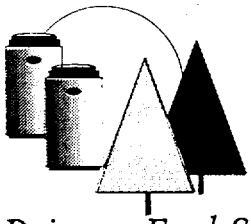
77-22



Private Fuel Storage, L.L.C.

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Phone 303-741-7009 Fax: 303-741-7806
John L. Donnell, P.E., Project Director

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August 31, 2001

DETERMINATION OF PROXIMITY TO WATERS OF THE UNITED STATES
PRIVATE FUEL STORAGE FACILITY
PRIVATE FUEL STORAGE L.L.C.

Reference: August 23, 2001 meeting between PFS, S&W, and EPA

In accordance with the discussions at our meeting last week, Private Fuel Storage has prepared the documentation you requested to evaluate whether there is any potential for oil and/or oil products to leave the Private Fuel Storage Facility and discharge in harmful quantities into waters of the United States. As we previously outlined to you (based on prior investigations and extensive field data), this additional documentation unequivocally demonstrates that there is no reasonably foreseeable chance that an oil spill could ever reach a jurisdictional water of the United States.

Again, we appreciate the time you took to meet with us and outline the information you need to make a determination. Thank you in advance for your prompt review of this Report. If you have any questions or need additional information please contact me at 303-741-7009.

Sincerely,

John L. Donnell
Project Director
Private Fuel Storage L.L.C.

Enclosure

NMSS/Rgn1

Copy to:

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David Allison-1/1
Dale Hanberg-1/1
U.S. NRC Document Control Desk-1/1
Utah Document file (D. Bird)-1/1

Determination of Proximity to Waters of the United States
Private Fuel Storage Facility
Tooele County, Utah

Background: Private Fuel Storage L.L.C. intends to construct a facility, the Private Fuel Storage Facility (PFSF), for the temporary storage of spent nuclear fuel generated at commercial nuclear power plants within the United States. The spent fuel transferred to the PFSF site will be delivered using rail as the primary means of transport, or using heavy haul tractor trailers as an alternate means of transport. At the site, the spent fuel will be stored in sealed metal canisters encased inside concrete casks. These canisters and casks have been designed to contain the spent fuel elements for the lifetime of the facility.

The PFSF site is located within the Skull Valley Band of Goshute Indian Reservation in Tooele County, Utah. The site property is being leased from the Band of Goshute Indians and is located within Section 6 and portions of Sections 5, 7, and 8 of Township 5 South, Range 8 West, with appurtenant facilities located along the PFSF access road through Sections 7, 8 and 9.

The PFSF may require that approximately 5700 gallons of oil be stored or used onsite in tanks and equipment such as cranes and transformers. The site or Owner Controlled Area (OCA) will encompass approximately 820 acres bounded by typical range fencing. A smaller area, approximately 99 acres within the OCA is bounded by security and nuisance fencing and is designated as the Restricted Area (RA). The oil stored or used onsite will be contained in close proximity to or within the southeast corner of the RA.

Private Fuel Storage has extensively studied the region surrounding the PFSF, including a detailed delineation of the proposed rail alignment between the Low Interchange on I-80 and the Skull Valley Goshute Indian Reservation (the "Rail Alignment Delineation"). The Rail Alignment Delineation evaluated the numerous drainages along the eastern flank of the Cedar Mountains and documented that there are no waters of the United States along the proposed railroad alignment; the U.S. Army Corps of Engineers finding of no jurisdiction, dated February 1, 2001, affirmed these conclusions. In contrast to the area evaluated in the delineation, PFSF would be located in a more central area of the valley where there are no drainages and extremely flat topography.

Purpose: The purpose of this Report is to further demonstrate that the Oil Pollution Prevention Regulations are not applicable at the PFSF site. As you are aware, these regulations are triggered for "owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing or consuming oil and oil products, and which, due to their location, could reasonably be expected to discharge oil in harmful quantities, . . . into or upon the navigable waters of the United States or adjoining shorelines." 40

C.F.R. § 112.1(b). The reasonable expectation determination "shall be based solely upon a consideration of the geographical, locational aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and shall exclude consideration of manmade features such as dikes, equipment or other structures which may serve to restrain, hinder, contain, or otherwise prevent a discharge of oil from reaching navigable waters of the United States or adjoining shorelines." 40 C.F.R. § 112.1(d)(1)(i). Accordingly, Private Fuel Storage representatives gathered data to determine whether, in the absence of any oil containment or control equipment, there is any reasonable expectation that a discharge of oil from the PFSF would reach waters of the United States.

Site Investigation: C. E. Hawk and J. L. Donnell of Private Fuel Storage conducted the field investigation on August 28, 2001. The area inspected is shown on Figures 1 and 2. The investigation documented conditions found along the blue-line topographic features depicted on the figures as A1-A7 and B1-B4 from the Northern boundary of the Skull Valley Band of Goshute Reservation until the features cease to exist to the North. Data collected are shown in Table 1. Photographs were taken at locations identified in Table 1 and are appended hereto.

A Global Positioning System (GPS) device was used to locate and follow the blue line features shown on Figures 1 and 2 to assure that the correct features were observed.[1] The field investigation specifically documented conditions for the area identified as A2-A7 and B2-B4.[2] Survey locations A-1 and B-1 were not surveyed as part of this report since they are located on the reservation "upgradient" of the northern boundary. The characteristics of the topographic features were classified as either general (G), swale (S), barely a swale (s), bed-and-bank (B) features, or flat (F) using the same classification system established in the Rail Alignment Delineation. The investigation documented the end or dissipation of the features.

Results: The area of the topographic feature nearest to the eastern side of the RA (marked as A1 – A7) is approximately 2400 feet away from any potential source of oil at the PFS facility. The topographic feature flows from A1 to A7 and the natural flow path across the RA is roughly parallel to the drainage path of the topographic feature. Accordingly, it is not reasonably foreseeable that spilled oil would leave the RA and flow cross gradient to the topographic feature identified by A1-A7. In the unlikely circumstance the oil was conveyed to a more distant lower point of the feature, it would not be expected to flow much distance north. The area is flat, i.e., the topographic feature drops 145 feet over a distance of 5.87 miles (i.e., from A1 to A7) which is approximately a 0.5% grade.

The data also suggest that – even under flash flood conditions – any spilled oil could not reach a water of the United States. First and as referenced above, the gradient of the

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[1] As evidenced by earlier investigations, blue line features are not always apparent at ground level and in some cases are not present at all.

[2] As noted on Table 1, field conditions required evaluation at certain alternative locations identified as B2A, A2A, A6A and A7A.

slope and the distance from the RA to the topographic feature A1-A7 minimize the potential that oil commingled with meteoric water would travel any substantial distance. Second, the topographical feature (A1-A7) dissipates at A6A, a location close to A6. The investigation tracked the direction of the blue line feature approximately 0.1 miles north to A7 and found no evidence of any drainage, channel or other type of conveyance. In fact, A7 is upgradient from A6 by approximately 3 feet. These data further establish that there is no channel or evidence of any connection to any channel or other conveyance running north. The closest potential jurisdictional water of the United States, the Great Salt Lake, is at least 18 miles away further to the North.

Similarly, the topographic feature identified by B1 to B4 could not reasonably be expected to convey oil or meteoric flow from the PFSF site. It is further east of topographic feature A1-A7, merges with topographic feature A1-A7 at location A4, and does not independently continue north towards the Great Salt Lake.

For the sake of completeness, the information on the closest topographic features to the west, i.e., the features identified as 6A-6B and 9A-9B, which are approximately 1.8 and 2.6 miles removed from the PFSF site respectively, have been evaluated as part of the Rail Alignment Delineation. While there is no reasonably foreseeable chance that oil or oil commingled with meteoric water would flow towards those features, the delineation presented specific data demonstrating that there are no waters of the United States or potential connection to waters of the United States associated with those features.

Conclusions: The data obtained to support the Rail Alignment Delineation as supplemented by the additional field work on and around the PFSF site location underscore that there is no reasonably foreseeable chance that an oil spill could ever reach a jurisdictional water of the United States or the adjoining shoreline. The data indicate that the distance from any waters of the United States coupled with the flat topography and the lack of any drainage to convey flow precludes the possibility that an oil spill (even if it were coupled with a storm event) would reach such waters.

Table 1

Reference Number	Latitude 40°	Longitude 112°	Rim Elevation, Feet	Bottom Elevation, Feet	Topographic Type	Shelving	Scoured Bed	Recent Deposition	Average Width[1]	Comments (If applicable)
A - 1	24' 51.77" N	46' 35.47" W								
A - 2	25' 09.39" N	47' 11.20" W	4490		s	N	N	N	360'	Photo 2 looking South
A - 3	25' 57.29" N	47' 33.19" W	4465		F	N	N	N	300'	Photo 4 South, Photo 5 North
A - 4	26' 31.79" N	47' 37.40" W	4434		S	N	N	N	6'	Photo 7 South
A - 5	28' 19.64" N	47' 33.70" W	4395		S	N	N	N	20'	Photo 8 South
A - 6	29' 42.04" N	47' 33.55" W	4371		F	N	N	N	–	Photo 9 South
A - 7	29' 55.57" N	47' 27.24" W	4374		F	N	N	N	–	Photo 12 South
B - 1	24' 53.50" N	46' 23.83" W								
B - 2	25' 09.76" N	46' 34.82" W								
B - 3	25' 35.82" N	47' 10.39" W			S	N	N	N	6'	JD Photo #87
B - 4	26' 02.26" N	47' 24.78" W	4443		S	N	N	N	4'	Photo 6 South
6 - A	24' 35.32" N	49' 50.77" W								Documented in Cirrus Wetland and Stream Survey
6 - B	29' 07.19" N	48' 29.69" W								Documented in Cirrus Wetland and Stream Survey
9 - A	24' 37.08" N	50' 40.10 W								Documented in Cirrus Wetland and Stream Survey
9 - B	28' 38.67" N	49' 00.63 W								Documented in Cirrus Wetland and Stream Survey
B - 2A *	25'11.4" N	46'39.8" W	4486		s	N	N	N	6'	Photo 1 looking North
A - 2A *	25'09.5" N	47'13.7" W	4475		S	N	N	N	6'	Photo 3 looking North
A - 6A *	29'42.8" N	47'34.4" W	4366		F	N	N	N	–	Photo 10 looking South
A - 7A *	29'44.8" N	47'32.1" W	4366		F	N	N	N	–	Photo 11 looking South

G = General
S = Swale
s = Barely a swale
B = Bed and Bank
F = Flat

* = B 2A, A 2A, A 6A, A7A are not depicted in the topographic figures. Their locations are in close proximity to B 2, A 2, A 6 and A 7, respectively.

Figure 1

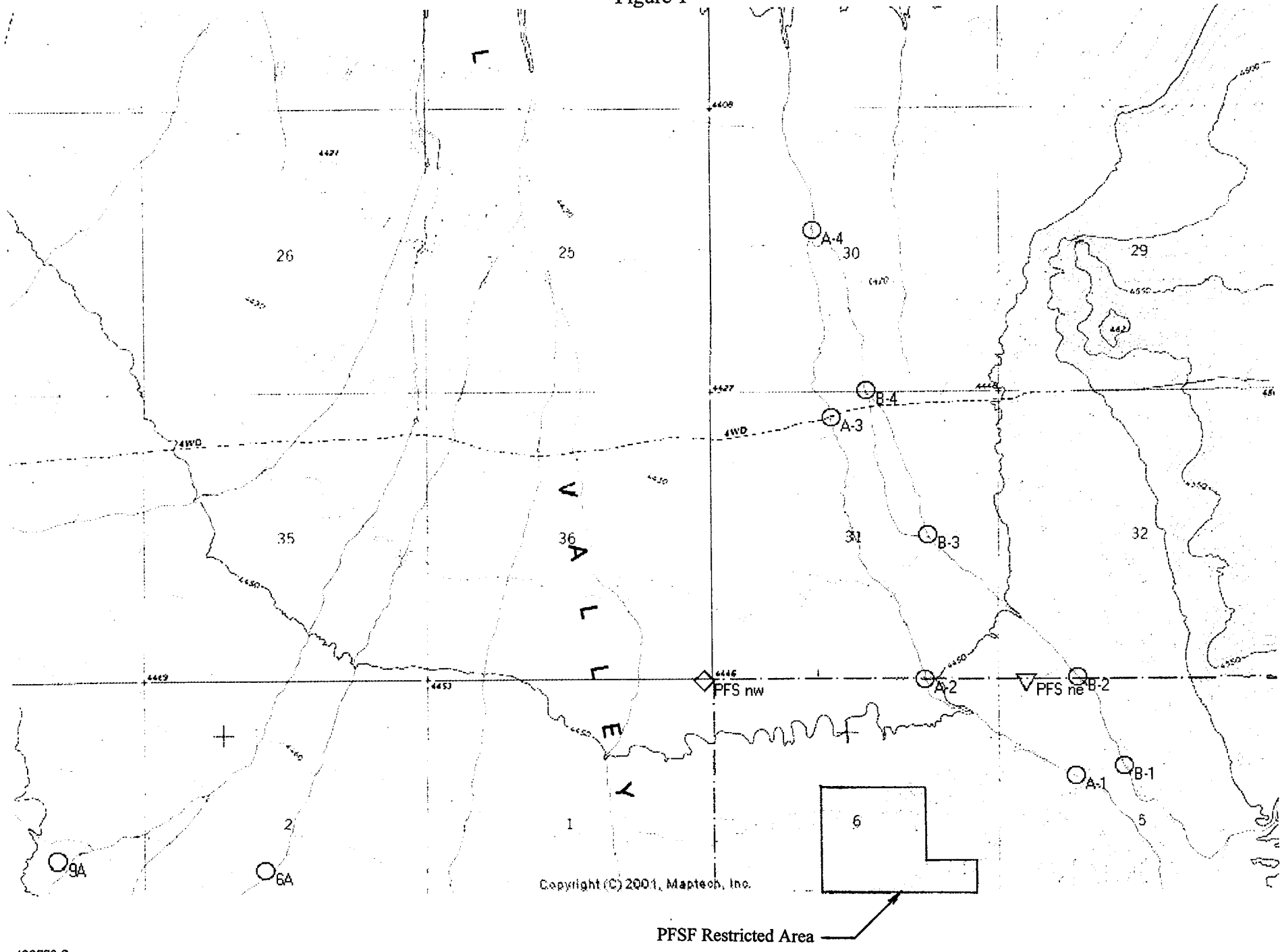

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Figure 2

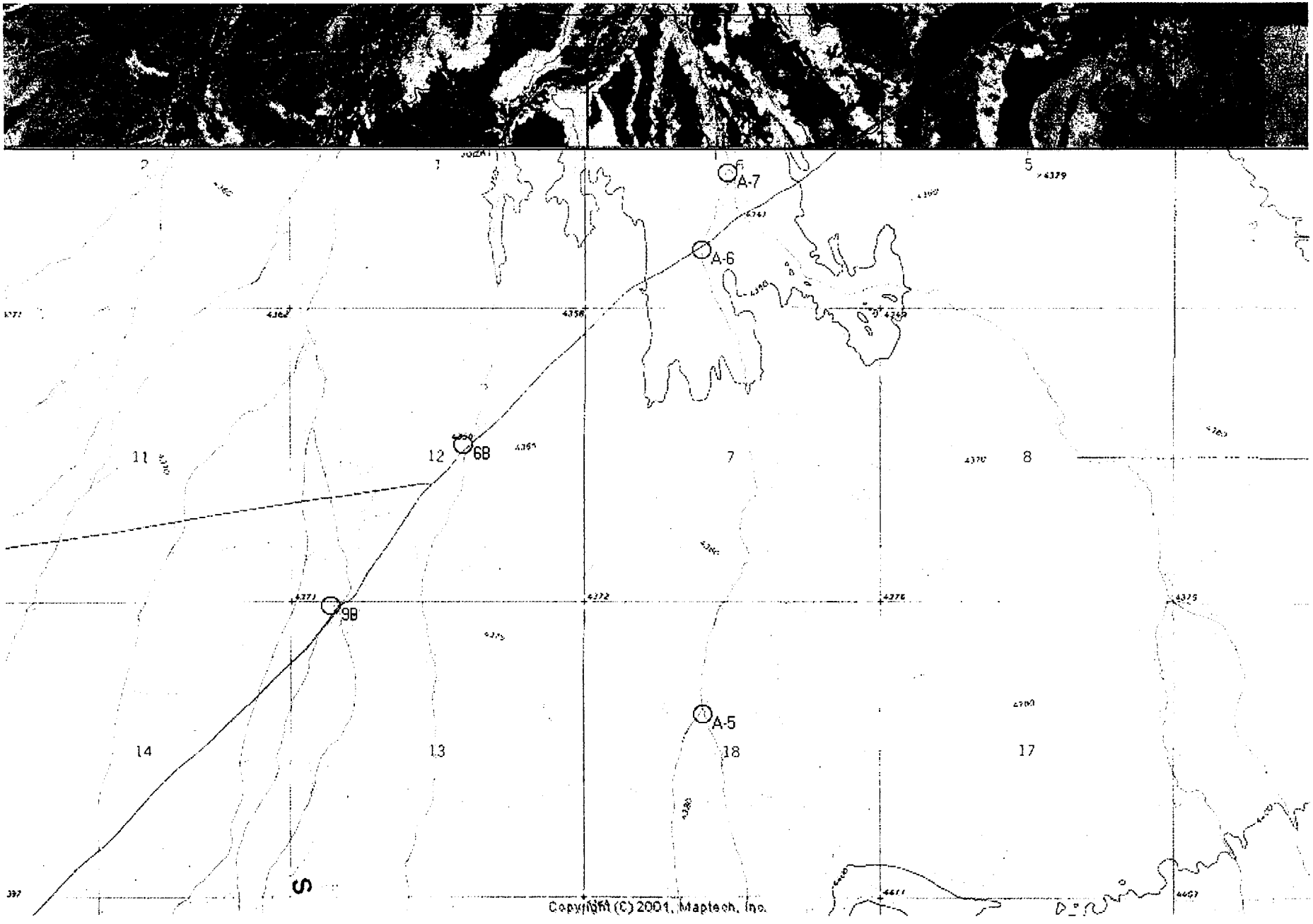

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PHOTO 1 - SITE B2A LOOKING NORTH

PHOTO 2 - SITE A2 LOOKING SOUTH

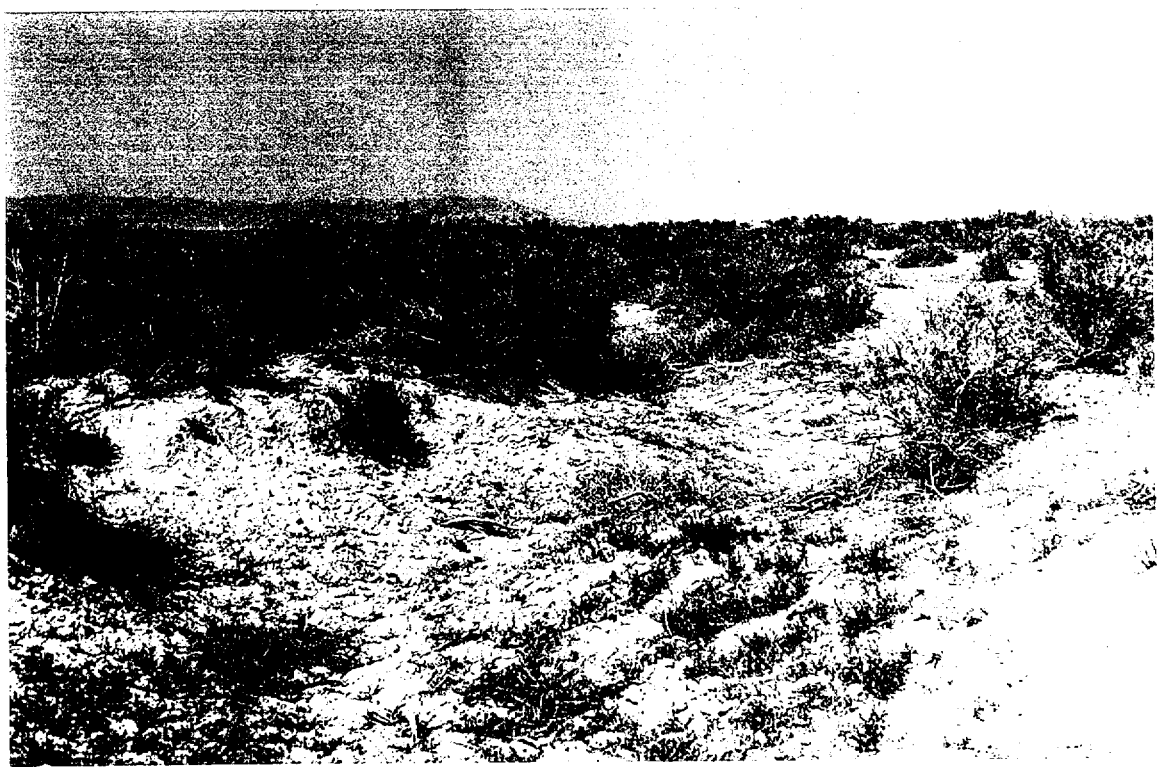

PHOTO 3 - SITE A2A LOOKING NORTH

PHOTO 4 - SITE A3 LOOKING SOUTH

PHOTO 5 - SITE A3 LOOKING NORTH

PHOTO 6 - SITE B4 LOOKING SOUTH

PHOTO 7 - SITE A4 LOOKING SOUTH

PHOTO 8 - SITE A5 LOOKING SOUTH

PHOTO 9 - SITE A6 LOOKING SOUTH

PHOTO 10 - SITE A6A LOOKING SOUTH

PHOTO 11 - SITE A7A LOOKING SOUTH

PHOTO 12 - SITE A7 LOOKING SOUTH