

In February 1992 the Bureau of Land Management published a handbook which contains reclamation standards for BLM and Indian lands. Specific to exploration projects is information on drill hole plugging; reclamation of exploration access; drill pad reclamation; mud pit design and reclamation; and reclamation of exploration trenches, mine excavations and bladed areas. This publication, BLM Manual Handbook H-3042-1, dated February 7, 1992, and entitled, *Solid Minerals Reclamation Handbook*, should be consulted for current BLM reclamation standards.

All operations, including casual use and operations under either a notice or a plan of operations, shall be conducted to prevent unnecessary or undue degradation of federal lands and shall comply with all pertinent federal and state law, particularly the Clean Air Act; the Federal Water Pollution Control Act; and standards for disposal and treatment of solid waste, including regulations issued pursuant to the Solid Waste Disposal Act. The operator shall also take such action as may be needed to prevent adverse impacts to threatened or endangered species and their habitat as well as cultural and/or paleontological resources.

◆ **Drill Hole Plugging Requirements**

All holes drilled for the purpose of mineral exploration should be plugged, sealed, or capped in a manner consistent with the state regulations.

The proper abandonment of drill holes will be achieved when:

1. All aquifers are adequately cemented or otherwise isolated to prevent migration of liquids or gases.
2. The surface hole is properly plugged to prevent injury to the public, livestock, and wildlife.
3. The surface is properly cleaned up and reclaimed according to the approved reclamation plan.

◆ **Reclamation Surety Requirements**

No bond is required for operations that constitute casual use. Bonding is required for operations at a notice or plan-of-operations level as a prerequisite to operating. Bonding is required to be sufficient to cover 100% of the estimated costs of reclamation, with a minimum rate of \$1,000 per disturbed acre (or portion thereof) at a notice level, and a \$2,000 per-disturbed-acre minimum at a plan-of-operation level. Reclamation cost estimates must assume a third-party contractor using equipment from off-site, and the cost estimate must be endorsed by a third-party engineer certified in the affected state.

This bonding requirement became effective on March 31, 1997. Existing notices on file with the BLM that cover active ongoing operations predating the effective date of the regulations are not required to provide certification of bonding until a new notice is filed.

In place of an individual bond on each separate operation, a blanket bond covering statewide or nationwide operations may be furnished at the option of the operator. In addition, memoranda of understanding exist with several states which allow for the posting of a single bond with the state. BLM will honor the financial guarantee chosen by the state if the BLM finds the instrument held by the state acceptable. (Specifically, the BLM will not accept mortgages or liens on real property.)

ALASKA

RESPONSIBLE AGENCY

Department of Natural Resources
Division of Mining/Water Management
3601 'C' Street, Suite 800
Anchorage, Alaska 99503-5935

Telephone: 907/269-8649
Fax 907/563/1853

Contact: Mitch Henning
Manager, Mine Permitting/Reclamation

The Department of Natural Resources, Division of Mining and Water Management, is responsible for permitting all exploration, development and mining of mineral resources on state claims in Alaska; is the central coordinating agency for permitting of all lode/placer mineral exploration activity and placer mining activity on state, federal and private lands in Alaska; administers all state mining claims and provides mining information; and administers laws pertaining to mining. The Division of Mining and Water Management is also responsible for the enforcement of all statutory mining reclamation requirements on federal, state, municipal and private lands and manages a state-wide reclamation bond pool for mining operations that require bonding.

REGULATORY AUTHORITY

1. Alaska Statutes Title 27 (Mining)
2. Alaska Statutes Title 38.05 (Alaska Land Act)
3. Alaska Administrative Code, 11 AAC 86 (Mining Rights)
4. Alaska Administrative Code, 11 AAC 96 (Miscellaneous Land Use)
5. Alaska Statutes 27.19 (Mining Reclamation)
6. Alaska Administrative Code, 11 AAC 97 (Mining Reclamation Regulations)

PERMITTING REQUIREMENTS

◆ General Requirements

Exploration activities are permitted under the state and federal mining laws and must also comply with the regulations concerning water quality, habitat protection and waste disposal. There are no state regulations unique to hard rock mineral exploration.

Most exploration activity in Alaska is permitted through the state's coordinated permitting process, the Annual Placer Mining Application. Despite its name, this application is used for all types of exploration, not just placer-related activity. The Division of Mining and Water Management receives, reviews and approves applications, then distributes them to thirteen other state and federal agencies. These agencies receive the applications as though directly from the applicant and they issue permits and approvals, if required, under their statutory and regulatory authority.

Generally, the land management agency on which the activity is taking place is the agency that issues authorization for the activity. The Division of Mining and Water Management issues the permits for all activity on state mining claims, but the Bureau of Land Management, U.S. Park Service, U.S. Forest Service and the U.S. Fish and Wildlife Service issue authorizations for the land managed by that agency. Exploration activity on the 44 million acres of Native lands in Alaska is managed by 13 different Native corporations. In addition, vehicular or equipment crossing of anadromous fish streams in the state requires a permit from the Alaska Department of Fish and Game, regardless of land status.

◆ Specific Requirements

1. Specific requirements are set by the land manager with jurisdiction for the land on which the activity takes place. Bonding is required for activities disturbing five acres or more. Reclamation is required of all disturbed areas on state and federal public lands. Top soil must be saved, exploration trenches must be backfilled and covered with top soil, and drill pads/mud pits reclaimed. Reclamation of access roads is site specific. The land manager sets reclamation/closure requirements in access permits.
2. Any exploration activity in the state may be permitted using an Annual Placer Mining Application (APMA) available from the Division of Mining and Water Management (copy attached). The APMA permitting process is used for all exploration activity in the state, not just placer-related exploration. The Division of Mining and Water Management distributes this application to other agencies and therefore most required permits can be received from one application.

3. **A permit is required for the following activities on state lands:**
 - a. Cross country travel or construction of access roads. The state may place seasonal restrictions on cross country travel. Travel may be limited to the winter months when the ground is frozen.
 - b. Crossing of all anadromous fish streams;
 - c. The use of explosives and explosive devices;
 - d. The use of any equipment, other than light portable field equipment (picks, shovels, pans, hand earth augers, and backpack power drills), vehicles (snow machines, jeeps, pickups, and weasels), airborne equipment, and marine equipment;
 - e. The use of hydraulic prospecting equipment;
 - f. Drilling to a depth in excess of 300 feet, including exploratory drilling or stratigraphic test wells on state land not under oil or gas lease;
 - g. Any activity that the Director of Mining and Water Management determines may result in unnecessary harm to land having special, scenic, historic, archaeological, scientific, biological, recreational, or other special resource values.
 - h. geophysical exploration for minerals
4. The application for a permit must include the following information:
 - a. A map showing the general location of all activities, claims locations, and entire access route to claim block of all equipment for which a permit is required;
 - b. A description of the proposed activity and the type of equipment which will be used; and
 - c. A description of reclamation activity that will be conducted.
5. **An annual application fee of \$100.** Multi-year permits must pay annual fees for the full term at time of application.
6. Multi-year permits are granted for the term requested, not to exceed five years. Permit may be extended for any number of consecutive periods, each period not to exceed one year.
7. All operations within the boundaries of the Alaska Coastal Management Program must go through a coordinated coastal consistency review. This adds 30 to 60 days to the permitting process.

◆ **Reclamation Standards**

The state reclamation act does not apply directly to exploration operations. Reclamation of exploration activity is required under the state's Miscellaneous Land Use permit stipulations. Reclamation of activity on federal lands is required under federal authorities.

General stipulations for activity on state land include:

1. Activities employing wheeled or tracked vehicles shall be conducted in such a manner as to minimize surface damage.
2. Existing roads and trails shall be used whenever possible. Trail widths will be kept to the minimum necessary.
3. All activities shall be conducted in a manner that will minimize disturbance of drainage systems, changing the character, polluting, or silting of streams, lakes, ponds, water holes, seeps, and marshes, or disturbance of fish and wildlife resources. Cuts, fills, and other activities causing any of the above disturbance if not repaired immediately, are subject to such corrective action as may be required by the Department.
4. The Department may prohibit the disturbance of vegetation within 300 feet of any waters located in specifically designated areas.
5. The Department may prohibit the use of explosives within one-fourth mile of designated fishery waters.
6. Trails and campsites shall be kept clean. All garbage and foreign debris shall be eliminated by removal, burning, or burial, unless otherwise authorized.
7. All survey monuments, witness corners, reference monuments, mining claim posts, and bearing trees shall be protected against destruction, obliteration, or damage.
8. Every reasonable effort shall be made to prevent, or suppress any fire in the operating area.
9. Holes, pits, and excavations shall be filled, plugged or repaired to the satisfaction of the Department. It is required that top soil be saved and all exploration trenches be backfilled and covered with top soil to allow natural regrowth of the site.

◆ **Drill Hole Plugging Requirements**

~~There are no specific engineering standards for drill hole plugging.~~ The Alaska Department of Environmental Conservation may require sealing of aquifers with a wall cake or cement plug. At a minimum, most land managers require that each hole be capped with an earthen plug.

◆ **Reclamation Surety Requirements**

Bonding of exploration activity is required for disturbances of five acres or more, per Alaska Statute 27.19. The "State-Wide Bond Pool Form" (copy attached) may be submitted with the APMA to satisfy this requirement. ~~Activities of less than five acres, on state or private land, do not require bonding.~~ The Commissioner of Natural Resources establishes the amount of the bond to reflect the reasonable and probable costs of reclamation but the bond may not exceed \$750 per acre. Participants in the bonding pool contribute an initial deposit not to exceed fifteen percent of the reclamation bond plus an additional non-refundable annual fee not to exceed five percent of the reclamation bond. The fifteen percent deposit is refunded upon satisfactory reclamation, or can be applied to a new reclamation plan elsewhere.

OTHER AGENCY CONTACTS

Alaska Department of Environmental Conservation
1001 Nobel Street, Suite 350
Fairbanks, Alaska 99701
907/451-2360

Alaska Department of Fish and Game
Habitat Restoration Division
1300 College Road
Fairbanks, Alaska 99701-1599
907/451-6192

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING AND WATER MANAGEMENT

TONY KNOWLES, GOVERNOR

3601 C STREET, SUITE 800
ANCHORAGE, ALASKA 99503-5935
PHONE: (907) 269-8649
FAX: (907) 563-1853

Dear Miner:

Enclosed is the 1997 Annual Placer Mining Application (APMA), along with associated forms that may or may not require submission. Please use 1997 forms only -- previous editions are obsolete. Incomplete applications and those submitted without required maps and applicable forms will be returned -- thus delaying permits.

The Division of Mining & Water Management urges you to submit your application early! For activity involving cross country access of equipment or operations within Alaska Coastal Zone Management boundaries, you are advised to submit the APMA by December 31, 1996. In addition:

➤ By December 31, 1996:

- 1) Operations with a total disturbance of less than five acres, are required to submit an Annual Reclamation Statement.
- 2) Non-refundable Bond Pool Maintenance Fees are required for those previously bonded operations where reclamation has not been approved.

➤ If you are operating on State land:

- 1) Regulation changes occurred in 1995 which allow the Division to issue "multi-year" permits for a maximum term of five years (11 AAC 96.040) -- indicate on the APMA if you are applying for such. APMA processing fees of \$100.00 per year apply, i.e. three years -- \$300.00, payable at time of application.
- 2) Operators/Lesseees on State mining claims, who are not claim owners of record, must submit a completed Notice of Operator Authorization form, before the APMA will be accepted as complete.
- 3) Placement and use of camp facilities on State land must be: necessary for mining; requested in writing; and, approved in advance. Existing facilities require permitting through the APMA process.
- 4) The Access Section of the APMA has been modified, please read this section carefully.

➤ If your intended activity involves suction dredging:

- 1) The Environmental Protection Agency (EPA) requires suction dredge operators to obtain a National Pollutant Discharge Elimination System (NPDES) Permit. Contact the EPA well in advance of your intended "start-up" date to determine if your operation can be permitted under the General Permit for Alaskan Placer Miners. Be aware, EPA has drafted a Modified General Permit for Placer Mining in Alaska which may be in effect by the 1997 mining season. The EPA may be reached at 1-800-424-4372, if you have any questions regarding the NPDES Permits.
- 2) Suction dredges, with an intake nozzle exceeding four inches, require authorization from the Army Corps of Engineers (COE). These can be permitted through the General Permit for Placer Mining Activities within Alaska. A COE "404" permit may be required for any mining activity utilizing mechanized equipment on "wetlands", including access construction -- again, contact the COE Permit Review Section well in advance of intended "start-up". A Toll Free Number 1-800-478-2712 is available for calls originating within Alaska; or dial them at (907) 753-2712 otherwise.

If assistance is required, contact one of our offices -- in Anchorage @ (907) 269-8649; or in Fairbanks @ (907) 451-2790.

Sincerely,

M. W. Henning
M. W. Henning
Permitting Manager

Enclosure
1997 APMA, w/Atch

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

TONY KNOWLES, GOVERNOR

3601 C STREET, SUITE 1278
ANCHORAGE, ALASKA 99503-5921
PHONE: (907) 269-8721
FAX: (907) 269-8908

October 16, 1996

Dear Miners:

We need your help! Under state and federal laws we review projects to protect cultural resources. During our reviews of the Annual Placer Mining Applications (APMA), we have observed that a high percentage of mining claims are located in areas where historic mining operations have taken place. Since only 5 percent of the entire state has been surveyed for archaeological, historic, and paleontological sites, we need help gathering site location information statewide.

To reduce costs to you and the state, we are requesting information about what sites you have observed on your mining claims. Please send photographs, a brief site description, and topographic maps, which pinpoint locations of sites. This information will help us work with you to minimize impacts to these sites. Our objective is not to impede your mining operations, but to manage these significant resources through avoidance.

Types of cultural resources most commonly found on mining claims are historic mining equipment, ditches and associated water control features, cabins, bridges, fossils, graves, and historic mining complexes.

Please help us inventory Alaska's rich mining history. By working together we can preserve our mining heritage.

If you have any questions, please contact Tim Smith at 269-8722 or Michele Jespersion at 269-8720.

Sincerely,



Judith E. Bittner
State Historic Preservation Officer

JEB:mmj



STATE OF ALASKA

1997

ANNUAL PLACER MINING APPLICATION (APMA)

for

MINING PERMITS, LAND USE PERMITS; WATER USE PERMIT; RECLAMATION PLAN APPROVAL; AND MINING LICENSE

GENERAL: To conduct exploration or mining activities in the State of Alaska, permits and licenses may be required from several State and Federal agencies. This application, when completed, will be distributed by the Division of Mining & Water Management to those agencies involved in the permitting process and represents a permit application to those agencies.

OPERATIONAL PERMITS: For most exploration and mining operations, the completion of this form should satisfy the application requirements for the following permits:

- Miscellaneous Land Use Permit (Mining Activity on State Claims); and Reclamation Plan of Approval for a Mining Operation -- Issued by the Department of Natural Resources, Division of Mining & Water Management
Miscellaneous Land Use Permit (Access/Surface Activity on State Land Other Than Mining Claims) -- Issued by the Department of Natural Resources, Division of Land
Water Use Permit -- Issued by the Department of Natural Resources, Division of Mining & Water Management
Fish Habitat Permits (Title 16) -- Issued by the Department of Fish and Game, Habitat & Restoration Division
Alaska Mining License -- Issued by the Department of Revenue as a license to pay tax -- not a license to mine.
Alaska Coastal Management Program (ACMP) Consistency Review -- Administered by the Division of Governmental Coordination
Annual Notice or Plan of Operation -- Bureau of Land Management

OTHER PERMITS THAT MAY BE REQUIRED:

Waste Water Discharge Permit -- Separate application is required by the U.S. Environmental Protection Agency to receive a National Pollutant Discharge Elimination System (NPDES) Permit.

Wetlands Permit -- Separate application is required by the U.S. Army Corps of Engineers to receive a Wetlands Permit.

RECLAMATION: Applications must be submitted early to assure the issuance of permits and approval of reclamation plans before commencement of field operations. In accordance with Alaska Statute 27.19, a miner may not engage in mining activity, involving more than five acres of disturbance, until a reclamation plan has been approved. Operations under five acres must submit a Letter of Intent to Conduct Reclamation and file an Annual Reclamation Statement not later than December 31st.

BONDING: All mining operations, with a mining disturbance of five acres or more, must be bonded per Alaska Statute 27.19. The "State Wide Bond Pool Form", included with this application, may be submitted with the APMA to satisfy this requirement or individual performance bonds may be provided. Operations of less than five acres, on State or Private land, do not require bonding.

AMENDED PLANS: Changes in operation must be submitted in writing and approved in advance before the commencement of such activity.

FEES: A \$100.00 processing fee must accompany the application -- "Multi-Year" permit applications require \$100.00 per year. Make check or money order payable to "ALASKA DEPARTMENT OF REVENUE." (NOTE: Water right fees are separate. Applicant will be contacted if required.)

STRUCTURES/CAMP FACILITIES: The placement and use of all surface structures must be requested and approved in advance -- describe in detail. Structures must be necessary for commercial mining activity and will be temporary in nature, without permanent foundations. Recreational cabins are not authorized under mining law.

SUBMIT COMPLETED APPLICATIONS TO ONE OF THE OFFICES BELOW:

(Mailed Applications) State Division of Mining & Water Management
3601 'C' Street, Suite 800
Anchorage, AK 99503-6936
(Hand Carry To: 3601 'C' Street, Suite 884
(Frontier Building)
Telephone: (907) 269-8649
FAX: (907) 663-1863

State Division of Mining & Water Management
3700 Airport Way
Fairbanks, AK 99709-4699
Hand Carry To: Same
Telephone: (907) 451-2790
FAX: (907) 451-2761

INCOMPLETE APPLICATIONS WILL BE RETURNED!!!

APMA INSTRUCTIONS AND CHECKLIST

For us to provide your mining permit before the mining season starts, we need your help. Please submit your APMA as early as possible! APMA's submitted after April 15, 1997 will be processed in as timely a manner as possible; however, staff field assistance visits will begin during May 1997, after which, the office time available for the review of applications will be quite limited.

PREPARATION OF APPLICATION: State mining regulations require applications to be completed in ink or typewriter. All sections should be completed, unless it is not applicable to the operation, then indicate by "N/A". Sketches must include all components listed on the sketch checklist -- again, indicate "N/A" if a component does not apply

ATTACHMENTS: Attachments to your application should be in 8 1/2" x 11" size. Oversize attachments, required to clarify complex operations, shall be provided by the applicant in sufficient copies to meet distribution requirements -- check with a DNR Division of Mining & Water Management office.

CHECKLIST: Please review the following checklist and make certain all applicable items are included before submitting the application -- **INCOMPLETE APPLICATIONS WILL BE RETURNED.**

Is the applicable processing fee enclosed?

Are all items on the application completed? Write "N/A"; "DOES NOT APPLY"; or draw a diagonal line through any sections which do not apply.

Are applicable maps listed below enclosed?

-- **ACCESS MAPS:** Include the appropriate U.S. Geological Survey (USGS) topographic map or maps at a scale of one inch equals one mile (1:63,360). Identify **entire** access route to your claim block from a major road system, airstrip, or boat landing. Reproduced portions of maps in 8 1/2" x 11" size are acceptable, provided they are readable and suitable for copying. Each map should be clearly identified with: 1) USGS identifier, i.e. Fairbanks A-3; and 2) all legal descriptions (townships and ranges involving the route).

-- **CLAIMS LOCATION MAP:** Include a USGS topographic map at a scale of one inch equals one mile (1:63,360), illustrating: location; claim name; claim number; camp location; airstrips; legal description; and appropriate USGS map identifier. Identify those claims with existing disturbance and those on which activity will take place this season.

Completed, readable sketch and narrative of operation. Include all items listed on sketch checklist.

Reclamation page signed and dated with the appropriate box checked (Reclamation Plan or Letter of Intent To Do Reclamation)

Notice of Operator Authorization form -- if you are operating on State mineral locations and are not an owner of the property being worked

Signed and dated 1996 Annual Reclamation Statement for Small Mines and/or Suction Dredge Operations (For operations under 5 acres)

Signed and dated Coastal Zone Management (CZM) Certification Statement, if applicable.

Completed State Wide Bond Pool Application or State Wide Bond Pool Renewal Form, if applicable.

Applicable bonding reclamation fees.

INCOMPLETE APPLICATIONS WILL BE RETURNED

**STATE OF ALASKA
1997 ANNUAL PLACER MINING APPLICATION**

APMA NO: _____

APPLICANT AND SITE INFORMATION

What type activity are you planning to perform? Suction Dredging (1)

Exploration Mining/Reclamation Reclamation Access Equipment

Coastal Zone? (2)

Yes No

Are the mining claims? (3)

State Federal Private

Check appropriate box(es) and list number(s) if any of the following permits have been issued for these claims:

EPA-NPDES Wastewater Discharge Permit No:

Corps of Engineers "404" Permit No:

Name of ALL Claim Owners: (4)

Lessee: (5)

Operator: (6)

Mailing Address: (Winter)

Mailing Address: (Winter)

Mailing Address: (Winter)

Mailing Address: (Summer)

Mailing Address: (Summer)

Mailing Address: (Summer)

Home Phone: (Winter)

Home Phone: (Winter)

Home Phone: (Winter)

Home Phone: (Summer)

Home Phone: (Summer)

Home Phone: (Summer)

Work Phone: (Winter)

Work Phone: (Winter)

Work Phone: (Winter)

Work Phone: (Summer)

Work Phone: (Summer)

Work Phone: (Summer)

To Whom Should Mining License Be Issued? Name:

Mailing Address: (7)

Home Phone:

Work Phone:

Social Security No. or Federal I.D. No. of Licensee: (8)

No. of Workers: (9)

Intended Start-up/Shut Down (Month/Day) (10)

From:

To:

CLAIM LISTING/SITE LOCATION INFORMATION

Mining District: (11)

Applicable U.S.G.S. Quad Map: (12)

On What Stream Is This Activity? (13)

Legal Description of Claims To Be Worked: (Township; Range; Section; Meridian) (14)

LIST ONLY THOSE CLAIMS WITH CURRENT DISTURBANCE AND/OR THOSE ON WHICH MECHANIZED MINING ACTIVITY WILL TAKE PLACE (ATTACH ADDITIONAL CLAIMS LISTING AS NECESSARY) (15)

NO.	CLAIM NAME	ADL/BLM NO.	NO.	CLAIM NAME	ADL/BLM NO.
1.			6.		
2.			7.		
3.			8.		
4.			9.		
5.			10.		

DESCRIPTION OF OPERATIONS

(16)

List equipment to be used (Type; Size; Purpose; and Number of Each):

List any equipment that will be crossing streams during mining activities.

(17)

List any equipment that will be used in the stream during mining activity.

ACCESS OUTSIDE OF CLAIM BLOCK

(18)

Access across state land may require a "Land Use Permit" from the Division of Land. Access across federal land requires approval of the managing federal agency. Access across private property, including native corporation lands, mental healthtrust lands, and other private property, may require authorization from the private property owner. It is the responsibility of the applicant to contact the appropriate managing land owner to assure all required permits for access are obtained.

A completed access map must be submitted with your APMA. Copies of U.S.G.S. topographic maps at a scale of 1"=1 mile must clearly indicate the proposed access route from start to finish and include appropriate legal descriptions (township and range) on each. The quadrangle map name should also be indicated (Healy A-3, etc.). Paper size should be limited to 8 1/2 x 11. Do not tape maps together.

Access is: Existing To Be Constructed Both (Explain): _____
If access is to be constructed, indicate: Type: _____ Length: _____ Feet Width: _____ Feet Depth: _____ Feet

A Right-of-Way (ROW) Permit is required from the Department of Natural Resources, Division of Land, to construct access on state land outside a claim block. "Construction" is the use of mechanized equipment to create or improve access, including dropping the blade or bucket, and/or adding gravel to the surface. Contact the Division of Land, in Anchorage (907) 269-8400; in Fairbanks (907) 451-2700; in Juneau (907) 465-3400 to determine if a ROW permit is required - applications may require six month to one year to process. NOTE: Any access constructed across "wetlands", including within your claim block, may require a Corps of Engineers (COE) "404" permit. It is the responsibility of the applicant to contact the COE for a determination as to whether or not this permit is required.

Indicate Type(s) of Access:

- All Season Road - A road intended to be used during all seasons of the year without causing long term damage to the road.
- Cross Country Trail - Travel is off an all season road with equipment/vehicles other than a standard 4-wheel drive pick-up truck, snowmobile, or 4-wheeler/6 wheeler All Terrain Vehicle (ATV), provided the vegetative mat is not killed or broken. Note, travel on a trail intended for winter use only is considered a cross country trail. The current performance guarantee for cross country travel on state lands is \$1,000.00 and must be received by the Division of Land before a permit will be issued. The performance guarantee will be released after travel is completed and no trail damage has occurred.
- Airstrip - Indicate length: _____ Feet
- River

If you are transporting equipment and/or fuel on a cross country trail, please complete the following:

1) List all equipment and vehicles being transported: _____

2) Are you transporting fuel? Yes No If "yes", indicate type and amount: _____

3) Are you transporting other petroleum products? Yes No If "yes", indicate type and amount: _____

4) How are the fuel/petroleum products contained? (i.e., drums, bladders, steel tanks, etc.) Indicate size of each container: _____

5) How are the fuel/petroleum products being transported (i.e., skid-mounted tank; trailer, 55 gallon drums on skid; tanker truck, etc.)? _____

6) Indicate proposed dates for each period of cross country travel: _____

NOTE: All cross country travel, on state land, must be completed between November 15 and March 15 unless specifically authorized by the Division of Land. Travel is not allowed if trail conditions indicate the likelihood of damage to the trail.

PLACER MINING METHOD (19)

Indicate Methods of Mining/Processing Used in Operation:

Suction Dredge: Nozzle Size: _____ Inches Engine HP: _____ Bucket Line Dredge: Bucket Size Is: _____ Cubic Feet

Washing Plant: Slick Plate Shaker Screen Trommel Sluice Box: Length: _____ Feet Width: _____ Feet Channels: _____

Hydraulic Giant: Nozzle Size _____ Inches Jig Plant: Cell Size: _____

ESTIMATED: Sluice Days This Season: _____ Cubic Yards of Material To Be Processed: Daily: _____ Annually: _____

OVERBURDEN (20)

Type: None Gravel, Average Depth: _____ Feet Organic Material, Average Depth: _____ Feet

EXPLORATION TRENCHING (21)
(Indicate Locations On Sketch Sheet or Topographic Map)

Estimated Number of Trenches To Be Cut: _____ Average Size: Length: _____ Feet Width: _____ Feet Depth: _____ Feet

EXPLORATION DRILLING (22)
(Indicate Locations On Sketch Sheet or Topographic Map)

Number of Holes to Be Drilled: _____; Type of Drill Used: _____; Estimated Maximum Depth: _____ Feet; Diameter of Holes: _____ Inches

How Will Drill Holes Be Plugged Upon Completion? _____

EXPLOSIVES (23)

Will Explosives Be Used? Yes No If "Yes", Indicate: Type: _____ Amount: _____

STRUCTURES/FACILITIES (24)
(Placement and use of any surface structure must be requested in writing and approved in advance)
(Include location on sketch sheet and topographic map)

Request use of existing facilities: Frame/Log Structure Trailer Tent/Tent Frame Camp facilities not required

Request authorization to construct or place: Frame/Log Structure Trailer Tent/Tent Frame

FUEL (31)

Volume Stored: _____ Gallons Indicate Distance Stored From Flowing Waters: _____ Feet

Type of Storage Container: Tanks Larger Than 660 Gallons Tanks Less Than 660 Gallons

Fuel Bladder 55 Gallon Drums

Other (Specify): _____

Are Fuel Containment Berms Around Storage Containers?: Yes No Is Berm Area Lined? Yes No

WATER USAGE

(25)

Water use should be planned so that you will have zero discharge of water back into the stream (creek, lake, etc.), if it is at all possible. Streams must be diverted around the mining operation and most miners achieve zero discharge by setting up a 100% recycle system. Zero discharge means no water is released back into a stream either through a pipe, an overflow, by pumping, or by visible seepage through a dam or tailings filter. Underground flow or seepage through a dam or berm, will be considered a discharge if the water quality in the stream is affected as it flows past your mining operation. If groundwater from your cut and surface run-off force you to have a discharge from your settling ponds, reasonable efforts must be made to divert the water around the operation to minimize your discharge...and under no circumstances can you be adding make-up water if you are having a discharge.

Do You Expect Your Operation To Have A Discharge? No Yes (If "Yes", Estimate GPM: _____)

(26)

Stream By-Pass Or Diversion? Not required Existing To be constructed Is Stream By-Pass? Permanent Temporary
(Indicate on mine plan diagram): Length: _____ Width: _____ Depth: _____

WATER USE AUTHORIZATIONS

(27)

Water usage (including water used in a 100% recycle system) may require authorization by either a Temporary Water Use Permit or a Water Rights Permit or Certificate. Information provided in the Make-Up Water Supply and Recycle/Settling Pond System sections of this application will be used to determine the quantity of water that you can be authorized to use for your mining operation.

Do you currently have a Water Rights Permit or Certificate? Yes No If yes, please indicate ADL/LAS Number: _____

If no, please contact the Division of Mining and Water Management - Water Resource Section, to determine what type of water use authorization you will require for your project. (State of Alaska, Division of Mining and Water Management - Water Resource Section, 3700 Airport Way, Fairbanks, AK 99709; (907) 451-2736 or State of Alaska, Division of Mining and Water Management - Water Resource Section, 3601 C Street, Suite 800, Anchorage, Alaska 99503-5935; (907) 269-8641.)

MAKE-UP WATER SUPPLY

(28)

"Make-Up Water" is that volume of water which must be taken from the stream and added to your settling ponds to replace water lost due to evaporation and seepage into the ground. **Federal Regulations prohibit the addition of make-up water while you are having any discharge from your settling ponds.**

Source of Make-up Water: Groundwater Gain From Cut High Water Events From Rain Seepage Infiltration From Stream
 Stream Other: _____

Method of Taking Water: Seepage Infiltration Pump With Intake Size Of _____ Inches Diversion Ditch From Stream With Headgate
 Other: _____

Estimated Average Amount Of Make-up Water: _____ Gallons Per Day, or _____ Gallons Per Week.
 No Make-up Water required

DAM

(29)

(An artificial barrier used to impound or divert water)

Purpose of Dam: Makeup Water Pond Settling/Recycle Ponds No Dam Required

Dam Information: Existing To Be Constructed Length: _____ Ft Height: _____ Ft Width At Crest: _____ Ft Width At Base: _____ Ft

RECYCLE/SETTLING POND SYSTEM

(30)

Is a Pre-Settling Pond Used: Yes No Is Recycle Used: Yes No Recycle Pond Is Pond # _____

Indicate Length (L), Width (W), and Depth (D) of Each Pond: Pond # 1: L: _____ Ft W: _____ Ft D: _____ Ft;

Pond # 2: L: _____ Ft W: _____ Ft D: _____ Ft; Pond # 3: L: _____ Ft W: _____ Ft D: _____ Ft (Indicate additional ponds on your mining plan.)

Recycle Pump: Return Line Size: _____ inches; Estimated GPM: _____; Estimated hours per day that recycle pump will be used: _____

PLEASE MAKE ONE FINAL REVIEW OF THE "CHECKLIST" TO MAKE CERTAIN THAT EVERY SECTION HAS BEEN COMPLETED ON THIS APMA. IF A SECTION DOES NOT APPLY TO YOUR OPERATION WRITE "N/A", "DOES NOT APPLY" OR DRAW A DIAGONAL LINE THROUGH THE SECTION.

INCOMPLETE APPLICATIONS WILL BE RETURNED!!!!

INSTRUCTIONS FOR COMPLETING SKETCH SHEET AND DESCRIPTION OF OPERATION

SUBMIT ONLY INK DRAWINGS OR "GOOD QUALITY" XEROX COPIES -- PENCIL DRAWINGS ARE NOT ACCEPTABLE AND WILL CAUSE THE ENTIRE APMA TO BE RETURNED.

This check list is provided to assist you in the completion of your Plan of Operations sketch. Sketch your complete mining and reclamation plans in detail; and include written descriptions of your planned operation, as necessary, including reclamation plans, to provide reviewing agencies an understanding of your proposed sequence of mining activities for the mining season.

INCLUDE EACH OF THE FOLLOWING ITEMS IN YOUR SKETCH -- IF AN ITEM DOES NOT APPLY, INDICATE BY "N/A".

- CLAIM LOCATIONS** -- indicate claim name, ADL/BLM number, boundary lines and corner posts.
- MINING CUTS** -- indicate location, dimensions (lengths, widths and depths), and sequence of mining; indicate active vs. planned cuts; and areas currently stripped vs. areas you are planning to strip.
- OVERBURDEN STOCKPILES** -- indicate material type, location and dimensions (lengths and widths)
- TAILINGS DISPOSAL AREAS** -- indicate temporary stockpiles and describe your proposed methods for permanent disposal, including location (where?, when? and how?)
- SETTLING PONDS** -- indicate location and dimensions (lengths, widths and depths) (number each pond as in Section (29) of this APMA Form; indicate your recycle system, including pump and line from pond to plant; also, indicate the direction of water flow through your pond system and the location and estimated quantity of any discharge.
- MAKE-UP WATER** -- indicate location of pump, line, or headgate and ditch; estimate the average make-up water added daily or weekly.
- STREAM** -- indicate location, name of drainage, direction of flow, and width of original channel.
- STREAM BY-PASSES** -- indicate location, dimensions (lengths, widths and depths), and direction of water flow.
- AREAS TO BE RECLAIMED** -- indicate location and dimensions (lengths and widths).
- PREVIOUSLY RECLAIMED AREAS** -- indicate locations.
- FUEL STORAGE AREA** -- indicate location with respect to stream and active mining area -- include distance from flowing waters.
- CAMP FACILITIES** -- indicate location and describe the type and purpose of each structure (Federal Operators should indicate the approximate length and width of the camp area).
- SANITARY AND SOLID WASTE** -- indicate location and method of disposal (i.e., outhouse; trash collection; etc.).
- NORTH ARROW** -- indicate the direction of north with respect to your operation.
- SIZE OF VALLEY** -- indicate, with dotted lines, the approximate width of the valley floor.
- ACCESS** -- indicate type and location of existing access to the claims and specifically to the mining area (Federal operators should include length and width of access); indicate type and location of proposed construction of new access including length, width and distribution of fill if wetlands are involved.

Please make one final review of the sketch sheet checklist to make certain that you included everything.

INCOMPLETE SKETCH SHEETS WILL CAUSE THE ENTIRE APMA TO BE RETURNED.

***** EXAMPLE *****

MINE PLAN NARRATIVE

MINING:

The mining operation is designed to economically recover gold and complete acceptable reclamation. The mine layout is directly related to reclamation. Mining will progress in the following steps -- see sketch:

- 1) A stream by-pass, 800' x 10', will be constructed on the left limit of the operation. The by-pass will be constructed to accommodate high water events including break-up without bank erosion.
- 2) Vegetation, including trees, brush, tundra, etc., will be separated from topsoil and overburden gravel and stockpiled in such a manner as to avoid erosion. Stockpiles will be 200' x 25' x 15', located on the right limit of each cut.
- 3) Topsoil will be separated and stockpiled next to the vegetation stockpiles. A space will be maintained between the stockpiles so that topsoil can be respread before the vegetation. Each topsoil stockpile will be 200' x 25' x 15', located on the right limit of each mining cut.
- 4) Gravel overburden will be used to reconstruct the stream channel and cap ponds. Gravel will be stored in the following manner:
 - a) Gravel from each cut will be pushed into the previously mined cut forming a dike for the next recycle pond. The dike will be constructed in such a manner that the largest portion of the pond will be immediately below the processing plant on the right limit. This places the pond sediment away from the reclaimed stream channel. The return portion of the pond will be narrow, one dozer blade width, forcing the fines to settle in the large pond area.
 - b) A stockpile of gravel, 200' x 25', will be placed on the left limit of the mine cuts and used to reconstruct the stream channel in the left limit of the ponds.
- 5) Coarse tailings will be pushed onto the pond dike and used to cap ponds.

RECLAMATION:

Reclamation will progress in the following steps:

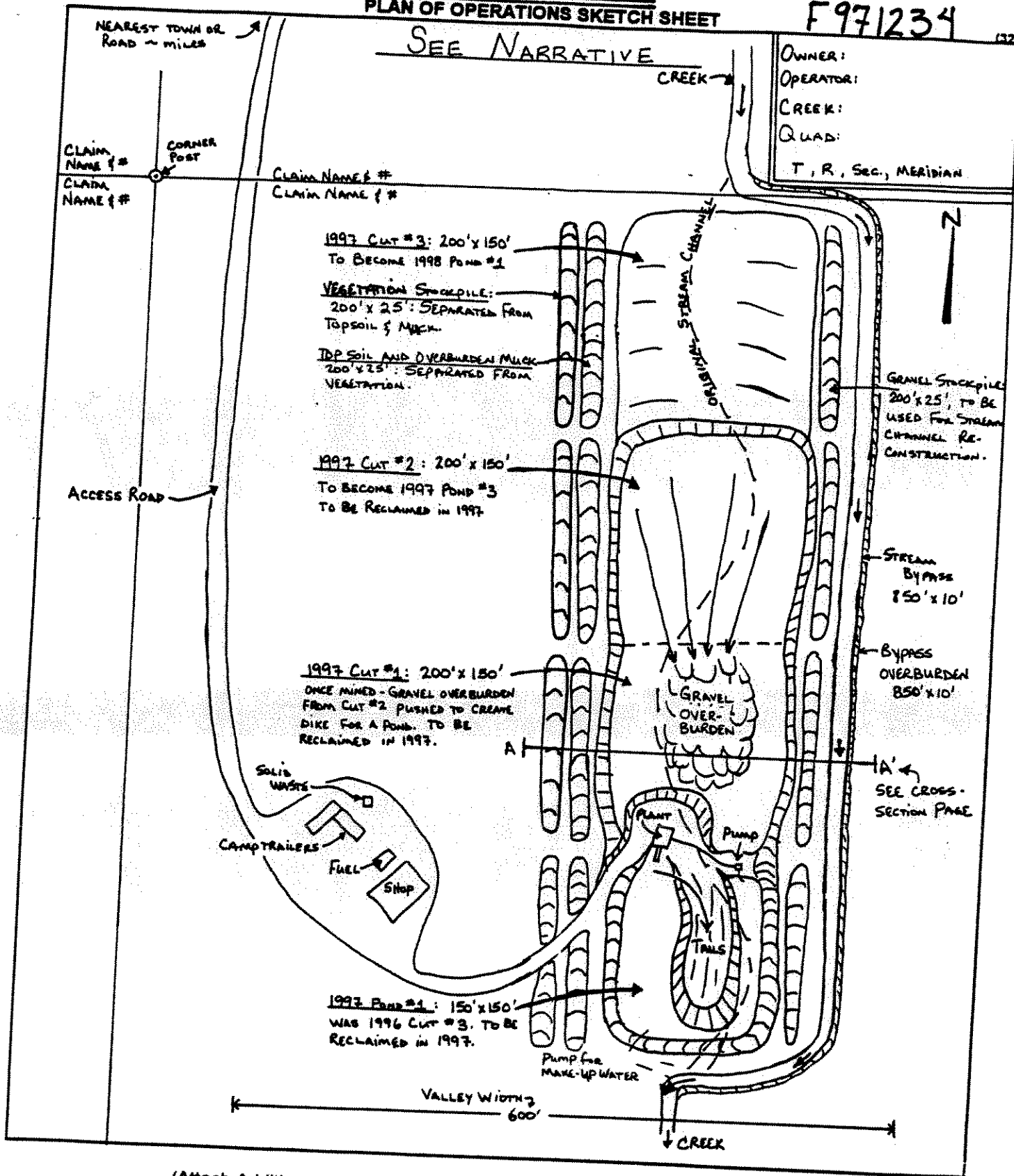
- 1) Ponds will be drained slowly with care taken not to lose sediment.
- 2) The stream will be reestablished in the left limit of the ponds. All sediment will be bailed out and a stable stream channel will be established using tailings stockpiled in the center and left limit of the ponds. The flood plain will be wide enough to prevent erosion during high water events. For this stream, the reconstructed flood plain will consist of a stream bed 20' wide with side banks 20' wide. The banks will have a 20:2 foot slope. The by-pass will be filled and vegetation respread.
- 3) The remaining tailing stockpiles will be used to cap the large portion of the pond and/or stabilize any remaining pond areas from erosion. To minimize erosion, final shaping will be done across the slope rather than up and down.
- 4) Banks of ponds will be flattened out to allow natural revegetation and avoid erosional degradation. The banks will have a slope of 20:1 feet.
- 5) Topsoil will then be respread over the tailings.
- 6) Finally, vegetation will be respread over topsoil. The vegetation will trap seeds and moisture as well as reduce erosion.

***** EXAMPLE *****

*** EXAMPLE ONLY ***
PLAN OF OPERATIONS SKETCH SHEET

F 971234

(32)

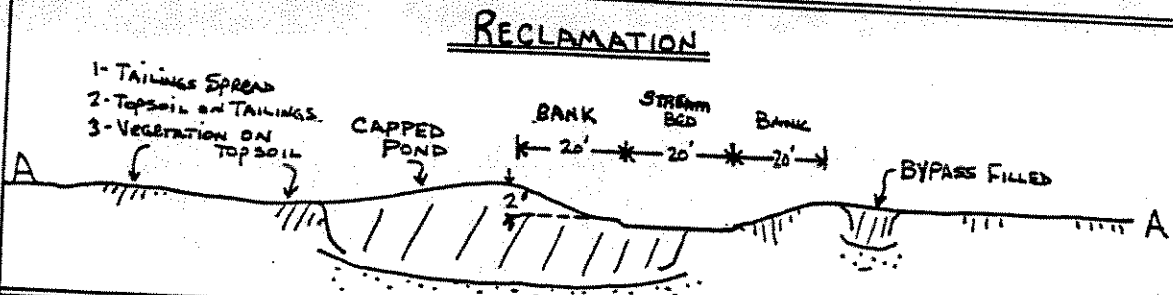
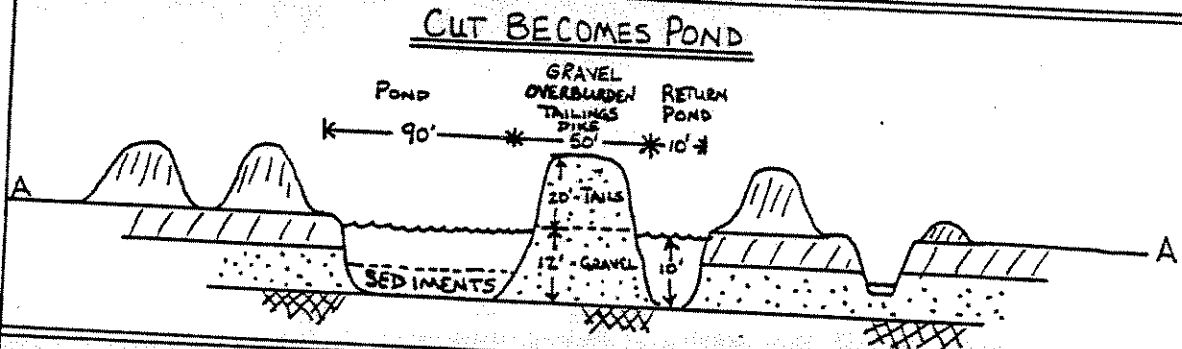
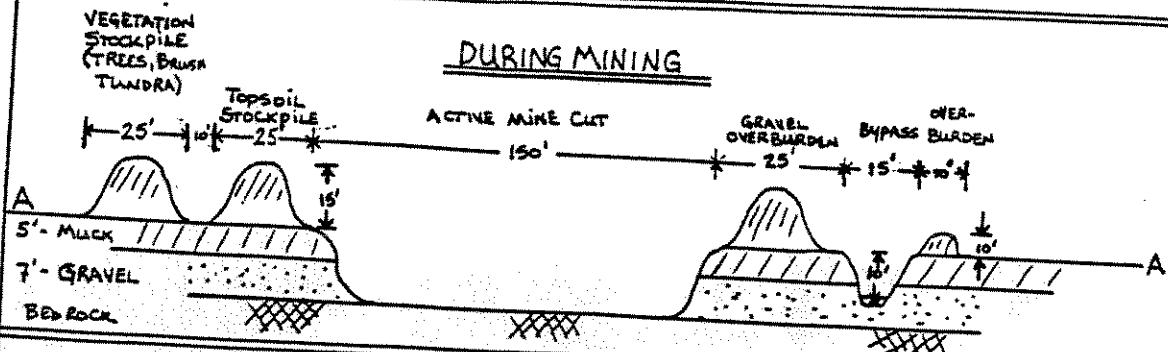


(Attach Additional Sheets, Along With Detailed Explanations As Necessary)
PLEASE REVIEW THE SKETCH SHEET CHECKLIST TO MAKE CERTAIN THAT YOU INCLUDED EVERYTHING.
INCOMPLETE SKETCH SHEETS WILL CAUSE THE ENTIRE APMA TO BE RETURNED.

*** EXAMPLE ONLY ***



OWNER:
OPERATOR:
CREEK:
CROSS-SECTION OF MINE CUT/POND AND STREAM BYPASS



CROSS-SECTIONS:

A cross-section is a "slice" through an area of ground which shows the vertical dimensions of slopes, layers and other features related to the mining operation.

To draw a cross-section, first define a line across an area of the mining operation where typical mining activity will occur. The line should cross the entire width of the operation. Next, draw the cross-sectional view along the line. Finally, label all components, include dimensions.

(Attach Additional Sheets. Along With Detailed Explanations As Necessary)

PLEASE REVIEW THE SKETCH SHEET CHECKLIST TO MAKE CERTAIN THAT YOU INCLUDED EVERYTHING. INCOMPLETE SKETCH SHEETS WILL CAUSE THE ENTIRE APMA TO BE RETURNED.

EXAMPLE ONLY

F971234

ACCESS MAP

EXISTING ROAD

Begin Cross-Country Travel

Cont'd on pg. 2

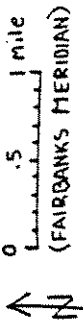
PROPOSED CAT TRAIN ROUTE
WINTER TRAIL

ITBS

DETAIL MAP OF PROPOSED CAT TRAIN ROUTE (SHEET 1 OF 4)

SOURCE: OPERATOR:

BASE FROM USGS BIG DELTA MAP SHEETS A344H



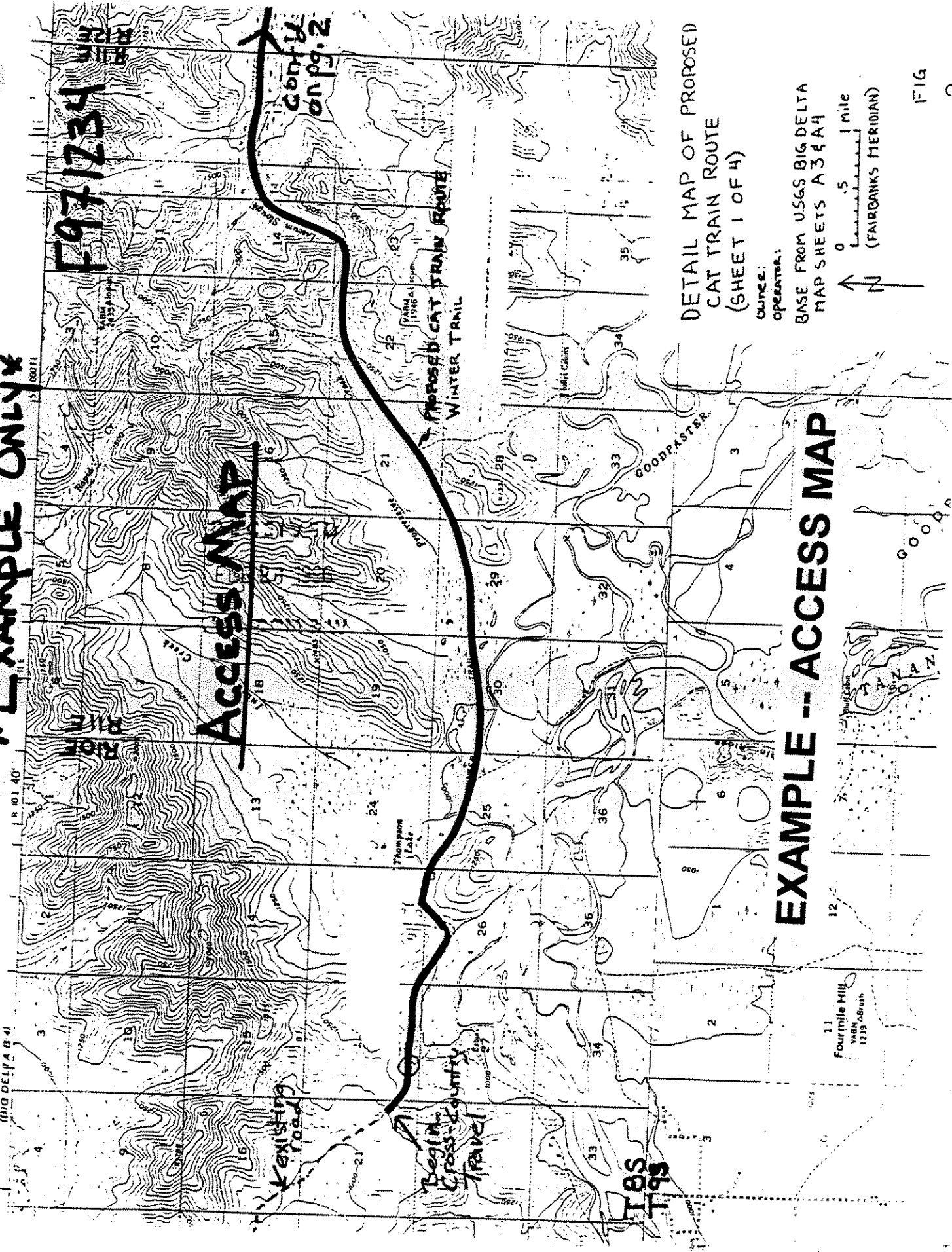
FIG

?

EXAMPLE -- ACCESS MAP

11 Fourmile Hill WASH 1235 68.ush

12 TAYAN




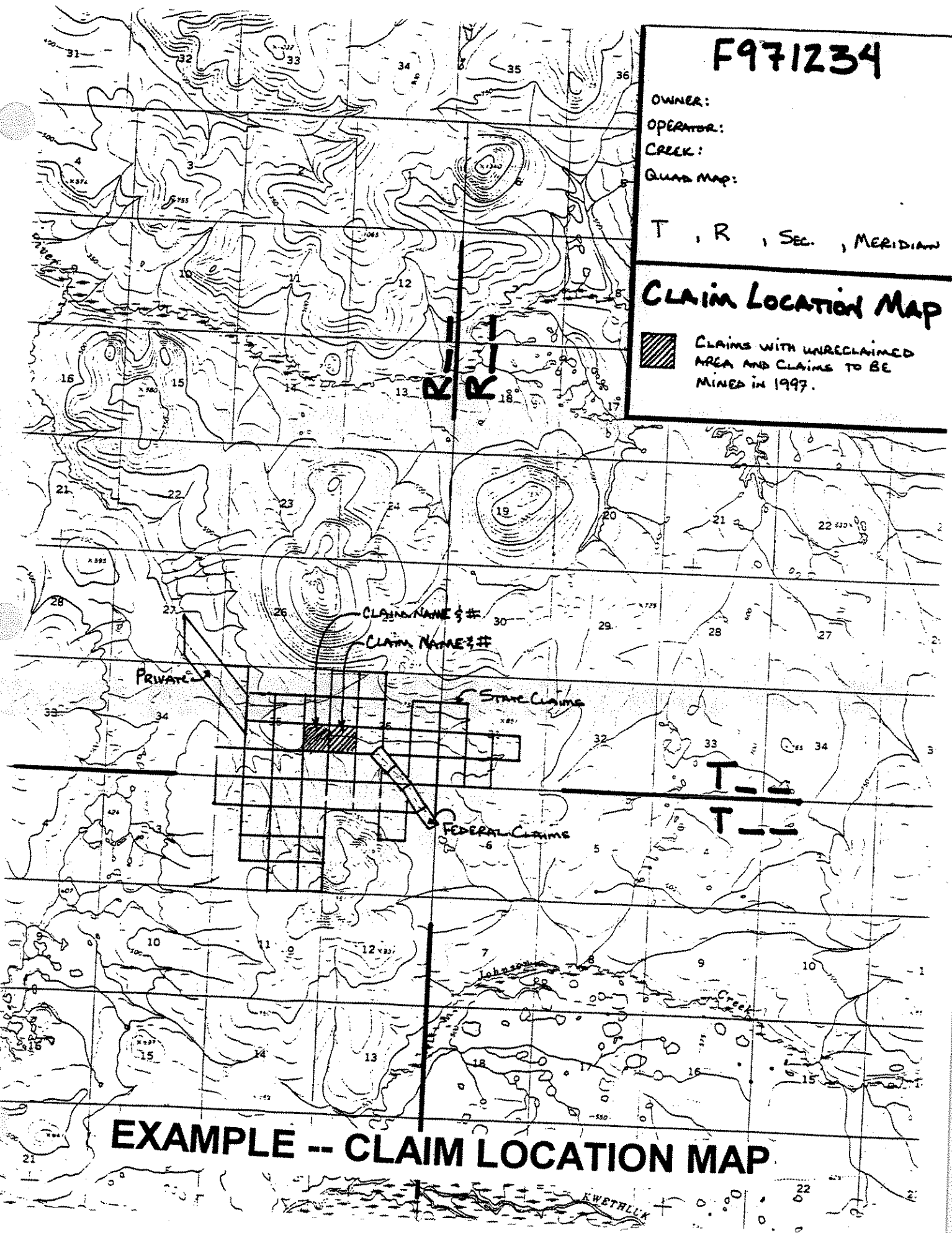
F971234

OWNER:
OPERATOR:
CREEK:
QUAD MAP:

T, R, Sec., MERIDIAN

CLAIM LOCATION MAP

 CLAIMS WITH UNRECLAIMED AREA AND CLAIMS TO BE MINED IN 1997.



EXAMPLE -- CLAIM LOCATION MAP

KWETHLUX

PLAN OF OPERATIONS SKETCH SHEET

(32)

(Attach Additional Sheets, Along With Detailed Explanations As Necessary)
**PLEASE REVIEW THE SKETCH SHEET CHECKLIST TO INSURE EVERYTHING IS INCLUDED
INCOMPLETE SKETCH SHEETS WILL CAUSE THE ENTIRE APMA TO BE RETURNED.**

Check One:

RECLAMATION PLAN
(Mined Area 5 Acres Or Greater)

RECLAMATION

LETTER OF INTENT TO DO RECLAMATION
(Mined Area Less Than 5 Acres)

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations. Reclamation bonding is required of mining operations with a mined area (all portions of a mining operation excluding camp and roads) of 5 acres or greater. Completion of this application will meet the requirements for a "Reclamation Plan" for operations 5 acres and larger in size and "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, please provide additional information concerning your plans for reclamation under separate attachments.

Total acreage currently disturbed: _____ acres. This should match: "Total Unreclaimed Acres" on your 1996 Annual Reclamation Statement for Small Mines, or line #7 on your 1997 Bond Pool Renewal Form. (Disturbed ground includes stripped areas; mining cuts; overburden and tailing stockpiles and disposal areas; stream by-passes; settling ponds and any other areas that have been disturbed since October 1991 (State mining claims or Private lands) or 1981 (Federal mining claims); and are currently unreclaimed.) -- Federal operators include area of camp and roads.

New acres to be mined in 1997: _____ acres.

Total acreage (currently disturbed plus new acres): _____ acres.

Of this acreage: _____ acres are State land. _____ acres are Private land. _____ acres are Federal land.

Total acreage to be reclaimed in 1997: _____ acres; and:

- Reclamation will be conducted concurrently with mining.
- Reclamation will be conducted at the end of the mining season.

Total volume of material to be disturbed in 1997: _____ cubic yards. (Including strippings and overburden to be removed)

The following reclamation measures shall be used. (These measures are required by law. Those that do not apply may be crossed out; but, an explanation must be given as to why these measures are not necessary at your site.)

1. Topsoil, vegetation, and overburden muck, not promptly redistributed to an area being reclaimed, will be individually separated and stockpiled for future use. This material will be protected from erosion and from contamination by acidic or toxic materials and will not be buried by tailings.
2. The area reclaimed will be reshaped to blend with the surrounding area using tailings, strippings, and overburden and be stabilized.
3. Stockpiled topsoil, overburden muck, and, if necessary, settling pond silts, will be spread over the contoured mine workings to promote natural plant growth such that the area can reasonably be expected to revegetate within five years. Stockpiled vegetation will be spread over topsoils.
4. Settling ponds located within the active flood plain and necessary for continued use during the next mining season will be protected from erosion or the fines removed.
5. Stream channel diversions will be relocated to a stable location in the valley flood plain.
6. The flood plain will be established wide enough to accommodate seasonal high water flood events and prevent undue erosional degradation.
7. Exploration trenches will be backfilled. Brush piles, stumps, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
8. All buildings and structures constructed, used or improved, on State land, will be removed, dismantled, or otherwise properly disposed of at the completion of mining. The campsite will be cleaned up and left free of debris.
9. Other: _____

IMPORTANT:

1. Alternative reclamation measures may be approved if the reclamation measures presented above are not applicable to your site. Please explain in separate correspondence. Submit a sketch and describe additional reclamation measures you propose to conduct at your mining operation. Reclamation measures must comply with Alaska Statute 27.19.
2. Federal land managers may require reclamation measures different to those identified above.

BONDING (Only required for mines 5 acres or larger)

In accordance with Alaska Statute 27.19, bonding is required for all mining operations having a mined area of five acres or greater. This area must be bonded for \$750.00 per acre, unless the miner can demonstrate that a third party contractor can do the required reclamation for less than that amount. A State-wide bonding pool has been established and may be joined by completing the bond pool application form. Federal land managers may have additional bonding requirements. Use bond form to calculate area of disturbance for bonding.

Signature of Applicant

Relationship to Claim(s)

Owner Lessee Operator

Date

**1996 ANNUAL RECLAMATION STATEMENT
for
SMALL MINES**

1996 APMA # _____

Complete and return this statement by December 31, 1996. If you did not operate, fill in name, check bottom box, sign and return form.

In accordance with AS 27.19 (Reclamation Act):

I, _____ hereby file an annual reclamation statement for the 1996 mining operation described in subject Annual Placer Mining Applications. **(Submission of this statement does not constitute reclamation approval.)**

Total acreage mined 1996: _____ acres. (Includes stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary stream diversions, stream bypasses, and settling ponds). **Federal operators should include area of camp and access roads.**

Volume of material mined in 1996: _____ cubic yards (includes strippings and processed material).

Total area reclaimed in 1996: _____ acres.

Total unreclaimed acres: _____. (This should match "total acreage currently disturbed" on the Reclamation/Signature page of your 1997 APMA.)

For the areas reclaimed, the following reclamation measures were used (check only measures that were used). **You must include photographs or videotapes of the completed reclamation work:**

- Spread and contoured tailings
- Spread topsoil, vegetation, overburden muck or fines on the surface of contoured tailings
- Reestablished flood plain with stream channel in stable position
- Backfilled and reclaimed temporary stream diversions
- Camp removed, cleaned up and left free of debris

Other reclamation measures taken: _____

I did not operate in 1996 and therefore did not conduct reclamation.

Signed

Date

**1996 ANNUAL RECLAMATION STATEMENT
for
SUCTION DREDGE OPERATIONS**

1996 APMA # _____

Complete and return this statement by December 31, 1996. If you did not operate, fill in name, check bottom box, sign and return form.

In accordance with AS 27.19 (Reclamation Act):

I, _____ hereby file an annual reclamation statement for the 1996 mining operation. **(Submission of this statement does not constitute reclamation approval.)**

Total acreage mined 1996: _____ acres.

Volume of material mined in 1996: _____ cubic yards (includes strippings and processed material).

Total area reclaimed in 1996: _____ acres.

Total unreclaimed acres: _____. (This should match "total acreage currently disturbed" on the Reclamation/Signature page of your APMA.)

For the areas reclaimed, the following reclamation measures were used (check only measures that were used):

Leveled and contoured gravel bar and riverbed tailing piles

Camp removed, cleaned up and left free of debris

My suction dredging operations did not generate tailing piles that needed to be reclaimed

Other reclamation measures taken: _____

I did not operate in 1996 and therefore did not conduct reclamation.

Signed

Date

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL FORM**

APMA # _____

Name _____

Mailing Address _____

City _____ State _____ Zip Code _____

submits unto the State of Alaska, Department of Natural Resources, the sum of (\$ _____) _____
DOLLARS for payment into the State Wide Bonding Pool to
meet the bonding requirements of Alaska Statute 27.19 for mining activity located on claim numbers: _____

These claims are located within legal description (Township, Range, Section, Meridian): _____

This bond amount was calculated as follows:

For Federal Claims: The total area of the mining operation, including camp site, access roads, unreclaimed areas, and areas to be stripped for mining next season is _____ acres. Acreage should be rounded to the next whole acre. This acreage must include all areas disturbed by mining operations after January 1, 1981, that have not been approved as reclaimed by BLM. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

For State and Patented Claims: The active mining disturbance, not including camp and access roads is _____ acres (acreage should be rounded to the next whole acre). This includes all areas that are part of the mining operation; including stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary stream diversions, stream bypasses, and settling ponds. This acreage must include all areas disturbed by a mining operation after October 15, 1991, that have not been approved as reclaimed by ADNR. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

Refundable bond deposit:

_____ acres X \$112.50 = \$ _____

Nonrefundable bond pool annual fee:

_____ acres X \$ 37.50 = \$ _____

(This acreage will be the same as above for this year):

Total \$ _____

Make check payable to ALASKA DEPARTMENT OF REVENUE. Sign and return this form, with payment, to Permitting/Field Operations, Division of Mining & Water Management, Department of Natural Resources: 3601 "C" Street, Suite 800, Anchorage, AK 99503-5935 or 3700 Airport Way, Fairbanks, AK 99709-4699.

Signed - Miner _____ Date _____

ADNR - Division of Mining & Water Management _____ Date _____

BLM - Bureau of Land Management _____ Date _____

**STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL RENEWAL FORM
FOR 1997 OPERATIONS**

APMA # _____

Name _____

Mailing Address City State Zip Code _____

submits unto the State of Alaska, Department of Natural Resources, a renewal of reclamation bonding for mining activity on claim's _____ located in Sec(s) _____, T _____, R _____, M _____.

The amount of the refund or amount owed was calculated as follows:

1. Number of acres bonded 1996: _____ acres

2. Number of acres mined or disturbed in 1996, including unreclaimed acreage from previous years -- October 1991 to present for state or private lands, and 1981 to present for federal claims. On federal claims include area of camp and access roads. _____ acres

Bonding credits carried forward from 1996 to 1997:

3. Number of acres bonded in 1996 but not mined or disturbed: _____ acres x \$ 112.50 = \$ _____
(1 minus 2 above)

4. Number of acres reclaimed in 1996 and approved by BLM/DNR (must submit Bond Release Application for State claims, when field inspection was not completed for reclaimed area -- PHOTOW/VIDEO DOCUMENTATION REQUIRED.) _____ acres x \$ 112.50 = \$ _____

5. Dollar total of lines 3 + 4: \$ _____

Bonding obligations for 1997:

6. Number of acres mined but not bonded in 1996: _____ acres x \$ 150.00 = \$ _____

7. Total number of all unreclaimed acres: _____ acres x \$ 37.50 = \$ _____
(line 7 should match "total acreage currently disturbed" on your 1997 Reclamation Plan. (2 minus 4 above)

8. New acres to be mined in 1997: _____ acres x \$ 150.00 = \$ _____

9. Dollar total of lines 6 + 7 + 8: \$ _____

10. Total acreage bonded in 1997 (7 + 8): _____ acres

If line 5 is larger than line 9 enter the difference here \$ _____. This amount will be refunded.

If line 9 is larger than line 5, the difference is due DNR \$ _____. **ALASKA DEPARTMENT OF REVENUE.** Make check payable to:

Signed - Miner Date

ADNR - Division of Mining & Water Management Date

BLM - Bureau of Land Management Date

AMENDED ACREAGE

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES STATE WIDE BOND POOL FORM

APMA # _____

Name _____

Mailing Address _____

City _____ State _____ Zip Code _____

submits unto the State of Alaska, Department of Natural Resources, the sum of (\$ _____)
_____ DOLLARS for payment into the State Wide Bonding Pool to meet the bonding
requirements of Alaska Statute 27.19 for mining activity located on claim numbers: _____

These claims are located within legal description (Township, Range, Section, Meridian): _____

This bond amount was calculated as follows:

For Federal Claims: The total area of the mining operation, including camp site, access roads, unreclaimed areas, and areas to be stripped for mining next season is _____ acres. Acreage should be rounded to the next whole acre. This acreage must include all areas disturbed by mining operations after January 1, 1981, that have not been approved as reclaimed by BLM. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

For State and Patented Claims: The active mining disturbance, not including camp and access roads is _____ acres (Acreage should be rounded to the next whole acre). This includes all areas that are part of the mining operation; including stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary stream diversions, stream bypasses, and settling ponds. This acreage must include all areas disturbed by a mining operation after October 15, 1991, that have not been approved as reclaimed by ADNR. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

Original acreage bonded: _____

New acreage bonded: _____

Refundable bond deposit (new): _____ acres X \$112.50 = \$ _____

Nonrefundable bond pool annual fee (new): _____ acres X \$ 37.50 = \$ _____

Grand total of bonded acres: _____

Total \$ _____

Make check payable to ALASKA DEPARTMENT OF REVENUE. Sign and return form with applicable fee to: Permitting/Field Operations, Division of Mining & Water Management, Department of Natural Resources: 3601 "C" Street, Suite 800, Anchorage, AK 99503-5935 or 3700 Airport Way, Fairbanks, AK 99709-4699.

Signed - Miner _____ Date _____

ADNR - Division of Mining & Water Management _____ Date _____

BLM - Bureau of Land Management _____ Date _____

**STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING & WATER MANAGEMENT STATEWIDE BOND POOL
TRANSFER OF RESPONSIBILITY FOR BONDING AND RECLAMATION**

TRANSFER FROM APMA #:	TRANSFER TO APMA #:		
<p>The parties listed below have agreed to a transfer of all responsibility and liability for any and all outstanding reclamation work and bonding that may be required by either the State of Alaska (in the case of mining activities performed on State land and/or State mining claims), or the United States (Federal) Government, through the jurisdiction of the U.S. Bureau of Land Management (BLM), and incorporating the permitted mining activities referenced under the above listed Annual Placer Mining Application (APMA) number(s).</p>			
MINING CLAIMS INVOLVED IN TRANSFER OF RESPONSIBILITY AND LIABILITY: (attach separate sheet for additional claims)			
CLAIM NAME	ADL/BLM NUMBERS	CLAIM NAME	ADL/BLM NUMBERS

Name of present bondholder responsible for bonding and reclamation on the above listed mining claims:

Name or Doing Business As (DBA)

Current Mailing Address (Street or P.O. Box)

City, State, Zip Code

Name of person and/or company accepting assignment of responsibility and liability for bonding and reclamation on the above listed mining claims:

Name or Doing Business As (DBA)

Current Mailing Address (Street or P.O. Box)

City, State, Zip Code

BY SIGNATURE HEREON, BOTH PARTIES AGREE ALL FUTURE REFUNDS OF BOND POOL DEPOSITS, IF ANY, ARE TO BE ISSUED TO: _____, UNLESS FURTHER TRANSFER ACTION IS INITIATED AND APPROVED.

<p>I, _____ Print or Type Name</p> <p>Hereby Agree to Assign all Responsibility and Liability For Any and All Outstanding Reclamation Work and Bonding On the Above Listed Claims To: _____</p> <p>_____ Signature</p> <p>_____ Date</p>	<p>I, _____ Print or Type Name</p> <p>Hereby Agree To Accept Any and All Responsibility and Liability; Any and All Outstanding Reclamation Work; and Bonding On the Above Claims From: _____</p> <p>_____ Signature</p> <p>_____ Date</p>
--	---

<p>NOTARY: Subscribed and sworn before me This _____ day of _____, 199____</p> <p>For original Bondholder: _____</p> <p>Signature of Notary: _____</p> <p>My Commission Expires: _____</p>	<p>NOTARY: Subscribed and sworn before me This _____ day of _____, 199____</p> <p>For new Bondholder: _____</p> <p>Signature of Notary: _____</p> <p>My Commission Expires: _____</p>
---	--

DNR/DOM&W MGT Approval: _____	Date: _____	Federal (BLM) Approval: _____	Date: _____
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NOTICE OF OPERATOR AUTHORIZATION – STATE MINERAL LOCATIONS

All operators or lease holders submitting APMA's for operations on State mineral locations must submit a "Notice of Authorization" from the owner of record. This notice of authorization must name the operator and leaseholder (if different), the claims(s) by Name and ADL number(s), and the time frame (beginning and ending dates) for which the authorization remains in force. The Division of Mining & Water Management will not issue any mining permits until we receive this Notice of Authorization. Please include it with your APMA.

OPERATOR AUTHORIZATION

I, _____, OWNER of state claim(s) :

<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

(Attach sheet with additional claims.)

have leased these claims to _____ or have authorized _____ to operate on these claims from ____ / ____ / ____ to ____ / ____ / ____.

Owner's Signature _____ Date _____

NOTARY:

Subscribed and sworn to before me this ____ day of _____, 19____.

For (owner) _____

(Signature of Notary)

My commission expires: _____

OR
(If the LESSEE and OPERATOR are not the same, both sections must be completed)

I, _____, LESSEE of state claim(s) :

<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

(Attach sheet with additional claims.)

have authorized _____ to operate on these claims from ____ / ____ / ____ to ____ / ____ / ____.

Lessee's Signature _____ Date _____

NOTARY:

Subscribed and sworn to before me this ____ day of _____, 19____.

For (Lessee) _____

(Signature of Notary)

My commission expires: _____

COASTAL ZONE MANAGEMENT (CZM) CERTIFICATION STATEMENT

If your proposed project is located within Alaskan Coastal Zone Management (ACZM) boundaries, it will be necessary for you to sign the certification statement below, answer the questions concerning current permits, and include this sheet with your completed Annual Placer Mining Application (APMA). This statement will be forwarded to the Division of Governmental Coordination (DGC) for retention in your project file. Should a federal permit require this certification, a copy will be forwarded to the appropriate federal agency.

Section 307(c)3(A) of the Coastal Zone Management Act of 1972, as amended by 16 USC 1456c(3), requires a permit applicant intending to conduct activities affecting land or water uses in Alaska's coastal areas to provide certification the activities will comply with the standards of the Alaska Coastal Management Program (ACMP).

If you are located in the coastal zone, the Division of Governmental Coordination (DGC) will coordinate the State's annual review of your operation. DGC will begin the State's review upon receipt of your APMA from the Division of Mining & Water Management (DOM&W).

If you need a Corps of Engineers (COE) Wetlands Permit, we strongly recommend you apply for it at your earliest convenience. The process can take several months and your coastal zone consistency determination may need to be amended if a COE permit is issued.

If your project was previously found consistent and has not changed, you should not have to go through a new consistency review. If appropriate, indicate no significant change in your operation by checking one of the boxes below:

My operation is a continuation of the same project as last year with no changes made.

My operation is a continuation of the same project as last year although I intend to make the following specific changes which I do not believe are significant (describe):

Certification Statement

I certify that, to the best of my knowledge and belief, the proposed activity described in my Annual Placer Mining Application complies with the approved Alaska Coastal Management Program, and will be conducted in a manner consistent with such program.

(Applicant Signature)

(Date)

RESPONSIBLE AGENCY

Arizona State Mine Inspector
1700 West Washington, Suite 400
Phoenix, AZ 85007

Telephone: 602/542-5971 Fax : 602/542-5335

Contact: Paul Catanzariti
Reclamation Specialist

REGULATORY AUTHORITY

1. Arizona Mine Reclamation Law, ARS 27-901, et seq.
2. Arizona Administrative Code Rules R11-2-101, et seq.

PERMITTING REQUIREMENTS

◆ **General Requirements**

Prior to drilling an exploration well, the well owner or exploration firm shall file a Notice of Intent to Drill on a form provided by the Arizona Department of Water Resources. Mineral exploration, geotechnical, cathodic protection, or grounding holes of 100 feet of depth or less do not require the filing of a Notice of Intent to Drill. More than one well may be drilled under a single Notice, so long as they are located within a single section. Drilling of the well(s) shall be completed within one year after the date of the Notice. A Project Completion Report must be filed for each mineral exploration hole within 30 days of completion of drilling. A Well Driller's report for each non-mineral exploration hole drilled must be filed by the well driller within 30 days of completion of drilling. Drillers must have a valid Arizona well driller's license. A Notice of Intent to Drill is required regardless of land status (federal, state, or privately owned).

Beginning April 1, 1997, an owner or operator of a new exploration operation shall not create a surface disturbance of more than five contiguous acres until a reclamation plan and financial assurance mechanism for the exploration operation are approved by the state mine inspector. If the inspector fails to notify the owner or operator that the plan submitted is approved, incomplete or denied within ninety days of receipt, exploration may begin.

◆ **Specific Requirements**

1. File a **Notice of Intent to Drill an Exploration Well(s)** (on a form provided by the Department of Water Resources).

Information required:

- a. Well/land location;
- b. Applicant name and address;
- c. Owner of well;
- d. Purpose of well (i.e. mineral exploration, geotechnical, etc.);
- e. Number of wells (holes);
- f. Owner of land;
- g. Description of well;
- h. Schedule for drilling;
- i. Drilling firm;
- j. Period well will remain in use; and
- k. Proposed method of abandonment.

2. **Fee of \$10** per Notice of Intent to Drill.
3. File a **Project Completion Report** for each mineral exploration hole within 30 days of completion of drilling.

Information required:

- a. The exact number of wells drilled;
- b. The depth to water encountered or detected, with reference to specific wells; and
- c. Any other information the Department may require.

4. **A Well Driller's report for each non-mineral exploration hole** drilled must be filed by the driller within 30 days of completion of drilling.

5. Effective April 1, 1997, a person who conducts exploration operations that will create **more than five contiguous acres of surface disturbance shall submit a reclamation plan to the state mine inspector. The reclamation plan shall:**

- 1) identify the county or counties in which exploration will be conducted
- 2) state the reclamation measures that will be taken to reclaim access roads, drill pads, etc.

6. A one-time submission fee must be submitted with the reclamation plan. For fiscal year 1996-1997 the submission fee is three dollars per acre of surface disturbance covered by the plan.
7. A financial assurance mechanism must be submitted to the state mine inspector within sixty days after a reclamation plan is approved.

◆ **Reclamation Requirements**

A reclamation plan for exploration operations should provide for the following requirements:

1. Exploration access roads that the operator constructs and that will not be part of post-exploration use shall be reclaimed in a timely manner after exploration is completed. If a governmental unit or agency will accept conveyance or dedication of an access road, reclamation is not required. Reclamation shall include removing culverts, restoring drainage to its general predisturbance configuration, ripping the road surface to reduce compaction and revegetation and controlling access of motorized vehicles to the reclaimed area.
2. Holes that are drilled for mineral exploration purposes, unless completed for water monitoring, withdrawal or other use, shall be plugged, sealed, or capped promptly after their use is completed as prescribed by rule by the department of water resources and as necessary to ensure the safety of persons, domestic animals, livestock and machinery in the area.
3. Drill pads shall be reshaped promptly after completion of drilling to prevent erosion and to establish contours that are generally compatible with the adjacent areas or shall be ripped to reduce compaction and aid revegetation and, if appropriate, seeded to minimize erosion.

◆ **Drill Hole Plugging Requirements**

Exploration drill holes shall be plugged as follows:

1. A drill hole not penetrating an aquifer shall include a surface seal which shall be accomplished as follows:
 - a. If the casing is removed from the top twenty feet of the well, a cement grout plug shall be set extending two feet below the land surface to a minimum of twenty feet below the land surface, and the well shall be backfilled above the top of the cement grout plug to the original land surface; and
 - b. If the casing is not removed from the top twenty feet of the well, a cement grout plug shall be set extending from the top of the casing to a minimum of twenty feet below the land surface, and the annular space outside the casing shall be filled with cement from the land surface to a minimum of twenty feet below the land surface.

2. A drill hole penetrating a single aquifer system with no vertical flow components shall be filled with cement grout, concrete, bentonite drilling muds, clean sand with bentonite, or cuttings from the well. A surface seal shall be installed as described in (1) above.
3. A well penetrating a single or multiple aquifer system with vertical flow components shall be sealed with cement grout or a column of bentonite drilling mud of sufficient volume, density and viscosity to prevent fluid communication between aquifers. A surface seal shall be installed as described in (1) above.
4. Materials containing organic or toxic matter shall not be used in the abandonment of a well.

◆ **Reclamation Surety Requirements**

The owner or operator of an exploration operation shall transmit a financial assurance mechanism to the state mine inspector within sixty days after a reclamation plan is approved. The inspector shall take final action on the financial assurance mechanism within thirty days after it is received. Beginning April 1, 1997, the financial assurance mechanism must be submitted in an amount equivalent to two thousand dollars per acre of new surface disturbance, unless the inspector approves a cost estimate for an amount less than two thousand dollars per acre. In computing reclamation costs, the inspector shall assume that third parties will perform the reclamation measures, unless the operator demonstrates sufficient financial ability to perform reclamation. Financial assurance is not required that duplicates financial assurance under other state or federal laws. An owner may provide financial assurance on an incremental basis for planned surface disturbances consistent with the reclamation plan.

Following reclamation, the owner/operator may apply for release of financial assurance by providing descriptions of reclamation measures performed, description of areas that have not been disturbed and estimates of the costs of reclamation measures that have not been performed. The inspector may release all or part of the financial assurance, depending on reclamation work completed, except that ten percent shall be retained for the costs of care, monitoring and one reseeding, if necessary. The inspector shall release the retained monies after a period of not more than three growing seasons.

OTHER AGENCY CONTACTS

**Mike Ball, Chief, Technical Support Unit
Department of Water Resources
Groundwater Management Support Section
500 North 3rd Street
Phoenix, Arizona 85004
602/417-2470**

**Arizona State Land Department
Natural Resources
1616 West Adams
Phoenix, Arizona 85007
602/542-4628**

**Arizona Department of Environmental Quality
3033 N. Central Avenue
Phoenix, Arizona 85012
602/207-2300**

CONDITIONS

1. Construction and abandonment standards for all wells shall be in accordance with A.A.C. Rules R12-15-811 and Rules R12-15-816.
2. Drilling of well(s) shall be completed within one (1) year after the date of Notice.
3. Mineral exploration, geotechnical, cathodic protection or grounding holes of 100 feet of depth or less do not apply to these provisions and do not require filing. However, if water is encountered during the drilling of these well(s), then the well(s) must be properly abandoned in accordance with Condition 1 above.
4. More than one well may be drilled under a single notice for mineral exploration and geotechnical wells so long as they are located within a single section.
5. A Project Completion Report and WELL ABANDONMENT COMPLETION REPORT must be filed for each mineral exploration hole within thirty (30) days of completion of drilling. A Well Driller Report for each hole drilled, must be filed by the driller within thirty (30) days of completion of drilling for geotechnical, cathodic protection and grounding.
6. The location of mineral exploration and geotechnical wells may be limited to the section, township and range. However, a complete legal description may be provided at the option of the well owner.
7. Pump equipment may not be installed on wells drilled for mineral exploration, geotechnical, cathodic protection or grounding purposes.
8. Special construction standards required pursuant to R12-15-821: _____

9. To abandon a well in the course of drilling, the drilling contractor shall not remove the drilling rig from the well site, otherwise, a Notice of Intent to Abandon a Well must be filed prior to abandonment, and abandonment shall not commence until Department authority has been issued or, if during the course of drilling a well the Driller or owner elects to discontinue drilling and proceed with the abandonment of the well. The filing of a Well Abandonment Completion Report shall be filed within 30 days of abandonment, in accordance with R12-15-816.F.

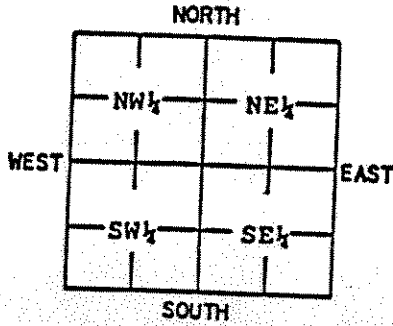
NO FEE REQUIRED

DEPARTMENT OF WATER RESOURCES (DWR)
15 South 15th Avenue
Phoenix, Arizona 85007

NO FEE REQUIRED

NOTICE OF INTENT TO ABANDON A WELL

A.R.S. §45-594, R12-15-816: Well abandonment shall be performed only by a licensed well drilling contractor or single well licensee. The owner of a well shall file a Notice of Intent to Abandon the well prior to abandonment.



INDICATE WELL LOCATION BY X
(Above diagram represents one 640 acre section)

6. County Assessor's ID:

Book _____ Map _____ Parcel _____

DESCRIPTION OF WELL TO BE ABANDONED:

7. Abandonment will begin: Month _____ Year _____ 8. Well Diameter _____ inches 9. Well Depth _____ feet

10. Type of Casing _____
11. Materials and methods to be used to abandon the well: _____

12. Reason for abandonment: _____

13. To your knowledge, is there any information that exists which indicates that the water in this well may be or is contaminated? Yes _____ No _____. If yes, explain on an attached sheet.

14. Licensed Driller performing abandonment: Firm Name _____ License No. _____
Address _____ City _____ State _____ Zip _____

1. Well Location:
Township _____ Range _____ Section _____

10 Acre $\frac{1}{4}$ 40 Acre $\frac{1}{4}$ 160 Acre $\frac{1}{4}$

2. Position location of the well on the land:

Latitude _____ " _____ "

Longitude _____ " _____ "

3. Well Registration Number: 55- _____

4. Well Owner: Name _____

Mailing Address _____

City _____ State _____ Zip _____

Telephone _____

5. Owner of the land: Name _____

Address _____

City _____ State _____ Zip _____

DO NOT WRITE IN THIS SPACE
OFFICE RECORD
File No. _____
Filed _____ By _____
Input _____ By _____
DUPLICATE
Mailed _____ By _____
Registration _____

GENERAL INSTRUCTIONS

1. This form is to be used to obtain authority to abandon a well.
2. If this well has just been discovered pursuant to A.R.S. §45-593.D., and has not been registered, this form will serve to register the well when properly abandoned and reported.
3. Fill out this form in DUPLICATE and send to 15 South 15th Avenue, Phoenix, AZ 85007.
4. Construction standards for abandonment shall be in accordance with Department Rules and Regulations.

I state that this Notice is filed in compliance with A.R.S. §45-594 and A.A.C. R12-15-816 and is complete and correct to the best of my knowledge and belief.

Date: _____ Signature of Well Owner: _____

DWR 55-38-7/90

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

PROJECT COMPLETION REPORT FOR MINERAL EXPLORATION DRILLING

This report must be prepared by the owner in all detail for each hole drilled and filed with the Department within 30 days following completion of the well drilling project.

1. Owner Name: _____
Address: _____
Street _____ City _____ State _____ Zip _____
2. Lessee or Operator Name: _____
Address: _____
Street _____ City _____ State _____ Zip _____
3. Driller Name: _____
Address: _____
Street _____ City _____ State _____ Zip _____
4. Location: _____ N/S _____ E/W _____
Township Range Section 10-Acre 40-Acre 160-Acre

WELL REGISTRATION NO. 55- _____ (REQUIRED)

DESCRIPTION OF WELL

5. Type of Casing (if installed): _____
6. Abandonment method and material used if abandoned: _____

Was well abandoned in the course of drilling pursuant to R12-15-816, F.? Yes _____ No _____

7. Date of period drilled: From: _____ To: _____

LOG OF WELL

- Unconsolidated Formation
- Consolidated Formation
Depth to water in feet below land surface: _____
(if encountered or detected)

I state that this report is filed in compliance with A.R.S. §45-600 and is complete and correct to the best of my knowledge and belief.

Owner/Lessee's Signature _____ Date _____

DWR-55-57-7/91(Rev)

DO NOT WRITE IN THIS SPACE OFFICE RECORD	
Registration No. _____	
Received _____	By _____
Entered _____	By _____
File No. _____	

CALIFORNIA

RESPONSIBLE AGENCY

State Mining and Geology Board
801 K Street, MS 24-05
Sacramento, California 95814-3500

Telephone: 916/322-1082

Contact: John Parrish, Ph.D.
Executive Officer

Office of Mine Reclamation
California Department of Conservation
801 K Street, MS 09-06
Sacramento, California 95814-3529

Telephone: 916/323-9198

Contact: Dennis J. O'Bryant
Assistant Director

REGULATORY AUTHORITY

1. California Public Resources Code section 2207
2. Surface Mining and Reclamation Act of 1975, (California Public Resources Code section 2710 et seq.)
3. California Code of Regulations, (Title 14, Chapter 8, section 3500 et seq.)
4. California Environmental Quality Act of 1970, (California Public Resources Code section 21001 et seq.)

PERMITTING REQUIREMENTS

◆ **General Requirements**

Mineral exploratory activities in California are regulated by the Surface Mining and Reclamation Act (SMARA). Pursuant to SMARA, no person shall conduct surface mining operations without obtaining lead agency (city or county) approval of: (1) a mining permit; (2) a reclamation plan; and (3) financial assurances for reclamation.

For the purposes of SMARA, exploratory and prospecting activities are considered a surface mining operation unless such activities include the removal of materials in a total amount of less than 1,000 cubic yards in any one location of an acre or less. SMARA also exempts from its reclamation requirements those exploratory activities that are required by federal law in order to protect a mining claim, if those activities are conducted solely for that purpose.

SMARA is administered by the State Mining and Geology Board, implemented at the local level by lead agencies, and enforced by the Office of Mine Reporting. For the purposes of implementing and clarifying SMARA, the State Mining and Geology Board adopts regulations (California Code of Regulations, section 3500 et seq.) with which surface mining operators and lead agencies must comply.

◆ **Specific Requirements**

1. Obtain a lead agency issued permit to conduct surface mining activities.
2. Obtain lead agency approval of a reclamation plan. Reclamation plan requirements are specified under SMARA sections 2772 and 2773.
3. Obtain a lead agency approved financial assurance for reclamation pursuant to SMARA section 2773.1. The amount of the assurance must be enough to cover the cost of reclamation, pursuant to the approved reclamation plan, for all lands remaining disturbed in a forthcoming 12-month period, and is reviewed, and as necessary, adjusted annually. The assurance must be made payable to the Department of Conservation and the lead agency, and may only take the form of: (1) a surety bond; (2) an irrevocable letter of credit; (3) a trust fund; or (4) other mechanisms as adopted by the State Mining and Geology Board through the regulatory process.
4. Undergo annual inspections by the lead agency.
5. Submit an annual report, together with an annual reporting fee, to the state as mandated by Public Resources Code section 2207. The reporting fee, as determined annually by the State Mining and Geology Board through the regulatory process, may not be less than \$50 or more than \$2,000 per mine.

6. Obtain a lead agency approved Interim Management Plan, pursuant to SMARA section 2770(h), should the mining operation become idle as defined by SMARA section 2727.1.
7. Comply with the provisions of the lead agency's local surface mining and reclamation ordinance.

◆ **Reclamation Standards**

The following are **minimum acceptable practices** to be followed in surface mining operations:

1. Erosion control facilities such as retarding basins, ditches, stream bank stabilization, and diking shall be constructed and maintained where necessary to control erosion.
2. Settling ponds or basins shall be constructed to prevent potential sedimentation of streams.
3. Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.
4. All reasonable measures shall be taken to protect the habitat of fish and wildlife.
5. Grading and revegetation shall be designed to minimize erosion and to convey surface runoff to natural drainage courses or interior basins designed for water storage.
6. Disturbed areas shall be retopsoiled and revegetated, using a selection of species having good survival characteristics for the topography, soil characteristics, and climate of the mined areas.

◆ **Drill Hole Plugging Requirements**

There are currently no state drill hole plugging requirements.

◆ **Reclamation Surety Requirements**

Lead agencies shall require financial assurances of each surface mining operation, as follows:

1. Financial assurances may take the form of surety bonds, irrevocable letters of credit, trust funds, or other forms of financial assurances specified by the state, in an amount the lead agency determines to be adequate to perform the reclamation in accordance with the surface mining operation's approved reclamation plan.

2. The financial assurance shall remain in effect for the duration of the surface mining operation and any additional period until reclamation is complete.
3. The amount of financial assurances required for any one year shall be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.
4. The financial assurances shall be made payable to the lead agency and the Department of Conservation.

OTHER AGENCY CONTACTS

California Office of Permit Assistance
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, California 95814
916/322-4245

Office of Mine Reclamation
Reclamation Unit
California Department of Conservation
801 K Street, MS 09-06
Sacramento, California 95814-3531
916/323-8567

COLORADO

RESPONSIBLE AGENCY

Department of Natural Resources
Division of Minerals and Geology
215 Centennial Building
1313 Sherman Street
Denver, Colorado 80203

Telephone: 303/866-3567

Contact: Carl Mount
Director

REGULATORY AUTHORITY

1. The Colorado Mined Land Reclamation Act, Article 32 of Title 34
2. Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board

PERMITTING REQUIREMENTS

◆ **General Requirements**

Any person desiring to conduct prospecting shall, prior to entry upon the lands (public or private), file with the Division of Minerals and Geology a **Notice of Intent to Conduct Prospecting Operations** on a form provided by the Colorado Mined Land Reclamation Board. The Board considers the term "exploration" to have the same meaning as the term "prospecting" within the Act and "development" as defined in the Act is a mining operation. If there is any question whether activities are considered prospecting or development, contact the Division.

Prospecting is defined as the act of searching for or investigating a mineral deposit. Prospecting includes, but is not limited to, sinking shafts, tunneling, drilling core and bore holes, and digging pits or cuts and other works for the purpose of extracting samples prior to commencement of development or extraction operations, and the building of roads, access ways, and other facilities related to such work. The term does not include those activities which cause no or very little surface disturbance, such as airborne surveys and photographs, uses of instruments or devices which are hand carried or otherwise transported over the surface to make magnetic, radioactive, or other tests and measurements, boundary or claim surveying, location work, or other work which causes no greater land disturbance than is

caused by ordinary lawful use of the land by persons not prospecting. The term also does not include any single activity which results in the disturbance of a single block of land totaling one thousand six hundred square feet or less of the land's surface, not to exceed two such disturbances per acre; except that the cumulative total of such disturbances will not exceed five acres statewide in any prospecting operation extending over twenty-four consecutive months.

All information provided the Division in a Notice of Intent to Conduct Prospecting shall be protected as confidential information by the Board and not be a matter of public record in the absence of written release from the operator or a finding by the Board of satisfactory reclamation.

◆ Specific Requirements

1. File Notice of Intent to Conduct Prospecting Operations.

Information required:

- a. Prospector — name, address, and phone number;
- b. Contact — name, address, and phone number;
- c. Description of lands — Site name; location, by township and range; estimated acreage of surface disturbance; and map, USGS 7.5 minute quadrangle, or similar map;
- d. Date of commencement;
- e. Type of operation that will be undertaken; and
- f. Reclamation measures.

A \$75 filing fee must accompany forms.

2. Reclamation surety, in the amount of \$2000 per acre of land to be disturbed or other such amount as determined by the Board. The financial warranty shall not be held for more than thirty days after the completion of reclamation.

3. Drill hole plugging

4. Final report, to be filed no later than sixty days after the completion of the abandonment of any drill hole which has artesian flow at the surface, or no later than twelve months after the completion of the abandonment of any other drill holes.

Information required:

- a. Date of completion of abandonment;
- b. Drill hole location; and
- c. Description of plugging, sealing, and capping techniques.

5. File of Notice of Completion of Prospecting Operations

Within 90 days of the filing of the Notice of Completion, the Board shall notify the person who had conducted the prospecting operations of the steps necessary to reclaim the land.

◆ **Reclamation Standards**

All lands affected by drilling must be reclaimed to a condition appropriate for the land use existing prior to exploration, or other beneficial use, upon completion of prospecting. The reclamation shall include, but not be limited to, the following:

1. Trash removed from the site.
2. Vegetation removed from the site must be properly disposed.
3. Drill cuttings must be spread to a depth no greater than one-half inch or buried in an approved disposal pit.
4. Mud pits shall be backfilled and graded to blend with the surrounding land surface.
5. Disturbed areas must be reseeded with an appropriate seed mix during the first normal period favorable for planting.

◆ **Drill Hole Plugging Requirements**

All drill holes shall be permanently plugged, sealed, or capped immediately following the drilling of the hole and the collection of drill hole information, unless provision is made to temporarily abandon the hole. Drill hole abandonment shall be as follows:

1. Any artesian flow of ground water to the surface shall be eliminated by a plug made of cement or a similar material or by a procedure sufficient to prevent such artesian flow.
2. Any drill hole which encounters an aquifer in volcanic or sedimentary rock, as aquifer is defined in section 37-90-103 (2), C.R.S., shall be sealed utilizing a sealing procedure which is adequate to prevent fluid communication between aquifers.
3. Each drill hole shall be securely capped at a minimum depth compatible with local cultivation practices or at a minimum of two feet below either the original land surface or the collar of the hole, whichever is lower elevation. The cap is to be made of concrete or other material which is satisfactory for such capping. The site shall be backfilled above the cap to the original land surface.
4. If any drill hole is to be ultimately used as or converted to a water well, the user shall comply with the applicable provisions of title 37, C.R.S.

5. Each drill site shall be reclaimed pursuant to section 34-32-116, including, if necessary, reseeding if grass or any other crop was destroyed.

◆ **Reclamation Surety Requirements**

Upon filing the Notice of Intent to Conduct Prospecting, a financial warranty shall be provided in an amount of \$2000 per acre of disturbed land or other amount as determined by the Division. The amount shall be equal to the cost of reclaiming the area to be disturbed. A statewide financial warranty may be submitted by a single operator for all of its Colorado exploration activities in an amount determined by the Division of Minerals and Geology. Amounts are based upon projected costs of reclamation.

Under memorandums of understanding with the Bureau of Land Management and Forest Service, all financial warranties established to ensure reclamation are to be posted with the State of Colorado.

OTHER AGENCY CONTACTS

Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220
303/331-4600

STATE OF COLORADO

DIVISION OF MINERALS AND GEOLOGY Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106



DEPARTMENT OF
NATURAL
RESOURCES

Roy Romer
Governor

James S. Lochhead
Executive Director

Michael B. Long
Division Director

Notice of Intent to Conduct Prospecting Information

If you plan to conduct prospecting on any land in Colorado, you are required to file notice and a financial warranty for the prospecting operations with the Mined Land Reclamation Board.

"Prospecting is defined as the act of searching for or investigating a mineral deposit. "Prospecting" includes, but is not limited to, sinking shafts, tunneling, drilling core and bore holes and digging pits or cuts and other works for the purpose of extracting samples prior to commencement of development or extraction operations, and the building of roads, access ways, and other facilities related to such work. The term does not include those activities which cause no or very little surface disturbance, such as airborne surveys and photographs, use of instruments or devices which are hand carried or otherwise transported over the surface to make magnetic, radioactive, or other tests and measurements, boundary or claim surveying, location work, or other work which causes no greater land disturbance than is caused by ordinary lawful use of the land by persons not prospecting. The term also does not include any single activity which results in the disturbance of a single block of land totalling 1600 square feet or less of the land surface, not to exceed two such disturbances per acre; except that the cumulative total of such disturbances will not exceed five acres statewide in any prospecting operation extending over twenty-four consecutive months.

You are encouraged to obtain and review a copy of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board, available for \$5.00 from the Division of Minerals and Geology (the "Division"). It is recommended that you review Rule 5 and C.R.S. 34-32-113.

Filing Requirements

A "Notice of Intent to Conduct Prospecting Operations" form, an application fee of \$75.00, and a financial warranty must be filed with the Board prior to entry upon lands for the purpose of conducting prospecting. The "Notice" form and financial warranty forms can be obtained from the Division of Minerals and Geology.

Financial Warranty

A financial warranty must be provided prior to entry upon lands for the purpose of prospecting. The prospector can either file a "One Site Prospecting Financial Warranty" or a "Statewide Prospecting Financial Warranty".

The One Site Prospecting Financial Warranty is usually filed by individuals or small companies where prospecting activities are limited to a single area. It must be filed in the amount of \$2,000.00 per acre of land to be disturbed unless the prospector demonstrates that a lesser amount will cover what it would cost the Board to complete reclamation. A Statewide Financial Warranty is usually filed by larger companies with multiple prospecting sites. It must be filed in the amount of \$25,000.00.

The financial warranty for a prospecting site will be retained by the Board until the prospector has completed reclamation of the prospecting site and been released, in writing, of reclamation responsibility.

Processing of Notice and Financial Warranty

Upon filing of a Notice and Financial Warranty, the Division will review them and provide the prospector with a written notice of their adequacy. If problems are identified, the prospector will be requested to submit additional information. If no problems are identified, then the prospector will be notified that the notice and financial warranty filing requirements have been met, at which time you may begin prospecting operations.

Terms and Conditions for Prospecting Operations

Detailed terms and conditions for conducting prospecting are described in Rules 5.3 and 6 of the Mineral Rules and Regulations. A prospector can obtain a copy from the Division of Minerals and Geology. Briefly, a prospector must:

1. Conduct prospecting operations so as to minimize surface disturbances.
2. Confine operations to areas near existing roads or trails, where practicable.
3. Conduct drilling so as to prevent cuttings and fluids from entering dry or flowing stream channels.
4. Abandon drill holes in timely manner as described in Rule 5.3 of the Regulations.
5. Complete reclamation of affected lands in a timely manner.
6. Comply with all applicable water quality laws and regulations.
7. Minimize adverse effects to wildlife.

Prospecting on BLM Land

The Board and the Bureau of Land Management have entered into a cooperative agreement that eliminates the need for a prospector to post a financial warranty with each agency and allows them to coordinate the review of the Notice in order to minimize administrative processing time and effort. If you plan to conduct prospecting on BLM land and wish to take advantage of the cooperative agreement, be sure to complete pages 5 and 6 of the "Notice of Intent" form. Send a complete copy of the notice to the BLM regional field office in the area of the proposed prospecting operation.