

600893

Seismic Reflection Data for Dixie Valley and Stillwater, Nevada



SE-1002 07/90

Two geothermal basins were surveyed as part of the Department of Energy's (DOE) Industry Coupled and Exploration Technology programs. The data were contributed by the University of Utah Research Institute (UURI), which managed this portion of the project for DOE. The surveys are stacked, migrated, and deconvoluted Vibroseis data.

The data, sections, and documentation which are available from the National Geophysical Data Center, together with reports available separately from UURI, constitute a case study that is very useful for research and educational purposes.

Dixie Valley Prospect

The Dixie Valley prospect spans three townships in Churchill and Pershing Counties (about 200 km east of Reno, Nevada). A report included with the documentation discusses the correlation of the seismic data with information from a thermal power well located within the survey area. The source of thermal energy is considered to be a pluton within the basement at the edge of the basin. The interpretation report suggests locations of the aquifer and pluton.

Analog data include four finite-difference migrated sections, and four final stack sections. Data are available in three formats:

Product Number	Cost	Format
637-G18-001	\$	Blackline paper
637-G19-001	\$	Sepia paper
637-G20-001	\$	Sepia plastic

Digital data consist of 35 digital tapes of field data, in SEG-B format. Data can be converted to SEG-Y. Surveyor's notes and Vibroseis operator's reports are included with digital data.

Product Number	SEG-B	SEG-Y	
912-G07-001	\$	\$	Field data (35 magnetic tapes)

Documentation for analog and digital data consists of the interpretation report (with location maps and 3 structure contour maps); a list of geophysical publications from UURI which provide additional interpretations of the area; and a copy of an abstract by Howard P. Ross, William E. Glenn, and Charles M. Swift. The abstract, "Reflection Seismic Surveys for Basin and Range Geothermal Areas - An Assessment," was published in the *Book of Abstracts* of the American Association of Petroleum Geologists Annual Convention, San Francisco, 1981.



National Geophysical Data Center

Stillwater Prospect

The Stillwater prospect spans four townships in Churchill County, about 150 km east of Reno. No interpretation report is included, but the area is also a geothermal field nearing production, and thought to be in a similar setting to that of Dixie Valley.

Analog data include one relative amplitude stack section (line 2 only); three scaled final stack sections (lines 2, 3, and 4); three finite-difference migrated final stack sections (lines 2, 3, and 4); and a seismic line location map. Data are available in three formats.

Product Number	Cost	Format
637-H18-001	\$	Blackline paper
637-H19-001	\$	Sepia paper
637-H20-001	\$	Sepia plastic

Digital data include a variety of magnetic tape data. Data can be converted to SEG-Y format. Observers reports, surveyors notes, and a location map are included with the digital data.

Product Number	SEG-B	SEG-C	SEG-Y
912-H07-001	\$		\$ Field data (19 magnetic tapes)
912-H07-002		\$	\$ Field correlated data (3 tapes)
912-H07-003			\$ Final stack sections (1 tape)

Documentation for analog and digital data includes a list of additional publications from UURI, and the AAPG abstract noted before.

HOW TO ORDER

Please refer to the product number when ordering. Specify analog and/or digital formats desired. Allow 2 to 4 weeks of extra time for orders requiring tape conversion to SEG-Y format.

Due to recent legislation, prices are subject to change without notice. Please call for price verification.

Mention of a commercial company or product does not imply endorsement by NOAA or the United States Department of Commerce.

U.S. DEPARTMENT OF COMMERCE REGULATIONS REQUIRE PREPAYMENT ON ALL NON-FEDERAL ORDERS. Please make checks and money orders payable to **COMMERCE/NOAA/NGDC**. All foreign orders must be in U.S. Dollars drawn on a U.S.A. bank. Do not send cash. Orders may be charged to an American Express card, MasterCard, or VISA card by telephone or letter; please include credit card account number, expiration date, telephone number, and your signature with the order.

A ten-dollar (\$10) handling fee is required on all orders; an additional ten-dollar (\$10) charge is required for non-U.S.A. orders. Overnight delivery is available at an additional cost; please call for details. Please direct telephone inquiries to (303) 497-6120 (Telex: 592811 NOAA MASC BDR). Inquiries, orders, and payment should be addressed to: **National Geophysical Data Center, NOAA, Code E/GC1, 325 Broadway, Boulder, CO 80303.**

UURI

EARTH SCIENCE LABORATORY
 391 CHIPETA WAY, SUITE C
 SALT LAKE CITY, UTAH 84108-1295
 TELEPHONE 801-524-3422

DATA TRANSMITTAL ACKNOWLEDGEMENT

SHIPPED TO:

National Geophysical Data Center
 Attn: Dr. David T. Dater
 NOAA, Code E/GC1
 325 Broadway
 Boulder, CO 80303

SHIPPED VIA:

United States Mail

SHIPPING DATE:

April 21, 1988

Dixie Valley, Nevada Reflection Seismic SurveyBox 1

Line	SP to SP	Date	Format	Type of data	REC#
1-South	102-138	"	"	"	SRC-S01A
1-South	102-138	"	"	"	SRC-S01C
1-South	140-176	"	"	"	SRC-S02A
1-South	140-176	"	"	"	SRC-S02B
1-South	178-214	"	"	"	SRC-S03B
1-South	178-214	"	"	"	SRC-S03A
1-South	182?-298	"	"	"	SRC-S05
1-South	216-254	"	"	"	SRC-S04B
1-South	216-254	10/7/81	SegB-G	Field	SRC-S04B
1-South	216-254	"	"	"	SRC-S04A
1-South	223-244	"	"	"	SRC-507

Box 2

Line	SP to SP	Date	Format	Type of data	REEL NO.
1-South	298-336	10/07/81	SEG-B-G	Field	SRC-S06
1-South	382-404	"	"	"	SRC-S08
1-North	102-140	"	" ?	"	SRC-N01A
1-North		"	"	"	SRC-N01
1-North	102-140	"	"	"	SRC-N02A
1-North	142-180	"	"	"	SRC-N02B
1-North	182-220	"	"	"	SRC-N03
1-North	220-260	"	"	"	SRC-N04
1-North	262-300	"	"	"	SRC-N05
1-North	302-332	"	"	"	SRC-N06A



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL DATA CENTER
325 Broadway
Boulder, Colorado 80303

September 25, 1987

E/GC1:DTD

Dr. Phillip M. Wright
University of Utah Research Institute
391 Chipeta Way
Suite C
Salt Lake City, UT 84108-1295

Dear Dr. Wright:

Mr. Howard Ross of your organization has recently contacted me with an offer to deposit seismic data at NGDC. The data were collected in 6-8 geothermal areas of interest in Utah and Nevada during a joint program by the Department of Energy and others called "the industry coupled program."

I would like to take this opportunity to thank you and your organization for depositing these data with NGDC. As a national data center tasked with disseminating public domain geoscience data NGDC encourages data exchange with academia, state and local government and industry. As such NGDC invites you to receive an equivalent amount of data which is available from NGDC.

To brief you a bit on our activities, I would like to give you some information. I am enclosing the following:

Annual Report Fiscal Year 1984 - although this says annual report it is the first and only one produced and should give you a general overview of our activities.

Publications, Maps, and Data Services - A one line description of data products available and their prices.

Solid Earth Geophysics Data Services - Contains further detailed information on this Division's data.

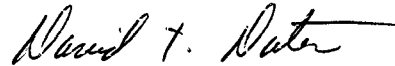
Directory of Data Services - A list of the contacts for the various data services at NGDC.



Data Announcement 84-TGB-10 - A sample of a data announcement describing a data set available to the public.

If you have any questions, please feel free to contact me.

Sincerely yours,

A handwritten signature in cursive script that reads "David T. Dater". The signature is written in black ink and has a fluid, connected style.

David T. Dater
Geophysicist
(303) 497-6120
FTS: 320-6120

Enclosures

HOW TO ORDER

U.S. DEPARTMENT OF COMMERCE REGULATIONS NOW REQUIRE PREPAYMENT ON ALL NON-FEDERAL ORDERS. Telephone pre-orders are accepted but data will not be shipped until payment is received. Checks and money orders should be made payable to COMMERCE/NOAA/NGDC. Please add handling fee for non-U.S.A. orders as follows: \$5 for orders up to \$50; 10% of cost of total order for orders \$50 and over. Please pay in U.S. dollars drawn on a U.S.A. bank. Orders may be charged to an American Express, MasterCard, or Visa card, by telephone or letter; please include card account number, expiration date, telephone number, and your signature with order. Inquiries, orders, and payment should be addressed to:

National Geophysical Data Center
NOAA, Code E/GC1
325 Broadway
Boulder, Co. 80303

Direct telephone inquiries about ordering information or analog data to:

Commercial: (303) 497-6541
FTS: 320-6541
Telex: 45897 Solterwarn

Direct telephone inquiries about digital data to:

Commercial: (303) 497-6123
FTS: 320-6123

NOTE: The prices quoted here are valid at least through September 30, 1986. Prices applicable after that date may be obtained by calling (303) 497-6541, FTS 320-6541.



SEISMIC DATA

DATA ANNOUNCEMENT

84-TGB-10

Seismic Data in the Texas Panhandle

The U.S. Department of Energy (DOE) has provided the National Geophysical Data Center (NGDC) various seismic reflection data from the Texas Panhandle for public dissemination. (See index map on pages 2 and 3.) These data were collected as part of DOE's studies to assess the Panhandle salt deposits as a possible site for disposing high-level nuclear waste.

About 150 line-miles of seismic data are now available in the form of sections and digital tapes. The data include half- and full-scale reproductions of seismic sections as well as shot-point maps and velocity determinations. The geophysical data are from 96-trace, 24-fold common depth point seismic reflection surveys. The energy source used was Vibroseis*, which sampled the data at a rate of 2 msec. The seismic data were collected and processed by Western Geophysical Company under contract to the Stone and Webster Engineering Corporation who were, in turn, under contract to Battelle Memorial Institute, the prime DOE contractor. In the near future, well logs from eleven wells drilled in the area by DOE will be available.

Data Availability

The final stacked CDP seismic sections and related data are available in three formats:

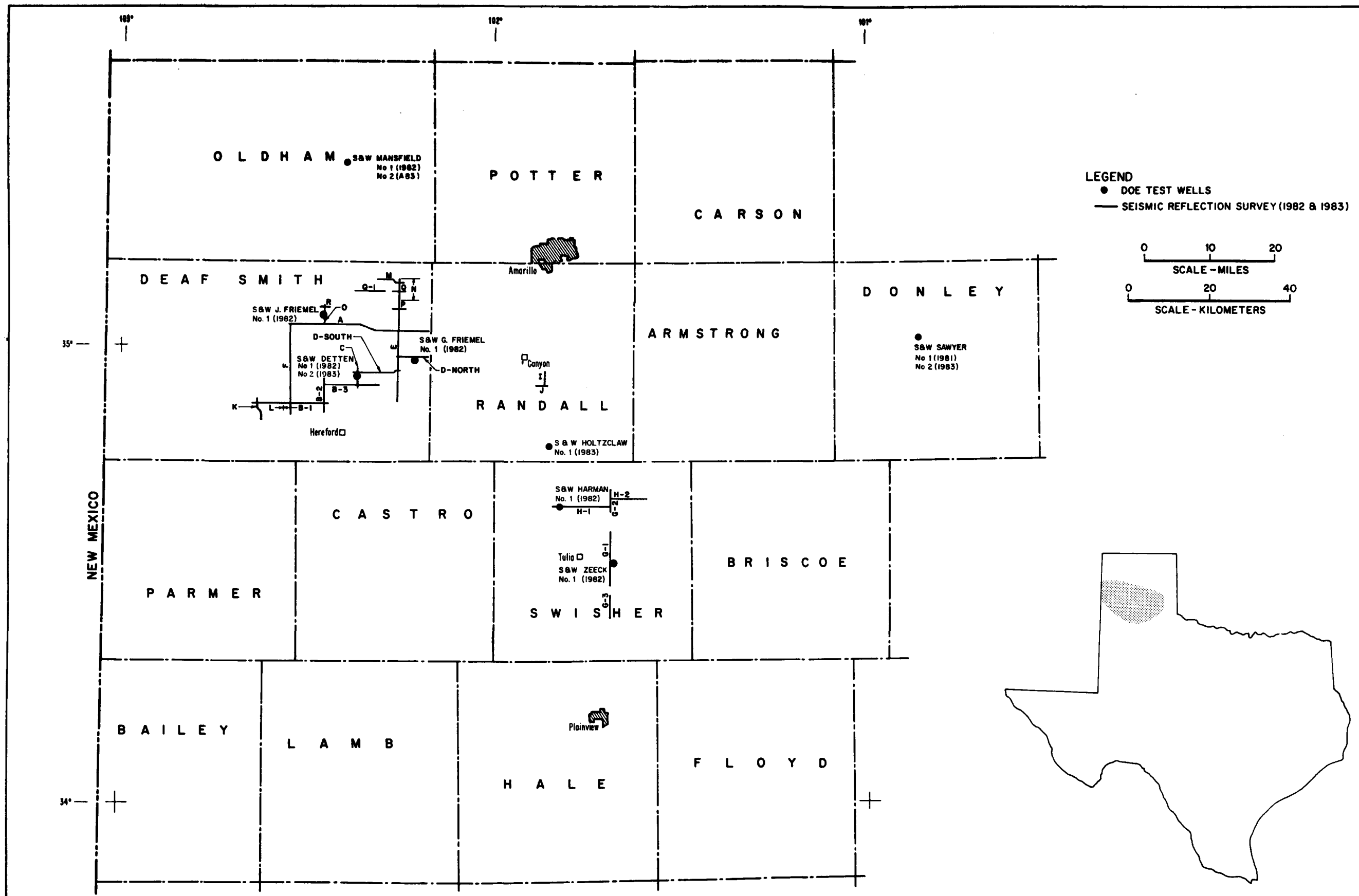
<u>Item No.</u>	<u>Description</u>	<u>Blackline</u>	<u>Sepia Paper</u>	<u>Sepia Plastic</u>
TGX-0202	Stacked Sections, Full scale, (10" = 1 s)	\$485	\$540	\$830
TGX-0204	Stacked Sections, Half scale, (5" = 1 s)	113	127	200
TGX-0205	Field Shot-point Maps	45	50	80
TGX-0206	Velocity Determinations	328	368	580

Also available are uncorrelated Vibroseis seismic field tapes (310) and ungained, unfiltered CDP seismic stacked tapes (28) for \$115 per tape. Appropriate documentation (shotpoint maps, observers logs, etc.) are included with the data. The seismic tapes are available by line or as an entire set.

* Vibroseis is a registered trademark and service mark of Conoco, Inc.



National Geophysical Data Center



Index Map Showing Coverage of DOE Seismic Reflection Data and Test Wells.

SEISMIC DATA TAPES

Aug 12, 1987

Stillwater	1 box (sample library) + 2 box Office Supply Room
Grass Valley <small>wind 5 & 50 ft w.</small>	1 box
GSI Spec. RMS & Min Mtns	1 box
Dixie Valley	4 boxes
Hill AFB refl. seismic	1 box
Seismic Expt. Noise Survey, RMS	1 box

Behind Dec -
See Davy.

Stillwater

0.45

0.4

1

1

0.5

0.5

0.5

0.5

0.5