



Arizona State Land Department

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FREQUENTLY ASKED QUESTIONS

Geologic Field Operations Plan

The Arizona State Land Department (Department) encourages all prospective applicants to review these frequently asked questions (FAQs) prior to submitting a Geologic Field Operations Plan (GFOP). The FAQs are only intended to provide guidance and are not intended to provide legal or technical advice. A meeting may be scheduled with the Department to answer questions regarding submitting a GFOP.

1. Why is a GFOP needed?

An approved GFOP is required before any exploration activities take place on State Trust Land (STL). Conducting exploration work on STL without an approved GFOP may result in the cancellation of the permit and/or lease.

Arizona Revised Statute (A.R.S) § 27-233 (B), § 27-251 and Arizona Administrative Code (A.A.C.) R12-5-1903 and R12-5-2004

2. What steps are necessary to apply for a GFOP?

- **Step 1:** Visit the "[ASLD Community Portal](#)" on the ASLD website and log into your existing account.
- **Step 2:** Go to "Leases" and click on the appropriate instrument (e.g., MEP, ROE, Oil & Gas Lease, Geothermal Lease, Aggregate Lease, Mineral Lease, SLUP(s) and Incidental Sales) for which you want to conduct exploration work, then click "Take Action".
- **Step 3:** Choose "Geologic Field Operations Plan"
- **Step 4:** Read the instructions and click "acknowledge" and then click "Next Page"
- **Step 5:** Include all the permits and/or leases to be included as part of the proposed GFOP
- **Step 6:** Access routes must either be described or displayed on the submitted map. Proof of legal access must be provided if the proposed access routes cross federal and/or private lands.
- **Step 7:** The following documentation must be uploaded including, but not limited to:
 - A description on the proposed work,
 - Locational information where ground disturbing activities will be taking place,
 - Maps depicting access,
 - A reclamation plan,
 - The native plant survey, when required,
 - Cover page of the cultural resources survey report, with a note stating when the report was submitted to the Archaeology Section, when required.

3. Which leases or permits may require a GFOP and why?

An approved GFOP is required for the following types of leases and permits:

- **Common Variety Mineral Material Lease (Aggregate Lease)** - If an Aggregate Lease requires a lease amendment(s) (e.g., changes to water, new water retention basin, etc.), a GFOP needs to be submitted to the Department for approval of the amendment(s).
- **Mineral Exploration Permit (MEP)** - A GFOP is required for geologic exploration activities. Once approved, these activities can apply towards the required expenditures for the permit.
- **Geothermal Lease** – A GFOP is required for geologic exploration and ground disturbing activities (e.g., drilling, road installation, etc.).
- **Mineral Lease** – If the proposed use is not authorized by the lease or the MDR or operations are expanding into areas where native plant or cultural surveys have not been completed, a GFOP would be required.
- **Oil and Gas Lease** – A GFOP is required for geologic exploration and ground disturbing activities (e.g., drilling, road installation, etc.).
- **Special Land Use Permit (SLUPs)** – A GFOP is required for geologic exploration activities.
- **Incidental Sale** – A GFOP is required to do cultural resource and native plant surveys.
- **Right of Entry (ROE)** – A GFOP is required for geologic exploration activities.

4. What kind of work is covered by a GFOP?

The work that can be conducted under a GFOP includes, but is not limited to:

- Aerial photographs (vertical and/or oblique) and/or Satellite imagery
- Airborne and/or surface geologic mapping
- Surface soil sampling (including sampling plants)
- Sediment sampling
- Subsurface sampling
- Groundwater monitoring and sampling
- Surface water monitoring and sampling
- Air monitoring and sampling (wind speed, wind direction, dust, radon, radium, asbestos, etc.)
- Gamma-ray sampling (uranium, radon, radium, etc.)
- Geochemical analysis (testing and/or assaying)
- Geotechnical analysis (sieve, bulk density, moisture content, etc.)
- Airborne geophysics (Electro-magnetic (EM), gravity, etc.)
- Surface geophysics (seismic, resistivity, magneto telluric (MT), etc.)
- Subsurface geophysics (caliper, electric, spontaneous potential (SP), optical and acoustic televiewer, etc.)
- Trenching and/or excavation (If the trench and/or excavation remains open longer than one workday, the trench and/or excavation must be fenced off).
- Drilling Wells:
 - *Mineral Exploration Well:*
Once a GFOP approval letter has been issued by the Department, the lessee or permittee must file a *Notice of Intention (NOI) to Drill and Abandon an Exploration/Specialty Well (ADWR Form 55-438)* with the Arizona Department of Water Resources (ADWR). A copy of the GFOP approval letter and a map of the drilling locations must be submitted with ADWR Form 55-438.
 - *Monitor or Piezometer Well:*
Once a GFOP approval letter has been issued by the Department, the lessee or permittee must file a *NOI to Drill, Deepen, or Modify a Monitor/Piezometer/Environmental Well (ADWR Form 55-44A)* with the ADWR. A copy of the GFOP approval letter and a map of the drilling locations must be submitted with ADWR Form 55-44A.
 - *Production wells and associated infrastructure:*
Once a GFOP approval letter has been issued by the Department, the lessee or permittee must file a *NOI to Drill, Deepen, Replace or Modify a Well (ADWR Form 55-40)* with ADWR. A copy of the GFOP approval letter and a map of the drilling locations must be submitted with ADWR Form 55-40.
 - *Oil and Gas Exploration and Production Wells:*

Once a GFOP approval letter has been issued by the Department, the lessee or permittee will need to apply for an Application for a Permit to Drill (APD) with the Arizona Oil and Gas Conservation Commission (AOGCC). A copy of the Department approval letter must be submitted with the APD.

- *Geothermal Exploration and Production Wells:*

Once a GFOP approval letter has been issued by the Department, the lessee or permittee will need to apply for an APD with the AOGCC. A copy of the Department approval letter must be submitted with the APD. Under certain conditions, ADWR Form 55-40, with a copy of the approved GFOP, may also need to be filed with ADWR.

- *Abandonment of Wells:*

Once a GFOP approval letter has been issued by the Department, the lessee or permittee must file a *NOI to Abandon a Well (ADWR Form 55-38)* with ADWR or Application to Plug and Abandon (Form 9) to the AOGCC, depending on well type. A copy of the GFOP approval letter and a map of the well location must be submitted with both ADWR or AOGCC.

- Placer testing (limited mining to determine amount of alluvial gold) - Production report(s) and royalty payment(s) are required for any gold recovered during exploration and/or testing

5. What happens if I don't get a GFOP?

Geologic exploration activities conducted without an approved GFOP will not be accepted as an expenditure, if required, and may result in cancellation of a permit or lease.

6. Is there an application fee for submitting a GFOP Application?

There is no application fee associated with a GFOP.

7. Are there limits on the number of permits or leases that can be associated with a GFOP?

There are no limits on the number of permits or leases that may be included under one GFOP if they are within one project or target area.

8. Are there any acreage limits associated with a GFOP?

There are no limits on the amount of acreage that can be included in a GFOP if the proposed fieldwork is within one project or target area. If the proposed fieldwork is not within one project or target area, a second GFOP would be required for areas not included in the project or target area.

9. Is financial assurance for reclamation and insurance required?

There is no reclamation bond or insurance required for activities conducted pursuant to a GFOP; reclamation bond and insurance requirements are addressed as a condition in the associated lease or permit.

10. What happens if ASLD only owns the subsurface?

A GFOP is required even if ASLD only owns the subsurface. If ASLD does not own the surface, the permittee or lessee may follow the options outlined below:

- Secure the written consent or waiver of the patentee or contract purchaser; or
- Pay to the patentee or contract purchaser the damages to the lands, livestock, water, crops, or other tangible improvements under agreement; or
- Post with the Department prior to his entry upon the lands, a cash deposit or surety bond, in an amount to be fixed by the Commissioner, conditioned upon payment to the patentee or contract purchaser for all such damage caused by lessee or permittee.

The surface owner may require additional conditions.

11. What happens if ASLD only owns the surface?

A GFOP must be submitted and approved prior to any work occurring. The GFOP should include ownership or control information of the subsurface along with a copy of the proposed operations plan and be submitted by the owner of the subsurface (mineral or oil & gas estate) for review.

12. When can a lessee or permittee access STL to determine the scope of a GFOP?

Access to STL is only authorized after the appropriate lease or permit has been signed by both parties and access across adjoining private and/or Federal land has been obtained.

13. Can site work be conducted prior to the approval of a GFOP?

No, the only work that may be performed without a GFOP are cultural resources and/or native plant surveys.

14. Is coordination with existing surface lessees and permittees required?

Yes, prior to initiating any fieldwork, surface lessees and permittees must be given a minimum of two weeks' notice. In addition, in the case of GFOPs needed for MEPs, the GFOP holder is liable for and required to compensate surface lessees and permittees of the STL covered by the lease or permit, or STL that the GFOP holder must traverse, for loss from damage or destruction to grasses, forage, crops, or improvements.

Arizona Revised Statute (A.R.S.) § 27-252(A)(4) (MEP).

15. What type of site-work should be conducted prior to submitting a GFOP application?

Prior to submitting a GFOP application, it is recommended to conduct cultural resources and native plant surveys if proposed exploration activities are considered to be ground disturbing. Submitting the cultural resources and native plant surveys to the Department prior to or at the same time as the GFOP application will help ensure prompt review of the GFOP. The following is a list of activities that require cultural resource and/or native plant surveys:

Activities		Cultural Resource Survey *	Native Plant Survey**
Surface Geophysics!	Seismic	Yes +	No
	Magneto telluric	No	No
Airborne	Airborne Geophysics	No	No
	Aerial Photography	No	No
	Helicopter Transport	No	No
Subsurface	Borehole, Coring	Yes	Yes
	Borehole Geophysics	Yes	Yes
	Wells	Yes	Yes
	Soil Samples	Yes	Yes
	Potholing, Trenching	Yes	Yes
Surface	Outcrop	No	No
	Soil	No	No
	Panning	Yes #	Yes #
	Temporary Road Construction	Yes #	Yes
	Drill Pad and Sump	Yes	Yes
	Helicopter Landing Zone	Yes	Yes
Mapping	No	No	
Plant Sampling	No	No	

Activities	Cultural Resource Survey *	Native Plant Survey**
* Cultural survey required for work areas as well as access ** Native plant survey required for work areas as well as access ! Listing of geophysics is not all inclusive # May be required depending on the scope of operation + Need arch survey if using vibroseis trucks		

Exemptions for Cultural Resource surveys are in development. Once completed, the table above will be updated to reflect those changes.

16. Where can I get information on conducting a cultural resource survey?

For information on conducting a cultural resource survey please contact the Arizona State Museum website at <https://statemuseum.arizona.edu>.

17. Where can I get information on conducting a native plant survey?

If a GFOP includes ground disturbing activities, a native plant survey must be conducted. Native plant survey(s) are conducted by the applicant and reviewed by the Department.

For contiguous/adjacent sections to a surveyed plot (at the same elevation), a native plant survey may not be required. In this scenario, a native plant evaluation may be conducted and consists of:

- Small Scale aerial photograph(s)
- Trail(s)/road(s) located on aerial photograph
- Drill site(s)/test pit(s) located on aerial photograph
- Representative photographs of the trail/road and/or drill site(s)/test pit(s)
- Provide a copy of the table of the types of native plants observed from the original native plant survey.

For additional ground disturbing activities, a native plant evaluation survey report may be substituted for a native plant survey if the following conditions are met:

- Land and permits/leases are contiguous to the original native plant survey,
- Area is similar in elevation (i.e., no vegetative changes or within a riparian area)

The most recent reference for the disposition and valuation method of native plants taken or negatively impacted *in situ* and incidental to authorized user(s) is posted on the Department’s website

18. Does the use of water from or on STL need to be addressed in a GFOP?

If water is needed to conduct exploration activities, the GFOP must state the following:

- State the source of water, noting if the source is on STL or off STL.
- State how the source of water will be transported to the exploration site.
- State the proposed use and volume of water.

The lessee/permittee will be billed for the use of water from STL based upon the total water use measured by a flow meter and self-reported use that is subject to Department verification.

19. Do I need to describe new road improvements, road repair or widening work in a GFOP?

Yes, the locations of all proposed road work required for access must be included in the GFOP application and approved through the Department. Any new roads or trails, or improvement of an existing road or trail (widening), is considered ground disturbing activities and must therefore be surveyed for cultural and native plant resources.

20. Can I use an Off-highway Vehicle (OHV) off an existing trail or road to conduct GFOP activities?

No, an OHV may only be used on existing roads and trails. Note that a one-time use or single set of tracks does not constitute an existing road or trail.

21. Does the Department's Mineral Section need to be notified prior to the start of GFOP fieldwork?

Yes, the Department's Mineral Section must be notified by email one week prior to the start of GFOP fieldwork.

22. Does the Department's Minerals Section need to be notified when GFOP fieldwork has been completed?

Yes, the Department's Mineral Section must be notified by email when GFOP fieldwork has been completed.

23. How long is a GFOP valid?

- A GFOP for one MEP
 - One year or when the MEP expires, whichever one expires first.
- A GFOP for two or more MEPs:
 - One year or upon expiration of one MEP, whichever one expires first.
- A GFOP for a ROE:
 - One year.
- A GFOP for an Oil & Gas lease:
 - It depends on the type of work to be conducted
 - For example – if GFOP is for initial surveys (surface geophysics, airborne geophysics), the expiration date of the GFOP is typically one year.
 - For example – if the GFOP is for drilling a well, the expiration date is typically the same as the lease expiration date.
 - If multiple leases are included in the same GFOP, the expiration date is the same as the O&G lease that expires first.
- A GFOP for a Geothermal lease:
 - It depends on the type of work to be conducted
 - For example – if the GFOP is for initial surveys (surface geophysics, airborne geophysics) the expiration date of the GFOP is typically one year.
 - For example – if the GFOP is for drilling a well, the expiration date is typically the same as the lease expiration date.
 - If multiple leases are included in the same GFOP, the expiration date would be the same as the geothermal lease that expires first.
- A GFOP for a SLUP:
 - If the SLUP is associated with mineral exploration, the expiration date is one year.
 - If the SLUP is associated with a hard rock mining operation, the expiration date is the same as the SLUP expiration date.
 - If the SLUP is associated with a common variety mining operation (e.g., aggregate, sand and gravel, boulders, etc.), the expiration date is the same as the SLUP expiration date.
 - If the SLUP is associated with either an Oil & Gas or geothermal operation, the expiration date is the same as the SLUP expiration date.
- A GFOP for an Incidental Sale:
 - For an incidental sale, the expiration date is one year.

If the approved work cannot be completed within the associated timeframes (as driven by the underlying use authorization), a new GFOP application must be submitted and approved prior to continuing operations.

24. Do I need to provide copies of the results of the work completed under a GFOP?

Yes, copies of analytical (see ARS 27-252 (A) (7) and (8)) and/or geotechnical results, boring logs, well completion reports, etc. must be submitted to the Department's Minerals Section at the expiration of the associated lease or permit. All geologic information remains confidential for one year after the lease or permit expires. In the case of oil and gas well records, the confidentiality period may be extended upon operator request.

A.R.S. § 27-252 (A) (7)(8) (MEP); A.R.S § 27-571 and § 27-522 (Oil and Gas)