

P-TE

MAILING ADDRESS: P.O. Box 440 RAPID CITY, SD 57709-0440 PH. 605-342-7224
PHYSICAL ADDRESS: 3401 UNIVERSAL DR. RAPID CITY, SD 57702 FX. 605-342-6979



& Sons, Inc.

RECEIVED
MAR 09 2026
MINERALS & MINING PROGRAM

March 6, 2026

SD DANR
Minerals and Mining Program
523 East Capitol, Joe Foss Building
Pierre, SD 57501-3182

RE: Pete Lien & Sons, Inc., Notice of Intent to Conduct Mineral Exploration, Rochford Graphite Exploration Project

Please find the application to conduct mineral exploration within South Dakota.

A copy of the Decision Memo from the USFS is included for reference. It is our intention to accept all the Forest Service Proposed Design Features.

Once a final Plan of Operations is signed, we will provide it to the SD DANR.

Pete Lien & Sons, Inc., has also provided a surety of \$100,000.

If there are any questions regarding this submittal or if additional information is required, please contact me at (605) 939-2719 or by email at mgolliher@petelien.com.

Respectfully,

A handwritten signature in blue ink, appearing to read "Michael Golliher".

Michael Golliher
Senior Mine Planning Engineer
Pete Lien & Sons, Inc.

Enclosures: EXNI NOI application, (2) maps, BHNH Approved Decision Memo (w/maps), \$100,000 Surety Bond

Department of Agriculture and Natural Resources
Minerals and Mining Program
523 East Capitol Avenue
Pierre, South Dakota 57501-3182
605 773-4201; Fax: 605 773-5286

RECEIVED
MAR 09 2026
MINERALS & MINING PROGRAM

NOTICE OF INTENT TO CONDUCT
MINERAL EXPLORATION OPERATION
(Excluding Uranium)

Pursuant to SDCL 45-6C **PAID**

Operator's name: Pete Lien & Sons, Inc

Mailing Address: PO Box 440, Rapid City, SD 57709-0440

Telephone: (605) 342-7224

Rec't# _____

Resident agent (if out-of-state corporation):

Resident agent address:

Telephone:

Legal description of area to be explored by Section, Township, and Range:

Sections 3, 4, 5, T1N, R3E; Sections 25, 30, 33 T2N, R3E

County: Pennington County

Give a brief description of the type of exploration to be conducted. Include a list of all minerals to be explored and a description of methods (e.g. drill rig type, number of holes to be drilled, number of drill pads to be constructed, proposed depth for each test hole, length of existing access roads and/or new access road construction).

Eighteen (18) drill holes are proposed within the Black Hills National Forest within Pennington County exploring for graphite.

They will be approximately three inches in diameter and will be drilled up to 1,000 feet in depth at a 45-degree angle. All drill sites are located within Sections 3, 4, 5, T1N, R3E; Sections 25, 30, 33 T2N, R3E and would measure approximately 30x50 feet for a combined area of disturbance of approximately 0.62 acres.

The drill will be a transportable over the road, track mounted core drill, capable of drilling a three (3) inch diameter hole.

Primary access to the drill sites within the BHNF National Forest Service roads and trails, primarily Rochford Road and South Rochford Road. To access general site locations, United States Forest Service (USFS) Roads 190 and 125 will be utilized for the northern drill sites (No. 6-8 and 11-15) and FS Roads 132 and 132.1B for the southern drill sites (No. 1-5 and 16-20). Additional cross-county travel and construction of access to drill sites will total less than 1.0 mile affecting approximately 1.82 acres.

Site preparation and clearing of vegetation will be completed with a compact track/skid steer loader (CTL) and mini excavator

Date exploration will commence: *Upon approval, weather permitting. To be completed within one (1) year.*

What legal authority does the operator have to conduct exploration on the above-described land? Include a copy if available.

Deed Lease US Forest Service Permit Pending US Forest Service Permit Other

Will the operator conduct uranium exploration? Yes No. If yes, a permit pursuant to SDCL 45-6D must be obtained.

INSTRUCTIONS:

Please reference SDCL 45-6C. This Notice of Intent must be accompanied by:

1. A plan of reclamation pursuant to Section 8.
2. A topographic map pursuant to Section 9.
3. A fee of \$250 payable to the Department of Agriculture and Natural Resources pursuant to Section 17.
4. A surety in an amount to be determined by the department pursuant to Section 19.
5. Any written landowner consultations giving alternative preferences for the reclamation of the affected land pursuant to Section 16.

Applicant affirms that the surface owner has been notified of the proposed mineral development and that said surface owner is aware of his rights to compensation for damages to property pursuant to SDCL 45-5A. Applicant hereby affirms that the mineral exploration will be conducted pursuant and subject to the provisions of SDCL 45-6C, and all regulations promulgated thereunder, that he will grant access to the SD Board of Minerals and Environment or its agents to the area under notice from the date of the notice and thereafter to assure compliance with the provisions of SDCL 45-6C.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Michael Golliber
Signature

Date: 3/6/2026

Title: SENIOR MINE PLANNING ENGINEER

STATE OF South Dakota

COUNTY OF Pennington

On this 6th day of March, 2026, before me personally appeared

Michael Golliber, who acknowledged himself to be the Senior Mine Planning Engineer
(Title)
for Pete Lien & Sons and that he is authorized to execute the Notice of Intent for the
(Operator)
purposes contained therein.

Loni S Anderson
Notary Public

My Commission Expires: 5-10-2026

SEAL



FOR DEPARTMENT USE ONLY

DATE APPROVED: BOND AMOUNT: EXNI NUMBER:

Chairman, SD Board of Minerals & Environment

STATE OF SOUTH DAKOTA
BEFORE THE SECRETARY OF

THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

IN THE MATTER OF THE)	
APPLICATION OF)	
)	CERTIFICATION OF
<u>Pete Lien & Sons, Inc., Rochford Graphite Exploration</u>)	
)	APPLICANT
STATE OF <u>South Dakota</u>)	
)	
COUNTY OF <u>Pennington</u>)	

I, Michael Gollither, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

I have read and understand South Dakota Codified Law Section 1-41-20 which provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:

- (a) Has intentionally misrepresented a material fact in applying for a permit;*
- (b) Has been convicted of a felony or other crime involving moral turpitude;*
- (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;*
- (d) Has had any permit revoked under the environmental laws of any state or the United States; or*
- (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or*

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification,

consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

I certify pursuant to 1-41-20, that as an applicant, officer, director, partner, or resident general manager of the activity or facility for which the application has been made that I; a) have not intentionally misrepresented a material fact in applying for a permit; b) have not been convicted of a felony or other crime of moral turpitude; c) have not habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage; (d) have not had any permit revoked under the environmental laws of any state or the United States; or e) have not otherwise demonstrated through clear and convincing evidence of previous actions that I lack the necessary good character and competency to reliably carry out the obligations imposed by law upon me. I also certify that this application does not substantially duplicate an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Further;

"I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct."

Dated this 6 day of MARCH, 2026.

Applicant (print) Michael Gollither

Michael Gollither
Applicant (signature)

Subscribed and sworn before me this 6th day of March, 2026.

Loni S. Anderson
Notary Public (signature)

My commission expires: 5-10-2026

(SEAL)



PLEASE ATTACH ANY ADDITIONAL INFORMATION NECESSARY TO DISCLOSE ALL FACTS AND DOCUMENTS PERTAINING TO SDCL 1-41-20 (1) (a) THROUGH (e). ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION

In preparing this reclamation plan, please address each item in detail, referencing SDCL 45-6C-8 and 45-6D-9. Please refer to the reclamation standards outlined in SDCL 45-6C-27 through 45-6C-34, SDCL 45-6D-33 through 45-6D-39, and the state's hole plugging regulations as detailed in ARSD 74:11.

1. Describe the type of reclamation the operator proposes to achieve in the reclamation of the affected land.

Drill cuttings, core and other non-toxic lubricants will be removed from the site and taken to an approved solid waste facility, disposed of down the hole, or buried using the following methods, in order of preference. Final determination of the method used will be based on an on-site review when the holes are drilled:

- *Constructed infiltration gallery/sump – Allow the water to infiltrate and then cover with mineral soil followed by the stockpiled organic soil.*
- *Natural depression or pre-existing sump – Allow the water to infiltrate and then cover with mineral soil if available and then with organic material. The topsoil or organic material if present will be removed first and stockpiled for use in reclamation. Once the drilling is completed on the site, the sump or depression will be leveled and covered with the organic material so that the drill cuttings are not visible.*
- *Disperse the cutting in voids between boulders or rocks.*

Standing water in sumps/infiltration galleries will be drained or allowed to percolate into the ground prior to backfilling. Excavations will be backfilled with excavated spoil material and topped with salvaged organic material.

Compacted surfaces created by exploration activities will be loosened. Disturbed areas will be re-contoured to their original condition to the extent possible by reapplying salvaged material over disturbance areas. This will include reapplication of mineral soil, topped with organic soil material, woody debris, and slash. Upon completion of reclamation, any excess salvaged material (rock, soils, slash, woody debris, etc.) will be scattered in the vicinity. Excess rock or soil will not be placed or scattered in streams or wetlands. If soil disturbance occurs, re-vegetation efforts will primarily rely on creation of micro-sites (roughened ground surfaces, placement of woody debris, etc.) for natural re-vegetation and redistribution of the salvaged on-site organic litter layer.

Because of the lack of anticipated soil disturbance (due to use of a self-leveling drill rig or timbers for leveling), additional seeding of disturbed areas may not be necessary.

2. Provide a proposed timetable for seeding and replanting indicating when and how the reclamation plan will be implemented. Such timetable shall be developed in consultation with the County District Conservationist as to the nature of the soils and native vegetation in the area of the proposed operation. These recommendations shall be followed, if any are provided, and copies of all correspondence shall be provided to the Department.

Reseeding may be prescribed if, upon inspection, it is noted that adequate organic material containing seed is not available. A certified weed-free mix of seed, specified by the USDA in their Decision Memo, for reclamation of lands within the Black Hills National Forest in the area south of Rochford, SD will be used.

- *High Elevation – Mid Zone: 25% Slender wheatgrass (*Elymus trachycaulus*), 30% Annual ryegrass (*Lolium multiflorum*), 10% Canada wildrye (*Elymus canadensis*), 10% Canby bluegrass (*Poa canbyi*), 20% Green needlegrass (*Nassella viridula*), 5% Purple prairie clover (*Dalea purpurea*) or American vetch (*Vicia Americana*).*
- *All seed should be certified weed-free, pure live seed. Seeding should be done at a rate of 20 pounds per acre.*

Prescribed re-vegetation will be accomplished as soon as possible; however, revegetation will be performed in the proper season in accordance with accepted agricultural and reforestation practices identified in consultation with USFS personnel on a site-specific basis.

3. Describe how the reclamation plan will rehabilitate the affected land.

The objectives of reclamation measures under this Plan of Operations are to:

- Return areas disturbed by the operation to a stable configuration that approximates the original condition to the extent possible. All surface areas disturbed by the operation shall be contoured in such a way as to closely approximate either surface contours existing in the disturbed area before the start of operations or surface contours of immediately and adjacent undisturbed terrain. In all cases, resulting contours shall be made to blend and merge with surrounding natural ground surfaces in an unobtrusive way imitating natural surface features commonly found in the immediate area.*

4. Describe the anticipated temporary and permanent plugging and capping procedures to be used. Please refer to SDCL 45-6C-28 through 45-6C-30, SDCL 45-6D-33 through 45-6D-35, and the state's hole plugging regulations as detailed in ARSD 74:11.

Drill holes will be sealed within 24-48 hours of drilling completion and before moving the drill rig.

A nondegradable, nonslip plug shall be placed at a point not less than eight feet below the ground surface and a five-foot column of cement grout shall be placed above the plug.

Topsoil or material representative of the undisturbed surface material shall be tamped into the upper three feet of the drill hole.

5. Provide the estimated cost of implementing and completing the proposed reclamation, and, the estimated cost of plugging and sealing each test hole.

Pete Lien & Sons, Inc. is submitting a \$100,000 statewide surety to cover all exploration operations.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Signature

Date: _____

Title: Senior Mine Planning Engineer, Pete Lien & Sons, Inc.



RECEIVED
MAR 09 2026
MINERALS & MINING PROGRAM

Decision Memo
Pete Lien and Sons
Rochford Exploration Drilling Project

USDA Forest Service
Black Hills National Forest, Mystic Ranger District
Sec. 3-5, T01N, R03E and Sec. 25 T02N, R02E, and Sec. 30, 32, 33
T02N, R03E BHM
Pennington County, South Dakota
PALS# 67838

Background

The Mystic Ranger District, Black Hills National Forest, received a request from Pete Lien and Sons, Inc. (PLS), of Rapid City, SD, for approval of a Plan of Operations (PO) for mineral exploration on National Forest System (NFS) land near Rochford, South Dakota. The proposal is referred to as the Rochford Mineral Exploratory Drilling Project (Rochford Project). The PO is for the exploration of locatable minerals to be conducted upon federal mining claims held by PLS. The PO is for mineral exploration only. There is no mining, milling, processing, tailings, waste rock nor ore removal proposed or considered at this time.

The original plan was received on June 11, 2024, and subsequently updated through the analysis process to incorporate mitigation measures and design refinements. In 2025 there was an internal review with a US Forest Service (USFS) interdisciplinary team; resource specialists requested adjustments be made to the PO and requirements were added to minimize resource impacts and public impacts. During the review process, the PO was refined to incorporate mitigation measures and design modifications identified by the USFS interdisciplinary team. These revisions reduced the number of drill pads from 20 to 18, increased the maximum borehole depth from 700 feet to 1,000 feet, and decreased temporary access routes from 9,500 to approximately 5,060 linear feet by shifting alignments to avoid sensitive resources and minimize surface disturbance.

The updated PO which incorporated the previously listed mitigation measures and design modifications (April 9, 2025) proposes graphite exploration drilling at 18 locations with boreholes up to 1,000 feet deep. Two laydown areas totaling approximate total of 0.30 acres would be used for equipment staging and water storage. Approximately 5,060 linear feet of new temporary overland access routes are proposed to support drill site access. Through continued interdisciplinary review and alignment refinements to minimize resource impacts, the total temporary overland access was reduced to approximately 5,050 linear feet.

Access to the project area will utilize existing NFS roads (NFS 190, 125, and 132) and overland two-



track trails wherever feasible. Water used for drilling will be sourced from approved municipal supplies and recirculated on-site using infiltration galleries or tanks. No water will be withdrawn from streams or wetlands.

The General Mining Act (GMA) of 1872, as amended, gives all American citizens (and companies) the statutory right to prospect, explore, and develop mineral projects on public domain land open to mineral entry. The Forest Service's role is to evaluate and approve reasonable, logical, and sequential operations adhering to the General Mining Act of 1872, as amended, the Organic Act of 1897 (16 USC §§ 478, 482, and 551) and Forest Service's locatable mineral regulation 36 Code of Federal Regulations (CFR) 228 Subpart A. Under this law, and its principal amendment of July 23, 1955, qualified prospectors may search for mineral deposits on these "public domain" lands.

Under the GMA of 1872 and 36 CFR 228 Subpart A, the agency as the federal land manager regulates surface operations through the locatable mineral regulations. The Forest Service also follows policy in the Minerals and Geology Manual (Forest Service Manual 2800) to encourage orderly mineral exploration while protecting surface resources. In accordance with 36 CFR 228.5, the submittal of a PO requires the Forest Service to consider whether to approve the proposed PO or to require changes or additions necessary for the plan to meet the purpose of the regulations for locatable mineral operations. The Forest Service has the discretion to approve the PO as is, or to approve the PO with additional mitigation measures to minimize impacts on natural resources. Furthermore, the Forest Service must assess whether the proposed operations will be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources in accordance with 36 CFR § 228.8.

The Forest Service also has the discretion to determine the level of analysis required under the National Environmental Policy Act (NEPA) based on the actions described in the PO and the Forest Service's knowledge of resources located in or near the project area. Due to the relatively small footprint of the proposed activities, knowledge of resources in the area, and the fact that drilling and reclamation operations would be completed in less than one year, it was determined that review of this proposal under a categorical exclusion (CE) was appropriate. Specifically, this action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA) under 7 CFR 1b.4(d)(32) [formerly 36 CFR 220.6(e)(8)]: *Short-term (one year or less) mineral, energy, or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment, construction of less than one mile of low standard road, or use and minor repair of existing roads.*

Purpose and Need for the Proposed Action

The agency's need is to respond to the proponent's submittal of a PO and to ensure operations will be conducted to minimize adverse environmental impacts on National Forest surface resources (36 CFR 228.8, Subpart A) where feasible. The purpose of this proposed action is to authorize mineral exploration activities consistent with the statutory right of the proponent to explore for and develop mineral resources on federally administered lands under the GMA of 1872 and with other laws and regulations. The decision for the Forest Service to make is whether to approve the PO as submitted or to approve with additional measures to protect surface resources. The proponent's need is to evaluate whether economically viable mineral deposits are present on company owned mining claims within the proposed project area, and to characterize



their nature, extent, shape, and economic value of such deposits. The Forest Service must process proposed mineral operations in a timely manner when they are submitted in accordance with regulations (36 CFR 228.4).

Proposed Action

The proposed action is for the Forest Service to authorize PLS to conduct mineral exploration for graphite by drilling boreholes at up to 18 proposed sites on NFS lands. Each drill site would be approximately 30 feet x 50 feet, or 0.034 acre in size. There would be one borehole at each site, and each borehole would be oriented vertically, or at an angle of up to 45 degrees. The maximum depth of each borehole would be 1,000 feet. Additionally, there would be two 0.15-acre laydown/staging areas used to store core boxes, hose, spare parts, water storage tanks, and site portable sanitation facilities.

Access to drill sites would rely on existing National Forest System roads (NFS) or temporary access routes and overland two-track routes wherever feasible, specifically NFS roads 190 and 125 for northern sites and NFS road 132 for southern sites. To reach pads from those roads, the proponent would implement approximately 5,050 feet of temporary overland access route improvements. Temporary access routes would be constructed only where necessary for safe passage of personnel and equipment, generally up to 15 feet in width, and sited to avoid wetlands, riparian areas, and water influence zones. Upon completion of drilling, all temporary access routes would be restored to pre-project conditions or as near as practicable, including recontouring, surface scarification, redistribution of salvaged topsoil and woody debris, and reseeding with a certified weed free seed mix approved by the Forest Service.

Drilling would be supplied with water from an approved municipal or industrial source trucked to the site. Water would be recirculated during drilling through either in-ground infiltration galleries (excavated trenches typically 2–4 feet deep, approximately 24 inches wide, up to 20 feet long) or above-ground sump systems (double-tank or double-crib systems lined with oil-impermeable fabric), which allow cuttings and fines to settle and clarified water to be returned to the drill. No surface waters would be used, and drill pads would be sited outside Aquatic Management Zones and away from mapped streams, springs, wetlands, and fens. Drilling additives would be limited to non-toxic, biodegradable materials approved for potable well development. Drill cuttings and fluids that cannot be placed down boreholes would be contained on-site within the sump/tank circuit; clarified water will be reused when practicable. At the completion of each borehole, remaining water will be allowed to infiltrate or be transported offsite to an appropriate facility, and cuttings will be buried within the disturbed pad area under redistributed topsoil or otherwise handled in accordance with State requirements.

Each borehole will be plugged, capped, sealed, and abandoned immediately upon completion consistent with Administrative Rules of South Dakota (ARSD) 74:11:08, including use of bentonite and/or cement grout seals and removal or cutoff of casing below grade. If a borehole must remain temporarily open (e.g., for downhole data collection), the proponent will obtain written authorization from the South Dakota Board of Minerals and Environment and the Forest Service and temporarily cap and mark the hole per ARSD specifications; permanent abandonment will follow as soon as practicable. Fuels and lubricants will be transported and stored in Department of Transportation (DOT)-compliant, properly labeled containers with secondary containment as



needed; Spill Prevention, Control, and Countermeasure (SPCC) compliant spill response materials will be kept at all active sites, and any releases will be reported and remediated in coordination with the Forest Service and the South Dakota Department of Agriculture and Natural Resources (SD DANR).

Project equipment will include one to three track or trailer mounted drill rigs; a water truck; pickup support vehicles; all terrain/utility vehicles; and, on an as needed basis, a compact track loader or backhoe for infiltration galleries and minor pad grading, and a small dozer or skid steer for access maintenance and reclamation. Traffic will comply with posted speed limits; safety signage will be installed along roads and trails adjacent to active drill locations; and all improvements authorized by the Forest Service (e.g., fences, gates, trails, utilities) will be protected and restored if disturbed. Solid waste generated at drill sites and staging areas will be removed regularly and disposed of off Forest at approved facilities; human waste will be contained in portable units and serviced offsite.

Drilling operations are expected to occur over less than one year from initiation, with work typically conducted on two 12-hour shifts (up to 24-hour operations if needed to meet schedule and subject to any timing restrictions). The maximum potential surface disturbance for the updated plan comprises approximately .6 acres for drill pads, approximately 1.8 acres for new temporary overland access routes (5,050 feet at 15 feet wide), and approximately 0.3 acre for laydown areas, for a combined estimate of less than 3 acres. All disturbed areas will be reclaimed concurrently where practicable and immediately following completion of use at each site. Operations will adhere to seasonal constraints and resource protection measures identified during the NEPA review and Section 7 consultation (e.g., restrictions near mapped bat hibernacula and potential bat maternity roost habitat), as well as Forest Service locatable minerals regulations (36 CFR 228, Subpart A), the Black Hills National Forest Plan standards and guidelines, and applicable state and federal water quality and noxious weed management requirements. No mining, milling, processing, tailings placement, waste rock stockpiling, or ore removal is proposed or authorized under this exploration plan.

All sites will be reclaimed following drilling activities. Project activities, including reclamation, will take one year or less. If project activities must extend beyond that time, additional environmental analysis would be necessary. The proposed activities include exploration drilling only; no mining activities would occur. If PLS chooses to pursue additional exploration or mining activities in the future, a separate PO and subsequent environmental analysis will be required.

Proponent Proposed Design Features

Pete Lien and Sons, Inc. (PLS) will implement a series of design features and best management practices to minimize environmental impacts during mineral exploration activities. These include:

Air Quality

- PLS and all contractors/subcontractors will comply with applicable Federal, State, and local air quality standards, including the Clean Air Act.
- All equipment will be equipped with approved spark arrestors, mufflers, catalytic converters, and other equipment required to operate legally.
- Work crews will utilize vehicles in such a manner as to minimize traffic on NFS roads and



trails and thereby reduce dust. The primary drilling method will be core drilling, which is conducted using water with inherent dust control. However, if percussion drills are used, the drill will be equipped with dust collectors.

- Speeds along NFS roads and trails will be restricted to 25 miles per hour and 15 miles per hour, respectively, to minimize dust generation. Potable water will be brought in from off-site and applied on an as-needed basis to control fugitive dust. This measure will also reduce both soil disturbance and the likelihood of collisions with wildlife.

Water Quality

- PLS will obtain a General Stormwater Permit for Construction Activities from the SD DANR before operations.
- Drill sites will not be in streams and wetlands. Operations will be conducted to prevent pollutants or debris from entering streams and wetlands. Pollutants entering streams will be reported as detailed in the PO (Section V. G. 3). In the event PLS or its contractors cause debris to enter streams and wetlands in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, PLS or its contractor will remove such debris as soon as practicable, but not to exceed 48 hours, and in an agreed manner that will cause the least disturbance.
- PLS will refrain from crossing all stream channels (ephemeral, intermittent, perennial) with motorized vehicles where a crossing doesn't already exist. No roads or fill/dredging activities will occur at these crossings. Please see the proposed overland access routes in Figures 2 and 3.
- Drill sites and infiltration galleries are located a minimum of 300 feet from all perennial streams and 200 feet from other riparian areas (ponds, lakes, reservoirs, and wetlands). If exceptions to these distances (increases or decreases) are required based on site conditions, PLS will gain approval from the on-site Forest Service representative in conjunction with Forest Service fisheries or hydrology specialists.
- Water is required to flush the mineral rock cutting from the drill hole. The water brought in will be potable and from municipal sources. To reduce consumption, the water will be stored in a tank or infiltration gallery for recirculation. The water to charge the hole initially will come from local, off-site sources. During drilling, the water used to flush the cuttings will collect in a tank or infiltration gallery and be recycled. Once the drill hole is completed, water contained in the tank or gallery will be allowed to infiltrate into the soil in the gallery leaving the mineral cuttings behind. It should be noted that the drilling fluid and additives will be the same as those used in developing a domestic water well. This process will comply with SD DANR requirements.
- Visual inspection will ensure that the water used to flush the drill cuttings is captured and directed to the infiltration gallery. Oil, grease, hydraulic fluid, and other petroleum products will not be released on the exploration site. If a release occurs, the contaminated material will be removed immediately and disposed of at a proper disposal site. Appropriate containment procedures will be employed such as containers and absorbent material for all diesel fuel, gasoline, hydraulic fluid, motor oil, and other hazardous



materials. Absorbent material will be kept on hand at each site where petroleum products are being used or stored. If leveling of the drill location is not necessary, absorbent material may, if required, be used to act as the berm. The material will be of sufficient size and absorption capacity to soak up any diesel fuel or other petroleum products stored on-site or contained in equipment that could be potentially released or spilled. In the case of an accidental spill or leak, the operator or designated representative would immediately report any accidental spill of petroleum or other chemicals by notifying the SD DANR at (605) 773-3296. Per SD DANR requirements, any contaminated soil or material must be temporarily stockpiled and sampled to determine the necessary disposal requirements.

- If seasonal closure is required, then the infiltration gallery and the drill site will be stabilized to minimize the potential for offsite transport of sediment. Once drilling is completed on a site, the drill water in the infiltration gallery will be allowed to infiltrate and then the mineral soil will be placed back into the gallery and then the stockpiled organic material will be placed on the gallery. Water and drill cuttings in sumps/infiltration galleries will be actively and aggressively managed to facilitate draining and infiltration as quickly as possible during and after the completion of drilling at each drill site. The sump/infiltration gallery will be reclaimed immediately upon infiltration.

Erosion and Surface Water Runoff

- Drill pad locations have been assessed for topography and slope for surface water runoff and erosion control.
- Drill pads are relatively small (on average 30 feet by 50 feet) which limits overall surface disturbance, thus the pads will not significantly impact surface water runoff from average rainfall or other normal weather events.
- Appropriate erosion control measures will be used as needed or as directed by the Forest Service and State to maintain safe and stable site conditions.
- Erosion from drilling operations or water usage is not anticipated due to the nature of the water recycling measures that will be applied at the drill sites.
- As determined by a Forest Service representative, berms, silt or drift fences, or straw wattles will be installed to prevent erosion.
- There will be no waste or tailing dumps. No drilling will occur in streams, riparian areas, or wetlands. The drill sites are small in extent (30 feet by 50 feet), and the surface is left undisturbed as much as possible which would allow natural infiltration to continue. The water used to flush cuttings will be captured and directed to the infiltration gallery or tanks and then recycled. Drilling mud, water, and other fluids as well as drill cuttings from drilling operations will be confined to the drill site using storage tanks or sumps or will be disposed of in accordance with this PO.
- If needed to prevent erosion of soil and other on-site materials when taking into consideration the risk involved with an intense precipitation event or infiltration gallery failure, a berm will be constructed on the downslope portion of the drill location.



Determination of such a need will be contingent upon a field visit and inspection by a Forest Service representative. Based on a site-specific review of sediment transport potential (factoring slope, vegetation, soil depths, and proximity to riparian areas) by a Forest Service representative, silt/drift fences or straw wattles will be installed at drill sites where deemed necessary.

- The slight chance for soil erosion would result from hitting an unexpected artesian aquifer during the drilling operation. In this event, the drilling contractor will conform to the State of South Dakota Capping, Sealing, and Plugging Exploration Test Holes Rules 74:11:08.

Vegetation

- When possible, drill sites will be located outside of meadows and on adjacent dry, rocky sites to minimize impacts on soils and plants.
- Drilling on steep slopes would be avoided whenever possible.
- Site preparation and clearing of vegetation will require site-specific pre-approval from a Forest Service representative.
- Merchantable timber removed will be utilized and paid for at Forest Service appraised rates.
- Upon completion of a drill site, all slash will either be piled in dirt-free piles in locations approved by the District Ranger or lopped and scattered in such a manner so as not to exceed heights of 18-inches above ground level.
- Lay-down areas would be located on previously disturbed sites, with the final selection of locations based on a field visit and approval of a Forest Service representative.
- Equipment will not be operated when ground and road conditions are such that excessive damage will occur (i.e., saturated road or soil conditions). Pete Lien and Sons or its assignees will conduct maintenance on routes within the project area to mitigate impacts as identified by a Forest Service representative.

Solid Waste Disposal

- Refuse associated with the exploration project will be removed and disposed of in proper disposal sites. Garbage and litter generated at the drill site and lay-down areas will be removed daily and placed in the secure garbage storage area at the temporary lay-down yard. Common refuse expected will be empty drill fluid additive and drilling oil/fluid containers, empty cement or bentonite bags, and general food wastes. From there, the garbage will be taken to an approved disposal site off National Forest System land every several days. Human waste generated by project activities at drill sites will be contained in portable toilets or similar receptacles designed to contain, transport, and dispose of human waste at a State of South Dakota-approved site off National Forest System lands. Solid waste generated at the site such as broken equipment, scrap metal, trash, garbage, tires, etc., will be promptly disposed of at an approved off-site facility. Contact the SD DANR Waste Management Program at (605) 673-3153 if you have questions concerning



solid waste disposal.

Scenic Values

- The drill sites are generally located in areas not easily visible from the surrounding area or trails. The drill sites are small in extent and reclamation will take place in a timely fashion once the drilling has been completed at the site. Any necessary reclamation at a lay down area will be consistent with USFS and State of South Dakota requirements.

Wildlife and Fish

- Disturbance to wildlife habitat is minimized by small drill pads and limited access. Streams are located near drill locations, particularly near drill sites 1-5 and 16-20. Best management practices outlined in Section V. B. will minimize impacts on streams. Minimizing disturbance to steep slopes, use of the on-site infiltration gallery, and proper management of drilling materials would prevent impacts on fisheries. PLS will refrain from crossing all stream channels (ephemeral, intermittent, perennial) with motorized vehicles. No roads or fill/dredging activities will occur at these crossings.

Noxious Weeds

- PLS would be responsible for preventing noxious weed infestations in the working area for the duration of the PO. Noxious weeds and exotic plants include those species recognized as such by Federal, State, or local agencies. PLS would follow prevention and control measures required by Federal, State, or local agencies.
- If determined necessary by the District Ranger, PLS would develop a plan for noxious weed and exotic plant prevention and control. The plan must have prior written approval from the District Ranger and, upon approval, shall be attached as an appendix to the PO. For additional information on the application of pesticides on public lands contact the South Dakota Department of Agriculture and Natural Resources at (605) 773-4432.
- Equipment would be washed by PLS and inspected by Forest Service personnel before being used in project implementation within the administrative boundaries of the Black Hills National Forest. This includes, but is not limited to drill rigs, vehicles used for transportation within the project area, and ATVs. In the event noxious weeds are noted at the project site and occur from activities, appropriate weed treatment will be coordinated with the Forest Service.

Cultural Resources

- The project will not interfere with or impact any known historical sites. Proposed drill pads will be at least 500 feet from all known historical locations.
- During permitted activities, bones, artifacts, foundations, or other indications of past human occupation of the area should be discovered, a Forest Service archeologist and District Ranger must be notified immediately to determine an appropriate course of action. All work will cease within 30-100 feet of the discovery, and a reasonable effort to protect the site will be made. Should the proposed activities take place outside of the identified area of potential effect, further consultation or review may be necessary.



Hazardous Substances

- Gasoline, diesel fuel, oils and greases, water supply pumps, trucks, and generators will be used. Fuel for the drill and the trucks will be transported in DOT-approved tanks. The drill will require daily re-fueling. Oil and grease will be transported on an as-needed basis. Copies of Safety Data Sheets for drilling lubricants and other substances associated with drilling will be supplied to the USFS. These materials will be handled and disposed of as described in the SOS or taken off-site. Locations of stockpiled reportable quantities (greater than 25 gallons) of fuel or other petroleum products will be reported to a Forest Service representative.
- If trucks are used to refuel drills adjacent to existing roads, the trucks will have slip tanks that contain approximately 100 gallons. As the fuel is consumed, fuel will be transported on an as-needed basis, which is anticipated to be daily. The fuel tanks will have the proper signage, and the drillers will maintain spill kits on site for use in case of a spill. Appropriate containment procedures will be employed such as stock tanks for containers and absorbent material for all diesel fuel, gasoline, hydraulic fluid, motor oil, and other hazardous materials. Absorbent material will be kept on hand at each site where petroleum products are being used or stored.
- Fuel barrels or tanks will be stored in secondary containments that have the capacity for 1.5 times the volume of the liquid being stored. All hazardous substances will be removed at the end of the project.
- Containment procedures will be employed such as ground tarps and absorbent material for all Diesel fuel, gasoline, hydraulic fluid, motor oil, and other hazardous materials. Absorbent material will be kept on hand at each site where petroleum products are being used or stored. PLS will report all significant spills of hazardous substances to the USFS, regardless of minimum quantities. Additionally, releases will be reported per SD DANR ARSD 74:34: regulated Substance List and Reporting of Discharges.

Forest Service Proposed Design Features

The following design features are required by the Forest Service in addition to the proponent proposed design features listed above.

General Safety

- Maintain all operating areas in a safe, neat, and professional manner.
- Maintain a copy of the approved PO and this Decision Memo onsite during all surface-disturbing operations.
- If artificial lighting is used, it will be downward directed to reduce light pollution.
- Designated speed limits (or less) will be maintained by the proponent and any contractors within the project area to reduce the potential for vehicle related collisions.
- Dust control will be accomplished by watering access routes as necessary.
- Use of seasonally closed roads will include the locking of seasonal gates each time the



proponent goes through the gate.

- All contractors and subcontractors will adhere to any current and imposed fire restrictions enacted within the Black Hills National Forest.
- PLS will develop and submit a safety signage plan to the Mystic District Ranger. Signs would be placed on any roads or trails adjacent to drill locations when drilling operations are under way. Safety signage that warns of heavy equipment road use should be posted throughout the work area to ensure the public is aware of the temporary work site.
- All existing Forest Service authorized improvements, including but not limited to fences, roads, trails, water tanks, guzzlers, gates, and utility lines are considered protected improvements and should be protected during project implementation. Should any damage occur the Mystic Ranger District must be notified immediately, and the damage will be repaired to its original condition as soon as possible.
- PLS shall develop an Emergency Response Plan (ERP) for the project and provide the plan to the USFS and local first responders prior to project initiation. The ERP shall be prepared in coordination with local emergency response agencies and shall address potential emergency situations, including but not limited to fire and injury. The plan shall include protocols directing on-site contractor actions in the event of a fire originating at the drill sites or occurring on adjacent National Forest System lands. The ERP shall also incorporate spill prevention and control measures, site signage requirements, and fire response procedures. All plans shall be submitted to the USFS for review and approval prior to project implementation.
- All vehicles, drill rigs, and other on-site equipment would be inspected as part of daily safety checks and would be equipped with a fire extinguisher, which would also be inspected routinely.
- A site security plan would be developed by the proponent to maintain site safety and limit risk of public interference.

Recreation

- Drilling operations would cease on the following holidays or weekends because of high traffic and recreational usage: Memorial Day, Fourth of July, and Labor Day.

Vegetation

- Some trees greater than 9 inches diameter at breast height (dbh) will be removed. If a need arises to remove any tree larger than 9 inches dbh, whether for safety concerns or otherwise, the Proponent must contact the Mystic Ranger District first and additional trees will be designated by the USFS.
- Retain all snags that are not considered a hazard to property or life.
- The project Proponent must coordinate with the Mystic Ranger District to determine which timber sales, if any, are active in the project vicinity and to coordinate project implementation to avoid conflicts between exploratory drilling and logging operations.



- The Forest Service will monitor and assess the progress of reclamation activities, including revegetation and erosion control, for a minimum of 3 years. Depending on the success of the reclamation efforts, additional seeding, weed treatment, or installation of erosion control structures may be required by the Proponent.

Botany & Noxious Weeds

- All equipment will be washed prior to entering the area to prevent the introduction of noxious weeds.
- PLS would be responsible for preventing and controlling noxious weed infestations in the working area. Noxious weeds include those species recognized as such by Federal, State, or local agencies. PLS would follow prevention and control measures required by Federal, State, or local agencies. If determined necessary by the District Ranger, PLS would develop a plan for noxious weed prevention and control. Equipment would be washed by PLS and inspected before being used in project implementation within the administrative boundaries of the Black Hills National Forest. This includes, but is not limited to drill rigs, vehicles used for transportation within the project area, and ATVs. In the event noxious weeds are detected in the project area, appropriate weed treatment will be coordinated with the Forest Service. However, the use of herbicide and pesticides would be limited to spot treatment (Standard 4304).
- All areas of ground disturbance would be monitored for noxious weeds and treated for two to three years post-disturbance following Forest Service standards for treatment methods.
- Where disturbance occurs, re-vegetation efforts will primarily rely on the creation of micro-sites (roughened ground surfaces, placement of woody debris, etc.) for natural re-vegetation and redistribution of the salvaged on-site organic litter layer. Reseeding may be prescribed if, upon inspection, it is noted that adequate existing organic material containing a native seed bank is insufficient to properly restore the native vegetation. Only native, certified weed-free seed of a mix pre-approved by Forest Service personnel will be used.
- Reseeding during reclamation will be done with a Forest Service approved seed mixture of:
 - High Elevation – Mid Zone: 25% Slender wheatgrass (*Elymus trachycaulus*), 30% Annual ryegrass (*Lolium multiflorum*), 10% Canada wildrye (*Elymus canadensis*), 10% Canby bluegrass (*Poa canbyi*), 20% Green needlegrass (*Nassella viridula*), 5% Purple prairie clover (*Dalea purpurea*) or American vetch (*Vicia Americana*).
 - All seed should be certified weed-free, pure live seed. Seeding should be done at a rate of 20 pounds per acre.
- All travel on South Rochford Road and NFS road 132 should be strictly limited to the roadway due to high-quality botanical habitat within the vicinity of these roads.
- The temporary access route to Drill Site 18 has been shifted to avoid sensitive plant species. No deviations from this access route are permitted.



- The project requires the development of currently undisturbed land to build access trails to the drill sites. By changing the alignment or location of these access trails, the project should avoid sensitive species populations and mitigate adverse impacts.

Hydrology

- Keep vehicles and equipment out of wetlands and streams as much as possible. Store vehicles and equipment further than 150 feet from water sources, including washing, cleaning or other activities that involve water running off equipment.
- Notify a Forest Service hydrologist if any unmapped streams, wetlands, springs, wet areas, caves, or sinkholes are found.
- Drill pads will be located outside Aquatic Management Zones (AMZs); over 100 feet from water features.
- Do not excavate material from or store excavated earth material in any stream, wetland, or Water Influence Zone.
- Use non-toxic, non-hazardous drilling fluids when practicable.
- Habitat disturbance will be minimized through the use of small drill pads and restricted access. At drill locations near streams (notably drill sites 1–5 and 16–20) the following best management practices would be followed to minimize impacts on streams.
- Drill sites will not be located in streams and wetlands. Operations will be conducted to prevent pollutants or debris from entering streams and wetlands. Pollutants entering streams will be reported as detailed in the PO.
- PLS will refrain from crossing all stream channels (ephemeral, intermittent, perennial) with motorized vehicles where a crossing doesn't already exist. No roads or fill/dredging activities will occur at these crossings.
- Drill sites and infiltration galleries are located a minimum of 300 feet from all perennial streams and 200 feet from other riparian areas (ponds, lakes, reservoirs, and wetlands). If exceptions to these distances (increases or decreases) are required based on site conditions, PLS will gain approval from the on-site Forest Service representative in conjunction with Forest Service fisheries or hydrology specialists.

Wildlife

PLS will implement the following conservation measures to minimize impacts on federally listed species, Rocky Mountain Region sensitive species (R2SS) and Species of Local Concern (SOLC) bat species occurring in the action area:

- Removal of suitable tree roosting habitat will be avoided during the summer occupancy period (May 1 - Sept 30). If this is not possible, an emergence survey of the suitable roost trees proposed for removal will be completed by the proponent in accordance with the US Fish & Wildlife Service's Summer Survey Guidance (USFWS 2024) to establish probable absence.
 - If probable absence is determined, tree clearing may occur during the active



season.

- If probable absence cannot be determined, the Forest Service may reinstate formal consultation or reconsider avoiding the active season construction.
- If emergence survey is positive for bats, the Forest Service can assume presence of the northern long-eared bat and tri-colored bat or would need to follow up with a presence/absence survey to verify species are not target species.
- No access route improvements or tree and vegetation clearing will be conducted during the pup season (June 15 – August 31) at drill locations 5, 13, and 20 due to them being within habitat structural stage 4B, 4C, 5, or deciduous stands, which are considered preferred maternity roosting habitat. Any drilling started prior to June 15 would be allowed to continue until drilling is completed.
- Construction of new access routes and vegetation clearing along the access to drill sites 2 and 4 can be conducted during bat hibernation season (October 1 – April 30) due to topographic barrier between construction sites and hibernation habitat buffer.
- Drilling that results in noise levels of 60 dBA or greater within potential maternity roost habitat at drill locations 5 and 20 is permitted if drilling stops between dusk and dawn to minimize impacts to foraging bats during the northern long-eared bat pupping season (June 15 – August 31). Any drilling started prior to June 15 would be allowed to continue until drilling is completed.
- No drilling will occur during bat hibernation season (October 1 – April 30) at drill locations 2, 18, and 19.
- If permitted activity that utilizes directional drilling that may reach within or beneath the ¼-mile hibernacula buffers, drilling activities should not be conducted during hibernation, spring emergence, and fall swarming (August 16 – June 1).
- Nighttime activities conducted during the active season will ensure that lighting should be shielded downward and directed away from suitable roosting habitat. If shielding and directional lighting is not possible, the Backlight, Uplight, Glare (BUG) system must be as close to a zero rating as possible for all three, with a priority of an uplight rating of zero.
- Disturbance to wildlife habitat is minimized by small drill pads and limited access. Streams are located near drill locations, particularly near drill locations 1- 5 and 16- 20. Best management practices will minimize impacts on streams.
- The following conservation measures would be implemented regarding bats and other wildlife:
 1. Retaining all snags that are not considered a hazard to property or life.
 2. Avoid disturbing, harming, or harassing bats, known roosts, or their hibernacula, and report the location of the bat detections/sightings to a Forest Service wildlife biologist.
 3. Notifying a Forest Service wildlife biologist of deceased bats as soon as possible.
 4. If any permitted activity results in the discovery of a raptor nest or defensive behavior



by a raptor that suggests a nest may be nearby, vacate the area immediately and notify a Forest Service wildlife biologist as soon as possible.

5. Open sumps at drill locations would have a barrier around them (e.g., hurricane fencing or something similar) sufficient to prevent cattle and big game from walking into the sump. Sumps will be covered with material that would not entangle birds or bats.
- To reduce the exposure to bats in White Nose Syndrome zone, during the active season (April 1 - October 15), conservation recommendations presented below would lessen the exposure and risk of direct and indirect effects on bat populations affected by white nose syndrome:
 1. Retain snags greater than 20-inch dbh where feasible unless considered to be a direct hazard to people and structures (Standard 2305).
 2. Caves or mines within the project area should be reported to the Mystic Ranger District Wildlife Biologist and District Archaeologist for evaluation. If determined that the site may be suitable bat maternity or hibernation habitat, buffers are to be maintained to protect the microclimate of the site (Standards 3207, 3208 and 3209).

Cultural Resources

- Cultural resources identified during a survey of the project area will be avoided by project activities.
- If previously unidentified archaeological or cultural resources are discovered during project implementation, or if unanticipated effects to known resources occur, work in the immediate vicinity of the discovery would be suspended. The Forest Service Archaeologist would be notified promptly, and the resource would be evaluated in accordance with applicable laws and regulations. Subsequent actions would be determined based on the results of that evaluation.

Reclamation

Reclamation practices will follow South Dakota Codified Law (SDCL) 45-6C-8, 45-6C-27 through 45-6C-29, 45-6C-31 through 45-6C-35, Administrative Rules of South Dakota (ARSD) 74:11:08 and USFS requirements.

Best management practices (BMPs) will be used to keep disturbance to a minimum required for the safe and successful completion of the project. Final and interim reclamation of the drill sites, lay-down areas, travel routes, and any other areas disturbed by exploration and exploration-associated activities will be initiated on a site-by-site basis as soon as the drilling and/or use of the site has been completed in consultation with the Black Hills National Forest and State of South Dakota. Reclamation measures will be adjusted as necessary to best achieve reclamation objectives.

To ensure adequate reclamation potential, organic litter will be stockpiled separately from the mineral soil.

The following are reclamation objectives for areas disturbed by exploration activities:



1. Reclaim the surface disturbed by operations by taking such measures as to prevent or control onsite and off-site damage to the environment and forest surface resources (36 CFR 228.8 (g)).
2. Return areas disturbed by operations to a stable configuration that approximates the original condition to the extent possible. All surface areas disturbed by the operation shall be recontoured in such a way as to closely approximate either surface contours existing in the disturbed area before the start of operations or surface contours of immediately and adjacent undisturbed terrain. In all cases, resulting contours shall be made to blend and merge with surrounding natural ground surfaces in an unobtrusive way imitating natural surface features commonly found in the immediate area.

Facilitating Reclamation

Application of reclamation measures will be concurrent with operations and/or begin immediately upon completion of operations at each site. Disturbed areas will be kept to the minimum size necessary to accommodate the exploration operation. If ground-leveling activities are needed or infiltration galleries/sumps are dug, all suitable on-site organic litter, soil, and soil material will be salvaged before any other site disturbance (such as drilling or leveling), and either stockpiled or used for immediate reclamation.

Felled or cut vegetative material (tree, logs, brush, etc.) will be stockpiled for reclamation. All straw wattles used on-site to reduce soil erosion would be composed of certified weed-free straw and wrapped in biodegradable material (i.e., not plastic, or photodegradable material). All natural fibers may be left on site.

Toxic materials will be handled and disposed of as specified in Section V., G. in the PO. PLS will assume responsibility for any necessary reclamation resulting from the activities of contracted and sub-contracted employees. Expected dates for completion of reclamation are provided in Sections I.F. and I.G. of the PO.

Interim Reclamation Measures

While completion of final reclamation as soon as possible is preferable, this may not always be possible due to snowfall or weather. In such an event, interim reclamation needs identified by the Forest Service representative will be completed for erosion control on all exploration disturbance areas. This could include draining sumps and infiltration galleries, erosion control measures such as constructing or installing water bars, scarifying compacted surfaces, placement of woody debris, and the application of an interim reclamation seed mixture approved by the Forest Service.

If a delay in plugging and capping is required (SDCL 45-6C-28), PLS will seek approval from the Forest Service and SD DANR. Upon approval and as described in ARSD 74:11:08:08, the hole shall be securely capped with a tapered concrete plug or suitable equivalent that is of sufficient diameter to prevent it from slipping below the surface. The temporarily plugged and capped hole shall be marked with a sturdy steel fence post with a minimum height of 42 inches above the ground surface. All test holes shall be capped and permanently plugged as soon as practical and may not be left unplugged for more than 30 days without approval of the SD DANR and the USFS.

Final Reclamation Measures



Well plugging: Per ARSD 74:11:08:04, exploration drill holes that encounter no water or only low permeability formations such as clays, shales, and till; the minimum acceptable test hole plugging method is the return of the excess drill cuttings to the drill hole to a point not less than eight feet below the ground surface. Backfill material must be free of contamination and have a permeability equal to or less than the permeability of the formations encountered in the borehole. A nondegradational, nonslip plug shall be placed at a point not less than eight feet below the ground surface, and a five-foot column of cement grout shall be placed above the plug. Topsoil or material representative of the undisturbed surface material shall be tamped into the upper three feet of the drill hole. Bentonite chips may be used as an alternative to cement grout in the top eight feet of the test hole if bentonite grout or bentonite chips are used to plug the test hole. Drill-hole collar pipe or casing will be removed or cut off below ground level.

If conditions require or aquifers or artesian water are encountered, plugging methods will conform to ARSD 74:11:08:05 through 74:11:08:07, where applicable.

Site Clean-Up and Re-Contouring: Site Drill cuttings and other non-toxic lubricants in sumps/infiltration galleries will be removed from the site or allowed to percolate into the ground before backfilling. Standing water in sumps/infiltration galleries will be drained or allowed to percolate into the ground before backfilling. Excavations will be backfilled with excavated spoil material and topped with salvaged organic material. Compacted surfaces created by exploration activities will be loosened. Disturbed areas will be re-contoured to their original condition to the extent possible by reapplying salvaged material over disturbance areas. This will include the reapplication of mineral soil, topped with organic soil material, woody debris, and slash. Upon completion of reclamation, any excess salvaged material (rock, soils, slash, woody debris, etc.) will be scattered in the vicinity. Excess rock or soil will not be placed or scattered in streams, or wetlands. Damage to NFS roads, ditches, trails, or associated drainage features (water bars, ditches, culverts, etc.) resulting from exploration activities and/or associated travel by PLS or contractor personnel will be repaired to a functional condition as specified by Forest Service personnel.

Revegetation: Where disturbance occurs, re-vegetation efforts will primarily rely on the creation of micro-sites (roughened ground surfaces, placement of woody debris, etc.) for natural re-vegetation and redistribution of the salvaged on-site organic litter layer.

Reseeding may be prescribed if, upon inspection, it is noted that adequate organic material containing seed is not available. Only native, certified weed-free seed of a mix pre-approved by Forest Service personnel will be used. Re-vegetation will be accomplished as soon as possible; however, it will be performed in the proper season in accordance with accepted agricultural and reforestation practices identified in consultation with Forest Service personnel on a site-specific basis. On areas needing immediate establishment of vegetation, non-native, non-aggressive annuals (e.g., wheat, oats, rye) or sterile species may be used while native perennials are becoming established or when native species are not available (e.g., during drought years or years when wildfires burn large acreages in the United States). Aggressive, non-native perennials (e.g., smooth brome, timothy) would not be used.

Seed would be tested for noxious weeds. If mulches are used, they are to be noxious weed free. Weed-free alfalfa seed may be used only when native legume seed is not available and only



when there is extensive disturbance associated with road construction or mine reclamation where topsoil is no longer available. Weed control on all disturbed or reclaimed areas will be conducted until SD DANR releases reclamation liability.

Reclamation Monitoring

PLS will commit to annual field inspections of drill sites and the lay-down area in conjunction with Forest Service and SD DANR staff (whenever possible) to cover areas used and occupied by PLS under this PO to monitor for reclamation effectiveness and noxious weed infestations for 3 years. Such field inspections will be documented with photographs or written descriptions. Field inspection information will be compiled at the end of each field season and provided to the Forest Service.

If the above reclamation efforts do not meet the established criteria required for bond release, PLS will collaborate with a Forest Service representative and make modifications to the site, incorporating such changes and additional procedures as may be expected to provide reclamation to the stated standard.

Reclamation Bond Release

Release of the reclamation bonds may be requested when:

- The majority of the reclamation bond will be available to PLS after post operation inspection of site cleanup, recontouring, backfilling, and scarification of the disturbed areas.
- Remaining reclamation bond will be held in order to monitor onsite and off-site damage to the environment and forest surface resources for three years to ensure proper revegetation and weed control.
- Re-vegetation will be deemed adequate when:
 1. Species composition is like that of adjacent areas; and
 2. The vegetative crown cover is 60 to 75 percent of the existing percent vegetative crown cover of adjacent areas not disturbed by operations authorized by this Plan.

Duration

Surface disturbance activities resulting from this project, including reclamation earthwork, would be one year (12 months) or less. If project activities must extend beyond that time, additional environmental analysis would be necessary. Any deviation from the approved reclamation design features that would result in ground disturbance would require a new PO or further review and approval. The complete PO is included in the project record and is incorporated by reference.

Decision

I have decided to approve exploration activities, including ground disturbing reclamation activities, for Pete Lien and Sons, Inc., on the Mystic Ranger District, Black Hills National Forest, as described above under the "Proposed Action" and further detailed in the PO Updates Notification letter (updated, April 2025).

On July 3, 2025, 36 CFR 220 were finalized, rescinding the previous regulation and which



modified the citations associated with certain categorical exclusions applicable to Forest Service actions. Specifically, the reference formerly cited as 36 CFR 220.6(e)(8) has been superseded and is now codified under 7 CFR 1b.4(d)(32). This change reflects the Department of Agriculture's consolidation of categorical exclusions and aligns Forest Service procedures with the broader USDA regulations governing environmental analysis and decision-making under the National Environmental Policy Act (NEPA). Importantly, while the citation has changed, the intent and scope of the categorical exclusion remain the same.

This action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable category of actions is identified in departmental procedures as 7 CFR 1b.4(d)(32). This category of action is applicable because the proposed action falls within category (d)(32), *short-term (one year or less) mineral, energy, or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment, construction of less than one mile of low standard road, or use and minor repair of existing roads*. The total duration of exploration program implementation will not exceed one year from initiation of approved activities.

I find that there are no extraordinary circumstances that would warrant further analysis and documentation in an EA or EIS. I considered resource conditions identified in agency procedures that should be considered in determining whether extraordinary circumstances might exist:

- ◆ **Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species** – The Black Hills National Forest satisfied Endangered Species Act (ESA), Section 7 Consultation obligations with the US Fish and Wildlife Service by submitting a Biological Assessment for the Rochford Exploration Drilling Project on December 29, 2025. The US Fish and Wildlife issued a Biological Opinion and a Conferencing Opinion on January 12, 2026.

The Biological Opinion and Conferencing Opinion stated that after reviewing the current status of northern long-eared bat, tri-colored bat and monarch butterfly, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects, it was the Service's biological/conference opinion that the Rochford Exploration Drilling Project, as proposed, *"may affect and is not likely to adversely affect."* No critical habitat has been designated or proposed for these species; therefore, none will be affected. Additionally, the determination of *"no effect"* was made for rufa red knot, Suckley's cockoo bumble bee, and western regal fritillary due to the low likelihood of occurrence and/or lack of suitable habitat in the action area.

Reasonable and Prudent Measures, with associated Terms and Conditions, were identified in the Biological/Conferencing Opinion and are required for implementation of the Rochford Exploration Drilling Project. The Rochford Biological Assessment and Biological/Conferencing Opinion are in the project record for reference.

Northern Long-eared Bat and Tricolored Bat

Due to their rarity in the action area and an abundance of suitable hibernacula, roosting, and foraging habitat across the broader landscape, the project *will not jeopardize the continued existence* of the tricolored bat (TCB). A provisional effect determination has also been made for



this proposed threatened species, which would apply if it became listed in the future. The proposed action may affect the northern long-eared bat (NLEB) and TCB because:

- NLEB and TCB may occur in the action area during the proposed action;
- The proposed action will result in limited permanent and temporary loss of suitable roosting habitat; and
- The proposed action may disturb and displace individual bats as a result of drilling noise and equipment, increased human presence, and vegetation removal.

The proposed action is not likely to adversely affect the northern long-eared bat or the tri-colored bat because:

- The conservation measures outlined in Section 7.0 will be implemented and the proposed action will only result in short-term and minor disturbances;
- Bats have been shown to be affected by non-natural noises only above 80 dBA (Shannon et al. 2016). Noise level outputs of drilling operations are not expected to interfere with bat foraging or communication as it would attenuate to 19.6 dBA at the 0.25-mile buffer.
- The proposed action would not result in impacts to hibernacula; and Suitable roosting habitat is abundant on the broader landscape and the limited loss of suitable roosting habitat would be insignificant.

Monarch Butterfly

Due to a lack of milkweed detected in the action area, monarch butterflies are unlikely to use the area for breeding and the project *will not jeopardize the continued existence* of the monarch butterfly. A provisional effect determination has also been made for this proposed threatened species, which would apply if it became listed in the future. The proposed action *may affect* the monarch butterfly because:

- Monarch butterflies may occur in the action area during the proposed action;
- The proposed action will result in limited permanent and temporary loss of vegetation and potential nectar sources; and
- Mortality and disturbance of individual monarchs may result from drilling noise and equipment, increased human presence, and vegetation removal.

The proposed action is *not likely to adversely affect* the monarch butterfly because:

- There is similar stopover and foraging habitat across the broader landscape;
- Individual monarch butterflies are unlikely to be impacted by construction activities because suitable breeding habitat was not identified in the action area; and
- Following construction, temporarily impacted vegetation will be revegetated.

The Biological Evaluation for the project indicated: A determination of *may adversely impact individuals but not likely to result in a loss of viability in the planning area, nor cause a trend toward federal listing*, for the following Rocky Mountain Region sensitive species: Townsend's big-eared bat, hoary bat, fringed myotis, northern goshawk, grasshopper sparrow, Lark bunting,



Lewis's woodpecker, black-backed woodpecker, northern leopard frog, Black Hills red-bellied snake, Mountain sucker, western bumblebee, and Cooper's mountain snail. A determination of 'no impact' is made for all other Rocky Mountain Region sensitive species not listed here.

- ◆ **Botany determination for ESA threatened and endangered species, Rocky Mountain Region sensitive species, and Species of Local Concern** – The Biological Evaluation for the project indicated: A determination of *may adversely impact individuals but not likely to result in a loss of viability in the planning area, nor cause a trend toward federal listing*, for the following Rocky Mountain Region sensitive species: Bloodroot, Great-spurred violet, Lesser round-leaf orchid, Mountain lady's slipper, Prairie Moonwort, Trailing clubmoss. Additionally, the determination "*likely to persist*" was made for the following Species of Local Concern: Arrowleaf sweet coltsfoot, Alpine Mountain sored, Broadlipped twayblade, Downy gentian, Limber pine, Southwestern showy sedge, Stiff clubmoss. Any RFSS or SOLC, not listed above, do not have suitable habitat in the project area therefore this project would not interfere with persistence of these species across the Black Hills National Forest.
- ◆ **Flood plains, wetlands, or municipal watersheds** – The proposed drilling activity will not take place in a wetland. There will be no adverse effects to wetlands. No drill pads, service stations or facilities will be placed in the recognized Federal Emergency Management Agency (FEMA) floodplains. This project is located on two HUC-12 level watersheds: 101201100107 (North Fork Castle Creek) and 101201100102 (South Fork Rapid Creek). North Fork Castle Creek flows southeast through the South Area, ultimately joining Castle Creek in the southeastern portion of the South Area. In the North Area, ephemeral tributaries associated with Lessering Draw drain northeastward, exiting the Project Area and flowing into South Fork Rapid Creek. Following the guidelines and design features provided, no adverse effects to the local hydrologic features or water supplies are expected because these actions are temporary in nature, no stream or floodplain modifications are proposed, and the implementation of the design features listed above would minimize or eliminate any adverse effects.
- ◆ **Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas** – there are no designated wilderness, wilderness study areas, or national recreation areas within or adjacent to the project area.
- ◆ **Inventoried roadless areas or potential wilderness areas** – there are no inventoried roadless areas on Mystic Ranger District nor are there potential wilderness areas within or adjacent to the project area.
- ◆ **Research natural areas** – there are no Research Natural Areas within or adjacent to the project area.
- ◆ **American Indians and Alaska Native religious or cultural sites** – There are no known Native American or Alaska Native religious or cultural sites within the project area.
- ◆ **Archaeological sites, or historic properties or areas** – A Level III Cultural Resource Inventory was performed for the proposed Rochford Drilling Exploration Project south of the town of Rochford, South Dakota. The undertakings identified that were evaluated and assessed through the cultural resource inventory included: the drilling of 18 bore holes, 3-inches in diameter with a maximum depth of 1,000 feet at a 45 degree angle, the anticipated disturbance area of the bore-hole pads



to be 30-feet by 50-feet for a total aggregate disturbance area of 3.3 acres, and a staging area used for storing water and staging equipment with an anticipated disturbance area of 2.3 acres. The Area of Potential Effect included a 30-meter buffer from the centerline of the existing access roads, a 30-meter buffer around the proposed drilling sites, and a 45-meter buffer around the proposed staging area. The aggregate Area of Potential Effect in regards to assessing the effect to cultural resources was determined to be 98 acres.

The cultural resources inventory was conducted pursuant to the National Historic Preservation Act (NHPA as amended) and its implementing regulations at 36 CFR § 800. Section 106 of the NHPA (54 USC 306108) directs federal agencies to take into account the potential effect of an undertaking on “historic properties,” which refers to cultural resources listed in, or eligible for listing in, the National Register of Historic Places as defined at 36 CFR § 800.16(l)(1). The cultural resource inventory presented in this report was conducted to assist the Forest Service in meeting these obligations.

The USFS had determined, as a result of the cultural resource inventory, that there are *no historic properties affected* by the undertaking pursuant to 36 CFR § 800.4(d)(1) of the NHPA.

On September 17, 2025, an invitation to review and comment on the archeological report was mailed, placed within shared external consultation folders and notified through email, or directly emailed to 16 tribal historic preservation offices and the South Dakota State Historic Preservation Office. On September 19, 2025, the Northern Cheyenne concurred with the determination of No Historic Properties Affected. On November 6, 2025, the South Dakota State Historic Preservation Officer issued a letter stating their concurrence with the determination.

The conclusions summarized in this document are based on a review of the project’s record that reflects best available science and consideration of relevant scientific information and responsible opposing views were raised by internal or external sources. Further, the analysis reflects that management direction, findings, and conclusions are consistent with the Forest Plan.

Tribal Coordination

Tribal engagement efforts, to date, are summarized here.

On January 28, 2025, the Forest sent 36 email and hard-copy letters as well as associated informational materials to 16 federally recognized Tribes, inviting them to participate in government-to-government consultation on the Rochford Project. The Rosebud Sioux Tribe and Northern Arapaho expressed interest in continued consultation and provided responses that informed early project development. Subsequently, our Tribal Relations Specialist provided the Tribes with a copy of informational materials on February 25, 2025.

An initial description of the proposed action for the Rochford Project was distributed to the same 36 Tribal contacts beginning April 9, 2025, initiating a 30-day public scoping comment period following publication of materials on the Black Hills National Forest website. The scoping package requested comments on the proposed action and invited Tribes to engage in coordination and consultation with the Black Hills National Forest. Additional comments and requests for consultation were received by multiple tribes during this period.



Throughout 2025, the Black Hills National Forest engaged in government-to-government consultation on the project, meeting with tribal representatives on ten separate occasions. In addition, between November and early December 2025, Black Hills National Forest staff visited tribal representatives at reservation offices in person to discuss and answer questions on the projects.

Two tribal resolution letters regarding the Rochford project were received by the Rosebud Sioux Tribe, dated December 30, 2025, and the Cheyenne River Sioux Tribe, dated December 31, 2025.

Public Involvement

Project information was entered in the Forest Service's Planning, Appeals, and Litigation System (PALS) database on 4/9/2025 (PALS #67838) and subsequently published to the Schedule of Proposed Actions (SOPA), which remained publicly accessible until 02/12/2026, when the SOPA system was decommissioned. On April 9, 2025, a scoping notification letter requesting input was distributed via email and U.S. mail to 110 recipients, including adjacent landowners, interested parties, organizations, local government entities, Tribes and other agencies. The scoping document and an informational PowerPoint presentation were made available on the Black Hills National Forest public website on April 9, 2025.

A total of 2,226 scoping comments were received on the project. Fourteen submissions were determined to be duplicates (same author and identical content). In accordance with Comment Analysis and Response Application (CARA) protocols, duplicate entries are filtered and are not displayed in the online record. Comments were collected via email, delivered by hand, by phone, email and online in CARA. Due to a change in the project's web address and in response to public requests, the Responsible Official decided to extend the scoping period by seven days. Appendix A includes a summary of comments received and agency responses. Public comments may be viewed on the project website: <https://cara.fs2c.usda.gov/Public/ReadingRoom?Project=67838>

Additional updates were made to the PO after the public scoping period. I have determined that no extraordinary circumstances exist pursuant to the reference formally cited as 36 CFR 220.6[b] has been superseded and is now codified under 7 CFR 1b.3(f) that would warrant further analysis in an environmental assessment (EA) or environmental impact statement (EIS).

Findings Required by Other Laws and Regulations

This decision is consistent with the Black Hills National Forest Land Management Plan, as amended. The project was designed in conformance with Black Hills National Forest Land and Resource Management Plan as required by the National Forest Management Act of 1976, as amended. In addition, it is consistent with other laws, regulations, and policy including the following:

- The General Mining Act of 1872, as amended, 30 U.S.C. SS 21-54 (1994), which confers a statutory right to enter upon the public lands to search for and mine minerals.

- Clean Air Act, as amended

- Clean Water Act, as amended



- Endangered Species Act, as amended
- American Antiquities Act and Historic Preservation Act
- Executive Order 13186 Migratory Bird Treaty Act
- Executive Order 11988 Floodplain Management
- Executive Order 12898 Environmental Justice
- Executive Order 14241 Immediate Measures to Increase American Mineral Production

I find that this decision is consistent with all other applicable Federal, State, and local laws or requirements.

Disclaimer

Approval of this PO does not constitute recognition or certification of ownership by any person named as owner therein. Approval of this PO does not constitute, now or in the future, recognition or certification of the validity of any mining claim to which it may relate or to the mineral character of the land on which it lies.

Administrative Review (Appeal) Opportunities

Decisions that are categorically excluded from documentation in an EIS or EA are not subject to an administrative review (pre-decisional objection process) (Agriculture Act of 2014, Subtitle A, Sec. 8006) as a result of the Consolidated Appropriations Act of 2015 (Pub. L. No. 113-76) and the Agricultural Act of 2014 (Farm Bill) (Pub. L. No. 113-76).

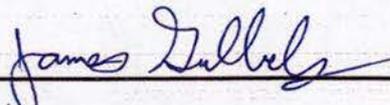
Implementation Date

Implementation of this proposed action area may not be implemented until:

1. The Forest Service has an approved reclamation bond posted by Pete Lien & Sons, Inc.
2. Pete Lien & Sons, Inc. has signed acceptance of, and the District Ranger has approved, the final Plan of Operations (PO).
3. Pete Lien & Sons, Inc. has secured any other applicable state, local, and federal permits and authorizations.

Contact

For additional information concerning this decision, contact: Jonathan Manning, Geological Engineer, Black Hills National Forest at 605-673-9200.


James Gubbels
Mystic District Ranger

2/27/26

Date



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To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Mail Stop 9410, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

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Figure 2. North Area Map of the Rochford Exploration Drilling Project.

