



Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

Phone: (760) 878-0263
FAX: (760) 878-0382
E-Mail: inyoplanning@inyocounty.us

AGENDA ITEM NO.:

7(Action Item – Public Hearing)

**PLANNING COMMISSION
MEETING DATE:**

October 28, 2026

SUBJECT:

Hold a hearing regarding the Order
Mandating Compliance for the St. Cloud
Mining Company– Ash Meadows Mine
(Mine ID 91-14-0018)

EXECUTIVE SUMMARY

This hearing is being held pursuant to a Notice of Violation and proposed Order To Comply in regards to the St. Cloud Mining – Ash Meadows Mine (ID 91-14-0018). This mine is located on lands administered by the Bureau of Land Management in T25N, R6E, Sections 9 and 10, Inyo County, California.

Pursuant to Inyo County Code § 7.70.070(c) and Public Resources Code § 2774.1, a hearing is being held to determine whether the Planning Commission will / will not 1) find that these violations have occurred and 2) issue an order imposing the penalties and remedies as set out in the attached Order to Comply and in this staff report.

PROJECT INFORMATION

Supervisory District: 5

Project Applicant: Jason Stevens with St. Cloud Mining.

Property Owner: USA Bureau of Land Management (Department of Interior)

Site Address: Death Valley Junction and approximately two miles south of Ash Meadows Road. Township 25 North, Range 6 East, Sections 9 and 10, San Bernardino Base and Meridian, Inyo County, California.

Community: Death Valley Junction, CA

A.P.N.: 043-130-04

General Plan: Rural Protection (RP)

Zoning: Open Space, 40 acre minimum (OS-40)

Size of Parcel: Approximately 137.52 Acres

Surrounding Land Use:

Location:	Use:	Gen. Plan Designation	Zoning
Site	Vacant	State and Federal Land (SFL)	Open Space – 40 acre minimum (OS-40)
North	Vacant	State and Federal Land (SFL)	Open Space – 40 acre minimum (OS-40)
East	Vacant	State and Federal Land (SFL)	Open Space – 40 acre minimum (OS-40)
South	Vacant	State and Federal Land (SFL)	Open Space – 40 acre minimum (OS-40)
West	Vacant	State and Federal Land (SFL)	Open Space – 40 acre minimum (OS-40)

Staff Recommended Action:

1) Find that these violations have occurred and issue an order imposing the penalties and remedies as set out in the Order to Comply and this staff report.

Alternatives:

1) Dismiss the violations.
2) Modify the Order to Comply as the Commission sees fit.
3) Continue the public hearing to a future date, and provide specific direction to staff regarding what additional information and analysis is needed.

Project Planner:

Ryan Standridge, Associate Planner and SMARA Coordinator

STAFF ANALYSIS

The Ash Meadows Mine was first permitted by the Inyo County Planning Commission in 1979 via Conditional Use Permit 79-18/Anaconda Company and an associated Reclamation Plan. The approved project consisted of an open-pit zeolite mining operation located approximately five miles east of Death Valley Junction and approximately two miles south of Ash Meadows Road. The original project contemplated an approximately 25-acre open-pit mine and associated waste dumps. The approved project description specifically provided that no processing would occur onsite.

In 2007, Ash Meadows, LLC submitted an amended Reclamation Plan to update the mining operation. Accordingly, on October 24, 2007, the Planning Commission approved Reclamation Plan 2007-01/Ash Meadows, LLC, amending Reclamation Plan 79-18. The amended plan was submitted to the California Department of Conservation for review as part of the County's SMARA review process.

Reclamation Plan 2007-01 provides for continued mining of the zeolite deposit within the existing disturbance area. The approved operation includes removal and stockpiling of overburden, further development of the north and south pit areas, excavation of zeolite ore, and hauling the excavated material from the mine site to an existing processing facility in Nye County, Nevada.

The approved Reclamation Plan allows mining equipment including a track dozer, rubber-tired loader, track hydraulic excavator, and portable custom-built grizzly. Reclamation Plan 2007-01 further states that no buildings or structures will be erected onsite, although a portable trailer may be maintained onsite on a limited basis. Additionally, the operator acknowledged in Reclamation Plan 2007-01 that, should the nature of the operation change, a modified or supplemental Plan of Operations and Reclamation Plan may be required.

In 2026, St. Cloud Mining proposed changes to the mining operation that included processing equipment, structures, and associated operational improvements not identified in Reclamation Plan 2007-01. During the operator's exploratory drilling program, the Planning Department reviewed the proposed activities and associated Bureau of Land Management ("BLM") Plan of Operations. During this review, the Planning Department determined that the approved Reclamation Plan was not consistent with the proposed Plan of Operations. The operator was advised that the discrepancy between the approved Reclamation Plan and the proposed operation would need to be resolved through County review before the proposed operational changes could be implemented.

In March 2026, the operator's consultant contacted the Planning Department regarding the proposed installation of processing equipment, structures, and associated operational improvements. On March 31, 2026, Planning Department staff advised the operator that implementation of the proposed improvements would require amendments to the approved Reclamation Plan.

St. Cloud Mining also sought authorization from BLM to modify its federal Plan of Operations. BLM's records state that St. Cloud Mining submitted a Plan of Operations modification on February 25, 2026 to add equipment and facilities including a Sany 405K front-end loader, Sany SY500 excavator, truck scale with concrete ramps, scale house, jaw crusher, radial stacker, water truck, generator, and electrical panel. BLM subsequently informed St. Cloud Mining that additional information was required before the modification could be considered complete and that the modification could not be approved prior to completion of the required environmental review.

BLM subsequently conducted a compliance inspection of the St. Cloud Mining operation. During its inspection, BLM documented equipment and facilities within the authorized

mine site that had been installed prior to obtaining authorization, including the front-end loader, excavator, truck scale, scale house, jaw crusher, and electrical equipment. BLM determined that these activities were outside the scope of the existing approved Plan of Operations and issued a Noncompliance Order.

The BLM Noncompliance Order directed St. Cloud Mining to update its Financial Assurance Cost Estimate and provide the appropriate financial assurance mechanism to address removal and remediation of unauthorized equipment and facilities onsite. BLM also directed St. Cloud Mining to cease using specified equipment, including the excavator, jaw crusher, radial stacker, truck scale, generator, and electrical panel until its Plan of Operations modification is approved.

Based on the information available to the Planning Department, the County determined that processing equipment, structures, and associated operational improvements had been installed and/or placed into operation that were not authorized under Reclamation Plan 2007-01.

In July 2026, given that the mining operation had been modified in a manner inconsistent with the approved Reclamation Plan and the Planning Department had not received an application to amend Reclamation Plan 2007-01, a revised Financial Assurance Cost Estimate (“FACE”), or a revised Financial Assurance Mechanism (“FAM”) reflecting the modified operation, the Planning Department sent a Notice of Violation pursuant to Inyo County Code § 7.70.070(A) to St. Cloud Mining on July 31, 2026.

The Notice of Violation informed St. Cloud Mining that, within thirty calendar days of receipt of the Notice, the operator was required to notify the County in writing which corrective action it would undertake to bring the operation into compliance.

The Notice provided St. Cloud Mining with two corrective options. Under Corrective Action A, St. Cloud Mining could restore the operation to the configuration authorized under Reclamation Plan 2007-01 by immediately ceasing operation of unauthorized processing equipment, structures, utilities, stockpiles, and associated operational improvements; removing unauthorized improvements; restoring affected areas; and notifying the County upon completion so that a follow-up inspection could be conducted.

Under Corrective Action B, St. Cloud Mining could elect to retain the installed improvements by obtaining all required County approvals. The Notice stated that this would require, at a minimum, an application to amend Reclamation Plan 2007-01, a revised FACE, a revised FAM following approval of the FACE, any required land use approvals.

The Notice further advised St. Cloud Mining that the amended Reclamation Plan must accurately reflect the mining operation proposed by the operator and be consistent with BLM's approved Plan of Operations. The Notice also advised that changes to the mining operation that differ from the approved Reclamation Plan require County review and approval prior to implementation and that submission of an application does not

constitute approval of the modified operation or authorize continued operation of improvements that have not been approved by the County.

The Notice directed St. Cloud Mining to immediately cease operation of processing equipment, structures, and facilities that are not authorized under the approved Reclamation Plan until the identified violations have been corrected. The Notice further advised that failure to notify the County of the selected corrective action within thirty days, or failure to complete the required corrective actions within the time specified by the County or a stipulated order, could result in issuance of an Order to Comply pursuant to Public Resources Code § 2774.1 and other enforcement remedies.

Since the issuance of the Notice of Violation, St. Cloud Mining has continued efforts to address compliance requirements associated with the mining operation. To date, these efforts have primarily been directed toward satisfying BLM's Noncompliance Order and federal Plan of Operations requirements. St. Cloud Mining has prepared an updated Financial Assurance Cost Estimate ("FACE"); however, as of October 8, 2026, the Planning Department has not received an application to amend Reclamation Plan 2007-01.

Public Resources Code § 2774.1 provides that an operator has thirty days after issuance of a Notice of Violation to complete the corrective actions identified in the Notice. If the Lead Agency determines that the time necessary to correct the violation will exceed thirty days, the Lead Agency may enter into a Stipulated Order to Comply with the operator that establishes a schedule and reasonable time for compliance. If the operator does not correct the violation or commit to enter into a Stipulated Order to Comply within thirty days after issuance of the Notice of Violation, the Lead Agency may issue an Order to Comply.

More than thirty days have passed since the County issued the Notice of Violation on July 31, 2026. Although St. Cloud Mining has been working toward compliance with BLM requirements and has prepared an updated FACE, the Planning Department has not received an application to amend Reclamation Plan 2007-01 or entered into a Stipulated Order to Comply establishing a schedule for correction of the violations. Therefore, the violations identified in the Notice of Violation remain unresolved.

Public Resources Code § 2774.1 and Inyo County Code § 7.70.070 provide for administrative penalties and other enforcement remedies. In determining whether administrative penalties should be imposed and the amount of any penalty, the Planning Commission may consider the nature, circumstances, extent, and gravity of the violation; any prior history of violations; the degree of culpability; economic savings resulting from the violation; and other matters justice may require. Staff is not recommending a specific administrative penalty amount at this time. The Planning Commission may determine at the hearing whether administrative penalties should be imposed and, if so, the amount of the penalty.

RECOMMENDATION

Planning Department staff recognizes that St. Cloud Mining has taken steps toward addressing the compliance issues associated with its BLM Plan of Operations and has prepared an updated FACE. However, these efforts have primarily been directed toward obtaining compliance with BLM's requirements and have not resolved the separate County compliance issue. The Planning Department advised St. Cloud Mining prior to implementation of the proposed operational changes that amendments to the approved Reclamation Plan would be required. Nevertheless, processing equipment, structures, and associated operational improvements were subsequently installed and/or placed into operation without an approved amendment to Reclamation Plan 2007-01.

This is not simply an administrative discrepancy between the County and BLM documents. Reclamation Plan 2007-01 defines the mining operation approved by Inyo County. The approved plan provides for zeolite ore to be excavated and hauled to an offsite processing facility in Nye County, Nevada, and provides that no buildings or structures will be erected onsite, with the limited exception of a portable trailer.

The original 1979 approval similarly provided that no processing would occur onsite.

The July 31, 2026 Notice of Violation provided St. Cloud Mining with two means of correcting the violation: restore the operation to the configuration authorized under Reclamation Plan 2007-01 or seek an amendment to the approved mining operation through the required County review and approval process.

While St. Cloud Mining has updated its FACE and is pursuing compliance with BLM, as of October 7, 2026, the Planning Department has not received an application to amend Reclamation Plan 2007-01. Therefore, the processing equipment, structures, facilities, and other operational changes that are inconsistent with Reclamation Plan 2007-01 have not been approved by the County.

Findings

The Notice of Violation and Order to Comply were properly served on Jason Stevens, as authorized agent for St. Cloud Mining Co.

[Evidence: Copies of the Notice and Order were sent to Mr. Stevens and his consultant, Jeff Garret, via certified mail and via email.]

This hearing was properly noticed.

[Evidence: Notice of the date of this hearing was provided in writing on August 27, 2026, which is more than 30 days before the date of this hearing. A revised notice reflecting the updated hearing time was provided via email on October 8, 2026.]

St. Cloud Mining Company is in violation of Public Resources Code § 2774.1(a) due to its failure to correct the violations identified in the Notice of Violation within 30 days as required by SMARA.

[Evidence: The Planning Department issued a Notice of Violation to St. Cloud Mining Company on July 31, 2026, identifying the violations and the corrective actions required to bring the operation into compliance. More than 30 days have passed since issuance of the Notice of Violation, and the violations have not been corrected. Although St. Cloud Mining Company has submitted an updated FACE and has been working toward compliance with BLM requirements, as of October 8, 2026, the Planning Department has not received an application to amend Reclamation Plan 2007-01.]

Orders

1. The Planning Commission is mandating a cessation of all activities at the St. Cloud Mining – Ash Meadows Mine that are not authorized under Reclamation Plan 2007-01. The Operator may continue mining activities authorized under Reclamation Plan 2007-01. No processing, construction / development work, installation or operation of structures or equipment, or other activity outside the scope of the approved Reclamation Plan shall occur unless and until the required County approvals are obtained..
2. St. Cloud Mining shall enter into a Stipulated Order to Comply establishing a schedule and reasonable time for bringing the operation into compliance with Reclamation Plan 2007-01 and applicable SMARA requirements.
3. If the Planning Commission determines that administrative penalties are warranted, the amount of the administrative penalty shall be set by the Planning Commission and shall be paid to the Inyo County Planning Department in accordance with Inyo County Code § 7.70.070, including the applicable appeal and payment provisions.

ATTACHMENTS

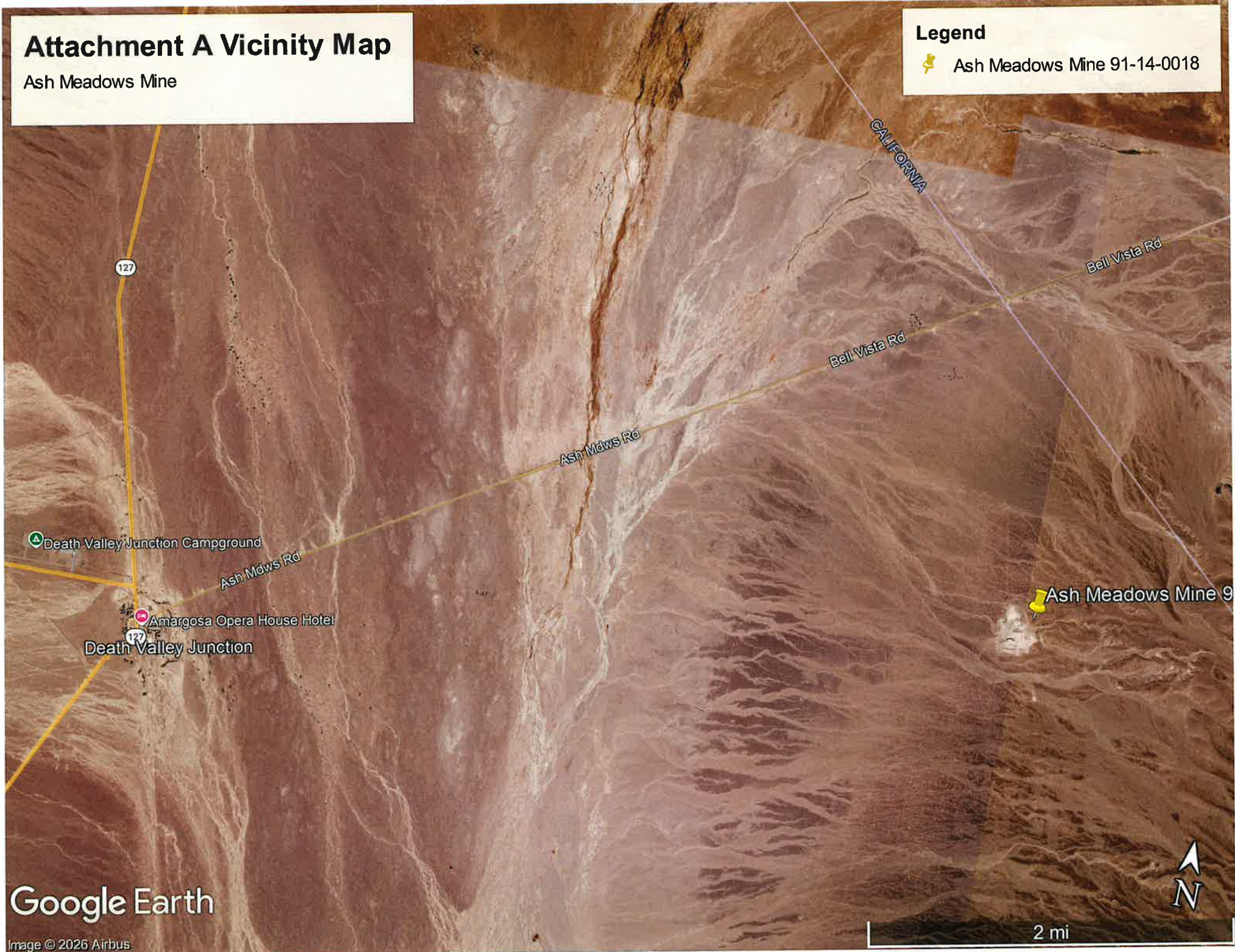
- A. Vicinity Map
- B. Approved Reclamation Plan 2007-01
- C. County Correspondence
- D. July 31, 2026 NOV
- E. BLM Noncompliance order/inspection Document

Attachment A Vicinity Map

Ash Meadows Mine

Legend

 Ash Meadows Mine 91-14-0018





**Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526**

**Phone: (760) 878-0263
(760) 872-2706
FAX: (760) 872-2712
E-Mail: InyoPlanning@qnet.com**

NOTICE OF DECISION

October 24, 2007

Glen Holly
Ash Meadows, LLC.
HCR 70 Box 7006
Amargosa Valley, NV 89020

SUBJECT: Reclamation Plan no. 2007-01/Ash Meadows, LLC.

On October 24, 2007 the Inyo County Planning Commission conducted a public hearing to consider Ash Meadows, LLC new reclamation plan, which will supercede the Conditional Use Permit and associated Reclamation Plan (CUP 79-18 issued to Anaconda Copper Company, on August 1, 1979.

At that time, Inyo County required both a conditional use permit (Zoning Ordinance) and a reclamation plan (SMARA) on Federal lands. Currently, Inyo County only requires a reclamation plan due to a change in County's policy regarding land use jurisdiction of lands under federal ownership. After considering the report of staff and all oral and written comments received, the Planning Commission took the following actions:

I. ENVIRONMENTAL

The Planning Commission determines that:

- a.** Based on the whole record, the Initial Study, the Draft Negative Declaration, and written comments received, responses to those comments contained herein, and pursuant to DEQA Guidelines section 15074(b), the Inyo County Planning Commission hereby adopts the negative Declaration and finds that the requirements of the California Environmental Quality Act have been satisfied..

[Evidence: In accordance with the requirements of the California Environmental Quality Act, an Initial Study and draft Negative declaration of Environmental Impact was prepared and circulated for this project for public review and comment. All concerns and issues raised in those comments are adequately addressed in the

discussion in the Draft negative Declaration, Staff Report and Public Hearing testimony.]

II. FINDINGS

The Planning Commission determines that:

- a.** The proposed reclamation plan is consistent with the Inyo County General Plan Designation and it's Goals and Policies, as well as the Inyo County Zoning Ordinance sections, which are applicable to the property.

[Evidence: The General Plan Designation is State and Federal Land (SFL), zoned Open Space, 40 acre minimum (OS-40), both which allow mining projects with the approval of a reclamation plan by Inyo county.]

- b.** The proposed reclamation plan conforms to and meets the requirements of Chapter 7.70 (Mining and Reclamation) of Inyo County Code and the California Surface Mining and Reclamation Act of 1975 (SMARA).

[Evidence: The proposed reclamation plan, along with the proposed Conditions of Approval, comply with the requirements of Chapter 7.70 (Mining and Reclamation) of Inyo County Code, and the provisions of the California Surface mining and Reclamation Act of 1975.]

III. CONDITIONS OF APPROVAL

The Planning Commission approves Reclamation Plan No. 2007-01/Ash Meadows, LLC. subject to the following conditions:

1. Terms of the Reclamation Plan:

- a.** The term of the reclamation plan shall be for a period of fifty (50) years from the date of approval.
- b.** If mining beyond the original foot print (26,3 acres) occurs, an amended reclamation plan and environmental review shall be required.

2. Timing of the Reclamation Plan:

- a.** The time of approval of the reclamation plan shall be for a period of fifty (50) years from the date of approval.
- b.** If any additional time is requested beyond fifty (50) years a time extension shall be required.

3. Conditions of the Reclamation Plan:

- a.** The reclamation of the site shall be on-going during the 50 year life expectancy of the site.
- b.** Small knolls or ridges will be constructed with slopes less than 3:1 to dispose of waste rock back into the mined-out open pit.
- c.** All surface facilities such as fuel containment structures shall be removed.
- d.** All scrap metal and other debris shall be removed from the property and properly disposed of.
- e.** All portable units (trailers, porta-john, safety equipment, extinguishers, etc) shall be removed.
- f.** To reduce sediment runoff diversion ditches around major areas of disturbance will be constructed; periodic inspection of and maintenance of runoff controls shall be conducted; reclamation of previously disturbed areas shall be accomplished where possible; minimize unnecessary surface disturbance and use sediment fences and/or water bars where necessary.
- g.** Diversion ditches shall be left in place to control sediment as a post-mining feature.
- h.** A BLM certified native seed mix shall be broadcast (by hand or machine) over the excavated area after the area has been scarified..
- i.** Reclamation will not be considered successful or complete until vegetation density reaches 20 percent diversity (species richness) of the perennial species on the surrounding undisturbed land. New perennial species shall be at least two years old before considered viable plants.
- j.** If re-vegetation does not occur within three years from the seeding the area shall be re-scarified and re-seeded.

4. Financial Assurances:

- a.** A surety bond in the amount of \$97,572.00 shall be posted in favor of Inyo County and BLM upon approval in order to insure that the project site will be reclaimed in accordance with the conditions of approval.

3. Reporting and Annual Inspections:

- Each year, the applicant will file an annual mining report with the State of California. These reports will be filed in a timely manner. Monitoring activities will continue until the County is satisfied that performance standards have been met. In accordance with SMARA Section 2774(b), Inyo County as the lead Agency will inspect and file annual inspection reports with the State of California.

4. Hold Harmless:

- The applicant, landowner, and operator shall defend, indemnify and hold harmless Inyo County, its agents, officers and employees from any claim, action, or proceeding against the county, its advisory agencies, appeal boards, or its legislative body concerning Reclamation Plan No. 2007-01/Ash Meadows, LLC.

Section 16.56.020 of the Inyo County Subdivision Ordinance provides that any interested party may, within ten (10) days after the Planning Commission's action, appeal the determination made by the Planning Commission to the Inyo County Board of Supervisors after compiling evidence of an alleged error and making an appeal fee payment of three-hundred dollars (\$300) to the Clerk of the Board. If you have any questions regarding the Planning Commission's action, please contact this office at (760) 872-2706.

Thank you,
INYO COUNTY PLANNING DEPARTMENT

Pat Cecil
Planning Director

Attachments: Vicinity Map/ Location Map
Negative Declaration
Application

CC: Richard Cervantes, Fifth District Supervisor
Paul Payne, Fifth District Commissioner
Jim Pompy, Office of Mine Reclamation



Inyo County Planning Department
168 North Edwards Street
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E-Mail: InyoPlanning@qnet.com

August 2, 2007

TO: Jim Pompy

FROM: Adena Fansler (Associate Planner/Mining Inspector)

RE: Reclamation Plan No. 2007-01/Ash Meadows, LLC.

Enclosed is Ash Meadows, LLC. Reclamation Plan for OMR's 30 day review.

Inyo County certifies that this submission is in compliance with the applicable requirements of Article 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations

If you have any questions regarding the above please contact me at (760) 878-0405.

Thank you,

Adena Fansler
Mining Inspector

Received by
DEPARTMENT OF CONSERVATION

AUG 16 2007

Office of Mine Reclamation



Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

Phone: (760) 878-0263
(760) 872-2706

DATE:

8/02/07

PROJECT TITLE:

Reclamation Plan NO. 2007-01/Ash Meadows, LLC

Affected Agency:

The Inyo County Planning Department is Lead Agency for the above project and had prepared a Draft Negative Declaration of Environmental Impact in accordance with the California Environmental Quality Act (CEQA) (Section 21000 et. seq. of Public Resources Code). Your agency has been identified as either being potentially affected by the proposed project, a trustee or responsible agency under CEQA, or has particular expertise in some aspect of the project.

The enclosed Draft Negative Declaration describes the proposed project, location and a description of any mitigation measures to reduce or eliminate any potentially significant adverse impacts. Also enclosed is a copy of the Initial Study and project plans that form the basis for the findings in the Draft Negative Declaration.

You are asked to review the enclosed document and evaluate the potential adverse impacts of the project as it pertains to your area of responsibility and expertise. Comments may be submitted in the form of additional information, needs for further studies, and recommended mitigation measures designed to assist Inyo County in carrying out its responsibilities under CEQA.

Section 21080 (c) of Public Resources Code requires any recommendation for the preparation of an Environmental Impact Report to be backed by substantial evidence in the record. Should you recommend any specific mitigation measures, Section 21081.6 of Public Resources Code requires your agency to also submit a recommended mitigation monitoring program to ensure implementation.

All comments on this Draft Negative Declaration must be received no later than 9/03/07.
Inyo County is not required to respond to comments received after this date.

If you have any questions or require additional information, please contact the Project Planner who is listed in the attached Initial Study at the phone number or internet address listed at the top of this page. Thank you for your assistance in this matter.

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

BOLE SPRING QUADRANGLE
NEVADA—CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

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20	21
22	23

GA Lode Claims
where 25 are
open zirconite
pit is currently
located.

Ash Meadows Zirconite

4/29/00
Tiffany Turner



Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
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FAX: (760) 872-2712
E-Mail: InyoPlanning@qnet.com

July 3, 2007

Glenn Holley
Ash Meadows, LLC
HCR 70, Box 7006
Amargosa Valley, NV 89020

RE: Complete Application - Amended Reclamation Plan No. 2007-01/Ash Meadows, LLC
(Reclamation Plan No.79-18)

Dear Mr. Holly:

The Planning Department is in receipt of your complete application for Amended Reclamation Plan No. 2007-01/Ash Meadows, LLC located approximately 25 miles northwest of Pahrump, Nevada and about seven miles east of Death Valley Junction, in Inyo County.

The processing for this amended reclamation plan will begin. We anticipate preparing a Negative Declaration for the above project; however, if additional information is required we will let you know. Although this is a preliminary estimate, we anticipate that this application will be ready to go before the Inyo County Planning Commission in June or July.

Please let us know if you have any questions regarding the above information or any other issues related to this application.

Thank you,

Adena Fansler
Associate Planner/Mining Inspector

RECEIVED
2007 OCT -5 PM 4:25
DEPT. OF CONSERVATION
OFFICE OF
MINE RECLAMATION

April 5, 2007

Ms. Adena Fansler
Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

RE: Plan of Operations/Rec. Plan
Application Submittal

Dear Adena:

Please find enclosed 5 binders of the Plan of Operations and Rec. Plan, check no. 8502 for the amount of \$3,292.00. This check is to cover the cost of the Initial Study, Negative Declaration and Reclamation Amendment w/o Expansion fees as illustrated on the Inyo County Planning Department Fee Schedule (attached) which I received from you during my last visit to your office. The remaining 10 binders are shipped in another box.

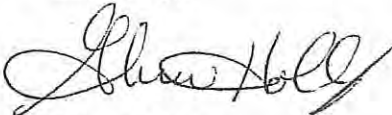
Also enclosed are the updates to pages for your copy of the Plan of Operations and Reclamation Plan that I delivered to you, the Processing Fee Agreement, The Planning Dept. Permit Application and the Mining Reclamation Plan Application. I filled out all that I can but have not completed the signature pages due to the change in ownership that is scheduled for April 10, 2007.

If/when final acquisition is completed on April 10, 2007 I will be in Tucson, Arizona meeting with the new owners. This meeting is currently scheduled for April 12, 2007. At that meeting we will review this application, the bonding and details of the new owners.

If you have any questions at all please give me a call at 775-372-5524 or on my cell phone (775) 764-1525.

Thank you for all your time.

Sincerely,



Glenn Holley
Manager/Engineer

RECEIVED
2007 OCT -5 PM 4:25
OFFICE OF
MINE RECLAMATION

Plan of Operations & Mine Plan
Ash Meadows L.L.C.

September 2005

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Prepared For:
U.S. Dept. of the Interior
Bureau of Land Management
California Desert District
Barstow Field Office



Prepared by:

Ash Meadows, LLC



AUG 06 2007

Office of Mine Reclamation

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DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Introduction

This report documents a "Modified" Plan of Operations and Reclamation Plan for the Ash Meadows open pit mine that resides in Inyo County, California (Figure 1). The report will summarize the proposed action, and display existing conditions. A final reclamation plan is illustrated and the proposed post-mining land uses are identified. Drawings are included which provide details of the property, and post-mining land structure.

The Ash Meadows mine is one of four mining facilities owned by Badger Mining Corporation (BMC). This operation is operated by Ash Meadows L.L.C (AMLLC) and is a non-metallic mining operation that produces natural zeolites primarily for environmental benefits such as water filtration, odor control, and horticultural products. The Ash Meadows zeolite is a very high-grade Clinoptilolite (Clino) deposit, held by 84 lode mining claims, which form a contiguous block of Federal claims in the Amargosa Desert. The 1735-acre claim group straddles the Nevada-California border in Inyo County, California and Nye County, Nevada (Figure 2).

The current active mine area is positioned on Lode claim numbers 17,20,36 and 85, which are located on the California side on the deposit (USGS Map and Drawing No. 1). The mine is a typical surface mining operation consisting of overburden stripping, dozer or excavator utilization to disseminate the ore, loader feed to a custom built grizzly, stockpiling sized ore which is hauled to the existing processing plant in Nye County, Nevada. The ore is delivered to the process plant via contractor owned over-the-highway end dump tractor/trailer. The processing plant is currently located on a approximate 125-acre privately owned parcel known as the Ash Meadows Rancho. The ore is crushed, screened and packaged if required, on site and distributed to various markets. Non-spec material is hauled back to the pit for storage. This material is either stockpiled outside the pit limits or within the disturbed areas of the pit.

As requested in a certified letter (APPENDIX) dated October 24, 2005 from the Bureau of Land Management, California Desert District, Barstow Field Office this "Modified" Plan of Operations was written.

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Plan of Operations

1. Operator Information:

Claim Owner(s) Ash Meadows L.L.C.
Claim Owner's Address PO Box 1905
Tax Identification Number #050523591
Telephone Number (520)744-6667

Project Name Ash Meadows Mine
Claim Type Unpatented Lode Claims
Claim Name(s) G.A. No. 36,17,18,85,20 & 21
BLM Serial Number(s)
Location of Claim(s) T25N, R6E, S9&10

Contact person from management board.

Full Name Daniel T. Eyde
Street Address
P.O. Box P.O. Box 1905
City Cortaro
State Arizona
ZIP Code 85652
Telephone Number: (520)744-6667

Registered Resident Agent Information:

Full Name Glenn V. Holley
Street Address 1861 E. Doral Court
P.O. Box
City Pahrump
State Nevada
ZIP Code 89048
Telephone Number: (775) 751-8809 or (775) 764-1525

Authorized Field Representative Information:

Full Name Glenn Holley
Street Address East Spring Meadows Road
P.O. Box HCR70 Box 7006
City Amargosa Valley
State Nevada
ZIP Code 89020
Telephone Number: (775) 372-5524

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2. Description of Operations

Purpose and Need for Proposed Action

The purpose of the "Modified" Plan of Operations (POO) and Reclamation Plan (RP) is to update the existing POO and RP which will allow continued mining of the zeolite materials for a limited time with no additional disturbance to existing conditions. The projected mine geometry and tonnages are based on projections from current/existing markets and can change any time. This "Modified" POO and RP is our best guess scenario at the time of this writing. If a change does occur where additional disturbance is required, another Plan of Operations and Reclamation Plan will be submitted for approval. The uses for the Zeolite materials include (but are not limited to) odor control products, stall litters, water filtration media, soil amendments, animal feed additives, and lightweight aggregates.

Proposed Action

The proposed operation will be within the existing disturbance of 26.3 acres within the project boundary. The project layout and operation are based upon current considerations of practicality, economics, and environmentally acceptable operation. The proposed project would involve the following:

- Overburden removal and stockpiling within the existing mine limits or placing on re-sloped areas ready for reclamation
- Development of ore mining faces and benches for the North, Southeast and Southwest open pit areas
- Mining, sizing through a custom built grizzly and haulage of ore materials to the Nevada facility
- Concurrent reclamation on existing waste rock dumps when appropriate overburden or growth medium is available
- Occasional back-haul of non-specification materials

Location and Access

The mine site is located in Inyo County, California approximately 25 miles northwest of Pahrump, Nevada and about seven miles east of Death Valley Junction, California. The current processing plant is located on a 125-acre privately owned parcel known as the Ash Meadows Rancho located in Nye County, Nevada and is located approximately seven miles from the mine. The specific area of interest is SE ¼ of Section 9 and SW ¼ of Section 10, T25N, R6E. The general location is indicated on the attached Figure 2. There is an existing gravel road providing access to this area from the Stateline highway.

General Mining Process

Minimal stripping of overburden is required prior to mining of the raw ore. The stripped material will be used for growth medium and will either be stockpiled or placed directly on re-sloped waste dumps. All stripping operations will occur within the existing disturbance areas. Following the stripping, raw ore

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will be excavated with a track dozer or a hydraulic excavator, sized with the custom built grizzly and then hauled from the mine in California to the processing facility located in Nevada for final processing and packaging.

Equipment to be utilized during mining will include, but not be limited to, a track dozer, rubber-tired loader, track hydraulic excavator and a portable custom built grizzly. Drilling and blasting may be used in the future if applicable, but will occur only after proper notification and permits are in hand.

Water Management Plans

Mine water

A hydrologic study was completed on the California mine area in October 1980, and a similar investigation was finished in October 1981 on the Nevada part of the deposit near the Ash Meadows Rancho property. Both studies included the drilling of test holes and the completion of pump tests. The 1980 report is shown in the APPENDIX.

The Nevada study concluded that pumping would be required to mine the deposit below the water table depth of 75 feet. The California report revealed that only small amounts of water would be encountered below the 100-foot-deep water table in the mine area. Drillhole information has shown that the planned mining will occur below "damp" levels in one area only. This area is in the north pit area and Figure 3 depicts the relationship between the mine design and this "damp" area. Indicated flows in the mine area of no more than a few gallons per minute were considered and we do not anticipate any pumping required, but rather manageable by evaporation.

Both studies concluded that discernible effects attributable to the water draw down from dewatering would extend no more than several hundred feet into relatively impervious sediments surrounding the mine. This supports the theory that mining would have no impact on habitats to the North.

Rock Characterization and Handling Plan

All of the minerals mined, processed and packaged by Ash Meadows are not reactive. Material Safety Data Sheet (MSDS) and a typical 26 element mineralogical analysis is included in the APPENDIX.

The Ash Meadows Zeolite deposit is an altered Tertiary volcanic ash flow tuff. The zeolite deposit is somewhat unique as extensive analytical work indicates that clinoptilolite is the only zeolite present. The impurities include small amounts of opal C-T, smectite, calcite, feldspar, unaltered ash, and rock sediment.

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Quality Assurance Plan

Quality assurance will be preserved in all aspects of the mining operation. Proper engineering design, planning and operations will be followed at all times to ensure a safe and efficient operation. Mining will occur on ten foot lifts, with a ten to fifteen foot wide safety bench being constructed after each twenty-foot high wall is mined out. Safety berms will be constructed and maintained to federal standards to accommodate the largest piece of equipment that will be working in the area. All ramp grades will be held to a maximum gradient of 10%, be constructed in non-fill material and will be within the proposed disturbance.

Spill Contingency Plans

There will be no hazardous chemicals or materials used in the mining process. Common oils, fuels and lubricants will be used on equipment as necessary and will be stored in an above ground storage containment area constructed with a synthetic liner and adequate berms to prevent any accidental seepage into the ground in the event of a spill or leak in tanks. All mobile equipment maintenance will be performed in a designated area and any spills will be contained, controlled and the material will then be properly disposed of. All contaminated soils will be excavated and put into container for shipping to an approved disposal site. Material Safety Data Sheets will be available at the mine site for all chemicals stored in the area.

The following procedures will be followed to ensure that the appropriate response is taken and the appropriate reporting is completed following a spill.

Assess the situation for safety.

Do not take any action that is unsafe.

Follow the "5 Cs."

Control - Control the source of the spill.

Contain - Contain all spilled material to prevent expansion of the contamination.

Contact - Immediately contact a member of the Operations Team. They will assist with clean up and reporting.

Clean up - Clean up all contaminated material and put on an impermeable surface or in an approved container

Cover - Cover all contaminated material with impermeable material.

Report - If reporting to the state is required, a member of the Operations Team will report to the state.

If reporting is not required by the state an internal incident will be completed. Examples of these spills are labeled "DeMinimis Exemptions" and are as follows:

Petroleum compounds:

A discharge of gasoline or another petroleum product that is completely contained on an impervious surface.

A discharge of less than one gallon of gasoline onto a surface that is not impervious or runs off an impervious surface.

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A discharge of less than five gallons of other petroleum products onto a surface that is not impervious or runs off an impervious surface.

contacts

list of people responsible and first responders.

List all hazardous materials, oils on site with MSDS

Growth Media, Stockpiles and Berms

Growth media would be removed and stored in berms or stockpiles for future reclamation. A berm is a small stockpile, which is normally dozed in place by a track dozer and is used as a temporary storage. The stockpile or berm will have a maximum height of ten feet and a maximum slope of 3H: 1V. The growth medium stockpile and/or berm may be seeded if the natural seeds within the growth media do not take hold.

Tamarisk (Salt Cedar) Removal and Control

There are several small clumps of Tamarisk growing in low lying areas east of the planned mine. Although the salt cedar is outside the permitted areas of the current mine plan, Ash Meadows, LLC plans to attempt to eradicate the plants by way of cut-stump eradication. After mechanically removing the trees, chemical application will be utilized to ensure that the base of the trees do not re-sprout. The use of *Habitat* will be utilized within 5 feet of any standing water and *Garlon 4* will be used everywhere else. The slash will be removed by hand to ensure minimum impact on the surrounding area and taken to a man-made dump area or pit within the boundaries of the proposed waste dump(s). Once in the pit, the slash will be sprayed with chemicals to ensure no growth will occur, and buried in accordance with BLM standards/requirements. This work will be accomplished during concurrent reclamation efforts by an outside consultant/contractor qualified in this area of work. (See proposal in Appendix). This cost is not reflected in reclamation cost estimates.

Roads

The existing roads are shown in Figure 2 and Drawing No. 1. The existing access road has an approximate width of 25-feet; the access road contains a gate that is controlled by Ash Meadows, LLC, Public access to the mine area is limited with a combination of signs, fencing, gates, and berms. Traffic on the access road consists of intermittent employee travel to and from the work area, intermittent ore shipments by means of end and bottom-dump trucks. Sprinkling with water and/or use of chemical binders would minimize dust on all haul roads and will be utilized when needed.

Power Generation

There are no power generation equipment to be utilized on site and therefore no power generation is required, with the exception of a small gas powered generator or welder for maintenance purposes.

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Fuel Storage

Fuel and lube oil for the diesel-powered equipment will be stored on site in bulk tanks. The bulk tanks will be installed above ground on compacted fill surrounded by berms. The containment area would be constructed of an impervious barrier that will contain the volume of the largest tank in the event of spillage or tank rupture in accordance with regulations. These regulations require that the containment area must be an impervious barrier that is able to hold 110 percent of the volume of the largest tank. Spill control would be provided in the fueling area. It is anticipated that a 950 gallon diesel fuel tank will be used, along with a 50 gallon oil and 50 gallon hydraulic fluid tank. The oil and hydraulic fluid tanks are double-lined with capacity for waste and clean oil or hydraulic fluid.

Upon discussion with the Water Quality Control Board in Victorville, California Ash Meadows, LLC will develop and post at the site a management plan for everyone's use and review on handling, storage and control of all fuels and oils.

Drainage Control

Diversion berms, water bars or "V" ditches and drainage channels will be constructed to divert surface water around the mine area where practical. These drainage control devices will be sized to transport surface waters to natural drainages.

Fencing

Fencing will be installed to deter any unauthorized access into the mine area. In addition to the fencing, the use of safety berms, dumps and dikes will also be utilized within the mine area.

Communications

Due to the remoteness of the mine, only intermittent cell phones, CB radios or walkie-talkies for communication is available.

Sanitary and Solid Waste Disposal

All sanitary wastes would be disposed of off-site, using a contractor supplied porta-potty. No septic tanks or leach fields will be constructed. Solid waste would be disposed of off-site in an approved landfill.

Work Force - Mining

Ash Meadows L.L.C. projects that the mining work force would average an estimated 3 associates. Mining will occur on an intermittent basis and will be completed by either a contractor or with in-house labor. Mining periods are anticipated to occur every quarter and will last approximately two weeks. Based on current sales, traffic on the roadways (dirt and pavement) will be approximately 5 trips/day, 2 days/month for a total estimate of 120 trips per year. Passenger vehicle traffic is estimated to be 2 trips per week for a total of 104 trips per year.

Buildings/Structures

No buildings or structures will be erected on site. A portable trailer may be left on site for parts and supplies, but again will only occur on a limited basis.

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PERMITS AND APPROVALS

Ash Meadows L.L.C. will obtain all permits and approvals from all federal, state, and local agencies for the proposed mining operation and reclamation plan. Known permits and approvals required for the proposed project are listed in Table 1.

Table 1 Required Permits and Approvals.

Permit/Approval	Agency
Plan of Operations	Bureau of Land Management
National Environmental Policy Act (NEPA) Compliance	BLM
Reclamation Plan	Inyo County Planning Department
Water Pollution Control	Water Quality Control Board
Air Quality Permits: Fugitive dust Emissions, Fuel burning Devices, Process Equipment	

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ASH MEADOWS, LLC

Ash Meadows, LLC
HCR 70, Box 7006
East Spring Meadows Rd.
Amargosa Valley, NV 89020

Phone 775-372-5524
Fax 775-764-1525

Reclamation Plan

"Modified" Plan of Operations

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RECLAMATION PLAN

Many measures will be taken to prevent unnecessary and undue degradation over the life of the project. These measures are listed in section 3-A in the included Mine Plan.

During reclamation of the mine area Ash Meadows, LLC (AM) will attempt, through selection and development of adequate seed mixtures of grasses, forbes and shrubs to reintroduce native species. The proposed reclamation seed mix is presented in Table 2. The immediate result may not be a diverse plant community due to the lack of topsoil and short-term weather conditions such as temperature and moisture. Successive seeding may be necessary. If it becomes apparent that the seed mixture is not taking after three years, AM would address the issue by adjusting the seed mixture and reseeding. After meeting the Inyo County Planning Departments successful reclamation plan, WCM will continue proper range management and monitoring for a period of three years. This is believed to be an integral part of the long-term vegetation development.

TABLE 2 Proposed Reclamation Seed Mix.

Species	Drilled (Lbs. /ac.)	Broadcast (lbs. /ac.)
Fourwing Saltbush		8
Indian Ricegrass		4
Globemallow		1
Blackbrush		0.5
Desert Saltbush		4
Desert Marigold		1
Nevada Ephedra		3
Spiny Hopsage		0.5
Wyoming Bigsage		0.5
Bursage		3
Alternate Species		
Brittlebush		4
Creosote		4
Flat-top Buckwheat		0.5

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POST-MINING LAND USE

The multiple use concept of the public land would be preserved in the post-mining land use. Wildlife habitat and recreation were the pre-mining land

uses within the project area. The long-term goal of the reclamation plan is to restore the disturbed site's productivity so that the opportunities for similar land uses are available in the future.

RECLAMATION TIMEFRAME AND GOALS

Ash Meadows, LLC intends to incorporate concurrent reclamation of areas that will no longer require additional disturbance, and will start the final reclamation of the project area after mining operations has ceased. This operation is anticipated to last many years as the market for zeolites continue to grow. The mine resources are estimated to contain more than 50 years of natural zeolites, however, this estimate can increase or decrease due to varying market demands, which will affect the overall mining rates and life.

Ash Meadows, LLC is planning to conduct reclamation of the project area with the following tasks:

- Re-grading/Shaping
- Contouring
- Growth Medium Placement
- Re-vegetation

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Re-grading or shaping will be completed primarily with track dozers where berms, dumps and roads will be re-shaped to try to match the surrounding terrain. All flat areas will be ripped or scarified and will have growth medium placed and reshaped to eliminate any future potential ponding. This task can and will be completed for each area of the mine that will not see any additional disturbance. This could be areas previously or currently mined out, areas on the large waste rock dumps that are at their designed heights and capacities or flat areas that will not longer be used.

Contouring is the final shaping of a feature to provide a safe and accessible slope that will provide an adequate area for growth medium and seed placement. The contouring efforts will provide a slope gentle enough to reduce or eliminate any potential erosion and will be ripped or scarified. The ripping and scarification will provide aeration of the soils and place for root growth. The contouring efforts will be completed with the use of the track dozers.

Growth medium placement is the placement of topsoil; approximately a 6-inch thickness will be placed over all sloped and re-contoured areas. Growth medium material will be taken from their associated stockpiles or berms, may be hauled to the location via haul trucks or trammed with the front end loader. Placed on the outer edge of the re-contoured area(s), the track dozers can then push the growth medium onto the slopes to reduce compaction of the recently ripped/scarified areas. Scarification will be completed again on the top layer of growth medium.

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After the growth medium has been placed, the approved seed mixture will be applied. The seed mixture will either be placed by hand spreading or with the use of an ATV with a large electric spreader for even distribution of the seeds. It is anticipated that it will take approximately three months to complete the final reclamation. Due to the plan of utilizing concurrent reclamation efforts throughout all active mining years, it is anticipated that the area subject to final reclamation will be small, in relation to the total disturbance.

The existing topography is presented in Drawing No. 1. The goal is to closely match the existing topography in the surrounding area. Drawing No. 3 shows the anticipated post-mining land topography.

FINAL GRADIENT TECHNICAL CRITERIA

Ash Meadows, LLC. will employ proven techniques and practices to ensure that reclaimed slopes, if developed, would be stable during and after construction. Since the local terrain is relatively flat, the intent will be to construct the final topography with similar grades that will eliminate any ponding. Small knolls or ridges will be constructed to facilitate the burying of the waste rock dumps on site. The intended ridges would be constructed with slopes gentler than 3:1 to provide stability and accommodate re-vegetation efforts.

FACILITY RECLAMATION

Facilities *Not* Reclaimed

- The main access road to the processing facility, which was constructed prior to January 1, 1981, will not be completely reclaimed, as it would provide public access into the area for post-mining land uses.
- Utilities needed for the post-mining land uses such as berms, fencing or signage would be removed and reclaimed.

Facility Demolition

- Surface facilities such as fuel containment will be removed and reclaimed
- Scrap metal and other debris will be removed from the property and properly disposed of.
- All portable units (trailers, porta-john, safety equipment, extinguishers, etc) will be removed

SEDIMENT CONTROL

In the event sediment runoff is a concern, Ash Meadows, LLC will employ proven measures to reduce it, including but not limited to:

- Construction of diversion ditches around major areas of disturbance.
- Periodic inspection of and maintenance of runoff controls until released.
- Concurrent reclamation of disturbed areas where possible

- Minimization of disturbance
- Sediment fences and/or water bars

Diversion ditches would be left in place to control sediment as a post mining feature.

AIR RESOURCES

Regular watering of the mine area and haul roads will be completed when and where required to control fugitive dust from traffic. All mining activities will stop intermittently when dust controls are not effective.

VISUAL RESOURCES

The proposed project would be seen from the public roads to the north and west of the proposed site. Reclaiming measures such as resloping and reseeding disturbed areas to blend with the surrounding topography would minimize long-term visual effects.

SITE MONITORING AND MAINTENANCE

Ash Meadows, LLC intends to oversee conductance of annual field inspections of the reclamation project area for a three-year period following final reclamation. The access gate, perimeter fencing and signage around the site will be maintained in an effort to exclude trespassers from the area until final approval.

RECLAMATION COSTS AND BONDING

Ash Meadows, LLC has estimated reclamation costs of **\$ 93,954.00**. These costs were estimated using the Caterpillar Performance Handbook Edition 26 for fuel consumption and production data, current Ash Meadows' associate hourly rates, equipment rental rates (March 2005) from Cashman Equipment Company and current seed prices from Comstock Seed (June 2005).

Alternatives to the Proposed Action

This section describes alternatives to the proposed action. Alternatives include the No Action Alternative.

No Action Alternative

The No Action Alternative serves as the baseline for which all environmental consequences are evaluated. Selection of the No Action Alternative would deny White Cliffs Mining, Inc. the opportunity to mine Zeolite ores from the area of interest.

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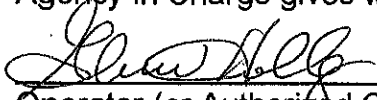
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Acknowledgements

- a. It is Understood that should the Nature of the Operation Change a Modified or Supplemental Plan of Operations and Reclamation may be Required.
- b. It is Understood that Approval of this Plan of Operation and Reclamation does not Constitute: (1) Certification of Ownership to Any Person Named Herein; and (2) Recognition of the Validity of any Mining Claim Herein.
- c. It is Understood that a Bond Equivalent to the Actual Cost of Performing the Agreed upon Reclamation Measures will be Required Before this Plan can be approved. Bonding and any Bond Reduction Amounts will be Set on a Site-specific Basis by the Lead Agency in Coordination with the Cooperating Agencies.
- d. It is Understood that Approval of this Plan does not Relieve me of My responsibility to comply with any other Applicable State or Federal Laws, Rules or Regulations.
- e. It is Understood that any Information Provided with this Plan that Is Marked Confidential will be Treated by the Agency in Accordance With that Agency's Laws, Rules and Regulations.

I/We have Reviewed and Agree to Comply with all Conditions in the Plan of Reclamation and Operations, including the Recommended Changes and Reclamation Requirements. I/We Understand that the Bond will not be Released until the Inyo County Planning Department, the BLM or the State Agency in Charge gives written Approval of the Reclamation Work.



Operator (or Authorized Official)
Glenn Holley

6-15-07
Date

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ASH MEADOWS, LLC

Ash Meadows, LLC
HCR 70, Box 7006
East Spring Meadows Rd.
Amargosa Valley, NV 89020

Phone 775-372-5524
Fax 775-764-1525

Mine Plan

"Modified" Plan of Operations

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MINE PLAN

"MODIFIED" PLAN OF OPERATIONS AND RECLAMATION PLAN PERMIT APPLICATION FOR A MINING OPERATION

The Information Listed on This Form Combines the Requirements of the BLM
for a Plan of Operation and for Filing an Application for a Reclamation Permit
for Mining:

1. Applicant Information:

A. Claim Name(s)

Claim Type Lode

Claim Owner(s) Ash Meadows L.L.C.

Claim Owner's Address 409 S Church St, Berlin, WI 54923

Project Name Ash Meadows Mine

BLM Serial Number(s) GA 17, GA 18, GA 20, GA 21, GA 36 & GA 85

Location of Claim(s) (Township, Range, Section) T25N, R6E, S9&10

B. Individual Completing Application:

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Full Name Glenn Holley

Title Mining Engineer

Date September 30, 2005

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C. Business Address of Individual Completing Application:

Business Name Ash Meadows, LLC

Street Address East Spring Meadows Road

P.O. Box Number HCR 70, Box 7006

City Amargosa Valley

State Nevada

ZIP Code 89020

Country, if Not United States of America United States

D. Telephone Number of Individual Completing Application:

Area Code 775

Number 372-5524

E. Corporation Information, if Applicable:

Corporate Name: Badger Mining Corporation

Corporate Officer's Information:

President Information: (Management Board)

Full Name Timothy Wuest
Street Address 409 S. Church Street
P.O. Box P.O. Box 328
City Berlin
State Wisconsin
ZIP Code 54923
Country, if Not U.S.A. _____
Telephone Number:
Area Code (920) Number 361-2388

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Treasurer Information:

Full Name Robert L. Brooks
Street Address 409 S. Church Street
P.O. Box P.O. Box 328
City Berlin
State Wisconsin
ZIP Code 54923
Country, if Not U.S.A. _____
Telephone Number:
Area Code (920) Number 361-2388

Secretary Information:

Full Name Robert L. Brooks
Street Address 409 S. Church Street
P.O. Box P.O. Box 328
City Berlin
State Wisconsin
ZIP Code 54923
Country, if Not U.S.A. _____
Telephone Number:
Area Code (920) Number 361-2388

Nevada Registered Resident Agent Information:

Full Name Glenn Holley
Street Address 1861 E. Doral Court
P.O. Box _____
City Pahrump
State Nevada
ZIP Code 89048
Country, if Not U.S.A. _____
Telephone Number:
Area Code (775) Number 764-1525

F. Partnership Information, if Applicable:

*** (Ash Meadows L.L.C. is a Limited Liability Company, which is lead by a management board.)**

Name of Partnership: Ash Meadows L.L.C. (Tax I.D #39-1963560)

Type of Partnership:

Limited:

General Partnership

Principal Partner Information: (Management Board Member)

Full Name Timothy Wuest
Street Address 409 S Church Street
P.O. Box P.O. Box 328
City Berlin
State Wisconsin
ZIP Code 54923
Country, if Not U.S.A. United States
Telephone Number:
Area Code 920 Number 361-2388

Registered Resident Agent Information:

Full Name Glenn Holley
Street Address 1861 E. Doral Court
P.O. Box
City Pahrump
State Nevada
ZIP Code 89048
Country, if Not U.S.A. United States
Telephone Number:
Area Code 775 Number 764-1525

Authorized Field Representative Information:

Full Name Glenn Holley
Street Address Spring Meadow Road
P.O. Box HCR70 Box 7006
City Amargosa Valley
State Nevada
ZIP Code 89020
Country, if Not U.S.A. United States
Telephone Number:
Area Code 775 Number 372-5524

Note: A Signed Authorization Must be Attached which Gives the Field Representative Authority to Act on Behalf of the Operator.

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2. Operating Plan:

G. Provide a Topographic Map(s) depicting:

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a. Boundaries of the Area of Operation

Comment(s): Refer to Drawings No.1 and No.2

b. Surface Ownership Within the Area of Operation:

- aa) ☐ Private;
- bb) ☒ BLM;
- cc) ☐ USFS;
- dd) ☐ State;

Comment(s): The proposed area of disturbance will be on BLM lands only.

c. Description of Areas to be Disturbed Showing Location and Layout of the Area of Operation. Include Names and Locations Of any Streams, Creeks, and Springs. Describe and Explain on The Map the Type of Operation, Method or Techniques you Propose (Example: Drilling, Open Pit Mining, Dredging, Milling, Include Locations, Capacity, Size and Amounts). Show on the Map and Describe the Size and kind of all Surface Disturbances, such as Trenches, Pits, settling Ponds, Stream Channel and Runoff Diversions, Waste Dumps, Drill Pads, Tailing Impoundments, Leach Pads, Buildings and Facilities.

Comment(s): The proposed Project is to be located about 25 miles northwest of Pahrump, in Inyo County California and about 10 miles east of Death Valley Junction, California. The specific area of interest is Township 25 North, Range 6 East, Sections 9 & 10. The proposed operation would directly impact approximately 26.3 previously disturbed acres within the project boundary. The project layout and operation are based upon current considerations of practicality, economics, and an environmentally acceptable mining operation. The location is indicated on the enclosed Figure 1 and Figure 2. There is an existing road providing access to this area and shown on above figures. The proposed mine plan and design is shown on Drawing No. 2.

The proposed project would involve the following:

- *Stripping and stockpiling of overburden material; this material will be used for growth medium placement when an opportunity exists*

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- Further development of the north and south pit areas for mining of Zeolite ores
- Excavation, breakage, sizing with custom built grizzly and haulage of mineralized ores from the mine area for further beneficiation at the existing process facility in Nye County Nevada
- Fuel, oil and hydraulic fluids for the diesel-powered equipment would be stored on site. The tanks would be installed aboveground on compacted fill and an impermeable surface layer surrounded by berms to contain the volume of the tank in the event of spillage or tank rupture in accordance with regulations. These regulations require that the containment be able to hold 110 percent of the volume of the largest tank. Spill control would be provided in the fueling area. A fire extinguisher will also be available in case of fire.
- Drainage channels, "V" ditches, water bars or berms would be constructed to divert surface water around the mine area. These structures will be sized to transport surface waters to natural drainages.
- Growth media will be removed and stored in stockpiles for future reclamation or immediately placed on resloped waste rock dumps for reclamation. These stockpiles will have a maximum height of 20 feet with a maximum slope of 3H: 1V. The stockpiles may be seeded if the natural seeds within the growth media do not take hold.
- The mine area will have fencing, berms, dikes and waste rock dumps to deter traffic from the mine area. Proper posting of signs will be incorporated to warn all about an open pit area.
- Intermittent cellular phone systems are the only means of communication at the mine site.
- All sanitary wastes would be disposed of off-site, using a contractor provided porta-potty. Solid waste would be disposed of offsite in an approved landfill.
- A first-aid station with a stretcher will be left on site for emergency use only.
- Fire extinguishers will be on site next to the fuel storage area and on each piece of mining equipment.
- Public access to the mine area will be limited with a combination of signs, fencing, gates, and berms. Warning signs will be placed on the main access road to advise the public of road speeds and that haul trucks may be traveling the roadway. The main access road

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from the State Line Highway/Hwy 90 to the mine will have an un-locked gate controlled by AMLLC employees.

- *AMLLC projects that the mining work force would average an estimated 3 employees and will be operated on an intermittent basis (i.e., 1 to 2 weeks per quarter). Employees will be from a mining contractor or the company.*

- d. Areas Disturbed by Previous Operator and Inactive. Provide a map showing the Claim or Project Boundaries and All Access Needs, on and off the Claim or Project. Specify what Existing Roads will be used, Where Maintenance or Reconstruction is Proposed and where any new Construction is Necessary. For new Construction, Include Construction Specifications such as Widths, Grades, and Lengths. Show Location and size of Culverts. Describe Maintenance Plans. Describe the Type and Size of Vehicles and Equipment that will be Traveling the Access Routes.

Comment(s): The existing roads are shown in Figure 1, Figure 2 and Drawing No. 1. The existing access road has an approximate width of 25-feet.

Sprinkling with water and/or use of chemical binders would minimize dust on the haul road. Routine maintenance would be completed on all haul roads as needed. Vehicles using the access road will consist of employee's and contractor's personal vehicles, rear-dump trucks, and semi-tankers and flatbeds.

- e. Areas Disturbed by Current Operator Prior to January 1, 1981 And Inactive;

Comment(s): None.

- f. Areas Disturbed by Current Operator Prior to January 1, 1981 And Still Active;

Comment(s): None

- g. Disturbed by Current Operator After January 1, 1981, But Prior To October 1, 1990 and Inactive;

Comment(s): None.

- h. Disturbed by Current Operator After January 1, 1981, But Prior To October 1, 1990 and Active;

Comment(s): None.

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- i. Areas which are Active on or After October 1, 1990;

Comment(s): 26.3 acres within the boundary of lode claims GA36, GA17, GA18, GA20, GA21 and GA85 which reside in Sections 9 & 10, T25N, R6E.

- j. Location of Access Roads Existing Prior to January 1, 1981;

Comment(s): To the best of AMLLC's knowledge, the access road to the proposed site existed prior to January 1, 1981.

- k. Location of Any Surface Water Bodies within One-half Mile Down Gradient of the Disturbance;

Comment(s): None.

H. Provide an Estimate of the Acreage of the Proposed Disturbance(s):

Public Land;

Private and/or State Land;

Comment(s): AMLLC proposes to develop and mine within previously disturbed areas which involve approximately 26.3 acres for the mine area. This acreage does not include the main access road, which is located on public land.

3. Reclamation Plan:

Comment(s):

- I. Provide a Written Description of the Measure to be Taken to Prevent Unnecessary or Undue Degradation and the Proposed Activities for Reclamation to be Undertaken During and After Completion of the Mining Operation. The Items in the Attached Mine Plan of Operations- Reclamation Bond Checklist must be completed, as Applicable.

Comment(s): Measures to be taken to prevent unnecessary and undue degradation over the life of the reclamation project would consist of the following:

- *Surface disturbance would be limited to the amount of area stated above.*
- *Mining and development of the project site in a controlled manner to minimize exposed areas.*
- *Growth medium salvage.*

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- *Concurrent reclamation of disturbed areas where possible.*
- *Revegetation will be conducted as soon as possible*
- *Drainage and sediment controls, if necessary.*
- *Construction of berms and growth medium stockpiles in gentle slopes (3:1).*
- *Construction of diversion ditches around major areas of disturbance.*
- *Use of dust suppression on roadways to minimize dust generation.*
- *Use of soil compaction and binding agents on selected disturbed areas as necessary.*
- *Employ proven techniques and practices to ensure that reclaimed slopes would be stable during and after development.*
- *Areas that would be seeded and stabilized would be monitored to ensure proper vegetation development.*

AMLLC would attempt, through selection and development of adequate seed mixtures of grasses, forbes and shrubs to reintroduce native species, as specified by the BLM. The immediate result may not be a diverse plant community due to the lack of topsoil and short-term weather conditions such as temperature and moisture. Successive seeding may be necessary. If it becomes apparent that the seed mixture is not taking after three years, AMLLC would address the issue by adjusting the seed mixture and reseeding. Proper range management and monitoring for a period of three years, after meeting the BLM's successful reclamation plan, is an integral part of the long-term vegetation development.

- J. Provide a Description of Other Reclamation Activities to be Performed, such as Reclamation of Historic Disturbances (Not part of Cost Estimate Calculation) if Applicable;

Public Land;

Private and/or State Land;

Comment(s): To the best of our knowledge, the main access road to the proposed mine site was originally constructed prior to January 1, 1981; and therefore this access road will remain for post-mining land use and access to the property.

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- K. Provide a Proposed Schedule of the Time for Initiation and Completion of Activities for Reclamation and Initiation of Surface Disturbance Activities;

Comment(s): AMLLC intends to continue mining operations in the proposed area during the fourth quarter of 2005 and continue throughout the life of the mine. AMLLC intends to utilize concurrent reclamation throughout the life of the operation and will start the final reclamation of the project after mining operations have ceased. This operation is anticipated to last many years as the market for zeolites continues to grow. The mine reserves are estimated to contain more than 50 years of natural zeolite. However, this estimate can increase or decrease due to varying market demands, which will affect production rates which will in turn affect mine life..

It is anticipated that modifications will be required periodically with changes in market demand; at which time, the Plan of Operations and Reclamation Plan will be reviewed and modified if necessary.

The existing topography is presented in Drawing No. 1. The goal is to closely approximate the existing topography during post-mining reclamation efforts. Drawing No. 3 shows the anticipated post-mining land topography.

- L. Provide a Description of the Proposed Productive Post-mining Land Use;

Comment(s): The multiple use concept of the public land would be preserved in the post-mining land use. Wildlife habitat and recreation were the pre-mining land uses within the project area. The long-term goal of the reclamation plan is to restore the disturbed site's productivity so that the opportunity for similar land uses will be available in the future.

- M. Provide a Contour map of the Post-mining Topography (at a scale which provides sufficient detail);

Comment(s): Refer to Drawing No. 3

- N. Provide the Technical Criteria Used to Determine the Final Gradient And Stability of Slopes Created or Affected by the Mining Operation;

Comment(s): AMLLC would employ proven techniques and practices to ensure that reclaimed slopes, if developed, would be stable during and after construction. Since the local terrain is relatively flat, the intent will be to construct the final topography with similar grades that will eliminate any ponding. Small knolls or ridges will be constructed to facilitate the burying of the waste

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rock on site. The intended ridges would be constructed with slopes gentler than 3:1 slope. Since depth to groundwater is approximately 90 feet below the surface in the project area, local groundwater conditions are not anticipated to be a factor in slope stability. As Figure 3 illustrates, minimal wet or damp areas will be encountered within the proposed mine plan and design.

O. Provide the Proposed Methods to be Used in Reclaiming Any Impoundments Used During the Operation;

- a. Regrading to Promote Runoff and Reduce Infiltration;
- b. Covering with Waste Rock, Topsoil or Growth Medium
- c. Revegetation
- d. Diverting Run-on;

Comment(s): No impoundments are anticipated; but the fuel containment area will be totally reclaimed. All tanks will be removed from the site, the impermeable layer will be removed and the berms will be regraded to ensure adequate drainage from the area. Growth medium will be placed prior to seeding.

P. Provide the Proposed Methods to be Used in Reclaiming Any Waste and Development Rock Piles;

- a. Re-grading to Round Off Sharp Edges. Enhance the Stability, Reduce Susceptibility to Erosion and Facilitate Efforts for Revegetation;
- b. Revegetation;
- c. Diverting Run-on

Comment(s): All waste rock dumps will be graded, sloped and growth medium will be placed on the slopes prior to seeding. All non-salable material from the process plant will be returned to the mine site and used as backfill in the appropriate pit area.

Q. Provide the Proposed Methods to be Used in Reclaiming any Dams for Tailings Ponds by;

- a. Covering with Waste Rock, Topsoil or Growth Medium;
- b. Revegetation;
- c. Rendering the Dam Incapable of Storing any Mobile Fluid in a Quantity Which Could Pose a Threat to the Stability of the Dam Or to Public Safety;
- d. If Applicable, Water Treatment Plants and Overflow Basins (Applicable Water Quality Permit May be Referenced);

Comment(s): Not Applicable. There will be no dams, tailings ponds, water treatment plants or overflow basins on site.

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R. Provide the Proposed Methods to be Used in Reclaiming any Heaps From Leaching by: Regrading to Enhance Structural Stability, Promote Run-off, Reduce Infiltration and Control Erosion;

- a. Covering with Waste Rock, Topsoil, or Growth Medium;
- b. Revegetation;
- c. Soil Stabilization;
- d. Diverting Run-on;
- e. Cyanide Stabilization/Neutralization (Applicable Water Quality Permit May be Referenced);
- f. Treatments of Outflows, Residual Chemicals or Fluids in the Heaps (Applicable Water Quality Permit May be Referenced);

Comment(s): Not Applicable. There will be no heap leaching on site.

S. Provide the Proposed Methods to Be Used in Reclaiming any Solution Ponds, Settling Ponds and Other Non-tailing Impoundments by;

- a. Backfilling and Regrading in Accordance with the Designated Post-Mining Land Use;
- b. Restoring the Pre-disturbance Surface water in Accordance with The Designated Post-Mining Land Use;
- c. Cyanide Stabilization/Neutralization;

Comment(s): Not Applicable. There are no solution ponds, settling ponds or other non-tailing impoundments on site.

T. Provide a Written Statement of any Constraints on the Estimated Time To Complete Reclamation Caused by the Residual Moisture Content or Physical or Chemical Qualities of Impoundments;

Comment(s): Not Applicable since there are no impoundments of any nature on site.

U. Provide a Written Description of the Proposed Reclamation Techniques And Locations of the Following Road Features, if Applicable;

- a. ☐ Recontouring or Regrading to Round Off, Cut and Fill Slopes to The Original Contour or to Approximate the Form of the Land Before Disturbance;
- b. ☐ Removing Culverts;
- c. ☒ Ripping/Scarifying;
- d. ☐ Waterbars;
- e. ☒ Revegetation;
- f. ☐ Restoring or Stabilizing Drainage Areas or Streambeds;
- g. ☐ Other Road Reclamation Activities

Comment(s): When operations have ceased all access roads, ramps and accessible flat areas within the mine area will be reclaimed. The main access road will not be reclaimed to provide adequate access to site for post-mining land use. All reclaimed areas will be revegetated according to the properly specified seed mixture.

- V. Provide a Description of the Measure Used to Minimize Loading of Sediment to Surface Waters During Operation and, During and After Reclamation, if Applicable;

Comment(s): Not Applicable. No surface waters exist within the project boundary or anywhere near or downstream from the operation.

- W. Provide a Description of the Proposed Disposition of Buildings, Equipment, Piping, Scrap, Reagents, Equipment, and Other Hazardous Or Toxic Materials, if Applicable;

- a. Demolishing to the Level of the Foundation and Burying the Demolished Items on the Site in Conformance with Applicable Solid Water Disposal Requirements;
- b. Salvaging and Sale;
- c. X Disposal Off of the Site in Conformance with Applicable Solid Waste Disposal Requirements;
- d. Continuing Use in a Manner Consistent with the Post-mining Use Of the Land;

Comment(s):

- *Surface facilities such as the parts trailer, porta-potty and other miscellaneous equipment will be removed.*
- *Scrap metal, trash and other debris will be removed from the property and properly disposed of.*
- *Waste oil and contaminated soil (due to fuel spillage and others) will be disposed of off site at an approved facility.*

- X. Provide a Description of Any Surface Facilities Such as Buildings or Roads which will Not Be Subject to Reclamation to Achieve the Proposed Post-mining Use, if Applicable;

Comment(s): The main access road from Highway 90/Stateline Highway to the mine area, which was constructed prior to January 1, 1981, will not be reclaimed, as it would provide public access into the area for post-mining land uses.

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Y. Provide a Description of the Methods to be Used in Reclaiming Any Open Pit Mines, if Appropriate, by;

- a. Performing Activities that will Provide for Public Safety;
- b. Stabilizing Pit Walls or Rock Faces where Required for Public Safety;
- c. Constructing and Maintaining Berms, Fences or Other Means of Restricting Access;
- d. Creating a Lake for Recreational, Wildlife or Other Use;
- e. Revegetation;

Comment(s): All pit walls are designed and will be mined in a manner to provide stability during and after mining. Safety berms and/or waste rock dumps will be left in place to deter traffic directly into the pit(s). Perimeter fencing will remain in place unless otherwise directed.

Z. Provide a Description of the Methods to be Used in Reclaiming Underground Mines, if Appropriate by:

- a. Sealing Shafts, Adits, Portals and Tunnels to Prevent Access;
- b. Constructing and Maintaining Berms, Fences or Other Means of Restricting Access;

Comment(s): Not Applicable. No underground mine workings on site.

AA. Provide a Description of Any Necessary Monitoring and Maintenance of Fences, Signs, and Other Structures to be Performed by the Operator On the Reclaimed Land, if Applicable;

Comment(s): AMLLC intends to oversee conductance of annual field inspections of the reclamation project area for a three-year period. The perimeter fencing, dikes, access gate and signage around the site will be maintained in an effort to exclude trespassers and livestock from the area.

BB. Provide a Description of any Reclamation which is Necessary Because Instream Mining;

Comment(s): Not Applicable.

CC. Provide a Written Statement of the Effect that the Proposed Reclamation May Have on Future Mining in the Area;

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Comment(s): AMLLC would ensure that the proposed reclamation would be carried out in such a manner that will improve the public perception of mining. The goal is to have the post-mining land condition as good as or better than the pre-mining status.

DD. Provide a Description of Drill Hole Plugging Procedures in Accordance with NRS 534.425 through 534.428, if Applicable;

Comment(s): As of this writing, several exploration drill holes have been cased and will need to be backfilled and/or plugged.

These drill holes have been drilled through various grades of Zeolite mineralization and the proposed action is to backfill with appropriate material based on the drill hole information provided by the drill logs.

EE. Provide a Description of Concurrent Reclamation, if Applicable;

Comment(s): Concurrent Reclamation will occur in areas that are completed and have no future plans for additional disturbance. This acreage will vary year-by-year.

FF. Provide a Description of Measures to be Taken During Extended Periods of Non-operation to Maintain the Area in a Safe and Clean Manner and to Reclaim the Land to Avoid Erosion and Other Adverse Impacts. If not filed at the Time of Plan Submittal, this Information Shall be Filed whenever the Operator Anticipates a Period of Non-operation, if Applicable;

Comment(s): Not Applicable at this time.

4. Provide a Statement That the Applicant Agrees to Assume Responsibility for The Reclamation of any Surface Area Affected by the Mining Operation;

Comment(s): AMLLC assumes the responsibility for the reclamation of all disturbed areas within the design pit limits. AMLLC or an outside contractor will perform the necessary reclamation set forth in our Reclamation Plan for this particular site.

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5. Provide an Estimate of the Reclamation Cost, based on:

GG. The Cost of Equipment Rental, Operation and Labor Appropriate for The Geographic Area, or;

HH. The Estimate of Cost from an Outside Contractor, or;

II. Any Other Method which is Acceptable to the Administrator, the Bureau of Land Management, the United States Forest Service or Another Federal Land Management Agency, if Appropriate;

JJ. Provide a Narrative Description of the Following Proposed Reclamation Activities, if Applicable;

- a. Earthwork;
- b. Revegetation;
- c. Removal/Disposal/Salvage of Structures and Equipment;
- d. Post Reclamation Maintenance;
- e. Equipment Mobilization/Demobilization;
- f. Cyanide Stabilization/Neutralization Measures, or Provide Reference to the Permit Issued Pursuant to NAC 445.242 through 445.24388;
- g. Agency Administrative/Management Costs;

KK. Provide a Reclamation Cost Estimate Submitted on NDEP Form or Equal;

Comment(s): AMLLC is planning to conduct the reclamation of the project area in two phases. Phase one is concurrent reclamation and phase two is final reclamation. Each phase will incorporate re-grading, re-contouring and re-vegetation.

- Anticipated costs of **\$93,954.00**

Refer to the Reclamation Cost Estimation Summary Sheets in the attached Reclamation Costs section for the details of the reclamation costs.

6. Provide an Attached Permit Application Fee;

Provide the Following Application Fee Calculation for Affected and Un-reclaimed Land included in the Plan for Reclamation.

Initial Study	\$453.00
Negative Declaration	\$ 87.00
<u>Rec Amendment w/o Expansion</u>	<u>\$2,752.00</u>
TOTAL	\$3,292.00

Note: A check or money order representing the total amount of this calculated fee must be enclosed with the Permit Application which is Submitted to the **Inyo County Planning Department; P.O. Drawer L; Independence, California 93526.**

Make the Check or Money Order Payable to the :
Inyo County Planning Department

Comment(s): Check Number 8502 in the required amount of **\$3,292.00** is enclosed.

7. Provide a Written Statement Setting Forth the Effect that the Proposed Reclamation will have on Public Safety.

Comment(s): Reclamation of the proposed site would remove any unnatural hazards, which may have been created by implementing this project.

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8. Acknowledgements;

LL. It is Understood that should the Nature of the Operation Change a Modified or Supplemental Plan of Operations and Reclamation may be Required.

MM. It is Understood that Approval of this Plan of Operation and Reclamation does not Constitute: (1) Certification of Ownership to Any Person Named Herein; and (2) Recognition of the Validity of any Mining Claim Herein.

NN. It is Understood that a Bond Equivalent to the Actual Cost of Performing the Agreed upon Reclamation Measures will be Required Before this Plan can be approved. Bonding and any Bond Reduction Amounts will be Set on a Site-specific Basis by the Lead Agency in Coordination with the Cooperating Agencies.

OO. It is Understood that Approval of this Plan does not Relieve me of My responsibility to comply with any other Applicable State or Federal Laws, Rules or Regulations.

PP. It is Understood that any Information Provided with this Plan that Is Marked Confidential will be Treated by the Agency in Accordance With that Agency's Laws, Rules and Regulations.

I/We have Reviewed and Agree to Comply with all Conditions in the Plan of Reclamation and Operations, including the Recommended Changes and Reclamation Requirements. I/We Understand that the Bond will not be Released until the Inyo County Planning Department, the BLM or the State Agency in Charge gives written Approval of the Reclamation Work.


Glenn Holley
Ash Meadows Management Team

3/30/07
Date

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Office of Mine Reclamation

ASH MEADOWS, LLC

Ash Meadows, LLC
HCR 70, Box 7006
East Spring Meadows Rd.
Amargosa Valley, NV 89020

Phone 775-372-5524
Fax 775-764-1525

Reclamation Cost Estimate

“Modified” Plan of Operations

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RECLAMATION COST ESTIMATION SUMMARY SHEET

Ash Meadows L.L.C. - Modified Mine Plan (Yr 1- ?) Office of Mine Reclamation

Enter those values in the cost estimate that are appropriate to this project. All reclamation costs are to be calculated as third party contracts. This summary sheet is to be accompanied by a map and worksheet describing how each itemized cost estimate was calculated.

Reclamation to include the following:

Contractor: N/A; All work to be completed by Ash Meadows, LLC

- Removal of all equipment, fuel tanks, oil containers, fuel containment area, and grizzly;
- Placement of ORE stockpiles back into appropriate pit area(s)
- Grading, sloping or re-contouring of all stockpiles (Waste and Ore) and fuel containment area to a safe slope of 3h:1v or less
- Rip/Scarify all accessible flat areas
- Placement of available growth medium on all re-contoured waste dumps and flat areas that require re-vegetation
- Construction of safety berms throughout the pit area(s), including a perimeter berm to deter access;
- Removal of all trash

A. EARTHWORK/RECONTOURING

ITEM	MANPOWER	EQUIPMENT	MATERIALS	TOTAL
Roads	\$ 927	\$ 2,738	\$ 0	\$ 3,665
2 Drill Site(s)	\$ 0	\$ 0	\$ 0	\$ 0
3 Water Well Abandonment	\$ 0	\$ 0	\$ 0	\$ 0
4 Pits/Adits/Trenches	\$ 1,321	\$ 3,901	\$ 0	\$ 5,222
5 Process Ponds	\$ 0	\$ 0	\$ 0	\$ 0
6 Heaps	\$ 0	\$ 0	\$ 0	\$ 0
7 Dumps (Waste, Topsoil)	\$ 4,900	\$ 14,475	\$ 0	\$ 19,375
8 Tailings	\$ 0	\$ 0	\$ 0	\$ 0
9 Structure & Building Areas	\$ 0	\$ 0	\$ 0	\$ 0
10 Storage & Equipment Areas	\$ 0	\$ 0	\$ 0	\$ 0
11 Drainage Control	\$ 0	\$ 0	\$ 0	\$ 0
12 Mobilization/Demobilization	\$ 0	\$ 4,500	\$ 0	\$ 4,500
13 Miscellaneous(2)	\$ 0	\$ 0	\$ 0	\$ 0
SUBTOTAL "A"	\$ 7,148	\$ 25,614	\$ 0	\$ 32,762

B. REVEGETATION/STABILIZATION

ITEM	MANPOWER	EQUIPMENT	MATERIALS	TOTAL
1 Roads	\$ 1,483	\$ 3,791	\$ 1,347	\$ 6,621
2 Drill Site(s)	\$ 0	\$ 0	\$ 0	\$ 0
3 Pits/Adits/Trenches	\$ 2,112	\$ 5,401	\$ 2,369	\$ 9,882

B. REVEGETATION/STABILIZATION (CONTINUED)

4	Process Ponds	\$ 0	\$ 0	\$ 0	\$ 0
5	Heaps	\$ 0	\$ 0	\$ 0	\$ 0
6	Dumps (Waste, Topsoil)	\$ 7,837	\$ 20,043	\$ 4,366	\$ 32,246
7	Tailings	\$ 0	\$ 0	\$ 0	\$ 0
8	Structure & Building Areas	\$ 0	\$ 0	\$ 0	\$ 0
9	Storage & Equipment Areas	\$ 0	\$ 0	\$ 0	\$ 0
10	Drainage Control	\$ 0	\$ 0	\$ 0	\$ 0
11	Monitoring (1 trip/quarter, 3 yrs.)	\$ 2,031	\$ 390	\$ 1,200	\$ 3,621
12	Miscellaneous(2)	\$ 0	\$ 0	\$ 0	\$ 0
	SUBTOTAL "B"	\$ 13,463	\$ 29,625	\$ 9,282	\$ 52,370

C. DETOXIFICATION/WATER TREATMENT/DISPOSAL OF WASTES -

<u>ITEM</u>	<u>MANPOWER</u>	<u>EQUIPMENT</u>	<u>N/A</u> <u>MATERIALS</u>	<u>TOTAL</u>
1 Process Ponds/Sludge	\$ 0	\$ 0	\$ 0	\$ 0
2 Heaps	\$ 0	\$ 0	\$ 0	\$ 0
3 Dumps (Waste & Landfill)	\$ 0	\$ 0	\$ 0	\$ 0
4 Tailings	\$ 0	\$ 0	\$ 0	\$ 0
5 Surplus Water Disposal	\$ 0	\$ 0	\$ 0	\$ 0
6 Fluid Management (3)	\$ 0	\$ 0	\$ 0	\$ 0
7 Monitoring	\$ 0	\$ 0	\$ 0	\$ 0
8 Miscellaneous(2)	\$ 0	\$ 0	\$ 0	\$ 0
SUBTOTAL "C"	\$ 0	\$ 0	\$ 0	\$ 0

**STRUCTURE, EQUIPMENT
AND FACILITY REMOVAL**

<u>MANPOWER</u>	<u>EQUIPMENT</u>	<u>MATERIALS</u>	<u>TOTAL</u>
\$ 0	\$ 0	\$ 0	\$ 0

E. SUBTOTAL - OPERATIONS PROJECT COSTS

(A THROUGH D)	\$ 20,611	\$ 55,239	\$ 9,282	\$ 85,132
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F. CONTINGENCY (4)

\$ 8,513

G. INSURANCE (5)

(ON SITE LIABILITY)

\$ 309

H. BOND (6)

(PERFORMANCE AND PAYMENT)

\$

I. PROFIT (7)

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\$

J. CONTRACT ADMINISTRATION (8)

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\$

K. GRAND TOTAL

(E THROUGH J)

Office of Mine Reclamation

\$ 93,954

1. For Federal construction projects, Davis-Bacon wage rates are required. Wage rates also contain Federal Insurance Corporation of America (FICA), State Industrial Insurance System (SIIS) and other required coverage and benefits covering the workforce. If the quoted hourly rates contain FICA, SIIS, Davis-Bacon wage rate, insurance bond premiums and profits, the operator may sign a statement under penalty of USC 1001, that the above listed rates contain these items and that itemization of these costs are therefore not necessary.
2. Miscellaneous items should be itemized on accompanying worksheets.
3. Calculate and use only when mineral processing activities are involved. Fluid management represents the costs of maintaining proper fluid management to prevent overflow of solution ponds through premature cessation or abandonment of operations. Calculate a six month direct cost estimate which includes power, supplies, equipment, labor and maintenance.
4. A contingency cost is included in the reclamation cost estimation to provide for project uncertainties and unexpected natural events. Calculate the contingency cost as a percentage of the operational project costs as follows : up to and including \$500,000, use 10%; over \$500,000 to \$5 million, use 8%; over \$5 million to \$50 million, use 6%; and greater than \$50 million, use 4%.
5. Insurance premiums are calculated at 1.5% of the total labor costs. Enter the premium amount only on this line.
6. Federal construction contracts exceeding \$25,000 require both a performance and a payment bond (Miller Act, 40 USC 270 *et seq*). Each bond premium is figured at 1.5% of the total project costs. Enter the sum of both premium costs on this line.
7. For Federal construction contracts, use 10% of estimated project costs.
8. For Federal construction contracts, use 18% of project costs for estimates up to and including \$1 million. Use 14% of estimated project costs over \$1 million to \$25 million and 10% of estimated project costs over \$25 million.
9. If the contractor's or operator's quoted hourly rates contained FICA, SIIS, Davis Bacon wage rates, insurance bond premiums, and profit: the contractor and operator may sign a statement under penalty of 18 USC 1001, that the above rates contain these items and that itemization of these costs are therefore not necessary.

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Office of Mine Reclamation

ASH MEADOWS, LLC

Ash Meadows, LLC
HCR 70, Box 7006
East Spring Meadows Rd.
Amargosa Valley, NV 89020

Phone 775-372-5524
Fax 775-764-1525

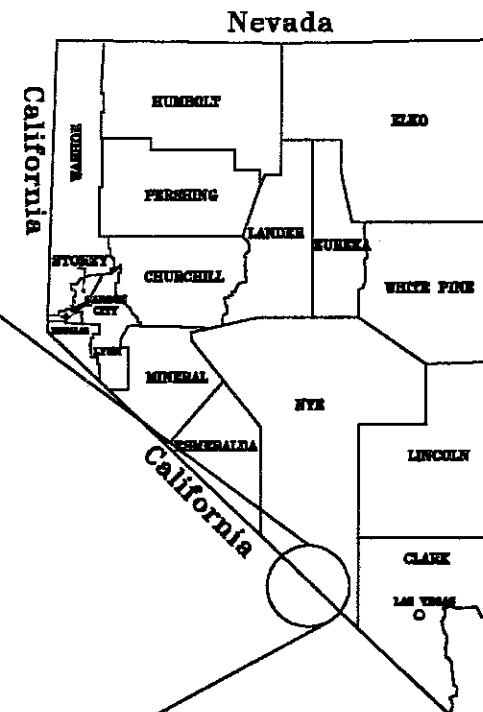
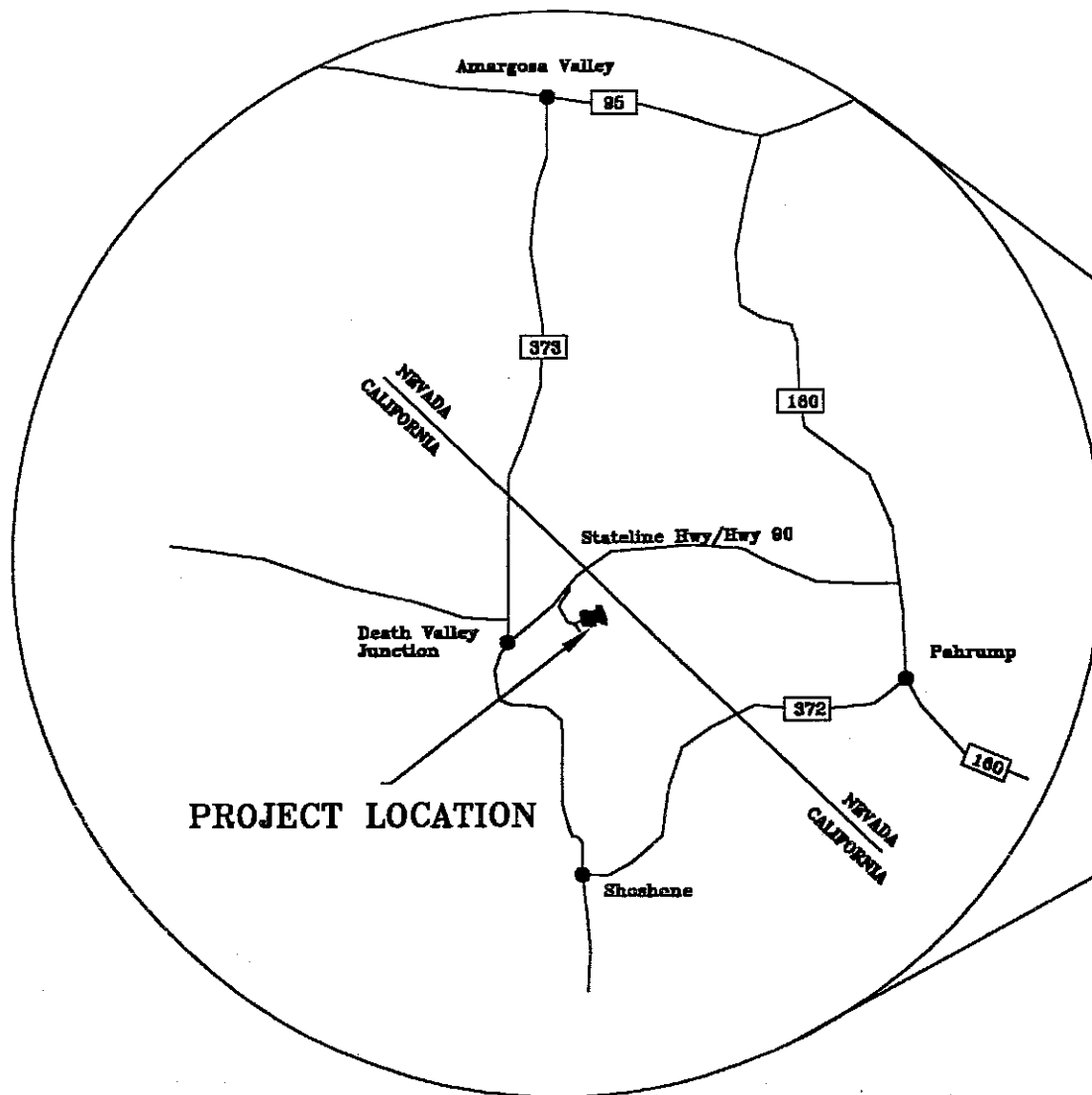
Figures and Drawings

"Modified" Plan of Operations

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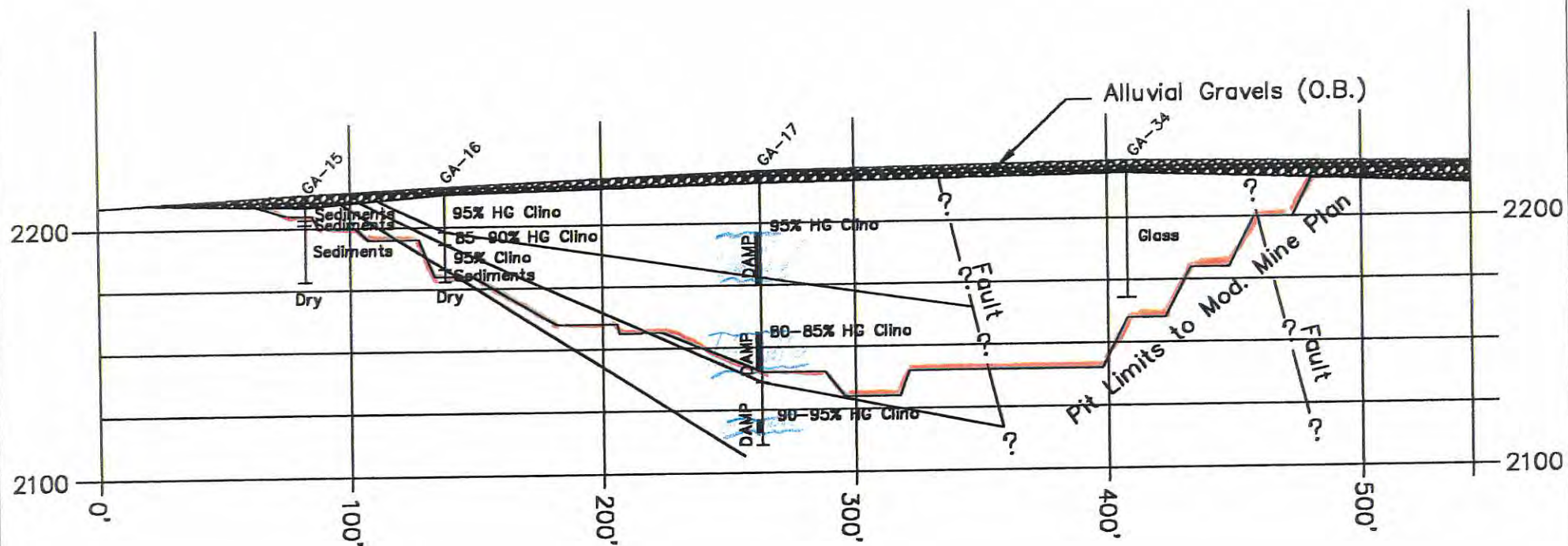
March 2005

ASH MEADOWS, LLC
Ash Meadows Zeolite Mine
SITE LOCATION
(INYO COUNTY, CALIFORNIA)

FIGURE 1

Scale : NTS

ASH MEADOWS, LLC
Inyo County, California Pit



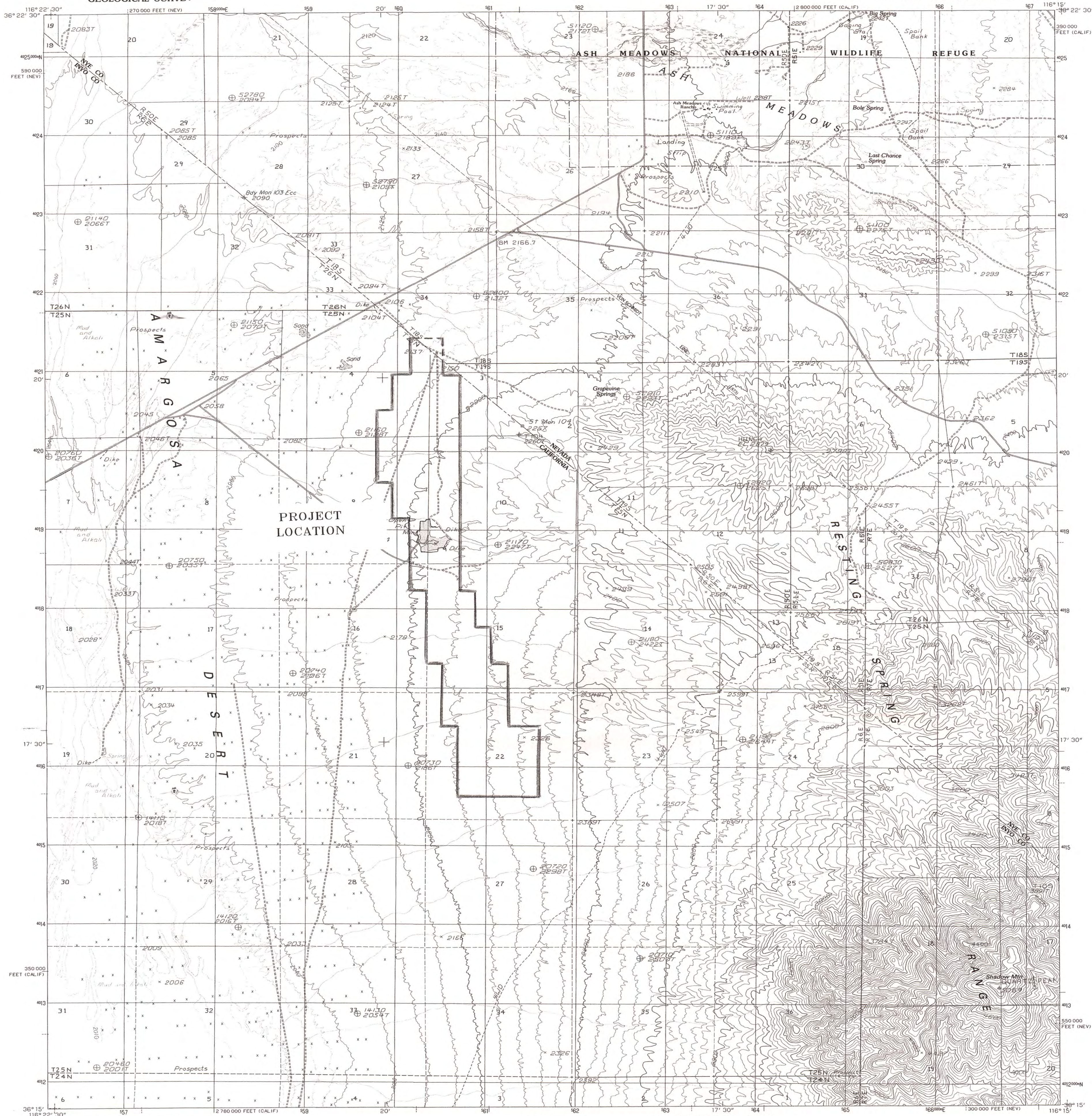
Profile A - A'

FIGURE 3

Scale: 1 in. = 60 ft.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BOLE SPRING QUADRANGLE
NEVADA-CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY USGS, NOSINOVA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1979 AND 1982
FIELD CHECKED 1983. MAP EDITED 1987
PROJECTION LAMBERT CONFORMAL CONIC
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ZONE 11
1000-FOOT STATE GRID TICKS: CALIF. ZONE 4; AND NEV. CENTRAL ZONE
UTM GRID DECLINATION 14°30' EAST
1980 MAGNETIC NORTH DECLINATION 14°30' EAST
VERTICAL DATUM NATIONAL GEODETIC VERTICAL DATUM OF 1929
HORIZONTAL DATUM 1927 NORTH AMERICAN DATUM
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(7 meters north / 78 meters east)
There may be private inholdings within the boundaries of any
Federal and State Reservations shown on this map
No distinction made between houses, barns, and other buildings

PROVISIONAL MAP
Produced from original
manuscript drawings. Infor-
mation shown as of date of
photography.

SCALE 1:24 000
KILOMETERS
METERS
MILES
FOOT
CONTOUR INTERVAL 40 FEET
SUPPLEMENTARY CONTOUR INTERVAL 10 FEET
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 FOOT
OTHER ELEVATIONS SHOWN TO THE NEAREST FOOT
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1987

NEVADA

ROAD LEGEND
Improved Road.....
Unimproved Road.....
Trail.....
Interstate Route..... U.S. Route..... State Route.....

BOLE SPRING, NEV.-CALIF.
PROVISIONAL EDITION 1987
36116-C3-TF-024

ADJOINING 7.5' QUADRANGLE NAMES

1	2	3	4	5	6	7	8
Franklin Well	Devils Hole	Amargosa Flat	Death Valley	Junction	High Peak	West of Eagle Mtn.	Eagle Mtn.
Stewart Valley							

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

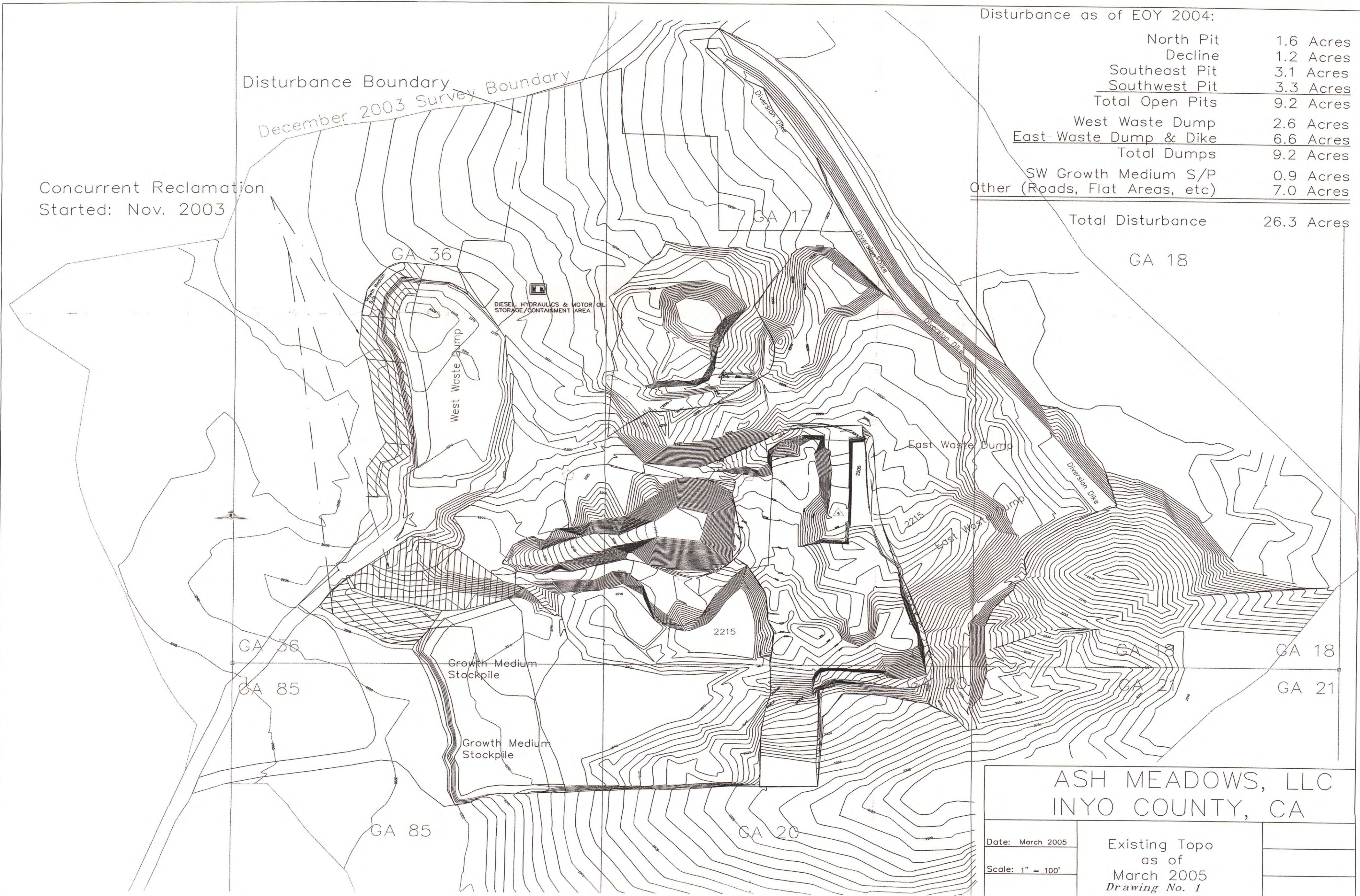
ASH MEADOWS, LLC
(FIGURE 2)

Concurrent Reclamation
Started: Nov. 2003

Disturbance Boundary
December 2003 Survey Boundary

Disturbance as of EOY 2004:

North Pit	1.6 Acres
Decline	1.2 Acres
Southeast Pit	3.1 Acres
Southwest Pit	3.3 Acres
Total Open Pits	9.2 Acres
West Waste Dump	2.6 Acres
East Waste Dump & Dike	6.6 Acres
Total Dumps	9.2 Acres
SW Growth Medium S/P	0.9 Acres
Other (Roads, Flat Areas, etc)	7.0 Acres
Total Disturbance	26.3 Acres



ASH MEADOWS, LLC INYO COUNTY, CA		
Date: March 2005	Existing Topo as of March 2005 <i>Drawing No. 1</i>	
Scale: 1" = 100'		

Proposed Disturbance :

Total Open Pits	11.0 Acres
Total Waste Dumps	8.0 Acres
SW T/S S/P	0.9 Acres
Roads, Stockpile Areas, Dikes, Flat Areas, etc.	6.4 Acres
Total Disturbance = 26.3 Acres	

Concurrent Reclamation
Started: Nov. 2003



ASH MEADOWS, LLC INYO COUNTY, CA

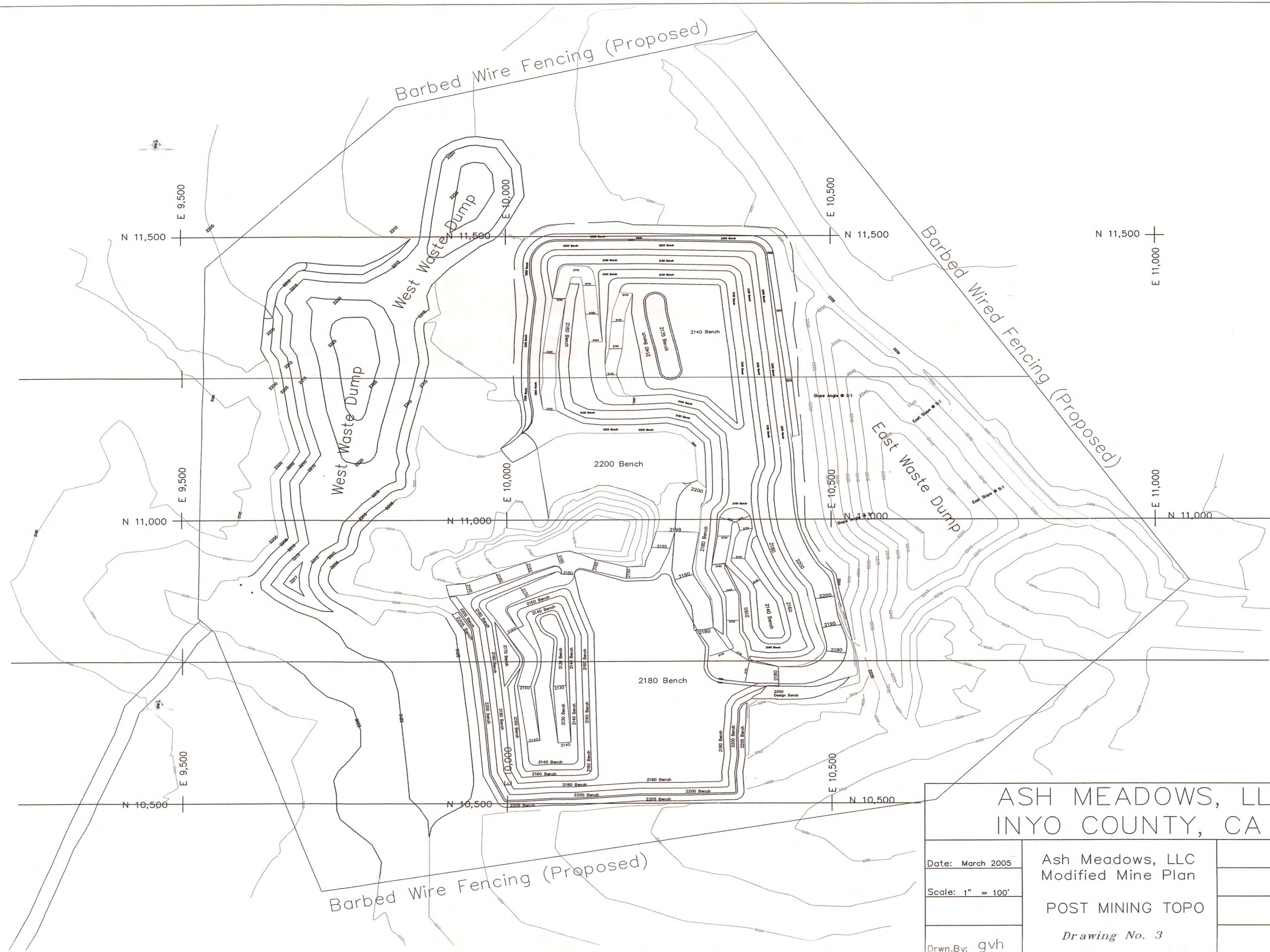
Date: March 2005

Scale: 1" = 100'

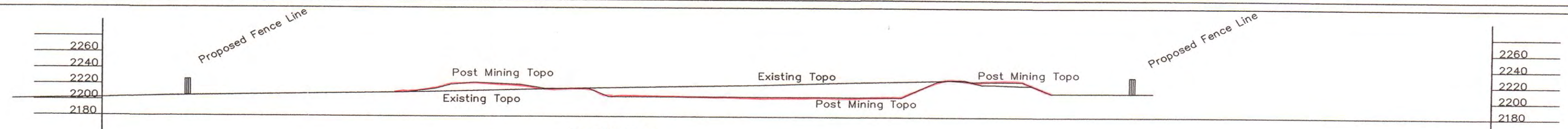
Drwn.By:

Ash Meadows, LLC
Modified Mine Plan
Year 1 - ?

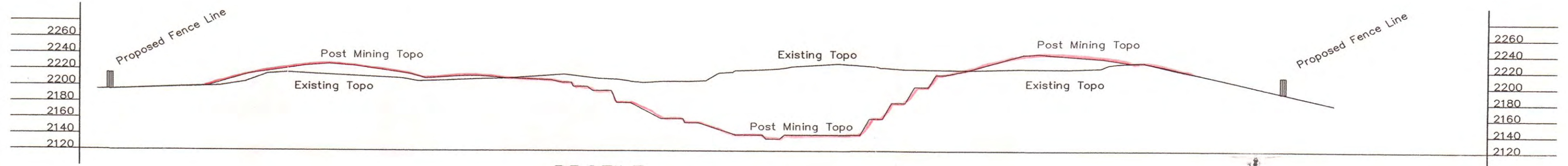
Drawing No. 2



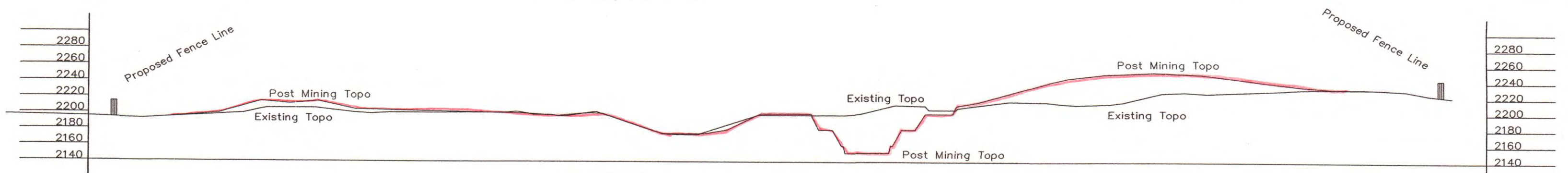
ASH MEADOWS, LLC INYO COUNTY, CA		
Date: March 2005	Ash Meadows, LLC Modified Mine Plan POST MINING TOPO <i>Drawing No. 3</i>	
Scale: 1" = 100'		
Drwn.By: gvh		



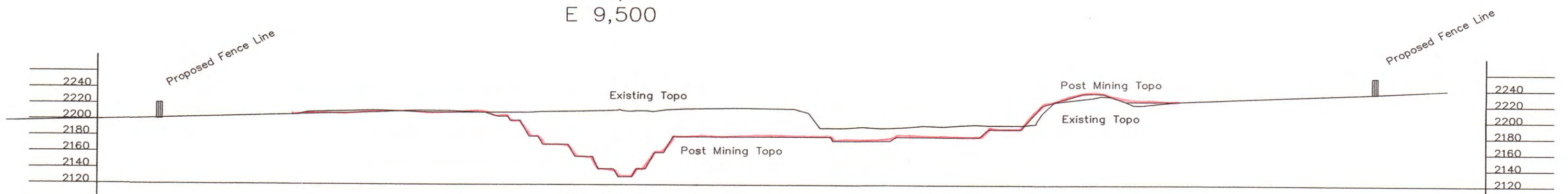
PROFILE
N 11,500
E 9,500



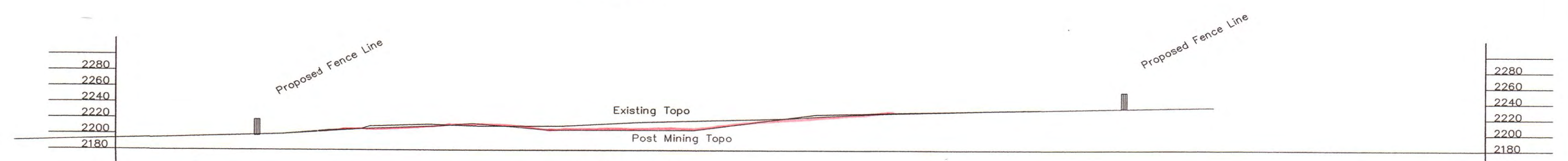
PROFILE
N 11,250
E 9,500



PROFILE
N 11,000
E 9,500



PROFILE
N 10,750
E 9,500



PROFILE
N 10,500
E 9,500

Drawn by: ash	ASH MEADOWS, LLC	Scale : 1" = 100'
Date: Sept. 2006	MODIFIED MINE PLAN POST MINING TOPO	Dwg. No. :

Appendix

- Salt Cedar Removal Plan & Cost**
- Archaeological Survey**
- Hydrologic Study**
- Reclamation Cost Estimate Details**
- Mineralogical Report & MSDS**
- BLM Correspondence**

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“Modified” Plan of Operations

Salt Cedar Removal Plan and Cost

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DEPARTMENT OF CONSERVATION

May 13, 2005

Nye County Salt Cedar Eradicators
HCR-70 Box 7004
Amargosa Valley, NV 89020
Mark : (775) 372-5409
Amber : (262) 337-0779

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Office of Mine Reclamation

Zeolite Salt Cedar Removal

The treatment area of the Zeolite Mine is found to the south of Bell Vista Road. There are approximately 75-100 small clumps of *Tamarix ramosissima* in the 2+ acre area of the Zeolite Mine. There is also a small area with a total of 3 trees to the west of the main treatment area.

To rid this area of the invasive Tamarisk, cut-stump eradication method will be applied. After mechanically removing the trees, chemical application will be utilized to ensure that the base of the trees do not re-sprout. Because this area is an ephemeral pool, approximately 60% of the trees will be inundated with water during the time of treatment. In order to generate the least amount of damage to the surrounding ecosystem this pool creates; the chemical *Habitat* will be utilized within 5 feet of standing water. *Garlon 4* will be used elsewhere. All chemicals (*Garlon 4* and *Habitat*) will be provided by the removal team.

The leftover slash will be removed by hand to ensure minimum impact on the surrounding area. The slash will be taken to a man-made pit within the boundaries of the Zeolite mine. Once in the pit, the slash will be sprayed with *Garlon 4* to ensure no growth will occur. The trees will then be buried in accordance with BLM standards.

We provide a total eradication guarantee. This guarantee includes all eradication work performed by the team. Our qualified personnel will return the following spring (at no additional charge) to ensure that any re-sprouts are destroyed.

The total cost of this project will be \$2,225.00. This bid includes all of the services and duties that are described in the preceding pages.

*Department of the Interior Chemical Application
Registration #C-4609; Exp. 12-31-06*

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Archaeological Survey

November 1978

Archaeological Research Center UNLV

AN ARCHAEOLOGICAL SURVEY OF MINING CLAIM
AREAS IN NEVADA AND CALIFORNIA IN THE
SOUTHERN PERIPHERY OF THE AMARGOSA DESERT
NEAR ASH SPRINGS, NEVADA

by

Richard Brooks and Joseph King

Archaeological Research Center
UNLV Museum of Natural History

with an appendix by

Arnie Cunningham Turner

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Prepared for the

Mineral Resources Group of the
Anaconda Company
555 Seventeenth Street
Denver, Colorado 80217

February, 1979

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INTRODUCTION

In response to a request by Mr. Dale Kittel, Permits Coordinator for the Mineral Resources Group of the Anaconda Company, Denver, Colorado, staff from the Archaeological Research Center, UNLV Museum, University of Nevada, Las Vegas (UNLV) conducted an archaeological survey in the general area of Grapevine and Ash Springs, on both sides of the Nevada/California border. This area is adjacent to the Amargosa River region and just east of Death Valley Junction, in Nye County, Nevada and Inyo County, California. Staff members conducting the survey included Dr. Richard H. Brooks, Joseph P. King, and Richard A. Wilson.

Authority for archaeological survey in the State of Nevada has been granted to Dr. Richard H. Brooks, through the Antiquities Act of 1906, by the Department of Interior Antiquity Permit Number 77-NV-096 and Nevada State Antiquities Permit Number 182. Contact was made with Charles McKinney, Manager Federal Antiquities Program, Heritage Conservation and Recreation Services, Washington D.C., who arranged for a special permit which was sent to Russ Kaldenberg at the Riverside Office of the Bureau of Land Management (BLM), so that the survey could be conducted within the area located on the California side of the border.

On November 25, 1978, Mr. Kittel telephoned in the request for the survey, and on November 29, 1978, Mr. Donald Curry, Consulting Geologist for the Anaconda Company, accompanied R. H. Brooks and J. P. King to the area to be surveyed, to establish the parameters of the mining claim areas. During this field trip Mr. Curry also identified a possibly unique type of mining claim marker, consisting of a low mound of dirt with rocks piled on top of the mound. The actual field survey was conducted on November 30,

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December 1, 21, and 22, 1978.

LEGAL DESCRIPTION OF THE AREA

The area in which the mining claims are located consists of portions of five sections in Nye County, Nevada, and seven sections in Inyo County, California. The Nevada sections include R 50 E, T 18 S, Sections 25, 26, 34 and 35; and R 50 E, T 19 S, Section 3. Those in California include R 6 E, T 25 N, Sections 3, 4, 9, 10, 15, 16, and 22. Each claim is approximately 1,000 feet wide by 2,000 feet long, and there are a total of 84 claims, consisting of both Gap Placer and GA Lode claims.

ENVIRONMENTAL SETTING

The elevations in the claim areas vary from approximately 2,000 feet to over 2,200 feet. The locale is generally a long alluvial fan, sloping north westward, and is dissected by a number of deeper arroyos and smaller channel systems. The study area is within the Lower Sonoran Life Zone. The Creosote Bush Community and the Salt Bush Community are found within this life zone. Elements of the Creosote Bush Community include creosote, bursage, cholla, Indian rice grass, buckwheat, pencil cactus, snake weed, desert holly, Indian millet, and the desert spiny herb. The Salt Bush Community contains desert holly, iodine bush, pickle weed, shadscale, and the desert spiny herb. On the fringes of the study area at Grapevine Springs, are found mesquite, arrowcane, wild grape, and thistle. In disturbed locales throughout the study area are traces of the introduced Russian thistle, and, in the ranching land north of the study area occurs the introduced tamarisk or salt cedar.

Animals within the Lower Sonoran Life Zone include jackrabbits, cottontail

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rabbits, antelope ground squirrel, kangaroo rats, and possible pack rats. Numerous lizards, black ants, ravens and wild horses were observed during the survey.

ARCHAEOLOGICAL SITE DATA REVIEW

There are no known National Register sites in the mining claim area. Previous archaeological work has been carried out in the Amargosa Basin and Ash Springs area. This includes a preliminary survey of four sections in the Amargosa Basin for Industrial Mineral Ventures by R. H. Brooks and D. O. Larson, Archaeological Research Center, in 1973. The results of this survey indicate that "the archaeological data encountered in the area imply much more use by aborigines than had been previously estimated. The evidence of pottery sites in addition to lithic sites also indicates seasonal use of the region by semi-sedentary gathering peoples as well as the more nomadic groups. Pottery is considered late in the southern Great Basin region, so that ceramic wares in this area are usually dated around 1,000-1,200 A.D. or later" (Brooks and Larson, 1973:10). Additional work has been done by G. Coombs, Archaeological Research Incorporated, for the BLM California Desert Planning Unit, Riverside, California, in 1977-78. One of the transects, during this work by Coombs, was located close to Grapevine Springs, adjacent to the study area, and lithic materials of aboriginal use patterns were found.

A third and more concentrated report has been published by P. J. Mehringer, Jr. and C. N. Warren in the Ash Meadows area of the Amargosa Desert. This locale is a few miles north of the study area. This publication consists of a detailed study of the sand dunes and peat formation in the Ash Meadows area, including a number of springs. From one site, the

Barnett Site, containing pottery and lithics, radiocarbon dates have been obtained averaging 1950 ± 100 BP (Mehring and Warren, 1978:128).

METHODOLOGY

Utilizing the mining claim markers, which are arranged in either north-south or east-west patterns, parallel transects were walked throughout the study area. In general the field crew maintained a 30-50 meter, transect width, walking within the transect in a zig-zag fashion to insure a maximum amount of coverage of the terrain. The survey was initially conducted in the Nevada sections while waiting for the special permit to arrive before starting work in California.

ARCHAEOLOGICAL RESULTS

There were no lithic or other surface prehistoric archaeological manifestations within the study area, as delineated by the claim markers, either in Nevada or California. The one piece of historic evidence consists of approximately thirteen small dirt mounds, surrounded by a circular trench and topped with rocks. In one case a Prince Albert tin can was found on top of the dirt near the rocks, but nothing was in the Prince Albert can. During the time of the survey, it was noted that these mounds were arranged in a linear fashion and were nearly always related to a distinct mineral exposure. On this basis it is assumed that these were a type of mineral claim markers that, according to Mr. Curry, are unique.

In an attempt to identify these possible claim markers A. L. Turner, research archaeologist for the Research Center, who lives in Carson City, contracted the Nevada Bureau of Mines and Geology and the Tonopah, Nye County, county recorder. Her report on this information is included as an

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appendix. As can be seen in her report, there is no information that can be used to positively identify these dirt mounds as evidence of a recorded mining claim. Unfortunately all this information is from Nevada records, and most of these dirt mounds are located on the California side of the border.

There is no doubt that these dirt mounds are historic in origin, not prehistoric, as there is no known evidence of this type of aboriginal activity in association with mineral deposits. Table 1 lists the ranges in size of all the possible claim markers that were encountered during this survey.

Archaeological clearance is recommended for this mining claim area based on an intensive archaeological survey. No prehistoric or historic materials were identified, with the exception only of the possible historic claim markers, located mainly on the California side of the border. The plat map referred to in page one of the appendix was for Nye County, Nevada, and since the markers that were identified are on the California side of the survey, this map did not provide any further explanation of the markers.

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TABLE I

Size Range of Historic Claim Markers

Claim Markers	Diameters	Height	Comments
1	160 cm x 170 cm	15-18 cm	No rock cover.
2	190 cm x 200 cm	20-25 cm	Rock on top of mound.
3	210 cm x 220 cm	20-25 cm	Rock on top of mound.
4	200 cm x 210 cm	15-20 cm	Tin can under rock.
5	190 cm x 195 cm	20-25 cm	Rock on top of mound.
6	180 cm x 185 cm	25 cm	Rock on top of mound.
7	215 cm x 220 cm	20-25 cm	Rock on top of mound.
8	210 cm x 220 cm	20-25 cm	Rock on top of mound.
9	220 cm x 230 cm	20-25 cm	Rock on top of mound.
10	215 cm x 220 cm	20-25 cm	Rock on top of mound.

APPENDIX 1

HISTORICAL BACKGROUND INFORMATION ON POSSIBLE
MINING CLAIMS DATING FROM THE 1870's to 1890's

by

Arnie Turner

LOCATION: Upper Ash Meadows area; Nye County, Nevada and possibly into Inyo County, California.

LEGAL DESCRIPTION: T. 18 S., R. 50 E. in portions of Sec. 25, 26, 34 and 35; T. 19 S., R. 50 E. in portions of Sec. 2 and 3; T. 25 N., R. 6 E. in portions of Sec. 3, 10, 15 and 22.

RESEARCH DESIGN: To check local sources for information concerning the problem of who may have filed claims within this area in the 1870's to 1890's. The specific question addressed was the problem of identifying the "claim, stake markers". These consist of circular trenches with dirt piled into the center and a rock pile on top of that. These "markers" appear to follow a strata through the area involved.

FINDINGS: The Ash Meadows area is located within the Ash Meadows Mining District. In 1917, clay was discovered in the area and in 1918 and 1919, Standard Oil mined this clay for Potash for Fuller's Earth (Mineral Resources of the U.S. 1918 and 1919). The main clay deposits are located seven to eight miles north and northwest of the research area (personal communication, Keith Papke, Bureau of Mines and Geology, University of Nevada, Reno).

The Nye County Recorder in Tonopah, Nevada, is sending a xerox of the map of the area to the ARC which may or may not locate the claims under question. Claims are filed with the recorder by name of claim and/or

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person, which in this case are both unknown.

The derivation of the circular trenches is not identifiable. There appears to be no precedent for and no historical data pertaining to this particular form of marker. Keith Papke (Bureau of Mines and Geology, University of Nevada, Reno) states that they are not bore holes and that they may simply be an individual's idea of a claim marker.

According to survey plat maps on file with the Bureau of Land Management in Reno, there are five claims within the project area. These claims are not patented. Evidently, these five claims should also be on the maps from the Nye County Recorder. If at least five claims are not shown, the BLM should be contacted for further information. Monuments were also shown on the BLM maps which are apparently mile posts: one mile apart, running on a Northwest to southeast line along the Nevada-California border. The physical appearance of these monuments if not shown.

AGENCIES CONSULTED: Bureau of Land Management, State Office; Bureau of Mines and Geology, University of Nevada, Reno; Nevada State Division of Mineral Resources; Nevada State Historical Society; Nevada State Library; Nevada State Museum; Nye County Recorder, Tonopah.

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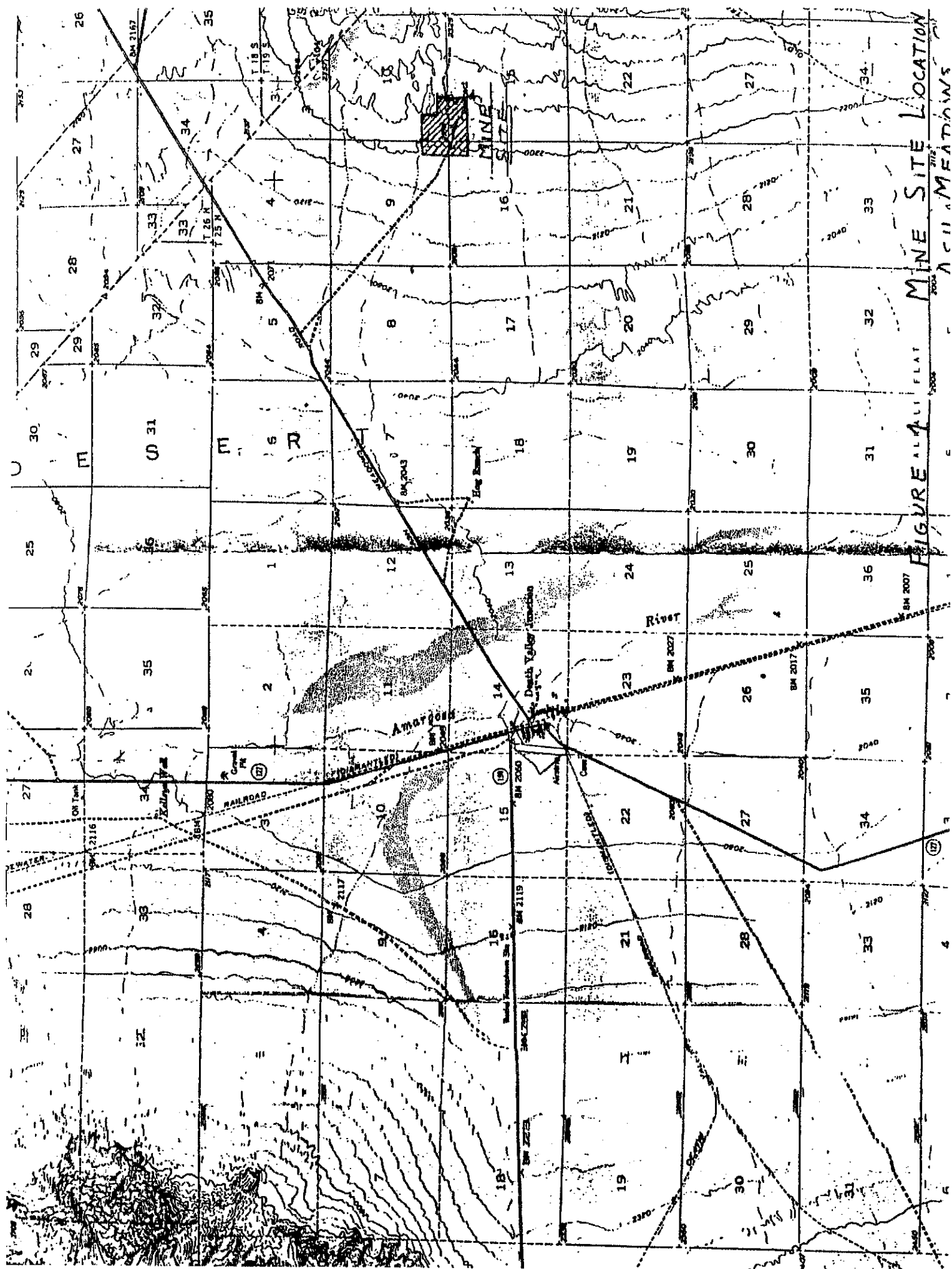


FIGURE 1 MINE SITE LOCATION
FLAT MEASUREMENTS

Hydrologic Study

October 1980

Hydro-Search, Inc.
Reno, Nevada

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HYDROLOGIC EFFECTS OF MINING

ASH MEADOWS ZEOLITE DEPOSIT

INYO COUNTY, CALIFORNIA

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AUG 06 2007

October 31, 1980

Office of Mine Reclamation

Prepared for:

ANACONDA Copper Company
555 Seventeenth Street
Denver, Colorado 80217

Project No. 1239-80

HYDRO-SEARCH, INC.
Consulting Hydrogeologists-Geologists
333 Flint Street
Reno, Nevada 89501

Submitted by:

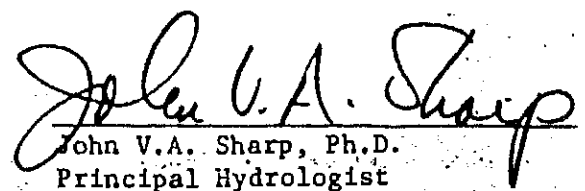

John V.A. Sharp, Ph.D.
Principal Hydrologist

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3.2 GROUND-WATER SYSTEM	6
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FIGURES

Figure 1. Location Map with Generalized Geology and Hydrology, Ash Meadows Zeolite Deposit, Inyo County, California.	3
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PLATES

Plate I. Geologic Map, Ash Meadows Zeolite Deposit, Inyo County, California.	In Pocket
Plate II. Hydrologic Cross Section Looking North, Ash Meadows Zeolite Deposit, Inyo County, California.	In Pocket

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1.0 FINDINGS

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1. The California zeolitic tuff occurs in an altered volcanic tuff that strikes north-south, and dips to the east at an average of 20° . The deposit is underlain by sediments composed of claystone, siltstone, and sandstone. The deposit is overlain by unaltered tuff. It is divided into a lower unit composed of zeolitic lapilli tuff and an upper unit of massive zeolitic tuff. These two units have a combined maximum thickness of approximately 150 feet. The zeolite deposit is cut by a series of north-trending, high angle faults (Plate I).
2. Ground water occurs in the zeolites and the associated materials at a depth of about 100 feet (Plate II). Water levels measured in zeolite exploration holes and hydrologic test wells show a flat surface, indicating the existence of an interconnected ground-water system.
3. Air lift pumping of four hydrogeologic test wells (150 to 250 feet in depth) in zeolitic tuff; interbedded siltstone, claystone, and sandstone; and unaltered tuff gave yields of five gallons per minute or less.

The low yields, low rates of recovery of water levels, and limited to no drawdown effects in water levels in nearby holes indicate that the permeability of materials in and around the zeolite body is extremely low.

4. Water will be encountered in mining the zeolite deposit below 100 feet and above the base of the deposit at about 150 feet. Flows should average out to no more than a few gallons per minute. These flows can be handled by evaporation or small scale pumping.

Occasionally larger flows may be encountered where the materials are highly fractured or where sandstone buildups occur. These flows should not be frequent or of long duration.

5. Discernible water table drawdown effects attributable to the 50 feet of drawdown in the zeolite deposit caused by the mining operations will extend no more than several hundred feet into the Tertiary sediments surrounding the mine.

The ground-water regime of Ash Meadows will not be altered or adversely affected by drainage of ground water by the mining operation.

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2.0 INTRODUCTION

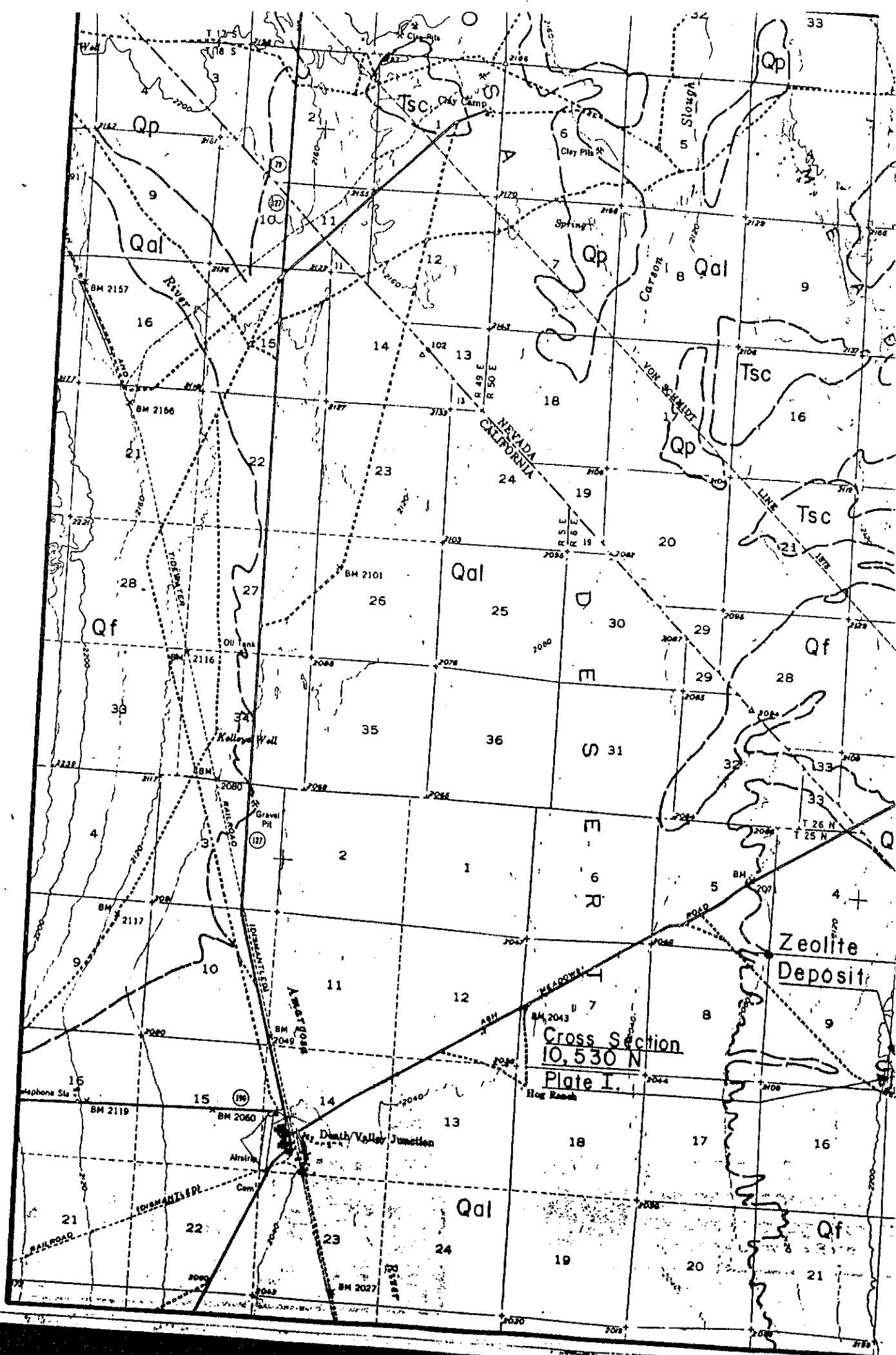
Office of Mine Reclamation

The Anaconda zeolite property is located in Inyo County, California in the southern portion of the Amargosa Desert, approximately one mile south of the Nevada state line (Figure 1). The deposit is a faulted zeolitic tuff deposit, with associated sediments and unaltered tuffs (Plate I). In June 1980 a hydrogeologic investigation was undertaken to determine the hydraulic characteristics of the zeolite deposit. The objective of the investigation was to assess the hydrologic effects of mining with respect to both occurrence of water in the open pit during the mining operation and possible effects of mining on regional water levels.

A proposed open pit would be excavated along the north-south strike of the deposit, and would result in the exposure of underlying sedimentary rocks in the western wall and floor of the pit, and exposure of the overlying glassy tuff along the eastern wall. Mining would extend to a maximum depth of 150 feet, 50 feet below the water table (Plate II).

A principal feature of the investigation was the installation and testing (pumping, drawdown and recovery of water levels) of a series of observation and pumping wells along a representative cross section of the deposit and eastern (unaltered tuff) and western (sediments) wall rocks.

Members of the technical staff of Hydro-Search, Inc. (HSI), Reno who participated in this work include Forrest L. Fox, hydrogeologist, and John V.A. Sharp, principal hydrologist.



EXPLANATION

- Qal** Alluvium, includes dune sand, talus, and gravel along Amargosa River (minor aquifer)
- Qp** Playa deposits
- Qf** Alluvial fan deposits
- Tsc** Sandstone and claystone, with subordinate siltstone, sandstone, tuff, limestone, and conglomerate
- Cbu** Bonanza King Formation, limestone and dolomite (major aquifer)
- Cs** Shadow Mountain Quartzite
- U**
D Fault (concealed)

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Scale: 1/62,500

Contour interval: 40 feet

Geology after: C.S. Denny & H. Drewes, 1965;
R.L. Naff, G.B. Maxey, & R.F. Kaufmann, 1974.

Hydrology after: I.J. Winograd and W. Thordarson, 1975.

Figure 1. Location Map with
Generalized Geology and Hydrology,
ASH MEADOWS ZEOLITE DEPOSIT
Inyo County California

PROJECT 1239-80

REVISIONS

DATE Nov. 1980



Hydro-Search, Inc.
CONSULTING HYDROLOGISTS-GEOLOGISTS
Austin • Denver • Reno

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3.0 REGIONAL HYDROGEOLOGY

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3.1 GEOLOGIC UNITS

3.1.1 Quaternary Deposits

Playa deposits (Qp), valley fill alluvium (Qal), and alluvial fans (Qf) comprise the major Quaternary deposits in the region (Figure 1). Playa deposits primarily occur to the north of the project area in Nevada. These fine-grained sediments, which include silt, clay, tuffaceous materials, and evaporites, accumulated in part near the distal end of alluvial fans and in part on a playa. Alluvial fan deposits grade laterally into the playa deposits and valley fill alluvium. The boundary between them is placed where more than half of the material is sand, silt, and clay. The playa deposits, due to their fine grained nature, are relatively impermeable in comparison with valley fill alluvium and as such do not transmit and yield significant quantities of ground water.

The valley fill alluvium primarily includes stream deposits and minor dune sand and talus. Where saturated, this material can effectively transmit and yield ground water only in quantities sufficient for it to be classified an aquifer of minor importance. Ground water in the Quaternary deposits typically moves laterally from recharge areas along the mountain flanks toward discharge areas in playas, stream courses, and valleys.

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Much of the surface of the fan deposits is desert pavement. These smooth, gently sloping pavements are composed of closely packed angular fragments of rock whose surfaces are either coated with desert varnish or etched by solution. The remaining portions of fan surfaces consist of dry stream channels which are eroded into the underlying Tertiary sediments (Section 3.1.2). The dry stream channels include localized pockets of sand and gravel. The fan deposits are thin and occur at the surface. As such, they do not contain, transmit, or yield significant quantities of ground water.

3.1.2 Tertiary Deposits

The lowlands north and northwest of the project area are underlain by a thick sequence of Tertiary fine-grained clastic rocks (Tsc) (Winograd and Thordarson, 1975). These materials, which contain the zeolite deposit, are largely concealed beneath the younger Quaternary playa, alluvium, and fan deposits. The Tertiary sequence is predominately siltstone and claystone. Subordinate amounts of sandstone, glassy and zeolitic tuffs, and limestone are present. The various rock types are well bedded, with individual beds ranging in thickness from a fraction of an inch to several tens of feet.

The Tertiary materials are predominately fine grained and do not transmit and yield significant quantities of ground water. This is the case for the zeolitic and glassy tuffs and sediments in the project area.

The sandstone and some of the tuff beds may be relatively more permeable. These could transmit and locally yield ground water in relatively small quantities.

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3.1.3 Paleozoic Rocks

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The Shadow Mountain Quartzite (Cs) is Cambrian in age and crops out southeast of the project area in the Resting Spring Range. Primary permeability of this unit is negligible while secondary fracture permeability may be important locally. The unit as a whole, however, is basically impervious and does not transmit and yield significant quantities of ground water (Winograd and Thordarson, 1975).

The Bonanza King Formation (Cbu), a Cambrian limestone and dolomite sequence, crops out in the hills near Devils Hole (Figure 1). The primary porosity and permeability of these carbonate rocks are extremely low. However, secondary porosity and permeability due to fractures and solution cavities make this unit a major aquifer. This aquifer has been placed in juxtaposition with Tertiary sediments along an extensive normal fault zone which trends to the northwest from Bole Spring (Figure 1). The impervious Tertiary sediments form a barrier to ground water which flows in the carbonates, resulting in numerous springs along the fault zone and to the east.

3.2 GROUND-WATER SYSTEM

The Anaconda zeolite deposit is located within the Amargosa Desert-Nevada Test Site ground-water flow system (Mifflin, 1968). This is a regional feature which encompasses about 4,000 square miles and includes ten intermontane valleys to the north and northeast of Ash Meadows. Recharge occurs

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on the north and northeast and discharge occurs primarily in the Ash Meadows area.

The dominant feature in the discharge area is a spring line which includes approximately thirty springs trending $N20^{\circ}-25^{\circ}W$ from the north end of the Resting Spring Range. The spring line closely parallels the trend of Paleozoic carbonate ridges which border most of the springs on the east. About twenty of the springs lie within a rectangular area one mile wide by ten miles long.

Fine-grained Tertiary sediments which are downdropped 2,000 feet or more immediately west of the spring line form the hydraulic barrier to the aquifer (Winograd and Thordarson, 1975).

The discharge of ground water along this spring line is to surface materials, primarily the Quaternary gravels. The source is the regional aquifer of the underlying Paleozoic carbonate rocks (Bonanza King Formation).

Recharge to the regional carbonate aquifer occurs throughout the catchment area to the east and northeast of Ash Meadows. Extensive hydrogeological investigations of the Nevada Test Site have found that Paleozoic carbonate sequences underlie the region and act as a drain to the southwest towards Ash Meadows. The hydraulic gradient of the ground-water system from the Nevada Test Site to Ash Meadows is approximately 0.5 feet per mile (Winograd and Thordarson, 1975). The gradient west of the spring line is approximately 90 feet per mile (Naff, Maxey, and Kaufmann, 1974). The sharp contrast in

gradients is a reflection of the large difference in permeability between the carbonate aquifer and the relatively impermeable Tertiary sediments.

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4.0 HYDROGEOLOGY OF THE ZEOLITE DEPOSIT

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4.1 GEOLOGY

The project area is located on an alluvial fan approximately five miles east of Death Valley Junction. The thin veneer of fan deposits is cut by stream channels which expose the underlying Tertiary sediments and tuffs. The Tertiary sequence dips gently to the east and in the vicinity of the zeolite deposit is cut by numerous north-trending high angle faults (Plates I and II). The Tertiary sequence in the vicinity of the zeolite deposit includes claystone, siltstone, glassy tuff, zeolitic tuff, and subordinate very fine-grained sandstone.

The zeolitic tuff can be divided into two distinct lithologic types. The lower unit is a lapilli zeolitic tuff. Overlying this unit is a massive zeolitic tuff. The zeolitic tuff is closely associated with fault zones. These zones apparently were the paths along which solutions percolated and altered the glassy tuff to a zeolitic tuff. Clay alteration is also widespread, but is predominant in the zeolitic lapilli unit.

4.2 GROUND-WATER HYDROLOGY

4.2.1 Ambient Conditions

A preliminary inventory on May 29, 1980 of water levels in exploration drill holes in the zeolite deposit indicated a relatively flat water level surface (Plate II). Water table elevations ranged from 2115 to 2120 feet (Plate I), indicating an interconnected ground-water system. Water levels are approximately 100 to 105 feet below the ground surface.

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4.2.2 Pumping Tests and Results

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The hydrogeologic drilling and pump testing program was designed to collect information on hydraulic characteristics of unaltered and zeolitic tuff and surrounding sedimentary materials. Along a representative cross section of the zeolite deposit (10530 N) observation wells and the pumping well were installed to depths well below the ore body (Plate II). The program included: one observation well (O-1) and one pumping well (PW-1) in the zeolite deposit; one observation well (O-2) in the claystone-siltstone sediments in the western wall rock; and one observation well (O-4) in the glassy tuff material in the eastern wall rocks.

A 12 $\frac{1}{2}$ -inch diameter pumping well was drilled to 200 feet and cased with blank and slotted 8 $\frac{5}{8}$ -inch steel casing. The well yield determined from air lift pumping was less than one gpm and the water level was very slow in recovering. These results indicate that the zeolitic tuff and underlying sediments are of low permeability and that yields are insufficient for performing tests with downhole pumps. In order to verify the low permeability of the zeolitic tuff, observation well O-1 was drilled 100 feet west of PW-1 to a depth of 220 feet. This well also showed minimal discharge of water during air lift pumping (<5 gpm).

To determine ground water conditions in the sedimentary unit underlying the zeolite deposit, observation well O-2 was drilled 250 feet west of PW-1. Interbedded fine grained sandstones, siltstones, and claystones of the

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Tertiary sedimentary sequence were encountered and the well yielded approximately 5 gpm.

To complete the drilling program observation hole 0-4 was drilled 250 feet east of PW-1 in the glassy tuff comprising the eastern wall rocks. Well 0-4 yielded one gpm during air lift pumping.

The four holes drilled along this cross section of the deposit encountered a variety of materials typical of the Tertiary sequence, including zeolitic and glassy tuff, claystone, siltstone, and sandstone. Air lift pumping showed very low yields of water, low rates of water level recovery, and limited to no drawdown effects on water levels in nearby holes. These findings indicate that the permeability of materials in and around the zeolite body is extremely low.

4.2.3 Ground-Water in Relation to Mining

Local Effects

Only minor amounts of ground water will be encountered in the proposed open pit. The water table will be encountered at a depth of about 100 feet and yields to the pit should average no more than several gallons per minute.

Open fractures are expected to produce the largest inflow to the pit, however, yields from the structures should not be excessive or of long duration. Even though the zeolitic tuff has a porosity on the order of 30 percent, it has low permeability as a result of a low interconnection of pore spaces and clay alteration. Inflow to the pit from wall rocks will also be limited.

The fine-grained sediments on the west and beneath the pit and the glassy tuff materials on the east are impermeable.

The minor amount of ground water inflow to the pit can probably be handled without difficulty, either by allowing it to stand and evaporate or by small scale pumping during periods of higher inflow. The inflow is not expected to create difficult mining conditions with respect to incidents of major flooding.

Regional Effects

From a regional point of view, the effects of mining on the ground-water system are controlled by the permeability and storage characteristics of the geologic materials surrounding the zeolite deposit. The zeolite deposit, located in volcanic tuffs is part of the extensive Tertiary sediments in the Amargosa Desert. These Tertiary deposits have been shown to be impervious on a regional basis. As such, discernable drawdown effects attributable to the 50 feet of drawdown caused by the mining will extend no more than several hundred feet into the Tertiary sediments surrounding the mine. Beyond that point, the mining operation will not have a discernible effect upon the regional ground-water body. The previously described ground-water regime of Ash Meadows will not be altered or adversely affected by drainage of ground water by the mining operation.

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-12-

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5.0 SOURCES OF INFORMATION

- ANACONDA Copper Company, Geologic Map and Geologic Cross Section, Ash Meadows, Inyo County, California.
- Denny, C.S., and Harold Drewes, 1965, Geology of the Ash Meadows Quadrangle, Nevada-California, Bulletin 1181-L, U.S. Geological Survey, 56 pp.
- Mifflin, M.D., 1968, Delineation of Ground-Water Flow Systems in Nevada, Technical Report Series H-W, Publ. No. 4, Desert Research Institute, Center for Water Resources Research, Reno, Nevada.
- Waff, R.L., G.B. Maxey, and R.F. Kaufmann, 1974, Interbasin Ground-Water Flow in Southern Nevada, Report 20, Nevada Bureau of Mines and Geology, Mackay School of Mines, University of Nevada, Reno, 28 pp.
- Walter, G.E., and T.E. Eakin, 1963, Geology and Ground Water of Amargosa Desert, Nevada-California, Ground-Water Resources-Reconnaissance Series, Report 14, U.S. Geological Survey, 45 pp.
- Winograd, I.J., and W. Thordarson, 1975, Hydrogeologic and Hydrochemical Framework, South-Central Great Basin, Nevada-California, with Special Reference to the Nevada Test Site, Professional Paper 712-C, U.S. Geological Survey, 126 pp.

Reclamation Cost Estimate - Details

Ash Meadows, LLC

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Description	Location	Acres	Based on Sloped Working Area (sq.ft.)		Depth (ft)	Distance (ft)	LCY	Work Req'd		Equipment Type	Eqpt Hrs.	Eqpt \$/hr	Operator \$/hr	Supervisor \$/hr	Labor \$	Equipment \$	Mat'l \$	Total \$
West Waste Rock Dump	West side of mine	2.6	189,884.0		1.0	0.0	7,032.7	Re-slope/Grade/Scarify		Dozer	32.6	\$206.78	\$25.00	\$45.00	\$2,279	\$6,733		\$9,012
East Waste Rock Dump & Dike	East side of mine	6.6	146,206.0		1.0	0.0	5,415.0	Re-slope/Grade/Scarify		Dozer	25.1	\$206.78	\$25.00	\$45.00	\$1,755	\$5,184		\$6,939
Main Entrance	East side of entrance	1.3	29,312.0		1.0	0.0	1,085.6	Re-slope/Grade/Scarify		Dozer	5.0	\$206.78	\$25.00	\$45.00	\$352	\$1,039		\$1,391
Topsoil Stockpile	Southwest side of mine	4.4	72,146.0		1.0	0.0	2,672.1	Re-slope/Grade/Scarify		Dozer	12.4	\$206.78	\$25.00	\$45.00	\$866	\$2,558		\$3,424
North Pit	Roads & Flat Areas ONLY	1.6	69,920.0		0.5	0.0	1,294.8	Rip/Scarify		Dozer	6.0	\$206.78	\$25.00	\$45.00	\$420	\$1,240		\$1,659
Southeast Pit	Roads & Flat Areas ONLY	3.1	44,247.0		0.5	0.0	819.4	Rip/Scarify		Dozer	3.8	\$206.78	\$25.00	\$45.00	\$266	\$784		\$1,050
Southwest Pit	Roads & Flat Areas ONLY	3.3	95,001.0		0.5	0.0	1,759.3	Rip/Scarify		Dozer	8.1	\$206.78	\$25.00	\$45.00	\$570	\$1,684		\$2,254
Old Anaconda Decline	Roads & Flat Areas ONLY	1.2	10,883.0		0.5	0.0	201.5	Rip/Scarify		Dozer	0.9	\$206.78	\$25.00	\$45.00	\$65	\$193		\$258
All Flat Areas, Roads, etc.	Southwest, North & Internal Roads, Dumps & Pads	2.2	95,832.0		0.5	0.0	1,774.7	Rip/Scarify		Dozer	8.2	\$206.78	\$25.00	\$45.00	\$575	\$1,699		\$2,274
Total Disturbance		26.3						Total			102.1				\$7,148	\$21,114		\$28,261

D8Dozer Re-slope, Grade & Scarify LCY/Hr 22.055 LCY Required

Production Capacity 400
Operator Efficiency 0.75
Mat'l - Loose Stockpile 1.20
Visibility 0.80
Job Effic. @ 45 min-hr 0.75

Adjusted Production 216

Operating Cost Estimate \$/hr

D8Dozer w/Water Truck

Fuel Consumption (gals/hr) 8.5

Fuel Cost \$25.50
FOG \$0.63
Undercarriage \$7.65
Dozer & Water Truck w/Water Rental Rate \$173.00

Total Hourly Oper. Cost \$206.78

Based on Sloped Working Area (sq ft)													
Growth Medium Placement													
Description	Location	Acres	Depth (ft)	Distance (ft)	LCY	Work Rec'd	Equipment Type	Loader Hrs.	Dozer Hrs.	Loader \$/hr	Dozer \$/hr	Operator \$/hr	Supervisor \$/hr
West Waste Rock Dump	West side of mine	2.6	189,884.0	1.0	0.0	7,032.7	Dozer, Loader	40.4	32.6	\$64.04	\$206.78	\$25.00	\$45.00
East Waste Rock Dump & Dike	East side of mine	6.6	149,206.0	1.0	0.0	5,415.0	Load, Haul, Place & Grade	31.1	25.1	\$64.04	\$206.78	\$25.00	\$45.00
Main Entrance	East side of entrance	1.3	29,312.0	1.0	0.0	1,065.6	Load, Haul, Place & Grade	6.2	5.0	\$64.04	\$206.78	\$25.00	\$45.00
Topsail Stockpile	Southwest side of mine	4.4	72,146.0	1.0	0.0	2,672.1	Load, Haul, Place & Grade	15.4	12.4	\$64.04	\$206.78	\$25.00	\$45.00
North Pit	Roads & Flat Areas ONLY	1.6	69,920.0	0.5	0.0	1,294.8	Load, Haul, Place & Grade	7.4	6.0	\$64.04	\$206.78	\$25.00	\$45.00
Southeast Pit	Roads & Flat Areas ONLY	3.1	44,247.0	0.5	0.0	819.4	Load, Haul, Place & Grade	4.7	3.8	\$64.04	\$206.78	\$25.00	\$45.00
Southwest Pit	Roads & Flat Areas ONLY	3.3	95,001.0	0.5	0.0	1,759.3	Load, Haul, Place & Grade	10.1	8.1	\$64.04	\$206.78	\$25.00	\$45.00
Old Anaconda Decline	Roads & Flat Areas ONLY	1.2	10,883.0	0.5	0.0	201.5	Load, Haul, Place & Grade	1.2	0.9	\$64.04	\$206.78	\$25.00	\$45.00
All Flat Areas, Roads, etc.	Southwest, North & Internal Roads, Dumps & Pads	2.2	85,832.0	0.5	0.0	1,774.7	Load, Haul, Place & Grade	10.2	8.2	\$64.04	\$206.78	\$25.00	\$45.00
Total Disturbance		26.3						126.8					
Operating Cost Estimate													
Total													
\$11,432 \$29,266 \$3,272 \$40,668													

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Operating Cost Estimate													
Loader Load Growth Medium													
LCY/Hr	LCY Required	Loader	Fuel Consumption (gal/hr)	4.5									
Production Capacity	322												
Operator Efficiency	0.75												
Matt'l - Loose Stockpile	1.20												
Visibility	0.80												
Job Effic. @ 45 min/hr	0.75												
Adjusted Production	173.9												
Total Hourly \$84.04													
Dozer Growth Medium Placement													
LCY/Hr	LCY Required	D8 Dozer w/Water Truck	Fuel Consumption (gal/hr)	8.5									
Production Capacity	400												
Operator Efficiency	0.75												
Matt'l - Loose Stockpile	1.20												
Visibility	0.80												
Job Effic. @ 45 min/hr	0.75												
Adjusted Production	216.0												
Total Hourly \$206.78													

Seed Mix Cost Table

<u>\$/lb</u>	<u>Name</u>	<u>lbs/acre PLS</u>	<u>Comments</u>	<u>Cost/Acre \$/Acre</u>
\$9.00	Fourwing Saltbush	8.0		\$72.00
\$4.00	Indian Ricegrass	4.0		\$16.00
\$35.00	Globemellow	1.0		\$35.00
\$60.00	Desert Marigold	1.0		\$60.00
\$50.00	Blackbrush	0.5	Total for all	\$25.00
\$15.00	Nevada Ephedra	3.0	species in	\$45.00
\$50.00	Spiny Hopsage	0.5	this selection	\$25.00
\$45.00	Wyoming Bigsage	0.5	should equal	\$22.50
\$80.00	Flat-top Buckwheat	0.5	12 lbs/acre	\$40.00
\$10.00	Desert Saltbush	4.0		\$40.00
\$28.00	Bursage	3.0		\$84.00
		<u>12.0</u>		<u>\$281.50</u>
		26.0		\$464.50

Note: All prices based on quotes received on June 21, 2005
from Comstock Seed; Gardnerville, NV
775-746-3681 (phone) 775-746-1701 (fax)

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JUN-21-2005 09:16 AM ASH MEADOWS, LLC

775 764 0990

P.81

TO: JENNY
 FROM: Glenn Holley
 DATE: June 21, 2005
 SUBJECT: WOOD BOND QUOTE FOR 30 ACRES
 From: Rebecca Lange

Glenn Holley
 Ash Meadows, LLC
 775-764-0990

BLM
 515-5059
 FAX 515-5023

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Estimates

2005

PLS 4B

\$9.00

\$4.00

\$35.00

\$6.00

\$50.00

\$15.00

\$50.00

\$45.00

\$80.00

\$10.00

\$28.00

TABLE 2 PROPOSED RECLAMATION SEED MIX		
SPECIES	DRILLED	BROADCAST
<i>Artemisia tridentata</i>	4	8
<i>Eurotia lanata</i>	8	8
<i>Oryzopsis hymenoides</i>	2	4
<i>Sphaeralcea ambigua</i>	5	1
<i>Baileya multiradiata</i>	5	1
At least three of the following species to be chosen after final seed price		
<i>Eurotia lanata</i>	6	12
<i>Coleogyne ramosissima</i>	Total for all species chosen in this selection	
<i>Ephedra nevadensis</i>		
<i>Grayia sphacelata</i>		
<i>Artemisia tridentata</i>		
<i>Ergonum fasciculatum</i>		
<i>Atriplex polycarpa</i>		

pounds per acre, PLS

Bureau of Land Management

351471271 DRS

May 18, 1998

Bureau of Land Management
Environmental Assessment

2-24

Are there other grasses at the site? If you know any
 seed, let us know to add it.

COMSTOCK SEED

817 HIGHWAY 89
 GARDNERVILLE, NV 89455

CASHMAN



Cashman Equipment

3101 East Craig Road
North Las Vegas, Nevada 89030
800.937.2326 tel
702.633.4699 fax



Ash Meadow LLC

March 11, 2005

Attn: Glen Holly

Fax: (775) 764-0990

Seth Hendrickson

Cell: (702) 328-0332

Office: (702) 566-4240

Equipment	Daily	Weekly	Monthly
D8 Dozer	1,280	5,120	14,465
330 Excavator	660	2,640	7,920
Thumb Attachment **	105	420	1,260
Extra Bucket	25	100	300

** When Thumb Attachment is being used only 42" & 48" Buckets are available, Additional buckets may be sent out with unit if smaller bucket is desired at times. Please call for more info. Thanks

1. Rental rates based on an 8-hour day, 40 hour workweek, and 160 hour work month (4 weeks).
2. Use in excess of one shift will be payable at the hourly rate of 1/16th of the daily charge, 1/80th of the weekly charge, and 1/320th of the monthly charge.
3. E.P.P. (Equipment Protection Plan) Charged 10 % of the rental amount unless certificate of insurance is provided.
4. Equipment should be returned full of fuel and original condition upon delivery.
5. Transport costs apply to all equipment delivered or picked up.

Tiger Teeth Costs

1. Part # 135-9408 Tip J400 T/S Tiger Tooth. \$ 66.14 each
 - Buckets use 3-5 teeth depending on size.
2. Part # 116-7408 Pin GET \$ 6.90 each
 - Pins are generally replaced each time with tooth.
3. Part # 116-7408 Retainer AS \$ 9.06 each
 - Retainers are generally replaced each time with teeth.

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DEC-23-2004 01:50 PM

FOR: ASH MEADOWS, LLC

775 764 0990

SEND

DATE	START	RECEIVER	PAGES	TIME	NOTE
DEC-23	01:50 PM	8009557561	0	12"	COM.E-7

JUNE 6, 2005

FLAT AREAS IN PIT ...

N. PIT

2135 BENCH = 4,410 ft² ✓
2140 BENCH = 22,500 ft² ✓
RAMP 2200-2140 = (680 x 20) = 13,600 ft² ✓
2200 BENCH = 29,410 ft² ✓
69,920 ft²
1.605 ACRES

SE PIT

2140 BENCH = 2,864 ft² ✓
2200 N-E ACCESS = (38 x 404) = 13,352 ft² ✓
RAMP 2175-2140 = (20 x 404) = 8,080 ft² ✓
" 2200-2180 WEST = (30 x 269) = 8,070 ft² ✓
" 2200-2180 EAST = (30 x 208) = 6,240 ft² ✓
2180 SHELF (SW) = 5,641 ft² ✓
44,247
1.016 ACRES

SW PIT

2180 BENCH = 66,107 ft² ✓
RAMP 2197-2180 = (20 x 222) = 4,440 ft² ✓
" 2198-2180 = (22 x 223) = 4,906 ft² ✓
" 2180-2140 = (20 x 378) = 7,560 ft² ✓
" 2140-2130 = (20 x 100) = 2,000 ft² ✓
2130 BENCH = 2263 ft² ✓
2140 BENCH = 7725 ft² ✓
95,001
2.1809 ACRES

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"OLD" ANACONDA DECLINE = 10,883 ft² ✓

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DEC-21-2004 07:22 AM

FOR: ASH MEADOWS, LLC

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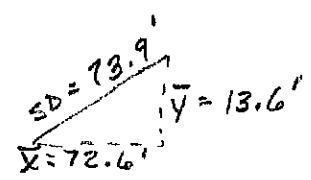
SUBSTITUTE RX

DATE	START	SENDER	PAGES	TIME	NOTE
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OLD ACCESS & WEST OF LARGE T/S S/P = 29,312 ft² ✓

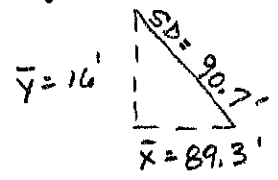
WEST WASTE DUMP -

WEST SLOPE:
5.3:1



$\times 1065 LF = 78,704 ft^2 \checkmark$

EAST SLOPE:
5.6:1

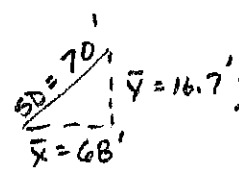


$\times 1065 LF = 96,596 ft^2 \checkmark$

FLAT AREAS ON TOP = 14,584 ft² ✓

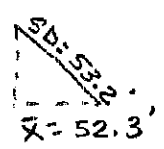
EAST WASTE DUMP -

N-W SLOPE:
4.1:1



$\times 268 LF = 18,760 ft^2 \checkmark$

N-E SLOPE:
5.2:1



$\times 268 LF = 14,258 ft^2 \checkmark$

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DEC-20-2004 09:41 AM

FOR: ASH MEADOWS, LLC

775 764 0990

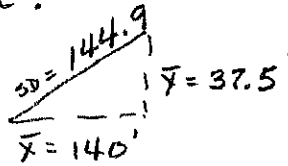
RECEIVE

DATE	START	SENDER	PAGES	TIME	NOTE
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EAST WASTE Dump (CON'T) -

WEST SloPE:

3.7:1



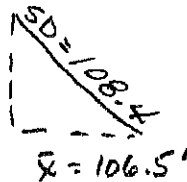
$$X \ 210 \ LF = 30,429 \ ft^2 \checkmark$$

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EAST SloPE:

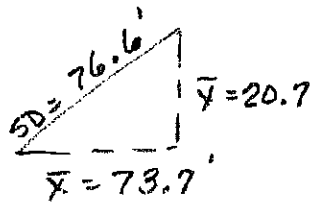
y-bar = 20'



$$X \ 210 \ LF = 22,764 \ ft^2 \checkmark$$

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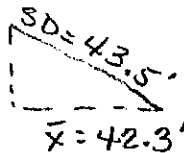
S-W SloPE:



$$X \ 294 \ LF = 22,520 \ ft^2 \checkmark$$

S-E SloPE:

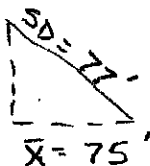
y-bar = 10'



$$X \ 294 \ LF = 12,789 \ ft^2 \checkmark$$

South SloPE:

y-bar = 17.5'



$$X \ 104 \ LF = 8,008 \ ft^2 \checkmark$$

$$11. \ 1.78 \ ft^2 \checkmark$$

pg 2 of 7

TRANSACTION REPORT

DEC-22-2004 01:15 PM

FOR: ASH MEADOWS, LLC

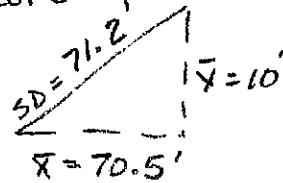
775 764 0990

RECEIVE

DATE	START	SENDER	PAGES	TIME	NOTE
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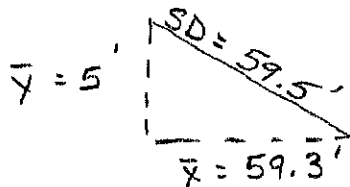
S-W T/s S/P -

WEST SLOPE:
7.0:1



$$X \ 552 \ LF = 39,302 \ ft^2 \checkmark$$

EAST SLOPE:
11.9:1



$$X \ 552 \ LF = 32,844 \ ft^2 \checkmark$$

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Mineralogical Report (Typical)
and
Material Safety Data Sheet (MSDS)

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August 25, 2005
Lab no. 205477

Received by
DEPARTMENT OF CONSERVATION

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Office of Mine Reclamation

Mr. Glenn Holley
Ash Meadows Zeolite, LLC
HCR 70, Box 7006
Amargosa Valley, Nevada 89020

Dear Mr. Holley:

Enclosed are the x-ray fluorescence (XRF) and x-ray diffraction (XRD) analytical results for eight samples received August 16.

A representative split of each sample was ground to approximately -400 mesh in a steel swing mill and then analyzed by our standard XRF procedure for 31 major, minor and trace elements. The relative precision/accuracy for this procedure is ~5-10% for major-minor elements and ~10-15% for trace elements (those elements listed in ppm) at levels greater than twice the detection limit in samples of average geologic composition. A replicate sample and a standard reference material ("SY3", a CANMET standard rock) were analyzed with the samples to demonstrate analytical reproducibility for your samples and analytical accuracy for a geologic standard, respectively. The accepted ("known") values for the quality control standard are listed with the XRF results.

A representative portion of each ground sample was packed into a well-type plastic holder and then scanned with the diffractometer over the range, $3-61^{\circ} 2\theta$ using $\text{Cu-K}\alpha$ radiation. The samples were also prepared as oriented mounts by drawing a mixture of distilled water and sample onto a filter and rolling the deposited material onto a glass disk. The oriented mounts were scanned over the range, $2-30^{\circ} 2\theta$; treated with glycol and then re-scanned over the range, $2-22^{\circ}$. Analysis of oriented mounts aids in the identification of clay minerals. Mineral concentrations were estimated using our XRF-determined elemental compositions, the relative peak heights/areas on the XRD scans and comparison to XRD data for clinoptilolite standards. Some of these samples appear to contain "amorphous" (noncrystalline) material. Amorphous material appears only as a broad elevation in the background of the XRD scan so its composition cannot be determined and the estimate of its concentration must be considered an "educated guess" based on the difference between the total mineral concentration and 100%. The detection limit for an average mineral in these samples is ~1-3% and the analytical reproducibility is approximately equal to the square root of the amount. "Unidentified" accounts for that portion of the XRD scan which could not be resolved and a "?" indicates doubt in both mineral identification and amount.

Thank you for the opportunity to be of continuing service to Ash Meadows.

Sincerely,

Peggy Dalheim

Ident							Wt %						
	Na ₂ O	MgO	Al ₂ O ₃	SiO ₂	P ₂ O ₅	S	Cl	K ₂ O	CaO	TiO ₂	MnO	Fe ₂ O ₃	BaO
1	3.54	0.55	11.1	69.2	<0.05	<0.05	<0.02	4.16	1.19	0.10	0.05	0.89	0.03
2	3.55	0.51	11.0	69.4	<0.05	<0.05	<0.02	4.18	0.84	0.10	0.03	0.90	0.02
3	3.45	0.58	10.9	67.8	<0.05	<0.05	<0.02	4.16	1.68	0.10	0.03	0.89	0.03
4	3.50	0.49	11.0	69.2	<0.05	<0.05	<0.02	4.18	0.74	0.10	0.03	0.89	0.03
4	3.56	0.59	10.9	67.9	<0.05	<0.05	<0.02	4.10	1.21	0.11	0.04	0.94	0.03
6	3.41	0.87	10.9	67.9	<0.05	<0.05	<0.02	4.13	1.43	0.12	0.03	1.08	0.05
7	3.41	1.17	11.0	67.7	<0.05	<0.05	<0.02	4.17	1.48	0.13	0.03	1.13	0.06
8	3.33	1.16	10.8	66.6	<0.05	<0.05	<0.02	4.12	1.46	0.13	0.03	1.13	0.06
Quality Control - Replicate (R) sample and standard reference material (SY3) analyzed with samples													
1(R)	3.49	0.54	10.7	68.1	<0.05	<0.05	<0.02	4.09	1.17	0.10	0.05	0.88	0.03
SY3-XRF	4.06	2.32	11.3	57.6	0.70	<0.05	<0.02	4.00	8.02	0.13	0.31	6.45	0.04
SY3-known	4.15	2.67	11.8	59.7	0.54	0.05	0.0147	4.20	8.26	0.15	0.32	6.45	0.05

Ident	PPM												
	V	Cr	Co	Ni	W	Cu	Zn	As	Sn	Pb	Mo	Sr	U
1	<10	<10	<10	<10	<10	26	18	<20	<50	36	<10	407	10
2	<10	<10	<10	<10	<10	<10	15	<20	<50	28	<10	378	20
3	<10	<10	<10	<10	<10	<10	13	<20	<50	28	<10	419	18
4	<10	<10	<10	<10	<10	<10	13	<20	<50	30	<10	381	<10
4	10	<10	<10	<10	<10	<10	14	<20	<50	34	<10	379	17
6	10	<10	<10	<10	<10	<10	16	<20	<50	27	<10	453	14
7	14	<10	<10	<10	<10	<10	18	<20	<50	30	<10	408	<10
8	11	<10	<10	<10	<10	<10	17	<20	<50	30	<10	395	15
Quality Control													
1(R)	<10	<10	<10	<10	<10	25	17	<20	<50	35	<10	393	<10
SY3-XRF	46	<10	19	<10	48	18	288	<20	<50	114	<10	284	558
SY3-known	51	10	12	11	--	16	250	20	--	130	--	306	650

Analysis Performed By The Mineral Lab, Inc

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Ident	-----		PPM	-----	
	Th	Nb	Zr	Rb	Y
1	20	13	88	121	21
2	18	14	90	123	17
3	33	14	90	118	20
4	22	14	91	129	15
4	26	12	85	113	22
6	27	12	91	130	18
7	16	12	88	121	18
8	20	12	91	118	16
Quality Control					
1(R)	20	14	84	123	20
SY3-XRF	922	155	379	198	715
SY3-known	990	145	320	208	740

----- Sample Labels -----	
Ident	
1	HEU 0608050850-001
2	HEU 0608050408-003
3	HEU 0613050408-004
4	HEU 0808050408-005
5	HEU 0809052035-001 (Composite #1 - #6)
6	HG -50 East Silo (06-08-05)
7	Protech Sample #1
8	Protech Sample #2
1(R)	HEU 0608050850-001

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Office of Mine Reclamation

August 25, 2005
Lab no. 205477

	Samples received August 16	
	"Sample Index"	
8x50	4+3	4+B
		4+B
		4+B
		Approx. Wt %
H2O 90.86 g 8/9/05 20X35	6-08-05 BEST SLO	POLYESTER SAMPLE #1
	SD	POLYESTER SAMPLE #2

August 25,
Lab no. 20

[illegible]



Material Safety Data Sheet

Revised December 23, 2003 Rev. B

Section 1 - Product Identification

Trade Names: Ash Meadows Clino, Ash Meadows Zeolite, Greenz-n-Teez, Amargosa Green Clino, Ash Meadows Clinoptilolite, Death Valley Junction Clinoptilolite, Death Valley Junction Clino, 1010A, 1010B, AMC 101, AMZ, HGZ-90, Pozzolan, TUFF-SORB, Desert-Dry, Zeo-Pure

Common Names/Synonyms: Clinoptilolite, Clino, Heulandite, Zeolite

Product Use: Fluid Filtration, Absorbent, Adsorbent

Manufacturers Name: Ash Meadows, LLC, a wholly-owned subsidiary of Badger Mining Corporation

Manufacturers Address: P.O. Box 328
409 South Church Street
Berlin, WI 54923

Manufacturers Telephone: 800-932-7263 (7 am - 5 pm Central Time Monday-Friday)
920-361-2388

Manufacturers Fax: 920-361-2826

Emergency Number: 800-932-7263 (7 am - 5 pm Central Time Monday-Friday)
920-361-2388

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Section 2 - Composition and Information on Ingredients

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Chemical Name: Clinoptilolite

CAS Number: 1318-02-1 (All Zeolites - excluding Erionite)
12173-10-3 (Natural Zeolites - excluding Erionite)

Specific Chemical Identity: Hydrated Sodium, Potassium Aluminosilicate
($\text{Na}_3\text{K}_4\text{Ca})(\text{Al}_8\text{Si}_{40}\text{O}_{96}) \cdot 24\text{H}_2\text{O}$)

Exposure Limits in Air:

OSHA PEL (as Inert or Nuisance Dust): 15 mppcf/5 mg/m³ (respirable fraction)
50 mppcf/15 mg/m³ (total dust)

ACGIH TLV (as particles not otherwise specified): 10 mg/m³ (Inhalable particles)
3 mg/m³ (respirable particles)

NOTE: There is no established occupational exposure level for the mineral clinoptilolite. The guidelines for Inert Dust are provided as guidelines.

Composition of Clinoptilolite varies naturally; product typically contains <5% of the following:

Name: Silica, Quartz, SiO₂

CAS Number: 14808 - 60- 7

Exposure Limits in Air:

OSHA - PEL	10 mg/m ³	(8-Hour Time Weighted Average)
ACGIH - TLV	0.05 mg/cubic meter	(8-Hour Time Weighted Average)
NIOSH	0.05 mg/cubic meter	(10-Hour Time Weighted Average, 40-hour work week)

Exposure Limits refer to the respirable fraction

Silica is classified as hazardous under Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.1200).

CAUTION:

Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C it can change to a form of crystalline silica known as trydimite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. Crystalline silica as trydimite and cristobalite are more fibrogenic than crystalline silica as quartz. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half the PEL for crystalline silica (quartz); the ACGIH TLV for crystalline silica as trydimite and cristobalite is one-half the TLV for crystalline silica as quartz.

Section 3 - Hazards Identification

Emergency Overview

Ash Meadows, LLC Clino is a dry pale greenish-yellow granular and powdery solid that has a sand-like appearance, with an earth-like odor. It is not flammable, combustible, or explosive. All potential environmental, health, and safety hazards associated with Clino are associated with the crystalline silica component of shale. A single exposure will not result in serious adverse health effects. Clino is not known to be an environmental hazard.

Potential Health Effects

Inhalation:

- a. Silicosis: Respirable crystalline silica (quartz) can cause chronic silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

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b. Cancer: Crystalline silica (quartz) inhaled from occupational sources in sufficient concentrations is classified as carcinogenic to humans. In its Ninth Annual Report on Carcinogens, the National Toxicology Program (NTP) listed crystalline silica as a known human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to respirable crystalline silica and increased lung cancer rates in workers exposed to crystalline silica dust. The International Agency for Research on Cancer (IARC) has evaluated crystalline silica and determined that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)."

c. Autoimmune Diseases: There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis is associated with the increased incidence of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys.

d. Tuberculosis: Silicosis increases the risk of tuberculosis.

e. Nephrotoxicity: There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis is associated with the increased incidence of kidney diseases, including end stage renal disease.

Eye Contact: Crystalline silica (quartz) may cause abrasion of the cornea. Received by
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Skin Contact: May cause abrasion to skin.

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Ingestion: No known health effect.

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Acute Effects: One form of silicosis, Acute Silicosis, can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

Chronic Effects: The adverse health effects -- lung disease, silicosis, cancer, autoimmune disease, tuberculosis, and nephrotoxicity -- are chronic effects.

Signs and Symptoms of Exposure: There are generally no signs or symptoms of exposure to crystalline silica (quartz). Often, chronic silicosis has no symptoms. The symptoms of chronic silicosis, if present, are shortness of breath, wheezing, cough and sputum production. The symptoms of acute silicosis are the same as those associated with chronic silicosis; additionally, weight loss and fever may also occur. The symptoms of scleroderma include thickening and stiffness of the skin, particularly in the fingers, shortness of breath, difficulty swallowing and joint problems.

Medical Conditions Generally Aggravated by Exposure: The condition of individuals with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.

See Section 11, Toxicological Information, for additional detail on potential adverse health effects.

Section 4 - First Aid Procedures

Inhalation - There is no specific treatment because the health effects associated with silica are chronic. If gross inhalation of silica occurs, remove the person to fresh air, perform artificial respiration as needed, and obtain medical attention as needed.

Eye - Wash the eye with water. If irritation persists, seek medical attention.

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Skin - If abrasion occurs, seek medical attention.

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Ingestion - If large amounts are ingested, seek medical attention.

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Section 5 - Fire Fighting Measures

Flashpoint:	None
Upper/Lower Explosive Limit:	Not Combustible
Autoignition Temperature:	None
Unusual Fire and Explosion Habits:	None
Extinguishing Media:	Compatible with all media; use the medium appropriate to the surrounding fire.
Special Fire Fighting Procedures:	None with respect to this product.
Hazardous Combustion Products:	None

Section 6 - Accidental Release Measures

Wear appropriate personal protective equipment as described in Section 8 of this document. Collect the material using a method which does not produce dust [High-Efficiency Particulate Air (HEPA) vacuum or thoroughly wetting down the product]. Place the product in a covered container appropriate for disposal. Dispose of the product according to federal, state, and local regulations.

Section 7 - Handling and Storage

Do not breathe dust which may be created during the handling of this product. Do not rely on vision to determine whether respirable silica is present in the air, as it may be present without

a visible cloud. Use good housekeeping procedures to prevent the accumulation of silica dust in the workplace. Avoid the creation of respirable dust.

Use adequate ventilation and dust collection equipment. Ensure that the dust collection system is adequate to reduce dust levels to below the appropriate occupational health limit.

In accordance with the U.S. Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (29 CFR 1910.1200, 1915.99, 1917.28, 1918.90, 1926.59, 1928.21), state, and/or local right-to-know laws and regulations, familiarize your employees with this MSDS and the information contained herein. Warn your employees (and your customers in case of resale) of the potential health risks associated with the use of this product and train them in the appropriate use of personal protective equipment and engineering controls which will reduce their risks of exposure.

See also American Society for Testing and Materials (ASTM) standard practice E 1132-99a, "Standard Practice for Health Requirements Relating to Occupational Exposure to Respirable Crystalline Silica."

Crystalline silica is listed by the Governor of the State of California, under Proposition 65, as requiring the following warning: "Detectable amounts of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in this product."

Section 8 - Exposure Controls/Personal Protection

Ventilation: Use local exhaust as required to maintain exposures below the occupational exposure limits; see also ACGIH, Industrial Ventilation - Recommended Practice (latest edition).

Respiratory Protection: Consult with OSHA regulations and NIOSH recommendations to determine the appropriate respiratory protection during use of this product. Use only NIOSH-approved respiratory protection equipment. Avoid breathing dust produced during the use and handling of this product. If the workplace airborne crystalline silica concentration is unknown for a given task, conduct air monitoring to determine the appropriate level of respiratory protection. Consult with a certified industrial hygienist, your insurance risk manager, or the OSHA Consultative Services group for detailed information. Ensure appropriate respirators are worn during and following the task, including clean-up or whenever airborne dust is present, to insure ambient dust levels are below occupational health limits. Provisions should be made for a respiratory protection training program (see 29 CFR 1910.134 -

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Respiratory Protection for minimum program requirements). See also ANSI standard Z88.2 (latest revision) "American National Standard for Respiratory Protection," 29 CFR 1910.134 and 1926.103, and 42 CFR 84.

Gloves: Recommended in situations where abrasion from product may occur

Eye: Use protection as appropriate for the task at hand.

Other: Use protective clothing as appropriate for the work environment.

Section 9 - Physical and Chemical Properties

Appearance:	Dry pale greenish yellow, pale green granules and powder, sand-like appearance
Odor:	Earth-like
Physical State:	Granular Solid
pH:	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density:	Not Applicable
Boiling Point or Range, °F:	None
Melting Point or Range, °F:	Approximately 1920°F
Solubility In Water:	Insoluble
Specific Gravity:	1.5-1.7

Section 10 - Stability and Reactivity

Stability:	Stable
Materials to Avoid:	Strong Oxidizing Agents, such as fluorine, chlorine trifluoride, and oxygen difluoride.
Hazardous Decomposition Products:	Clinoptilolite and silica will dissolve in hydrofluoric acid and produce a corrosive gas - silicon tetrafluoride.
Hazardous Polymerization:	Will not occur

Section 11 - Toxicological Information

For Respirable Silica:

A. SILICOSIS

The major concern is silicosis (lung disease), caused by the inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

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Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to levels above the occupational exposure limits for airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF).

Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease (cor pulmonale) secondary to the lung disease.

Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that the lung lesions appear earlier and the progression is more rapid.

Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

B. CANCER

IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz and cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans (Group 1)*." The IARC evaluation noted that not all industrial circumstances studied evidenced carcinogenicity. The monograph also stated that "[C]arcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997).

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NTP – The National Toxicology Program, in its Ninth Annual Report on Carcinogens, concluded that respirable crystalline silica is known to be a human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to respirable crystalline silica and increased lung cancer rates in workers exposed to crystalline silica dust.

There have been many articles published on the carcinogenicity of crystalline silica, which the reader should consult for additional information; the following are examples of recently published articles: (1) "Crystalline Silica and Lung Cancer: The Problem of Conflicting Evidence", Indoor Built Environ, Volume 8, pp. 121-126 (1998); (2) "Crystalline Silica and the risk of lung cancer on the potteries", Occup. Environ. Med., Volume 55, pp. 779-785 (1998); (3) "Is Silicosis Required for Silica-Associated Lung Cancer?", American Journal of Industrial Medicine, Volume 37, pp. 252- 259 (2000); (4) "Silica, Silicosis, and Lung Cancer: A Risk Assessment", American Journal of Industrial Medicine, Volume 38, pp. 8-18 (2000); (5) "Silica, Silicosis, and Lung Cancer: A Response to a Recent Working Group Report", Journal of Occupational and Environmental Medicine, Volume 42, pp. 704-720 (2000).

C. AUTOIMMUNE DISEASES

There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. For a review of the subject, the following may be consulted: "Occupational Exposure to Crystalline Silica and Autoimmune Disease", Environmental Health Perspectives, Volume 107, Supplement 5, pp. 793-802 (1999); "Occupational Scleroderma", Current Opinion in Rheumatology, Volume 11, pp. 490-494 (1999); "Connective tissue disease and silicosis", Am J Ind Med, Volume 35, pp. 375-381 (1999).

D. TUBERCULOSIS

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational Lung Disorders, Third Edition, Chapter 12, entitled "Silicosis and Related Diseases", Parkes, W. Raymond (1994); "Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners," Occup Environ Med., Volume 55, pp.496-502 (1998); "Occupational risk factors for developing tuberculosis", Am J Ind Med, Volume 30, pp. 148-154 (1996).

E. KIDNEY DISEASE

There is evidence that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis is associated with the increased incidence of kidney diseases, including end stage renal disease. For additional information on the subject, the following may be consulted:

"Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000); "End stage renal disease among ceramic workers exposed to silica", Occup Environ Med, Volume 56, pp. 559-561 (1999); "Kidney disease and arthritis in a cohort study of workers exposed to silica", Epidemiology, Volume 12, pp. 405-412 (2001).

Section 12 - Ecological Information

Clino and crystalline silica are not known to be ecotoxic.

Section 13 - Disposal Considerations

General: Clino and crystalline silica may be landfilled. Material should be placed in covered containers to minimize generation of airborne dust.

RCRA: Clino and crystalline silica (quartz) are not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

The above information applies to Ash Meadows, LLC Clino only as sold. The product may be contaminated during use, and it is the responsibility of the user to assess the appropriate disposal method in this situation.

Section 14 - Transport Information

Clino and crystalline silica (quartz) are not hazardous materials for purposes of transportation under the U. S. Department of Transportation Table of Hazardous Materials, 49 CFR §172.101.

Section 15 - Regulatory Information

UNITED STATES (FEDERAL AND STATE)

TSCA No.: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.

RCRA: Clinoptilolite and crystalline silica (quartz) are not classified as hazardous wastes under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

CERCLA: Clinoptilolite and crystalline silica (quartz) are not classified as hazardous substances under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

Emergency Planning and Community Right to Know Act: Clinoptilolite and crystalline silica (quartz) are not extremely hazardous substances under Section 302 and are not toxic chemicals subject to the requirements of Section 313.

Clean Air Act: Clinoptilolite and crystalline silica (quartz) mined and processed by Ash Meadows, LLC were not processed with or do not contain any Class I or Class II ozone depleting substances.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

NTP: Respirable crystalline silica (quartz) is classified as a known human carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

California Proposition 65: Crystalline silica (quartz) is classified as a substance known to the state of California to be a carcinogen.

CANADA

Domestic Substances List: Ash Meadows, LLC products, as naturally occurring substances, are on the Canadian DSL.

WHMIS Classification: D-2A

OTHER

EINECS No.: 231-545-4 (for silica)

EEC Label (Risk/Safety Phrases): R 48/20, R 40/20, S22, S38 (for silica)

IARC: Crystalline silica (quartz) is classified in IARC Group 1.

National, state, provincial or local emergency planning, community right to know or other laws, regulations or ordinances may be applicable--consult applicable national, state, provincial or local laws.

Section 16 - Other Information

An electronic version of this MSDS is available at www.badgerminingcorp.com/ashmeadows. More information on the effects of crystalline silica exposure may be obtained from the Occupational Safety and Health Administration (OSHA) (phone number: 1-800-321-OSHA; website: <http://www.osha.gov>) or from the National Institute for Occupational Safety and Health (NIOSH) (phone number: 1-800-35-NIOSH; website: <http://www.cdc.gov/niosh>).

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

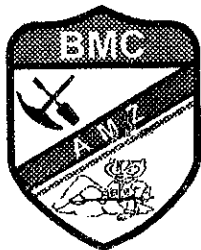
Office of Mine Reclamation

Bureau of Land Management Correspondence

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AUG 06 2007

Office of Mine Reclamation



ASH MEADOWS, LLC.

CORPORATE:

P.O. BOX 328, 409 SOUTH CHURCH STREET,

BERLIN, WISCONSIN 54923

TEL: (920) 381-2388 - FAX: (920) 381-2828

SALES, MARKETING, MINE
& PLANT OPERATIONS:

HCR 70 - BOX 7006, EAST SPRING MEADOWS ROAD,

AMARGOSA VALLEY, NV 89020

TEL: (775) 372-5524 - FAX: (775) 784-0990

November 16, 2006

Mr. Jamie Livingood
Staff Geologist
U.S. Dept. of the Interior
Bureau of Land Management
Barstow Field Office
2601 Barstow Road
Barstow, CA 92311

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

RE: Ash Meadows, LLC
Answers to Oct. 17, 2005
Questions by BLM

Dear Mr. Livingood:

Please find the following response(s) to Ms. Roxie C. Trost's questions in her October 17, 2005 letter. I hope you and Ms. Trost find the responses adequate.

Qtn. 1 - find enclosed a revised page 7 for clarification that all ramps will be built in non-fill material; this replaces the original writing that depicts the ramps will be built in virgin ground, thus causing additional disturbance

Qtn 2 - detailed cross-sections or profiles showing current and post mining topography is enclosed with Drawing No. 3.

Qtn 3 - The diversion dikes are shown on Drawings No. 1 - 3 and reside on the east side of the mine area. These dikes are currently built. Water bars and v-ditches will be constructed within the current disturbance area and are minimal in size (<6" deep). Water bars and v-ditches are used to control meteoric run-off within the pit area.

Qtn 4 - Fencing is shown on Drawings No. 1-3; Due to Federal regulations (MSHA), safety berms must be constructed for all elevated roads, ramps or landings. Therefore safety berms will be constructed on all ramps, dumps and highwalls.



ASH MEADOWS, LLC.

CORPORATE:

P.O. BOX 328, 409 SOUTH CHURCH STREET,
BERLIN, WISCONSIN 54923
TEL: (920) 361-2388 - FAX: (920) 361-2828

SALES, MARKETING, MINE & PLANT OPERATIONS:

HCR 70 - BOX 7008, EAST SPRING MEADOWS ROAD,
AMARGOSA VALLEY, NV 89020
TEL: (775) 372-5524 - FAX: (775) 784-0980

Qtn 5 - Planned disturbance is within the existing disturbed areas. No additional disturbance is required for the "Modified" Plan of Operations.

Qtn 6 - Post mining topo (Drawing No. 3) has been modified and enclosed to indicate majority of the stockpile will be removed.

Qtn 7 - Reclamation of the existing exploration drill holes will be completed before the fall of 2007 so seeding (if necessary) can be completed as well.

The question on whether the Ash Meadows zeolites are of a common variety use can be explained as follows:

The Ash Meadows zeolite (Clinoptilolite) is not of a common variety use. The current markets that Ash Meadows, LLC sells to are as follows:

- Water Filtration; Pools, Spas, Low-Radiation cleanup, Proprietary Water Filtration Projects, etc. (Various product sizes priced up to \$1,800 per ton)
- Ammonia Removal or Odor Control; Dairy Cattle, Poultry composts, Swine, Fish Nurseries, Aquarium, Horse Stalls, etc.; (Various product sizes priced up to \$400 per ton)
- Feed Supplements for Dairy Cattle for Feed Efficiency, reduction in toxic effects of high ammonia (see enclosed Tri-Fold Brochure)

The Ash Meadows Zeolite is well known for its high Cation-Exchange Capacity (CEC) and is highly recommended and used for removal of heavy metals, radioactive materials and ammonia.

I hope this answers all your questions.

Sincerely,

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Glenn Holley
Operations Manager/Engineer

Office of Mine Reclamation

Cc: Inyo County Planning Department
Badger Mining Corporation



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
www.ca.blm.gov/barstow



In Reply Refer To:
CACA 30224
CAMC 2123
3809 (P)
(CA-680.29)

OCT 17 2005

CERTIFIED MAIL 7004 1160 0005 6482 1045
RETURN RECEIPT REQUESTED

Glenn Holley
Ash Meadows, LLC
HCR 70 Box 7006
Amargosa Valley, NV 89020

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Dear Mr. Holley:

Thank you for delivering your modified Plan of Operations (CACA 30224) to this office on September 29, 2005, for the Ash Meadows Zeolite Mine in T.25N., R.9E., sections 9 & 10.

The Plan of Operations does not meet the content requirements of § 3809.401 (b) and therefore is incomplete. The following information is required to consider your plan of operations complete:

1. On page 7 under the Quality Assurance Plan it states, "*All ramp grades will be held to a maximum gradient of 10% and will be constructed in virgin ground only*". This would indicate new surface disturbance, which is inconsistent with other statements in the plan of no new surface disturbance. Please clarify whether ramps will disturb new areas or not.
2. Please provide detailed cross sections or profiles showing current and post mining of the zeolite pits and waste stockpiles.
3. Indicate on a map the location of diversion dikes, water bars, and or v-ditches proposed in the Plan for flood control.
4. Indicate on a map the location of fencing, safety berms, dumps, and dikes that are proposed to discourage the public.
5. It is not clear where the disturbance boundary is located on the modified mine plan map (Map #2). Please submit an USGS 7.5 minute topographic map that clearly delineates the current and proposed disturbances.
6. *The Post Mining Topo (Drawing No. 3)* indicates that there will still be a relatively large growth medium stockpile in the southwest portion of the mine site. Please revise to

indicate that a majority of the stockpile will be removed from this location, as it will be spread out throughout the mine.

7. A reclamation schedule for the existing exploration drill holes.

It is the opinion of the BLM staff geologists that the use of zeolites as a lightweight aggregate is a common variety use and would require a sales contract with this office. Common variety minerals must be purchased under the 1947 Materials Act, codified at 43 CFR 3600. In order to extract minerals from post-July 23, 1955 mining claims, the mineral materials must be an uncommon variety. Uncommon varieties must meet the following criteria as set forth in *McClarty v. Secretary of the Interior*, 408 F2d 907, 908 (9th Cir 1969):

- a. There must be a comparison of the mineral deposit in question with other deposits of such minerals generally;
- b. The mineral deposit in question must have a unique property;
- c. The unique property must give the deposit a distinct and special value;
- d. If the special value is for uses to which ordinary varieties of the mineral are put, the deposit must have some distinct and special value for such use;
- e. The distinct and special value must be reflected by the higher price that the material commands in the market place or by reduced cost or overhead so that the profit to the claimant would be substantially more.

If you feel you can show that the zeolite is not a common variety, please inform this office of 1) the unique property or special value, 2) specifications for the proposed uses, and 3) evidence that the subject rock is marketable for the proposed uses.

If you wish to purchase the material, you may do so under the regulations found at 43 CFR 3600, which would require the relinquishment of the claims. However, if you believe the material to be of uncommon variety, please inform this office which of the following options, as provided in 43 CFR 3809.101, you choose.

1. The BLM will suspend consideration of the Plan of Operations pending the outcome of a mineral examination or contest proceedings. The BLM will allow the performance of any operations that are necessary (including assessment work) for timely compliance with requirements of Federal and State laws.
2. The BLM will continue with processing the Plan of Operations provided the operator is willing to establish an escrow account for the appraised value of mineral removed. You must make regular payments to the escrow account in a manner similar to payments under 43 CFR 3610. The moneys in the escrow account will be disbursed to the operator or to the U.S. Treasury based on the final determination on whether the mineral is locatable or salable.

If the zeolite is found to be a common variety as a result of a mineral examination and hearing, any subsequent production and contract will be by competitive bidding.

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DEPARTMENT OF CONSERVATION

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Office of Mine Reclamation

Please be advised that you must not begin operations until BLM approves the modified plan operations and you provide the financial guarantee required at 43 CFR §3809.551.

If you have any questions please contact Jamie Livingood, staff Geologist, at (760) 252-6029.

Sincerely,

Roxie C. Trost

Roxie C. Trost
Field Manager

cc : Inyo County Planning Department
Planning Department P.O. Drawer "L"
Independence, CA 93526

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AUG 06 2007
Office of Mine Reclamation



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
www.ca.blm.gov/barstow



In Reply Refer To:
CACA 30224
CAMC 2123
3809 (P)
(CA-680.29)

JUN 15 2005

CERTIFIED MAIL 7003 1010 0004 5129 7394
RETURN RECEIPT REQUESTED

Attn: Glenn Holley
Ash Meadows, LLC
HCR 70 Box 7006
Amargosa Valley, NV 89020

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Dear Mr. Holley:

On April 21, 2005, you hand delivered a modified plan of operations for the Ash Meadows Zeolite Mine located in T.25N., R.6E., sections 9 & 10 to BLM staff geologist Jamie Livingood. This modification is in response to a certified letter from this office dated October 29, 2004, which stated, among other things, the requirement to submit a plan modification, and that the current disturbance at the mine has exceeded the authorized disturbed area according to the original plan of operations (CACA 30224) approved by this office on July 21, 1981.

The modified plan of operations does not meet the content requirements of § 3809.401 (b) and therefore is incomplete. The following information is required to consider your plan of operations complete:

1. It is not clear where the disturbance boundary is located on the modified mine plan map (Map #2). Please submit an USGS 7.5 minute topographic map that clearly delineates the current and proposed disturbances.
2. The reclamation plan calls for growth media salvage. Please indicate on your modified mine plan map where the growth media will be stockpiled. If it is your intention to leave a berm around the project site at conclusion of operations, the use of growth medium is not permitted for this purpose. This material will be distributed throughout the project site (where feasible) in order to promote re-vegetation.
3. The reclamation plan states that "concurrent reclamation of disturbed areas where possible"; however, in the proposed action description you stated that you intend to develop ore mining faces and benches for the north, southeast, and southwest open pit areas. Please submit detailed drawings showing what areas you consider reclaimed, where new disturbances or pits, if any, will occur, and clearly delineate present and future locations for waste piles.

4. Provide an estimated number of truck trips, to include passenger vehicles, per day and per year from the mine site. Describe type and sizes of mine equipment to be used to remove ore from mine. Is any processing/screening proposed at the mine site?
5. Please provide quantities of diesel fuel and hydraulic oil to be stored on site. Storage of petroleum products exceeding 1320 gallons in aboveground tanks or containers may be subject to the Aboveground Petroleum Storage Act. Please contact the Victorville Branch Office of the Water Quality Control Board located at 15428 Civic Dr., Suite 100 Victorville, CA 92392 for their review. You can also reach them by calling (760) 241-6583.
6. During our joint field visit on December 7, 2004, you indicated that drainage control might be needed on the south-southeast portion of the project. If needed, please describe and indicate on a map, as well as on the ground, where drainage control will be needed.
7. Page 25 of the modified plan states that "all non-salable material from the process plant will be returned to the mine site and used as backfill in the appropriate pit area". Please describe how the ore is processed at the plant, to include any chemicals or substances introduced during processing. Also please contact the Victorville Branch Office of the Water Quality Control Board located at 15428 Civic Dr., Suite 100 Victorville, CA 92392 to allow for their review of this proposed action. You can also reach them by calling (760) 241-6583.
8. On several occasions, the plan modification refers to *Drawing No. 3* for post mining and reclamation efforts. Please submit this map as it was not included.
9. Please provide a detailed cross section with the same scale as the map with descriptions of the proposed mine operations. In the mine plan modification, it is estimated that the water table will be encountered at 90 feet below ground surface. Please describe in detail your proposal to manage ground water if encountered.
10. The plan does not address current reclamation standards such as topsoil handling or for drill hole plugging (metal casings on southern end of project) in accordance with 43 CFR §3809.401 (b)(3)(vi) and (i) respectively. Please refer to 43 CFR §3809.401 for a complete description of information required by this office.
11. Indicate how you will eradicate and control tamarisk growing in the blocked drainages.
12. As mentioned in a letter to you from this office dated October 29, 2004, the original plan of operations was approved for a 25 acre phased mine plan. BLM staff members, using a GPS unit, determined that the current disturbed area is now 26.3 acres. Please review the current financial assurance and adjust it to reflect current and proposed disturbance. See the enclosed Reclamation Cost Estimation Summary Sheet and Surface Management Financial Guarantee Requirements to assist you.

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DEPARTMENT OF CONSERVATION

AUG 06 2007

Within 30 days of receipt of this letter, please provide this office with a schedule for submitting your complete plan modification and financial assurance estimate. If you would like to schedule a meeting at the site, or if you have any questions in general, please contact staff geologist, Jamie Livingood, at (760) 252-6029.

Sincerely,


for Roxie C. Trost
Field Manager

Enclosure

Example Reclamation Cost Estimation Summary Sheet

cc w/o attachments:

Inyo County Planning Department
Planning Department P.O. Drawer "L"
Independence, CA 93526

Water Quality Control Board
Attn: Hisam Baqai
15428 Civic Dr. Suite 100
Victorville, CA 92392

Received by
DEPARTMENT OF CONSERVATION
AUG 06 2007
Office of Mine Reclamation

RECLAMATION COST ESTIMATION SUMMARY SHEET

This cost estimation summary sheet is provided to assist the operator and BLM in calculating the reclamation cost estimate. The summary sheet is designed to accompany the Reclamation Cost Checklist. The summary sheet is not all inclusive nor is it required.

Notice [] Plan of Operations []

BLM Case-file No. _____

Project Name: _____

Enter those values in the cost estimate that are appropriate to this project. All reclamation costs are to be calculated as third party contracts. This summary sheet is to be accompanied by a worksheet describing how each itemized cost was calculated.

A. EARTHWORK/RECONTOURING

ITEM	LABOR ¹	EQUIPMENT	MATERIALS	TOTAL
1. Roads	\$ _____	\$ _____	\$ _____	\$ _____
2. Drill Site(s)	\$ _____	\$ _____	\$ _____	\$ _____
3. Drill Hole Abandonment ²	\$ _____	\$ _____	\$ _____	\$ _____
4. Pits/Adits/Trenches	\$ _____	\$ _____	\$ _____	\$ _____
5. Process Ponds	\$ _____	\$ _____	\$ _____	\$ _____
6. Heaps	\$ _____	\$ _____	\$ _____	\$ _____
7. Dumps (Waste & Landfill)	\$ _____	\$ _____	\$ _____	\$ _____
8. Tailings	\$ _____	\$ _____	\$ _____	\$ _____
9. Structure & Building Areas	\$ _____	\$ _____	\$ _____	\$ _____
10. Storage & Equipment Areas	\$ _____	\$ _____	\$ _____	\$ _____
11. Drainage Control	\$ _____	\$ _____	\$ _____	\$ _____
12. Mobilization/Demobilization	\$ _____	\$ _____	\$ _____	\$ _____
13. Miscellaneous ³	\$ _____	\$ _____	\$ _____	\$ _____
SUBTOTAL	\$ _____	\$ _____	\$ _____	\$ _____

B. REVEGETATION/STABILIZATION

ITEM	LABOR ¹	EQUIPMENT	MATERIALS	TOTAL
1. Roads	\$ _____	\$ _____	\$ _____	\$ _____
2. Drill Site(s)	\$ _____	\$ _____	\$ _____	\$ _____
3. Pits/Adits/Trenches	\$ _____	\$ _____	\$ _____	\$ _____
4. Process Ponds	\$ _____	\$ _____	\$ _____	\$ _____
5. Heaps	\$ _____	\$ _____	\$ _____	\$ _____
6. Dumps (Waste & Landfill)	\$ _____	\$ _____	\$ _____	\$ _____
7. Tailings	\$ _____	\$ _____	\$ _____	\$ _____
8. Structure & Building Areas	\$ _____	\$ _____	\$ _____	\$ _____
9. Storage & Equipment Areas	\$ _____	\$ _____	\$ _____	\$ _____
10. Drainage Control	\$ _____	\$ _____	\$ _____	\$ _____
11. Monitoring	\$ _____	\$ _____	\$ _____	\$ _____
12. Miscellaneous ³	\$ _____	\$ _____	\$ _____	\$ _____
SUBTOTAL	\$ _____	\$ _____	\$ _____	\$ _____

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DEPARTMENT OF CONSERVATION

ATTACHMENT 2-1

AUG 06 2007

Office of Mine Reclamation

C. DETOXIFICATION/WATER TREATMENT/DISPOSAL OF WASTES

<u>ITEM</u>	<u>LABOR¹</u>	<u>EQUIPMENT</u>	<u>MATERIALS</u>	<u>TOTAL</u>
1. Process Ponds/Sludge	\$ _____	\$ _____	\$ _____	\$ _____
2. Heaps	\$ _____	\$ _____	\$ _____	\$ _____
3. Dumps (Waste & Landfill)	\$ _____	\$ _____	\$ _____	\$ _____
4. Tailings	\$ _____	\$ _____	\$ _____	\$ _____
5. Surplus Water Disposal	\$ _____	\$ _____	\$ _____	\$ _____
6. Fluid Management ⁴	\$ _____	\$ _____	\$ _____	\$ _____
7. Monitoring	\$ _____	\$ _____	\$ _____	\$ _____
8. Miscellaneous ³	\$ _____	\$ _____	\$ _____	\$ _____
SUBTOTAL	\$ _____	\$ _____	\$ _____	\$ _____

D. STRUCTURE, EQUIPMENT AND FACILITY REMOVAL	<u>LABOR¹</u>	<u>EQUIPMENT</u>	<u>MATERIALS</u>	<u>TOTAL</u>
	\$ _____	\$ _____	\$ _____	\$ _____

E. HAZARDOUS MATERIALS⁵	<u>LABOR¹</u>	<u>EQUIPMENT</u>	<u>MATERIALS</u>	<u>TOTAL</u>
	\$ _____	\$ _____	\$ _____	\$ _____

F. MITIGATION⁶	<u>LABOR¹</u>	<u>EQUIPMENT</u>	<u>MATERIALS</u>	<u>TOTAL</u>
	\$ _____	\$ _____	\$ _____	\$ _____

G. SUBTOTAL – OPERATIONAL & MAINTENANCE COSTS (A through F)	\$ _____	\$ _____	\$ _____	\$ _____
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H. ADMINISTRATIVE COSTS

1. Engineering, Design and Construction (ED&C) Plan ⁷	\$ _____
2. Contingency ⁸	\$ _____
3. Insurance ⁹ (On Site Liability)	\$ _____
4. Bond ¹⁰ (Performance and Payment)	\$ _____
5. Contractor Profit ¹¹	\$ _____
6. BLM Contract Administration ¹²	\$ _____
7. BLM Indirect Cost ¹³	\$ _____
SUBTOTAL	\$ _____

I. GRAND TOTAL (G and H)	\$ _____
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Attach sources/information used in cost estimate (examples: Caterpillar Performance Handbook, contractor's estimate, BLM state office procurement analyst, etc.).

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DEPARTMENT OF CONSERVATION

AUG 06 2007

ATTACHMENT 2-2

Office of Mine Reclamation

RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

1. Federal construction contracts require Davis-Bacon wage rates for contracts over \$2,000. Wage rate estimates may include base pay, payroll loading, overhead and profit. To avoid double counting of any of the identified administrative costs the operator must itemize the components of their labor cost estimates or provide BLM with a signed statement, under penalty of USC 1001, that identifies what specific administrative costs are included in the quoted hourly rate.
2. The reclamation cost estimate must include the estimated plugging cost of at least one drill hole for each active drill rig in the project area. Where the submitted Notice or approved Plan of Operations calls for drill holes to be plugged, but doesn't specifically require the drill holes be plugged before the drill rig has been moved from the drill pad, the reclamation cost estimate must include the plugging cost for those drill holes. For all drill holes and wells scheduled to be left open, the estimated plugging cost must be included in the reclamation cost estimate. Where the approved Plan of Operations proposes immediate mining through an area where the drilling is to occur, and the cost of the post-mining reclamation is included in the reclamation cost estimate, the cost estimate does not need to include the plugging costs for those drill holes.
3. Miscellaneous items should be itemized on accompanying worksheets.
4. Fluid management should be calculated only when mineral processing activities are involved. Fluid management represents the costs of maintaining proper fluid management to prevent overflow of solution ponds through premature cessation or abandonment of operations. Calculate a minimum six month direct cost estimate which includes power, supplies, equipment, labor and maintenance.
5. Handling of hazardous materials includes the cost of decontaminating, neutralizing, disposing, treating and/or isolating all hazardous materials used, produced, or stored on the site.
6. Any mitigation measures required in the Plan of Operations must be included in the reclamation cost estimate. Mitigation may include measures to avoid, minimize, rectify and reduce or eliminate the impact, or compensate for the impact.
7. Engineering, design and construction (ED&C) plans are often necessary to provide details on the reclamation needed to contract for the required work. To estimate the cost to develop an ED&C plan use 4-8% of the O&M cost. Calculate the ED&C cost as a percentage of the O&M cost as follows: up to and including \$1 million, use 8%; over \$1 million to \$25 million, use 6%; and over \$25 million, use 4%. Inclusion of a line item for the development of an ED&C plan may not be necessary for small operations, such as notice-level exploration. With small, uncomplicated reclamation efforts contracting may be able to proceed without developing an ED&C plan.
8. A contingency cost is included in the reclamation cost estimation to cover unforeseen cost elements. Calculate the contingency cost as a percentage of the O&M cost as follows: up to and including \$500,000, use 10%; over \$500,000 to \$5 million, use 8%; over \$5 million to \$50 million, use 6%; and greater than \$50 million, use 4%. As with the ED&C cost, inclusion of a contingency cost may not be necessary for small operations, such as notice-level exploration.
9. Insurance premiums are calculated at 1.5% of the total labor costs. Enter the premium amount if liability insurance is not included in the itemized unit costs.
10. Federal construction contracts exceeding \$100,000 require both a performance and a payment bond (Miller Act, 40 USC 270et seq.). Each bond premium is figured at 1.5% of the O&M cost. Enter the sum of both premium costs on this line.
11. For Federal construction contracts, use 10% of estimated O&M cost for the contractor's profit.
12. To estimate the contract administration cost, use 6 to 10% of the operational and maintenance (O&M) cost. Calculate the contract administration cost as a percentage of the O&M cost as follows: up to and including \$1 million, use 10%; over \$1 million to \$25 million, use 8%; and greater than \$25 million use 6%.
13. BLM's indirect cost rate is 21% of BLM's contract administration costs.

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DEPARTMENT OF CONSERVATION

AUG 8 6 2007

Office of Mine Reclamation

ATTACHMENT 2-3

RECLAMATION COST CHECKLIST

This checklist is provided to assist the operator and BLM in calculating the engineering and environmental costs required to properly stabilize and reclaim the area disturbed by mineral exploration and/or mining operations. The checklist is designed to accompany the Reclamation Cost Estimation Summary Sheet. It is not all inclusive nor is it required, but is intended to serve as a reminder of issues that should be considered.

Access roads and drill pads

1. Mobilization and demobilization.
2. Recontouring or regrading to approximate the original topography as closely as possible.
3. Removal of culverts.
4. Ripping or scarifying the surface.
5. Water diversion construction.
6. Restoration or stabilization of drainage areas or stream beds.
7. Revegetation.

Drill hole and well abandonment

1. Mobilization and demobilization.
2. Plugging, capping, and segregation of drill holes from the ground water system.
3. Drill-hole and well (water, monitoring and piezometer) abandonment must meet all applicable Federal and State standards.

Trenches, pits, shafts, and adits

1. Mobilization and demobilization.
2. Recontouring or regrading to approximate the original topography as closely as possible.
3. Revegetation.
4. Securing portals from public entry.

Waste rock dumps, overburden, and interburden storage areas

1. Encapsulation, mixing or other engineered placement method in controlling acid rock drainage (ARD) migration.
2. Recontouring and regrading to approximate the surrounding topography as closely as possible to enhance stability, reduce susceptibility to erosion, and facilitate efforts to establish vegetation.
3. Diversion of run-on.
4. Covering with rock, clay, topsoil, other growth medium or other cover material.
5. Revegetation.

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DEPARTMENT OF CONSERVATION

ATTACHMENT 3-1

AUG 06 2007

Office of Mine Reclamation

Dams for tailings ponds

1. Covering with rock, clay, topsoil, other growth medium or other cover material.
2. Revegetation.
3. Rendering the dam incapable of storing any mobile fluid in a quantity which could pose a threat to the stability of the dam, or to public safety.
4. Construction of temporary containment basins and water treatment facilities for leakage or outflow of effluent.

Impoundment for tailings

1. Regrading to promote run-off and reduce infiltration.
2. Covering with waste rock, clay, topsoil, other growth medium or other cover material.
3. Revegetation.
4. Diversion of run-on.
5. Temporary containment basins and water treatment facilities for leakage or outflow of effluent.

Heaps from leaching

1. Cost of maintaining proper fluid management to prevent overflow of solution ponds through premature cessation or abandonment of the operation (six month direct cost estimate for recirculating process fluids). Include the cost of a Process Fluid Inventory, which typically runs from \$15,000 to \$35,000, depending on site complexity.
2. Rinsing, detoxification and neutralization procedures as approved in the notice.
3. Containment and treatment of outflows of residual chemicals or fluids from the heaps, including any disposal of surplus or drain down water. Include all engineering, development and reclamation costs.
4. Diversion of run-on.
5. Regrading to enhance structural stability, promote run-off, reduce infiltration, and control erosion.
6. Covering with waste rock, clay, topsoil, other growth medium or other cover material.
7. Stabilization and revegetation.

Solution ponds, settling ponds, and other non-tailings impoundments

1. Backfilling and grading as approved in the notice.
2. Restoration of the pre-disturbance surface water regime, if appropriate.
3. Proper disposal of process pond sludge.

ATTACHMENT 3-2

Received by
DEPARTMENT OF CONSERVATION

AUG 23 2007

Office of Mine Reclamation

Building foundations, facilities, structures and other equipment

1. Demolition costs to the level of the foundation and burial costs of the demolition debris on site, in conformance with applicable solid waste and hazmat disposal requirements.
2. Salvage operations and sale costs. No provision for salvage value or credit is permitted.
3. Off-site disposal costs of "1" above, in conformance with applicable solid waste disposal and hazmat requirements.
4. Costs of continued use in a manner that is consistent with the proposed post mining land use.

Open pit mines

1. Providing for the public safety.
2. Stabilization of pit walls or rock faces where required for public safety.
3. Construction and maintenance of berms, fences, or other means of restricting public access.
4. Costs associated with the creation and maintenance of a lake for recreation, wildlife enhancement, or other beneficial use.
5. Revegetation.

Underground mines

1. Sealing shafts, adits, portals, and tunnels to prevent access.
2. Construction and maintenance of berms, fences, or other means of restricting access.

Revegetation

1. Application of top soil or other growth medium.
2. Seed bed preparation.
3. Selection of appropriate species of seeds or plants (consult BLM staff specialist).
4. Addition of soil amendments such as fertilizers, mulches, or other compounds to assist in plant growth.
5. Planting or seeding (equipment, personnel, cost of seeds/plants).

Site Maintenance, Monitoring, and Evaluation

1. Any site monitoring costs as required by the BLM.
2. Monitoring well costs for heaps, leach fields, bioreactors and tailings ponds as required by the [insert the requirements mandated by your state's mining and/or environmental regulatory agency].
3. Evaluation to determine whether the revegetation and slope stability meet the criteria established for bond release or project closeout if work is done by BLM contractor.

ATTACHMENT 3-3

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
www.ca.blm.gov/barstow



OCT 29 2004

In Reply Refer To:
CACA 30224
CAMC 2123
3809 (P)
(CA-680.29)

CERTIFIED MAIL 7004 1160 0005 6482 2196
RETURN RECEIPT REQUESTED

Ash Meadows, LLC
HCR 70 Box 7006
Amargosa Valley, NV 89020

Dear Mr. Holley:

On September 30, 2004, BLM staff geologists, Jarnie Livingood and Ken Schulte, conducted a routine compliance inspection of the Ash Meadows Zeolite Mine located in T.25N., R.6E., sections 9 and 10, approximately 5 miles east of Death Valley Junction, CA.

On July 21, 1981, this office approved a 15-year plan of operations submitted by Anaconda Copper Co. This plan included a three phased, 25-acre open pit mine in which zeolite ore would be drilled, blasted, and transported off-site for processing. Concurrent mine reclamation was to occur as areas were mined-out.

The recent inspection shows that 27 acres have been disturbed, exceeding the 25-acres of disturbance originally authorized by this office. It was also determined that the current disturbed area has migrated approximately 400 feet further to the east than what was originally authorized.

Therefore, in order to prevent unauthorized activities and unnecessary or undue degradation, please modify your plan of operations to address the following issues. See enclosed "Suggested Form for Plan of Operations/Notice" for assistance:

1. The original plan of operations approved in 1981 has exceeded its fifteen-year duration. Please modify your plan to show current claimants/claims, operator(s), future mining plans, and duration of operations.
2. The original plan indicated 25 acres would be disturbed. As mentioned above, 27 acres have been disturbed.
3. The pit disturbance has migrated approximately 400 feet to the east of original drawings according to the 1981 mine plan maps.

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DEPARTMENT OF CONSERVATION

AUG 08 2007

Office of Mine Reclamation

4. The plan does not address current reclamation standards such as topsoil handling or for drill hole plugging (metal casings on southern end of project) in accordance with 43 CFR §3809.401 (b)(3)(vi) and (i) respectively. Please refer to 43 CFR §3809.401 for a complete description of information required by this office.
5. The original plan of operations stated concurrent reclamation of mined out areas would occur. Please submit a detailed map that shows reclaimed areas, as well as a schedule for future reclamation. Also, please include where new disturbances will occur, and the future locations of pit expansion, waste piles, and topsoil piles.
6. Indicate how you will eradicate and control tamarisk growing in the blocked drainages.
7. Please indicate whether milling will occur on site, and if so, how the screened material (granules and waste powder) will be managed.
8. The operation currently has a \$35,100.00 financial assurance on file with Inyo County. As this operation has exceeded the authorized 25-acre threshold, please update your financial assurance to reflect this and any other changes. Enclosed is an "Example Reclamation Cost Estimation Summary Sheet" to assist you with your financial assurance estimation.

Within 30 days of receipt of this letter, please provide this office with a schedule for submitting your plan modification. If you would like to schedule a meeting at the site, or if you have any questions in general, please contact staff geologist, Jamie Livingood, at (760) 252-6029.

Sincerely,



Roxie C. Trost
Field Manager

Enclosures-2

1. Suggested Form for Plan of Operations/Notice
2. Example Reclamation Cost Estimation Summary Sheet

cc w/o attachments:

Inyo County Planning Department
Planning Department P.O. Drawer "L"
Independence, CA 93526

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DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation

Meeting with U.S. Dept. of Interior
Bureau of Land Management
California Desert District
Barstow Field Office
(760) 252-6029
Fax: (760) 252-6099

Location: Barstow Field Office
2601 Barstow Road
Barstow, CA 92311

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Date & Time: November 23, 2004 (9:30 a.m.)

Office of Mine Reclamation

Attendance: BLM – Jamie Livingood (Geologist)
Ken Schulte (Geologist)

Ash Meadows, LLC – Glenn Holley

Purpose: To address issues outlined in the October 29, 2004 certified letter from the Bureau of Land Management (BLM) to Ash Meadows, LLC (AM).

Discussion:

Following brief introductions, Glenn Holley, Jamie Livingood and Ken Schulte discussed the certified letter and each item of concern that the BLM had on the Inyo County mine area.

With the aid of a 100 scale topographic map (surveyed in December 2003) and the disturbance table, Glenn explained the areas of disturbance and how they were measured. Ash Meadows' total disturbance to date was calculated to be 26.3 acres. The BLM had field measurements of 27 acres using a GPS.

Glenn explained that the pit(s) have a total disturbance of 9.2 acres, waste dumps (including dikes) have disturbance of 9.2 acres, and the topsoil stockpile has a disturbance of 0.9 acres and the remaining disturbed areas total 7.0 acres. Glenn explained that this disturbance is well below the permitted amount of 25 acres for the open pit(s) and the total 40 acres as shown in the 1981 Plan of Operations.

Ken Schulte disagreed and said the permit allows for 25 acres of total disturbance. Glenn recited the first sentence of the 1981 Plan of Operations that states:

"The project involves the establishment of a 25 acre open pit zeolite mine on a 40 acre site along with required haulage and access roads." This is the

same writing in the Surety Bond signed on July 27, 1999 by Ash Meadows Zeolite, LLC.

Ken said he interprets the sentence to say only 25 acres of total disturbance is permitted.

Jamie Livingood interjected and said that it's more of a concern that Ash Meadows has mined approximately 400' beyond the pit limits that was outlined in the original permit and therefore a modified plan or updated plan needs to be submitted to the BLM.

Glenn presented a drawing of the current mine with the Anaconda phased pit limits. Jamie was correct in that mining has occurred outside the original pit limits on the east side. The drawing shows mining has occurred beyond the original design by 200' on the southern most end and 65' on the northern end for a total of 1.5 acres outside the original pit limits. The original pit limits have a total surface disturbance of 32.3 acres, which does not include access roads, dumps or stockpiles. This acreage is not identified in the 1981 Plan of Operations.

A new Plan of Operations or Modified Plan, reclamation cost estimate and bond will need to be generated based on the existing and planned disturbance. Ash Meadows is also responsible for the 2 miles of primary access. The plan must include claimants, claims, operator, future mining plans, reclamation plan, drill hole plugging and duration of operation.

A brief discussion on the elimination and control of tamarisk that has grown in the blocked drainage on the east side of the diversion dike was held. The BLM uses a special chemical but one must acquire a permit for its use. The other option will be to cut down and maintain.

Jamie Livingood asked where the fines came from and Glenn informed them that the fines were brought back to the pit from the process plant. These fines were placed in the waste dump areas and covered with suitable waste material to reduce the effects of wind erosion. The BLM agreed with this action and asked that we continue with this practice and cover as much of the fines rejects as possible.

Glenn informed the BLM that our fiscal year ends on March 31 of each year and business plans are usually required prior to that date. This is when Glenn proposes a plan or modified plan with new reclamation cost estimates be completed. Jamie and Ken had no problems with this schedule at this time.

A site visit was scheduled for December 7, 2004 at 1:30 pm on the mine site.

Received by
DEPARTMENT OF CONSERVATION

AUG 06 2007

Office of Mine Reclamation



PLANNING COMMISSION

Drawer L • INDEPENDENCE • CALIFORNIA 93526 • (714) 878-2411 (Ext. 318)

August 3, 1979

Mr. R.W. Knostman
Industrial Minerals Department
Anaconda Company
555 Seventeenth Street
Denver, Colorado 80217

RE: CUP #79-18

NOTICE OF DECISION

On August 1, 1979, the Inyo County Planning Commission held a public hearing to consider your Conditional Use Permit application (CUP #79-18). The Commission adopted the Negative Declaration and voted to approve the Conditional Use Permit for the following described project subject to the conditions listed below which incorporate a Reclamation Plan as required by the State Surface Mining and Reclamation Act of 1975.

DESCRIPTION OF PROJECT:

Project involves the establishment of a 25 acre open pit zeolite mine on a 40 acre site. The project site is located five miles east of Death Valley Junction and two miles south of Ash Meadows Road. The project involves a 25 acre open pit mine (500' x 2400' x 100') and eleven (11) acres of waste dumps (total 600,000 tons). The project site is zoned OS-40 (Open Space-40 acres) and is under the jurisdiction of BLM.

CONDITIONS OF APPROVAL:

1. All mining, excavation and waste dump sites shall be restricted and located in substantial conformance with Exhibit A.
2. If a primary crusher is installed at the site evidence shall be submitted to the Planning Department that a "Permit to Operate" has been obtained from the Great Basin Air Pollution Control District.
3. If a mobilehome is to be utilized for watchman it shall be installed under permit and shall be occupied only by an employee of the firm. Said mobilehome shall be licensed annually and be registered in Inyo County.

Attachment B

4. All sanitation and sewage facilities shall be approved by the County Health Department.
5. Upon depletion of the zeolite deposit or upon termination of the mining activity all isolated piles of zeolite and waste rock shall be leveled to conform with the natural terrain.
6. The north waste dump shall be resloped to 1.25 to 1 or flatter and the south waste dump shall be resloped to 1.7 to 1 or flatter within six (6) months after termination of the mining activity.
7. The pit walls shall be recontoured within six (6) months after termination of the mining activity. The final grade shall be approximately 20% as shown on the geologic cross section map (Exhibit C) and the entire pit site shall be graded in substantial conformance with Exhibit B and covered with at least six (6) inches of overburden to the maximum extent possible.
8. All structures, fixtures, containers and other physical objects associated with the mine shall be removed from the area within six (6) months after termination of the mining activity.
9. A surety bond in the amount of twenty thousand dollars (\$20,000) shall be posted in favor of Inyo County in order to insure that the project site shall be reclaimed in accordance with the conditions of this permit.
10. The applicant shall submit a notarized statement to the Planning Department accepting responsibility for reclaiming the mined lands as per conditions specified herein.
11. The County shall reserve the right to periodically inspect the project site with prior notification to the applicant, to determine that the conditions as stated herein are being complied with.
12. This Conditional Use Permit shall be reviewed and the applicant's compliance with conditions of approval evaluated five years from the date of approval. The amount of the surety bond shall also be reviewed and can be adjusted as deemed appropriate.

Attachment B

13. Any expansion of the mining activity beyond that described herein shall require an amendment to the Conditional Use Permit.

Condition #1 references Exhibit "A". Exhibit "A" is the "Preliminary Mine Plan Final Pit-Ash Meadows Property" dated April 1979. Condition #7 references Exhibit "B" and "C". Exhibit "B" is the "Reclaimed Pit Area-Ash Meadows Property" dated April 1979. Exhibit "C" is the "Geologic Cross Section-Looking North-10,060N-Ash Meadows Property" dated January 1979.

In regard to Condition #9 surety bond in the amount of twenty thousand dollars (\$20,000) shall be posted in favor of Inyo County. This surety bond (performance bond) should indicate it is for the reclamation of the project site and specify that the bond is for Conditions 5, 6, 7, and 8 as listed above.

In regard to Condition #10, which requires that a notarized statement be submitted by Anaconda Company to the Planning Department accepting responsibility for reclamation, we have enclosed a statement we wish to have signed and notarized by an authorized representative of Anaconda Company.

Failure to comply with the conditions stated above will result in the proposed use being in violation of the Inyo County Code. Please be advised that, pursuant to the County Code (Section 18.81.140), the proposed use must be..."established or construction necessary and incident to its establishment..." begun within six months of the Commission's conditional approval. This Conditional Use Permit becomes void if this time requirement is not met.

This Conditional Use Permit will become effective fifteen days after the Planning Commission's action. During that time, pursuant to Inyo County Code Section 18.81.270, any concerned person may appeal the decision or any condition of this approval.

If you have any questions regarding the above, please feel free to contact this office.

Sincerely,

Douglas Sherburne
Planning Director

Roger DeHart
Roger DeHart
Associate Planner

ENCL: Reclamation Statement

cc: Assessor's Office

EAST WEST MINERALS, INC.

Head office: 3 Harbor Drive • Suite 103
Sausalito, California 94965
Telephone: (415) 331-8880 • Fax: (415) 331-5937



Permit file.

August 27, 1987

Inyo County Planning Department
Drawer L
Independence, CA 93526

RE: Conditional Use Permit #79-18/East West Minerals, Inc.
(formerly Anaconda Company)

In accordance with the conditions placed on Conditional Use Permit #79-18 originally issued to Anaconda Company, by the Inyo County Planning Commission on August 1, 1979 and as stated in the Notice of Decision dated August 3, 1979, we agree to accept the responsibility for reclaiming the mined lands as stated therein.

Sincerely,

Tony Wicks
President
East West Minerals, Inc.

NOTARY CERTIFICATE

COPIES from TA

Attachment B



PLANNING DEPARTMENT

DRAWER L • INDEPENDENCE • CALIFORNIA 93526

(619) 878-2411 (Ext. 306, 307, 318)

County of
INYO

Roger DeHart
~~TED HILTON~~
Planning Director

April 27, 1987

APR 29 1987

Tony Wickes
East West Minerals, Inc.
3 Harbour Drive, Suite 103
Sausalito, CA 94965

1/8/12/2000

Re: Conditional Use Permit #79-18/Anaconda Company

Dear Mr. Wickes:

It has recently come to our attention that East West Minerals has purchased Anaconda Company's zeolite deposits in the Ash Meadows area of Inyo County in November 1985.

This mining operation was approved by Inyo County in 1979 through Conditional Use Permit #79-18. The transfer of the mining operation by Anaconda to East West Minerals also involves the transfer of the Conditional Use Permit and all of it's conditions of operation.

Enclosed is a copy of the Notice of Decision sent to Anaconda in 1979. The thirteen (13) conditions of approval are still applicable to the project. We wish to bring our files up to date as well as obtaining assurance that the project is still adequately bonded for. Therefore, please submit the following information:

1. Name and address of corporate headquarters for East West Minerals, Inc.
2. Name and address of local contact person for East West Minerals, Inc.
3. Submission of the surety bond in the sum of twenty thousand dollars (\$20,000) in favor of Inyo County. A copy is enclosed. (See Condition #9)
4. Submission of the enclosed agreement to accept the reclamation of the mined lands as per CUP #79-18. A copy is enclosed. (See Condition #10)

1/8/12/2000

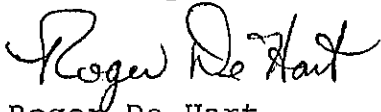
Upon the receipt of the above information ours files will be current.

*Kurtis Kellogg
Inyo County
Inspector*

Page 2

If you have any questions regarding the above please feel free to contact this office.

Sincerely,

A handwritten signature in cursive script that reads "Roger De Hart". The signature is written in dark ink and is positioned above the printed name.

Roger De Hart
Planning Director

cc: 5th District Supervisor (Bremmer)



County of
INYO

PLANNING DEPARTMENT

Drawer L • INDEPENDENCE • CALIFORNIA 93526 • (714) 878-2411 (Ext. 318)

NEGATIVE DECLARATION

PROJECT TITLE: Conditional Use Permit No. 79-18/Anaconda

PROJECT LOCATION:

Project is situated on approximately 40 acres located five miles east of Death Valley Junction and two miles south of Ash Meadows Road (intersection of Sections 9, 10, 15 & 16 of T25N, R6E, SBB & M)

PROJECT DESCRIPTION:

Project involves the establishment of an open-pit zeolite mine. The overburden will be removed and placed in two waste dumps (4 acres and 7 acres in size). The zeolite would be drilled, blasted and stockpiled on the site. It will then be trucked out of the area for processing. Ultimately, the pit will cover 25 acres and be approximately 100 feet in depth. Initially, production will be a few thousand tons per year and could increase to 500,000 to 1,000,000 tons per year by 1988. The project would employ two or three workers at the start.

FINDINGS:

An Initial Study was prepared by the Planning Department which indicated that the proposed project will not have a significant effect on the environment of Inyo County for the following reasons:

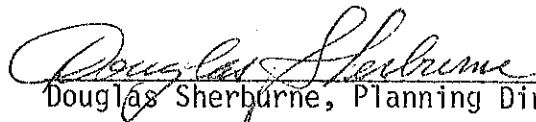
1. The project is situated in a remote and isolated portion of the County which insures that no significant adverse impact upon humans will result.
2. No rare or endangered plants or animals are known to exist in the immediate area of the project. The project site contains sparse vegetation and minimal animal habitat.
3. An archaeological survey has been conducted on the site and no archaeological resources were found.
4. Due to the remote location of the project site no significant adverse visual impacts will occur.
5. A reclamation plan pursuant to the State Surface Mining and Reclamation Act of the 1975 will insure that feasible reclamation measures shall be accomplished to return the site to as natural a condition as possible.

Attachment B

The review period for this Negative Declaration ends July 26, 1979.

ADDITIONAL INFORMATION IS AVAILABLE FROM THE INYO COUNTY PLANNING DEPARTMENT

Date: July 12, 1979


Douglas Sherburne, Planning Director

RDH:dIm

Attachments: Initial Study
Vicinity Map



PLANNING DEPARTMENT

P.O. BOX 37 • INDEPENDENCE • CALIFORNIA 93526 • (714) 878-2411 (Ext. 318)

INITIAL STUDYFOR USE WITH: CLP #79-18 / AnacondaCONCLUSIONS - RECOMMENDED ACTION

The Planning Department recommends the following actions:



The proposed project will not have a significant environmental effect and the issuance of a Draft Negative Declaration is recommended and if adopted shall constitute a negative finding for the mandatory findings required pursuant to Section 15082 of the guidelines.



The proposed project may have a significant effect on the environment but which can be mitigated by the measures described in the Initial Study. These measures are recommended as conditions for the adoption of a Negative Declaration and that if these measures are so incorporated into and made a part of the proposed project, the project shall be found not to have a significant effect on the environment and if adopted shall constitute a Negative Finding for the Mandatory Findings required pursuant to Section 15082 of the Guidelines.



The proposed project may have a significant effect on the environment, this due to the uncertainty resulting from a specific lack of basic information which could affect the finding. This additional information should be provided and analyzed before the Initial Study is completed and a finding made.



The proposed project may have a significant effect on the environment and an Environmental Impact report is required which shall address the issues and concerns identified in the Initial Study. This shall constitute an Affirmative Finding of one or more of the Mandatory Findings of significance pursuant to Section 15082 of the Guidelines.

Douglas Sherburne
Douglas Sherburne
Director of Planning

7/12/79
Date

Attachment B

RECOMMENDED - MANDATORY FINDINGS OF SIGNIFICANCE:

(Required - Section 15082 State Guidelines)

(Yes-No)

- No 1. The project has a potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below selfsustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California History or Pre-History.
- No 2. The project has the potential to achieve short-term environmental goals to the disadvantage of long term environmental goals.
- No 3. The project has possible environmental effects which are individually limited but cumulatively considerable. As used in the subsection, "Cumulatively Considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- No 4. The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

BACKGROUND INFORMATION

APPLICANT Anaconda Company
ADDRESS 555 Seventeenth Street PHONE (303) 575-4000
CITY, STATE, ZIP Denver, Colorado 80217

PROJECT LOCATION: Five miles east of Death Valley Junction and
two miles south of Ash Meadows Road, (intersection of Secs.
9, 10, 15 & 16 of T25N, R6E, S8M). ASSESSOR'S PARCEL NO. - - -
NEAREST INTERSECTION/LANDMARK: Death Valley Junction

Attachment B

PROJECT DESCRIPTION: Project involves the establishment of an open-pit zeolite mine. The project site will consist of a 25 acre open pit mine and two waste dumps totalling 11 acres. Production initially would be intermittent consisting of a few thousand tons per year and may reach 500,000 to 1,000,000 tons near the end of the mining operation (10 yrs). No processing will occur on the site.

PRESENT LAND USE/ACTIVITY OF PROJECT SITE: Vacant - mineral exploring (trenches & drilling)

PRESENT LAND USES/ACTIVITIES SURROUNDING PROJECT SITE:

NORTH BLM land - Zoned OS-40 - vacant

SOUTH BLM land - Zoned OS-40 - vacant

EAST BLM land - Zoned OS-40 - vacant

WEST BLM land - Zoned OS-40 - vacant

ENVIRONMENTAL DESCRIPTION OF PROJECT SITE: Located at 2200 foot on a alluvial fan sloping west which is dissected by a number of arroyos. Much of the site is covered with desert pavement. Area is in the Lower Sonoran Life Zone. Vegetation is Creosote Bush Community

Attachment B

GENERAL PLAN LAND USE DESIGNATION: Open Space

GENERAL PLAN ELEMENT DESIGNATION: 14-00000-00000

ZONING DISTRICT: OS-40

OTHER ENVIRONMENTAL DOCUMENTS PREPARED BY: Archaeologic Report
by UNLV Museum of Natural History (Feb. 1979)

DEPARTMENTS/AGENCIES/GROUPS CONSULTED: To Be COMMENTS

BLM (Ridgecrest & Bakerfield)

County Road Dept.

Air Pollution Control Dist. (Bishop)

Nye County Planning Dept.

(Attach any written comments)

SUMMARIZE SIGNIFICANT COMMENTS:

[illegible]

EVALUATION OF POTENTIAL SIGNIFICANT EFFECTS

MATRIX KEY:

1. IMPACT: A-ADVERSE; B-BENEFICIAL; N-NO EFFECT2. DEGREE: I-INSIGNIFICANT
S-SIGNIFICANT3. PHASE: C-CONSTRUCTION; O-OPERATION4. LINKAGE: D-DIRECT; I-INDIRECT5. DURATION: S-SHORT TERM; L-LONG TERM6. MITIGATION MEASURES: YES; NO

IMPACT	DEGREE	PHASE	LINKAGE	DURATION	MITIGATION MEASURES
--------	--------	-------	---------	----------	---------------------

RESOURCES-CONDITIONS-PROCESSESIMPACT CHARACTERISTICS

<u>GEOLOGIC</u>							
STABILITY	N						
SEISMIC HAZARDS	N						
SOILS Disturbance of 40 acres of shallow soil	A	I	O	D	L	Yes	stockpiling soil for reuse during reclamation
EROSION Disruption of existing drainage channels	A	I	O	D	L	Yes	rerouting of drainage system around project site
GEOLOGIC RESOURCES Removal of a non-renewable resource.	A	I	O	D	L	No	
<u>BIOTIC</u>							
FLORA Elimination of 40 acres of flora and fauna habitat. Minor	A	I	O	D	L	No	
FAUNA due to sparse nature of vegetation and animal habitat	A	I	O	D	L	No	
ECOLOGICAL	N						
RARE OR ENDANGERED LIFE FORM	N						
BIOTIC USE	N						
<u>ATMOSPHERIC</u>							
AIR QUALITY Dust from mining activity and vehicle operation	A	I	O	D	L	Yes	Compliance with A.P.C.D. regs.
CLIMATE	N						

IMPACT	DEGREE	PHASE	LINKAGE	DURATION	MITIGATION MEASURES
--------	--------	-------	---------	----------	---------------------

RESOURCES - CONDITIONS - PROCESSES

IMPACT CHARACTERISTICS

HYDROLOGIC

FLOODS - FLOODING

N

WATER QUALITY

N

WATER USE

Employee & equipment
usage only.

N

ENERGY AND RESOURCE CONSERVATION

MATERIALS-RESOURCES

N

ENERGY USE

Use of diesel fuel for
mining equipment

A

I

O

D

L

No

ENERGY SOURCE

N

CULTURAL-AESTHETIC RESOURCES

UNIQUE LANDFORMS

N

VISUAL QUALITY-SCENIC RESOURCES

A

I

O

D

L

Yes

Contouring
waste dumps
and revegetation.

PARKS-RECREATION

N

HISTORICAL RESOURCES

N

ARCHAEOLOGICAL RESOURCES

N

archaeological
survey previously
completedSOCIO-ECONOMIC RESOURCES

COMMUNITY CHARACTERISTICS

N

EMPLOYMENT

3-4 employees initially. More
more if market is established

B

I

O

D

L

NA

HOUSING

N

ECONOMY

Goods & Services Addition
to tax base

B

I

O

D

L

NA

Attachment B

	IMPACT	DEGREE	PHASE	LINKAGE	DURATION	MITIGATION MEASURES
RESOURCES - CONDITIONS - PROCESSES						
IMPACT CHARACTERISTICS						
<u>TRANSPORTATION-CIRCULATION</u>						
HIGHWAY-STREET CAPACITY	N					
HIGHWAY-STREET DESIGN	N					
INTERNAL CIRCULATION	N					
AIRPORT-AIR TRANSPORTATION	N					
HIKING-EQUESTRIAN TRAILS	N					
<u>LAND USE PLANNING</u>						
SURROUNDING LAND USES	N					
GENERAL PLAN	N					
ZONING OS-40	N					
<u>SERVICES INFRASTRUCTURE</u>						
WATER SUPPLY	N					
SEWAGE DISPOSAL	N					
FIRE PROTECTION	N					
EDUCATION	N					
ELECTRICAL SERVICE	N					
SOLID WASTE	N					
COMMUNICATIONS	N					

Attachment B

IMPACT

DEGREE

PHASE

LINKAGE

DURATION

MITIGATION
MEASURES

RESOURCES - CONDITIONS - PROCESSES

IMPACT CHARACTERISTICS

PUBLIC SAFETY

ENVIRONMENTAL HEALTH

N

SPILLS-ACCIDENTS

N

FIRE HAZARDS

N

NOISE

HUMAN

Noise during mining activity.
will only affect employees

A

I

O

D

L

No

WILDLIFE

N

DESCRIBE THE POTENTIAL SIGNIFICANT EFFECTS IDENTIFIED ABOVE IN THE MATRIX:

None of the potential effects identified in the Initial Study are considered significant nor are the insignificant effects considered cumulatively significant.

Attachment B

DESCRIBE FEASIBLE MITIGATION MEASURES APPROPRIATE TO REDUCE AND/OR ELIMINATE THE POTENTIAL SIGNIFICANT EFFECTS OR OTHER ADVERSE EFFECTS IDENTIFIED ABOVE:

None

DESCRIBE ANY FEASIBLE ALTERNATIVE USES OR DESIGNS WHICH WOULD APPEAR TO REDUCE AND/OR ELIMINATE THE SIGNIFICANT EFFECTS IDENTIFIED ABOVE:

None

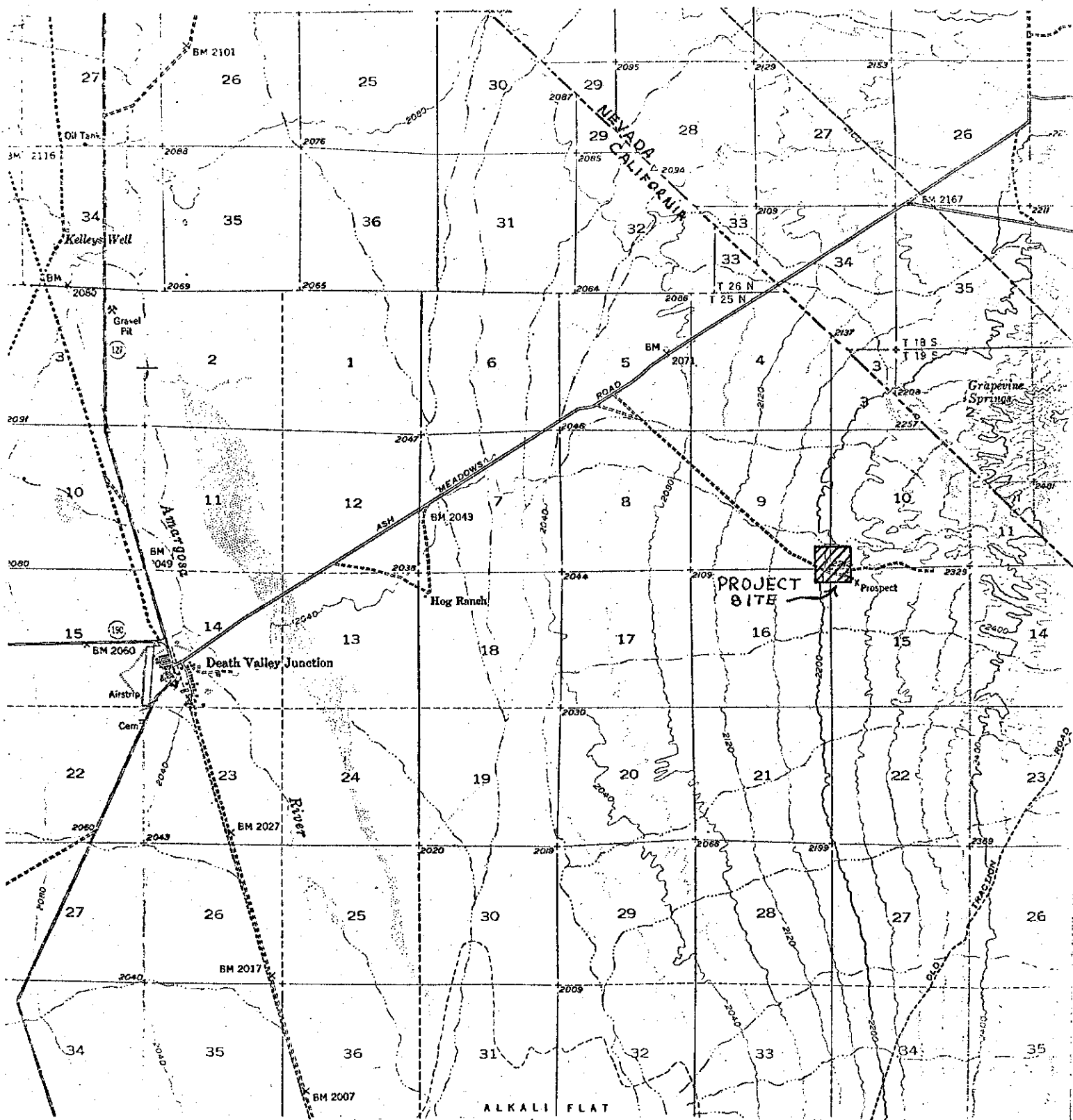
DESCRIBE ANY WAYS IN WHICH THE PROJECT COULD ~~ATTACHMENT B~~ ^{POSTER}, STIMULATE OR REMOVE DEVELOPMENT CONSTRAINTS:

The project which covers approximately 40 acres and will have a life-span of 10 years has the potential of expanding northward and southward. Twaconda has approximately 3000 acres of mining claims in the area (in both Calif. & Nevada) which have the possibility of containing vast additional zeolite deposits.

DESCRIBE ANY SUPPLEMENTAL INFORMATION WHICH WOULD ASSIST IN DETERMINING THE SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT:

None

Attachment B



VICINITY MAP

APPLICATION NO. CUP 79-18

APPLICANT ANACONDA COPPER CO.

GEN. PLAN DES. OPEN-SPACE

REQUEST OPERATE AN OPEN PIT

ZEOLITE MINE USING APPROX.

40 ACRES

EAST OF DEATH VALLEY JUNCTION SCALE 1"=1 MILE

Appendix B

County/City Inyo

SUGGESTED MODEL RECLAMATION PLAN

As a guide to Counties and Cities for Compliance with
Section 2772, Surface Mining and Reclamation Act of 1975

OWNER, OPERATOR, AND AGENT:1. Applicant

Name The Anaconda Copper Company
Address 555 Seventeenth Street:
Denver, Colorado 80217
Telephone 303/575-4000

2. Name (if any) of Mineral Property Ash Meadows3. Property Owners, or owners of surface rights (List all owners).

Name The Anaconda Copper Company - Valid claims on
Address land administered by U.S. BLM
U. S. Government (DOI/BLM)
Telephone

4. Owners of Mineral rights.

Name The Anaconda Copper Company Lode/Placer Claims
Address 555 Seventeenth Street
Denver, Colorado 80217
Telephone 303/575-4000

5. Lessee.

Name N/A
Address
Telephone

6. Operator.

(Mining will be by a contractor to be named at a

Name The Anaconda Copper Company (later date)
Address 555 Seventeenth Street
Denver, Colorado 80217
Telephone 303/575-4000

DO NOT WRITE IN THIS SPACE

7. Agent of Process. (Person designated by operator as his agent for the service of process).

Name The Anaconda Copper Company/CT Corporation System
Address 700 South Flower Street, Suite 1010
Los Angeles, California 90017
Telephone 213/680-1500

Attachment B.

LOCATION:

8. Brief description, including legal, of the extent of the mined lands (to be) involved by this operation, including total acreage.

Portions of
Section(s) 9, 10, 15, Township 25N, Range 6E,
SB Meridian

9. Describe the access route to the operation site.

Graded and oil surfaced 2-lane dirt road

10. Attach Location and Vicinity Map.

Attached.

DESCRIPTION:

11. Mineral commodity (to be) mined: Zeolite (Clinoptilolite)

12. Geologic description, including brief general geologic setting, more detailed geologic description of the mineral deposit (to be) mined, and principal minerals or rock types present. The zeolite deposit is an altered volcanic ash-flow tuff approximately 150 feet thick that has been altered principally to clinoptilolite. The horizon strikes northerly and dips easterly from 5° to 30° and is bounded on the west by a steep fault. The mineable portion of the bed consisting of greater than 80% clinoptilolite ranges up to 500 feet in horizontal dimension, as indicated by surface exposures and drill intersections.

13. Brief description of environmental setting of the site and the surrounding areas. Describe existing area land use, soil, vegetation, ground water elevation and surface water characteristics, average annual rainfall and/or other factors pertaining to environmental impacts and their mitigation and reclamation.

See answers to questions 34 and 35 on Conditional Use Permit Application on Attachments _____

DO NOT WRITE IN THIS SPACE

Attachment B

PROPOSED (EXISTING) SURFACE MINING OPERATION:

14. Proposed starting date of operation Immediate
 Estimated life of Operation 10 years
 Duration of First Phase N/A

15. Operation will be (is): Continuous _____, Seasonal _____,
 Intermittent X

Developed,
 not yet in operation X, Temporarily deactivated _____,
 Stockpile in Mine _____

16. Operation will be :
 Under 5,000 tons cu. yds/yr. _____
 5,000 - 50,000 tons cu. _____ Estimated first 3 years
 50,000 - 250,000 tons X Estimated years 4-5
 250,000 - 1,000,000 tons _____ Estimated years 6-10
 Over 1,000,000 tons cu. yds/yr. _____

17. Total anticipated production

Mineral commodities to be removed -2.8 mil. tons _____
 Waste retained on the site - 600,000 tons _____
 Waste disposed off site - _____ tons (cu. yds.) _____
 Maximum anticipated depth 100 ft.

18. Mining Method: (Check all applicable)

Open Pit	<u>X</u>	Gravel/Sand Pit	_____
Single Bench	_____	Drill and Blast	<u>X</u>
Quarry:			
Hill Top	_____	Clay Pit	_____
Multibench	<u>X</u>	Truck to processing	<u>X</u>
Side Hill	_____	Borrow Pit	_____
Dragline	_____	plant (To RR)	_____
Low Level	_____	Tailings Pond	_____
Shovel	_____	Slurry Pump	_____

Underground	_____	Waste dump	_____ X _____
Gravel bar skimming	_____	Rail	_____
Other	_____	Other	_____

19a. If processing of the ores or minerals mined is planned to be conducted at or adjacent to the site, briefly describe the nature of the processing and explain disposal method of the tailings or waste from processing.

19b. Estimate quantity (gallons per day) and quality of water required by the proposed operation, specifying proposed sources of this water, of method of its conveyance to this property and the quantity and quality and method of disposal of used and/or surplus water.

Human consumption only in future by employees of an Independent Contractor to be engaged by Anaconda.

20. If the nature of the deposit and the mining method used will permit, describe and show the steps or phases of the mining operation that allow concurrent reclamation, and include a proposed time schedule for such concurrent activities.

Not practical because of nature of deposit and multiple bench sequential operation.

21. Attach a map of the mined lands and/or suitable aerial photograph showing:

- (a) Boundaries and topographic details of the site;
- (b) Location of all streams, roads, railroads, water walls, and utility facilities within 500 feet of the site;
- (c) Location of all currently proposed access roads to be constructed in conducting the surface mining operation(s);
- (d) Location of areas (to be) mined, and of waste dumps and tailings ponds.
- (e) By use of overlay symbol or color, depiction of separate mining phases if applicable. (See Item 20).
- (f) The source of map base, orientation (North arrow), and scale (e.g., 1" = 500', etc.) of the map.

See Attachments

RECLAMATION PLAN:

22. Indicate on an overlay of map of Item 20, or by color or symbol on map those areas to be covered by reclamation plan.

Acreage _____ See _____

Attachments _____

DO NOT WRITE IN THIS SPACE

Attachment B

23. Describe the ultimate physical condition of the site and specify proposed use(s), or potential uses, of the mined lands as reclaimed.

See Reclamation Plan Summary

24. Describe relationship of the interim uses other than mining and the ultimate physical condition to:

- (a) Zoning regulations.
- (b) General plan and plan elements.

25. Provide evidence that all owners of a possessory interest in the land have been notified of the proposed use(s) or potential uses identified in Item 22. (Attach copy of notarized statement of acknowledgment, etc.)

Mining Claim

26. Describe soil conditions and proposed soil salvage plan.

See Reclamation Plan Summary

27. Describe the methods, their sequence and timing, to be used in bringing the reclamation of the land to its end state. Indicate on map (Item 21-22) or on diagrams as necessary. Include discussion of the pertinent items listed below.

- (a) Backfilling and grading.
- (b) Stabilization of slopes.
- (c) Stabilization of permanent waste dumps, tailings, etc.
- (d) Rehabilitation of pre-mining drainage.
- (e) Removal, disposal, or utilization of residual equipment, structures, refuse, etc.
- (f) Control of contaminants, especially with regard to surface runoff and ground water.
- (g) Treatment of streambeds and streambanks to control erosion and sedimentation.
- (h) Removal or minimization of residual hazards.
- (i) Resoiling, revegetation with evidence that selected plants can survive given the site's topography, soil and climate.

See Reclamation Plan Summary

28. If applicant has selected a short term phasing of his reclamation, describe in detail the specific reclamation to be accomplished during first phase.

29. Describe how reclamation of this site in this manner may affect future mining at this site and in the surrounding area.

No effect

DO NOT WRITE IN THIS SPACE

Attachment B

RECLAMATION PLAN

ASH MEADOWS - CALIFORNIA

Overburden will be used to construct berms around the pit perimeter. These berms will be contoured to promote natural revegetation and will remain after mining operations cease.

The north mine dump slope will be 1.25 to 1 and the south dump 1.7 to 1. Revegetation with creosote bush will be attempted on finished dump surfaces during operations, but the low precipitation and lack of surface water in the area severely limits revegetation efforts.

The pit walls will be recontoured after permanent cessation of operations. The final grade will be approximately 20% as shown on the geologic cross section map. The finished surface will be covered with at least six inches of overburden, to the extent possible with the small amount of overburden on the deposit, and contoured to promote revegetation. Revegetation will be attempted using methods determined during operations with the help of the U.S. Soils Conservation Services and similar agencies.

Berms will be constructed across pit access roads to discourage unauthorized entry.



RE: Ash Meadows

From Ryan Smith-Standridge <rstandridge@inyocounty.us>

Date Tue 3/31/2026 10:46 AM

To Jeff Garrett <vjefgarrett@hotmail.com>

Jeff,

Thank you for the information regarding the proposed modification to the Plan of Operations for the Ash Meadows Mine.

Based on our review, the addition of on-site processing (crusher, stacker, stockpiling, and associated infrastructure) represents a change to the approved operation that will require a **minor amendment** through Inyo County. This amendment will be processed through a public hearing before the Planning Commission.

As part of this process, you will also need to update the **reclamation plan, FACE**, and complete the appropriate level of **CEQA review** associated with the proposed changes.

To assist with preparing the submittal, the County's Reclamation Plan Content Checklist is provided here:

https://www.inyocounty.us/sites/default/files/2021-09/RP%20Content%20Checklist%20TEMPLATE_2018-04-09.pdf

Given the timing, you may also want to consider whether a **time extension** of the existing approval would be appropriate to process concurrently. So you don't have to.

For reference, a recent example of a similar Planning Commission action (time extension) can be found here:

https://www.inyocounty.us/sites/default/files/2025-10/Staff%20Report%20pc%20ready_3.pdf

Please let me know if you would like to discuss the amendment process or submittal requirements.

Ryan Standridge
Associate Planner/SMARA Coordinator
(760)878-0405



From: Jeff Garrett <vjefgarrett@hotmail.com>

Sent: Tuesday, March 24, 2026 9:26 AM

To: Ryan Smith-Standridge <rstandridge@inyocounty.us>

Subject: Ash Meadows

Ryan

St. Cloud Mining has submitted a minor modification to the BLM for their existing approved 43CFR3809 Plan of Operations, CACA106058510, for the Ash Meadows Mine.

Relevant information is provided below.

What does St. Cloud need to submit to Inyo County and/or the State of California?

Mining will continue as outline in the approved plan.

Historically, operations at the Ash Meadows Mine have been limited to mining of zeolite with processing occurring off-site. St. Cloud is now proposing to include some on-site processing of zeolite.

Conventional equipment including a Sany SY500 Excavator and Sany 405K wheel loader will be used to transport run-of-mine material from the pits to a portable jaw crusher which will crush and size the material. A radial stacker will be used to stockpile the sized material. Sized material will be conveyed into stockpiles by the radial stacker. The material from the stockpiles is then loaded into street-legal 27-ton haul trucks (or similar) for shipment off-site.

A Thurman above ground scale will be installed to weigh trucks hauling the material from the site. The location of the truck scale is shown in Figure 1. The crusher and stacker are portable and may be moved as mining proceeds. Figure 1 shows the crusher/stacker location. Refer to Table 1 for a general list of on-site equipment.

Table 1
Typical Equipment (or equivalent)

Equipment	Number	Purpose
Truck Scale (Thurman above ground scale; includes two 10' concrete ramps, two 10' concrete approaches, and four 3'x12'x1' (in the ground) concrete pads)	1	Weigh trucks
Portable crusher (Nordbreg jaw)	1	Crushes and sizes material
Radial stacker (MARCO 36"x50')	1	Conveys sized material into stockpiles
Sany SY500 Excavator	1	Digging, lifting, and moving materials
Sany 405K wheel loader	1	Digging and hauling excavated materials and loading material into trucks for transportation

Mining and processing will occur on a as needed basis and will take place within the current disturbance footprint.

Portable generator(s) will be used on-site to provide power for the crushing/stacking equipment.

Processing equipment will be permitted with the Great Basin Unified Air Pollution Control District (GBUAPCD) as required.

No fuel or lubricant storage tanks are planned. Hydrocarbons used would be stored on the equipment and fueling of equipment would be done with mobile fuel/lube trucks. Diesel fuel used on the site will comply with California Air Resources Board (CARB) low-sulfur diesel requirements. Spill containment will consist of a plastic sheet raised on the edges, or a containment tub, placed beneath the fueling point and covering the soil. Petroleum lubricants in the form of grease and motor oil would be stored on the drill rig in a sealed box and consist of one case of each product. Less than one gallon of solvent would be on site at any one time and stored with oil and grease.

Should spillage of petroleum-based products occur, it will be collected and placed in a closed bin and transported off-site for proper disposal.

Attachment C

Only minor servicing of mobile equipment (greasing and periodic fueling) would be conducted on BLM administered lands, limiting the potential for diesel fuel spills. Spill response kits would be maintained to ensure that pollutants are prevented from entering into washes. Any pollutants generated by drilling related activities would be properly disposed of in accordance with applicable regulations.

All equipment used for mining, and material processing, operations will be removed from the operational area including mobile equipment (feeders, crushers, conveyor belts, stackers, etc.), and structures (scales, concrete footings and slabs, etc.) will be removed from the Site once mining operations have ceased.



Figure 1 – showing the locations of the truck scale and portable crusher and stacker.
application for modification

Sent from [Outlook](#)

BLM California Desert District
2601 Barstow Road
Barstow, CA 92311
Email: jlivingo@blm.gov
Phone: 760-252-6029

Attachment C

From: Ryan Smith-Standridge <rstandridge@inyocounty.us>
Sent: Wednesday, June 17, 2026 11:05 AM
To: Livingood, Jamie L <jlivingo@blm.gov>
Subject: [EXTERNAL] FW: Ash Meadows

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

FYI – this is what they were told.

Ryan Standridge
Associate Planner/SMARA Coordinator
(760)878-0405



From: Ryan Smith-Standridge
Sent: Tuesday, March 31, 2026 10:46 AM
To: Jeff Garrett <vjeffgarrett@hotmail.com>
Subject: RE: Ash Meadows

Jeff,

Thank you for the information regarding the proposed modification to the Plan of Operations for the Ash Meadows Mine.

Based on our review, the addition of on-site processing (crusher, stacker, stockpiling, and associated infrastructure) represents a change to the approved operation that will require a **minor amendment** through Inyo County. This amendment will be processed through a public hearing before the Planning Commission.

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Attachment C

Ryan Standridge
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(760)878-0405



From: Jeff Garrett <vjeffgarrett@hotmail.com>
Sent: Tuesday, March 24, 2026 9:26 AM
To: Ryan Smith-Standridge <rstandridge@inyocounty.us>
Subject: Ash Meadows

Ryan

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Relevant information is provided below.

What does St. Cloud need to submit to Inyo County and/or the State of California?

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Mining and processing will occur on a as needed basis and will take place within the current disturbance footprint.

Portable generator(s) will be used on-site to provide power for the crushing/stacking equipment.

Processing equipment will be permitted with the Great Basin Unified Air Pollution Control District (GBUAPCD) as required.

No fuel or lubricant storage tanks are planned. Hydrocarbons used would be stored on the equipment and fueling of equipment would be done with mobile fuel/lube trucks. Diesel fuel used on the site will comply with California Air Resources Board (CARB) low-sulfur diesel requirements. Spill containment will consist of a plastic sheet raised on the edges, or a containment tub, placed beneath the fueling point and covering the soil. Petroleum lubricants in the form of grease and motor oil would be stored on the drill rig in a sealed box and consist of one case of each product. Less than one gallon of solvent would be on site at any one time and stored with oil and grease.

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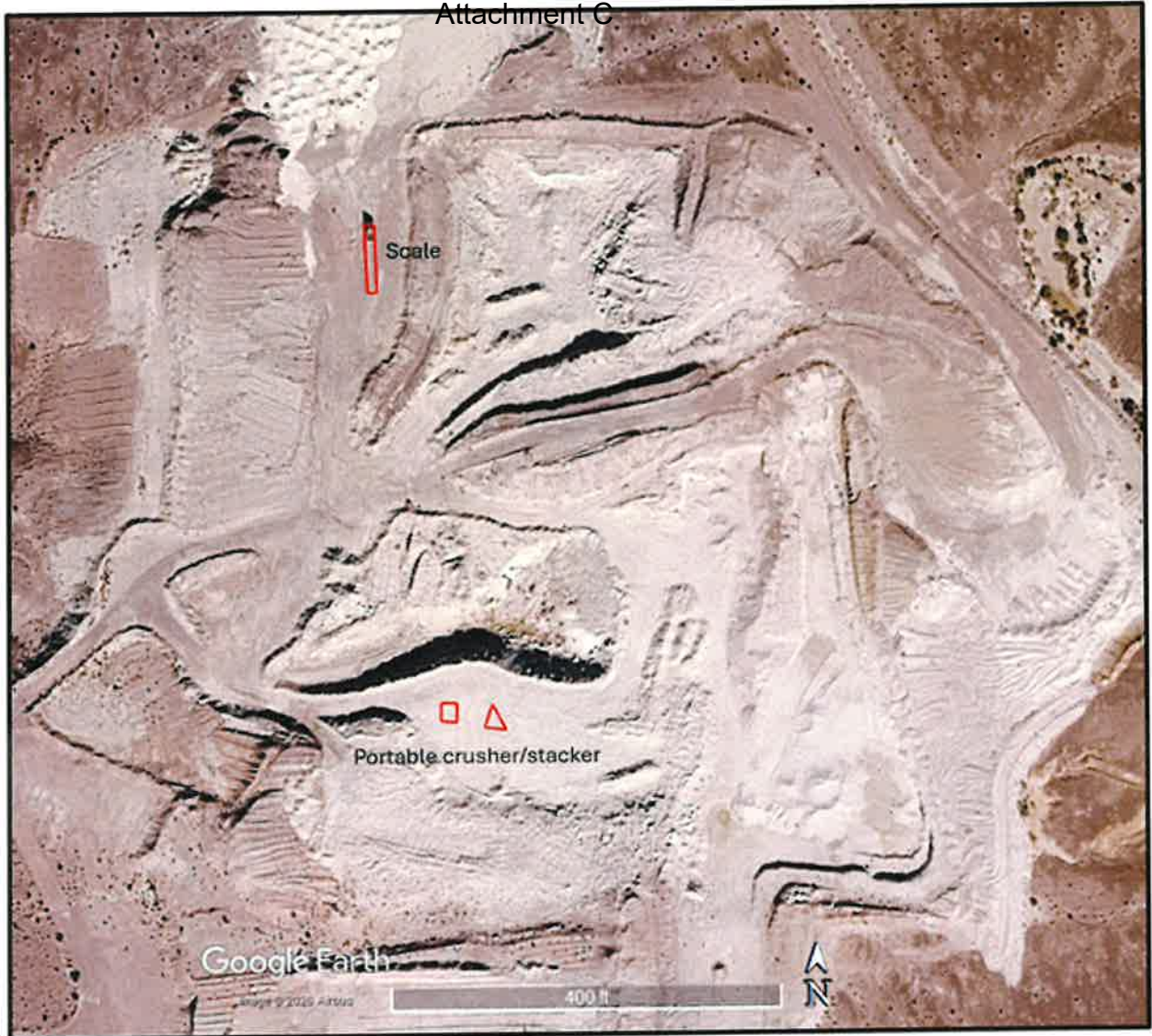
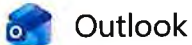


Figure 1 – showing the locations of the truck scale and portable crusher and stacker, application for modification

Sent from [Outlook](#)



Re: [EXTERNAL] FW: Ash Meadows

From Livingood, Jamie L <jlivingo@blm.gov>
Date Wed 6/17/2026 1:34 PM
To Ryan Smith-Standridge <rstandridge@inyocounty.us>

Yes, I'm sending them a noncompliance order for setting up a truck scale & scale house, and a portable crusher prior to their modification being approved. I'll have to look at the original POO to see if it called for an excavator, as they brought in one as well as a [REDACTED] stacker were not in the pit the day of my inspection.

Jamie Livingood, Geologist
U.S. Department of the Interior - Region 8 and 10
BLM California Desert District
2601 Barstow Road
Barstow, CA 92311
Email: jlivingo@blm.gov
Phone: 760-252-6029

From: Ryan Smith-Standridge <rstandridge@inyocounty.us>
Sent: Wednesday, June 17, 2026 12:00 PM
To: Livingood, Jamie L <jlivingo@blm.gov>
Subject: RE: [EXTERNAL] FW: Ash Meadows

Just to confirm you are issuing a NOV to St. Cloud for operating outside of the approved Plan of operation. I will also need to confirm with a site visit and at that site visit after I speak with council I will post a CEASE and Desist order. So I can get the ball rolling will you email me a rundown of you findings so I can start this process here. I am looking at going out Monday.

Ryan Standridge
Associate Planner/SMARA Coordinator
(760)878-0405



From: Livingood, Jamie L <jlivingo@blm.gov>
Sent: Wednesday, June 17, 2026 11:13 AM
To: Ryan Smith-Standridge <rstandridge@inyocounty.us>
Subject: Re: [EXTERNAL] FW: Ash Meadows

Thanks Ryan.

Jamie Livingood, Geologist
U.S. Department of the Interior - Region 8 and 10



Outlook

Ash Meadows

From Jeff Garrett <vjffgarrett@hotmail.com>

Date Tue 3/24/2026 9:25 AM

To Ryan Smith-Standridge <rstandridge@inyocounty.us>

Ryan

St. Cloud Mining has submitted a minor modification to the BLM for their existing approved 43CFR3809 Plan of Operations, CACA106058510, for the Ash Meadows Mine.

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Figure 1 – showing the locations of the truck scale and portable crusher and stacker.
application for modification

Sent from [Outlook](#)



Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

Phone: (760) 878-0263
FAX: (760) 872-2712
E-Mail: Inyoplanning@inyocounty.us

NOTICE OF SMARA VIOLATION

California Surface Mining and Reclamation Act of 1975

(Public Resources Code § 2710 et seq.)

Inyo County Code Chapter 7.70 – Surface Mining and Reclamation

Date: 7/31/2026

Property Owner: USA BUREAU OF LAND MGMT

Operator/Responsible Party: ST. Cloud Mining P.O.Box 196 Winston, NM 87943

Location: T25N, R6E, S9 & S10

APN: 043-130-04

Dear Property Owner and/or Operator:

The County of Inyo ("County"), acting as the Lead Agency under the California Surface Mining and Reclamation Act of 1975 ("SMARA"), Public Resources Code section 2710 et seq., and Inyo County Code Chapter 7.70, has determined that the above-referenced surface mining operation has been modified in a manner that is not consistent with the approved Reclamation Plan and associated County approvals.

The Inyo County Planning Commission approved Reclamation Plan No. 2007-01 on October 24, 2007. The approved Reclamation Plan establishes the mining operation and reclamation activities authorized by the County.

During the operator's exploratory drilling program, the County reviewed the operator's proposed activities and the associated Bureau of Land Management (BLM) Plan of Operations. During that review, the County determined that the approved 2007 Reclamation Plan was not consistent with the proposed Plan of Operations. The operator was advised that the discrepancy between the approved Reclamation Plan and the proposed operation would need to be resolved through the appropriate County review process before the proposed operational changes could be implemented.

In March 2026, the operator's consultant contacted the County regarding the proposed installation of processing equipment, structures, and associated operational improvements. On March 31, 2026, County staff advised the operator that implementation of those improvements would require amendments to the approved Reclamation Plan.

Based upon information presently available to the County, processing equipment, structures, and associated operational improvements have since been installed and/or placed into operation. To date, the County has not received an application to amend Reclamation Plan No. 2007-01, a revised Financial Assurance Cost Estimate (FACE), or a revised Financial Assurance Mechanism (FAM) reflecting the modified operation.

Accordingly, the County has determined that the operation, as presently configured, is not consistent with the approved Reclamation Plan and is therefore not in compliance with SMARA and Inyo County Code Chapter 7.70.

REQUIRED CORRECTIVE ACTIONS

Pursuant to Public Resources Code section 2774.1 and Inyo County Code Chapter 7.70, the operator shall, within thirty (30) calendar days of receipt of this Notice of Violation, notify the County in writing which of the following corrective actions will be undertaken to bring the operation into compliance.

Corrective Action A – Restore the Operation to the Approved Reclamation Plan

The operator shall:

- Immediately cease operation of all processing equipment, structures, utilities, stockpiles, and associated operational improvements that are not authorized under Reclamation Plan No. 2007-01;
- Remove all unauthorized improvements from the site;
- Restore all disturbed areas associated with those improvements to a condition consistent with the approved Reclamation Plan; and
- Notify the County upon completion so that a follow-up inspection may be conducted to verify compliance.

Completion of these actions shall return the operation to the configuration authorized under the approved Reclamation Plan.

Corrective Action B – Amend the Approved Mining Operation

The operator may elect to retain the installed improvements by obtaining all required County approvals.

At a minimum, the operator shall submit:

- An application to amend Reclamation Plan No. 2007-01;
- A revised Financial Assurance Cost Estimate (FACE);
- A revised Financial Assurance Mechanism (FAM) following approval of the FACE;
- Any required land use approvals;
- Any environmental documentation required for the County's review; and
- Any additional technical information requested by the County.

The amended Reclamation Plan shall accurately reflect the mining operation proposed by the operator and shall be consistent with the Bureau of Land Management's approved Plan of Operations. Any changes to the mining operation that differ from the approved Reclamation Plan shall require County review and approval before implementation.

Submission of an application does not constitute approval of the modified operation and does not authorize continued operation of improvements that have not been approved by the County.

CESSATION OF UNAUTHORIZED ACTIVITIES

Until the violations identified in this Notice have been corrected, the operator shall immediately cease operation of processing equipment, structures, and facilities that are not authorized under the approved Reclamation Plan.

FAILURE TO COMPLY

Failure to notify the County of the selected corrective action within thirty (30) calendar days, or failure to complete the required corrective actions within the time specified by the County or a

Stipulated Order to Comply, may result in the issuance of an Order to Comply pursuant to Public Resources Code section 2774.1, referral to the California Department of Conservation, Division of Mine Reclamation, and any additional enforcement remedies authorized under SMARA and Inyo County Code Chapter 7.70.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ryan K. Standridge".

Ryan Smith-Standridge
Associate Planner / SMARA Coordinator
Inyo County Planning Department



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Barstow Field Office

2601 Barstow Road

Barstow, CA 92311

www.blm.gov/office/barstow-field-office

APR 03 2026

In Reply Refer To:
CACA 106005810
(Legacy CACA 30224)
3809 (P)
CA-680-29

Fed Ex Tracking Number: 8162 8336 5899

DECISION

St. Cloud Mining
Attn: Jason Stevens
P.O. Box 196
Winston, NM 89743

:
:
:
:

Surface Management

NONCOMPLIANCE ORDER

A compliance examination of the St. Cloud Mining (SCM) operations under plan of operations (PoO) CACA 106005810 in Sections 9, 10 & 15, Township 25N., Range 6E., San Bernardino Baseline and Meridian, Inyo County, CA, was conducted on June 11, 2026. During the inspection, BLM Geologist, Jamie Livingood noted that a Sany 405K front-end loader, a Sany SY 500 excavator, a truck scale (w/ concrete ramps), a scale house, a jaw crusher, and an electrical panel were within the authorized mine site prior to obtaining authorization from this office.

A review of the Bureau of Land Management (BLM) records indicates the following facts: 1) On February 25, 2026, SCM submitted a PoO modification to add a Sany 405K front-end loader, a Sany SY 500 excavator, a truck scale (w/ concrete ramps), a scale house, a jaw crusher, a radial stacker, a water truck, a generator, and electrical panel. On May 7, 2026, this office sent SCM a certified letter (9589 0710 5270 3637 9655 03) informing you that the PoO modification was complete, however, the BLM cannot approve the modification before completing the environmental review required under the National Environmental Policy Act, or other applicable requirements under 43 CFR 3809.411(a)(3).

Based on our inspections and records, SCM's activity is unauthorized and is in violation of the Federal Land Policy and Management Act (FLPMA). Specifically, SCM is in violation of the following regulations:

1. Causing unnecessary or undue degradation by failing to comply with the terms and conditions of an approved plan of operations. 43 CFR §3809.5,
2. Beginning any operations, other than casual use, before you receive an approved plan of operations. 43 CFR §3809.605(b),

INTERIOR REGIONS 8 & 10 • LOWER COLORADO BASIN & CALIFORNIA-GREAT BASIN

ARIZONA, CALIFORNIA, NEVADA, OREGON*

* PARTIAL

3. Conducting any operations outside the scope of your notice or approved plan of operations. *43 CFR §3809.605(c)*,
4. Beginning operations prior to providing a financial guarantee that meets the requirements of this subpart. *43 CFR §3809.605(d)*.

Under authority of 43 CFR §3809.601(a), SCM is ordered, within 30 days from receipt of this order to:

1. Update the Financial Assurance Cost Estimate (FACE) and provide an adequate financial assurance mechanism with the State and the BLM to address removal and remediation of the unauthorized equipment and facilities on-site. *43 CFR 3809.580(a)*.
2. Cease using the Sany SY 500 excavator, jaw crusher radial stacker, truck scale, generator and electrical panel until your plan modification is approved by this office. The front-end loader use is permitted as a similar loader is authorized in the approved PoO.

If SCM does not comply within 30 days of receipt or notification of this order, the BLM may take further action against you pursuant to 43 CFR §3809.601(b) and issue a Suspension Order for all or part of the SCM operation. Additionally, action could be taken under 43 CFR §3809.604 or §3809.700:

§3809.604(a): If you do not comply with a BLM order issued under §§ 3809.601 or 3809.602, the Department of the Interior may request the United States Attorney to institute a civil action in United States District Court for an injunction or order to enforce its order, prevent you from conducting operations on the public lands in violation of this subpart, and collect damages resulting from unlawful acts. This relief may be in addition to the enforcement actions described in §§ 3809.601 and 3809.602 and the penalties described in §3809.700

§3809.700(a): Individuals. If you knowingly and willfully violate the requirements of this subpart, you may be subject to arrest and trial under section 303(a) of FLPMA (43 U.S.C. 1733(a)). If you are convicted, you will be subject to a fine of not more than \$100,000 or the alternative fine provided for in the applicable provisions of 18 U.S.C. 3571, or imprisonment not to exceed 12 months, or both, for each offense; and

§3809.700(b): Organizations. If an organization or corporation knowingly and willfully violates the requirements of this subpart, it is subject to trial and, if convicted, will be subject to a fine of not more than \$200,000, or the alternative fine provided for in the applicable provisions of 18 U.S.C. 3571.

Appeal of a Decision under 43 CFR Subpart 3809

If you are adversely affected by this decision, you may request State Director review of this decision. If you request State Director review, the request must be received in the BLM California State Office: at BLM California State Director, 2800 Cottage Way suite W-1622, Sacramento, CA 95825 no later than 30 calendar days after you receive or are notified of this decision. The request for State Director review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director review is pending unless you request and

obtain a stay from the State Director. If you request a stay with the State Director, you have the burden of proof to demonstrate that a stay should be granted using the standards and procedures for obtaining a stay from the Interior Board of Land Appeals (IBLA).

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the IBLA. You may contact the BLM California State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with the Interior Board of Land Appeals (IBLA) in accordance with the regulations at 43 CFR Part 4.

Under 43 CFR 3809.801(a)(1), if you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations contained in 43 CFR Part 4. The notice of appeal must be filed no later than 30 days after the date of receiving notice of this decision. Any notice of appeal must be filed with the IBLA and must include a copy of the decision being appealed, a statement of standing, and a statement of timeliness.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must show sufficient justification based on the following criteria at 43 CFR 4.405(b): You must serve a copy of the notice of appeal and any accompanying documents on the office of the officer who made the decision, each person or entity named in the decision, and the appropriate Office of the Solicitor at the time of filing with IBLA (see 43 CFR 4.403(b); 4.407(b)). Parties must serve the Office of the Solicitor at the address shown on Form 1842-1. Service on a party known to be represented by an attorney or other designated representative must be made on the representative. If a statement of reasons for the appeal is not included with the notice of appeal, it must be filed within 30 days after the record on appeal is filed with the IBLA. Failure to file a statement of reasons within the time required will subject the challenged decision to summary affirmance (see 43 CFR 4.412(a)).

If you have any questions concerning this Noncompliance Order, please contact staff Geologist, Jamie Livingood at (760) 252-6029 or at jlivingood@blm.gov.

Sincerely,



Marc Stamer
Field
Manager

1 Enclosure

- 1- Form 1842-1, Information on Taking Appeals to the Interior Board of Land Appeals
- 2- Copy of June 11, 2026 inspection report

cc: BLM California State Director
2800 Cottage Way, suite W-1622
Sacramento, CA 95825

Inyo County Planning Department
Attn: Ryan Smith-Standridge
PO Box Drawer L
Independence, CA 93526

Attachment E
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,
- AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

**1. NOTICE OF
APPEAL.....**

A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that they wish to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the *FEDERAL REGISTER*, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

2. WHERE TO FILE

NOTICE OF APPEAL.....

Bureau of Land Management
2601 Barstow Road
Barstow, CA 92311

**WITH COPY TO
SOLICITOR.....**

Office of the Solicitor
2800 Cottage Way, Suite E-1712
Sacramento, CA 95858-1890

3. STATEMENT OF REASONS

Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).

**WITH COPY TO
SOLICITOR.....**

Office of the Solicitor
2800 Cottage Way, Suite E-1712
Sacramento, CA 95858-1890

4. SERVICE OF DOCUMENTS

A party that files any document under 43 CFR Subpart 4, must serve a copy of it concurrently on the appropriate official of the Office of the Solicitor under 43 CFR 4.413(c) and 4.413(d). For a notice of appeal and statement of reasons, a copy must be served on each person named in the decision under appeal and for all other documents, a copy must be served on each party to the appeal (including intervenors). Service on a person or party known to be represented by counsel or other designated representative must be made on the representative. Service must be made at the last address of record of the person or party (if unrepresented) or the representative, unless the person, party or representative has notified the serving party of a subsequent change of address.

5. METHOD OF SERVICE....

If the document being served is a notice of appeal, service may be made by (a) Personal delivery; (b) Registered or certified mail, return receipt requested; (c) Delivery service, delivery receipt requested, if the last address of record is not a post office box; or (d) Electronic means such as electronic mail or facsimile, if the person to be served has previously consented to that means in writing. All other documents may be served by (a) Personal delivery; (b) Mail; (c) Delivery service, if the last address of record is not a post office box; or (d) Electronic means, such as electronic mail or facsimile, if the person to be served has previously consented to that means in writing.

6. REQUEST FOR STAY.....

Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a Notice of Appeal (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your Notice of Appeal (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

STATE OFFICES AND AREAS OF JURISDICTION:

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Headquarters Office, Bureau of Land Management, 760 Horizon Drive, Grand Junction, CO 81506.

(Form 1842-1, September 2020)



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
www.ca.blm.gov/barstow



In Reply Refer To:
3809 (P)
(CA-680.29)

MEMORANDUM

TO: Ash Meadows – St. Cloud Casefile (106005810 & 30224 (legacy))

FROM: Jamie Livingood - Geologist

SUBJECT: Mine Inspection

DATE: 6/22/26

On June 11, 2026, I had a scheduled site visit with Jason Steavens of St. Cloud Mining at the Ash Meadows pit located in Sections 9, 10 & 15, Township 25N., Range 6E., San Bernardino Baseline and Meridian, Inyo County, CA to discuss their latest proposed PoO modification, submitted on 2/25/26. This modification requested adding milling equipment in the authorized pit. On 5/7/26, this office informed St. Cloud that their PoO mod was complete; however, NEPA needed to be completed before this office could approve the mod. This notification was via official correspondence.

Jason Stevens, Audie Padilla, and two other St. Cloud employees (?), and Jeff Garrett (Env. Consultant) were at the pit when I arrived at noon on June 11, 2026. The PoO mod, received on 2/25/26, to mill the zeolite in the pit proposed a truck scale and scale house, a portable crusher, a radial stacker, a front-end loader, an excavator, a portable generator and a water truck. During my inspection I documented that the truck scale, scale house, portable crusher, front-end loader, an excavator was already on-site. I informed them they were not authorized to use the new equipment until this office authorized the PoO modification. I intend to issue a noncompliance order.

Photos:



V to N of Sany 405 K front-end loader



V to S of Sany SY 500 excavator and jaw crusher



V to ENE of truck scale & scale house



V to S of Sany SY 500 excavator and jaw crusher



V to W of boneyard w/ miscellaneous part and equipment



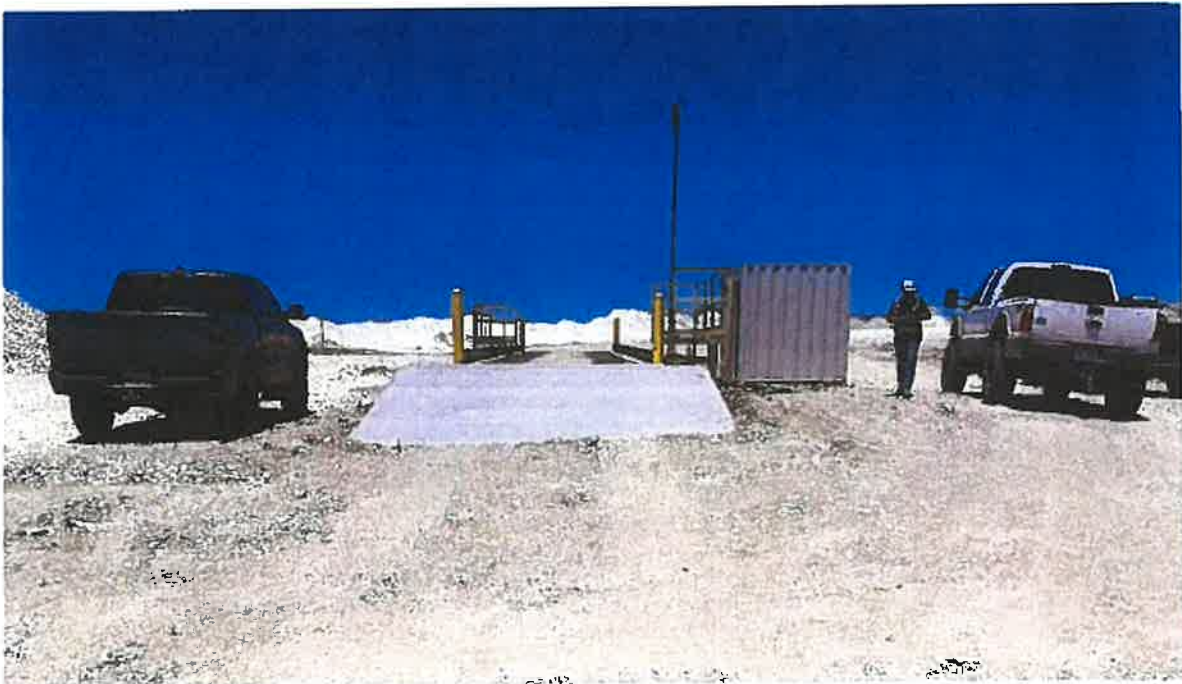
V to SE of Nordberg 2136 jaw crusher



V to E of electrical panel for portable generator and jaw crusher



V to N of electrical panel, Sany SY 500 excavator and Sany 405K front-end loader



V to N of scale and scale house