



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

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DECISION RECORD for the Goat Mountain Hardrock Prospecting Permit Applications (DOI-BLM-ORWA-0000-2016-0001-EA)

INTRODUCTION

This document summarizes the reasons and the rationale for my decision to grant two hardrock prospecting permits to Ascot USA, Inc.¹ (Ascot) pursuant to the authorities stated below and consistent with Alternative 4 as analyzed in the Modified Environmental Assessment (MEA) designated as DOI-BLM-ORWA-0000-2016-0001-EA and dated December 17, 2015. Attached to this record are the terms and conditions that will be made part of the permits (Attachment B – *USFS Specified Conditions, Recommendations, and Notices* and Attachment C – *BLM Conditions and General Stipulations*), as well as the specific type and location of exploration activities authorized (Attachment D – *Exploration Activities Authorized*). In making my decision, I worked closely with the United States Forest Service’s (USFS), Gifford Pinchot National Forest (GPNF) wherein the permit area is located. I relied on that agency's determination of conformance with the applicable forest plan and its decision that prospecting activities will not interfere or be inconsistent with the primary purposes for which the lands were acquired as provided in the USFS Decision Notice (DN) and Finding of No Significant Impact (FONSI) dated January 29, 2018 (available at the links listed below).

BACKGROUND

This Bureau of Land Management (BLM) Decision Record (DR) is predicated on the above referenced MEA and addresses my decision to take administrative action on the two pending hardrock prospecting permit applications submitted by Ascot USA, Inc., on November 29, 2011 (serial numbers WAOR-066628 and WAOR-066973). The applications, as amended, requested authorization in accordance with the Code of Federal Regulations (CFR) Part 43 § 3505 –

¹ Ascot USA Inc., is a wholly owned subsidiary of Ascot Resources Ltd., a Canadian public exploration company registered in Washington State.

Prospecting Permits, to conduct of exploratory hardrock drilling (prospecting) within the approximately 900 acres of acquired lands encompassed by Mineral Survey (MS) parcels 708, 774, 779, 1329, and 1330 (Table A – *Parcels Included in Prospecting Permit Applications*) that were formally patented to Duval Corp. The parcels are located in western Washington on portions of Sections 7, 8, 9, 16, 17, 18 and 19 of Township 10 North, Range 6 East, Willamette Meridian; generally situated on the southwest facing slope of Goat Mountain in the historic Mount St. Helens Mining District of northern Skamania County (see MEA Appendix A for graphic depictions of the Permit Application Area, MS parcels, forest management allocations, access, and proposed location of drill sites and equipment).

Table A. Parcels Included in Prospecting Permit Applications

Acquired Blocks	Serial #	Patent Date	Acres	Mineral Survey (MS) Block
Index Group	43393	March 8, 1906	247.93	MS-779*
Earl Group	43189	November 20, 1906	266.15	MS-774*
Judy/April Group	46820016	August 6, 1982	163.90	MS-1329*
Wendy Group	46820017	August 6, 1982	2.70	MS-1330*
Germania Group	114944	March 21, 1910	217.27	MS-708†
Total acres under application			897.94	

* Parcels included in Prospecting Permit WAOR-066628.

† Parcel included in Prospecting Permit WAOR-066973.

The contiguous MS parcels extend northeastward from the boundary of the Mount St. Helens National Volcanic Monument along the fringe of the 1980 eruption blast zone. At the time of Monument designation, the Duval Corp held patents for these lands under the Mining Law of 1872. Following acquisition by Pennzoil, Duval divested its hardrock mineral holdings in 1984 and the lands were subsequently acquired by the USFS through donation and purchase (Table B – *Status of Acquisition*), except for the private undivided 50% mineral interest in MS-708 (~217 acres) now held by Ascot. For acquired lands, all hardrock minerals are available for prospecting only by permit issued by the BLM (43 CFR 3505) with the prior written consent of the USFS (43 CFR 3503.20 (c)), which manages all surface resources and land use.

Table B. Status of Acquisition

Mineral Survey (MS) Blocks in Prospecting Permit Applications	Patent Issued (Surface & Mineral)	Surface Estate Back to USA	Type of Transaction/Authority (Surface)	Current Status of Federal Surface Estate	Mineral Estate Back to USA	Type of Transaction/Authority (Mineral)	Current Status of Federal Mineral Estate
MS-774	1905	1935	Exchange-General Exchange Act, 1922	Reserved PD	1986	Donation-Act of 1978	Weeks Act, 1911
MS-779	1906	1935	Exchange-General Exchange Act, 1922	Reserved PD	1986	Donation-Act of 1978	Weeks Act, 1911
MS-708	1910	1970	Exchange-General Exchange Act, 1922	Reserved PD	1986 (only undivided 50%)	Donation-Act of 1978	Weeks Act, 1911
MS-1329	1982	1986	Purchase-Weeks Act, 1911	Acquired Weeks Act	1986	Purchase-Weeks Act, 1911	Weeks Act, 1911
MS-1330	1982	1986	Purchase-Weeks Act, 1911	Acquired Weeks Act	1986	Purchase-Weeks Act, 1911	Weeks Act, 1911

Following an initial completeness review of the 2011 applications, a comprehensive EA analysis of the proposed prospecting was prepared under BLM managed arms-length contract by URS Corp. (now AECOM). The Bureau formally accepted the assessment in November 2012. Based on the EA, the USFS issued a DN and FONSI on December 4, 2012, along with formal consent to the BLM for issuance of the permits subject to specified stipulations for protection of other resources. The BLM announced its DR and FONSI on December 20, 2012 for issuance of the two permits. The USFS decision was subsequently appealed by the Gifford Pinchot Task Force (Plaintiff) on February 5, 2013, and denied by the District Ranger on March 21, 2013. The Plaintiff did not appeal the BLM’s decision to the Interior Board of Land Appeals. Rather, the Plaintiff filed a Civil Complaint on December 19, 2013, in the U.S. District Court of Oregon, challenging both the USFS and BLM decisions. The legal proceedings concluded with a formal hearing on Motions for Summary Judgment on May 19, 2014, and issuance of the Court’s Opinion and Order on July 3, 2014. The Court’s Order granted in part and denied in part the Plaintiff’s motion for Summary Judgment, and ordered the Plaintiff to prepare a Final Judgment consistent with the Court’s decision. The Judgment was signed by the Court on August 6, 2014, vacating both the USFS and BLM (Agencies) decisions and FONSI, but not the EA.

By letter of November 4, 2014, Ascot requested the Agencies to proceed with necessary actions to modify the 2012 EA consistent with the Court Order and to reconsider their respective decisions on the permit applications. During 2015, the Agencies formally reestablished their cooperator status and directed AECOM in the modification of the EA.

The resulting MEA (DOI-BLM-ORWA-0000-2016-0001-EA) was prepared in accordance with the Memorandum of Agreement (BLM OR-936-1503) fully executed on March 9, 2015, in which Ascot, the USFS, and the BLM defined their respective responsibilities and procedures related to modification of the 2012 EA utilizing the arms-length services of a third party

contractor – AECOM (an American multinational engineering firm that provides design, consulting, construction, and management services) pursuant to the BLM Task Order dated March 9, 2015.

The completed MEA was issued for a 30-day public comment period initiated on January 5, 2016, by notices published in *The Chronicle*, Centralia, WA; and in *The Columbian*, Vancouver, WA. However, due to an unintended delay in notifying all known parties of interest based on public comments received when the EA was originally issued in 2012 (DOI-BLM-OR-934-2012-0001-EA), the Agencies re-released the MEA for a second 30-day comment period on February 18, 2016. Post cards announcing the availability of the MEA were mailed to all known parties of interest (approximate 4,000). The same notification was also published to the USFS' Gifford Pinchot National Forest Current and Recent Projects webpage; and to the BLM's Oregon/Washington Minerals Program webpage and to the BLM's National ePlanning NEPA Register (see links below). The second public comment period closed on March 21, 2016, by which time the BLM had received some 3,661 responses (approximately 950 e-mails, 50 letters, 507 NGO pre-printed post cards, and 2,154 NGO petition signatures).

- USFS <http://www.fs.usda.gov/projects/giffordpinchot/landmanagement/projects>
- BLM <http://1.usa.gov/1NFp1eT>

The 2015 MEA did not change the original location, scope, or need for the proposed action as evaluated in the 2012 EA. Rather, the assessment was modified and amended specifically to address the deficiencies identified in the Court's July 3, 2014 Order. Additional clarification and detail was also added regarding:

- Clear determination that the proposed action is not inconsistent with and/or would not interfere with outdoor recreation, which the Court found is a primary purpose for the acquisition of lands encompassed by MS-1329 and-1330 utilizing Land and Water Conservation Funds.
- Interpretation of "support facilities" within the context of the Gifford Pinchot National Forest Plan and Aquatic Conservation Strategy Standards and Guidelines as including drill shacks and sumps, as found by the Court in its Order.
- Inclusion of a Project Area hydrogeologic groundwater assessment in order to provide a "hard look" at baseline groundwater information, as required by the Court's Order.
- Assessment of the effectiveness of mitigation measures stemming from design features, as identified in the Court's Order.
- Inclusion of an alternative eliminating proposed drilling at sites within riparian reserve buffer zones, as the Court required in its Order.
- Indication that the USFS consent decision is part of the permitting process as a prerequisite to the BLM's legal authority to issue the permits.
- Disclosures required by USFS regulations for prime farmlands, range lands and forest

lands; floodplains, wetlands, energy, consumers, civil rights, minority groups, and environmental justice.

- Acknowledgement in the BLM's decision that the MEA was utilized as a basis for its administrative action on the proposed exploration and operating plan (43 CFR 3505.40 and .45 – *What is an Exploration Plan*, and 3592.1 – *Operating Plans*).
- Assurance that all issues raised during scoping were addressed.
- Revision of the Designated Critical Habitat for Northern Spotted Owls and rationale for not conducting Project Area owl surveys.
- Analysis for lichen, bryophyte, and invasive plant species.
- Acknowledgement that the Green River is eligible for consideration as a Wild and Scenic River.
- Addition of two Traditional Cultural Properties recently identified by the Cowlitz Tribe.
- Ensuring consistency of each alternative with the Aquatic Conservation Strategy Objectives, and with plans and policies such as environmental justice, treaty resources and reserved Indian rights, wetlands and floodplains, unique characteristics of the area, etc.
- Scheduling Proposed Action activities around wildlife and recreation concerns.
- Balancing water use between on-site sources, re-use of drilling fluids, and water obtained from off-site sources.
- Drilling fluid management to improve re-circulation and to minimize subsurface impacts.
- Monitoring the quality of existing water resources within the Project Area before and during drilling activities.
- Complete sealing of all drill holes after completion.
- Assuring that actions within the Permit Area will not be inconsistent with or interfere with the primary purposes for which the lands were acquired, including under authority of the Weeks Act and for protection of National Forest lands, and under the Land and Water Conservation Act.

Neither of Ascot's permit applications, nor the associated Plan of Operation contemplated or proposed any ancillary mining activity. The purpose and need is thus focused only on geotechnical and mineralogical exploration (prospecting) as outlined above. Consequently, the MEA and this DR and FONSI do not address, analyze, or authorize in any manner the conduct of potential mining activities. Authorization for any additional activities, including additional exploration, would require separate application(s), environmental analysis, and approval by the BLM with the prior consent of the USFS, if proposed.

AUTHORITIES

The BLM has the responsibility for management of the Federal mineral estate, including the authority to implement regulations for authorization of mineral exploration and prospecting (43 CFR 3505 – *Prospecting Permits*) on acquired lands managed by the USFS. The BLM's

delegation of authority specifies the level at which decision-making authority is held. The BLM Oregon/Washington State Director has delegated the authority to issue preference right and competitive leases of mineral lands and deposits on public domain and acquired lands to the Branch Chief of Land, Mineral and Energy Resources, BLM Oregon/Washington State Office.

Where National Forest System (NFS) lands are involved, the BLM and the USFS must work cooperatively to evaluate the environmental impacts of the proposed prospecting consistent with the National Environmental Policy Act (NEPA), applicable land use plans, and the implementing regulations.

Consistent with 43 CFR 3503.20 (b) – *...if Another Federal Agency Manages the Lands...*, the USFS, as the surface managing agency, has decided to formally consent to the issuance of prospecting permits by the BLM (Attachment A –USFS Letter of Consent, 04/13/2018). In this case, the USFS has consented to issuance of permits for Ascot to prospect for hardrock minerals, including copper, molybdenum, silver, gold, and associated minerals. As part of the consent, the USFS has specified conditions, recommendations, and notices to be included in the permits for use and protection of other resources. In addition, the USFS also incorporated specified conditions from the MEA (MEA, Appendix E – Best Management Practices) as part of their consent.

Both Agencies have based their decisions regarding the permit applications on the information and effects analysis presented in the MEA dated August 7, 2017. The USFS also used the analysis in the MEA to determine that the proposed exploration activities would not be inconsistent with or interfere with the primary purposes for which the lands were acquired. In addition, the USFS determined that prospecting within the Project Area as depicted in the MEA Appendix A, Figure 2 – *Project Area*, is consistent with the Gifford Pinchot National Forest Land and Resource Management Plan, as amended (GPNF Plan). The USFS documented their decision together with specific stipulations (Attachment B – *USFS Specified Conditions*) with a Decision Notice and FONSI dated January 29, 2018. These are adopted and made an integral part of this BLM DR.

Additional Applicable Authorities:

- Implementation of obligations pursuant to *The Multiple-Use-Sustained-Yield Act* (1960); *The National Forest Management Act* (1976); *The Gifford Pinchot National Forest Land and Resource Management Plan* of 1990, including Management Indicator Species List, Survey and Manage Species List, and Sensitive and Special Status Species Lists, as supplemented and amended by the *Northwest Forest Plan* and the associated Aquatic Conservation Strategy Objectives and Standards and Guidelines for Riparian Reserves of 1994.
- Approval of prospecting permits consistent with the Federal government's *Mining and Minerals Policy Act* of 1970, the *Weeks Act* of 1911 (P.L. 61-435; 36 Stat. 961), the *Mineral*

Resources on Weeks Law Lands of 1917 (39 Stat.1150, as supplemented; 16 U.S.C. 520), and the *President's Reorganization Plan No. 3 of 1946* Section 402 (60 Stat. 1097; 1099, 5 U.S.C. Appendix). Together, these foster and encourage private enterprise in the development of economically sound and stable mining and mineral industries, and to help assure the orderly and economic development of mineral resources to satisfy industrial, security and environmental needs.

- Regulations at 43 CFR §3505.45 – *What Is an Exploration Plan*, 43 CFR 3592.1 – *Operating Plans*, 3592.2 – *Maps of Underground Workings and Surface Operations*, and §3593.1 – *Core or Test Hole Cores, Samples, Cuttings*; as well as referenced subsections for operating and exploration plans.
- Stipulations, findings, and in particular Alternative 4 assessed in the “Goat Mountain Hardrock Prospecting Permit Applications Environmental Assessment,” (DOI-BLM-ORWA-0000-2016-0001-EA), dated June 28, 2012 as modified on December 17, 2015 (included by reference and available at:
 - BLM: <http://1.usa.gov/1NFp1eT>
 - USFS: <http://www.fs.usda.gov/projects/giffordpinchot/landmanagement/projects>
- Other authorities listed in the MEA Table 1.3-1 – *Supplemental Authorities Consulted*.

ALTERNATIVES ANALYZED IN THE MEA

The MEA evaluated in detail four action alternatives as summarized below:

- **Alternative 1 (No Action):** Under the No Action Alternative, the USFS would not consent to issuance of the two proposed prospecting permits, and/or the BLM would subsequently deny the requested permits and the Exploration Plan associated with the two applications. Furthermore, segments of currently closed forest roads would not be temporarily reactivated, proposed drill pad sites would not be prepared, and no drilling or associated activities would occur. The No Action Alternative, however, does not foreclose or preclude future applications for mineral prospecting, leasing, or development within the Project Area. Should that occur, separate environmental analysis and administrative decisions specific to such application(s) would be required by the USFS and the BLM.
- **Alternative 2 (Proposed Action):** The Proposed Action is that described in Ascot's Prospecting Permit Applications and associated Exploration Plan for prospecting on the south face of Goat Mountain within the Gifford Pinchot National Forest (GPNF). Alternative 2 includes design features to protect the land, other resources, and the primary purposes for which the lands were acquired that the USFS would specify if it were to consent to the BLM for issuance of the two prospecting permits. This alternative also contains conditions to address certain resource issues that the BLM would require if it were to approve the permits and associated Operating and Exploration Plan.

- **Alternative 3 (Based on Scoping):** Based on the 2012 public scoping comments, the Agencies prepared Alternative 3 which includes additional design features to address balancing water use from on-site sources with the re-use of drilling fluids and water obtained from off-site sources as needed; drilling fluid and borehole management to improve recirculation and to minimize possible impact to the existing groundwater features and the introduction of foreign material into the surrounding formations; monitoring the quality of on-site water sources before and during drilling activities to detect any Project related changes to the quantity or quality; additional requirements related to drillhole abandonment; Project timing restrictions to protect sensitive habitat including that of the northern spotted owl and interference with recreational resources; and utilizing a portable drill shack/baffling/insulation and directional lighting at active drill sites to minimize intrusion into the surrounding environs.
- **Alternative 4 (Preferred and Selected):** Based on public comments on the 2015 MEA and the Court's Order dated July 3, 2014, Alternative 4 was developed by modifying Alternative 3 to exclude installation and conducting drilling activities on proposed drill sites situated within Riparian Reserve (e.g., at proposed drill pads 6 and 7 as identified in Alternative 2) along the Green River and in the drainage identified as National Hydrography Dataset (NHD) 1. Alternative 4 is the preferred alternative identified in the 2015 MEA and encompasses the actions on which the BLM is basing its decision to issue the two hardrock prospecting permits. The USFS's consent decision is also based on selection of Alternative 4.

Four other alternatives were considered in the MEA, but eliminated from detailed analysis (see Section 2.1.5) as either being infeasible, not meeting the purpose and need, or resulting in effects that would not differ measurably from the four action alternatives previously summarized. In summary, these included:

- Use of overland travel to avoid temporary reactivation of existing closed roads and use of road sections that cross through riparian buffers. This alternative was rejected because the steep terrain, it would be physically impossible to traverse most of the Project Area without constructing roads or trails in order to reach the proposed drill sites. Moreover, the effects of such overland travel would not be more or less harmful to the landscape and forest cover than Alternative 2, 3, and 4.
- Ascot's initial Exploration Plan for conduct of a drilling program from 25 drill pads. The Exploration Plan was later amended and eliminated proposed drill sites 8 and 9 as shown on MEA Figure 3 in Appendix A – *Environmental Assessment Figures 1-8, 10, and 11*, because their installation would require a substantial amount of additional tree removal and grading in order to gain access to these two drill sites.
- Limiting access along FS Road 2612 to only the existing road in its current condition, rather than permitting road improvements and maintenance. Such improvements and maintenance were included in Ascot's Proposed Action to ensure the safety of Project personnel and the

traveling public. Additionally, this route is the primary access to the northeastern portion of the Goat Mountain area and its associated recreational resources. This alternative was eliminated as it would be technically infeasible due to safety concerns and would limit access to the drill sites needed to carry out the proposed exploratory drilling activities.

- Restricting permitting to only the approximately 200 acres encompassed by MS-708 where both Ascot and the United States each own an undivided interest in 50 percent of the mineral estate. Such an alternative would eliminate 10 of the proposed drill sites and require redirection of drilling at two of the remaining sites to preclude boreholes from extending into the subsurface of adjoining lands. This approach, however, would not meet the purpose and need of either the applicant or the federal government's policy to foster and encourage private enterprise in the development of economically sound and stable industries, and the orderly and economic development of domestic resources to help ensure satisfaction of industrial, security, and environmental needs (Mining and Minerals Policy Act of 1970), i.e., the scientific knowledge that would be gained from the full extent of the proposed prospecting for which it is largely dependent on private exploration.

Narrowing prospecting to only MS-708 would preclude delineation of the geotechnical features and the mineralogical resources across the entire area of interest. Lacking the more detailed data that would be gathered over the wider extent of the application area would also be technically impractical because it would not provide Ascot and the Agencies with sufficient verifiable data to assess the existence of a valuable deposit using accepted technical, economic, and environmental policies and practices. Without such a determination, the Agencies would be precluded from effectively evaluating any future leasing application(s) (43 CFR 3500 – *Leasing of Solid Minerals Other Than coal and Oil Shale*).

DECISION

As the Responsible Official, it is my decision to issue the two requested hardrock prospecting permits to Ascot USA, Inc., for mineral exploration activities (drilling and collection of surficial hand samples) within MS parcels 708, 774, 779, 1329, and 1330 as described in the Plan of Operations (Exploration Plan) dated October 5, 2011, subject to the changes, limitations, design features and associated mitigation measures, and stipulations analyzed in the MEA for Alternative 4 (MEA Section 2.1.4 – *...Drill Site Riparian Avoidance*). Furthermore, I find that implementation of Alternative 4 will be fully consistent with the biological and groundwater assessments described in Appendix F – *Goat Mountain Hardrock Prospecting Permit Applications EA - Biological Assessment* and Appendix G – *Groundwater Resources Report, Goat Mountain Hardrock Prospecting Permit Applications*, and inclusive of the design features derived from Appendix E -*Best Management Practices* as enumerated in MEA. In addition, the *USFS Specified Conditions, Recommendations, and Notices* described in the USFS Decision Notice and FONSI are adopted verbatim (Attachment B) together with the *BLM Conditions and General Stipulations* (Attachment C). Ascot will also be required to submit for BLM approval a

revised Exploration Plan of Operations that incorporates these conditions and stipulations prior to issuance of a Notice to Proceed (NTP).

DECISION RATIONALE

Under the Mining and Minerals Policy Act of 1970, the Federal Government's overall policy is to foster and encourage private enterprise in the development of economically sound and stable industries and in the orderly and economic development of domestic resources to help assure satisfaction of industrial security and environmental needs.

My decision to take action on Ascot's applications and to formally issue the two prospecting permits (WAOR 066628 and WAOR 066973) for lands within the GPNF is based on the following four factors:

- Decision Factor 1 – Compliance with requirements at 43 CFR 3505 and 43 CFR 3509.45.
- Decision Factor 2 – Compliance with applicable environmental requirements.
- Decision Factor 3 – Determination that issuance of the prospecting permit is in the public interest.
- Decision Factor 4 – Consent of the USFS, the surface managing agency.

Decision Factor 1 – Compliance with Requirements

I have determined, for the following reasons, that authorization of the permits complies with requirements at 43 CFR 3505 – *Prospecting Permits* and at 43 CFR 3509 regarding – *Fractional Interest Prospecting Permits* where the United States holds less than 100 percent of the mineral interest of the parcel as is the case for the lands within MS-708.

- Ascot submitted a complete application, including an Exploration/Operation Plan, dated October 5, 2011, for the afore described proposed hardrock exploration within the approximately 898 acre proposed Project Area. The first year's rental and application processing fees were also submitted to the BLM by the applicant. Ascot will now be required to pay all intervening rental due up to the date of this decision, and to submit a revised Plan of Operations that incorporates the changes, limitations, design features, and stipulations evaluated in the MEA and in particular for Alternative 4 consistent with *Best Management Practices* listed in Appendix E of the MEA and those specified by the USFS prior to issuance of a Notice to Proceed (NTP) by the BLM. Until then, Ascot cannot undertake any actions on the ground, except those related to casual prospecting (rock hounding) – as is the case for any citizen of the United States.
- Ascot has also demonstrated its qualifications for a *Fractional Interest Prospecting Permit* (43 CFR 3509) through fulfillment of a purchase option agreement for title to the 50 percent undivided private interest in the mineral estate encompassed by lands within MS-708 that were previously held by General Moly, Inc., of Lakewood Colorado.
- Ascot and other parties who have held or expressed interest in these same lands have

represented that existing data is inadequate to make informed geotechnical, mineralogical, and engineering determinations as to whether a valuable deposit exists as required by 43 CFR 3507 – *Preference Right Lease Applications* in order for the BLM to authorize further exploration or leasing. Available information is insufficient for the BLM to determine if a valuable deposit exists within the proposed Permit Area pursuant to 43 CFR 3501.10(a) – *What Types of Mineral Use Authorizations Can I Get Under These Rules*. The BLM will issue prospecting permits under 43 CFR 3505.10 and 3509.40 for the permittee to collect geotechnical information necessary for the BLM to determine if a valuable deposit exists. A "valuable deposit" means an occurrence of minerals of such character that a person of ordinary prudence would be justified in the further expenditure of his or her labor and means, with a reasonable prospect of success in developing a profitable mine" (43 CFR 3501.5). This is a higher regulatory standard than the previous "workability standard," which did not take into account costs other than direct costs. The proposed additional geotechnical exploration will validate and expand upon the existing limited data and related published reports.

Decision Factor 2 – Compliance with Environmental Requirements

I have determined, consistent with the USFS FONSI of January 29, 2018 and the attached BLM-prepared FONSI that authorizing the proposed mineral prospecting and exploration meets applicable environmental requirements and will not have a significant effect on the human environment taking into consideration:

Geologic and Mineral Resources (see MEA Sec. 3.2)

Extraction of the drill core and surface hand samples for geotechnical and mineralogical analysis will provide information needed to make sound decisions regarding possible need for further exploration and/or the economic value and physical viability of the mineral resources within the Project Area. The analysis and study of the Project Area's subsurface will help better define the geological setting, including structure, faults, physical stability, mineralization, and the potential for generation of acid rock drainage (ARD). The amount of non-mineralized and mineralized material that will be removed from the Project Area consistent with the MEA Alternative 4 is considered to be negligible. Alternative 4 requires sealing the entire well column of all completed drill holes by methods and materials that are appropriate to prevent movement of groundwater within, into, and around the abandoned drill hole. Bentonite/cement mixtures as described in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160) would be used to abandon all drill holes that encounter artesian flow. Sealing all drill holes will prevent native sulfide minerals encountered from being exposed to water and oxygen. This stipulation will limit atmospheric oxygen contact with the sulfide minerals, preventing ARD production.

The BLM decision to issue the permits confers exclusive rights on Ascot to prospect on the specific lands within a Permit Area using those exploration activities approved in the permits

with the objective of determining whether or not a valuable mineral deposit exists. If Ascot discovers what can be determined to be a valuable mineral deposit, it can apply for a non-competitive lease to develop the minerals discovered under the prospecting permit. However, any subsequent application for a lease would be subject to a separate determination by the BLM that a valuable mineral deposit has been located and preparation of a separate NEPA analysis. Any future application(s) would be evaluated independently and would require a BLM leasing authorization subject to the prior written consent of the USFS.

Hydrology and Hydrogeology (see MEA Sec. 3.3)

No significant impacts to hydrologic or hydrogeological resources were identified during the EA process.

No wetlands or floodplains have been mapped within the immediate vicinity of drill sites within the Project Area. Project-related activities are not proposed in locations associated with relatively flat spots along the intermittent or seasonal streams that may have wetland characteristics.

The prospecting permits will only authorize the use of on-site groundwater sources from previously drilled exploratory drill hole MM-10 and Duval Hole 06 that are exhibiting artesian (naturally flowing) groundwater conditions as a source of water for drilling fluids. Groundwater use is allowed under a Washington State Department of Ecology groundwater withdrawal exemption in which up to 5,000 gallons per day (gpd) can be withdrawn for industrial purposes, including mineral exploration. If more than 5,000 gpd per day is needed, Ascot must either obtain a Washington State Department of Ecology groundwater water right permit or acquire additional water from a potable off-site source. Daily on-site water use will be recorded using a totalizing flow meter. Upon project completion, Duval Hole 06 and MM-10 would be abandoned in accordance with Washington Administrative Code (WAC) 173-160-381 to the extent technically feasible following cessation of the authorized drilling program.

The requirement for recirculation of drilling fluids under Alternative 4 is anticipated to reduce overall water usage. Furthermore, under Alternative 4, the future risk of release of groundwater to the surface and movement of groundwater within and between each drill holes would be eliminated as all drill holes will be sealed and those that encounter artesian flow will be abandoned by filling the entire well column with cement or grout.

Potential risks to surface water and groundwater at the site through leaks and spills of petroleum-based fuels, lubricants, and hydraulic fluids associated with the operation of mechanical equipment, such as the drilling equipment, generators, pumps, and support vehicles will be reasonably mitigated in accordance with the required Project Spill Prevention Control and Countermeasures (SPCC) plan (MEA Section 2.1.2.3 – *Proposed Design Features and Best Management Practices*). All drilling fluids and cuttings circulated to the ground surface will be collected within lined sumps or tanks and the residue removed from the project site following

drilling. Containers of hazardous substances be labeled and handled in accordance with Mine Safety and Health Administration (MSHA) regulations. Environmentally safe drilling fluids and procedures consistent with Chapter 173-162 WAC will be used. Spill containment kits will be located at each operating site to allow workers to rapidly respond to spills and releases if they occur.

Riparian impacts will be minor (MEA Section 3.3.2.2.1 – *Direct Effects*). Some tree clearing (<12-inch diameter at breast height (dbh)) and minor brush removal will occur at lower elevations within the Project Area. Temporary closed road reactivation and installation of drill sites are consistent with the Aquatic Conservation Strategy (ACS) Objectives (see Table 3.3-1) and also comply with the Minerals and Road Management Standards and Guidelines established for Riparian Reserves in the GPNF Plan. As further noted in MEA Section 3.3.2.2.1, the limited impact to upland vegetation and the few trees cleared relative to the existing forest cover will have minimal potential to alter temperature conditions or otherwise affect nearby streams.

A finding that the permitted project "meets" or "does not prevent attainment" of the ACS objectives has been made by both the BLM and the USFS-GPNF. See Table 3.3-1 – *Aquatic Conservation Strategy Objectives*, in the MEA. The 1994 Northwest Forest Plan requires that proposed projects on Federal lands must be consistent with the ACS Objectives.

Total surface disturbance associated within the Project Area will be 3.25 acres, including temporary reactivation of existing closed roads. The work will be performed in areas with grades of 3 to 35 percent. The Project Area in place soils have a low risk of erosion from surface water flows as indicated by an erosion K factor of 0.15 (MEA Section 3.4.1 – *Affected Environment*). The Plan of Operation will implement all erosion control measures and BMPs listed in Appendix E of the MEA.

Soils (see MEA Sec. 3.4)

Soils in the Project Area are typical of mountain slopes in the north Cascade Range formed in layers of aerially deposited volcanic ash and pumice, well drained; with slopes up to 35 percent. Soils in the Project Area were mapped by the NRCS and contain no Prime and Unique Farmland areas as defined by 7 CFR 657.5. Locally, soils consist of sandy loam and loamy sand with varying amounts of gravel with an estimated K factor of 0.15, indicating a low risk of erosion from surface water flows.

The Proposed Action and Alternative 4 will incorporate measures to minimize soil erosion and sedimentation to natural including the use of water bars and culverts, installation of erosion control material and growth media, and implementation of BMPs listed in the MEA Appendix E. Impacts would also be reduced by concurrent reclamation of drill pad sites, sumps, trenches, and temporarily reactivated road segments that are no longer needed for access. Reclamation activities, such as re-grading, ripping, and re-vegetation of disturbed areas would also minimize soil loss.

Wildlife (see MEA Sec. 3.5)

Direct, indirect, and cumulative impacts to wildlife (including Federal Endangered Species Act (ESA) and/or USFS Sensitive Species, Management Indicator Species (MIS), Survey and Manage (S&M), and others such as migratory and resident birds and mammals resulting from the project are expected to be minor due to the nature and minimal extent of the action at each individual drill pad site, scheduling, and the temporary duration of the overall project.

Alternative 4 further reduces the potential impacts to the northern spotted owl by imposing a timing restriction that avoids the nesting season. Impacts may include tree removal, noise, presence of workers and equipment, and lighting at one drill site at a time. These impacts are considered minor because, while the project may temporarily impact individuals or habitats, the project will not contribute to a trend toward listing of any species under the Federal ESA or cause a loss of viability to the population or species or result in a permanent loss of habitat. Juvenile birds or other low-mobility or slow-moving wildlife species (salamanders, small mammals) could have the potential for direct mortality as a result of the movement of equipment and drill site installation if they are occupying the associated space. Alternative 4 reduces this potential impact by requiring a qualified employee to clear each drill pad site of low-mobility wildlife prior to operations (BLM specific stipulation, see Appendix C). However, the old roadbeds, drill pad locations, and edges of active roads are not highly attractive habitats for any of these species. Adult birds and other mobile wildlife would be expected to temporarily vacate habitat and usage adjacent to these areas where equipment is operating because of noise and human activity, but are also expected to return soon after Project activity ceases.

Of the 39 species listed under the Federal Endangered Species Act (ESA) and the USFS Sensitive Species, Management Indicator Species (MIS), and/or Survey and Manage (S&M) lists which are documented or suspected to occur in the GPNF, only 15 species have potential to occur within the Project Area or the immediate vicinity. Only those species identified as having a potential to be affected by this Project were analyzed in detail in the MEA. The remaining species with no habitat present and no documented presence in the Project Area were eliminated from further analysis. A brief summary of the analysis and conclusions in the MEA are included below. See MEA Section 3.5 – *Wildlife*, for additional details.

Northern spotted owl (*Strix occidentalis caurina*, Federal ESA Threatened, USFS MIS):

Northern spotted owls are documented to occur in the project vicinity (USFS 2012) According to USFS GIS data, the nearest northern spotted owl observation record from surveys in 2003 is located approximately 2.5 miles north of the project site. According to the same data, the nearest observed "activity polygon" for northern spotted owls is approximately 3.75 miles northeast of the Project Area. The young, second-growth habitat lower in elevation in the Project Area is not suitable habitat for northern spotted owls. Impacts to northern spotted owls are addressed in the project-specific Biological Assessment (see the MEA Appendix E for more detail).

There is potentially suitable spotted owl habitat in the mature timber stand around or adjacent to

drill Pads 10, 11, 12, 13, 22, 23, 24, and 25. While there have been no surveys to indicate whether northern spotted owls occur nearby, it may be assumed that the habitat is occupied. The exploration activities will occur at the edge of the suitable habitat along existing closed roads that will be temporarily reactivated. It is estimated that approximately 68 trees would be removed along the edge of suitable habitat. However, no trees greater than a 12-inch dbh would be removed unless there are determined to be hazardous; therefore, the suitability of the habitat will be unchanged. Under Alternative 4 there will be no impact to designated critical habitat for northern spotted owls consistent with the ESA designations in 1992, 2008, and the more recent 2012 final critical habitat rule.

In addition, under Alternative 4 drilling at Pads 10, 11 12, 13, 22, 23, 24, and 25 located near northern spotted owl nesting sites or adjacent to potentially suitable habitat in mature timber stands will be restricted to only occur after the nesting season (February 28 through July 1). To reduce impacts to surrounding areas due to noise, a drill shack with baffles and/or insulation would be used. Furthermore, night lighting will be directed toward the operating equipment and shielded to minimize intrusion into the surrounding environs. Alternative 4 will have a reduced impact if owls are present within the potentially suitable habitat when compared to the Proposed Action

Equipment noise, lights, and human activity may affect, but are not likely to adversely affect, northern spotted owls. The United States Fish and Wildlife Service (USFWS) has reviewed and accepted the BLM/USFS prepared Biological Assessment and has concurred with the agency determination that the Proposed Action, with the timing restriction imposed under Alternative 4, is may affect/not likely to adversely affect.

Pine marten (*Martes americana*, USPS MIS), **Pileated woodpecker** (*Dryocopus pileatus*, USFS MIS), and **Tree cavity excavating birds** (USFS MIS): The pileated woodpecker is common throughout the GPNF in mature and late-successional forests. The GPNF Plan designated the hairy woodpecker as the representative cavity excavator for this Management Indicator category. Hairy woodpeckers are common on the GPNF. The habitat that is suitable for northern spotted owls is also suitable for pine martens, pileated woodpeckers, and tree cavity excavating birds. The noise, activity, and removal of tree cover along roadways associated with the project might affect individual animals, causing them to temporarily move away from active exploration sites. However, individuals would be expected to return when activity ceases following reclamation. Effects to these species are anticipated to be minor and temporary. The effects will be further reduced under Alternative 4 by the timing restrictions imposed on drilling at Pads 10, 11 12, 13, 22, 23, 24, and 25.

Roosevelt elk (*Cervus elaphus*, USFS MIS): The habitat in the Project Area is suitable as general forage and cover habitat for roosevelt elk, but it is not particularly suitable for use for calving (no ponds or wetlands nearby) nor for winter range (elevations are marginal and forage is not abundant). The Proposed Project does not lie within the identified elk wintering habitat

boundary. The noise and human activity associated with the project would be expected to displace Roosevelt Elk from the Project Area while the exploration activities are occurring, but they would return to the area after the exploration activities cease.

Blacktail deer (*Odocoileus hemionus*, USFS MIS): The habitat in the Project Area is suitable as general forage and cover habitat for blacktail deer, but it is not particularly suitable for winter range (elevations are marginal and forage is not abundant). The noise and human activity associated with the Project would be expected to displace blacktail deer from the Project Area while the exploration activities are occurring, but they would return to the area after the exploration activities cease.

Mountain goat (*Oreamnos americanus*, FS MIS): Suitable habitat consists of steep, rocky escape cover adjacent to open foraging areas and large tree forest used for thermal protection and cover in winter. The portion of the Project Area in late-successional forest may well serve as important winter range for mountain goat. Since project activities in potential winter range habitat will not occur during winter months impacts to mountain goats are unlikely. Therefore, No Impacts to mountain goats are expected to occur.

Wolverine (*Gulo gulo luteus*, Federal ESA Candidate; USFS Sensitive): The USFS considers this species to be documented in the GPNF. Wolverines are extremely unlikely to occur in the Project Area because they are thought to require large tracts of wilderness habitat in forested and mountainous areas. Thus, suitable habitat is not available in the project area for all life stages. If wolverines are present, impacts would be minor because the exploratory drilling activities would only temporarily impact individuals or habitat; it will not contribute or cause a loss of viability to the population or species or a permanent change to or loss of habitat.

Van Dyke's salamander (*Plethodon vandykei*, USFS Sensitive and MIS), **Cascade torrent salamander** (*Rhyacotriton cascadae*, USFS Sensitive), **Larch Mountain salamander** (*Plethodon larselli*, USFS Sensitive and S&M): Each species requires specific habitat. Van dyke's salamander requires bedrock outcrops and cobbly stream substrate. Cascade torrent salamanders require rocks bathed in a constant flow of water or rocky stream substrate. The larch mountain salamander utilizes talus, scree, gravelly soils, and other areas where interstitial spaces exist. The Project Area is missing the key habitat elements for these species. It is very unlikely that the van dyke's salamander, cascade torrent salamander, or larch mountain salamander occur in the Project Area; therefore, no impact to these species is anticipated.

Bald eagle (*Haliaeetus leucocephalus*, USFS Sensitive Species, Bald and Golden Eagle Protection Act): The bald eagle is considered a winter resident of the GPNF. They are most commonly seen near riparian areas associated with rivers. No winter roosting sites have been documented in the Project Area. The Project Area has no riparian habitat associated with large rivers which would provide habitat for the bald eagle. It is very unlikely that the bald eagle would utilize the habitat in the Project Area for anything other than transiting between other

areas with suitable habitat. No impact to this species is anticipated.

Cumulative effects on wildlife and wildlife habitat are mostly related to additional, small increments of the same kinds of effects as have occurred in the past. Past activities in the vicinity of the proposed exploration include previous limited mineral development, previous timber harvest, and previous mineral exploration. Current or ongoing activities would include recreational use and timber management, both of which also include road and trail use and maintenance. The collective consequences of these small incremental impacts are negligible.

Pacific fisher (*Pekania pennant*, anticipated FS Sensitive Species): The Pacific fisher began to be reintroduced into the Southern Cascades in 2015. The Project Area does provide suitable habitat and the short-term increase in disturbance that may cause avoidance of the area during project activities. Although the Project will have a small negative impact to fisher and its habitat, it will not contribute to a negative trend in viability of this species on the forest because of the minor amount of habitat affected and short duration of effects.

***Fisheries* (see MEA Sec. 3.6)**

The Proposed Action and Alternative 4 will have no effect on listed or candidate fish species, including Lower Columbia River (LCR) chinook, LCR coho, and LCR steelhead, or on designated Critical Habitat for chinook salmon and steelhead trout because of distribution limiting barriers downstream at the confluence of the Green River with Falls Creek at River Mile 24.95 and at River Mile 31.3. The Project Area occurs around River Mile 32, which is approximately seven miles upstream from the first anadromous barrier and far enough upstream from the anadromous barrier for any ESA-listed salmonid species to not be affected by the project activities; it is also consequently located beyond designated Essential Fish Habitat.

The 1993 GPNF stream surveys (Haapala 1993) documented the likely presence of cutthroat, brook trout, and resident rainbow trout in the Green River and its tributaries within the Project Area. Cutthroat/steelhead is designated an MIS by the GPNF Plan. Bull trout, the other fisheries MIS designated by the GPNF Plan, is not present in the Project Area.

By implementing and maintaining impact avoidance and minimization measures consistent with the ACS guidelines and the USFS National Core Best Management Practices (BMP) for Water Quality Management (WQM) in Minerals Management (MM) Activities (FS-990a), impacts to surface water will be minimized to the point of being negligible. The ACS Guidelines and USFS Manual (FSM) MM BMPs that are particularly relevant have been added as stipulations to the prospecting permit and are included in Appendix E of the MEA.

Minor displacement of soil may result from the project's ground-disturbing activities (e.g., equipment operation) but would not manifest itself as sediment in fish-bearing waters. A small volume of soil (< 1 cu yd.) may be mobilized, but is expected to be retained as surface soil and/or captured in intermittent channels because the soil type presents a low risk of erosion from surface water flows. The small quantity of fine sediment that might get into any streams would

be immeasurable and compared with existing conditions and will have no adverse effects to any life stage of fish or aquatic life, including downstream fish habitat in the Green River.

No impacts to resident fish are anticipated from the Proposed Action because the BMPs and other limitations, design features, and stipulations will protect hydrologic, aquatic, and riparian resources.

The cumulative effects on fish and aquatic habitat is related to additional small increments of the same kinds of effects as have occurred in the past, such as timber management, road maintenance, equestrian activities, and other recreational activities. In areas that are to be disturbed, natural re-growth of vegetation that has served to control erosion and sedimentation may be temporarily affected. The collective consequences of these small, incremental impacts are minor and considered negligible.

Vegetation (see MEA Sec. 3.7)

No significant impacts to vegetation are anticipated because of the very limited amount of surface disturbance. The Proposed Action and Alternative 4 will not interfere with or be inconsistent with future use of the area for timber production and are compatible with the existing Matrix designation because they will not impact the future productivity of the existing or future forest stands.

The Project Area is in the traditional and accustomed use area of the Yakama, Puyallup, and Cowlitz Tribes. It is likely that plant species of cultural importance are located in the Project Area. However, information about traditional plant use is sensitive in nature and cannot be shared without permission of the Tribes. The Cowlitz Indian Tribe has indicated during government-to-government consultation that the Tribe views plants as a natural resource of cultural value. (Source: William Iyall, Chairman, Cowlitz Indian Tribe, from a letter dated March 16, 2012.) Because the authorized exploration activities involve a very limited amount of vegetation disturbance, the loss of native plants from these modifications is anticipated to be minor and would not occur in areas where any culturally significant plant is abundant enough to be harvested.

The USFS has records for two noxious weed species in the Project Area; scot's broom (*Cytisus scoparius*) and tansy ragwort (*Senecio jacobaea*). Surface-disturbing activities associated with the Proposed Action and Alternative 4 present a high risk of spreading noxious weeds. These risks have been reasonably minimized by requiring implementation of BMPs and other limitations, stipulations, and mitigation measures. See Appendix F of the MEA.

No Federal ESA-listed plant species occur on the GPNF. In addition, no known locations of any special status plant species are known to occur in the project vicinity.

Heritage and Cultural Resources (see MEA Sec. 3.8)

The Proposed Action and Alternative 4 will not directly impact natural, historic, or

archaeological resources of the upper Green River fork of the Toutle River that contribute to its being considered a culturally significant landscape by the Cowlitz Indian Tribe or any sites deemed eligible for nomination to the National Historic Register. See section 3.8.2.2 of the EA.

The Project Area falls within the historic St. Helen's Mining District, which was designated in 1892 as a 156-square mile area along the flanks of Goat Mountain and headwaters of the Green River (McClure 1984). Over 400 mining claims were filed within this district between 1892 and 1911, with copper, gold, and silver being the most sought-after minerals. Specifically, the Germania Mining and Milling Company filed historic mining claims circa 1900, including the Germania, Germania Jr., Germania Secundus, and Adamantine No. 2 lodes of Mineral Claim 708, which overlap the Project Area. Though a small amount of exploration re-occurred in the 1930s, most mineral development activity was suspended until larger mining corporations re-filed many old claims in the 1960s and 1970s (McClure 1984:4-5). Previous exploratory drilling was conducted in the same location by the Duval Corporation in the 1970s and 1980s. The Duval Corporation suspended operations following acquisition by Pennzoil and the 1980 eruption of Mount St. Helens and subsequently divested their interests. The project drill sites are all located on a previously constructed road system on drill pad sites dating to the Duval Corporation period of use or later salvage logging following the 1980 Mount St. Helens eruption.

Several previously documented archaeological resources are located within approximately one mile of the Project Area; nearly all are historic mining-related sites. Instances of peeled cedars associated with American Indian use have also been documented. Previous inventories along Goat Mountain Trail 217 and in the Green River Horse Camp did not identify cultural resources.

Field visits were conducted by URS Corp. (now AECOM) cultural resource personnel. Following the same field methods utilized in 2010 by USFS (Taber 2010a), individual proposed drill pad sites were inventoried using a 25-foot diameter radius around the outer dimensions of each pad site. Closed roads where reactivation is proposed were also surveyed along with a buffer of 15 feet on each side of the road prism, unless precluded by steep slopes. A metal detector was used to search for potential buried historic materials, since the results of a record search indicated the potential for such site types to be found in the general vicinity. Older trees, where present, were examined for cultural scarification. No cultural or historic resources were identified during these surveys.

Given the negative findings of past and current field investigations (Taber 2010a, 2010b; McDaniel and Stegner 2012 forthcoming; and McClure 1982a, 1982b) combined with the extent of prior disturbance related to previous road building and drill pad installation within the Project Area, the project is not anticipated to have direct impacts to currently known archaeological resources. It is possible, but unlikely, that the project would result in impacts to as yet unidentified archaeological resources. Ascot and its agents will be required to adhere to protocol outlined in an Inadvertent Discovery Plan. Should any cultural resources or human remains be encountered, further ground-disturbing activities will be suspended until the site has been

properly investigated and cleared by the USFS GPNF Archeologist.

***Visual/Scenic Resources* (see MEA Sec. 3.9)**

The Visual Quality Objectives (VQO) established in the GPNF Plan for the Project Area are characterized as Retention and Partial Retention in the foreground and Modification in the middle ground viewing zones. The effects of both the Proposed Action and Alternative 4 on visual resources are consistent with GPNF Plan Visual Quality Objectives (VQO).

Proposed drilling operations occurring at nine locations, along FS Road 2612 and the road leading to the Green River Horse Camp (Pads 1, 2, 3, 4, 5, 14, and 15), will be seen by recreational users. The remaining drill sites and temporarily reactivated road segments will be screened from the public view by existing vegetative cover and by controlling public access to these reactivated roads. The project would result in short-term visual impacts caused by initial surface disturbance at drill sites located in the immediate foreground along FS Road 2612 and the road leading to the Green River Horse Camp.

Due to natural intervening topographic features, no drill sites or drilling equipment will be seen from Mount St. Helens National Volcanic Monument.

After drilling is completed, roads and drill pad areas will be reclaimed and returned to their original natural condition. There will be some visible impacts for several seasons until the vegetation becomes established. Until vegetation becomes established, this disturbance may be visible along existing roads but will not attract attention, nor will it be apparent to the casual observer. No long-term visual effects from either the Proposed Action or Alternative 4 are anticipated.

***Air Quality* (see MEA Sec. 3.10)**

Due to the short-term and small scale nature of the action pursuant to implementation Alternative 4 there will not significantly impact to the local air quality, or alteration in the existing classification under the Clean Air Act, or affect to global climate change.

Air quality in the Project Area is generally good due to the limited population and lack of industrial activity. The Project Area falls within the Southwest Clean Air Agency (SCAA) jurisdiction. The area is in a rural setting and considered "unclassifiable/attainment" as established in 40 CFR 81.348. The Project Area is treated as an attainment area and is categorized as a Class II area under the Clean Air Act regulations.

The Proposed Action and Alternative 4 will utilize small displacement, diesel-powered equipment, as outlined in the Plan of Operation and listed in the MEA, to clear existing closed roads segments and to prepare proposed drill sites. As needed, diesel-powered water pumps may also be used, as well as a water truck to import water from off-site potable water sources for drilling and to reduce dust emissions caused by project activities. After road reactivation is completed, and the majority of pad installation is completed, two track mounted drills, two ATV,

four 4x4 pickup trucks, two portable pumps, one track excavator, and additional small hand equipment will remain in use to support the exploration program.

The BLM prospecting permits authorize the use of on-site water sources. Use of on-site water sources will significantly reduce the road traffic and fugitive dust caused by water trucks. No restriction on the quantity of on-site water use would be imposed by the prospecting permits, however, water use limitations of 5,000 gpd are imposed by the Washington State Department of Ecology, unless a permit is obtained. The BLM and USFS have determined that restricting use of on-site water sources could require up to five water truck round trips per day from the Randle, WA area. Hauling water to the site on a regular basis would increase the amount of exhaust from the water truck fuel emissions, create additional fugitive dust from vehicle use, and increase road use/wear. Ascot, however, will be required to actively suppress dust generation and to maintain associated forest roads.

Transportation and Access (see MEA Sec. 3.11)

Under the Proposed Action and Alternative 4, approximately 15 to 20 project employees will routinely commute to the Project Area, primarily from the towns of Randle and/or Morton, Washington. This level of use is lower than the average recreation use during the peak hunting season and will not add significantly to the existing average daily traffic. Increased travel on the USFS road system may lead to accelerated wear and rutting. As part of the project, Ascot will be responsible for completing road maintenance and repairs as determined by the USFS.

The Proposed Action and Alternative 4 will reactivate 1.69 miles (about 3.07 acres) of closed roads for access to 14 drill pad sites. This includes 1.35 miles (2.45 acres) of previously reactivated then decommissioned roads from the 2010 drilling program and 0.34 miles (0.62 acres) of newly reactivated, decommissioned roads. Installation of a gate where the closed road segments join FS Road 2612 will help to limit public access to these temporarily reactivated roads. Drilling will occur on the sides of FS Road 2612 and the road used to access the Green River Horse Camp (Pads 01-05, 14, and 15). Drilling will not occur directly within the public road and will not restrict public or administrative access along FS Road 2612 or the segment accessing the Green River Horse Camp. Drilling in the vicinity of Green River Horse Camp (Pads 6 and 7) is restricted under Alternative 4 and will not occur during the peak use period (fall hunting season).

All temporarily reactivated road segments will be decommissioned and reclaimed at the conclusion of exploratory drilling activities.

Recreation (see MEA Sec. 3.12)

Impacts to recreation use under Alternative 4 will be limited to the immediate vicinity of the Project Area and, more specifically, to the individual drill pad sites at the time of drilling activity. Any proposed disruption would be temporary and of a nature that would not permanently interfere with or be inconsistent with recreation opportunities or public access

within the Project Area.

The Goat Mountain vicinity provides a wide variety of recreational activities for visitors including hiking, horseback riding, bicycling, kayaking, camping, picnicking, fishing, hunting, wildlife and bird watching opportunities, sightseeing, and pleasure driving. There are also opportunities for gathering special forest products including berries, mushrooms, boughs, beargrass, and floral greens.

Primary use areas are the Green River Horse Camp, Green River Trail #213, and Goat Mountain Trail #217. The use season is July through late October, primarily based on weather and practical accessibility of local roads and trails. This equates to approximately 35 weekend days and 90 weekdays. Peak use of 20 to 40 visitors per day occurs during the fall hunting season (usually full week stays). Alternative 4 precludes drilling activities at proposed pad sites 6 and 7 located within the immediate vicinity of the Green River Horse Camp to avoid these activities within riparian buffer zones. This restriction eliminates potential disturbance of 20 to 40 visitors per day from sounds, operating lights, and other intrusions associated with drilling operations.

Under the Proposed Action and Alternative 4, all recreational activities would continue, except within the immediate vicinity of the proposed drill sites as a safety measure. Temporarily reactivated roads (which are currently closed) will generally not be available for motorized use by the public and a gate at the intersection with FS Road 2612 will be maintained throughout the duration of the Project in order to ensure public safety.

Noise and human activity from exploration activities will reduce the opportunity for solitude in the immediate vicinity of each individual drill pad during periods of active operations.

Increased traffic from approximately 15 to 20 workers regularly commuting from Randle and Morton would add some additional vehicle traffic to the Goat Mountain site; however, employee vehicles will be parked behind the security gate leading north off of FS Road 2612, and will not interfere with visitors to the Green River Horse Camp or trailheads and the associated parking.

Under the Proposed Action and Alternative 4, wildlife viewing, bird watching, and hunting activities will not be adversely impacted, except in areas immediately adjacent to ongoing operations.

The GPNF has determined that values contributing to the Wild and Scenic River eligibility on National Forest lands will not be impacted by the Proposed Action or Alternative 4. The USFS has provided a specific stipulation that addresses Wild and Scenic River eligibility, and the BLM has incorporated this stipulation verbatim into this decision document.

The GPNF has also determined that the Tumwater Inventoried Roadless Area will not be impacted by the Proposed Action or Alternative 4 because no surface disturbing activities are proposed within the boundary. The USFS has provided a specific stipulation that addresses

applicable regulations and Standards and Guidelines in the GPNF Plan. The BLM has incorporated this stipulation verbatim into this decision document.

Socioeconomics (see MEA Sec. 3.13)

Unemployment in the City of Morton, Lewis County, and Cowlitz County in 1990, 2000, and 2010 was generally higher than the State of Washington. Although unemployment in Skamania County was lower than the State in 2010, historically it has been higher. A portion of increasing unemployment can be attributed to declining employment in natural resource industries. See MEA Section 3.13.

Some of the work associated with exploration activities requires specialized skills not typically available locally. However, Ascot has stated that it attempts to hire local residents for support positions. This will provide temporary employment opportunities during drilling activities for local residents. Typical operations would require one drill foreman, two to four drillers, two to four drill helpers, two to three geologists, and two to three core technicians. Support workers might include two local trail and pad contractors and one security employee. In addition, lodging of non-local workers and local purchases of food, and other supplies will likely occur as a result of the Proposed Action and Alternative 4, thereby creating a positive economic benefit to the local community.

The Proposed Action and Alternative 4 will not have disparate effects on any consumers, minority groups, women, civil rights, or social/ethnic groups. Future timber harvest and related employment in the Project area would not be precluded or impacted by the Proposed Action or Alternative 4.

Data collected during implementation of the Proposed Action and Alternative 4 will be utilized to demonstrate whether or not a valuable deposit exists, and whether Ascot or a successor would be prudent to pursue future mineral lease applications. Significant local support was expressed during the public scoping period regarding the potential economic opportunities stemming from mineral exploration. However, the Proposed Action and Alternative 4 only address exploration. Any subsequent application for a lease would be subject to a separate determination by the BLM that a valuable mineral deposit has been located, preparation of a separate NEPA analysis, and issuance of a separate decision. Future applications would be evaluated independently and would require a BLM leasing authorization subject to the consent of the surface managing agency (ie., USFS).

Noise (see MEA Sec. 3.14)

The use of small trucks, excavators, ATVs, and drill rigs, water pumps, as well as handheld equipment such as chainsaws, will introduce an increased temporary level of point source human generated sound in the Project Area. Rural forested areas generally have an ambient noise level of 40 db (lower limit of urban sound), and sound from use of the proposed Project equipment will rarely rise above that of a power mower (~90 db). Noise generated during drilling will

diminish with distance from the source (ie., intensity is inversely proportional to the square of the distance from the source) and will be further attenuated by intervening terrain, forest cover, and soils, as well as the use of a portable insulated baffel around the drill rig.

The potential for noise impacts to wildlife and recreation will be temporary and minimized in the vicinity of the Green River Horse Camp by restricting drilling to daytime hours during the week prior to Labor Day and prohibiting drilling on that day. No additional impacts from Project related noise are anticipated.

Decision Factor 3 - Prospecting Permit is in the Public Interest

I have determined that issuance of the prospecting permits and approval of an amended Plan of Operation, inclusive of the changes, limitations, design features, and stipulations as described for Alternative 4 and in Appendix E of the MEA – *Best Management Practices*, is in the public interest. While no standards defining what constitutes "in the public interest" are directly promulgated regarding prospecting in 43 CFR 3505 or 3509, the criteria listed in 43 CFR 3515.16(a) regarding mineral lease exchanges (not proposed in this action) provide a useful framework for analysis of Alternative 4.

(1) Agricultural production potential (see MEA Sec. 1.3.1.8)

The Project Area is not utilized for commercial agriculture. Forest productivity will not be impacted, and any future timber harvest is not precluded by the authorized exploration activities.

(2) Scenic values (see MEA Sec. 3.9)

Proposed drilling operations occurring at nine locations along FS Road 2612 and the road leading to the Green River Horse Camp (Pads 1, 2, 3, 4, 5, 14, and 15) would be readily visible by recreational users. The remaining drill sites and temporarily reactivated closed road segments will be screened from the public view from along the FS 2612 and at the Horse Camp by the terrain and existing vegetative cover, and by controlling access to reactivated roads sections and active drill sites. After drilling is completed, roads and drill pads will be reclaimed and ultimately returned to essentially their original condition. There will be some visible impacts for approximately one season that will diminish with each passing growth period as temporary and native vegetation becomes established resulting in no long-term post-project visual effects.

No drill sites or drilling equipment will be seen from Mount St. Helens National Volcanic Monument due to intervening terrain features. The GPNF has also determined that the effects of authorizing exploration activities on visual resources are consistent with GPNF Plan Visual Quality Objectives.

(3) Biological values including threatened or endangered species habitat (see MEA Sec. 3.5, 3.6, and 3.7)

Direct impacts to wildlife (including Federal ESA and/or USFS Sensitive Species, MIS, S&M, and others such as migratory and resident birds and mammals) resulting from the Proposed

Project and Alternative 4 will be minor due to the nature and minimal extent of physical activities at each drill pad site and along temporarily reactivated road segments, and implementation of timing restrictions that preclude Project work during the nesting season for the northern spotted owl.

No Federal ESA-listed plant species occur on the GPNF. In addition, there are no known locations of any special status species within the Project vicinity. Given the limited ground disturbance proposed it is very unlikely that any sensitive vascular plant species will be impacted, nor will invasive weeds be introduced into the Project Area.

The small quantity of fine sediment that might get into any streams would be immeasurable above baseline conditions and will have no adverse effects to any life stage of fish or aquatic life, including downstream fish habitat in the Green River. The Proposed Action and Alternative 4 will have no significant effect on listed or candidate fish species, including LCF chinook, coho, and steelhead or on critical habitat for chinook, salmon, steelhead, and trout because of distribution-limiting barriers downstream at the confluence of the Green River with Falls Creek at River Mile 24.95 and at River Mile 31.3. Likewise, no impacts to resident fish are anticipated.

(4) Geologic values (see MEA Sec. 3.2)

Extraction of the drill cores and removal of surficial hand samples for analysis will provide information needed by both Ascot and the Agencies to make sound fact-based decisions regarding the mineralogy and structural features of the Project Area as well as the existence of a valuable deposit, including its possible economic potential and environmental viability. The utility of this information will be vital to the BLM and the USFS when considering any additional applications for mineral exploration or leasing within the Project Area.

Potential impact to the geologic setting will be significantly reduced by the additional stipulation under Alternative 4 for sealing the entire well column of all drill holes by methods and materials that are appropriate to prevent movement of water within, into, and around the abandoned drill hole. Bentonite/cement mixtures such as described in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160) will be used to abandon all drill holes that encounter artesian flow. Sealing all drill holes will prevent native sulfide minerals from being exposed to water and oxygen preventing production of acid rock drainage.

(5) Archeological, historic, or other cultural values (see MEA Sec. 1.1.2, 3.8)

Because the proposed exploration will involve a very limited amount of disturbance (see Decision Factor 2 - *Transportation and Access*, and MEA Sec. 3.11), the loss of native plants from implementation of the Proposed Action and Alternative 4 is anticipated to be minor and would not occur in areas where any culturally significant plant is abundant enough to be harvested. Completed cultural surveys did not identify any sites of cultural or historic interest. Government-to-government consultation with the Cowlitz Indian Tribe identified numerous resource uses and values within the Project Area that are of interest to the Tribe. No significant

impacts to these resource uses or values, however, were identified.

(6) *Other public interest values such as recreational use* (see MEA Sec. 3.12)

Under the Proposed Action and Alternative 4, all recreational activities would continue, except temporarily within the immediate vicinity of the proposed drill sites.

No surface-disturbing activities are proposed within the small northerly portion of the MS-774 and 708 that fall within the boundary of the Tumwater Inventoried Roadless Area. The GPNF has provided a stipulation that all activities within these MS units shall be subject to and all proposed activities will be consistent with the 2001 Roadless Rule at 36 CFR 294. The BLM has incorporated this stipulation verbatim.

(7) *Residential or urban areas* (see MEA Sec. 1.3.1.8)

No residential or urban areas are within the vicinity of the Project Area.

(8) *Invasives* (see MEA Sec. 1.3.1.9, 3.7.1.3, 3.7)

There are six recorded invasive plant species in the vicinity of the Proposed Project. Areas to be directly disturbed by Project activities will be surveyed for these and potentially other invasive plants as part of a risk assessment and identification of control measures pursuant to the Pacific Northwest Region Invasive Plant Program Record of Decision for Preventing and Managing Invasive Plants (USDA FS 2005a); and the Forest Plan Amendment #20 for GPNF and Columbia River Gorge National Scenic Area (Washington Portion) (FS 2008b). Although there is a risk of spreading noxious weeds in the Project Area, this risk is associated only with the potential for noxious weeds to be spread within a very limited area based on the limited amount of disturbance proposed. Under no circumstances would non-native invasive plant species be used for revegetation.

(9) *Designations* (see MEA Sec. 1.3)

Regarding potential inclusion in the wilderness or wild and scenic rivers systems, the GPNF has determined that values contributing to Wild and Scenic River eligibility on National Forest lands will not be impacted by the Proposed Action or Alternative 4. The GPNF has provided specific stipulations that address the Inventoried Roadless Area and eligible Wild and Scenic Rivers.

(10) *Public Uses* (see MEA Sec. 3.12)

No public uses will be impacted by prospecting activities. Temporary Project related visual, recreation, and noise impacts may locally affect the quality of visitor experience; however, all current and ongoing public uses in the Project Area are expected to continue without interruption.

Decision Factor 4 – Consent of the USFS

In reaching my decision, I have relied extensively on the written consent and determinations of the USFS (Attachment A). In addition, I have incorporated all of the Conditions,

Recommendations and Notices provided by the USFS in its Decision Notice and FONSI dated January 29, 2018 (Attachment B). That decision outlines the determination of the Manager of the Cowlitz Valley Ranger District that issuance of the two prospecting permits to Ascot for the lands encompassed by MS parcels 708, 774, 779, 1329, and 1330 as analyzed in the MEA Alternative 4 conforms with the applicable Land and Resource Management Plans and will not interfere with or be inconsistent with the purposes for which the lands were acquired.

CONSULTATION (see MEA Sec. 5)

USFWS (see MEA Appendix F)

The USFWS has reviewed and accepted the agency-prepared Biological Assessment and has concurred with the agency determination that the Proposed Action, with the timing restriction imposed under Alternative 4 of may affect/not likely to adversely affect ESA Listed or Candidate Species.

National Oceanic and Atmospheric Administration (NOAA) Fisheries (see MEA Sec. 3.6.1.3)

No consultation with NOAA Fisheries was required because the Proposed Action and Alternative 4 have no effect on listed or candidate fish species, including LCR chinook, LCR coho, and LCR steelhead, due to distribution-limiting barriers downstream at the confluence of the Green River with Falls Creek at River Mile 24.95 and at River Mile 31.3. Designated Critical Habitat for chinook salmon, steelhead, and trout is not present in the Project Area.

Government-to-Government (see MEA Sec. 3.8.1.4)

In a letter dated March 16, 2012, the Cowlitz Indian Tribe requested formal government-to-government consultation with the BLM and the USFS. Several concerns were expressed, including: the need for completion of a cultural and archaeological resources survey; the need for known and historic mining resources to be better characterized so that impacts could be avoided; the likely association of trails near the Project Area with pre-contact period Indian trails tied to resource gathering; the presence of wild goats at Goat Mountain, which were and are an important element of the Cowlitz Indian Tribe cultural heritage; and the importance and presence of berries, for which the Project Area would also have been utilized. Additionally, the upper Green River fork of the Toutle River is considered a culturally significant landscape by the Cowlitz Indian Tribe (William Iyall, Chairman of the Cowlitz Indian Tribe, in a letter dated March 16, 2012). An initial, formal government-to-government consultation meeting was held with the Tribal Chairman, the Tribal Historic Preservation Officer, and other staff of the Cowlitz Indian Tribe on March 30, 2012. A second meeting was held via conference call on May 30, 2012, to brief the Cowlitz Indian Tribe on the 2012 EA prior to its release for public comment. Additional in-person meetings were held August 28, 2012, and November 16, 2012. Prior to release of the MEA for public comment, renewed consultation was initiated with the Cowlitz Tribe on August 18, 2015. Additional consultation was conducted prior to issuance of the USFS Draft Decision Notice and FONSI on July 10, 2017, and prior to issuance of the BLM Decision Record and FONSI.

PUBLIC INVOLVEMENT (see MEA Sec. 1.8)

Table C – *Scoping, Comment, and Consultation*, below, summarizes the principle opportunities

afforded the public to make input to the NEPA process for this actions and associated Agency decisions in addition to other authorities consulted as listed in MEA Table 1.3-1 – *Supplemental Authorities Consulted*.

Table C. Summary of Scoping, Comment, and Consultation

Action	Location	Date	Notes
2012 EA Public Scoping	Longview, WA	2/15/2012	84 Attendees
2012 EA Public Scoping	Morton, WA	2/16/2012	400+ Attendees
2012 EA Public Scoping	Stevenson, WA	3/13/2012	135+ Attendees
Public Comment Period for 2012 EA	Announced Open Public Comment Period	6/29/2012 for 45 days+	Received ~6,000 Comments
Public Comment Period for 2015 MEA	Announced Open Public Comment Period	1/5/2016 to 3/21/2016	Received ~3,700 Comments
Government-to-Government Consultation with Cowlitz Tribe	Longview, WA.....	3/30/2012	Past and On-going Consultation
	Conference Call.....	5/30/2012	
	Longview, WA.....	8/28/2016	
	Longview, WA.....	11/16/2012	
	Longview, WA.....	8/18/2015	
	Longview, WA.....	8/10/2017	

AUTHORIZATION

As the Responsible Official, it is my decision to grant the two hardrock prospecting permits (WAOR 066973 and 066628) to Ascot USA, Inc., for mineral exploration activities (exploratory drilling and surface hand sampling) within the area defined by MS parcels 708, 774, 779, 1329, and 1330 (see depictions in MEA Appendix A) and in accordance with the as described and analyzed Alternative 4 of the 2015 MEA. In addition, the USFS Specified Conditions, Recommendations, and Notices described in the USFS Decision Notice dated January 29, 2018 are adopted verbatim (Attachment B) in addition to those imposed by the BLM (Attachment C). This decision is also predicated on Ascot USA, Inc., submission for BLM approval of a revised Plan of Operations that incorporates these changes, limitations, design features, and stipulations prior to issuance of an NTP by the BLM.

Signature: _____

Title: Chief, Branch of Land Mineral and Energy Resources, Oregon State Office

Date: _____

References:

Haapala, D.L. 1993. *Green River 1993 Stream Survey Narrative*. Gifford Pinchot National Forest, Mount St. Helens National Volcanic Monument. Amboy, WA

ADMINISTRATIVE REMEDIES

Administrative appeal/review of a prospecting permit decision by the BLM is available under 43 CFR Part 4, provided that applicable regulations are followed.

Effective Date of Decision

This is a lands decision in accordance with BLM regulations at 43 CFR Subpart 3505. The decision will become effective as described in 43 CFR § 4.21.

Right of Appeal

This decision may be appealed to the U.S. Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals (Board) by those who meet the qualifications outlined in 43 CFR § 4.410. A written notice of appeal must be filed in strict accordance with the requirements and timeframes described at 43 CFR § 4.411. Only signed hard copies of a notice of appeal that are delivered to either of the following addresses will be accepted:

Bureau of Land Management
Oregon State Office
1220 SW 3rd Ave., Ste 1100
Portland, OR 97204

Bureau of Land Management
Oregon State Office
P.O. Box 2965
Portland, OR 97208

A notice of appeal must be served in accordance with the requirements and timeframes described in 43 CFR § 4.413. As required by 43 CFR § 4.422(c), at the end of the notice of appeal appellants must sign a certification that service has been or will be made in accordance with the applicable rules and specifies the date and manner of such service. The service address for the Regional Solicitor has recently changed to the following:

Regional Solicitor
Pacific Northwest Region
U.S. Department of the Interior
601 SW 2nd Ave., Ste 1950
Portland, Oregon 97204

Notices of appeal transmitted by electronic means, including but not limited to facsimile and e-mail, will not be considered. The person signing the notice of appeal has the responsibility of proving eligibility to represent the appellant before the Board under its regulations at 43 CFR § 1.3. The appellant also has the burden of showing that the decision appealed is in error. The

appeal must clearly and concisely state which portion(s) or element(s) of the decision is being appealed. If the notice of appeal does not include a statement of reasons, such a statement must be filed in accordance with 43 CFR § 4.412.

Under 43 CFR § 4.21(b), an appellant may petition the Board to stay the implementation of the decision while an appeal is pending. If filed, a petition for stay must accompany a timely filed notice of appeal. A petition for stay must meet the requirements outlined in 43 CFR § 4.21, including showing sufficient justification based on the following standards:

- I. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted, and
4. Whether the public interest favors granting the stay.

A notice of appeal with a petition for a stay must be served in accordance with 43 CFR § 4.21(b)(3).

Attachment A: USFS Consent Letter



United States
Department of
Agriculture

Forest
Service

Cowlitz Valley Ranger District

10024 US Highway 12
Randle, WA 98377
360-497-1100
Fax: 360-497-1102

File Code: 2800

Date: 4/13/2018

Lenore Heppler
Branch Chief - Land, Mineral and Energy Resources
Bureau of Land Management
1220 SW 3rd, Ave
Portland, OR 97204

BLM-RECEIVED

18APR20FRPM4:17

Dear Branch Chief Heppler,

This letter conveys my consent, as authorized official for the Gifford Pinchot National Forest, to the BLM to issue two prospecting permits subject to the attached conditions and notices, for prospecting permits WAOR-066628 and WAOR-066973, as specified below. Forest Service consent was analyzed in the Goat Mountain Hardrock Prospecting Permit Applications Environmental Assessment (No. DOI-BLM-ORWA-0000-2016-0001-EA) and the decision notice and finding of no significant impact (DN/FONSI) of January 29, 2018. I have selected alternative 4 which requires protective measures including standard stipulations and design features identified by the BLM and Forest Service (EA, Section 2.1.2.3). Specifying conditions for consent by the Forest Service is limited to the authority of the agency under the statutory framework.

For permit WAOR-066628 (680.671 ac), the Forest Service consents to including the following lands in the prospecting permit: Sections 8, 9, 16, 17, 18, 19, and 20 of Township 10 North, Range 6 East, Willamette Meridian, Skamania County, Washington. For permit WAOR-066973 (217.273 ac), the Forest Service consents to including the following lands in the prospecting permit: Sections 7, 8, 17, and 18 of Township 10 North, Range 6 East, Willamette Meridian, Skamania County, Washington. Conditions and notices made a part of the Forest Service consent are provided in Attachment 1. These conditions and notices are also included in the Forest Service "Decision Notice and Finding of No Significant Impact" (DN/FONSI). Specified conditions and notices are applicable to both prospecting permits.

Per 43 CFR 3590, the Forest Service will also have recommendations for Conditions of Approval for the exploration plan. Please notify us when you would like those forwarded.

Thank you for your time and consideration. If you have questions regarding the consent decision, please contact Gar Abbas, District Ranger, at gabbas@fs.fed.us or 360-497-1105. If you have questions regarding the Forest Service NEPA process, please contact Charlie Sharp, Environmental Coordinator, at charlesmsharp@fs.fed.us or 970-403-6174.

Sincerely,

GAR ABBAS
District Ranger



Caring for the Land and Serving People

Printed on Recycled Paper



Attachment B: USFS Specified Conditions

Following are specified conditions, recommendations, and notices of Forest Service consent to BLM issuing prospecting permits described in applications WAOR-066628 and WAOR-066973. These are conditions to be added to the permits by the BLM and implemented by the permittee. Also included are specified conditions from the EA, Appendix E- Best Management Practices.

1. NOTICE - Pursuant to the provisions of the act of March 4, 1917 (16 USC 520), Section 402 of the Re-organization Plan No. 3 of July 16, 1946 (60 Stat. 1097, 1099), the Act of August 7, 1947 (30 USC 352), and the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) as said authorities have been or may hereafter be amended, no mineral development of any type is authorized hereby, and consent to the issuance of this prospecting permit as required by law and regulation (43 CFR 3507.11 (d)) and 43 CFR 3507.19(c)) is given subject to the express stipulation that no mineral lease may be issued for the land under permit without the prior consent of the USDA Forest Service and the proper rendition of an environmental analysis in accordance with the National Environmental Policy Act of 1969, the findings of which shall determine whether and under what terms and conditions for the protection of the land involved the lease may be issued.
2. CONDITION - *Standard Stipulation for Lands of the NFS under the Jurisdiction of the Department of Agriculture (FSM 2822.42)*: The permittee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the prospecting permit. The Secretary of Agriculture's rules and regulations must be complied with for: (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of the Interior; (2) uses of all existing improvements, such as forest development roads, within and outside the area permitted by the Secretary of the Interior; and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior. All matters related to this stipulation are to be addressed to Cowlitz Valley Ranger District at: 10024 US Highway 12, P.O. Box 670. Randle, WA 98377-9105, 360-497-1100.
3. NOTICE - Lands within the permit area in the Tumwater Inventoried Roadless Area (IRA), specifically Northern portions of BLM WAOR 66628 (Attachment 2) are subject to the rules and regulations of the Secretary of Agriculture pertaining to road construction, reconstruction and timber harvest consistent with the 2001 Forest Service Roadless Rule at 36 CFR 294. No ground-disturbing or vegetation-altering activities shall be authorized in the inventoried roadless area without additional prior written consent for specific activities from the Forest Service.

4. **CONDITION** for WAOR 66628 - Within 0.25 mile of the wild and scenic eligible section of the Green River (Attachment 2), mitigation and reclamation measures to minimize surface disturbance, sedimentation and visual impairment are required.
5. **CONDITION** - No new surface occupancy is allowed in Riparian Reserves (Attachment 2). This condition applies to both proposed (i.e., pads 6 and 7) and future activities.
6. **CONDITION** - To avoid potential noise-related disturbance to northern spotted owls during the nesting season, surface disturbing activities (drilling activities, road clearing or reactivation, vegetation removal) shall not occur at Pads 10, 11, 12, 13, 22, 23, 24 and 25 between March 1 and July 15 (Attachment 2).

BMP	Description	EA Section
Air Quality		
BMP-1	To reduce impacts, excavated materials from sump construction would be visually monitored for wind and water erosion. If needed, the piles would be covered to prevent material loss. The proposed work area generally receives enough rainfall to keep dust levels low along the unimproved roads. If visual dust is observed during road travel, a water truck would be used to reduce dust emissions during heavy traffic. Prompt site reclamation following drilling activities would also result in a reduction of windblown material.	3.10
Cultural Resources		
BMP-2	All project employees would be instructed regarding the type and nature of archaeological and cultural features that might be encountered during project construction, including the proper steps for protecting and reporting such features before further ground disturbing activities are undertaken.	3.8
BMP-3	Ascot and its agents would be required to adhere to protocol outlined in an Inadvertent Discovery Plan, which details actions to be followed by Ascot and its agents in the unlikely event unanticipated cultural resources or human remains are encountered during implementation of the Project. Ascot would be advised of state and federal regulations and laws protecting cultural resources and human remains, both orally and as documented in the Inadvertent Discovery Plan, which would be developed by the USFS GPNF archaeologist, who would be responsible for ensuring that the plan is adhered to throughout the duration of the Project. Should any cultural resources or human remains be encountered, further ground disturbing activities would be curtailed until the site has been properly investigated and cleared.	3.8
BMP-4	In the case that a designated member of an associated Tribe(s) requests to monitor the Project Site during drilling, this activity would be included as a permit condition and coordinated through the BLM/USFS. The designated tribal member would adhere to all on-site safety measures.	3.8

BMP	Description	EA Section
Fisheries		
BMP-5	All applicable Min-2. Minerals Exploration BMPs would be implemented (USFS National Core BMPs 2012).	3.6
BMP-6	A BLM approved Spill Prevention Control and Countermeasures (SPCC) plan would be developed before operations begin and carried wherever project activities occur. The containment plan should include but not be limited to possessing a spill containment kit on-site and having pre-identified containment locations. A spill containment kit would be located where equipment is stored or operated. Equipment would be scrubbed so it is free of external petroleum-based products and invasive plant seeds or biomass. Hydraulic/oil/fuel leaks would be repaired prior to operating on National Forest System lands. Equipment would be checked daily for leaks and any necessary repairs would be completed prior to commencing work activities along the stream. Equipment storage locations would be approved by the Project administrator. Equipment would not be stored adjacent to or in stream channels when not in use, which would avoid potential effects of vandals, accidents, or natural disasters. Any accidental spills of a hazardous material (e.g., oil, fuel, transmission fluid) from any operating equipment or in place of storage on land or in water would be reported to GPNF personnel.	3.6
BMP-7	Service and refueling areas would be located at least 100 feet from stream courses or wet areas (including chainsaws and other hand powered tools).	3.6
BMP-8	Road segments treated within riparian areas would be re-contoured to mimic natural floodplain contours and gradient to the greatest degree possible.	3.6
BMP-9	Sediment control barriers would be installed between the Project and the stream for those road segments immediately adjacent to the stream or where the road fill is near the wetted stream.	3.6
BMP-10	Drainage features (drain dips) would be spaced to hydrologically disconnect road surface runoff from stream channels.	3.6
BMP-11	Excavated waste material would be disposed of in stable locations out of the flood-prone area. Waste material other than hardened surface material may be used to restore natural or near-natural contours.	3.6
BMP-12	Disturbance of existing vegetation in ditches and at stream crossings would be minimized to the greatest extent possible.	3.6
BMP-13	Activities would be conducted during dry-field conditions with low to moderate soil moisture levels.	3.6
BMP-14	Project activities would restore natural drainage patterns (e.g., channel geometry, substrate and flow) and when possible promote passage of all fish species and life stages present in the area.	3.6
BMP-15	All applicable NWFP S&Gs would be followed, as well as applicable administrative unit BMPs and Washington State findings and recommendations, (Washington State Hydraulic Codes).	3.6

BMP	Description	EA Section
BMP-16	Road stabilization and decommissioning would retain LWM typically accumulated on culvert structures and channel margins. Material would be repositioned on-site or integrated into stream restoration projects as identified by a USFS Fish Biologist to the benefit of aquatic species.	3.6
BMP-17	Rip-rap or other hard structures used in culvert protection, (e.g., rock armoring at the inlet and outlet of the culvert), would be removed on decommissioned crossings at all unnamed creeks.	3.6
BMP-18	Any stream bank stabilization deemed necessary following culvert removal would use bioengineered solutions, (such as root wads, log toes, coir logs, woody and herbaceous plantings).	3.6
BMP-19	Effective and appropriate erosion controls would be used as necessary to ensure that the likelihood of sediment delivery to streams or other water bodies is negligible.	3.6
Geology⁷		
BMP-20	Long-term impacts to soil, water quality and riparian resources would be minimized to the extent permitted by the geologic target when selecting locations for exploration activities.	3.2
BMP-21	Water bodies, sensitive areas, unstable slopes and highly erosive soils would be avoided to the extent practicable.	3.2
BMP-22	Clearing, excavation and other surface disturbing activities would be limited to the minimum necessary for exploration needs.	3.2
BMP-23	All new roads and drilling pads would be constructed to a safe and appropriate standard, “no higher than necessary” to accommodate their intended use (see BMP Road-2 (Road Location and Design), BMP Road-3 (Road Construction and Maintenance) and BMP Road-4 (Road Operations and Maintenance)).	3.2
BMP-24	Suitable design and construction practices would be employed to avoid, minimize, or mitigate surface disturbances as well as maintain the reclamation potential of the site.	3.2
BMP-25	Directional drilling techniques would be used when practicable to avoid or reduce surface disturbance.	3.2
BMP-26	The extent of open exploratory areas at one time would be limited and one site would be restored before moving on to the next one, to the extent practicable.	3.2
BMP-27	Applicable practices from BMP Fac-2 (Facility Construction) would be implemented to minimize erosion and stormwater discharge from ground disturbance at exploration sites.	3.2
BMP-28	Applicable practices of Chemical Use Management Activities BMPs would be implemented when chemicals are used in exploration activities.	3.2

⁷ Forest Service Manual BMPs for Minerals Exploration (Ref. FSM 2810, 2820, and 2850).

BMP	Description	EA Section
BMP-29	Applicable practices of BMP Fac-6 (Hazardous Materials) would be implemented to manage petroleum products and other hazardous materials used in exploration activities.	3.2
BMP-30	Applicable practices from BMP Min-2 (Mineral Exploration) would be implemented to properly manage all exploration-related wastes, including drilling fluids, produced water and potentially acid-generating rock materials, to minimize the risk of groundwater and surface water contamination and to meet state and federal requirements.	3.2
BMP-31	Applicable practices of BMP Min-6 (Ore Stockpiles, Mine Waste Storage and disposal, Reserve Pits and Settling Ponds) and BMP Min-8 (Produced Water) would be implemented.	3.2
BMP-32	Applicable practices of BMP Min-8 (Minerals Site Reclamation) would be implemented to reclaim the project site concurrent with exploration activities.	3.2
Hydrology/Hydrogeology⁸		
BMP-33	Guideline-1. Adverse effects to aquatic and other riparian dependent resources from mineral operations should be minimized or avoided. For operations in a riparian management area, ensure operators take all practicable measures to maintain, protect, and rehabilitate water quality, and habitat for fish and wildlife and other riparian dependent resources which may be affected by the operations.	3.3
BMP-34	Guideline-2. Structures and support facilities should be located outside Riparian Reserves. Where no alternative to siting facilities in Riparian Reserves exists, locate them in a way to minimize adverse effects to aquatic and other riparian dependent resources. Existing roads should be maintained to minimize damage to aquatic and riparian dependent resources in the Riparian Reserves.	3.3
BMP-35	Guideline-4. Where possible, adjust the operating plans for existing activities to minimize adverse effects to aquatic and riparian dependent resources in the Riparian Reserves.	3.3
BMP-36	Guideline RF-1. (RF-Road Management from Standard and Guidelines in Forest Plan) Generally avoid new road construction in Riparian Reserves, except where necessary for stream crossings.	3.3
BMP-37	Standard RF-2. Avoid side-casting (placement of unconsolidated earthen waste materials resulting from road and drill site construction or maintenance) in Riparian Reserves.	3.3
BMP-38	Standard RF-3. Avoid placing fill material on organic debris in Riparian Reserves.	3.3

⁸ Aquatic Conservation Strategy (ACS) Objectives. Forest Service National Core Best Management Practices (BMPs) for Water Quality Management in Minerals Management Activities (USFS 2012); minerals and road management standards and guidelines established for riparian reserves in the Gifford Pinchot Forest Plan

BMP	Description	EA Section
BMP-39	Standard RF-4. Minimize or avoid disruption of natural hydrologic flow paths, including diversion of stream flow and interception of surface and subsurface flow when constructing or reconstructing roads or landings either inside or outside of Riparian Reserves.	3.3
BMP-40	Guideline RF-5. Wetlands and unstable areas should be avoided when reconstructing existing roads or constructing new roads and landings. Minimize impacts where avoidance is not practical.	3.3
BMP-41	Standard RF-6. New or replaced permanent stream crossings will accommodate at least the 100-year flood, including associated bedload and debris.	3.3
BMP-42	Standard RF-7. Where physically feasible, construction or reconstruction of stream crossings will avoid diversion of stream flow out of the channel and down the road in the event of crossing failure.	3.3
BMP-43	Standard RF-8. In fish bearing streams, construction or reconstruction of stream crossings will provide and maintain passage for all fish species and all life stages of fish.	3.3
BMP-44	Guideline RF-9. Construction or reconstruction of stream crossings should allow passage for other riparian dependent species where connectivity has been identified as an issue.	3.3
BMP-45	Guideline RF-11. Generally minimize hydrologic connectivity and delivery from roads. This includes roads inside and outside of Riparian Reserves.	3.3
BMP-46	Guideline RF-12. Road drainage should be routed away from potentially unstable channels, fills, and hill slopes. This applies both inside and outside of Riparian Reserves.	3.3

Attachment B: USFS Specified Conditions (Cont.)

Standards and Guidelines: 1994 Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl

BMP	Description	EA Section
BMP-47	<p>RF-2. For each existing or planned road, meet Aquatic Conservation Strategy objectives by:</p> <ul style="list-style-type: none"> a) Minimizing road and landing locations in Riparian Reserves. b) Completing watershed analyses (including appropriate geotechnical analyses) prior to construction of new roads or landings in Riparian Reserves. c) Preparing road design criteria, elements, and standards that govern construction and reconstruction. d) Preparing operation and maintenance criteria that govern road operation, maintenance, and management. e) Minimizing disruption of natural hydrologic flow paths, including diversion of stream flow and interception of surface and subsurface flow. f) Restricting sidecasting as necessary to prevent the introduction of sediment to streams. <p>Avoiding wetlands entirely when constructing new roads.</p>	3.3
BMP-48	<p>RF-4. New culverts, bridges and other stream crossings shall be constructed, and existing culverts, bridges and other stream crossings determined to pose a substantial risk to riparian conditions will be improved, to accommodate at least the 100-year flood, including associated bedload and debris. Priority for upgrading will be based on the potential impact and the ecological value of the riparian resources affected. Crossings will be constructed and maintained to prevent diversion of stream flow out of the channel and down the road in the event of crossing failure.</p>	3.3
BMP-49	<p>RF-5. Minimize sediment delivery to streams from roads. Outsloping of the roadway surface is preferred, except in cases where outsloping would increase sediment delivery to streams or where outsloping is unfeasible or unsafe. Route road drainage away from potentially unstable channels, fills, and hillslopes.</p>	3.3
BMP-50	<p>RF-6. Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams.</p>	3.3
BMP-51	<p>RF-7. To meet the Aquatic Conservation Objectives. The contractor shall provide:</p> <ul style="list-style-type: none"> a) Inspections and maintenance during storm events. b) Inspections and maintenance after storm events. c) Road operation and maintenance, giving high priority to identifying and correcting road drainage problems that contribute to degrading riparian resources. <p>Traffic regulation during wet periods to prevent damage to riparian resources.</p>	3.3

BMP	Description	EA Section
BMP-52	<p>To maintain water quality and to reduce the amount of water needed during drilling the following measures would be followed:</p> <ul style="list-style-type: none"> a) Only NSF/ANSI Standard 60-2003 Certified drilling fluid additives and bentonite grouts may be used during drilling. b) Water bearing zones and open formations encountered during drilling would be sealed, using approved drilling fluids and /or bentonite grouts, during drilling to allow for the recirculation of drilling fluids to the maximum extent possible. If loss of circulation is encountered during drilling, the portion of the formation causing the loss would be sealed prior to continued drilling, and the drill hole will be abandoned if circulation cannot be re-established. c) Drilling fluids would be reused to the extent possible. Appropriately sized sumps lined with an impermeable liner and/or tanks would be used to contain drill fluids. Spent drilling fluids would be treated according to the Proposed Action Alternative 2. <p>Daily on-site water use would be recorded using a totalizing flow meter.</p>	3.3
BMP-53	<p>Following the completion of each drill hole, the drill holes would be grouted and sealed to prevent the flow of water within, into, or around the abandoned drill hole. Sealing would include a ten-foot cement surface plug placed within the top twenty feet of each drill hole to help ensure an adequate surface seal. Portland concrete cement mixed with clean water and aggregates, or bagged cement mixed with clean water, would be used for the surface plug. The top of the surface plug would be completed one to two feet lower than the post-reclamation surface of the drill pad to prevent future trip hazards and address aesthetic concerns. Alternate drill hole abandonment/sealing methods and materials would be considered for prior approval. Alternate abandonment methods would include drill-string tremie placement of sealing materials and use of high-solids bentonite grout and/or bentonite/cement mixtures such as described in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160). Drilling fluid additives would be required to meet NSF/ANSI 60-2003 standards, or as approved by the agencies. These products protect the environment should drill holes encounter permeable zones and groundwater systems.</p>	3.3
Noise		
BMP-54	Baffles or other noise reduction techniques around the drill rigs would be used for intrusive noise reduction during drilling activity.	3.14
Recreation		
BMP-55	Recreational access to GRHC (Green River Horse Camp) and Trails 213 and 217 would be maintained.	3.12
BMP-56	Drilling operations would be sequenced to reduce impacts during high recreational use periods.	3.12

BMP	Description	EA Section
BMP-57	Signage and notices to alert users of the project area would be posted to facilitate public safety.	3.12
BMP-58	Public access to areas that are hazardous to public safety and health concerns would be controlled, especially immediately around drilling, drill pads, sumps, and access roads.	3.12
Soils		
BMP-59	Erosion of soils would be minimized by BMPs such as silt fences, mulch on roads, culverts and water bars, and adherence to all practicable sedimentation controls consistent with applicable erosion control measures and BMPs, including such additional mitigation measures subject to the authorizing Agencies' discretion.	3.4
Transportation		
BMP-60	As required by MSHA, drilling personnel would be required to drive defensively, maintain posted speed limits, and give the right-of-way to the travelling public by using turnouts whenever possible. Practice of defensive driving and obeying speed limits would be expected to reduce the chance of collisions with both the public and wildlife. These safe driving techniques would extend to water truck operators.	3.11
BMP-61	Drilling would not occur directly within the road, except along those segments currently closed, but temporarily reactivated for this project. A gate would be temporarily installed and maintained to control public access from FS Road 2612 to these areas for safety purpose. Proposed pad locations should offer areas large enough to accommodate the equipment without restricting access. Where the Proposed Action occurs near FS Road 2612 or the access road to the Green River Horse Camp (Pads 01-05, 14 and 15), access would be limited and controlled by the contractor. Public access to areas of active operations would be discouraged.	3.11
Vegetation		
BMP-62	To prevent the introduction of noxious weeds into the project area all heavy equipment will be cleaned prior to entering National Forest System lands. An inspection by the USFS would be required to ensure that equipment is clean before work can begin.	3.7
BMP-63	Weed-free straw and/or mulch would be used.	3.7
BMP-64	The Guide to Noxious Weed Prevention Practices (USDA 2001) would be followed.	3.7
BMP-65	The Pacific Northwest Region Invasive Plant Program Record of Decision for Preventing and Managing Invasive Plants (USDA 2005) would be followed.	3.7
BMP-66	Native plant materials would be used as the first choice in revegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur. Under no circumstances would non-native invasive plant species be used for revegetation.	3.7

BMP	Description	EA Section
BMP-67	Road reactivation clearing zones would be minimized, as much as safety regulations will allow.	3.7
Visual and Scenic Resources		
BMP-68	Downcast lighting during night operations would reduce indirect effects. Drilling operations would be mobile and visual impacts from the presence of the drill would be temporary at each pad location. As needed, baffles can be placed around the mobile drill rig to further attenuate light intrusion to surrounding environs during night time operations.	3.9
Wildlife Resources		
BMP-69	The project would have a limited operating period from March 1 to July 15 in the northern portion of the project area where mature forest is located to protect suitable owl habitat. No surface disturbing activities will occur from March 1 to July 15. No road reactivation or drilling activities in or immediately adjacent to the late successional older forest stands in the upper elevation section of the Project Area would occur until after July 15. Road reactivation or drilling would occur only between July 16 and February 28 for the northern portion of the Project Area where suitable Northern Spotted Owl habitat is present.	3.5
BMP-70	Lighting used for construction and operation of the project would be limited to the minimum needed for safety and reasonable functionality; in certain instances, lighting would be further managed by directing operational lighting inward.	3.5
BMP-71	Drilling equipment and generators would be outfitted with noise muffling devices when feasible to reduce the level of disturbance to wildlife from noise.	3.5
BMP-72	If listed species or critical habitats not identified in the EA are encountered, they would be appropriately identified and project activities appropriately adjusted to avoid or minimize impacts.	3.5

ADDITIONAL PROTECTIVE MEASURES

In addition to the above specified and recommended conditions, and notices, I have selected alternative 4 which requires protective measures including standard stipulations and design features identified by the BLM and Forest Service (EA, Section 2.1.2.3). These measures will be included in the BLM's approval of the exploration plan, should the prospecting permits be issued. Specifying conditions for consent by the Forest Service is limited to the authority of the agency under the statutory framework. Additional protective measures identified under alternative 4 are not a Forest Service decision, per se; however, they are a component and requirement of the alternative and are the basis, in part, for my decision and finding of no significant impact.

Attachment C: BLM Conditions and General Stipulations

1. Revise the Plan of Operation/Exploration Plan (Plan) dated October 5, 2011, inclusive of procedures to comply with the regulations listed in MEA Section 1-6 – *Federal Authority and Regulatory Context*, and further summarized/expanded in the Authorities section of this DR; provide information required at 43 CFR §3505.45 – *What is an Exploration Plan*, and §3509.47 – *What Information Must I Include in My Application for a Fractional Interest Prospecting Permit*; conform with the MEA findings consistent with Alternative 4; subsequent clarifications based on appeal; and applicable land use plans. The revision should include a complete site Reclamation Plan, Spill Prevention Control and Countermeasures Plan, Emergency Bore Hole Sealing Plan, and Plan to Control Invasive Plants with the latter based on consultation with the USFS.

2. Submit three copies of the revised Plan (43 CFR §3505.40) to the BLM at the following address:

U.S. Bureau of Land Management
Oregon/Washington State Office
Mineral and Energy Section (OR-936.2)
P.O. Box 2965
Portland, Oregon 97208-2965

3. Take no on-the-ground activities regarding implementation of the revised Plan, except casual use, until Ascot USA has:

- Received a written NTP from the BLM, including the fully executed *Prospecting Application and Permit* (BLM Form 3510-1) for WAOR - 066628 and WAOR – 066973.
- Agreed to the USFS and the BLM Specified Conditions and such other stipulations, as described herein and in Section 14 of the aforementioned Permit form, including acknowledgement that all actions within the Permit Area will be consistent with 43 CFR §3505.55 – *What are My Obligations to BLM Under an Approved Prospecting Permit*, the revised Plan, and to only such subsequent modification(s) either required or approved by the Agencies inclusive of:
 - All practical means to avoid and/or minimize environmental impacts that might occur from Project implementation; and
 - The *Standard Stipulation for Lands of the NFS Under the Jurisdiction of the Department of Agriculture* as required by the Forest Service Manual §2822.42 (included by reference) regarding the obligation of the prospecting permittee to comply with all applicable rules and regulations of the Secretary of Agriculture.
- Paid to the BLM annual rental, inclusive of years 2012 to date, at the rate of \$.50 per acre or fraction thereof, and thereafter for each subsequent year to pay such rental in advance of the anniversary date of the Permits (43 CFR §3504.15 and §3504.16).
- Filed with the BLM Oregon/Washington State Office at the above stated address a bond of no less than \$544,463.00, if the Toxicity Characteristic Leaching Procedure (TCLP)

indicates that core material would not be classified as hazardous and drilling wastes can be disposed of at a local landfill within 50 miles of the Project Area (43 CFR §3504.50) utilizing BLM Form 3504-1 for a *Personal Bond* or Form 3504-3 for a *Surety Bond* (43 CFR §3504.55). If TCLP testing indicates that some or all of the core material is classified as hazardous, the BLM will adjust the required bond amount to cover the additional cost of transportation to and utilization of a licensed facility, such as that at Arlington, Oregon. In no case shall the bond be less than that required for a third party contractor to fully reclaim all Project related disturbance; remove facilities, equipment, and materials; re-contour disturbed areas to near pre-mining topography; isolate and neutralize, or remove toxic or potentially toxic materials; salvage and replace topsoil; prepare seedbeds and revegetation to meet the Aquatic Conservation Strategy objectives; dispose of all waste materials; and attain disposition of core samples.

- Received approval of a *Spill Prevention Control and Countermeasures* (SPCC) Plan. The SPCC plan will include, but is not be limited to, possessing a spill containment kit on-site and having pre-identified containment locations. A spill containment kit will be located where equipment is stored or operated. Equipment will be scrubbed so it is free of external petroleum-based products and invasive plant seeds or biomass before being brought into the Permit Area. Leaking hydraulic fluids, lubricants, and fuels will be repaired prior to operating on National Forest System lands. Equipment will be checked daily for leaks and any necessary repairs will be completed prior to commencing work. Equipment storage locations will be approved by the Agencies. Equipment will not be stored adjacent to or in stream channels. This will also help avoid potential effects of vandals, accidents, or natural disasters. Any accidental spills of a hazardous material (e.g., oil, fuel, transmission fluid, etc.) from any operating equipment or in a place of storage must be reported to the USFS and to the BLM.
- Received approval of an *Emergency Bore Hole Sealing Plan* that addresses control of artesian flow of groundwater from exploration core holes, including instructions and contact information for getting appropriate personnel, equipment, and supplies to the drill site in a timely manner and for establishing a reasonable plan for controlling and stopping flow within the core hole and to the surface.
- Received approval of a USFS required *Noxious Weed Risk Assessments* identifying noxious weeds within the Project Area and control measures that will be undertaken during Project implementation (FSM §2081.03, 11/29/95).
- Provided for unrestricted ingress and egress of Government officers for inspection of the Project area and operations by duly identified representatives of the Departments of the Interior and Agriculture, a properly designated representative of the Cowlitz Tribe, and suitably identified representatives other agencies with administrative responsibility to the lands.
- Agree to present pre-inspection Project status and safety briefings, and to provide personal protective equipment.
- Agree to make periodic reports to the Agencies on all matters pertaining to the character,

- progress, and results of Project work or related matters requested by the Agencies.
- Agreed to provide the BLM with all data generated through prospecting needed to develop an accurate estimate of potential hardrock mineralization, including quality, quantity, and geologic structure. All proprietary and confidential information should be clearly marked. Such data may include core hole and sample information specified at 43 CFR §3593.1. This information is required in order to show whether or not a discovery of a valuable deposit has been made (43 CFR §3507.18). All data must be collected during the term of the Permit, but may include refer to prior geologic work. The BLM reserves the right to request supplemental data.
 - **Agreed to conduct all actions regarding implementation of the approved revised Plan consistent with DOI-BLM-ORWA-0000-2016-0001-EA, Alternative 4, and in particular with Appendix B – *Associated Regulations, Plans, Policies and ...*, Appendix E – *Best Management Practices*, Appendix F – *...Biological Assessment*; and Appendix G – *Groundwater Resources Report, Goat Mountain Hardrock Prospecting Permit Applications* as well as with the regulations and Agency decisions described above. The following listed items chronicle the salient conditions and stipulations in the fore mentioned documents.
 - Take no action that would interfere with or be inconsistent with the primary purposes for which the lands were acquired under the Weeks Law of 1911, specifically regarding interference with the regulation of the flow of navigable streams or for the production of timber and other forest products as modified by the Mineral Resources on Weeks Law Lands of 1917 regarding prospecting, development, and utilization of mineral resources of such lands.
 - Take no action that would interfere with or be inconsistent with outdoor recreation, a primary purpose for which some of the lands were acquired according to the Court’s Opinion and Order dated July 3, 2014.
 - Ensure that all exploration (prospecting) is conducted in an environmentally sound manner consistent with the planning for and the management of other National Forest resources. Cause no disturbance or degradation of existing environmental conditions within designated riparian areas, the adjoining Mount St. Helens National Volcanic Monument, and the Tumwater Inventoried Roadless Area, as well as on all other areas surrounding the Permit Area. Take no action that would impact or interfere with determination of the eligibility of the Green River as suitable for designation under the National Wild and Scenic Rivers Act.
 - Safeguard the public from all potentially hazardous project generated conditions. Temporarily limit public access to drill sites in the northern portion of the Project Area through the use of a temporary locking gate and installation of small berms to deter entry of public vehicles. Utilize temporary signage, access control gate, and security personnel to protect public safety and provide for equipment security.
 - Agree to not disturb designated or newly (inadvertently) discovered cultural and scientific features, unless clearance and authorization is obtained from the Agencies.

- Instructed all Project employees regarding the type and nature of archaeological, cultural, and scientific features that might be encountered during Project activities, including the proper steps for protecting, reporting, restricting access, and adhering to all protocol for Inadvertent Discovery for such features before further ground disturbing activities are undertaken.
- Immediately notify the concerned Tribes and all appropriate county, state, and federal agencies, including the Department of Archeological and Historic Preservation. The agencies and Tribe(s) will discuss possible measures to remove or void cultural material, and will reach an agreement with the project proponent regarding actions to be taken and disposition of material.
- If human remains are uncovered, appropriate law enforcement agencies shall be notified, and the above steps followed. If the remains are determined to be Native, consultation with the affected Tribes will take place in order to mitigate the final disposition of said remains.
- Suspend ground disturbing activities at any site if yet unidentified archaeological resources, cultural resources, plant species of cultural importance, items of scientific interest, or human remains be encountered until the site has been properly investigated and cleared by the USFS.
- Implementing and maintaining impact avoidance and minimization measures consistent with the 1994 Northwest Forest Plan (NWFP) that requires consistency with the Aquatic and Riparian Conservation Strategy (ACS) guidelines, and the USFS National Core Best Management Practices (BMPs) for Water Quality Management in Minerals Management Activities (USFS 2012).
- Obtain groundwater locally from Duval drill hole 06 or MM-10-10 on MS-708 (Pad 20); and supply it to drill sites by gravity feed or by small diesel pumps placed near the water source using pressure hoses. Use no on-site surface waters to meet project water needs. Total groundwater use from local sources will not exceed 5,000 gallons per day (gpd), as measured by flow rate gauge(s), consistent with the Washington State Department of Ecology groundwater withdrawal exemption, unless a proper Groundwater Right/Use Permit is obtained and copies of the permit are filed with the Agencies. Abandon Duval Hole 06 and MM-10-10 in accordance with Washington Administrative Code (WAC) 173-160-381 following the cessation of the drilling program, unless directed otherwise by the Agencies.
- Verify that groundwater is not being negatively impacted by drilling activities by sampling water from Duval Hole 06 and MM-10-10 prior to drilling activities and monthly thereafter until all drilling has been completed. Analyze water samples for temperature, pH, salinity, and at a minimum arsenic, cadmium, copper, lead, mercury, and zinc. If significant changes in water quality are observed, suspend drilling until appropriate measures to protect groundwater quality are implemented, or the cause is ascribed to natural/non-Project related conditions.
- Acquire supplemental water, as needed, from off-site regulated potable water source(s) that

are periodically tested and documented. Utilize a portable/temporary water tank for on-site surge and/or compensation storage as needed during times when uses of at-site groundwater is administratively restricted or additional water is needed for road maintenance, dust suppression, and emergency fire control. The location of the water storage tank will be mutually agreed upon by the Agencies. Measure and record total on-site water usage.

- Implement runoff, sediment, and other environmental controls consistent with the General Water Quality BMPs (USDA Pacific Northwest Region 1988), including utilization of all practicable sedimentation controls, placement of silt fences, mulch on roads, culverts at stream crossings, and water bars, consistent with applicable erosion control measures and the BMPs, including such additional mitigation measures subject to the authorizing Agencies' discretion.
- Perform a water delineation and obtain a U.S Army Corps of Engineers (USACE) boundary concurrence and jurisdictional determination for any in-water work. Work in waters that are regulated under Section 404 and 401 of the Clean Water Act may also require permits from the USACE and the Washington State Ecology. Any work in intermittent or perennial streams may require a Hydraulic Project Approval permit from the Washington Department of Fish and Wildlife (WDFW). If the project will result in more than one acre of soil disturbance, apply for coverage under a Washington Stormwater Construction General Permit.
- Reduce impacts to surrounding areas and disturbance to wildlife and recreation users from equipment noise and operating lights by equipping all motorized equipment and generators with state-of-the-art noise muffling devices, use of a portable drill shack(s), and lamp shields.
- Actively control all Project generated dust sources, including construction, road use, and equipment operation. If visible dust is observed during road reactivation or travel, use a water truck to actively reduce dust emissions.
- Minimize to the greatest extent possible interference with public use and enjoyment of existing recreational opportunities, roads and trails, and the Green River Horse Camp. Maintain recreational access to the Green River Horse Camp and Trails 213 and 217. Sequence drilling operations to reduce impacts during high recreational use periods; particularly operations associated with Pads 6 and 7 near the Horse Camp. Install signage and post notices to alert public users of the Project area to facilitate public safety. Protecting public safety by controlling access to hazardous areas in the immediate vicinity of ongoing Project activities, especially in areas immediately around drilling, drill pads, sumps, and along temporarily reactivated access roads. Promptly reclaim roads and drill pads when no longer needed.
- Utilize, reactivate, maintain, and subsequently decommission and reclaim only those drill sites and existing roads and trails analyzed in the MEA in the manner and means consistent with the Aquatic Conservation Strategy Objectives or as otherwise specified by the USFS, including clearing, side casting, grading, controlling runoff and sedimentation, signage,

regulation of traffic, gating, and reclamation. Remove trees growing on closed road segments that are being temporarily reactivated and save all such material for use during reclamation as downed woody debris. Trees along road edges can be limbed only to the extent necessary to avoid job hazards. If hazard trees are noted in the immediate area and are deemed dangerous by the USFS, they can be removed on an approved selective basis. Visually monitor materials excavated during road reactivation, drill pad preparation and temporary sump installation for wind and water erosion. As needed, piles of such material will be covered to prevent material loss.

- Establish a security gate at the intersection of the decommissioned roads with FS Road 2612 to control motorized public access to Project work areas. Provide traffic control when drilling near FS Road 2612 or the access road to the Green River Horse Camp (Pads 01-07, 14 and 15).
- Reactivate and subsequently fully reclaim approximately 1.69 miles (about 3.3 acres) of decommissioned roads, including removal of trees (see EA Table 3.7-2 Tree Removal) and other vegetation that may have sprouted since closure; grubbing, brushing, removal of sloughing, and limbing of over-hanging vegetation as necessary for safe passage of equipment. The area of disturbance for restored decommissioned roads is based on a 10-foot wide non-system road and a 5-foot cast area. As recommended by the USFS, place weed free straw on the road to minimize erosion. Clear and/or construct and subsequently fully reclaim 23 approximately 20 by 20 foot (400 square foot) drill pads, as depicted in MEA Appendix A Figures 3, 4, and 6, on or adjacent to indicated roads with as minimal a disturbance as possible. Cease operations if ruts in the road are greater than two inches deep, and/or Agency representatives determine that continued use of the road during wet conditions is causing excessive resource damage.
- Conduct no road reactivation in or immediately adjacent to the late successional older forest stands in the northern upper elevation of the Project Area where suitable Northern Spotted Owl habitat is present until after July. Road reactivation in this area may occur between July 1 and February 28. Road segments within riparian areas should be re-contoured to mimic natural floodplain contours and gradient to the greatest degree possible. Install sediment control barriers along road segments immediately adjacent to streams or where the road fill is near the wetted stream. Dispose of excavated waste material at stable locations out of the flood prone area. Waste material other than hardened surface material may be used to restore natural or near-natural contours.
- Use a qualified employee or consultant approved by the USFS to carefully clear each drill pad site of low-mobility or slow-moving wildlife species – such as juvenile birds, salamanders, and frog – prior to setting up the drill rig and beginning operations. Low mobility wildlife will be carefully removed from the Project site. All appropriate permits for collection and relocation of wildlife and amphibians will be obtained by Ascot USA.
- Establish water bars at approximate 30-degree angle downslope along roads in the Project Area in accordance with MEA Table 2.1-3 Road Grades and Water Bars to prevent erosion. Retained selected bars during reclamation as indicated by the USFS. Equip all road crossings of natural drainage channels and intermittent and/or seasonal streams with

culverts. Install temporary culverts in areas with seasonal drainages as shown on EA Figure 6, Surface Waters in the Project Area, and as recommended by Agencies. Temporary culverts on reactivated roads will generally affect a 16 to 20 feet length of channel, and should be placed when perennial drainages are at their lowest flow and when intermittent drainages are dry. Place silt screens at culvert outfalls along with weed-free straw bales for filtration. Direct outflow away from natural drainages and streams. During reclamation, culverts and silt screens will be removed and the original drainage channels and slope configuration re-established.

- Directionally drill a total of 63 NQ core holes (~2.75-inch diameter) with HQ diameter casing (~3.78 inch diameter), as needed. Conduct drilling on a 24-hour, seven day a week basis generally from late-May until early November. At the discretion of the Agencies, drilling may begin earlier or continue later depending upon weather conditions. If drilling activities are conducted during inclement and/or unpredicted weather conditions, a snow plow permit may be required. Provide, in advance of drilling, an emergency sealing plan that addresses artesian flow of groundwater, including instructions and contact information staging equipment and supplies to the drill site in a timely manner and establishing reasonable plans for controlling and stopping flow within the core hole and to the surface.
- Use drilling fluids consisting primarily of water and bentonite with minimal polymer drilling additives to attain needed density and removal of cuttings. Drilling fluid additives must meet NSF/ANSI approval standards for drinking water wells and adherence to Chapter 173-162 WAC. Provide the Agencies with Material Safety Data Sheets (MSDS) for all drilling fluid additives. Drilling fluid additives must meet NSF/ANSI 60-2003 standards, or as approved by the Agencies for use in potable water supply wells. Over-case drill holes through unconsolidated overburden with the temporary casing extending into underlying bedrock to prevent near surface groundwater from flowing into the annular space of the exploratory drill hole and to prevent fluids from discharging out of the annular space into the overburden.
- Optimize drilling operations to promote return of fluids and cuttings and to attain the formation of a “mudcake” within the core hole annulus, or implement other measures subject to Agency approval to minimize distribution of cutting into the adjacent formations and the generation of acid rock drainage, as well as to seal water bearing and porous zones to control cross-flow of groundwater. If loss of circulation is encountered during drilling, take immediate steps to reestablish circulation by sealing the formation causing the loss prior to continued drilling. If circulation cannot reestablished, the drill hole will be abandoned by sealing.
- Maximize reused of drilling fluids in order to minimize overall water use. Decant remaining drilling fluids at the completion of drilling through an enviro-mat at the ground surface within the respective drill pads. Retain returned drilling fluids and cuttings by using appropriately sized temporary sumps (generally 4 feet by 6 feet in width and 2 feet by 4 feet in depth) with impermeable liners and/or portable tanks to contain recyclable drilling fluids. Sumps and/or tanks must be placed within the defined drill pads, or at an alternate location approved by the Agencies. Dispose of solid materials, such as drilling

mud and cuttings, at a suitably licensed off-site facility. All containers of hazardous substances be labeled and handled in accordance with Mine Safety and Health Administration (MSHA) regulations.

- Seal each drill hole consistent with Washington State Department of Natural Resources' (DNR) fact sheet for "Mineral Exploration Well/Drill Hole Plugging and Abandonment," using methods and materials that are appropriate to prevent movement of water within, into, and around the abandoned drill hole. Bentonite/cement mixtures, such as described in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160), will be used to abandon all drill holes that encounter artesian flow.
- Alternate drill hole abandonment/sealing methods and materials will be considered for use with prior Agency review. Alternate abandonment methods could include drill-string tremie placement of sealing materials, and use of high-solids bentonite grout and/or bentonite/cement mixtures, as described in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160), providing the sealing methods and materials ensure a seal that will prevent vertical water flow into or within the abandoned drill hole.
- Abandon former drill holes MM-10-10 and Duval Hole 06 near Pad 20, which reportedly encountered artesian conditions, at the end of the exploration drilling program using bentonite/cement mixtures according to the Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160), unless directed otherwise by the Agencies.
- Restrict drilling at Pads 10, 11, 12, 13, 22, 23, 24 and 25, located near spotted owl nesting sites, to occur after the nesting season, which generally occurs from March 1 to June 30. Drilling at these sites may proceed after July 1 until February 28.
- Salvage, protect, and utilize all surficial material and downed woody vegetation in reclamation of drill sites, roads, and trails. Downed woody debris and young regenerating trees and shrubs will be temporarily placed along the edges of roads and drill pads and scattered back across the roads and drill pads during reclamation to provide cover and shelter for ground dwelling wildlife. Remove no trees until marked and approved by the USFS, and none greater than 12-inch diameter-at-breast-height (dbh), unless they pose an imminent hazard. See EA Table 3.5-1 Tree Removal. Implement all practicable sedimentation controls consistent with applicable erosion control measures and Best Management Practices (BMPs), including such additional mitigation measures subject to the authorizing Agencies' discretion. Applicable vegetation and erosion control measures are described in EA Sections 2.1.2.1 and 3.6.3, and in Appendix E – *Mitigation Measures*.
- Insure that project personnel do not travel off designated routes in motorized vehicles. Utilize and safely operate only the equipment assessed in the EA as listed below. Use all available means to limit noise, intrusion of artificial light, dust generation, and travel to the greatest extent practicable. Equip all engines with fuel tanks with oil and fuel containment systems. Park all equipment when not in use along existing roads located beyond the temporary access security/control gate. Locate equipment service and refueling areas at

least 100 feet from stream courses or wet areas (including chainsaws and other hand powered tools).

- 1 Kubota 290 or equivalent sized tracked brushing/excavator for removal of vegetation, minor grubbing, and building sumps and drill pads (gasoline and/or diesel powered).
 - 1 track mounted JD690 or equivalent sized excavator as needed in limited areas for road clearing and pad installation.
 - 1 or 2 self-propelled/self-leveling track-mounted hydraulic diamond drill rigs with an unfolded set-up dimension of 16 feet by 16 feet to bore the explorations core holes (diesel powered).
 - 1 or 2 six-wheel all-terrain vehicles (ATV) equipped with rod carrier beds to move drilling rods between sites (gasoline and/or diesel powered).
 - 2 or more four-wheel-drive pickup trucks for site access, movement of small equipment and drilling supplies, and mobile fuel supply (gasoline and/or diesel powered).
 - 1 standard 3,000-5,000 gallon water truck to obtain supplemental water for project use from potable off-site sources (diesel powered).
 - 1 or 2 portable framed and tarpaulin-covered 16 foot by 16 foot drill shack(s) to attenuate noise, shade artificial lighting, and protect drill operators from inclement weather.
 - Temporary barrels and/or tanks to store up to 300 gallons of fuel and lubricants on-site equipped with secondary containment, and regularly monitored and inspected for compliance with the Spill Prevention Control and Countermeasures Plan.
 - An on-site water storage tank for Project and emergency use.
 - Small portable equipment, including a diesel generator, two diesel water pumps, and hand tools housed within or next to the drill shack within a separate baffled structure.
- Obtain approval of a Project Spill Prevention Control and Countermeasures Plan to control drilling fluids and petroleum products. All containers of hazardous substances will be labeled and handled in accordance with Mine Safety and Health Administration (MSHA) regulations.
 - Do not jeopardize the continued existence of listed Threatened and Endangered species nor adversely modify designated critical habitats consistent with Section 7 of the Endangered Species Act (ESA) (50 CFR 402). Provide similar protection to USFS Sensitive Species, USFS Management Indicator Species (MIS) (USFS 2011, 1995, USFWS 2012, WDFW 2012), and Essential Fish Habitat (EFH) as noted in the Magnuson-Stevens Act.
 - Minimize disturbance of existing vegetation in ditches and at stream crossings to the greatest extent possible. Conduct activities to the greatest extent possible during dry-field conditions with low to moderate soil moisture levels. Restore natural drainage patterns (e.g., channel geometry, substrate and flow) and whenever possible promote passage of all fish species and life stages present in the area. Retain large woody material that accumulates on culvert structures and channel margins. Such material should be

repositioned on-site or integrated into stream restoration projects as identified by a USFS Fish Biologist to the benefit of aquatic species. Remove rip-rap or other hard structures used in culvert protection, (e.g., rock armoring at the inlet and outlet of the culvert), when decommissioned crossings at all unnamed creeks. Use bioengineered solutions for any stream bank stabilization deemed necessary following culvert removal, such as root wads, log toes, coir logs, woody and herbaceous plantings.

- Conduct reclamation on a site-by-site basis as drilling and related activities are completed to avoid maintaining long-term topsoil or vegetation stockpiles. Rehabilitate any disturbed areas within one year of completion of Project activities. Reseed only with a native seed mix developed by the GPNF, which includes blue wild rye, California brome, and slender hairgrass. Under no circumstances will non-native invasive plant species be used for revegetation.
- Reclaim drill pads and reactivated roads by restoring them to an uneven stable surface as close to original grade as practical. Pull cast piles back from the outside fill slopes and spread material irregularly over the surface to recreate natural contours. In areas of steeper grades, conform water bars to the natural drainage pattern at the intervals listed in EA Table 2.1-3. Remove temporary culverts and re-established natural drainage slopes with downed woody debris placed as silt barriers and as wildlife habitat features. Place trees, stumps, and other downed woody debris on reactivated decommissioned roads scheduled for re-closure.
- Reclaim sites on existing active USFS roads as close to original condition as possible. Return topsoil and vegetation removed during Project activities to promote regeneration and to mitigate erosion. Downed woody debris and young regenerating trees and shrubs will be placed along the edges of roads and at drill pads. During reclamation, debris created during the vegetation clearing action will be scattered back across the roads and drill pads to provide cover and shelter for ground dwelling wildlife.
- Place topsoil in local cast piles and re-distributed on the final reclaimed surface. Scarify all drill sites and existing decommissioned roads to relieve compaction of pads and road bed material. Fill in drilling fluid sumps following removal of mud and cuttings as part of the pad reclamation by backfilling with cast material.
- Within seven days after Project completion, any disturbed sites adjacent to streams will be protected from erosion through approved seeding (native seeds) and weed-free mulching and other erosion control devices necessary to mitigate movements of sediment into stream waters. If initial erosion control measures are inadequate, a new erosion control plan would be required and implemented as soon as possible. If seasonally late, then ensure that within one year of Project completion stream banks would be vegetated with native grasses or woody species that have been approved by the district hydrologist and botanist.
- With the exception of a security employee, Project employees will not dwell within the Project or Permit Area. Emphasize hiring of local residents for support positions. Plan for approximately 15-20 Project employees to safely commute on a daily bases primarily between Randle and Morton, Washington, and the Project site. Insure that Project employees, as required by MSHA, drive defensively, maintain posted speed limits, and

give the right-of-way to the travelling public by using turnouts whenever possible. Park employee vehicles behind the security gate leading of FS Road 2612.

Attachment D: Exploration Activities Authorized

Prospecting Application and Permit WAOR-066628 and WAOR-066973 will require compliance with terms and conditions specified in Sections 1 through 13, and with the USFS and BLM Special Stipulations enumerated in Section 14, for conduct of the following hardrock prospecting activities:

- Utilization of the following equipment:
 - Two track-mounted diamond drills (diesel powered)
 - Two six-wheel ATVs (gasoline and/or diesel powered)
 - Small track excavator (diesel and/or gasoline powered)
 - Four 4x4 pickup trucks (gasoline and/or diesel powered)
 - Water truck (diesel powered)
 - Two water pumps (diesel powered)
 - On-site temporary water storage tank
 - Associated equipment maintenance, containment, SPCC materials, and hand tools
- Temporary reactivation (reconditioning to the minimal extent necessary) of closed road segments (~3.07 miles or 1.69 acres) for access as are subsequently marked on the ground in agreement with the USFS.
- Removal of small trees and other vegetation that may have sprouted within the alignment of the road segments to be temporarily reactivated (~68 trees, 12 inches dbh or less) and such other danger trees as are subsequently marked in agreement with the USFS.
- Utilization and maintenance of USFS Road 2612 for site access consistent with use and permitting requirements of the USFS.
- Establishment or reconditioning of 21 drill sites (pads 1, 2, 3, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25) each no more than 400 square feet in area including a temporary lined sump for management of drilling fluids at locations generally depicted on Figures 3 – 6 of MEA Appendix A as are subsequently marked on the ground in agreement with the USFS. Pad sites 1 – 5, 14, and 15 must be situated so as to not impede public access along FS Road 2612 or the side road to the Green River Horse Camp.
- Installation of a temporary on-site above-ground water storage tank located in agreement with the USFS.
- Installation of water bars, berms, culverts, and other erosion, sedimentation and environmental control structures at sites subsequently marked on the ground in agreement with the USFS.
- Conduct of grubbing, brushing, and removal of bank slough; limbing of over-hanging vegetation and removal of hazard trees as necessary for safe passage of equipment; and such other maintenance required by the USFS.
- Completion of up to 63 small diameter directional NQ core holes (2.75-inch diameter with HQ diameter casing (3.78 inches), as needed), utilizing fluids that meet Washington (State) Administrative Code 173-216 standards.
- Removal of rock core (~100,000 linear feet) and hand samples of surficial material for off-

site analysis.

- Installation of temporary signage and traffic controls to maintain public safety and limit public vehicular access to temporarily reactivated road segments.