RECEIVED
MAY 06 2021
DEPARTMENT OF WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WATER SUPPLY BANK RENTAL AGREEMENT No. 516

This is to certify that:

PILOT GOLD (USA) INC
1031 RAILROAD ST STE 110
ELKO, NV 89801-3975

SUPPORT DATA
IN FILE # 17-7118

filed an application to rent water from the Water Supply Bank ("Bank"). The Idaho Water Resource Board ("Board"), being authorized to operate a Bank and to contract by and through the Director of the Idaho Department of Water Resources ("Director, Department") for rental of water from the Bank, agrees to rent water as follows:

Summary of Water Rights or Portions Rented from the Bank

Water Right No.	Priority Date	Source	Diversion Rate (CFS)	Diversion Volume (AF)	Acres (AC)	Rate Per Acre (CFS/AC)	Volume Per Acre (AF/AC)
17-7118	11/21/1985	GROUND WATER	0.09	37.9	14.3	0.006	2.7
17-7136	1/7/1991	GROUND WATER	0.14	25.2	7.2	0.019	3.5
Combined Limit Totals			**0.23**	**50.1**	**14.3**	**0.016**	**3.5**
Combined Rental Totals			**0.23**	**63.1**	**21.6**	**0.016**	**3.5**

Term of Rental: This rental agreement shall take effect when all parties have signed it and shall continue in effect until December 31, 2021. Use of rental water shall be authorized as of either the date this rental agreement takes effect or the first day of the rental season of use, in 2021, whichever occurs last.

Annual Rental Fee:

2021 - 2023: $2,500

The full fee for the rental of the above-described right(s) is $2,500.00 for 2021 through 2023. The rental fee includes an administrative fee of $2,500.00 for 2021. Note that the renter is obligated to pay only the administrative fees associated with the water right(s): 17-7136, 17-7118.

An annual payment shall be received by the Department on or before December 31 each year preceding the use of the rented water rights. The agreement will be void if payment is not received by the due date in a given year. Rental fees are non-refundable. To voluntarily terminate the agreement early, notify the Department in writing prior to the rental fee due date.

Total Water Use Authorized Under Rental Agreement

Beneficial Use	Diversion Rate (CFS)	Diversion Volume (AF)
INDUSTRIAL	0.23	50.1
Combined Total	0.23	50.1

Detailed water right conditions are attached.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WATER SUPPLY BANK RENTAL AGREEMENT No. 516

The undersigned renter agrees to use the water rented under this agreement in accordance with the Water Supply Bank rules and in compliance with the limitations and conditions of use described in this agreement:

Signature of Renter _____ Date 4/26/2024

Printed Name Peter Shahbestari Title Vice President of Operations

*Title required if signing on behalf of a company or organization or with power of attorney

Having determined that this agreement satisfied the provisions of Idaho Code § 42-1763 and IDAPA 37.02.03.030 (Water Supply Bank Rule 30), for the rental and use of water under the terms and condition herein provided, and none other, I hereby execute this Rental Agreement on behalf of the Idaho Water Resource Board.

By _____ Date 5/7/21
BRIAN PATTON, Acting Administrator
Idaho Water Resource Board

Rental approved by IDWR _____ Date 5/7/21

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WATER SUPPLY BANK RENTAL AGREEMENT No. 516

WATER USE DETAILS

LOCATION OF POINT(S) OF DIVERSION

GROUND WATER SENE Sec. 36, Twp 15S, Rge 29E, CASSIA County

BENEFICIAL USE	DIVERSION RATE	VOLUME
INDUSTRIAL	0.23 CFS	50.1 AF

SEASON OF USE

Water Right No.	From	To	
17-7118	4/1	10/31	0.09 CFS
17-7136	4/1	10/31	0.14 CFS

RENTERS PLACE OF USE: INDUSTRIAL

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
15S	29E	20													X			X	X
15S	29E	21									X	X	X	X		X	X		X
15S	29E	26			X				X	X	X	X	X	X		X	X		X
15S	29E	27	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
15S	29E	28		X		X	X	X							X			X	X
15S	29E	33	X			X													X
15S	29E	34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15S	29E	35		X			X	X	X	X	X	X	X	X	X	X	X	X	X
15S	29E	36				X						X	X	X	X		X	X	X
16S	29E	2	X L1	X L1 X L2	X	X	X X L3	X X L3 X L4	X	X	X	X	X	X	X	X	X	X	X
16S	29E	3	X L1	X L1 X L2	X	X	X X L3	X X L3 X L4						X	X	X	X	X	X
16S	29E	9				X													X
16S	29E	10	X	X			X	X	X										X
16S	29E	11	X	X	X		X	X											X

RENTAL AGREEMENT CONDITIONS OF ACCEPTANCE

1. The use of water under this agreement shall be subject to the provisions of Idaho Code § 42-1766.
2. Rental of the specified right from the bank does not, in itself, confirm the validity of the right or any elements of the water right, or improve the status of the right including the notion of resumption of use. It does not preclude the opportunity for review of the validity of this water right in any other department application process.

WATER SUPPLY BANK RENTAL AGREEMENT No. 516

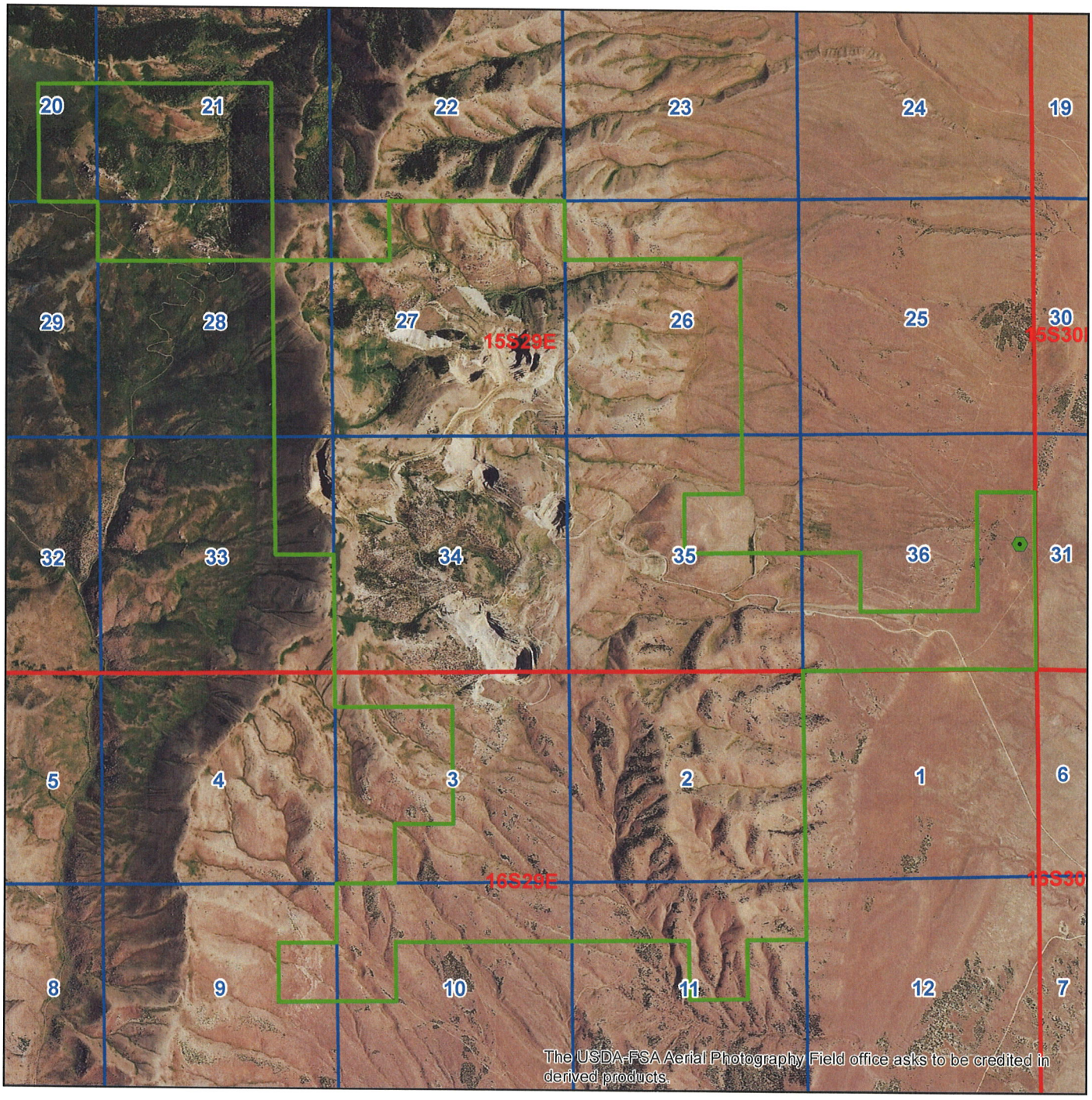
3. Use of water under this agreement does not constitute a dedication of the water to renter's place of use, and upon expiration of this agreement, the points of diversion and place of use of the water shall revert to those authorized under the water right and/or again be available to rent from the bank.
4. Use of water under this agreement shall not prejudice any action of the Department in its consideration of an application for transfer or permit filed by the applicant for this same use.
5. Renter agrees to comply with all applicable state and federal laws while using water under this agreement.
6. Renter agrees to hold the Board, the Director and the state of Idaho harmless from all liability on account of negligent acts of the renter while using water.
7. Renter acknowledges and agrees that the Director may terminate authorization for the use of a water right based on a water right's priority date.
8. Failure of the renter to comply with the conditions of this agreement is cause for the Director to rescind approval of the rental agreement.
9. Approval of this rental does not authorize construction of a well.
10. Industrial use is for exploratory well drilling and dust abatement.
11. The use of water for all consumptive uses, including dust abatement, shall not exceed 35.8 af.

Idaho Water Resource Board

Attachment to Water Supply Bank Rental Agreement No. 516

Effective until December 31, 2023

This map depicts the **rental place of use** pursuant to the rental agreement and is attached to the agreement solely for illustrative purposes.



Authorized Rental Point of Diversion

Authorized Rental Place of Use

Township/Range

Sections

N

0 1 2 Miles

Form 42-1761-2 10/15

STATE OF IDAHO
WATER RESOURCE BOARD

APPLICATION TO RENT WATER FROM THE BOARD'S WATER SUPPLY BANK

RECEIVED
FEB 16 2021
DEPARTMENT OF WATER RESOURCES

Applicant Name: Pilot Gold (USA) Inc.

Is this application being submitted with a lease application as a lease/rental package? Yes ☑ No ☐
If yes, specify companion water rights in Section 4

This application must be completed according to the minimum requirement checklist below. This checklist is part of the rental application and must be included with the rental application. **Applications that do not meet the minimum requirements will not be placed in the processing queue and may be returned until all minimum requirements have been met.**

Rental applications should be submitted well in advance of the desired start date for the use of rental water. Rental applications may be processed as early as November 1 of the year prior to the intended use of rental water. Any rental application received on or before November 1 for use in the next year will be assigned a received date of November 1. Rental applications submitted more than one year in advance of the proposed start date for the use of rental water will not be accepted and will be returned to applicants. Rental applications may be returned to applicants if the desired start date for the use of rental water cannot be accommodated by the Water Supply Bank. Rental requests will not be accepted once the rental season of use period has concluded.

One rental application per beneficial use of water. For multiple beneficial uses of water, separate rental requests should be submitted for each unique beneficial use of water. One rental application can be submitted if you propose to rent water from multiple sources.

For additional instructions on completing a rental application, visit the Bank's website at http://idwr.idaho.gov/water_supply_bank.

MINIMUM REQUIREMENT CHECKLIST

Check All Items as Either Attached (Yes) or Not Applicable (N/A)

Attachment	N/A	Yes	
		Yes	
		☑	Completed *Application to Rent Water from the Board's Water Supply Bank*
		☑	Confirmation that this form has been printed single sided, per requirement of the Water Supply Bank
Attachment	**N/A**	**Yes**	
2		☑	A map showing the proposed point(s) of diversion, place(s) of use, and water diversion and distribution systems proposed to be used with your rental request
3A	☐	☑	Detailed information on a proposed use of rental water
3F	☐	☑	Authorization from the owner/operator of the rental point(s) of diversion
3H	☐	☐	Water modeling to account for the impacts of the rental request
3J	☐	☐	Documents justifying a rate of flow greater than 0.02 cfs/acre
3K	☐	☐	Authorization from the owner/operator of the property at the proposed rental place(s) of use
4B	☐	☑	Explanation of how the rental water will sufficiently accomplish your rental purposes
4C	☐	☑	Explanation of consumptive use amounts for water rights experiencing a change in nature of use

Department Use Only – Proposed Water Right(s)
17-7118
17-7136

1984

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

1. CONTACT INFORMATION

A. Applicant Pilot Gold (USA) Inc.

Mailing Address C/o Peter Shabestari, VP of Opns., 1031 Railroad St., Suite 110, Elko, NV 89801
Street City State Zip Code

Email Address pshabestari@libertygold.ca Phone Number 775-777-2900

B. Is this application being completed by an authorized representative on behalf of the applicant? Yes ☑ No ☐
If yes, representatives (includes company employees if the applicant is a corporation, as well as legal counsel or consultants) should provide their information below if they desire to be included on correspondence with the rental applicant.

Representative David R. Tuthill, Jr. Professional Title Water Resource Engineer

Organization Idaho Water Engineering Relationship to Applicant Consultant

Mailing Address 2918 N El Rancho, Boise, ID 83704

Email Address dave@idahowaterengineering.com Phone Number 208-870-0345

2. MAP

Create a map of the proposed point(s) of diversion, place(s) of use and water diversion, delivery and distribution systems. Make sure the rental place of use is outlined and annotated with legal land descriptions (Township, Range, Section and Quarter-Quarters) or with GPS coordinates. For irrigation purposes, mark the number of acres you desire to irrigate. Attach the map to this application and label it **Attachment 2**.

3. DESCRIPTION OF PROPOSED USE FOR RENTAL WATER

A. Describe why you desire to rent water and provide a detailed description of your proposed use. If the proposed use is not for irrigation, describe in detail how you determined the amount of rental water required. If the space below is insufficient, attach additional sheets as required and label them **Attachment 3A**:
Drilling fluid and a small amount of road watering.

B. Enter the desired and/or minimum rates of flow, volume, or irrigable acres requested for your rental purposes:

Desired Rate (Cubic Feet/Second)	Desired Volume (Acre-Foot)	Minimum Rate* (Cubic Feet/Second)	Minimum Volume* (Acre-Foot)	Desired Acres (if applicable)
0.22 CFS	50 AF	0.22 CFS	50 AF	AC

* ***Sometimes water rights provide an exceptionally low rate per acre and/or low volume per acre. This section is meant to establish an acceptable range of water sufficient for your proposed water use. Please see question 4B and complete if necessary.***

C. This section must be completed in full. Enter the proposed start date and latest possible start date for using rental water as well as the number of years you would like to rent water. The latest possible start is the latest possible date by which you would be willing to pay for a rental and be able to benefit from utilizing rental water.

Desired Start Date (month/day/year)	Latest Possible Start Date (month/day/year)	*Mark Desired Rental Duration (Calendar Years)					**Applicant's preference if rental application cannot be processed prior to the latest possible start?	
3/1/2021	4/1/2021	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5	☑ Process application as soon as possible	☐ Return application to applicant

* ***The number of years permissible for a rental is subject to the lease contract duration for the water right(s) being rented.***
** ***Per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right. Water Supply Bank rental applicants are not authorized to utilize rental water prior to the execution of an approved rental agreement. Rental requests may be returned to applicants if no water is available from the Bank to fulfill a rental request.***

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

D. Describe your water distribution system and how rental water will be delivered from the point(s) of diversion (POD) to the proposed place of use (POU):
Divert from wells into water trucks to be transported to the places of use. See attached POD/POU Supplement for locations.

E. Describe the physical type (pump, headgate, etc.) and location of the POD from which rental water is proposed to be diverted:

POD Description	Water Source	Other Water Rights Diverted from this POD
SENE S. 36 T15S, R29E	Groundwater	Temporary permit TP-17-10

If the POD(s) above are located where water is turned into a canal, lateral or ditch, or if they are located on your property but are serviced by water that is delivered via a canal, lateral or ditch, your rental request must include documented authorization from all relevant canal companies, irrigation districts and/or water delivery entities, confirming that they consent to your diversion of water from their system.

F. Has documented consent from all relevant water delivery entities been obtained? Yes ☑ N/A ☐
If yes, include documented consent as **Attachment 3F**.

G. Do any POD(s) identified in Question 3E divert from a water source that may require water modeling? Yes ☐ No ☑
Refer to the Water Modeling Requirements Information Sheet to determine if a rental POD may require water modeling.

H. Has water modeling been provided with your rental request? Yes ☐ N/A ☑
If yes, label modeling Attachment 3 H.
Rental applications that require modeling will be returned if modeling is not provided.

I. Specify the desired beneficial use of water and the requested season of use or number of acres required:

☐ Irrigation _____ (number of acres) Duration: Subject to IDWR standard seasons of use
☐ Commercial from: _____ (mm/dd) to: _____ (mm/dd)
☐ Stockwater from: _____ (mm/dd) to: _____ (mm/dd)
☑ Industrial from: 3/1 (mm/dd) to: 12/31 (mm/dd)
☐ Other: _____ from: _____ (mm/dd) to: _____ (mm/dd)

J. For irrigation uses, do you propose to divert water at a rate greater than 0.02 cfs/acre? N/A ☑ Yes ☐ No ☐
If yes, justify the rate of flow and attach any supporting documents as **Attachment 3J**. Justification may include information on soil composition, conveyance losses, crop type, irrigation systems, public access areas, etc. A rate of 0.03 cfs/acre is permissible for irrigation of 5 acres or less.

K. Do you own the land at the proposed rental place of use (POU)? Yes ☐ No ☑
If no, attach documentation from the POU owner/operator confirming your authorization to use the POU and label it **Attachment 3K**.

L. List all other water rights and sources of water at the rental place of use for the same purpose, including privately owned water rights and water received from a municipal supplier, an irrigation district, a canal company or any other water delivery entity. Explain why additional water is required:
Temporary permit TP-17-10 provides 5 af. Additional water is required for the identified uses.

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

4. RENTAL REQUESTS FOR SPECIFIC WATER RIGHTS

A. Are you requesting to rent specific water rights? Yes ☑ No ☐

If yes, specify below the elements of the water rights you are requesting to rent. **If no,** continue to Question 4B.

Important Information: Diversion rates and volumes sought for rent must be proportionate to the per acre diversion rates and per acre volume limits of the water right under lease contract to the Water Supply Bank. Prior to completing this section, applicants should review all water right lease contracts and any active rental agreements to determine which elements of a water right are available to satisfy a rental request. Lease and rental documents are searchable via IDWR's website.

Water rights identified below must either already be leased to the Bank or a lease proposal should accompany this rental request. **Rental requests for water rights not yet leased to the Bank will be returned if companion lease applications are not provided with the rental request.** For leased rights featuring combined limits, rentals must be consistent with combined diversion rate, volume or acre limits. Combined limits should be listed on a row below water right numbers.

Water Right Elements Leased to Water Supply Bank					Leased totals, minus water right elements involved in active rental agreements, equals water right elements available for rent	Water Supply Bank Rental Request		
Water Right Number (leave blank if sub-total of combined limits)	Nature of Use	Diversion Rate (CFS)	Volume (AF)	Acres (AC)		Diversion Rate (CFS)	Volume (AF)	Acres (AC)
17-7118	Irrigation	0.09	30	14.3		0.09	30	
17-7136	Irrigation	0.13	20	14.3		0.13	20	
Applicants must ensure the requested rate per acre and volume per acre do not exceed the rate per acre and volume per acre limits of water rights leased to the Water Supply Bank					TOTAL	0.22	50	
						CFS	AF	AC

**Attach multiple copies of this page if space above is insufficient to list all water rights requested to be rented on this application.*

B. If water right conditions, combined limits, or the sum of all water right elements being requested provide an unconventional duty of water (e.g., an unusually low rate per acre or volume per acre for irrigation use), explain how your proposed rental will sufficiently accomplish your intended purposes. Attach a separate page if space is insufficient and label it **Attachment 4B**:

The duty of water for these well irrigated acres is 3.5 afa/annum. Thus the total volume for 14.3 ac is 50 af/annum.

The consumptive use for the watering of alfalfa is about 70%. Anticipated consumptive use of rented water is less.

C. Does your rental request propose to change the nature of use for any water right(s) being rented? Yes ☑ No ☐

If yes, explain how the water right(s) will be converted to new uses. Include the historic, consumptive use amounts for the water right being rented if you have it, as well as the new consumptive use amount for your proposed beneficial use. If space below is insufficient, attach a separate page and label it **Attachment 4C**:

See previous response. Most of the water will be used as drilling fluid. This water will go downhole and will be lost to the aquifer with essentially no consumptive use. Road watering (with 100% consumptive use) will be limited.

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

5. ADDITIONAL INFORMATION

A. Is this the first time that rental water is being requested for this purpose at the rental place of use? Yes ☑ No ☐
If no, list previous rental requests/agreements and explain why you have not secured a permanent water right for your needs:

B. Have you or do you intend to submit an application for permit or transfer proposing a similar use as this rental? Yes ☐ No ☑
If yes, describe:

C. Was this rental application submitted in response to a Notice of Violation (NOV) or a pending NOV? Yes ☐ No ☑
If yes, describe the date and location of the NOV.

D. Additional Information

DECLARATION

I hereby assert that the information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval. I understand that if this rental application is approved, it will be subject to the provisions of Section 42-1766, Idaho Code and all applicable state and federal laws. I understand that the submission of a rental application provides no guarantee for approval of a rental agreement. I also understand that, per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right and that I am not authorized to utilize water as proposed in this application prior to the execution of an approved rental agreement.

Signature of Applicant	Peter Shabestari Printed Name of Applicant	2/11/2021 Date
Signature of Representative	David R. Tuthill, Jr. Printed Name of Representative	2/16/2021 Date

Mail to:

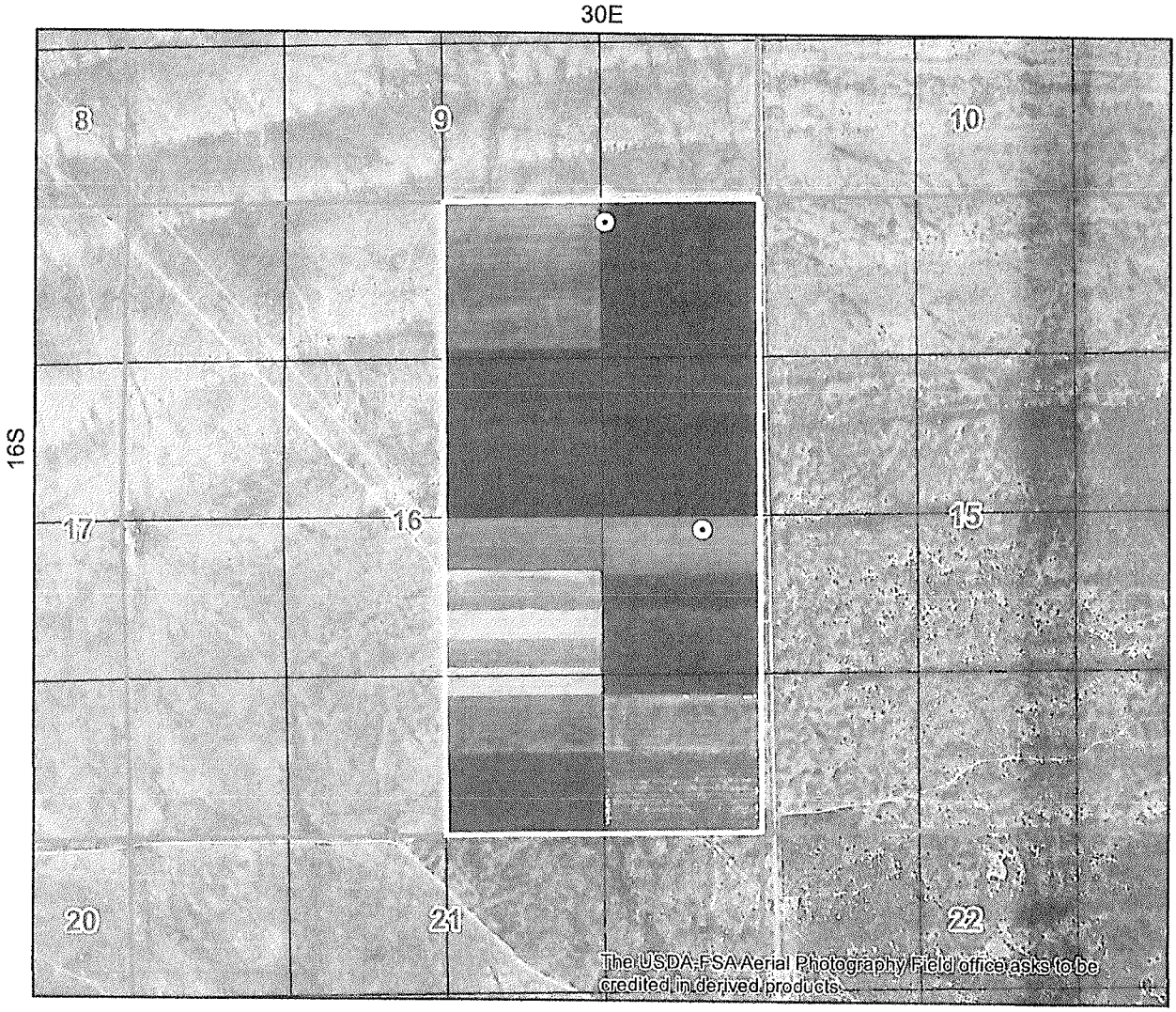
Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098

State of Idaho
Department of Water Resources

Water Right
17-7118

IRRIGATION

The map depicts the place of use for the water use listed above and point(s) of diversion of this right as currently derived from interpretations of the paper records and is used solely for illustrative purposes. Discrepancies between the computer representation and the permanent document file will be resolved in favor of the actual water right documents in the water right file.



⊙ Point of Diversion

Place Of Use Boundary

Townships

PLS Sections

Quarter Quarters

0 0.175 0.35 0.7 Miles

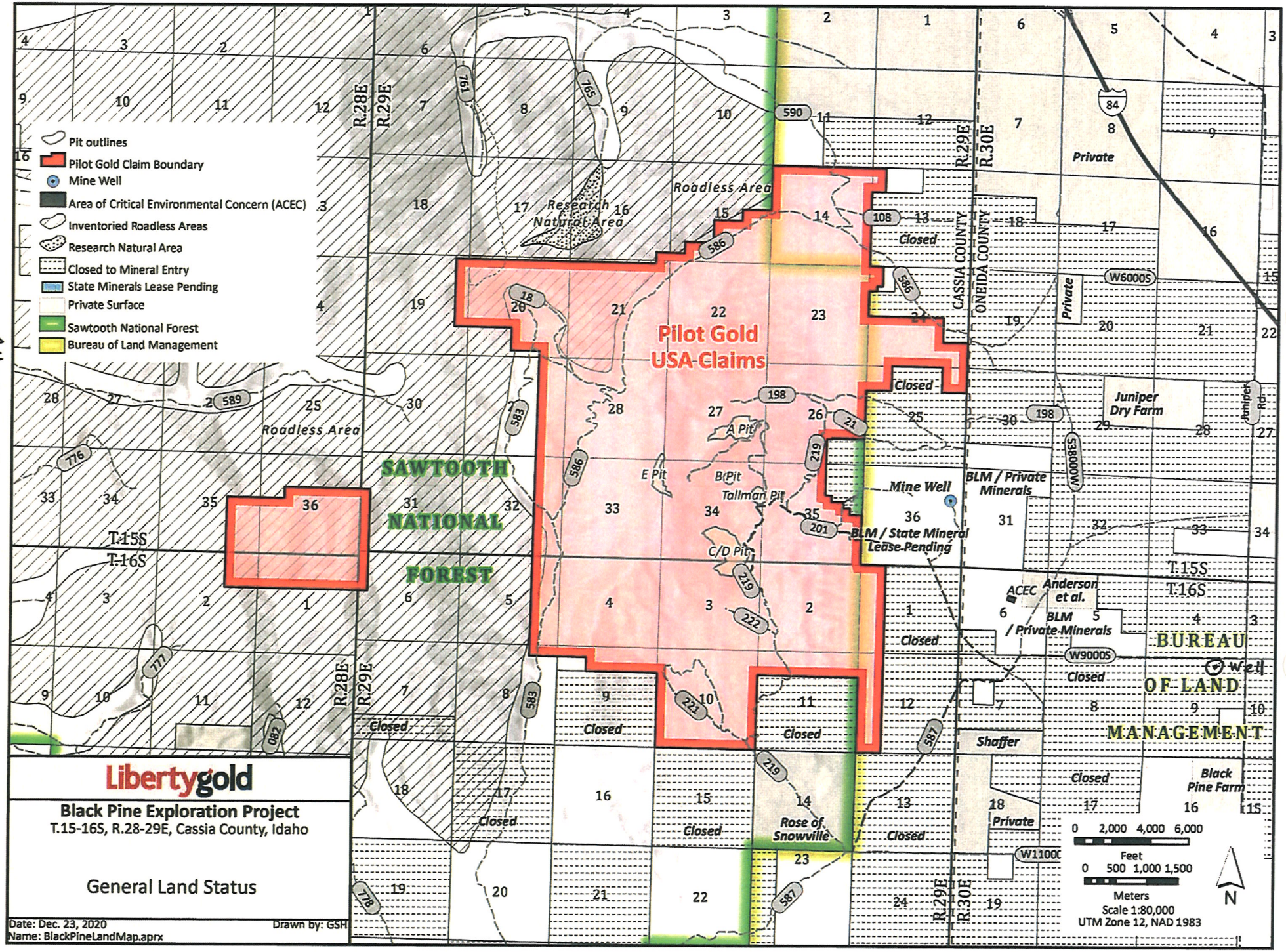
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Map produced on January 24, 2021

Attachment 2

Map and Copy of the Associated Temporary Permit

Attachment 2



Libertygold

Black Pine Exploration Project
T.15-16S, R.28-29E, Cassia County, Idaho

General Land Status

Date: Dec. 23, 2020 Drawn by: GSH
Name: BlackPineLandMap.aprx

Form 202A 04/17

ID No. TP-17-10

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TEMPORARY APPROVAL OF WATER USE

For a use not intended to become an established water right and not to exceed one (1) year in duration in accordance with Idaho Code § 42-202A.

Name of applicant Pilot Gold (USA) Inc. Phone (775) 777-2900

Mailing address 1031 Railroad St., Suite 110 City Elko

State NV Zip 89801 Email gheston@libertygold.ca

1. Source of water Well tributary to Curlew Valley

2. Location of point(s) of diversion. If more than two, attach a Point of Diversion/Place of Use Supplement. ☒

TWP	RGE	SEC	GOVT LOT	¼	¼	¼	County	Source	Local name or tag #
16S	30E	9		NW	NE		Oneida	Underground	Black Pine Well #1
15S	29E	36		SE	NE		Cassia	Underground	Black Pine Mine

3. Location of place of use. If more rows are needed, attach a Point of Diversion/Place of Use Supplement. ☒

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

4. Proposed use of water:

   a. ☐ Prevention of flood damage ☐ Ground water recharge ☐ Ground water or surface water remediation

   ☒ Other (Limited to a diverted volume of 5 acre-feet.) Describe: Gold exploration drilling and dust control; well rehab

   b. Attach a detailed description of how the proposal will accomplish the intended objective, such as prevention of flood damage.

5. Amount of water. Complete all three:

   a. Maximum rate of diversion: _____ cfs; or 55 gpm.

   b. Maximum daily volume: _____ AF; or 45,000 gallons.

   c. Maximum volume over the duration of the request: 5 AF; or _____ gallons.

6. Duration of diversion: from January 1, 2021 (month-day) to December 31, 2021 (month-day).

7. Describe proposed diverting works: Pump from an existing well using an electric pump, truck water to Place of Use

8. a. Who owns the property at the requested point of diversion? BLM (PODs 1,2); Zeldon Nelson (#3); Juniper Dry Farm (#4(

   b. Who owns the facilities that will convey water to the place of use? Water trucks

   c. Who owns the land to be irrigated or place of use? Sawtooth National Forest, Minidoka Ranger District; BLM

   d. If any of the items above is owned by a person or entity other than the applicant, describe the arrangement allowing access and attach written evidence of the arrangement. Sawtooth NF Plan of Operations # 2017-072046; BLM IDI-39132

9. Attach an 8 ½" x 11" map identifying the water source, point(s) of diversion, place(s) of use and conveyance system.

I hereby acknowledge that I assume all risk of the diversion and use of the water under this approval. I certify this is a temporary use and is not intended to become an established water right.

Signature of Applicant | J.P. Operations Title, if any | 1-12-2021 Date

Received by [illegible] Date 1/15/21 Time 1:30 pm

$50.00 fee receipted by [illegible] # E0460567 Date 1/15/2021

Watermaster comments received? _____ Date _____

ID No. TP-17-10

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

The Idaho Department of Water Resources ("Department") has examined this application for temporary approval to use water under the provisions of Idaho Code § 42-202A and has determined that:

___ A. The application for temporary approval should be denied because _____

_____

_____

✓ B. The application for temporary approval should be approved, since

1. The temporary approval can be properly administered.
2. Other water sources are not readily available.
3. The approval is in the public interest.
4. The approval will not injure known public values associated with the water source or any known water rights.
5. If the temporary approval is within a water district, the Department has sought and considered the recommendations of the watermater.

This application is therefore hereby:

___ A. DENIED

✓ B. APPROVED, subject to the following conditions:

1. Diversion and use of water under this approval is subject to all valid existing water rights.
2. The applicant assumes all risk of the use of the water under this approval.
3. This approval authorizes a maximum diversion volume of 5 AF and a maximum diversion rate of 0.13 cfs. (55gpm)
4. This approval does not grant a right-of-way across the land of another.
5. The Department may cancel or reduce the rate of flow or volume authorized by this approval. For example, the Department may cancel or reduce this approval if it concludes the water use is injuring other water rights or adversely affecting fish, wildlife or other public values.
6. The applicant shall not divert water when downstream minimum flow water rights are not being satisfied.
7. This approval does not create a continuing right to use water.
8. A temporary approval for ground water recharge or prevention of flood damage shall be an opportunistic use of surplus water and shall not interfere with the filling of surface water reservoirs.
9. For a temporary approval authorizing ground water recharge or ground water or surface water remediation, the applicant shall measure and record the weekly quantity of water diverted and report the diversion data to the Department upon request.
10. This temporary approval is not an authorization for the described water use to be used as mitigation or credit for any other purpose.
11. Other: _____

_____

12. This approval expires on December 31, 2021.

Signed this 20th day of January, 2021.

_____
For the Department

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Ident. No. _____

Point of Diversion/Place of Use Supplement

Attachment to: ☒ Application for Permit to Appropriate Water ☐ Application for Transfer** ☐ Adjudication Claim
☐ Application for Amendment of Permit ☐ Beneficial Use Field Report ☐ Statutory Claim

Location of points of diversion (POD):

New POD?	Twp	Rge	Sec	Govt Lot	¼	¼	¼	County	Source	Local name or well/diversion tag #
☐ Yes	15S	30E	4		NW	NE		Oneida	ground water	70461-Z.Nelson
☐ Yes	15S	30E	28		NE	NW		Oneida	groudd water	Juniper Dry Farm
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										

Description of place of use (POU):

a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
15S	29E	26			M				M	M	M	M	M	M			M	M	
15S	29E	27	M	M	M	M	M		M	M	M	M	M	M	M	M	M	M	
15S	29E	33	M			M													
15S	29E	34	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
15S	29E	35		M			M	M	M	M	M	M	M	M	M	M	M	M	
16S	29E	3	M	M	M	M	M	M		M	M		M	M	M	M	M	M	
16S	29E	9	M																
16S	29E	10						M											
16S	29E	2	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
15S	29E	28		M		M	M	M							M			M	
15S	29E	20													M			M	
15S	29E	21									M	M	M	M		M	M		
16S	29E	11		M															

**If this supplemental sheet is for an Application for Transfer, insert this page into Part 1B of the application.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Ident. No. _____

Point of Diversion/Place of Use Supplement

Attachment to: ☐ Application for Permit to Appropriate Water ☐ Application for Transfer** ☐ Adjudication Claim
☐ Application for Amendment of Permit ☐ Beneficial Use Field Report ☐ Statutory Claim

Location of points of diversion (POD):

New POD?	Twp	Rge	Sec	Govt Lot	¼	¼	¼	County	Source	Local name or well/diversion tag #
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										
☐ Yes										

Description of place of use (POU):

a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
15S	29E	36				M						M	M	M	M		M	M	

**If this supplemental sheet is for an Application for Transfer, insert this page into Part 1B of the application.

Exhibit A
Black Pine Project

MG and PMG Unpatented Lode Mining Claims

Owner: Pilot Gold (USA) Inc.

Cassia County, Idaho
603 Claims

Township	Range	Sections	County
15 South	28 East	35-36	Cassia
15 South	29 East	13-16, 19-29, 31-35	Cassia
16 South	28 East	1-2	Cassia
16 South	29 East	1-6, 8-12	Cassia

Boise Base Line and Meridian

Claim Name	Location Date	BLM Serial Number	BLM Recording Date	County	County Document Number	County Recording Date
MG 1	9/23/2009	IMC199549	10/22/2009	Cassia	2009-005242	10/21/2009
MG 2	9/23/2009	IMC199550	10/22/2009	Cassia	2009-005243	10/21/2009
MG 3	9/23/2009	IMC199551	10/22/2009	Cassia	2009-005244	10/21/2009
MG 4	9/23/2009	IMC199552	10/22/2009	Cassia	2009-005245	10/21/2009
MG 5	9/23/2009	IMC199553	10/22/2009	Cassia	2009-005246	10/21/2009
MG 6	9/23/2009	IMC199554	10/22/2009	Cassia	2009-005247	10/21/2009
MG 7	9/23/2009	IMC199555	10/22/2009	Cassia	2009-005248	10/21/2009
MG 8	9/23/2009	IMC199556	10/22/2009	Cassia	2009-005249	10/21/2009
MG 9	9/23/2009	IMC199557	10/22/2009	Cassia	2009-005250	10/21/2009
MG 10	9/23/2009	IMC199558	10/22/2009	Cassia	2009-005251	10/21/2009
MG 11	9/23/2009	IMC199559	10/22/2009	Cassia	2009-005252	10/21/2009
MG 12	9/23/2009	IMC199560	10/22/2009	Cassia	2009-005253	10/21/2009
MG 13	9/23/2009	IMC199561	10/22/2009	Cassia	2009-005254	10/21/2009
MG 14	9/24/2009	IMC199562	10/22/2009	Cassia	2009-005255	10/21/2009
MG 15	9/24/2009	IMC199563	10/22/2009	Cassia	2009-005256	10/21/2009
MG 16	9/24/2009	IMC199564	10/22/2009	Cassia	2009-005257	10/21/2009
MG 17	9/24/2009	IMC199565	10/22/2009	Cassia	2009-005258	10/21/2009
MG 18	9/24/2009	IMC199566	10/22/2009	Cassia	2009-005259	10/21/2009
MG 19	9/24/2009	IMC199567	10/22/2009	Cassia	2009-005260	10/21/2009
MG 20	9/24/2009	IMC199568	10/22/2009	Cassia	2009-005261	10/21/2009
MG 21	9/24/2009	IMC199569	10/22/2009	Cassia	2009-005262	10/21/2009
MG 22	9/24/2009	IMC199570	10/22/2009	Cassia	2009-005263	10/21/2009
MG 23	9/24/2009	IMC199571	10/22/2009	Cassia	2009-005264	10/21/2009
MG 24	9/24/2009	IMC199572	10/22/2009	Cassia	2009-005265	10/21/2009

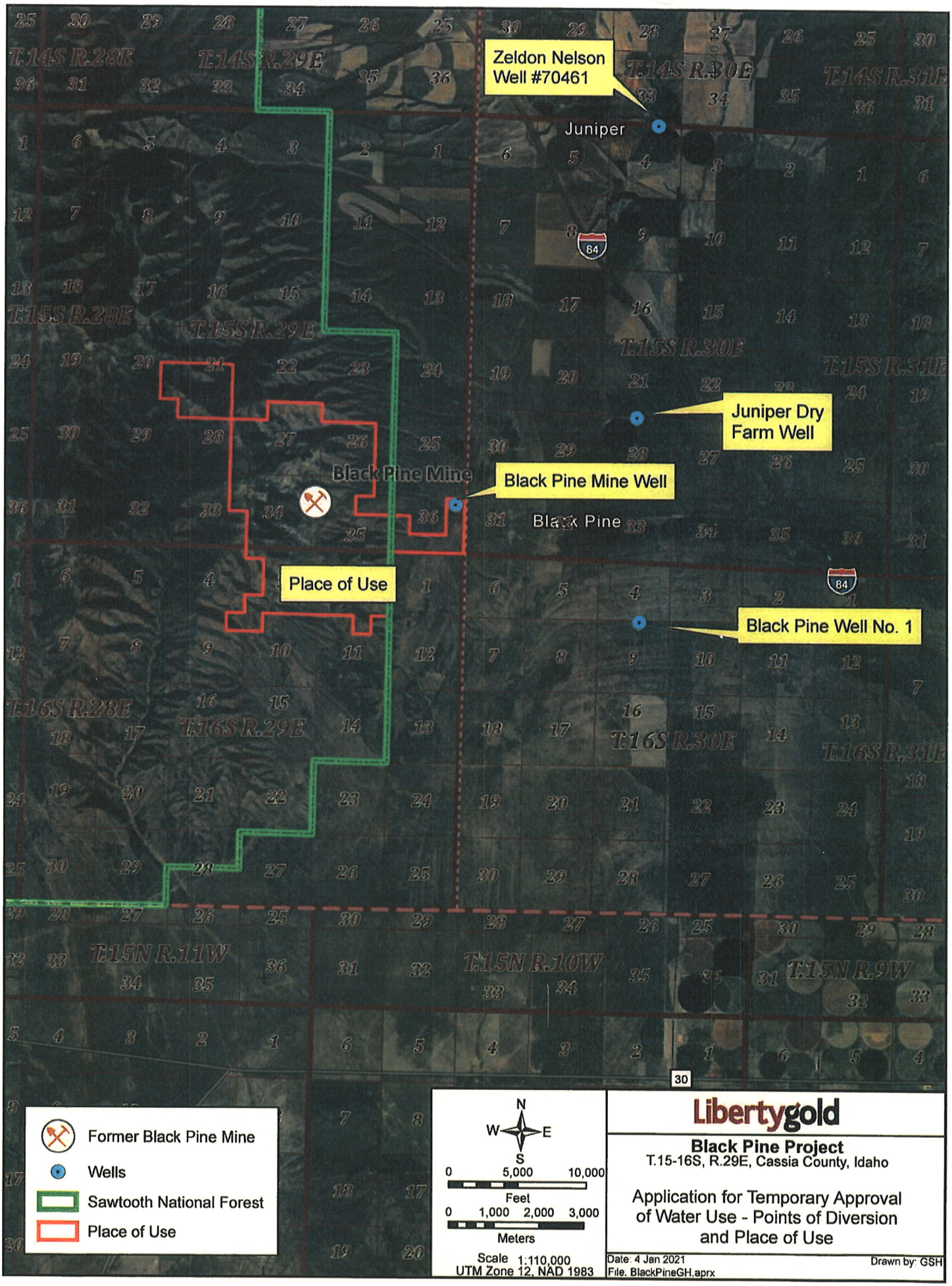
Date and Time Run:
1/8/2021 12:05:01 PM

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Mining Claims

CUSTOMER INFORMATION

Admin State: ID
Geo State: ID
Claimant Name: PILOT GOLD (USA) INC
Address: 1031 RAILROAD ST STE 110
City: ELKO **State:** NV **Zip:** 89801-3975 **Int Rel:** CLAIMANT **Cus**

Serial Number	Lead Serial Number	Claim Name	County	Dispostion	Case Type	Last Assmt Year	Location Date	Me Ra
IMC199549	IMC199549	MG 1	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199550	IMC199549	MG 2	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199551	IMC199549	MG 3	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199552	IMC199549	MG 4	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199553	IMC199549	MG 5	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199554	IMC199549	MG 6	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199555	IMC199549	MG 7	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199556	IMC199549	MG 8	CASSIA	ACTIVE	LODE	2021	09/23/2009	
IMC199557	IMC199549	MG 9	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199558	IMC199549	MG 10	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
								08
								08
IMC199559	IMC199549	MG 11	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199560	IMC199549	MG 12	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199561	IMC199549	MG 13	CASSIA	ACTIVE	LODE	2021	09/23/2009	08
								08
IMC199562	IMC199549	MG 14	CASSIA	ACTIVE	LODE	2021	09/24/2009	08
								08


Zeldon Nelson
Well #70461
Juniper
Juniper Dry
Farm Well
Black Pine Mine
Black Pine Mine Well
Black Pine
Place of Use
Black Pine Well No. 1
T.14S R.28E
T.14S R.29E
T.14S R.30E
T.14S R.31E
T.15S R.28E
T.15S R.29E
T.15S R.30E
T.15S R.31E
T.16S R.28E
T.16S R.29E
T.16S R.30E
T.16S R.31E
T.15N R.11W
T.15N R.10W
T.15N R.9W
84
30
Former Black Pine Mine
Wells
Sawtooth National Forest
Place of Use
N
W
E
S
0 5,000 10,000
Feet
0 1,000 2,000 3,000
Meters
Scale 1:110,000
UTM Zone 12, NAD 1983
Libertygold
Black Pine Project
T.15-16S, R.29E, Cassia County, Idaho
Application for Temporary Approval of Water Use - Points of Diversion and Place of Use
Date: 4 Jan 2021
Drawn by: GSH
File: BlackPineGH.aprx

Attachment 3A, Detailed Information on Proposed Used of Rental Water

The rented water is to be primarily used as drilling fluid for mining operations, where water will be injected downhole and will be added back to the aquifer. The loss of this water to the aquifer will be minimal. In addition, a small amount of water will be used for road watering. This water will be totally lost from the aquifer, but the amount of water used for road watering will not exceed 30% of the total water use. Thus, the consumptive use under this Rental will not exceed the consumptive use of the watering of alfalfa, the present use of the water to be Leased to the Water Supply Bank to supply this Rental.

Attachment 3F

Authorization from the Owner/Operator of the Rental Point of Diversion

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Pocatello Field Office
4350 Cliffs Drive
Pocatello, Idaho 83204-2105
(208) 478-6340

In Reply Refer To:
3809 (LLIDI02000)
IDI-39132

DEC 23 2020

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

DECISION

Attn: Moira Smith
Pilot Gold (USA) Inc.
1031 Railroad St., Suite 110
Elko, Nevada 89801

Plan of Operation: IDI-39132

PLAN OF OPERATIONS APPROVED – CONDITIONS OF APPROVAL REQUIRED
DETERMINATION OF FINANCIAL GUARANTEE AMOUNT

Dear Ms. Smith,

The Bureau of Land Management (BLM) Pocatello Field Office hereby approves Pilot Gold's amended Plan of Operation IDI-39132. Pilot Gold must conduct operations as described in the Plan of Operations. To avoid or minimize potential negative effects and unnecessary or undue degradation to resources on BLM administered lands Pilot Gold must also adhere to the following conditions of approval that were developed as environmental protection measures and required design features under the Final Black Pine Exploration Expansion Environmental Assessment (published December 21, 2020):

Access and Safety

1. BLM designated routes cannot be blocked, or access precluded by the public.

2. Pilot Gold will maintain all roads utilized as part of this plan of operations. If any existing system roads and travel routes in the project area are severely damaged as a result of Pilot Gold activities, Pilot Gold would return them to as close to original condition as possible and facilitate agreements with Oneida County, Cassia County, and BLM in order to maintain and/or reconstruct roads as necessary.

3. All equipment and other facilities would be maintained in a safe and orderly manner.

4. All project-related traffic would observe prudent speed limits to enhance public safety protect wildlife, livestock, and minimize dust emissions. All activities would be conducted in conformance with applicable federal and state health and safety requirements.

Air Quality

1. Dust created in the Project Area would be minimized to the extent reasonable by minimizing vehicular traffic and using prudent vehicle speeds to minimize fugitive dust created during travel.

2. Application of water on roads and pads would be used when necessary to suppress dust.

Water Resources, Riparian Resources, and Aquatic Systems

1. Environmental Protection Measures for sediment control would be utilized during construction, operation, and reclamation to minimize sedimentation from disturbed areas.

2. No chemicals or equipment would remain on site during seasonal closures.

Scenic Values

1. Within two years of final operation completion, final reclamation and seeding will be completed of all remaining surface disturbance associated with the project.

Cultural Resources

1. Pursuant to 43 CFR 10.4(b), if any unidentified cultural resources are discovered during proposed activities, operations in the immediate area of the discovery would be halted. The discovery would be reported to the BLM, and the BLM or its authorized representatives would be allowed to document and evaluate the discover, and if appropriate, would be allowed time for the determination and implementation of actions necessary to prevent or mitigate the loss of important cultural values in consultation with the Idaho State Historic Preservation Office (SHPO).

Biological Resources

1. Between March 1 and May 15, Pilot would limit travel to the Black Pine Mine well between 6:00pm and 9:00am to minimize potential disturbance to Greater sage grouse. Water trucks would be filled before the end of the prior-days operations, so as to avoid traveling the mine well road before 9:00 am. The elevated storage tank and service pole proposed for the well site will be outfitted with raptor perch deterrent structures.

2. Pilot would continue to coordinate with specialists from the USFS, BLM and Idaho Fish & Game to implement a strategy to protect sensitive species and develop and incorporate all applicable design features stemming from analysis of on-going wildlife surveys on an annual basis through the annual plan of work submitted to the USFS.

3. Pilot would restrict their use of routes 586 694, 108; and 587 north of route 694. as well as south of route 201, during the lekking and wintering seasons (November 1 – May 15) for access into Areas 2 and 4. Should unforeseen need arise that would conflict with said timing restrictions, use of routes would be limited to 9am-6pm, daily, on a case -by-case basis.

4. Use of the segment of BLM Route 601 between the intersection with BLM Route 587 and Juniper Road/BLM Route 607 should be consolidated and trip-limited during the lekking season to avoid excessive travel in and out of the project area. From March 1 – May 15 the use of BLM Route 601 would be limited to 10 AM to 5 PM for any heavy vehicle traffic (e.g. transports [drill rig, rig support vehicles, dozer, excavators, office trailers] and mud supply). Trip limitations (consolidated convoy travel into project area from Interstate) would be required for daily light truck (4x4 pickup) project entrance between 6PM and 9AM. Two convoy trips in the AM (e.g., 5:30 and 7:30 AM), and one in the evening (e.g., 7 PM) would be required. If project access be necessary external from convoys during lekking season timing restriction, use of Route 693-587-201 would be required.

5. The entirety of the BLM portion of the project area is within both sage-grouse nesting and winter habitat. Construction and maintenance (road, facilities, or otherwise) that could result in ground disturbance, and therefore direct impacts to nesting birds, during the migratory bird/sage-grouse nesting season (April 1 – July 31) and wintering seasons (November 1 – March 31) should be avoided. If nesting season is unavoidable, bird surveys shall be conducted by BLM approved biologist/survey method and buffered in accordance with the BLM PFO RMP (2012).

6. The elevated storage tank and service pole proposed for the well site will be outfitted with raptor perch deterrent structures.

7. Pilot would continue to coordinate with specialists from the USFS, BLM and Idaho Fish & Game to implement a strategy to protect sensitive species and develop and incorporate all applicable design features stemming from analysis of on-going wildlife surveys on an annual basis through the annual plan of work submitted to the USFS.

8. Pilot would plan ground-clearing activities to avoid the nesting season specific to migratory birds and raptors (May 15 to August 15) to minimize potential impacts to nesting birds. Any vegetation in avian habitat planned for removal during the nesting season would first be surveyed for nesting locations. Such surveys for migratory birds, raptors, or other special status bird species would be conducted May 15 through August to identify any active nests in areas of planned disturbance. If active nests are found, they would either be avoided until fledging occurs or appropriate buffers around active nests would be developed by a USFS biologist before these areas are disturbed.

9. Pilot would continue to cooperate with the USFS and BLM to conduct annual Grouse lek counts of active leks closest to the Project Area for the life of the project.

Vegetation Resources and Noxious Weeds

1. Pilot will work with the USFS and BLM to site the storage tank and well turn-around facility so as to avoid disturbing sage brush vegetation around the Black Pine Mine Production well-head.

2. Pilot would continue to cooperate with the USFS and BLM to inventory, monitor and report noxious weeds and their treatment within areas of active disturbance, areas of on-going reclamation and reclaimed areas related to Pilot's activities within the Project Area.

3. Pilot would treat invasive weeds along roads and access roads (requiring maintenance) prior to annual ground disturbing activities to reduce the threat of inadvertent distribution.

4. All vehicles or equipment necessary for operations would be cleaned of dirt, mud, or visible plant debris before moving into the Project Area.

5. When completing rehabilitation and reseeding activities, ensure sagebrush and/or bitterbrush seedlings or seeding is a component of rehabilitation activities when these species are suitable for the rehabilitation site(s). Rehabilitation activities should also include preferred forbs as a component of seed mixes. This design feature is to address habitat components for mule deer winter range and sage-grouse habitat within the project area.

Grazing Management

1. To reduce the impact to livestock grazing, any potential damage to livestock fences from exploration operations would be immediately replaced or repaired.

2. Pilot employees and contractors would leave all livestock gates, open or closed, when traveling through the Project Area for public safety and to ensure non-interference with livestock operations.

3. Pilot will coordinate with USFS, BLM and grazing permittees to ensure reclamation activities can be timed so as not to be adversely impacted by livestock.

Closure and Reclamation

1. Operational areas on BLM administered surface would be reshaped to approximately the same original contour, and the areas seeded with an agency-approved seed mix, where appropriate. Since the Project Area provides important forage for several wildlife species, the seed mixes would include one or more forage species, as well as a variety of grasses, forbs and shrubs to provide appropriate forage and shelter for these species. Erosion control measures would be implemented as needed.

Required Financial Guarantee

Based on your reclamation cost estimate, the BLM review of the cost estimate, and consideration of the above conditions of approval, the required financial guarantee amount is hereby set at $41,465 for reclamation associated with amended Plan IDI-39132. The financial guarantee must be filed with and accepted by the BLM Idaho State Office before you begin operations on BLM lands. You will be notified by decision of the acceptance or rejection of your bond and financial guarantee.

Financial guarantees must be submitted to Attn: Hunter Lawrence, BLM, Idaho State Office, 1387 South Vinnell Way, Boise, Idaho 83709. Surety and personal bond forms are enclosed for your use. You may file either a personal bond with a cashier's check, certified check, certificate of deposit, or letter of credit, or a surety bond which must be issued by a surety company approved by the Department of the Treasury. The list of surety companies is available at: https://www.fiscal.treasury.gov/fsreports/ref/suretyBnd/c570_a-z.htm#i. You may contact Judy Duenas at (208) 373-3866 or Hunter Lawrence at (208) 373-4044 if you have any questions regarding bonds and financial guarantees.

Appeal of Decision

If you are adversely affected by this decision, you may request that the BLM Idaho State Director review this decision. If you request a State Director Review, the request must be received in the BLM Idaho State Office at 1387 South Vinnell Way, Boise, Idaho 83709, no later than 30 calendar days after you receive or have been notified of this decision. The request for State Director Review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director Review is pending, unless a stay is granted by the State Director. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the Interior Board of Land Appeals (IBLA). You may contact the BLM Idaho State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with this office 4350 Cliffs Drive, Pocatello, Idaho 83204 which we will forward to IBLA.

If you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations at 43 CFR 3809.801(a)(1). Your Notice of Appeal must be filed in this office at 4350 Cliffs Drive, Pocatello, Idaho 83204 within 30 days from receipt of this decision. As the appellant you have the burden of showing that the decision appealed from is in error.

This decision will remain in effect while the IBLA reviews the case, unless a stay is granted by the IBLA. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Request for a Stay

If you wish to file a petition pursuant to regulations 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by Interior Board of Land Appeals (IBLA), the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of this notice of appeal and petition for a stay must also be submitted to each party named in the decision and to the IBLA and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:
1) The relative harm to the parties if the stay is granted or denied,
2) The likelihood of the appellant's success on the merits,
3) The likelihood of immediate and irreparable harm if the stay is not granted, and
4) Whether the public interest favors granting the stay.

If you have any questions, please contact Bryce Anderson, Geologist, at (208) 478-6353.

Sincerely,

MELISSA WARREN

Digitally signed by MELISSA WARREN
Date: 2020.12.23 07:39:47 -07'00'

Melissa Warren
Field Manager

Enclosures:
1 - Form 1842-1, Information on Taking Appeals to the Interior Board of Land Appeals (2 p)

cc:
Bureau of Land Management, Hunter Lawrence (ID933)
Bureau of Land Management, Judy Duenas (ID933)
Bureau of Land Management, Joseph Larsen (ID933)
Sawtooth National Forest, Attn: Randy Thompson, 2306 Hiland Ave., Burley, ID 83318
Sawtooth National Forest, Attn: Jim DeMaagd, 370 American Ave., Jerome, ID 83338
Sawtooth National Forest, Attn: Heidie Torrealday, 370 American Ave., Jerome, ID 83338

Form 1842-1
(September 2020)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,

AND

2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL	A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
2. WHERE TO FILE **NOTICE OF APPEAL**	Bureau of Land Management, Pocatello Field Office, 4350 Cliffs Drive, Pocatello, Idaho 83204
WITH COPY TO SOLICITOR	Field Solicitor, U.S. Department of the Interior, Federal Building & U.S. Courthouse, 550 West Fort Street, MSC 020, Boise, ID 8372
3. STATEMENT OF REASONS	Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).
WITH COPY TO SOLICITOR	Field Solicitor, U.S. Department of the Interior, Federal Building & U.S. Courthouse, 550 West Fort Street, MSC 020, Boise, ID 8372
4. SERVICE OF DOCUMENTS	A party that files any document under 43 CFR Subpart 4, must serve a copy of it concurrently on the appropriate official of the Office of the Solicitor under 43 CFR 4.413(c) and 4.413(d). For a notice of appeal and statement of reasons, a copy must be served on each person named in the decision under appeal and for all other documents, a copy must be served on each party to the appeal (including intervenors). Service on a person or party known to be represented by counsel or other designated representative must be made on the representative. Service must be made at the last address of record of the person or party (if unrepresented) or the representative, unless the person, party or representative has notified the serving party of a subsequent change of address.
5. METHOD OF SERVICE	If the document being served is a notice of appeal, service may be made by (a) Personal delivery; (b) Registered or certified mail, return receipt requested; (c) Delivery service, delivery receipt requested, if the last address of record is not a post office box; or (d) Electronic means such as electronic mail or facsimile, if the person to be served has previously consented to that means in writing. All other documents may be served by (a) Personal delivery; (b) Mail; (c) Delivery service, if the last address of record is not a post office box; or (d) Electronic means, such as electronic mail or facsimile, if the person to be served has previously consented to that means in writing.
6. REQUEST FOR STAY	Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a Notice of Appeal (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your Notice of Appeal (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

(Continued on page 2)

43 CFR SUBPART 1821-GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Grand Junction, CO and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

STATE OFFICES AND AREAS OF JURISDICTION:

Alaska State Office ---------- Alaska
Arizona State Office ---------- Arizona
California State Office ---------- California
Colorado State Office ---------- Colorado
Eastern States Office ---------- Arkansas, Iowa, Louisiana, Minnesota, Missouri and, all States east of the Mississippi River
Idaho State Office ---------- Idaho
Montana State Office ---------- Montana, North Dakota, and South Dakota
Nevada State Office ---------- Nevada
New Mexico State Office ---------- New Mexico, Kansas, Oklahoma, and Texas
Oregon State Office ---------- Oregon and Washington
Utah State Office ---------- Utah
Wyoming State Office ---------- Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Headquarters Office, Bureau of Land Management, 760 Horizon Drive, Grand Junction, CO 81506.

Pilot Gold (USA) Inc.
Suite 110
1031 Railroad Street
Elko, Nevada
USA 89801 3975

pilotgold.com

T 775 777 2900
F 775 777 2901

January 15, 2020

Randy Thompson
Sawtooth National Forest
Minidoka Ranger District
2306 Hiland Ave.
Burley, ID 83318

CC: Jim DeMaagd and Heidie Torrealday
Sawtooth National Forest
370 American Ave.
Jerome, ID 83338

Re: Black Pine Exploration Project Plan of Operations, Amendment

Dear Mr. Thompson, Mr. DeMaagd, and Ms. Torrealday:

Pilot Gold (USA) Inc. is submitting an amendment to the Plan of Operations (#POO-2017-072046) for the Black Pine Exploration Project in Cassia County, Idaho.

Pilot proposes new drill sites and roads to the east of the current Plan area. Additional disturbance will include approximately 3.8 miles of new constructed roads (critical access to remain open during the life of the project) and 11.5 miles of spur roads with a running width of 14-15 feet. Additional disturbance will also include 154 drill sites (40 feet wide by 40 feet long, including a sump). The additional proposed disturbance under this Plan Amendment is approximately 50.7 acres.

Pilot proposes to conduct an archaeological survey within the yellow area on the attached map so that we will have maximum flexibility to relocate proposed roads and sites, and for future mine facilities.

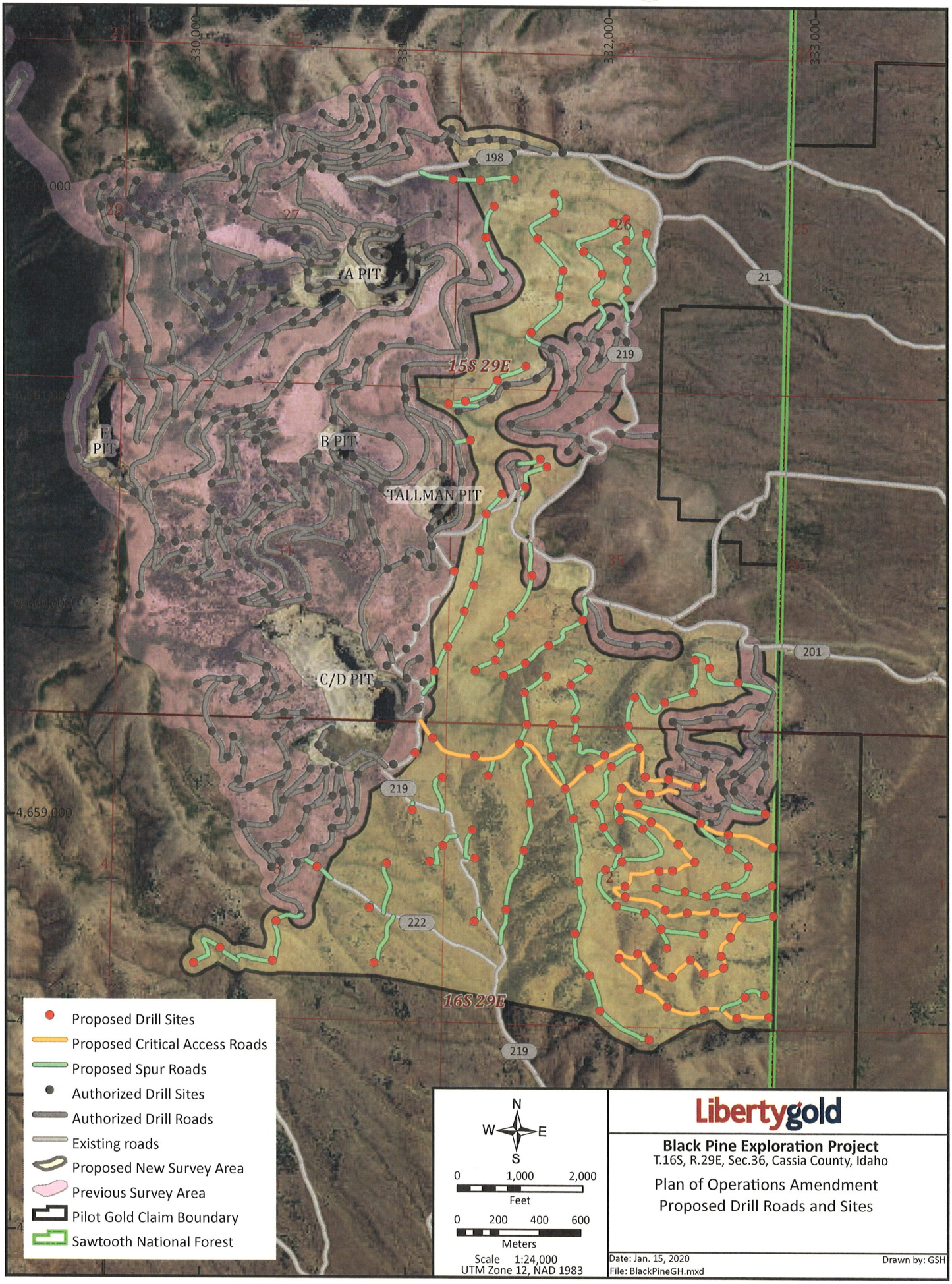
The amendment roads and sites are shown in the attached map. Pilot will send you a digital version and GIS files via e-mail today.

We would like to schedule a meeting to discuss the amendment and possible surveys as soon as possible.

Please contact Gerald Heston at 775-777-2900 or gheston@libertygold.ca if you require more information. Thank you for your attention to this matter.

Sincerely,

Gerald Heston
GIS Manager, Land, Permitting


330,000
331
332,000
333,000
198
A PIT
15S 29E
B PIT
E PIT
TALLMAN PIT
C/D PIT
219
21
201
222
16S 29E
4,659,000
Proposed Drill Sites
Proposed Critical Access Roads
Proposed Spur Roads
Authorized Drill Sites
Authorized Drill Roads
Existing roads
Proposed New Survey Area
Previous Survey Area
Pilot Gold Claim Boundary
Sawtooth National Forest
N
W
E
S
0 1,000 2,000
Feet
0 200 400 600
Meters
Scale 1:24,000
UTM Zone 12, NAD 1983
Libertygold
Black Pine Exploration Project
T.16S, R.29E, Sec.36, Cassia County, Idaho
Plan of Operations Amendment
Proposed Drill Roads and Sites
Date: Jan. 15, 2020
File: BlackPineGH.mxd
Drawn by: GSH

Pilot Gold (USA) Inc.
Suite 110
1031 Railroad Street
Elko, Nevada
USA 89801 3975

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T 775 777 2900
F 775 777 2901

May 29, 2020

Randy Thompson
Sawtooth National Forest
Minidoka Ranger District
2306 Hiland Ave.
Burley, ID 83318

CC: Jim DeMaagd and Heidie Torrealday
Sawtooth National Forest
370 American Ave.
Jerome, ID 83338

Danny Miller
Bureau of Land Management
Pocatello Field Office
4350 Cliffs Drive
Pocatello, ID 83204

Re: Black Pine Exploration Project Plan of Operations, Amendment – ADDENDUM for mine well and access roads on BLM Surface: Revision incorporating BLM comments

Dear Mr. Thompson, Mr. DeMaagd, Ms. Torrealday, and Mr. Miller:

Pilot Gold (USA) Inc. (Pilot Gold) is submitting this Addendum to the Amendment to the Plan of Operations (#POO-2017-072046) for the Black Pine Exploration Project (the "Exploration Project" in Cassia County, Idaho.

On February 19, 2020 Pilot Gold submitted a right-of-way grant application to the BLM Pocatello Field Office for access to the Black Pine Mining Well in Section 36, T. 15S R.29E, as well as travel access to public roads between the Exploration Project and the town of Juniper. BLM and USFS have requested that Pilot Gold append the Plan of Operations amendment with actions relating to the mine well. This letter describes the proposed actions.

Operator Information

Pilot Gold (USA) Inc. (a wholly owned subsidiary of Liberty Gold Corp.)
1031 Railroad St, Suite 110
Elko, Nevada 89801
Phone: (775) 777-2900; Fax: (775) 777-2901

Taxpayer ID: 27-4313603

Pilotgold

Contact information:

CONTACT	POSITION	EMAIL	CELL PHONE #
MOIRA SMITH	President	msmith@libertygold.ca	(775) 934-2987
GERALD HESTON	GIS/Environmental Coordinator	gheston@libertygold.ca	(775) 843-4107
WILL LEPORE	Project Manager	wlepore@libertygold.ca	Canada (604) 992-3315 USA (775) 340-6643
PETE SHABESTARI	Project Manager	pshabestari@libertygold.ca	(801) 809-1083

Mining Claims

This amendment is being submitted to support activities proposed on federal lode mining claims. A list of lode mining claims with proposed activities is enclosed as Attachment 1.

Public Access Roads

Pilot Gold proposes travel on existing open BLM roads between the town of Juniper and the Exploration Project, as shown on Figure 1.

Road Name	Length m	Length miles	From	To	Average Width m	Acres
Juniper Road (BLM 607)	15,843	9.84	North edge of Sec 9, T.15S R,30E	Utah-Idaho State Line	9.1	35.80
W 9000 S (BLM 601)	3,628	2.25	Juniper Road	BLM 587	8.5	7.65
W 6000 S (BLM 694)	3,203	1.99	Juniper Road	BLM 586	5.2	4.10
S 38000 W (BLM 587)	4,839	3.01	W6000S (BLM 694)	W9000S (BLM 601)	6.1	7.29
BLM 198	4,020	2.50	S38,000W (BLM 587)	USFS boundary	4.3	4.24
BLM 108	586	0.36	BLM 590	East edge of Sec. 14 T.15S R.29E	4.3	0.62
BLM 201	3,555	2.21	BLM 587	USFS boundary	6.4	5.62
BLM 219	34	0.02	BLM 587	Private property in section 19 (USFS easement)	5.5	0.05
BLM 586	5,724	3.56	W6000S (BLM 694)	USFS boundary	4.6	6.47
BLM 587	4,684	2.91	W9000S (BLM 601)	BLM 219	5.5	6.35
BLM 590	2,874	1.79	BLM 586	North edge of S½ Sec.14 T.15S R.29E	5.5	3.90
Black Pine Mine Well Road & turnaround at well	1,281	0.80	BLM 201	Black Pine Mine Well	4.0	1.27
Total	**50,272**	**31.24**				**83.35**

Also, Pilot Gold wishes to utilize an existing parking area on the south side of BLM Road 201 in the SW¼SW¼ Section 36, T.15S R.29E that is approximately 30 × 65 meters, or 0.45 acre. This area is shown on Figure 2.

No temporary use areas will be required.

Black Pine Mine Well

This well, located in the SE¼NE¼ of Section 36, T.15S R.29E, was used by Pegasus Gold during Black Pine Mine operations in the 1990s. Pilot Gold wishes to rehabilitate the well and use water for exploration drilling and dust control.

Figure 2 shows the location of the mine well, mine well road, and a portion of Road 201 leading up to the USFS-BLM boundary. Figure 3 includes a detail plan of the mine well area, as well as an inset aerial photo of what the area looked like in 1998 during the Pegasus Gold mine operations.

At the Black Pine Mine Well site, Pilot Gold will install:

- an elevated 12,000-gallon water tank (8 × 25 feet and 20 feet high)
- 60-horsepower pump (Webtrol model WS500600 or equivalent)
- 480 V 3-phase power from the existing electrical line
- a 20 foot wide graveled turnaround that is 110 feet long

The well and tank will be surrounded by temporary, free-standing fence panels (such as corral panels) to prevent livestock access.

Rehabilitation will involve brushing, swabbing, and washing the well screen.

Well and pump

The existing mine well will be rehabilitated and fitted with a 60 horsepower pump (Webtrol Model No. WS500600 or equivalent) capable of producing 1.2 cubic feet per second (500 gallons per minute). The pump will be placed at 250 foot depth. Water will be pumped to the elevated water tank. The well will have a float valve control to regulate water fill. The well will be operated by the water truck operator as needed.

In January 2020, Pilot Gold received a temporary water right appropriation from the Idaho Division of Water Resources, (#TP-17-09). Pilot Gold will obtain annual temporary water permits for the life of the Exploration Project or until permanent water rights are secured.

Power Supply

Raft River Rural Electric Co-op, Inc. ("RRRECI") operates the existing 3-phase power line that runs to within 55 feet of the well. The existing wooden power poles are 40 feet tall and installed 6 feet in the ground. Each pole has an 8 feet wood crossarm mounted to the pole with galvanized hardware and

porcelain insulators on them. They are raptor framed according to RUS specifications. Each pole supports 4 ACSR wires (3 phases wires and 1 neutral) all current carrying wires. On the last pole of this existing line Raft River would hang 3 25KVA transformers with cutouts to energize and disconnect the transformers. These transformers would change the voltage from 14,400-volt primary power to 480 volt secondary power. RRRECI also would bird cap and bird guard all transformers. RRRECI would set another 30 foot full treat wood pole within 10 feet of the well and run overhead wire between poles to carry the secondary power to the well. All secondary wires will be coated wires.

Water Tank

The 12,000-gallon tank has dimensions of 8 feet wide by 25 feet long by 8 feet tall; the stand is 12 feet high, making the total structure 20 feet high. Raptor deterrents will be installed along the top of the tank. The water tank will be installed by two persons and one vehicle. See Figure 3 for an example photo. Water will be pumped into the tank directly from the well, and then water trucks will fill up from the elevated tank.

Well Road and Turnaround Area

The Mine Well road runs for about 4,200 feet from BLM road 201 to the Mine Well. The existing two-track road to the well is currently suitable for water truck travel but may require minor improvements such as recontouring the road where it crosses a small dry drainage. Other improvements may include scraping the center strip to reduce grass growth that may become a fire hazard or providing water bars and rolling dips to improve water drainage. If required, gravel for the road bed will be obtained from a nearby quarry on private land within the valley. The parking/vehicle turnaround area will be approximately 20 feet wide and 110 feet long, covering 0.06 acres. The well and access road will be used during the life of the Exploration Project, which may be extended. The access road would be watered for dust control as needed.

Sparse vegetation will be cleared within a 20 × 110-foot area around the mine well for the vehicle turnaround. The area is within the footprint of the former Pegasus Gold well building and pad, which was removed and reclaimed in the early 2000s. No topsoil will be disturbed by the location of the water tank. Vegetation removed during construction will be scattered near the site.

Up to 20 round trips per day during peak drilling activities are generally anticipated from March to December. Up to four water trucks will be used for this purpose. Snow removal will be the responsibility of Pilot Gold.

The mine well and road would be used for the life of the Exploration Project. The schedule of operations on the BLM administered lands would correspond with the four-year term of the POO (#POO-2017-072046) authorized by the USFS. It is expected that the POO (#POO-2017-072046) would end in February 2023; however, the term could be extended. Should the POO (#POO-2017-072046) term be extended, Pilot Gold would provide notification of the POO extension to BLM.

If the mine well and road are not needed past the Exploration Project, the road will be regraded and returned to pre-project condition.

Temporary fencing (such as corral panels) will be installed as needed to protect the well head from livestock.

Safety

All public roads will remain open during upgrades. All vehicles will have fire suppression tools, fire extinguishers, and first aid kits. The well contractor will utilize their own safety protocol. Water trucks and construction equipment will be powered by diesel fuel. Spill prevention measures will be employed. Pilot Gold's Spill Prevention Plan is enclosed as Attachment 2.

Environmental Impacts

The well upgrade is anticipated to have no adverse impacts on or conflicts with air quality, noise, geologic hazards, mineral and energy resources, paleontological resources, soils, vegetation, wildlife, threatened and endangered species, cultural resources, visual resources, BLM projects, recreation activities, or wilderness.

- Livestock: No adverse impacts expected. Using the Black Pine Mine Well instead of the nearby livestock wells will improve safety for livestock and vehicles.
- Wilderness: There are no Wilderness Areas or Wilderness Study Areas near the Black Pine Mine Well site.
- Wildlife: The area is designated Important Habitat Management Area for greater sage-grouse. As part of the Black Pine Exploration Project Plan of Operations, annual lek counts have been provided to the US Forest Service and the State of Idaho.
- Recreation: The ROW grant and well would not preclude existing recreational access or other travel along public roads.
- Wetlands: No wetlands are shown in the area from the National Wetlands Inventory.
- Cultural and Paleontological Resources: No cultural resources are expected in the area.
- Visual Resources: At the Black Pine Mine Well, a new 20-foot tall water tank and stand will be installed.
- Noise: Up to 20 round-trips per day during peak drilling activities are generally anticipated from March to December. Up to four water trucks will be used for this purpose.
- Water Resources: No adverse impacts to ground water resources are anticipated. The US Forest Service has taken water quality samples from the well in the last two years and there are no concerns.
- Weeds: Pilot Gold will avoid noxious weed infestations. If noxious weed control is necessary as part of the reclamation all herbicide applications will be coordinated through the BLM's noxious weed specialist. Only BLM approved herbicides will be used, and all applications will be by a

licensed applicator. All trucks and equipment to be utilized on this Exploration Project will be cleaned of all dirt, debris, and plant materials prior to arriving on site.

Reclamation and Removal of Equipment

If the mine well is not needed past the Exploration Project, the water pump and tank will be removed. The vehicle turnaround will be reclaimed and revegetated as specified in the Environmental Assessment Appendix B, Pilot Gold's Reclamation Plan (Attachment 3). The well head will remain in place with a locked cover. The mine well road would be returned to pre-project condition.

Fuel Transportation

Diesel fuel needed for drilling and other uses will be stored in tanks on private property in the town of Juniper. Drilling company support vehicles have 200-gallon tanks that will be filled up at the tank and transported to the Exploration Project. In case of spills, the drilling companies have their own safety protocols in place. Boart Longyear, the primary drilling contractor, maintains an expansive Spill Prevention Control and Countermeasures Plan, a Storm Water Pollution Prevention Plan, and employee training plan (Bruce Grange, Senior Safety Coordinator, Bruce.grange@boartlongyear.com, 775-778-5642).

Pilot Gold vehicles will not transport fuel. Pilot Gold maintains a comprehensive safety manual on site in the case of spills and emergencies. Pilot Gold's Spill Containment Plan is enclosed as Attachment 2. Please contact Gerald Heston at 775-777-2900 or gheston@libertygold.ca if you require more information. Thank you for your attention to this matter.

Sincerely,

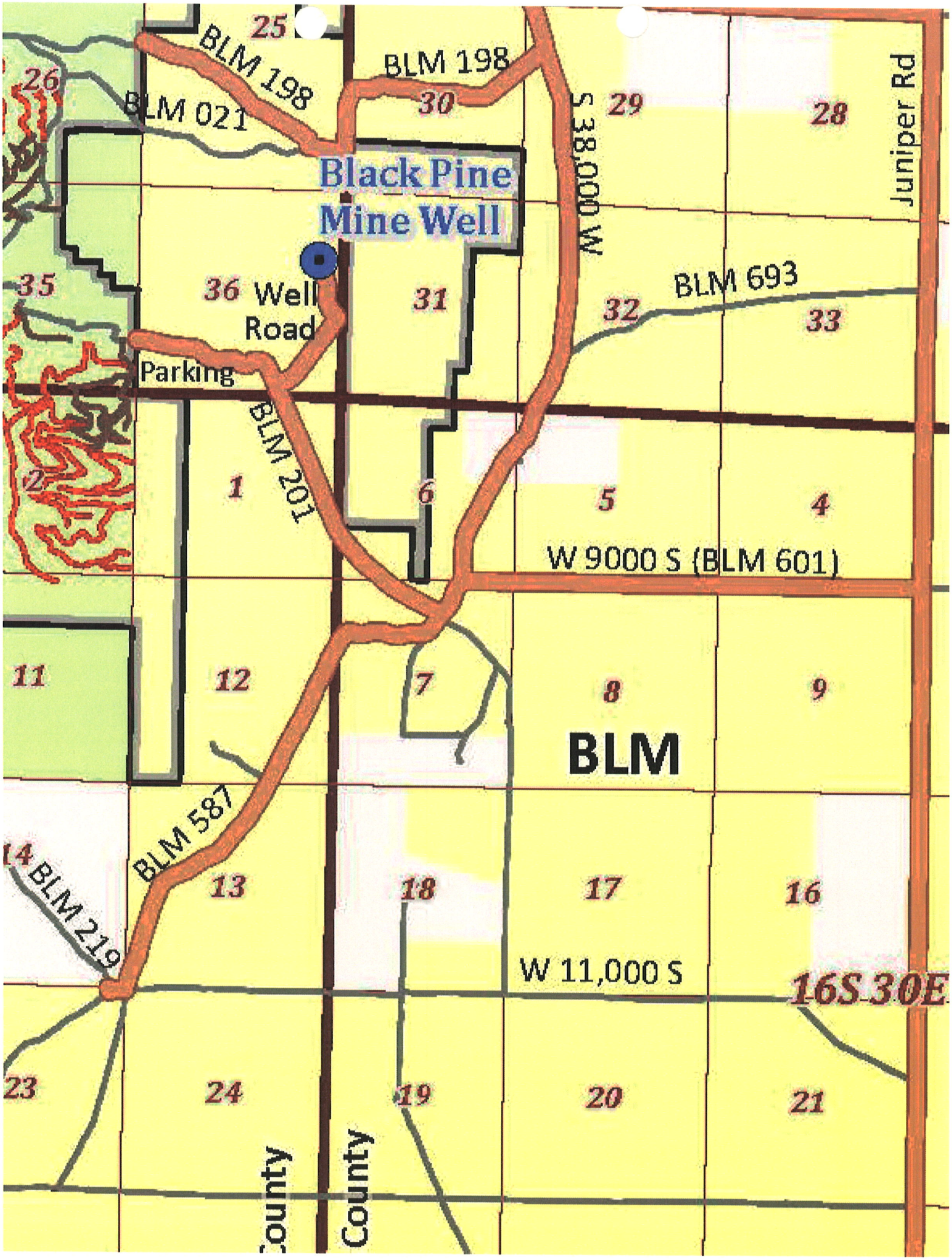
Moira Smith
President, Pilot Gold (USA) Inc.

Figures

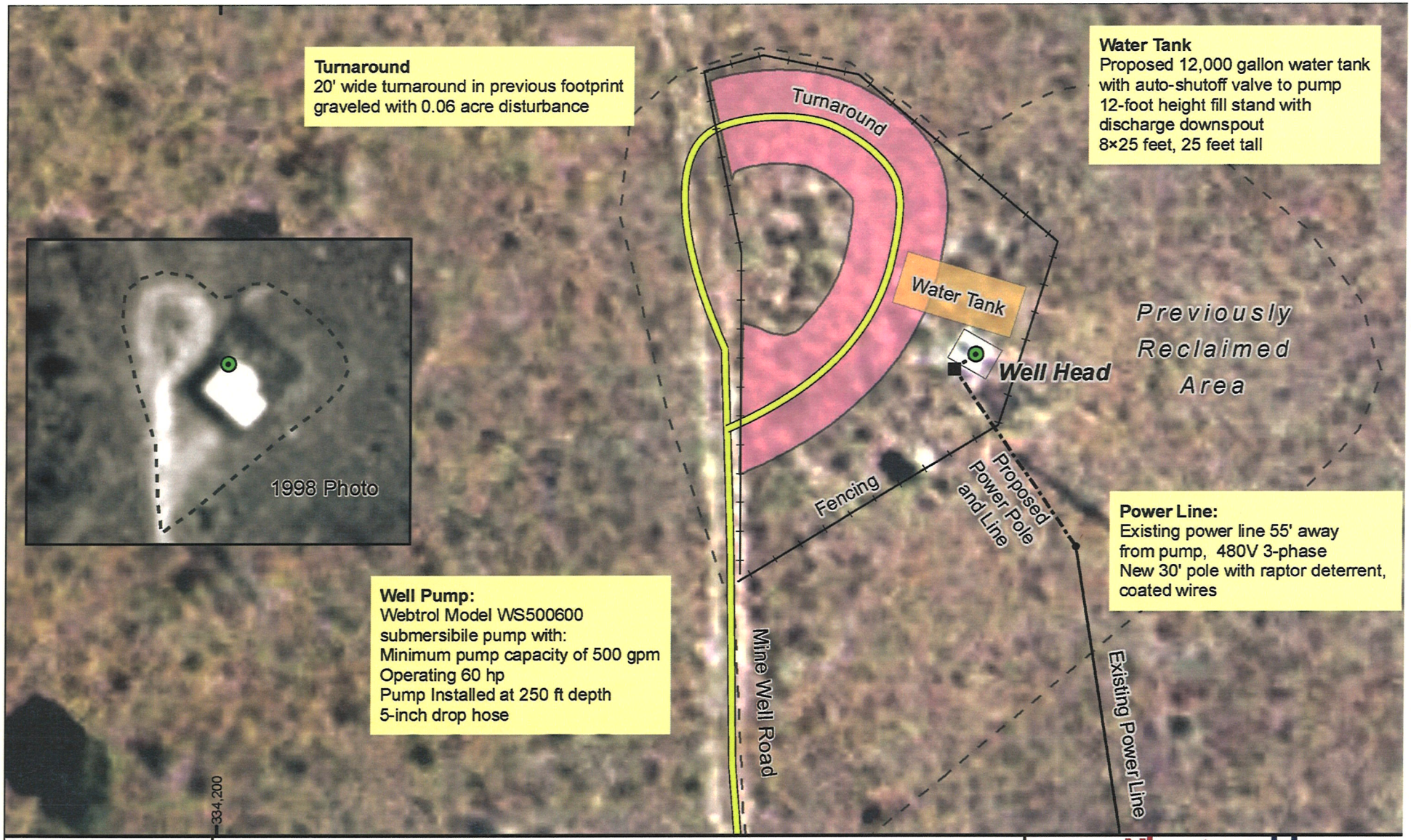
1. Project Area, Well Site, and Access Roads
2. Black Pine Mine Well Road Access
3. Black Pine Mine Well Detail Map

Attachments

1. List of mining claims with proposed disturbance.
2. Pilot Gold's Spill Prevention Plan
3. Reclamation Plan (Appendix B to Environmental Assessment)


25
BLM 198
BLM 198
26
BLM 021
30
29
28
S 38,000 W
Juniper Rd
Black Pine
Mine Well
35
36
Well
Road
31
32
BLM 693
33
Parking
BLM 201
2
1
6
5
4
W 9000 S (BLM 601)
11
12
7
8
9
BLM
BLM 587
14 BLM 219
13
18
17
16
W 11,000 S
16S 30E
23
24
19
20
21
County
County





N
W E
S

0 10 20 30
Feet
0 2 4 6 8 10
Meters

Scale 1:360
UTM Zone 12, NAD 1983

August, 2010 Aerial Photo

Libertygold

Black Pine Exploration Project
Section 36, T.15S R.29E, Cassia Co., Idaho

Figure 3
Black Pine Mine Well
Detail Map

Date: May 6, 2020 Drawn by: GSH
File: BP_Well detail.mxd

Attachment 1
Black Pine Exploration Project Plan of Operations

MG and PMG Unpatented Lode Mining Claims with Proposed Disturbance

Owner: Pilot Gold (USA) Inc.

Township 15 South, Range 29 East, Sections 14, 20, 21, 24-28, 33-35
Township 16 South, Range 29 East, Sections 2-3, 9-19
Boise Base Line and Meridian
Cassia County, Idaho

Includes all claims covered by Mineral Gulch Plan of Operations (#2016-063179), Black Pine Plan of Operations (#2017-072046) and Amendment; and BLM access roads

Claim Name	Serial Number	Location Date	Surface
MG 5	IMC199553	9/23/2009	USFS
MG 6	IMC199554	9/23/2009	USFS
MG 7	IMC199555	9/23/2009	USFS
MG 8	IMC199556	9/23/2009	USFS
MG 9	IMC199557	9/23/2009	USFS
MG 10	IMC199558	9/23/2009	USFS
MG 11	IMC199559	9/23/2009	USFS
MG 12	IMC199560	9/23/2009	USFS
MG 13	IMC199561	9/23/2009	USFS
MG 14	IMC199562	9/24/2009	USFS
MG 15	IMC199563	9/24/2009	USFS
MG 19	IMC199567	9/24/2009	USFS
MG 20	IMC199568	9/24/2009	USFS
MG 21	IMC199569	9/24/2009	USFS
MG 22	IMC199570	9/24/2009	USFS
MG 23	IMC199571	9/24/2009	USFS
MG 24	IMC199572	9/24/2009	USFS
MG 25	IMC199573	9/24/2009	USFS
MG 26	IMC199574	9/24/2009	USFS
MG 27	IMC199575	9/24/2009	USFS
MG 28	IMC199576	9/24/2009	USFS
MG 29	IMC199577	9/24/2009	USFS
MG 30	IMC199578	9/24/2009	USFS
MG 31	IMC199579	9/24/2009	USFS
MG 32	IMC199580	9/24/2009	USFS
MG 33	IMC199581	9/24/2009	USFS

Claim Name	Serial Number	Location Date	Surface
MG 34	IMC199582	9/24/2009	USFS
MG 35	IMC199583	9/24/2009	USFS
MG 37	IMC199585	9/24/2009	USFS
MG 38	IMC199586	9/24/2009	USFS
MG 39	IMC199587	9/24/2009	USFS
MG 40	IMC199588	9/24/2009	USFS
MG 41	IMC199589	9/24/2009	USFS
MG 42	IMC199590	9/24/2009	USFS
MG 43	IMC199591	9/24/2009	USFS
MG 44	IMC199592	9/24/2009	USFS
MG 45	IMC199593	9/24/2009	USFS
MG 46	IMC199594	9/24/2009	USFS
MG 47	IMC199595	9/24/2009	USFS
MG 48	IMC199596	9/24/2009	USFS
MG 49	IMC199597	9/24/2009	USFS
MG 50	IMC199598	9/24/2009	USFS
MG 51	IMC199599	9/24/2009	USFS
MG 52	IMC199600	9/24/2009	USFS
MG 53	IMC199601	9/24/2009	USFS
MG 54	IMC199602	9/24/2009	USFS
MG 55	IMC199603	9/22/2009	USFS
MG 56	IMC199604	9/22/2009	USFS
MG 57	IMC199605	9/22/2009	USFS
MG 58	IMC199606	9/22/2009	USFS
MG 59	IMC199607	9/22/2009	USFS
MG 60	IMC199608	9/22/2009	USFS

Claim Name	Serial Number	Location Date	Surface
MG 61	IMC199609	9/24/2009	USFS
MG 62	IMC199610	9/23/2009	USFS
MG 63	IMC199611	9/23/2009	USFS
MG 64	IMC199612	9/23/2009	USFS
MG 65	IMC199613	9/23/2009	USFS
MG 66	IMC199614	9/23/2009	USFS
MG 67	IMC199615	9/23/2009	USFS
MG 68	IMC199616	9/23/2009	USFS
MG 69	IMC199617	9/23/2009	USFS
MG 70	IMC199618	9/23/2009	USFS
MG 71	IMC199619	9/23/2009	USFS
MG 72	IMC199620	9/23/2009	USFS
MG 73	IMC199621	9/22/2009	USFS
MG 74	IMC199622	9/22/2009	USFS
MG 75	IMC199623	9/22/2009	USFS
MG 76	IMC199624	9/22/2009	USFS
MG 77	IMC199625	9/22/2009	USFS
MG 78	IMC199626	9/22/2009	USFS
MG 79	IMC199627	9/22/2009	USFS
MG 80	IMC199628	9/23/2009	USFS
MG 81	IMC199629	9/23/2009	USFS
MG 82	IMC199630	9/23/2009	USFS
MG 83	IMC199631	9/23/2009	USFS
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MG 86	IMC199634	9/23/2009	USFS
MG 87	IMC199635	9/23/2009	USFS
MG 88	IMC199636	9/23/2009	USFS
MG 89	IMC199637	9/23/2009	USFS
MG 91	IMC200230	2/1/2010	USFS
MG 92	IMC200231	2/1/2010	USFS
MG 93	IMC200232	2/1/2010	USFS
MG 94	IMC200233	2/1/2010	USFS
MG 95	IMC200234	2/2/2010	USFS
MG 98	IMC200237	2/2/2010	USFS
MG 99	IMC200238	2/2/2010	USFS
MG 100	IMC200239	2/2/2010	USFS
MG 101	IMC200240	2/2/2010	USFS
MG 102	IMC200241	2/2/2010	USFS
MG 103	IMC200242	2/2/2010	USFS
MG 104	IMC200243	2/2/2010	USFS
MG 105	IMC200244	2/2/2010	USFS
MG 109	IMC200248	2/4/2010	USFS
MG 110	IMC200249	2/4/2010	USFS
MG 111	IMC200250	2/4/2010	USFS
MG 112	IMC200251	2/4/2010	USFS
MG 116	IMC200255	2/2/2010	USFS
MG 119	IMC200258	2/4/2010	USFS
MG 124	IMC200263	2/4/2010	USFS/ BLM
MG 125	IMC200264	2/4/2010	USFS
MG 126	IMC200265	2/4/2010	USFS
MG 127	IMC200266	2/4/2010	USFS
MG 183	IMC200632	4/9/2010	USFS
MG 184	IMC200633	4/10/2010	USFS
MG 185	IMC200634	4/10/2010	USFS
MG 186	IMC200635	4/10/2010	USFS
MG 213	IMC200662	4/10/2010	USFS
MG 214	IMC200663	4/10/2010	USFS
MG 215	IMC200664	4/10/2010	USFS
MG 216	IMC200665	4/10/2010	USFS
MG 217	IMC200666	4/10/2010	USFS
MG 243	IMC200692	4/10/2010	USFS
MG 244	IMC200693	4/10/2010	USFS
MG 245	IMC200694	4/10/2010	USFS
MG 246	IMC200695	4/10/2010	USFS
MG 247	IMC200696	4/10/2010	USFS
MG 248	IMC200697	4/10/2010	USFS
MG 249	IMC200698	4/10/2010	USFS
MG 274	IMC200723	4/7/2010	USFS
MG 275	IMC200724	4/7/2010	USFS
MG 276	IMC200725	4/10/2010	USFS
MG 277	IMC200726	4/10/2010	USFS
MG 278	IMC200727	4/10/2010	USFS
MG 279	IMC200728	4/10/2010	USFS
MG 306	IMC200755	4/8/2010	USFS
MG 316	IMC200765	4/8/2010	USFS
MG 317	IMC200766	4/8/2010	USFS
MG 319	IMC200768	4/8/2010	USFS
MG 320	IMC200769	4/8/2010	USFS
MG 321	IMC200770	4/8/2010	USFS
MG 324	IMC200773	4/8/2010	USFS

Claim Name	Serial Number	Location Date	Surface
MG 325	IMC200774	4/8/2010	USFS
MG 326	IMC200775	4/8/2010	USFS
MG 327	IMC200776	4/8/2010	USFS
MG 328	IMC200777	4/8/2010	USFS
MG 329	IMC200778	4/8/2010	USFS
MG 332	IMC200781	4/8/2010	USFS
MG 333	IMC200782	4/8/2010	USFS
MG 334	IMC200783	4/8/2010	USFS
MG 335	IMC200784	4/8/2010	USFS
MG 336	IMC200785	4/8/2010	USFS
MG 337	IMC200786	4/8/2010	USFS
MG 341	IMC200790	4/8/2010	USFS
MG 342	IMC200791	4/8/2010	USFS
MG 343	IMC200792	4/8/2010	USFS
MG 344	IMC200793	4/8/2010	USFS
MG 345	IMC200794	4/8/2010	USFS
PMG 12	IMC216714	10/24/2016	USFS/ BLM
PMG 13	IMC216715	10/24/2016	USFS/ BLM
PMG 14	IMC216716	10/24/2016	USFS/ BLM
PMG 15	IMC216717	10/25/2016	USFS/ BLM
PMG 16	IMC216718	10/25/2016	USFS/ BLM
PMG 17	IMC216719	10/25/2016	USFS/ BLM
PMG 18	IMC216720	10/26/2016	USFS/ BLM
PMG 22	IMC216724	10/24/2016	USFS
PMG 23	IMC216725	10/24/2016	USFS
PMG 24	IMC216726	10/24/2016	USFS
PMG 25	IMC216727	10/25/2016	USFS
PMG 26	IMC216728	10/25/2016	USFS
PMG 27	IMC216729	10/25/2016	USFS
PMG 28	IMC216730	10/26/2016	USFS
PMG 29	IMC216731	10/26/2016	USFS
PMG 32	IMC216734	10/24/2016	USFS
PMG 33	IMC216735	10/24/2016	USFS
PMG 34	IMC216736	10/24/2016	USFS
PMG 35	IMC216737	10/25/2016	USFS
PMG 36	IMC216738	10/25/2016	USFS
PMG 37	IMC216739	10/25/2016	USFS
PMG 38	IMC216740	10/26/2016	USFS

Claim Name	Serial Number	Location Date	Surface
PMG 39	IMC216741	10/26/2016	USFS
PMG 50	IMC216752	10/23/2016	USFS
PMG 51	IMC216753	10/23/2016	USFS
PMG 101	IMC227539	9/21/2018	USFS
PMG 151	IMC230441	1/9/2020	BLM
PMG 153	IMC230443	1/9/2020	BLM
PMG 160	IMC230450	1/8/2020	BLM
PMG 197	IMC230487	1/8/2020	BLM
PMG 206	pending	5/15/2020	BLM
PMG 208	pending	5/15/2020	BLM
PMG 209	pending	5/15/2020	BLM
PMG 213	pending	5/15/2020	BLM
PMG 214	pending	5/15/2020	BLM
PMG 215	pending	5/15/2020	BLM
PMG 216	pending	5/15/2020	BLM
PMG 217	pending	5/15/2020	BLM
PMG 218	pending	5/15/2020	BLM
PMG 219	pending	5/15/2020	BLM
PMG 227	pending	5/16/2020	BLM
PMG 228	pending	5/16/2020	BLM
PMG 237	pending	5/16/2020	BLM

Attachment 2

Spill Prevention Plan

Black Pine Exploration Project Spill Prevention Plan

Objectives

The purpose of this Spill Prevention Plan (Plan) is as follows:

- To identify all pollutant sources that may exist within the Black Pine Exploration Project Area.
- To identify Best Management Practices (BMPs) to prevent or reduce the quantity of potential pollutants discharged to the ground or surface water in order to minimize environmental impacts during and after the exploration project.

Availability

A copy of this Plan shall be attached to the Project's Exploration Operating Plan, along with the Material Safety Data Sheets (MSDS) of all products used on-site for vehicle maintenance or the exploration program and identified BMPs. All contractors are responsible for familiarizing their personnel with the information pertaining to BMPs and spill prevention.

Preventive maintenance

Good housekeeping practices will be followed on-site during the exploration Project:

- An effort will be made to store only enough product required to do the job.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Manufacturers' recommendations for proper use and disposal will be followed.
- The Project Manager will inspect daily to insure proper use and disposal of materials on-site.

The contractor shall have a vehicle preventive maintenance program to insure that all vehicles are operating under optimum conditions and all hoses and fittings are in good condition and leak free. It is the responsibility of the operator, mechanic, tool pusher or other designee, to execute the repairs or preventive maintenance and complete any reporting required. Assignment for repair when equipment is in a remote location may be issued verbally by field superintendent or district manager.

Source identification

Pollutants

Potential sources of pollutants from drilling rigs, service vehicles, and other equipment includes oil, fuel, and lubricating grease. Additional sources of pollutants may include drilling fluids (mud and foam), borehole plugging materials, solvents, trash and other debris. These pollutants are not expected to come into contact with on-site soils or surface waters; however, BMPs shall be utilized to prevent potential release of contaminants.

Construction Debris

To minimize impacts during precipitation events, trash bins shall be regularly inspected for leaks.

Spill Contingency Plan

Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, sorbent materials, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

Well-maintained equipment will be used to perform the work, and when practicable, equipment maintenance will be performed offsite. In the event of oil, fuel, and lubricating grease leaks, cleanup will be conducted as soon as possible. If the leak is on pavement or a compacted surface, an oil absorbing product such as Absorb® will be applied. Once the clean-up product has absorbed the leak, it will be swept up into watertight drums or bins, and disposed of according to federal, state, or local regulations. If the leak occurs on soil, the contaminated soil will be removed and disposed of according to federal, state, or local regulations. In the event of a major spill the following actions should be taken, in addition to any federal, state, and local health and safety regulations:

1. Contain the spread or migration of the spill, using on-hand supply of erosion control structures and/or by creating dirt berms, as feasible and necessary. Also utilize the materials and equipment stored on-site to control the spill.
2. Notify the Environmental or Project Manager immediately.
3. Within 24 hours of an identified spill, the site manager or a designated representative will notify the following local and state agencies:

In case of spills:

Agency	Phone number
All Spills	911
Idaho Department of Environmental Quality (Twin Falls) http://www.deq.idaho.gov/contact-us/	(800) 270-1663
Sawtooth National Forest, Minidoka Ranger District, Burley https://www.fs.usda.gov/sawtooth/	(208) 678-0430
Utah Dept. of Environmental Quality https://deq.utah.gov/general/report-an-incident	(801) 536-4123
BLM Pocatello Field Office https://www.blm.gov/office/pocatello-field-office	(208) 478-6340
BLM Salt Lake Field Office (West Valley, UT) https://www.blm.gov/office/salt-lake-field-office	(801) 977-4300

Emergency

Agency	Phone Number
All Emergency Calls	911
Idaho State Police – Patrol, Accident reporting https://www.isp.idaho.gov/isp/district4.html (Cassia) https://www.isp.idaho.gov/isp/district5.html (Oneida)	Cellular: *ISP (*477) (800) 233-1212
Utah Highway Patrol	911; admin: 801-965-4518

https://highwaypatrol.utah.gov/contact/	
Cassia County Sheriff's Office, non-emergency dispatch	(208) 878-2251
Oneida County Sheriff's Office, non-emergency dispatch	(208) 766-2251
Box Elder County Sheriff's Office, main number	(435) 734-3300

Wildfire Reporting

Agency	Phone Number
Idaho http://idahofirewise.org/2017/03/01/how-to-report-a-wildfire/	911 or County Sheriff
Utah – Northern Utah Interagency Fire Center **https://gacc.nifc.gov/gbcc/dispatch/ut-nuc/**	(801) 495-7611

Medical

Facility	Phone Number
Cassia Regional Hospital, Burley 1501 Hiland Ave., Burley, ID 83318 https://intermountainhealthcare.org/locations/cassia-regional-hospital/hospital-information/contact-maps/	(208) 678-4444
River View Urgent Care, Burley 382 N. Overland Ave., Burley, ID 83318 http://www.urgentcareofidaho.com/clinic-locations/river-view-urgent-care-medical-center/	(208) 678-6996
Bear River Valley Hospital, Tremonton 905 N 1000 W, Tremonton, UT 84337 https://intermountainhealthcare.org/locations/bear-river-valley-hospital/	(435) 207-4500
Urgent care in Tremonton? *closest ones are in Brigham City or Logan*	

Vehicle Assistance

Facility	Phone Number
Towing – Archibald Tire Pros, Snowville 65 S Stone Rd, Snowville, UT 84337 https://www.archibaldtirepros.com/locations	(435) 730-1702

4. This Plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

Best Management Practices

During construction, water will be used for dust control, mixing of grout, and cleanup. Water used for dust control will be sprayed over the ground at a rate which will moisten the soil but not cause runoff.

It is the responsibility of the contractor to define equipment staging areas to minimize footprint impacts, and to prevent impacts to water courses and other sensitive areas.

The contractor is responsible for maintaining water-tight trash bins or dumpsters in the Project Area to minimize leakage to ground surface. Contractors will be responsible for maintaining contained areas for concrete wash-out and properly disposing of concrete, if used.

The Project Supervisor shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances).

The following BMPs will be utilized as appropriate, and copies of each BMP are included with this Plan (Kennedy/Jenks Consultants 2008):

- Spill Prevention and Control (GM-6)
- Vehicle and Equipment Maintenance and Fueling (GM-8)
- Material Delivery, Handling, Storage and Use (GM-10)
- Liquid Waste Management (GM-13)
- Hazardous Waste Management (GM-17)

Material Safety Data Sheets

Material Safety Data Sheets (MDSDs) are provided by the drilling contractor and copies will be kept on site and in Pilot's office in Elko, Nevada.

Drilling Fluid Additives and Lubricants, Provided by M-I SWACO, A Schlumberger Company, P.O. Box 368, Carlin, NV 89822, (775) 754-6880

1. Calcium Chloride Solid
2. Calseal W60
3. Cedar Fiber
4. D-D (Drilling detergent)
5. Drilling Paper
6. Kla-Gard
7. Kwik-Plug
8. Magma Fiber
9. Max Gel
10. Mix All
11. My-Lo-Jel
12. Platinum Foam Plus
13. Platinum Pac
14. Platinum Rod Coat
15. Platinum Rod Ease
16. Polypac R
17. Poly-Plus 2000
18. Poly-Plus EHV
19. Poly-Plus LV
20. Polyswell
21. Portland Cement
22. Ringfree
23. Rod Coat B 700
24. Rod Ease
25. Soda Ash
26. Super Plug
27. Tackle
28. Tube Lube

Hydrocarbons, provided by Major Drilling America Inc., 2200 South 4000 West, Salt Lake City, UT 84120, (801) 974-0645.

1. All-clear Soda Ash
2. Anti-Seize Lubricant
3. Automatic Transmission Fluid
4. Brakleen® Brake Parts Cleaner (aerosol)
5. Canola Diesel-Hammer fuel

6. Chevron and Texaco Regular Unleaded Gasolines
7. Coppercoat Base
8. Diesel Fuel (all types)
9. Easy-Clean Rig Wash
10. Gojo Orange Pumice Hand Cleaner
11. Howes Lubricator Diesel Treat
12. Loctite Threadlocker Blue 242
13. Max Gel
14. Mobil Permazone Antifreeze & Coolant
15. NAPA Premium Starting Fluid
16. Platinum Foam Plus
17. Polar Antifreeze
18. Poly-plus
19. Polyswell
20. Portland Cement
21. Purple powder
22. Star brite AW 68 Hydraulic Oil
23. Super Plug
24. Unocal Guardol 15W/40
25. WD-40
26. Windshield Washer Anti-freeze

Appendix B - Pilot Golds Reclamation Plan

Reclamation Plan

Reclamation will be completed to the standards described in Idaho Administrative Rules (IAR) 20.03.02.140. Reclamation will meet the reclamation objectives as outlined in the *Best Management Practices for Mining in Idaho* (Idaho Department of Lands (IDL), 1992) and the Sawtooth Forest Plan (2012). All Pilot drill sites, sumps, and road construction will be re-contoured and reseeded.

Reclamation will be designed to achieve post-exploration land uses consistent with the Sawtooth National Forest's (SNF) land use management plans for the Black Pine Management Area, which are outlined in the *Sawtooth National Forest Land and Resource Management Plan* (USFS, 2012). Reclamation is intended to return disturbed land to a level of productivity comparable to pre-exploration levels. Post-exploration land use includes wildlife habitat, livestock grazing, hunting, and dispersed recreation. The post-exploration land use is not expected to differ from pre-exploration land use.

During exploration activities, Pilot will: manage drilling to contain cuttings and manage drilling fluids; monitor road conditions; and keep sites clean and safe.

After exploration activities are terminated, reclamation will involve re-grading disturbed areas related to this Project to their approximate original contour. The Project will then be seeded using the approved reclamation seed mixture and application rates furnished by the SNF. Overland travel routes will be scarified and reseeded, if necessary. Yearly visits to the site will be conducted to monitor the success of the revegetation for a period of at least three years or until revegetation success has been achieved per *Best Management Practices for Mining in Idaho* (IDL, 1992) and IAR 20.03.02.11(ii).

Exploration activities will occur over approximately four years. All reclamation work, with the exception of revegetation monitoring, will be completed no later than one year after the completion of activities under this Project. Pilot will conduct concurrent reclamation of disturbed areas once it is determined that the disturbance is no longer required for Project activities.

Weed Control

- Pilot would continue to cooperate with the USFS to inventory and monitor noxious weeds and undesirable plants within areas of active disturbance, areas of on-going reclamation and reclaimed areas related to Pilot's activities within the Project Area;

- Pilot would treat any noxious weeds or undesirable plant infestations that result from ground disturbing activities within the Project Area;

- Pilot would treat invasive weeds along roads and access roads (requiring maintenance) prior to implementation to reduce the threat of inadvertent distribution;

- At a minimum, on-site inspections and hand-spraying treatments would be conducted semi-annually in late-June and mid-August by Pilot's personnel. Inspection and treatments would be recorded and provided to the USFS; and
- All vehicles or equipment used to implement the Proposed Action would be cleaned of dirt, mud, or visible plant debris before moving into the Project Area;

- Invasive weed species would be monitored and treated until reclamation efforts have been declared successful by a qualified USFS representative;

- Any seed mix used for restoration would be approved by the Forest Botanist;

Drill hole plugging

All holes will be abandoned in accordance with the State of Idaho Rules for Exploration Operations and Required Reclamation (IAR 20.03.02.06) as well as SNF policies.

For reverse-circulation holes, a bentonite slurry is tremmied down the hole at a rate of two minutes per bag. Periodically, the hole is probed to ensure that the top ten feet of each hole is not filled. The top ten feet of each hole is plugged with cement, which is batched in a mixer and poured down the hole.

For mud-rotary and core holes, the density of the mud slurry is measured at the completion of the hole and bentonite is added to bring the slurry density and viscosity to that specified in the regulation; which is:

- Increase mud viscosity by 20 seconds to at least 50 seconds, and
- Ensure a mud weight of at least nine pounds per gallon.

After holes are filled to within ten feet of the surface, the specified cement cap is poured. Drill holes will be plugged immediately after drilling is completed and samples have been collected.

Re-grading and reshaping

Re-grading and reshaping of all constructed drill sites and exploration roads will be completed to approximate the original topography, in accordance with the State of Idaho Rules for Best Management Practices and Reclamation for Surface Mining Operation and Permanent Closure of Cyanidation Facilities (IAR 30.20.02.140) as well as SNF policies. Fill material, enhanced with growth media, will be pulled onto the roadbeds to fill the road cuts and restore the slope to natural contours. Roads and drills sites will be re-graded and reshaped with a front-end excavator or bulldozer. Excavators will be used on slopes greater than 30%. For overland travel roads, upgraded roads or pads that do not require replacement of side-cast material, reclamation will be accomplished with an excavator bucket/ripper or a dozer to knock down and smooth any berms and relieve road compaction. Tire tracks (trails created by overland travel) will be lightly scarified and left in a rough state as necessary to relieve compaction, inhibit soil loss from runoff, and prepare the seed bed.

Should any drainage be disturbed, they will be reshaped to approach the pre-construction contours. The resulting channels will be of the same capacity as up and downstream reaches and will be made non-erosive by use of surface stabilization techniques (rip-rap) where necessary, and ultimately revegetated. Following completion of earthwork, all disturbed areas will be broadcast seeded.

Riparian mitigation

There are no surface waters in the Project Area. Erosion control BMPs will be employed to prevent excess sedimentation.

Wildlife and fisheries habitat rehabilitation

Impacts to wildlife will consist of temporary habitat loss, displacement, and disturbance from human activity and noise. Wildlife could tend to avoid active drilling sites and move temporarily into adjacent habitat, which could increase populations in those areas. Impacts to animals could be lessened by reclaiming access and drill roads as quickly as possible; therefore, impacts will be temporary and will not eliminate individual territories or populations.

Handling and Application of Topsoil

Whenever possible, and primarily on reasonably level terrain, topsoil will be graded and stockpiled to the uphill margin of the pad and sump cut. On steeper slopes, topsoil will be stored as side-cast along the periphery of the pads. Although this will mix the limited existing quantities of topsoil with the sub-soils, experience has shown that the resulting surface soils can support vegetation. The alternative option of pushing topsoil uphill prior to cutting pads on steep slopes would result in a significant increase in surface disturbance due to bulldozers working "back-and-forth" below the proposed disturbance.

Revegetation

Re-contouring of drill pads, sumps and, if necessary, roads, will be the primary means by which seedbeds will be prepared. During seed placement, the ground surface will be roughened by dragging a chain harrow or other suitable implement. Leaving a roughened surface will provide greater opportunities for seed and moisture to be trapped and held. Additional benefits include slower runoff, increased infiltration, and in general, more favorable microclimates conducive to seed germination.

Seeding procedures will be dependent upon site characteristics. Re-contoured pads, sumps and roads with severe slopes will be seeded with hand-held broadcast seeders. An electric broadcast seeder mounted on an all-terrain vehicle (ATV) may be used on roads with gentle slopes. A chain drag mounted behind the ATV may be used to cover the seed.

Isolation, removal, and/or control of acid-forming, toxic, or deleterious materials

All refuse generated by the Project will be disposed of at an authorized landfill facility off site, consistent with applicable regulations. No refuse will be disposed of on site. Water or nontoxic drilling fluids, additives, gels, and abandonment materials will be utilized as necessary during drilling and will be stored at the Project Area.

Hazardous materials utilized at the Project Area will include diesel fuel, gasoline, and lubricating grease. Approximately 500 gallons of diesel fuel will be stored in fuel delivery systems on vehicles and drill rigs. Approximately 100 gallons of gasoline will be stored in fuel delivery systems for light vehicles. Approximately 100 pounds of lubricating grease will be stored on the drill rigs or transported by drill trucks. All containers of hazardous substances will be labeled, handled, and stored in accordance with State and MSHA regulations. In the event that a reportable quantity of hazardous or regulated materials, such as diesel fuel, is spilled, measures will be taken to control the spill, and BLM, Idaho Department of Environmental Quality (IDEQ), and the Emergency Response Hotline will be notified as required. If any oil, hazardous material, or chemicals are spilled during operations, they will be cleaned up in a timely manner. After clean up, the oil, toxic fluids, or chemicals and any contaminated material will be removed from the site and disposed of at an approved disposal facility.

Removal or stabilization of buildings, structures and support facilities

All trailers, portable toilets, generators, equipment, and supplies will be removed following completion of the Project. These facilities will be removed by being transported off site with trucks and/or trailers. Materials, including scrap, trash, and unusable equipment, will be removed on a daily or weekly basis and disposed of in accordance with federal and state regulations and laws. No permanent facilities will be built. Facilities removal will be completed within sixty to ninety days after operations conclude.

Post-closure management

The Black Pine Mine was reclaimed by SNF in the late 1990s. The operator partially re-contoured the some of the open pits by back filling waste into the pits and spreading stockpiled topsoil over disturbed areas. Exploration roads surrounding the mine area were also re-contoured and re-seeded.

Post-closure management will commence on any reclaimed area following completion of the reclamation work for the area. Post-closure management will extend until the reclamation of the site or component has been accepted by both the SNF and IDL. For bonding purposes, a three-year post-closure management period is assumed following completion of reclamation construction on any site. For sites reclaimed early in the operations, management of the reclaimed sites will occur concurrently with operational site management.

Proposed schedule of the time for initiation and completion of activities for reclamation

The Project would consist of phased reclamation. Upon completion of drilling, all drill holes would be plugged and abandoned according to the regulatory requirement set forth in IDAPA 20.02.03, Idaho Well Construction Standards, and Idaho Groundwater Rule (IDAPA 58.08.11). Pilot would notify the District Ranger or authorized representative when operations are completed and when season and/or final reclamation work would commence. The goal of the phased/concurrent exploration/reclamation process is to limit the total active disturbed acreage throughout the life of the Proposed Action. Surface disturbance that is absolutely necessary for access and continued mineral exploration would be left open until it is determined that the area is no longer necessary for access and exploration, at which time it would be reclaimed. Areas

concurrently reclaimed would be seeded and reclaimed and monitored to ensure that the goals of reclamation have been met.

Areas that are no longer needed for mineral exploration activities would receive final recontouring and seeding within one year after completion or abandonment of exploration activities. Constructed drill roads that are no longer needed for access or mineral exploration would receive final reclamation within one year after completion or abandonment of the Project and would include the following: a) closure to normal vehicular traffic; b) construction of cross drains, dips, or water bars where needed; c) shaping road surface to as near a natural contour as practicable and stabilizing with windrowed topsoil; and d) seeding all regraded areas with a USFS approved reclamation seed mixture.

Pilot would reclaim all surface disturbances to approximate original contour when these areas are determined to be no longer necessary for exploration activities. Areas previously reclaimed may be reactivated based on drilling results and addressed by subsequent work plan submittals. Any past reclaimed areas that are reactivated would be reclaimed in the same manner as discussed above. The USFS would be notified prior to the commencement of annual reclamation work.

All other disturbed areas, including sumps and staging areas would be reshaped to approximately the same original contour, windrowed topsoil would be replaced, and the areas would be seeded with a USFS-approved seed mix. The reclamation schedule by technique is included in Table 3 and will be refined pending final environmental review of the project. Since the Project Area provides important forage for several wildlife species, the seed mixes would include one or more forage species, as well as a variety of grasses, forbs and shrubs to provide appropriate forage and shelter for these species. Erosion control measures would be implemented as needed.

TABLE 3. ANTICIPATED RECLAMATION SCHEDULE

Tasks	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Regrading/Recontouring					X	X	X	X	X	X		
Seeding									X	X	X	
Monitoring					X	X	X	X	X	X		

Access roads

Reclamation access roads include existing SNF system roads and reclaimed roads reopened by the previous operator.

Measures to minimize loading of sediment to surface waters during the operation and reclamation

Sediment control structures may include; however, are not be limited to, fabric or certified weed-free straw wattle filter fences, siltation or filter berms, sumps, and down-gradient drainage channels in order to prevent unnecessary or undue degradation to the environment. Sediment traps (sumps), constructed, as necessary, within the drill pad disturbance, will be used to contain drill cuttings.

Effect the proposed reclamation will have on public safety.

No unnatural hazards will exist during or after reclamation in the disturbed/reclaimed areas.

References

Idaho Rules 20.03.02, Rules Governing Exploration, Surface Mining, and Closure of Cyanidation Facilities, https://adminrules.idaho.gov/rules/current/20/index.html, accessed Nov. 13 2017

Idaho Department of Lands, 1992. *Best Management Practices for Mining in Idaho*. https://www.idl.idaho.gov/mining/bmp/bmp1992ttl.pdf, accessed Nov. 13, 2017

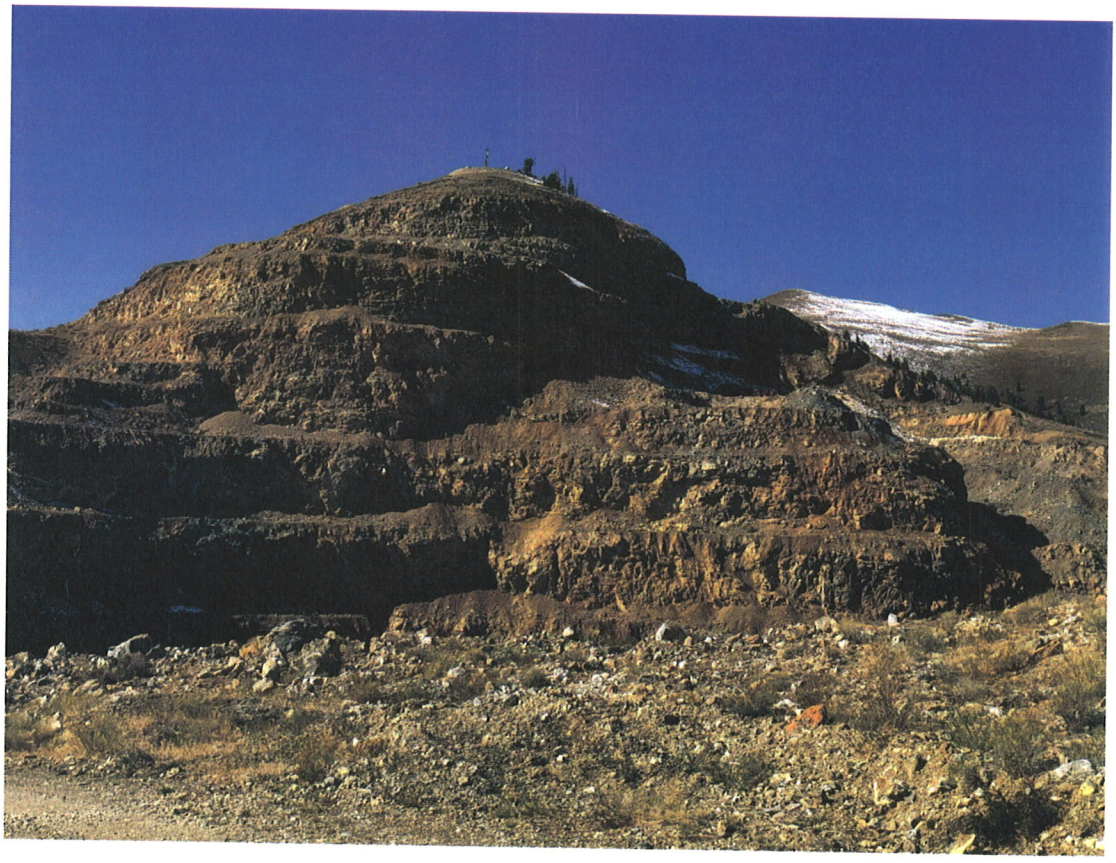
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United States Department of Agriculture

Forest Service

Final Environmental Assessment
Black Pine Exploration Project Expansion

Minidoka Ranger District, Sawtooth National Forest, Cassia County, Idaho
December 21, 2020



For Information Contact:
Heidie Torrealday, Geologist
370 American Ave.
Jerome, Idaho 83338
(208) 423-7566
heidie.torrealday@usda.gov

Responsible Official:
Kirk Flannigan
Acting Forest Supervisor
Sawtooth National Forest
370 American Ave.
Jerome, Idaho 83338

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1.0 Introduction

Background

The Minidoka Ranger District of the Sawtooth National Forest (Forest Service) received a plan of operation (Plan) from Pilot Gold (USA) (Pilot) January 15, 2020 to expand mineral exploration drilling within their current project area at the former Black Pine mine site located in the Black Pine Mountains of Cassia County, Idaho. This proposed additional mineral exploration drilling is to occur within the same area analyzed under an Environmental Assessment by the USFS in 2018[1]. Pilot also filed a complete amended Plan of Operation (IDI-39132) with the Bureau of Land Management (BLM) Pocatello Field Office May 29, 2020, which identifies the commercial use of existing access routes and access to the former Black Pine production well located on lands administered by the BLM. Water from this source is necessary to support mineral exploration activities proposed on the Forest Service lands.

Pilot initially proposed mineral exploration activities in a Plan submitted to the Sawtooth National Forest May 8, 2017. The USFS subsequently prepared an Environmental Assessment (EA) that analyzed the effects of these proposed activities along with alternatives to the original proposal. The EA documents the associated direct, indirect, and cumulative environmental effects of their mineral exploration activities. A Decision Notice/Finding of No Significant Impact (DN/FONSI) was issued December 12, 2018, allowing for the implementation of a modification of Pilot's proposed mineral exploration that includes addition of Environmental Protection Measures (EPMs) designed to minimize or avoid effects to a variety of surface resources. Over the life of the project Pilot's exploration proposal could create approximately 141 acres of surface disturbance associated with the construction of drilling access roads and drill pads. The incorporation of unconstructed drill pad and road locations previously analyzed and authorized by the USFS under the Western Pacific Resources, Inc. Plan of Operations (POO-2011-030938) could also be included in annual workplans.

Pilot submitted their first annual workplan in February 2019, consistent with their authorized Plan and initiated mineral exploration activities April 17, 2019 after all required clearances had been met. Active exploration work continued until mid-December 2019 with the completion of 93 drill holes (87 Reverse Circulation and 6 core) from 46 drill pads. Approximately 5.2 miles of access road was constructed to access drill sites. All holes were immediately abandoned upon completion per State of Idaho and USFS requirements. Drilling resulted in the discovery of two mineralized zones within the area of the former open pit mine and expanded the understanding of the mineralization trends at the site which through its intent has informed the exploration effort. These areas of discovery have led Pilot to request a plan modification so as to continue exploration into untested areas of the site that align with observed trends in mineralized host geology.

[1] Black Pine Exploration Project, Environmental Assessment, Sawtooth National Forest, August 2018

1.1 Scope of Supplement

This supplement to the 2018 Black Pine Exploration EA has been prepared to evaluate and incorporate the additional data necessary to disclose the environmental consequences associated with the additional mineral exploration proposed in Pilot's January 15, 2020 Plan for expanded exploration.

This EA evaluates the effects of constructing approximately 15 miles of additional drill access road within the current project area and 154 additional drill pads with attending sumps. Should all roads and drill sites proposed be constructed the additional proposed disturbance would be approximately 50.7 acres. Pilot's proposal includes the use of a well to pump water necessary to support operations along with the commercial use of access routes located on BLM administered surface east of the project area. This supplemental analysis will inform the deciding official how best to reduce impacts from the additional activities proposed and determine if environmental protection measures beyond those incorporated into the currently approved Plan are necessary.

The National Environmental Policy Act (NEPA) Handbook allows for supplementation or revision of an EA "if the interdisciplinary review of new information or changed circumstances indicates that changes in the EA are needed to address environmental concerns that have a bearing on the action or its impacts" (FSH 1909.15 Section 18.4).

1.2 Project Location and Access

The general location of the Project is illustrated in Figure 1. The Project can be accessed by traveling south from Juniper, Idaho on county and BLM roads for approximately 8 miles, then west on county road (Black Pine Mine) toward the former Black Pine mine area.

Pilot's unpatented mining claims encompass approximately 7,610 acres on lands within the Black Pine Division administered by the Minidoka Ranger District of the Sawtooth National Forest. The proposed area of exploration interest is approximately 1660 acres centered primarily within the area of the former Black Pine mine (Figure 1).

1.3 Purpose and Need for Action

The purpose of and need for the Proposed Action is for Pilot to identify and delineate gold ore deposits, specifically through subsurface exploratory drilling on NFS land in the Project Area. The statutory right of Pilot to explore for and develop mineral resources on federally administered land is recognized in the General Mining Law of 1872. The proposed activities are needed in order to evaluate the Project Area for the potential of future mineral resource development.

The USFS's purpose in considering approval of the Proposed Action is to provide multiple resource use of the National Forest and respond to Pilot's submittal of a Plan of Operations. Congress has directed the USFS to administer NFS lands for multiple-use purposes. These purposes have been stated in the Organic Administration Act, the Multiple Use Sustained-Yield Act, National Forest Management Act, and other legislation and Executive Orders (EOs) (USFS, 2012).

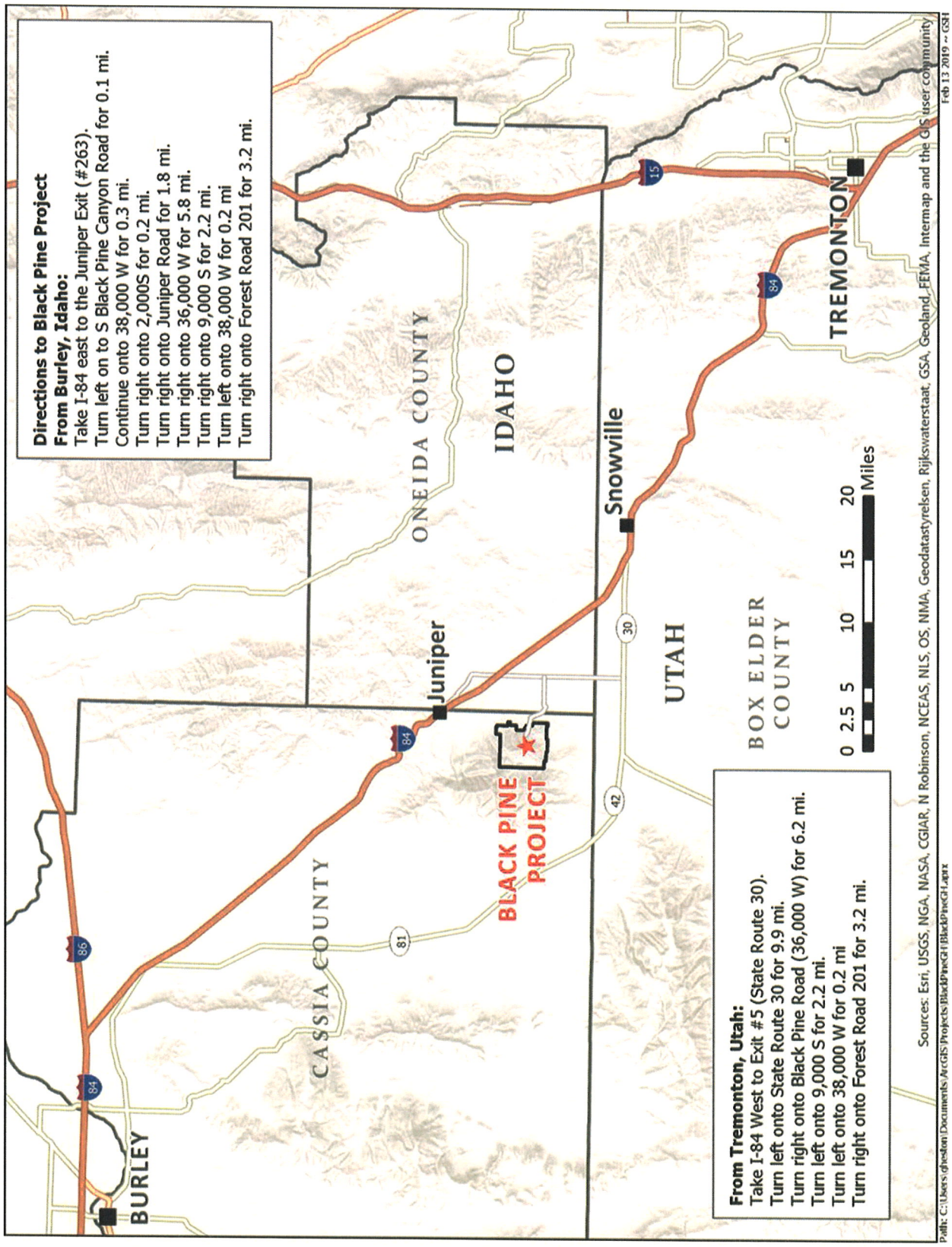


Figure 1. General Location of the Black Pine Exploration Project.

Surface management regulations (36 CFR 228) require that all mineral exploration, development, and operation activities be conducted in a manner that minimizes adverse environmental impacts to USFS administered surface resources. Additional need for action is established by the BLM's responsibility under the Federal Land Policy and Management Act of 1976 (FLPMA) and BLM Surface Management Regulations at 43 CFR 3809, to respond to and process Pilot Gold's amended Plan of Operations which includes those activities proposed on BLM administered lands and to take any action necessary to prevent unnecessary or undue degradation of the lands.

The USFS and BLM are required to comply with the NEPA to analyze what impacts from the Proposed Action and reasonable alternatives would have on the natural and human environment (36 CFR 220; 43 CFR 46). The agencies need to consider approval of the Proposed Action to respond to its mandate to manage public lands for multiple uses in a manner which recognizes the nation's need for domestic sources of minerals from public lands while protecting scientific, scenic, historic, archeological, ecological, environmental, air and atmospheric and hydrologic values. This EA is prepared in conformance with the NEPA and associated Council of Environmental Quality (CEQ) regulations (40 CFR 1500-1508).

1.4 Connected Actions

The CEQ defines connected actions as actions that are closely related and that: 1) automatically trigger other actions that may require NEPA analysis; 2) cannot or will not proceed unless other actions are taken previously or simultaneously; or 3) are interdependent parts of a larger action and depend on the larger action for their justification (40 CFR Part 1508.25). The following connected action has been identified and will be evaluated as part of this NEPA review.

Pilot's plan includes ingress and egress onto the project area via a network of BLM and county roads as well as accessing an existing water well located on BLM administered lands east of the project area. The well was drilled in 1989 to provide production water for the former Black Pine Mining operation and was decommissioned upon final mine reclamation in the early 2000s. Pilot intends to equip the well with a new pump capable of pumping up to 80,000 gallons of water per day (during peak drilling operations) to provide the water necessary for drilling activities located on NSF lands. An elevated water tank (up to 12,000-gallon capacity) will be added to provide storage. Power for pumping will be accessed from an existing 3-phase power line located less than 100 feet from the well. A graveled turnaround approximately 110-feet in length is proposed and the facility would be surrounded by a temporary, free-standing fence panels to prevent livestock intrusion. The well is accessed by an existing road that would be graded and improved to support daily water truck travel.

1.5 Decision Framework

The Decision Framework for the Forest Service remains unchanged from the August 2018 Black Pine Exploration EA. The preparation of this supplement does not affect or negate the final Decision/FONSI reached for the implementation of the Black Pine Exploration Project as currently authorized.

Based on the environmental analysis and disclosure documented in this EA, the Authorized Official for the Forest Service will decide 1) whether to select the proposed action as proposed or modified, or as described in an alternative; 2) what mitigation measures if any, are needed; and 3) what monitoring is required.

The 43 CFR 3715 and 3809 regulations provide for the management of surface disturbance associated with mineral exploration and development including mining claim use and occupancy on public lands administered by BLM. Upon the completion of a final environmental assessment, BLM will issue a decision pertaining to the proposed components of the Plan to be conducted on BLM administered lands and provide Pilot with any required authorizations.

1.6 Forest Plan Direction

The applicable Forest Plan Direction remains unchanged from the August 2018 Black Pine Exploration EA.

1.7 Applicable Regulatory Requirements and Required Coordination

The applicable regulatory requirements and coordination remain unchanged from the August 2018 Black Pine Exploration EA.

1.8 Land Use Plan Conformance Statement

The Proposed Action has been reviewed for conformance with the Approved Pocatello Resource Management Plan (RMP, April 2012) and is in conformance with the following RMP Goals, Objectives, and Actions:

- **Goal ME-1.** *Develop mineral resources (oil and gas, geothermal, solid minerals) consistent with other resource and use direction.*

- **Objective ME-1.2.** *Coordinate with federal agencies (e.g., BIA, BOR, USFS, and USFWS) on mineral development proposals related to the federal mineral estate where such agencies have surface management responsibilities.*

- **Objective ME-2.2.** *Maintain or reestablish the hydrologic function, integrity, quality, and other surface resource values of lands affected by mineral development consistent with the disturbed site potential.*

- **Action ME-1.2.1.** *The federal mineral estate will be managed consistent with laws, policies and established requirements.*

- **Action ME-2.2.2.** *The following operation standards and guidelines would be applied as appropriate to reduce environmental impacts from mineral exploration and development operations:*

OPERATIONAL STANDARDS:

- *Mineral exploration and development will include plans for concurrent or timely reclamation. Plans will be modified and updated as appropriate.*

- *The lessee/operator will monitor reclamation work and report to the Authorized Officer annually until reclamation is accepted as adequate and the performance bond released.*

- *Within development areas, soils and native vegetation will be retained undisturbed when disturbance of the site is not necessary for minerals development or safety.*

- *Mineral operations performance bonds will include an amount that reflects the actual cost to BLM (including current administration and overhead costs) to reclaim facilities and related surface disturbance. This amount will be determined by BLM and bonds secured.*

OPERATIONAL GUIDELINES:

- *Selection of plant species for establishment will reflect the surrounding ecosystem and post development land use. Plant materials selected for reclamation use will be adapted to the climate of the site. Consideration and preference will be given to promoting natural succession, native plant species, and structural diversity.*

- *Before release of the performance bond, the site will be assessed to assure:*
  - *minimum ground cover exists to attain long-term soil productivity requirements;*
  - *ground cover persists naturally, at minimum cover needs, without artificial assistance (e.g., irrigation, fertilizers, etc.); and*
  - *impacted lands are reclaimed and meet or suitably trend toward meeting applicable Standards (BLM 1997) and post development land use objectives.*

- *In reclaimed areas, vegetation will include species that meet wildlife habitat needs. Cover for wildlife will be incorporated into design plans (e.g., slash piles, logs, rock piles, etc.).*

- *Roads, disturbed areas, and facilities no longer necessary for mineral exploration and development will be reclaimed as soon as practicable*

The Proposed Action was also reviewed for conformance with the 2015 Record of Decision and Approved Greater Sage-Grouse Resource Management Plan Amendment for Idaho and

Southwestern Montana (2015 GRSG APRMPA). The final conformance review for the BLM action can be found in Attachment 6.

1.9 Public Involvement

The proposal for expanded mineral exploration was listed in the Sawtooth National Forest quarterly Schedule of Proposed Actions (SOPA) February 2020. In addition, the Forest Service mailed a project description to 12 individuals, agencies, and organizations on February 19, 2020, inviting public comment. The BLM conducted external public scoping to identify resource issues for the supplemental analysis. The BLM mailed a letter to 14 individuals, agencies, and organizations on May 14, 2020, inviting public comment. The BLM requested public comments be received by June 20, 2020. Four comment letters were received.

The project team used comments as well as input derived from internal review to determine if major issues exist with the proposal and to define the scope of the supplemental analysis. A legal notice announcing the 30-day opportunity to comment on the draft EA was published November 1, 2020.

Pursuant to 43 CFR 3809.411(c), the BLM provided a 30-day public review and comment period for amended Plan IDI-39132. Notices of availability announcing the public review and comment were posted in the *Times News* on November 6, 2020 and *Idaho Enterprise* on November 12, 2020. No comments were received.

1.10 Consultation with Sovereign Tribal Governments

Because sovereign tribal governments can be affected by the policies and actions of the Forest Service in managing the lands and resources under its jurisdiction, the Forest Service has a duty to consult with them on matters affecting their interests. Because of this government-to-government relationship, efforts were made to involve sovereign tribal governments and to solicit their input regarding the proposed action.

The exploration proposal was presented during multiple formal consultation meetings with both the Shoshone-Bannock and the Shoshone-Paiute Tribes in February and March 2020. The Northwest Band of Shoshone defer consultations to the Shoshone-Bannock at Fort Hall but were notified of the proposal through formal letter on February 19, 2020. Information and updates regarding the exploration proposal and the environmental analysis continues to be shared and consultation is on-going.

1.11 Issues

Issues to be carried forward for analysis were determined through the USFS and BLM public scoping processes, as described above, and through internal scoping conducted by an interdisciplinary team of USFS and BLM resource specialists. The following major issues were addressed and analyzed in detail within the 2018 Black Pine Exploration EA and will be evaluated within this supplemental.

- Wildlife including special-status species, USFS/BLM sensitive species, migratory birds, and management indicator species
- Scenic Resources
- Water Resources (Groundwater, water quality and quantity)

1.12 Other Resource Concerns

The following resource concerns were reviewed during internal and external scoping of Pilot's proposal for expanded operations and were similarly brought forward in the 2018 EA for the initial Black Pine Exploration Plan. They were, however, determined to be requests for information or other process concerns, addressed through mitigation measures or project design criteria, resolved through existing law, regulation, or policy, or are beyond the scope of this analysis. Some are addressed through other processes such as the Forest Plan or BLM Resource Management Plan. Therefore, these resources will not be analyzed in further detail in this supplemental EA; soils, air quality, land use/status, environmental justice, range, wilderness, socioeconomics, paleontological resources, roadless, climate change.

The following issues as stated are important and were reviewed during the scoping process and considered in the determination of key issues. Rationale for limited analysis or dismissal is provided below.

Ground disturbing activities associated with the expanded drilling program may facilitate the further spread of noxious and invasive weeds throughout the project area.

A baseline inventory of the project area provides an account of what infestations or noxious weeds existed prior to exploration (USFS, 2011b). To reduce the probability of introduction and spread of noxious and invasive plant species, the project design criteria and mitigations measures comply with Forest Plan standards and guidelines requiring noxious weed treatment prior, during and post implementation, vehicle and equipment cleaning, all borrow, restoration, rehabilitation, and stabilization material be noxious weed free, and a restoration plan for site reclamation developed prior to exploration. A Forest Service Botanist and BLM Natural Resource Specialist will be consulted during development and revegetation actions will include the use of native species.

Construction activities may trigger landslides or destabilize soils due to steep slopes within the project area.

The Forest Plan requires that proposed activities address the potential to affect slope stability (SWST12). As with the first Black Pine exploration Plan, the proposed expansion includes earthwork to construct drill pads and road construction to provide access. Comments received during public scoping suggest this work could affect hillslope stability.

As was completed for the initial Black Pine drilling proposal, the initial filter for analyzing potential landslide issues with the proposed routes is to use the SINMAP model. The SINMAP results show that none of the 154 sites or proposed access roads are located on anything rated as

"Moderate" or "High" for slope instability. All the newly proposed sites and roads are on slopes rated "Stable" or "Low". Similarly, the other relevant factors for these new proposals (no evidence of slope instability, phased reclamation) articulated in the 2018 EA are also consistent with the previously authorized sites and routes. The new proposal has a lower risk than the previously approved sites.

Exploratory Activity will increase health and safety risks associated with fueling and fuel transport onto public lands.

Concerns have been expressed regarding bulk fuel hauling and the risk of spills on public lands. While no bulk fuel hauling or bulk fuel storage is proposed by Pilot Gold or their contractors, the project is designed to limit the amount of fueling that will occur and provide criteria for fueling operations. Pilot Gold has prepared a comprehensive Spill Prevention Plan which is included as Attachment 2 within this draft EA.

Increased travel on routes through and onto public lands may cause road damage.

Concerns have been expressed regarding damage to routes maintained by the USFS, BLM and local county governments from increase equipment travel to the project area. Pilot would negotiate agreements with Cassia and Oneida Counties, the State of Idaho, BLM and private property owners to use or perform maintenance on roads that access the project area. Concerns were also expressed regarding seasonal restrictions for use of access routes. Seasonal restrictions for proposed activities, including access, can be found under Section 2.3; Environmental Protection Measures.

2.0 Proposed Actions and Alternatives

2.1 Introduction

As with the original authorized plan of operations, the proposal for expanded exploration drilling includes construction of new drill roads and drill sites, reconstruction of previously reclaimed roads, utilization and maintenance of existing roads, and subsequent reclamation and restoration of disturbances (USFS, 2018b).[2] Proposed drill targets in the Project Area would be defined based on existing knowledge of the geology including past and current exploration information. Proposed drill roads and drill sites relative to those operational elements previously authorized are shown in Figure 3. The actual location of constructed or reopened drill roads and drill sites may be field adjusted or eliminated based on drill results, geology, sensitive resources, or rock outcrops. Pilot's selection of proposed drill road locations would be based on avoidance or minimization of impacts to sensitive resources. No exploration operations or associated construction would occur near the reclaimed leach pad associated with the former Pegasus Gold-Black Pine Mine operation.

2.2 Alternative 1 – Existing and Proposed Exploration Activities

Pilot proposes to expand their mineral exploration activities within their 1660-acre project area beyond those locations analyzed and approved in 2018 to include the addition of up to 154 drill pads and the construction of approximately 15 miles of additional access road. Should all roads and drill pads proposed in the expansion plan be constructed the additional disturbance is estimated at 50.7 acres. The operator intends to incorporate these additional areas into their overall exploration program and annual work plans submittals, identifying the areas where annual exploration will occur. In order to limit road construction and disturbance on the landscape, no more than 25% percent of temporary roads required for drill site access, outside of access required for the full length of the project period would be constructed during each annual operating period. Concurrent reclamation would be required annually to adhere to this operating protocol. No permanent infrastructure construction is proposed, and no surface occupancy on NFS lands is required.

Water needed to support drilling operations would be accessed from the former Black Pine Mine Well located on BLM lands east of the project area. This well was drilled in 1989 and operated to service mining operations dating to the late 1990s. Pilot proposes to reinstall a pump and a service pole necessary to tie into the existing 3-phase power that once serviced the well. Pilot would grade an existing road (Mine Well Road; Figure 2) from BLM Road 201 to handle daily water truck traffic to the well site. A vehicle turn-around at the end of the road would be constructed and graveled, approximately 110-feet long and 20-feet wide, covering an estimated 0.06 acres. An elevated 12,000-gallon storage tank is proposed for installation near the well. The well and tank would be surrounded by temporary, free-standing fence panels to prevent livestock intrusion. It is expected between 10 and 20 roundtrips could be made daily depending on the number of drills

[2]Decision Notice/Finding of No Significant Impact, Black Pine Exploration Project, Minidoka Ranger District, Sawtooth National Forest, Cassia County, Idaho, December 2018.

operating seasonally. The well and access road would be used for the total life of the exploration project. Ingress and egress into the project area would be via existing county and BLM roads from I-84 and Juniper, Idaho (Figure 2). Table 2-1 presents a summary of activities pertaining to the applicant's proposal for expanded drilling operations.

Table 2-1. Summary of activities pertaining to the Proposed Action.

Activity	Description
Drilling Activities on NFS lands	
Drill Area Access	Ingress and egress into the project area would be via existing county and BLM roads across BLM administered lands from I-84 and Juniper, Idaho. Access via rubber-tire 4-wheel drive vehicles, ATV and track-mounted equipment such as D-8 dozer and CAT excavator.
Drill pads	Approximately 156 drill pads to be constructed on NFS lands. 1 to 4 drill pads may be occupied by a drill rig at any one time. Pad dimensions expected to be approximately 40 x 40 ft. in size necessary to support track-mounted industry standard drilling equipment, sump excavation and ancillary support equipment such as rod and water truck.
Drill Holes (Core and RC)	As many as 10 holes may be drilled from one drill pad. Total number of holes would be determined based on prior drill results.
Construction of temporary roads	Approximately 15 miles road construction could occur over the 4-year life of the project; 12.6 miles of new road, 2.7 miles collocated onto previous roads.
Work force	Three-person drill crew, two-three geologists, and equipment operator as needed for road/pad construction: Reverse-Circulation drilling operations planned as one 12-hour shift. Core drilling operations may be incorporated as a 24-hour/day operation for up to four months during each operating season.
Surface Use of BLM administered lands	
Drill water supply	Water for drilling operations would be pumped and trucked daily from the Black Pine Mine well and associated storage tank under approved temporary water right granted by IDWR.
Reclamation	
Exploration holes, drill pad areas and access road and spurs, and use on BLM lands.	Before the drill leaves a site, all drill holes will be backfilled and grouted in accordance with IDAPA 20.02.03, Idaho Well Construction Standards, and Idaho Groundwater Rule (IDAPA 58.08.11) All drill pads, sumps and temporary roads would be backfilled, re-contoured, and re-seeded using standard reclamation practices and on annual reclamation schedule to ensure that no more than 25% of roads beyond what has been identified for critical access remain open annually; sediment and stormwater control BMPs to be incorporated. Facilities associated with the use of the Black Pine Mine Well (Storage Tank, turn-around) will be reclaimed and revegetated. The pump will be removed. The access road would be returned to pre-project condition and well head will remain in place.

2.2.1 Project-Specific Forest Plan Amendment

Due to a previous mapping error related to the scenic environment within the Black Pine mine and Pilot's project area, the existing condition does not meet Forest Plan Visual Quality Objectives (VQOs) as currently defined in the Forest Plan. As this expansion proposal is within the same project area analyzed in 2018 implementation would continue to be inconsistent with Forest Plan Standard SCST01. Authorization of this expansion within the project area would require a separate decision and therefore a separate project-specific Forest Plan amendment. Consistent with the 2018 analysis and decision associated with the Black Pine Exploration Project, the amendment would read *"SCSTO1: All projects shall be designed to meet the adopted Visual Quality Objectives (VQOs) as displayed on the Forest VQO map. The Black Pine Exploration Expansion Project as approved on (date signed) is exempt from this standard."*

2.2.2 Ancillary Facilities

Equipment and facilities at the staging areas would include temporary trailers and a storage container. One temporary trailer would be used as a drill logging facility. A portable gasoline generator would be used to supply electricity to this facility. Pilot would use a 5th-wheel type travel trailer on site to support geological and technical staff during operations. A portable toilet facility would be placed at the staging area. No structure would be built or maintained on public land located within or adjacent to the Project Area, unless approved under a supplemental Plan. Pilot also proposes to utilize a previously disturbed 0.45-acre area on BLM lands along route BLM designated route 201 for temporary equipment parking and loading/unloading supplies and equipment for mobilization onto NFS lands (Figure 4).

2.2.3 Drill Sites and Drilling Procedures

Figure 3 shows the location of the proposed expanded area of drill sites and access roads relative to areas of currently authorized exploration. Drill pads would be approximately 40 ft. x 40 ft. and constructed within the width of the road disturbance to accommodate a track-rig and associated support equipment. Sumps would measure approximately 12-15 ft long by 10 ft wide by 5 ft deep and constructed within the area of drill pad disturbance, large enough to trap cuttings and control water overflow generated during drilling. Sumps would be designed to be zero-discharge facilities and would be constructed on the cut side of the slope instead of in the fill material. As a safety measure, sumps would be engineered to have easy egress (i.e., slopes would not exceed 10%) or fencing to prohibit wildlife and livestock access. Soil capable of serving as a growth media would be salvaged and placed uphill of the cut slope so that it could be brought back over the top of the drill pads after construction to restore natural contour.

Exploration drilling is expected to include a mix of both core and reverse circulation drills. Track-mounted or low-impact rubber-tired drill rigs would be utilized to reduce impacts. One or more drill holes may be drilled from a single site in "fans" to reduce disturbance and the required reclamation over the life of the Project. If the drilling from one location in a particular phase is successful, the site may be utilized again in later phases. The actual number of drill holes drilled per site and over the life of the project would vary depending on drilling results. Drill holes are estimated to range from 200 to 1,500 feet in depth with most drill holes drilled less than 600 feet

in depth. The duration of drilling at each pad will vary by location and sub-surface geologic conditions encountered and typically ranges between two days to approximately two weeks.

2.2.4 Road Construction and Access

Main Access Roads

The project area on NFS lands would be accessed from Juniper, Idaho via existing roads (Figure 2). The primary access into the project area would be along Juniper Road from its origin with Interstate I-84 heading south from Juniper, Idaho to its junction with W 9000 S (BLM 601), for approximately 7.6 miles. The eastern and central portions of the project area would be accessed by continuing west on W 9000 S (BLM 601) onto NFS lands via BLM Roads 587 and 201. Pilot would access the northern portions of their project area via either west on BLM 198 from BLM 587 or from BLM 586 on FS 586 into East Dry Canyon (Figure 2).

Exploration Roads

All exploration roads would be constructed on NFS lands within the project area (Figure 3). As with the currently authorized drilling activities, roads would be constructed for single lane traffic with an average travel width of approximately 13 feet (with actual widths between 12 feet and 15 feet depending on hillslope). Grading activities on the existing roads and constructed roads would create roughly a 2-ft berm along the outside of the road as is required by the drilling contractor for operational safety. This safety berm will require cut-outs at appropriate locations to allow for proper surface drainage of roads. Constructed roads would generally be kept at grades of 10 percent or less, except for short stretches less than 200 feet that may require a 12 percent grade.

Exploration roads would be constructed using typical earthwork construction practices for temporary mineral exploration roads to minimize surface disturbance, erosion, and visual contrast, as well as to facilitate reclamation. Balanced cut and fill construction would be used to the extent practicable to minimize the exposed cut slopes and the volume of fill material. Since the depth of cut would be kept to a minimum, growth medium would be stockpiled to the uphill side of the drill pad to be used during reclamation.

Road construction would be implemented using a dozer, excavator, or equivalent equipment. An excavator would be used on roads on slopes greater than 30 percent. Road grades would be no steeper than 10 percent, except for short drill spurs, to be consistent with USFS roads manual. Pilot or its contractors would utilize a road grader to maintain surface road integrity and drainage. Emissions of fugitive dust from roads would be minimized by the application of water from a water truck as a method of dust control.

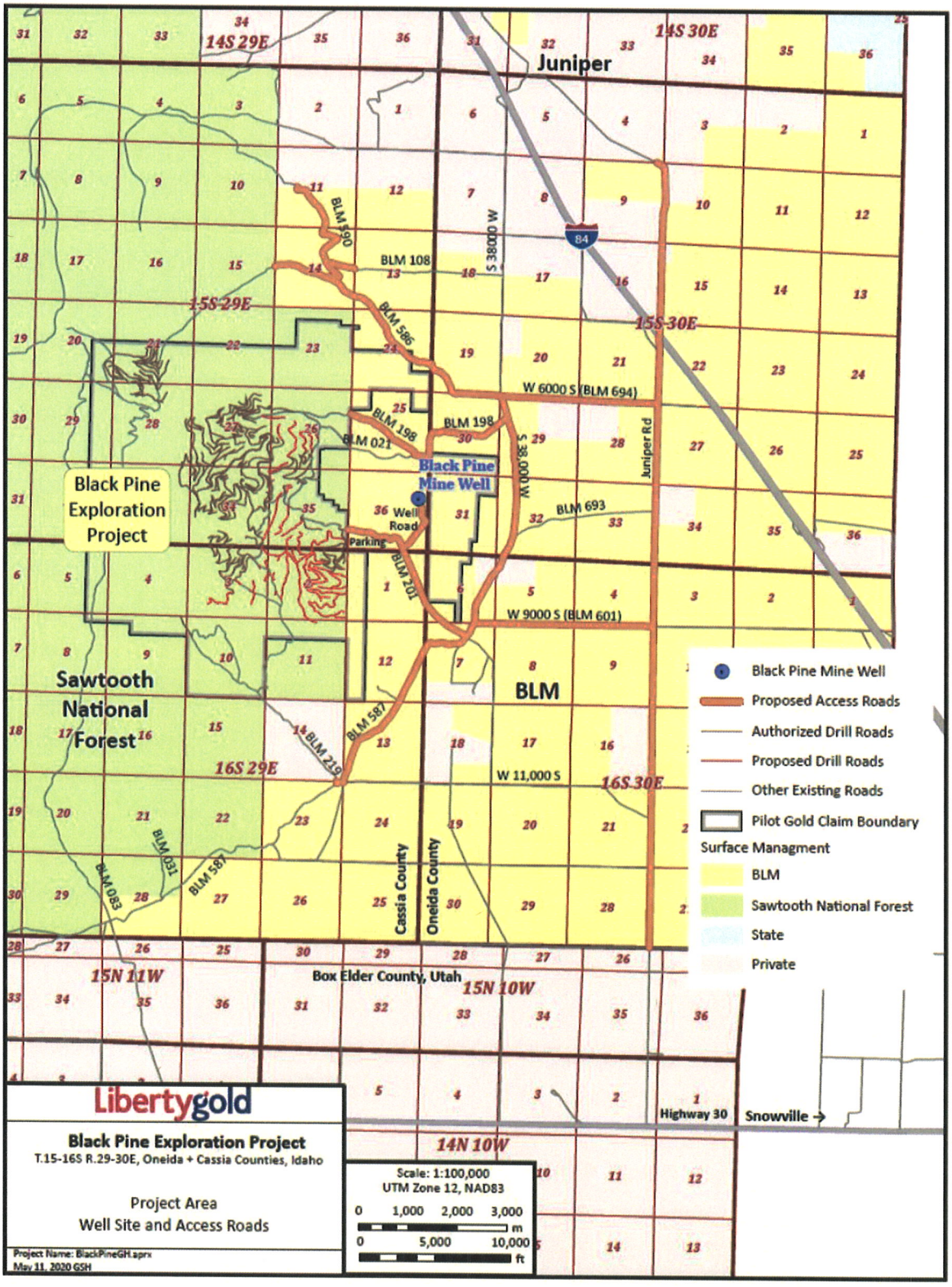


Figure 2. Land Status and primary access routes into the Black Pine Project area.

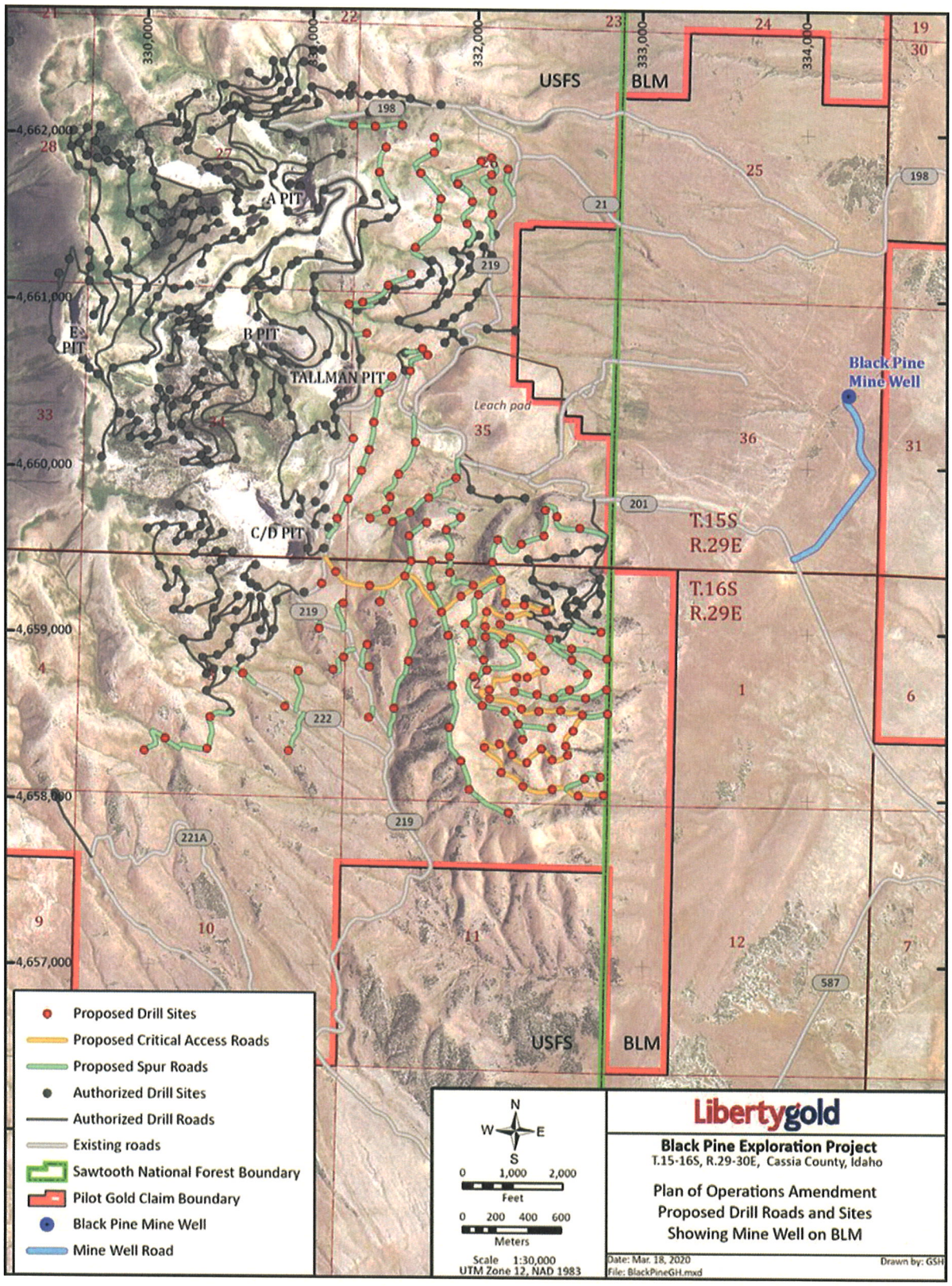


Figure 3. Location of proposed additional drill roads and drill sites in relation to those previously authorized.

There are no perennial or intermittent streams within the Black Pine project area, therefore no stream crossing improvements are expected. If constructed roads cross drainages, both the approach and exit would have a reverse grade to ensure that any stormwater flow in the drainage would not follow the road disturbance. Roads would be constructed to minimize fills and maintain unobstructed flows in accordance with 33 CFR 323.4 (a-c), the National BMPs for Water Quality Management on NFS Lands (USDA, 2012), and the Forest Plan.

Appropriate signage would be placed to notify the public of road blockages and work in the area. All sign posting would require USFS approval and meet the standards set forth in the Manual on Uniform Traffic Control Devices. When site-specific concerns indicate that the implementation of these requirements is not reasonable and practicable, exemptions would need to be requested in writing by Pilot. No public roads would be closed as a result of Project related activities. Locked gates installed during the Western Pacific exploration program will continue to be used to ensure drill roads are not accessed by the public. Additional gates may be installed to preclude unauthorized entrance by the public onto drill roads.

Road Maintenance

Pilot would perform routine road maintenance commensurate with use of the roads in the area. All road maintenance of Forest System and BLM roads in use in the project area would be limited to the existing road dimensions. Pilot would negotiate agreements with Cassia and Oneida Counties, the State of Idaho, BLM and private property owners, as needed, to use or perform maintenance on roads accessing the project area.

Well Road and Turn-around Area

The Mine Well road runs for about 4,200 feet from BLM road 201 to the Mine Well. This existing route was constructed during the Black Pine Mine operation to access and service the mine well and existing powerline It is currently closed to motorized travel under the BLM Curlew-Deep Creek Management Plan, but is suitable for water truck travel and may require minor improvements such as recontouring the road where it crosses a small dry drainage. Other improvements may include scraping the center strip to reduce grass growth that may become a fire hazard or providing water bars and rolling dips to improve water drainage. If required, gravel for the roadbed will be obtained from a nearby quarry on private land within the valley. The parking/vehicle turn-around area will be approximately 20 feet wide and 110 feet long, covering 0.06 acres (Figures 4 & 5). The access road would be watered for dust control as needed.

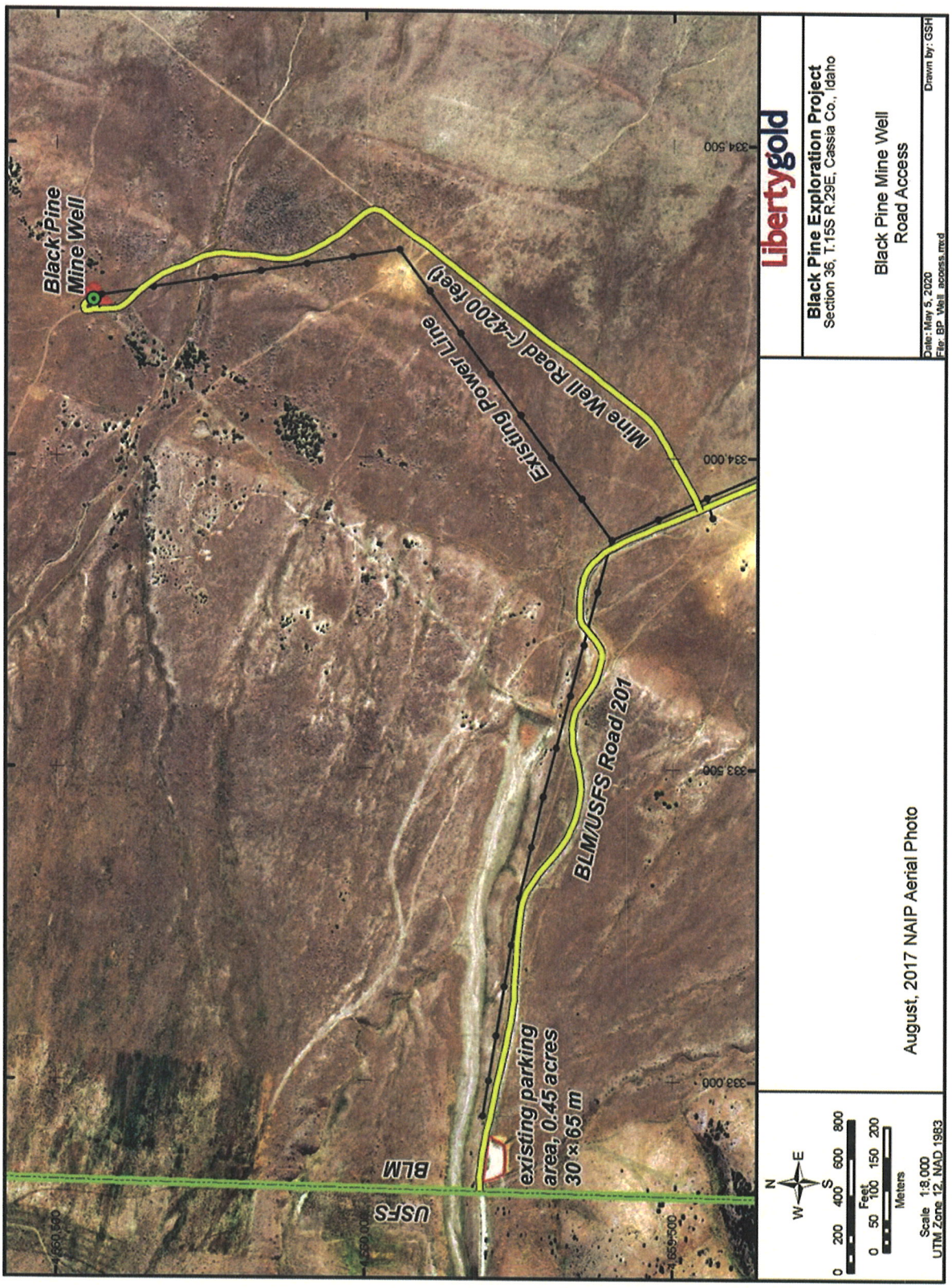


Figure 4. Black Mine well and road access.

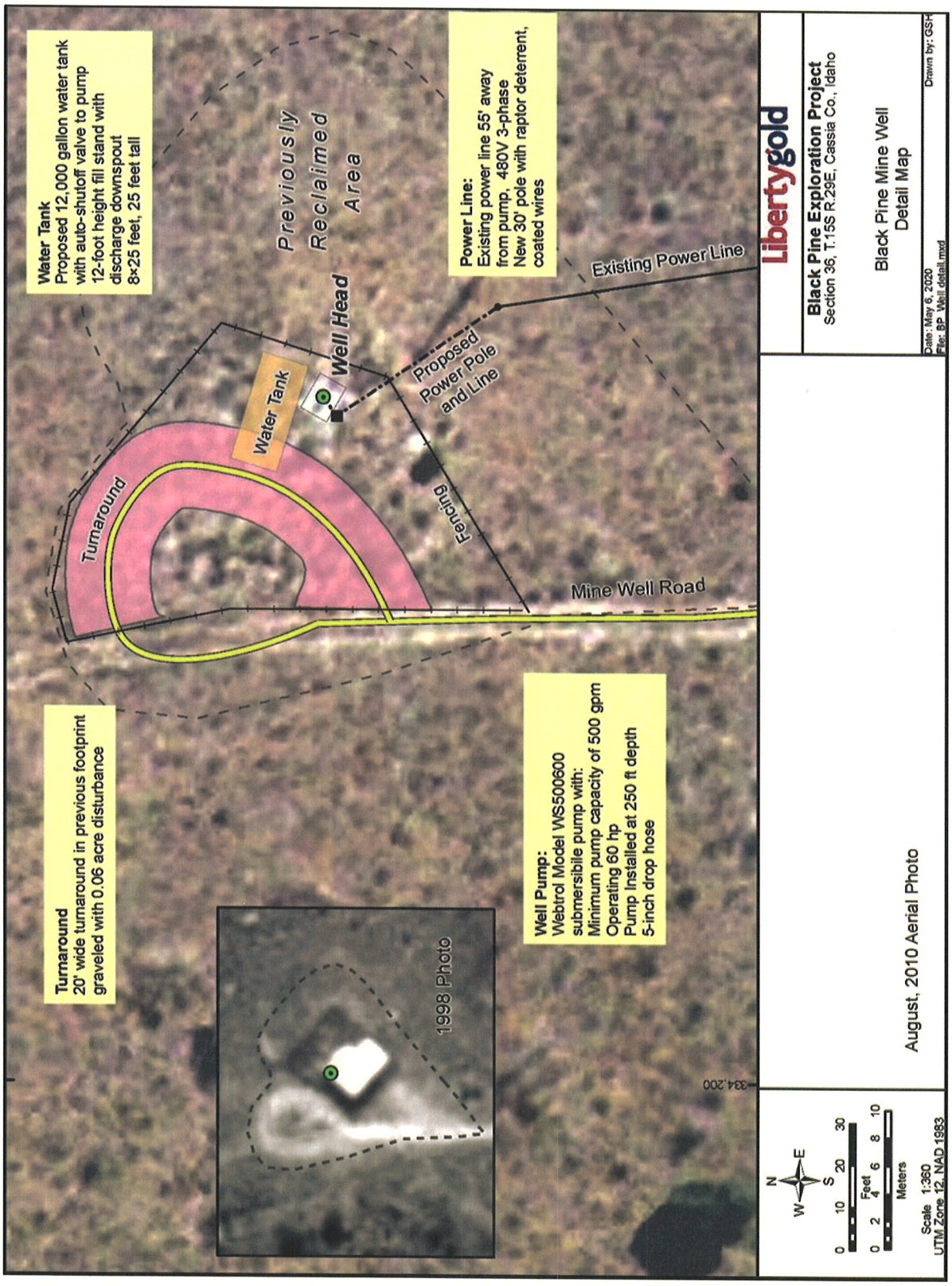


Figure 5. Detail of Black Pine Mine Well and conceptual location of turn-around.

The proposed turn-around is within the footprint of the former Pegasus Gold well building and pad, which was removed and reclaimed in the early 2000s. No topsoil will be disturbed by the location of the water tank.

The mine well and road would be used for the life of the Exploration Project. The schedule of operations on the BLM administered lands would correspond with the four-year term of the Plan (#POO-2017-072046) authorized by the USFS. It is expected that the Plan (#POO-2017-072046) would end in February 2023; however, the term could be extended. Should the Plan (#POO-2017-072046) term be extended, Pilot Gold would provide notification of the Plan extension to BLM.

2.2.5 Equipment and Vehicles

As described in Section 2.2.1, exploration drilling includes a mix of both reverse circulation and core drills. Track-mounted or low-impact rubber-tired drill rigs would be utilized from contractors to reduce impact. A Caterpillar (CAT) D6 or D8 and Cat 325 excavator, or equivalent equipment, would be used to construct the roads and drill sites where needed and facilitate reclamation. Exploration and drilling personnel and geologists would access the site in four-wheel drive vehicles. In order to complete the project in the proposed 4-year time frame, up to four rigs may be used in the Project Area and may each include the following support vehicles:

- One 2,000-gallon to 3,500-gallon water truck or all-terrain vehicle;
- One pipe truck;
- One booster truck;
- One auxiliary air compressor; and
- One portable light plant/generator as required.

2.2.6 Surface Water and Groundwater Control

No perennial or intermittent streams occur within the Black Pine project area. However, when necessary to prevent and minimize movement of soil, Pilot would install appropriate sediment barriers (such as certified weed free straw bale or silt fences) downhill of drill sites. Pilot would coordinate with the USFS to implement the appropriate Environmental Protection Measures (EPMs) prior to surface disturbance and develop a stormwater pollution and prevention plan (SWPPP) for the project and make this available for review. Discharge of excess water and drill effluent would not be allowed to flow uncontrolled from drill sumps.

All drill holes would be abandoned in accordance with IDAPA 20.03.02 prior to the drill rig moving from the drill site. Abandonment reports and logs would be submitted within 30 days of completion of the proposed drilling to the Minidoka Ranger District's Minerals Administrator. Pilot would shut down drilling activities if groundwater is encountered which could not be controlled utilizing all available containment measures and EPMs.

2.2.7 Water Use

Water needed to support drilling operations and dust suppression would be procured from the former Black Pine Mine Well located on BLM lands east of the project area, drilled and operated during mining operations dating to the late 1990s. The existing mine well will be rehabilitated and fitted with a 60-horsepower submersible pump capable of producing 1.2 cubic feet per second (500 gallons per minute). The pump would be placed at a depth of approximately 250 feet below surface. Water will be pumped to the elevated 12,000-gallon storage tank to be installed near the well and would have a float valve control to regulate water fill. The well will be operated by the water truck operator as needed and surrounded by temporary, free-standing fence panels to prevent livestock access. It is expected between 10 and 20 roundtrips could be made daily depending on the number of drills operating seasonally.

In January 2020, Pilot Gold received a temporary water right appropriation from the Idaho Division of Water Resources, (#TP-17-09). Pilot Gold will obtain annual temporary water permits for the life of the Exploration Project or until permanent water rights are secured.

2.2.8 Power Supply

Raft River Rural Electric Co-op, Inc. (RRRECI) operates the existing 3-phase power line that extends to within 55 feet of the well. The existing wooden power poles are 40 feet tall and installed 6 feet in the ground. Each pole has an 8-feet wood crossarm mounted to the pole with galvanized hardware and porcelain insulators and are raptor framed according to RUS specifications. Each pole supports 4 ACSR wires (3 phases wires and 1 neutral) all current carrying wires. On the last pole of this existing line Raft River would hang 3 25KVA transformers with cutouts to energize and disconnect the transformers. These transformers would change the voltage from 14,400-volt primary power to 480-volt secondary power. RRRECI also would bird cap and bird guard all transformers. RRRECI would set another 30-foot full treat wood pole within 10 feet of the well and run overhead wire between poles to carry the secondary power to the well. All secondary wires will be coated wires.

2.2.8 Fire Suppression

Per 36 CFR 228.11, Pilot would comply with all applicable Federal and State fire laws and regulations and would take all reasonable measures to prevent and suppress fires in the Project Area and would require employees, contractors, and subcontractors to do likewise. Pilot would report any fire to local authorities and to the South Idaho Dispatch Center. Pilot would ensure that prevention and suppression actions are in accordance with the Plan and would prepare a fire plan, including potential evacuation routes, for the duration of exploration operations.

All internal combustion power equipment used in the Project Area would be equipped with an approved spark arrester that complies with all state and federal fire requirements as set forth in the USFS publication entitled "Spark Arrester Guide" (USFS, 2012a). All arresters would be in satisfactory working condition. The following are exempt from the requirements of this rule: (a) turbine-charged internal combustion engines in which 100 percent of the exhaust gases pass

through a turbo-charger; (b) engines of passenger vehicles and light trucks equipped with a muffler with baffles; and (c) water pumping equipment used in firefighting.

All vehicles including the drilling rig, backhoe, water truck and pickup trucks would have at least one size "O" shovel (38.5-inch handle minimum) or larger, and one 5 ABC or larger rated fire extinguisher at all times. The water truck used in the Project Area would be used in the event of a fire and a method of pumping or delivering water (e.g., hoses) would be available. All portable equipment, including the drill rig, support vehicles and drilling supplies would be removed from the Project Area during non-operating periods such as winter shutdown. Prior to commencing exploration operations, Pilot would contact the South Idaho Interagency Dispatch Center to determine the level of fire danger and if any additional fire precaution procedures are necessary for the fire danger level.

2.2.9 Fuel Transport and Hazardous Substances

Hazardous substances utilized for the Proposed Action would include diesel fuel, gasoline, and lubricating grease. Approximately 500 gallons of diesel fuel and 100 gallons of gasoline would be stored in fuel delivery systems on drill rigs and their support vehicles. Approximately 100 pounds of lubricating grease would be stored on the drill rig or transported by drill trucks. Pilot has prepared a Spill Prevention Plan which is kept on site during operations and would be implemented in case of a hazardous or regulated material spill (Attachment 2). All workers on site would be familiar with the Spill Prevention Plan and would be capable of implementing all required response actions.

Gasoline required to fuel a generator providing electricity to ancillary facilities at the staging area would be transported in hand-held containers. Lubricating grease would be transported in five-gallon tubs (or similar container). All containers of hazardous substances would be labeled and handled in accordance with the Idaho Department of Transportation.

If hazardous or regulated materials are spilled, measures would be taken to control the spill and the USFS, IDEQ, and/or Idaho State Com Hotline would be notified as required. Any hazardous substance spills would be cleaned up immediately and any resulting waste would be transferred off site in accordance with all applicable local, state and federal regulations. Contract drillers would maintain spill kits on site and within vehicles and equipment for use in case of a spill.

2.3 Environmental Protection Measures

Pilot Gold commits to the following environmental protection measures (EPMs) and required design features (RDFs) to avoid or minimize potential negative effects and unnecessary or undue degradation to resources surrounding and within the Project Area during construction, operation, and reclamation of the Proposed Action.

2.3.1 Access and Safety

- Public safety would be maintained throughout the life of the project. Pilot is committed to a safety program that includes training for employees and contractors and has prepared a comprehensive, in-house safety manual that every employee is required to read. A copy is provided to contractors and visitors. The safety program includes a Safety Orientation Check-In required of all contractors and visitors to the project and includes discussion pertaining to driver safety, natural elements, operation safety, wildlife, communication, as well as other worker safety concerns. The safety program includes Pilot Gold's Emergency Reference Sheet provided to all contractors and visitors to the project that lists the emergency contact numbers of first responders and the locations of the nearest hospitals, etc., in case of emergency. Pilot conducts weekly safety meetings with every contractor working on-site. During that time, the project safety representative audits the contractor's activities and equipment. Each participant is required to sign a safety meeting sign-in sheet to attest to their attendance and understanding of the discussed topics of the week. These forms are kept on file in the project area.

- Forest Service roads or BLM designated routes cannot be blocked, or access precluded by the public.

- Pilot Gold will maintain all roads utilized as part of this plan of operations. If any existing system roads and travel routes in the project area are severely damaged as a result of Pilot Gold activities, Pilot Gold would return them to as close to original condition as possible and facilitate agreements with Oneida County, Cassia County, and BLM in order to maintain and/or reconstruct roads as necessary.

- All equipment and other facilities would be maintained in a safe and orderly manner.

- All project-related traffic would observe prudent speed limits to enhance public safety protect wildlife, livestock, and minimize dust emissions. All activities would be conducted in conformance with applicable federal and state health and safety requirements.

2.3.2 Air Quality

- Dust created in the Project Area would be minimized to the extent reasonable by minimizing vehicular traffic and using prudent vehicle speeds to minimize fugitive dust created during travel.

- Application of water on roads and pads would be used when necessary to suppress dust.

2.3.3 Water Resources, Riparian Resources, and Aquatic Systems

In addition to standard operating procedures for controlling surface water during operations, the following EPMs would be implemented to reduce impacts to water resources:

- EPMs for sediment control would be utilized during construction, operation, and reclamation to minimize sedimentation from disturbed areas;

- Construction and drilling activities would avoid springs and seeps. In order to facilitate drainage and prevent erosion, all roads would have water bars constructed, as needed, as specified in the USFS Roads Manual. As needed, sediment control structures would include, but would not be limited to, fabric and/or weed-free straw bale filter fences, siltation or filter berms, mud sumps, and down-gradient drainage channels in order to minimize adverse environmental impacts;

- In coordination with the USFS, Pilot would place certified weed-free straw bales and silt fences in drainages to capture sediment where it is determined to be necessary based on site inspection and monitoring by USFS staff and Pilot staff and contractors;

- No chemicals or equipment would remain on site during seasonal closures.

2.3.4 Solid Waste

- A minimal amount of general refuse associated with drilling operations is expected to be generated in the Project Area. All refuse would be removed and disposed of off-Forest in an authorized landfill facility off-site and consistent with applicable regulations. No refuse would be disposed of or left on site.

- Portable toilets would be used and serviced during operations and removed at the end of each operating season.

2.3.5 Scenic Values

- Consistent with annual phased drilling operations, Pilot would reclaim constructed roads not required for future use in the Project Area;

- As required for operations, all lighting fixtures would be hooded and shielded, face downward, located within soffits, and directed onto the active drilling only, and away from adjacent areas.

- Within two years of final operation completion, final reclamation and seeding will be completed of all remaining surface disturbance associated with the project.

2.3.6 Cultural Resources

- Cultural resource inventories for the Project Area related to the initial Black Pine Exploration Project were conducted by ASM Affiliates, Inc. (ASM) in the summer of 2017. Additional survey and resource inventories applicable to the expansion and the connected actions were conducted spring 2020. Eligible and unevaluated cultural features, as identified in the cultural inventories would be avoided by all exploration activities. This avoidance strategy would be confirmed through the annual implementation plan for each

phase. If previously undiscovered cultural resources are identified during exploration activities, the discoveries would be left intact and the USFS would be contacted and, if appropriate, tribal governments consulted with for guidance. Pilot would not proceed with surface disturbing activities in areas of unrecorded cultural resources unless written authorization is obtained from the District Ranger.

- Pursuant to 43 CFR 10.4(b), if any unidentified cultural resources are discovered during proposed activities, operations in the immediate area of the discovery would be halted. The discovery would be reported to the BLM, and the BLM or its authorized representatives would be allowed to document and evaluate the discover, and if appropriate, would be allowed time for the determination and implementation of actions necessary to prevent or mitigate the loss of important cultural values in consultation with the Idaho State Historic Preservation Office (SHPO).

2.3.7 Biological Resources

- Based on wildlife survey and baseline analysis presented in the 2018 Black Pine Exploration Project EA, the Project Area has been broken up into four distinct areas. The following timing restrictions are currently in place for authorized exploration activities. These restrictions will translate to the new area to avoid or minimize potential impacts to wildlife and/or sensitive USFS species (Figure 6) and would prohibit drilling activities (road construction, drill rig mobilization, or drilling) during the timeframes/areas identified.

    - **Area 1:** Southeastern drill-hole locations: Due to known Greater sage grouse and Columbia sharptail grouse lek locations occurring closest to this area (greater than 2 miles away), project construction activities in this area would be restricted between March 1 through June 30 to reduce potential impacts to lekking activities.
    - **Area 2:** South-central drill-hole locations. Due to the evidence of wintering mule deer in this area, project activities would be restricted from December 15 through March 15.
    - **Area 3:** Central drill-hole locations: Due to this area being largely disturbed from previous mining activities and observations of wintering mule deer being the lowest in this area likely due to marginal habitat, no project timing restrictions are identified, and this area is considered open.
    - **Area 4:** Northwest drill-hole locations: Although there is not a wildlife timing restriction for this area, in a typical year snow conditions would preclude project activities in this area until June 15 or later.

- Additional timing restrictions on Project Area access routes to reduce potential impacts to GRSG and CSTG would include:

    - During the lekking season (March 1 – June 30), use of BLM Route 601 between the intersection with BLM Route 587 and Juniper Road/BLM Route 607 for

project access would be limited to 10 AM to 5 PM for any heavy vehicle traffic (e.g. transports [drill rig, rig support vehicles, dozer, excavators, office trailers] and mud supply). Trip limitations (consolidated convoy travel into project area from Interstate) would be required for daily light truck (4x4 pickup) project entrance between 6PM and 9AM. Two convoy trips in the AM (e.g. 5:30 and 7:30 AM), and one in the evening (e.g. 7 PM) would be expected to effectively minimize traffic/noise related impacts to lekking grouse. If project access be necessary external from convoys during lekking season timing restriction, use of Route 693-587-201 would be required.

- Use of BLM routes 586, 587, 108, and 694; and route 587 north of route 694, south of route 201 would be avoided during the lekking and wintering seasons (November 1 – May 15). Should unforeseen need arise that would conflict with said timing restrictions, use of routes would be limited to 9am-6pm, daily, on a case -by-case basis.

- From March 1 and May 15, Pilot would limit travel to the Black Pine Mine well between 6:00pm and 9:00am to minimize potential disturbance to Greater sage grouse. Water trucks would be filled before the end of the prior-days operations, so as to avoid traveling the mine well road before 9:00 am.

- The entirety of the BLM portion of the project area is within both sage-grouse nesting and winter habitat. Construction and maintenance (road, facilities, or otherwise) that could result in ground disturbance, and therefore direct impacts to nesting birds, during the migratory bird/sage-grouse nesting season (April 1 – July 31) and wintering seasons (November 1 – March 31) should be avoided. If nesting season is unavoidable, bird surveys shall be conducted by BLM approved biologist/survey method and buffered in accordance with the BLM Pocatello Field Office RMP (2012).

- The elevated storage tank and service pole proposed for the well site will be outfitted with raptor perch deterrent structures.

- Pilot would continue to coordinate with specialists from the USFS, BLM and Idaho Fish & Game to implement a strategy to protect sensitive species and develop and incorporate all applicable design features stemming from analysis of on-going wildlife surveys on an annual basis through the annual plan of work submitted to the USFS.

- Raptor surveys would be required prior to project activities during the March 15 - July 15 time period. If active raptor nests are discovered, an appropriate buffer as identified by the USFS wildlife biologist, based upon best available science and life history traits of the species would be developed by the USFS to be implemented until birds have fledged.

- All drill sumps would be constructed shallower on one end than the other so if an animal or person were to fall in the sump they could safely escape.

- Pilot would plan ground-clearing activities to avoid the nesting season specific to migratory birds and raptors (May 15 to August 15) to minimize potential impacts to nesting birds. Any vegetation in avian habitat planned for removal during the nesting season would first be surveyed for nesting locations. Such surveys for migratory birds, raptors, or other special status bird species would be conducted May 15 through August to identify any active nests in areas of planned disturbance. If active nests are found, they would either be avoided until fledging occurs or appropriate buffers around active nests would be developed by a USFS biologist before these areas are disturbed.

- Reclamation plans would focus on restoring areas disturbed by the mineral exploration activity to healthy sagebrush ecosystems. Specifically, reclamation would include bitterbrush and sagebrush seeding and planting of shrub plugs is a component of reclamation on sites that have the potential to support these species. Reclamation seed mixes would include at least two sage-grouse preferred forbs are included in reclamation seed mixes. Evidence of sage-grouse use would be considered in determining successful reclamation.

- If a Golden Eagle nest is discovered in the project area, the proponent would work with the Forest Service and US Fish and Wildlife Service to ensure "Take" according to the Bald and Golden Eagle Protection Act does not occur. If "Take" could not be avoided, the proponent would work with the US Fish and Wildlife Service on any required permitting.

- Nest buffers would be based on the species and site specifics of the area, including topography, screening cover, distance that noise carries during implementation, etc. as well as the species life history and species-specific requirements. USFS will use USFWS buffer guidelines for raptors and will adjust to site specific conditions as required.

- Trees 12 inches DBH or greater would be avoided and not removed when constructing temporary roads unless there was no other alternative for the route siting that would be acceptable for safety purposes.

- Pilot would continue to cooperate with the USFS and BLM to conduct annual Grouse lek counts of active leks closest to the Project Area for the life of the project.

2.3.8 Vegetation Resources and Noxious Weeds

- Pilot will work with the USFS and BLM to site the storage tank and well turn-around facility so as to avoid disturbing sage brush vegetation around the BPMI well-head.

- Pilot would continue to cooperate with the USFS and BLM to inventory, monitor and report noxious weeds and their treatment within areas of active disturbance, areas of on-going reclamation and reclaimed areas related to Pilot's activities within the Project Area.

- Noxious weed control measures would be implemented for any State or County listed noxious weeds following the Sawtooth and Boise National Forests Invasive Species Project EIS, Pesticide Discharge Management Plan, and NPDES Permit.

- Pilot would treat invasive weeds along roads and access roads (requiring maintenance) prior to annual ground disturbing activities to reduce the threat of inadvertent distribution.

- At a minimum, on-site inspections and hand-spraying treatments would be conducted semi-annually by Pilot's personnel. Inspection and treatments would be recorded and provided to the USFS.

- All vehicles or equipment necessary for operations would be cleaned of dirt, mud, or visible plant debris before moving into the Project Area.

- Invasive weed species would be monitored and treated until reclamation efforts have been declared successful by a qualified USFS representative.

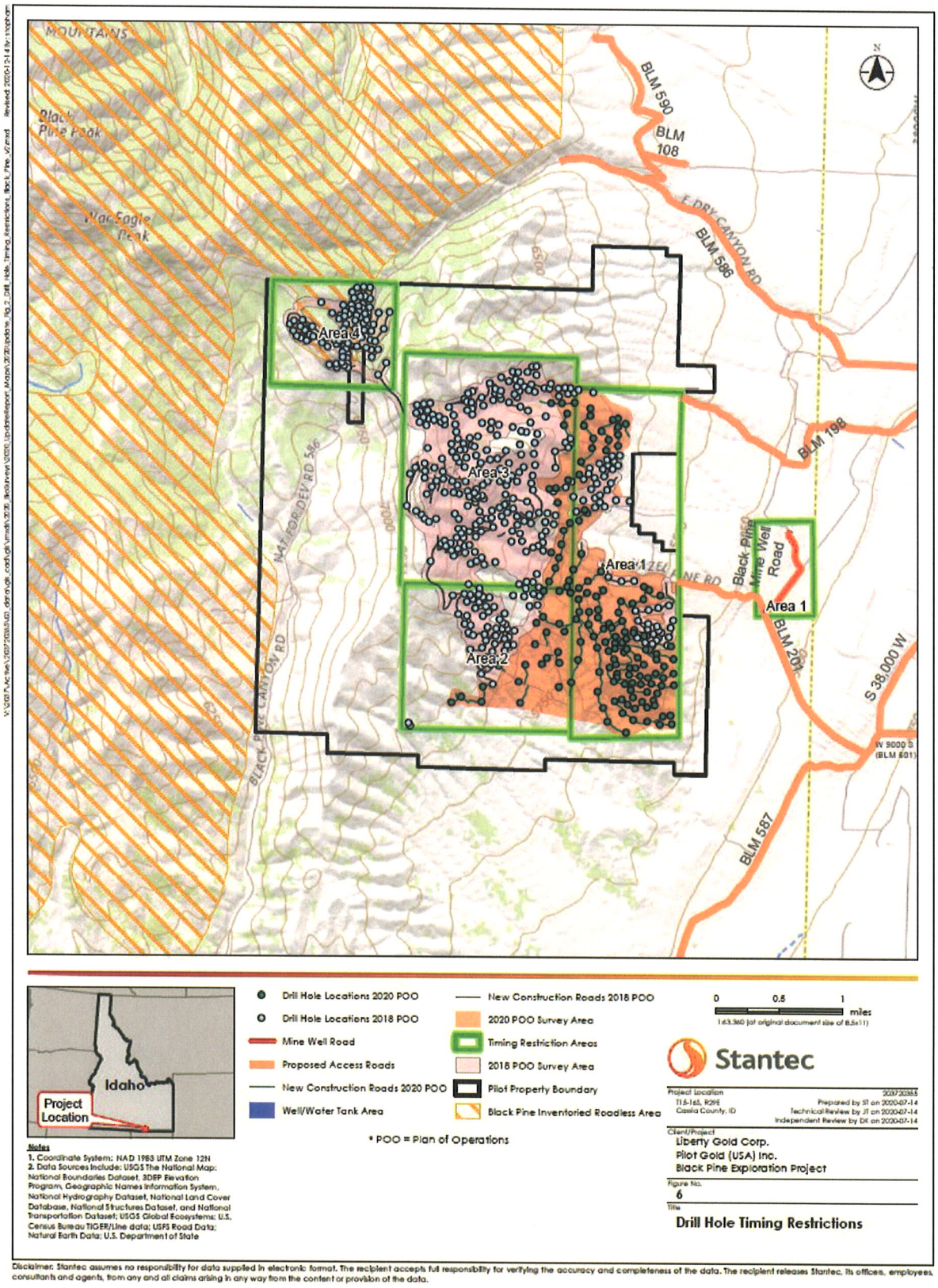


Figure 6. Area of Project Timing Restrictions

- When completing rehabilitation and reseeding activities, ensure sagebrush and/or bitterbrush seedlings or seeding is a component of rehabilitation activities when these species are suitable for the rehabilitation site(s). Rehabilitation activities should also include preferred forbs as a component of seed mixes. This design feature is to address habitat components for mule deer winter range and sage-grouse habitat within the project area.

- Any seed mix used for restoration would be approved by the Forest Botanist.

2.3.9 Grazing Management

- To reduce the impact to livestock grazing, any potential damage to livestock fences from exploration operations would be immediately replaced or repaired.

- Pilot employees and contractors would leave all livestock gates, open or closed, when traveling through the Project Area for public safety and to ensure non-interference with livestock operations.

- Pilot will coordinate with USFS, BLM and grazing permittees to ensure reclamation activities can be timed so as not to be adversely impacted by livestock.

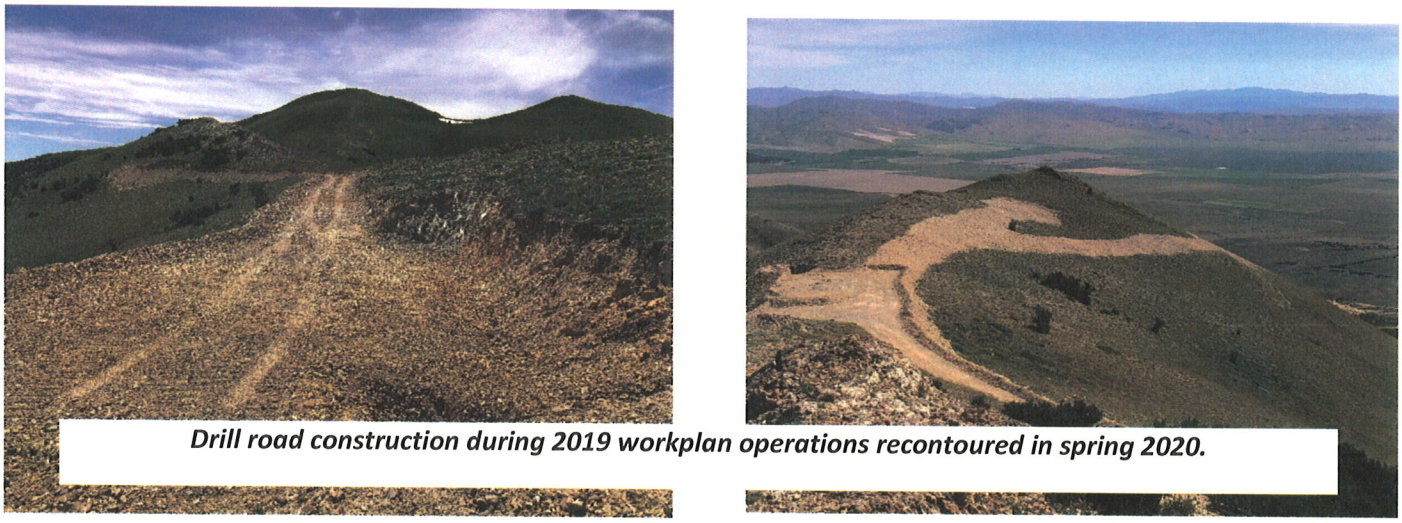
2.3.10 Closure and Reclamation

The Project would consist of phased exploration with concurrent reclamation. Upon completion of drilling, all drill holes would be plugged and abandoned according to the regulatory requirement set forth in IDAPA 20.02.03, Idaho Well Construction Standards, and Idaho Groundwater Rule (IDAPA 58.08.11). Pilot would notify the District Ranger or Minerals Administrator when drilling operations are complete and when season and/or final reclamation work would commence.

The goal of the phased exploration/concurrent reclamation process is to limit the total active disturbed acreage throughout the life of the project. Surface disturbance determined necessary for critical access would remain open until it is determined that the area is no longer necessary to facilitate project access and further exploration, at which time it would be reclaimed. Roads required for longer term project access would be physically closed to the public until such time as they are fully reclaimed. Areas concurrently reclaimed would be seeded at the appropriate time and monitored to ensure that the goals of reclamation have been met.

Areas no longer needed for mineral exploration activities would receive final recontouring and seeding within one year after completion of exploration activities. Constructed drill roads that are no longer needed for access or mineral exploration would receive final reclamation within one year after completion or abandonment of the Project and include the following: a) closure to normal vehicular traffic; b) construction of cross drains, dips, or water bars where needed; c) shaping road surface to as near a natural contour and stabilizing with woody debris where feasible; and d) seeding all regraded areas with a USFS approved reclamation seed mixture.

Pilot would reclaim all surface disturbances to approximate original contour when these areas are determined to be no longer necessary for exploration activities. Areas previously reclaimed may be reactivated based on drilling results and addressed by subsequent work plan submittals. Any past reclaimed areas that are reactivated would be reclaimed in the same manner as discussed above.



Drill road construction during 2019 workplan operations recontoured in spring 2020.

All other disturbed areas, including sumps, staging areas and operational areas on BLM administered surface would be reshaped to approximately the same original contour, and the areas seeded with an agency-approved seed mix, where appropriate. Since the Project Area provides important forage for several wildlife species, the seed mixes would include one or more forage species, as well as a variety of grasses, forbs and shrubs to provide appropriate forage and shelter for these species. Erosion control measures would be implemented as needed.

2.4 No Action Alternative

Under the No Action Alternative, the USFS would not approve the proposed expansion of drilling activities on NFS lands. No exploration would occur within those target areas identified by Pilot and no additional information on potentially valuable mineral deposits within the Project Area would be obtained. However, Pilot would be able to conduct previously authorized exploration drilling operations under the 2018 Plan of Operations and the 2011 Plan of Operations transferred from Western Pacific Resources when Pilot came into possession of the Project Area. Also, under the No Action Alternative, the BLM would not approve the amended Plan of Operation (IDI-39132) filed by Pilot Gold for use of the Black Pine Mine well and commercial use of previously existing access routes. Pilot would be able to continue utilizing Black Pine Well No. 1 and access routes on BLM lands to support the currently authorized drilling activities under BLM grant IDI-39032 until December 31, 2020 at which time the grant will expire.

Implementation of the No Action Alternative would not meet Pilot's purpose and need and would not meet national policy objectives to facilitate appropriate mineral resource development. The

No Action Alternative would also impair Pilot's mining claim development rights under the General Mining Law of 1872.

2.5 Alternatives Considered but Not Analyzed

Limited Operating Period

This alternative was presented in the 2018 EA for the Black Pine Exploration Project and considered specifically to respond to issues pertaining to wildlife and operational disturbance. The Forest Service would approve the proponent's expansion plan; however, the operation would be limited to one 12-hour shift from roughly 6:00 am to 6:00 pm in order to limit the human activity, traffic, and noise that may cause disturbance to big game and other wildlife species. A project-specific Forest Plan amendment would be required for implementation of this alternative to exempt the project from standard SCST01.

Pilot's need for a 24-hour operating period would be to conduct core-drilling operations which typically require a round-the-clock presence in order to secure a full length of core. Core drilling is a typical and often necessary component of an exploration program. The core reveals details of stratigraphy, rock structure, and mineralization and is typically drilled in conjunction with reverse circulation in order to conduct additional assaying and metallurgical testing of the cored material.

Pilot originally estimated a core drill could be on site between eight and twelve weeks each season during the life of the project. A core rig was on site for approximately six weeks during the 2019 operating season and again during the 2020 operating season. It was determined that the Forest Service does not have the authority to deny Pilot the ability to collect the information relevant to their exploration effort only available through an industry standard core drilling operation. Pilot could annually coordinate this component of their program with the USFS to avoid possible wildlife timing restrictions that may be required by the USFS, BLM, and Idaho Fish and Game. As such, this alternative was dismissed from further analysis.

Forest Plan amendment to correct the VQO

As described in Section 2.2.1 and in more detail in Section 3.3.2 of the 2018 EA for the Black Pine Exploration Project, the Forest plan VQO for the area is incorrect. The Forest considered correcting the mapped VQOs within the project area rather than a project-specific amendment to exempt the project from the standard that relies on the incorrect VQO; however, the 2012 Planning Rule (36 CFR 219) requires utilization of a different management system for visual quality/scenic environment than that which is currently in place for the Sawtooth National Forest. In order to correct the mapping error, the visual mapping system for the entire Forest would need to be updated using a Forest Plan-level amendment, which is not feasible at this time.

Drafting Water from off-site Location

Pilot Gold, USFS and BLM considered the continuation of drafting water from an off-site source and trucking water into the project area. The community of Juniper is located approximately 11

miles northeast of the project area. The operation of water trucks and support vehicles traveling to and from Juniper to the project area for the life of the project would result in unnecessary road degradation, impacts to air quality, potential conflicts with water rights and grazers in the area, and unnecessary disturbance to wildlife. Increased heavy-truck traffic would increase health and safety concerns. Increased travel times to and from the project area could lead to delays and complications in drilling and render the project economically infeasible. As compared to the Proposed Action, Pilot Gold under temporary water right would utilize water from a nearby well source within 2 miles of the project area, therefore minimizing unnecessary degradation to roads and associated disturbances and potential conflicts with other water right holders and beneficial uses. This alternative is economically infeasible and does not result in incremental environmental benefits; therefore, it has been eliminated from detailed analysis.

Helicopter Supported Drilling

Helicopter drilling was evaluated as a possible alternative in the 20-18 EA and considered again in this supplemental analysis. In terms of practically incorporating the area of expanded drilling into the annual workplan administration, the forest Service did not deem it practical to have certain portions of the drill program subject to drilling via helicopter, where the larger portion of the plan area has been previously authorized as a track and truck-mounted program. This alternative was dismissed, however the original rationale and supporting documentation regarding the economics, risks, safety concerns, fuel handling, etc., related to helicopter-supported drilling are made part of this project record.

2.6 Monitoring

During all phases of exploration operations, Pilot would cooperate with the USFS and BLM to inventory and monitor noxious weeds and undesirable plants within the areas of disturbance. At the conclusion of the Project, reclaimed areas would be monitored for at least three years to ensure successful establishment of vegetation. Monitoring for the control of erosion would be carried out in conjunction with reclamation and noxious weed monitoring.

2.7 Monitoring of Action Alternative SOPs and Reclamation

As part of project Standard Operating Procedures (SOPs), drill sites and other reclaimed areas will be monitored to ensure that EPMs are in place and working so that soil erosion and other potential resource impacts are avoided or minimized. Specific monitoring measures applicable to the Action Alternative are outlined under project SOPs and additional necessary incorporated based on the complete effects analysis. Site inspections and inspection reports will be completed by USFS Minerals Administrators. Site inspections and monitoring of reclamation activities provide direction on the success of actions that have been taken, corrective actions needed, and the timeframes that recommendations are made. Reclamation that has been conducted would be tracked and documented and provided to the Forest Service through annual reclamation statements. These statements would outline specific EPMs applied during and after project-related operations.

2.8 Federal, State or Local Approvals Potentially Applicable to Proposed Action

Table 2-2 presents a summary of potential permits and approvals required by Pilot Gold prior to project implementation.

Table 2-2. Summary of permits and approvals.

Approval Type	Status/Comment
Water right from IDWR	Pilot will procure temporary water rights to pump water necessary to meet project needs until a permanent water right is granted. Water will be trucked to project area from off-site under a temporary ROW granted by the BLM until authorization is granted to draft water from Black Pine Mine well.
Stream Alteration Permit from IDWR	No permit anticipated. No perennial or intermittent streams on site. Not required for impacts on intermittent or ephemeral streams.
NPDES Multi-Sector General Permit from the USEPA	A project SWPPP has been developed for the project and is available for inspection at the project site. The SWPPP would be updated as appropriate to consider project components related to expansion plan.
Reclamation Bonding	The appropriate bond would be established and required by the Forest Service and BLM before activities subject to the bond are implemented.
Conditional use permit and road maintenance agreement from Oneida County	Necessary permits/agreements would be obtained as needed before activities commence.

3.0 Affected Environment

This section describes the current status of resources that may be affected by either the Proposed Action or No Action Alternative. Data concerning existing (i.e. baseline) conditions and resource trends were obtained from the following; previous studies/surveys; published sources; and/or field observations of the Project Area. Those elements of the human environment that are not present, present and not affected, or determined not to be affected and are not considered further in this EA are listed in Section 1.9. The elimination of irrelevant issues follows CEQ policy, as stated in 40 CFR 1500.4.

The Project Area is located on NFS land within the central Black Pine Mountains in south eastern Cassia County, Idaho. It is situated within the area of the former Black Pine Mine at elevations ranging from 5100 to 8000 feet AMSL. The Project Area encompasses approximately 1660 acres on lands administered by the Minidoka Ranger District of the Sawtooth National Forest (Refer to Figure 1). The dominant topographic features found in this region are deep canyons and valleys with relatively short and steep drainages. The affected environment for each affected resource is discussed below.

As directed by the CEQ implementing regulations for the NEPA, the environmental consequences discussion focuses on resource conditions in the Project Area associated with the major issues and concerns presented in Chapter 1. The discussion of environmental consequences forms the scientific and analytic basis for comparing the alternatives under consideration. Environmental consequences are discussed in terms of direct, indirect, and cumulative effects (40 CFR 1502.16). Direct effects are caused by the Proposed Action and occur at the same time and place (40 CFR 1508.8(a)). Indirect effects are caused by the Proposed Action and occur later in time or further removed in distance but are still reasonably foreseeable (40 CFR 1508.8(b)).

Environmental consequences and effects are discussed in relation to indicators and thresholds. Indicators, also known as measures, have been established for each resource and may be either quantitative or qualitative. Indicators are used to evaluate the potential effects of the alternatives. Thresholds are used to determine the significance of the effects. The cause and effect relationship between the indicator and the specific threshold is discussed for each alternative to highlight effects or unintended consequences that may occur from the Proposed Action and No Action Alternative.

3.1 Previous Reclamation, Remediation and Mitigation Activities

The Black Pine Exploration Project, including the area of expansion considered in this document, encompasses previously explored and mined areas of the Mineral Gulch, East Dry and Black Pine drainages. The area is in the Black Pine Mining District, which has experienced intermittent underground and open-pit mining operations over approximately 100-year period, resulting in approximately 300 acres of disturbance of Forest Service and BLM lands. Past reclamation and remediation of prior exploration and mining activities have been described in Section 3.1 in the 2018 Black Pine Exploration EA.

3.2 Groundwater Resources

This section describes groundwater resources that may be affected by expansion of project activities as well as the potential environmental consequences that may result. Information for groundwater resources was obtained through USGS topographic and geologic maps, prior groundwater studies conducted for the Black Pine Mine operation, a groundwater review questionnaire prepared by Pilot, and water quality data collected roughly between 1991 and 2020, which continues as part of ongoing monitoring required under the currently authorized plan of operations. Additional information, including drilling procedures and their relation to groundwater resource protection as well as water quality data, may be reviewed in the groundwater specialist report prepared for the first phase of the exploration[3] and 2018 decision and a supplement to that report prepared for the expanded operations available as part of this project record (Donohoe, 2020). The existing conditions for the No Action Alternative are the same as those for the Proposed Action.

3.2.1 Affected Environment

Geology

The bedrock and surficial geology present within the expansion area have not changed from that which was described previously. The reader is referred to the 2018 Black Pine Exploration EA, the final groundwater report prepared for the Black Pine Exploration Project, and the supplemental groundwater report prepared in support of this analysis.

Occurrence of Groundwater

Given the long history of mining and exploration, groundwater resources in the vicinity of the Black Pine Mine, including the proposed area of drilling have been well documented. The main hydro-stratigraphic units in the area of the proposed operations are most likely associated with the Middle and Lower Pennsylvanian Oquirrh Formation however given the structural complexity of these strata, the lateral and vertical extent of these units is limited. The occurrence of water in an aquifer depends on the type of porosity (primary and secondary) of the rocks or deposits and the degree of interconnection of open spaces within them. For example, unconsolidated alluvial deposits which are present mostly as valley fill east of the project area have substantial primary, or intergranular, porosity (open spaces between fragments or grains). Both the Gold Mine well and BPMI production well (Figure 7), which are closest in proximity to the project area, produce water from the alluvial aquifer. Most of the porosity in consolidated sedimentary, igneous, and metamorphic rocks is secondary and resulted from tectonic activity, such as faulting and folding. These secondary open spaces generally are not well connected.

Conceptual Hydrologic Model

Groundwater recharge occurs by way of rainfall and snowmelt within the upper reaches of the Black Pine and Mineral Gulch drainage basins and migrates to a point of topographic low. There

[3] Final Groundwater Specialist Report, Black Pine Exploration Project, USFS, August 2018.

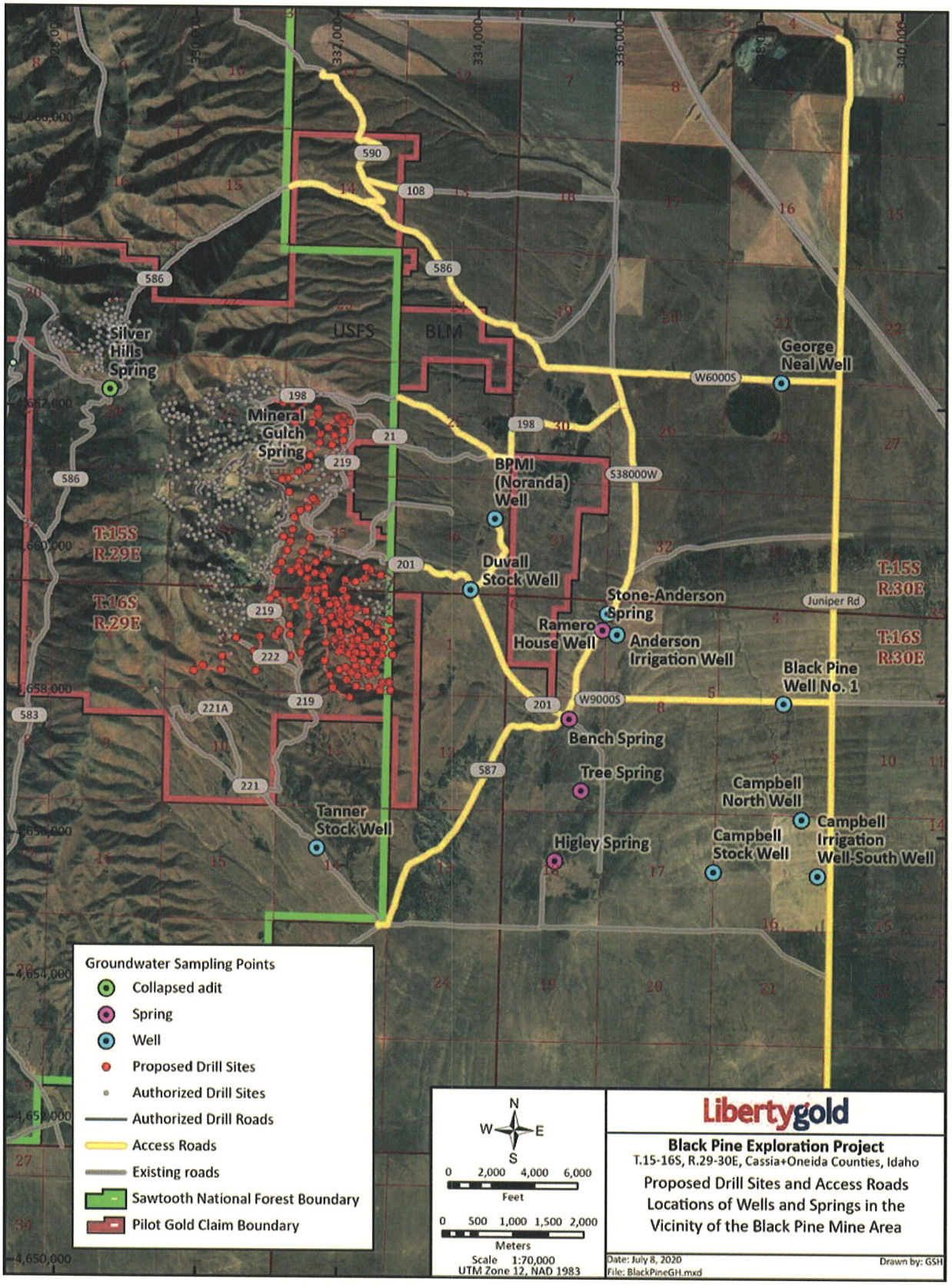


Figure 7. Location of wells and springs in proximity to the Black Pine Project Area.

are no perennial or intermittent streams in the project area. Surface flow from the existing mine area is generally in an easterly, radial pattern into the valley. Although mountain channels are well defined, they show little sign of active runoff which would primarily be during times of spring snow melt or periods of severe or sustained thunderstorms during the summer months. In the project area, groundwater likely travels along bedding surfaces or structures within the metasedimentary rocks.

Water level Information

Wells

The location of wells and springs in proximity to the project area are shown in Figure 7. Exploration drilling completed to date within in the former mine area and leach pad areas did not encounter any measurable groundwater at depths between 300 and 700 feet below surface (Morrison-Knudsen, 1988; USFS, 1994).

The wells identified in the area are between 100 and 550 feet deep. Irrigation wells in the alluvial valley are between 300 and 500 feet and are generally deeper than wells located along the base of the Black Pine range, which are approximately between 300 and 400 feet deep. One domestic well (Romero) drilled in 1999 has a finished depth of 100 feet. Depths to water vary between 100 to 250 feet according to well log information. Direct measurement of the BPMI Production well in September 2017 indicated a static water level of 163 feet below ground surface. The closest well to the mine site (Gold Mine/Duvall Well) drilled in 1952 reported a static water depth of 228 feet. No recent water level data exists to indicate if the depth to water has remained static or if water levels have changed.

The regional direction of groundwater flow trends to the east-southeast from the mountainous areas toward the alluvial valleys. A groundwater study completed by Idaho Geological Survey in 1995 for the purposes of developing a groundwater model to predict the drawdown effects of siting a second production well at the Black Pine Mine describes a similar conceptual hydrogeologic model. The report determined groundwater flow direction to be southeast from the BMPI project well based on static water level data from the Gold Mine/Duvall Well, BPMI Project Well, and the Anderson Irrigation Well (Whelan, 2000).

Springs

Springs are considered surface expressions of the water table or perched zones of groundwater. Surface water resources in the Curlew Valley east of the project area are limited and consist mainly of several small springs (refer to Figure 7) located approximately 3 to 3.5 miles southeast (downgradient) of the former mine and project area. These springs provide stock water as well as domestic water supply for several residents in the valley. Lost Tunnel and Silver Hill Springs located within Black Pine Canyon on the west side of the Black Pine Range have also been identified. Silver Hill Spring has been developed for stock watering purposes and monitored periodically by the Forest Service since 2006. The Silver Hill Spring along with a small seep in Mineral Gulch are both surface water expressions emanating from backfilled adits associated with

the Silver Hills and Hazel Pine operations. Silver Hills Spring flows less than 0.5 gallons per minute. Mineral Gulch sampled in 2017 flowed less than 0.10 gallon per minute and does not sustain appreciable flow. Mineral Gulch continues to be monitored but has not been sampled since fall 2017 due to a lack of water.

Groundwater Quality

Data relevant to groundwater quality was first compiled within a contractor-prepared baseline study for the first phase of mining operations at the Black Pine mine. The study identifies pre-1988 water quality sampling completed for spring locations as well as stock wells distal to the project area (Chapman, 1972; Morrison-Knudsen, 1988). Additional sites (wells and springs) sampled between 1991 and 2001 as part of a groundwater monitoring effort associated with the expansion of the Black Pine Mine operation were also evaluated and considered in the analysis of the proposed action. Monitoring of select sites has continued through to present day. A new baseline protocol was established in the fall of 2017 upon the receipt of Pilot Golds Plan. All previously sampled locations were evaluated, and additional sites were included that were not incorporated or not available to sample in years prior.

Groundwater sampling has continued biannually since 2017 when the first phase of Pilot Golds exploration plan was received, with the most recent samples collected June 2020. Both total and dissolved metals are considered as three of the sampled sites are used as a domestic/culinary water source (Romero, Stone Spring, Higley Spring[4]). In general, water chemistry in the area indicates calcium-bicarbonate type water with low levels of trace metals. The data presented indicates groundwater quality meets or exceeds the Idaho Groundwater Quality Standard as well as Drinking Water Standards and water quality has not changed appreciably since data collection began (Attachment 5).

3.2.2 Environmental Consequences

Direct and Indirect Impacts of the Proposed Action on Groundwater Resources

Direct impacts to groundwater resources may include aquifer contamination from drilling if drill holes are left open or improperly plugged. Contamination could occur through open holes by surface run-off or separate aquifers becoming interconnected through drill holes. Significant loss of fluids from drill holes, and migration of water or drilling fluids via large faults, fractures, or solution cavities could affect a receptor, such as a stream, spring, wetland, or water supply well.

To ensure groundwater resource protection, only one hole per rig would be open at a time and Pilot would follow drill hole plugging regulations and additional USFS groundwater protection measures, as described in Section. 2.2.2. Relevant regulatory standards that apply to groundwater protection are:

[4] Higley Spring was last sampled in 2017 and has not been sample since due to lack of access granted by private landowner.

- The Idaho Groundwater Rule (IDAPA 58.01.11)
- Idaho Rules Governing Exploration, Surface Mining Closure of Cyanidation Facilities (IDAPA 20.03.02)
- The Idaho Well Construction Standards (IDAPA 37.03.09)

The Well Construction Standards Rule is indirectly applicable in that mineral exploration drill holes are not considered to be wells and therefore are not subject to the standards of the rule. However the rule does require that the construction of such holes meets the intent of the regulations which is "to protect the ground water resources of the state against waste and contamination", implying that the exact letter of the rule need not be strictly followed as long as the intent is met. All the SOPs meet the intent of the rule and in almost every instance meet or exceed the standards.

Effects to groundwater flow and discharge

To date, including data from the currently authorized plan of operations, no groundwater has been intersected in exploration drill holes, within the areas of the open pit, waste rock dumps or the area of the heap leach pad to depths ranging from 300 to 700 feet (USFS, 1994; Western Pacific Resources, pers. comm., 2014; Shabasteri, pers. Comm, 2020). Groundwater has not infiltrated the open pits that remain within the project area in the nearly 25 years since mining operations ceased at the Black Pine site. During drilling it is possible that there could be very minor pressure increases or decreases in the aquifer as a result of encountering lost circulation or discrete water entry zones. If there were springs nearby, this could result in a very brief fluctuation in flow if there happened to be a direct hydraulic connection between the drill hole and the discharge point. The only location where this could potentially occur is in the area of the Silver Hills spring. Such fluctuations in discharge, if detectable, would likely not be outside the range of seasonal variability for this spring and would have negligible effects on these features.

Effects on water quality

Drilling exploratory holes without proper SOPs has the potential to alter the chemical composition of surface water and groundwater through the mixing of waters from different sources. The drilling SOPs described above serve to minimize or eliminate the mixing of groundwater, surface water, and drilling fluid filtrate (the liquid that passes through bentonite filter cake).

For the small quantities of water that may mix as a result of drilling, the net effect to the receiving aquifer can be viewed as neutral or possibly even slightly beneficial with regard to its potential consumption by various organisms. The emphasis of this effects analysis will be on substances which have the potential to degrade water quality, the mechanisms by which this could occur, and why the SOPs serve to limit such effects to the degree they become negligible, temporary, and thus insignificant. The substances to be considered are 1)

petroleum products, and 2) drilling fluid additives. The possible water-mixing situations will be addressed:

- Drilling fluid filtrate mixing with groundwater
- Groundwater mixing with other groundwater
- Surface water and groundwater mixing

In addition to the above water mixing scenarios, the related issue of drilling fluid and drill cuttings disposal will be addressed.

Effects of drilling fluid filtrate mixing with groundwater

The volume of drilling fluid filtrate lost from the drill hole that could enter groundwater if water-bearing fractures are encountered in the drill hole, is minimized by the drilling SOPs which result in the formation of filter cake and the sealing of lost circulation zones (LCZs).

It may be useful to further examine the effectiveness of the bentonite filter cake at limiting the extent of filtrate migration into an aquifer. The process of filter cake formation has been studied and modeled by a number of authors. The filtration rate of drilling fluid into permeable formations is controlled primarily by the permeability and thickness of the filter cake (Jaio & Sharma, 1994; Wu et al., 2005). As the filter cake builds up, it rapidly becomes less permeable (Donaldson & Chernoglazov, 1987). Reported hydraulic conductivity values for filter cake are very low (Campbell and Gray, 1975; Jaio & Sharma, 1994; Kelessidis et. al., 2006) and are comparable to that of unfractured granite. Wu et. al. (2005) indicate that this low permeability is reached in a matter of seconds.

Once the filter cake forms, fluid which passes through it (the filtrate) from either the drill hole surface or sealed off LCZs can migrate into an aquifer. As noted above, filter cake thickness and permeability are the main controlling factors that determine how much filtrate is produced and how far it moves away from the drill hole. Campbell and Gray (1975) cite a case of filtrate moving two feet in 138 hours. Wu et.Al. (2005) model a filtrate travel distance of roughly 0.4 meters in 2 days for several different permeability scenarios. Distances such as these are likely to represent high values for what would be possible in alluvium, since surface casing is normally set in less than a day, after which time no further fluid can move into the formation. Estimations of fluid movement would require an understanding of bedrock hydraulic properties which could be derived from more intensive characterization studies and modeling, however the data required for such an exercise is not readily available. Acquiring enough data could easily require the drilling of more holes than the present exploration program and might well provide only a very minor gain in predictive accuracy and confidence level. Such a level of analysis is not justified for this project.

The chemical composition of the filtrate is perhaps more relevant than volume and distance estimates in assessing potential aquifer impacts. The filtrate would be composed of the make-up water used to mix the drilling mud, small amounts of very fine bentonite particles, and a small quantity of drilling additives. In order to comply with direction in the Idaho Ground

Water Quality Rule (IDAPA 58.01.11) to maintain or improve existing ground water quality the makeup water quality would be equal to or better than the expected groundwater quality that could be encountered in a drill hole. Since water quality analysis of available sources in the area indicate no contaminants or exceedances in metals, the effects to groundwater quality would be insignificant. Pilot currently trucks their make-up water for drilling from the Black Pine No. 1 well that has been analyzed on numerous occasions and meets state drinking water standards[5].

The drilling additives used are non-toxic, biodegradable and certified (NSF/ANSI Standard 60) for use in domestic water supply wells. Even though all products are in regular usage for water well drilling, the question has been raised as to whether differences in the chemical composition of the drilling fluid and the groundwater could result in significant detrimental effects to an aquifer if substantial mixing occurred.

The scale and duration of chemical effects is important in assessing their significance. The only fluid that will migrate into the formation beyond the bentonite filter cake (whether it is coating the drill hole or the surfaces of fractures or pore space in an LCZ) is the filtrate. The low permeability of the filter cake allows only a small volume of filtrate to enter the formation and filtrate production is limited to the time the hole is open.

It should be noted that the use of drilling fluid mixed with a make-up water source that meets drinking water standards as described above assumes that if drilling filtrate enters an aquifer that does not have naturally elevated concentrations of metals or contaminants of concern, the dilution mixing will have a negligible effect on groundwater quality. Regardless, the effects are still very localized and negligible with respect to the aquifer quality as a whole.

Effects of groundwater mixing

The primary mechanism by which groundwater can mix with other groundwater of differing chemical composition is by aquifer cross-flow. If flow from an aquifer containing elevated levels of metals or contaminants of concern enters an aquifer having lower concentrations of those elements, then degradation of water quality in the receiving aquifer would result.

The risk of groundwater mixing due to cross-flow during the active drilling phase is minimized by sealing off any inflows or outflows of water as they are encountered. The potential for cross-flow between shallow alluvial aquifers and bedrock aquifers is further reduced by casing and cementing all holes through any near-surface alluvial formations into bedrock. One possible cause of cross-flow between shallow aquifers in the cased section of a drill hole is leaky annular seals. The SOPs for casing installation described above would prevent this.

In order for cross-flow to occur, a zone of inflow and a zone of outflow (a net pressure differential between zones) would have to be encountered in the same hole. Such zones are

[5] Attachment 5: Spring water quality sampling, June 2020.

sealed off as they are drilled through so there sold never be an inflow and outflow zone open simultaneously. It should be noted however that typically the sealing of inflow/outflow zones is not 100% effective and there can still be minor residual inflow/outflow leakage occurring. Thus, there is a very limited time during drilling when a minor amount of cross-flow between a previously sealed inflow/outflow zone and a newly encountered inflow/outflow zone could occur. Once the second (or any subsequent) zone is sealed, the volume of any cross-flow would diminish even further.

Any contaminant of concern in the residual inflow would be diluted by the drilling fluid prior to becoming part of any residual outflow from the drill hole through an imperfectly sealed LCZ. As with other impacts analyzed here, even the limited potential for residual cross-flow described above is relatively short-lived since the holes are promptly abandoned after reaching their total planned depth. Like the drilling fluid losses described above, the overall effects to the receiving aquifer would be negligible and temporary.

After abandonment there is little risk of cross-flow occurring through either the annular grout seal or the drill hole seal. Both bentonite and cement are highly effective sealants (Papp, 1996). The permeability of Benseal® bentonite grout is $1.1x10^{-8}$ cm/s (Baroid, 2011). The permeability of neat cement is 4.5×10^{-7}cm/s (Edil et. al., 1992). Since these values are much lower than the permeability of any aquifer there would be no vertical flow paths through the annular space or the drill hole itself that could interconnect aquifers.

Some of the relative advantages and disadvantages of each material in various applications are discussed in Stichman (1990). He points out that shrinkage of cement can result in cracking that may permit water flow. Edil et. al. (1992) conducted a comparative study of the sealing properties of several types of grout. They found Benseal® (a bentonite slurry grout product commonly used) to be most effective. Despite some minor seepage at the seal-casing interface they considered neat cement and cement-bentonite grouts to provide a good seal.

Effects of surface water (or surface contaminants) mixing with groundwater

There are two mixing situations that will be considered; when surface water is the contributing source and groundwater is the receiving water and vice-versa.

There are no perennial or intermittent streams in the project area that could be intersected by a drill hole or flow down a drill hole. Storm water runoff would be the only surface water of concern and this would be prevented from flowing down the drill hole during active drilling because all the drill holes have surface casing that typically rises several feel above the surrounding pad surface which is graded to shed water. Flow of surface water into an aquifer via the annular space would be prevented by proper sealing of the casing with the approved materials. In addition, the various material handling measures noted in the drilling procedures section would prevent spills of hazardous materials stored on the drill site that could then infiltrate into shallow alluvial aquifers.

If a significant water entry results in an artesian flow of poor-quality groundwater (e.g. elevated contaminants of concern) at the ground surface, this water could flow into and mix with nearby surface water. This mixing is not a concern since there is no surface water in the project area to mix with and no exploratory drilling to date within the project area has encountered groundwater, let alone artesian conditions.

Groundwater may affect surface water if it becomes surface water by discharging from a seep or a spring as is the case with the springs east of the mine area. The already low probability of groundwater quality being affected by drilling fluid or aquifer cross-flow as described above becomes even lower by the time it reaches a discharge point (assuming a hydraulic connection between the drill hole and the discharge point exits). This is unlikely given the distance (3-3.5 miles) between the springs east of the mine area. The closest groundwater discharge point in the project area is Silver Hills Spring. Although Campbell and Gray (1975) acknowledge a host of possible reactions and processes that could occur over the transport path, they single out the attenuating processes of filtration, adsorption, and dilution in their conclusions that "...the mobility of drilling fluids in the ground-water system is clearly of very limited extent...".

Effects of drilling fluid and drill cuttings disposal

Most of the drying of a collection sump takes place by evaporation, but a small volume of fluid would infiltrate in the same manner that filtrate passes through filter cake in a drill hole. For the same reasons as previously discussed, this filtrate is not expected to move very far beyond the immediate vicinity of the sump.

Concerns have been expressed regarding the potential for high-sulfide drill cuttings (which may be encountered in ore zones or areas of Recognized Environmental Conditions) contained in the mud to generate acid rock drainage and/or leach metals which might then migrate with the filtrate into shallow groundwater. This possibility is unlikely primarily because the very low permeability of bentonite clay makes it an ideal material for isolating potential contaminants from the environment, and it has many environmental engineering applications in this capacity. Besides its low permeability, it has a high cation exchange capacity and tends to adsorb (and thus immobilize) metal ions (Zarha, et.al, 2009).

The bulk metals and sulfide content of the drill cuttings is expected to be low because the Black Pine mineral deposit is largely oxidized. While bedrock stratigraphy may host some amount of sulfide mineralization in proximity to the former Silver Hills mine, given previous mining history, the extent to which sulfide mineralization occurs within the project area is low based on acid-base accounting (ABA) and metal leachability tests conducted for the Black Pine Mine expansion (Schaffer & Assoc., 1992). Water quality analysis indicates that groundwater is not transporting metals and therefore not coming into contact with sulfide minerals (Attachment 5). Should sulfide minerals be encountered their accumulation in sumps by volume would be insignificant. For sulfides to create acid rock drainage, they must

oxidize to liberate hydrogen ions to solution. Commonly this takes place naturally in areas where seasonal fluctuations of the water table produce alternating wet and dry conditions. The sulfides enclosed within the bentonite in the drill sumps would have extremely limited exposure to air and water. Additionally, backfilling and reclaiming the sumps would further reduce oxidation of drill cuttings. Thus, the drill cuttings in the backfilled and reclaimed drill sumps would not be expected to generate any significant amount of acidity.

Effects of Exploration Drilling on Water Quantity

The State of Idaho and the IDWR maintain broad authority over the appropriation of the public surface and groundwaters of the state. Pursuant to Idaho Code §42-201(7), no other agency shall enact any rule or ordinance or take any other action to prohibit, restrict or regulate the appropriation of the public surface or groundwaters of the state, and any such action shall be null and void. Consequently, USFS and BLM have limited authority to implement additional stipulations which would further regulate the appropriation and use of groundwater granted by the State of Idaho.

Nevertheless, groundwater pumping is expected to cause drawdown in the vicinity of the BPMI Well and potential impacts to groundwater resources must be assessed. There are no diversions of surface water in the project area. Groundwater is the primary source for existing water rights and appropriations from wells and springs.

The potential impacts to groundwater resources from well pumping to supply water in support of exploration drilling, albeit temporary, are assessed in terms of whether the estimated drawdown caused from pumping will be injurious to:

- Public interests in groundwater resources (wildlife, recreation, etc.),
- Existing water rights to appropriate groundwater, or
- Protectable interests in domestic wells.

Estimates of potential impacts to other wells or springs are sensitively dependent upon the hydrostratigraphic framework of the aquifer, confined or unconfined conditions, pumping rates and durations, and aquifer parameters such as transmissivity (T) and storativity (S), in addition to other variables (Dohohoe, 2020).

Analytical Method

In lieu of using a calibrated numerical groundwater flow model, which has not been developed for the Black Pine project, an existing analytical solution was discussed and agreed upon for use by USFS and Donohoe Hydrogeo, LLC. (email communication, 6/3/2020) to estimate potential impacts to groundwater resources, in terms of drawdown, as a result of pumping from the BPMI well for drilling water supplies. The Theis nonequilibrium method was selected for this analysis (Donohoe, 2020).

The Theis (1935) solution (or Theis nonequilibrium method) is among the most widely used equations in transient groundwater hydraulics for determining the properties (transmissivity and

storativity) of nonleaky confined aquifers and estimating drawdown, at a given distance and time, from therein (Donohoe, 2020).

The Theis equation was utilized for this analysis because it is widely used and accepted by groundwater hydrologists. In addition, the State of Utah provides an online Theis equation calculator for estimating drawdown caused by pumping. The Theis equation calculator is freely available to the public and therefore ensures that the results of this analysis are publicly repeatable and verifiable (Donohoe, 2020). Refer to the Groundwater report prepared for this supplemental EA for specifics and defined parameters for the Theis equation[6].

The Theis equation calculator is available from the following URL:
https://www.waterrights.utah.gov/wellinfo/theis/theis_input.asp.

Analytical Assumptions and Limitations

The limiting assumptions which are invoked with the Theis (1935) equation do not always correspond well with real world observations. Nevertheless, the Theis solution is generally accepted to provide a reasonably conservative approximation of water level drawdown which may result from well pumping. Some of the limiting assumptions are described below:

- The aquifer is infinite in horizontal extent and vertical gradients are therefore negligible.
  - o *Hydrogeological systems, at this scale, can be limited and variable in extent and vertical gradients can be significant and considerable.*

- The aquifer is of uniform thickness, homogenous, and isotropic.
  - o *Hydrogeological systems, at this scale, can vary in thickness and more commonly exhibit physical properties that are heterogeneous and anisotropic.*

- The well penetrates the entire aquifer saturated thickness and flow to the well is horizontal.
  - o *Wells are commonly considered to partially penetrate the saturated thickness of an aquifer because they do not extend a significant depth to the bottom of the aquifer, and if vertical gradients are significant, then a vertical component of flow exists.*

- The well pumping rate is constant and continuous.
  - o *Wells are more frequently pumped on an intermittent basis for energy efficiency and conservation.*

- The aquifer is confined and non-leaky.
  - o *Aquitards and confining layers in aquifers are not completely impermeable and, at this scale, aquifer hydraulics can vary from confined, semi-confined (leaky), unconfined, compartmentalized, perched, or a combination of such physical conditions.*

- The aquifer releases groundwater from storage instantaneously as hydraulic head decreases.
  - o *Unconfined aquifers can exhibit a delayed release of water from storage.*

[6] Preliminary Hydrogeologic Characterization and Groundwater Resources Impact Assessment, Black Pine Mineral Exploration Project, Cassia and Oneida Counties, Idaho, Donohoe HydroGeo, LLC, August 2020.

• Groundwater removed from aquifer storage is completely consumed and is not replenished via recharge to the aquifer.

  o *The aquifer receives natural recharge, from precipitation and interbasin flow, and it receives secondary recharge from various beneficial uses of groundwater which are not entirely consumptive.*

Given these assumptions and limitations, results from Theis distance-drawdown analyses are expected to yield a conservative (overestimated) approximation of potential drawdown which may occur, at a given time and distance, from the pumping well (Donohoe, 2020).

Aquifer Parameter Input Values

Parameter input values utilized for this analysis are summarized in Table 3.2-1.

Table 3.2-1: Aquifer parameter input values for Black Pine project area

Parameter	Parameter Description	Estimated Input Value	Explanation / Reference
r =	distance (ft) from pumping well	3,485 ft (0.66 miles)	Distance between BPMI Well and Duvall Well
t =	time (days) since pumping started	365 days	*Permit TP-17-09 expires after 1 year (365 days)*
Q =	well pumping rate (ft^3/day)	3.1 GPM (596.8 ft^3/day)	*3.1 GPM = 5 AFA per TP-17-09*
T =	aquifer transmissivity (ft^2/day)	10,000 GPD (1,337 ft^2/day)	Bolke and Price, 1969
S =	aquifer storativity (unitless)	0.05 (5 percent)	Bolke and Price, 1969

Estimated Value for Well Pumping Rate

A constant pumping rate (Q) of 3.1 GPM (5 AFA), from the BPMI Well, is used as the input value for this analysis, despite knowing that higher diversion rates will occur intermittently, because the maximum volume allowed to be pumped is ultimately limited to 5 AF in a 1-year period of time (t).

Estimated Distance Between Pumping Well and Nearest Receptors

Wells and springs in proximity to the BPMI Well are shown in Figure 8. The Duvall Well is located 0.66 miles from the BPMI Well and is the nearest receptor of interest for this analysis. Therefore, an input value of 0.66 miles (3,485 ft) was selected as the distance (r) from the pumping well for this analysis. Other nearby receptors, in the vicinity of the BPMI Well, include the Ramero Well (1.30 miles) and Stone Spring (1.36 miles).

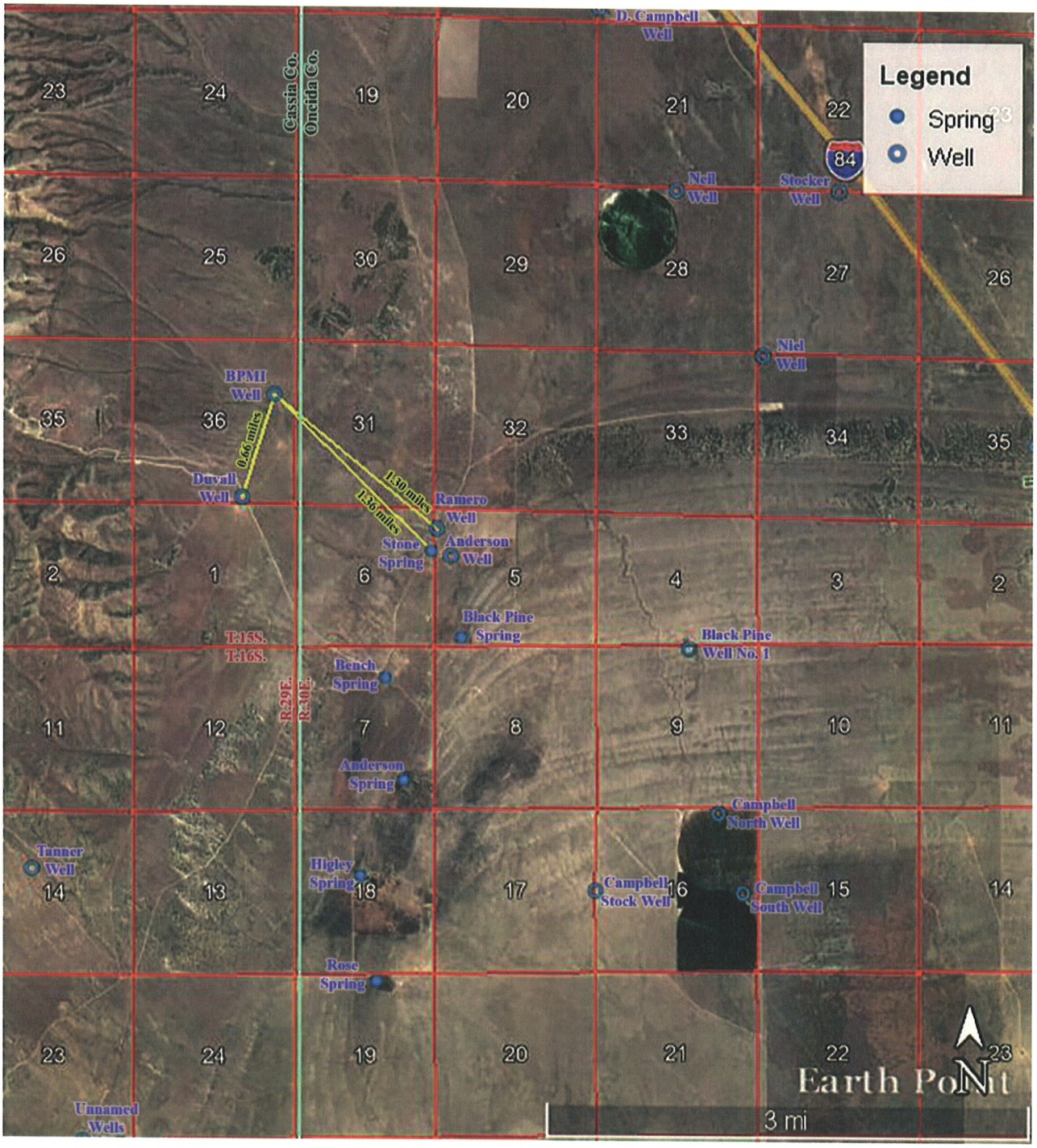


Figure 8. Location of wells and springs in proximity to BPMI well.

Estimated Values for Transmissivity (T) and Storativity (S)

Bolke and Price (1969) estimated alluvial aquifer transmissivity (*T*) in Curlew Valley, near the Idaho-Utah border, to range from 10,000 to 100,000 GPD/ft (1,337-13,370 ft2/day) and also estimated the alluvial aquifer coefficient of storativity (*S*), which includes components of specific yield (*Sy*), specific storage (*Ss*), and saturated thickness (*b*), to be at least 0.05 (5 percent). Storage coefficients generally range from 0.1 to 0.3 for unconfined aquifers (Lohman, 1972).

The resulting drawdown (*s*) at a given distance (*r*) and time (*t*) is directly proportional to the well pumping rate (*Q*) and inversely proportional to estimated values for aquifer transmissivity (*T*) and storativity (*S*). Therefore, lower input values for transmissivity (*T*) and storativity (*S*) were selected for this analysis in order to yield more conservative (overestimated) results in terms of the potential drawdown that could result from well pumping.

Analytical Results

Results from the Theis analysis indicate that pumping 3.1 GPM from the BPMI Well will cause minimal drawdown, 0.66 miles away, in the Duvall Well (Donohoe, 2020). Drawdown in the Duvall well is predicted to approach 0.03 ft after pumping for 1 year and is predicted to approach 0.11 ft after pumping for 10 years. These results are considered to be conservative and overestimated due to the limiting assumptions invoked with the method and the fact that the BPMI Well was pumped for one-hour in September of 2019 at 83.5 GPM, with a 5-HP pump, without any drawdown occurring.

The following conclusions can be made regarding the existing condition of groundwater resources within the vicinity of the former Black Pine mine and the area of Pilot Golds proposed and inherited exploration activities, including the area of proposed expansion:

- Drilling activities are expected to occur only within bedrock aquifers
- Groundwater is expected to be of very limited occurrence within bedrock outside of fault and fracture zones
- Fracture-controlled aquifers are likely to be present within bedrock fault or fracture zones. Their areal extent and interconnectedness are unknown.
- Where groundwater becomes surface water within the proposed drilling area, water quality standards are met
- Despite past mineral activity within the entire area of Pilot Gold's exploration proposal over a 120-year period, water quality monitored from groundwater wells and springs since 1967 has not changed appreciably in that time period. Water quality meets or exceeds State water quality standards.
- The quantity of groundwater withdrawals needed to accomplish the proposed drilling program will have negligible effects on water withdrawals for other beneficial uses in the area.

The effects on groundwater resources from implementation of the proposed expansion of exploration drilling are expected to be negligible, temporary, and insignificant. This conclusion

was arrived at through the analysis process documented in the specialist report available as part of this project record. This assessment of the overall significance of the effects of exploration drilling on groundwater resources is based upon 1) the existing condition of groundwater resources despite a long history of exploratory drilling in the area, 2) the degree of risk of water quality degradation posed by exploration drilling, and 3) the severity of consequences should mixing of chemically different waters occur.

The aquifers within the project area that could be impacted by drilling are for the most part confined to bedrock fractures or faults, are of limited extent, and if mineralized, may have slightly elevated concentrations of metals. The benign nature of the drilling fluids and the limited potential for interaction between aquifers having differing water quality poses little risk of aquifer degradation. If minor transient aquifer cross-flow does result in the mixing of small volumes of water, the consequences are slight since 1) groundwater quality would not be degraded and 2) effects to surface discharge sources (springs) would be negligible and temporary.

In addition, potential impacts to water quantity, in terms of water levels and flow rates, are assessed to be minimal and negligible. A well must cause drawdown in the groundwater system in order for groundwater to flow into the well. The predicted drawdown in the Duvall Well, due to pumping from the BPMI well, is considered reasonable and acceptable because such minimal drawdown will not diminish the yield from the well, require lowering of the pump, or cause an excessive water lift to be necessary. Other receptors are further away from the BPMI Well and will experience less drawdown than predicted at the Duvall Well.

Potential impacts to water quantity can be avoided or minimized by using multiple points of diversion as allowed under Pilot's current temporary water right permit TP-17-09.

No Action Alternative

Under the No Action Alternative, no exploration activities would be conducted pursuant to the proposed expansion plan submitted by Pilot, however construction of remaining drill sites and drill roads previously authorized under the May 2017 modified plan of operations and the transferred 2012 Western Pacific Resource Plan could still be implemented. Pilot could continue utilizing the Black Pine No. 1 well and associated access for the water necessary to support currently authorized drilling activities under BLM grant IDI-39032 until December 31, 2020 at which time the grant will expire. Under the No Action Alternative, use of the BPMI Well proposed under the amended Plan of Operation (IDI-39132) submitted to the BLM would not be authorized.

3.3 Visual Resources

This section describes visual resources that may be affected by the expansion of Project activities. The area of proposed expansion remains within the overall project area assessed in the 2018 EA prepared for the Black Pine Exploration Project. For an assessment of visual resources relative to the entire project area, refer to the Black Pine Exploration Project Scenery Resource Technical Report (USFS, 2018).

The National Forest Visual Management System has been used by the Forest Service since the early 1970's and provides the basis for describing acceptable degrees of landscape alteration within the Sawtooth National Forest (SNF). This system describes a range of desired conditions; but more importantly provides a means of assessing the potential visual effect of various proposals, relative to prescribed management objectives found within our current Forest Plan. Natural landscape features and viewer sensitivity (both physical numbers and concern for the environment) help to establish visual management objectives for any given area. All public lands within the SNF were first inventoried in the early 1980's. Since that time, this Visual Management System has been routinely used on the SNF to evaluate proposed activities and determine visual compatibility.

The visual analysis for a proposal on public lands begins with a description of the physical attributes that comprise affected and surrounding landscape characteristics. This overall impression is created by a unique combination of visual features which include the land, existing vegetation, water, rock outcrops, and topography. In addition to physical landscape features, perceptual factors also help to determine "how" forest visitors or highway travelers might perceive a proposed site alteration.

The attributes of a proposed activity can then be assessed by the same method and a comparison drawn between the existing environment and proposed management activity. The degree of landscape alteration is evaluated, and a comparison made as to whether or not a proposal is consistent with inventoried Visual Quality Objectives (VQO) and direction provided in the Sawtooth Forest Land and Resource Management Plan. These planning guidelines and management direction are provided to assure the protection of SNF scenic values.

3.3.1 Affected Environment

Existing Condition

The project area is located within the Snake River Plain landscape character type which covers southern Idaho, northern Nevada, and northwestern Utah. The topography is moderate-to-steep in the upper elevations with rolling hills incised with minor intermittent drainages in the lower elevations. In the project area, the Black Pine Mountains are the dominant landscape feature in the area. The range is variable in appearance with strong dissections and broad stretches of predominantly mixed mountain shrub and sagebrush plant communities with stands of conifer in the northern most drainages.

The former mine is located on National Forest lands. All facilities associated with prior operations have been dismantled and removed off-site. The surface has been extensively reclaimed, except for several large open pits, portions of road cuts related to the former haul route and two large waste rock dumps. Areas from which the public will likely view the proposed expanded mineral exploration activity are as follows:

- Interstate 84; viewed as background, greater than 4 miles from viewing location (Figure 9).



Figure 9. Typical Project Area 'Background' (Over 4 Miles Distant View from Interstate 84.

Because the eastern aspect of the project area where expanded project activities are proposed is almost entirely visible from Interstate 84, it is understood that the general public has a higher sensitivity to Forest management activities in this area. This area is mapped as viewer sensitivity level 1 (highest sensitivity). Sensitivity levels are a measure of people's concern for the scenic quality of the National Forests. Sensitivity levels are determined for land areas viewed by those who are traveling through the Forest on developed roads and trails, are using areas such as campgrounds and visitor centers, or are recreating at lakes, streams, and other water bodies.

Variety Classes are obtained by classifying the landscape into different degrees of landscape complexity. This determines those landscapes which are most important and those which are lesser

value from the standpoint of scenic quality. Classification is based on the premise that all landscapes have some value, but those with the most variety or diversity have the greatest potential for high scenic value. Most of the project area is mapped as Class B (Common). Common is characterized by slopes between 30 – 60%, with occasional obvious but not outstanding rock features, near continuous vegetative cover with interspersed patterns, and drainages with common meandering and flow characteristics. There is a small portion of the project in the southeast corner that is mapped as Class C (Minimal).

Variety class, viewing distance zone, and viewer sensitivity level are combined to determine the Visual Quality Objective (VQO) for the project area. Visual Quality Objectives used on the Sawtooth National Forest are defined as follows:

- ***Preservation (P)*** – reserved for Wilderness or Wilderness study areas. Not present in the project area.
- ***Retention (R)*** provides for management activities which are not visually evident to the casual Forest visitor. Activities may only repeat form, line, color, and texture which are frequently found within the characteristic landscape. Changes in size, intensity, patterns etc. should not be evident. Not present in the project area.
- ***Partial Retention (PR)*** is the next lower VQO. This objective provides for management activities which remain visually subordinate to the characteristic landscape. Activities may repeat form, line, color or texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinate. The majority of proposed project actions are within this mapped/adopted VQO.
- ***Modification (M)*** is the second lower VQO. Under the modification visual quality objective management activities may visually dominate the original characteristic landscape. Activities which are predominately introduction of facilities, such as buildings, signs, roads, etc., should borrow naturally established form, line, color, and texture so completely and at such scale that its visual characteristics are compatible with the natural surroundings. A lesser amount of proposed project actions are being proposed in this VQO.
- ***Maximum Modification (MM)*** represents the lowest visual quality objective within the management system. Activities are dominant and out of scale but appear natural in the background. A very small amount of proposed project actions are proposed within this VQO.
- ***Unacceptable Modification*** Excessive landscape modifications regardless of the distance from which the management activity may be observed. Size of activities is excessive. Activities contrast in form, line, color and texture are all visually unrelated to the characteristic landscape. Visual impacts which exceed 10 years duration.
- ***Rehabilitation (Re)*** is a short-term management alternative used to restore landscapes containing undesirable visual impacts to a desired visual quality. It may not always be

possible to immediately achieve, but it should provide a more desirable landscape.

The primary VQOs for the area of proposed expansion are Partial Retention (PR) and Modification (Figure 10). Two sites are proposed within an area of Maximum Modification (MM). Each VQO has corresponding management goals.

A VQO of Partial Retention (PR) allows the result of management activities to be visible but not recognized as an unnatural occurrence. Changes are not to be visually evident to the average person, and they should not attract attention with the natural appearance of the landscape remaining dominant. This partial retention objective must be met as soon as possible after project completion (within one year).

A VQO of Modification (M) allows the results of management activities to be seen and possibly dominate the landscape but should repeat natural patterns, if possible, as soon as possible within a maximum of five years of project completion.

Many of the features of the former Black Pine mine along with evidence of past excavation and mineral exploration activities occur on lands that have been designated with the VQO of PR. These include reclaimed roads, recontoured waste rock dumps, dismantled surface facilities, and the remaining highwalls and open pits (Figure 11).

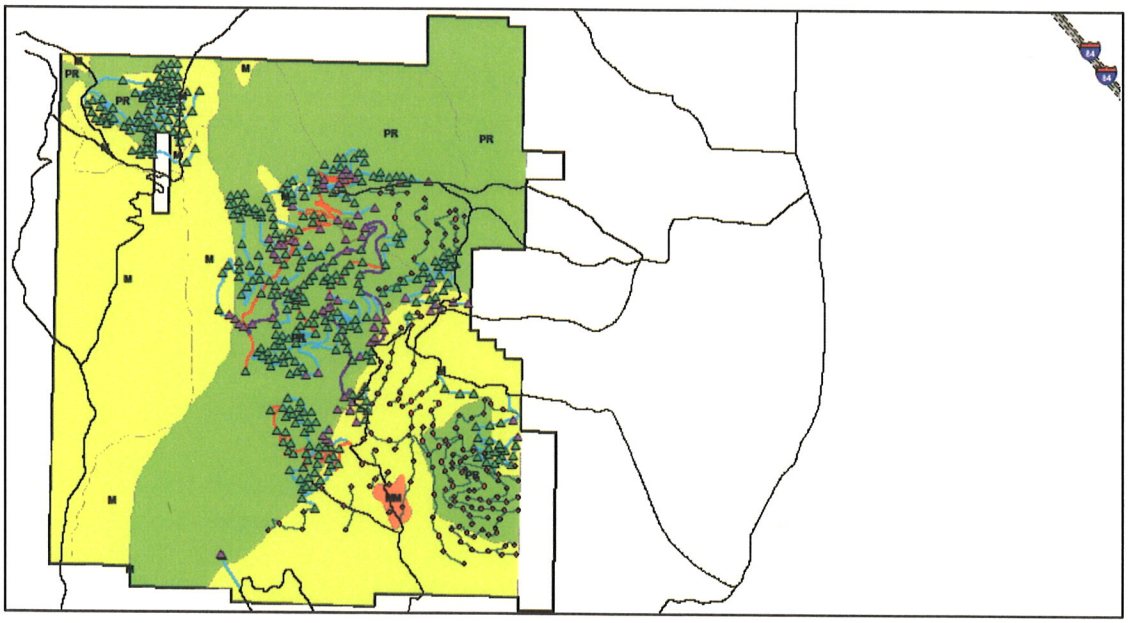


Figure 10. VQO designations within the project area.



Figure 11. Remaining highwall benches from A-pit, Black Pine Mine

3.3.2 Environmental Consequences

This section describes the environmental consequences to the scenic environment that would be realized by the implementation of the proposed mineral exploration activities. In accordance with the Visual Management System, Agriculture Handbook No. 462, a project level VQO review is required for consistency in VQO applications. Forest VQOs were mapped and adopted in the early 1980's at a Forest level, so little to no fine-scale analysis was applied at that time that would have noted and corrected mapping errors and/or deficiencies. During the Scenery resource report development, a project-level analysis of the adopted VQOs is required as well as ground-truthing of the original VQO ratings to ensure compliance with current Forest Plan Standards.

The project area is mapped with VQOs of *Partial Retention, Modification* and a very small area of *Maximum Modification* (Figure 12*)*. This site existed as a mining area before the Sawtooth Forest mapped VQOs in 1981. As a result, the Forest should have mapped an appropriate VQO to reflect the pre-existing disturbance associated with mining and reasonably foreseeable management action at the time VQOs were established. The appropriate VQO for an area with the type of minerals exploration and extraction activities would be *Maximum Modification.* This VQO, while acceptable to the levels of disturbance typical of this type of minerals extraction, also has very specific scenery guidelines protecting the resource, such that the project area management activities must appear as natural from the background viewing distance, which would be reasonably considered achievable in a landscape such as this with appropriate management elements and design features and/or mitigations.

Direct and Indirect Impacts of the Proposed Action on Visual Resources

The components of the expanded mineral exploration proposal were evaluated to determine effects to visual resources and if whether, following reclamation, Forest Plan Standards requiring projects be designed to meet the adopted VQO (as displayed on the Forest VQO map) will be met.

Construction of drill roads, drill pads and their subsequent reclamation have the greatest potential of affecting the scenic resource beyond current conditions. The primary impact would result from removal of vegetation and associated disturbance which would create contrasts in landforms, lines and color. It is the contrast of these components when viewed against the more homogenous face of the range that make these components appear out of place, hence their visual impact.

Digital simulations from Key Observation Points (KOPs) depicted in Figure 13 were identified as travel routes from which most Forest visitors view the project area.

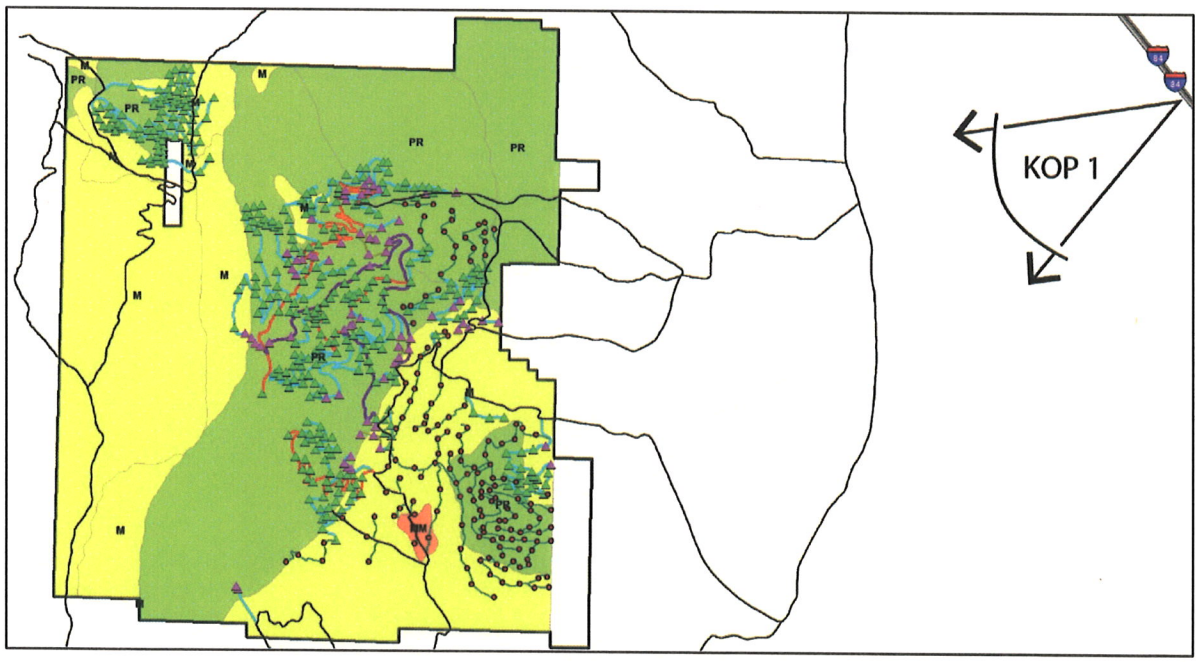


Figure 12. Simulation of Key Observation Points (KOPs) distal to the Black Pine Exploration area

KOP 1

KOP 1 is located on Interstate 84 east of the project area boundary. This KOP is a background distance zone project viewshed toward the Mineral Gulch and Burnt Basin drainages. This viewshed includes the eastern aspect of the project area where the area of expanded mineral exploration is proposed. The predominant vegetation type is grass, forb, and sage lands with isolated pockets of conifer/juniper within drainages upper slopes where aspects and conditions allow. This KOP has the most proposed drill sites and roads of the three KOPs presented in the Scenery Technical Reports prepared for the project (USFS, 2018, 2020). Both *Partial Retention* and *Modification* VQOs are mapped in the project landscape visible from this KOP.

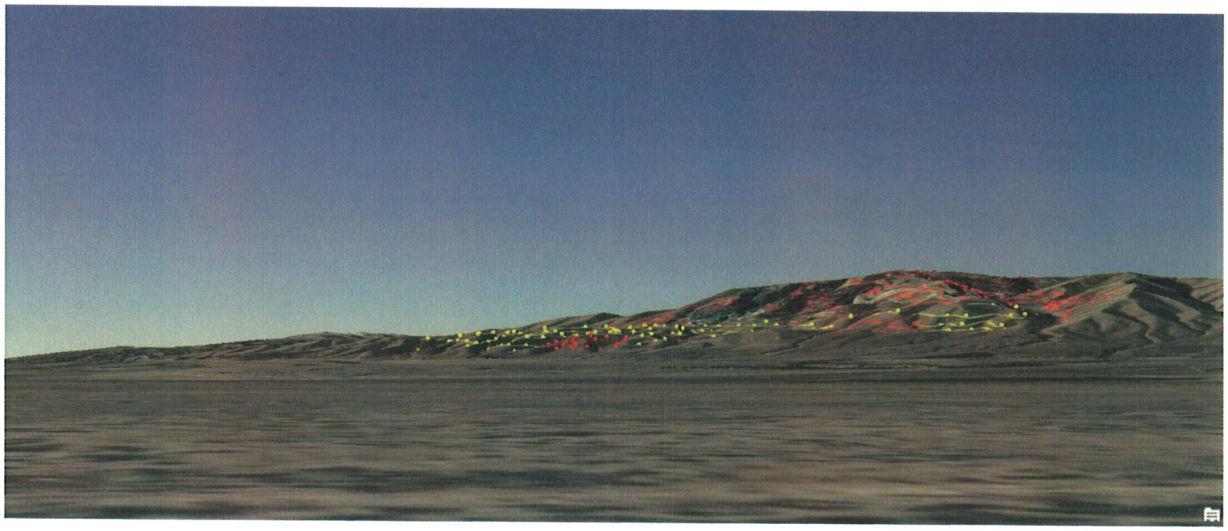


Figure 13. Simulated view from KOP 1.

Upon project completion, the KOP 1 view of project features identified in this proposal will be comprised of background views of reclaimed roads. This is primarily due to the Low to Intermediate Visual Absorption Capacity (VAC) for this area which makes it, at best, extremely difficult to screen management activities in a landscape such as this. For more information, the reader is referred to the supplement to the Black Pine Scenic Resource Report in the full project record.

While it might be expected that the views from this KOP of previous road reclamation work in this area may serve as examples of visual effects of this activity after approximately 20 years, the proposed action and design criteria integrated into this project are expected to improve upon what are perceived to be reclamation shortfalls from past mining activities. Reclamation challenges associated with prior actions include achieving full re-contouring of mine haul roads, developing a successful combination of stabilizing vegetation and native plant coverage, and continued post-project monitoring to ensure the success of these two things. The primary non-conforming scenery impacts will continue to be the highly visible and contrasting open pit high-walls, rock dumps and excavated material benching from previous open pit mining and mineral exploration activities from this KOP. To a much lesser extent the previously reclaimed road network add to the collective visual impact, primarily due to the application of a seed mix that does not accurately represent adjacent native vegetation, which forms an uncharacteristic linear plant type color and texture contrast with the adjacent landscape.

Design criteria has been included to improve upon previous reclamation efforts to the extent that any new roads and drill sites will be more effectively restored and any existing reclaimed roads that are to be re-opened for this project will be more effectively reclaimed post-project as a result.

When viewed from the background of this high priority travel route KOP, the effects will readily blend into the adjacent characteristic landscape to appear as natural which will meet the *Maximum*

Modification VQO for this area. However, the mapped and adopted *Partial Retention* and *Modification* VQOs, which require scenery modifications that resemble natural features and/or that appear visually subordinate from foreground and middle-ground distance zones, cannot be attained with a proposal of this type and density and magnitude in a setting with this low VAC.

No Action Alternative

Under the No Action Alternative, no exploration activities would be conducted pursuant to the Plan of Operations submitted by Pilot for expanded drilling operations, however construction of drill sites and drill roads previously proposed by Pilot and authorized under the 2018 DN/FONSI and the transferred Western Pacific Resource Plan could still be implemented.

As discussed above, this finer-scale project VQO analysis has determined that adopted Forest VQOs within this project area have not been correctly applied to the Black Pine Mine area due to established history of use and prior Forest Plan standards. Given the existing condition of the Black Pine Mine area, meeting the correct VQO *Maximum Modification* would require a commitment to an extensive reclamation plan that would likely include a combination of earth work, pit backfill, slope stabilization, recontouring, aggressive revegetation, and substantial rock work/rock staining. It is not reasonable or realistic to expect that sufficient resources will be committed to an effort of this scale in the future.

The previously permitted exploration activities will not meet the mapped VQOs where they are to occur. As a result, the existing condition is inconsistent with Forest VQOs; however, the No Action alternative is not inconsistent with the Forest Plan decision, which included, "The decision maker has the discretion, on a case-by-case basis, to modify pre-existing authorizations to bring them into compliance with the Revised Plan standards and guidelines" (2003 Forest Plan ROD, page 40). As described above, the responsible official for the Forest Plan has determined that it is not reasonable or realistic to reclaim the previously permitted activities to meet the Forest VQOs or what would be the correct *Maximum Modification* VQO.

3.4 Wildlife

This section describes wildlife resources that may be affected by the expansion of Project activities as well as the potential environmental consequences resulting from Project activities. It should be noted that the area for this Project and for the mineral exploration project analyzed in Stantec (2018)[7] are similar as the proposed expanded exploration area is adjacent to that previously authorized in 2018 and the analysis areas for various resources overlap and extend beyond the respective project areas for each portion of the exploration (Refer to Figure 3).

Because wildlife in the majority of the Project Area was already described by Stantec (2018), this evaluation tiers to that document and only provides additional information when 1) additional data is already available due to ongoing monitoring; 2) additional data was required due to an area not being covered previously or a new potential for effects to individual species, such as for the actions occurring on BLM administered lands; or 3) additional data is required due to changing biological or regulatory conditions for a species, for example, Greater-sage grouse (*Centrocercus urophasianus;* GRSG).

Species considered for analysis are described below and shown in Table 3.4-1.

- ESA Listed Species – There are no known occurrences of species listed as threatened, endangered, or candidate under the ESA, or designated critical habitat for any ESA listed species within the Project Area. However, the species list from the U.S. Fish and Wildlife Service (USFWS) generated for this Project (USFWS 2020), lists Canada lynx (*Lynx canadensis*) as having the potential to occur.

- USFS Sensitive Species – The potential for species (or their habitat) included on the Regional Forester's sensitive species list (USFS 2016) to be present in the Project Area was analyzed in Stantec (2018). Five species or their habitat were considered to potentially be present as shown in Table 3.4-1. Because the Project lies within the same area of NFS land analyzed in Stantec (2018) and is similar in scope (i.e., mineral exploration), the same species are considered potentially present. It should be noted that additional pygmy rabbit (*Brachylagus idahoensis*) surveys were conducted in 2020 within the expanded exploration and action area (mine well and road). No suitable habitat, pygmy rabbits, burrows, pellets, or other sign were observed and therefore will not be discussed further. The survey memo is included as Appendix A within the Supplement to the Terrestrial Wildlife Report.

- MIS Species – Sawtooth National Forest (SNF) Management Indicator Species (MIS) discussed includes: Greater sage grouse

[7] Terrestrial Wildlife and Aquatic Species Specialist Report and Biological Evaluation, Black Pine Exploration Project, Stantec Consulting Services, June 2018.

- Locally Important Species – Effects to mule deer (*Odocoileus hemionus*), moose (*Alces alces shirasi*), and Rocky Mountain elk (*Cervus elaphus canadensis*) are analyzed.
- BLM Sensitive Species – Special Status Species and Important Habitat Values with the potential to occur in the Project Area are included in Table 3.4.1.[8]
- Migratory Birds – Effects to migratory birds (including raptors) are analyzed pursuant to Executive Order (EO) 13186, 66 Fed. Reg. 3853, signed January 10, 2001, and associated USFS and BLM Memorandums of Understanding (MOUs). In addition, effects to Golden eagle (*Aquila chrysaetos*) are analyzed due to regulations established by the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c).

Table 3.4-1. Species Considered for Analysis

Terrestrial Wildlife Species	Status	Probability of Occurrence Within the Project Area	Potential Habitat Within the Project Area	Species Analyzed?	Rationale for not Analyzing
Canada Lynx (*Lynx canadensis*)	Threatened	Low	No Potential Habitat	No	Canada lynx habitats are strongly associated with boreal forest habitats with dense horizontal cover, persistent snow, and moderate to high snowshoe hare densities (Aubry et al. 2000, Interagency Lynx Biology Team 2013). The Canada Lynx Conservation Assessment and Strategy (Interagency Lynx Biology Team 2013) identifies geographic areas that were delineated based on lynx occurrence records and the distribution of appropriate forest vegetation. The Project Area does not support the appropriate forest vegetation and is not within a Canada lynx geographic area.
Bald Eagle (*Haliaeetus leucocephalus*)	USFS Sensitive, BLM Sensitive	Low	Low Potential Habitat	No	There are no known bald eagle nest territories on the Black Pine Division of the SNF or within the Project Area. Surveys have not detected any bald eagles. Bald eagles generally utilize cottonwoods and snags near open water as roosting sites (Stalmaster

[8] BLM Special Status Species and Important Habitat Values are discussed in Appendix B of the Final Supplement to the Terrestrial Wildlife and Biological Evaluation, September 2020.

Terrestrial Wildlife Species	Status	Probability of Occurrence Within the Project Area	Potential Habitat Within the Project Area	Species Analyzed?	Rationale for not Analyzing
					1987). Because none of these components occur in the Project Area, the Project would have no impact on bald eagle.
California Bighorn Sheep (*Ovis Canadensis californiana)*	USFS Sensitive	Low	Potential Habitat	No	The Idaho Department of Fish and Game (IDFG) and the USFS have identified suitable unoccupied habitat for bighorn sheep on the Black Pine Division; however, there are no plans to introduce Bighorn sheep into this area and there are no known populations, nor were they detected during surveys.
Columbian Sharp-tailed Grouse (*Tympanuchus phasianellus columbianus*)	USFS Sensitive, BLM Sensitive	Moderate	Potential Habitat	Yes	
Columbia Spotted Frog (*Rana luteiventris*)	USFS Sensitive	Low	Potential Habitat	No	There are no perennial water sources within the Project Area and in general, there is minimal potential habitat for amphibians of any type. Columbia spotted frogs would not likely be impacted by the Project.
Flammulated Owl (*Psiloscops flammeolus*)	USFS Sensitive, BLM Sensitive	Low	Low Potential Habitat	No	Limited suitable habitat is available in the northwest portion of the Project Area where mixed conifer/aspen forest exists. This is not within or adjacent to the proposed expanded exploration area. No surveys were conducted as part of the proposed expanded mineral exploration and no incidental observations were made during other surveys. As a result, the existing condition for flammulated owl is the same as

Terrestrial Wildlife Species	Status	Probability of Occurrence Within the Project Area	Potential Habitat Within the Project Area	Species Analyzed?	Rationale for not Analyzing
					described in Stantec (2018) and effects are expected to be the same and unchanged.
Golden Eagle (*Aquila chrysaetos*)	The Bald and Golden Eagle Protection Act of 1940, BLM Sensitive	High	Known Occurrence	Yes	
Gray Wolf (*Canis lupus*)	USFS Sensitive, BLM Sensitive	Low	Not Observed or Reported in the Project Area	No	Suitable habitat for gray wolf has been defined as any place with an adequate supply of ungulate prey and freedom from excessive human persecution (Fritts et al. 1993). Although it is assumed that single wolves travel through southern Idaho, there have been no agency confirmed wolf sightings or wolf activity on the Black Pine Division or within the Project Area.
Greater Sage-grouse (*Centrocercus urophasianus*)	USFS Sensitive, BLM Sensitive	High	Known Populations and Occurrences	Yes, as MIS	
Northern Goshawk (*Accipter gentiles*)	USFS Sensitive	Low	Very Low Potential Habitat	No	Suitable habitat for northern goshawk is not present in the Project Area. Northern goshawk would not likely be impacted by the Project.
Peregrine Falcon (*Falco peregrinus*)	USFS Sensitive	Low	Potential Habitat, no Known Occurrences	No	As peregrine falcons are not currently known to use the Project Area and proposed drill locations would not affect potential cliffs used for nesting by peregrine falcons or have a negative effect on peregrine foraging habitat, the Project would have no impact to peregrine falcons.

Terrestrial Wildlife Species	Status	Probability of Occurrence Within the Project Area	Potential Habitat Within the Project Area	Species Analyzed?	Rationale for not Analyzing
Pygmy Rabbit (*Brachylagus idahoensis*)	USFS Sensitive, BLM Sensitive	Low	Isolated Areas of Potential Habitat, No Known Occurrences	No	Pygmy rabbits are known to excavate their own burrow systems. Due to this unique feature among rabbits, soil properties, including depth and texture that allow ease of excavation are required (Weiss and Verts 1984). Due to no known occurrences and lack of sufficient habitat, pygmy rabbit would not likely be impacted by the Project nor were they detected during surveys.
Spotted Bat (*Euderma maculatum*)	USFS Sensitive	Moderate	Limited Potential Habitat	Yes	
Townsend's Big-eared Bat (*Corynorhinus townsendii*)	USFS Sensitive, BLM Sensitive	Moderate	Limited Potential Habitat	Yes	
North American Wolverine (*Gulo gulo*)	USFS Sensitive ESA Proposed Threatened	Low	No Potential Habitat	No	There are no confirmed sightings in the Project Area and suitable foraging or denning habitat (forested riparian areas) is not available within the Project Area. Due to the lack of known occurrences and the lack of suitable habitat, the Project would not likely affect North American wolverine or its habitat.
Mule Deer (*Odocoileus hemionus*)	Locally Important Game Species	High	Known Occurrence; Habitat Present	Yes	
Moose (*Alces alces shirasi*)	Locally Important Game Species	High	Known Occurrence; Habitat Present	Yes	
Rocky Mountain Elk	Locally Important	High	Known Occurrence;	Yes	

Terrestrial Wildlife Species	Status	Probability of Occurrence Within the Project Area	Potential Habitat Within the Project Area	Species Analyzed?	Rationale for not Analyzing
(*Cervus elaphus canadensis*)	Game Species		Habitat Present		
Migratory Birds and Raptors	Protected under Migratory Bird Treaty Act of 1918 (MBTA) and EO 13186	High	Known Occurrence; Habitat Present	Yes	
Hooker's Buckwheat (*Eriogonum hookeri*)	BLM Sensitive	Low	Low Potential Habitat	Yes	

3.4.1 Affected Environment

As described in Stantec (2018), most of the undisturbed vegetation and wildlife habitat found within the Project Area consists of sagebrush, grasses and juniper in the lower elevations on generally south and west exposures. Mixed conifer and aspen communities generally occur on the north and east exposures at higher elevations. Reclamation and seeding of native vegetation have taken place on areas disturbed from past mining, which encompass a large portion of the Project Area. These areas of past mining activities along with evidence of past wildfires have greatly altered the habitat for all species within the Project Area. In addition, the lack of springs or other surface water sources is a limiting factor for many wildlife species.

Regional Forester's Sensitive Species and BLM Special Status Species
Columbian Sharp-Tailed Grouse (CTSG)

Columbian sharp-tailed grouse (CSTG) habitat within the Project Area is described in Stantec (2018). As described in Stantec (2018) and shown on Figure 14, there are two occupied CSTG leks within four miles of the Pilot Property Boundary. Lek counts are provided in Table 3.4-2. No CSTG have been observed within the proposed expanded area during field surveys.

Table 3.4-2. CSTG Active Lek Survey Counts

Lek Number	2012	2018	2019	2020
	High Bird Count Only			
4CT047/010	30	30	30-50	35
012	N/A	10	10	20
4C140				7

N/A – not an identified lek in 2012
4C140 – GRSG lek that also included CTSG in 2020.

Greater Sage-Grouse (MIS)

As described in Stantec 2018, the Project Area provides habitat for Greater Sage-grouse GRSG and there are active leks within 4 miles. Habitat within the Project Area is primarily summer/ late brood-rearing habitat, although locations with denser stands of sagebrush, for example in the lower elevations east of the proposed expanded exploration area (i.e., closer to the known leks) may also be used as nesting/early brood-rearing and winter habitat. On NFS land, habitat is mapped as General Habitat Management Area (GHMA). The BLM administered land east and immediately adjacent was mapped as Important Habitat Management Area (IHMA). However, due to Idaho reaching a hard population trigger in the management zone under its sage grouse management plan, the IHMA designation has been changed to a Priority Habitat Management Area (PHMA). The mapped management areas are shown on Figure 14, with definitions described below.

Priority Habitat Management Areas (PHMAs) focus on conserving the two key meta-populations in the sub-region. These meta-populations consist of a large aggregation of interconnected breeding subpopulations of GRSG that have the highest likelihood of long- term persistence. PHMAs include adequate area to accommodate continuation of existing land uses and landowner activities.

General Habitat Management Areas (GHMAs) encompass habitat that is outside of PHMAs or IHMAs. GHMAs contain approximately 10 percent of the occupied leks that are also of relatively low male attendance compared to leks in PHMA or IHMA. GHMAs are generally characterized by lower quality disturbed or patchy habitat of low lek connectivity. GHMAs comprise areas of occupied seasonal or year-round habitat outside of priority habitat.

Important Habitat Management Areas (IHMAs) contain additional habitat and populations that provide a management buffer for the PHMA and to connect patches of PHMA. IHMAs are typically adjacent to PHMAs but generally reflect somewhat lower GRSG population status and/or reduced habitat value due to disturbance, habitat fragmentation or other factors.

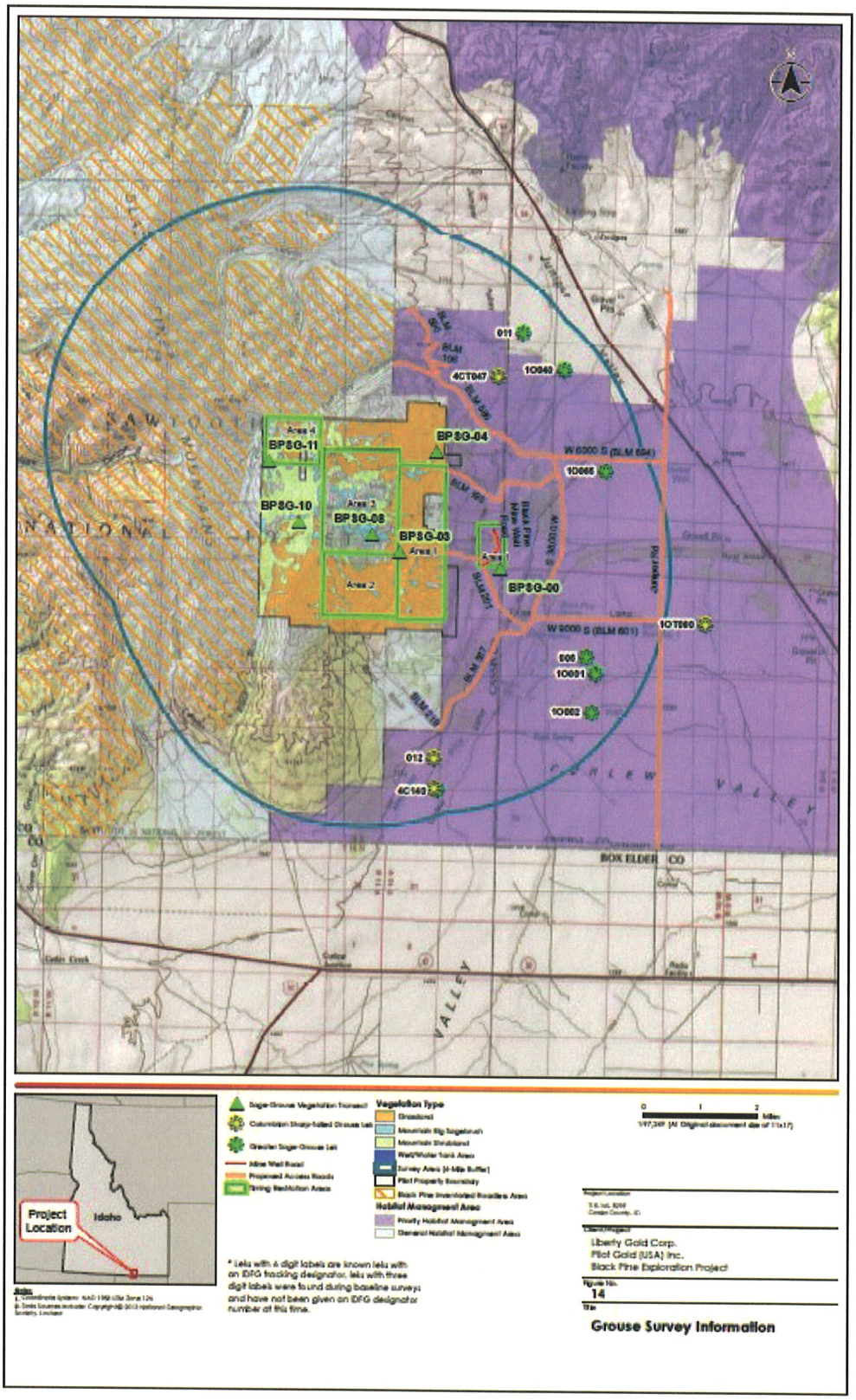


Figure 14. Sharptail and Sage Grouse Lek Locations.

Although the general condition of habitat in the Project Area is known to have been affected through time by habitat fragmentation from roads, invasive species, mining and fire, as reported in Stantec (2018), the USFS and BLM undertook two efforts in 2020 to better quantify habitat suitability. The first effort was to use Idaho's Sage-Grouse Habitat Quantification Tool (HQT) to quantify habitat function for GRSG habitat within the Project Area and evaluate potential impacts of the Project. The second effort was to collect site-scale habitat data at a limited number of sites throughout the USFS administered portion of the Project Area to provide a more quantitative site-specific estimate of habitat suitability.

The HQT measures the quality and quantity of habitat at a site in terms of functional acres (State of Idaho 2019). Functional acres and the full methodology used in the HQT are described in detail in State of Idaho (2019). In simple terms, functional acres are a function of habitat quality and habitat quantity, with quality determined by multiple factors at multiple spatial scales. At the smallest scale, the site-scale score, the HQT uses either site-scale data collected following guidelines in the BLM Habitat Assessment Framework (HAF; Stiver et al. 2015) or assumes site-scale scores from Idaho's Sage-grouse Habitat Planning Map. For this Project, IDFG ran a draft analysis using scores assumed from the habitat planning maps, as site-scale data on NFS lands was unavailable.

Preliminary results from the draft analysis are included as Appendix C within the supplement to the terrestrial wildlife report (Stantec, 2020). The results indicate that within an approximately 19,110-acre project area (defined as a 6-kilometer buffer around the well/water tank and a 1-kilometer buffer around road/well pad disturbance not encompassed by the 6-kilometer buffer), there are approximately 1,280 functional acres. It should be noted that the "project area" is defined differently here than in the rest of this document. The area is defined by IDFG based on the type of disturbance being analyzed. Although it is different, it does encompass all exploration areas, as well as areas within the 4-mile survey area surveyed for sage grouse in Stantec (2018). The HQT model was run when the BLM administered land was mapped as IHMA (i.e., before the hard population trigger was reached). Running the HQT with BLM administered lands as PHMA changes a multiplier in the formula used to determine functional acres. Because the multiplier change is relatively small and the portion of the Project Area mapped as PHMA is small, the results do not substantially change the estimates.

Site-scale data was collected at six randomly selected locations within the Project Area. The sampling locations were stratified and dispersed throughout different vegetation communities: three sites were sampled within the grassland community that composes much of the lower elevation habitat within the Project Area and likely received the most sage-grouse use; one site was sampled within the mountain big sagebrush community that is found in fragmented patches throughout the mid to upper elevation portions of the Project Area, and; two sites were sampled within the mountain shrubland habitat that is found primarily on the east and north sides of the Project Area (Figure 15). Sites were sampled and the data analyzed according to BLM HAF guidelines. However, it should be noted that HAF guidelines suggest multiple samples within a

stratum (in this case the vegetation communities described above) to account for variability of vegetation within a stratum and provide a measure of uncertainty in habitat indicator estimates (Stiver et al 2015). Except for the grassland community, a smaller number of samples was collected which may not fully capture both natural and anthropogenic variability.

The HAF survey locations were located primarily in summer/ late brood-rearing habitat, although the locations may also be used as nesting/early brood-rearing and winter habitat. The data, summary forms, and photos are included as Appendix D within the supplemental terrestrial wildlife report (Stantec, 2020)[9]. The breakdown by vegetation community/survey location is as follows:

- One location in grassland (BPSG-00) was rated unsuitable for nesting/early brood-rearing, summer/late brood rearing, and winter habitat. Two locations (BPSG-03 and 04) were rated as unsuitable for nesting/early brood rearing and winter habitat, but marginal for summer/late brood rearing.
- The one site in mountain big sagebrush (BPSG-08) was rated marginal for nesting/early brood-rearing, suitable for summer/late brood-rearing, and marginal for winter habitat.
- One site in mountain shrubland (BPSG-08) was rated marginal for all habitat categories. The other (BPSG-11) was rated suitable for nesting/early brood-rearing and summer/late brood-rearing, but marginal for winter habitat.

The major factor influencing the determinations at all sites was reduced average sagebrush canopy cover. As mentioned above and described in Stantec (2018), wildfire has removed large patches of sagebrush habitat. The USFS, BLM, and IDFG have planted native shrubs in key sagebrush habitat affected by wildfire in the recent past; however, those areas may take more than 15 years to produce good quality GRSG habitat again. Furthermore, even though the mountain big sagebrush site was rated as suitable for summer/late brood-rearing, the lack of connectivity between large sagebrush patches (due to mining, wildfire, etc.) may limit use and suitability at a landscape scale for GRSG.

Four active GRSG leks have been identified within a 4-mile survey area. Two of these leks were identified by IDFG (1O001 and 4C140) and monitored from 2014 – 2017. One lek was identified during helicopter surveys in 2018 and given the number 011. All three of these leks have been monitored annually since. The other active lek (Idaho State number 1O065) was regularly active from 1995-2006 but was considered inactive in Stantec (2018) due to a few years with no birds prior to 2020. However, three birds were observed at the lek in 2020 (Ann Moser, Wildlife Staff Biologist, IDFG, Personal Communication). An additional two leks have been identified but determined to be inactive, these leks are Idaho State numbers 1O040 and 1O002. 1O040 had eight birds in 2008, but none since, and 1O002 has not had birds observed since 1990 (Ann Moser,

[9] A summary of habitat suitability related to HAF survey locations can be reviewed in Table 5 of the Supplemental Terrestrial Wildlife Report (Stantec, 2020) made part of this project record.

Wildlife Staff Biologist, IDFG, Personal Communication). The leks are shown on Figure 14 and high-bird lek counts for the three monitored leks are provided in Table 3.4-3. Note that Stantec numbered lek 05 is close in proximity to Idaho State lek 1O001 and is considered the same lek. Likewise, Stantec lek number 13 is close in proximity to Idaho State lek 4C140 and is considered the same lek.

Table 3.4-3. GRSG Active Lek Survey Counts with the Study Area

Lek Number	2014	2015	2016	2017	2018	2019	2020
High Bird Count Only							
1O065							3
011	N/A	N/A	N/A	N/A	6 males; 5 females	5 males; 0 females	4 males; 2 females
4C140/013*	7	0	5	9	1 male; 1 female	1 male; 0 females	3 males; 1 female
1O001/005	0	10	0	0	4 males; 3 females	2 males; 2 females	2 males; 0 females

*Due to proximity, this lek was considered associated with lek 4C140
N/A – not an identified lek in those years.

Golden Eagle

Golden eagle habitat requirements are described in Stantec (2018). As previously described golden eagles were observed during wildlife surveys in 2017 and one potential golden eagle nest was also identified. That nest was discovered to be active on April 4, 2019. Following discovery, biologists monitored the nest to ensure that road and pad construction activities did not disturb the nesting eagles. The nest was monitored a total of seven times. A single chick was observed on all visits until July 16, 2019, when no eagles were observed on the nest. Since the eaglet was previously observed in the nest to be greater than four weeks old, and the eaglet would have been greater than 51 days old at the time of the visit (hatched prior to May 15) the nesting attempt was deemed to be successful. A ground search was conducted below the nest (mostly by binoculars given the terrain) to make sure the eaglet had not died, with no results. Based on USFWS Interim Golden Eagle Technical Guidance (Pagel et al. 2010), the nest was monitored from the observation point for four hours to see if any eagles would return. However, there was no activity during this time. As a result, it appears the eagle likely dispersed. A summary of the monitoring reports is included in the supplemental terrestrial wildlife report (Stantec, 2020).

The nest from 2019 was surveyed for any signs of use (i.e., fresh whitewash, fresh decorating, or eagle presence) on March 5, 2020. No new whitewash or greenery was seen on the nest. No eagle was found on the nest. On the second day of the survey, a golden eagle was observed perched on a hill above the nest, and another eagle was found perched in the valley below. Due to the early timing of the nest survey it is possible that the eagles were in the courting and nest selection stage

and not yet incubating eggs. Other areas of the pit were searched for any new stick nests, with none being found. The eagle nest was surveyed again on March 27, 2020 and was found to have some decorating on it. However, no eagles were seen at the nest. The nest was surveyed again on April 2 and 9 and found to be inactive with no new decorating or eagles seen in the area. A potential alternate eagle nest site known to exist to the west was surveyed on April 9 and was inactive. No eagles were observed in that nest area, which is just over 0.5 miles from the 2020 drilling areas. It is possible that the eagles observed in 2020 are nesting in the Project Area and the nest site was undetected during field surveys by biologists.

Sensitive Bat Species

Sensitive bat species with the potential to occur in the Project Area are listed in Table 3.4-1 and include: big brown bat, little brown bat, long-eared myotis, pallid bat, spotted bat, Townsend's big-eared bat, and western small-footed myotis. Habitat requirements for these species are described in Appendix B of the supplemental wildlife report and Stantec (2018). As described in Stantec (2018), only limited, cursory surveys for bats were conducted prior to mining activities in association with the Black Pine Mine (1990's) prior to closure (USFS 2012) and the presence of these bat species has not been determined. However, abundant roosting and foraging habitat does exist throughout the Project Area, and based on their general life history, there is the potential for the bat species listed above to occur.

Important Game Species

Habitat requirements, distribution, and population information for mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus canadensis*), and moose (*Alces alces*) are described in Stantec (2018). The area analyzed for these species in Stantec (2018) included the expanded mineral exploration area and no additional big game surveys were conducted specifically for this Project. As a result, there is no additional information for these species beyond incidental observation of these species during other surveys. Mule deer and elk have been observed frequently throughout the Project Area, including on the BLM portion of the Project Area. Because moose more typically use the northwest portion of the Project Area (Stantec 2018), they have been observed less frequently.

Migratory Bird Species and Raptors

Regulations pertaining to migratory birds and a general description of habitat in the Project Area are both described in Stantec (2018). Numerous surveys for migratory birds and raptors have been conducted within the Project Area as part of previous baseline surveys, pre-construction surveys, and monitoring. These are detailed in Stantec (2018) and various survey memos included in Appendix A of the supplemental terrestrial wildlife report made part of this project record. A total of 68 species of migratory birds, including raptors, have been identified within the Project Area. Birds identified are shown in Table 3.4-4. There were active nests for great-horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), and golden eagle in the Project Area in 2019, but no active raptor nests were located in 2020. Raptor nests (active and inactive), as well as the

areas surveyed, are shown on Figure 16. Focused surveys for burrowing owls (*Athene cunicularia*) in the BLM-administered portion of the Project Area did not note any individuals or burrows.

Table 3.4-4. Migratory Bird Species Identified within the Project Area

Common Name	Scientific Name
American Kestrel	*Falco sparverius*
American Robin	*Turdus migratorius*
American Tree Sparrow	*Spizella arborea*
Black-billed Magpie	*Pica hudsonia*
Black-capped Chickadee	*Poecile atricapillus*
Black-headed Grosbeak	*Pheucticus melanocephalus*
Blue-gray Gnatcatcher	*Polioptila caerulea*
Brewer's Blackbird	*Euphagus cyanocephalus*
Brewer's Sparrow	*Spizella breweri*
Broad-tailed Hummingbird	*Selasphorus platycercus*
Brown Creeper	*Certhia americana*
Brown-headed Cowbird	*Molothrus ater*
Bullock's Oriole	*Icterus bullockii*
Cassin's Finch	*Carpodacus cassinii*
Chipping Sparrow	*Spizella passerina*
Chukar	*Alectoris chukar*
Clark's Nutcracker	*Nucifraga columbiana*
Common Nighthawk	*Chordeiles minor*
Common Raven	*Corvus corax*
Cooper's Hawk	*Accipiter cooperii*
Dark-eyed Junco	*Junco hyemalis*
Dusky Flycatcher	*Empidonax oberholseri*
Ferruginous Hawk	*Buteo regalis*
Golden Eagle	*Aquila chrysaetos*
Grasshopper Sparrow	*Ammodramus savannarum*
Gray Flycatcher	*Empidonax wrightii*
Great Horned Owl	*Bubo virginianus*
Green-tailed Towhee	*Pipilo chlorurus*
Hairy Woodpecker	*Picoides villosus*
Hammond's Flycatcher	*Empidonax hammondii*
Hermit Thrush	*Catharus guttatus*
Horned Lark	*Eremophila alpestris*
House Finch	*Carpodacus mexicanus*

Common Name	Scientific Name
House Wren	*Troglodytes aedon*
Lark Sparrow	*Chondestes grammacus*
Lazuli Bunting	*Passerina amoena*
Lewis's Woodpecker	*Melanerpes lewis*
Loggerhead Shrike	*Lanius ludovicianus*
MacGillivray's Warbler	*Oporornis tolmiei*
Mountain Bluebird	*Sialia currucoides*
Mountain Chickadee	*Poecile gambeli*
Mourning Dove	*Zenaida macroura*
Northern Flicker	*Colaptes auratus*
Northern Harrier	*Circus cyaneus*
Pine Siskin	*Carduelis pinus*
Pinyon Jay	*Gymnorhinus cyanocephalus*
Red-breasted Nuthatch	*Sitta canadensis*
Red-tailed Hawk	*Buteo jamaicensis*
Rock Pigeon	*Columba livia*
Rock Wren	*Salpinctes obsoletus*
Ruby-crowned Kinglet	*Regulus calendula*
Sagebrush Sparrow	*Amphispiza belli*
Sage Thrasher	*Oreoscoptes montanus*
Say's Phoebe	*Sayornis saya*
Spotted Towhee	*Pipilo maculatus*
Swainson's Hawk	*Buteo swainsoni*
Tree Swallow	*Tachycineta bicolor*
Turkey Vulture	*Cathartes aura*
Vesper Sparrow	*Pooecetes gramineus*
Violet-green Swallow	*Tachycineta thalassina*
Warbling Vireo	*Vireo gilvus*
Western Kingbird	*Tyrannus verticalis*
Western Meadowlark	*Sturnella neglecta*
Western Scrub-Jay	*Aphelocoma californica*
Western Tanager	*Piranga ludoviciana*
Woodhouse's Scrub Jay	*Aphelocoma californica*
White-breasted Nuthatch	*Sitta carolinensis*
Yellow Warbler	*Dendroica petechia*

BLM Sensitive Plant Species

Hooker's Buckwheat is a species of wild buckwheat native to the Intermountain West. It is an annual forb that is typically found in desert to semi-desert habitat. It is similar to other species in the genus Eriogonum and can be difficult to distinguish from similar species in the field. There is a historical observation from 2007 in Mineral Gulch (approximately 0.5 miles to the northwest of the proposed expanded area and 1.35 miles to the northwest of the well/water tank area). A survey was conducted on June 20, 2020, in the Mineral Gulch area, in the well/water tank area, and the along Mine Well Road. A buckwheat was found in the Mineral Gulch area near the 2007 observation. However, it appeared to be *Eriogonum umbellatum* (sulphur-flower wild buckwheat). No other Eriogonum species were found elsewhere in Mineral Gulch, around the well/water tank area, or along Mine Well Road. Most of the area around the well/water tank area and along Mine Well Road has been burned by fairly recent fires with post fire vegetation dominated by cheatgrass (*Bromus tectorum*). The area is also currently grazed. The combination of these two disturbances has heavily impacted vegetation and removed any suitable habitat for Hooker's buckwheat.

3.4.2 Environmental Consequences

Direct and Indirect Impacts of Proposed Action on Wildlife

Regional Forester's and BLM Sensitive Species: Columbian Sharp-tailed Grouse

Alternative 1 – Existing and Proposed Exploration Activities (Proposed Action)

The Proposed Action, if fully implemented, would directly impact an additional 51 acres. Pilot would incorporate the additional roads proposed under the expanded exploration into its annual work plans. In order to limit road construction and disturbance on the landscape, no more than 25% percent of temporary roads required for drill site access, outside of access required for the full length of the project period would be constructed during each annual operating period. At present, approximately 6.5 miles of road may be constructed before additional reclamation requirements are triggered. The proposed action would allow for an additional estimated 3 miles of road that could remain open to facilitate exploration. Approximately 18 percent of roads associated with the proposed expansion would be collocated onto previous roads.

Mortality from disturbance is not expected as birds are expected to disperse prior to disturbance activities. Any disturbance would be avoided during the nesting season or pre-construction surveys would be conducted, as required. Disturbance from noise associated with drilling activities would represent a short-term direct impact and a longer-term effect on habitat in areas where vegetation is bladed and removed as reclamation could take up to 15 years or longer to create useful habitat for CSTG. Because the majority of habitat within the proposed expansion

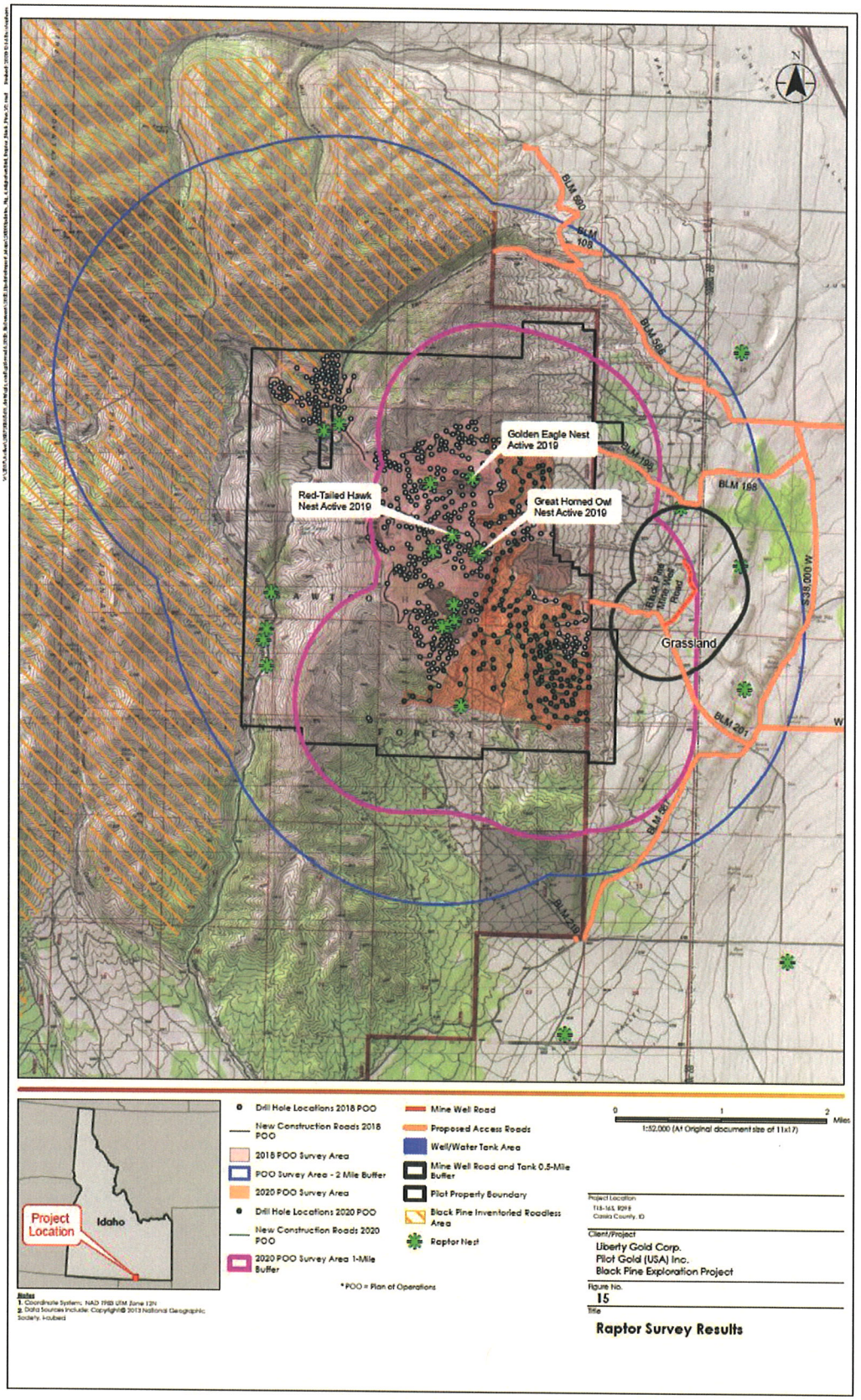


Figure 15. Raptor Survey Results

area is not currently considered to be quality nesting or brood rearing habitat, but may provide some foraging and security cover, the impacts would be minor.

Human activity and noise/lights associated with machinery and equipment may cause some level of indirect disturbance to CSTG using the Project Area on a daily basis, as well as up to two miles distance or greater from the Project Area. Noise has been shown to have detrimental impacts to breeding bird populations (including CSTG). The noise produced from traffic and drilling operations could hamper the detection of CTSG vocalizations, which could make the following behaviors difficult: attracting mates and establishing territories. High levels of anthropogenic noise may also interfere with the detection of avian alarm calls such as those signaling the presence of predators, which could lead to higher rates of predation (Parris and Schneider 2008; Ortega 2012).

Because Project activities would be restricted as discussed in the EPMs for the Project until after the lekking period, impacts to mating are not expected. However, noise may cause CSTG to avoid using areas immediately adjacent to Project activities for nesting, and early and late brood rearing activities. This avoidance would likely have minor effects due to the lack of habitat immediately adjacent to the Project and would be limited to the summer and fall while Project activities are taking place. Drilling would stop or be minimized throughout winter and spring which are the most critical time periods for grouse. Sharp-tailed grouse have not been observed within the exploration areas during winter as there is little mountain shrub or riparian areas. The Project would have negligible effects on CSTG during the winter.

The Project would construct and/or temporarily reopen reclaimed roads. These are low level, low speed, and low-use roads by nature, where CSTG can easily be avoided by vehicles. There is minimum risk to grouse from collision on these types of roads. Sumps are emergency containment devices and are not expected to hold open water or fluids throughout the drilling operations. In the event of a spill, best management practices would be used to reduce exposure by CSTG and other wildlife species.

Alternative 1 **May Impact** CSTG individuals or potential habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Alternative 2 – No Action

The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be No Impact on CSTG individuals or habitat from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the overall Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Greater Sage-grouse (MIS)

Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)

If fully implemented, the proposed expansion of mineral exploration and connected actions would directly impact up to an additional 51 acres, primarily within mapped GHMA, with approximately three acres associated with the well site facilities and Mine Well Road within PHMA. Pilot would incorporate the additional roads into its annual work plans. In order to limit road construction and disturbance on the landscape, no more than 25% percent of temporary roads required for drill site access, outside of access required for the full length of the project period would be constructed during each annual operating period. At present, approximately 6.5 miles of road may be constructed before additional reclamation requirements are triggered. The proposed action would allow for an additional estimated 3 miles of road that could remain open to facilitate exploration. Approximately 18 percent of roads associated with the proposed expansion would be collocated onto previous roads.

In terms of functional acres, the HQT analysis determined that functional acre loss for the entire Project (in the case of the HQT analysis "Project" includes the currently approved exploration, the expanded exploration, and the well and road on BLM administered land) would be approximately 197 acres, which is slightly less than the sum of all disturbance (141 acres for the currently approved exploration, 51 acres for the proposed expanded exploration, and the 3 acres for the water well and access road disturbance). Following reclamation, assuming reclamation efforts are successful in establishing desired vegetation for sage-grouse, there would be no permanent loss of functional acres. The HQT originally identified permanent loss of the only 3 functional acres associated with the Mine Well Road (IDFG 2020) because the analysis considered the road would not be reclaimed. However, the road would be reclaimed in that it would return to its current condition and there would be no permanent loss.

In addition to direct habitat disturbance, the noise produced by the Proposed Action would have the potential to impact GRSG that occur within hearing distance of the Project. Anthropogenic noise impacts GRSG in a number of ways, including acoustic masking. Acoustic masking occurs by decreasing the threshold of detection for sound from the aggregated presences of other sounds. This impedes the ability of GRSG to vocalize reducing their ability to find mates, reducing the strength of pair bonds, shift predator response behavior, and increase vigilance behavior (NDOW 2018). Blickley et al. (2012) also found elevated stress levels as measured from fecal corticosterone metabolites in sage-grouse at experimental sites where birds were exposed to chronic anthropogenic noise versus control sites. This indicates that noise may have a physiological impact to GRSG, which can translate into effects on individuals' ability to reproduce.

The use of the timing restrictions in Area 1 (Refer to Figure 6) would limit the impacts from noise generated by the Proposed Action on GRSG. The pump for the water well would be submersible (Webtrol electric pump, WS500600 or equivalent) and is expected to be nearly silent at the well-site, as the pump will be subterranean (depth of 250 feet). Well-site noise associated with water pumping would be limited to the sounds of water filling the holding tank. In the future, should a louder pump/different configuration be used by the proponent, or some other need arise, noise screening/shielding may be required based on BLM inspection to ensure compliance. Additionally,

the distance of the Project to known leks would attenuate any sound produced, further limiting its impacts on GRSG.

Other possible activities that could impact GRSG include mortality due to collisions, exposure to spills, or an increase in West Nile Virus (WNV). The use of drill rigs and associated vehicles is not considered to be heavy or frequent mining traffic and probability of grouse mortality due to collision is considered very low. Sumps are emergency containment devices and are not expected to hold open water or fluids throughout the drilling operations. In the event of a spill, best management practices would be used to reduce exposure to grouse and other wildlife species, in addition, all proposed drill sites and sumps are a minimum of 3 miles from any active lek, which minimizes potential exposure to GRSG. Although WNV (primarily spread by mosquitoes) has been implicated in mortality of sage-grouse and represents an additional stressor on sage-grouse populations (Walker et al. 2004), it is unknown if WNV is present in the Black Pine sage-grouse population. Precipitation within the Black Pine Mine area averages around 12 inches per year. Standing water tends to evaporate very quickly in the Black Pine Mine area and sumps on site are designed to catch and drain water. As a result, exploratory mining activities in the Black Pine area are not expected to create wetlands or standing water that would provide a vector for WNV.

Alternative 1 **May Impact** GRSG individuals or potential habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be **No Impact** to GRSG from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Golden Eagle
Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)
Golden eagles have been documented in the Project Area, both foraging and nesting. Road construction and drilling would not substantially reduce foraging habitat or directly affect nesting habitat (which is primarily within the existing pit areas). However, noise and human activity associated with road construction and drilling is likely to result in displacement of foraging or nesting eagles to other adjacent and undisturbed areas. In the case of nesting, this could result in nest abandonment. However, based upon required surveys prior to initiating Project activities each year, as described in the EPMs, impacts to nesting are not expected. This was demonstrated in 2019, when drilling activities were avoided and/or monitored until the golden eagle nesting was successful. As a result, impacts are likely to be limited to displacement during foraging, which given the habitat available in surrounding areas would be minor.

Alternative 1 **May Impact** individual golden eagles through displacement but **will likely not cause a trend toward federal listing** or a loss of viability to the species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be **No Impact** to golden eagles from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Sensitive Bat Species
Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)
Abundant roosting and foraging habitat exists throughout the Project Area and bats are currently using this habitat, but the species of bat has not been determined. Neither prey species nor roosting habitat would be affected by the Proposed Action. If Project activities occur at night, lights used on the drilling equipment could draw bats to the lights in search of insects. While bats could benefit from this concentrated prey source, there is some risk of injury to bats from drilling activities.

The increase in noise from the Proposed Action may have an impact on bats. Noise produced may cause roost abandonment, avoidance of foraging areas, dysfunctional allocation of time and energy resources to vigilance behaviors, and degradation of physiological condition and social order. The noise may also mask bat vocalizations as well as insect vocalizations making foraging less successful (Caltrans 2016). As bats may use the area for foraging and there is some potential for injury to individual bats near drilling equipment, the Proposed Action may impact bats, but the risk of individual bat mortality is low.

Alternative 1 **May Impact** individuals of the sensitive bat species[10], but will not likely contribute to a trend towards federal listing or cause a loss of viability to the populations or individual species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be **No Impact** to the sensitive bat species from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Important Game Species

Mule Deer
Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)

[10] Refer to Table 7: Summary of Determinations, Supplement to Terrestrial Wildlife Report, Stantec, 2020.

The expansion of mineral exploration, if fully implemented, could directly impact up to 51 acres, all within mapped winter range for mule deer and remove foraging and security/hiding cover (shrubs) within the Project Area as well as increase habitat fragmentation as a result of temporary roads that would be constructed In order to limit road construction and disturbance on the landscape, no more than 25% percent of temporary roads required for drill site access, outside of access required for the full length of the project period would be constructed during each annual operating period. At present, approximately 6.5 miles of road may be constructed before additional reclamation requirements are triggered. The proposed action would allow for an additional estimated 3 miles of road that could remain open to facilitate exploration.

Mule deer have continued to use the shrub and forb communities for foraging and hiding cover immediately adjacent to previous exploration sites throughout the active drilling periods and would likely continue to do so for this Project. Human activity and noise/lights associated with machinery has the potential to disrupt the breeding, fawning and foraging cycles. Mule deer would likely avoid the activity areas, moving into quieter, adjacent habitat during these time periods. Implementation of EPMs for timing restrictions would occur in areas where deer are most likely to use in winter and Project activities would not be allowed in these areas between January 1 to March 15 (Refer to Figure 6; Area 2), thus minimizing potential impacts to wintering deer. Other timing restrictions (Area 1) would also have an indirect benefit to mule deer that use those areas.

The Proposed Action would have short term effects for the life of the Project on mule deer foraging and security habitat due to habitat disturbance and human presence/noise. Because the overall acres that could be open at any time is limited and reclamation required, effects due to habitat loss are not expected to have long term impact to the mule deer population on the Black Pine Division. Due to implementation of EPMs, increased human presence and habitat fragmentation are not expected to cause long term declines to the Black Pine mule deer herd beyond what has already occurred resulting from past activities in the area.

Alternative 1 May Impact mule deer individuals or potential habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Alternative 2 – No Action

The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be No Impact to mule deer from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Elk

Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)

Elk use is not common within the Project Area except during the winter months (S. Soletti, Wildlife Biologist, USFS, personal observation, Stantec 2018). Past wildfires, which have removed shrubs

and replaced them with grass species has favored elk over mule deer on the Black Pine Mountains. The Proposed Action would directly impact up to 51 acres of habitat that can be used by elk and would result in a short-term increase in fragmentation in the Project Area, which is likely a larger concern for elk.

Elk are sensitive to disturbance and human activity and noise/lights associated with machinery has the potential to disrupt elk use in the Project Area and any elk using the Project Area would likely avoid the activity areas, moving into quieter, adjacent habitat during these time periods. While elk are sensitive to disturbance, they generally will use an area they prefer again after the disturbance has stopped, especially when the disturbance is short term (less than 3 years).

The Proposed Action would have short term effects for the life of the Project on elk foraging habitat. However, the Project is not expected to have long term effects to the elk population in the area over the life of the Project. Overall, the Project is expected to have minor effects on elk in the Project Area.

Alternative 1 May Impact elk individuals or potential habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Alternative 2 – No Action

The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be No Impact to elk from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Moose

Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)

Moose use in the project area is associated with winter range use, primarily at the upper elevations of the Project Area. If fully implemented, the expansion of mineral exploration activities would directly impact up to 51 acres of habitat, but that habitat is primarily in lower elevation grassland areas rather than in the northwest portion of the Project Area where the best moose habitat is. In addition, much of the area that would be impacted by the Proposed Action has either been previously disturbed or has been impacted by wildfires. As a result, any impacts to habitat would be minor and would not have long term effects to the moose population in the area over the life of the Project.

Human activity and noise/lights associated with machinery has the potential to disrupt moose use in the Project Area and any moose using the Project Area would likely avoid the activity areas, moving into quieter, adjacent habitat during these time periods. As stated above, the best moose habitat and most moose observations (Stantec 2018) are not in the proposed expanded area and any activity/noise effects would likely be minor due to most moose use occurring in the winter months when operations are restricted or drilling activities typically aren't conducted. In addition,

while the timing restrictions included as part of the Proposed Action are not specifically designed to benefit moose, individuals in those areas would receive a benefit from reduced activity.

Alternative 1 May Impact moose individuals or potential habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be No Impact to moose from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

Migratory Bird Species

Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)
If fully implemented, the expansion of mineral exploration could directly impact an additional 51 acres of habitat for migratory birds. Mortality is not expected as birds are expected to disperse prior to disturbance and disturbance would be avoided during the nesting season or pre-construction surveys conducted. Pilot would incorporate the additional roads proposed under the expanded exploration into its annual work plans. In order to limit road construction and disturbance on the landscape, no more than 25% percent of temporary roads required for drill site access, outside of access required for the full length of the project period would be constructed during each annual operating period. At present, approximately 6.5 miles of road may be constructed before additional reclamation requirements are triggered. The proposed action would allow for an additional estimated 3 miles of road that could remain open to facilitate exploration. Due to concurrent reclamation, the amount of short-term disturbance at any given time would be minor.

Daily human activity and noise/lights associated with machinery and equipment during the operating season may cause some level of disturbance to migratory birds within the Project Area. Sagebrush obligates may avoid areas immediately adjacent to Project activities for nesting and brood rearing due to the noise and activity level. The noise produced from traffic and drilling operations could hamper the detection of avian vocalizations, which could make the following behaviors difficult: attracting mates and establishing territories. Noise may also adversely impact avian population dynamics by dampening the calls of nestlings when begging for food. In the presence of loud noise, nestlings may need to produce louder calls in order to elicit the desired response from their parents (Leonard and Horn 2005). High levels of anthropogenic noise may also interfere with the detection of avian alarm calls such as those signaling the presence of predators, which could lead to higher rates of predation (Parris and Schneider 2008; Ortega 2012). Migrating songbirds can be confused by lights associated with tall structures such as drilling towers. This is not expected to be an issue on this Project as noisy activity connected with night

drilling would discourage use by birds moving through the area. This avoidance would be primarily during the summer and fall seasons while exploration activities are actually taking place.

The Project would construct and/or temporarily reopen reclaimed roads. These are low level-low speed roads by nature, where birds can easily be avoided by vehicles. There is minimum risk to migratory birds from collision on these types of roads. Sumps are emergency containment devices and are not expected to hold open water or fluids throughout the drilling operations. In the event of a spill, best management practices would be used to reduce exposure by birds and other wildlife species.

Potential disturbance to nesting migratory birds would be reduced with adherence to EPMs. Implementation of the EPMs would help mitigate the effects to migratory bird habitat by providing buffers around any known nests and cavities and allowing any active nests to fledge out. Additionally, while the timing restrictions included as part of the Proposed Action are not specifically designed to benefit migratory birds, individuals in those areas would receive a benefit from reduced drilling activity.

Alternatives 1 **May Impact** priority migratory bird species habitat **but will not likely contribute to a trend towards federal listing** or cause a loss of viability to priority migratory bird species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be **No Impact** to migratory birds from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

BLM Sensitive Species

Alternative 1 - Existing and Proposed Exploration Activities (Proposed Action)
The area surrounding the well/water tank area and Mine Well Road does not currently provide suitable habitat for Hooker's buckwheat. Widening of the road and construction of the well turn around area would have no impact on this species.

Alternative 2 – No Action
The No Action Alternative means that exploration would not occur in the proposed expanded area and there would be No Impact to Hooker's buckwheat from expanded exploration. Ongoing and permitted uses and management activities on BLM and NFS lands would continue within the Project Area, including previously authorized exploration drilling operations that may have effects on individuals or their habitat within the Project Area.

3.5 Irreversible and Irretrievable Commitment of Resources

An Irreversible commitment of resources can be defined as a commitment of resources that cannot be reversed or recovered, and the change cannot be reverse, reclaimed, or repaired. Irreversible commitments generally occur to nonrenewable resources such as minerals or cultural resources, and to those resources that are renewable only over long time spans. An Irretrievable commitment of resources can be defined as a commitment of resources that would only be lost for a period of time but could be recovered in the long term through reclamation or repair (Shipley Group, 2010).

Since mineral exploration only removes small samples of the host deposit and no eligible cultural resources have been identified within the project area, no irreversible commitment of resources is expected from implementing the Proposed Action. Many of the impacts for each resource discussed in Chapter 3.0 would be an irretrievable commitment of resources (pumping groundwater from wells in support of drilling operations, vegetation and habitat removal for the life of the proposed project, scenic impacts from the proposed project). However, the majority of these impacts would be short-term in duration and would only last until reclamation is completed and productivity can be restored. Phased operations, reclamation and project EPMs would reduce any long-term impacts from the Proposed Action.

4.0 Cumulative Effects

For the purposes of this EA, the cumulative impacts are the sum of all past, present (including proposed actions), and reasonably foreseeable future actions (RFFAs) resulting primarily from mining, commercial activities, and public uses. The purpose of the cumulative analysis in the EA is to evaluate the significance of the Proposed Action's contributions to cumulative impacts. A cumulative impact is defined under federal regulations as follows:

> "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

As required under the NEPA and the regulations implementing NEPA, this chapter addresses those cumulative effects on the environmental resources in the Cumulative Impacts Analysis Areas (CIAAs) which could result from the implementation of the Proposed Action and No Action Alternative; past actions; present actions; and RFFAs. The extent of the CIAA will vary with each resource, based on the geographic or biologic limits of that resource. As a result, the list of projects considered under the cumulative analysis may vary according to the resource being considered. In addition, the length of time for cumulative effects analysis will vary according to the duration of impacts from the Proposed Action on the particular resource.

4.1 Introduction

Environmental consequences of the Proposed Action were evaluated previously in Chapter 3 for the environmental resources at issue within the 2018 Black Pine Exploration EA and additional information is supplemented herein. Discussed in the following sections are those resources that have potential to be cumulatively impacted by the expansion of mineral exploration within the identified CIAAs. The discussions are based upon the previous analysis of each environmental resource as well as the overall location of the proposed expansion of mineral exploration within the previously analyzed project area.

The geographical areas considered for the analysis of cumulative effects vary in size and shape to reflect each evaluated environmental resource and the potential area of impact to each from the Proposed Action as determined through the analysis in Chapter 4. For this cumulative impact analysis, the assessment areas for terrestrial wildlife were developed based on topography, species habitat requirements, and known use patterns from local knowledge, professional experience and survey data. The assessment area is spatially illustrated in Figure 16.

For this cumulative impact analysis, the combined East Dry, Burnt, and Black Pine Watershed is the CIAA for groundwater. The Pilot Gold project boundary is the CIAA for visual/scenic resources.

Information utilized in the cumulative impacts assessment was gathered from the following sources: GIS shape files provided by the BLM and USFS; BLMs land and Mineral Legacy Rehost 2000 (LR2000) System; and aerial photography. The BLM LR2000 database was queried for authorized multiple land use activities, pending ROW grants, mineral and non-mineral exploration and mining permits. The USFS Schedule of Proposed Actions was also reviewed for past, present, and RFFAs on USFS administered land.

Table 4.1-1 lists the analyzed resources, the name and size of each CIAA, and the figure number on which the geographic extent of the CIAA is shown. Projects are defined for the cumulative analysis in this supplemental EA as activities that could interact with the Proposed Action in a manner that would result in cumulative impacts. Activities have been grouped as past, present, and RFFAs. The term "overall CIAA boundary" is used in this section which is defined as the total boundary of all the CIAAs together.

The effects of exploration drilling are expected to be short term (<5 years). Effects associated with reclamation and landscape restoration are expected to be limited to the short-term (3-10 years). The scope of this analysis of cumulative effects will be focused on these time frames.

Table 4.1-1. Cumulative Impacts Analysis Areas

Resource	Cumulative Impacts Analysis Areas	
	Acres	**Description**
Scenic Resources	1660	Pilot Gold's Property Boundary
Columbia Sharp-tail and Greater Sage-grouse	94,707	4-mile survey centered on project area including additional 4-mile buffer centered on active leks identified by survey. (Figure 16)
Big Game including Mule Deer, Elk and Moose	67,003	(HUC 12) Black Pine and East Dry watershed boundary east to Interstate 84 (Figure 16)
General Wildlife including Townsend's Big Eared Bat, Spotted Bat, Raptors and Migratory Birds	67,003	(HUC 12) Black Pine and East Dry watershed boundary east to Interstate 84 (Figure 16)
Groundwater Resources	67,003	HUC 12 (Black Pine, Burnt Basin and East Dry) (Figure 16)

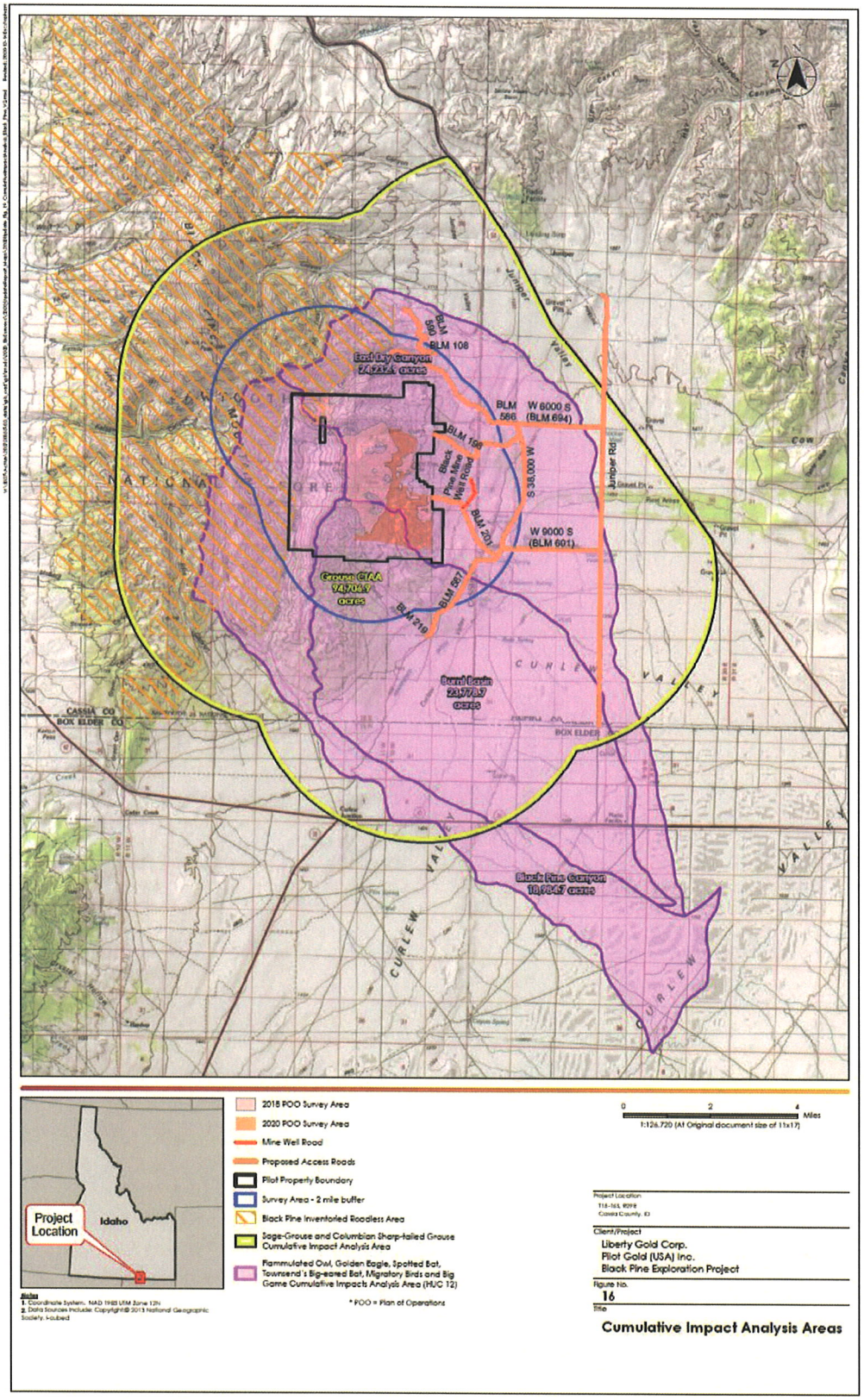


Figure 16. Cumulative Impact Analysis Area

4.2 Past Actions

According to the FSH 1909.15.1 and the CEQ Guidance memorandum on Consideration of Past Actions in Cumulative Effects Analysis dated June 24, 2005, CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions. CEQ regulations do not require agencies to catalogue or exhaustively list and analyze all individual past actions (FSH, 2012d; CEQ, 2005). In compliance with CEQ regulations, only those past actions that may result in present impacts were analyzed in this EA.

Mineral Exploration and Mineral Development

Mineral prospecting, exploration, and development were first conducted in the late 1800s within the area of Black Pine Canyon (Silver Hills Mine) and Mineral Gulch. Previous exploration and mining efforts culminating in the development of the first open pit at Black Pine (Tallman Pit) happened in the 1950s with the Duval Company based in Ogden, Utah. Mineral exploration continued into the 1970s and 1980s with Newmont Exploration and Noranda at the head of East Dry and Black Pine Canyons. Exploration culminated in the discovery of economic oxide gold by Noranda Exploration in the late 1980s. Noranda submitted plans for mine development in 1987, the analysis of which was documented in an August 1988 EA. Noranda revised their plan of operation in August 1989 to include development of three open pits, two heap leach pads, up to eight solution ponds, a haul road system, and ore recovery and ancillary support facilities.

Black Pine Mining Inc. (BPMI) owned by Pegasus Gold purchased the rights to develop a cyanide heap leach/open pit operation from Noranda in June 1990 and adopted Noranda's approved operating plan. BPMI revised the Noranda plan, which the Forest Service evaluated with an additional EA and findings documented with a FONSI in March 1991. The plan revision involved a single 100-acre valley-fill heap leaching facility capable of processing 22 million tons of gold ore. Operations at that time had been implemented and constructed under operating Plan Number 01-91-02, consisting of BPMIs operation of the Tallman, A, and B mine pits, the Tallman waste dump, crushing facilities, the cyanide leach pad, and processing and ancillary surface support facilities. During mine operation, BPMI simultaneously conducted exploration activities in areas adjacent to the mine along with concurrent road and drill pad reclamation.

In 1995 the Forest Service prepared an EIS and Record of Decision evaluating the expansion of the existing Black Pine gold mine, which included the development of three additional open pits (C/D, E and J Pits), partial back fill of existing pits, creation of new waste rock dumps, construction of haul roads, and raising the height of the existing heap leach pad to accommodate the increased volume of ore. Total combined acreage of all surface disturbance analyzed in the EIS is estimated at 260 acres.

Mining continued until 1998 and the operation closed following the bankruptcy of Pegasus. An examination of GIS data and aerial photography it is estimated between 1992 and 2001,

approximately 550 acres have been reclaimed. This includes exploration drill roads, knock-down and recontouring of waste rock dumps, backfilling of smaller pits, removing facilities and scarifying compacted areas, backfilling and reshaping process ponds, reshaping slopes, and windrowing and reseeding. Four open pits remain. Monitoring of the drain-down and continued rinsing of the heap leach facility continues under the original BPMI/Pegasus plan of operations.

In 2010 the Forest Service evaluated a new plan of operation from Western Pacific Resources, Inc. (WPR) to drill 32 holes and disturb approximately 13 acres in support of exploration activities at the former mine site under Plan # POO- 2011-030938. WPR submitted a supplement to their exploration plan in 2011 to drill an additional 34 holes and disturb an additional 33 acres. In 2016, Pilot Gold assumed WPRs plan of operation and reclamation and bonding responsibilities.

Pilot Gold submitted a new Plan (POO-2017-072046) in May 2017 proposing 370 drill sites and approximately 29 miles of spur roads and access route construction within their 1660-acre project area centered on the former Black Pine mine. This proposal incorporates the previously authorized exploratory drilling approved by the USFS in 2011 and 2012 that was never implemented by Western Pacific Resources. This plan, authorized February 2019, allows for approximately 141 acres of surface disturbance.

Powerlines, Telephone Lines, Communication Facilities, and Other Utilities

There are several miles of powerlines, telephone lines, and other utilities within the overall CIAA boundary. The powerline installed in support of mining operations was extended from BLM lands east of the Black Pine mine and project area with an extension installed to provide power to the Black Pine Mine well. Other various infrastructure includes water wells drilled to serve past mining operations and water improvements including troughs and spring boxes installed for livestock.

Wildland Fires

The largest and most recent wildland fires within the CIAA boundaries on NFS land and BLM lands are the Black Pine 1 and 2 fires (2007) and Burnt Basin fire (2006). Utilizing Forest Service and BLM GIS Fire History information, approximately 82,000 acres surrounding the proposed project area, including roadless, have been affected by wildland fire and are still recovering.

4.3 Present Actions

Mineral Exploration and Mineral Development

Pilot Gold Inc. conducted exploration drilling operations in the fall of 2017 pursuant to the authorized plan of operations transferred from Western Pacific Resources, Inc. which authorized up to 33 acres of surface disturbance including 55 drill sites. Pilot constructed approximately 2

miles of road and drilled 13 reverse circulation holes which were properly plugged and abandoned upon completion.

Pilot submitted their first annual workplan in February 2019, consistent with their authorized 2-17 plan of operations and initiated construction of drill roads and drill pad access April 17, 2019 after all required clearances had been met per their 2019 workplan. Active exploration work continued until mid-December 2019 with the completion of 93 drill holes (87 Reverse Circulation and 6 core) from 46 drill pads. Approximately 5.2 miles of access road was constructed to access drill sites. Pilot initiated their 2020 Workplan April 4, 2020. To date drilling activities have impacted an estimated 28 acres with 1.3 acres reclaimed that includes reclamation of 35 drill sites and 0.9 miles of access road.

Roads

Approximately 70 miles of road exist within the overall CIAA boundary. In May 2018, the updated Motor Vehicle Use Maps (MVUM) for the Minidoka Ranger District were made available to the public. Approximately 15 miles of road within the overall CIAA boundary are county, private, or BLM jurisdiction, open yearlong. Approximately 51 miles of roads within the overall CIAA boundary on NFS land are public and open yearlong.

Livestock Grazing

Livestock grazing is permitted throughout the overall CIAA boundary. Grazing occurs both on Forest Service and BLM administered lands within the CIAA. The Pocatello Field Office recently completed an evaluation of the Curlew allotment (BLM, 2019). The Curlew allotment encompasses approximately 139,999 acres consisting of approximately 134,241 acres of BLM managed public land, 2,691 acres of State managed land, 810 acres of US Forest Service managed Land and 2,236 acres of private land.

In September 2020, the BLM Pocatello field office implemented a stock water improvement project within the area east of the Black Pine mine to transmit stock water through a buried pipe from the Duvall well to a series of stock water troughs in the vicinity of the Black Pine mine well road. The pipeline was installed along existing routes to minimize cross country travel. Four new stock water troughs were installed, and four pre-existing troughs were replaced. New disturbance associated with the project consisted of approximately 1 acre. This action was described and analyzed in the Curlew Allotment EA (BLM 2019).

4.4 Reasonably Foreseeable Future Actions

Reasonably Foreseeable Future Actions within the CIAAs include new prospecting and mineral exploration, livestock grazing, dispersed recreation, wood cutting, big-game hunting, and agricultural development on private lands.

Mining is not considered a RFFA because mineral exploration can occur over many years and never lead to the development of a mining proposal requiring environmental review, analysis and approval. At the present, there are no proposals to develop a mine within the CIAA. If there is a future mining proposal, it would require site-specific environmental review, analysis and approval.

4.5 Cumulative Impacts of the Proposed Action Alternative

4.5.1 Groundwater Resources

The potential effect for drill hole filtrate migration is within a few feet of the drilled drill hole, however features such as springs and wells that can be measured to assess water quality occur distal to the project area, therefore the cumulative effect area would the HUC 12 (Black Pine, Burnt Basin, East Dry) watershed as these contain the proposed drilling areas on National Forest and the aquifers or portions thereof that may exist directly beneath these areas.

Past activities that could have had impacts on groundwater resources include previous mining and mineral exploration associated with the former Silver Hills mine of the late 1880s, the Tallman/Hazel Pine Mine which operated intermittently between the 1930s and 1950s, mineral exploration and subsequent mine development by Noranda in the 1980s and early 1990s, mine expansion, closure and reclamation under Pegasus Gold and BPMI mining through early 2000, and renewed exploratory drilling by Western Pacific Resources, Inc. and Pilot Gold in 2011, 2012, 2017 and 2019. Reclamation associated with these previous activities, including recontouring and monitoring of the BPMI heap-leach facility continues into the present date.

Currently, livestock grazing occurs within and outside of the project area however the extent is limited due to the lack of surface water. Both livestock and wildlife converge on spring locations both on FS, BLM, and private lands within the CIAA. Groundwater pumping in support of agriculture will continue on private lands east of the project area within the Juniper and Curlew Valleys that will likely have some impact on aquifers east of the project area. Curlew Valley is a groundwater sub-basin within the greater, regional Bear River drainage basin. Adjudication proceedings for the Idaho portion of the Bear River drainage basin were initiated in July of 2020 and it may take a few more years before water rights in Curlew Valley become subject to the adjudication and ultimately become decreed or curtailed, based upon communications with the former Idaho State Engineer, David Tuthill, Jr., dba Idaho Water Engineering (Donohoe, 2020). Despite the fact that the existing condition of groundwater resources may have been influenced by previous mineral exploration and mining in the area, groundwater data collected since 1967 and other additional sites have showed little change in water chemistry, suggesting that the water quality has not changed appreciably over a near 50-year period (Appendix D). Impacts from past, present and RFFAs when combined with the Proposed Action would result in negligible cumulative impacts in terms of groundwater quality, so long as protective measures continue to be

taken. The proposed action is proposing to use approximately 1.5 AFY. This would be a negligible impact to water quantity within the sub-basin when combined with and compared with ongoing agricultural, livestock and domestic uses within the CIAA. While it will add cumulatively in the short-term (during the project duration), it is an authorized consumptive use regulated by the State of Idaho and is expected to be a negligible cumulative impact in terms of water quantity.

4.5.2 Scenic Resources

While views from Key Observation Points (KOPs) have been analyzed that are both within and outside of the project area, impacts to scenic resources are measured specifically on the lands on which they occur from viewpoints on and off said lands therefore the CIAA for visual resources is the project area boundary.

The only past and present activities that would continue to impact visual resources are system and non-system road use and maintenance, grazing, recreation and mineral exploration. These activities and their administration could result in restrictions on access, removal of vegetation and creation of unauthorized routes. Wildfire has also affected the landscape; however the Forest Plan recognizes fire as a natural component of the visual landscape.

The impact from the proposed action when combined with the past and present actions and RFFA is expected to remain reasonably similar and therefore is not expected to critically affect the visual resource beyond the current background levels that are considered the existing condition.

4.5.3 Wildlife

For this Project, the cumulative effects study area (CIAA) varies for each species or group of species (Figure 16). For CTSG and GRSG, it is a four-mile buffer of the Project Area and leks determined to be active during 2018 helicopter survey. The eastern boundary of this CIAA is limited to Interstate 84 as it likely presents a significant barrier to these species. The overall CIAA for these species encompasses approximately 95,000 acres. These two species were grouped together since they generally utilize similar habitats within the CIAA and generally exhibit similar behavior patterns. The CIAA for migratory birds, big game, bats, and raptor species is the HUC-12 watersheds that encompass the Project Area. The overall CIAA for these species encompasses approximately 67,000 acres. These species were grouped together since they all potentially use the Project Area and areas of adjacent habitat. The CIAA was determined to be large enough as most, if not all of the impacts to these species, would occur within the HUC-12 watersheds that comprise the Project Area.

These CIAA boundaries were selected as they generally encompass the distribution of the species within the Project Area and encompass areas adjacent to the Project Area while not creating such large boundaries that might dilute potential cumulative impacts, plus they include the various land use activities that need to be considered for the cumulative effects analysis. The majority of actions

have also taken place within these areas with regards to mining, road use, grazing, agricultural, etc. Most impacts to the species being analyzed would occur within or immediately adjacent to the Project Area and it is unlikely that any short-term or long-term adverse impacts to these species would occur beyond the CIAA boundaries.

The primary federal activities that have likely impacted sensitive wildlife species and their habitats in the analysis area include use of system and development and use of non-system roads, livestock grazing, herbicide application, recreation and non-recreation special-use permitted activities, developed recreation, water diversion structures, irrigation (inadvertent), current and past timber harvest, current and past mining and exploration activity, personal use firewood cutting, and dispersed recreation (including snowmobiling).

The reclamation and restoration of past mining disturbance has been extensive within the Black Pine area. Utilizing Forest Service and BLM GIS data it is estimated that approximately 550 acres of surface disturbance associated with past exploration and mining activities have been reclaimed, revegetated and restored within the project area. These acreages include past exploration roads, prospect pits, large waste rock dumps, landing areas, mine facilities, heap leach and process ponds. These management activities and disturbances have contributed to the establishment and distribution of some amount of noxious and non-native plant species in the analysis area. While reseeding and revegetation efforts associated with mine reclamation has changed vegetation composition and vegetation type within the project area, overall surface conditions and biotic function have improved as compared to those that would remain had reclamation not been completed and these disturbances left unattended on the landscape.

Historic and in some cases, current livestock grazing in the analysis area has degraded upland and isolated riparian habitats and changed vegetation composition. Wildfires and wildfire suppression have played an important role in vegetation community composition at the landscape scale within and adjacent to the project area. Highways and other high traffic roadways (e.g. Interstate 84) often have a deleterious effect on wildlife. Wildlife attempting to cross these roads are at heightened risk of mortality from vehicle collisions. The building of I-84 effectively cut off the mule deer migration between Black Pine and Sublett Mountains and for flightless species essentially represents a permanent barrier. Additionally, the noise produced from these roads can have an adverse impact on wildlife.

Present actions include the currently authorized exploration activities. Currently authorized activities are similar to those described in this document: the construction of access roads and drill sties, reconstruction of previously reclaimed roads, utilization and maintenance of existing roads, and subsequent reclamation and restoration of these disturbances.
Reasonably foreseeable actions include the above listed uses involving recreation at or near similar use levels, continued livestock grazing at or near current levels, wildfire suppression, travel

management actions including rehabilitation of non-system routes and normal yearly maintenance of roads. USFS infrastructure and facilities, where they occur, are expected to be maintained through time. Current habitat fragmentation, high road densities and disturbance to wildlife from motor vehicles and the recreating public is expected to continue at or near current levels and is expected to continue to negatively affect to some degree wildlife distribution and productivity, especially for species that are sensitive to disturbance. Past motorized cross-country travel has had a direct negative effect to sensitive species by interrupting travel corridors, by reducing security cover, and causing human disturbance during critical life periods, such as, nesting, fawning, and foraging. Implementation of the Sawtooth Travel Plan (MVUM 2008) has reduced impacts from motorized cross-country travel over time within the Black Pine Division. This management action has improved overall conditions for sensitive species by limiting disturbance to these species.

Inventory and control of noxious weeds is expected to occur at or near current levels with mechanical treatment (i.e. hand pulling, mowing, etc.) and chemical pesticide (herbicide) application. In the future, management actions and projects to control invasive grasses and restore sagebrush habitat are likely to be developed and occur.

4.5.3.1 Cumulative Effects to Columbia Sharp-tailed grouse (CTSG) and Greater sage-grouse (CRSG)

CSTG and GRSG individuals and their habitat have been affected by past and current mining and mineral exploration, reclamation of these disturbances, livestock grazing, timber management, road building, fire suppression, fuelwood gathering, invasive weeds, wildfire, agricultural and private land development and other uses as described in detail above.

Both CSTG and GRSG in the CIAA have declined through time with some of the active leks becoming inactive through time and declining lek attendance; CSTG and especially GRSG are now at lower population levels where they could become locally extirpated within the CIAA in the future, especially if a random event occurs (i.e. large wildfire, disease, etc.) as population resiliency at the current levels is minimal. The combination of wildfires which have removed shrub communities as well as fragmentation of the landscape from roads, mining and mineral exploration activities, and development of private lands for agricultural activities have removed sagebrush habitat long term. Invasive species, primarily cheatgrass, are well established throughout the CIAA with very few large expanses of sagebrush left in the CIAA. Restoration of disturbance events in the CIAA has been relatively unsuccessful in establishing the vegetation composition necessary to support CSTG or GRSG to complete their life cycle. Efforts to restore the necessary habitat components for CSTG and especially GRSG through active restoration techniques (seedings, planting, etc.) in the CIAA and reverse the long-term trend of declining habitat for these species in the CIAA has been minimal. There are no new planned habitat restoration projects in the CIAA by the Forest Service; however, BLM is pursuing several sagebrush seeding/planting efforts, as

well as rangeland seeding diversification/cheatgrass abatement due to the hard population trigger being reached for GRSG.

The Proposed Action, if fully implemented, has the potential to add cumulatively to the above-named effects to CSTG and GRSG individuals and their habitat beyond what was analyzed in the 2018 EA due to the added spatial and temporal extents of the project related to the proposed expansion. Overall cumulative effects contributed by this expanded mineral exploration in addition to the effects analyzed in the 2018 EA should be minor to moderate overall due to the EPMs and reclamation that would be implemented for the Project. The reclamation, if fully successful, are intended to improve vegetation success beyond that realized from past reclamation efforts, and ultimately reduce habitat fragmentation, prevent and control the propagation of non-native species. EPM's, which are expected to be implemented as planned, should reduce disturbances to these species during critical life phases through project timing restrictions and protections.

In addition to the EPMs and reclamation efforts described in this document, Attachment 7 of this EA describes voluntary compensatory mitigation. The proposed mitigation would consist of planting 20,000 sagebrush and bitterbrush seedlings in the area adjacent to identified active and undetermined sage-grouse leks within the sage-grouse CIAA on BLM managed lands over an approximately 100-acre area. If Pilot chose to implement the proposed voluntary compensatory mitigation, cumulative effects would be reduced to minor.

4.5.3.2 Cumulative Effects to Migratory Birds and Golden Eagle

Habitat for migratory birds, golden eagle foraging, and potentially suitable habitat for flammulated owls within the Project Area has been affected by historic mining activities, historic livestock grazing (pre-1940) and associated range structures, invasive weeds, wildfire, wildfire suppression activities, and motorized recreation. All of these activities will likely continue and have the potential to impact nesting and foraging opportunities for sagebrush dependent migratory birds and foraging and nesting opportunities for golden eagles.

The former Black Pine Mine operation removed sagebrush-obligate bird habitat and foraging habitat for golden eagles in locations where pits were excavated, ore removed, and rock dumps established. This mining activity fragmented and altered the landscape with varying levels of effect, such as temporary roads which recover with vegetation through time to areas such as the open pits, which will never recover. Extensive reclamation has taken place in many portions of the Project Area and most areas except the open pits have vegetative cover, although marginal in quality. The non-vegetated areas have been permanently lost for use by most sagebrush migratory birds, foraging golden eagles, although open pit high walls can create cliff-like nesting opportunities for eagles. Past approved exploration activities along with this Project has resulted in disturbance to vegetation although successful reclamation and revegetation has occurred with varying levels of habitat restored through time.

Invasive species do occur in site specific locations throughout the Project Area and on the Black Pine Division, in general. Primary vectors for invasive species spread are vehicles that introduce weeds along road corridors. Invasives also become established after wildfire events. By crowding out native species, invasives have the potential to reduce the quality of habitat for sagebrush migratory bird habitat and overall golden eagle foraging habitat. Project activities do provide the potential for weed invasion into the Project Area, which could add cumulatively to the overall invasive species occurrence on the Black Pine Division, however invasive prevention and control is a required EPM for this project therefore the cumulative effect is expected to be negligible.

Throughout their range on a landscape scale in southern Idaho and within the Black Pine Division, sagebrush migratory birds have been directly affected by large scale wildfire and patch level conversion to annual grass and invasive species. These wildfires may have an indirect effect by causing fragmentation of habitat and interrupting continuity and migratory corridors for sagebrush obligates. Wildfire and invasives remain a potential threat to the persistence of quality sagebrush migratory bird habitat and can impact foraging habitat for golden eagles. These threats can also impact potentially suitable habitat for these species in the CIAA.

Past motorized cross-country travel has had a direct negative effect to migratory birds by interrupting travel corridors, reducing cover, and causing human disturbance during critical life periods, such as, nesting and foraging. Implementation of the Sawtooth Travel Plan (MVUM 2008) has reduced impacts from motorized cross-country travel over time within the Black Pine Division. This trend should continue as law enforcement efforts are stepped up in the future. This management action has improved overall conditions for sagebrush migratory birds by limiting the disturbance to these species during critical life phases.

All of the above activities would likely continue in the foreseeable future (1-15 years) and thus, the Proposed Action has the potential to add cumulatively to the above-named effects to sagebrush migratory bird populations and their habitat, golden eagle foraging habitat. While overall effects to sagebrush dependent migratory bird habitat and golden eagle habitat is expected to be low, over time this Project does add incremental cumulative effects to habitat for these species.

These cumulative effects should be minor to negligible due to the required addition of EPMs and reclamation efforts that would be implemented for the Project. EPM's are expected to improve vegetation success and ultimately reduce habitat fragmentation were reclamation not required.

4.5.3.3 Cumulative Effects to Big Game Species including Mule Deer, Elk and Moose

Mule deer, elk, and moose individuals and their habitat have been affected by the conversion of shrublands to grasslands as a result of past and current mining and mineral exploration and subsequent reclamation of these disturbances, livestock grazing, timber management, road building, fire suppression, fuelwood gathering, invasive weeds, wildfire and private land

development and uses as described in detail above. In addition, habitat fragmentation and loss of security cover has also occurred by many of the past and current activities in the CIAA.

The Proposed Action has the potential to add cumulatively to the above-named effects to mule deer, elk, and moose individuals and their habitat through the implementation of the proposed surface disturbing activities. Cumulative effects are expected to be minor as areas of proposed road construction will occur along segments that have been previously disturbed and reclaimed in support of prior mineral exploration efforts. In these areas, the quality of security cover is low due to past actions in the project area.

The extent of new proposed road construction and the potential for impacts to existing vegetative cover will depend on the results of each annual phase of exploration drilling which will ultimately determine whether the full extent of proposed new disturbances will be required, reducing the overall projected cumulative project impact. Requiring the proponent adhere to site reclamation and restoration requirements to restore topography and implement reclamation efforts are expected to improve vegetation success and ultimately reduce habitat fragmentation were reclamation not required. Reclamation requirements will also prevent and control the propagation of non-native species and reduce disturbances to these species during critical life phases through appropriate project timing restrictions that offer these species opportunity to migrate into areas adjacent to the project area with more suitable habitat and cover.

4.5.3.4 Cumulative Effects to Sensitive Bat Species

Sensitive bat species individuals and their habitat have potentially been affected by past and current mining and mineral exploration, livestock grazing, timber management, road building, fire suppression, fuelwood gathering, invasive weeds, wildfire and private land development and uses as described in detail above. The Proposed Action has the potential to add cumulatively to the above-named effects to these bat species and their habitat, although the cumulative effects should be minor due to the EPMs and reclamation efforts that would be implemented for the Project that are expected to improve vegetation success beyond that realized from past reclamation efforts, and ultimately reduce habitat fragmentation were reclamation not required, and reduce disturbances to these species through appropriate project timing restrictions.

4.6 Cumulative Impacts of the No Action Alternative

Under the No Action Alternative, the proposed mineral exploration activities described in Pilot's modified proposal would not occur, and no further impacts to resources would occur. Current levels of disturbance and activities associated with current authorized activities would remain unchanged. Within the CIAAs, only those actions which have already occurred or have been approved would affect the resources of concern. The No Action alternative would not alter cumulative effects.

5.0 List of Preparers and Reviewers

USFS – Sawtooth National Forest

Kirk Flannigan	Acting Sawtooth Forest Supervisor
Randy Thompson	Minidoka District Ranger
Heidie I. Torrealday	Project Lead – Regional Geologist
Scott Soletti	Wildlife
Mark Dallon	Hydrology/Soils
Matt Phillips	Scenic Resources
Thomas Stewart	Botany/Soils
Doug Baughman	Heritage Resources
Kevin Duchow	Engineering
Jessica French	Rangeland Management
Michael Haney	NEPA Coordinator

BLM – Pocatello Field Office

Melissa Warren	Field Manager
Bryce Anderson	BLM Lead - Geologist
Danny Miller	Realty Specialist
Cindy Jernigan	Realty Specialist
David Price	Wildlife Biologist
Amy Lapp	Archaeologist
Karen Kraus	Natural Resource Specialist/Botanist
Blaine Newman	Assistant Field Manager
Michael Kuyper	Assistant Field Manager

Pilot Gold (USA) – Project Operator

Moira Smith	Vice-President, Exploration and Geoscience
Gerald Heston	Permitting/GIS
Pete Shabasteri	Project Geologist
Will LePore	Project Geologist

Stantec – Contractor

Greg Brown	Principal/Senior Project Manager/Biologist
David Kikkert	Wildlife Biologist
Anna Skinner	Hydrologist

Donohoe HydroGeo LLC

Timothy Donohoe	Hydrogeologist

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7.0 List of Attachments

Attachment 1 – Proposed Project-Specific Forest Plan Amendment

Attachment 2 - Black Pine Exploration Project Spill Prevention Plan

Attachment 3 - Pilot Golds Reclamation Plan

Attachment 4 – Monitoring Plan

Attachment 5- Water Quality Data

Attachment 6. Final BLM Greater Sage Grouse Land Use Plan Conformance Review

Attachment 7. Proposal for Voluntary Mitigation

Attachment 8. Response to Comments

Attachment 4B and 4C

See explanation provided in Attachment 3A

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 E Front Street, Suite 648 • PO Box 83720 • Boise ID 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700
Website: idwr.idaho.gov • Email: idwrinfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

May 12, 2021

PILOT GOLD (USA) INC
1031 RAILROAD ST STE 110
ELKO, NV 89801-3975

RE: RENTAL OF WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NO(S). 17-7118 & 17-7136, AGREEMENT 516

Dear Renter:

Please find enclosed a receipt in the amount of **$2,500.00** and a copy of a fully executed Water Supply Bank Rental Agreement in connection with the rental of 63.1 acre-feet of water for industrial use during 2021. Upon receipt of this fully executed agreement, you are authorized to divert water in compliance with the conditions of water use described in the agreement.

Pursuant to the Water Supply Bank Rules, the rental fee will be retained by the Department to offset administrative costs since you have a private agreement with the lessor of the right(s).

If you have any questions, please contact this office at bank@idwr.idaho.gov or (208) 287-4800.

Sincerely,

Amanda Johnson-Veibell

for
Water Supply Bank

Enclosures: Receipt No. C110351
Rental Agreement (copy)

c: Sascha Marston – Fiscal
IDWR Eastern Regional Office
David Tutthill

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 E Front Street, Suite 648 • PO Box 83720 • Boise ID 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700
Website: idwr.idaho.gov • Email: idwrinfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

April 22, 2021

PILOT GOLD (USA) INC
1031 RAILROAD ST STE 110
ELKO, NV 89801-3975

**RE: APPLICATION TO RENT WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NO(S). 17-7118 & 17-7136, AGREEMENT 516**

*****TIME SENSITIVE RESPONSE REQUIRED*****

Dear Applicant:

The Department of Water Resources acknowledges receipt of your application to rent water from the Water Supply Bank. **I have enclosed a Water Supply Bank Rental Agreement for your review and signature.** Upon signature and return of the original agreement, together with the rental fee described below, the Department will also sign the original agreement and return an executed copy to you. Execution of the agreement and compliance with the conditions of approval authorize diversion and use of water as provided in the agreement.

A rental fee of **$2,500.00** was calculated based on the current rental rate of $20.00 per acre-foot times a diversion volume of 63.1 acre-feet. Since you have a private agreement with the lessor, **you are only obligated to pay the 10% administrative fee or $2,500.00.** An annual payment shall be received by the Department prior to the execution of this agreement and prior to January 1 in all subsequent years for the duration of the rental period. The agreement will be void if payment is not received prior to the due date in a given year. If you would like to terminate the agreement prior to the end of the rental period, you must submit written notice of your intent to the Department at least 30 days prior to the rental fee due date.

Please send a check for $2,500.00 made payable to the Idaho Department of Water Resources, **together with the signed rental agreement, within 14 days** so I can complete processing.

If you have any questions, please contact this office at bank@idwr.idaho.gov or (208) 287-4800.

Sincerely,

Amanda Johnson-Veibell

for
Water Supply Bank

Enclosure(s)

c: IDWR Front Desk

Memorandum

To: Rental Application 1984
From: Remington Buyer
Date: April 16, 2021
Re: Water Supply Bank Rental Application for Industrial (Mining) Purposes

Purpose/Narrative: Rental application 1984 was received February 16, 2021 from Pilot Gold (USA) Inc, through Dave Tuthill of Idaho Water Engineering. Peter Shabestari signed the application on behalf of Pilot Gold (USA) Inc.

The rental proposes a diversion of ground water from basin 17, from a well located on the eastern side of the Black Pine mountain range in Cassia County. The water will be transported by a water truck up into the Sawtooth National Forrest, and will be used to hydraulically drill holes as part of Pilot Gold's "Black Pine Exploration Project". Per information provided by the applicant, a sum total of 50 af will be diverted annually under this rental, with 85% of the water (42.5 af) being used non-consumptively as a drilling fluid, and the remaining 15% of water (7.5 af) being used fully consumptively for road watering.

There were many maps provided with the rental application. Last year, a temporary water use approval was issued for the mining project. The place of use (POU) within which water will be authorized to be used for industrial mining purposes under this rental will be the same POU associated with last year's temporary water use approval, based on the map submitted for that prior application to IDWR.

The renter has agreed to a rental payment of $25,000 for the rental of 50.1 af of water, equivalent to $499/af. Pursuant to Water Supply Bank procedures, the Bank will allow this rental rate, and the Bank will levy the rental fee of $2,500/annually for the water right rental. The payment agreement is for three years. In recognition that the water right lease is intended to run for this three years, this rental will be approved for three years.

Authority to File: The applications were signed and submitted by Mr. Shabestari, Vice President of Operations for Pilot Gold (USA) Inc. The point of diversion (POD) and place of use (POU) for this rental are situated on lands owned by the United States; the POD is on land owned by the Bureau of Land Management (BLM), while the land where the water will be used for mining and road watering purposes belongs to the United States Forest Service (USFS). A copy of the BLM's approved Plan of Operations was included with the rental application, as was a copy of the "Black Pine Exploration Expansion Environmental Assessment", produced by the USFS. In the USFS environmental assessment (EA) document, the USFS affirmed that the Black Pine Exploration Project is and remains authorized by the USFS pursuant to a prior final Decision/FONSI. No concerns about authority to file.

Water Right Validity/Forfeiture Evaluation: The water rights being used to facilitate this rental are valid and leased to the Bank. No concerns about the validity of the water rights to be rented.

The POD proposed for this rental is an already existing well which is commonly known as the "Black Pine Mine Well", located in the SENE quarter-quarter (QQ) of Section 36 in Township 15S, Range 29E. IDWR records indicate that a well was drilled in this QQ on September 9, 1989, in association with the development of permit 17-7132. However, when the permit was licensed, an amendment was approved to move the POD to the NENE QQ of Section 36, so that it would authorize diversions from a different well, associated with water right 17-7140. As such, it does not appear that the well from which water will be diverted under this rental is presently associated with any active water rights.

The POU where mining activities will occur under this rental are lands that are associated with three unique mining water rights: 17-7132, 17-7140 and 17-2024. The validity of these three mining water rights is unclear. This rental should not affect the validity of the three water rights.

Injury Evaluation: Because this rental proposes a movement of ground water rights 17-7118 and 7136 from their current location to a new location, it is relevant to consider the injury potential presented under this rental. Also, because the rental proposes a change in nature of use, the injury potential for the change should also be considered.

The POD locations for both the lease and rental are not within the boundaries of any ground water management areas and there do not appear to be any limitations on how much water can be moved from the lease POD to the rental POD. Typically, when a change in nature of use is reviewed, particularly for surface water rights, the Department prevents potential injury by restricting how much of the leased diversion volume can be authorized to be diverted at the rental location; to prevent potential injury to water users downstream of the lease location, who historically benefited from return flows associated with the non-consumptive use of water at the lease location, the Department typically only allows the rental of the consumptively used portion of the overall diversion volume at the rental location. However, when a rental proposes a largely non-consumptive use of water, and when it is for ground water, or storage water, it may not be necessary to limit the rental volume to the consumptive use volume, if no injury is apparent.

The portions of water rights 17-1778 and 7136 leased to the Bank provide for an overall diversion volume of 50.1 af, of which 35.8 af is calculated to be the consumptive use volume (based on a consumptive use volume to diversion volume ratio of 2.5 : 3.5). As such, historically, ground water users downgradient of the lease location have typically received return flows of 14.3 af (50.1 af – 35.8 af). However, through the lease, 50.1 af of water will be left un-diverted and this increased aquifer volume will now flow downgradient to other water users. As such, no injury appears evident to downgradient water users under the lease.

The applicant has requested an overall diversion volume of 45-50 af, of which, 42.5 af would be returned to the aquifer, while only 7.5 af would be consumptively used. As such, in reality, the rental proposes an increase a potential drawdown of 7.5 af of ground water in the vicinity of the rental location. There are no ground water management areas designated for this area, and it is unclear whether increased diversions of water under this rental would impact or cause injury to downgradient water users. It is proposed that the overall rental volume of 50.1 af be authorized for industrial purposes, with a conditions that both affirms: 1) the consumptive use of water for road watering is limited to 7.5 af; *and* 2) any water user who feels that the rental might be causing them injury will be allowed to petition the Director to modify or cancel the rental, upon a showing of injury.

Finally, provided water is diverted and used as authorized under the already-established BLM and USFS approvals, no injury is foreseen under this rental.

Enlargement of Use: The calculated consumptive use of water under this rental is expected to not exceed 7.5 af. The consumptive use associated with the irrigation use of water rights 17-7118 and 17-7136 is calculated to be 35.8 af. Because the consumptive use of water under the rental will be less than the consumptive use calculated for the portions of the water rights being rented, no enlargement is apparent under the rental.

Local Public Interest: Staff are unaware of any local public interests that are averse to the rental.

Beneficial Use/Conservation of Water Resources: The rental appears consistent with the conservation of water resources in Idaho.

Department/Watermaster Comments: Comments were requested from Eastern Region on March 22, 2021.

Water Supply Bank Evaluation: Bank staff recommend the approval of this rental.

From: Dave Tuthill <dave@idahowaterengineering.com>
Sent: Thursday, April 15, 2021 5:06 PM
To: Buyer, Remington
Cc: Pete Shabestari; Bank
Subject: Re: WSB Rental Application 1984 - Pilot Gold (USA) INC

Thanks, Remington!

Cheers,

Dave
David R. Tuthill, Jr., Ph.D., P.E.
Idaho Water Engineering, LLC
2918 N. El Rancho Pl., Boise, ID 83704
Office: (208) 378-1513
Cell: (208) 870-0345
Fax: (888) 538-7703
email: dave@idahowaterengineering.com
website: www.idahowaterengineering.com

On Thu, Apr 15, 2021 at 5:03 PM Buyer, Remington <Remington.Buyer@idwr.idaho.gov> wrote:

Dave,

My apologies that I never got back to you with an answer about doing a three year lease/rental. The answer is yes, we can issue lease and rental approvals for three years, instead of one. I finalized my review of these applications earlier this month, and approvals are being prepared for issuance. I will update the approvals to make them for three years, to reflect the agreement between Pilot Gold and Black Pine Ranch.

Remington

From: Dave Tuthill <dave@idahowaterengineering.com>
Sent: Thursday, February 18, 2021 9:15:48 AM
To: Pete Shabestari
Cc: Buyer, Remington; Bank
Subject: Re: WSB Rental Application 1984 - Pilot Gold (USA) INC

Thanks, Pete.

My understanding was that this lease application would be for one year, so this is what we submitted.

Given the three year agreement, Remington can we change the application to reflect three years at this point?

Thanks,

Dave

On Thu, Feb 18, 2021, 9:07 AM Pete Shabestari <pshabestari@libertygold.ca> wrote:
I have attached our signed copy of the water lease agreement, the agreement is for 3 years with escalating payments each year so I assume that we need to re-do the water lease rent agreement with IDWR every year?

Peter Shabestari, PG
Vice President of Operations, Great Basin Manager

Pilot Gold (USA) Inc., *a subsidiary of*

1031 Railroad St., Suite 110
Elko, NV 89801 USA
Office 775-777-2900
Mobile 801-809-1083

From: Dave Tuthill [mailto:dave@idahowaterengineering.com]
Sent: Wednesday, February 17, 2021 2:49 PM
To: Buyer, Remington <Remington.Buyer@idwr.idaho.gov>; Pete Shabestari <pshabestari@libertygold.ca>
Cc: Bank <Bank@idwr.idaho.gov>
Subject: Re: WSB Rental Application 1984 - Pilot Gold (USA) INC

Thanks, Remington, for your rapid evaluation of this information.

Yes, Pilot Gold has agreed to pay the $25K directly to Black Pine Farm LP for the annual rental. The amount is being reported to you for purposes of assessing the 10% rental fee, which Pilot Gold will pay directly to IDWR upon approval of the documents.

I am including in this email the Pilot Gold representative, Mr. Pete Shabestari, in case you need more in writing in this regard.

Thanks!

Dave

David R. Tuthill, Jr., Ph.D., P.E.
Idaho Water Engineering, LLC
2918 N. El Rancho Pl., Boise, ID 83704
Office: (208) 378-1513
Cell: (208) 870-0345
Fax: (888) 538-7703
email: dave@idahowaterengineering.com
website: www.idahowaterengineering.com

On Wed, Feb 17, 2021 at 2:42 PM Buyer, Remington <Remington.Buyer@idwr.idaho.gov> wrote:
Hi Dave,

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However, I didn't see anything in the rental application paperwork confirming that Pilot Gold (USA) Inc has agreed to Black Pine Farm LP's requested rental rate of $25,000. Is this annual payment going to be made to Black Pine Farm LP through IDWR and the Water Supply Bank, or, is this payment going to be issued directly to Black Pine Farm LP by Pilot Gold (USA) Inc?

The answer to this question will allow us complete our review of Black Pine Farm's lease and Pilot Gold (USA) Inc's rental of water rights 17-7118 and 17-7136.

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To: 'Dave Tuthill' <dave@idahowaterengineering.com>
Cc: Bank <Bank@idwr.idaho.gov>
Subject: WSB Rental Application 1984 - Pilot Gold (USA) INC

Hi Dave,

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1. A map identifying the location where the rented water rights will be used for industrial (mining and road watering) purposes;

2. An estimate of the total volume of water that will be diverted from the well in S36, T15S, Rge29E, and the total volume that you estimate will be used for: a) road watering, and 2) drilling fluid for the bore hole.

3. A document confirming that Pilot Gold (USA) Inc is authorized to use rental water on lands not owned by them;

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If you could email me copies of the above, that would be greatly appreciated. I will be in the office Friday and can check to confirm whether some or all of the above were already provided with the physical rental application.

Thanks,

Remington

WATER LEASE AGREEMENT

This WATER LEASE AGREEMENT ("Agreement") is made and entered into this ____ day of February 2021 ("Effective Date"), by and between BLACK PINE FARM, LP, an Idaho Limited Partnership, ("Black Pine Farm") the address of which is 2475 S. Juniper Road, Malta, Idaho 83342-8758, and Pilot Gold (USA) Inc., a Delaware corporation registered to do business in Idaho, ("Pilot Gold"), whose address for the purposes of this Agreement is 1031 Railroad Street, Suite 110, Elko, Nevada 89801. The parties hereto may also be referred to individually as party, and collectively as parties.

RECITALS

A. Pilot Gold owns the Black Pine Mine (the "Project") and related facilities located within the Idaho Department of Water Resources ("IDWR") Basin 17 – in the Curlew Valley, in Oneida County, Idaho, and currently is conducting exploration drilling at the Project.

B. Black Pine Farm is the owner of certain water rights granted by the IDWR under Water Permit No. 17-7118 and 17-7136 (collectively, the "Water Right") , which has a Point of Diversion and Place of Use that are located within Curlew Valley, Basin 17, in Oneida County, Idaho. A copy of Water Permit No. 17-7118 and 17-7136 is attached hereto as Exhibit A.

C. Pilot Gold desires to lease a portion of the Water Right from Black Pine Farm for use of the water for drilling and dust suppression at the Project, and Black Pine Farm desires to lease 50 acre feet annually (AFA) of the Water Right to Pilot Gold for such purpose.

D. The parties desire through this Agreement to make arrangements for Pilot Gold to lease a portion of the Water Right from Black Pine Farm, and to set forth the terms and conditions of such lease and use of water thereunder. The parties shall use the Idaho Department of Water Resources managed water supply bank established in accordance with Idaho Code 42-1761 through 42-1766 and the Water Supply Bank Rules (IDAPA 37.02.03) provided that this Agreement shall set forth the terms governing the lease of 50 AFA of the Water Right for Pilot Gold's use.

AGREEMENT

NOW THEREFORE, in consideration of an initial lease payment of TWENTY FIVE THOUSAND ($25,000) DOLLARS ("Initial Payment"), made to Black Pine Farm within thirty (30) days of execution of this Agreement, and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and of the promises and covenants contained in this Agreement, the parties agree as follows:

1. Grant. During the Term (*defined below*) of this Agreement Black Pine Farm leases a portion of the Water Right exclusively to PILOT GOLD, and PILOT GOLD takes a portion of the Water Right from Black Pine Farm, as held in the Idaho Water Supply Bank, on the terms set forth in this Agreement

2. Term. Unless sooner terminated as provided herein, this Agreement shall be effective for a term of 3 years commencing on the Effective Date ("Term"). The Parties shall

cooperate to renew the rental through the Idaho Water Supply Bank as required by the Water Supply Bank Rules. At the end of the 3 year term, the parties will work in good faith to negotiate an extension or further term if requested by PILOT GOLD.

3. Use and Maintenance of Water Right.

(a) PILOT GOLD intends to put 50 AFA under the Water Right to beneficial use at the Project immediately to support its exploration drilling. In consultation with Black Pine Farms, PILOT GOLD, shall prepare and file necessary paperwork to put 50 AFA of the Water Right into the State Water Bank subject to rental by Pilot Gold under the terms of this Agreement and, change the point of diversion and place of use to the Black Pine Mine Well located in the NE ¼ section corner of section 36, T15S, R29E and change the use from agriculture to mining. The parties shall cooperate in executing documents necessary to effect such Change Applications, extensions, or other requirements, and shall share copies of all documents submitted to, and/or received from, IDWR with regard to the 50 AFA of the Water Right subject to this Agreement. The Application to Change shall be in the name of Black Pine Farm. The Application to Change shall include, as an attachment thereto, the Memorandum of Water Lease Agreement. PILOT GOLD will pay all fees associated with the State Water Bank rental as well as any fees associated with moving the point of diversion.

(b) PILOT GOLD will prepare and file any pumping reports required by IDWR to document water usage for the 50 AFA subject to this Agreement and shall provide Black Pine Farm with copies all such pumping reports. Following the completion of the water agreement PILOT GOLD will, if necessary, file all documents needed to move the water right back to the original Point of diversion and the use back to Agricultural.

4. Initial and Annual Lease Payments & Alternative Arrangement for Pumping.

(a) The Initial Payment made to Black Pine Farm upon execution of this Agreement satisfies the lease payment obligation for the first year of the Agreement. The Initial Payment shall be made upon the condition of PILOT GOLD's right and ability to use a portion of the Water Right as set forth herein. If such use is not authorized by the IDWR for any reason or the full 50 AFA is not reasonably available at the Black Pine Mine Well with reasonable improvements to that well as necessary for pumping, PILOT GOLD's payment (or allocation of any portion of the 50 AFA that is unavailable for use) shall be held in constructive trust for payment for the use of alternative water rights owned by Black Pine Farm and mutually agreed to serve PILOT GOLD's use as contemplated herein.

(b) Subject to PILOT GOLD's right to terminate this Agreement pursuant to Section 6 below, PILOT GOLD, in order to maintain this Agreement in effect, shall pay to Black Pine Farm subsequent lease payments in the amount of TWENTY FIVE THOUSAND ($25,000) DOLLARS for the first year, TWENTY SEVEN THOUSAND DOLLARS ($27,000) for the second year, and TWENTY NINE THOUSAND DOLLARS ($29,000) for the third year with each annual payment on or before each anniversary of the Effective Date, commencing on the first anniversary for the continuous right to use the 50 AFA as needed for the Project.

(c) If for any reason PILOT GOLD is unable to access the Water Right from its preferred main Point of Diversion at the Black Pine Mine Well, and PILOT GOLD must take drill water from the existing Point of Diversion while Black Pine Farm is actively pumping water and irrigating, then Pilot Gold would pay an additional flat maintenance fee of $500 per month. If PILOT GOLD must take water outside normal irrigation times (normal irrigation times are generally May – September) when the Black Pine Farm's pump are normally shut off, then PILOT GOLD must pay the $500 per month maintenance fee as well as the entire electric bill for pumping; provided, however, that in no event shall the payment of this electric fee exceed $3,000 per month.

5. Representations and Warranties.

(a) Black Pine Farm represents and warrants that: (i) it has not previously encumbered, mortgaged or conveyed any portion of the Water Right, Permit No. 17-7136 or 17-7118; (ii) it has materially complied with all of its obligations under Permit No. 17-7136 and 17-7118 and Permit No. 17-7136 and 17-7118 both are valid and in good standing; and (iii) it has no knowledge of any pending litigation or other claims challenging Permit No. 17-7136 or 17-7118.

(b) The Parties represent and warrant to each other that each is in good standing under the laws of the jurisdiction in which it is incorporated, and that it has all the requisite power, right and authority to enter into this Agreement, to perform its obligations under this Agreement, and to commit to this Agreement. The execution and delivery of this Agreement and the consummation of the obligations and indemnities provided herein have been duly and validly authorized by all necessary corporate or company action on the part of each party.

6. Termination. This Agreement shall terminate upon its expiry or the sooner of a written notice of termination given by PILOT GOLD to Black Pine Farm. Upon termination of this Agreement, the parties shall cooperate in filing such Change Applications or other notice or regulatory submission as may be required by IDWR to reflect the final use and disposition of the Water Right after termination.

7. Default. In the event either party is in default in the observance or performance of any of the covenants or obligations hereunder, the non-defaulting party shall give the defaulting party written notice of default, expressly denominated as a "Notice of Default" and specifying the details of the same. The defaulting party shall have a reasonable time of not more than sixty (60) days within which to remedy such default or, with respect to a default which cannot be cured within the sixty (60) day period, to commence within the sixty (60) days such action as may be necessary to remedy such default and to diligently prosecute such action until the default is cured. Unless the defaulting party shall so comply or commence to comply, this Agreement may be terminated at the option of the non-defaulting party upon written notice. The non-defaulting party's right to terminate for a default as provided in this Section 7, shall in be in addition to all other remedies allowed by law or equity.

8. Force Majeure. All obligations of both parties, shall be suspended while, but only as long as, a party is prevented from complying with such obligations in whole or in part by strikes, lockouts, acts of God, explosion, flood, wildfire, epidemics, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials or services in the open market,

inability to obtain permits, licenses, or any necessary governmental or private authorization, unusually severe weather, inadequate facilities for the transportation of materials, market conditions, adverse geological conditions, any local, state or federal law, regulation or order or any other matters beyond the reasonable control of a party, whether similar to the matters herein specifically enumerated or not and whether foreseeable or unforeseeable; provided, however, that performance shall be resumed within a reasonable time after such cause has been removed; and provided further that neither party shall be required, unwillingly, to adjust any labor disputes or to question the validity or to refrain from judicially testing the validity of any local, state or federal order, regulation or law.

9. Filing of Agreement. A copy of this Agreement shall not be filed with the IDWR, but rather the Memorandum of Water Lease Agreement in the form agreed to and attached hereto as Exhibit B shall be attached to, and made a part of, the Application to Change or any submission required for the Water Supply Bank.

10. Confidential Information. Except for the filing of the Memorandum of Water Lease Agreement (in the form attached hereto as Exhibit B) with the IDWR as provided in Section 9 above, the terms and conditions of this Agreement shall be treated by the parties as confidential, and no party shall disclose such information to third parties without the prior written consent of the other party. Except as otherwise required by law, such as any pumping reports referenced above, the parties shall not disclose to third parties any other data, reports, records or other information in connection with this Agreement. The disclosure restrictions set forth in this Section 10 shall apply during the term of this Agreement and for a period of one year following the expiration or termination of this Agreement. The disclosure restrictions in this Section 10 shall not apply to disclosures to any affiliate, to any public or private financing agency or institution, securities regulatory authority, to any contractors or subcontractors the parties may engage, and to employees, attorneys or consultants of the parties, or to any third party to which one of the parties contemplates the transfer, sale, assignment, encumbrance or other disposition of their interests in this Agreement, or with which one of the parties contemplates a merger, amalgamation or other corporate reorganization, provided, however, that any such third party to whom disclosure is made has a legitimate business need to know the disclosed information, and shall first agree in writing to protect the confidential nature of such information at least to the same extent as the parties are obligated under this Section. In the event either of the parties is required to disclose the terms of this Agreement to any federal, state or local government, any court, agency or department thereof, or any stock exchange or securities regulatory authority, the party so required shall immediately notify the other party of such requirement, and the proposed form and content of the disclosure. To the extent legally permissible, such notice shall be delivered at least two business days prior to the date of the disclosure. The non-disclosing party shall have the right to review and comment upon the form and content of the disclosure and to object to such disclosure to the entity seeking the information, and to seek confidential treatment of that information by the receiving entity.

11. Necessary Acts and Cooperation. The parties hereby agree to do any act or thing and to execute any and all instruments required by this Agreement and which are necessary and proper to make effective the provisions of this Agreement.

12. Miscellaneous Provisions.

(a) Notice. All notices or other communications to either party shall be in writing and shall be sufficiently given if (i) delivered in person, (ii) sent by registered or certified mail, return receipt requested, or (iii) sent by overnight mail by a courier that maintains a delivery tracking system. Subject to the following sentence, all notices shall be effective and shall be deemed delivered (i) if by personal delivery, on the date of delivery, (iii) if by mail, on the date of delivery as shown on the actual receipt, and (iii) if by courier, as documented by the courier's tracking system. If the date of such delivery or receipt is not a business day, the notice or other communication delivered or received shall be effective on the next business day ("business day" means a day, other than a Saturday, Sunday or statutory holiday observed by banks in the jurisdiction in which the intended recipient of a notice or other communication is situated.) A party may change its address from time to time by notice to the other party as indicated above.

All notices to Black Pine Farm shall be addressed to:

Black Pine Farm

John O Campbell, General Partner
2475 S. Juniper Road
Malta, ID 83342-8758

All notices to PILOT GOLD shall be addressed to:

Pilot Gold (USA) Inc.

Pete Shabestari, Vice President of Operations
1031 Railroad Street, Suite 110
Elko, NV 89801

(b) Inurement. All covenants, conditions, indemnities, limitations, and provisions contained in this Agreement apply to, and are binding upon the parties to this Agreement, their heirs, representatives, successors, and assigns.

(c) Implied Covenants. The only implied covenants in this Agreement are those of good faith and fair dealing.

(d) Waiver. No waiver of any provision of this Agreement, or waiver of any breach of this Agreement, shall be effective unless the waiver is in writing and is signed by the party against whom the waiver is claimed. No waiver of any breach shall be deemed to be a waiver of any other subsequent breach.

(e) Modification. No modification, variation, or amendment of this Agreement shall be effective unless it is in writing and signed by the parties to this Agreement.

(f) Entire Agreement. This Agreement, including the Exhibits attached hereto, sets forth the entire agreement of the parties with respect to the transactions contemplated herein and supersedes any other agreement, representation, warranty, or undertaking, written or oral.

(g) Memorandum. A memorandum of this Agreement in the form attached as Exhibit B shall be recorded in the records of **Oneida County, Idaho**, promptly after execution of this Agreement.

(h) Further Assurances. Each of the parties agrees that it shall take from time to time such actions and execute such additional instruments as may be reasonably necessary or convenient to implement and carry out the intent and purpose of this Agreement.

(i) Construction. The section and paragraph headings contained in this Agreement are for convenience only, and shall not be used in the construction of this Agreement. The invalidity of any provision of this Agreement shall not affect the enforceability of any other provision of this Agreement.

(j) Rule Against Perpetuities. Any option or right to acquire any property interests under this Agreement shall be exercised, if at all, within the time period allowed under any applicable rule against perpetuities.

(k) Governing Law. This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Idaho, without regard to that State's conflicts of laws provisions.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

BLACK PINE FARM:

By: 

PILOT GOLD:

By: 

EXHBIT A
SEE ATTACHED COPY OF WATER PERMIT NO. 17-7136 & 17-7118

EXHIBIT B

MEMORANDUM OF WATER LEASE AGREEMENT

Recorded at the request of and return to:

Pilot Gold
1031 Railroad Street, Suite 110
Elko, Nevada 89801

The undersigned affirms that this document
does not contain a social security number.

MEMORANDUM

WATER LEASE AGREEMENT

NOTICE IS HEREBY GIVEN that BLACK PINE FARM, LP, an Idaho Limited Partnership, ("Black Pine Farm") the address of which is 2475 S. Juniper Road, Malta, Idaho 83342-8758, and Pilot Gold (USA) Inc., a Delaware corporation registered to do business in Idaho, whose address for the purposes of this Agreement is 1031 Railroad Street, Suite 110, Elko, Nevada 89801 ("PILOT GOLD"), have entered into a WATER LEASE AGREEMENT ("Agreement") dated effective as of February ___, 2021 ("Effective Date").

1. LEASED WATER RIGHT

Black Pine Farm is the owner of that certain water right granted by the Idaho Department of Water Resources ("IDWR") under Water Permit No. 17-7136 & 17-7118 ("Water Right"), which have Points of Diversion and Points of Use that are located within IDWR Basin 17, Curlew Valley, Oneida County, Idaho.

2. GRANT

The Agreement grants PILOT GOLD the exclusive lease of 50 acre feet annually (AFA) under the Water Right for use at it's the Black Pine Mine located within IDWR Basin 17, Curlew Valley, Oneida County, Idaho.

3. TERM

The Agreement shall continue in force for a term of 3 years ("Term"), unless sooner terminated or extended, all as further provided in, and subject to, the terms and conditions as set forth in the Agreement.

4. TERMINATION

The Agreement shall terminate at the end of its Term. PILOT GOLD may terminate the Agreement at any time upon written notice to Black Pine Farm, subject to the terms and conditions as set forth in the Agreement.

This Memorandum is made for the purpose of giving actual and record notice of the Agreement which is incorporated herein by this reference and made a part hereof. Copies of the

Agreement are in the possession of the parties at the addresses shown above. In the event of any inconsistency between this Memorandum and the Agreement, the Agreement shall control. The execution and recordation of this Memorandum shall not modify, amend, extinguish or supersede or in any other manner affect the rights and responsibilities of the parties under the Agreement.

This Memorandum may be executed in counterparts.

IN WITNESS WHEREOF, this MEMORANDUM OF WATER LEASE AGREEMENT has been executed to be effective as of the Effective Date.

PILOT GOLD:

a Delaware corporation

By: _____

STATE OF _____)
) ss
COUNTY OF _____)

On the _____ day of February 2021, personally appeared before me, a Notary Public within and for said County and State, _____, _____ if Pilot Gold, known or proved to me to be said person, who acknowledged that he executed the foregoing instrument on behalf of PILOT GOLD.

_____

SEAL

Notary Public

My Commission Expires _____

BLACK PINE FARM:

an Idaho Limited Partnership

By: _____

STATE OF _____)
) ss
COUNTY OF _____)

On the _____ day of January 2021, personally appeared before me, a Notary Public within and for said County and State, _____, _____ of BLACK PINE FARM, LP, known or proved to me to be said person, who acknowledged that he executed the foregoing instrument on behalf of BLACK PINE FARMS, LP.

_____

SEAL

Notary Public

My Commission Expires _____

Reply all | Delete Junk | •••

Water Supply Bank Lease Application 1982 and Rental Application 1984



Buyer, Remington
Today, 11:28 AM
Cefalo, James

Reply all |

Sent Items

Draft Lease Contract 13...
243 KB

Lease Map.pdf
1 MB

Lease Review M
763 KB

Show all 6 attachments (4 MB) Download all

Hi James,

Black Pine Ranch LLC is leasing into the Bank 14.3 acres of their irrigated land near the Utah border, east of Black Pine mountain, so that the lease volume of water might be rented by Pilot Gold (USA) Inc for mining exploration work on Black Pine Mountain. The Water Supply Bank lease proposal and rental request records are attached. On behalf of Eastern Region, please advise if you have any questions, comments or concerns about this transaction.

Thanks,

Remington

Reply all | Delete Junk | •••

From: Pete Shabestari [mailto:pshabestari@libertygold.ca]
Sent: Wednesday, February 17, 2021 3:13 PM
To: Dave Tuthill <dave@idahowaterengineering.com>; Buyer, Remington <Remington.Buyer@idwr.idaho.gov>
Cc: Bank <Bank@idwr.idaho.gov>
Subject: RE: WSB Rental Application 1984 - Pilot Gold (USA) INC

Thanks for looking at this so quickly, to answer a few of your questions below, see my answers in red

A map identifying the location where the rented water rights will be used for industrial (mining and road watering) purposes;
I have attached a map showing the larger project area with the permit area which is where the water will be used.

An estimate of the total volume of water that will be diverted from the well in S36, T15S, Rge29E, and the total volume that you estimate will be used for: a) road watering, and 2) drilling fluid for the bore hole.
We estimate to use 45-50 AFA over the course of the year with 85% going into drilling water and 15% used for road maintenance.

A document confirming that Pilot Gold (USA) Inc is authorized to use rental water on lands not owned by them;
We own the federal mining claims on the project area shown on the map and the authorization to use water on these lands is granted through the Plan of Operations issued by the USFS, included in the package, which authorizes the drilling and road maintenance.

4. Confirmation from Pilot Gold (USA) Inc that they have agreed to the rental price of $25,000 to Black Pine Farm LP for water rights 17-7118 and 17-7136.
We have an agreement in place and it should have been included in the package. We do need to know when and how we need to pay IDWR the $2500 fee though

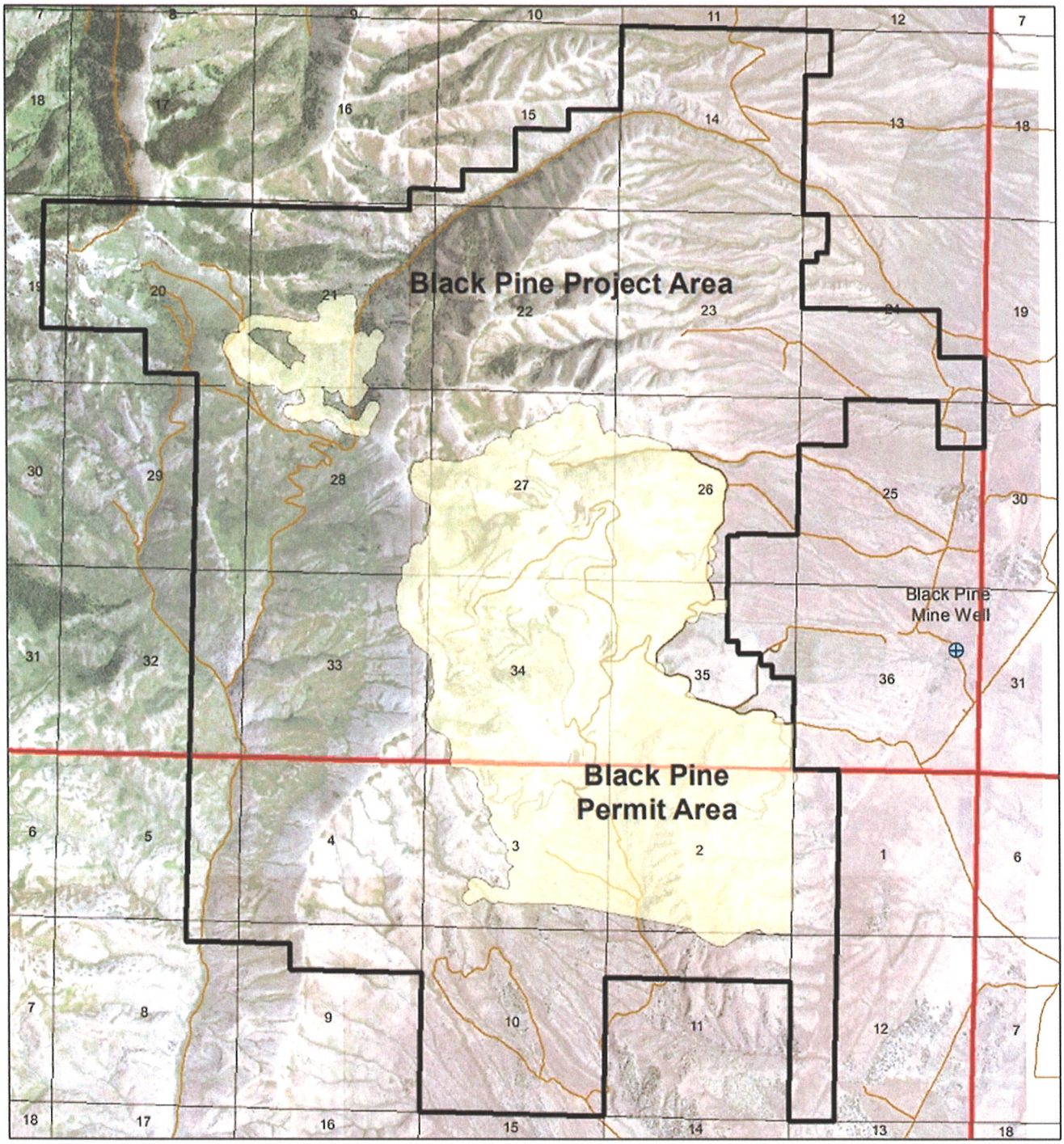
Thank you

Pete

Peter Shabestari, PG
Vice President of Operations, Great Basin Manager
Pilot Gold (USA) Inc., *a subsidiary of*

Libertygold

1031 Railroad St., Suite 110
Elko, NV 89801 USA
Office 775-777-2900
Mobile 801-809-1083


Black Pine Project Area
Black Pine Permit Area
Black Pine Mine Well

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Sent: Wednesday, February 17, 2021 2:49 PM
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David R. Tuthill, Jr., Ph.D., P.E.
Idaho Water Engineering, LLC
2918 N. El Rancho Pl., Boise, ID 83704
Office: (208) 378-1513
Cell: (208) 870-0345
Fax: (888) 538-7703
email: dave@idahowaterengineering.com
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Remington