



USG Nevada LLC

1505 Tyrell Lane Boise, ID 83706
Tel: 208.424.1027 Fax: 208.424.1030

February 9, 2011

Bureau of Land Management
Black Rock Field Office
Attn: Raquel Minky
5100 E. Winnemucca Blvd.
Winnemucca, NV 89445

RECEIVED BLM
WINNEMUCCA NV
2011 FEB 17 PM 2:54

Dear Raquel,

Enclosed is an application for a geothermal exploration using a surface seismic survey.

This work is part of USG's Department of Energy Grant Application DE-FOA-0000109. I believe we have addressed issues regarding the proposal and potential concerns regarding impacts to archeological resources. I hope that you find the application adequate.

If you need any additional information please feel free to contact me at (208) 424-1027 or Ms. Donna Stammers our Environmental Coordinator at the San Emidio project (775) 557-2203.

Sincerely,

Scott H. Nichols
Manager, Permitting and Lands

CC: Donna Stammers, San Emidio Project Environmental Coordinator

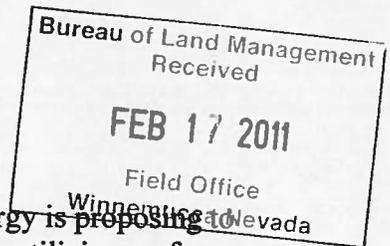
(Original by mail)

APPLICATION FOR SUPPLEMENTAL SURFACE SEISMIC EVALUATION

under

DEPARTMENT OF ENERGY

RECOVERY ACT GRANT DE-FOA0000109



I. GENERAL OPERATIONS

U.S. Geothermal Inc. (USG) in cooperation with the U.S. Department of Energy is proposing to supplement the geological profile of the San Emidio geothermal resource area utilizing surface seismic equipment. The Department of Energy is providing funding for the project under Grant DE-FOA-0000109. The geophysical data collection will require 4 additional, 1 mile seismic transects along which 40 "seismic acceleration" points will be evaluated. The seismic data will be collected with a truck mounted tri-axial vibroseis machine. (See Equipment Photos)
There will be no roads or excavation required and the truck will make one pass along each route. Based on the geologic structure and known geologic features USG's exploration work will be located on both private and BLM administered lands. (See Maps)

II. EQUIPMENT, MATERIALS AND PROCEDURES

Contractors and Equipment – (Section 3261.13 b.1)

Optim (Optim Seismic Data Solutions) from Reno Nevada has been contracted to collect and evaluate the seismic data. USG will have one or two staff on site during the testing and data collection. The tri-axial vibroseis machine is a 64,000 pound, field truck designed for overland travel without the need for roads. See the enclosed photos. The truck starts the testing on one end of the seismic alignment and travels in a relatively straight path along the seismic route. The vibroseis unit, which is carried along the belly of the truck, will provide the seismic data at 200 foot intervals along the route. No excavation or road building is required. We anticipate a 15 minute period to complete each test and move to the next site. Each seismic alignment will be tested in approximately 7 hours and the complete operation will be completed in approximately 3 days.

III. EXPLORATION CRITERIA

Road Specifications

No roads are required and no roads will be constructed. Existing access routes will be utilized where possible.

Ancillary Facilities and Pipeline Specifications

There are no ancillary facilities, structures, or equipment required for the work. No earthwork is proposed or anticipated for the seismic study.

Design Criteria Common to all Construction

All existing gates and fences will be maintained. Best Management Practices (BMPs) will be utilized throughout the project. All equipment from out of the area will be washed to reduce the potential for spread of noxious weeds. Upon completion of the seismic study, any disturbed soils will be stabilized. Water runoff and erosion will be evaluated on an ongoing basis. Noxious weeds will be controlled and weed spraying will be evaluated annually.

Water Supply

No water is required for the work. Drinking water for consultants and support staff is available from USG's office.

Flagging & Staking

Route flagging will be completed prior to the work to ensure archeological sites are avoided. Each seismic route and the associated seismic evaluation points will be loaded into the truck mounted GPS unit.

Clearing, Grading, Earthwork, Structures, & Stabilization

There will be no clearing, grading or earthwork required for the proposed testing. There are no trees on the sites and no vegetation will be grubbed or removed.

IV. RESOURCE PROTECTION

There are no identified long term impacts to rangeland, wildlife, visual, soils, geological, hydrologic, or recreation resources. Short term impacts could result from displacement of wildlife or recreational users during the testing.

Archeological resources are not impacted and all sites are avoided. There is no earthmoving or excavation proposed under the operations. In the event that the BLM Authorized Officer determines that an additional cultural evaluation is required for the testing, USG will direct a qualified archeologist to evaluate the test sites and ensure that each selected test location will not be located on an archeological occurrence.

V. TERMINATION AND REHABILITATION

Surface Reclamation

All equipment will be removed and each seismic acceleration point will be evaluated for erosion potential. Any disturbed site will be left scarified to enhance infiltration and reduce surface runoff. Seeding will be completed with a BLM approved mixture. Seed will be broadcast at a proposed rate of approximately 25 pounds per acre. No fertilizer is anticipated. Noxious weeds will be treated as necessary.

VI. MISCELLANEOUS INFORMATION

Waste Disposal

No trash, debris, solid waste, or hazardous waste will be disposed of on this Site. All such material will be removed and disposed at approved sites.

Traffic Control Plan

A traffic control plan is not warranted for this operation.

Safety Plan

A safety plan will be retained by the staff which provides information for emergency contacts and access routes.

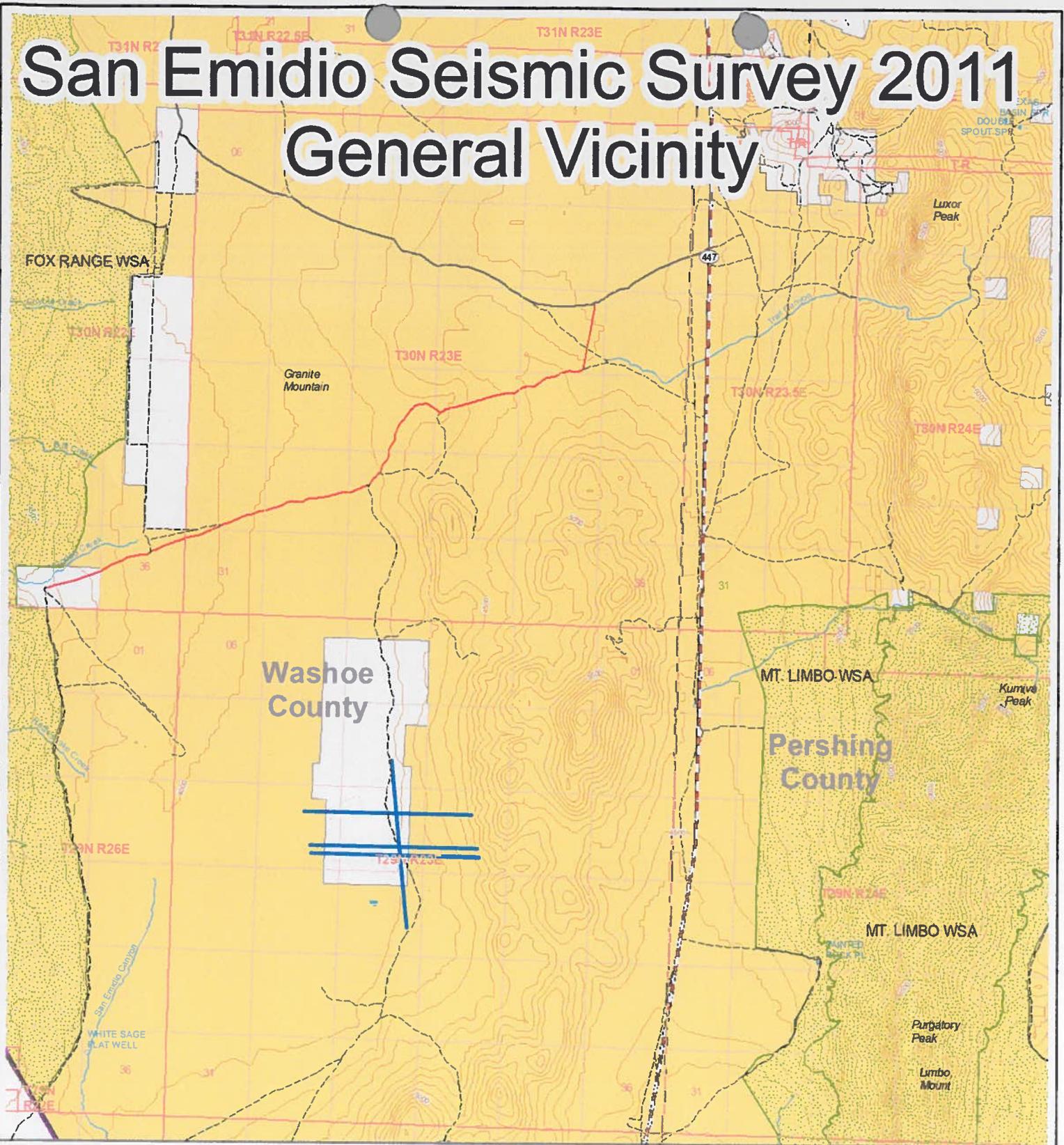
Fire Prevention

A fire prevention plan will be retained by the staff which provides information for emergency contacts and access routes. On site staff will be notified of weather related equipment restrictions.

Spill Prevention and Contingency Plan

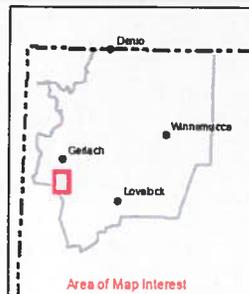
A spill control and prevention plan will be retained by staff for all applicable materials.

San Emidio Seismic Survey 2011 General Vicinity



Legend

- San Emidio Seismic Lines
- Misc. 2-Track
- NDOT Highways
- Paved County Road
- SR
- WSA
- Roads
- NCA
- BLM Systems Road
- Playa
- City Road



Winnemucca District Office

Black Rock Field Office
5100 E. Winnemucca Blvd.
Winnemucca, NV 89445

Map Date: 02/18/2011

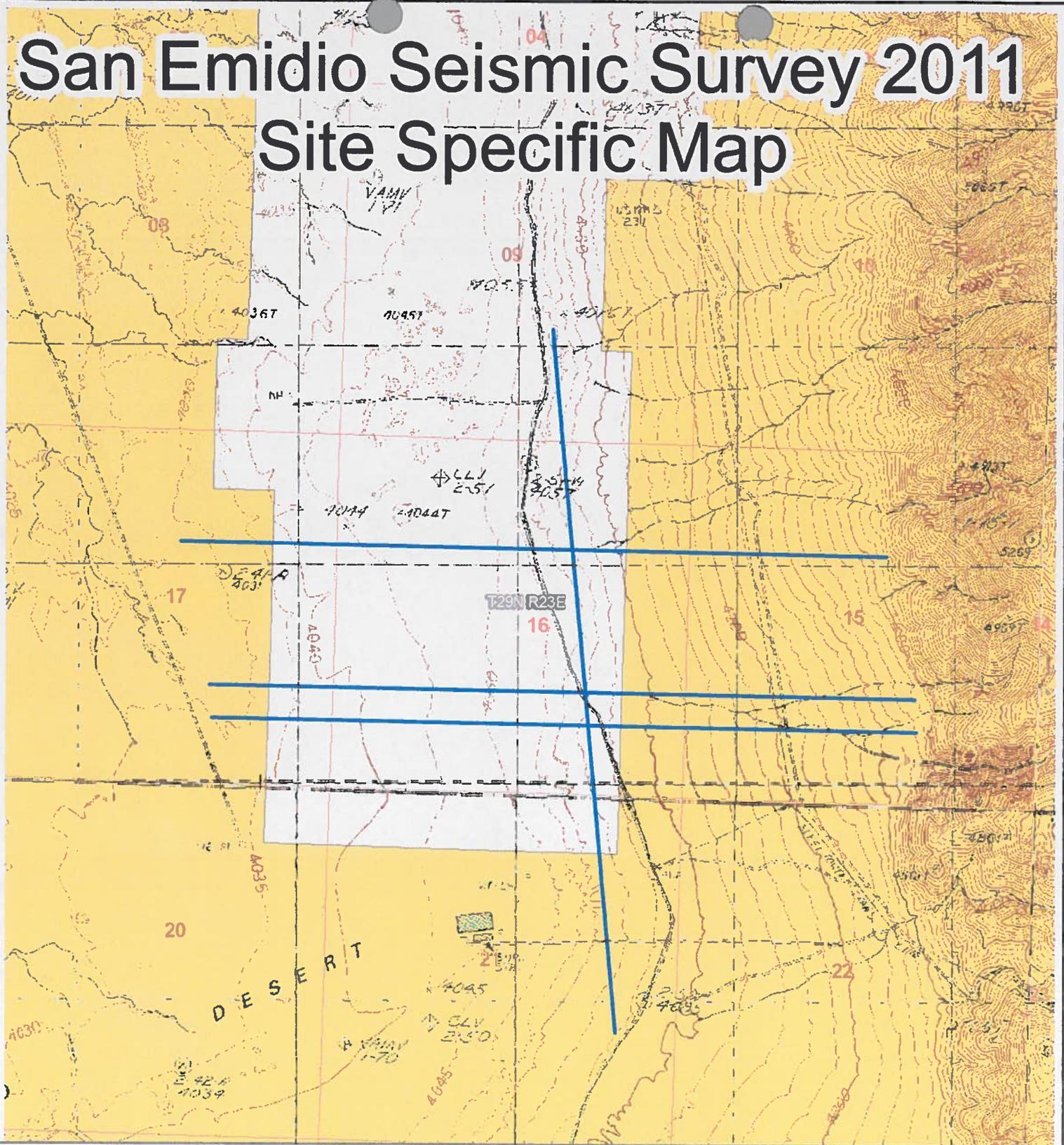
0 0.2 0.4 0.8 Miles



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1:100,000

San Emidio Seismic Survey 2011 Site Specific Map



Legend

San Emidio Seismic Lines

ROAD CATEGORY

BLM Systems Road

City Road

Primitive Road

Paved County Road

Ownership

Bureau of Land Management

Private



1:24,000



Winnemucca District Office

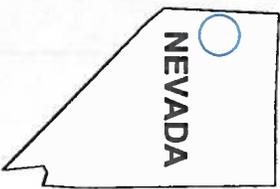
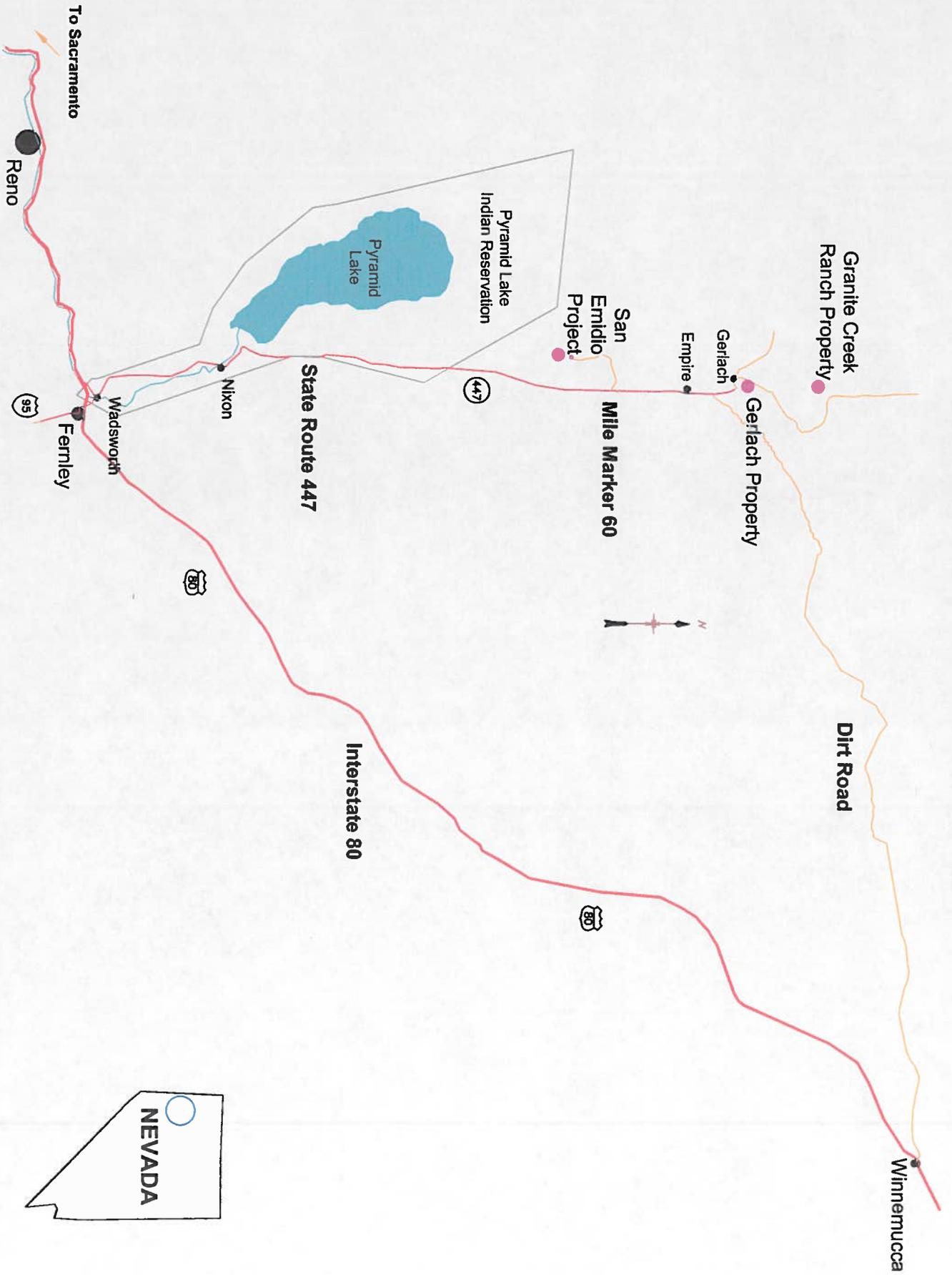
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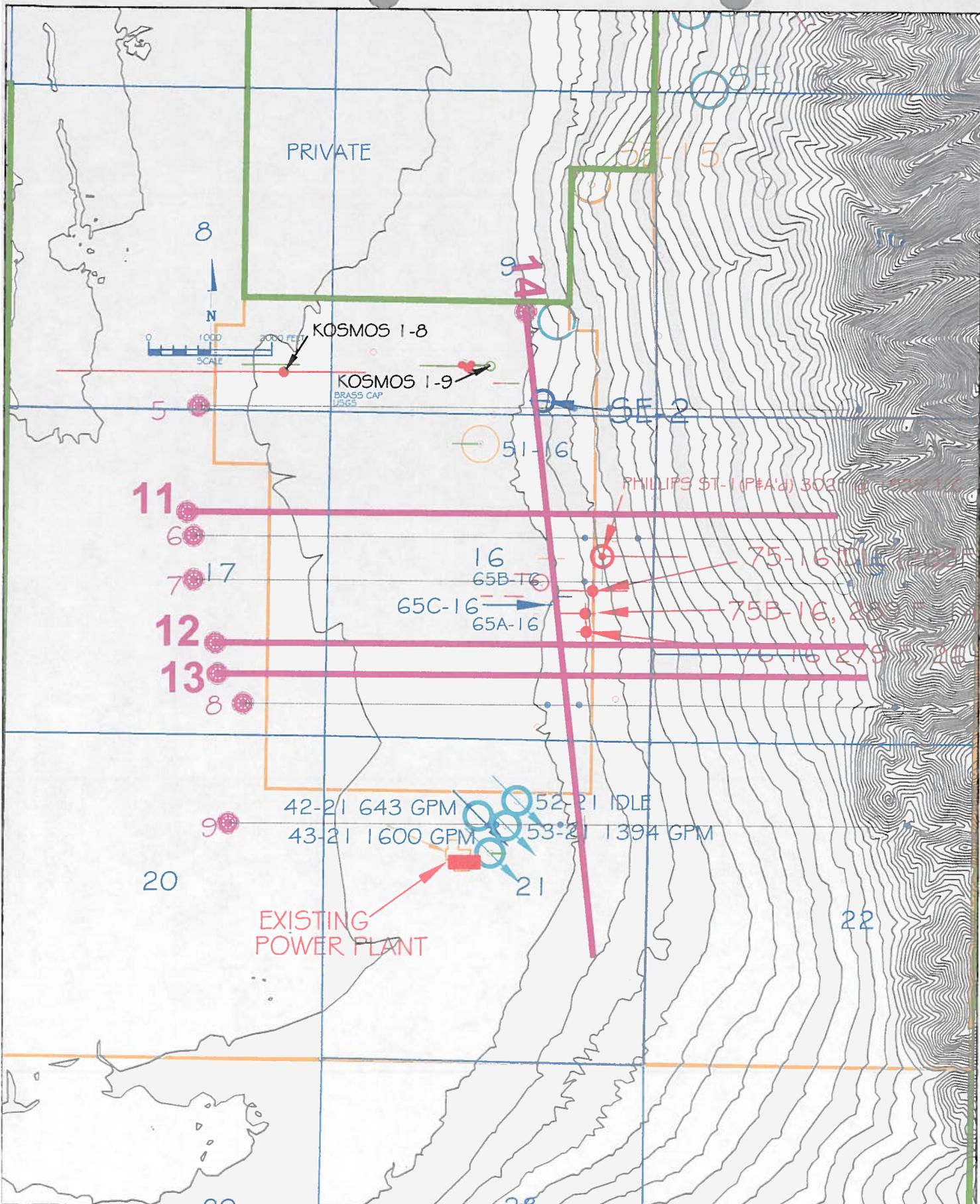
Map Date: 02/18/2011

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<p>EXPLANATION</p> <ul style="list-style-type: none"> ◆ EXISTING PRODUCTION WELL ○ EXISTING INJECTION WELL — PROPOSED INFILL SEISMIC LINES — REFLECTION/REFRACTION PROFILE 	<p>SAN EMIDIO GEOTHERMAL PROJECT</p> <p>PROPOSED INFILL SEISMIC LINES</p>		<p>FIGURE 1</p> <p>BY: WM. TEFLOW DATE 2/9/2011</p>
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San Emidio Infill Seismic Lines - Southern Exploration Area

NV St Pln NAD 27 (ft)		NV St Pln NAD83 (ft)		UTM WGS 84 (m)		WGS 84	
E	N	E	N	E	N	Lat	Lon
266595	2052740	2390984	15176086	294394	4473291	40° 23.09173' N	119° 25.33427' W
277155	2052740	2401544	15176086	297613	4473234	40° 23.10784' N	119° 23.05988' W
267056	2050613	2391445	15173959	294523	4472641	40° 22.74214' N	119° 25.23064' W
277616	2050613	2402005	15173959	297742	4472583	40° 22.75821' N	119° 22.95645' W
267098	2050111	2391487	15173457	294533	4472487	40° 22.65953' N	119° 25.22057' W
277658	2050111	2402047	15173457	297752	4472430	40° 22.67560' N	119° 22.94643' W
272077	2056029	2396466	15179375	296083	4474264	40° 23.64187' N	119° 24.16014' W
273228	2045532	2397617	15168878	296376	4471058	40° 21.91480' N	119° 23.89137' W



