



**SURFACE MINING
RECLAMATION
PERMIT
(Form SM-9)**

name change transfer revision

Permit holder: Mason Quarry, Inc.

Mailing address: P. O. Box 43, Aberdeen, WA 98520

Pursuant to RCW 78.44, a Reclamation Permit is hereby granted to the above-named permit holder to engage in surface mining on the property described in the application and material on file under this permit. The total area to be disturbed by surface mining, including the deposition of surface-mining refuse, shall be in accordance with the reclamation plan filed with and approved by the Department of Natural Resources under this permit, and in accordance with the conditions and descriptions set forth in Exhibit "A" attached hereto and made a part hereof, and RCW 78.44.

TERM OF PERMIT

This permit shall be in effect from the date of issuance and shall remain in effect so long thereafter as the permit holder pays the annual basic fee for each site, complies with the Surface Mining Act and the rules promulgated thereunder, complies with the reclamation plan, and maintains a performance security as required by the Act.

CHANGE OR MODIFICATION OF RECLAMATION PLAN

The permit holder shall obtain written approval from the Department prior to any change or departure from the approved reclamation plan.

PERFORMANCE SECURITY

A performance security shall be submitted to and approved by the Department prior to commencement of surface mining. The permit holder may submit a cash deposit, assignment of a savings account or certificate of deposit, bank letter of credit, negotiable securities, assignments of interest in real property within the state, or a corporate surety bond in the amount specified. The amount of the performance security shall be subject to adjustment according to RCW 78.44.

TRANSFER OF PERMIT

The transfer of this permit to another permit holder shall not be made unless approved in writing by the Department. A transfer shall not be approved unless the successor permit holder assumes all duties of the former permit holder to complete the reclamation of the land and the Department approves the successor permit holder's performance security.

PENALTIES

The Department may suspend surface mining or impose civil penalties if the permit holder conducts surface mining in any manner not authorized by RCW 78.44, the rules adopted thereunder, the approved reclamation plan, or this permit.

Permitted this 1st day of December, 1989 Revised this 12th day of June, 2007

Signature <u></u>	NW ¼ Sec <u>29</u> , T <u>28</u> N, R <u>01 E</u>
Name (type or print) <u>Matthew I. Brookshier</u>	SW ¼ Sec <u>29</u> , T <u>28</u> N, R <u>01 E</u>
Title <u>Geologist, Surface Mining Reclamation Program</u>	NE ¼ Sec <u>30</u> , T <u>28</u> N, R <u>01 E</u>
Division of Geology and Earth Resources	SE ¼ Sec <u>30</u> , T <u>28</u> N, R <u>01 E</u>
	_____ ¼ Sec _____, T _____ N, R _____

TOTAL ACREAGE AND DEPTH OF PERMIT AREA (Include all acreage to be disturbed by mining, setbacks, and buffers, and associated activities during the life of the mine.) (See SM-BA.)

Total area disturbed will be 40 acres.

Maximum vertical depth below pre-mining topographic grade is 160 feet

Maximum depth of excavated mine floor is 220 feet relative to mean sea level

DNR Reclamation Permit No.
70 - 012619

EXHIBIT A
Conditions of the Permit
Surface Mining Reclamation Permit # 70-012619
Revised June 12, 2007

1. This surface mine reclamation permit applies to the following area: a 40-acre permit area located in portions of the southwest and northwest quarters of Section 29 and of the southeast and northeast quarters of Section 30, Township 28 North, Range 01 East, Willamette Meridian, Jefferson County.
2. All mining and reclamation shall comply with the rules and regulations pursuant to Chapter 78.44 RCW and Chapter 332-18 WAC.
3. All mining and reclamation shall comply with the reclamation plan, dated February 6, 2007 by the permittee and approved by the Department of Natural Resources on June 12, 2007. Any amendment or change to the plan must be submitted to and approved in writing by the Department. The Reclamation Plan consists of the following documents:
 - Permit Letter, dated June 12, 2007
 - Surface Mining Reclamation Permit (Form SM-9) dated June 12, 2007 Exhibit A, listing 12 additional conditions of the permit
 - Standard Reclamation Plan
 - Application for Reclamation Permit (Form SM-8A), dated February 6, 2007 by the permittee and dated January 26, 2007 by the landowner
 - County or Municipality Approval for Surface Mining (Form SM-6), dated by the permittee on June 25, 2004 and approved by Jefferson County on June 29, 2004
 - Reclamation Narrative date stamped by Geology and Earth on February 8, 2007
 - Six reclamation maps: Figure 1 through Figure 6 date stamped by Geology and Earth on February 8, 2007
4. If there is any conflict between the conditions in Exhibit A and any other language of the approved reclamation permit (which includes the reclamation plan), the language in Exhibit A will prevail.
5. The permit holder shall mark the entire perimeter of the 40-acre permit area with easily visible, permanent metal posts as detailed on reclamation map Figure 3. Posts shall be driven into the ground and extend at least three feet above the ground surface. A sufficient number of boundary markers shall be used to delineate the permit boundary enabling the operator, permittee and the Department of Natural Resources to monitor the progress of mining and reclamation. Permanent boundary markers shall be visible from one to the next, such that the entire perimeter of the site could be reestablished using the Global Positioning System, if the boundary markers were destroyed. All permit area posts shall be maintained for the duration of this reclamation permit.

6. The permitted depth at this site is 160 vertical feet from original ground surface. No excavation shall occur below an elevation of 220-feet msl. If additional mining depth is anticipated the reclamation plan must be revised prior to exceeding the permitted depth.
7. The total area disturbed, at any one time, is to be minimized by progressive reclamation and shoreline construction. Reclamation activities shall, to the extent feasible be conducted simultaneously with the surface mining.
8. If importation of soil or any other off site material intended for reclamation is proposed, the source and volume must be identified and written approval must be obtained from the Department prior to importation.
9. All topsoil shall be excavated, stockpiled and maintained on site for use in final reclamation. Stockpiles shall be seeded with grasses during storage to prevent erosion. Topsoil shall not be removed or sold as a product from the permit area. Soil shall be replaced to a minimum depth of 0.5-feet on the slopes and pit floor subsequent to ripping over-compacted native material.
10. Mining to the final slope shall, at minimum, vary between 2 and 3-feet horizontal to 1-foot vertical unless required to blend adjacent or existing slopes. Reclaimed slope faces shall not be straight or planar and shall incorporate a break in slope ratio, or other best management practice, to dissipate runoff energy. Slope faces shall be sinuous and variable and right angles and shall be eliminated. All reclaimed slopes must remain stable upon completion of reclamation.
11. Revegetation shall be completed as detailed in the narrative and in Form SM-8A. Noxious weeds shall not be considered acceptable vegetation and natural revegetation only shall not be deemed satisfactory. Prior to any variation from the revegetation plan, written approval must be obtained from the Department.
12. The permit holder or operator shall maintain a complete copy of this permit, including these conditions and the approved reclamation plan with additions and amendments, at the mine site for the duration of the permit.



WASHINGTON STATE DEPARTMENT OF
Natural Resources

**REQUEST FOR TRANSFER
OF SURFACE MINE
RECLAMATION PERMIT
(Form SM-2B)**

I (We), Shine Quarry, Inc., the current permit holder(s), hereby consent to the transfer of my (our) rights, privileges, and obligations under Reclamation Permit No. 70-012619, located in Section(s) 30, 29, Township(s) 28 North, Range(s) 1E E/W, of Jefferson County, Washington.

I. I (We) acknowledge that I (we) will continue to be responsible for all reclamation responsibilities for Reclamation Permit No. 70-012619, and for all obligations under the Surface Mining Reclamation Act as permittee(s), until final approval of this transfer by the Department of Natural Resources (DNR) as evidenced by the authorized signature below. I understand that DNR may not accept the transfer of the Permit until the proposed transferee(s) submit(s) acceptable documents required by the Surface Mine Reclamation Act and rules, especially WAC 332-18-150. The proposed transferee(s) may be required to submit the following documents, in complete and acceptable form, prior to approval by DNR: (1) SM-8A; (2) revised reclamation plan; (3) written approval of all parties having a possessory interest in the land; (4) revised SM-6; (5) SEPA checklist; and (6) adequate performance security. Prior to transfer, the permit must be in good standing and order.

NEW PERMIT HOLDER AND/OR LANDOWNER/MINERAL RIGHTS HOLDER INFORMATION	
New Permit Holder: <u>Mason Quarry, Inc.</u>	Landowner/Mineral Rights Holder (attach signed copies if more than one) <u>Pope Resources</u>
Address: <u>110 Commerce Street Post Office Box 43</u>	Address: <u>19245 10th Avenue NE</u>
UBI No.: <u>602-698-086</u>	
City, State, Zip: <u>Aberdeen, WA 98520</u>	City, State, Zip: <u>Poulsbo, WA 98370-7456</u>
Phone: <u>(360) 532-9380</u>	Phone: <u>(360) 697-6626</u>

II. I (We) agree to comply with all of the terms and conditions of the current approved Permit, the Surface Mine Reclamation Act, and rules. I (We) acknowledge that I (we) may be required to submit any or all of the documents listed in Section I above prior to approval of the transfer by DNR.

New Permit Holder Signature: <u>Mason Quarry Inc.</u> <i>[Signature]</i> , Pres.	Landowner/Mineral Rights Holder Signature: <u>Pope Resources, a Delaware limited partnership</u> <i>[Signature]</i> David L. Nunes, Pres. & CEO
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III. With this signature, I (we) hereby relinquish all interest in Surface Mining Permit No. 70-012619 subject to the approval of this transfer request by the Department of Natural Resources.

Current Permit Holder: <u>Shine Quarry, Inc.</u> <u>Danae Larrance</u> By: <u>Danae Larrance, President</u>	Date: <u>May 1, 2007</u>
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IV. This transfer has been approved by the Department of Natural Resources

DNR Surface Mining Approved Signature: <i>[Signature]</i>	Date: <u>06/07/2007</u>
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JUN 01 2007
Geology and Earth

Pinnacle

Real Estate Law Group, PLLC

Craig L. Jones
cjones@pinnacle-law.com

Craig L. Jones
Grant E. Courtney
Andrew J. Pratt
Daliah E. Treyve

May 24, 2007

Jim Mason
Mason Quarry, Inc.
P.O. Box 43
Aberdeen, WA 98520

Re: Request for Transfer of Surface Mine Reclamation Permit

Dear Jim:

Enclosed please find the executed original Request for Transfer of Surface Mine Reclamation Permit.

If you have any questions, or wish to discuss this further, please give me a call.

Sincerely,


Craig L. Jones

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SURFACE MINING SAVINGS CERTIFICATE ASSIGNMENT (Form SM-5)

I. For value received, Mason Quarry, Assignor, does hereby assign, transfer, and set over to the State of Washington, Department of Natural Resources, hereafter called the State, all rights, title, and interest in Savings Certificate No. 53100087 in the amount of One hundred sixty-three thousand dollars (\$ 163,000), payable on or after April 27, 2007, issued by

Bank Of America

a financial institution authorized to do business in the State of Washington, hereafter called the Bank, which Bank is a member of the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, or the National Credit Union Administration, and payable to Mason Quarry, the Assignor herein.

II. The Assignor makes this assignment pursuant to RCW 78.44, and that certain Reclamation Permit No. 70-012619 was issued to Mason Quarry (Shine Quarry) on

- III. The Assignor may, with the consent of the State, replace or renew a Savings Certificate once it has expired or is voided by the Bank.
IV. The State may at any time, after giving written notice to the Assignor, surrender the Savings Certificate to the Bank in exchange for money.
V. Any penalty suffered by the State as a result of demanding payment from the Bank shall be assessed against the Assignor.
VI. The Assignor is not entitled to any earnings or interest on the cash proceeds after the State has surrendered the Savings Certificate. Such earnings and interest shall be retained by the State.
VII. The Savings Certificate shall be held by the State during the term of this assignment.

VIII. The Assignor hereby authorizes and directs the Bank to pay the above-described Savings Certificate or any interest or earnings thereof as instructed by the State until such time as the Bank shall receive the Release provided for below. The Bank shall not be liable to inquire whether there has been performance by the Assignor or notice has been given the Assignor or to see to the application of any monies paid on the instruction of the State, and in such matters the Bank may rely upon the instruction of the State executed over the signature of the person, or his designee, appearing under the Acceptance below without need to verify the authority of such person. Nothing herein shall prevent the State from designating a person authorized to act for it in another lawful manner.

IX. It is agreed, as between the Bank and the Assignor, that in the event the bank closes or goes into receivership, any Federal Deposit Insurance Corporation, Federal Savings and Loan Insurance Corporation, or National Credit Union Administration Insurance proceeds paid on, to, or as a result of the Assignor deposits with said Banks, shall first be applied to cover this assignment.

X. Signed and dated at Aberdeen, Washington, this 27 day of April, 2007. Assignor's signature: James C. Mason. Mailing address: P.O. Box 43, Aberdeen, WA 98520.

BANK ACCEPTANCE

XI. The Bank of America Bank, as witnessed below by the signature of a duly authorized officer hereby recognizes the above assignment of Savings Certificate No. 53100087 in the amount of \$ 163,000 this 1 day of May, 2007. Authorized signature: Nancy McHugh, CSA. Mailing address: 500 'A' Street Ste 250, Tacoma, WA 98402. Branch: Tacoma Commercial.

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DEPARTMENT OF NATURAL RESOURCES ACCEPTANCE

XII. The State of Washington, Department of Natural Resources, hereby accepts the foregoing assignment of Savings Certificate No. 53100087 held by Bank of America in the amount of \$ 163,000 this 1st day of June, 2007. Authorized signature: Nancy C. De... (signature)

RELEASE

XIII. The above assignment of Savings Certificate No. drawn on in the amount of \$ is hereby released. The authorized signature and seal, below, shall witness the termination of the State's interest in this assignment.

XIV. I, Assignor in the above agreement, recognize by my signature below the release of the assignment as carried out in Clause X above. Signed this day of. Assignor's signature.

Handwritten initials and date: PCH 6/17/07

Check appropriate box(es): new permit revision of existing permit transfer of permit expansion

NOTE: Do not attempt to use this MS Word 2000 Template until you have carefully read the accompanying instruction document (SM8AINST.PDF) and unless you are familiar with the use of templates in MS Word.

1. NAME OF APPLICANT/PERMIT HOLDER(S) Shine Quarry-Danae Larrance			12. Are all of these mines now in compliance with RCW 78.44, WAC 332-18, and conditions of the permits? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 13. Have you ever had a surface mine operating or reclamation permit revoked? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Have you ever had a reclamation security forfeited? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no If you answered yes to either of the above, list the permit number(s):																										
2. MAILING ADDRESS 9861 Hwy 104 Port Ludlow, WA 98365			14. Type of proposed or existing mine: <input type="checkbox"/> pit <input checked="" type="checkbox"/> quarry Material(s) to be mined: <input type="checkbox"/> sand and gravel <input checked="" type="checkbox"/> rock or stone <input type="checkbox"/> clay <input type="checkbox"/> metal <input type="checkbox"/> limestone <input type="checkbox"/> silica <input type="checkbox"/> other _____ Deposit type: <input type="checkbox"/> glacial <input type="checkbox"/> river floodplain (alluvial) <input type="checkbox"/> river channel deposits <input type="checkbox"/> talus <input checked="" type="checkbox"/> bedrock <input type="checkbox"/> lode <input type="checkbox"/> unknown <input type="checkbox"/> other _____																										
3. Telephone 360-385-7007 UBI No. 601071122			15. Total Acreage and Depth of Permit Area: (Include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) (See Form SM-6.) Total area disturbed will be <u>40.0</u> acres. Area to be disturbed in next 36 months will be <u>1.5</u> acres. Maximum vertical depth below pre-mining topographic grade is <u>160.0</u> feet. Maximum depth of excavated mine floor is <u>220.0</u> feet relative to mean sea level																										
4. NAME OF MINE Shine Quarry																													
5. Street address and milepost of surface mine 9861 Hwy. 104 Port Ludlow, WA 98365			16. Expected start date of mining On-going																										
6. Distance (miles) Two			17. Estimated number of years Approx. 10 years																										
7. Direction from NW			18. Total quantity to be mined over life of mine (estimated): <input type="checkbox"/> tons, or <input checked="" type="checkbox"/> cu yds 3,435,000																										
8. Nearest community Shine			19. Estimated annual production: <input type="checkbox"/> tons, or <input checked="" type="checkbox"/> cu yds 350,000																										
9. COUNTY: Jefferson No attachments will be accepted. Legal Description of permit area: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>1/4</th> <th>1/4</th> <th>Section</th> <th>Township</th> <th>Range</th> </tr> </thead> <tbody> <tr> <td>SW</td> <td>NW</td> <td>29</td> <td>28N</td> <td>1E</td> </tr> <tr> <td>NW</td> <td>SW</td> <td>29</td> <td>28N</td> <td>1E</td> </tr> <tr> <td>NE</td> <td>SE</td> <td>30</td> <td>28N</td> <td>1E</td> </tr> <tr> <td>SE</td> <td>NE</td> <td>30</td> <td>28N</td> <td>1E</td> </tr> </tbody> </table>					1/4	1/4	Section	Township	Range	SW	NW	29	28N	1E	NW	SW	29	28N	1E	NE	SE	30	28N	1E	SE	NE	30	28N	1E
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10. TOTAL ACREAGE OF PERMIT AREA APPLIED FOR (include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) 40.0 acres																													
11. Do you or any person, partnership, or corporation associated with you now hold, or have you held, a surface mining operating or reclamation permit? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If you answered yes to the above, please list:																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Permit Number</th> <th colspan="2">Active Operation?</th> <th colspan="2">Reclamation current/complete?</th> </tr> <tr> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>12619 (Shine Quarry)</td> <td style="text-align:center"><input checked="" type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input checked="" type="checkbox"/></td> </tr> <tr> <td> </td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td> </td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> </tbody> </table>					Permit Number	Active Operation?		Reclamation current/complete?		Yes	No	Yes	No	12619 (Shine Quarry)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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20. Subsequent land use: <input type="checkbox"/> industrial <input type="checkbox"/> commercial <input type="checkbox"/> residential <input type="checkbox"/> agricultural <input checked="" type="checkbox"/> forestry <input type="checkbox"/> wetlands and lakes <input type="checkbox"/> Other _____ Reclaimed elevation of floor of mine: <u>220.0</u> feet relative to mean sea level Reclaimed elevation is shown on cross sections? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Subsequent land use is compatible with County or Municipal comprehensive plan? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no County or Municipality Approval for Surface Mining (Form SM-6) attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no SEPA Checklist required? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If any answers are no, explain: _____																													
21. Application fee for a new reclamation permit is herewith attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no																													

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FEB 08 2007

Geology and Earth Reclamation Permit App No. 70-012619

CHECKLIST OF RECLAMATION STANDARDS

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Geology

Permit area has been divided into segments for mining and a mining schedule has been developed? yes no
 If no, explain: _____

Permit area has been divided into segments for reclamation and a reclamation schedule has been developed? yes no
 If no, explain: _____

23A. Permit and Disturbed Area Boundaries

Boundary of the permit area has been marked on the ground with permanent boundary markers? yes no
 Explain boundary markers: Revised boundary will be marked with line-of-sight metal posts.

23B. Soiling Topsoil, Subsoil, and Overburden for Reclamation

Thickness of topsoil is 0.5 feet
 Thickness of subsoil is 0.0 feet
 Depth to bedrock is 0.5 feet
 Total volume of topsoil is 27,100 cubic yards
 Total volume of subsoil is 0.0 cubic yards
 Volume of stored topsoil/subsoil is 22,000 cubic yards and will require approx. 2.0 acres for storage.

Storage areas are shown on maps and have been marked on the ground with permanent boundary markers? yes no
Existing storage areas shown on maps but not marked on the ground.

Topsoil will be salvaged? For all remaining excavation. yes no
 If no, explain: _____

Topsoil and overburden will be moved to reclaim an adjacent depleted segment? yes no
 If no, explain: _____

Before materials are moved, vegetation will be cleared and drainage planned for soil storage areas? yes no
 If no, explain: _____

Soil storage areas will be stabilized with vegetation to prevent erosion if materials will be stored for more than one season? yes no
 If no, explain: _____

23C. Setbacks and Screens

Maximum depth of the mine will be 160 feet from 380 feet (*highest*) to 220 feet (*lowest*) elevation relative to mean sea level.
 This is the maximum relief of the disturbed area
 The setback for this site will be N/A feet wide.

Is a permanent, undisturbed buffer planned for this site? yes no
 If no, explain: Site is surrounded by timber production land - no buffers necessary.

Setbacks are shown on maps and have been marked on the ground with permanent boundary markers? yes no
 If no, explain: Setbacks not necessary.

Does this site have a backfilling plan that addresses the protection of adjacent property and how the final, stable slopes are to be achieved? yes no
 If no, explain: No backfilling is proposed.

23D. Buffers to Protect Streams and Flood Plains

If yes, see "Additional Information Requirements for Flood Plain Mines." This document is included in the SM8AINST.PDF file.

A stream buffer of at least 200 feet has been marked on the ground with permanent boundary markers? yes no

A buffer of at least 200 feet from the 100-year flood plain has been marked on the ground with permanent boundary markers? yes no
 If no, explain: Not applicable to this site

Copy of Shoreline Permit from local government or the Dept of Ecology is attached? yes no

Hydraulic Project Approval from the Department of Fish and Wildlife is attached? yes no

23E. Conservation Buffers

Conservation buffers will be established for the following purpose(s): (Check all that apply)

unstable slopes wildlife habitat water quality other _____

Describe the nature and configuration of the conservation buffer(s): N/A

Conservation setbacks are shown on maps and have been marked on the ground with permanent boundary markers? N/A yes no

CHECKLIST OF RECLAMATION STANDARDS

23E. Ground Water

High water table depth is _____ feet relative to mean sea level, below original surface, or unknown.

Low water table depth is _____ feet relative to mean sea level, below original surface, or unknown.

Annual fluctuation of water table is from _____ feet on _____ to _____ feet on _____.

Direction of ground water flow: Unknown

Are well logs attached? Two closest wells in DOE database search were a mile or more from quarry site yes no

Is the aquifer perched? Unknown yes no

Is the shallowest aquifer: confined unconfined Unknown

The site will be mined: wet dry both

Describe mining method: Hard rock quarry/cut slope method

The site is in a: N/A

critical aquifer recharge area sole source aquifer public water supply watershed
 wellhead protection area special protection area designated aquifer protection area

Ground water study attached? yes no

If yes, see "Additional Information Requirements for Hydrologically Sensitive Areas." This document is included in the SM8AINST.PDF file.

If no, explain: Site will be mined dry.

23G. Archeology

Are archeological/cultural resource sites present? yes no

If yes, describe how you will protect these resources:

24A. Soil Replacement

Topsoil will be saved? In all areas still to be excavated yes no

If no, explain:

Up to 4 feet of topsoil and (or) subsoil will be restored? yes no

If no, explain: Topsoil will be restored according to SM-7A and SM-10, Russ Holt, 02/06/03. *rlh*

Topsoil will be restored and seedbeds prepared as necessary to promote effective revegetation and to stabilize slopes and mine floor? yes no

If "yes" give details, if "no", explain: Topsoil will be replaced to an average depth of 6 inches.

Subsoil will be replaced to an approximate depth of 0.0 feet on the pit floor and a depth of 0.0 feet on slopes.

Topsoil will be replaced to an approximate depth of 0.5 feet on the pit floor and a depth of 0.5 feet on slopes.

Topsoil will be distributed evenly over the site? yes no

If no, explain:

If topsoil is in short supply, it will be strategically placed in depressions and low areas in adequate thickness to conserve moisture and promote revegetation? yes no

If no, explain:

Topsoil will be moved when conditions are not overly wet or dry? yes no

If no, explain:

Topsoil will be imported? yes no

If yes, describe source. If no, explain: Adequate topsoil exists to fulfill requirements.

Synthetic topsoil made from compost, biosolids, or other amendments will be used and (or) made on site to supplement existing topsoil? yes no

If yes, explain:

Materials such as till, loess, and (or) silt are available on site that could be used to supplement topsoil for reclamation. yes no

If yes, explain:

Silt from settling ponds or a filter press will be used for reclamation? yes no

If yes, explain:

Settling pond clay slurries will be pumped or hauled to other segments for reclamation? yes no

If yes, explain:

Soil will be replaced with equipment that will minimize compaction, or it will be plowed, disked, or ripped

CHECKLIST OF RECLAMATION STANDARDS

following placement? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil will be immediately stabilized with grasses and legumes to prevent loss by erosion, slumping, or crusting? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil stockpile areas are shown on maps and will be marked on the ground with permanent boundary markers to protect from loss? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Segmental topsoil removal and replacement is shown on maps? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil salvage and replacement plan included? Refer to narrative. If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
24B. Removal of Vegetation	
Vegetation will be removed sequentially from areas to be mined to prevent unnecessary erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Small trees and other transplantable vegetation will be salvaged for use in revegetating other segments? If yes, give details. If no, explain: Refer to narrative	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Wood and other organic debris will be: <input type="checkbox"/> recycled <input type="checkbox"/> removed from site <input checked="" type="checkbox"/> chipped <input checked="" type="checkbox"/> burned <input type="checkbox"/> buried <input type="checkbox"/> used to synthesize topsoil or mulch <input checked="" type="checkbox"/> other (explain) Some coarse debris will be salvaged as described below.	
Solid waste disposal, burning, and land use permits are attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Some coarse wood (logs, stumps) and other large debris will be salvaged for fish and wildlife habitats? If yes, give details. If no, explain: Where practical, large woody debris will salvaged and randomly piled in open space areas to provide additional wildlife habitat.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
24C. Erosion control for Reclamation	
Pit floor will slope at gentle angles toward highwall, sediment retention pond, or proper drainage? If yes, give details. If no, explain: Refer to narrative. Slope from pit floor to detention pond is approximately 7%.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Revegetation, sheeting, and (or) matting will be used to protect areas susceptible to erosion? If yes, give details. If no, explain: Refer to narrative.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Water control systems used for erosion control during segmental reclamation will: Divert clean water around pit? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Trap sediment-laden runoff before it enters a stream? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Result in essentially natural conditions of volume, velocity, and turbidity? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Handle a 25-year, 24-hour peak event? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no (Have you attached calculation?) <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Be removed or reclaimed? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
If any answers are no, explain: Natural drainage conditions will be restored by reclamation - normal sheetflow will continue to infiltrate on-site. A vegetated swale will replace the sedimentation pond. Refer to narrative.	
Will any water control systems be removed upon final reclamation? If yes, explain:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Water control measure will be established to prevent erosion of setbacks and neighboring properties? If yes, give details. If no, explain: Refer to narrative.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Storm-water conveyance ditches and channels will be lined with vegetation or riprap? N/A If yes, give details. If no, explain: Infiltration ditch (Figure 5) is gravel-lined	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Natural and other drainage channels will be kept free of equipment, wastes, stockpiles, and overburden? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

25A. Final Slopes	
Final slopes will be created using the cut-and-fill method? Explain procedure to be used: Mined-in slopes	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Slopes will be created by mining to the final slope using the cut method? Explain procedure to be used: Slopes will be cut to grade at 2-2.5H:1V during excavation.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will vary in steepness? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will have a sinuous appearance in both profile and plan view?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

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CHECKLIST OF RECLAMATION STANDARDS

If no, explain:

Large rectilinear (that is, right angle, or straight, planar) areas will be eliminated? yes no

If no, explain:

Where reasonable, tracks of the final equipment pass will be preserved and oriented to trap moisture, soil, and seeds, and to inhibit erosion? yes no

If no, explain:

25B. Slope Requirements for Pits and Overburden/Adm. Rock Piles (non-cliff production)

If the mine is a quarry or in hard rock, skip to Quarry section (25C).

Slopes will vary between 2 and 3 feet horizontal to 1 foot vertical or flatter, except in limited areas where steeper slopes are necessary to create sinuous topography and control drainage? yes no

If no, explain:

For pits, slopes will not exceed 2 feet horizontal to 1 foot vertical except as necessary to blend with adjacent natural slopes? yes no

Give details:

Slope stability analysis required? yes no

If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM&AINST.PDF file.

Slope stability analysis provided by _____

25C. Slope Requirements for Quarries and Hardrock Metal Mines

If mine is a pit in unconsolidated materials covered by Section 25B, go to Section 25D

Check the appropriate box(es)

- Slopes will not exceed 2 feet horizontal to 1 foot vertical.
- Slopes steeper than 1 foot horizontal to 1 foot vertical are an acceptable subsequent land use as confirmed on Form SM-6.
- Hazardous slopes or cliffs are indigenous to the immediate area and already present a potential threat to human life. Photo and maps attached to document presence of cliffs.
- Geologic or topographic characteristics of the site preclude slopes being reclaimed at a flatter angle and are an acceptable subsequent land use as confirmed on Form SM-6.

Slope stability analysis required? yes no

If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM&AINST.PDF file.

Slope stability analysis provided by _____

Measures will be taken to limit access to the top and bottom of hazardous slopes? yes no

Describe measures, or if no, explain: **Steep slopes are indigenous to the surrounding topography (timber production lands - no residences). Mined-in slopes will not exceed 2:1.**

Selective blasting will be used to remove benches and walls and to create chutes, buttresses, spurs, scree slopes, and rough cliff faces that appear natural? yes no

Describe procedures, or if no, explain: **No benches or highwalls will be left in place.**

Reclamation blasting will be used to reduce the entire highwall to a scree or rubble slope less than 2 feet horizontal to 1 foot vertical? yes no

Blasting plan is attached? yes no

If no, explain:

Access to benches will be maintained for reclamation blasting? yes no

If no, explain: **No reclamation blasting proposed**

Small portions of benches will be left to provide habitat for raptors and other cliff-dwelling birds? yes no

25D. Backfilling

Slopes will require backfilling? yes no

Depth of backfilling is **N/A** feet.

Slope stability compaction analysis required? yes no

Compaction analysis provided by _____

Backfilling plan and (or) permits are attached? yes no

If no, explain: **N/A**

Backfilling will be done with overburden material after topsoil has been separated? **N/A** yes no

If no, describe composition and source of backfill material:

Explain method of placement of fill:

Locations of stockpiles are shown on maps and will be marked on the ground with permanent boundary markers? **Refer to narrative.** yes no

Will backfill be imported? yes no

If yes, give volumes needed to meet reclamation plan:

Areas to be backfilled are shown on maps? yes no

CHECKLIST OF RECLAMATION STANDARDS

If no, explain: N/A

All grading/backfilling will be done with clean, inert, non-organic solids? yes no

If yes, give details. If no, explain: All materials used for grading will be from native onsite sources.

Backfilled slopes will be compacted? yes no

If yes, give details. If no, explain: N/A

Will you be backfilling into water? N/A yes no

If yes, is slope stability analysis attached? yes no

If yes, describe method: N/A

25E. Mine Floors

Flat areas will be formed into gently rolling mounds? yes no

If yes, give details. If no, Explain: Quarry floor will be ripped to create various topography and depressions

Mine floor will be gently graded into sinuous drainage channels to preclude sheetwash erosion during intense precipitation? yes no

If yes, give details. If no, explain: No channels required - sheetflow conditions natural to site.

Mine floor and other compacted areas will be bulldozed, plowed, ripped, or blasted to foster revegetation? yes no

If yes, give details. If no, explain: Refer to narrative

25F. Lakes, Ponds, and Wetlands

Is water currently present in the area or will the mining penetrate the water table? yes no

If no, go to Section 25G.

Reclaimed areas below the permanent low water table in soil, sand, gravel, and other unconsolidated material will have a slope no steeper than 1.5 feet horizontal to 1 foot vertical? yes no

If yes, give details. If no, explain:

If not already present, soils, silts, and clay-bearing material will be placed below water level to enhance revegetation? yes no

If yes, give details. If no, explain:

Some parts of pond and lake banks will be shaped so that a person can escape from the water? yes no

If yes, give details. If no, explain:

Armored spillways or other measures to prevent undesirable overflow or seepage will be provided to stabilize bodies of water and adjacent slopes? yes no

If yes, give details. If no, explain:

Wildlife habitat will be developed, incorporating such measures as:

Sinuous and irregular shorelines? yes no

Varied water depths? yes no

Shallow areas less than 18 inches deep? yes no

Islands and peninsulas? yes no

Give details:

Ponds or basins will:

Be located in stable areas? yes no

Have sufficient volume for expected runoff? yes no

Have an emergency overflow spillway? yes no

Spillways and outfalls will be protected (for example, rock armor) to prevent failure and erosion? yes no

If any answers are no, explain:

Proper measures will be taken to prevent seepage from water impoundments that could cause flooding outside the permitted area or adversely affect the stability of impoundment dams or adjacent slopes? yes no

If yes, give details. If no, explain:

Written approval from other agencies with jurisdiction to regulate impoundment of water is attached? yes no

If no, explain:

25G. FINAL DRAINAGE CONFIGURATION

Drainage will be capable of carrying the peak flow of the 25-year, 24-hour precipitation event (Data are available at DNR Region offices) N/A yes no

If yes, are calculations attached? yes no

If yes, give details. If no, explain: Sheet flow typical of pre-mining conditions.

Drainages will be constructed on each reclaimed segment to control surface water, erosion, and siltation? yes no

Clean runoff is directed to a safe outlet? yes no

If either yes, give details. If no, explain: No drainage channels necessary - indigenous sheetflow/infiltration conditions will be restored

Are these shown on maps? N/A yes no

The grade of ditches and channels will be constructed to limit erosion and siltation? N/A yes no

CHECKLIST OF RECLAMATION STANDARDS

If yes, give details. If no, explain: **No ditches or channels**

Natural-appearing drainage channels will be established upon reclamation? **No drainage channels on site** yes no

If yes, give details. If no, explain:

25A. Dealing with Hazardous Materials

Hazardous materials are present at the mine site? yes no

If no, go to Section 25B

The final ground surface drains away from any hazardous natural materials? yes no

If yes, give details. If no, explain:

Plan for handling hazardous mineral wastes indigenous to the site is attached? yes no

If no, written approval from all appropriate solid waste regulatory agencies attached? yes no

26B. Removal of Debris

All debris (garbage, 'bone piles', treated wood, old mining equipment, etc.) will be removed from the mine site? yes no

All sheds, scale houses, and other structures will be removed from the site? yes no

If either answer is yes, give details. If no, explain: **Scale house is property of Pope Resources and will remain for timber scales.**

The mine site is in: eastern Washington
 western Washington

The mine site is: wet dry?

The average precipitation is **40 inches** per year.

Revegetation will start during the first proper growing season (fall for grasses and legumes, fall or late winter for trees and shrubs) following restoration of slopes? yes no

If yes, give details. If no, explain: **Refer to narrative**

Test plots will be used to determine optimum vegetation plans? yes no

The site will not be revegetated because:

It is a rural area with a rainfall exceeding 30 inches annually and erosion will not be a problem (requires approval of DNR).

Demonstration plots and areas will be used to show that active revegetation is not necessary.

Revegetation is inappropriate for the approved subsequent use of this surface mine.

Explain: **N/A**

Documentation is attached? yes no

27A. Recommended Planter Species

In the Sections below, check the species that will be planted at your mine site:

** indicates nitrogen-fixing species*

Western Washington Dry Areas

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> alfalfa* | <input type="checkbox"/> Lupine* | <input type="checkbox"/> clover* | <input type="checkbox"/> orchard grass |
| <input type="checkbox"/> cereal rye | <input type="checkbox"/> perennial rye | <input type="checkbox"/> colonial bent grass | <input type="checkbox"/> ponderosa pine |
| <input type="checkbox"/> creeping red fescue | <input checked="" type="checkbox"/> red alder* | <input checked="" type="checkbox"/> Douglas fir | <input type="checkbox"/> shore pine |
| <input checked="" type="checkbox"/> ground cover | <input type="checkbox"/> shrubs | <input type="checkbox"/> other | |

Western Washington Wet Areas

- | | | | |
|--|--|--|---------------------------------|
| <input type="checkbox"/> birdsfoot trefoil | <input type="checkbox"/> sedges | <input type="checkbox"/> cedar | <input type="checkbox"/> tubers |
| <input type="checkbox"/> cottonwood | <input type="checkbox"/> wetland grasses | <input type="checkbox"/> creeping red fescue | <input type="checkbox"/> willow |
| <input type="checkbox"/> red alder* | <input type="checkbox"/> other | | |

Eastern Washington Dry Areas

- | | | | |
|---|---|-----------------------------------|---|
| <input type="checkbox"/> alder* | <input type="checkbox"/> grasses | <input type="checkbox"/> alfalfa* | <input type="checkbox"/> juniper |
| <input type="checkbox"/> black locust | <input type="checkbox"/> lodgepole pine | <input type="checkbox"/> clover | <input type="checkbox"/> lupine* |
| <input type="checkbox"/> deciduous trees | <input type="checkbox"/> ponderosa pine | <input type="checkbox"/> shrubs | <input type="checkbox"/> deep-rooted ground cover |
| <input type="checkbox"/> diverse evergreens | <input type="checkbox"/> other | | |

CHECKLIST OF RECLAMATION STANDARDS

Eastern Washington Wet Areas

- | | | | |
|---------------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> alder* | <input type="checkbox"/> cottonwood | <input type="checkbox"/> poplar | <input type="checkbox"/> sedges |
| <input type="checkbox"/> serviceberry | <input type="checkbox"/> tubers | <input type="checkbox"/> willow | |
| <input type="checkbox"/> other | | | |

Give planting details (stems/acres of trees and shrubs, see Forest Practices manual; lbs/acre of grass, legume, or forb mixture):
Refer to narrative.

Describe weed control plan:
Refer to narrative.

17B: Planting Techniques

Revegetation at this site will require:

- | | | |
|--|---|--|
| Ripping and tilling? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Blasting to create permeability? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Mulching? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Irrigation? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Fertilization? As needed. | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Importation of clay- or humus-bearing soils? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Other soil conditioners or amendments? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
- Give details: **Refer to narrative**

Trees and shrubs will be planted in topsoil or in subsoil amended with generous amounts of organic matter? yes no
 If yes, give details. If no, explain: **Planting will utilize topsoil. See narrative.**

- | | | |
|---|---|--|
| Mulch will be piled around the base of trees and shrubs? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| High quality stock will be used? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Trees and shrubs will be planted while they are dormant? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Stock will be properly handled, kept cool and moist, and planted as soon as possible? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Seeds will be covered with topsoil or mulch no deeper than one-half inch? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
- If any answers are no, explain: **Refer to narrative.**

All required maps are attached (*See Instructions for detailed requirements*)? yes no

All required cross-sections are attached (*See Instructions for detailed requirements*)? yes no

Geologic map attached (if required)? yes no

All documents submitted have the date, the name and address of the permit holder, and the application number on every page of the material? yes no

The plan contains predominantly relevant information? yes no

Have you completed the SM-6 and has it been signed by the local jurisdiction? yes no

Have you provided the SEPA checklist? yes no

Have you provided a copy of the SEPA Determination (DNS, MDNS, or DS)? **N/A** yes no

Have you attached photographs? yes no

Are additional supplemental studies included? yes no

If yes, check the appropriate box(es) below:

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Archeological | <input type="checkbox"/> Geohydrologic | <input type="checkbox"/> Backfill | <input type="checkbox"/> Slope stability |
| <input type="checkbox"/> Topsoil | <input type="checkbox"/> Flood plain | <input type="checkbox"/> Conservational | <input type="checkbox"/> Vegetation |
| <input type="checkbox"/> Other | | | |

Other permits required? yes no

If yes, check the appropriate box(es) below:

- | | | |
|--|---|---|
| <input type="checkbox"/> Shoreline permit | <input type="checkbox"/> Water Discharge Permit | <input type="checkbox"/> Solid Waste Permit |
| <input type="checkbox"/> Air Quality Permit | <input type="checkbox"/> NPDS or General Discharge Permit | <input type="checkbox"/> Hydraulic Project Approval |
| <input type="checkbox"/> Special or Conditional Use Permit | <input type="checkbox"/> Other | |

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The applicant shall be considered as the permit holder for this surface mine and shall be responsible for compliance with Chapter 78.44 RCW, Chapter 332-18 WAC, the approved reclamation plan and attachments, and the conditions of the permit if issued by the Department of Natural Resources.

I hereby agree to comply with this plan. <i>Signature of applicant or company representative</i> <i>Danae Larrance</i>	Name and Title of Company Representative (Please print) Danae Larrance Pres.	Date signed 2-6-07
--	---	-----------------------

SURFACE OWNERSHIP Give names, addresses, and signatures of all individuals with possessory interest in land. Pope Resources, PO Box 7, Port Gamble, WA 98364 (attach signed copies of this page if more than one) I verify that the applicant has my permission to mine from my land. <i>Signature of landowner(s)</i> <i>Patrick Raymond</i> <i>Date Signed</i> <i>Patrick Raymond Area Manager 1/26/07</i> <i>Pope Resources</i> <i>P.O. Box 7, Port Gamble, WA 98364</i> I hereby verify that I have seen and approved this plan. <i>Signature of landowner(s)</i> <i>Patrick Raymond</i> <i>Date Signed</i> <i>Patrick Raymond Area Manager 1/26/07</i> <i>Pope Resources</i> <i>P.O. Box 7, Port Gamble, WA 98364</i>	OWNERSHIP OF RIGHTS TO REMOVE MINERALS BY SURFACE MINING Give names, addresses, and signatures of all individuals with rights. (attach signed copies of this page if more than one) I verify that the applicant has my permission to mine this land. <i>Signature of rights owner(s)</i> <i>Patrick Raymond</i> <i>Date Signed</i> <i>Patrick Raymond Area Manager 1/26/07</i> <i>Pope Resources</i> <i>P.O. Box 7 Port Gamble, WA 98364</i> I hereby verify that I have seen and approved this plan. <i>Signature of rights owner(s)</i> <i>Patrick Raymond</i> <i>Date Signed</i> <i>Patrick Raymond Area Manager 1/26/07</i> <i>Pope Resources</i> <i>P.O. Box 7, Port Gamble, WA 98364</i>
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Date accepted	Accepted by:	Title:	Reclamation Permit No.
12 JUN 07	Matthew I. Bradshier	Geologist, SMRS	70-02619

Comments by Department:
 See Exhibit A, Conditions of the Permit, attached to and made a part of the permit.

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WASHINGTON STATE DEPARTMENT OF
Natural Resources

**COUNTY OR MUNICIPALITY
APPROVAL FOR
SURFACE MINING
(Form SM-6)**

NAME OF COMPANY OR INDIVIDUAL APPLICANT(S) <small>Same as name of the exploration permit holder. (Type or print in ink.)</small> Shine Quarry, Inc.	TOTAL ACREAGE AND DEPTH OF PERMIT AREA <small>(Include all acreage to be disturbed by mining, setbacks, and buffers, and associated activities during the life of the mine.) (See SM-8A.)</small> Total area disturbed will be <u>40</u> acres Maximum vertical depth below pre-mining topographic grade is <u>160</u> feet Maximum depth of excavated mine floor is <u>220</u> feet relative to mean sea level				
	COUNTY <u>Jefferson</u> No attachments will be accepted. Legal description of permit area:				
MAILING ADDRESS 9861 Hwy. 104 Port Ludlow, WA 98365 Telephone 360-385-7007	1/4	1/4	Section	Township	Range
	NW	SW	29	28N	1E
	SW	NW	29	28N	1E
	NE	SE	30	28N	1E
	SE	NE	30	28N	1E

Proposed subsequent use of site upon completion of reclamation
Commercial Forest (CF80)

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Signature of company representative or individual applicant(s) <i>Danae Larrance</i>	Name and title of company representative (please print) Danae Larrance	Date signed 6/25/04
---	--	-------------------------------

TO BE COMPLETED BY THE APPROPRIATE COUNTY OR MUNICIPALITY:

Please answer the following questions 'yes' or 'no'.

1. Has the proposed surface mine been approved under local zoning and land-use regulations?	Yes	No
2. Is the proposed subsequent use of the land after reclamation consistent with the local land-use plan/designation?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

When complete, return this form to the appropriate Department of Natural Resources regional office.

Name of planning director or administrative official (please print) JL SCALF	Address 621 SHERIDAN ST. PORT TOWNSEND, WA 98368		
Signature <i>JL Scalf</i>			
Title (please print) DIRECTOR OF COMM DEV			
Telephone 360-379-4493	Date 6/29/04	DNR Reclamation Permit No. 12619	

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1 - INTRODUCTION

On behalf of Shine Quarry, Inc., Ecological Land Services, Inc. (ELS) has prepared this updated surface-mine reclamation plan for the Washington State Department of Natural Resources (DNR), Division of Geology and Earth Resources. This reclamation plan, including the narrative, DNR forms, and maps and figures, is intended to satisfy the DNR requirements as stated in *Chapter 78.44 Revised Code of Washington (RCW)*.

2 - SITE DESCRIPTION

2.1 - Site Location

The Shine Quarry is located in the Northeast $\frac{1}{4}$ of the Southeast $\frac{1}{4}$ and the Southeast $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ of Section 30, and the Northwest $\frac{1}{4}$ of the Southwest $\frac{1}{4}$ and the Southwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 29, Township 28 North, Range 1 East, W.M. in Jefferson County, Washington. The street address is 9861 Hwy. 104, Port Ludlow, Washington.

2.2 - Background

Permitted operations at the Shine Quarry began in 1989 after the Washington Department of Natural Resources approved the reclamation plan and issued permit #70-012619. The permit authorized operation of a surface mine on 20 leased acres south of Port Ludlow, Washington. The leased quarry site is located within the approximately 21,000-acre Thorndyke Block, a portion of the 72,000-acre Hood Canal Tree Farm owned by Pope Resources. Although the 1989 permit provides for mining and reclamation on only 20 acres, Shine Quarry, Inc. in fact has a renewable 40-acre lease agreement with Pope Resources. A permit inspection of the quarry site in April of 2004 led to a DNR recommendation that the entire 40 acres should be permitted by both the county and the state. Shine Quarry, Inc. subsequently applied to Jefferson County for an acreage revision to the original County Approval for Surface Mining (Form SM-6). A new SM-6 for 40 acres was issued in June, 2004, and this revised plan reflects the increased acreage.

2.3 - Subsequent Use

The reclamation plan proposes a subsequent use of timber production, conforming to the Jefferson County Comprehensive Plan land-use designation as Commercial Forest (CF80). There is no zoning district for the area. Native forest tree species will be planted as an integral part of the revised reclamation plan. Refer to the Revegetation Plan (Section 6) for details.

3 - GEOLOGY AND HYDROLOGY

3.1 - Regional and Site Geology

The mine permit boundary is located on a glacial terrace approximately 1.5 miles west of Squamish Harbor (Hood Canal). The Washington State Department of Natural Resources

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(DNR) *Geologic Map of Washington – Northwest Quadrant*, describes the geologic units in the region as being Volcanic Deposits (Ev_c). The volcanic deposits are basalts of the Lower-Middle Eocene Crescent Formation. This correlates with the U.S. Geological Survey (USGS) *Open-File Report 91-147* categorization of the bedrock geology as the exposed upper member of the Crescent Formation, consisting of massive and columnar-jointed basalt flows (Tev). “Red oxidized zones at the tops of these flows are common and most of this unit appears to have been erupted under subaerial conditions.” (Yount and Gower, 1991).

The project site is characterized by gently rolling, timbered slopes (approximately 7% grade from north to southwest across the project site). Pre-mining elevations, based on 1973 USGS maps, were from 380 to 220 feet MSL. The lowest topography encountered within the permit boundary is at the SW corner of the site and outside the active mine extraction area. Annual precipitation at the quarry site ranges from 30 to 55 inches. The existing Shine Quarry has revealed significant basalt material to a depth of 120 feet bgs consistent with the geologic units described on the DNR geologic map and USGS Open-File Report referenced above.

3.2 – Groundwater

Groundwater information provided in this report is based on well log information obtained from the Department of Ecology (DOE) and an independent report, Robinson & Noble DRATIC evaluation 1998. A DOE database search for well logs within one mile of the Shine Quarry yielded information on one active domestic well located one mile to the southeast. An additional active well that is the water supply for the Shine Pit, a sand and gravel operation located on the south side of Hwy. 104, is located approximately 1.1 mile from the quarry site according to the Robinson & Noble report. It is unknown if the aquifer these wells draw from is confined or unconfined or if both wells draw from the same aquifer. Based on data for these two wells, it appears that domestic water supply is drawn at or below 150 feet MSL. Due to the limited water table data and its distance from the site, it is likely not representative of the water table on the subject property. The mining depth for the Shine Quarry is limited to 220 feet MSL (Form SM-6), which is significantly higher than the data obtained off-site and shows no physical evidence that it is contacting the water table. Based on the physical evidence of a dry quarry floor at the current mining depth and the basalt material being excavated, mining to the proposed depth is not expected to encounter groundwater. Refer to Table 3-1 for approximate well distance from site, elevations of wells (estimated from topographic maps) and water levels.

Table 3-1

Water Supply Well Data

ELS Well No.	Name on Well Report	Well Distance From Site	Well Surface Elevation	Elevation of Water Level (depth to screen)
311	Fred Hill Materials	1.1 mile	approx. 300 ft.	approx. 150 ft.
321	Tom Graves	1.0 mile	approx. 220 ft.	approx. 90 ft.

Note: Elevation in Mean Sea Level (MSL).

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Ecological Land Services, Inc.
December 2006

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EXTENSION (11/11/07)

4 – MINING AND RECLAMATION

4.1 – Segmental Mining and Reclamation

The permit boundary for this site encompasses 40 acres leased from Pope Resources. Approximately 26 acres have been previously disturbed by mining operations, which have included rock extraction, product stockpiles, equipment storage areas and haul roads. The proposed mining disturbance encompasses all mining-related operations inside a revised 40-acre boundary, which includes all prior disturbance. Historically, topsoil and subsoil have been salvaged as one soil unit and stockpiled. All stockpiled topsoil and subsoil is considered a valuable resource for reclaiming the site and will be stabilized and maintained for that purpose.

Segmental reclamation was not a condition of the original (1989) permit, and mining has proceeded as one single mining segment with minimal reclamation. The revised plan has redrawn the permit/lease boundary (with Pope Resources approval) to encompass all prior disturbance. Segmental reclamation will begin starting with the northern 9 acres (Phase 1), which will be reclaimed as mining progresses back out to the center of the site from the northernmost excavation to 220-foot MSL. Existing topsoil stockpiles will remain in Mining Segment 1 (Phase 3) until needed for Phase 1 reclamation.. Phase 2 reclamation (in the SE 6 acres of the site) will also utilize existing stockpiled topsoil. Additional salvaged soil will be temporary stored on 30-foot benches maintained at the northern and eastern site perimeter. Reclamation of the remaining permitted area (Phase 3) will begin at the cessation of mining (Figure 4).

Maximum elevation difference within the proposed mining boundary revision will be 160 feet bgs, from the highest pre-mining elevation of 380 feet MSL to the lowest elevation of 220 feet MSL (which now parallels the westernmost boundary of the site). The quarry floor will first be mined to 260 feet MSL (while allowing for the maintenance of the 30-foot bench at the 280-foot level on the site perimeter) followed by additional excavation in lifts down to 220 feet.

The proposed redrawn permit boundary will allow construction of a sinuous post-mining topography. Final topography will include cut-to-grade slopes (2-2.5H:1V) resulting from mining. The perimeter of the permit/lease area will be sinuously joined to the existing contours of the surrounding Pope Resources forestland. (Figure 5).

4.2 – Topsoil and Subsoil Plan

The U.S.D.A. Soil Conservation Service, *Soil Survey Of Jefferson County Area, Washington* (1975), describes the onsite soils as Olete very gravelly silt loam (OeD) and Olete-Alderwood complex (OID). All the topsoil that has been salvaged from the extraction area and stockpiled is OeD. The topsoil profile is described as the O1, O2, B21ir and B22ir horizons, approximately 18 inches in depth overlying the subsoil (C horizon). The B-horizon topsoil reduces from dark reddish brown to dusky red color with depth, which appears to be relatively consistent over the unexcavated portions of the site. According to the Soil Survey mapping, inclusions of basalt rock outcrops and areas of shallow soils are included within this soil type. This variability is demonstrated at the Shine Quarry site where depth to basalt bedrock ranges from 0.0 to 12.0 inches.

TABLE 4-1

Soil Budget For Shine Quarry Revised Reclamation Plan

Mining Segment	Reclamation Phase	Acres	ESTIMATED TOPSOIL VOLUME (cy)			ESTIMATED OVERBURDEN VOLUME (cy)		
			Topsoil Available	Topsoil Needed for Reclamation	Surplus Topsoil	Overburden Available	Overburden For Reclamation	Surplus Overburden
Seg-1	Phase 1	9.00	7,260	7,260	-	-	-	-
Seg.-2	Phase 2	6.00	4,840	4,840	-	-	-	-
Seg-1	Phase 3	23.00	15,000	18,560	(3,560)	-	-	-
Totals		38.00	27,100	30,660	(3,560)	-	-	-

Assumptions:

Maximum Mining Depth: 160 feet below pre-mining topographic grade
Permit Boundary Acreage: 40 acres
Mining Disturbance Boundary: 40 acres
Topsoil Salvage Depth: up to 6 inches -- areas with rock outcrops will provide less
Overburden Depth: 0
Topsoil Placement Depth: 6 inches per SM-7A and SM-10 by Russ Holt, 5 Feb. 2003.
Volumes: Cubic yards based on in situ calculations (no swell factor included).

Calculations Notes:

Topsoil Available: Volume based on existing stockpiles and future soil-salvage area
Topsoil Placement: 6 inches over 13 acres of slopes; remainder placed in depressions ripped into quarry floor
Overburden Available: Overburden and topsoil (growth medium) are indistinguishable on-site. Site is outcrop with a maximum of 6 inches of growing medium.
Existing Topsoil Stockpile Volume: estimated 15,000 cubic yards

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The 15,000 (current stockpile estimate) + 7260 (9 acres M-1)) + 4840 (6 acres M-2) cubic yards of undifferentiated topsoil/subsoil will be replaced on approximately 13 acres of reclaimed slopes (all slopes) and approximately 10 acres of quarry floor at completion of mining (Table 4.1). Topsoil will be replaced to an approximate average depth of 0.5 feet over reclaimed slopes, staging areas and roads to promote effective revegetation. Where feasible, reclaimed areas will be ripped to reduce compaction. Topsoil will be replaced evenly over the graded slopes with scrapers or truck/dozer operations. Dozers and or backhoes may be used to configure the final slope and prepare the seedbed. Some micro-relief, such as shallow depressions and ridges from ripping and topsoil replacement operations, will be left in the reclaimed surface. This micro-topography will promote germination of grasses and assist in sediment capture during the initial years of reclamation. Depressions ripped at spaced intervals into the quarry floor will receive all topsoil not distributed on the configured slopes.

Topsoil will be handled only during conditions that are not overly wet or dry. Because the existing topsoil is conducive to supporting the native tree species planned for reclamation, no supplements are proposed for initial plantings (the revegetation plan provides for fertilization of individual seedlings during the second or third growing season if necessary). Existing soil stockpiles will be "track walked" perpendicular to their slope and seeded with an annual grass mixture to prevent erosion. Topsoil will be distributed on mined-in slopes and pit floor contemporaneously with completion of mining in the northernmost portion of Segment 1 and in Segment 2. Subsequent reclamation of the remaining permitted area (Segment 1, Phase 3) will begin at the cessation of mining within the revised permit boundary.

Reclaimed areas will be revegetated with prescribed species during the first fall or winter after completion of mining to stabilize the site. The Soil Budget (Table 4.1) shows the overall soil material budget for the site.

4.3- Setbacks and Buffers

The majority of final topography will be created by application of the cut method and will not require any reclamation setback or backfilling. No additional buffers will be required for streams, unstable slopes or critical wildlife habitat within the permit boundary or adjacent to the project.

5 - EROSION CONTROL

5.1 - Existing Stormwater

Any stormwater runoff associated with the existing mine is currently directed into a settling pond at the edge of the southwestern perimeter of the existing pit. Pond water is conveyed via culvert to a ditch that borders the permanent forest road on the southwestern perimeter of the site where it infiltrates. Based on January-April 2003 field observations, there is no evidence of untreated runoff or erosion leaving the site. Within the existing pit, portions of the exposed basalt may be

temporarily saturated, evidenced by seepage during the winter months. Seepage does not appear to be continuous and flows are minimal.

5.2 – Proposed Stormwater Plan and Erosion Control System

Shine Quarry has an existing Stormwater Pollution Prevention and Erosion Sediment Control Plan (1996) that complies with special conditions S6 and S7 of the quarry's Sand and Gravel General Permit (No. WAG-50-1097). The revision of the permit boundaries will not reduce the effectiveness of the existing plan. Best Management Practices as specified in the plan will continue to be implemented. Stormwater will continue to be directed as shown on the plan's site map. The plan appears to have been successful to date in containing all sediment on site and will be revised as necessary to reflect changing conditions over the life of the mine. During reclamation of Phase 3 the existing pond will be replaced with an infiltration swale at the southwest corner of the site (Figure 5). This vegetated swale will remain as a permanent fixture connected via an outfall to the current infiltration ditch bordering the forest road.

6 – REVEGETATION PLAN

6.1 – Upland Forestry

In keeping with Jefferson County's Commercial Forest designated land-use classification for the site, native upland forested communities consisting of conifers and hardwoods interspersed with small open space areas will be established to provide a diverse and practical revegetation scheme. The forested communities will consist primarily of commercial Douglas fir planted at 435 trees/acre. Red alder, a nitrogen-fixing hardwood species, will be planted at the same density on north-facing slopes and in any other areas that will not support the growth of Douglas fir.

In addition to the two species proposed for planting, a managed-forest mixture of shrubs and trees on the surrounding adjacent land belonging to Pope Resources will provide a seed source for natural vegetation propagation. Native herbaceous seed, present in the redistributed topsoil, will inoculate the reclaimed areas with understory species. If necessary, additional seed may be sown if adequate re-seeding does not occur naturally within the first year. Table 6-1 identifies vegetation to be installed to establish pre-existing flora and enhance vegetative diversity, wildlife habitat, slope protection and erosion control. Bareroot trees will be supplied by a local nursery and from within the proper seed zone. Based on the poor quality of the native topsoil in the area, fertilization of individual seedlings may be required after the second or third growing season. Fertilizer should be applied to individual trees and not broadcast, to minimize the potential for competition from invasive herbaceous species.

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**TABLE 6-1
Upland Forest Revegetation Specifications**

Species Common Name	Scientific Name	Planting Method	Planting Density	Planting Season
Douglas fir	<i>Pseudotsuga menziesii</i>	Bareroot	435 per acre	Spring
Red alder	<i>Alnus rubra</i>	Bareroot	435 per acre	Spring

6.2 - Open Space

Small, randomly positioned open-space areas on the quarry floor will be seeded with a grass/legume mix at 20 pounds per acre to promote wildlife forage. Fertilizer will be broadcast at a rate of 200 lbs./acre in these areas at the time of initial seeding. These small pockets will be located in areas that will complement the function and value of the upland forest. The seed mix identified in Table 6-2 is a combination of native and naturalized species recommended to provide effective soil stabilization, soil nutrients and wildlife forage. Seeding will also achieve temporary erosion control and long-term reclamation goals for the site. This prescription can be substituted with a comparable mix of native species. Where practical, large woody debris will be salvaged and randomly piled in the open space areas to provide additional wildlife habitat and shelter.

**TABLE 6-2
Open Space Revegetation Specifications**

Species Common Name	Scientific Name	Planting Method	Planting Density	Planting Season
Big bluegrass	<i>Poa ampla</i>	broadcast	5 %	spring/fall
Columbia brome	<i>Bromus vulgaris</i>	broadcast	20 %	spring/fall
Orchard grass	<i>Dactylis glomerata</i>	broadcast	20 %	spring/fall
Timothy	<i>Phleum pratense</i>	broadcast	10 %	spring/fall
Tall fescue	<i>Festuca arundinacea</i>	broadcast	10 %	spring/fall
W. Dutch clover	<i>Trifolium repens</i>	broadcast	25 %	spring/fall
Ladak alfalfa	<i>Medicago sativa</i>	broadcast	5 %	spring/fall
Burnet	<i>Sanguisorba sp.</i>	broadcast	5 %	spring/fall

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REFERENCES

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LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. There are no other warranties, express or implied. The services performed were consistent with our agreement with our client. This report is prepared solely for the use of our client and may not be used or relied upon by a third party for any purpose. Any such use or reliance will be at such party's risk.

The opinions and recommendations contained in this report apply to conditions existing when services were performed. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report. ELS does not warrant the accuracy of supplemental information incorporated in this report that was supplied by others.

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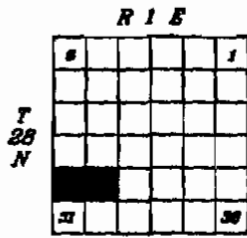
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LOCATION MAP
47° 53' 18" N Latitude
122° 42' 49" W Longitude



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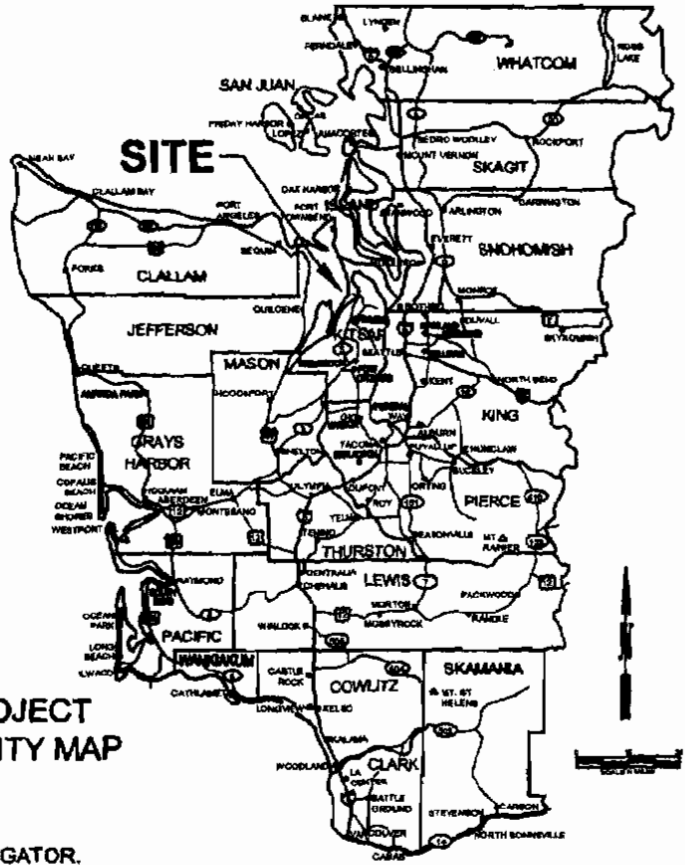
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DIRECTIONS TO SITE:

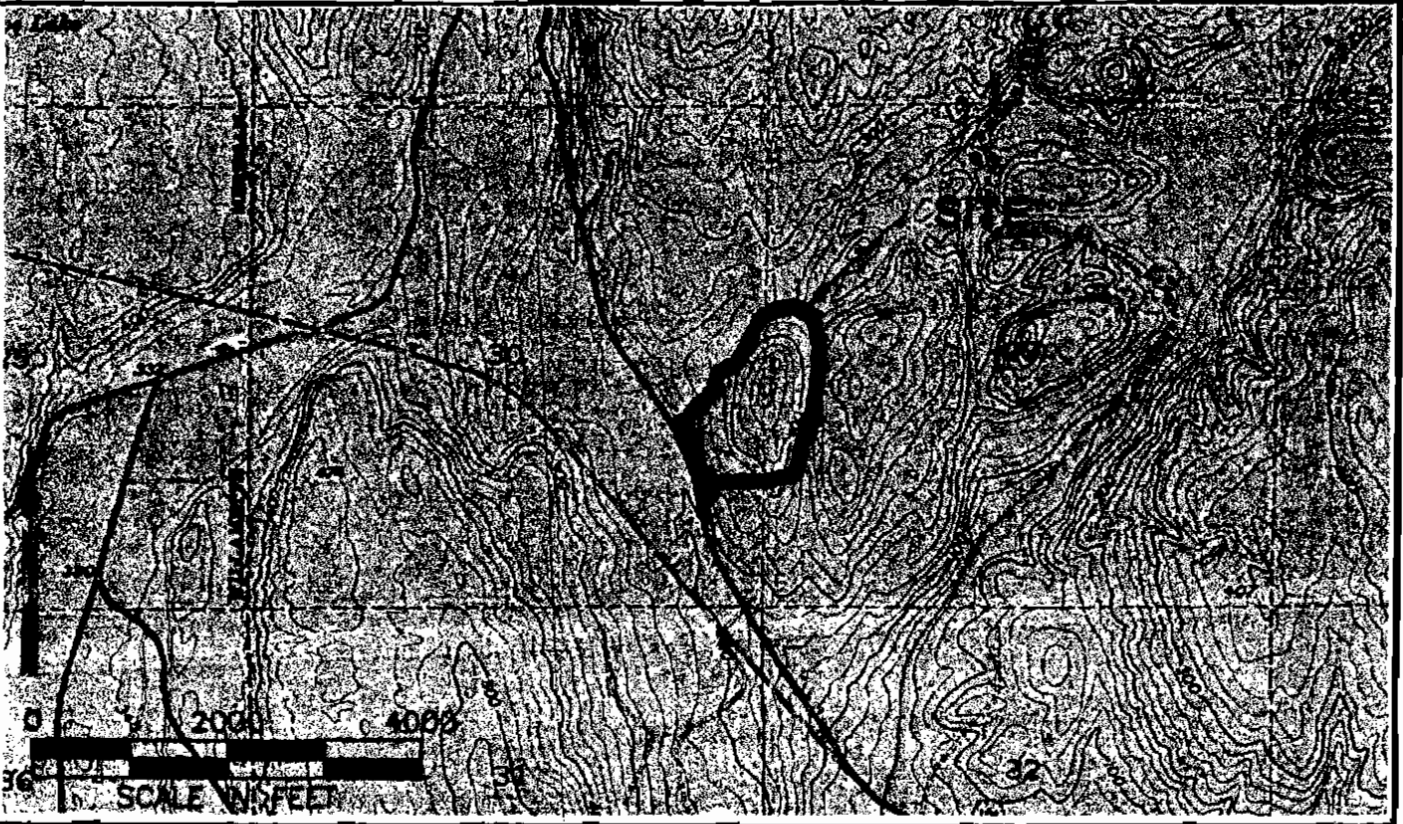
SITE IS LOCATED APPROXIMATELY 8 MILES WEST OF PORT GAMBLE. FROM PORT GAMBLE, DRIVE WESTBOUND ON STATE HIGHWAY 104, OVER HOOD CANAL. SITE ACCESS ROAD IS LOCATED ON RIGHT (NORTH) SIDE OF STATE HIGHWAY 104.

PROJECT VICINITY MAP



NOTE:

USGS TOPOGRAPHIC QUADRANGLE MAP (PORT LUDLOW, 1973)
REPRODUCED USING MAPTECH, INC. SOFTWARE TERRAIN NAVIGATOR.



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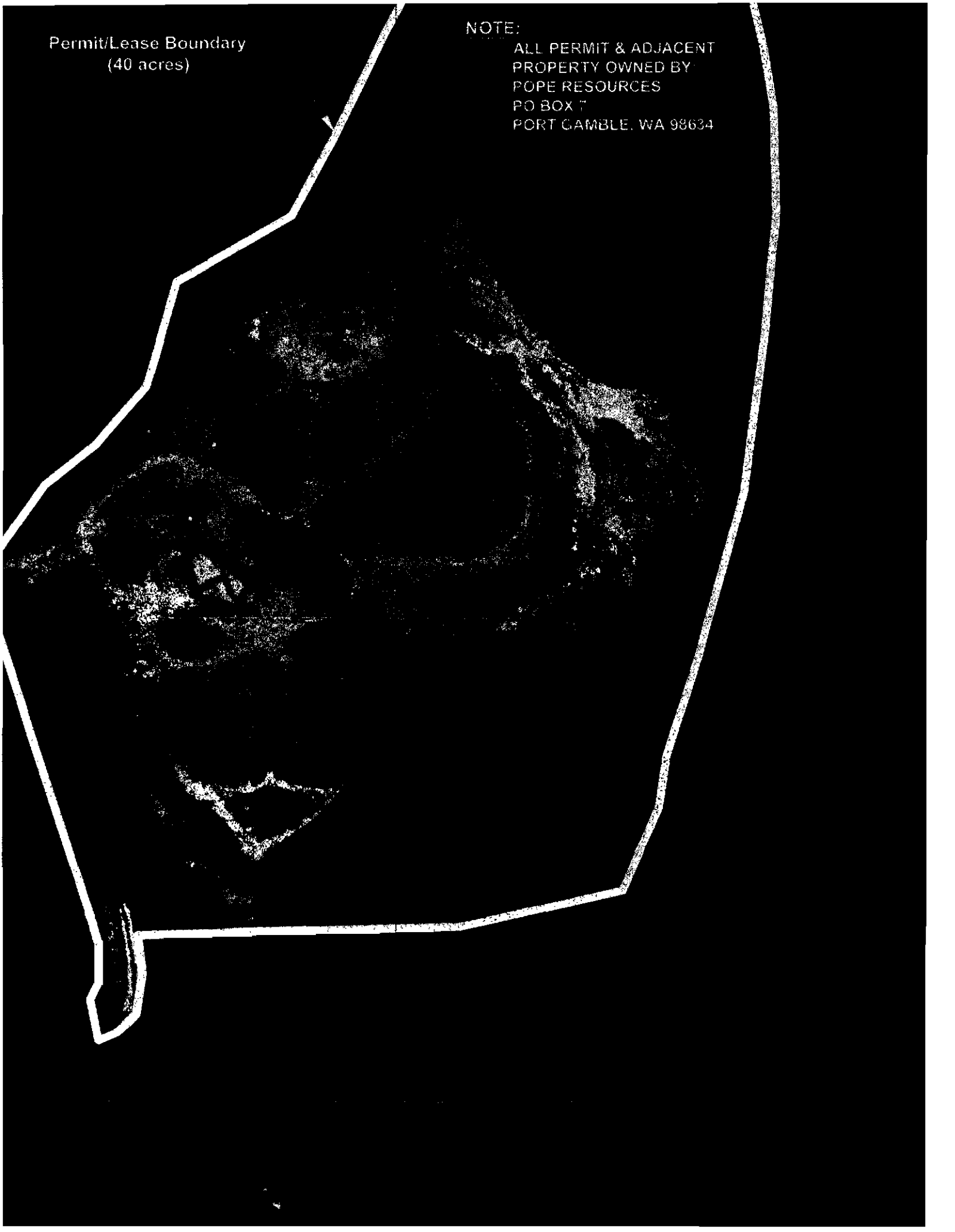
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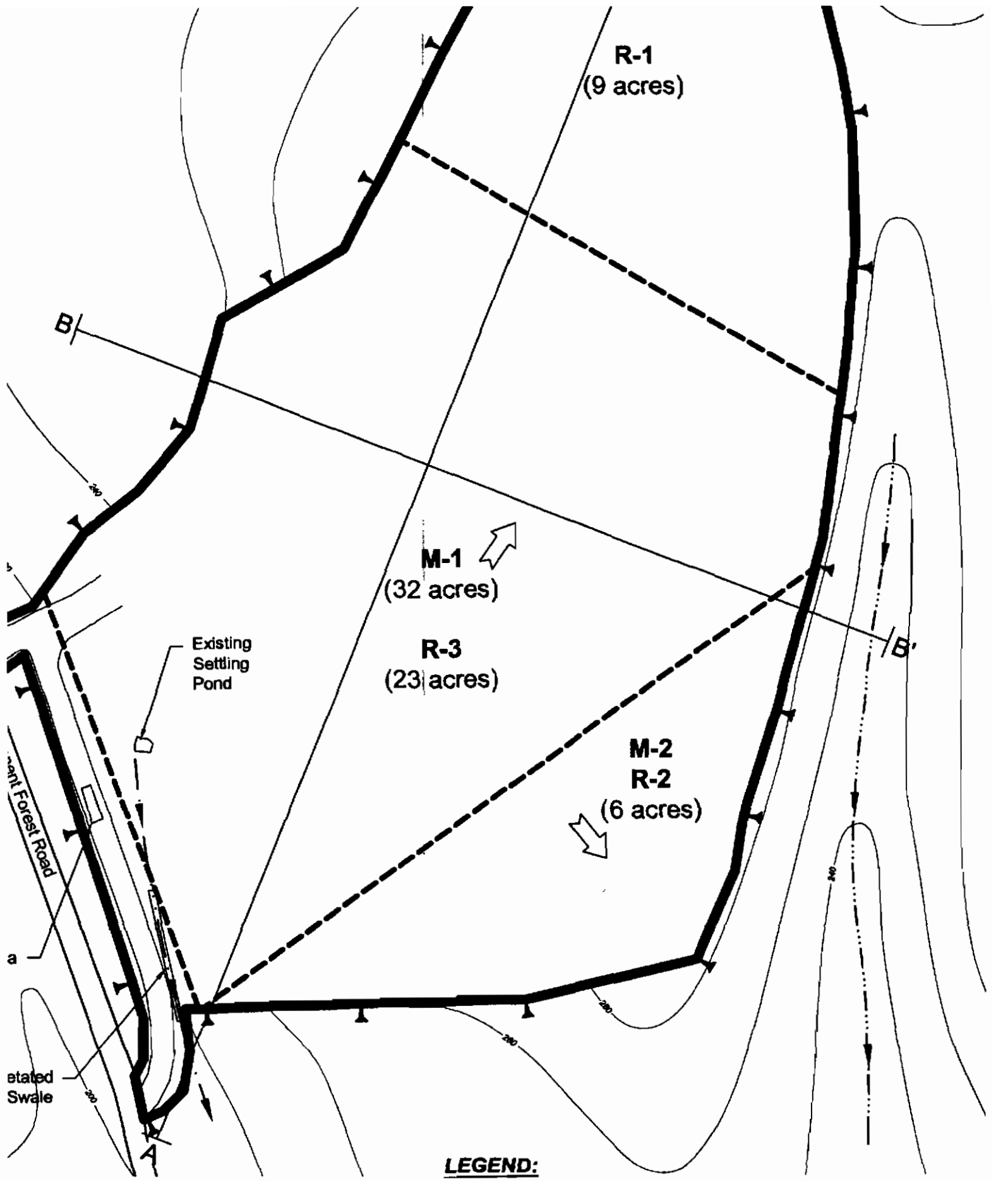
Figure 1
VICINITY MAP
Shine Quarry
Shine Quarry, Inc.
Jefferson County, Washington
Sections 29 & 30, Township 28N, Range 1E, W.M.

Permit/Lease Boundary
(40 acres)

NOTE:

ALL PERMIT & ADJACENT
PROPERTY OWNED BY
POPE RESOURCES
PO BOX 7
PORT GAMBLE, WA 98634





- LEGEND:**
- Permit/Lease Boundary (40 acres)
 - Permanent Boundary Marker (Line of Sight)
 - Segment Boundary
 - Intermittent Drainage & Flow
 - A ——— A' Cross Section Location (See Figure 6)
 - M-1** Mining Segment