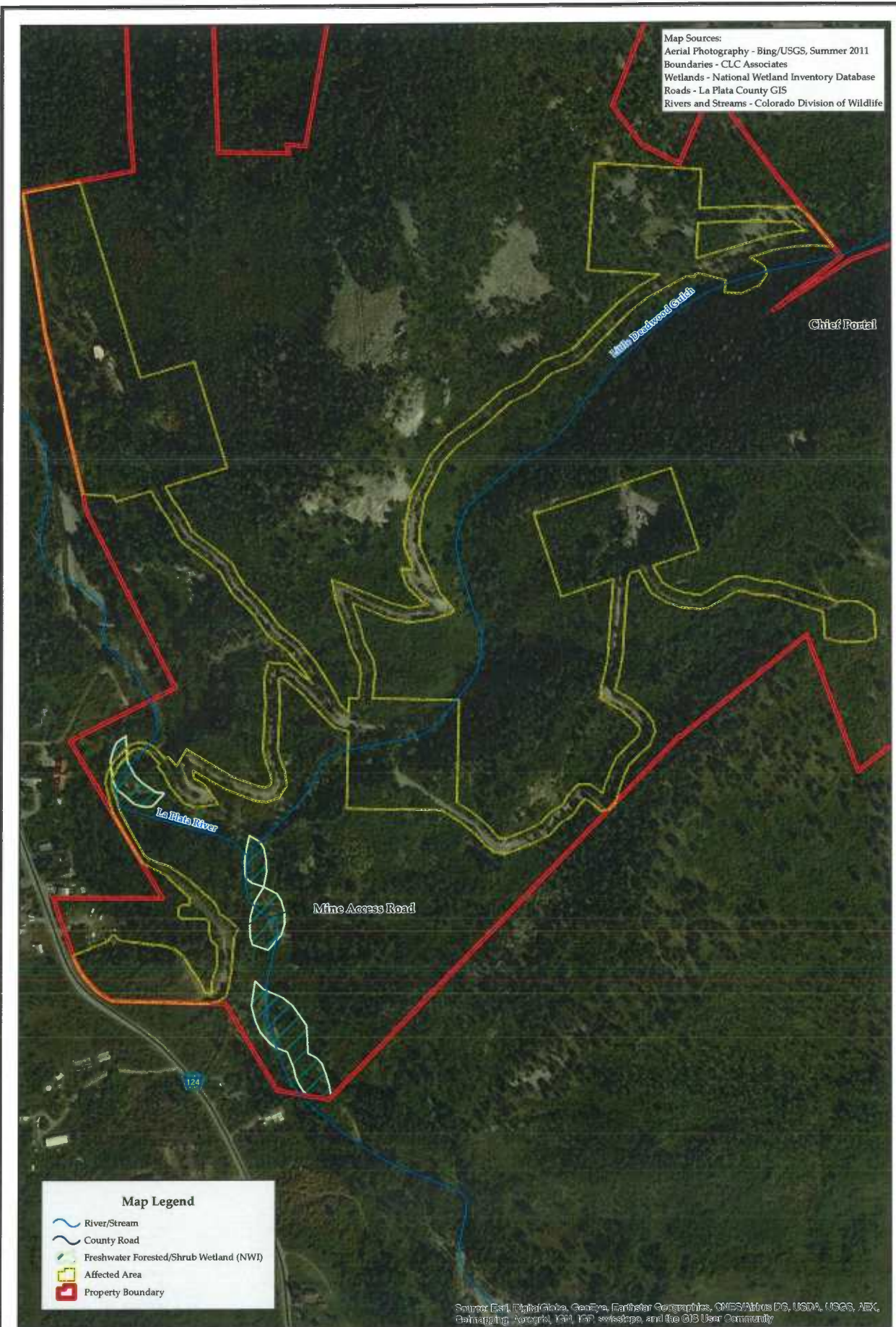
0 50 100 200 Feet

1 inch = 100 feet

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:1,200

May Day Mine
Existing Conditions At
Chief Portal Site

Figure
3B



Z:\ProjectFiles\108-14\Wetland\108-14\GIS\Map\108-14\Figure 4 NWI Wetland.mxd

BIKIS 355 RiverGate Lane, Suite B4-45
 Durango, CO 81301
 (970) 385-1340ph 385-2341fx
 www.BIKISWater.com

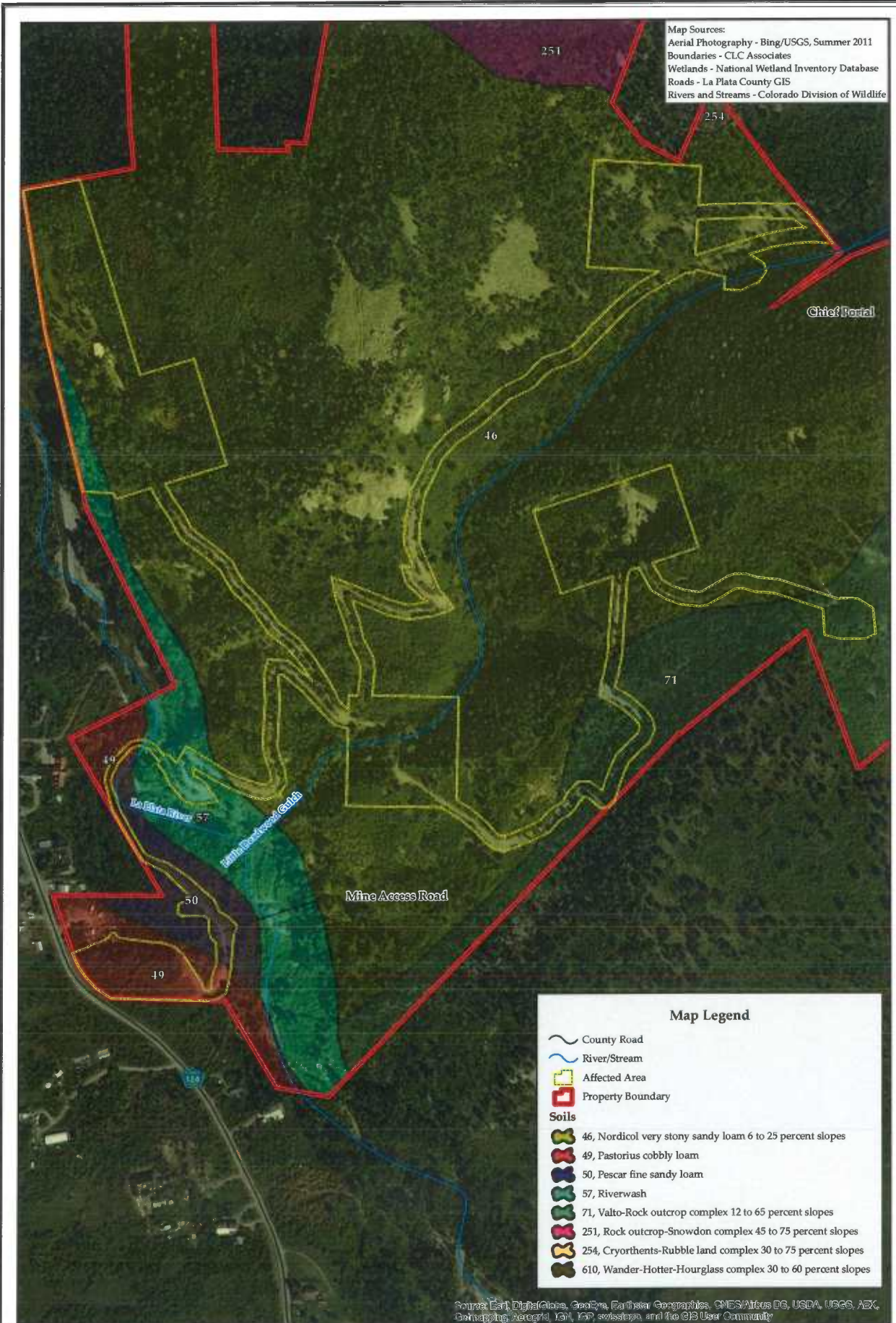
Water Consultants
 a division of **ESGM**

0 150 300 600 Feet
 1 inch = 300 feet

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:3,600

**May Day Mine
 NWI Wetland Map**

**Figure
 4**



Map Sources:
 Aerial Photography - Bing/USGS, Summer 2011
 Boundaries - CLC Associates
 Wetlands - National Wetland Inventory Database
 Roads - La Plata County GIS
 Rivers and Streams - Colorado Division of Wildlife

Map Legend

- County Road
- River/Stream
- Affected Area
- Property Boundary

Soils

- 46, Nordicol very stony sandy loam 6 to 25 percent slopes
- 49, Pastorius cobbly loam
- 50, Pescar fine sandy loam
- 57, Riverwash
- 71, Valto-Rock outcrop complex 12 to 65 percent slopes
- 251, Rock outcrop-Snowdon complex 45 to 75 percent slopes
- 254, Cryorthents-Rubble land complex 30 to 75 percent slopes
- 610, Wander-Hotter-Hourglass complex 30 to 60 percent slopes

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Com mapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Com mapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Bikis Water Consultants
 a division of **BSGM**

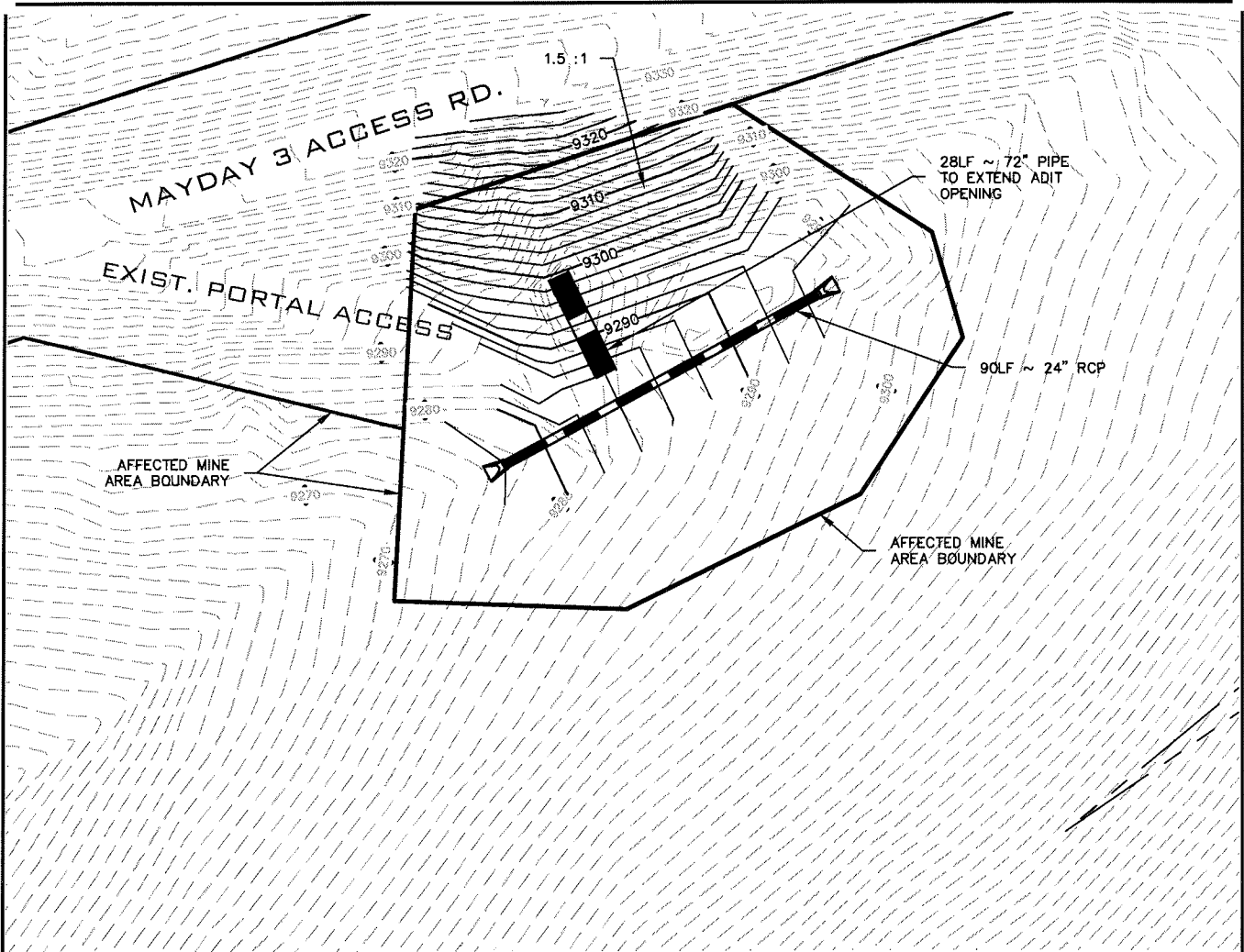
555 RiverGate Lane, Suite B4-42
 Durango, CO 81301
 (970) 383-2340ph 385-2341fx
 www.BikisWater.com

0 150 300 600 Feet
 1 inch = 300 feet

Designed by: KCH
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:3,600

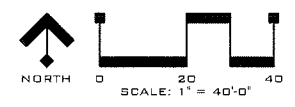
**May Day Mine
 Soils Map**

**Figure
 5**



LEGEND

- 8715 — PROPOSED MAJOR CONTOUR
- 8717 — PROPOSED MINOR CONTOUR
- - - 8715 - - - EXISTING MAJOR CONTOUR
- - - 8717 - - - EXISTING MINOR CONTOUR



PROJ #: 12.0008
 DATE: 6-15-12
 DWN BY: JJA
 CHK BY: DJM

CHIEF PORTAL WORK PLAN TR
MAYDAY IDAHO MINE COMPLEX
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY, COLORADO

CLC ASSOCIATES
 9480 E. ORCHARD RD.
 SUITE 2000
 GREENWOOD VILLAGE
 COLORADO 80111
 P 303 770 5600
 F 303 770 2349
 CLCASSOC.COM
 ARCHITECTURE
 ENGINEERING PLANNING
 LANDSCAPE ARCHITECTURE
 LAND SURVEYING



FIGURE-6

CHIEF PORTAL GRADING PLAN



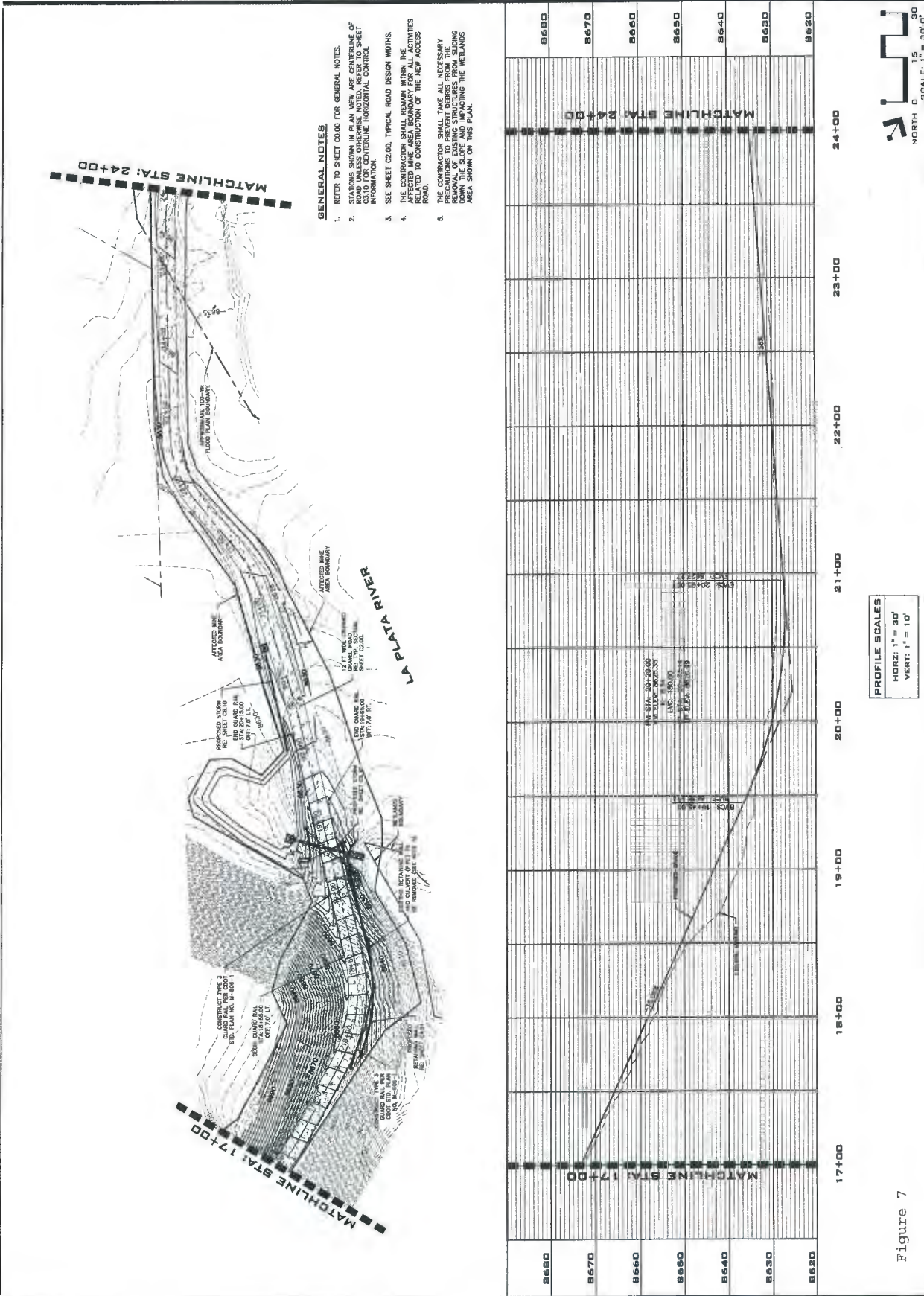
WILDCAT MINING CORPORATION
 10000 E. CENTRAL AVENUE
 DENVER, COLORADO 80231
 PHONE: 303.750.1000
 FAX: 303.750.1001
 WWW.WILDCATMINING.COM

CONSTRUCTION PLANS
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY
 COLORADO



NEW ACCESS RD PLAN & PROFILE
 DATE: 02/13
 DMS: 17 YRS SUBMITTAL

PROJECT #11.0074
 DRAWING NO. 11.0074-01
 DESIGNED BY: JUA
 CHECKED BY: DAW
 SCALE: 1" = 30' 0"



- GENERAL NOTES**
1. REFER TO SHEET C600 FOR GENERAL NOTES.
 2. STATIONS SHOWN IN PLAN VIEW ARE CENTERLINE OF ROAD UNLESS OTHERWISE NOTED. REFER TO SHEET C600 FOR HORIZONTAL CONTROL INFORMATION.
 3. SEE SHEET C600, TYPICAL ROAD DESIGN DETAILS.
 4. THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES AFFECTED BY THE CONSTRUCTION OF THE NEW ACCESS ROAD.
 5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE REMOVAL OF EXISTING STRUCTURES FROM SLIDING AND TO PREVENT DAMAGE TO THE WETLANDS AREA SHOWN ON THIS PLAN.

PROFILE SCALES
 HORZ: 1" = 30'
 VERT: 1" = 10'

Figure 7



WILDCAT MINING CORPORATION
 10000 E. WILDCAT AVENUE
 DENVER, COLORADO 80231
 PHONE: 303.755.1234
 FAX: 303.755.1235
 WWW.WILDCATMINING.COM

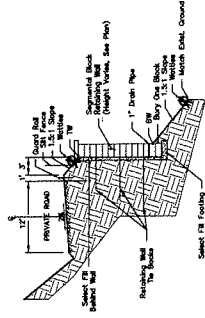
CONSTRUCTION PLANS
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY
 COLORADO



DATE	01/25/15	DESCRIPTION	REVISIONS
PROJECT #	11.00774	DESIGNED BY	JWA
CHECKED BY	JWA	DRAWN BY	DMH
C4.91			

LEGEND

- 8715 — PROPOSED MAJOR CONTOUR
- 8717 — PROPOSED MINOR CONTOUR
- 8719 — EXISTING MAJOR CONTOUR
- 8721 — EXISTING MINOR CONTOUR
- 8723 — EXISTING SPOT ELEVATION
- 8725 — PROPOSED SPOT ELEVATION
- 8727 — TOP OF WALL
- 8729 — BOTTOM OF WALL
- TW
- BW



WALL SECTION X-X
 NOT TO SCALE

GENERAL NOTES

1. REFER TO SHEET C0.00 FOR GENERAL NOTES.
2. RETAINING WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, UNLESS OTHERWISE NOTED. REFER TO SHEET C0.10 FOR CENTERLINE HORIZONTAL CONTROL INFORMATION.
3. DIMENSIONS IN SECTION ARE TO CENTERLINE OF ROAD AND CENTERLINE OF PROPOSED WALL.
4. SEE SHEET C2.00, TYPICAL ROAD DESIGN NOTES.
5. TYPE "M" RIPRAP SHALL MEET DOT SPECIFICATIONS WITH A D50=12".

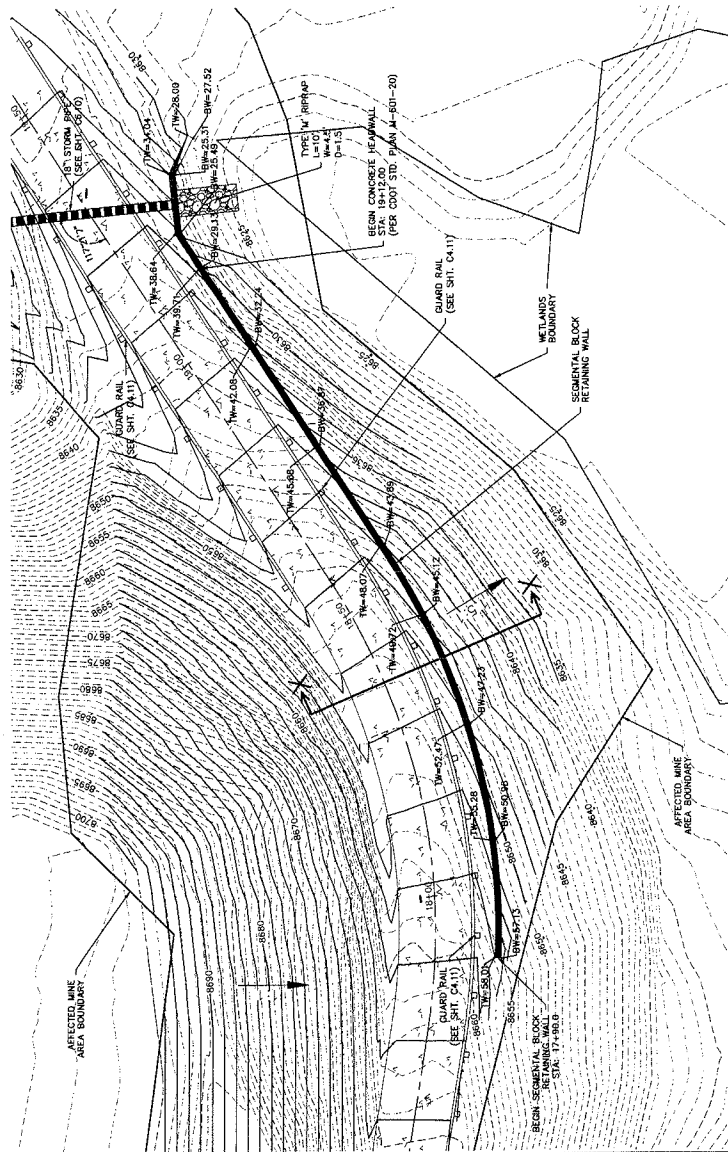


Figure 8



WILDCAT MINING CORPORATION
CONSTRUCTION PLANS
LA PLATA COUNTY
COLORADO



DATE	DESCRIPTION
02/02/12	DRMS 1817R SUBMITTAL

PROJECT #11-0074
 DESIGNED BY: JMM
 CHECKED BY: OJM

C4.20

LEGEND

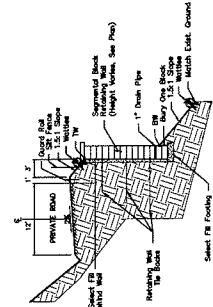
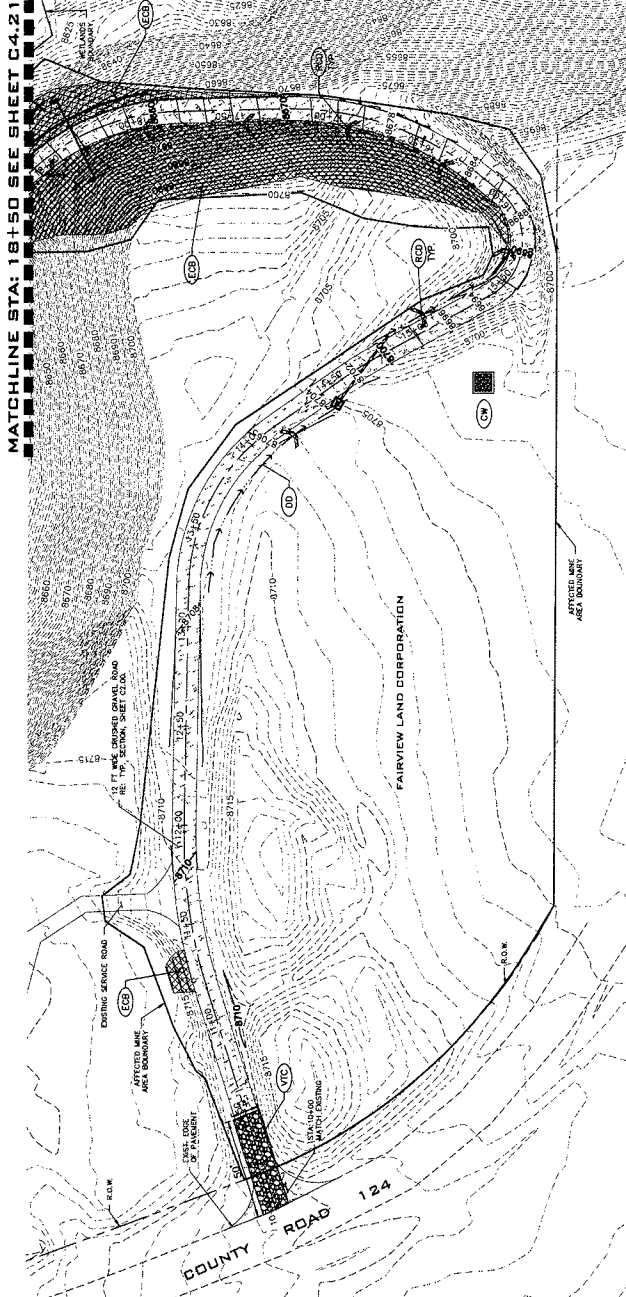
- PROPERTY LINE
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- AFFECTED WARE AREA BOUNDARY
- SILT FENCE
- VEHICLE TRACKING CONTROL
- ROCK CHECK DAM
- DIVERSION DITCH
- CONCRETE WASHOUT
- SOIL RETENTION BLANKET

GENERAL NOTES

- REFER TO SHEET C040 FOR GENERAL NOTES.
- STATIONS SHOWN IN PLAN VIEW ARE CENTERLINE OF ROAD UNLESS OTHERWISE NOTED. REFER TO SHEET INFORMATION FOR HORIZONTAL CONTROL.
- SEE SHEET C200, TYPICAL ROAD DESIGN WIDTHS.

CONSTRUCTION NOTES

- (VTC)** INSTALL VEHICLE TRACKING CONTROL TO DIMENSIONS SHOWN. REFER TO SHEET C450, CDOT STANDARD DETAIL M-208-1.
- (ECB)** INSTALL SOIL RETENTION BLANKETS. REFER TO SHEET C454R, CDOT STANDARD DETAIL M-208-1.
- (RCD)** INSTALL ROCK CHECK DAM. REFER TO SHEET C450, CDOT STANDARD DETAIL M-208-1.
- (SD)** INSTALL 1 FOOT DEEP DIVERSION DITCH.
- (CW)** INSTALL CONCRETE WASHOUT AREA.
- (ECP)** INSTALL EROSION LOG SLOPE PROTECTION. REFER TO SHEET C450, CDOT STANDARD DETAIL M-208-1.



Note: See Structures Detail for Exact Dimensions of Wall Profile. Details of Select Fill Behind Wall and Location of the Blankets.

NOTE:
 AFTER GRADING OPERATIONS HAVE BEEN COMPLETED, COVER ALL SLOPES STEEPER THAN 2:1 WITH EROSION CONTROL BLANKETS PER CDOT STANDARD PLAN NO. M-208-1



Figure 9A



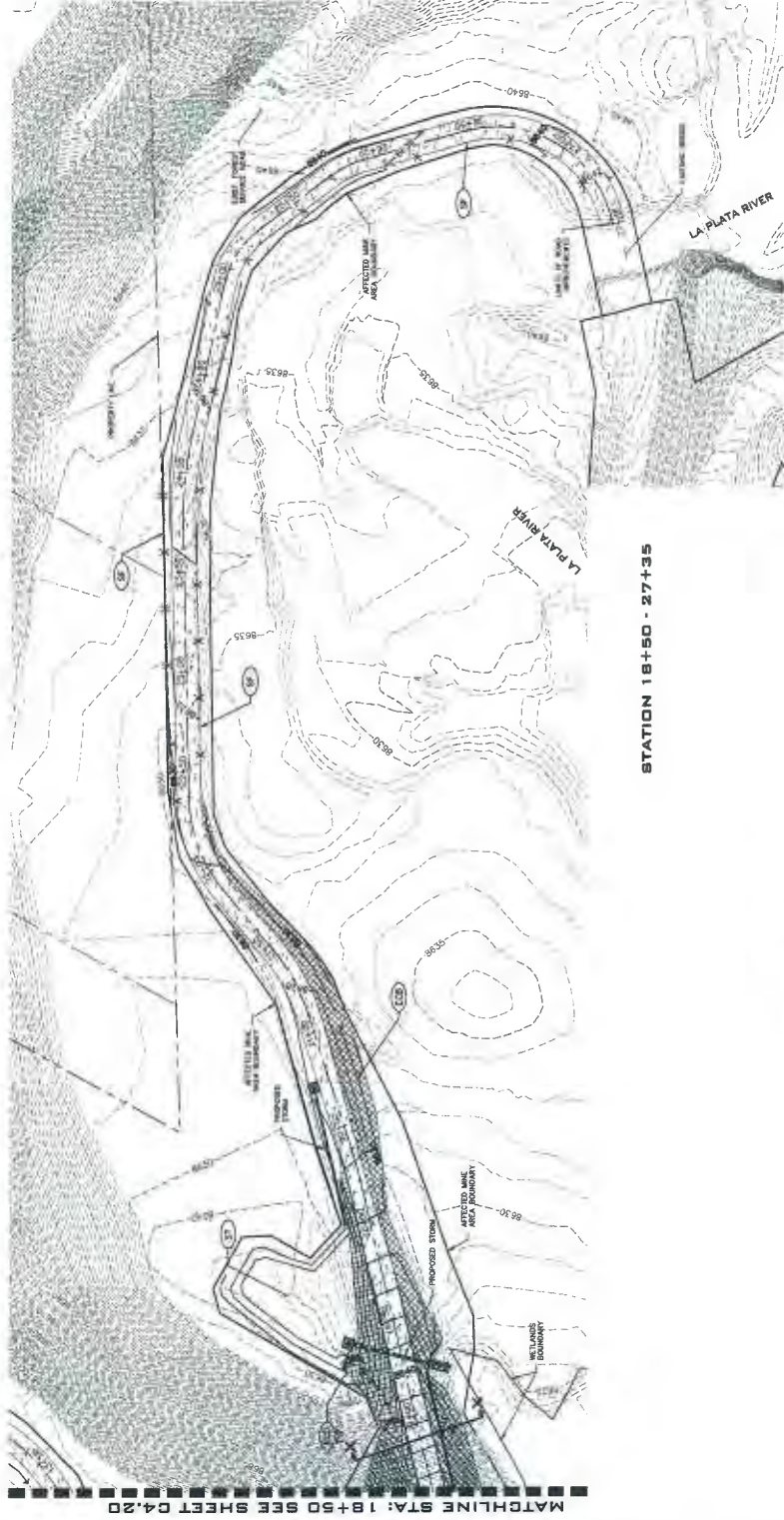
ELC ASSOCIATES, INC.
 1800 S. CHERRY AVE., SUITE 100
 DENVER, COLORADO 80202
 PHONE: 303.733.8800
 FAX: 303.733.8801
 WWW.ELCASSOCIATES.COM

CONSTRUCTION PLANS
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY
 COLORADO



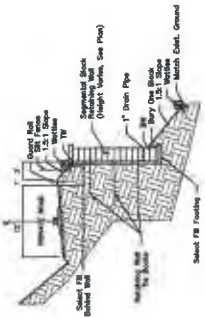
NEW ADDRESS RD EROSION CONTROL PLAN
 DATE: 02/02/13
 DRAWN BY: JTB
 PROJECT #11-0074
 DESIGNED BY: JJA
 CHECKED BY: DJM

NORTH
 SCALE: 1" = 30'-0"



STATION 18+50 - 27+35

- GENERAL NOTES**
- REFER TO SHEET C4.00 FOR GENERAL NOTES.
 - STATIONS SHOWN IN PLAN VIEW ARE CENTERLINE OF ROAD UNLESS OTHERWISE NOTED. REFER TO SHEET C3.10 FOR CENTERLINE HORIZONTAL CONTROL INFORMATION.
 - SEE SHEET C2.00, TYPICAL ROAD DESIGN WIDTHS.
- CONSTRUCTION NOTES**
- (ST) INSTALL STONE CURB WITH 1:1 SLOPE PROTECTION. REFER TO SHEET C4.90, CDOT STANDARD DETAIL M-208-1.
 - (EL) INSTALL EROSION LOG SLOPE PROTECTION. REFER TO SHEET C4.90, CDOT STANDARD DETAIL M-208-1.
 - (ES) INSTALL SOIL RETENTION BLANKETS. REFER TO SHEET C4.90, CDOT STANDARD DETAIL M-208-1.
 - (RS) INSTALL ROCK CHECK DAM. REFER TO SHEET C4.90, CDOT STANDARD DETAIL M-208-1.
 - (SF) INSTALL SILT FENCE. REFER TO SHEET C4.90, CDOT STANDARD DETAIL M-208-1.
- LEGEND**
- PROPERTY LINE
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - AFFECTED MINE AREA BOUNDARY
 - SILT FENCE
 - ROCK CHECK DAM
 - INSTALL EROSION LOG SLOPE PROTECTION
 - INSTALL SOIL RETENTION BLANKETS
 - SOIL RETENTION BLANKET



Note: See Standard Detail for Exact Dimensions of Wall Footing. Depth of Sheet Pile Behind Wall, and Length of the Blanket.

Figure 9B



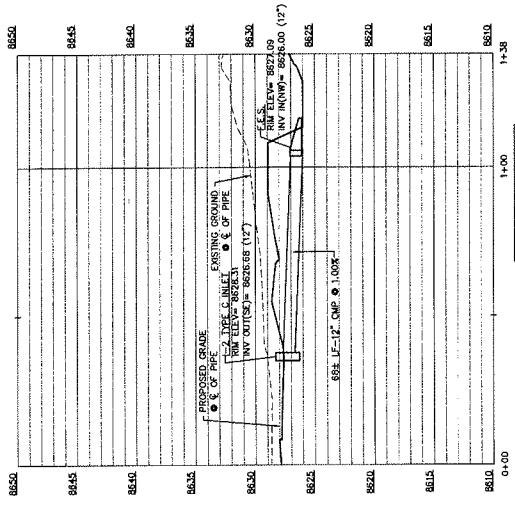
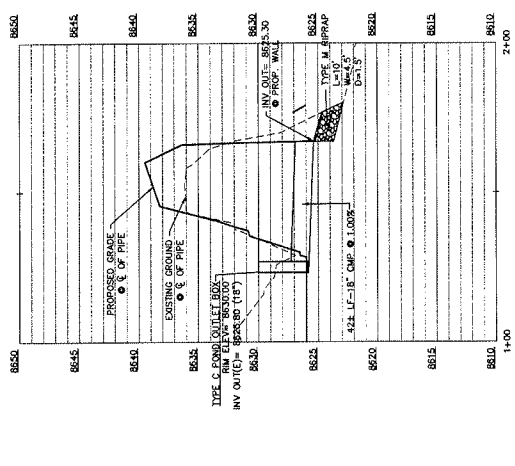
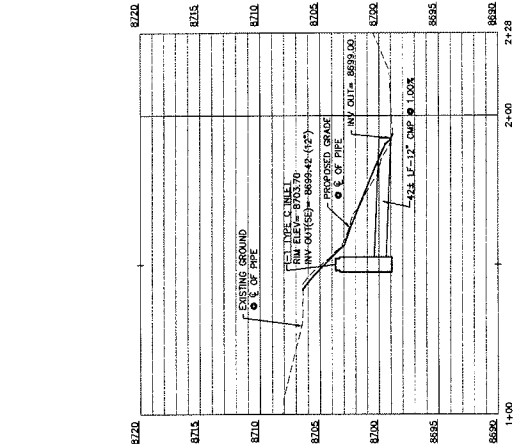
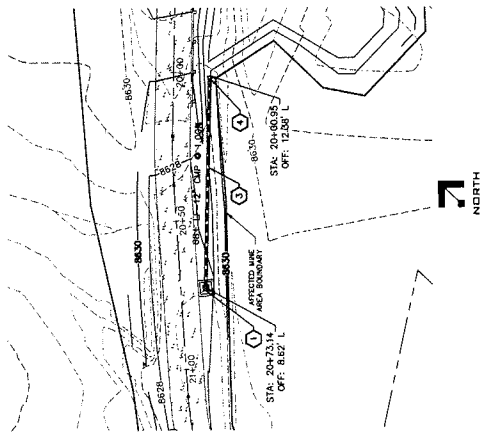
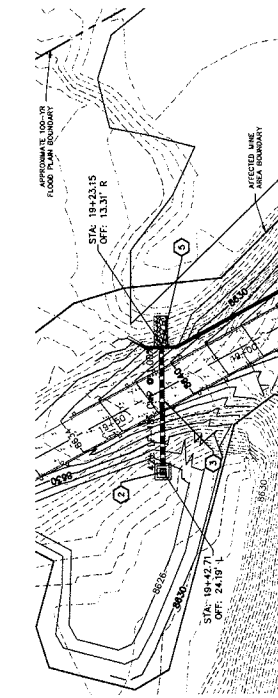
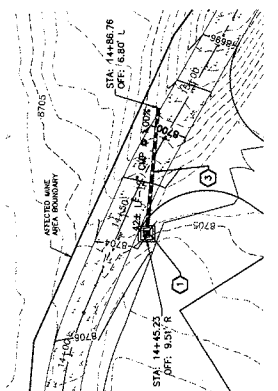
WILCOAT MINING CORPORATION
LA PLATA COUNTY
COLORADO
CONSTRUCTION PLANS



NEW ACCESS RD STORM PLAN & PROFILE
DATE: 8/20/13
DESCRIPTION: DRAINAGE
PROJECT # 111-0374
DRAWN BY: JJA
CHECKED BY: DJM
66.10

- GENERAL NOTES**
1. REFER TO SHEET C0.00 FOR GENERAL NOTES.
 2. STATIONS AND OFFSET SHOWN IN PLAN VIEW ARE CENTERLINE OF ROAD UNLESS OTHERWISE NOTED. HORIZONTAL CONTROL INFORMATION.
 3. SEE SHEET C2.00, TYPICAL ROAD DESIGN WIDTHS.
 4. TYPE M BRIDGES SHALL MEET CDOT SPECIFICATIONS WITH A 50MPH "E".
- CONSTRUCTION NOTES**
1. CONSTRUCT TYPE 'C' INLET PER CDOT STD. PLAN NO. M-504-10. RE: SHEET C4.91.
 2. CONSTRUCT MODIFIED TYPE 'C' PER DETAILS ON SHEET C5.91.
 3. INSTALL CORRUGATED METAL PIPE (CMP) PER MANUFACTURER'S RECOMMENDATIONS.
 4. INSTALL CORRUGATED METAL PIPE (CMP) FLARED END SECTION (YES) PER CDOT STD. PLAN NO. M-503-10.
 5. CONSTRUCT CONCRETE HEADWALL AND SLOTTED PER CDOT STD. PLAN NO. M-504-10, M-504-12, AND M-504-20.

- CONSTRUCTION NOTES**
1. CONSTRUCT TYPE 'C' INLET PER CDOT STD. PLAN NO. M-504-10. RE: SHEET C4.91.
 2. CONSTRUCT MODIFIED TYPE 'C' PER DETAILS ON SHEET C5.91.
 3. INSTALL CORRUGATED METAL PIPE (CMP) PER MANUFACTURER'S RECOMMENDATIONS.
 4. INSTALL CORRUGATED METAL PIPE (CMP) FLARED END SECTION (YES) PER CDOT STD. PLAN NO. M-503-10.
 5. CONSTRUCT CONCRETE HEADWALL AND SLOTTED PER CDOT STD. PLAN NO. M-504-10, M-504-12, AND M-504-20.



PROFILE SCALES
HORIZ: 1" = 20'
VERT: 1" = 5'

SCALE: 1" = 20'-0"

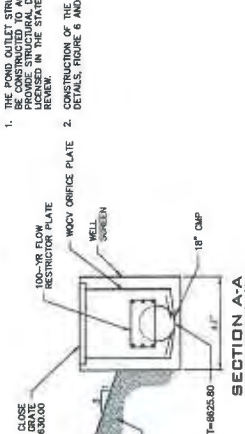
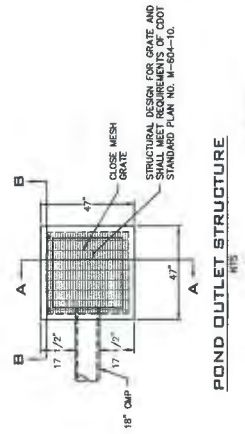
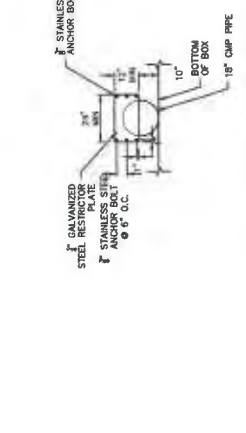
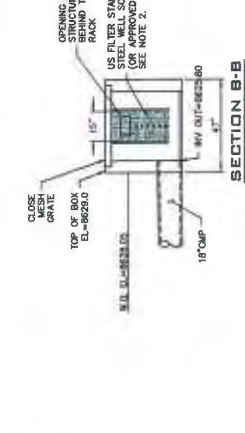
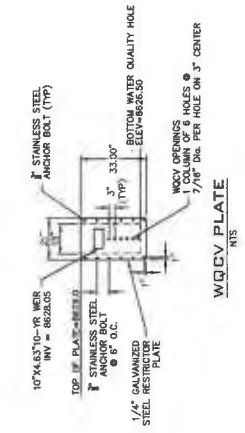
Figure 10A



WILDCAT MINING CORPORATION
 CONSTRUCTION PLANS
 LA PLATA COUNTY
 COLORADO



PROJECT # 11-0074
 DRAWING NO. 080
 CHECKED BY: DJM

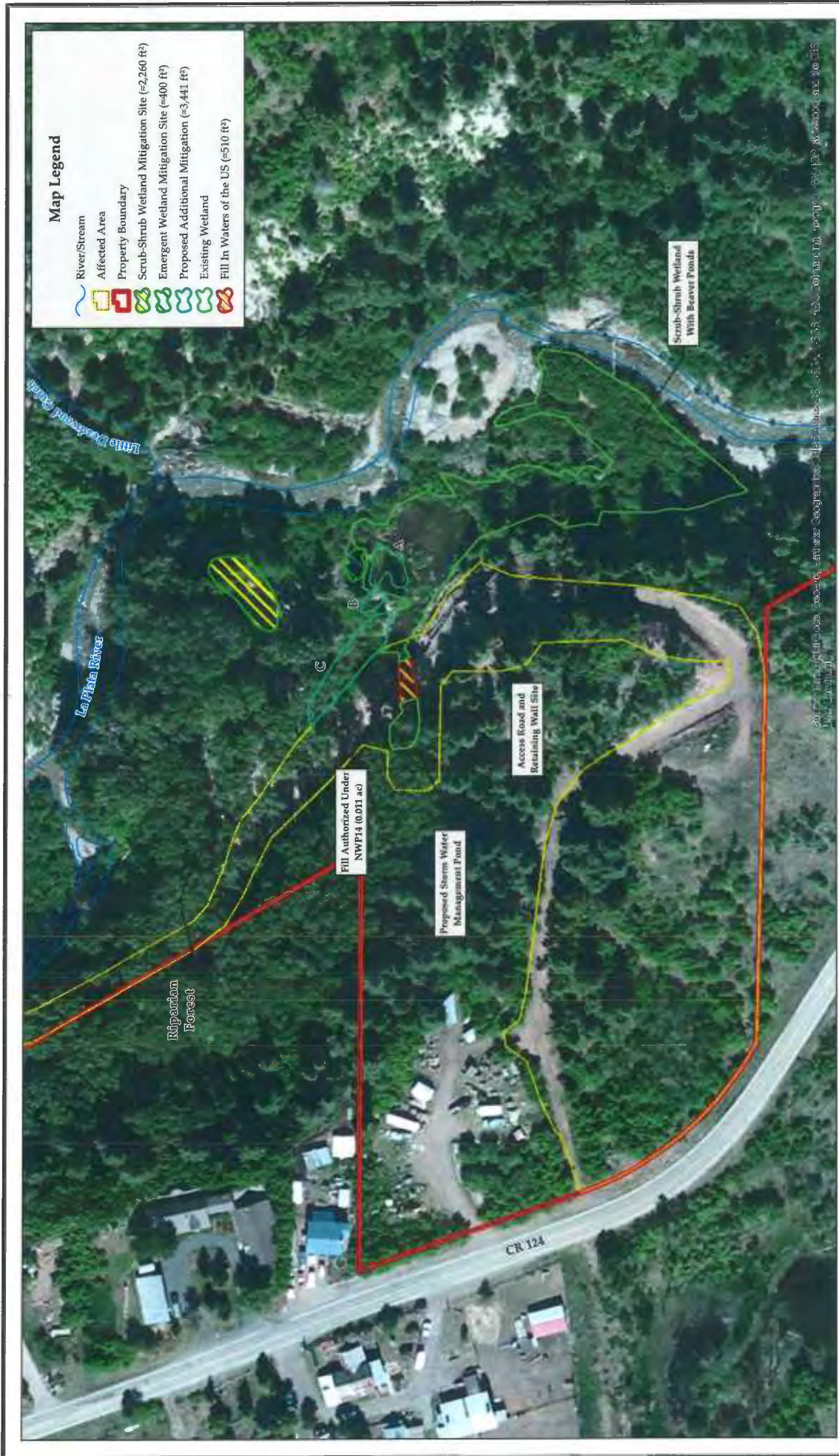


NOTES:
 1. THE POND OUTLET STRUCTURE (TYPE "C" INLET) PER CDD STANDARD M-604-10 SHALL BE CONSTRUCTED TO ACCOMMODATE A CLOSE MESH GRATE. THE MANUFACTURER SHALL PROVIDE A STRUCTURAL DESIGN FOR GRATE AND SHALL BE REVIEWED BY THE CDD STANDARD PLAN NO. M-604-10.
 2. CONSTRUCTION OF THE WELL SCREEN SHALL CONFORM TO URBAN DRAINAGE STANDARD DETAILS, FIGURE 6 AND FIGURE 6-a.

WATER QUALITY VOLUME	VOL (AC-FT)	WSL (FT)
10-YR VOLUME (INCL WQ)	0.051	8629.05
100-YR VOLUME (INCL WQ)	0.160	8630.0
FREEDBOARD*		8631.0

DETENTION POND OUTLET STRUCTURE DETAILS

Figure 10B

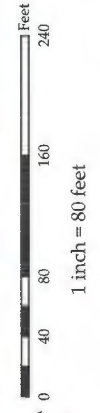


Map Legend

- River/Stream
- Affected Area
- Property Boundary
- Scrub-Shrub Wetland Mitigation Site (~2,260 ft²)
- Emergent Wetland Mitigation Site (~400 ft²)
- Proposed Additional Mitigation (~3,441 ft²)
- Existing Wetland
- Fill In Waters of the US (~510 ft²)

Designed by: DSS
 Checked by: DBM
 Date: 5/31/2016
 Scale: 1:960

Map Sources:
 Aerial Photography - Microsoft, Summer 2010
 Hydrography and Boundaries - CLC Associates
 Wetland Data - BWC GPS Data



555 River-Clear Lane, Suite B-42
 Durango, CO 81301
 www.bikiswater.com

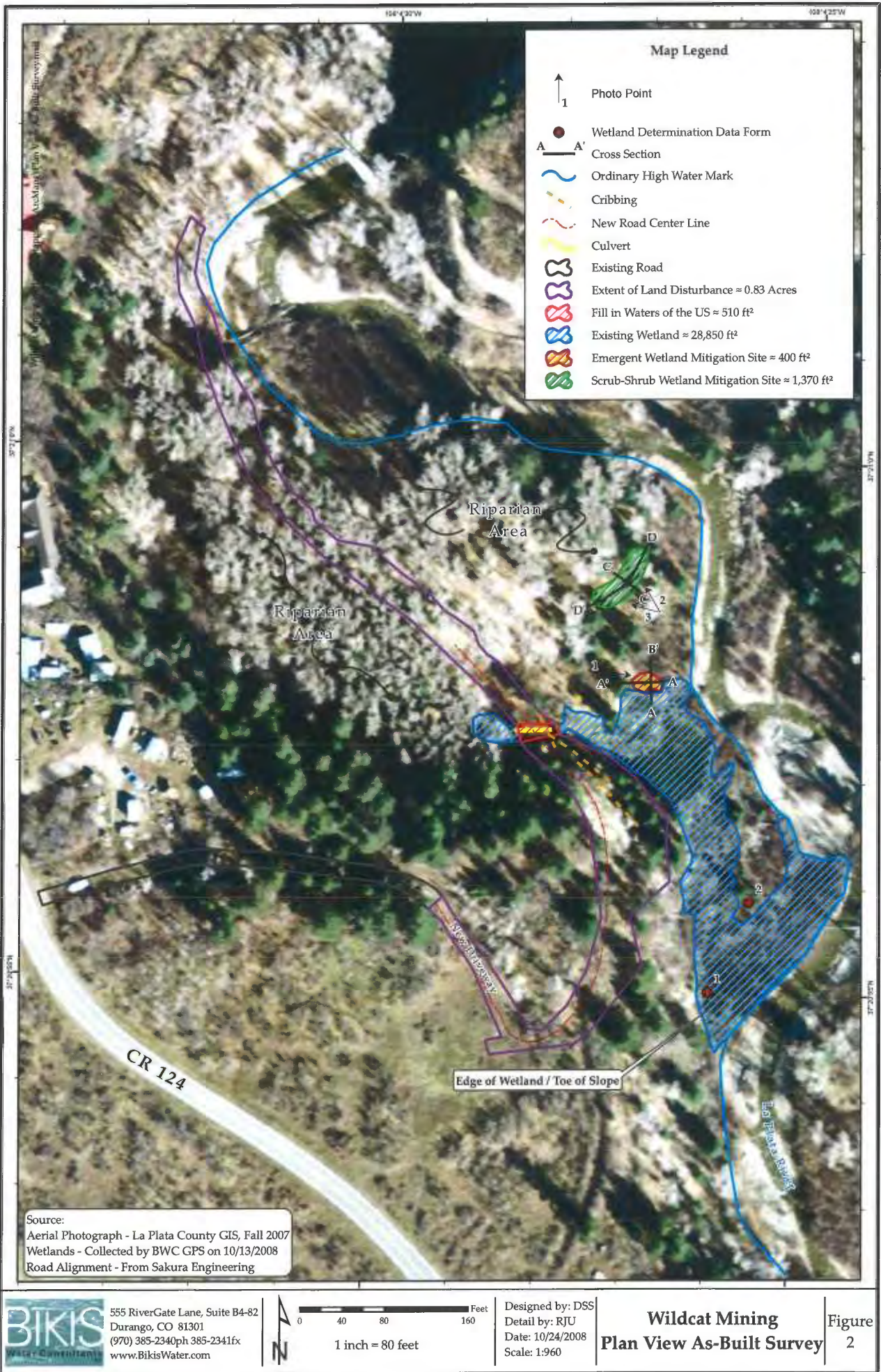
BIKIS
 Water Consultants
 a division of SGM

Project: P16-14 Wetland Mitigation; Figure 17: Additional Wetland Mitigation

**May Day Mine
 Additional Wetland Mitigation**

Figure 17

Appendix A:
As-built Drawing of Wetland Mitigation



Appendix B:
Photographs of Mitigation Area

Wetland Mitigation May Day Mine



Photo 1. Emergent mitigation wetland.



Photo 2. Close-up of emergent mitigation wetland showing excellent growth of willows and emergent species.

Wetland Mitigation May Day Mine



Photo 3. Close-up of emergent mitigation wetland showing excellent growth of willows and emergent species.



Photo 4. Scrub-shrub mitigation wetland. Note willow growth with sparse understory.

Wetland Mitigation May Day Mine



Photo 5. Scrub-shrub wetland looking south. Note viability of planted willows.



Photo 6. Close-up of planted willow showing recent growth

Appendix C:
Photographs of Existing Conditions at
Chief Portal and Mine Access Road

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 1. Little Deadwood Gulch channel upstream of the Chief Portal.



Photo 2. Little Deadwood Gulch upstream of the Chief Portal.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 3. Channel upstream of historical fill at old culvert. Note sediment deposit.



Photo 4. Loamy, well-drained soil along Little Deadwood Gulch channel. The soil lacks hydric indications.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 5. Channel downstream of Chief Portal. Note the abundant woody material.



Photo 6. Access road down to the Chief Portal. The Portal is off the photo to the lower right.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 7. Wetland dominated by willows and horsetail at toe of existing mine access road. (see WDDF 2 in Appendix D).



Photo 8. WDDF _ in scrub-shrub wetland. Note light-colored tailings.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 9. Scrub-shrub wetland associated with beaver ponds between the La Plata River and the existing mine access road.



Photo 10. Riparian scrub-shrub wetland south of the existing mine access road.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 11. Crossing authorized under NWP 14 with cottonwood forest in the background.



Photo 12. Close-up of mine tailing at WDDF _.

Existing Conditions at Chief Portal and Mine Access Road May Day Mine



Photo 13. Close-up of soil at WDDF _.

Photo

Appendix D:
Wetland Determination Data Forms for
Chief Portal and Mine Access Road

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Chazip Porto City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 1
 Investigator(s): MEHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): _____ Slope (%): 20
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		

Remarks: located in cool, damp forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
1. <u>ACEA NEGUNDO</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0' _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>HEMOCLEUM LANATUM</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. <u>MORANTHELIUM STELLATUM</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
3. <u>MELISSA CILIATA</u>	<u>10</u>	_____	<u>FACU</u>	
4. <u>ANGELICA</u>	<u>10</u>	_____	<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Mesic plant community - Oak, shaded area.</u>				

Chief
Partial

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR3/2		—				lo	Granular structure

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: limited soil in rocks. Earthworms found. No redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located next to channel but on slope 2-3' above the O.H.W.M. NO SEEPS or SPRINGS.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Chief puita City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 2
 Investigator(s): METHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillside Local relief (concave) convex, none: _____ Slope (%): 20
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks: dry snow year.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u>	(A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u>	(B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u>	(A/B)
4. _____				Prevalence Index worksheet:	
				Total % Cover of:	Multiply by:
= Total Cover				OBL species _____ x 1 = _____	
= Total Cover				FACW species _____ x 2 = _____	
= Total Cover				FAC species _____ x 3 = _____	
= Total Cover				FACU species _____ x 4 = _____	
= Total Cover				UPL species _____ x 5 = _____	
= Total Cover				Column Totals: _____ (A)	_____ (B)
= Total Cover				Prevalence Index = B/A = _____	
Hydrophytic Vegetation Indicators:					
<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation					
<input checked="" type="checkbox"/> 2 - Dominance Test is >50%					
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹					
<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)					
<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹					
Problematic Hydrophytic Vegetation ¹ (Explain)					
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____					
Remarks:					

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
= Total Cover			

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Asracleum lanatum</u>	<u>10</u>		<u>FAC</u>
2. <u>Mertensia ciliata</u>	<u>1r</u>		<u>FACW</u>
3. <u>Aromia marginatus</u>	<u>1r</u>		<u>FACU</u>
4. <u>Angelica</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FACV</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
= Total Cover			

Woody Vine Stratum (Plot size: <u>7/16</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. <u>lily</u>	<u>5</u>		
= Total Cover			

% Bare Ground in Herb Stratum	Absolute % Cover
<u>5</u>	

Chief Portal

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10Yr 3h, 3/8		—				lo	Granular Structure

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: Hard to dig due to rocks. Well drained. NO redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

(includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil very dry. no sp-ing or seeps. Located 4' above channel.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: MINER ACCESS RD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 1
 Investigator(s): METHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): _____ Slope (%): 1%
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____ Soil or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____ Soil _____ or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____		
Remarks: <u>soil has old mine tailings. project area is in a drought.</u>			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (AB)
1. <u>Populus deltoides</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover			<u>30</u>	
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Cornus stolonifera</u>	<u>65</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Salix mucronata</u>	<u>10</u>	_____	<u>OBL</u>	
3. <u>ACEA Globosa</u>	<u>10</u>	_____	<u>FACU</u>	
4. _____	_____	_____	_____	
_____ = Total Cover			<u>40/10</u>	
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover			_____	
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover			_____	
% Bare Ground in Herb Stratum _____				
Remarks: <u>no herbaceous understory - much litter.</u>				

Rd

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 4/4		—				SisSs	
8-14	10Y 6/2	20					ClSi	inclusions - old tailings?

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: Soil has inclusions of silty clay material, otherwise is silt. Inclusions show signs of reduced matrix.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil dry, located in cool riparian forest photo 1.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINING ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 2
 Investigator(s): METHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Juvab Local relief (concave, convex, none): Flat Slope (%): 0
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? NO Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <u>DROUGHT CONDITIONS.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. _____	_____	_____	_____	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
= Total Cover				Column Totals: _____ (A) _____ (B)
Herb Stratum (Plot size: _____)				Prevalence Index = B/A = _____
1. <u>EQUISETUM ARVENSE</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>APPELLURUS PROTENSUS</u>	<u>5</u>		<u>FAC</u>	
3. <u>ELEOCHARIS OLIVATUS</u>	<u>10</u>		<u>OBL</u>	
4. <u>GLYCERIA STRIATA</u>	<u>Tr</u>		<u>OBL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Woody Vine Stratum (Plot size: <u>47/18</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum <u>5</u>				
Remarks: <u>CORNUS & POPULUS NEAR-BY.</u>				

rd

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/4	90	—	—	—	—	Si	Saturated
4-11	2.5Y 9/0	100	—	—	—	—	muck?	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: Very dark > 4"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches):

Saturation Present? (includes capillary fringe) Yes No Depth (inches): 0

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located on floodplain on La Plata River. water is backing up from the river

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINE ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 13
 Investigator(s): MEHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Small mound Local relief (concave, convex, none): convex Slope (%): 10
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Soil has old tailings. Drought conditions.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>PSEUDOTSUGA MENZIESII</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
4. _____	<u>10</u> = Total Cover	_____	_____	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. <u>SALIX MONTICOLA</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	OBL species _____ x 1 = _____
2. <u>CORNUS STOLONIFERA</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	<u>45/13</u> <u>90</u> = Total Cover	_____	_____	UPL species _____ x 5 = _____
Herb Stratum (Plot size: _____)				Column Totals: _____ (A) _____ (B)
1. <u>EQUISETUM AENESE</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>MAIANTHESMUM STELLATUM</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Hydrophytic Vegetation Indicators:
3. _____	_____	_____	_____	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
4. _____	_____	_____	_____	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
5. _____	_____	_____	_____	____ 3 - Prevalence Index is ≤3.0 ¹
6. _____	_____	_____	_____	____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
7. _____	_____	_____	_____	____ 5 - Wetland Non-Vascular Plants ¹
8. _____	_____	_____	_____	____ Problematic Hydrophytic Vegetation ¹ (Explain)
9. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
11. _____	<u>10/3</u> <u>20</u> = Total Cover	_____	_____	
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>80</u>				
Remarks: <u>some litter, understorey dry.</u>				

Rd

Sampling Point: 3

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10Y ₂ 6/4		—				Si	old tailings
10-14	10Y ₂ 5/3		—				Si	platy structure

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: soil dense with platy structure > 10". no hydric indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: soil dry. Located 4-5' above WDOF #2 water from river. no source of wetland hydrology

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINE ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 4
 Investigator(s): METHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terraces Local relief (concave, convex, none): _____ Slope (%): 5
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: _____)				OBL species _____ x 1 = _____	
1. <u>Salix monticola</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	FACW species _____ x 2 = _____	
2. <u>QUERCUS Gambell</u>	<u>10</u>	_____	<u>FACW</u>	FAC species _____ x 3 = _____	
3. _____	_____	_____	_____	FACU species _____ x 4 = _____	
4. _____	_____	_____	_____	UPL species _____ x 5 = _____	
5. _____	_____	_____	_____	Column Totals: _____ (A) _____ (B)	
_____ = Total Cover				Prevalence index = B/A = _____	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Smilacina</u>	<u>10</u>	_____	<u>FAC</u>	1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Cyperus prostratus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	2 - Dominance Test is <u>>50%</u>	
3. <u>Dactylis glomerata</u>	<u>50</u>	_____	<u>FACU</u>	3 - Prevalence Index is $\leq 3.0^1$	
4. <u>Equisetum arvense</u>	<u>10</u>	_____	<u>FAC</u>	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	5 - Wetland Non-Vascular Plants ¹	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>25</u>					
Remarks: <u>understory is dry.</u>					

Rd

Sampling Point: 4

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 3/3	100					100m	litter
1-14	10YR 7/3	100	—				Si	old tailings

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located 10' above work - from the river.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINE ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 5
 Investigator(s): MEHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): MOUND Local relief (concave, convex, none): CONVEX Slope (%): 5
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <u>SOIL (tailings) show effects of groundwater from RIVER. UNDERSTORY IS STILL RELATIVELY DRY. GOOD DIVERSITY OF SHRUBS.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
4. _____	_____	_____	_____	Prevalence Index worksheet:	
= Total Cover				Total % Cover of _____	Multiply by: _____
Sapling/Shrub Stratum (Plot size: _____)				OBL species _____ x 1 = _____	
1. <u>Salix spp</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	FACW species _____ x 2 = _____	
2. <u>CORNUS STUNDEIRA</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	FAC species _____ x 3 = _____	
3. <u>RIBES INERME</u>	<u>15</u>		<u>FACU</u>	FACU species _____ x 4 = _____	
4. <u>ROSA WOODSIS</u>	<u>7</u>		<u>FACU</u>	UPL species _____ x 5 = _____	
5. <u>JUPHORIASCRAPUS ABUS</u>	<u>10</u>		<u>FACU</u>	Column Totals: _____ (A) _____ (B)	
= Total Cover				Prevalence Index = B/A = _____	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>MAIANTHUM STELLATUM</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. <u>EGALITETUM AUVINSE</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
3. _____	_____	_____	_____	_____ 3 - Prevalence Index is ≤3.0 ¹	
4. _____	_____	_____	_____	_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	_____ 5 - Wetland Non-Vascular Plants ¹	
6. _____	_____	_____	_____	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum <u>30</u>					
Remarks:					

Rd

Sampling Point: 5

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10Y~ 3/3						L	
3-6	10Y~ 7/3						Si	old tailings
> 6	10Y~ 4/1						Si	w/ inclusions

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histisol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: depleted also w/ in mine tailings.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located close to river.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINE ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: WILDCAT MINING CORP State: CO Sampling Point: 6
 Investigator(s): MEHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Fluvial Local relief (concave, convex, none): FLA Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
= Total Cover				Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: _____)				OBL species	x 1 = _____
1. <u>Salix muniticola</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	FACW species	x 2 = _____
2. _____	_____	_____	_____	FAC species	x 3 = _____
3. _____	_____	_____	_____	FACU species	x 4 = _____
4. _____	_____	_____	_____	UPL species	x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
= Total Cover				Prevalence Index = B/A = _____	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Equisetum arvense</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<input checked="" type="checkbox"/> - Rapid Test for Hydrophytic Vegetation	
2. <u>Carex aquatilis</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
3. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
= Total Cover					
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
% Bare Ground in Herb Stratum <u>20</u>					
Remarks:					

Rd

6

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/4						CLL	
5-12	10YR 5/1		10YR 5/8	30	D	M	CL	very mottled

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located on hummock 1' above water of river

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: MINE ACCESS ROAD City/County: La Plata Sampling Date: 6/5/12
 Applicant/Owner: Wildcat Mining Corp State: CO Sampling Point: 7
 Investigator(s): MEHAN Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Fluvial plain Local relief (concave, convex, none): Flat Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>AKER MEGALANTHUS</u>	<u>10</u>		<u>FAC</u>	
2. <u>PIANUS CANTONIA</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. <u>POPULUS ANGUSTIFOLIA</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
4. _____	<u>65</u> = Total Cover			Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>SALIX sp</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>2 FAC</u>	
2. <u>CORNUS STOLONIFERA</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. <u>SPHAGNUM AVERSE</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				

% Bare Ground in Herb Stratum _____				
Remarks: _____				

Rd

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: No pit dug - too many roots.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): 2

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): 0

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix E:
**Alternatives Analysis for Mine Egress
Construction at the Chief Portal**

555 RiverGate Lane, Suite B4-82
 Durango, Colorado 81301
 Tele: 970.385.2340
 Fax: 970.385.2341
 www.BikisWater.com



BIKIS
 Water Consultants LLC

MEMORANDUM

To: Chief Kara Hellige
 U.S. Army Corps of Engineers

From: Dave Mehan, Senior Scientist
 Bikis Water Consultants, LLC

Date: June 29, 2012

Re: Alternatives Analysis for Mine Egress Construction at the Chief Portal - Wildcat Mining Corporation (USEPA Order for Compliance Docket No. CWA-08-2012-0011)

This memorandum is being provided as a follow-up to our field meeting on May 24, 2012, at the May Day Idaho Mine complex located in La Plata Canyon outside of Durango. The purpose of the meeting was to observe the two areas addressed in the Order for Compliance cited above, the New Mine Access Road and Chief Portal (Portal), to determine appropriate restoration for the areas. This memorandum evaluates alternatives for restoration of the Portal and was prepared with input from other members of the Wildcat Mining Corporation (Wildcat) team.

BACKGROUND

The Portal is located along the upper reach of Little Deadwood Gulch in a relatively rugged and remote area. The site is accessible from a relatively narrow four-wheel drive road within the mine property. From the mine road, the site is reached from a narrow and rough access road approximately 120 feet in length with a grade of 26 percent down to the gulch. The gulch is relatively narrow and very incised with steep side-slopes. The Portal itself is located approximately 18 feet from the centerline of Little Deadwood Gulch on the north bank.

Information indicates that work was first done on the Chief Portal in the 1910s to explore the May Day vein at the elevation of 9,300 feet. The historical exploration at the Portal consisted of excavating approximately 180 feet of 4 feet wide by 7 feet high underground workings prior to 1926. No later than 1926, the Portal workings were connected by an underground vertical shaft (i.e., winze) to the May Day mine 70 feet below the Portal to create a secondary (i.e., emergency) escape-way from the May Day mine. The Portal and underground workings are shown on mine survey maps prepared in 1926 by George Gary and in 1949 by Edwin Eckel (Geological Survey Professional paper 219). It is known that this early work included excavation at the site of the present portal, and placement of soil and blasted rock into Little Deadwood Gulch. No production was ever recorded from the Portal, and no stoping is evident in the underground workings. This indicates that all of the excavated blast rock was left in the Little Deadwood Gulch which served as an historical pad to access the Portal. A hollow 36-inch boiler tank was placed in the gulch to act as a culvert which conveyed flow in the gulch beneath the historical fill. This early fill, based on measuring the underground workings and the remnant fill on surface, is estimated to comprise approximately 315 cubic yards (CY) and represents the historical (pre-Clean Water Act (CWA)) condition at the site.

Kara Hellige
June 29, 2012
Page 2

More recently, believed to be in 2009, the previous manager of Wildcat removed soil and rock from above the Portal, creating a steep scar, and placed this material mostly on top of the historical fill. This material was placed in piles which are presently evident. The historical culvert was also partially removed from the historical fill by the previous manager.

Engineering calculations found that the volume of the total fill (both new and historical) is around 550 CY, and the volume of the steep scar above the Portal is around 245 CY. The remaining 305 CY of fill corresponds well with the measured volume of excavated blast rock from historical exploration. This supports the contention that the more recent fill piles only came from the scar above the portal, and that all other fill in Little Deadwood Gulch was placed prior to enactment of the CWA.

Little Deadwood Gulch is an intermittent stream. The channel consists primarily of cobble and boulder-sized material, with a thin, poorly developed soil matrix. No hydric soils are shown to occur in the area on available soils mapping. Woody debris is evident in and near the channel. There are no springs or seeps in the area of the Portal. Vegetation consists of mixed, mesic forest. Work by Bikis Water Consultants, LLC (BWC) determined that there are no wetlands in or along the Little Deadwood Gulch channel or in the vicinity of the Portal, based on field work using the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region" (U.S. Army Corps of Engineers, May 2010). The aquatic resource value of the channel is relatively limited due to the lack of perennial water and wetlands. For example, a cursory survey in May 2012 did not find any macroinvertebrates or other aquatic life in the channel. The limit of jurisdiction for the channel is the ordinary high water mark (OHWM), the average width of which was measured as 8 feet in the field.

ALTERNATIVES FOR RESTORATION

The Order contemplates the removal of all dredged and fill material from Little Deadwood Gulch and the restoration of the gulch to its pre-impact condition and grade, unless otherwise approved by the U.S. Environmental Protection Agency (USEPA). Considering the requirement to maintain egress via the Chief Portal and the presence of pre-CWA fill, three alternatives were evaluated that entail removing the post-CWA fill from Little Deadwood Gulch and restoring the flow pathway in the vicinity of the Chief Portal.

Alternative 1 - Retaining Wall Plan

Constructing a retaining wall entails restoration of Little Deadwood Gulch to the pre-1910 condition, including removal of pre-jurisdictional fill place prior to enactment of the CWA. Figure 1 shows this alternative, which would include:

- Excavation and removal of an estimated 550 CY of soil and rock from Little Deadwood Gulch to be temporarily stored at the May Day No. 3 working area.
- Removal of the remnants of the historical culvert in the fill.
- Excavation of an unknown amount of material to expose bedrock on the slope above the portal

Kara Hellige
June 29, 2012
Page 3

- Construction of an 80-foot long by 12-foot high retaining wall at the base of the scar and in front of the portal using mechanically stabilized earth (MSE) blocks with tie backs to bedrock or vertical micropiles.
- Placement of an unknown amount of sorted and compacted material between the freshly exposed bedrock and the retaining wall.
- Haul and permanent placement of any remaining soil and rock at another location on the mine property away from wetlands or other waters of the U.S.
- Re-grading of the channel of Little Deadwood Gulch to its pre-mining contours.
- Either installation of a reinforced portal entry through the bottom of the retaining wall or installation of a 35-foot vertical conduit that breaches the Portal workings at or beneath the mine road above the portal.
- Grading and compaction of the channel bottom.
- Planting of trees and shrubs.

Estimated cost: \$240,000

Amount of recent fill removed: 245 CY.

Amount of historical fill removed: 305 CY.

Logistical considerations: There are two technically difficult challenges with this alternative. The first involves the construction of the retaining wall which requires excavating the slope it resides on down to bedrock. A large talus field is situated above the access road, and additional excavation into the already unstable slope creates a potentially hazardous working condition. In the event that the slope does become unstable during construction, the retaining wall will have to rest entirely on micropiles that are drilled vertically into bedrock. If micropiles are used, the project costs will increase substantially.

The second challenge is maintaining access to the Portal. The stability of the slope and access to bedrock during construction of the retaining wall will determine whether a horizontal reinforced portal entry at the bottom of the retaining wall or a vertical conduit that breaches the Portal from above is safer to construct and to use. If a vertical conduit is used, the project costs will increase substantially.

Technological considerations: There are no other cost-effective technologies that could be applied to this alternative to reduce its cost, affect impacts or its feasibility.

Resource Impacts: This alternative would result in restoration of the Little Deadwood Gulch channel to its pre-1910 condition with no permanent impacts to waters of the U.S.

Evaluation: Wildcat respectfully submits that complete removal of all the fill from Little Deadwood Gulch is not practicable because it is potentially hazardous to construct the retaining wall while maintaining egress to the Chief Portal. As contemplated, this alternative will meet all of the technical requirements of the Colorado Division of Reclamation Mining and Safety (DRMS), but it

Kara Hellige
June 29, 2012
Page 4

may fail to meet the safety and technical requirements of the Mine Safety and Health Administration (MSHA). In the interest of safety, it may be necessary to construct a new emergency escape-way at another location which would create new disturbance and add to the cost. This alternative is also the most costly and potentially cost-prohibitive.

Alternative 2 - Culvert Plan

An alternative to complete restoration of Little Deadwood Gulch is to retain the historical fill in Little Deadwood Gulch and install a new culvert in the fill. Figure 2 shows this alternative, which would include:

- Excavation and removal of approximately 285 CY of fill from Little Deadwood Gulch, including all of the 2009 fill (an estimated 245 CY) that is to be temporarily stored at the May Day No. 3 working area.
- Removal of the remnants of the historical culvert in the fill.
- Installation of 90 linear feet of greater than or equal to 24-inch reinforced concrete pipe (RCP) along the centerline of Little Deadwood Gulch. The 24-inch RCP will accommodate the modeled 100-year, 24-hour storm event.
- Placement of a screen on the upstream side of the RCP to reduce the potential for blockage by woody debris.
- Grading, reinforcing, and compacting the fill above the RCP (i.e., the pad) to accommodate sheet flow in the event the culvert is plugged or flows exceed the 100-year, 24-hour storm event.
- Installation of approximately 28 linear feet of greater than or equal to 72-inch conduit that ramps (negative 30 percent slope) and anchors into bedrock to join the current opening of the Portal. This conduit would serve as the new access point of the Portal, and would be equipped with a steel, double-locking door.
- Sorting and compacting the 2009 fill into the scar above the Portal (which is the origin of the fill) plus an additional approximately 950 CY of sorted and compacted fill derived from the talus slope adjacent to the road to comprise a 1.5:1 slope which will effectively stabilize the slope between the road and the pad, per the Geotechnical Engineer's recommendations.
- Planting of trees and shrubs adjacent to pad, where 2009 fill was removed.

Estimated cost: \$55,000

Amount of recent fill removed: 245 CY.

Amount of historical fill removed: 40 CY.

Logistical considerations: The challenge of this alternative is the installation of the Portal conduit. Even though bedrock is already exposed at the Portal, there would have to be minor additional excavation to expose bedrock to the extent that the conduit could effectively be fastened to bedrock. There is some risk that the concealed bedrock is too fractured to accommodate 4- to 8-foot long

Kara Hellige
June 29, 2012
Page 5

split set-bolts with epoxy. Split set-bolts are relatively low cost to install, so if the bedrock is too fractured, larger bolts will have to be installed with an air-track drill and grouted in place, which will substantially increase costs.

Technological considerations: This is a low-cost alternative to Alternative 1, and utilizes technologies that effectively restore the flow pathway of Little Deadwood Gulch without the much higher costs of a large retaining wall.

Resource Impacts: This alternative would result in restoration of the flow pathway of Little Deadwood Gulch past the Portal area. Long-term considerations include potential blockage of the culvert at some point in the future and long-term maintenance. The grading, compacting, and reinforcement of the resulting pad above the culvert will be designed to accommodate sheet flow in the event that the culvert does become plugged or flows exceed its capacity.

Evaluation: Considering logistics, costs, and the preservation of access to the Portal, this is the preferred alternative. This alternative will also maintain flows and circulation in Little Deadwood Gulch and have minimal affect on aquatic resource functions in the area. As contemplated, this alternative will meet all of the safety and technical requirements of the MSHA and DRMS. There will be a requirement for long-term maintenance of the culvert to ensure a clear flow pathway for Little Deadwood Gulch. Since these lands are privately owned and the Portal represents a crucial access point for the May Day mine, Wildcat will commit to long-term maintenance of the culvert.

Alternative 3 - Knee Wall Plan

An alternative to the previous plans is to construct a short retaining wall (i.e., knee wall) that re-routes the drainage of Little Deadwood Gulch around the pad that would be retained for access to the Portal. Figure 3 shows this alternative, which would include:

- Excavation and removal of all fill south of the centerline of Little Deadwood Gulch to be temporarily stored at the May Day 3 working area.
- Removal of the remnants of the historical culvert in the fill.
- Excavation (i.e., trenching) of an unknown amount of material for 125 feet along the centerline of Little Deadwood Gulch until exposing bedrock.
- Construction of a 125-foot long retaining wall that is 0 to 4 feet above the drainage surface (see Figure 3 for varying heights) using MSE blocks with tiebacks to bedrock or vertical micropiles.
- Grading and compacting fill north of the knee wall to accommodate construction of the access conduit to the Portal.
- Installation of approximately 45 linear-feet of greater than or equal to 72-inch conduit that ramps (negative 25 percent slope) and anchors into bedrock to join the current opening of the Portal. This conduit would serve as the new access point of the Portal, and would be equipped with a steel, double-locking door.
- Sorting and compacting the previously excavated fill into the scar above the portal plus an additional approximately 825 CY of sorted and compacted fill derived from the talus slope

Kara Hellige
June 29, 2012
Page 6

adjacent to the road to comprise a 1.5:1 slope which will effectively stabilize the slope between the road and the pad, per the Geotechnical Engineer's recommendations.

- Grading and compaction of the channel bottom south and adjacent to the knee wall.
- Planting of trees and shrubs adjacent to, and south of the knee wall.

Estimated cost: \$110,000

Amount of recent fill removed: Not know at this time, since all materials south of the centerline will be removed, which is TBD during construction.

Amount of historical fill removed: Not known since all materials south of the centerline will be removed, which is TBD during construction.

Logistical considerations: Similar to Alternative 1, a challenge with this option is the construction of the retaining wall. The depth to bedrock is unknown and may require significant trenching. In the event that trenching is not practicable, vertical micropiles will be used which will increase costs substantially. Another challenge is the installation of the portal conduit. Even though bedrock is already exposed at the portal, there would have to be minor additional excavation to expose bedrock to the extent that the conduit could effectively be fastened to bedrock. There is some risk that the concealed bedrock is too fractured to accommodate 4 to 8 foot long split set-bolts with epoxy. Larger bolts would have to be installed with an air-track drill and grouted in place, which will increase costs substantially.

Technological considerations: This is a lower cost option to Alternative 1, but a higher cost option to Alternative 2, and utilizes technologies from both alternatives that effectively restore the flow pathway of Little Deadwood Gulch.

Resource Impacts: This alternative would result in restoration of the flow pathway of Little Deadwood Gulch past the Chief Portal area. Also, this alternative would allow access to the Portal, without long-term maintenance requirements to ensure an unobstructed flow pathway since it does not include a culvert.

Evaluation: Considering logistics, costs, and preserving access to the Portal, this is a moderately favorable alternative. As contemplated, this alternative will meet all of the safety and technical requirements of the MSHA and DRMS. However, there are several technical challenges to this alternative which reduce its desirability, and this alternative is still relatively expensive in terms of cost.

SUMMARY AND CONCLUSIONS

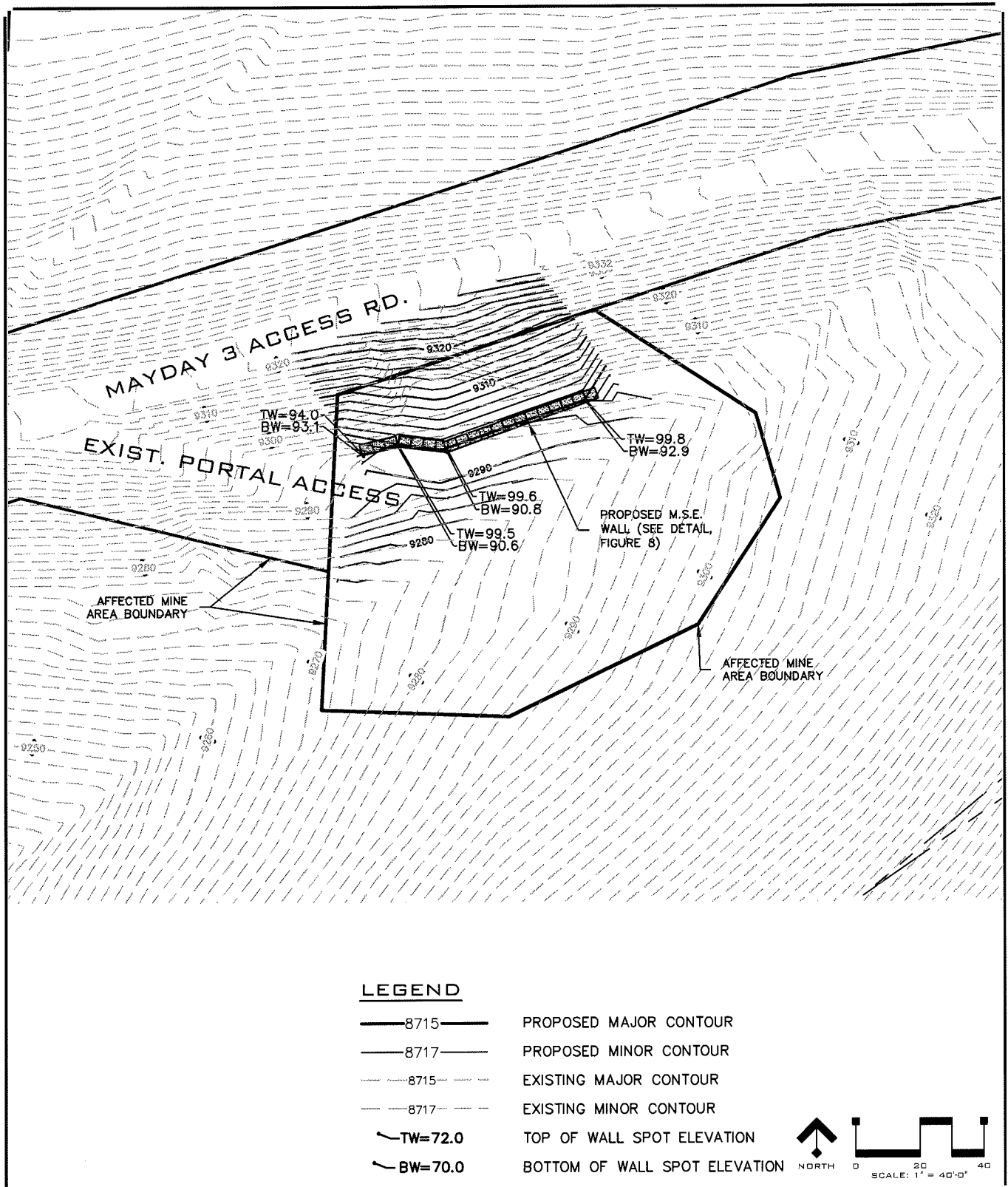
Three alternatives were evaluated for restoration of the Portal in terms of potential affects on aquatic resources, ability to provide the required mine egress, costs and technological factors. Based on the evaluation, the preferred option is Alternative 2 - Culvert Plan. This alternative results in the removal of all the recent fill placed in Little Deadwood Gulch and restoration of the hydrologic functions of the channel. Flow and circulation patterns downstream of the Portal will not be altered from the pre-impact condition. This alternative will also meet engineering and safety standards for the Portal. Wildcat will commit to maintaining the culvert and minimize the potential for debris

Kara Hellige
June 29, 2012
Page 7

blockage. As a back-up measure, the fill for the pad will be compacted to be able to safely convey sheet-flow in the event that the culvert capacity is exceeded.

Attachments: Figures 1-3. Alternatives for Chief Portal

P:\Project Files\174-12 May Day Mine\2012\Alternatives Analysis\Memo-AlternativesAnalysis-2012-06-29.doc



PROJ #: 12.0008
 DATE: 6-15-12
 DWN BY: JJA
 CHK BY: DJM

CHIEF PORTAL WORK PLAN TR
MAYDAY IDAHO MINE COMPLEX
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY, COLORADO

CLC ASSOCIATES
 8490 E. ORCHARD RD.
 SUITE 2000
 GREENWOOD VILLAGE
 COLORADO 80111
 P 303 770 5600
 F 303 770 2349
 CLCASSOC.COM
 ARCHITECTURE
 ENGINEERING PLANNING
 LANDSCAPE ARCHITECTURE
 LAND SURVEYING

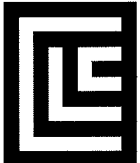
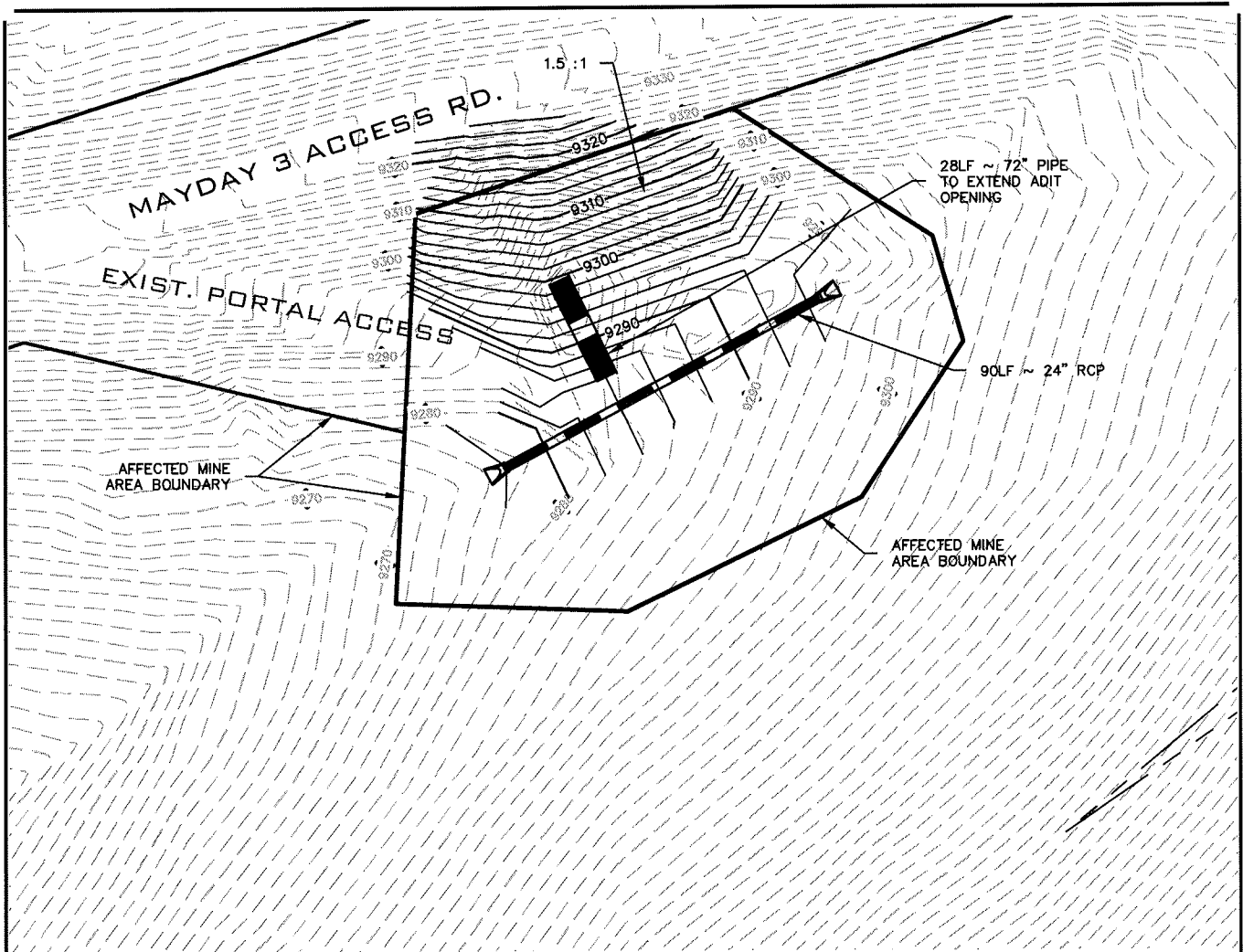


FIGURE-1

CHIEF PORTAL GRADING PLAN



LEGEND

- 8715 — PROPOSED MAJOR CONTOUR
- 8717 — PROPOSED MINOR CONTOUR
- - - 8715 - - - EXISTING MAJOR CONTOUR
- - - 8717 - - - EXISTING MINOR CONTOUR



PROJ #: 12.0008
 DATE: 6-15-12
 DWN BY: JJA
 CHK BY: DJM

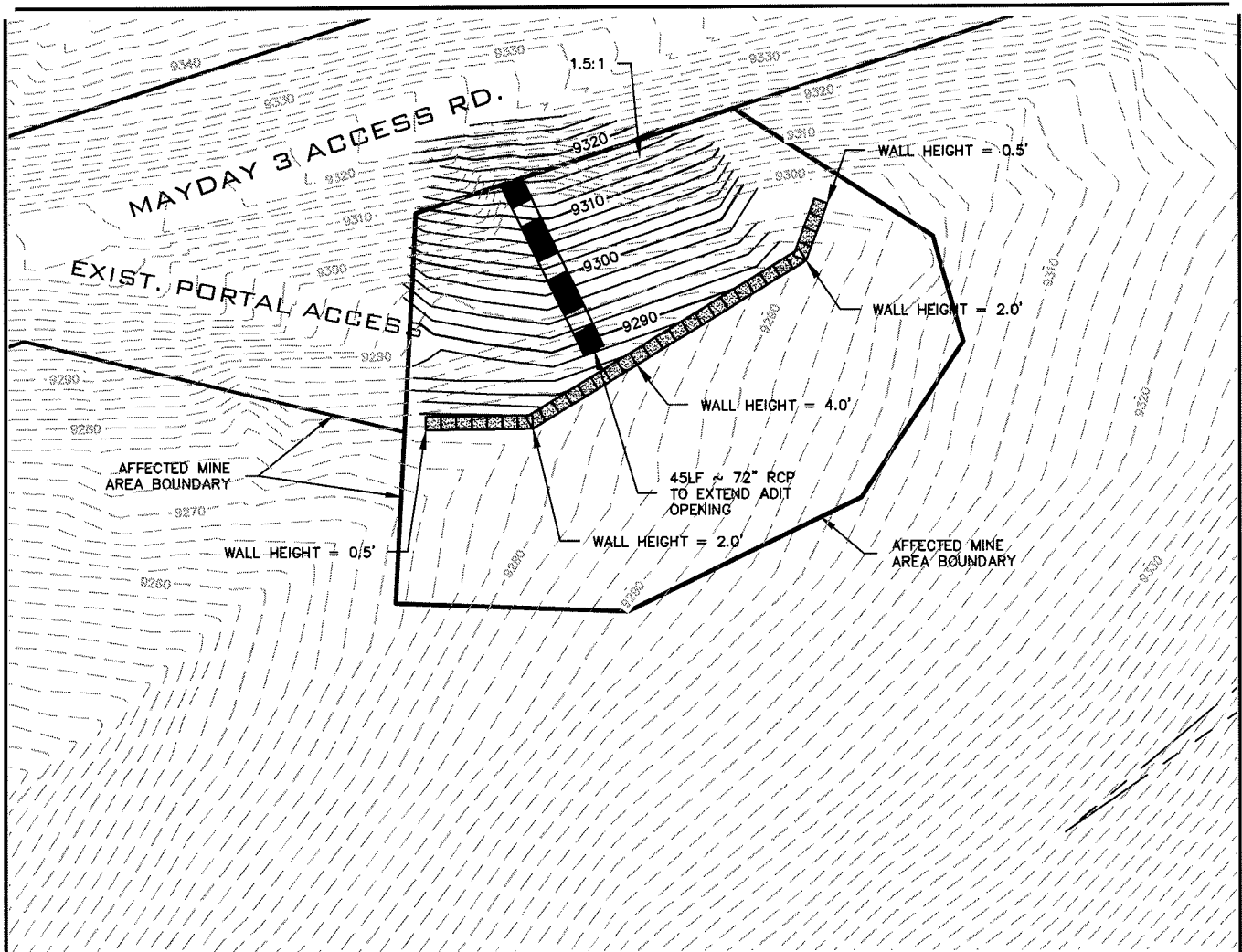
CHIEF PORTAL WORK PLAN TR
MAYDAY IDAHO MINE COMPLEX
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY, COLORADO

CLC ASSOCIATES
 8480 E. ORCHARD RD.
 SUITE 2000
 GREENWOOD VILLAGE
 COLORADO 80111
 P 303 770 5600
 F 303 770 2349
 CLCASSOC.COM
 ARCHITECTURE
 ENGINEERING PLANNING
 LANDSCAPE ARCHITECTURE
 LAND SURVEYING



FIGURE-2

CHIEF PORTAL GRADING PLAN



LEGEND

- 8715 PROPOSED MAJOR CONTOUR
- 8717 PROPOSED MINOR CONTOUR
- 8715 EXISTING MAJOR CONTOUR
- 8717 EXISTING MINOR CONTOUR



PROJ #: 12.0008
 DATE: 6-15-12
 DWN BY: JJA
 CHK BY: DJM

**CHIEF PORTAL WORK PLAN TR
 MAYDAY IDAHO MINE COMPLEX
 WILDCAT MINING CORPORATION
 LA PLATA COUNTY, COLORADO**

CLC ASSOCIATES

8480 E. ORCHARD RD.
 SUITE 2000
 GREENWOOD VILLAGE
 COLORADO 80111
 P 303 770 5600
 F 303 770 2349
 CLCASSOC.COM

ARCHITECTURE
 ENGINEERING PLANNING
 LANDSCAPE ARCHITECTURE
 LAND SURVEYING

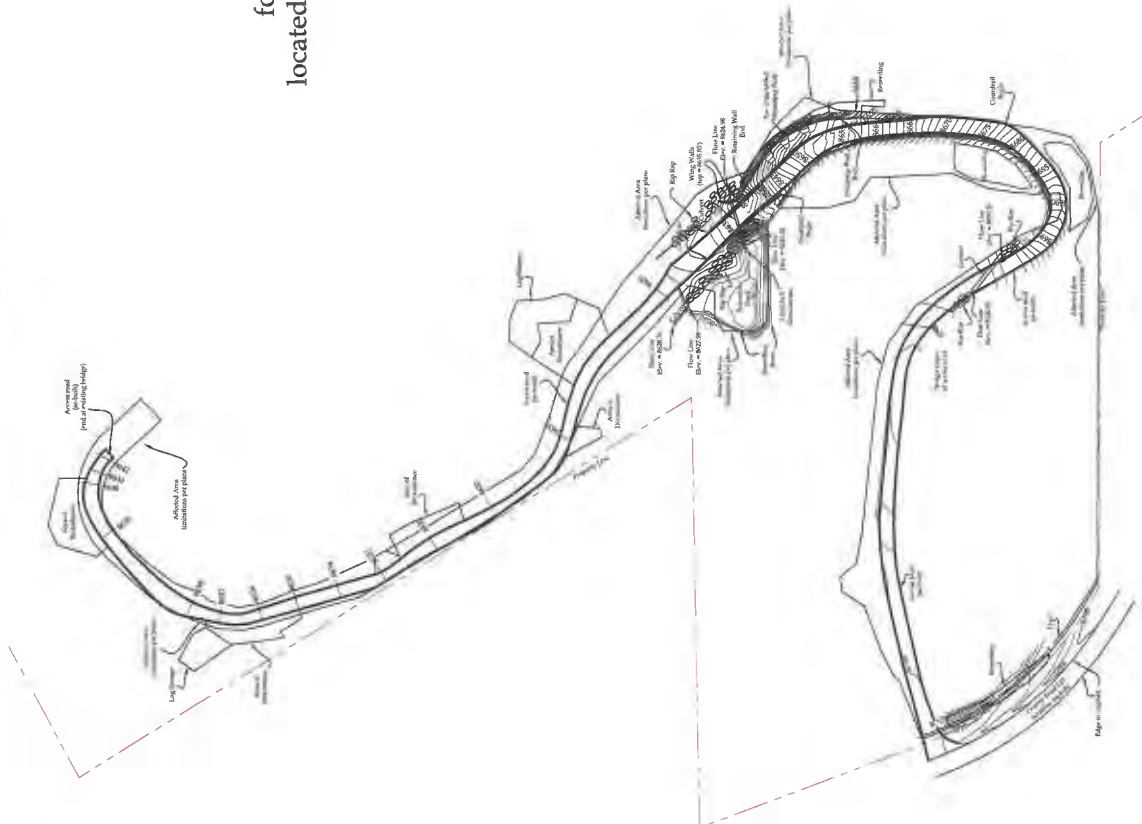


FIGURE-3

CHIEF PORTAL GRADING PLAN

Appendix F:
**Wildcat Mining As-built Survey for New
Road, Retaining Walls, etc.**

**Wildcat Mining
As-Built Survey**
for new road, retaining walls, etc.
located in Section 28, T36N, R11W, N.M.P.M.
La Plata County, Colorado



SUBMITTAL CERTIFICATION:
I, the undersigned, being a duly qualified and licensed Professional Engineer in the State of Colorado, do hereby certify that the foregoing is a true and correct copy of the original as submitted to the State of Colorado, and that the same is a true and correct copy of the original as submitted to the State of Colorado, and that the same is a true and correct copy of the original as submitted to the State of Colorado.

John P. Mann, C.E.
Colorado Registration No. 2096

Mountain Man Surveying	Wildcat Mining As-Built Survey Station 10+00-20+00 located in Section 28, T36N, R11W, N.M.P.M. La Plata County, Colorado	
	2855 North Main, Suite 8106 Durango, Co. 81301 Phone: 970-249-4338 Fax: 970-249-4346	Scale: 1"=50' Prepared By: J.E.M. Checked By: J.E.M. Date: 7-25-14
	Project No: 100907-22-H	Page: 1 of 1

Appendix G:
**Alternatives Analysis for Stormwater
Management Pond (Including Figure
EXB1)**

APPENDIX G

ALTERNATIVES ANALYSIS FOR STORMWATER MANAGEMENT POND (Including Figure EXB1)

La Plata County requires that all new development associated with the New Access Road capture and detain stormwater that is in excess of existing stormwater for the area that is improved. The construction of the New Access Road will increase run-off through the installation of a gravel surface. Based upon a drainage report prepared by Carroll & Lange - Manhard, it has been determined that the construction of the road will require a detention pond that can hold 4,792 cubic feet of stormwater run-off in a 100-year event. This volume has been reviewed and approved by both La Plata County (during the roadway variance process) and the Colorado Division of Reclamation Mining and Safety (DRMS) through a Technical Revision to the existing mining permit for the New Access Road.

The alternatives are relatively limited since the pond has to be situated in the project area so that it can capture the run-off from the New Access Road to function.

Alternative 1 - Detention Pond at Existing Culvert: The detention pond would be located at the existing culvert under the road because this is a low point in the alignment of the road (See Figure EXB1 of this appendix). The run-off could be easily conveyed to the pond through the use of roadside ditches and with minimal storm sewer pipe. Wetlands exist on both sides of the road at the culvert (Figure 3a of the Restoration Plan). The wetlands on the east side of the road are more closely associated with the La Plata River, have more water, and are higher quality wetlands. The amount of impact from construction of a pond on the east side of the road would be greater. For these reasons, it is proposed to construct the required pond on the west side of the road (Figure EXB1).

Through a multi-year amendment process, the Mine Affected Area boundary of the DRMS mine permit was defined and approved. The pond at this location is within the approved boundary.

Alternative 2 - Detention Pond Relocated to the North: This alternative contemplates locating the detention pond to the area near the existing bridge that crosses the La Plata River (See Figure EXB1 of this appendix). There are several reasons a pond at this location is not practicable:

A pond at this location would be outside of the approved Mine Affected Area boundary, and no impacts associated with the mining operation may occur outside of this boundary. An amendment to the DRMS permit would be required to increase the area of this boundary, which typically requires four to six months for approval.

Conveying the drainage from the New Access Road to this location would require the installation of significant storm sewer pipe. As mentioned in Alternative 1, there is a low point in the roadway alignment. To prevent this area from flooding during high rainfall events, it would be necessary to capture run-off that flows to this location and reroute it to the detention pond near the bridge. Most of this rerouting would be accomplished through the installation of underground storm sewer pipe that would be installed against the grade of the road, causing a deep installation of the pipe. This would make the detention pond very deep and create problems for gravity release from the pond.

The natural topography in this area is not as flat causing the need for more grading to fit the detention pond into this location.

A pond at this location would be more costly due to the need for stormwater pipe, increased earthwork and costs for permitting with DRMS (and the cost of the time delay for approval).

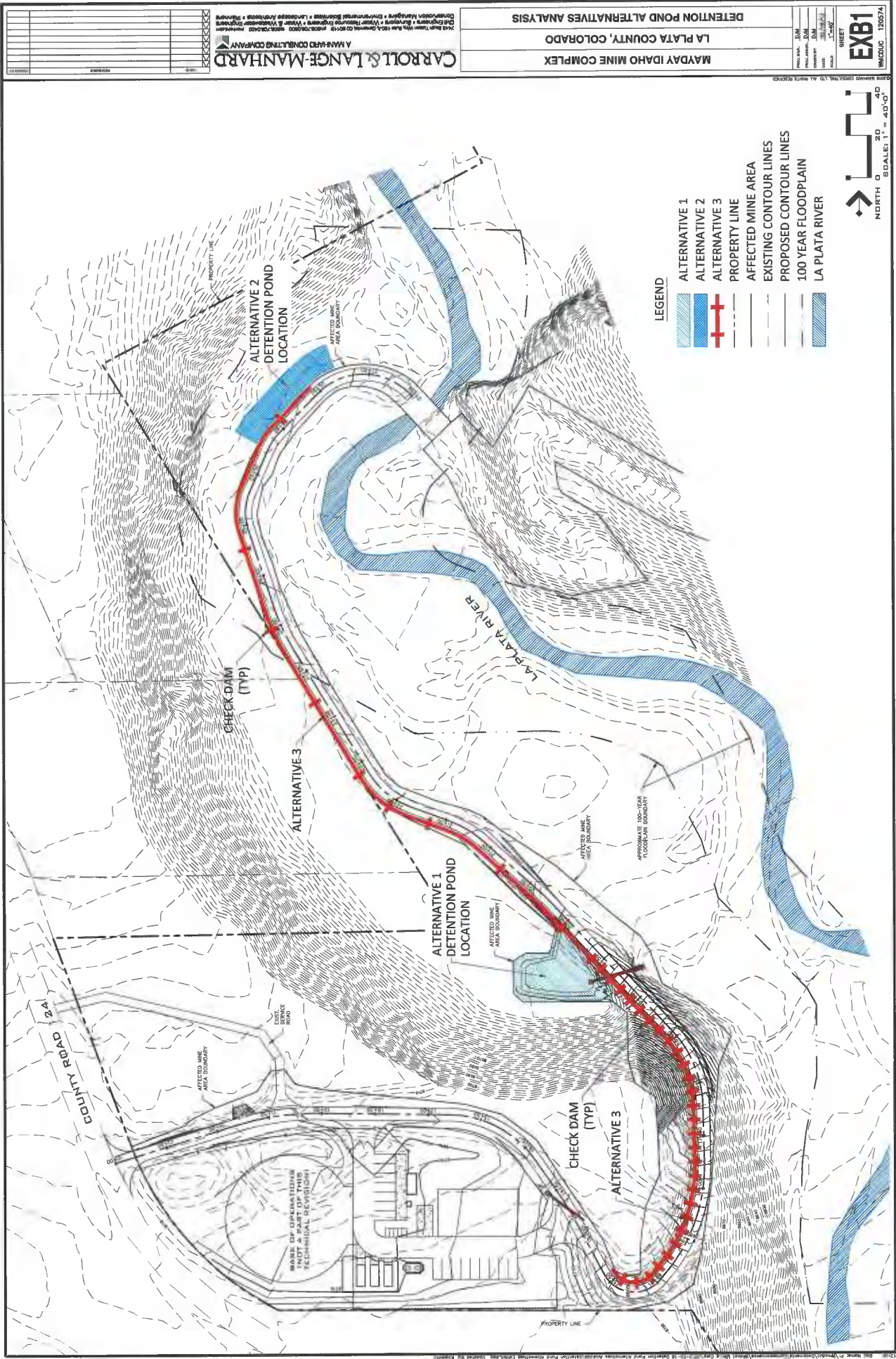
A pond at this location would be within the 100-year floodplain for the La Plata River and would be inundated during a 100-year event.

Alternative 3 - Utilize Roadside Ditches for Detention: A third alternative to provide detention is to detain the drainage generated within the roadside ditches through the use of multiple check dams (Figure EXB1). This is not a practical alternative because of the steep grade of the road and impact outside of the Mine Affected Area boundary. Reasons that this alternative is not practicable include:

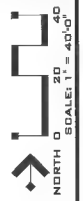
Typical installation of check dams is that the bottom of one check dam is at an equivalent elevation of the next downstream check dam. If a 2-foot tall check dam was used to detain water within the roadside ditches, the check dams would be spaced at 13.3 feet along the portion of the road with 15 percent grade. This would only create 52.5 cubic feet of storage at each check dam (based on a typical 4-foot wide ditch section), which would only capture about 50 percent of the required detention volume for the New Access Road.

To increase this number, the ditch could be widened to capture and detain more drainage within the roadside ditches. However, as mentioned in Alternative 2, the affected area boundary does not provide enough room to widen the ditch in most locations along the New Access Road. The roadside ditches would need to be roughly twice as wide as they are currently designed to capture and store the required detention of the New Access Road. This would cause grading outside of the affected area boundary for the majority of the roadway alignment.

The check dams would require extensive maintenance for them to continue to function properly. Such a system of check dams is not a typical means to provide stormwater detention.



- LEGEND**
- ALTERNATIVE 1
 - ALTERNATIVE 2
 - ALTERNATIVE 3
 - PROPERTY LINE
 - AFFECTED MINE AREA
 - EXISTING CONTOUR LINES
 - PROPOSED CONTOUR LINES
 - 100 YEAR FLOODPLAIN
 - LA PLATA RIVER



MAYDAY IDAHO MINE COMPLEX
LA PLATA COUNTY, COLORADO
DETENTION POND ALTERNATIVES ANALYSIS

CARROLL & LANGF-MANNHARD
A LAM-ARD CONSULTING COMPANY
Civil, Mechanical, Electrical, and Environmental Engineers & Surveyors
1100 East 17th Avenue, Suite 100, Denver, Colorado 80202
Tel: 303.733.1100 Fax: 303.733.1101
WWW.CARROLL-AND-LANGF-MANNHARD.COM

NO.	DESCRIPTION	DATE	BY

COUNTY ROAD 241

CHECK DAM (TYP)

ALTERNATIVE 1
DETENTION POND
LOCATION

ALTERNATIVE 3

CHECK DAM (TYP)

ALTERNATIVE 2
DETENTION POND
LOCATION

CHECK DAM (TYP)

ALTERNATIVE 3

LA PLATA RIVER

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

Appendix H:
PCN for Work in Plan

U.S. Army Corps of Engineers South Pacific Division



Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the Nationwide Permit Program within SPD, including General and Regional Conditions. Please consult instructions prior to completing this form.

Box 1 Project Name May Day Idaho Mine			
Applicant Name George Robinson		Applicant Title CEO	
Applicant Company, Agency, etc. Wildcat Mining Corporation		Applicant's internal tracking number (if any) NA	
Mailing Address 3926 N State Hwy 67 Sedalia, CO 80135			
Work Phone with area code 720-641-2534	Home Phone with area code NA	Fax # with area code NA	E-mail Address geogerobinson@r2incorporated.com
Relationship of applicant to property: <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input type="checkbox"/> Other:			
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a Corps nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work only after all necessary permits have been received.			
Signature of applicant 			Date (m/d/yyyy) 6/1/2016

Box 2 Authorized Agent/Operator Name <i>(If an agent is acting for the applicant during the permit process)</i> Dave Mehan, PWS			
Agent/Operator Title Senior Scientist		Agent/Operator Company, Agency, etc. Bikis Water Consultants--SGM	
Mailing Address 555 RIVERGATE LANE, STE B4-82			
Work Phone with area code 970-385-2340	Home Phone with area code NA	Fax # with area code 970-385-2341	E-mail Address davem@sgm-inc.com
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant 			Date (m/d/yyyy) 6/1/2016
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
Signature of authorized agent 			Date (m/d/yyyy) 6/1/2016

Box 3 Name of Property Owner(s), if other than Applicant:	
OWNER IS THE APPLICANT--SEE ABOVE	
Owner Title	Owner Company, Agency, etc.
Mailing Address	
Work Phone with area code	Home Phone with area code

Box 4 Name of Contractor(s) (if known):	
NOT KNOWN AT THIS TIME	
Contractor Title	Contractor Company, Agency, etc.
Mailing Address	
Work Phone with area code	Home Phone with area code

Box 5 Site Number <u>1</u> of <u>2</u>. Project location(s), including street address, city, county, state, zip code where proposed activity will occur:	
THIS PCN ADDRESSES TWO PROPOSED ACTIVITIES AT THE MINE: 1) RETENTION OF FILL IN LITTLE DEADWOOD GULCH THAT IS REQUIRED TO RE-CONSTRUCT THE CHIEF PORTAL, AND 2) CONSTRUCTION OF A STORMWATER MANAGEMENT POND REQUIRED BY LA PLATA COUNTY FOR THE NEW MINE ACCESS ROAD.	
Waterbody (if known, otherwise enter "an unnamed tributary to"): Little Deadwood Gulch (Chief Portal work) and the La Plata River (New Mine Access Road)	
Tributary to what known, downstream waterbody: San Juan River	
Latitude & Longitude (D/M/S, DD, or UTM): Access road work -108° 04' 28.86", 37° 20' 57.33" Chief Portal -108° 04' 06.09", 37° 21' 19.28"	Zoning Designation (no codes or abbreviations): No zoning.
Assessors Parcel Number: NA	Section, Township, Range: Sec 28, T 36 N, R 11 W NMPM
USGS Quadrangle map name: La Plata	
Watershed and other location descriptions, if known: The Chief Portal is located towards the headwaters of Little Deadwood Gulch, which is a relatively small, intermittent tributary to the La Plata River. The stormwater management pond is located adjacent to the La Plata River (See Figure 2 in the Restoration Plan).	

Directions to the project location:

Figure 1 in the Restoration Plan is a vicinity map. The site is located on private property which is part of an active, permitted mine. To get to the site, go west on State Highway 161 from Durango 10.6 miles to County Road 124. Go north on County Road 124 4.2 miles to the mine access road. Take a right turn on the mine access road and follow this road approximately 0.2 miles to the stormwater management pond area. The Chief Portal is in a relatively remote location that is accessible from several internal mining roads requiring a 4-wheel drive. Mine staff should be contacted for escort to this site.

Nature of Activity (Description of project, include all features, see instructions):

CHIEF PORTAL: STABILIZATION OF THE CHIEF PORTAL AREA BY: REMOVING THE RECENT FILL IN LITTLE DEADWOOD GULCH, INSTALLING A NEW CULVERT TO CONVEY UP TO THE 100-YEAR FLOW AND REVEGETATING DISTURBED AREAS. SEE FIGURE 6 IN THE RESTORATION PLAN.

STORMWATER MANAGEMENT POND: GRADING AND WORK TO CONSTRUCT A STORMWATER MANAGEMENT (DETENTION) POND TO TREAT INCREASED FLOWS FROM THE MINE ACCESS ROAD, PER LA PLATA COUNTY STANDARDS. SEE FIGURES 10A AND 10B IN RESTORATION PLAN.

Project Purpose (Description the reason or purpose of the project, see instructions):

CHIEF PORTAL: TO CREATE A REQUIRED MINE EGRESS FOR EMERGENCY EVACUATION.
STORMWATER MANAGEMENT POND: TO PROVIDE STORMWATER QUALITY TREATMENT AND DETENTION FOR THE ADDITIONAL RUNOFF THAT WILL GENERATED FROM THE NEW MINE ACCESS ROAD.

Use Box 6 if dredged and/or fill material is to be discharged:

Box 6 Reason(s) for Discharge into waters of the United States:

CHIEF PORTAL: A MINE EGRESS IS REQUIRED TO MEET STATE AND MSHA STANDARDS FOR AN UNDERGROUND MINE, AS PROPOSED. THE CHIEF PORTAL IS A SUITABLE LOCATION FOR SUCH AN ACCESS AND IS LOCATED IN AREA THAT HAS BEEN DISTURBED PREVIOUSLY. USE OF THIS AREA WILL NOT RESULT IN ANY ADDITIONAL FILL IN WATERS OF THE US, AND WILL RESULT IN HYDROLOGIC RESTORATION OF LITTLE DEADWOOD GULCH. NO PRACTICABLE LOCATIONS EXIST. A DETAILED ALTERNATIVES ANALYSIS FOR THIS AREA IS INCLUDED IN APPENDIX E OF THE RESTORATION PLAN.

STORMWATER MANAGEMENT POND: LA PLATA COUNTY REQUIRES DETENTION AND TREATMENT OF RUNOFF FROM THE NEW MINE ACCESS ROAD. THE PROPOSED POND WILL MAINTAIN FLOWS TO HISTORICAL LEVELS AND WILL ALSO ENHANCE STORMWATER QUALITY. AN ALTERNATIVES ANALYSIS FOR THE POND IS INCLUDED IN APPENDIX F OF THE RESTORATION PLAN.

Type(s) of material being discharged and the amount of each type in cubic yards:

Chief Portal: Approximately 10 CY of clean fill and rock.

Stormwater Management Pond: Most of the work in the small wetland will be excavation. A relatively small amount of clean fill and rock will be discharged.

Total surface area in acres of wetlands or other waters of the U.S. filled (see instructions):

0.015 ac for Chief Portal plus 0.028 ac for stormwater pond=0.043 acres.

Indicate in ACRES and LINEAR FEET (where appropriate) the proposed impacts to **waters of the United States**, and identify the impact(s) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent		Temporary	
	Acres	Linear feet	Acres	Linear feet
Wetland	0.043			
Riparian streambed				
Unveg. streambed		90		
Lake				
Ocean				
Other				
Total:	0.043	90		

<p>Potential indirect and/or cumulative impacts of proposed discharge (if any): The work at the Chief Portal includes removal of 285 CY of existing fill and stabilization of the area which should improve water quality and vegetation conditions at the site. Construction of the stormwater management pond will maintain flows to historic levels and will also enhance the water quality of runoff from the road (and existing conditions). This will help to protect the adjacent wetlands and aquatic resources of the La Plata River. Therefore, no adverse indirect or cumulative impacts will occur.</p>
<p>Required drawings (see instructions): Vicinity map: <input checked="" type="checkbox"/> Attached (or mail copy separately if applying electronically) To-scale Plan view drawing(s): <input checked="" type="checkbox"/> Attached (or mail copy separately if applying electronically) To-scale elevation and/or Cross Section drawing(s): <input checked="" type="checkbox"/> Attached (or mail copy separately if applying electronically)</p>
<p>Has a wetlands/waters of the U.S. delineation been completed? <input checked="" type="checkbox"/> Yes, Attached (or mail copy separately if applying electronically) <input type="checkbox"/> No</p> <p>If a delineation has been completed, has it been verified in writing by the Corps? <input type="checkbox"/> Yes, Date of approved jurisdictional determination (m/d/yyyy): _____ Corps file number: _____ <input checked="" type="checkbox"/> No</p>
<p>Please attach¹ one or more color photographs of the existing conditions (aerials if possible). ¹or mail copy separately if applying electronically</p>

Dredge Volume: Indicate in CUBIC YARDS the quantity of material to be dredged or used as fill: 0
CY

Indicate type(s) of material proposed to be discharged in waters of the United States:
Clean rock and soil.

For proposed discharges of dredged material into waters of the U.S. (including beach nourishment), please attach² a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available).

²or mail copy separately if applying electronically

Is any portion of the work already complete? YES NO

If yes, describe the work: Historic fill exists in Little Deadwood Gulch at the Chief Portal site.

Box 7 Intended NWP number (1st)³: 32
Intended NWP number (2nd):
Intended NWP number (3rd):

³Enter the intended permit type(s). See NWP regulations for permit types and qualification information (http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm).

Box 8 Authority:

Is Section 10 of the Rivers and Harbors Act applicable?: YES NO

Is Section 404 of the Clean Water Act applicable?: YES NO

Box 9 Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?: YES NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

Location of larger development (If discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):

Total area in acres of entire project area (including larger plan of development, where applicable):

<p>Box 10 Threatened or Endangered Species Please list any federally-listed (or proposed) threatened or endangered species or critical habitat within the project area (use scientific names (e.g., Genus species), if known):</p>	
<p>a. c. e.</p>	<p>b. d. f.</p>
<p>Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted? <input type="checkbox"/> Yes, Report attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	
<p>If a federally-listed species would be impacted, please provide a description and a biological evaluation. <input type="checkbox"/> Yes, Report attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> Not attached</p>	
<p>Has the USFWS/NOAA Fisheries issued a Biological Opinion? <input type="checkbox"/> Yes, Attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No If yes, list date Opinion was issued (m/d/yyyy):</p>	
<p>Has Section 7 consultation been initiated by another federal agency? <input type="checkbox"/> Yes, Initiation letter attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	
<p>Has Section 10 consultation been initiated for the proposed project? <input type="checkbox"/> Yes, Initiation letter attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	

<p>Box 11 Historic properties and cultural resources: Please list any historic properties listed (or eligible to be listed) on the National Register of Historic Places:</p>	
<p>a. c. e.</p>	<p>b. d. f.</p>
<p>Are any cultural resources of any type known to exist on-site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>Has an archaeological records search been conducted? <input type="checkbox"/> Yes, Report attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	
<p>Has a archaeological pedestrian survey been conducted for the site? <input type="checkbox"/> Yes, Report attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	
<p>Has a Section 106 MOA been signed by another federal agency and the SHPO? <input type="checkbox"/> Yes, Attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No If yes, list date MOA was signed (m/d/yyyy):</p>	
<p>Has Section 106 consultation been initiated by another federal agency? <input type="checkbox"/> Yes, Initiation letter attached (or mail copy separately if applying electronically) <input checked="" type="checkbox"/> No</p>	

Box 12 Measures taken to avoid and minimize impacts to waters of the United States (if any):

See the alternatives analysis included in Appendices E and F of the Restoration Plan. Erosion controls will be used during construction to minimize the discharge of sediment from the sites. Disturbed areas at the sites will be revegetated and mulched after construction.

Include multiple copies of Box 13 for separate sites.

Box 13 Proposed Compensatory Mitigation (site 1 of 1) related to fill/excavation and dredge activities. Indicate in ACRES and LINEAR FEET (where appropriate) the total quantity of waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (wetland, riparian streambed, unvegetated streambed, lake, ocean, other) or non-jurisdictional (uplands⁵). Indicate mitigation type (on- or off-site by applicant, mitigation bank, in-lieu fee program):

Water Body Type	Created	Restored	Enhanced	Preserved	Mitigation type
Emergent wetland	0.079 acre				On-site by app
	-				
Totals:	0.079 acre				

⁵ For uplands, please indicate if designed as an upland buffer.

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:

NA

Has a draft/conceptual mitigation plan been prepared in accordance with the Army Corps of Engineers District guidelines? Yes, Attached (or mail copy separately if applying electronically) No

Mitigation site Latitude & Longitude (D/M/S, DD, or UTM):

USGS Quadrangle map name:
La Plata

Assessors Parcel Number:
NA

Section, Township, Range:
Sec 28, T 36 N, R 11 W of NMPM

Other location descriptions, if known:

Next to the existing emergent wetland mitigation site that was created to compensate for impacts from the new mine access road.

Directions to the mitigation location:

See Figure 2 of the Restoration Plan.

Box 14 Water Quality Certification (see instructions):
 Applying for certification? Yes, Attached (or mail copy separately if applying electronically) No
 Certification issued? Yes, Attached (or mail copy separately if applying electronically) No
 Exempt? Yes No
 If exempt, state why: Agency concurrence? Yes, Attached No

Box 15 Coastal Zone Management Act (see instructions):
 Is the project located within the Coastal Zone? Yes No
 If yes, applying for a coastal commission-approved Coastal Development Permit?
 Yes, Attached (or mail copy separately if applying electronically) No
 If no, applying for separate CZMA-consistency certification?
 Yes, Attached (or mail copy separately if applying electronically) No
 Permit/Consistency issued? Yes, Attached (or mail copy separately if applying electronically) No
 Exempt? Yes No
 If exempt, state why:

Box 16 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Type Approval ⁴	Identification No.	Date Applied	Date Approved	Date Denied
DRMS	State Mine permit	M-1981-185			
La Plata County	road design				

⁴ Would include but is not restricted to zoning, building, and flood plain permits

NWP General Conditions (GC) checklist:

1. Navigation:

Project would be in compliance with GC? Yes No

2. Aquatic Life Movements:

Project would be in compliance with GC? Yes No

3. Spawning Areas:

Spawning areas present? Yes No

Project would be in compliance with GC? Yes No

4. Migratory Bird Breeding Areas:

Migratory bird breeding areas present? Yes No

Project would be in compliance with GC? Yes No

5. Shellfish Beds:

Shellfish beds present? Yes No

Project would be in compliance with GC? Yes No

6. Suitable Material:

Project would be in compliance with GC? Yes No

7. Water Supply Intakes:

Project would be in compliance with GC? Yes No

8. Adverse Effects From Impoundments:

Project would be in compliance with GC? Yes No

9. Management of Water Flows:

Project would be in compliance with GC? Yes No

10. Fills Within 100-Year Floodplains:

Project would be within 100-year floodplains? Yes No

If yes, project would be in compliance with GC? Yes No

11. Equipment:

Project would be in compliance with GC? Yes No

12. Soil Erosion and Sediment Controls:

Project would be in compliance with GC? Yes No

13. Removal of Temporary Fills:

Project would be in compliance with GC? Yes No

14. Proper Maintenance:

Project would be in compliance with GC? Yes No

15. Wild and Scenic Rivers:

Project would be within a National Wild and Scenic River System (including proposed system)?

Yes No

Project would be in compliance with GC? Yes No

16. Tribal Rights:

Project would be in compliance with GC? Yes No

17. Endangered Species: see Box 10 above.

18. Historic Properties: see Box 11 above.

19. Designated Critical Waters (*check those that apply*)

Includes:

- 1) NOAA-designated marine sanctuaries,
- 2) National Estuarine Research Reserves,
- 3) State natural heritage sites,
- 4) Officially designated waters

Applicant is aware of the restrictions a) and b) below? Yes No

a) NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50: No NWP can be authorized.

b) NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38: Notification is required.

20. Mitigation: see Box 13 above.

21. Water Quality (401 Certification): see Box 14 above.

22. Coastal Zone Permit: see Box 15 above.

23. Regional and Case-By-Case Conditions:

Complete the Regional Conditions checklist below.

Project would be in compliance with any Case-by-case conditions? Yes No

24. Use of Multiple Nationwide Permits:

Applicant is aware that if total proposed acreage of impact exceeds acreage limit of NWP with highest specified acreage, no NWP can be issued? Yes No

25. Transfer of Nationwide Permit Verifications:

Applicant is aware of this permit transfer requirement? Yes No

26. Compliance Certification:

Applicant is aware of this post-construction requirement? Yes No

27. Pre-Construction Notification:

If a PCN is required, the PCN includes: (*check those that apply*)

Delineation of wetlands and other waters of the U.S.

If project results in the loss of greater than 1/10 acre of wetlands, a compensatory mitigation plan or statement describing how the mitigation requirement will be satisfied

For non-Federal applicants, a list of threatened or endangered species or designated critical habitat that might be affected by the proposed work

For Federal applicants, documentation demonstrating compliance with the Endangered Species Act

For non-Federal applicants, a list of historic properties listed on, or determined eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places that may be affected by the proposed work; or a vicinity map indicating the location of the historic property

For Federal applicants, documentation demonstrating compliance with the National Historic Preservation Act

28. Single and Complete Project:

Project would be in compliance with GC? Yes No

NWP Regional Conditions (RC) checklist:

II. Sacramento District (SPK) in Colorado:

SPK Regional conditions to be applied only in Colorado in the Sacramento District:

- a. Are utility line and/or road activities crossing perennial water or special aquatic sites located within the Colorado Basin proposed under NWPs 12 and/or 14? Yes No

If yes, notification pursuant to General Condition 27 is required using either the South Pacific Division Preconstruction Notification (PCN) Checklist or a completed application form (ENG Form 4345). In addition, the PCN shall include:

1. A written statement explaining how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States;
2. Drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and size (in acreage) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the high tide line should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation; and
3. Pre-project color photographs of the project site taken from designated locations documented on the plan drawing.

- b. Are bank stabilization activities proposed under NWP 13 within streams which average less than 20 feet across (measured between the ordinary high water marks) and require placement of greater than ¼ cubic yard of suitable fill material per running foot below the plane of the ordinary high water mark? Yes No

If yes, notification pursuant to General Condition 27 (as described above) is required.

- c. Is the activity proposed under NWP 27? Yes No

1. Does the activity include a fishery enhancement component? Yes No

If yes, notification pursuant to General Condition 27 (as described above) is required. The Corps will send the PCN to the Colorado Parks and Wildlife (CPW) (formerly Colorado Division of Wildlife) for review. In accordance with General Condition 27, CPW will have 10 days from the receipt of Corps notification to indicate that they will be commenting on the proposed project. CPW will then have an additional 15 days after the initial 10-day period to provide those comments. If CPW raises concerns, the applicant may either modify their plan, in coordination with CPW, or apply for a standard individual permit.

2. Does the activity involve the length of a stream? Yes No

If yes, the post-project stream sinuosity will not be significantly reduced, unless it is demonstrated that the reduction in sinuosity is consistent with the natural morphological evolution of the stream (sinuosity is the ratio of stream length to project reach length).

3. Does the activity involve a structure? Yes No

If yes, the structure will allow the upstream and downstream passage of aquatic organisms, including fish native to the reach, as well as recreational water craft or other navigational activities, unless specifically waived in writing by the District Engineer. The use of grout and/or concrete in building structures is not authorized by NWP 27.

4. Does the activity involve construction of a water park (i.e., kayak courses) or flood control project?
 Yes No

If yes, the construction of water parks and flood control projects are not authorized by NWP 27.

- d. Is the activity proposed under NWPs 29 and/or 39? Yes No

If yes, notification pursuant to General Condition 27 (as described above) is required. A copy of the existing FEMA/locally-approved floodplain map must be submitted with the PCN. When reviewing proposed developments, the Corps will utilize the most accurate and reliable FEMA/locally-approved pre-project floodplain mapping, not post-project floodplain mapping based on a CLOMR or LOMR. However, the Corps will accept revisions to existing floodplain mapping if the revisions resolve inaccuracies in the original floodplain mapping and if the revisions accurately reflect pre-project conditions.

- e. Will the activity involve the removal of temporary fills? Yes No

If yes, General Condition 13 (Removal of Temporary Fills) is amended by adding the following: When temporary fills are placed in wetlands in Colorado, a horizontal marker (i.e. fabric, certified weed-free straw, etc.) must be used to delineate the existing ground elevation of wetlands that will be temporarily filled during construction.

- f. Will the activity occur within a spawning area? Yes No

If yes, General Condition 3 (Spawning Areas) is amended by adding the following: In Colorado, all Designated Critical Resource Waters (see Enclosure 1) are considered important spawning areas. Therefore, in accordance with General Condition 19 (Designated Critical Resource Waters), the discharge of dredged or fill material is not authorized by the following NWPs in these waters: NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50. In addition, in accordance with General Condition 27, notification (as described above) is required for the use of the following NWPs in these waters: NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38..

- g. Will the activity use broken concrete as fill material? Yes No

If yes, notification pursuant to General Condition 27 (as described above) is required. Permittees must demonstrate that soft engineering methods utilizing native or non-manmade materials are not practicable (with respect to cost, existing technology, and logistics), before broken concrete is allowed as suitable fill. Use of broken concrete with exposed rebar is prohibited in perennial waters and special aquatic sites.

- h. Will the activity involve work with heavy equipment in perennial or intermittent waters of the United States?
 Yes No

If yes, General Condition 11 (Equipment) is amended by adding the following condition: If heavy equipment is used for the subject project that was previously working in another stream, river, lake, pond, or wetland within 10 days of initiating work, one of the following procedures is necessary to prevent the spread of New Zealand Mud Snails and other aquatic hitchhikers:

1. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and keep the equipment dry for 10 days; or
2. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with either a 1:1 solution of Formula 409 Household Cleaner and water, or a solution of Sparquat 256 (5 ounces Sparquat per gallon of water). Treated equipment must be kept moist for at least 10 minutes; or
3. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with water greater than 120 degrees F for at least 10 minutes.

- i. Is the activity located with a fen and/or a wetland adjacent to a fen? Yes No

If yes, all NWP's except 3, 6, 20, 27, 32, 38, and 47, are revoked. For NWP's 3, 20, 27, and 38, notification pursuant to General Condition 27 (as described above) is required and the permittee may not begin the activity until the Corps determines the adverse environmental effects are minimal. A fen is defined as:

Fen soils (histosols) are normally saturated throughout the growing season, although they may not be during drought conditions. The primary source of hydrology for fens is groundwater. Histosols are defined in accordance with the U.S. Department of Agriculture, Natural Resources Conservation Service publications on Keys to Soil Taxonomy and Field Indicators of Hydric Soils in the United States (<http://soils.usda.gov/technical/classification/taxonomy>).

- j. Is the activity proposed within 100 feet of the point of groundwater discharge of a natural spring?
 Yes No

If yes, all NWP's, except NWP 47, require notification pursuant to General Condition 27 (as described above). A spring source is defined as any location where ground water emanates from a point in the ground. For purposes of this condition, springs do not include seeps or other discharges which lack a defined channel.

Additional Information Regarding Minimization of Impacts and Compliance with Existing General Conditions:

1. Permittees are reminded of the existing General Condition No. 6 which prohibits the use of unsuitable material. Organic debris, building waste, asphalt, car bodies, and trash are **not** suitable material. Also, General Condition 12 requires appropriate erosion and sediment controls (i.e. all fills must be permanently stabilized to prevent erosion and siltation into waters and wetlands at the earliest practicable date). Streambed material or other small aggregate material placed along a bank as stabilization will **not** meet General Condition 12. Also, use of erosion control mats that contain plastic netting may not meet General Condition 12 if deemed harmful to wildlife.
2. Designated Critical Resource Waters in Colorado. In Colorado, a list of designated Critical Resource Waters has been published in accordance with General Condition 19 (Designated Critical Resource Waters). This list will be

published on the Albuquerque District Regulatory home page (<http://www.spa.usace.army.mil/reg/>). A copy is attached (see Enclosure 1).

3. Federally-Listed Threatened and Endangered Species. General Condition 17 requires that non-federal permittees notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project. Information on such species, to include occurrence by county in Colorado, may be found at the following U.S. Fish and Wildlife Service website:
http://www.fws.gov/mountain%2Dprairie/endspp/name_county_search.htm.

Enclosure 1**DESIGNATED CRITICAL RESOURCE WATERS IN COLORADO**

The following waters within the State of Colorado are designated as critical resource waters. In accordance with General Condition 19 (Designated Critical Resource Waters), the discharge of dredged or fill material is not authorized by the following nationwide permits in these waters: NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49 and 50. In addition, in accordance with General Condition 27 (Pre-Construction Notification), notification to the District Engineer is required for use of the following nationwide permits in these waters: NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37 and 38.

a. Outstanding Natural Resource Waters:

- Cache la Poudre Basin: All tributaries to the Cache La Poudre River system, including all lakes and reservoirs, which are within Rocky Mountain National Park;
- Laramie River: All tributaries to the Laramie River system, including all lakes and reservoirs which are in the Rawah Wilderness Area;
- North Fork Gunnison River: All tributaries to North Fork Gunnison River system, including lakes, reservoirs and wetlands within the West Elk and Raggeds Wilderness Area;
- North Platte River: All tributaries to the North Platte River and Encampment Rivers, including all lakes and reservoirs, which are in the Mount Zirkle Wilderness Area;
- San Miguel River: All tributaries, lakes, reservoirs, and wetlands within the boundaries of the Lizard Head and Mt. Sneffels Wilderness Area;
- Roaring Fork River: All tributaries to the Roaring Fork River system, including lakes, reservoirs and wetlands within the Maroon Bells/Snowmass Wilderness Area;
- Uncompahgre River: All tributaries to the Uncompahgre River system, including lakes, reservoirs, and wetlands within the Mt. Sneffels and Big Blue Wilderness Areas;
- Upper Arkansas River Basin: All streams, wetlands, lakes, and reservoirs within the Mount Massive and Collegiate Peaks Wilderness Areas;
- Upper Colorado River: Mainstem of the Colorado River system including tributaries, lakes, reservoirs, and wetlands within Rocky Mountain National Park;
- Upper Gunnison River Basin: All tributaries, lakes, reservoirs, and wetlands in the La Garita Wilderness Area. All tributaries to the Gunnison River system, including lakes, reservoirs, and wetlands within West Elk, Collegiate Peaks, Maroon Bells, Raggeds, Fossil Ridge, Oh-Be-Joyful and Big Blue Wilderness Areas;
- White River: Trapper's Lake and tributaries to Trapper's Lake;
- Yampa River: All tributaries to the Yampa River, including lakes, reservoirs and wetlands within Zirkle Wilderness Area.

b. Gold Medal Waters. Gold Medal Waters, as identified by the State of Colorado, are defined in the Colorado Fishing Season Information brochure, on the Colorado Division of Wildlife website (<http://wildlife.state.co.us>) or can be obtained at any Colorado Division of Wildlife or Corps office in Colorado.

c. Cutthroat Trout Waters. Waters designated as Cutthroat Trout Waters by the Colorado Division of Wildlife, Colorado Wildlife Commission, as listed in the Colorado Division of Wildlife's regulation at Chapter 0, Appendix C, which can be accessed via the following website address:
<http://wildlife.state.co.us/NR/rdonlyres/4D6FFAC6-64EB-4516-A5E9-AE91B7392A95/0/Ch00.pdf>

Appendix I:
**Photographs of the Areas for Additional
Mitigation**

Appendix I - May Day Idaho Mine Complex
New Areas for Additional Mitigation
Wildcat Mining



Photo I-1. Photo of Area A for additional mitigation.

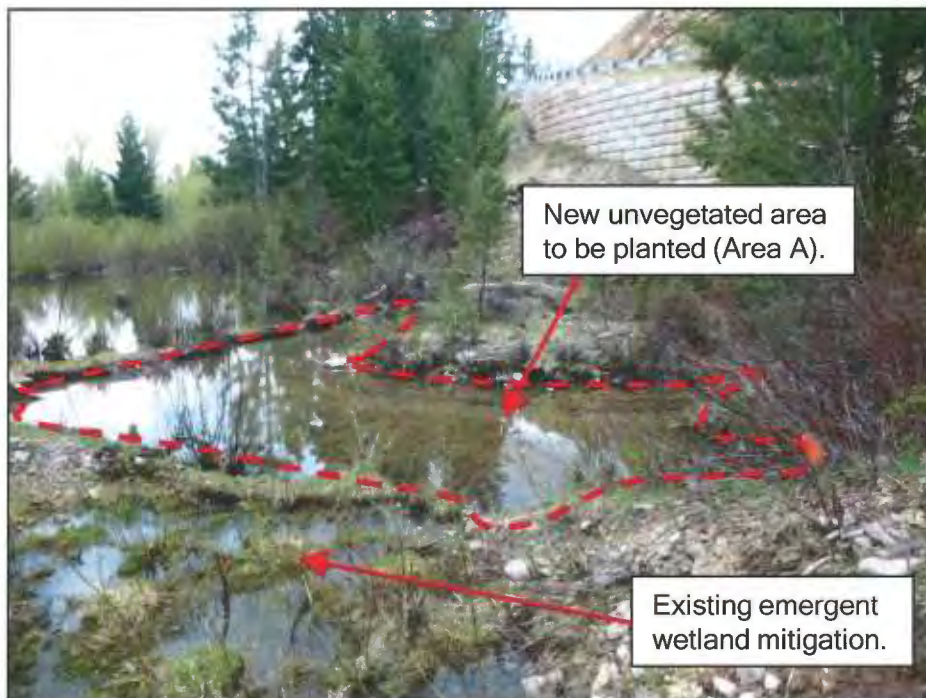


Photo I-2. Photo of Area A to be used for additional mitigation.

Appendix I - May Day Idaho Mine Complex Wildcat Mining



Photo I-3. Photo of Area C for additional mitigation.



Photo I-4. Area C with retaining wall in background.



www.BikisWater.com