



CITY WATER AND LIGHT WESTSIDE WASTEWATER TREATMENT PLANT JONESBORO, ARKANSAS

NPDES POND CLOSURE PLAN

**NPDES PERMIT NO. AR0037907
AFIN: 16-00152**



NOVEMBER 20, 2020

CITY WATER AND LIGHT
WESTSIDE WASTEWATER TREATMENT PLANT
JONESBORO, ARKANSAS

NPDES POND CLOSURE PLAN

NPDES PERMIT NO. AR0037907
AFIN: 16-00152

Prepared for

City Water and Light
Westside WWTP
1605 Willett Road
Jonesboro, AR 72403

Prepared by

FTN Associates, Ltd.
3 Innwood Circle, Suite 220
Little Rock, AR 72211

FTN No. 10969-2405-001

NOVEMBER 20, 2020

ENGINEERS CERTIFICATION

I, Raymond E. Wieda, having examined City Water and Light's Westside Wastewater Treatment Plant located in Jonesboro, Arkansas, attest that, as of the date of this certification, this Closure Plan has been prepared in accordance with good engineering practices. This Closure Plan was prepared based upon my examination of the site and upon information provided to me by City Water and Light. This certification is contingent upon the fact that all information supplied, up to the date of this certification, is unquestionably accurate and was provided in good faith. This certification in no way relieves City Water and Light of its duty to prepare and fully implement this Closure Plan and to amend this Closure Plan in accordance with the regulations as may be appropriate. This certification is valid only if this page has the original raised seal and signature of the engineer.



November 20, 2020

Raymond E. Wieda, PE
Arkansas No. 9420

Date

TABLE OF CONTENTS

1.0	GENERAL SITE INFORMATION	1
1.1	Background	1
1.2	Facility Description.....	1
1.3	Operator Information	1
1.4	Contact Information	2
1.5	Site Information	2
1.6	Facility/Site Permit Information	2
2.0	EXISTING PONDS	3
3.0	POND WASTE CHARACTERISTICS	4
3.1	Surface Water.....	4
3.2	Pond Sediments.....	4
3.3	Sediment Characterization	4
3.3.1	Total Arsenic.....	7
3.4	Conclusions.....	7
4.0	POND CLOSURE PLAN	8
4.1	In-Place Closure.....	8
4.2	Final Stabilization	8
4.3	Closure Schedule	9
4.4	Certification of Closure.....	9

LIST OF APPENDICES

APPENDIX A:	Site Drawings
APPENDIX B:	Construction Plans
APPENDIX C:	Sampling and Analysis Plan
APPENDIX D:	Settled Soils Analytical Results
APPENDIX E:	Chemical Analysis of Soils and Other Surficial Materials of the Conterminus United States

LIST OF TABLES

Table 2.1	NPDES ponds general description.....	3
Table 3.1	Pond sediment volumes	4
Table 3.2	North and South Pond analytical results and EPA benchmark comparison	6

1.0 GENERAL SITE INFORMATION

1.1 Background

City Water and Light (CWL) operates the Westside Wastewater Treatment Plan (WWTP) in Jonesboro, Arkansas, under National Pollutant Discharge Elimination System (NPDES) Permit AR0037907. As shown on the WWTP site map (Appendix A), two ponds (the North Pond and South Pond) are associated with the WWTP. The ponds were constructed in 1978 for sludge storage, however, they were never used for this purpose. Over the last 40+ years, the ponds have collected stormwater and served as emergency containment for the facility's ferric chloride storage area.

CWL is planning some site improvements that will encompass the area currently occupied by the ponds. CWL intends to close the North and South Ponds according to DEQ's "Waste Storage Pond Closure Guidelines".

1.2 Facility Description

CWL's WWTP is located at 1605 Willet Road in western Jonesboro. The WWTP receives both domestic and industrial wastewater. The WWTP has a design flow of 3.0 MGD and includes a bar screen, grit removal, primary sedimentation, trickling filters, secondary sedimentation, disinfection using peracetic acid, and reaeration. Sludge from the WWTP is treated by gravity thickening, lime stabilization, and dewatering prior to land application under authority granted by State Water Permit 5105-WR-1.

1.3 Operator Information

Company:	City Water and Light
Site Address:	PO Box 1289
City:	Jonesboro
State:	AR Zip: 72403
County:	Craighead
Telephone Number:	(870) 935-5581

1.4 Contact Information

Company: City Water and Light
Contact: Jake Rice III, PE
Mailing Address: PO Box 1289
City: Jonesboro
State: AR Zip: 72403
County: Craighead
Telephone Number: (870) 935-5581
Email Address: jrice@jonesborocwl.org

1.5 Site Information

SIC Code: 4952 Municipal Sewage System
NAICS Code: 221320
Project Latitude: 35 Degrees 51 minutes 35 seconds
Project Longitude: 90 Degrees 43 minutes 53 seconds

Method for determining 1:24,000 United States (US) Geologic Survey topographic map
latitude/longitude:

1.6 Facility/Site Permit Information

NPDES Industrial Stormwater General Permit Number: ARR000629
NPDES Individual Permit Number: AR0037907
Water - SPB: 5105-WR-1
Air Permit, Title V: _____
Hazardous Waste Permit: _____
NPDES General Construction Storm Water Permit Number: _____

2.0 EXISTING PONDS

The WWTP has two (2) surface water impoundments associated with the NPDES Permit – the North Pond and the South Pond. These ponds were constructed for sludge storage but never used for this purpose. The ponds have served as primarily stormwater ponds for the last 40+ years. A general description of the ponds can be found in Table 2.1.

Table 2.1 NPDES ponds general description.

Name	Use and Area Description	WSE* (ft)	Perimeter (ft)	Area (acres)
North Pond	Stormwater and sludge storage	293.5	700	0.66
South Pond	Stormwater and sludge storage	292.5	680	0.59

*Assumed Water Surface Elevation

Potential pollutants in the North and South Pond water and sediments include total suspended solids (TSS), biochemical oxygen demand (BOD), chemical oxygen demand (COD), metals, nutrients (nitrogen and phosphorus), and oil and grease. Water level in each pond is typically 1 to 2 feet. The ponds are not permitted for direct discharge and concrete dams have been constructed in the spillway for each pond to prevent accidental overflow.

3.0 POND WASTE CHARACTERISTICS

3.1 Surface Water

The North and South Ponds are not permitted for direct discharge. The ponds currently receive only direct stormwater and emergency overflow from the secondary containment for the ferric chloride storage area. The pond closure process will include emptying the ponds by pumping the contents to the headworks of the WWTP to commingle with WWTP influent. The commingled wastewater will be treated and discharged via permitted Outfall 001. Outfall 001 discharges will be sampled for the required parameters and the results reported to DEQ on discharge monitoring reports, as per NPDES Permit AR0037907.

3.2 Pond Sediments

Despite not being used for sludge storage, the pond bottoms have a small sediment layer most likely due to organic matter and other sediments that have accumulated in the ponds from stormwater runoff. Estimates were made of the volume of sediment in each pond by probing the pond for depth and estimating pond area from aerial photographs. The volumes of sediment in each pond are summarized in Table 3.1.

Table 3.1. Pond sediment volumes.

Pond	Average Sediment Depth (ft)	Sediment Volume (cy)
North Pond	< 0.25	< 250
South Pond	< 0.05	≈ 0

3.3 Sediment Characterization

Pond sediments were sampled to characterize the quality of the sediment and the potential pond closure options. Sampling procedures were as follows:

- A minimum of one composite sediment sample was collected from the sediments in the North and South Ponds.
- Composite samples were comprised of a minimum of 10 individual samples collected at representative locations throughout each pond.
- Individual samples were collected using a clamshell sediment sampler or similar to a depth of 12 inches.
- Individual samples from each pond were composited in a clean plastic bucket and mixed thoroughly. A subsample of the mixed composite material was placed in a clean sample container for delivery to the contract laboratory.
- Individual samples were observed for stratification indicating differences in sediment quality. If identified, the sampling depth for that pond was adjusted so that each stratified layer was sampled separately.

The composited samples were delivered to a contract laboratory for analysis. Each sample was analyzed for the following parameters:

- | | |
|-------------------|---------------------|
| • Aluminum, Total | • pH |
| • Arsenic, Total | • CBOD-5 |
| • Barium, Total | • Copper, Total |
| • Cadmium, Total | • Molybdenum, Total |
| • Chromium, Total | • Nickel, Total |
| • Iron, Total | • TPH (wet weight) |
| • Lead, Total | • Loss on ignition |
| • Mercury, Total | • Total Solids |
| • Selenium, Total | • PCB |
| • Silver, Total | |

The analytical results from these samples are included in Appendix B. The data were screened using evaluation benchmarks from the Environmental Protection Agency (EPA) and DEQ as appropriate. A summary of the data and evaluation benchmarks can be found in Table 3.2. Shaded values in Table 3.2 indicate results that exceeded the evaluation benchmark. All results were below the evaluation benchmark except for arsenic.

Table 3.2. North and South Pond analytical results and EPA benchmark comparison.

Parameter	Units	Evaluation Benchmarks ¹					North Pond		South Pond	
		EPA Corrosivity Characteristic ²	EPA RSL Industrial Soil ³	EPA Toxicity Characteristic (mg/L) ⁴	DEQ TPH Lowest Screening Level ⁵	Background range for Arkansas (mg/kg) ⁶	Analysis Result	TCLP calculation (mg/L) ⁷	Analysis Result	TCLP calculation (mg/L) ⁷
Loss on Ignition	%						6.3		4.0	
pH	SU	<=2, >=12.5					6.6		4.6	
Total Solids	%						56		60	
BOD-Carbonaceous	mg/L						< 400		< 400	
TPH	mg/Kg				440		81		66	
Aluminum, Total	mg/Kg		110,000				12,000		6,600	
Arsenic, Total	mg/Kg		3.0	5.0		2.6-27.0	7.8	0.39	7.5	0.38
Barium, Total	mg/Kg		22,000	100			69	3.5	61	3.1
Cadmium, Total	mg/Kg		98	1.0			< 0.40	< 0.020	< 0.40	< 0.020
Chromium, Total	mg/Kg			5.0			14	0.70	16	0.80
Copper, Total	mg/Kg		4,700				17		20	
Iron, Total	mg/Kg		82,000				13,000		11,000	
Lead, Total	mg/Kg		800	5.0			16	0.80	15	0.75
Nickel, Total	mg/Kg		1,100				9.3		5.9	
Mercury, Total	mg/Kg		4.6	0.20			< 0.10	< 0.0050	< 0.10	< 0.0050
Molybdenum, Total	mg/Kg		580				< 1.0		< 1.0	
Selenium, Total	mg/Kg		580	1.0			< 7.0	< 0.35	< 7.0	< 0.35
Silver, Total	mg/Kg		580	5.0			< 0.70	< 0.035	< 0.70	< 0.035
PCB-1016	mg/Kg		5.1				< 0.018		< 0.017	
PCB-1221	mg/Kg		0.83				< 0.018		< 0.017	
PCB-1232	mg/Kg		0.72				< 0.018		< 0.017	
PCB-1242	mg/Kg		0.95				< 0.018		< 0.017	
PCB-1248	mg/Kg		0.94				< 0.018		< 0.017	
PCB-1254	mg/Kg		0.97				< 0.018		< 0.017	
PCB-1260	mg/Kg		0.99				< 0.018		< 0.017	

3.3.1 Total Arsenic

EPA's regional screening level (RSL) for arsenic in industrial soils (3.0 mg/kg) was exceeded in both samples. However, it is difficult to attribute RSL exceedances for arsenic to historical site activities because natural background concentrations in Arkansas range from 2.6 mg/kg to 27 mg/kg (Boerngen and Shacklette, 1981). The arsenic concentrations in the samples were within natural background concentrations in Arkansas soil, with the highest arsenic concentration reported at 7.8 mg/kg, and cannot be definitively attributable to site activities. Background concentration comparisons and the cited reference have been included in previous FTN Comprehensive Site Assessments containing Human Health Risk Assessments conducted by CTEH that have been approved by DEQ. Therefore, arsenic is not a parameter of concern in the pond sediments.

3.4 Conclusions

Pond sediment sample analysis results show no indications that pond sediments contain hazardous waste, and apart from arsenic, no analysis results have exceeded DEQ or USEPA screening levels. All arsenic concentrations are within the natural background concentration range for Arkansas, indicating that arsenic concentrations in pond samples cannot be definitively attributed to site activities. Therefore, the sediment does not need to be removed and the ponds can be closed in place.

4.0 POND CLOSURE PLAN

4.1 In-Place Closure

Because the analytical results revealed no parameters of concern in the pond sediments, CWL proposes to close the North and South in-place. The following procedure will be used for the in-place closure:

1. Remove any water remaining in the ponds by pumping it to the headworks of the WWTP where it will be comingled with WWTP influent, treated, and discharged via Outfall 001. Outfall 001 discharges will be monitored and the results reported to DEQ in accordance with the NPDES Permit.
2. Once the water level has been lowered as much as practicable, the pond levees will be cut to allow the pond bottoms to dry out so the area can be evaluated for site improvements. The pond levees will be cut such that stormwater runoff will be directed to well-vegetated fields to the west of the ponds. The facility will obtain coverage under the Construction Stormwater General Permit to cover stormwater discharges from the pond areas.
3. Backfill the ponds with a suitable clean fill material to cover the sediments and meet targeted grade for site improvements. The ponds will be filled and compacted to provide suitable base for site improvements. Clean fill will be obtained from existing pond levees, onsite borrow areas, or offsite borrow areas, as needed.

Upon approval of this closure plan by ADEQ, CWL will begin the process of obtaining capital and scheduling contractors and equipment needed to close and regrade the pond areas. All final grades will be established according to the approximate final grading plan in the drawings shown in Appendix A.

4.2 Final Stabilization

Final use of the closed pond area is still under consideration. Final stabilization will depend on the designated post-construction use of the area. The areas will be stabilized using vegetation, pavement, and/or gravel or otherwise suitably stabilized to minimize sediment runoff post-construction.

4.3 Closure Schedule

The NPDES Pond Closure schedule will be determined by DEQ approval, finalization of the WWTP designs, weather conditions, and available funding for closure construction activities. The following is an estimated closure schedule:

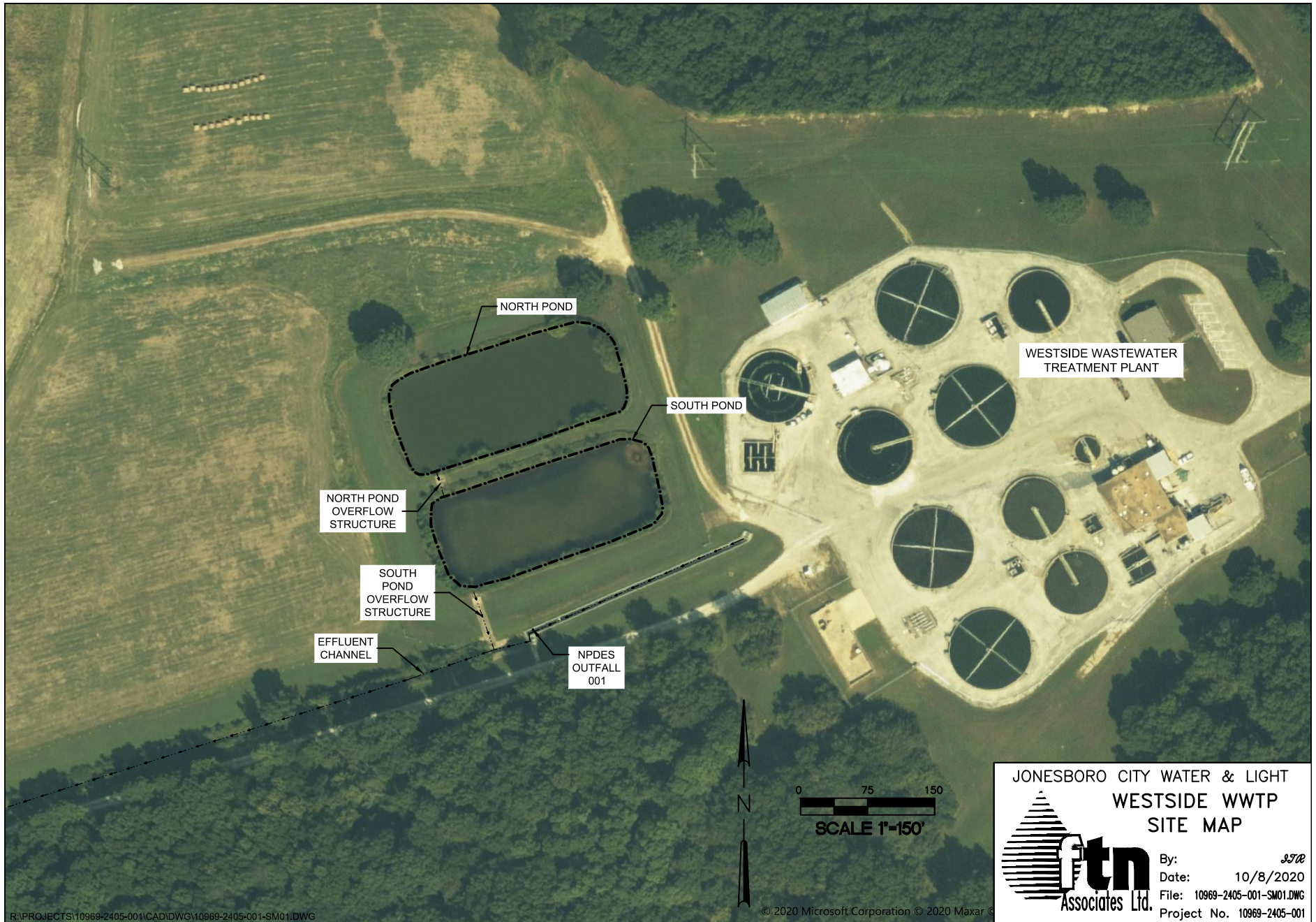
Task	Estimated Schedule
NPDES Pond Closure Plan - Submitted to DEQ	November 2020
NPDES Pond Closure Plan - DEQ Comment and Approval	January 2021
Develop Construction Stormwater Pollution Prevention Plan and Permit	March 2021
Initiate phased pond closure process	Spring 2021
Complete Pond Closure Process	Fall 2021

4.4 Certification of Closure

Once final stabilization has been achieved, the certifying engineer will prepare a Closure Certification that will be submitted to DEQ. This certification will state that the pond was closed in basic accordance with this Closure Plan as approved by DEQ. The certification will be stamped by a professional engineer registered in the State of Arkansas.

APPENDIX A

Site Drawings



APPENDIX B

Construction Plans

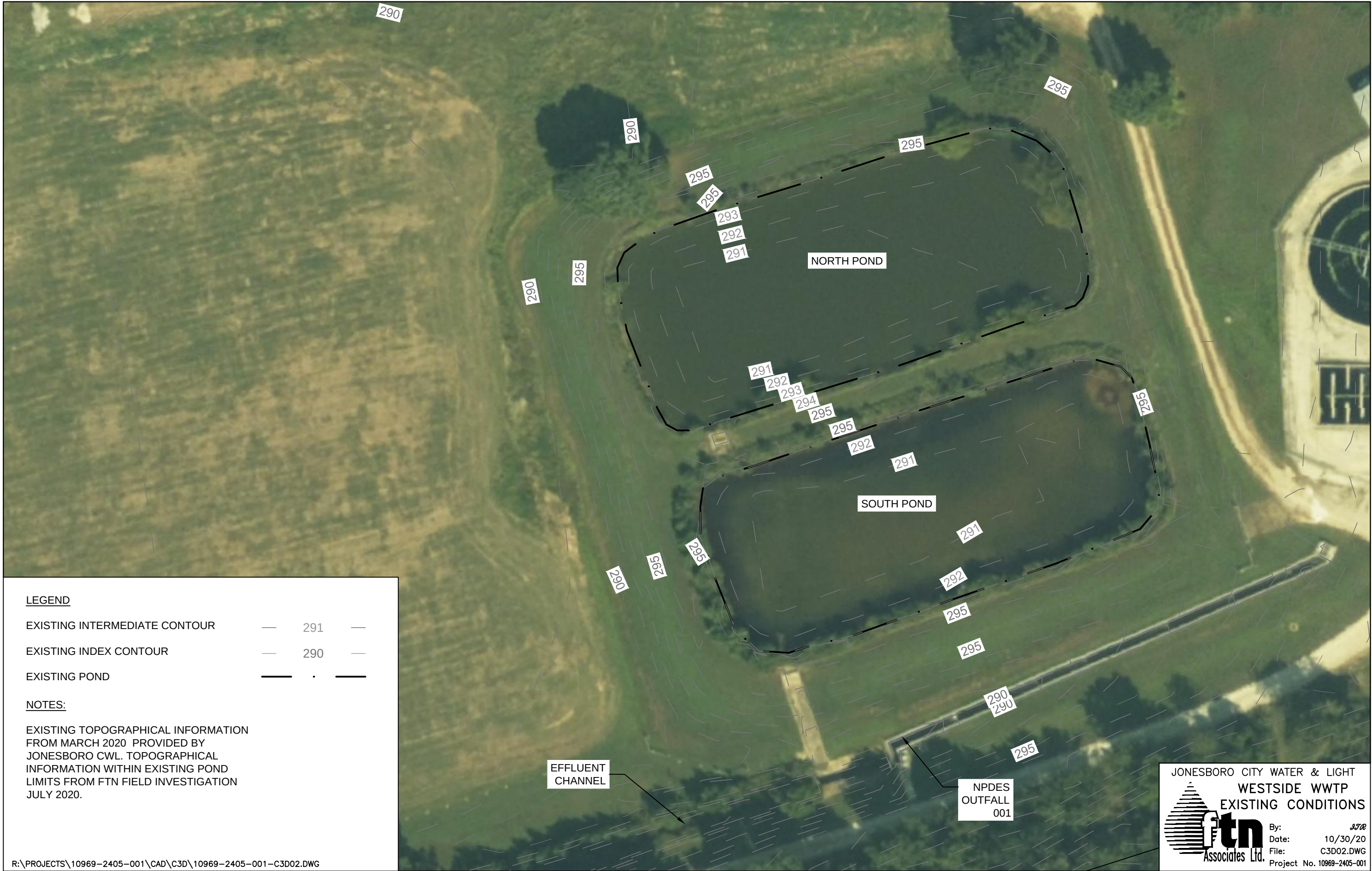
CUT AND FILL VOLUMES				
CUT/FILL	MINIMUM DEPTH	MAXIMUM DEPTH	VOLUME (CY)	COLOR
CUT	-3.74	0.00	3547	Red
FILL	0.00	1.00	1824	Yellow
FILL	1.00	2.81	1643	Green

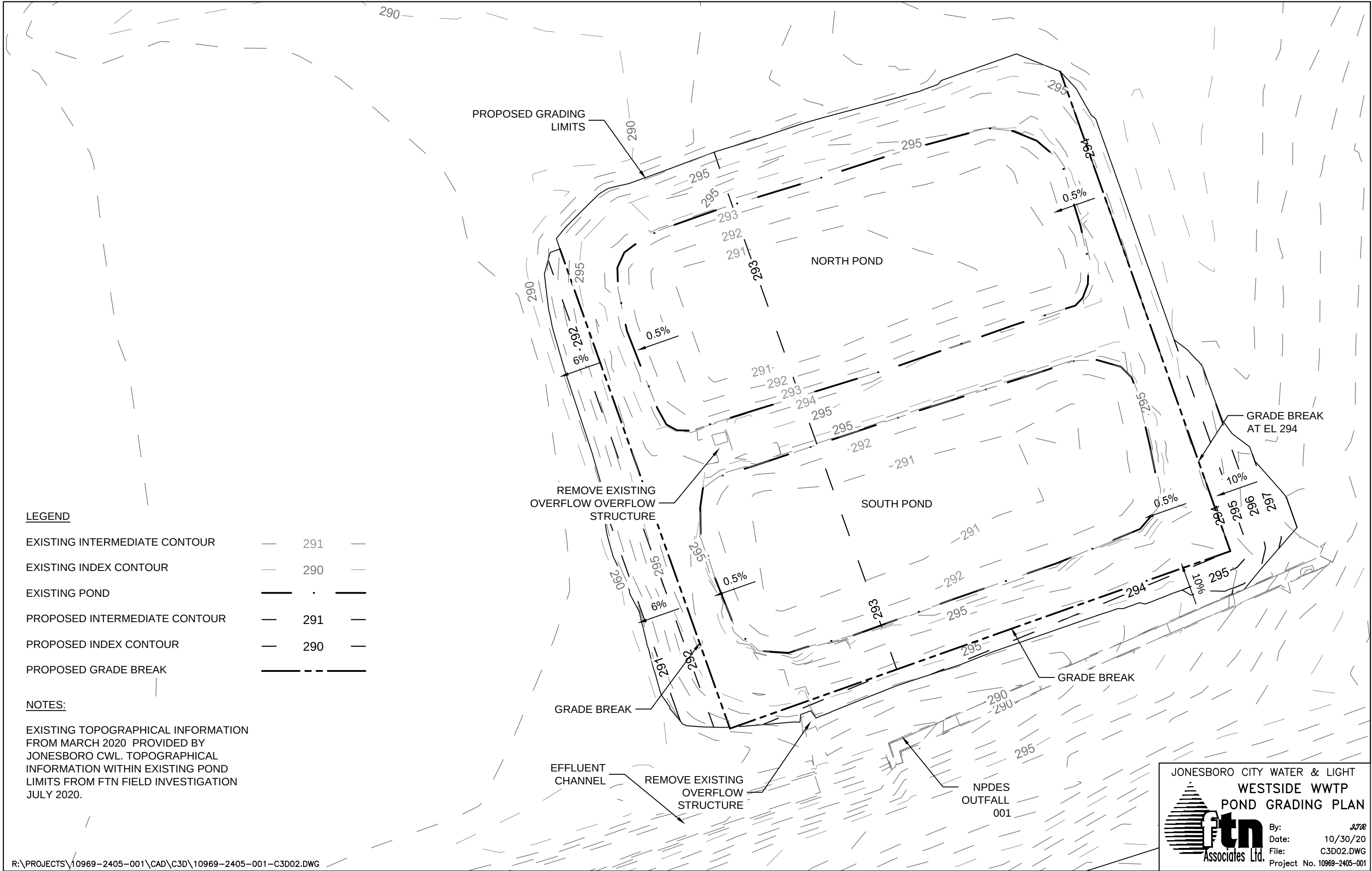
LEGEND		
EXISTING INTERMEDIATE CONTOUR	---	---
EXISTING INDEX CONTOUR	---	290
EXISTING POND	---	.
PROPOSED INTERMEDIATE CONTOUR	---	---
PROPOSED INDEX CONTOUR	---	290
PROPOSED GRADE BREAK	---	---

NOTES:

EXISTING TOPOGRAPHICAL INFORMATION FROM MARCH 2020 PROVIDED BY JONESBORO CWL. TOPOGRAPHICAL INFORMATION WITHIN EXISTING POND LIMITS FROM FTN FIELD INVESTIGATION JULY 2020.







APPENDIX C

Sampling and Analysis Plan



JONESBORO CITY, WATER, and LIGHT WEST WASTEWATER TREATMENT PLANT

SAMPLING AND ANALYSIS PLAN FOR POND CLOSURES

**NPDES PERMIT NO. AR0037907
AFIN: 16-00152**

July 28, 2020

JONESBORO CITY, WATER, AND LIGHT
WEST WASTEWATER TREATMENT PLANT

SAMPLING AND ANALYSIS PLAN FOR
POND CLOSURES

NPDES PERMIT NO. AR0037907
AFIN: 16-00152

Prepared for

City Water and Light
Westside WWTP
1605 Willett Road
Jonesboro, AR 72403

Prepared by

FTN Associates, Ltd.
3 Innwood Circle, Suite 220
Little Rock, AR 72211

FTN No. 10969-2405-001

July 28, 2020

TABLE OF CONTENTS

1.0	GENERAL SITE INFORMATION	1
2.0	SAMPLING PROCEDURES	2
3.0	ANALYSIS PROCEDURES.....	3

1.0 GENERAL SITE INFORMATION

City Water and Light (CWL) operates the Westside Wastewater Treatment Plan (WWTP) in Jonesboro, Arkansas, under National Pollutant Discharge Elimination System (NPDES) Permit AR0037907. Two ponds (the North Pond and South Pond) are associated with the WWTP. The ponds were constructed in 1978 for sludge storage; however, they were never used for this purpose. Over the last 40+ years, the ponds have collected stormwater and served as emergency containment for the facility's ferric chloride storage area.

CWL is planning a future development that will encompass the area currently occupied by the ponds. CWL intends to close the North and South Ponds according to DEQ's "Waste Storage Pond Closure Guidelines".

This plan addresses the sampling and analysis of pond sediments necessary to evaluate the potential pond closure options.

2.0 SAMPLING PROCEDURES

Pond sediments will be sampled to characterize the quality of the sediment and the potential pond closure options. Sampling procedures will be as follows:

- A minimum of one composite sediment sample will be collected from the North Pond and the South Pond.
- Composite samples will be comprised of a minimum of 10 individual samples collected at representative locations throughout each pond.
- Individual samples will be collected using a clamshell sediment sampler or similar to a depth of 12 inches.
- Individual samples from each pond will be composited in a clean container and mixed thoroughly. A subsample of the mixed composite material will be placed in a clean sample container for delivery to the contract laboratory.
- Individual samples will be observed for stratification indicating differences in sediment quality. If identified, the sampling depth for that pond will be adjusted so that each stratified layer is sampled separately.

3.0 ANALYSIS PROCEDURES

The composited samples will be delivered to a contract laboratory for analysis. Each sample will be analyzed for the following parameters:

- Aluminum, Total
- Arsenic, Total
- Barium, Total
- Cadmium, Total
- Chromium, Total
- Iron, Total
- Lead, Total
- Mercury, Total
- Selenium, Total
- Silver, Total
- Copper, Total
- Molybdenum, Total
- Nickel, Total
- TPH (wet weight)
- Loss on ignition
- Total Solids
- PCB
- pH
- CBOD-5

Additional parameters may be added if determined appropriate based on observations made during sampling.

Samples will be analyzed according to approved US Environmental Protection Agency methods and reported in units of mg/kg or other units as appropriate.

APPENDIX E

**Chemical Analysis of Soils and Other Surficial Materials
of the Conterminous United States**

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CHEMICAL ANALYSES OF SOILS AND OTHER SURFICIAL
MATERIALS OF THE CONTERMINOUS UNITED STATES

By

Josephine G. Boerngen and Hansford T. Shacklette

Open-File Report 81-197

1981

This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards or nomenclature.

Contents

	Page
Introduction.....	1
Sample collection, preparation, and analysis.....	2
Location, description, and concentration of elements for samples of surficial materials.....	3
References cited.....	6

Table	Page
Table 1. Location, description, and concentration of elements for samples of surficial materials.....	8

Introduction

A sampling program was begun in 1961 that was designed to give estimates of the abundance of elements in soils and other surficial materials and in associated plants from sites selected along routes of travel, and in study areas, of U.S. Geological Survey scientists. The sampling plan was kept simple. The proposed sampling intensity consisted of one sample of soil and one of plants collected at sites about 50 mi. (81 km) along routes of travel to areas of other types of field study. Sampling sites were selected, insofar as possible, that represented soil in its natural condition. This program resulted in the sampling of 863 sites. The results of the soil analyses were published for 35 elements by plotting their concentrations, in two to five frequency classes, on maps (Shacklette, Hamilton, Boerngen, and Bowles, 1971).

Soon after this publication, interest in environmental geochemistry, particularly the application to problems of industrial and vehicular pollution, increased greatly. At the same time, advances in analytical techniques made the analysis of additional elements practical. Therefore, the samples from the first study, with some additional samples, were analyzed and reported as follows: mercury by Shacklette, Boerngen, and Turner (1971); lithium and cadmium by Shacklette, Boerngen, Cahill, and Rahill (1973); and selenium, fluorine, and arsenic by Shacklette, Boerngen, and Keith (1974).

Sampling according to this plan continued, as opportunities arose, until autumn, 1975, resulting in the sampling of 355 additional sites that were selected to give a more uniform geographical coverage of the conterminous United States. These samples were analyzed and the data were merged with those of the original samples to produce the results given in this report.

The elemental composition of only the surficial materials were given in all reports; the data on analysis of the plant samples are held in files of the U.S. Geological Survey.

This study was made possible by the cooperation of many persons in the U.S. Geological Survey. We express our appreciation to those who collected samples, as follows: Jessie M. Bowles, F. A. Branson, R. A. Cadigan, F. C. Canney, H. L. Cannon, F. W. Cater, Jr., M. A. Chaffey, Todd Church, J. J. Connor, Dwight Crowder, R. J. Ebens, R. N. Eicher, J. A. Erdman, R. F. Gantner, G. B. Gott, W. R. Griffiths, T. P. Hill, E. K. Jenne, M. I. Kaufman, J. R. Keith, Frank Kleinhampl, A. T. Miesch, R. F. Miller, R. C. Pearson, E. V. Post, Douglas Richman, James Scott, D. E. Seeland, R. C. Severson, M. H. Staatz, T. A. Steven, M. H. Strobell, V. E. Swanson, R. R. Tidball, H. A. Tourtelot, J. D. Vine, and R. W. White.

We thank the following members of the U.S. Department of Agriculture, Soil Conservation Service for providing soil samples from areas in Minnesota: Donald D. Barron, Carroll R. Carlson, Donald E. DeMartelaire, Royce R. Lewis, Charles Sutton, and Paul Nyberg.

We acknowledge the analytical support provided by the following U.S. Geological Survey chemists: Lowell Artis, Philip Aruscavage, A. J. Bartel, S. D. Botts, L. A. Bradley, J. W. Budinsky, Alice Caemmerer, J. P. Cahill, E. Y. Campbell, G. W. Chloe, Don Cole, E. F. Cooley, N. M. Conklin, W. B. Crandell, Maurice Devalliere, P. L. D. Elmore, E. J. Finlay, Johnnie Gardner, J. L. Glenn, T. F. Harms, R. C. Haven, R. H. Heidel, M. B. Hinkle, Claude Huffman, Jr., L. B. Jenkins, R. J. Knight, B. W. Lanthorn, L. M. Lee, K. W. Leong, J. B. McHugh, J. D. Mensik, V. M. Merrit, H. T. Millard, Jr., Wayne Mountjoy, H. M. Nakagawa, H. G. Neiman, Uteana Oda, C. S. E. Papp, R. L. Rahill, V. E. Shaw, G. D. Shipley, Hezekiah Smith, A. J. Sutton, Jr., J. A. Thomas, Barbara Tobin, J. E. Troxel, J. H. Turner, and G. H. VanSickle.

We were assisted in computer programming for the data by J. B. Fife and George VanTrump, Jr.

Sample collection, preparation, and analysis

The sampling sites were selected, if possible, to represent surficial materials that were altered very little from their natural condition and that supported native or cultivated plants suitable for sampling. In practice, this site selection necessitated sampling away from roadcuts and fills, but in some areas only cultivated fields were available for sampling. The materials sampled included soil as defined by soil scientists, beach and dune sands, very stony lithosols, and organic deposits generally considered to be peat instead of soil. Most samples were collected at a depth of about 8 in. (20 cm), which reduced or avoided the effects of surface contamination. In zonal soils, this depth commonly is within the range of the B soil horizon (zone of element accumulation). Some lithosols over near-surface bedrock did not extend downward to 8 in. (20 cm); they were sampled at the bottom of soil development in the profile.

Areas of field studies commonly were sampled more intensively than at intervals of 50 miles (81 km). Samples used from these studies were selected to represent about the same geographical coverage as did those along roads.

The soil samples were dried in the laboratory, pulverized and sieved, and the minus-2mm fractions were used for analysis. The methods of analysis used for some elements were changed during the course of the study as new techniques and instruments became available. The results published in the first report (Shacklette, Hamilton, Boerngen, and Bowles, 1971) were obtained for most elements by use of a semiquantitative six-step emission spectrographic method (Neiman, 1976). Other methods were used for the following elements: atomic absorption, with flame (Huffman and Dinnin, 1976) for mercury, lithium, magnesium, sodium, rubidium, and zinc; atomic absorption, flameless (Vaughn, 1967) for mercury; X-ray fluorescence spectrometry (Wahlberg, 1976) for calcium, germanium, iron, potassium, selenium, silver, sulfur, and titanium; combustion (Huffman and Dinnin, 1976), total carbon; and neutron activation (Millard, 1975, 1976) for thorium and uranium.

Location, description, and concentration of elements for samples of
surficial materials

Table 1 provides one page of descriptive material for 50 samples, arranged alphabetically by Postal Service abbreviations for state names and by county names, followed by four pages of analytical data for these samples, then proceeds to the descriptive page for the next 50 samples, and so on through the table. The state names in the descriptive material of site locations are abbreviated according to the system used by the Government Printing Office (GPO). The following table gives these abbreviations.

<u>State</u>	<u>GPO</u>	<u>Postal Service</u>	<u>State</u>	<u>GPO</u>	<u>Postal Service</u>
Alabama	Ala.	AL	Nebraska	Nebr.	NE
Arizona	Ariz.	AZ	Nevada	Nev.	NV
Arkansas	Ark.	AR	New Hampshire	N.H.	NH
California	Calif.	CA	New Jersey	N.J.	NJ
Colorado	Colo.	CO	New Mexico	N. Mex.	NM
Connecticut	Conn.	CT	New York	N.Y.	NY
Delaware	Del.	DE	North Carolina	N.C.	NC
Florida	Fla.	FL	North Dakota	N. Dak.	ND
Georgia	Ga.	GA	Ohio	Ohio	OH
Idaho	Idaho	ID	Oklahoma	Okla.	OK
Illinois	Ill.	IL	Oregon	Oreg.	OR
Indiana	Ind.	IN	Pennsylvania	Pa.	PA
Iowa	Iowa	IA	Rhode Island	R.I.	RI
Kansas	Kans.	KS	South Carolina	S.C.	SC
Kentucky	Ky.	KY	South Dakota	S. Dak.	SD
Louisiana	La.	LA	Tennessee	Tenn.	TN
Maine	Maine	ME	Texas	Tex.	TX
Maryland	Md.	MD	Utah	Utah	UT
Massachusetts	Mass.	MA	Vermont	Vt.	VT
Michigan	Mich.	MI	Virginia	Va.	VA
Minnesota	Minn.	MN	Washington	Wash.	WA
Mississippi	Miss.	MS	West Virginia	W. Va.	WV
Missouri	Mo.	MO	Wisconsin	Wis.	WI
Montana	Mont.	MT	Wyoming	Wyo.	WY

The location of the sampling sites is given by north latitude and west longitude in degrees and minutes, and the collection date is given by year and month. The format used for table 1 allows only 70 spaces for site and soil descriptions, therefore, this column is written in telegraphic style, employing numerous abbreviations, minimum punctuation, and the elimination of unnecessary connectives in the statements in order to give as much information as possible in the limited space. The sampling sites are located more precisely by a descriptive reference to landmarks, such as highways, towns, rivers, or other geographic features. The distances of

the sites from these landmarks are approximate, generally rounded to whole numbers. The descriptions of the surficial materials closely follow those made at the sites by the collectors, and are usually expressed in nontechnical terms. A list of the abbreviations that were used follows.

<u>Abbreviation</u>	<u>Word or term</u>	<u>Abbreviation</u>	<u>Word or term</u>
ALLUV	Alluvium	NAT	National
ALT	Alternate	NAT FOR	National forest
BLM	Bureau of Land Management	N.P.	National Park
BR	Branch	NR	Near
BRWN	Brown	PK	Park
C.H.	Courthouse	QUAD	Quadrangle
CO	County	QUAT	Quaternary
CR	Creek	R.	River
DECID.	Deciduous	RD	Road
FT	Fort	RES	Reservation
HATC	Hatchery	RR	Railroad
HOR	Horizon	RT	State Route
HTS	Heights	RX	Rocks
I	Interstate Highway	SED	Sedimentary
IN.	Inch or inches	SERV	Service
IRR	Irrigation	SH	Shale
JCT	Junction	SPGS	Springs
LGHT	Light	SS	Sandstone
LS	Limestone	TERT	Tertiary
MED	Medium	TPK	Turnpike
MI	Mile	US	U.S. Highway
MT	Mount or mountain	YDS	Yards
MX	Mixed		

Bismuth, cadmium, praseodymium, and silver were found infrequently in measurable concentrations in the samples. Data for these elements are given in the following table.

SAMPLE NO.	STATE	COUNTY	LATI- TUDE	LONGI- TUDE	DATE COLLECTED	LOCATION, DESCRIPTION, AND CONCENTRATION (PPM) OF ELEMENTS	
BISMUTH							
GC171650	AZ	PINAL	33 18	111 5	64 5	US 60-70 W EDGE OF SUPERIOR; STONY ROUGH SOIL.....	15
250450	CA	INYO	36 28	117 52	66 6	RT 190 OWENS LAKE 5 MI S KEELER; SAND NEAR PLAYA.....	15
CADMIUM							
0A0250	CA	KERN	35 30	119 38	70 7	JCT RT 33 AND UNNUMBERED RD 10 MI NW BUTTOWILL; SOIL NOT DESCRIBED.....	1.0
242750	CA	NEVADA	39 14	121 2	66 7	I-40 AT GISCO; SOIL NOT DESCRIBED.....	1.0
243150	CA	SANTA CLARA	36 58	121 33	66 7	US 101 AT RT 152 EXIT GILROY; SOIL NOT DESCRIBED.....	10.0
270650	CA	SHASTA	40 31	121 30	68 9	IN LASSEN VOLCANIC N.P. 3 MI SE MANZANITA LAKE; B HORIZON SOIL.....	1.0
184450	CO	MOFFAT	40 15	108 40	65 6	US 40 5 MI E MASSADONA; BROWN CLAYEY SILT 8 IN. DEPTH.....	1.0
0A6950	CO	SUMMIT	39 33	106 9	72 9	US 6.5 MI E OFFICERS GULCH CAMPGROUND; BROWN GRAVELLY SOIL ON TILL.....	11.0
155850	KS	BOURBON	37 45	94 55	63 10	US 54 10 MI W FT. SCOTT; DARK PRAIRIE SOIL OVER LIMESTONE.....	1.5
024450	KS	LOGAN	39 7	101 44	71 10	US 40 AT OAKLEY; BLACK PRAIRIE SOIL.....	2.0
023550	MT	CASCADE	47 32	111 10	71 5	1 MI NORTH MALSTROM AIR BASE; CULTIVATED, PLOW ZONE.....	2.0
191350	NM	CHAVES	33 22	104 50	65 6	US 70 18 MI SW ROSWELL; VERY DRY, TAN, MANY CHERT FRAGMENTS.....	1.5
042250	OH	AUGLAIZE	40 30	83 55	66 10	US 33 1 MI NW LAKEVIEW; BROWN SILTY LOAM CULTIVATED.....	1.0
267450	SD	BROWN	45 25	98 7	68 8	RT 37 1 MI S GROTON; GRAY MOTTLED B HORIZON LACUSTRINE CLAY, GRASSLAND.....	1.0
152150	TX	HARRIS	29 47	95 38	63 7	US 90 2 MI E ADDICKS; DARK ALLUVIAL CLAY.....	1.0
022750	VA	WYTHE	36 58	80 57	72 9	RT 121 AT MAX MEADOWS; MUCK.....	4.0
056050	WI	POLK	45 31	92 35	70 5	RT 35 2 MI S LUCK; YELLOW SANDY LOAM.....	1.0
PRASEODYMIUM							
070350	AL	MONTGOMERY	32 17	86 12	73 1	US 231 5 MI S MONTGOMERY; SANDY LOAM.....	100
SILVER							
171450	AZ	COCONINO	34 33	111 18	64 5	RT 87 AT CLINTS WELL; DARK FOREST SOIL.....	3.0
033150	CO	CLEAR CREEK	39 47	105 47	65 8	US 40 ON BERTHOUD PASS; BROWN, ON GRANITE AND GNEISS RUBBLE.....	2.0
186250	ID	BANNOCK	42 47	112 24	65 6	I-15 8 MI SE POCATELLO; BROWN SILT, 4 IN. DEPTH.....	3.0
023550	MT	CASCADE	47 32	111 10	71 5	1 MI NORTH MALSTROM AIR BASE; CULTIVATED, PLOW ZONE.....	.7
263150	UT	SUMMIT	40 52	111 15	68 7	I-80 2 MI S RT 133 EXIT NEAR STREAM BED; BLACK ORGANIC ALLUVIUM.....	5.0
022750	VA	WYTHE	36 58	80 57	72 9	RT 121 AT MAX MEADOWS; MUCK.....	3.0

Some elements were looked for in all samples but were not found. These elements, analyzed by the semiquantative spectrographic method, and their approximate lower detection limits, in parts per million, are as follows: gold, 20; hafnium, 100; indium, 10; platinum, 30; palladium, 1; rhenium, 30; tantalum, 200; tellurium, 2,000; and thallium, 50. If lanthanum or cerium was found in a sample, the following elements, with their stated lower detection limits, were looked for in the same sample but were not found: dysprosium, 50; erbium, 50; gadolinium, 50; holmium, 20; lutetium, 30; terbium, 300; and thulium, 20.

The following symbols used in table 1 are explained as follows: N, not detected in the sample; leaders (--), no data available; <, less than the stated value; and >, greater than the stated value.

References cited

- Huffman, Claude, Jr., and Dinnin, J. I., 1976, Analysis of rocks and soil by atomic absorption spectrometry and other methods, in Miesch, A. T., Geochemical survey of Missouri--Methods of sampling, laboratory analysis, and statistical reduction of data: U.S. Geological Survey Professional Paper 954-A, p. 12-14.
- Millard, H. T., Jr., 1975, Determination of uranium and thorium in rocks and soils by the delayed neutron technique, in U.S. Geological Survey, Geochemical survey of the western coal region, 2d Annual Progress Report July 1975: U.S. Geological Survey Open-File Report 75-436, p. 79-81.
- _____, 1976, Determination of uranium and thorium in USGS standard rocks by the delayed neutron technique, in Flanagan, F. J., ed., Description and analyses of eight new USGS rock standards: U.S. Geological Survey Professional Paper 840, p. 61-65.
- Myers, A. T., Havens, R. G., and Dunton, P. J., 1961, A spectrochemical method for the semiquantitative analysis of rocks, minerals, and ores: U.S. Geological Survey Bulletin 1084-I, p. 207-229.
- Neiman, H. G., 1976, Analysis of rocks, soils and plant ashes by emission spectroscopy, in Miesch, A. T., Geochemical survey of Missouri--Methods of sampling, laboratory analysis, and statistical reduction of data: U.S. Geological Survey Professional Paper 954-A, p. 14-15.
- Shacklette, H. T., Boerngen, J. G., Cahill, J. P., and Rahill, R. L., 1973, Lithium in surficial materials of the conterminous United States and partial data on cadmium: U.S. Geological Survey Circular 673, 8 p.
- Shacklette, H. T., Boerngen, J. G., and Keith, J. R., 1974, Selenium, fluorine, and arsenic in surficial materials of the conterminous United States: U.S. Geological Survey Circular 692, 14 p.

- Shacklette, H. T., Boerngen, J. G., and Turner, R. L., 1971, Mercury in the environment--Surficial materials of the conterminous United States: U.S. Geological Survey Circular 644, 5 p.
- Shacklette, H. T., Hamilton, J. C., Boerngen, J. G., and Bowles, J. M., 1971, Elemental composition of surficial materials in the conterminous United States: U.S. Geological Survey Professional Paper 574-D, 71 p.
- Vaughn, W. W., 1967, A simple mercury vapor detector for geochemical prospecting: U.S. Geological Survey Circular 540, 8 p.
- Wahlberg, J. S., 1976, Analysis of rocks and soils by x-ray fluorescence, in Miesch, A. T., Geochemical survey of Missouri--Methods of sampling, Laboratory analysis, and statistical reduction of data: U.S. Geological Survey Professional Paper 954-A, p. 11-12.
- Ward, F. M., Lakin, H. W., Canney, F. C., and others, 1963, Analytical methods used in geochemical exploration by the U.S. Geological Survey: U.S. Geological Survey Bulletin 1152, 100 p.

Table 1.--Location, description, and concentration of elements for samples
of surficial materials

[Data are divided into five-page units. The first page of each unit gives the sample numbers for 50 samples, the state and county names listed alphabetically, the latitude and longitude in degrees and minutes, the date of sample collection, the location of the sampling site, and the description of the sample. The following 4 pages give analytical results for 46 elements for each of the 50 samples in this unit. The second unit follows alphabetically by state and county, and so on through the entire table]

Table 1.--Location, description, and concentration of elements for samples of surficial materials

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC151050	AL	BALDWIN	30 34	87 36	63 7	US 90 9 MI E ROBERTSDALE; BLACK, SANDY-ORGANIC, WET
GC195050	AL	BUTLER	31 45	86 31	65 6	RT 10 10 MI E GREENVILLE; VERY FINE ALLUVIAL GRAY SAND
GC273950	AL	CHILTON	32 50	86 38	69 1	RT 22 AT CLANTON; GRAY SANDY SOIL OVER SANDSTONE
GC194750	AL	CHOCTAW	31 47	88 24	65 6	RT 12 3 MI W SILAS; RED SANDY SOIL
GC194850	AL	CLARKE	31 41	87 44	65 6	US 84 2 MI E GROVE HILL; YELLOW SANDY SOIL
GC275250	AL	COLBERT	34 43	87 50	69 1	US 72 8 MI W MUSSEL SHOALS; RED CLAY LOAM OVER LIMESTONE
GC194950	AL	CONECUH	31 24	87 4	65 6	US 84 3 MI E BELLEVUE; CHOCOLATE-BROWN SANDY LOAM
GC070250	AL	DALLAS	32 22	86 58	73 1	US 80 3 MI E SELMA; WET GRAY CLAY
GC274950	AL	DE KALB	34 27	85 47	69 1	RT 35 5 MI W FT. PAYNE; MEDIUM BROWN LOAM
GC273750	AL	GREENE	32 52	87 54	69 1	US 43 2 MI N EUTAW; LIGHT BROWN SANDY LOAM OVER SANDSTONE
GC195250	AL	HENRY	31 35	85 5	65 6	RT 10 2 MI E SHORTERVILLE; YELLOW SANDY SOIL
GC275150	AL	LAWRENCE	34 39	87 9	69 1	US ALT. 72 AT HILLSBORO; REDDISH-YELLOW CLAY OVER LIMESTONE
GC274150	AL	LEE	32 37	85 17	69 1	US 280 5 MI E OPELIKA; YELLOW SANDY SOIL OVER SANDSTONE
GC275050	AL	MADISON	34 43	86 25	69 1	US 72 3 MI N GURLEY; RED ALLUVIAL CLAY
GC070150	AL	MARENGO	32 31	87 45	73 1	US 80 6 MI E DEMAPOLIS; GRAY CLAY
GC151150	AL	MOBILE	30 36	88 10	63 7	US 90 4 MI W MOBILE; WHITISH-GRAY SAND
GC070350	AL	MONTGOMERY	32 17	86 12	73 1	US 231 5 MI S MONTGOMERY; SANDY LOAM
GC195150	AL	PIKE	31 43	85 46	65 6	RT 10 4 MI E BRUNDAGE; RED SANDY LOAM
GC274050	AL	TALLAPOOSA	32 56	86 0	69 1	RT 22 3 MI W ALEXANDER CITY; YELLOWISH-BROWN SANDY LOAM OVER SANDSTONE
GC273850	AL	TUSCALOOSA	33 3	87 20	69 1	US 82 15 MI W CENTREVILLE; RED CLAY OVER SANDSTONE
GC273150	AR	ASHLEY	33 8	91 56	69 1	US 82 1 MI E CROSSETT; LIGHT BROWN CLAY LOAM
GC199450	AR	CARROLL	36 15	93 20	65 7	RT 68 5 MI W ALPENA; GRAY LITHOSOL OVER SANDSTONE
GC273250	AR	CHICOT	33 19	91 16	69 1	US 82 2 MI E LAKE VILLAGE; DARK ALLUVIAL LOAM
GC064450	AR	CONWAY	35 10	92 39	72 10	1-40 1 MI W PLUMERVILLE; BROWN SANDY LOAM
GC064650	AR	CRAWFORD	35 32	94 21	72 10	1-40 AT JCT US 71; POORLY DRAINED BROWN LOAM
GC064150	AR	CRITTENDEN	35 12	90 16	72 10	US 64 2 MI E VINCENT; DARK GRAY CLAY
GC275950	AR	FAULKNER	34 5	92 25	69 1	RT 36 2 MI E CONWAY; RED CLAY OVER SANDSTONE
GC199250	AR	FULTON	36 26	91 59	65 7	US 62 5 MI W VIOLA; YELLOW LITHOSOL WITH CHERT
GC199050	AR	GREENE	36 5	90 33	65 7	RT 25 3 MI W PARAGOULD; YELLOW LOAM LOESS
GC064550	AR	JOHNSON	35 24	93 22	72 10	1-40 2 MI N KNOXVILLE; SHALLOW SILT
GC272950	AR	LAFAYETTE	33 22	93 30	69 1	US 82 1 MI E STAMPS; GRITTY SAND FROM CONGLOMERATE
GC275850	AR	LONOKE	34 47	91 53	69 1	US 70 1 MI E LONOKE; MOTTLED RED AND GRAY ALLUVIUM
GC199350	AR	MARION	36 16	92 40	65 7	RT 62 1 MI W YELVILLE; RED-YELLOW CLAY OVER LIMESTONE
GC275750	AR	MONROE	34 45	91 11	69 1	US 49 12 MI S BRINKLEY; MOTTLED RED AND GRAY ALLUVIUM
GC276050	AR	PERRY	35 1	93 2	69 1	RT 10 1 MI E CASA; DARK BROWN LOAM OVER SHALE
GC276150	AR	SCOTT	34 51	93 50	69 1	RT 28 2 MI W HARVEY; LITHOSOL OVER SANDSTONE
GC199150	AR	SHARP	36 19	91 19	65 7	US 62 11 MI W HARDY; YELLOW CLAY LOAM WITH CHERT
GC273050	AR	UNION	33 13	92 43	69 1	US 82 2 MI W ELDORADO; GRAY SAND
GC199550	AR	WASHINGTON	36 13	94 0	65 7	RT 68 4 MI E SPRINGDALE; YELLOW LOAM OVER SANDSTONE
GC064350	AR	WHITE	35 6	91 50	72 10	US 64 1 MI S MCRAE; LIGHT BROWN CLAY
GC064250	AR	WOODRUFF	35 15	91 9	72 10	US 64 4 MI E MCCRORY; BROWN SANDY ALLUVIUM
GC171950	AZ	APACHE	35 34	110 0	64 5	CO RD AT SUNRISE SPRINGS; SANDY CLAY ALLUVIUM
GC180150	AZ	APACHE	35 45	109 15	64 7	RT 264 .2 MI N ON SAWMILL RD; 1-6 IN. DEPTH
GC250050	AZ	APACHE	34 18	109 22	66 5	US 666-180 15 MI N SPRINGERVILLE; SOIL OVER MUDSTONE
GC262350	AZ	APACHE	36 55	109 45	68 5	US 164 CHINLE WASH CROSSING 40 MI NE KAYENTA; RED SAND
GC245450	AZ	COCHISE	31 40	110 16	66 7	RT 82 2 MI E JCT WITH RT 90 W OF FAIRBANK; SOIL NOT DESCRIBED
GC245650	AZ	COCHISE	31 25	109 51	66 7	US 80 3 MI E LOWELL; SOIL NOT DESCRIBED
GC245750	AZ	COCHISE	31 40	109 37	66 7	US 666 1 MI S ELFRIDA; SOIL NOT DESCRIBED
GC072950	AZ	COCONINO	35 58	111 23	73 3	US 89 7 MI S JCT US 164; DUNE SAND
GC073050	AZ	COCONINO	36 25	110 48	73 3	US 164-160 3.5 MI S COW SPRINGS; RED SAND

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC151050	1.50	1.9	70	150	N	--	--	.12	300	N	30.0	5.0
GC195050	.70	3.8	50	50	N	--	--	.15	N	N	10.0	5.0
GC273950	1.50	4.9	50	150	N	--	--	.04	150	3	20.0	7.0
GC194750	5.00	8.3	N	100	N	--	--	.30	N	7	50.0	10.0
GC194850	1.50	1.6	30	100	N	--	--	.25	N	N	15.0	5.0
GC275250	3.00	6.5	30	500	1.0	--	--	.19	N	15	50.0	20.0
GC194950	3.00	8.5	50	200	N	--	--	.35	N	10	20.0	15.0
GC070250	1.00	.8	20	100	N	<.5	.3	--	<150	N	15.0	2.0
GC274950	1.00	5.6	30	200	N	--	--	.04	N	5	50.0	10.0
GC273750	.70	1.6	20	150	N	--	--	.04	N	3	30.0	5.0
GC195250	1.50	2.4	N	70	N	--	--	.20	N	N	15.0	5.0
GC275150	1.50	5.4	50	200	N	--	--	.05	N	3	30.0	10.0
GC274150	2.00	2.0	N	500	N	--	--	.02	150	10	20.0	10.0
GC275050	3.00	8.5	50	300	1.0	--	--	.22	N	3	50.0	20.0
GC070150	3.00	10.6	N	150	N	.9	9.8	28.12	N	5	70.0	15.0
GC151150	.30	1.1	70	100	N	--	--	.10	200	N	30.0	3.0
GC070350	1.50	2.7	30	100	N	.9	1.1	.08	200	5	20.0	5.0
GC195150	3.00	9.2	50	70	N	--	--	.20	N	3	30.0	15.0
GC274050	1.50	1.2	N	300	N	--	--	.13	N	3	7.0	5.0
GC273850	10.00	6.6	30	500	1.0	--	--	.15	200	5	50.0	20.0
GC273150	1.50	8.1	30	200	N	--	--	.07	150	7	30.0	15.0
GC199450	2.00	7.5	N	300	1.5	--	--	.30	N	30	70.0	15.0
GC273250	3.00	6.0	30	500	1.0	--	--	.27	150	10	50.0	20.0
GC064450	2.00	3.1	20	200	N	<.5	.4	--	N	5	50.0	7.0
GC064650	2.00	6.3	50	200	N	<.5	1.1	.19	N	7	30.0	10.0
GC064150	7.00	7.2	50	1,000	1.5	.5	2.1	.53	<150	10	70.0	30.0
GC275950	3.00	14.0	30	200	N	--	--	.02	N	5	70.0	15.0
GC199250	1.50	13.0	50	150	N	--	--	.15	N	7	30.0	10.0
GC199050	7.00	11.0	70	500	N	--	--	.15	N	15	100.0	30.0
GC064550	5.00	8.7	50	300	1.5	.7	1.0	.09	<150	10	50.0	15.0
GC272950	.70	2.6	<20	200	N	--	--	.04	N	N	10.0	5.0
GC275850	3.00	8.3	50	300	N	--	--	.15	150	5	50.0	20.0
GC199350	>10.00	27.0	100	300	2.0	--	--	.25	N	15	150.0	50.0
GC275750	5.00	11.0	50	500	N	--	--	.15	N	3	50.0	20.0
GC276050	3.00	13.0	50	300	2.0	--	--	.11	N	20	50.0	15.0
GC276150	1.50	16.0	30	200	1.5	--	--	.04	N	5	50.0	15.0
GC199150	3.00	8.3	70	200	N	--	--	.25	N	15	50.0	15.0
GC273050	1.00	9.1	20	300	N	--	--	.05	N	3	10.0	5.0
GC199550	3.00	13.0	30	300	N	--	--	.30	N	70	100.0	20.0
GC064350	3.00	4.6	50	200	N	.7	1.8	--	<150	10	30.0	7.0
GC064250	3.00	5.3	50	700	N	<.5	.5	.60	N	5	15.0	20.0
GC171950	7.00	5.3	50	500	N	--	--	--	--	10	20.0	10.0
GC180150	3.00	--	50	500	N	--	--	.64	N	7	30.0	10.0
GC250050	3.00	6.2	30	500	N	--	--	3.00	N	7	30.0	30.0
GC262350	1.50	1.6	20	300	N	--	--	.60	N	<3	7.0	7.0
GC245450	3.00	8.5	30	500	N	--	--	1.37	N	7	30.0	30.0
GC245650	5.00	4.3	30	700	N	--	--	1.12	N	7	15.0	15.0
GC245750	3.00	7.1	30	300	N	--	--	.51	N	7	15.0	70.0
GC072950	10.00	2.3	30	1,500	N	<.5	3.4	1.12	N	5	5.0	10.0
GC073050	3.00	2.0	20	500	N	<.5	.4	.67	N	N	7.0	10.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Hg %	Mn ppm	Mo ppm
GC151050	.007	.50	<5	--	.34	--	.17	150	9	.070	70	N
GC195050	<.001	.30	N	--	.10	--	.05	30	6	.030	700	N
GC273950	.005	.70	N	--	.07	--	.24	30	12	.150	150	N
GC194750	.022	2.00	7	--	.09	--	.15	30	30	.150	70	N
GC194850	<.001	.50	N	--	.04	--	.15	N	8	.050	300	N
GC275250	.030	1.50	10	--	.10	--	.85	50	22	.150	1,000	N
GC194950	.002	1.50	5	--	.15	--	.20	50	18	.150	3,000	N
GC070250	--	.50	N	1.02	.02	<.5	.17	50	5	.030	150	N
GC274950	.023	2.00	<5	--	.05	--	.33	N	12	.150	100	N
GC273750	.026	.70	N	--	.04	--	.24	N	5	.100	300	N
GC195250	<.001	.50	N	--	.08	--	.05	30	7	.050	150	N
GC275150	.006	1.00	<5	--	.03	--	.30	N	16	.100	200	N
GC274150	.003	2.00	10	--	.04	--	1.20	30	6	.200	500	N
GC275050	.025	1.50	7	--	.08	--	.60	50	44	.300	1,000	N
GC070150	.040	2.00	5	.46	.03	2.1	.36	N	25	.200	100	5
GC151150	.003	.50	N	--	.17	--	.05	100	7	.030	100	N
GC070350	--	.70	<5	1.28	.06	1.7	.36	150	25	.100	200	N
GC195150	.002	2.00	7	--	.08	--	.15	N	11	.100	100	N
GC274050	<.001	.50	10	--	.03	--	.95	N	13	.100	100	N
GC273850	.041	3.00	20	--	.11	--	1.30	100	16	1.000	100	N
GC273150	.013	1.00	7	--	.09	--	.50	50	18	.200	150	N
GC199450	.008	5.00	7	--	.08	--	.36	30	14	.100	3,000	N
GC273250	.023	1.50	15	--	.06	--	1.50	70	24	.700	2,000	N
GC064450	--	1.00	5	1.15	.05	<.5	.49	N	15	.100	300	N
GC064650	--	1.00	5	1.41	.06	.9	.63	N	15	.070	1,000	N
GC064150	.040	2.00	20	1.78	.07	.6	1.96	50	30	.500	500	N
GC275950	.035	3.00	10	--	.06	--	.45	50	25	.300	100	N
GC199250	.024	2.00	5	--	.06	--	.32	N	12	.070	700	N
GC199050	.028	3.00	15	--	.08	--	1.50	30	25	.700	300	N
GC064550	--	2.00	7	1.76	.07	.7	.93	50	30	.200	700	N
GC272950	.004	.70	N	--	.03	--	.15	30	7	.050	50	N
GC275850	.015	1.50	10	--	.06	--	.80	70	32	.200	300	N
GC199350	.160	3.00	30	--	.15	--	3.20	30	59	1.000	200	7
GC275750	.017	1.50	15	--	.07	--	1.10	50	22	.500	100	3
GC276050	.023	2.00	10	--	.13	--	.90	30	44	.200	1,500	N
GC276150	.023	5.00	7	--	.04	--	.50	30	21	.150	700	N
GC199150	.086	1.50	7	--	.07	--	.60	50	20	.100	1,000	N
GC273050	.006	1.00	N	--	.02	--	.50	N	8	.050	100	N
GC199550	.007	2.00	10	--	.04	--	.70	30	17	.150	1,500	7
GC064350	--	1.00	5	1.29	.08	1.9	.45	50	20	.100	1,000	N
GC064250	--	1.00	7	1.14	.04	<.5	1.43	N	--	.100	150	N
GC171950	.077	1.50	20	--	.09	--	2.20	30	70	2.000	300	N
GC180150	--	1.50	10	--	--	--	1.60	50	--	.300	300	N
GC250050	.063	3.00	30	--	.06	--	1.46	30	26	1.500	300	N
GC262350	<.001	.50	7	--	.10	--	1.30	N	10	.300	150	N
GC245450	.016	1.50	30	--	.16	--	.24	N	31	.700	300	N
GC245650	.024	1.50	30	--	.02	--	2.78	30	63	1.000	500	N
GC245750	.018	1.50	20	--	.10	--	1.99	30	28	.500	700	3
GC072950	--	2.00	15	1.47	.03	<.5	2.30	50	12	.300	1,000	N
GC073050	--	.70	5	1.34	.02	<.5	1.38	N	12	.500	200	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC151050	N	15	150	N	.006	N	--	--	--	7	.4	--
GC195050	N	15	N	<5	.004	15	--	--	--	N	.2	--
GC273950	N	20	N	7	.008	N	--	--	--	5	.3	--
GC194750	N	15	N	30	.008	N	--	--	--	10	.3	--
GC194850	N	15	N	5	.002	N	--	--	--	N	.4	--
GC275250	15	15	70	20	.020	20	--	--	--	7	.3	--
GC194950	N	15	N	30	.008	N	--	--	--	7	.2	--
GC070250	N	10	N	N	--	N	<20	<.08	<1	N	.4	39
GC274950	N	10	--	7	.016	N	--	--	--	5	.5	--
GC273750	N	10	--	<5	.012	N	--	--	--	N	.2	--
GC195250	N	N	N	5	.002	N	--	--	--	N	.1	--
GC275150	.07	20	--	10	.008	<10	--	--	--	5	.6	--
GC274150	.10	10	N	7	.016	15	--	--	--	10	.5	--
GC275050	.15	15	70	20	.024	20	--	--	--	7	.4	--
GC070150	.10	N	--	20	--	N	25	<.08	9	7	.3	7
GC151150	N	30	70	N	.006	N	--	--	--	7	.2	--
GC070350	<.05	<10	150	N	--	15	<20	<.08	<1	5	<.1	37
GC195150	N	N	N	20	.006	N	--	--	--	7	.2	--
GC274050	.30	N	--	N	.006	10	--	--	--	<5	.4	--
GC273850	.15	20	70	15	.020	20	--	--	--	20	.9	--
GC273150	.15	15	70	7	.008	15	--	--	--	7	.7	--
GC199450	.10	15	N	30	.030	30	--	--	--	5	.7	--
GC273250	.50	15	70	20	.030	20	--	--	--	7	.7	--
GC064450	.10	<10	--	5	--	N	35	<.08	<1	<5	.6	39
GC064650	.10	<10	--	10	--	20	30	<.08	<1	<5	<.1	39
GC064150	.70	<10	70	20	--	20	100	<.08	<1	10	<.1	30
GC275950	.10	15	70	15	.016	15	--	--	--	10	1.0	--
GC199250	<.05	N	N	15	.016	20	--	--	--	N	.4	--
GC199050	1.00	20	N	30	.008	30	--	--	--	10	.7	--
GC064550	.20	10	70	10	--	15	50	<.08	1	10	.2	36
GC272950	N	10	N	<5	.004	N	--	--	--	N	.6	--
GC275850	.30	20	70	7	.030	30	--	--	--	10	.7	--
GC199350	.30	N	N	50	.006	70	--	--	--	15	.4	--
GC275750	.70	15	70	7	.012	20	--	--	--	10	2.4	--
GC276050	.20	15	70	30	.060	20	--	--	--	10	.9	--
GC276150	.10	10	N	20	.060	10	--	--	--	7	1.0	--
GC199150	.15	15	N	20	.004	15	--	--	--	5	.4	--
GC273050	.07	10	--	<5	.008	10	--	--	--	N	.3	--
GC199550	.15	15	N	50	.012	15	--	--	--	7	2.5	--
GC064350	.10	10	N	5	--	15	36	<.08	<1	<5	.3	37
GC064250	.70	N	--	10	--	30	55	.09	2	<5	<.1	33
GC171950	1.50	15	N	30	.030	15	--	--	--	10	.2	--
GC180150	1.00	15	N	15	.006	15	--	--	--	10	--	--
GC250050	.50	10	N	15	.026	15	--	--	--	7	<.1	--
GC262350	.30	N	--	7	.004	10	--	--	--	N	<.1	--
GC245450	.70	15	N	15	.039	20	--	--	--	7	.1	--
GC245650	2.00	15	N	7	.039	30	--	--	--	7	<.1	--
GC245750	.70	15	N	15	.017	70	--	--	--	7	1.1	--
GC072950	1.00	<10	N	N	--	20	100	<.08	<1	<5	<.1	35
GC073050	.30	<10	--	5	--	10	55	.12	<1	<5	<.1	39

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC151050	--	10	.300	--	--	15	50	7.0	--	700
GC195050	--	N	.300	--	--	15	30	3.0	20	300
GC273950	--	7	.700	--	--	30	30	3.0	20	500
GC194750	--	15	.200	--	--	70	10	2.0	20	100
GC194850	--	N	.300	--	--	15	20	2.0	--	300
GC275250	--	70	.500	--	--	50	50	5.0	40	500
GC194950	--	15	.300	--	--	50	150	15.0	25	300
GC070250	.48	5	.500	18.06	3.01	20	50	7.0	11	700
GC274950	--	15	.500	--	--	30	30	3.0	15	700
GC273750	--	10	.500	--	--	20	30	3.0	10	500
GC195250	--	N	.200	--	--	20	20	1.5	--	200
GC275150	--	10	.500	--	--	30	30	3.0	20	500
GC274150	--	30	1.000	--	--	30	30	7.0	35	500
GC275050	--	50	.500	--	--	70	50	5.0	55	300
GC070150	2.08	500	.150	--	3.98	70	10	1.5	59	100
GC151150	--	10	1.000	--	--	15	70	10.0	--	2,000
GC070350	1.53	10	.500	22.57	5.48	30	30	3.0	21	500
GC195150	--	10	.200	--	--	70	15	2.0	20	150
GC274050	--	100	.100	--	--	15	10	1.5	15	200
GC273850	--	150	.500	--	--	100	30	3.0	25	300
GC273150	--	30	.300	--	--	30	30	5.0	15	500
GC199450	--	20	.200	--	--	30	30	3.0	60	150
GC273250	--	100	.500	--	--	70	50	7.0	40	300
GC064450	.64	15	.300	13.63	1.75	30	30	5.0	24	300
GC064650	1.69	15	.300	6.17	3.10	30	15	2.0	48	500
GC064150	1.67	200	.300	10.40	3.76	100	20	3.0	94	150
GC275950	--	30	.500	--	--	50	30	5.0	30	200
GC199250	--	10	.200	--	--	50	15	2.0	--	150
GC199050	--	150	.500	--	--	100	30	5.0	40	300
GC064550	2.27	70	.500	11.44	4.71	70	50	5.0	39	500
GC272950	--	7	.200	--	--	20	20	3.0	15	500
GC275850	--	70	.700	--	--	50	50	5.0	40	200
GC199350	--	70	.200	--	--	50	20	3.0	30	100
GC275750	--	150	.500	--	--	100	70	5.0	30	300
GC276050	--	50	.300	--	--	50	50	5.0	65	150
GC276150	--	20	.300	--	--	50	30	5.0	35	300
GC199150	--	20	.300	--	--	50	30	3.0	--	200
GC273050	--	20	.200	--	--	30	20	3.0	10	300
GC199550	--	50	.300	--	--	50	30	3.0	50	200
GC064350	1.48	20	.500	12.90	4.23	50	30	5.0	28	300
GC064250	10.24	150	.150	5.78	1.12	20	40	1.0	48	100
GC171950	--	700	.200	--	--	70	30	3.0	25	200
GC180150	--	70	.150	--	--	30	30	3.0	--	150
GC250050	--	200	.150	--	--	70	30	3.0	42	150
GC262350	--	50	.100	--	--	15	10	1.5	25	150
GC245450	--	70	.150	--	--	70	15	3.0	50	150
GC245650	--	150	.150	--	--	70	30	3.0	50	150
GC245750	--	30	.150	--	--	30	30	5.0	90	150
GC072950	.77	300	.200	10.05	3.40	70	20	2.0	31	150
GC073050	1.03	70	.100	2.45	1.11	15	10	2.0	18	150

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC171450	AZ	COCONINO	34 33	111 18	64 5	RT 87 AT CLINTS WELL; DARK FOREST SOIL
GC172050	AZ	COCONINO	35 14	111 47	64 5	I-40 5 MI E FLAGSTAFF; B HORIZON DARK FOREST SOIL
GC172151	AZ	COCONINO	35 32	113 20	64 5	US 66 32 MI NW SELIGMAN; ARID LIGHT B HORIZON
GC180450	AZ	COCONINO	36 6	111 15	64 7	RT 264 1 MI E MOENKOPI; 1-6 IN. DEPTH
GC180550	AZ	COCONINO	36 55	111 30	64 7	US 89 AT GLEN CANYON DAM AT PAGE; SAND 1-6 IN. DEPTH
GC180750	AZ	COCONINO	36 10	112 4	64 7	AT N RIM GRAND CANYON LODGE; LOAMY SOIL 1-6 IN. DEPTH
GC180850	AZ	COCONINO	36 43	112 14	64 7	US 89A 1 MI S JACOB LAKE LODGE; BLACK ROCKY LOAM
GC180950	AZ	COCONINO	36 40	111 40	64 7	US 89 JCT WITH US 89A AT BITTER SPRING; SANDY 1-6 IN. DEPTH
GC250250	AZ	COCONINO	35 13	112 23	66 5	US 66-89 5 MI E ASH FORK; LITHOSOL FROM VOLCANIC EXTRUSIVE LAVA
GC171350	AZ	GILA	34 20	111 5	64 5	RT 160 AT KOHL'S RANCH; DARK FOREST SOIL
GC171750	AZ	GILA	33 49	110 27	64 5	RT 77 6 MI N SALT R CROSSING, NE GLOBE; DARK FOREST SOIL
GC009051	AZ	GRAHAM	32 26	109 21	64 9	8 MI NW BOWIE; ALLUVIAL SOIL
GC009751	AZ	GRAHAM	32 45	109 30	64 9	8 MI SE SOLOMON; ALLUVIAL SOIL
GC171150	AZ	GRAHAM	33 8	110 8	64 5	US 70 AT BYLAS; ARID LIGHT SOIL
GC250150	AZ	GREENLEE	33 22	109 17	66 5	US 666 54 MI N CLIFTON IN WHITE MTS; LITHOSOL FROM BASALT LAVA
GC009451	AZ	MARICOPA	33 52	113 11	64 9	5 MI S AGUILA; ALLUVIAL SOIL
GC171550	AZ	MARICOPA	33 25	111 50	64 5	3200 E MAIN IN MESA; IRRIGATED-ALLUVIUM
GC244950	AZ	MARICOPA	32 54	112 44	66 7	RT 85 2 MI S GILA BEND; SOIL NOT DESCRIBED
GC008651	AZ	MOHAVE	36 43	113 3	64 9	10 MI W KAIBAB; ALLUVIAL SOIL
GC172250	AZ	MOHAVE	35 12	114 5	64 5	US 93-466 2 MI W KINGMAN; LIGHT ARID SOIL
GC172350	AZ	MOHAVE	35 47	114 31	64 5	US 93 45 MI NW KINGMAN; ARID LIGHT SOIL
GC172450	AZ	MOHAVE	34 20	113 10	64 5	US 93 90 MI SE KINGMAN NEAR SANTA MARIA R; SOIL NOT DESCRIBED
GC073150	AZ	NAVAJO	36 44	110 8	73 3	US 164-160 6 MI NE KAYENTIA; RED DRIFTING SAND
GC171250	AZ	NAVAJO	34 25	110 37	64 5	RT 160 AT HEBER; ARID LIGHT SOIL
GC171850	AZ	NAVAJO	35 2	110 37	64 5	RT 66-180 5 MI E WINSLOW; SANDY SOIL
GC180250	AZ	NAVAJO	35 50	110 10	64 7	RT 264 1 MI W JEDDITO WASH; 1-6 IN. DEPTH
GC180350	AZ	NAVAJO	35 55	110 40	64 7	RT 264 .5 MI W HOTEVILLA; 1-6 IN. DEPTH
GC245050	AZ	PIMA	32 12	112 50	66 7	RT 85 AT ROWOOD 1 MI E AJO; SOIL NOT DESCRIBED
GC245150	AZ	PIMA	32 10	112 10	66 7	RT 86 2 MI W QUIJOTOA; SOIL NOT DESCRIBED
GC245250	AZ	PIMA	32 0	111 15	66 7	RT 86-RT 286 JCT, ROBLES JCT; SOIL NOT DESCRIBED
GC072750	AZ	PINAL	32 48	111 45	73 3	JCT I-10 & I-8 6 MI S CASA GRANDE; SANDY COLLUVIUM
GC171650	AZ	PINAL	33 18	111 5	64 5	US 60-70 W EDGE OF SUPERIOR; STONY ROUGH SOIL
GC245350	AZ	SANTA CRUZ	31 22	110 53	66 7	RT 82 1 MI NE NOGALES; SOIL NOT DESCRIBED
GC008251	AZ	YUMA	33 55	113 25	64 9	8 MI NE WENDEN; ALLUVIAL SOIL
GC072850	AZ	YUMA	33 3	113 24	73 3	LOS PALOMAS RANCH NEAR HYDER, 25 MI N SENTINEL & I-8; SANDY ALLUVIUM
GC244550	AZ	YUMA	33 40	114 14	66 7	US 95 1 MI S JCT WITH I-10, NEAR QUARTZSITE; SOIL NOT DESCRIBED
GC244650	AZ	YUMA	32 53	114 30	66 7	RT 95 24 MI N YUMA; SOIL NOT DESCRIBED
GC244850	AZ	YUMA	32 45	113 37	66 7	I-8 AT MOHAWK PASS; SOIL NOT DESCRIBED
GC074750	CA	BUTTE	39 44	121 18	73 8	CO RD 3 MI E BRUSH CREEK; SOIL OVER GRANITIC ALLUVIUM
GC074850	CA	BUTTE	39 50	121 50	73 8	COUNTY RD BETWEEN CHICO & COHASSET; SOIL OVER OLIVINE BASALT
GC077050	CA	DEL NORTE	41 55	124 9	73 9	US 101 AT SMITH RIVER; DARK BROWN BLOCKY CLAY
GC074550	CA	EL DORADO	38 33	120 44	73 7	CO RD NEAR RIVER PINES; LIGHT BROWN LOAM OVER GRANITE
GC077150	CA	HUMBOLDT	41 20	124 2	73 9	US 101 5 MI N ORICK; YELLOW LOAM
GC077250	CA	HUMBOLDT	40 42	124 13	73 9	US 101 2 MI S FIELDS LANDING; BLOCKY ORANGE CLAY
GC260150	CA	HUMBOLDT	40 9	124 5	66 7	15 MI W BRICELAND; FROM 5-IN. DEPTH
GC072650	CA	IMPERIAL	32 40	115 30	73 3	JCT RT 98 & 86 1 MI N CALEXICO; SANDY DESERT LOAM
GC022950	CA	INYO	35 51	117 20	71 4	10 MI N TRONA; ALKALI DESERT SOIL
GC052650	CA	INYO	36 37	117 8	63 6	SITE AND SOIL DESCRIPTION NOT RECORDED
GC072350	CA	INYO	36 37	117 0	73 3	RT 190 3 MI S DEVILS GATE, DEATH VALLEY NAT MONUMENT; SANDY COLLUVIUM
GC078250	CA	INYO	36 24	117 17	73 9	RT 190 16 MI W DEATH VALLEY JCT; BROWN SILT UNDER VOLCANIC PAVEMENT

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC171450	3.00	16.0	30	200	N	--	--	1.20	N	7	30.0	30.0
GC172050	>10.00	65.0	N	700	N	--	--	.80	N	30	100.0	30.0
GC172151	>10.00	1.4	30	700	3.0	--	--	1.40	150	15	70.0	30.0
GC180450	2.00	--	30	200	N	--	--	.64	N	N	10.0	7.0
GC180550	2.00	--	30	300	N	--	--	2.00	N	5	100.0	10.0
GC180750	3.00	--	50	200	N	--	--	.64	N	7	50.0	10.0
GC180850	5.00	--	30	300	N	--	--	2.30	N	10	150.0	20.0
GC180950	3.00	--	50	200	N	--	--	.64	N	N	20.0	10.0
GC250250	3.00	9.8	20	500	N	--	--	2.20	150	15	150.0	30.0
GC171350	3.00	6.2	50	200	N	--	--	.72	N	7	70.0	20.0
GC171750	3.00	8.3	N	200	1.5	--	--	18.00	--	10	100.0	20.0
GC009051	>10.00	7.6	N	700	N	--	--	2.20	N	10	100.0	50.0
GC009751	7.00	4.7	N	500	N	--	--	4.20	N	10	100.0	30.0
GC171150	7.00	7.4	30	700	N	--	--	8.20	--	15	50.0	20.0
GC250150	7.00	5.2	N	1,000	N	--	--	3.10	N	30	300.0	70.0
GC009451	7.00	8.2	N	500	N	--	--	1.80	N	10	100.0	50.0
GC171550	>10.00	6.5	N	700	N	--	--	1.50	N	15	70.0	30.0
GC244950	7.00	2.0	30	700	1.5	--	--	2.96	150	10	30.0	30.0
GC008651	7.00	7.5	N	300	N	--	--	7.10	--	10	50.0	30.0
GC172250	>10.00	5.7	N	1,000	3.0	--	--	2.60	300	20	200.0	30.0
GC172350	7.00	8.6	30	700	3.0	--	--	1.50	150	15	70.0	30.0
GC172450	>10.00	6.9	N	500	5.0	--	--	3.00	200	15	50.0	30.0
GC073150	1.00	1.6	N	200	N	<.5	.5	1.75	N	N	10.0	5.0
GC171250	3.00	7.0	30	300	N	--	--	1.00	N	5	30.0	20.0
GC171850	5.00	6.3	N	700	N	--	--	3.40	--	10	70.0	20.0
GC180250	3.00	--	30	500	N	--	--	1.10	N	7	20.0	10.0
GC180350	5.00	--	30	500	N	--	--	.88	N	5	15.0	10.0
GC245050	3.00	4.9	30	700	N	--	--	.81	N	10	30.0	30.0
GC245150	7.00	5.9	70	700	N	--	--	.76	N	15	30.0	70.0
GC245250	5.00	2.9	N	700	1.5	--	--	.88	N	7	15.0	20.0
GC072750	10.00	4.0	20	700	1.5	<.5	.7	2.30	200	10	70.0	30.0
GC171650	>10.00	97.0	N	700	N	--	--	1.40	300	10	50.0	200.0
GC245350	5.00	9.1	N	700	1.5	--	--	1.29	N	7	15.0	20.0
GC008251	>10.00	2.9	N	700	N	--	--	2.00	N	20	70.0	20.0
GC072850	7.00	2.7	20	1,000	1.5	<.5	1.0	3.62	<150	7	50.0	20.0
GC244550	3.00	7.0	70	500	N	--	--	2.18	N	7	15.0	15.0
GC244650	5.00	6.7	30	700	1.5	--	--	3.28	150	10	30.0	15.0
GC244850	3.00	9.2	30	700	N	--	--	.51	N	10	30.0	30.0
GC074750	7.00	1.8	N	300	N	.9	.8	2.25	N	15	100.0	50.0
GC074850	10.00	4.5	N	500	N	<.5	.7	.68	N	50	700.0	150.0
GC077050	>10.00	3.1	20	700	N	--	6.2	.64	N	20	500.0	70.0
GC074550	10.00	1.0	50	1,000	1.5	<.5	6.2	1.01	N	<3	20.0	20.0
GC077150	10.00	3.9	20	300	N	4.1	1.4	.84	N	10	200.0	50.0
GC077250	7.00	1.6	30	700	N	2.7	6.3	.65	N	10	300.0	30.0
GC260150	10.00	6.6	50	500	N	--	--	.35	N	10	150.0	100.0
GC072650	5.00	4.0	50	500	N	1.9	1.3	4.05	N	5	30.0	20.0
GC022950	>10.00	4.0	<20	1,500	2.0	<.5	.4	2.36	<150	10	20.0	30.0
GC052650	7.00	--	100	500	N	--	--	.88	--	7	50.0	30.0
GC072350	7.00	12.7	30	500	2.0	<.5	1.7	5.45	--	5	50.0	15.0
GC078250	5.00	12.0	<20	300	N	.6	3.7	9.88	N	10	50.0	30.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC171450	.017	1.00	10	--	.14	--	1.20	30	20	.300	500	N
GC172050	<.001	5.00	30	--	.08	--	1.80	50	25	.700	1,000	N
GC172151	.063	3.00	50	--	.08	--	2.80	70	41	1.500	700	N
GC180450	--	.30	10	--	--	--	1.60	N	--	.500	150	N
GC180550	--	.50	7	--	--	--	1.50	30	--	.500	200	N
GC180750	--	1.00	10	--	--	--	1.20	30	--	.200	200	N
GC180850	--	1.50	15	--	--	--	2.00	50	--	.500	700	N
GC180950	--	.70	7	--	--	--	1.80	50	--	.300	150	N
GC250250	.029	3.00	30	--	.06	--	1.63	70	36	1.500	700	N
GC171350	.034	1.50	15	--	.10	--	1.40	50	28	.500	200	N
GC171750	.090	1.50	10	--	.05	--	.60	N	25	1.500	200	N
GC009051	.062	3.00	20	--	.05	--	3.10	50	46	2.000	500	N
GC009751	.130	2.00	20	--	.02	--	2.30	N	120	2.000	500	N
GC171150	.066	2.00	20	--	.05	--	2.20	30	69	1.000	300	N
GC250150	<.001	7.00	30	--	.42	--	2.31	50	19	3.000	700	3
GC009451	.060	3.00	20	--	.05	--	2.40	N	43	1.500	300	N
GC171550	.057	3.00	30	--	.06	--	2.30	50	33	1.000	700	N
GC244950	.028	2.00	30	--	.05	--	2.51	70	25	1.500	700	N
GC008651	.013	2.00	20	--	.04	--	2.50	30	56	3.000	300	N
GC172250	.080	5.00	30	--	.06	--	2.30	150	26	2.000	500	N
GC172350	.041	3.00	20	--	.03	--	3.00	70	34	1.000	500	N
GC172450	.060	3.00	30	--	.57	--	2.30	200	54	1.000	700	N
GC073150	--	.30	N	.98	<.01	<.5	1.01	N	11	.200	100	N
GC171250	.029	1.00	10	--	.03	--	.90	30	13	.700	150	N
GC171850	.029	1.50	20	--	.06	--	1.60	50	17	1.000	700	N
GC180250	--	1.00	15	--	--	--	2.10	30	--	.500	300	N
GC180350	--	.70	15	--	--	--	2.00	70	--	.500	200	N
GC245050	.027	1.50	30	--	.04	--	2.76	30	24	1.500	700	3
GC245150	.034	3.00	30	--	.06	--	3.75	70	19	1.000	700	3
GC245250	.019	1.50	30	--	.04	--	3.25	50	21	.500	300	N
GC072750	.040	5.00	15	1.73	.01	.9	2.58	70	20	1.500	700	N
GC171650	.072	3.00	30	--	.48	--	2.70	200	24	.700	500	N
GC245350	.031	1.50	30	--	.05	--	2.84	30	44	.700	300	N
GC008251	.042	2.00	15	--	.03	--	2.20	30	21	1.000	200	N
GC072850	.050	3.00	15	.83	.03	1.3	2.29	<30	30	1.000	500	N
GC244550	.022	1.50	30	--	.16	--	1.93	30	22	1.500	500	N
GC244650	.018	2.00	30	--	.03	--	2.77	50	41	1.500	500	N
GC244850	.039	1.50	30	--	.36	--	2.00	30	32	1.500	500	N
GC074750	.080	5.00	20	--	.04	--	.95	N	15	1.500	700	N
GC074850	--	10.00	15	1.38	.05	3.1	.49	N	15	.700	3,000	N
GC077050	--	7.00	20	.64	.08	1.2	.83	N	41	1.000	1,000	N
GC074550	.050	2.00	15	1.35	.03	.9	2.98	N	30	.500	300	N
GC077150	--	3.00	20	1.17	.06	2.5	.70	N	35	1.000	500	N
GC077250	--	3.00	10	1.19	.07	1.2	1.04	N	21	.700	500	N
GC260150	<.001	5.00	20	--	.55	--	1.40	N	41	1.000	500	<3
GC072650	.050	1.50	10	1.21	.03	<.5	1.91	<30	22	1.000	200	N
GC022950	--	5.00	20	1.22	.02	.5	2.64	50	15	1.000	1,000	N
GC052650	--	1.50	20	--	--	--	1.90	50	--	3.000	300	N
GC072350	.050	3.00	15	1.32	.05	1.9	1.66	50	30	1.500	500	N
GC078250	.080	3.00	10	1.35	.04	1.3	1.42	30	30	3.000	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC171450	.70	15	N	20	.016	20	--	--	--	5	1.6	--
GC172050	1.00	30	N	50	.024	20	--	--	--	15	.3	--
GC172151	1.50	15	70	70	.060	20	--	--	--	20	.3	--
GC180450	.70	10	N	15	.008	15	--	--	--	N	--	--
GC180550	.50	10	N	15	.008	20	--	--	--	N	--	--
GC180750	.50	10	N	15	.045	15	--	--	--	7	--	--
GC180850	1.00	10	N	15	.450	20	--	--	--	10	--	--
GC180950	.50	10	N	10	.008	15	--	--	--	N	--	--
GC250250	.70	15	70	50	.087	20	--	--	--	15	.5	--
GC171350	.70	15	N	30	.024	10	--	--	--	7	.2	--
GC171750	.70	10	N	30	.030	15	--	--	--	10	.4	--
GC009051	2.00	N	--	30	.040	20	--	--	--	15	.1	--
GC009751	2.00	N	--	20	.040	15	--	--	--	10	.2	--
GC171150	2.00	15	N	30	.044	50	--	--	--	15	.4	--
GC250150	1.50	15	N	150	.131	20	--	--	--	20	.2	--
GC009451	1.00	N	--	30	.040	15	--	--	--	15	<.1	--
GC171550	1.50	15	N	50	.024	20	--	--	--	15	<.1	--
GC244950	1.50	30	70	15	.109	30	--	--	--	15	.1	--
GC008651	1.00	N	--	15	.040	N	--	--	--	7	.2	--
GC172250	1.50	30	150	150	.060	20	--	--	--	30	.2	--
GC172350	1.00	20	70	50	.024	30	--	--	--	15	<.1	--
GC172450	1.50	30	150	70	.090	50	--	--	--	20	.4	--
GC073150	.15	N	--	<5	--	N	35	<.08	<1	N	.2	40
GC171250	.30	10	N	15	.030	10	--	--	--	5	.8	--
GC171850	1.50	15	N	20	.024	20	--	--	--	10	.2	--
GC180250	.70	10	N	10	.024	15	--	--	--	7	--	--
GC180350	1.00	10	N	10	.030	20	--	--	--	7	--	--
GC245050	1.50	15	N	15	.065	20	--	--	--	7	--	--
GC245150	1.50	20	70	15	.092	70	--	--	--	15	<.1	--
GC245250	1.50	15	70	10	.026	15	--	--	--	7	.1	--
GC072750	2.00	<10	100	30	--	20	105	<.08	<1	10	.1	--
GC171650	2.00	20	300	20	.024	100	--	--	--	30	.8	30
GC245350	1.50	15	N	15	.031	30	--	--	--	10	.1	--
GC008251	1.50	15	--	30	.040	15	--	--	--	15	.4	--
GC072850	1.00	<10	N	20	--	20	95	<.08	<1	10	<.1	29
GC244550	.70	10	N	7	.087	20	--	--	--	10	.2	--
GC244650	1.00	15	N	15	.087	30	--	--	--	10	<.1	--
GC244850	1.00	10	N	15	.079	30	--	--	--	10	.2	--
GC074750	.70	N	--	50	--	10	<20	<.08	<1	15	<.1	25
GC074850	.50	N	--	150	--	10	20	<.08	<1	30	<.1	20
GC077050	1.00	<10	--	100	--	15	85	.09	<1	15	<.1	25
GC074550	.70	<10	--	<5	--	15	210	<.08	<1	5	.3	23
GC077150	1.50	<10	--	50	--	15	60	<.08	<1	10	.5	25
GC077250	1.50	<10	--	50	--	20	70	<.08	<1	15	<.1	31
GC260150	2.00	<10	--	50	.060	20	--	--	--	15	.4	--
GC072650	1.00	<10	N	10	--	15	75	.33	<1	7	.3	31
GC022950	3.00	10	N	10	--	15	100	<.08	<1	10	.2	29
GC052650	5.00	N	--	10	.080	30	--	--	--	10	--	--
GC072350	1.00	<10	N	10	--	15	80	<.08	<1	7	.4	27
GC078250	1.00	N	N	20	--	15	60	<.08	2	10	.1	20

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC171450	--	100	.150	--	--	50	30	3.0	50	200
GC172050	--	200	.700	--	--	100	50	7.0	100	500
GC172151	--	200	.300	--	--	70	50	5.0	100	150
GC180450	--	70	.070	--	--	20	10	1.5	50	100
GC180550	--	100	.070	--	--	30	15	2.0	--	100
GC180750	--	100	.100	--	--	20	20	2.0	25	150
GC180850	--	100	.150	--	--	70	50	5.0	75	150
GC180950	--	70	.100	--	--	20	15	2.0	--	150
GC250250	--	150	.300	--	--	150	50	7.0	95	300
GC171350	--	70	.300	--	--	50	30	5.0	50	500
GC171750	--	300	.200	--	--	70	30	3.0	25	100
GC009051	--	200	.150	--	--	70	30	5.0	60	150
GC009751	--	500	.150	--	--	100	20	3.0	60	100
GC171150	--	500	.300	--	--	100	30	5.0	50	150
GC250150	--	300	.700	--	--	300	30	3.0	81	300
GC009451	--	300	.150	--	--	70	15	1.5	75	150
GC171550	--	300	.500	--	--	100	50	7.0	100	300
GC244950	--	200	.300	--	--	70	30	5.0	60	300
GC008651	--	200	.100	--	--	70	15	1.5	70	30
GC172250	--	700	.700	--	--	150	50	7.0	100	500
GC172350	--	300	.500	--	--	70	50	7.0	150	300
GC172450	--	200	.300	--	--	100	70	10.0	100	300
GC073150	<.10	50	.050	--	1.13	10	N	N	12	50
GC171250	--	70	.150	--	--	30	20	3.0	25	200
GC171850	--	200	.300	--	--	70	30	5.0	25	300
GC180250	--	100	.100	--	--	30	30	3.0	25	100
GC180350	--	100	.100	--	--	30	30	3.0	50	150
GC245050	--	150	.150	--	--	70	20	3.0	60	200
GC245150	--	150	.200	--	--	70	30	5.0	70	200
GC245250	--	150	.150	--	--	70	20	3.0	50	150
GC072750	1.21	300	.500	16.55	2.37	150	20	2.0	68	300
GC171650	--	500	.300	--	--	100	50	7.0	150	300
GC245350	--	300	.150	--	--	70	20	3.0	80	300
GC008251	--	300	.150	--	--	100	30	3.0	30	100
GC072850	1.16	300	.200	9.21	2.64	70	20	3.0	70	150
GC244550	--	150	.150	--	--	50	20	3.0	70	300
GC244650	--	150	.150	--	--	70	20	5.0	70	300
GC244850	--	300	.150	--	--	70	20	3.0	70	200
GC074750	1.22	200	.300	5.60	1.54	150	15	2.0	82	50
GC074850	.83	50	.500	5.31	1.65	300	10	2.0	95	70
GC077050	1.02	150	.200	7.19	2.61	200	15	2.0	102	70
GC074550	1.45	300	.100	9.27	6.76	70	10	1.5	60	100
GC077150	.33	100	.300	12.79	1.80	200	10	2.0	113	50
GC077250	.54	200	.200	4.33	1.59	150	10	1.5	56	100
GC260150	--	150	.300	--	--	150	20	3.0	80	100
GC072650	1.19	200	.200	6.42	2.90	70	20	2.0	54	200
GC022950	.86	500	.500	--	1.65	150	10	2.0	54	150
GC052650	--	500	.200	--	--	30	20	2.0	50	150
GC072350	1.37	500	.300	12.50	2.49	70	20	2.0	52	50
GC078250	1.63	200	.200	10.02	3.01	70	15	1.5	64	150

Table 1. Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC078350	CA	INYO	36 23	116 41	73 9	RT 190 16 MI W DEATH VALLEY JCT; LGHT BRWN SILT UNDER DESERT PAVEMENT
GC250350	CA	INYO	36 25	117 34	66 6	RT 190 7 MI W PANAMINT SPR; DISINTEGRATED VOLCANICS, WHITE CLAY
GC250450	CA	INYO	36 28	117 52	66 6	RT 190 OWENS LAKE 5 MI S KEELER; SAND NEAR PLAYA
GC250550	CA	INYO	36 51	118 15	66 6	US 6-395 .7 MI S FISH HATCHERY N INDEPENDENCE; A HORIZON BY DITCH
GC250650	CA	INYO	37 23	118 40	66 6	US 395 10 MI W BISHOP IN PINE CR DRAINAGE; HYDROMORPHIC, FROM DITCH
GC023050	CA	KERN	35 23	117 53	71 4	AT KOEHN LAKE; DESERT LOAM, ALKALI
GC023150	CA	KERN	35 8	118 28	71 4	AT TEHACHAPI; DRY COLLUVIAL SOIL
GC060250	CA	KERN	35 30	119 38	70 7	JCT RT 33 AND UNNUMBERED RD 10 MI NW BUTTONWILLOW; SOIL NOT DESCRIBED
GC078150	CA	KERN	35 38	118 24	73 9	RT 178 AT LAKE ISABELLA; GRITTY LOAM OVER GRANITE
GC243850	CA	KERN	35 25	119 0	66 7	RT 99 AT RT 119 JCT, S BAKERSFIELD; SOIL NOT DESCRIBED
GC075250	CA	LAKE	38 50	122 42	73 8	RT 173 NEAR COBB; LOAM OVER PYROXENE ANDESITE
GC243950	CA	LOS ANGELES	34 35	118 43	66 7	I-5 5 MI N CASTAIC; SOIL NOT DESCRIBED
GC244050	CA	LOS ANGELES	34 1	118 25	66 7	I-405 AT CULVER CITY; SOIL NOT DESCRIBED
GC077850	CA	MADERA	36 56	120 3	73 9	RT 99 2 MI S MADERA; RED-BROWN SANDY LOAM
GC023350	CA	MARIN	37 54	122 34	71 4	MUIR WOODS; LITHOSOL
GC077350	CA	MENDOCINO	39 40	123 29	73 9	US 101 1.5 MI S LEYTONVILLE; LITHOSOL ON SANDSTONE
GC077450	CA	MENDOCINO	39 6	123 12	73 9	US 101 4 MI S UKIAH; LIGHT BROWN LOAM
GC077750	CA	MERCED	37 25	120 46	73 9	RT 99 4 MI S MERCED CO LINE; SANDY ALLUVIUM
GC062550	CA	MODOC	41 42	120 22	70 10	US 395 1 MI S DAVIS CREEK; TAN SILT IN BASALTIC ROCKS
GC062650	CA	MODOC	41 12	120 5	70 10	RT 81 8 MI S EAGLEVILLE; DARK SILT LITHOSOL OVER BASALT
GC270350	CA	MODOC	41 40	121 21	68 9	ON RD TO LAVA BEDS N M FROM PEREZ 3 MI W RT 139; B HORIZON SOIL
GC270450	CA	MODOC	41 12	120 59	68 9	CO. RD OFF RT 139-299 NEAR ADIN; B HORIZON SOIL
GC005051	CA	MONO	37 55	118 45	62 10	US 6 10 MI E LEE VINING 1/2 MI N HI; UNCONSOLIDATED SAND 8-IN. DEPTH
GC250750	CA	MONO	37 51	119 7	66 6	US 395 5 MI S LEE VINING AT JUNE LAKE TURNOFF; HIGH IN PUMICE
GC250850	CA	MONO	38 16	119 13	66 6	US 395 AT RT 108 JCT N BRIDGEPORT; BLACK TOP SOIL NEAR STREAM
GC230950	CA	MONTEREY	36 22	121 45	66 7	HEADWATERS N FORK RATTLESNAKE CR OF CARMEL R; SOIL NOT DESCRIBED
GC243250	CA	MONTEREY	36 31	121 54	66 7	RT 1 1 MI S CARMEL; SOIL NOT DESCRIBED
GC243350	CA	MONTEREY	36 1	121 32	66 7	RT 1 1 MI S LUCIA; SOIL NOT DESCRIBED
GC242650	CA	NEVADA	39 20	120 37	66 7	I-80 AT DONNER PASS SUMMIT; SOIL NOT DESCRIBED
GC242750	CA	NEVADA	39 14	121 2	66 7	I-40 AT CISCO; SOIL NOT DESCRIBED
GC270750	CA	PLUMAS	40 12	121 7	68 9	RT 89 ON W SIDE LAKE ALMANOR, SE PRATTVILLE; B HORIZON SOIL
GC270850	CA	PLUMAS	39 52	120 46	68 9	RT 70-88 S OF SPRING GARDEN; B HORIZON SOIL
GC072550	CA	RIVERSIDE	33 52	115 53	73 3	NEAR CENTER OF JOSHUA TREE NAT MONUMENT; ALLUVIAL SAND, ALKALI
GC242550	CA	RIVERSIDE	33 50	116 33	66 7	I-10 SAN GORGONIO PASS, NEAR PALM SPRINGS EXIT; SOIL NOT DESCRIBED
GC244350	CA	RIVERSIDE	33 38	115 46	66 7	I-10 AT CHIRIACO SUMMIT; SOIL NOT DESCRIBED
GC244450	CA	RIVERSIDE	33 37	114 40	66 7	RT 78 3 MI S BLYTHE; SOIL NOT DESCRIBED
GC044650	CA	SAN BERNARDINO	34 7	117 22	67 2	I-10 1 MI SW RIALTO EXIT; ORANGE-BROWN SANDY, 10-IN. DEPTH IN ORCHARD
GC044750	CA	SAN BERNARDINO	34 53	117 4	67 2	I-15 3 MI S BARSTOW; GRAY-BROWN DESERT SOIL ON RHYOLITE
GC044850	CA	SAN BERNARDINO	35 5	116 9	67 2	I-15 4 MI SW RASOR EXIT; SAND DERIVED FROM GRANITE
GC044950	CA	SAN BERNARDINO	35 29	115 27	67 2	I-15 MOUNTAIN PASS AT BAILEY EXIT; MED BROWN ON PRECAMBRIAN
GC052750	CA	SAN BERNARDINO	34 30	115 38	66 11	BRISTOL LAKE NEAR AMBOY; SOIL NOT DESCRIBED
GC072450	CA	SAN BERNARDINO	35 36	116 15	73 3	RT 127 5 MI SW JCT RT 190 AT SALT SPRINGS; SANDY LOAM, DESERT PAVEMENT
GC062450	CA	SAN JOAQUIN	38 8	121 8	70 7	RT 88 5 MI N WATERLOO; SOIL NOT DESCRIBED
GC023250	CA	SAN LUIS OBISPO	35 39	120 23	71 4	AT SHANDON; ALLUVIAL SOIL
GC243450	CA	SAN LUIS OBISPO	35 37	121 11	66 7	RT 1 AT SAN SIMEON; SOIL NOT DESCRIBED
GC243550	CA	SAN LUIS OBISPO	35 3	120 28	66 7	RT 166 2 MI W TWITCHELL RESERVOIR; SOIL NOT DESCRIBED
GC074350	CA	SAN MATEO	37 46	122 27	73 7	IN SAN FRANCISCO; SOIL OVER DEBRIS & COLLUVIUM
GC243650	CA	SANTA BARBARA	34 55	119 40	66 7	RT 166 AT NEW CUYAMA; SOIL NOT DESCRIBED
GC243050	CA	SANTA CLARA	37 25	122 10	66 7	IN PALO ALTO; SOIL NOT DESCRIBED
GC243150	CA	SANTA CLARA	36 58	121 33	66 7	US 101 AT RT 152 EXIT, GILROY; SOIL NOT DESCRIBED

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC078350	7.00	16.5	20	500	N	.6	3.7	11.21	--	5	30.0	10.0
GC250350	5.00	7.9	20	500	N	--	--	6.20	N	15	70.0	30.0
GC250450	3.00	31.0	300	700	N	--	--	7.40	N	15	70.0	30.0
GC250550	7.00	11.0	N	700	1.0	--	--	2.10	150	15	30.0	15.0
GC250650	3.00	2.2	N	1,500	1.0	--	--	1.10	N	3	15.0	10.0
GC023050	>10.00	2.3	20	1,000	N	<.5	--	4.20	N	10	15.0	100.0
GC023150	10.00	4.4	20	700	1.5	<.5	1.5	3.00	N	10	50.0	20.0
GC060250	10.00	8.6	50	1,000	1.0	--	--	2.38	N	10	100.0	30.0
GC078150	10.00	4.9	20	1,000	1.5	<.5	.4	.95	N	5	20.0	10.0
GC243850	7.00	9.2	N	500	N	--	--	2.26	N	15	20.0	20.0
GC075250	>10.00	3.0	N	500	N	2.1	2.2	.20	N	15	500.0	150.0
GC243950	7.00	8.3	50	500	N	--	--	2.10	N	15	30.0	50.0
GC244050	7.00	3.1	N	700	N	--	--	1.57	N	15	30.0	30.0
GC077850	>10.00	4.5	<20	700	1.5	.6	--	2.82	N	10	50.0	20.0
GC023350	10.00	13.2	50	500	N	1.2	3.4	.28	<150	20	150.0	100.0
GC077350	10.00	3.2	N	300	N	2.6	3.8	2.13	N	50	100.0	200.0
GC077450	10.00	2.5	50	500	N	<.5	1.6	.55	N	15	100.0	50.0
GC077750	10.00	1.4	<20	1,000	1.5	<.5	.7	2.19	N	<3	10.0	5.0
GC062550	>10.00	5.5	N	1,000	1.0	--	--	1.87	<150	30	70.0	50.0
GC062650	>10.00	8.7	<20	700	<1.0	--	--	4.42	N	15	70.0	50.0
GC270350	>10.00	--	<20	1,000	1.0	--	--	2.80	N	15	50.0	50.0
GC270450	>10.00	2.5	N	700	1.0	--	--	3.10	N	30	70.0	150.0
GC005051	7.00	--	N	300	3.0	--	--	.65	N	N	15.0	15.0
GC250750	3.00	6.7	30	500	1.5	--	--	1.00	N	3	15.0	15.0
GC250850	5.00	16.0	N	1,000	1.0	--	--	2.50	N	15	30.0	70.0
GC230950	7.00	1.3	N	700	N	--	--	2.50	150	15	70.0	15.0
GC243250	5.00	2.9	N	700	N	--	--	3.75	N	3	30.0	300.0
GC243350	3.00	9.8	N	300	N	--	--	1.09	N	15	150.0	30.0
GC242650	7.00	3.3	N	300	N	--	--	3.32	N	15	30.0	30.0
GC242750	7.00	69.0	N	500	N	--	--	.18	N	7	30.0	70.0
GC270750	>10.00	8.1	<20	700	1.0	--	--	1.00	N	30	200.0	150.0
GC270850	>10.00	4.3	<20	700	N	--	--	1.90	N	20	30.0	150.0
GC072550	10.00	1.3	N	700	1.5	<.5	2.0	1.50	200	10	50.0	20.0
GC244250	7.00	4.2	N	700	N	--	--	1.56	150	15	20.0	30.0
GC244350	7.00	7.0	70	700	N	--	--	1.04	N	7	15.0	15.0
GC244450	3.00	4.3	N	300	N	--	--	1.51	N	7	15.0	15.0
GC044650	>10.00	7.0	N	700	2.0	--	--	2.20	150	15	50.0	20.0
GC044750	3.00	2.7	N	500	1.5	--	--	2.10	N	7	70.0	15.0
GC044850	7.00	2.8	20	700	2.0	--	--	1.30	150	15	30.0	20.0
GC044950	>10.00	3.2	20	500	N	--	--	5.60	--	15	30.0	30.0
GC052750	5.00	9.5	50	500	N	<.5	--	4.06	--	7	50.0	15.0
GC072450	>10.00	3.5	<20	1,500	1.5	--	.8	1.39	<150	15	50.0	20.0
GC062450	10.00	3.2	N	1,000	1.0	--	--	1.63	30.0	<3	30.0	5.0
GC023250	10.00	2.1	<20	1,500	1.5	<.5	.3	.29	N	15	1,500.0	30.0
GC243450	3.00	6.1	N	300	N	--	--	1.26	N	7	70.0	30.0
GC243550	3.00	5.0	N	300	N	--	--	1.79	N	20	200.0	100.0
GC074350	7.00	9.2	30	1,500	N	.7	.6	.68	N	7	150.0	15.0
GC243650	3.00	5.9	N	700	N	--	--	1.48	N	15	20.0	30.0
GC243050	7.00	6.0	N	700	N	--	--	.67	N	7	150.0	30.0
GC243150	3.00	8.2	N	700	N	--	--					

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC078350	--	1.50	20	1.20	.03	2.1	1.57	<30	30	3.000	300	N
GC250350	.036	3.00	30	--	.03	--	1.71	50	30	3.000	700	N
GC250450	.060	3.00	30	--	.04	--	1.97	30	67	1.500	500	N
GC250550	.010	3.00	30	--	.11	--	3.10	70	24	1.000	700	3
GC250650	.064	1.50	20	--	.03	--	3.35	30	16	.300	500	N
GC023050	--	5.00	20	1.52	.04	<.5	1.76	N	20	1.500	500	N
GC023150	.060	5.00	20	1.19	.08	.7	1.82	50	22	1.000	500	N
GC060250	.045	3.00	15	--	.05	--	1.85	50	40	1.500	300	3
GC078150	.040	2.00	20	1.52	.07	<.5	3.27	N	24	.500	700	N
GC243850	.048	3.00	30	--	.32	--	2.23	50	50	1.500	700	3
GC075250	--	7.00	50	1.77	.06	6.0	.43	N	20	.500	500	N
GC243950	.019	3.00	30	--	.08	--	2.48	70	54	2.000	700	3
GC244050	.033	3.00	30	--	.64	--	2.31	50	14	1.500	700	N
GC077850	--	5.00	20	1.57	.02	.9	1.68	N	32	1.500	700	N
GC023350	--	5.00	20	1.47	.11	1.1	1.95	50	45	1.000	500	N
GC077350	--	10.00	30	2.01	.08	1.8	.68	N	15	1.000	2,000	N
GC077450	--	3.00	20	1.45	.50	<.5	1.71	<30	30	1.000	500	N
GC077550	--	1.50	20	1.00	.01	<.5	2.59	N	11	.500	200	N
GC062550	.015	7.00	20	--	.02	--	1.06	50	23	.700	1,500	N
GC062650	.061	3.00	20	--	.18	--	1.18	30	17	1.500	700	N
GC270350	.022	7.00	30	--	.04	--	2.20	30	39	2.000	700	N
GC270450	.020	7.00	30	--	.07	--	.60	50	22	1.500	1,000	<3
GC005051	--	1.50	30	--	--	--	3.00	50	--	.500	300	N
GC250750	.018	1.50	30	--	.15	--	3.34	30	30	.300	300	N
GC250850	.032	3.00	30	--	.82	--	1.77	30	34	1.500	700	3
GC230950	.059	3.00	30	--	.08	--	2.02	70	29	1.500	500	N
GC243250	.072	1.50	20	--	.62	--	2.22	N	20	.300	150	N
GC243350	.023	3.00	30	--	1.50	--	1.58	N	42	3.000	700	N
GC242650	.056	3.00	30	--	.70	--	1.02	N	15	1.500	700	N
GC242750	.044	3.00	30	--	.18	--	2.34	N	10	1.500	300	3
GC270750	<.001	7.00	20	--	.09	--	.75	N	26	.700	700	3
GC270850	.004	7.00	30	--	.35	--	.50	N	15	2.000	1,000	3
GC072550	.070	5.00	15	1.62	.01	<.5	2.47	150	5	1.000	500	N
GC244250	--	2.00	30	--	.06	--	2.75	70	13	1.500	700	N
GC244350	.035	1.50	30	--	.02	--	3.84	70	12	.300	300	N
GC244450	.027	1.50	15	--	.02	--	1.76	50	14	.700	300	N
GC044650	.025	3.00	30	--	.02	--	2.20	70	17	.700	500	N
GC044750	.044	1.50	20	--	.02	--	1.60	30	22	.700	200	N
GC044850	.002	1.50	30	--	.04	--	3.00	50	13	.500	300	N
GC044950	.029	5.00	30	--	.03	--	2.50	70	28	.700	300	N
GC052750	.058	2.00	30	--	.13	--	2.30	70	100	3.000	500	3
GC072450	.060	5.00	20	1.43	.03	.6	2.44	50	20	1.500	700	N
GC062450	.010	2.00	15	--	.04	--	1.73	30	16	.500	700	N
GC023250	--	1.00	20	1.11	.04	.9	2.54	N	10	.500	150	N
GC243450	.002	3.00	15	--	.15	--	.88	N	39	1.500	1,000	N
GC243550	.050	1.50	30	--	.10	--	1.54	30	12	1.500	200	3
GC074350	--	5.00	15	.92	.23	<.5	1.07	N	14	2.000	2,000	N
GC243650	.041	1.50	20	--	.07	--	2.80	30	23	.700	300	3
GC243050	.032	3.00	30	--	1.00	--	1.55	N	30	1.500	500	N
GC243150	.004	1.50	15	--	.07	--	1.63	N	18	.300	300	5

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC078350	2.00	<10	N	5	--	15	75	<.08	<1	5	.2	19
GC250350	1.50	10	N	30	.131	20	--	--	--	15	.3	--
GC250450	3.00	15	N	15	.083	70	--	--	--	10	1.5	--
GC250550	3.00	10	70	7	.083	30	--	--	--	15	.4	--
GC250650	1.50	10	--	7	--	30	--	--	--	7	.2	--
GC023050	3.00	<10	N	7	--	10	75	<.08	<1	15	.3	25
GC023150	2.00	<10	N	15	--	20	80	<.08	<1	15	.2	28
GC060250	1.50	10	N	50	--	15	--	--	--	15	.6	--
GC078150	1.50	<10	--	5	--	20	155	<.08	<1	10	<.1	32
GC243850	1.50	15	N	15	.127	15	--	--	--	15	.2	--
GC075250	.50	<10	--	200	--	20	40	.16	<1	15	.1	19
GC243950	1.50	N	70	15	.113	70	--	--	--	15	.4	--
GC244050	2.00	10	70	15	.131	150	--	--	--	15	.1	--
GC077850	2.00	<10	--	20	--	20	80	<.08	<1	15	.2	28
GC023350	1.50	<10	70	100	--	50	50	<.08	2	15	.5	26
GC077350	.70	N	--	50	--	N	20	<.08	<1	30	.3	18
GC077450	1.50	10	N	30	--	15	70	<.08	<1	15	.1	30
GC077750	2.00	<10	--	<5	--	20	95	<.08	<1	5	.5	34
GC062550	1.50	10	70	20	--	15	--	--	--	15	.3	--
GC062650	2.00	N	--	30	--	15	--	--	--	15	<.1	--
GC270350	2.00	10	N	50	.024	10	--	--	--	20	<.1	--
GC270450	1.50	10	N	50	.024	15	--	--	--	30	<.1	--
GC005051	3.00	15	N	10	.016	30	--	--	--	5	--	--
GC250750	3.00	10	N	5	.031	30	--	--	--	5	.3	--
GC250850	3.00	10	N	15	.118	30	--	--	--	15	.8	--
GC230950	1.50	10	70	7	.070	15	--	--	--	15	.1	--
GC243250	1.50	N	N	7	.135	50	--	--	--	5	.3	--
GC243350	2.00	N	N	150	.087	10	--	--	--	15	.2	--
GC242650	1.50	N	N	15	.083	30	--	--	--	15	.4	--
GC242750	.70	10	N	15	.070	150	--	--	--	15	1.2	--
GC270750	.70	10	--	100	.024	15	--	--	--	20	.1	--
GC270850	1.00	<10	150	30	.080	10	--	<.08	<1	15	<.1	32
GC072550	2.00	<10	70	20	--	15	105	--	--	15	.3	--
GC244250	2.00	N	70	15	.109	70	--	--	--	15	.2	--
GC244350	3.00	N	70	7	.122	20	--	--	--	7	<.1	--
GC244450	.70	10	N	7	.074	30	--	--	--	7	.3	--
GC044650	3.00	10	70	20	.060	15	--	--	--	15	.2	--
GC044750	2.00	<10	--	10	.030	15	--	--	--	7	.1	--
GC044850	2.00	10	--	7	.040	20	--	--	--	7	<.1	--
GC044950	2.00	10	70	30	.060	30	--	--	--	15	.3	--
GC052750	2.00	10	N	20	.110	30	--	--	--	15	.2	--
GC072450	2.00	<10	N	7	--	20	120	<.08	<1	10	.2	25
GC062450	1.50	10	N	20	--	15	--	--	--	15	.1	--
GC023250	2.00	<10	--	20	--	15	95	<.08	<1	15	<.1	33
GC243450	1.00	N	N	70	.065	15	--	--	--	15	1.2	--
GC243550	.70	10	N	30	.148	15	--	--	--	7	.2	--
GC074350	.70	<10	--	70	--	300	45	<.08	<1	15	<.1	34
GC243650	1.00	15	N	15	.105	15	--	--	--	7	.5	--
GC243050	1.50	N	N	30	.118	30	--	--	--	15	.4	--
GC243150	.70	N	N	30	.135	70	--	--	--	7	.7	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued.

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC078350	.82	500	.150	11.22	2.55	50	15	1.5	60	50
GC250350	--	300	.300	--	--	150	30	3.0	95	200
GC250450	--	500	.150	--	--	150	30	3.0	100	150
GC250550	--	300	.200	--	--	150	30	3.0	76	300
GC250650	--	200	1.000	--	--	50	15	2.0	33	150
GC023050	1.05	700	.300	6.75	1.80	300	20	3.0	86	70
GC023150	1.49	300	.200	11.27	1.98	150	20	3.0	92	100
GC060250	--	500	.300	--	--	150	20	2.0	84	200
GC078150	3.37	150	.300	22.33	4.79	50	15	3.0	59	300
GC243850	--	300	.300	--	--	70	30	3.0	150	150
GC075250	1.64	30	.500	--	3.41	200	15	2.0	65	100
GC243950	--	300	.200	--	--	70	30	3.0	140	100
GC244050	--	200	.300	--	--	70	30	3.0	130	150
GC077850	.72	300	.500	8.68	3.81	150	10	1.5	81	150
GC023350	5.12	70	.200	6.34	3.12	150	30	5.0	113	200
GC077350	.68	100	1.000	--	.78	500	50	5.0	164	70
GC077450	.92	150	.300	6.74	3.08	150	15	3.0	80	150
GC077750	.13	500	.150	9.21	3.32	50	10	1.5	47	100
GC062550	--	500	.700	--	--	200	30	3.0	72	150
GC062650	--	700	.300	--	--	100	20	3.0	104	70
GC270350	--	500	.500	--	--	100	30	3.0	50	150
GC270450	--	500	.700	--	--	150	30	3.0	80	100
GC005051	--	200	.070	--	--	30	30	3.0	20	70
GC250750	--	150	.700	--	--	70	30	3.0	40	150
GC250850	--	500	.300	--	--	150	30	3.0	85	150
GC230950	--	300	.300	--	--	150	30	3.0	85	150
GC243250	--	300	.150	--	--	30	10	1.5	50	100
GC243350	--	70	.150	--	--	70	30	3.0	110	70
GC242650	--	300	.150	--	--	150	30	3.0	100	100
GC242750	--	70	.150	--	--	150	30	3.0	110	150
GC270750	--	150	.700	--	--	150	30	5.0	90	150
GC270850	--	200	.500	--	--	150	15	1.5	80	70
GC072550	1.56	150	.200	30.77	2.52	100	50	5.0	56	200
GC244250	--	200	.150	--	--	70	30	3.0	70	150
GC244350	--	150	.150	--	--	30	30	3.0	40	100
GC244450	--	100	.150	--	--	30	15	3.0	50	300
GC044650	--	700	.300	--	--	150	50	5.0	70	200
GC044750	--	500	.150	--	--	100	30	3.0	60	70
GC044850	--	700	.200	--	--	70	30	3.0	50	150
GC044950	--	300	.300	--	--	100	30	3.0	80	150
GC052750	--	700	.150	--	--	70	30	3.0	50	70
GC072450	1.49	500	.300	14.83	3.15	150	20	3.0	64	200
GC062450	--	500	.500	--	--	100	20	2.0	62	150
GC023250	.99	500	.100	3.78	2.18	50	10	1.5	25	50
GC243450	--	70	.300	--	--	70	20	3.0	50	150
GC243550	--	70	.150	--	--	70	30	3.0	70	300
GC074350	7.43	200	.700	7.69	2.04	150	20	3.0	212	50
GC243650	--	150	.200	--	--	50	30	3.0	70	200
GC243050	--	150	.300	--	--	150	30	3.0	110	100
GC243150	--	150	.150	--	--	70	20	3.0	100	150

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date colln.	Site and Soil Descriptions
GC074950	CA	SHASTA	40 30	121 55	73 8	RT 44 W OF SHINGLETOWN; FOREST SOIL OVER PYROXENE ANDESITE
GC075050	CA	SHASTA	40 41	122 44	73 8	RT 299 NEAR BUCKHORN MT SUMMIT; SOIL OVER TONALITE
GC270550	CA	SHASTA	40 55	121 34	68 9	NEAR JCT RT 299 AND RT 89; B HORIZON SOIL
GC270650	CA	SHASTA	40 31	121 30	68 9	IN LASSEN VOLCANIC N PK. 3 MI SE MANZANITA LAKE; B HORIZON SOIL
GC077650	CA	SOLANO	38 15	122 0	73 9	RT 12 3 MI E FAIRFIELD; LIGHT BROWN GRAVELLY LOAM, SALINE
GC242950	CA	SOLANO	38 22	122 0	66 7	I-80-RT 12 JCT W OF FAIRFIELD; SOIL NOT DESCRIBED
GC077550	CA	SONOMA	38 38	122 39	73 9	RT 128 3.8 MI NW CALISTOGA; BLOCKY YELLOW LOAM
GC075150	CA	TEHAMA	40 17	122 17	73 8	I-5 7 MI N RED BLUFF EXIT; SOIL ON GRAVELLY ALLUVIUM
GC077950	CA	TULARE	36 30	119 31	73 9	RT 99 2 MI S KINGSBURG; SANDY LIGHT BROWN LOAM
GC078050	CA	TULARE	35 53	119 17	73 9	RT 99 AT EARLMORT EXIT; CULTIVATED SANDY LOAM
GC074450	CA	TUOLUMNE	38 2	120 14	73 7	RT 108 NEAR CONFIDENCE; LOAM OVER GRANITE
GC242850	CA	YOLO	38 34	121 37	66 7	RT 20 1 MI S NEVADA CITY; SOIL NOT DESCRIBED
GC074650	CA	YUBA	39 14	121 36	73 7	RT 70 5 MI N MARYSVILLE; CLAYEY ALLUVIUM
GC157150	CO	ARAPAHOE	39 37	104 15	63 10	US 40 2 MI N STRASBURG; CALCIMORPHIC, OVER LIMESTONE
GC181150	CO	ARCHULETA	37 12	107 0	64 7	US 160 1 MI E JCT US 84 E PAGOSA SPRINGS; VERY RICH BLACK LOAM
GC277550	CO	BACA	37 10	102 35	69 1	US 385 5 MI N CAMPO; FINE SANDY SILT
GC016750	CO	CHAFFEE	38 51	106 1	62 5	US 285 30 MI N SALIDA MCGEE GULCH; BLACK SOIL ON GRANITE
GC028250	CO	CHAFFEE	38 33	106 4	72 8	US 285 2 MI W JCT US 50; ALLUVIAL SOIL
GC025050	CO	CHEYENNE	38 49	102 33	71 10	US 40 AT FIRSTVIEW; SHORT GRASS PRAIRIE SOIL
GC156950	CO	CHEYENNE	38 55	103 9	63 10	US 40 26 MI S HUGO; CALCIMORPHIC, OVER LIMESTONE
GC033150	CO	CLEAR CREEK	39 47	105 47	65 8	US 40 ON BERTHOUD PASS; BROWN ON GRANITE GNEISS RUBBLE
GC033250	CO	CLEAR CREEK	40 3	106 9	65 8	US 40 3 MI W HOT SULPHUR SPRINGS; ORANGE-BROWN SANDY GRAVEL
GC170050	CO	DOUGLAS	39 15	104 53	64 5	I-25 AT LARKSPUR EXIT; DARK FOREST SOIL
GC066850	CO	EAGLE	39 39	106 51	72 9	RT 6.5 MI W EAGLE; LIGHT BROWN SILT OVER MASSIVE GYPSUM BEDS
GC086150	CO	EL PASO	38 45	104 27	75 6	JCT MILNE & DRENNAN RDS, 6 MI S 5 MI W ELLIOT; WINDBLOWN SAND & SILT
GC190150	CO	EL PASO	38 36	104 42	65 6	I-25 4 MI S FOUNTAIN; LITHOSOL
GC085050	CO	ELBERT	39 33	104 24	75 6	E END OF AIRLINE RD AT JCT CO. RD GOING S TO RT 86; SILTY CLAY LOAM
GC085150	CO	ELBERT	39 8	104 9	75 6	US 24 1 MI S RAMAH; LOESS, SHORT GRASS PRAIRIE
GC066750	CO	GARFIELD	39 33	107 40	72 9	0.4 MI N SILT JCT & US 6; LIGHT BROWN SILT ON GRAVEL
GC185150	CO	GRAND	40 4	106 23	65 6	US 40 1 MI E KREMMLING; BROWN SILT 8-IN. DEPTH, RICH IN ROOT MATERIAL
GC016550	CO	GUNNISON	38 28	107 10	62 5	US 50 15 MI W GUNNISON; BLACK SOIL
GC016651	CO	GUNNISON	38 27	106 21	62 5	SITE AND SOIL DESCRIPTION NOT RECORDED
GC028150	CO	GUNNISON	38 31	106 45	72 8	US 50 1 MI NW PARLIN; LIGHT BROWN LOAM
GC231450	CO	HINSDALE	37 34	107 12	66 8	WILLIAMS CR DRAINAGE SAN JUAN PRIMITIVE AREA; SOIL NOT DESCRIBED
GC016950	CO	JEFFERSON	39 22	105 15	62 5	SITE AND SOIL DESCRIPTION UNKNOWN
GC155150	CO	JEFFERSON	39 39	105 12	63 7	US 285 2 MI S MORRISON; LITHOSOL, FROM IGNEOUS AND METAMORPHIC ROCKS
GC085350	CO	KIOWA	38 26	103 23	75 6	CO. RD 8 MI N ARLINGTON OFF RT 96; BROWN CALCIC SOIL
GC156850	CO	KIOWA	38 20	102 40	63 10	US 287 20 MI N LAMAR; CALCIMORPHIC, OVER LIMESTONE
GC016450	CO	LA PLATA	37 25	107 50	62 5	US 550 11 MI N DURANGO; BLACK SOIL
GC073350	CO	LA PLATA	37 13	107 41	73 3	US 160 7 MI E JCT US 550; BROWN CLAY
GC181050	CO	LA PLATA	37 10	107 40	64 7	US 160 2 MI W BAYFIELD; BLACK SHALEY SOIL 1-4 IN. DEPTH
GC028350	CO	LARIMER	40 28	104 59	72 9	1 MI E JCT I-25 & RT 392; LOESS
GC075350	CO	LARIMER	40 57	105 21	73 9	US 287 1 MI S VIRGINIA DALE; DARK LOAM OVER GRANITE
GC085750	CO	LAS ANIMAS	37 8	104 1	75 6	US 160 8 MI W JCT 389 AT TRINCHERS CREEK; ALLUVIUM FROM SANDSTONE
GC085950	CO	LAS ANIMAS	37 47	104 21	75 6	RT 10 1 MI W CO. LINE IN LAS ANIMAS CO.; SILT LOAM ON SILTSTONE
GC190350	CO	LAS ANIMAS	37 20	104 35	65 6	I-25 4 MI S AGUILAR; AZONAL RED CLAY
GC085250	CO	LINCOLN	38 51	103 42	75 6	JCT RT 94 & 71 AT PUNKIN CENTER; RESIDUAL REDDISH SANDY LOAM
GC157050	CO	LINCOLN	39 16	103 42	63 10	US 40 1 MI N LIMON; CALCIMORPHIC, OVER LIMESTONE
GC044350	CO	LOGAN	40 48	102 57	66 10	US 138 AT PROCTOR; BROWN SILTY CLAY LOAM
GC016150	CO	MESA	38 59	108 26	62 5	US 6-24 10 MI E GRAND JUNCTION; CLAY SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC074950	10.00	2.2	N	150	N	1.4	3.8	.15	N	20	150.0	150.0
GC075050	>10.00	.3	N	1,000	N	<.5	.6	2.51	N	7	100.0	7.0
GC270550	10.00	3.5	N	300	N	--	--	2.00	N	50	150.0	100.0
GC270650	>10.00	3.7	20	1,000	1.0	--	--	2.20	N	10	30.0	30.0
GC277650	7.00	10.8	50	1,000	N	<.5	1.1	1.47	N	10	70.0	30.0
GC242950	7.00	6.7	30	700	N	--	--	1.09	N	15	70.0	30.0
GC077550	10.00	3.3	<20	700	N	.6	2.4	1.24	N	30	700.0	30.0
GC075150	>10.00	5.2	<20	1,000	N	<.5	2.4	.90	N	20	200.0	70.0
GC077950	>10.00	.4	<20	1,000	2.0	<.5	.5	2.15	N	5	30.0	10.0
GC078050	10.00	2.8	<20	700	N	<.5	.3	2.43	N	5	20.0	10.0
GC074450	>10.00	1.3	50	500	N	.6	1.8	.37	N	7	20.0	20.0
GC242850	7.00	11.0	50	300	N	--	--	.71	N	20	150.0	70.0
GC074650	10.00	4.4	<20	500	1.5	.7	1.1	2.65	N	20	200.0	70.0
GC157150	7.00	7.5	30	700	1.5	--	--	.76	N	7	50.0	20.0
GC181150	5.00	--	30	200	N	--	--	1.40	N	10	30.0	10.0
GC277550	5.00	1.3	<20	700	N	--	--	1.00	N	3	10.0	7.0
GC016750	>10.00	--	N	1,000	2.0	--	--	1.60	N	15	50.0	70.0
GC028250	10.00	4.0	<20	1,000	2.0	2.3	2.3	4.72	<150	7	30.0	30.0
GC025050	7.00	5.7	20	1,000	1.5	.8	2.3	3.09	<150	7	70.0	30.0
GC156950	7.00	12.0	30	700	1.5	--	--	1.00	N	10	50.0	20.0
GC033150	>10.00	6.6	N	700	5.0	--	--	.70	150	15	50.0	30.0
GC033250	>10.00	3.2	N	700	N	--	--	.90	N	10	30.0	15.0
GC170050	>10.00	3.2	N	2,000	3.0	--	--	.72	200	5	20.0	15.0
GC066850	5.00	2.2	<20	700	N	<.5	1.4	11.23	N	10	50.0	20.0
GC086150	5.00	2.0	N	1,000	1.0	<.5	.5	.17	N	N	7.0	2.0
GC190150	5.00	2.1	N	700	5.0	--	--	.65	N	5	20.0	10.0
GC085050	5.00	4.7	N	700	1.0	<.5	1.0	.46	N	7	20.0	15.0
GC085150	3.00	4.1	20	700	N	<.5	1.7	1.76	N	5	50.0	7.0
GC066750	7.00	4.6	20	1,000	1.5	<.5	.8	1.98	<150	5	20.0	15.0
GC185150	5.00	7.7	N	700	N	--	--	1.14	150	10	30.0	20.0
GC016550	7.00	--	50	700	2.0	--	--	1.30	N	10	70.0	30.0
GC016651	7.00	--	30	1,500	3.0	--	--	1.10	N	7	30.0	20.0
GC028150	10.00	3.1	20	1,000	3.0	<.5	1.3	.83	<150	10	50.0	15.0
GC231450	5.00	16.0	N	700	N	--	--	2.22	N	15	30.0	50.0
GC016950	7.00	--	N	1,000	5.0	--	--	1.10	300	10	30.0	50.0
GC155150	7.00	10.0	N	700	2.0	--	--	2.73	200	7	50.0	50.0
GC085350	5.00	11.6	50	1,000	1.0	1.7	.9	3.10	N	10	50.0	20.0
GC156850	7.00	7.6	30	700	N	--	--	1.00	N	10	70.0	20.0
GC016450	>10.00	--	30	500	2.0	--	--	.89	<150	15	100.0	50.0
GC073350	10.00	3.3	20	500	1.5	1.3	1.8	1.00	N	10	50.0	50.0
GC181050	7.00	--	20	700	N	--	--	2.86	N	10	50.0	20.0
GC028350	5.00	7.9	50	500	1.0	.8	2.3	3.35	N	7	30.0	20.0
GC075350	7.00	2.2	<20	500	2.0	1.1	1.5	8.66	200	20	20.0	50.0
GC085750	3.00	7.8	N	500	N	.5	3.4	4.64	N	7	50.0	20.0
GC085950	5.00	6.2	N	1,000	1.0	.9	1.7	2.40	N	7	20.0	10.0
GC190350	>10.00	2.6	30	700	N	--	--	.19	N	15	70.0	50.0
GC085250	3.00	2.0	N	700	1.0	1.5	.6	1.80	N	3	15.0	7.0
GC157050	7.00	7.9	50	500	N	--	--	2.40	N	10	50.0	20.0
GC044350	5.00	5.9	30	500	1.5	--	--	3.10	150	7	30.0	30.0
GC016150	7.00	--	50	300	1.5	--	--		N	5	50.0	20.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC074950	--	7.00	20	1.44	.05	2.3	1.08	N	10	.500	300	N
GC075050	--	5.00	20	1.18	.01	.6	1.97	N	30	1.500	500	N
GC270550	.005	10.00	30	--	.05	--	.75	N	23	2.000	1,000	N
GC270650	.007	3.00	15	--	.25	--	2.10	N	24	1.500	500	N
GC077650	--	3.00	10	1.45	.04	1.0	1.74	N	23	.500	700	N
GC242950	.045	3.00	30	--	.13	--	2.18	30	37	.700	500	N
GC077550	--	3.00	10	1.13	.07	1.2	1.26	N	15	.500	1,000	N
GC075150	--	5.00	20	1.39	.05	<.5	.95	N	13	.500	700	N
GC077950	--	3.00	15	1.13	.01	<.5	2.51	<30	14	.700	700	N
GC078050	--	2.00	15	.90	.01	<.5	1.53	N	15	1.000	500	N
GC074450	--	3.00	20	1.39	.06	1.6	1.96	N	10	.500	700	N
GC242850	.055	3.00	30	--	.24	--	1.33	N	67	3.000	700	N
GC074650	--	5.00	20	1.47	.04	1.1	1.43	N	15	1.500	700	N
GC157150	.038	3.00	30	--	.04	--	2.60	70	25	.700	300	N
GC181150	--	1.50	15	--	--	--	1.80	70	--	.700	300	N
GC277550	.011	.70	7	--	.02	--	2.40	N	8	.150	150	N
GC016750	--	7.00	50	--	--	--	2.90	100	--	1.500	1,000	N
GC028250	--	3.00	20	1.60	.02	3.5	2.86	70	17	.700	700	N
GC025050	--	2.00	15	1.29	.02	1.3	2.10	70	25	1.000	300	N
GC156950	.051	3.00	30	--	.11	--	2.40	50	34	1.000	500	N
GC033150	.096	2.00	50	--	.06	--	3.10	50	25	.700	700	S
GC033250	.053	2.00	20	--	.03	--	3.00	50	21	.500	500	N
GC170050	.021	1.50	50	--	.10	--	6.30	150	24	.300	200	N
GC066850	.060	5.00	10	.89	.02	.9	1.15	N	35	2.000	500	N
GC086150	--	.70	15	1.22	.02	.5	3.09	30	8	.150	150	N
GC190150	.035	.70	20	--	.04	--	3.40	30	14	.200	200	N
GC085050	--	1.00	15	1.55	.04	.9	2.65	30	16	.300	300	N
GC085150	--	1.00	10	1.58	.04	.7	1.83	30	17	.500	150	N
GC066750	--	3.00	15	1.33	.03	<.5	1.64	70	14	.500	500	N
GC185150	.064	2.00	20	--	.04	--	2.78	70	21	.700	700	N
GC016550	--	3.00	20	--	--	--	2.20	30	--	1.000	700	N
GC016651	--	3.00	30	--	--	--	2.50	50	--	.700	1,500	N
GC028150	.060	3.00	20	.92	.01	.5	1.72	50	30	.500	700	N
GC231450	.058	3.00	30	--	.22	--	1.69	30	24	1.000	700	N
GC016950	--	7.00	50	--	--	--	2.80	200	--	1.000	1,000	N
GC155150	.190	3.00	30	--	.18	--	2.70	100	32	.700	500	N
GC085350	--	2.00	15	1.22	.03	1.9	2.18	30	38	1.000	300	N
GC156850	.042	2.00	30	--	.06	--	2.30	50	28	1.000	500	N
GC016450	--	3.00	30	--	--	--	2.70	50	--	1.500	500	N
GC073350	.040	3.00	20	2.15	.03	<.5	1.82	50	17	.500	500	N
GC181050	--	2.00	20	1.56	--	--	2.00	50	--	.500	500	N
GC028350	.040	3.00	10	1.14	.02	1.7	2.13	30	--	1.000	300	N
GC075350	.100	7.00	20	1.14	.02	.6	1.81	150	21	1.500	1,000	N
GC085750	--	1.50	10	.85	.03	<.5	1.35	N	20	.700	200	N
GC085950	.040	1.50	15	1.06	.03	1.5	1.90	N	20	.700	300	N
GC190350	.062	5.00	30	--	.06	--	1.90	50	49	1.000	1,000	N
GC085250	--	.70	10	.87	.03	1.2	2.92	N	13	.200	150	N
GC157050	.080	3.00	30	--	.08	--	2.40	50	41	1.500	300	N
GC044350	.102	2.00	30	--	.05	--	2.50	50	50	1.500	500	N
GC016150	--	1.50	30	--	--	--	2.00	30	--	2.000	300	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC074950	.20	N	--	100	--	10	<20	<.08	<1	20	.4	27
GC075050	2.00	<10	--	10	--	10	55	<.08	<1	15	.2	26
GC270550	1.00	20	--	150	.060	20	--	--	--	30	.4	--
GC270650	2.00	10	--	20	.024	15	--	--	--	10	.4	--
GC077650	1.00	<10	--	20	--	15	85	<.08	1	15	<.1	33
GC242950	1.00	10	N	15	.122	30	--	--	--	15	.3	--
GC077550	1.50	10	--	150	--	20	70	<.08	<1	10	.1	29
GC075150	1.00	<10	--	70	--	20	50	.12	<1	15	<.1	28
GC077950	2.00	10	N	10	--	20	100	<.08	<1	10	.2	31
GC078050	1.50	N	--	10	--	15	30	.08	<1	10	<.1	32
GC074450	.70	N	--	5	--	10	80	<.08	<1	7	.1	29
GC242850	1.50	N	N	150	.079	15	--	--	--	15	.3	--
GC074650	1.00	<10	--	100	--	10	50	.09	<1	20	.5	28
GC157150	1.50	15	70	20	.044	30	--	--	--	10	.6	--
GC181150	1.00	10	N	15	.060	50	--	--	--	15	--	--
GC277550	.50	10	--	7	.008	15	--	--	--	<5	.3	--
GC016750	2.00	30	150	20	.090	50	--	--	--	30	--	--
GC028250	2.00	<10	70	10	--	30	125	<.08	<1	10	.5	28
GC025050	1.00	10	70	15	--	20	95	<.08	<1	10	.3	29
GC156950	1.50	15	N	30	.044	30	--	--	--	10	.7	--
GC033150	1.50	30	N	15	.016	50	--	--	--	7	.4	--
GC033250	2.00	20	N	15	.016	50	--	--	--	10	.4	--
GC170050	1.00	100	70	15	.020	50	--	--	--	20	.3	--
GC066850	.70	<10	--	50	--	10	45	4.78	<1	10	<.1	17
GC086150	1.00	10	N	N	--	20	130	<.08	<1	<5	<.1	38
GC190150	2.00	15	N	7	.012	30	--	--	--	5	.4	--
GC085050	.70	10	N	7	--	30	100	<.08	<1	7	<.1	36
GC085150	.70	10	N	7	--	15	80	<.08	<1	7	<.1	36
GC066750	.70	10	N	10	--	15	75	<.08	<1	5	<.1	34
GC185150	.70	20	70	15	.070	30	--	--	--	15	.2	--
GC016550	1.50	20	N	20	.060	30	--	--	--	10	--	--
GC016651	2.00	30	N	15	.030	100	--	--	--	7	--	--
GC028150	1.00	<10	N	10	--	50	60	<.08	<1	7	<.1	33
GC231450	1.50	10	N	7	.083	15	--	--	--	15	.3	--
GC016950	1.50	70	300	20	.090	100	--	--	--	30	--	--
GC155150	2.00	15	150	20	.024	70	--	--	--	15	.5	--
GC083350	2.00	N	N	20	--	20	100	1.15	--	10	.6	29
GC156850	1.50	15	N	20	.044	30	--	--	--	10	.7	--
GC016450	2.00	20	N	30	.060	50	--	--	--	10	--	--
GC073350	.70	<10	N	10	--	20	80	<.08	<1	10	.4	30
GC181050	1.00	15	N	15	.030	30	--	--	--	15	--	--
GC028350	1.00	<10	N	15	--	15	85	<.08	1	7	<.1	30
GC075350	1.50	10	150	20	--	15	75	<.08	<1	20	.3	28
GC085750	1.00	10	--	20	--	15	55	<.08	<1	5	.3	26
GC085950	1.50	N	--	10	--	15	65	<.08	<1	7	.2	31
GC190350	1.50	N	N	30	.024	30	--	--	--	15	.7	--
GC085250	.70	10	--	5	--	20	125	<.08	<1	<5	.1	39
GC157050	1.00	15	N	20	.064	30	--	--	--	10	.7	--
GC044350	.70	15	70	15	.050	15	--	--	--	10	.4	--
GC016150	1.00	15	N	15	.044	20	--	--	--	7	--	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC074950	.64	20	.500	--	2.53	200	<10	1.0	74	70
GC075050	.60	500	.200	13.10	2.29	150	10	1.5	86	50
GC270550	--	200	.500	--	--	300	30	3.0	70	100
GC270650	--	500	.300	--	--	70	10	2.0	30	100
GC077650	.77	200	.300	7.17	2.39	150	20	3.0	70	150
GC242950	--	150	.200	--	--	100	30	3.0	100	150
GC077550	.54	150	.500	6.14	2.95	70	20	2.0	58	300
GC075150	1.75	200	.300	4.05	1.62	200	20	3.0	81	100
GC077950	.42	300	.200	15.88	4.77	100	20	2.0	53	200
GC078050	.52	300	.200	--	3.22	70	10	2.0	51	100
GC074450	.87	50	.150	17.80	3.41	150	20	3.0	47	100
GC242850	--	70	.200	--	--	150	30	3.0	130	70
GC074650	<.10	300	.500	5.63	1.77	200	15	3.0	90	100
GC157150	--	300	.300	--	--	100	50	5.0	50	300
GC181150	--	150	.150	--	--	70	30	5.0	75	150
GC277550	--	100	.100	--	--	20	10	1.5	100	150
GC016750	--	300	.700	--	--	100	150	--	125	700
GC028250	1.58	500	.300	20.79	4.91	100	20	3.0	82	100
GC025050	1.25	300	.200	12.85	3.75	100	50	5.0	63	300
GC156950	--	300	.300	--	--	150	50	7.0	100	300
GC033150	--	200	.300	--	--	70	30	5.0	70	200
GC033250	--	300	.300	--	--	50	20	3.0	40	150
GC170050	--	200	.500	--	--	50	150	20.0	50	700
GC066850	1.20	200	.300	4.41	1.96	100	20	1.5	76	150
GC086150	.90	150	.100	5.09	1.77	20	15	2.0	30	300
GC190150	--	100	.100	--	--	50	20	3.0	25	100
GC085050	1.94	150	.200	14.78	3.83	50	15	2.0	65	150
GC085150	.31	150	.200	13.10	3.02	50	15	1.5	51	150
GC066750	.83	300	.200	9.25	2.71	70	30	5.0	63	200
GC185150	--	300	.300	--	--	70	50	5.0	78	200
GC016550	--	300	.500	--	--	100	30	5.0	50	300
GC016651	--	300	.300	--	--	70	20	3.0	120	150
GC028150	.35	200	.200	14.02	3.36	100	20	3.0	64	150
GC231450	--	300	.300	--	--	100	30	3.0	82	150
GC016950	--	300	.700	--	--	100	150	--	400	500
GC155150	--	200	.200	--	--	70	50	5.0	200	200
GC085350	1.76	200	.150	12.74	3.27	100	15	1.5	95	150
GC156850	--	300	.300	--	--	150	30	5.0	100	300
GC016450	--	300	.500	--	--	70	50	5.0	105	150
GC073350	1.84	200	.300	9.34	3.23	150	20	2.0	91	150
GC181050	--	200	.200	--	--	70	10	5.0	75	150
GC028350	1.50	200	.200	12.87	3.39	70	30	2.0	64	300
GC075350	.77	200	.700	11.63	2.93	150	30	5.0	110	150
GC085750	.98	500	.200	11.19	2.97	70	15	1.5	135	100
GC085950	1.08	300	.200	6.71	2.90	70	20	3.0	49	150
GC190350	--	300	.300	--	--	150	30	3.0	90	100
GC085250	.78	100	.150	10.76	1.92	30	15	2.0	34	150
GC157050	--	200	.300	--	--	100	30	3.0	100	150
GC044350	--	300	.150	--	--	50	30	3.0	90	150
GC016150	--	200	.200	--	--	70	20	3.0	35	150

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC066550	CO	MESA	39 11	109 3	72 9	US 50-6 REST STOP .5 MI E STATE LINE; GRAY-BROWN SOIL ON SILTSTONE
GC066650	CO	MESA	39 11	108 17	72 9	JCT I-70 & RT 65; LIGHT BROWN SILT
GC262150	CO	MINERAL	37 28	106 47	68 5	US 160 AT SUMMIT WOLF CREEK PASS; SHALLOW SOIL OVER BEDROCK
GC033450	CO	MOFFAT	40 32	107 27	65 8	US 40 4 MI E CRAIG; BROWN SILTY LOAM
GC033550	CO	MOFFAT	40 26	108 16	65 8	US 40 12 MI W MAYBELL; BROWN SANDY B HORIZON
GC033650	CO	MOFFAT	40 16	109 2	65 8	US 40 1 MI E COLO-UTAH LINE; RED BROWN SAND
GC185450	CO	MOFFAT	40 15	108 40	65 6	US 40 5 MI E MASSADONA; BROWN CLAYEY SILT 8-IN. DEPTH
GC015550	CO	MONTEZUMA	37 28	108 39	62 5	US 160 9 MI NW CORTEZ; LOESS SOIL ON DAKOTA SANDSTONE
GC073250	CO	MONTEZUMA	37 21	108 30	73 3	US 160 4 MI E CORTEZ; SANDY LOAM
GC016250	CO	MONTEROSE	38 31	107 56	62 5	SITE AND SOIL DESCRIPTION NOT RECORDED
GC027850	CO	MONTEROSE	38 15	108 21	72 8	NUCLA RD OFF RT 90 AT W LIMIT UNCOMPAGRE NAT FOREST; COLLUVIUM & SILT
GC028050	CO	MONTEROSE	38 26	107 35	72 8	US 50 2 MI W CIMARRON; LIGHT BROWN LOAM OVER SHALE
GC044450	CO	MORGAN	40 15	103 45	66 10	RT 71 1 MI N BRUSH; BROWN SANDY LOAM
GC085450	CO	OTERO	37 45	103 30	75 6	RT 109 15 MI S LA JUNTA; SANDY LOAM, MODERATELY WELL DEVELOPED
GC085850	CO	OTERO	37 40	104 0	75 6	US 350 1 MI N DELHI; ARIDISOL FROM SANDSTONE AND SHALE
GC016350	CO	OURAY	37 57	107 40	62 5	SITE AND SOIL DESCRIPTION NOT RECORDED
GC027950	CO	OURAY	38 9	107 49	72 8	RT 62 3 MI W RIDGEWAY; SILT OVER SHALE
GC033350	CO	PARK	40 24	106 38	65 8	US 40 ON RABBIT EARS PASS; SANDY B HORIZON ON HORNBLende SCHIST
GC155050	CO	PARK	39 27	105 42	63 7	US 285 AT KENOSHA PASS SUMMIT; DARK LOAM, FROM GRUS
GC181450	CO	PARK	39 13	106 0	64 7	US 285 4 MI S FAIRPLAY; SOIL NOT DESCRIBED
GC156750	CO	PROWERS	38 0	102 7	63 10	US 50 1 MI W HOLLY; IRRIGATED CALCIMORPHIC SOIL
GC277650	CO	PROWERS	37 45	102 35	69 1	US 385 9 MI N COUNTY LINE; LIGHT YELLOW SAND OVER SANDSTONE BUTTES
GC086050	CO	PUEBLO	38 25	104 11	75 6	BOONE RD 12 MI N BOONE; WINDBLOWN SAND
GC170150	CO	PUEBLO	37 58	104 47	64 5	I-25 20 MI S PUEBLO; ARID LIGHT SOIL
GC185250	CO	ROUTT	40 29	107 2	65 6	US 40 2 MI E STEAMBOAT SPRINGS; BROWN SILTY CLAY 8-IN. DEPTH
GC181350	CO	SAGUACHE	38 14	105 55	64 7	US 285 .5 MI N VILLA GROVE; SAN LUIS VALLEY LOAM
GC010351	CO	SAN MIGUEL	38 2	108 40	64 9	18 MI SW NUCIA; SOIL ON ALLUVIAL FILL
GC027750	CO	SAN MIGUEL	38 8	108 23	72 8	BLM RD AT BURN CANYON 7 MI W NORWOOD; SOIL DERIVED FROM SANDSTONE
GC066950	CO	SUMMIT	39 33	106 9	72 9	US 6 .5 MI E OFFICERS GULCH CAMPGROUND; BROWN GRAVELLY SOIL ON TILL
GC016850	CO	TELLER	38 57	105 17	62 5	US 24 E EDGE FLORISSANT; BLACK SOIL
GC000250	CO	WASHINGTON	39 45	103 14	62 5	US 36 1 MI W ANTON; MEDIUM BROWN SILTY LOAM
GC263250	CO	WELD	40 53	104 47	68 8	US 85 2 MI S ROCKPORT AND .5 MI E ON GROVER RD; B HORIZON CALICHE VEIN
GC268750	CO	WELD	40 59	103 42	68 8	RT 71 26 MI N STONEHAM; LOESS AND SAND CAP OVER FISSILE LIMESTONE
GC268850	CO	WELD	40 38	104 5	68 8	RT 14 18 MI W JCT RT 52; SANDY SILT TOPSOIL CALICAREOUS SANDY SUBSOIL
GC000350	CO	YUMA	39 42	102 23	62 5	US 36 1 MI W IDALIA; BROWN SILTY LOAM
GC006250	CT	NEW HAVEN	41 16	72 50	62 10	CONN TPK 2 MI E EXIT 52; YELLOWISH-ORANGE SANDY CLAY
GC006150	CT	NEW LONDON	41 35	72 4	62 10	CONN TPK 3 MI NE EXIT 81; YELLOW-BROWN B HORIZON
GC032450	DE	NEW CASTLE	39 19	75 37	72 9	RT 13 2 MI N SMYRNA; LIGHT BROWN SAND
GC032250	DE	SUSSEX	38 43	75 9	72 9	RT 24 2 MI SW MIDWAY; SANDY PEBBLY SOIL
GC278150	FL	ALACHUA	29 30	82 18	69 1	US 441 1 MI S MICANOPY; UPLAND HUMIC SAND
GC025850	FL	BREVARD	28 10	80 37	71 7	I-95 12 MI N JCT WITH US 192; ORGANIC SOIL AND SAND
GC026650	FL	BROWARD	26 9	80 29	71 7	JCT US 27 & RT 84 NEAR ANDYTOWN; ORGANIC & SANDY SOIL
GC278550	FL	CHARLOTTE	27 0	82 10	69 1	US 41 5 MI W MURDOCK; FINE SAND
GC070450	FL	CITRUS	28 48	82 24	73 2	US 19 3 MI N HOMOSASSA; YELLOW SANDY SOIL
GC025450	FL	CLAY	31 50	82 5	71 7	JCT RT 218 & US 301 8 MI N LAWTEY; MUCK
GC026550	FL	COLLIER	25 50	80 59	71 7	US 41 AT PAOLITA STATION; MUCK WITH SAND & SHELLS
GC026750	FL	COLLIER	26 10	80 57	71 7	RT 84 W OF SEMINOLE RESERVATION; ORGANIC & SANDY SOIL
GC278750	FL	COLLIER	25 55	81 45	69 1	RT 92 ON BEACH RIDGE OF MARCO ISLAND; CALICAREOUS SAND
GC278850	FL	COLLIER	26 8	81 30	69 1	RT 838 10 MI W JCT RT 29; HUMIC SAND OVER MARL, NON-CALICAREOUS
GC026450	FL	DIXIE	29 38	83 8	71 7	US 19-98 AT CROSS CITY; ORGANIC & SANDY SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC066550	3.00	8.3	50	300	1.5	<.5	1.4	4.09	<150	N	30.0	10.0
GC066650	10.00	5.5	30	1,000	1.5	<.5	1.3	2.53	<150	5	50.0	20.0
GC262150	>10.00	4.9	30	700	1.0	--	--	1.00	N	7	30.0	30.0
GC033450	7.00	7.2	30	700	N	--	--	1.00	150	15	100.0	20.0
GC033550	5.00	4.2	30	500	N	--	--	.60	N	N	15.0	10.0
GC033650	5.00	5.3	50	500	N	--	--	1.80	N	N	15.0	15.0
GC185450	3.00	10.0	70	300	N	--	--	7.43	--	3	30.0	30.0
GC015550	7.00	--	30	500	2.0	--	--	.60	N	7	50.0	30.0
GC073250	3.00	5.4	30	300	N	<.5	1.6	1.40	N	<3	20.0	10.0
GC016250	7.00	--	70	500	2.0	--	--	4.20	--	7	100.0	50.0
GC027850	3.00	3.5	30	300	N	<.5	.7	.33	N	5	100.0	20.0
GC028050	7.00	10.1	20	700	1.5	.9	2.2	5.42	--	5	70.0	20.0
GC044450	3.00	4.9	20	700	1.0	--	--	.50	N	5	30.0	15.0
GC085450	5.00	9.6	<20	700	1.0	.9	1.4	3.62	N	7	30.0	15.0
GC085850	10.00	8.8	30	1,000	1.0	1.2	3.3	8.45	N	7	70.0	30.0
GC016350	>10.00	--	N	700	2.0	--	--	.65	N	20	30.0	70.0
GC027950	10.00	10.8	30	500	N	1.2	5.9	14.49	--	7	70.0	50.0
GC033350	>10.00	3.3	N	700	N	--	--	1.20	N	15	50.0	30.0
GC155050	3.00	4.0	N	500	N	--	--	1.50	N	N	50.0	30.0
GC181450	7.00	--	30	500	N	--	--	1.10	--	7	50.0	10.0
GC156750	7.00	8.8	50	700	N	--	--	3.80	N	10	50.0	20.0
GC277650	1.00	3.9	<20	100	N	--	--	.09	N	3	3.0	5.0
GC086050	5.00	2.3	N	1,000	N	<.5	.3	.28	N	5	15.0	7.0
GC170150	5.00	8.5	30	500	N	--	--	8.40	--	7	50.0	15.0
GC185250	5.00	8.2	30	700	N	--	--	.58	150	15	70.0	30.0
GC181350	>10.00	--	20	700	N	--	--	1.40	N	15	50.0	20.0
GC010351	5.00	7.2	30	300	N	--	--	8.40	N	N	70.0	20.0
GC027750	5.00	6.7	30	500	N	<.5	1.6	1.68	<150	5	50.0	20.0
GC066950	7.00	4.9	<20	500	1.5	.9	1.2	1.07	<150	10	50.0	20.0
GC016850	>10.00	--	N	1,500	2.0	--	--	1.80	N	10	70.0	30.0
GC000250	5.00	5.0	30	700	N	--	--	.79	150	15	30.0	30.0
GC263250	5.00	9.1	20	700	N	--	--	.55	N	3	20.0	15.0
GC268750	1.50	5.0	N	700	N	--	--	32.00	N	3	10.0	15.0
GC268850	10.00	4.5	20	300	1.5	--	--	4.90	N	3	30.0	15.0
GC000350	3.00	5.4	30	700	N	--	--	1.00	150	7	30.0	20.0
GC006250	7.00	3.7	N	300	N	--	--	.70	N	10	30.0	20.0
GC006150	>10.00	4.5	N	500	N	--	--	.98	N	5	50.0	10.0
GC032450	3.00	2.7	20	500	N	2.3	2.1	.17	N	5	50.0	7.0
GC032250	1.50	<.1	<20	300	N	.7	1.5	.15	N	5	10.0	3.0
GC278150	2.00	1.5	20	200	1.5	--	--	.95	N	N	50.0	3.0
GC025850	.20	.2	<20	30	N	<.5	.2	.11	N	N	1.0	N
GC026650	1.00	2.5	N	30	N	4.1	6.9	2.03	--	N	20.0	7.0
GC278550	.20	2.9	20	30	N	--	--	.04	N	N	2.0	2.0
GC070450	.30	.5	<20	20	N	<.5	.4	--	N	N	5.0	N
GC025450	5.00	3.9	N	20	N	2.5	29.9	--	N	N	10.0	5.0
GC026550	3.00	3.3	<20	30	N	--	9.4	14.79	N	N	30.0	2.0
GC026750	.30	.3	<20	50	N	<.5	3.0	.25	N	N	2.0	1.0
GC278750	.20	1.3	20	50	N	--	--	1.80	N	N	3.0	3.0
GC278850	.70	1.0	30	50	N	--	--	.14	N	N	5.0	1.0
GC026450	.20	7.0	<20	10	N	<.5	1.0	.95	N	N	2.0	1.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC066550	.070	1.50	10	1.48	.02	1.4	1.27	50	30	.500	100	N
GC066650	--	2.00	20	1.25	.02	<.5	1.80	<30	15	1.000	200	N
GC262150	.046	3.00	30	--	.24	--	2.50	50	20	1.000	1,500	N
GC033450	.037	2.00	20	--	.02	--	1.70	70	21	.700	700	N
GC033550	.011	.70	10	--	.01	--	1.70	N	12	.200	200	N
GC033650	.025	.70	7	--	.02	--	1.80	N	17	.500	300	N
GC185450	.057	1.50	30	--	.05	--	1.70	30	35	1.500	300	N
GC015550	--	2.00	20	--	--	--	2.10	30	--	.700	300	N
GC073250	--	1.00	7	1.27	.02	.8	.74	N	15	.700	100	N
GC016250	--	2.00	30	--	--	--	2.10	30	--	2.000	300	N
GC027850	--	2.00	10	.92	.03	<.5	1.10	50	15	.200	150	N
GC028050	.050	3.00	20	1.18	.05	.7	1.80	<30	30	1.000	300	N
GC044450	.055	1.50	20	--	.05	--	2.70	30	22	.300	300	N
GC085450	.070	2.00	15	1.47	.04	1.0	1.60	50	32	1.000	200	N
GC085850	--	1.50	20	1.03	.05	1.5	1.83	N	35	.700	100	S
GC016350	--	7.00	30	--	--	--	1.90	50	--	1.000	1,500	N
GC027950	.070	3.00	20	.94	.02	2.1	1.46	50	24	1.000	300	7
GC033350	.027	3.00	30	--	.04	--	2.50	50	40	1.000	500	N
GC155050	.045	1.50	15	--	1.30	--	2.00	50	37	.500	300	N
GC181450	--	2.00	20	--	--	--	2.50	70	--	.500	300	N
GC156750	.051	3.00	30	--	.20	--	2.20	50	29	1.000	500	N
GC277650	.007	.70	N	--	.08	--	.19	N	9	.050	70	N
GC086050	--	1.50	20	1.42	.03	.5	2.88	50	15	.300	200	N
GC170150	.044	2.00	20	--	.06	--	1.70	30	22	.700	300	N
GC185250	.041	2.00	20	--	.14	--	2.13	70	28	.700	700	N
GC181350	--	3.00	20	--	--	--	2.70	70	--	.500	1,000	N
GC010351	.110	1.50	15	--	.06	--	2.00	N	42	1.000	150	N
GC027750	--	2.00	15	1.69	.03	1.0	1.16	<30	30	.500	150	N
GC066950	--	3.00	15	1.44	.04	.6	1.76	50	20	.700	500	N
GC016850	--	3.00	30	--	--	--	2.20	50	--	.700	700	N
GC000250	.053	1.50	30	--	.08	--	2.21	70	25	.700	700	N
GC263250	.021	2.00	20	--	.02	--	2.90	30	12	.300	300	N
GC268750	.056	.70	5	--	.03	--	.85	N	9	.700	70	N
GC268850	.073	2.00	20	--	.01	--	2.50	50	28	1.500	300	N
GC000350	.044	1.50	20	--	.07	--	2.27	70	19	.700	500	N
GC006250	.005	1.50	10	--	.22	--	1.30	N	31	.500	700	N
GC006150	.028	2.00	20	--	.39	--	1.80	30	23	.500	200	7
GC032450	--	1.00	10	1.22	.05	1.5	1.71	<30	15	.100	100	N
GC032250	--	.50	5	.55	.03	<.5	1.21	N	7	.050	70	N
GC278150	.130	.70	<5	--	.06	--	.24	N	14	.300	150	N
GC025850	--	.03	N	.98	.01	<.5	.12	N	--	.007	N	N
GC026650	--	.30	N	.39	.04	2.1	1.47	N	5	.150	30	N
GC278550	.024	.07	N	--	.11	--	.02	N	<5	.010	2	N
GC070450	--	.10	N	.97	.01	<.5	.11	N	<5	.007	10	N
GC025450	--	.15	N	.60	.14	2.3	--	N	<5	.010	10	N
GC026550	--	1.00	5	.62	.03	--	.06	N	20	.150	100	N
GC026750	--	.20	N	.77	.03	.7	.14	N	<5	.015	20	N
GC278750	<.001	.10	N	--	.10	--	.02	N	<5	.020	20	N
GC278850	<.001	.15	N	--	.03	--	.04	30	7	.020	20	N
GC026450	--	.20	N	.74	.02	<.5	.04	N	<5	.015	10	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC066550	.50	<10	N	5	--	15	50	<.08	1	5	.3	32
GC066650	2.00	<10	N	10	--	15	85	<.08	<1	5	1.0	31
GC262150	3.00	10	100	7	.040	20	--	--	--	7	.5	--
GC033450	1.00	20	N	20	.024	30	--	--	--	7	.3	--
GC033550	.70	N	N	5	.012	15	--	--	--	5	<.1	--
GC033650	.70	N	N	7	.016	20	--	--	--	N	.2	--
GC185450	.70	N	N	15	.096	30	--	--	--	7	2.6	--
GC015550	1.00	20	N	20	.008	30	--	--	--	7	--	--
GC073250	.20	N	--	7	--	N	35	<.08	<1	<5	.3	36
GC016250	2.00	15	N	30	.060	100	--	--	--	10	--	--
GC027850	.30	<10	N	7	--	10	40	<.08	<1	5	.2	37
GC028050	1.00	<10	N	10	--	20	50	<.08	<1	7	.4	25
GC044450	.70	15	70	15	.030	20	--	--	--	7	.3	--
GC085450	1.00	10	N	10	--	20	70	<.08	3	7	--	32
GC085850	.50	N	--	20	--	15	60	.72	<1	10	.3	21
GC016350	1.50	20	70	20	.090	100	--	--	--	15	--	--
GC027950	1.00	<10	N	20	--	15	80	<.08	2	7	.3	19
GC033350	2.00	15	N	20	.016	50	--	--	--	10	.1	--
GC155050	2.00	15	N	7	.120	30	--	--	--	7	.5	--
GC181450	1.00	10	N	10	.030	70	--	--	--	15	--	--
GC156750	1.50	15	N	30	.044	30	--	--	--	10	1.4	--
GC277650	.05	N	--	5	.004	N	--	--	--	N	.3	--
GC086050	2.00	10	N	5	--	20	125	<.08	<1	<5	.2	38
GC170150	1.50	10	N	20	.044	30	--	--	--	10	.8	--
GC185250	.70	15	70	15	.087	30	--	--	--	15	--	--
GC181350	1.00	10	N	15	.060	50	--	--	--	7	.3	--
GC010351	1.00	N	--	20	.040	N	--	--	--	5	--	--
GC027750	.50	<10	N	10	--	15	40	<.08	2	7	2.3	33
GC066950	1.50	<10	N	15	--	30	85	<.08	<1	10	<.1	31
GC016850	3.00	15	70	15	.060	30	--	--	--	10	--	--
GC000250	.70	15	70	15	.039	20	--	--	--	15	.5	--
GC263250	1.00	10	N	7	.016	20	--	--	--	7	.2	--
GC268750	.70	N	--	7	.016	10	--	--	--	N	.5	--
GC268850	1.00	10	N	10	.024	15	--	--	--	7	.4	--
GC000350	.70	15	N	10	.048	20	--	--	--	10	.3	--
GC006250	1.50	N	N	15	.020	N	--	--	--	7	.5	--
GC006150	1.50	10	N	10	.020	N	--	--	--	10	1.2	--
GC032450	.50	<10	N	7	--	20	60	<.08	<1	5	.5	37
GC032250	.20	<10	N	<5	--	10	40	<.08	<1	N	<.1	38
GC278150	<.05	10	--	7	.600	N	--	--	--	7	.2	--
GC025850	N	N	--	N	--	N	<20	<.08	<1	N	<.1	42
GC026650	.10	N	--	5	--	100	<20	<.08	8	N	.2	33
GC278550	N	N	--	N	.004	N	--	--	--	N	.1	--
GC070450	N	<10	--	N	--	N	<20	<.08	<1	N	.2	36
GC025450	N	N	--	5	--	10	<20	<.08	<1	N	.5	17
GC026550	.05	N	--	5	--	10	<20	<.08	<1	5	.2	22
GC026750	<.05	N	--	N	--	N	<20	<.08	<1	N	<.1	42
GC278750	<.05	15	--	N	.030	N	--	--	--	N	.3	--
GC278850	<.05	N	70	N	.004	N	--	--	--	N	.3	--
GC026450	N	N	--	N	--	N	<20	<.08	<1	N	.3	41

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC066550	2.28	150	.150	10.13	3.87	70	20	2.0	32	150
GC066650	1.38	150	.200	9.41	4.32	150	20	2.0	82	150
GC262150	--	700	.300	--	--	70	20	5.0	85	300
GC033450	--	200	.300	--	--	70	30	5.0	40	300
GC033550	--	100	.070	--	--	20	10	1.5	--	100
GC033650	--	70	.100	--	--	20	10	1.5	--	100
GC185450	--	150	.150	--	--	150	30	3.0	20	70
GC015550	--	150	.300	--	--	70	30	5.0	35	300
GC073250	.91	50	.150	--	2.35	30	10	1.5	34	200
GC016250	--	300	.200	--	--	150	20	3.0	180	70
GC027850	.44	70	.200	7.00	2.55	30	10	2.0	28	300
GC028050	.96	200	.300	8.55	3.10	150	20	2.0	97	70
GC044450	--	150	.150	--	--	50	30	3.0	60	150
GC085450	1.79	200	.200	13.30	3.24	70	20	3.0	66	150
GC085850	2.65	1,000	.150	15.28	5.98	100	15	1.5	50	70
GC016350	--	300	.500	--	--	100	30	--	155	150
GC027950	1.27	300	.200	13.60	4.89	200	20	3.0	110	100
GC033350	--	300	.300	--	--	70	20	3.0	60	150
GC155050	--	200	.100	--	--	50	30	2.0	250	150
GC181450	--	100	.100	--	--	70	20	3.0	100	100
GC156750	--	300	.300	--	--	150	30	5.0	100	150
GC277650	--	10	.070	--	--	15	N	1.0	15	70
GC086050	2.18	150	.150	6.41	2.74	50	20	3.0	38	200
GC170150	--	500	.150	--	--	150	20	3.0	50	300
GC185250	--	150	.300	--	--	70	30	5.0	79	300
GC181350	--	300	.500	--	--	100	50	5.0	125	200
GC010351	--	200	.070	--	--	70	15	1.5	70	50
GC027750	2.01	100	.200	11.03	2.74	70	20	3.0	37	500
GC066950	1.02	150	.200	14.17	2.88	70	20	3.0	2,080	150
GC016850	--	1,000	.300	--	--	100	30	3.0	65	150
GC000250	--	150	.300	--	--	70	70	3.0	70	300
GC263250	--	200	.150	--	--	50	30	3.0	30	200
GC268750	--	500	.050	--	--	20	N	1.0	20	30
GC268850	--	300	.150	--	--	50	20	2.0	35	100
GC000350	--	100	.150	--	--	30	30	3.0	60	300
GC006250	--	100	.200	--	--	50	20	3.0	45	150
GC006150	--	150	.300	--	--	70	30	3.0	35	200
GC032450	.40	100	.200	6.98	2.12	30	20	3.0	29	300
GC032250	.17	30	.150	2.76	.95	10	10	1.0	17	300
GC278150	--	70	.200	--	--	30	50	3.0	20	300
GC025850	.23	N	.030	--	.47	N	N	N	<5	70
GC026650	7.88	200	.020	--	1.68	20	N	N	40	N
GC278550	--	<5	.070	--	--	N	N	N	--	70
GC070450	<.10	5	.100	--	.62	<7	N	1.0	<5	300
GC025450	<.10	N	.100	6.05	2.47	7	10	1.0	8	200
GC026550	.61	150	.100	3.16	4.32	30	<10	1.0	14	50
GC026750	<.10	5	.070	--	.57	N	N	N	<5	50
GC278750	--	30	.100	--	--	7	<10	1.0	35	500
GC278850	--	7	.070	--	--	7	20	1.5	--	500
GC026450	1.92	N	.010	--	.33	N	N	N	8	20

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC025650	FL	FLAGLER	29 26	81 24	71 7	RT 11 3 MI S BUNNELL; SAND & ORGANIC SOIL
GC160151	FL	FRANKLIN	29 54	84 36	64 4	US 98.3 MI ENE JCT US 319; LIGHT BROWNISH-GRAY
GC070550	FL	GADSDEN	30 25	83 55	73 2	US 27 1 MI NW CAPPS; ORANGE SANDY SOIL
GC070650	FL	GADSDEN	30 36	84 36	73 2	US 90 W EDGE OF QUINCY; RED SANDY LOAM
GC160051	FL	GULF	29 45	85 9	64 4	RT 30 100 YDS W GULF-FRANKLIN CO LINE; GRAY, SANDY
GC278950	FL	HENDRY	26 45	81 27	69 1	RT 29 5 MI S LABELLE; CLEAN WHITE SAND
GC278350	FL	HERNANDO	28 35	82 20	69 1	US 41 2 MI E BROOKSVILLE; UPLAND FINE SAND
GC279050	FL	HIGHLANDS	27 20	81 20	69 1	US 27 5 MI S SEBRING IN CITRUS GROVE; YELLOW SAND
GC277750	FL	HILLSBOROUGH	28 0	82 22	69 1	RT 60 IN LIMONA; UNCONSOLIDATED HUMIC SAND
GC026050	FL	INDIAN RIVER	27 43	80 54	71 7	AT VERO BEACH MUNICIPAL AIRPORT; ORGANIC & SANDY SOIL
GC150650	FL	JACKSON	30 47	85 27	63 7	US 90 5 MI W MARIANNA; YELLOWISH-BROWN, SANDY
GC278650	FL	LEE	26 30	81 50	69 1	US 41 5 MI N SAN CARLOS PARK; YELLOWISH SAND
GC278250	FL	LEVY	29 17	82 27	69 1	US 41 2 MI S MORRISTON; UPLAND FINE CLEAN SAND
GC150550	FL	LIBERTY	30 32	84 58	63 7	UNNUMBERED RT 3 MI W ROCK BLUFF; SANDY FOREST SOIL
GC278450	FL	MANATEE	27 26	82 36	69 1	US 41 UNDISTURBED LOT N EDGE BRADENTON; HUMIC SAND
GC278050	FL	MARION	29 10	81 45	69 1	5 MI E LAKE BRYANT; UPLAND YELLOW CLEAN SAND
GC026150	FL	OKEECHOBEE	27 18	80 46	71 7	US 441 2 MI N OKEECHOBEE; VERY DARK ORGANIC & SANDY SOIL
GC025950	FL	OSCEOLA	27 50	80 54	71 7	SUNSHINE STATE PARKWAY 3 MI S KENONSVILLE; ORGANIC & SANDY SOIL
GC261550	FL	PINELLAS	28 10	82 47	68 5	INTERIOR OF HONEYMOON ISLAND; COQUINA SAND
GC277850	FL	POLK	28 18	81 48	69 1	RT 33 AT EVA; NON-CALCAREOUS SAND OVER LIMESTONE
GC279150	FL	POLK	27 52	81 50	69 1	RT 60 AT EDGE OF BARTOW; LIGHT BROWN SAND
GC025550	FL	PUTNAM	30 38	81 40	71 7	RT 100 7 MI W PALATKA AT RICE CREEK BRIDGE; GRAY SANDY SOIL
GC150850	FL	SANTA ROSA	30 39	86 56	63 7	US 90 1 MI E JCT FLA. 87; GRAY SAND IN PINE WOODS
GC150950	FL	SANTA ROSA	30 21	87 11	63 7	RT 399 1 MI N PENSACOLA BEACH; BEACH SAND
GC277950	FL	SEMINOLE	28 45	81 20	69 1	US 19-92 MARGIN OF LAKE JESSUP; CALCIC BEACH SAND WITH SHELLS
GC026250	FL	SUWANNEE	30 19	82 47	71 7	I-75 N OF WHITE SPRINGS; ORGANIC & SANDY SOIL
GC026350	FL	TAYLOR	30 11	83 40	71 7	US 19-98 NEAR ECONFINA RIVER CROSSING S OF IDDO; DARK ORGANIC & SAND
GC025750	FL	VOLUSIA	28 52	80 55	71 7	US 1 W OF OAKHILL; YELLOW SANDY SOIL
GC150750	FL	WALTON	30 44	86 9	63 7	US 90 2 MI W DEFUNIAK SPRINGS; REDDISH-ORANGE, SANDY
GC160250	FL	WALTON	30 23	86 22	64 4	SITE NOT RECORDED; BROWN-GRAY SANDY, HIGHLY ORGANIC SOIL; TOP 10 IN.
GC196150	GA	BANKS	34 23	83 31	65 7	RT 441 6 MI N HOMER; RED PEBBLY CLAY 9-IN. DEPTH
GC211550	GA	BARTOW	34 8	84 48	65 7	.12 MI W ALTOONA DAM OVER WEISSNER; SOIL NOT DESCRIBED
GC050351	GA	BURKE	33 11	81 52	63 8	RT 80 12 MI E WAYNESBORO; REDDISH SLIGHTLY SANDY
GC150050	GA	CHARLTON	30 49	82 2	63 7	RT 23 2 MI S FOLKSTON; ORGANIC AND SAND, IN PINE-DECIDUOUS FOREST
GC050651	GA	CHATHAM	32 12	81 11	63 8	RT 21 1.5 MI N PORT WENTWORTH; DARK SILT
GC150150	GA	CLINCH	30 36	82 31	63 7	RT 94 2 MI N FLORIDA STATE LINE; WHITE SAND WITH ORGANIC STAIN
GC274650	GA	COBB	33 49	84 33	69 1	US 78 7 MI E AUSTELL; YELLOW SAND
GC195550	GA	COFFEE	31 31	82 53	65 6	RT 32 3 MI W DOUGLAS; ORGANIC-STAINED WHITE SAND
GC274450	GA	CRAWFORD	32 45	84 1	69 1	US 341 3 MI N ROBERTA; RED CLAY
GC195350	GA	DOUGHERTY	31 30	84 23	65 6	RT 62 7 MI E LEARY; RED CLAY
GC050551	GA	EVANS	32 16	81 53	63 8	US 23 5 MI N CLAYTON; YELLOWISH-GRAY SILT LOAM
GC074050	GA	EVANS	32 6	81 48	73 8	US 280 FLOODPLAIN OF CANOCHEE RIVER; SANDY ALLUVIUM
GC211450	GA	FLOYD	34 14	85 20	65 7	RT 100 3.5 MI E CAVE SPRINGS; B HORIZON SOIL
GC050151	GA	FORSYTH	34 8	84 14	63 8	US 19 8 MI SW CUMMING; YELLOWISH, MOTTLED
GC050251	GA	GLASCOCK	33 9	82 37	63 8	RT 171 8.5 MI S GIBSON; YELLOWISH SAND
GC195750	GA	GLYNN	31 11	81 23	65 6	ON ST. SIMEON ISLAND NEAR FT. FREDERICA; DARK, SANDY SOIL
GC274750	GA	HARALSON	33 48	85 12	69 1	US 27 10 MI N BREMEN; SANDY LOAM
GC211150	GA	HART	34 23	82 51	65 7	US 29 10 MI E HARTWELL; SOIL NOT DESCRIBED
GC050451	GA	JENKINS	32 43	82 3	63 8	RT 25 9 MI S MILLEN; YELLOWISH-BROWN, SANDY
GC150350	GA	LOWNDES	30 48	83 20	63 7	US 84 1 MI W VALDOSTA; SANDY YELLOW SOIL IN PINE-DECIDUOUS FOREST

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC025650	.30	.4	N	50	N	.6	1.8	--	N	N	3.0	N
GC160151	.70	2.0	N	70	N	--	--	.16	N	N	7.0	30.0
GC070550	3.00	4.2	N	200	N	<.5	.4	.08	N	N	20.0	3.0
GC070650	2.00	4.3	20	70	N	<.5	1.0	.25	N	N	10.0	3.0
GC160051	.50	1.9	N	70	N	--	--	.16	N	N	10.0	10.0
GC278950	.07	1.4	30	20	N	--	--	.02	N	N	1.0	1.0
GC278350	.20	--	30	30	N	--	--	.11	N	N	2.0	1.0
GC279050	.30	1.5	N	30	N	--	--	.04	N	N	2.0	7.0
GC277750	1.00	--	<20	100	N	--	--	.08	N	N	7.0	3.0
GC026050	.30	<.1	100	30	N	<.5	.3	--	N	N	7.0	1.0
GC150650	3.00	15.0	50	200	N	--	--	.18	300	7	50.0	10.0
GC278650	.15	52.0	<20	30	N	--	--	.02	N	N	1.5	1.5
GC278250	.50	2.9	30	50	N	--	--	.04	N	N	7.0	2.0
GC150550	3.00	22.0	30	200	N	--	--	.24	N	N	50.0	10.0
GC278450	.15	--	20	30	N	--	--	.16	N	N	1.5	3.0
GC278050	.30	2.8	70	20	N	--	--	.02	N	N	5.0	1.5
GC026150	1.00	.5	20	50	N	.8	2.6	.38	N	N	5.0	2.0
GC025950	.10	<.1	N	15	N	<.5	1.1	--	N	N	2.0	N
GC261550	.70	--	70	70	N	--	--	.90	<150	N	5.0	N
GC277850	.50	4.4	N	30	N	--	--	.02	N	N	2.0	1.0
GC279150	1.00	1.8	70	100	N	--	--	.90	N	N	15.0	2.0
GC025550	.20	.6	N	30	N	<.5	.1	--	N	N	2.0	1.0
GC150850	3.00	9.4	70	200	N	--	--	.12	N	N	150.0	20.0
GC150950	.30	1.8	N	100	N	--	--	.14	N	N	10.0	N
GC277950	1.00	1.5	70	50	N	--	--	2.40	N	N	5.0	N
GC026250	.30	<.1	20	30	N	<.5	.4	--	N	N	5.0	3.0
GC026350	.10	.4	20	20	N	<.5	3.6	--	N	N	5.0	N
GC025750	.50	<.1	<20	30	N	<.5	.2	--	N	N	5.0	N
GC150750	3.00	5.2	50	200	N	--	--	.16	200	N	70.0	15.0
GC160250	.50	14.0	30	50	N	--	--	.24	N	N	15.0	50.0
GC196150	2.00	2.2	100	150	N	--	--	.15	N	5	50.0	20.0
GC211550	>10.00	10.0	50	500	N	--	--	.30	N	7	70.0	15.0
GC050351	--	13.0	N	50	N	--	--	.18	200	N	70.0	20.0
GC150050	1.50	1.8	30	300	N	--	--	.26	150	N	20.0	5.0
GC050651	--	--	30	300	1.5	--	--	.42	N	N	50.0	7.0
GC150150	.30	1.8	50	50	N	--	--	.10	150	N	20.0	5.0
GC274650	7.00	1.4	N	700	1.0	--	--	.60	N	10	7.0	3.0
GC195550	1.50	1.4	30	50	N	--	--	.10	N	N	15.0	3.0
GC274450	7.00	2.8	N	500	1.0	--	--	.04	N	3	30.0	50.0
GC195350	7.00	12.0	N	150	1.5	--	--	.28	300	20	100.0	50.0
GC050551	--	--	N	150	N	--	--	.20	N	N	20.0	7.0
GC074050	1.00	.3	<20	100	N	<.5	1.1	--	<150	N	5.0	2.0
GC211450	2.00	29.0	N	500	N	--	--	.30	N	20	15.0	50.0
GC050151	--	2.6	N	500	N	--	--	.18	300	7	70.0	20.0
GC050251	--	7.0	50	300	N	--	--	.24	200	N	50.0	10.0
GC195750	.70	2.0	50	100	N	--	--	.40	150	N	5.0	3.0
GC274750	2.00	4.1	50	300	N	--	--	.04	N	3	20.0	15.0
GC211150	5.00	2.4	N	300	N	--	--	.35	200	5	50.0	30.0
GC050451	--	2.6	30	150	N	--	--	.14	N	N	20.0	5.0
GC150350	1.50	3.8	30	150	N	--	--	.10	N	N	50.0	7.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC025650	--	.10	N	.86	.03	<.5	.06	N	<5	.010	15	N
GC160151	.021	.15	N	--	.63	--	.05	N	10	.020	20	N
GC070550	--	1.50	5	1.43	.02	1.8	.11	50	10	.050	50	N
GC070650	--	1.50	5	1.31	.04	1.8	.15	N	--	.020	50	N
GC160051	<.001	.10	N	--	.62	--	.07	N	<5	.020	30	N
GC278950	<.001	.01	N	--	.01	--	.01	N	<5	.005	<2	N
GC278350	.010	.05	N	--	.17	--	.02	N	<5	.010	10	N
GC279050	<.001	.07	N	--	.03	--	.02	N	<5	.020	7	N
GC277750	.012	.20	N	--	.08	--	.04	N	5	.030	7	N
GC026050	--	.15	N	1.13	.01	<.5	.04	N	<5	.020	20	N
GC150650	.011	1.00	7	--	.18	--	.22	200	19	.100	3,000	N
GC278650	<.001	1.00	N	--	.03	--	.02	N	<5	.007	3	3
GC278250	<.001	.10	N	--	.02	--	.19	30	19	.015	15	N
GC150550	.008	1.50	7	--	.79	--	.02	50	<5	.150	200	N
GC278450	.003	.07	N	--	.31	--	.02	N	<5	.007	2	N
GC278050	<.001	.30	N	--	.03	--	.01	N	<5	.020	100	N
GC026150	--	.50	N	.93	.06	1.1	.03	N	<5	.020	10	N
GC025950	--	.02	N	.99	.03	<.5	.09	100	<5	.010	N	N
GC261550	.010	.15	N	--	.02	--	.04	N	<5	.030	50	N
GC277850	<.001	.15	N	--	.03	--	.02	N	<5	.015	30	N
GC279150	.110	.15	N	--	.05	--	.05	N	8	.050	7	N
GC025550	--	.02	N	.93	.01	<.5	.09	N	<5	.005	20	N
GC150850	.009	1.50	10	--	.19	--	.27	70	23	.130	500	N
GC150950	<.001	.15	N	--	.42	--	.95	N	<5	.030	15	N
GC277950	<.001	.20	N	--	.04	--	.08	N	8	.100	10	N
GC026250	--	.10	N	.85	.01	<.5	.12	N	<5	.010	70	N
GC026350	--	.10	N	.74	.05	.5	.12	N	--	.010	10	N
GC025750	--	.20	N	.81	.01	<.5	.07	N	<5	.015	20	N
GC150750	.031	1.00	7	--	.32	--	.35	100	21	.100	300	N
GC160250	<.001	.15	N	--	3.40	--	.12	N	<5	.050	100	N
GC196150	<.001	2.00	5	--	.04	--	.20	N	7	.070	150	N
GC211550	.029	7.00	15	--	.11	--	.65	N	23	.200	100	N
GC050351	.017	3.00	15	--	.16	--	.12	70	27	.150	70	N
GC150050	<.001	.30	5	--	1.00	--	.55	100	9	.070	150	N
GC050651	--	2.00	15	--	--	--	.65	50	--	.200	150	N
GC150150	<.001	.10	N	--	.32	--	.02	70	7	.020	20	N
GC274650	.030	1.00	20	--	.04	--	1.60	N	12	.300	100	N
GC195550	.002	.30	N	--	.03	--	.04	N	7	.050	20	N
GC274450	<.001	3.00	15	--	.02	--	.65	N	12	.300	200	N
GC195350	<.001	3.00	10	--	.18	--	.10	100	19	.150	700	N
GC050551	--	1.00	N	--	--	--	.17	<30	--	.050	500	N
GC074050	--	.30	N	1.06	.03	.7	.34	30	<5	.020	30	N
GC211450	.033	5.00	5	--	.10	--	.50	30	15	.150	3,000	7
GC050151	.035	2.00	15	--	.22	--	1.20	150	18	.300	150	N
GC050251	.002	1.50	7	--	.39	--	.28	70	18	.200	200	N
GC195750	.074	.30	N	--	.05	--	.20	70	<5	.020	100	N
GC274750	.007	1.50	7	--	.03	--	.65	N	11	.200	500	N
GC211150	.021	3.00	15	--	.16	--	.95	150	16	.150	200	N
GC050451	.001	.70	<5	--	.19	--	.17	50	11	.050	70	N
GC150350	.005	.50	N	--	.16	--	.09	50	12	.070	70	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC025650	<.05	<10	--	N	--	N	<20	<.08	<1	N	<.1	42
GC160151	N	N	--	N	.002	10	--	--	--	N	.2	--
GC070550	N	<10	N	10	--	N	<20	<.08	<1	5	.1	38
GC070650	N	<10	--	7	--	N	<20	<.08	1	<5	<.1	35
GC160051	N	N	--	N	.004	10	--	--	--	N	.3	--
GC278950	N	N	--	N	--	N	--	--	--	N	<.1	--
GC278350	N	N	--	N	.004	N	--	--	--	N	<.1	--
GC279050	N	N	--	N	.016	N	--	--	--	N	.3	--
GC277750	N	<10	--	5	.180	N	--	--	--	N	.2	--
GC026050	<.05	<10	--	N	--	N	<20	<.08	<1	15	.4	41
GC150650	.07	20	300	15	.016	10	--	--	--	N	.5	--
GC278650	N	N	--	N	.008	N	--	--	--	N	.2	--
GC278250	N	10	N	N	.016	N	--	--	--	N	<.1	--
GC150350	N	20	N	10	.030	N	--	--	--	7	<.1	--
GC278450	N	N	--	N	.004	N	--	--	--	N	.9	--
GC278050	N	10	--	N	.008	N	--	--	--	N	.2	--
GC026150	<.05	<10	--	N	--	N	<20	.11	<1	N	<.1	--
GC025950	<.05	<10	--	N	--	N	<20	<.08	<1	N	<.1	40
GC261550	<.05	N	<70	N	.030	N	--	--	--	N	.1	42
GC277850	N	<10	--	N	.008	N	--	--	--	N	.1	--
GC279150	N	<10	--	5	.600	N	--	--	--	<5	.1	--
GC025550	N	N	--	N	--	N	<20	.08	<1	10	.4	43
GC150850	.10	30	N	10	.012	10	--	--	--	N	.9	--
GC150950	.10	N	N	N	.004	N	--	--	--	N	<.1	--
GC277950	N	<10	--	N	.008	N	--	--	--	N	.3	--
GC026250	N	N	--	N	--	N	<20	<.08	<1	N	<.1	42
GC026350	N	N	--	N	--	N	<20	<.08	1	N	<.1	41
GC025750	N	<10	--	N	--	N	<20	<.08	<1	N	.3	42
GC150750	.10	20	70	7	.012	10	--	--	--	7	.6	--
GC160250	N	N	--	N	.004	150	--	--	--	N	.7	--
GC196150	N	15	N	7	.008	15	--	--	--	10	.5	--
GC211550	N	N	--	20	.012	15	--	--	--	10	1.3	--
GC050351	--	15	N	20	.006	20	--	--	--	10	.9	--
GC150050	.07	15	70	10	.012	10	--	--	--	N	.4	--
GC050651	--	15	N	N	.012	20	--	--	--	10	--	--
GC150150	N	30	N	N	.004	N	--	--	--	N	.2	--
GC274650	1.00	N	--	5	.004	20	--	--	--	5	.9	--
GC195550	N	15	N	7	.002	15	--	--	--	N	.4	--
GC274450	.15	10	--	20	.008	15	--	--	--	10	.5	--
GC195350	N	15	70	50	.012	20	--	--	--	10	.3	--
GC050551	--	20	N	7	.008	10	--	--	--	10	--	--
GC074050	N	<10	N	N	--	N	<20	<.08	<1	N	<.1	39
GC211450	N	15	N	50	.008	300	--	--	--	5	.2	--
GC050151	--	10	150	10	.012	20	--	--	--	10	.6	--
GC050251	--	20	N	10	.006	10	--	--	--	10	<.1	--
GC195750	.10	15	70	N	.002	N	--	--	--	N	.4	--
GC274750	.10	10	--	5	.016	10	--	--	--	5	.4	--
GC211150	.15	10	200	20	.016	30	--	--	--	7	.5	--
GC050451	--	15	N	N	.002	N	--	--	--	7	.4	--
GC150350	N	20	N	5	.008	N	--	--	--	7	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC025650	1.02	N	.100	--	.67	7	N	1.0	<5	200
GC160151	--	N	.100	--	--	N	15	2.0	--	100
GC070550	1.29	100	.150	--	7.80	50	50	5.0	16	200
GC070650	1.71	15	.200	6.99	2.03	30	10	1.0	23	300
GC160051	--	5	.150	--	--	N	15	1.5	25	300
GC278950	--	N	.030	--	--	N	N	N	--	50
GC278350	--	N	.100	--	--	N	<10	N	10	300
GC279050	--	5	.070	--	--	N	N	<1.0	10	100
GC277750	--	50	.100	--	--	7	10	1.0	10	100
GC026050	.68	N	.200	2.15	.38	7	<10	1.0	<5	100
GC150650	--	20	.500	--	--	30	200	15.0	25	1,500
GC278650	--	N	.050	--	--	N	N	N	--	100
GC278250	--	7	.150	--	--	7	20	2.0	--	300
GC150550	--	20	.300	--	--	30	30	5.0	50	1,000
GC278450	--	5	.050	--	--	N	N	N	10	70
GC278050	--	<5	.300	--	--	10	<10	1.0	10	500
GC026150	.33	10	.050	--	.51	10	10	1.0	<5	70
GC025950	1.06	N	.070	--	.35	<7	N	N	<5	200
GC261550	--	30	.200	--	--	N	30	3.0	35	1,500
GC277850	--	5	.100	--	--	N	N	1.0	10	150
GC279150	--	70	.150	--	--	10	20	2.0	15	300
GC025550	<.10	N	.050	--	.39	N	N	N	5	200
GC150850	--	20	.700	--	--	30	70	10.0	25	1,000
GC150950	--	N	.150	--	--	N	10	N	25	200
GC277950	--	30	.070	--	--	10	<10	N	10	70
GC026250	.29	N	.100	--	.84	N	N	1.0	6	200
GC026350	.76	N	.100	--	.59	N	N	<1.0	<5	300
GC025750	.52	N	.100	2.44	.29	7	N	1.0	<5	500
GC150750	--	30	.700	--	--	20	50	7.0	25	700
GC160250	--	15	.200	--	--	10	15	15.0	25	200
GC196150	--	N	.200	--	--	50	15	1.5	--	100
GC211550	--	50	.500	--	--	70	30	5.0	50	500
GC050351	--	15	.300	--	--	100	20	3.0	25	300
GC150050	--	20	.500	--	--	15	30	--	50	1,500
GC050651	--	100	.700	--	--	50	30	3.0	25	500
GC150150	--	N	.700	--	--	15	100	10.0	25	1,000
GC274650	--	300	.150	--	--	30	10	1.5	30	100
GC195550	--	N	.300	--	--	20	20	2.0	--	500
GC274450	--	50	.300	--	--	150	15	3.0	25	200
GC195350	--	15	.300	--	--	100	30	5.0	40	200
GC050551	--	10	.500	--	--	30	30	7.0	25	2,000
GC074050	.73	7	.200	7.82	2.67	15	20	3.0	5	500
GC211450	--	N	.070	--	--	30	N	N	400	30
GC050151	--	100	.300	--	--	50	70	7.0	50	1,000
GC050251	--	30	.500	--	--	30	70	7.0	25	1,000
GC195750	--	15	.300	--	--	10	15	1.5	--	200
GC274750	--	15	.500	--	--	30	20	3.0	20	500
GC211150	--	15	.300	--	--	70	30	3.0	30	500
GC050451	--	10	.500	--	--	20	30	5.0	25	2,000
GC150350	--	15	.500	--	--	20	50	7.0	25	2,000

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC196050	GA	MORGAN	33 37	83 22	65 6	RT 278 2 MI E MADISON; RED PEBBLY SAND
GC022350	GA	MURRAY	34 52	84 44	63 7	US 411 14 MI N CHATSWORTH; YELLOWISH FRIABLE, SOME SAND
GC196250	GA	OGLETHORPE	33 49	83 6	65 7	US 78 1 MI E LEXINGTON; SOIL OVER GRANITE
GC274550	GA	SPALDING	33 14	84 16	69 1	US 41 2 MI S GRIFFIN; LIGHT BROWN SANDY SOIL
GC274250	GA	STEWART	32 9	84 47	69 1	US 280 10 MI W RICHLAND; RED-BROWN SANDY SOIL OVER SANDSTONE
GC274350	GA	SUMTER	32 9	84 9	69 1	RT 49 3 MI S ANDERSONVILLE; RED-BROWN SAND OVER SANDSTONE
GC150450	GA	THOMAS	30 48	84 3	63 7	US 319 3 MI S THOMASVILLE; REDDISH-ORANGE SANDY LOAM
GC195450	GA	TIFT	31 27	83 36	65 6	US 82 2 MI E TY TY; YELLOW SAND
GC049951	GA	TOWNS	34 57	83 51	63 8	US 76 2 MI E YOUNG HARRIS; RED GRANULAR MICACEOUS
GC211350	GA	WALTON	33 51	83 37	65 7	US 78 5 MI W JCT RT 20; SOIL NOT DESCRIBED
GC195650	GA	WARE	31 5	82 17	65 6	RT 177 NEAR ENTRANCE TO OKEFINKOEE SWAMP PARK; GRAY SAND
GC195850	GA	WAYNE	31 34	81 50	65 6	RT 25 50 MI N BRUNSWICK; REDDISH SAND
GC195950	GA	WHEELER	32 10	82 45	65 6	RT 280 1 MI E ALAMO; YELLOW SANDY SOIL
GC043450	IA	AUDUBON	41 35	94 45	66 10	I-80 AT ANITA EXIT; BROWNISH-BLACK SILTY LOAM
GC029950	IA	BREMER	42 44	92 9	72 9	RT 3 3 MI S BUCK CREEK; SANDY ORGANIC SOIL
GC029650	IA	BUENA VISTA	42 45	95 5	72 9	RT 3 3 MI E JCT US 71; BLACK PRAIRIE LOAM
GC029850	IA	BUTLER	42 45	92 56	72 9	RT 3 2 MI E DUMONT; SANDY ALLUVIUM
GC043050	IA	CEDAR	41 40	91 0	66 10	I-80 AT DURANT EXIT; BROWNISH-BLACK SILTY CLAY LOAM
GC046851	IA	CLAYTON	42 53	91 15	62 7	CO RD 1.7 MI N JCT WITH US 52 1 MI N GARNAVILLO; YELLOW-RED CLAYEY
GC030050	IA	DELAWARE	42 38	91 19	72 9	RT 3 5 MI E EDGEWOOD; LOESS
GC047551	IA	DUBUQUE	42 20	90 55	61 7	US 151 2 MI W AND 2 MI S FILLMORE A J CASEY FARM; YELLOW-BROWN
GC027150	IA	HAMILTON	42 18	93 34	72 6	FARM RD 200 FT N CO RD 175 E OF ELLSWORTH; DARK PRAIRIE SOIL
GC027250	IA	HANCOCK	43 7	93 38	72 6	US 69 1 MI N JCT US 18 NW OF GARNER; DARK PRAIRIE SOIL
GC043250	IA	JASPER	41 45	92 50	66 10	I-80 AT KELLOGG-SULLY EXIT; BROWN SILTY LOAM
GC043150	IA	JOHNSON	41 45	91 55	66 10	I-80 AT OXFORD EXIT; BROWNISH-GRAY SILTY CLAY LOAM
GC029550	IA	PLYMOUTH	42 48	95 56	72 9	RT 3 3 MI E REMSEN; BROWN LOAM ON TILL
GC043350	IA	POLK	41 45	93 45	66 10	I-80 AT RT 60-141 GRIMES EXIT; BROWNISH-GRAY SILTY LOAM
GC043550	IA	POTTAWATTAMIE	41 15	95 35	66 10	RT 92 3 MI E TREYNOR; BROWN SILTY LOAM
GC067950	IA	SIoux	42 59	96 0	72 6	RT 60 BY FLOYD RIVER N OF ALTON; DARK PRAIRIE SOIL
GC046951	IA	WINNEBIEK	43 10	91 47	62 7	US 52 4 MI SE OSSIAN; YELLOWISH CLAYEY, 6-IN. DEPTH
GC029750	IA	WRIGHT	42 44	93 52	72 9	RT 3 5 MI E GOLDFIELD; BLACK PRAIRIE SOIL
GC075950	ID	BANNOCK	42 50	112 25	73 9	SE EDGE OF POCATILLO; DARK BROWN LOAM OVER VOLCANIC ROCKS
GC186250	ID	BANNOCK	42 47	112 24	65 6	I-15 8 MI SE POCATELLO; BROWN SILT 4-IN. DEPTH
GC075750	ID	BEAR LAKE	42 14	111 12	73 9	US 30 7 MI SE MONTPELIER; DARK LOAM OVER GRAVEL TERRACE
GC186350	ID	BINGHAM	43 16	112 29	65 6	US 26 11 MI NW BLACKFOOT; BROWN CLAY 8-IN. DEPTH
GC186750	ID	BLAINE	43 52	114 40	65 6	US 93 NEAR GALENA PASS; BROWN CLAY ON ANDESITIC LAVA, 8-IN. DEPTH
GC186850	ID	BLAINE	43 21	114 10	65 6	RT 23 AT GANNETT; BROWN SILT 6-IN. DEPTH
GC186450	ID	BUTT	43 46	113 22	65 6	US 93A 3 MI N MOORE; BROWN SAND AND CLAY 3-IN. DEPTH
GC186950	ID	BUTT	43 28	113 35	65 6	US 93A AT CRATERS OF THE MOON; VOLCANIC CINDERS 8-IN. DEPTH
GC034850	ID	CANYON	43 39	116 40	65 8	US 20-26 E EDGE CALDWELL; GRAY-BROWN CLAY LOAM CULTIVATED
GC075850	ID	CARIBOU	42 44	111 55	73 9	US 30 2 MI W BANCROFT; VERY DARK SILT ON GRAVEL TERRACE
GC034350	ID	CASSIA	42 6	113 17	65 8	US 30S 17 MI S MALTA; GRAY SILTY DESERT SOIL
GC034450	ID	CASSIA	42 32	113 54	65 8	US 30 5 MI W BURLEY; LIGHT BROWN-GRAY SILT
GC037950	ID	CLARK	44 10	112 15	65 10	US 91 AT DUBOIS; BROWNISH-GRAY SILT ON BASALT
GC186550	ID	CUSTER	44 17	114 1	65 6	ALT. 93 ABOUT MIDWAY BETWEEN CHALLIS AND DICKEY; BROWN SILT AND CLAY
GC186650	ID	CUSTER	44 16	114 42	65 6	US 93 14 MI W CLAYTON; BROWN SAND 8-IN. DEPTH
GC034650	ID	ELMORE	43 0	115 14	65 8	US 30-26 4 MI NE GLENNS FERRY; MED BROWN SILTY SAND
GC034750	ID	ELMORE	43 18	115 55	65 8	US 30-26 18 MI NW MOUNTAIN HOME; MED BROWN SAND
GC186150	ID	FRANKLIN	42 20	112 0	65 6	US 91 1 MI S SWANLAKE; BROWN SILT, ABUNDANT ROCK FRAGMENTS
GC059650	ID	IDAHO	46 8	115 46	70 10	US 12 1 MI W LOWELL; ORGANIC LOAM OVER GNEISS COLLUVIUM

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC196050	>10.00	1.2	N	500	N	--	--	.15	150	10	50.0	70.0
GC022350	--	3.4	30	300	N	--	--	.22	N	7	100.0	20.0
GC196250	>10.00	2.2	N	500	N	--	--	.40	N	7	20.0	15.0
GC274550	5.00	5.0	20	300	1.0	--	--	.04	N	10	30.0	20.0
GC274250	2.00	7.4	30	200	1.5	--	--	.04	300	10	50.0	15.0
GC274350	1.50	2.5	20	100	N	--	--	.03	150	3	15.0	7.0
GC150450	7.00	13.0	N	150	N	--	--	.20	N	N	100.0	7.0
GC195450	1.50	1.8	30	50	N	--	--	.10	N	N	15.0	10.0
GC049951	--	2.5	N	500	N	--	--	.20	N	15	70.0	100.0
GC211350	3.00	--	N	200	N	--	--	.20	N	N	10.0	7.0
GC195650	.50	3.7	30	15	N	--	--	--	N	N	10.0	3.0
GC195850	.50	6.9	30	30	N	--	--	--	N	N	5.0	2.0
GC195950	.70	1.2	N	150	N	--	--	.10	N	N	5.0	3.0
GC043450	7.00	7.7	30	700	1.0	--	--	.60	N	15	70.0	50.0
GC029950	3.00	2.9	<20	500	N	<.5	1.1	.28	N	<3	20.0	7.0
GC029650	7.00	6.7	30	700	1.5	1.8	4.3	1.18	<150	10	70.0	50.0
GC029850	3.00	.9	<20	500	N	<.5	.5	.78	N	N	15.0	3.0
GC043050	7.00	9.6	50	700	1.0	--	--	.55	150	15	100.0	30.0
GC046851	--	12.0	50	700	2.0	--	--	.56	--	10	100.0	10.0
GC030050	5.00	6.5	50	500	2.0	<.5	1.4	1.19	N	7	70.0	20.0
GC047551	--	6.5	20	300	--	--	--	.50	--	5	50.0	7.0
GC027150	7.00	3.6	20	500	N	1.0	5.6	1.92	<150	7	70.0	50.0
GC027250	5.00	7.8	20	500	N	1.0	1.1	1.87	N	7	30.0	20.0
GC043250	7.00	12.0	30	700	1.5	--	--	.50	150	20	70.0	50.0
GC043150	7.00	12.0	30	700	1.5	--	--	.50	150	20	100.0	50.0
GC029550	10.00	7.9	50	1,000	1.5	.8	1.9	3.78	N	10	70.0	20.0
GC043350	7.00	6.8	30	500	1.5	--	--	.80	N	15	70.0	30.0
GC043550	10.00	13.0	30	700	1.0	--	--	.85	150	15	70.0	50.0
GC067950	7.00	4.1	50	700	1.5	.7	5.1	1.09	N	10	70.0	50.0
GC046951	--	6.1	30	700	3.0	--	--	.60	--	15	50.0	10.0
GC029750	5.00	5.1	50	500	N	.7	4.6	1.72	N	7	100.0	15.0
GC075950	10.00	5.0	20	700	2.0	<.5	1.6	2.86	N	7	30.0	30.0
GC186250	3.00	7.0	70	300	1.5	--	--	1.93	N	15	30.0	20.0
GC075750	3.00	5.2	50	500	N	<.5	1.6	2.24	<150	5	50.0	30.0
GC186350	3.00	5.9	70	500	1.5	--	--	1.36	150	15	50.0	30.0
GC186750	5.00	4.6	N	1,000	1.5	--	--	1.72	150	15	100.0	30.0
GC186850	3.00	7.0	30	700	N	--	--	.86	N	7	30.0	30.0
GC186450	3.00	9.5	30	1,000	1.0	--	--	1.43	N	15	70.0	30.0
GC186950	5.00	4.0	N	1,500	3.0	--	--	3.93	200	30	3.0	30.0
GC034850	7.00	6.0	30	1,000	2.0	--	--	2.50	N	15	70.0	30.0
GC075850	5.00	5.1	30	500	1.5	<.5	2.3	6.34	N	7	50.0	50.0
GC034350	5.00	7.0	70	500	N	--	--	9.70	--	10	70.0	20.0
GC034450	3.00	4.2	50	500	N	--	--	3.40	N	10	50.0	30.0
GC037950	7.00	6.2	20	700	N	--	--	2.20	N	15	100.0	30.0
GC186550	3.00	8.7	150	700	1.0	--	--	2.57	N	10	70.0	50.0
GC186650	5.00	7.4	N	700	1.5	--	--	1.43	150	10	30.0	20.0
GC034650	7.00	3.2	N	700	N	--	--	2.80	N	30	100.0	30.0
GC034750	7.00	5.3	N	1,000	N	--	--	1.20	N	10	30.0	20.0
GC186150	1.50	6.4	30	200	N	--	--	5.50	--	5	15.0	20.0
GC059650	>10.00	3.7	N	1,500	1.5	--	--	4.02	<150	15	100.0	20.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC196050	.083	3.00	50	--	.05	--	2.00	50	22	.700	200	N
GC022350	.013	.70	20	--	.08	--	.95	50	19	.200	70	N
GC196250	.020	2.00	50	--	.11	--	2.60	50	37	.300	150	N
GC274550	.007	1.50	15	--	.06	--	1.10	30	13	.200	1,000	N
GC274250	.003	1.50	5	--	.05	--	.24	100	14	.100	700	N
GC274350	.021	.50	<5	--	.03	--	.06	70	8	.070	200	N
GC150450	.018	5.00	15	--	.40	--	.06	50	21	.150	100	N
GC195450	.011	.70	<5	--	.04	--	.04	50	6	.030	50	N
GC049951	.015	5.00	30	--	.25	--	1.50	70	18	1.000	150	N
GC211350	<.001	.70	7	--	.02	--	2.10	N	13	.030	150	N
GC195650	.069	.07	N	--	.05	--	.01	N	<5	.010	15	N
GC195850	<.001	.20	N	--	.03	--	.20	N	<5	.015	15	N
GC195950	.030	.30	N	--	.02	--	.35	N	<5	.010	50	N
GC043450	.002	2.00	30	--	.07	--	1.50	50	24	.300	700	N
GC029950	--	1.00	10	1.09	.05	<.5	.82	50	10	.150	100	N
GC029650	--	2.00	15	1.08	.04	1.9	1.60	50	19	.500	500	N
GC029850	--	.70	10	.71	.02	<.5	1.07	N	5	.200	150	N
GC043050	.027	3.00	30	--	.06	--	1.50	70	24	.300	700	N
GC046851	.015	3.00	15	--	.29	--	1.70	50	25	.500	700	N
GC030050	.040	2.00	10	1.50	.05	.7	1.66	<30	16	.700	700	N
GC047551	.041	.70	5	--	.14	--	1.30	--	26	.150	300	N
GC027150	.050	3.00	10	1.43	.06	1.2	1.39	50	20	.500	100	N
GC027250	--	2.00	10	1.27	.04	.9	1.50	N	15	.700	700	N
GC043250	.032	3.00	30	--	.07	--	1.80	70	26	.500	700	N
GC043150	.034	3.00	30	--	.08	--	1.80	70	27	.500	700	N
GC029550	.050	3.00	15	--	.13	--	1.22	50	16	1.000	700	N
GC043350	.022	1.50	20	1.06	.08	<.5	1.50	30	20	.300	700	N
GC043550	.045	2.00	30	--	.06	--	1.80	70	28	.500	1,000	N
GC067950	.040	5.00	15	1.11	.07	.8	1.87	<30	26	.700	700	N
GC046951	.019	3.00	10	--	.18	--	.19	70	21	.300	1,000	N
GC029750	.050	2.00	15	1.32	.03	1.4	1.46	<30	25	.700	700	N
GC075950	.040	3.00	20	1.17	.02	.6	1.64	<30	20	1.500	700	N
GC186250	.031	3.00	30	--	.06	--	1.98	50	33	1.500	700	N
GC075750	.050	1.50	10	1.51	.02	<.5	1.60	N	20	.700	500	N
GC186350	.056	3.00	30	--	.04	--	1.98	70	35	2.000	700	N
GC186750	.028	3.00	30	--	.14	--	2.92	70	40	1.500	700	N
GC186850	.028	1.50	15	--	.03	--	1.94	30	22	1.000	300	N
GC186450	.056	2.00	30	--	.09	--	2.13	70	22	1.500	500	N
GC186950	.070	10.00	30	--	.07	--	1.92	150	26	1.500	1,000	N
GC034850	.036	2.00	30	--	.04	--	1.40	50	30	1.500	500	N
GC075850	.050	2.00	10	1.26	.02	1.8	1.22	<30	25	.500	500	N
GC034350	.058	1.50	20	--	.03	--	1.70	N	32	1.500	700	N
GC034450	.036	1.50	15	--	.03	--	1.80	30	23	.700	500	N
GC037950	.042	3.00	15	--	.05	--	1.40	N	21	1.500	700	N
GC186550	.064	2.00	30	--	.04	--	2.18	30	25	1.500	300	N
GC186650	.036	3.00	30	--	.06	--	2.62	70	31	1.000	500	N
GC034650	.048	5.00	30	--	.03	--	1.70	70	20	2.000	1,000	N
GC034750	.019	1.50	20	--	.03	--	2.80	N	21	.500	700	N
GC186150	.026	1.50	15	--	.03	--	1.59	30	17	1.500	300	N
GC059650	.054	7.00	30	--	.05	--	1.29	70	21	3.000	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC196050	.20	15	N	20	.012	20	--	--	--	10	.6	--
GC022350	--	15	--	15	.118	15	--	--	--	15	.6	--
GC196250	.50	15	N	15	.008	50	--	--	--	7	.4	--
GC274550	.15	10	70	10	.016	30	--	--	--	7	.6	--
GC274250	.05	20	100	15	.016	10	--	--	--	7	.2	--
GC274350	N	10	70	7	.020	N	--	--	--	5	.4	--
GC150450	N	10	N	15	.012	15	--	--	--	15	1.3	--
GC195450	N	15	N	7	.002	N	--	--	--	5	.2	--
GC049951	--	10	N	30	.012	15	--	--	--	15	.8	--
GC211350	.30	10	--	N	.002	15	--	--	--	N	.2	--
GC195650	N	50	N	N	<.002	N	--	--	--	N	<.1	--
GC195850	N	15	N	N	.002	N	--	--	--	N	<.1	--
GC195950	N	15	N	N	<.002	N	--	--	--	N	.2	--
GC043450	.70	15	70	30	.030	20	--	--	--	10	.5	--
GC029950	.70	N	--	5	--	10	40	<.08	<1	N	.8	36
GC029650	.70	10	N	20	--	20	85	<.08	<1	15	.4	31
GC029850	.70	N	--	<5	--	10	40	<.08	<1	N	<.1	38
GC043050	.70	15	70	30	.030	20	--	--	--	15	.8	--
GC046851	--	--	--	20	.020	15	--	--	--	10	.3	--
GC030050	.70	10	N	20	--	20	65	<.08	<1	7	<.1	35
GC047551	--	--	--	15	.030	15	--	--	--	--	.3	--
GC027150	.70	N	70	20	--	15	60	<.08	<1	7	.1	27
GC027250	.70	<10	--	15	--	15	55	<.08	<1	10	.5	34
GC043250	.70	10	70	50	.040	30	--	--	--	15	.6	--
GC043150	.70	15	70	50	.030	30	--	--	--	15	.5	--
GC029550	1.00	<10	N	20	--	15	60	<.08	<1	5	<.1	28
GC043350	.70	10	N	30	.030	20	--	--	--	10	.8	--
GC043550	.70	15	70	70	.040	20	--	--	--	15	.4	--
GC067950	.70	10	N	20	--	30	95	<.08	<1	15	.3	29
GC046951	--	--	--	20	.030	10	--	--	--	10	.6	--
GC029750	1.00	<10	N	20	--	20	75	<.08	<1	7	.3	28
GC075950	1.00	10	N	15	--	20	80	<.08	<1	7	<.1	30
GC186250	.70	30	70	30	.079	30	--	--	--	15	.2	--
GC075750	.50	10	--	15	--	15	60	.11	1	5	<.1	32
GC186350	.70	30	70	30	.079	30	--	--	--	15	.4	--
GC186750	1.50	20	70	30	.113	30	--	--	--	15	<.1	--
GC186850	.70	15	N	30	.065	30	--	--	--	10	.5	--
GC186450	.70	20	70	30	.083	30	--	--	--	15	.5	--
GC186950	1.50	70	150	7	.188	30	--	--	--	30	.2	--
GC034850	1.50	30	N	20	.030	30	--	--	--	15	.2	23
GC075850	.70	10	N	15	--	15	90	<.08	<1	7	.2	--
GC034350	1.50	15	N	20	.024	20	--	--	--	10	.2	--
GC034450	1.00	15	N	20	.030	20	--	--	--	7	.2	--
GC037950	1.00	N	--	70	.016	N	--	--	--	10	.3	--
GC186550	.30	15	N	30	.057	20	--	--	--	15	1.1	--
GC186650	1.00	30	70	15	.079	30	--	--	--	10	<.1	--
GC034650	1.50	50	N	50	.090	20	--	--	--	20	.3	--
GC034750	2.00	15	N	15	.012	50	--	--	--	7	.3	--
GC186150	.30	15	N	10	.061	15	--	--	--	7	.4	--
GC059650	2.00	<10	70	30	--	10	--	--	--	15	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC196050	--	100	.300	--	--	70	10	1.5	70	100
GC022350	--	70	.500	--	--	70	20	3.0	50	700
GC196250	--	100	.200	--	--	50	10	1.0	30	100
GC274550	--	20	.300	--	--	50	30	5.0	25	150
GC274250	--	10	.500	--	--	50	70	7.0	20	300
GC274350	--	7	.300	--	--	20	70	5.0	15	200
GC150450	--	70	.300	--	--	100	30	--	25	700
GC195450	--	N	.200	--	--	20	15	2.0	--	300
GC049951	--	30	.300	--	--	70	30	N	100	300
GC211350	--	30	.200	--	--	20	10	1.0	--	300
GC195650	--	N	.500	--	--	10	10	1.5	--	500
GC195850	--	N	.100	--	--	N	N	1.0	--	300
GC195950	--	N	.100	--	--	N	10	1.5	--	200
GC043450	--	150	.300	--	--	100	50	7.0	40	200
GC029950	.16	100	.100	4.63	.94	30	<10	1.0	25	70
GC029650	.19	150	.200	8.40	3.82	150	30	3.0	73	200
GC029850	.36	150	.070	--	.76	20	N	1.0	19	50
GC043050	--	200	.300	--	--	100	50	7.0	50	200
GC046851	--	200	.700	--	--	100	30	--	50	700
GC030050	1.10	150	.300	13.26	2.80	70	20	3.0	57	300
GC047551	--	70	.200	--	--	30	15	--	50	200
GC027150	.96	150	.200	8.73	2.95	100	15	1.5	94	100
GC027250	.18	150	.200	7.00	1.85	70	10	2.0	50	100
GC043250	--	150	.300	--	--	150	50	7.0	60	200
GC043150	--	150	.300	--	--	150	70	7.0	40	200
GC029550	.47	200	.200	7.63	2.17	100	20	2.0	60	200
GC043350	--	150	.300	--	--	70	30	5.0	50	150
GC043550	--	200	.300	--	--	150	70	7.0	50	200
GC067950	3.48	150	.200	11.67	3.74	150	20	3.0	118	150
GC046951	--	200	.500	--	--	100	30	--	50	700
GC029750	2.25	150	.200	7.02	4.57	100	15	2.0	84	200
GC075950	1.67	300	.300	10.96	3.06	50	30	5.0	75	300
GC186250	--	70	.300	--	--	70	30	5.0	88	300
GC075750	1.00	100	.200	8.12	2.81	50	15	1.5	53	300
GC186350	--	150	.300	--	--	100	50	7.0	110	300
GC186750	--	300	.300	--	--	70	30	3.0	93	150
GC186850	--	150	.150	--	--	70	30	3.0	84	150
GC186450	--	150	.200	--	--	100	30	3.0	120	150
GC186950	--	200	1.000	--	--	50	150	--	250	700
GC034850	--	500	.300	--	--	70	30	3.0	55	200
GC075850	1.11	200	.300	9.19	3.35	70	20	3.0	85	300
GC034350	--	500	.200	--	--	70	30	3.0	55	150
GC034450	--	200	.200	--	--	50	30	3.0	40	200
GC037950	--	200	.500	--	--	100	15	1.5	60	150
GC186550	--	150	.150	--	--	150	30	3.0	160	150
GC186650	--	200	.300	--	--	70	30	3.0	83	200
GC034650	--	300	.700	--	--	150	50	5.0	60	200
GC034750	--	500	.200	--	--	50	30	3.0	30	100
GC186150	--	70	.150	--	--	30	30	3.0	50	200
GC059650	--	1,000	.700	--	--	200	20	2.0	103	100

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC034550	ID	JEROME	42 40	114 31	65 8	RT 79 4 MI S JEROME; GRAY-BROWN SILT ON BASALT
GC037050	ID	KOOTENAI	47 40	116 45	65 10	I-90 1 MI S COER D'ALENE; MED BROWN SILT
GC038050	ID	MADISON	43 53	111 38	65 10	RT 33 1 MI E TETON; BROWN-GRAY SILTY LOAM EDGE CULTIVATED FIELD
GC061250	ID	NEZ PERCE	46 26	116 50	70 10	US 12 10 MI E LEWISTON; ORGANIC SILT OVER BASALT
GC017050	ID	OWYHEE	42 27	115 35	63 10	CO RD 40 MI SE BRUNEAU ON INDIAN HOT SPRING RD; SOIL UNDER HOPSAGE
GC076050	ID	POWER	42 37	113 9	73 9	I-15W 1.9 E CASSIA CO LINE; LOESSIAL SILT BY SNAKE RIVER
GC037150	ID	SHOSHONE	47 29	115 58	65 10	US 10 1 MI NW WALLACE; BROWN-BLACK ORGANIC COLLUVIUM
GC038150	ID	TETON	43 39	111 7	65 10	RT 33 5 MI S DRIGGS; BROWN-GRAY SANDY LOAM
GC231150	ID	VALLEY	45 16	115 14	66 7	BIG RAMEY CR UPPER RAMEY MEADOWS; SOIL NOT DESCRIBED
GC231550	ID	VALLEY	44 16	116 5	66 7	RT 15 2 MI S SMITHS FERRY; POOR B HORIZON ON GRANITE
GC026850	ID	WASHINGTON	44 20	116 23	71 9	DIRT RD IN BROAD VALLEY 1 MI SE JCT CRANE CREEK RD; ON BASALT ALLUV
GC057550	IL	BUREAU	41 17	89 22	70 6	RT 29 2 MI NW HENNEPIN; BROWN FOREST LOAM
GC057950	IL	CLARK	39 18	87 50	70 8	US 50 9 MI E MARTAINSVILLE; LOAM FROM GLACIAL TILL
GC002250	IL	COOK	41 30	87 44	62 5	US 30 5 MI W CHICAGO HTS; DARK BROWN-BLACK SILTY CLAY LOAM
GC007650	IL	DOUGLAS	39 47	88 17	62 10	US 36 2 MI W US 45 JCT; DARK BROWN-GRAY CLAY LOAM
GC059750	IL	EFFINGHAM	39 3	88 45	70 8	US 40 .8 MI E ALTAMONT; GRAY SILT
GC002150	IL	GRUNDY	41 11	88 19	62 5	US 66 1 MI W GARDNER; DARK BROWN-BLACK SILTY CLAY LOAM
GC042950	IL	HENRY	41 25	90 0	66 10	I-80 AT ATKINSON; BROWNISH-BLACK SILTY CLAY LOAM
GC042650	IL	IROQUOIS	40 47	87 40	66 10	US 24 5 MI W IND-ILL LINE; BLACK SILTY LOAM
GC030150	IL	KANE	42 7	88 28	72 9	JCT I-90 & US 20; DARK PRAIRIE SOIL
GC042850	IL	LA SALLE	41 20	89 0	66 10	US 51 5 MI S PERU; BLACK SILTY LOAM
GC067150	IL	LAWRENCE	38 43	87 45	72 10	US 50 4 MI W LAWRENCEVILLE; YELLOW CLAY
GC001950	IL	LOGAN	40 3	89 28	62 5	US 66 1 MI N BROADWELL SW HI; BROWN CLAY LOAM
GC007750	IL	MACON	39 50	89 8	62 10	US 36 10 MI W DECATUR; DARK BROWN-GRAY CLAY LOAM
GC057750	IL	MC DONOUGH	40 26	90 48	70 6	N EDGE OF COLCHESTER; LOAM ON LOESS
GC002050	IL	MC LEAN	40 40	88 46	62 5	US 66 1 MI N LEXINGTON; DARK BROWN CLAY LOAM
GC057650	IL	OGLE	41 59	89 16	70 6	RT 64 4 MI E OREGON; SANDY SOIL OVER SANDSTONE
GC001650	IL	PIKE	39 43	91 12	62 5	US 36 AT HULL; DARK BROWN-GRAY CLAY LOAM
GC001750	IL	PIKE	39 36	90 46	62 5	US 36-54 2 MI E PITTSFIELD; OLIVE-GRAY SILTY CLAY LOAM
GC057850	IL	RANDOLPH	38 6	89 40	70 6	RT 4 4 MI S SPARTA; BROWN FOREST
GC001850	IL	SANGAMON	39 44	89 57	62 5	US 36-54 2 MI W NEW BERLIN; DARK BROWN CLAYEY LOAM
GC067050	IL	ST CLAIR	38 36	87 45	72 10	US 50 4 MI W LEBANON; CLAY LOAM
GC047451	IL	STEPHENSON	42 5	89 55	61 7	US 52 4.5 MI W LANARK; YELLOWISH-BROWN
GC042350	IN	ADAMS	40 45	84 52	66 10	RT 124 .7 MI W OHIO-IND LINE; BROWN SILTY LOAM
GC002450	IN	ELKHART	41 44	85 59	62 5	IND TPK 1 MI W JCT RT 19; ORANGE-BROWN SANDY SUBSOIL
GC067250	IN	FLOYD	38 17	85 51	72 10	I-64 2 MI W NEW ALDANY; CLAY SOIL IN FOREST
GC007450	IN	HENDRICKS	39 46	86 29	62 10	US 36 4 MI W AVON; GRAY-ORANGE SANDY CLAY SUBSOIL
GC007350	IN	HENRY	39 48	85 19	62 10	US 40 2 MI W STRAUGHN; BROWN CLAY LOAM
GC059950	IN	MONROE	39 10	86 32	70 8	AT BLOOMINGTON, STARNES RD NEAR FLATWOODS RD JCT; LOAM ON TILL
GC002350	IN	PORTER	41 36	87 4	62 5	RT 49 3 MI N BLACK HAWK BEACH; ORANGE-BROWN SILTY LOAM
GC002550	IN	STUBEN	41 44	84 58	62 5	IND TPK AT INTERCHANGE 10; OLIVE CLAY & LEACHED CLAY
GC007550	IN	VERMILLION	39 48	87 27	62 10	US 36 2 MI E IND 71 JCT; BROWNISH-GRAY CLAY LOAM
GC042450	IN	WABASH	40 44	85 46	66 10	RT 15 4 MI NW LAFONTAINE; GRAY-BROWN SILTY LOAM
GC042550	IN	WHITE	40 50	86 45	66 10	US 24 3.5 MI W IDAVILLE; BLACK SILTY LOAM
GC155850	KS	BOURBON	37 45	94 55	63 10	US 54 10 MI W FT. SCOTT; DARK PRAIRIE SOIL OVER LIMESTONE
GC156050	KS	BUTLER	37 45	96 37	63 10	US 54 1 MI W ROSALIA; DARK PRAIRIE SOIL OVER LIMESTONE
GC058650	KS	CHEROKEE	37 9	94 48	70 10	RT 96 6 MI E COLUMBUS; PLOW ZONE
GC000450	KS	CHEYENNE	39 45	101 32	62 5	US 36 6 MI E BIRD CITY; BROWN-GRAY SILTY LOAM
GC058250	KS	COMANCHE	37 13	99 27	70 10	RT 160 4 MI E PROTECTION; SANDY SOIL
GC058450	KS	COWLEY	37 15	96 46	70 10	RT 160 5 MI S BURDEN; CHERNOZEM

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC034550	5.00	3.7	30	700	N	--	--	1.30	N	15	50.0	20.0
GC037050	>10.00	23.0	20	1,000	N	--	--	1.00	N	15	50.0	70.0
GC038050	7.00	4.5	30	700	N	--	--	1.20	N	10	70.0	20.0
GC061250	7.00	4.7	<20	1,000	N	--	--	2.54	<150	15	30.0	20.0
GC017050	>10.00	--	N	500	1.5	--	--	2.00	N	7	50.0	15.0
GC076050	5.00	4.2	50	700	2.0	<.5	1.0	1.61	N	7	50.0	20.0
GC037150	7.00	13.0	150	700	N	--	--	4.20	N	5	50.0	30.0
GC038150	5.00	11.0	30	500	N	--	--	8.10	N	5	70.0	20.0
GC231150	7.00	2.7	N	1,000	1.0	--	--	.79	150	5	15.0	7.0
GC231550	7.00	3.8	N	700	N	--	--	2.21	150	7	15.0	7.0
GC026850	10.00	3.6	N	1,000	2.0	<.5	.9	2.31	N	20	15.0	70.0
GC057550	7.00	5.8	30	700	N	--	1.3	.40	N	7	50.0	10.0
GC057950	7.00	7.0	50	700	1.0	--	--	.27	N	5	50.0	20.0
GC002250	3.00	8.4	70	500	N	--	--	.86	N	15	50.0	30.0
GC007650	7.00	8.4	N	500	N	--	--	.70	N	10	50.0	30.0
GC059750	7.00	3.3	30	500	N	--	--	.30	N	3	30.0	15.0
GC002150	3.00	10.0	70	300	N	--	--	.71	N	7	30.0	30.0
GC042950	7.00	9.2	50	700	1.0	--	--	.65	150	15	70.0	30.0
GC042650	7.00	7.4	70	700	1.5	--	--	1.10	N	10	70.0	30.0
GC030150	3.00	3.3	20	300	N	1.1	5.7	.75	N	5	50.0	20.0
GC042850	7.00	9.8	50	700	1.0	--	2.0	.28	150	15	70.0	20.0
GC067150	3.00	7.9	70	500	1.5	.9	--	1.07	N	10	70.0	15.0
GC001950	3.00	11.0	70	500	1.5	--	--	.50	N	15	30.0	50.0
GC007750	7.00	7.9	30	500	N	--	--	.30	N	10	50.0	20.0
GC057750	7.00	5.2	50	700	N	--	.8	.49	N	10	50.0	10.0
GC002050	3.00	10.0	30	500	N	--	--	--	150	15	30.0	30.0
GC057650	.30	2.7	30	30	N	--	.5	--	N	N	15.0	7.0
GC001650	3.00	4.3	70	700	N	--	--	.61	N	7	30.0	30.0
GC001750	3.00	8.8	70	500	N	--	--	.56	150	15	30.0	30.0
GC057850	7.00	4.4	30	700	N	--	1.3	.40	N	7	50.0	10.0
GC001850	3.00	8.4	70	700	N	--	--	.71	150	15	50.0	50.0
GC067050	5.00	7.5	50	700	N	.9	3.2	.66	<150	7	70.0	30.0
GC047451	--	4.7	30	500	--	--	--	.50	--	10	70.0	10.0
GC042350	5.00	7.9	70	500	1.0	--	--	7.10	N	15	70.0	50.0
GC002450	1.50	3.6	30	300	N	--	--	.30	N	7	15.0	15.0
GC067250	10.00	10.2	70	500	2.0	1.0	3.4	.19	<150	10	70.0	20.0
GC007450	7.00	15.0	30	500	N	--	--	.70	N	15	50.0	30.0
GC007350	5.00	4.8	30	500	N	--	--	.62	N	10	50.0	20.0
GC059950	7.00	8.0	50	700	N	--	--	.25	<150	7	50.0	15.0
GC002350	3.00	5.7	70	500	N	--	--	.34	N	15	30.0	15.0
GC002550	3.00	4.4	N	300	N	--	--	16.08	N	7	30.0	15.0
GC007550	7.00	12.0	30	500	N	--	--	.40	N	15	50.0	30.0
GC042450	5.00	7.5	70	700	1.0	--	--	1.80	150	7	70.0	70.0
GC042550	1.50	3.7	30	500	N	--	--	.65	N	3	30.0	15.0
GC155850	7.00	6.3	30	500	N	--	--	.56	N	7	70.0	15.0
GC156050	7.00	9.7	30	500	1.5	--	--	.56	N	10	70.0	20.0
GC058650	7.00	8.3	30	500	<1.0	--	--	.28	<150	3	50.0	20.0
GC000450	5.00	3.7	30	700	N	--	--	1.00	150	15	30.0	30.0
GC058250	7.00	2.4	<20	1,000	N	--	--	.41	N	N	10.0	7.0
GC058450	7.00	7.2	20	300	<1.0	--	--	8.65	N	5	50.0	50.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC034550	.020	2.00	20	--	.06	--	2.00	30	19	1.000	700	N
GC037050	.033	7.00	20	--	.03	--	2.80	50	31	.700	700	N
GC038050	.029	2.00	15	--	.06	--	1.20	30	26	.700	500	N
GC061250	.056	7.00	15	--	.03	--	1.52	50	22	1.500	500	N
GC017050	--	2.00	20	--	--	--	2.50	30	--	1.000	200	5
GC076050	.060	2.00	10	1.42	.01	.7	1.85	50	20	1.000	500	N
GC037150	.098	2.00	15	--	.71	--	2.50	N	112	1.000	500	N
GC038150	.050	2.00	15	--	.05	--	2.10	N	20	2.000	500	N
GC231150	.038	3.00	30	--	.12	--	3.34	70	30	.500	500	N
GC231550	.027	3.00	30	--	.14	--	1.76	70	29	1.000	500	N
GC026850	--	7.00	15	1.66	.03	<.5	1.54	30	15	.500	1,000	N
GC057550	.015	1.50	10	--	.06	<.5	1.60	30	17	.200	1,000	N
GC057950	.013	1.50	10	--	.04	--	1.48	30	23	.300	200	N
GC002250	.040	3.00	30	--	.26	--	1.89	30	32	.700	300	N
GC007650	.024	1.50	20	--	.20	--	2.00	30	26	.700	500	N
GC059750	.012	1.00	7	--	.05	--	1.31	30	14	.150	700	N
GC002150	.025	2.00	30	--	.12	--	1.83	30	30	1.000	300	3
GC042950	.019	3.00	20	--	.07	--	1.10	50	19	.300	700	N
GC042650	.013	3.00	30	--	.14	--	1.70	50	33	.300	700	N
GC030150	--	2.00	10	.70	.05	1.8	1.48	<30	20	.500	700	N
GC042850	.017	3.00	30	--	.06	--	1.60	70	24	.300	1,000	N
GC067150	--	1.50	7	1.45	.07	.8	1.37	<30	15	.200	1,500	N
GC001950	.007	3.00	20	--	.37	--	1.73	30	22	.700	1,000	3
GC007750	.015	1.50	15	--	.13	--	1.80	30	25	.500	700	N
GC057750	.021	1.50	10	--	.04	<.5	1.60	30	20	.200	700	N
GC002050	.023	3.00	30	--	.11	--	1.78	70	27	.700	700	N
GC057650	.030	.15	N	--	.03	<.5	.20	N	<5	.020	15	N
GC001650	.023	1.50	15	--	.07	--	1.64	30	19	.300	700	N
GC001750	.017	1.50	15	--	.13	--	1.74	70	20	.700	1,000	N
GC057850	.013	1.50	10	--	.04	<.5	1.40	30	17	.200	300	N
GC001850	.036	3.00	20	--	.16	--	1.83	50	22	.700	700	N
GC067050	--	1.50	10	1.49	.04	1.4	1.68	50	15	.300	700	N
GC047451	.050	1.00	7	--	.20	--	1.80	--	17	.200	500	--
GC042350	.047	3.00	30	--	.07	--	2.20	30	37	1.500	500	7
GC002450	.006	1.50	7	--	.09	--	1.27	N	13	.150	700	N
GC067250	.050	5.00	20	1.63	.05	.9	2.12	70	57	.700	200	N
GC007450	.036	2.00	20	--	.26	--	1.70	N	29	.500	500	5
GC007350	.026	1.50	15	--	.21	--	1.80	30	28	.500	500	N
GC059950	.055	1.50	10	--	.04	--	1.43	30	19	.300	500	N
GC002350	.032	1.50	15	--	.11	--	1.86	30	16	.300	1,000	N
GC002550	.057	1.50	15	--	.07	--	1.20	N	22	3.000	300	7
GC007550	.026	2.00	20	--	.16	--	1.90	N	27	.500	1,000	N
GC042450	.007	3.00	30	--	.06	--	1.50	30	20	.700	300	7
GC042550	.003	1.00	15	--	.08	--	1.30	N	10	.150	200	N
GC155850	.030	1.50	15	--	.05	--	1.40	50	27	.500	500	N
GC156050	.030	3.00	30	--	.11	--	1.60	50	34	.700	500	N
GC058650	.051	1.50	7	--	.04	--	.96	50	28	.200	700	N
GC000450	.013	1.50	30	--	.04	--	2.23	70	26	.700	500	N
GC058250	.001	.70	5	--	.04	--	2.37	N	9	.150	150	N
GC058450	.020	1.50	10	--	.11	--	1.25	30	25	.500	700	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC034550	1.00	30	N	20	.030	30	--	--	--	10	.1	--
GC037050	1.50	N	N	30	.004	20	--	--	--	15	.3	--
GC038050	1.50	N	N	30	.030	N	--	--	--	7	.4	--
GC061250	1.50	10	70	15	--	10	--	--	--	20	.2	--
GC017050	1.50	10	--	20	.170	15	--	--	--	10	--	--
GC076050	.70	<10	N	15	--	15	70	<.08	<1	7	<.1	33
GC037150	1.50	N	--	15	.030	50	--	--	--	10	<.1	--
GC038150	1.00	N	--	20	.024	N	--	--	--	7	.4	--
GC231150	3.00	10	70	<5	.074	15	--	--	--	7	<.1	--
GC231550	1.50	15	70	5	.105	15	--	--	--	7	1.2	--
GC026850	1.00	10	N	10	--	15	60	<.08	<1	20	.3	28
GC057550	--	<10	<70	15	.039	15	--	--	--	7	.2	37
GC057950	.70	10	N	10	--	30	--	--	--	7	--	--
GC002250	.70	15	N	30	.052	70	--	--	--	15	1.0	--
GC007650	1.00	10	N	20	.040	20	--	--	--	7	.5	--
GC059750	.70	10	N	7	--	20	--	--	--	7	--	--
GC002150	.70	15	N	30	.048	30	--	--	--	10	.6	--
GC042950	.70	10	70	30	.020	30	--	--	--	15	.5	--
GC042650	1.00	15	70	30	.040	20	--	--	--	15	1.0	--
GC030150	.70	N	N	10	--	30	50	<.08	<1	7	.1	32
GC042850	.70	10	70	20	.030	30	--	--	--	15	.6	--
GC067150	.70	10	N	10	--	30	60	<.08	<1	7	.4	36
GC001950	.70	15	N	30	.092	300	--	--	--	15	.5	--
GC007750	1.00	15	N	20	.030	15	--	--	--	7	.7	--
GC057750	--	10	N	15	.031	20	--	--	--	7	--	--
GC002050	.70	15	N	20	.162	30	--	--	--	15	.6	38
GC037650	--	N	--	N	.052	N	--	--	--	N	1.9	42
GC001650	.70	15	N	15	.052	15	--	--	--	7	.5	--
GC001750	.70	30	N	20	.031	30	--	--	--	15	.5	--
GC057850	--	<10	N	15	.044	15	--	--	--	7	.4	39
GC001850	.70	30	N	30	.131	30	--	--	--	15	.8	--
GC067050	1.00	<10	70	15	--	50	65	<.08	1	7	<.1	33
GC047451	--	--	--	15	.030	15	--	--	--	--	.4	--
GC042350	1.00	10	N	30	.040	15	--	--	--	15	.4	--
GC002450	.50	10	N	15	.035	N	--	--	--	N	<.1	--
GC067250	1.00	10	70	20	--	30	110	<.08	<1	10	<.1	28
GC007450	1.00	15	N	20	.020	20	--	--	--	10	.4	--
GC007350	1.00	10	N	20	.030	15	--	--	--	7	.3	--
GC059950	.70	10	70	10	--	15	--	--	--	7	.4	--
GC002350	.70	15	N	15	.017	15	--	--	--	7	.5	--
GC002550	.70	N	--	20	.052	15	--	--	--	15	.5	--
GC007550	1.00	15	N	20	.020	20	--	--	--	7	.4	--
GC042450	.70	15	N	20	.020	20	--	--	--	10	.5	--
GC042550	.50	10	N	7	.040	30	--	--	--	5	.3	--
GC155850	1.00	20	N	20	.016	20	--	--	--	10	.6	--
GC156050	1.00	15	N	30	.012	30	--	--	--	10	.5	--
GC058650	.50	10	70	10	--	20	--	--	--	10	.6	--
GC000450	.70	15	70	15	.044	30	--	--	--	15	.3	--
GC058250	.50	<10	N	<5	--	15	--	--	--	N	<.1	--
GC058450	.70	<10	N	15	--	15	--	--	--	7	.5	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC034550	--	200	.300	--	--	70	30	3.0	30	300
GC037050	--	300	.500	--	--	150	30	3.0	90	150
GC038050	--	200	.300	--	--	70	20	2.0	50	300
GC061250	--	300	.700	--	--	150	50	5.0	88	150
GC017050	--	200	.200	--	--	70	30	3.0	25	150
GC076050	1.44	200	.300	11.73	3.07	70	20	3.0	56	500
GC037150	--	70	.300	--	--	70	30	3.0	170	150
GC038150	--	200	.150	--	--	70	30	2.0	60	150
GC231150	--	300	.200	--	--	30	20	2.0	56	300
GC231550	--	500	.200	--	--	70	15	1.5	95	150
GC026850	1.94	300	1.000	22.00	2.88	300	20	2.0	117	200
GC057550	--	150	.300	--	--	50	20	3.0	87	300
GC057950	--	150	.300	--	--	50	20	3.0	38	300
GC002250	--	70	.300	--	--	70	30	3.0	100	200
GC007650	--	150	.200	--	--	70	30	2.0	65	150
GC059750	--	100	.300	--	--	30	30	3.0	59	200
GC002150	--	70	.150	--	--	70	30	3.0	84	200
GC042950	--	200	.300	--	--	70	50	5.0	50	200
GC042650	--	200	.300	--	--	100	30	5.0	50	150
GC030150	.57	100	.150	--	2.16	70	15	1.5	80	100
GC042850	--	200	.500	--	--	70	50	5.0	70	200
GC067150	1.24	100	.300	10.04	3.41	70	30	5.0	47	300
GC001950	--	70	.200	--	--	70	30	7.0	140	300
GC007750	--	200	.300	--	--	100	30	3.0	45	200
GC057750	--	150	.500	--	--	70	20	3.0	47	300
GC002050	--	70	.300	--	--	70	30	7.0	67	300
GC057650	--	7	.050	--	--	10	N	N	--	30
GC001650	--	70	.300	--	--	30	30	7.0	63	300
GC001750	--	70	.300	--	--	70	30	7.0	56	500
GC057850	--	150	.500	--	--	50	20	2.0	34	200
GC001850	--	100	.300	--	--	70	50	7.0	110	300
GC067050	1.56	150	.300	10.55	3.38	70	30	5.0	67	300
GC047451	--	150	.200	--	--	30	20	--	50	300
GC042350	--	300	.300	--	--	100	30	3.0	50	100
GC002450	--	30	.150	--	--	20	15	1.5	32	150
GC067250	1.15	150	.500	10.94	3.23	150	30	5.0	113	200
GC007450	--	150	.200	--	--	100	20	2.0	70	150
GC007350	--	150	.300	--	--	70	20	2.0	50	150
GC059950	--	100	.500	--	--	70	30	3.0	45	500
GC002350	--	70	.300	--	--	30	30	3.0	51	300
GC002550	--	500	.150	--	--	70	15	3.0	55	70
GC007550	--	150	.200	--	--	100	30	3.0	55	200
GC042450	--	200	.300	--	--	70	30	5.0	50	300
GC042550	--	100	.150	--	--	30	15	1.5	40	150
GC155850	--	100	.500	--	--	50	30	5.0	50	300
GC156050	--	150	.300	--	--	100	30	5.0	50	300
GC058650	--	70	.700	--	--	50	30	3.0	200	300
GC000450	--	150	.150	--	--	70	30	5.0	74	300
GC058250	--	100	.150	--	--	15	15	1.5	21	300
GC058450	--	150	.300	--	--	70	30	3.0	78	300

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC000550	KS	DECATUR	39 50	100 41	62 5	US 36 7 MI W OBERLIN; DARK BROWN SILTY LOAM
GC024450	KS	DICKINSON	38 56	97 22	71 10	1-70 AT SOLOMON EXIT; DARK BROWN PRAIRIE LOAM
GC001150	KS	DONIPHAN	39 52	95 12	62 5	US 36 1 MI W SPARKS; YELLOW-BROWN LOESS
GC024650	KS	ELLIS	38 52	99 8	71 10	1-70 AT VICTORIA EXIT; YELLOW CLAY
GC024550	KS	ELLISWORTH	38 51	98 17	71 10	1-70 AT VESPER EXIT; DARK BROWN PRAIRIE SOIL
GC156450	KS	FORD	37 50	99 45	63 10	US 50-56 AT SPEARVILLE; DARK PRAIRIE SOIL
GC156550	KS	GRAY	37 52	100 38	63 10	US 50 2 MI W CHARLESTON; CALICHE OVER LIMESTONE
GC058350	KS	HARPER	37 15	98 9	70 10	RT 160 4 MI E ATTICA; SANDY SOIL
GC156150	KS	HARVEY	38 0	97 15	63 10	US 81 2 MI S NEWTON; DARK PRAIRIE SOIL OVER LIMESTONE
GC024250	KS	JACKSON	39 5	95 37	71 10	US 24 AT E CITY LIMIT TOPEKA; LOESS & COLLUVIUM
GC000850	KS	JEWELL	39 47	97 57	62 5	US 36 2 MI E FORMOSO; TOUGH BROWN-GRAY CLAY LOAM
GC156650	KS	KEARNY	37 55	101 20	63 10	US 50 6 MI W LAKIN; CALICHE OVER LIMESTONE
GC024850	KS	LOGAN	39 7	101 44	71 10	US 40 AT OAKLEY; BLACK PRAIRIE SOIL
GC058550	KS	MONTGOMERY	37 13	95 53	70 10	RT 160 6 MI W ELK CITY; CHERNOZEM
GC000650	KS	NEMAH	39 50	99 45	62 5	US 36 9 MI E NORTON; BROWN-GRAY SILTY LOAM
GC001050	KS	NEMAH	39 51	96 9	62 5	US 36 5 MI W SENECAS; BROWN-GRAY HARD CLAY LOAM
GC156250	KS	RENO	38 0	98 0	63 10	US 50 8 MI W HUTCHINSON; DARK PRAIRIE SOIL OVER LIMESTONE
GC058150	KS	SEDWICK	37 17	100 45	70 10	RT 160 8 MI W PLAINS; CHERNOZEM
GC000750	KS	SMITH	39 47	98 49	62 5	US 36 3 MI W SMITH CENTER; BROWN LOAM
GC156350	KS	STAFFORD	37 58	98 55	63 10	US 50 3 MI E MACKSVILLE; DARK PRAIRIE SOIL OVER LIMESTONE
GC058050	KS	STANTON	37 32	101 45	70 10	AT JOHNSON CITY; CULTIVATED
GC024750	KS	TREGO	39 1	100 1	71 10	1-70 AT VODA RD EXIT; SILTY PRAIRIE SOIL
GC024350	KS	WABAUNSEE	39 4	96 20	71 10	1-70 AT EXIT 318; DARK BROWN PRAIRIE SOIL OVER LIMESTONE
GC024950	KS	WALLACE	38 53	101 44	71 10	US 40 1 MI E SHARON SPRINGS; DARK PRAIRIE SOIL
GC000950	KS	WASHINGTON	39 49	97 4	62 5	US 36 1 MI W WASHINGTON; CLAYEY STREAM SEDIMENT
GC155950	KS	WOODSON	37 50	95 52	63 10	US 54 2 MI W BATESVILLE; DARK PRAIRIE SOIL OVER LIMESTONE
GC024150	KS	WYANDOTTE	39 7	94 50	71 10	US 24 AT 118TH ST W KANSAS CITY; BLACK PRAIRIE SOIL
GC182751	KY	ADAIR	37 13	85 15	65 5	1.5 MI E HOLMES NEAR GREEN RIVER; B HORIZON RED-YELLOW PODZOLIC
GC183851	KY	BATH	38 2	83 39	66 5	RT 36 1 MI S OLYMPIA SPRINGS; RED-YELLOW PODZOLIC
GC157650	KY	BELL	36 44	83 40	64 8	RT 117 2 MI N PINEVILLE; LITHOSOL ON SANDSTONE
GC049851	KY	BREATHITT	37 26	83 23	62 8	RT 1110 7 MI SW HADDIX; YELLOW SILT SLIGHTLY SANDY
GC183651	KY	BULLITT	37 51	85 37	66 5	BERNHEIM FOREST, ON HILL TOP; B HORIZON RED-YELLOW PODZOLIC
GC183251	KY	CLAY	37 13	83 51	66 5	3 MI S BURNING SPRINGS; B HORIZON RED-YELLOW PODZOLIC
GC051050	KY	CLINTON	36 43	85 13	67 6	400 YDS S PICKENS BR, 2500 FT E ILLWILL CR.; HILLTOP SOIL
GC049251	KY	CRITTENDEN	37 20	88 12	62 8	1.5 MI S SHERIDAN BY FLUORSPAR PROSPECT PIT; RED-YELLOW LOOSE SANDY
GC049551	KY	EDMONSON	37 15	86 15	62 8	RT 62 1 MI W ROCKPORT; GRAY-YELLOW, FINE-GRAINED
GC051351	KY	ELLIOTT	38 11	83 6	65 6	CO RD 4-3/4 MI STRAIGHT WEST OF BRUIN; SOIL NOT DESCRIBED
GC049651	KY	FAYETTE	38 3	84 30	62 8	EXPERIMENT FARM WOODS; VIRGIN SOIL, REDDISH-BROWN CLAY
GC067450	KY	FLOYD	37 41	82 46	72 10	US 23 2 MI N PRESTONBURG; YELLOW CLAY
GC050750	KY	GRAVES	36 32	88 29	67 6	RT 97, .6 MI NE BELL CITY, 50 FT N COUNTY ROAD; HILLTOP SOIL
GC157550	KY	HARLAN	36 55	82 52	64 8	SUMMIT OF BLACK MT AT VA. STATE LINE; DARK FOREST SOIL ON LS
GC051150	KY	LARUE	37 28	85 33	67 6	RT 210 1 MI N HIBERNIA, 700 YDS NE OTTER CR. CHURCH; HILLTOP SOIL
GC157250	KY	LINCOLN	37 28	84 39	64 8	RT 27 AT HALLS GAP 30 MI N STANFORD; BROWN PODZOLIC, 4 IN. TO LS
GC182451	KY	LYON	37 6	88 2	65 5	1.5 MI E, .6 MI S FAIRVIEW; B HORIZON RED-YELLOW PODZOLIC
GC157350	KY	MC CREARY	36 53	84 30	64 8	RT 27 MCCREARY-PULASKI CO LINE; BROWN PODZOLIC OVER SS
GC181951	KY	MEADE	38 5	86 24	65 5	RT 1047 1.5 MI S WOLF CR; B HORIZON RED-YELLOW PODZOLIC
GC051250	KY	MONROE	36 47	85 50	67 6	1.8 MI SW MOUNT HERMAN, 1000 YDS S COUNTY LINE; HILLTOP SOIL
GC049451	KY	MUHLENBERG	37 20	87 0	62 8	ROCK ASPHALT QUARRY NEAR KYROCK; REDDISH SANDY
GC049751	KY	NICHOLAS	38 20	83 58	62 8	CO RD 2 MI E CARLISLE; YELLOWISH CLAY IN DECIDUOUS WOODS
GC050950	KY	SIMPSON	36 38	86 32	67 6	.2 MI S & .1 MI E TYRE CHAPEL ON HILL S OF ROAD; SOIL NOT DESCRIBED

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC000550	3.00	5.4	70	700	N	--	--	1.21	150	15	30.0	30.0
GC024450	5.00	3.9	30	700	N	.8	1.1	.56	N	5	50.0	10.0
GC001150	3.00	14.0	70	700	N	--	--	.58	150	15	30.0	30.0
GC024650	5.00	2.7	<20	1,000	N	1.1	2.7	7.17	--	<3	30.0	10.0
GC024550	10.00	7.1	50	1,000	3.0	1.1	1.8	.75	<150	10	100.0	30.0
GC156450	7.00	5.5	30	700	N	--	--	.72	N	7	50.0	15.0
GC156550	7.00	7.3	N	700	N	--	--	7.00	--	7	50.0	15.0
GC058350	5.00	2.6	N	1,000	N	--	--	.22	N	N	7.0	2.0
GC156150	7.00	8.2	30	700	1.5	--	--	.60	N	7	50.0	20.0
GC024250	7.00	6.3	50	500	2.0	.7	2.6	19.82	<150	10	50.0	30.0
GC000850	3.00	7.2	50	500	N	--	--	.71	150	15	30.0	30.0
GC156650	7.00	7.3	30	700	N	--	--	2.80	N	10	50.0	15.0
GC024850	7.00	9.9	30	700	2.0	3.5	4.5	1.98	<150	7	50.0	70.0
GC058550	7.00	12.0	30	500	<1.0	--	--	.36	<150	7	70.0	15.0
GC000650	3.00	5.6	70	700	N	--	--	1.00	150	15	30.0	30.0
GC001050	5.00	10.0	70	500	N	--	--	.63	150	15	30.0	50.0
GC156250	7.00	5.8	30	700	N	--	--	.48	N	10	50.0	15.0
GC058150	7.00	7.3	<20	1,000	N	--	--	1.92	<150	5	50.0	20.0
GC000750	3.00	6.2	50	700	N	--	--	1.36	150	15	30.0	30.0
GC156350	7.00	6.2	30	700	N	--	--	.58	N	10	100.0	15.0
GC058050	7.00	4.3	20	1,000	1.0	--	--	.54	<150	5	30.0	20.0
GC024750	10.00	5.0	50	1,000	1.5	.8	1.3	1.49	<150	10	50.0	20.0
GC024350	7.00	8.4	70	300	2.0	1.2	5.9	5.75	--	10	100.0	50.0
GC024950	10.00	3.0	50	1,000	2.0	1.9	2.5	2.35	<150	10	50.0	30.0
GC000950	3.00	5.4	70	500	N	--	--	.49	150	10	30.0	30.0
GC155950	7.00	13.0	30	500	1.5	--	--	.48	N	10	70.0	20.0
GC024150	5.00	7.0	50	700	2.0	.7	1.8	.56	N	7	70.0	20.0
GC182751	--	9.3	30	200	N	--	.3	.08	N	N	50.0	50.0
GC183851	--	2.0	90	690	N	--	.4	--	N	15	120.0	16.0
GC157650	7.00	--	70	1,000	N	--	--	.50	150	15	200.0	15.0
GC049851	--	--	30	300	2.0	--	--	.12	--	20	50.0	7.0
GC183651	--	14.0	36	340	N	--	.4	.23	N	9	83.0	20.0
GC183251	--	11.0	28	190	N	--	.4	.06	N	7	78.0	15.0
GC051050	--	2.8	50	130	N	--	--	.67	--	4	35.0	6.0
GC049251	--	8.6	20	50	2.0	--	--	2.60	--	50	1,000.0	100.0
GC049551	--	2.3	50	200	1.5	--	--	.20	--	7	100.0	5.0
GC051351	--	6.3	30	500	2.0	--	--	--	N	5	100.0	30.0
GC049651	--	7.0	100	500	2.0	--	--	.36	<150	20	50.0	10.0
GC067450	10.00	4.7	20	500	3.0	<.5	1.0	.18	--	7	50.0	15.0
GC050750	--	8.1	70	600	N	--	--	.24	--	17	84.0	16.0
GC157550	>10.00	--	50	700	N	--	--	.20	200	10	150.0	15.0
GC051150	--	2.8	59	300	N	--	--	.24	--	11	39.0	10.0
GC157250	>10.00	--	100	700	N	--	--	.30	150	15	150.0	15.0
GC182451	--	11.0	30	300	N	--	.4	.27	N	5	70.0	20.0
GC157350	--	--	50	200	N	--	--	.40	N	10	150.0	10.0
GC181951	--	14.0	30	300	<1.0	--	.3	.37	N	7	70.0	30.0
GC051250	--	9.5	71	300	N	--	--	.60	--	9	71.0	11.0
GC049451	--	9.6	50	200	2.0	--	--	.24	--	15	30.0	7.0
GC049751	--	11.0	100	300	2.0	--	--	.68	--	30	70.0	20.0
GC050950	--	5.8	89	240	N	--	--	.28	--	5	70.0	10.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC000550	.035	1.50	30	--	.05	--	2.21	70	22	1.000	500	N
GC024450	--	1.50	10	.95	.03	1.1	1.76	<30	20	.500	200	N
GC001150	.040	2.00	30	--	.08	--	1.89	50	27	1.500	700	N
GC024650	--	1.00	10	.73	.01	2.0	1.63	N	10	.300	150	N
GC024550	.040	3.00	20	1.63	.04	1.2	1.83	50	23	1.000	500	N
GC156450	.094	2.00	20	--	.08	--	2.20	50	23	.500	500	N
GC156550	.042	1.50	20	--	.04	--	2.10	50	19	.500	300	N
GC058350	.004	.30	5	--	.01	--	2.38	N	5	.030	100	N
GC156150	.026	2.00	15	--	.10	--	1.90	30	25	.500	300	N
GC024250	.040	3.00	15	1.80	.03	1.0	--	50	25	.500	300	N
GC000850	.033	1.50	30	--	.07	--	2.05	50	24	.700	500	N
GC156650	.044	2.00	20	--	.02	--	2.20	50	27	1.000	500	N
GC024850	.050	2.00	15	1.43	.14	1.2	2.14	50	26	.700	500	N
GC058550	<.001	2.00	15	--	.02	--	1.14	50	40	.300	700	N
GC000650	.032	1.50	30	--	.05	--	2.07	70	21	.700	500	N
GC001050	.057	2.00	30	--	.07	--	1.50	50	33	1.000	500	N
GC156250	.026	2.00	15	--	.13	--	2.10	50	21	.500	300	N
GC058150	.015	1.50	15	--	.04	--	2.01	30	17	.500	500	N
GC000750	.017	2.00	30	--	.04	--	2.09	70	23	1.000	500	N
GC156350	.030	2.00	20	--	.12	--	2.30	50	22	.500	300	N
GC058050	.025	1.50	15	--	.06	--	2.32	50	20	.500	500	N
GC024750	.040	3.00	15	1.25	.02	2.1	2.13	50	20	1.000	500	N
GC024350	.070	3.00	15	1.31	.03	2.2	2.20	50	45	1.500	500	N
GC024950	.050	2.00	20	.77	.03	1.6	2.34	50	25	.700	500	N
GC000950	.021	1.50	20	--	.07	--	1.54	50	17	.700	500	N
GC155950	.013	3.00	20	--	.11	--	1.40	30	30	.700	500	N
GC024150	.040	2.00	10	1.28	.05	1.3	1.66	<30	19	.500	500	N
GC182751	.030	2.50	7	--	.07	--	.78	N	30	--	43	N
GC183851	.060	6.50	35	--	.03	--	2.49	64	136	--	260	N
GC157650	--	2.00	20	--	--	--	.90	70	--	.700	700	N
GC049851	--	.70	15	--	--	--	2.20	50	--	.100	300	<3
GC183651	.049	4.10	17	--	.09	--	1.08	46	40	--	170	N
GC183251	.007	3.20	12	--	.15	--	.27	37	35	--	100	N
GC051050	.025	.83	N	--	.55	--	.40	N	28	--	100	N
GC049251	.368	7.00	15	--	.09	--	.15	150	55	5.000	700	<3
GC049551	.007	.70	7	--	.27	--	.90	--	15	.070	70	<3
GC051351	.088	--	15	--	.06	--	3.00	30	80	--	--	N
GC049651	.007	1.50	10	--	.28	--	1.40	70	27	.150	2,000	<3
GC067450	.040	3.00	20	1.65	.02	<.5	1.74	<30	25	.500	300	N
GC050750	.010	2.80	16	--	.05	--	1.60	60	22	--	550	N
GC157550	--	3.00	30	--	--	--	1.50	100	--	.700	700	N
GC051150	.033	1.20	N	--	.05	--	1.25	N	16	--	510	N
GC157250	--	3.00	30	--	--	--	1.70	70	--	1.000	700	N
GC182451	.019	4.10	7	--	.08	--	1.58	N	28	--	320	N
GC157350	--	1.00	7	--	--	--	.49	30	--	.150	300	N
GC181951	<.001	6.50	10	--	.09	--	1.33	N	36	--	220	N
GC051250	.012	1.90	13	--	.35	--	.56	N	21	--	160	N
GC049451	.013	1.00	7	--	.35	--	1.10	50	15	.100	700	<3
GC049751	.049	5.00	15	--	.15	--	2.40	70	40	.300	1,000	<3
GC050950	.004	2.10	N	--	.12	--	.57	N	18	--	120	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC000550	.70	15	N	15	.057	30	--	--	--	10	.3	--
GC024450	1.00	10	N	10	--	15	85	<.08	<1	5	.7	33
GC001150	.70	15	N	15	.052	30	--	--	--	10	.7	--
GC024650	.70	N	--	7	--	15	75	<.08	<1	<5	.1	28
GC024550	1.00	10	N	20	--	30	100	.11	<1	10	<.1	30
GC156450	1.50	15	N	20	.034	200	--	--	--	10	.4	--
GC156550	2.00	10	N	15	.044	20	--	--	--	7	.3	--
GC058350	.70	<10	N	N	--	15	--	--	--	N	<.1	--
GC156150	1.00	15	N	15	.024	30	--	--	--	10	.4	--
GC024250	1.00	10	70	20	--	20	70	<.08	<1	10	.5	23
GC000850	.70	20	N	15	.039	30	--	--	--	10	.7	--
GC156650	1.50	15	N	20	.044	20	--	--	--	10	.2	--
GC024850	.70	<10	N	20	--	150	105	.09	<1	10	.3	28
GC058550	.50	10	70	20	--	15	--	--	--	10	.7	--
GC000650	.70	30	70	15	.044	30	--	--	--	10	.5	--
GC001050	.70	15	N	15	.017	30	--	--	--	15	1.3	--
GC156250	1.50	15	N	20	.024	30	--	--	--	10	.5	--
GC058150	1.00	10	70	10	--	20	--	--	--	7	.3	--
GC000750	.70	20	70	15	.035	30	--	--	--	10	.5	--
GC156350	1.50	15	N	20	.044	30	--	--	--	10	.3	--
GC058050	1.00	10	70	15	--	20	--	--	--	7	.3	--
GC024750	1.00	10	70	15	--	15	100	<.08	2	10	<.1	30
GC024350	1.00	<10	N	50	--	15	95	<.08	1	10	.2	23
GC024950	1.00	<10	N	15	--	20	100	<.08	<1	10	.2	30
GC000950	.70	15	N	15	.026	30	--	--	--	7	.4	--
GC155950	1.00	15	N	20	.012	30	--	--	--	10	.8	--
GC024150	.70	10	N	10	--	20	75	<.08	<1	10	<.1	35
GC182751	--	<10	--	<5	.017	<10	--	--	--	5	.8	--
GC183851	--	20	--	43	.022	<10	--	--	--	22	.4	--
GC157650	.30	15	N	20	.060	50	--	--	--	10	--	--
GC049851	--	--	--	10	.020	10	--	--	--	10	--	--
GC183651	--	15	--	19	.022	11	--	--	--	15	.7	--
GC183251	--	18	--	18	.026	<10	--	--	--	13	.7	--
GC051050	--	15	--	6	.020	N	--	--	--	N	.2	--
GC049251	--	--	--	700	.450	10	--	--	--	20	.1	--
GC049551	--	--	--	7	.005	10	--	--	--	5	1.9	--
GC051351	--	<10	--	30	.030	15	--	--	--	15	.8	--
GC049651	--	--	--	15	.075	15	--	--	--	7	.4	31
GC067450	1.00	<10	N	10	--	15	95	<.08	<1	7	.5	--
GC050750	--	26	--	21	.030	21	--	--	--	12	.5	--
GC157550	.30	15	70	20	.040	20	--	--	--	20	--	--
GC051150	--	17	--	13	.030	20	--	--	--	N	.5	--
GC157250	1.00	20	70	30	.020	30	--	--	--	15	--	--
GC182451	--	<10	--	<5	.017	15	--	--	--	7	.6	--
GC157350	.10	15	N	7	.010	20	--	--	--	7	--	--
GC181951	--	<10	--	<5	.026	20	--	--	--	7	.9	--
GC051250	--	28	--	12	.020	22	--	--	--	10	.7	--
GC049451	--	--	--	10	.030	10	--	--	--	7	.3	--
GC049751	--	--	--	20	.110	20	--	--	--	15	.4	--
GC050950	--	26	--	10	.020	15	--	--	--	N	.4	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC000550	--	150	.150	--	--	70	30	5.0	64	300
GC024450	1.01	200	.200	13.02	3.87	70	30	5.0	46	200
GC001150	--	100	.300	--	--	70	50	7.0	73	300
GC024650	1.08	100	.100	6.81	2.22	70	15	2.0	45	100
GC024550	1.54	200	.300	4.50	3.48	150	30	5.0	70	200
GC156450	--	200	.300	--	--	70	30	5.0	50	300
GC156550	--	300	.200	--	--	70	20	3.0	50	200
GC058350	--	70	.070	--	--	7	10	1.0	14	70
GC156150	--	150	.300	--	--	70	30	3.0	50	200
GC024250	1.79	200	.500	10.22	3.73	100	20	5.0	61	500
GC000850	--	100	.300	--	--	70	30	7.0	62	300
GC156650	--	300	.300	--	--	100	30	5.0	50	300
GC024850	5.00	150	.200	16.08	3.17	100	30	2.0	246	150
GC058550	--	100	.500	--	--	70	30	3.0	68	300
GC000650	--	150	.300	--	--	70	30	7.0	56	700
GC001050	--	70	.200	--	--	70	30	7.0	79	300
GC156250	--	150	.300	--	--	70	30	5.0	50	700
GC058150	--	150	.200	--	--	50	30	3.0	60	200
GC000750	--	100	.300	--	--	70	30	7.0	62	500
GC156350	--	150	.300	--	--	100	30	5.0	50	500
GC058050	--	200	.300	--	--	70	30	3.0	65	300
GC024750	1.94	200	.500	--	3.43	100	20	3.0	64	500
GC024350	1.66	200	.300	4.63	3.25	150	20	3.0	71	200
GC024950	.57	300	.200	12.87	3.57	100	20	3.0	85	300
GC000950	--	70	.300	--	--	70	30	7.0	50	300
GC155950	--	150	.300	--	--	70	30	5.0	50	300
GC024150	.99	100	.300	13.94	4.42	100	30	5.0	57	500
GC182751	--	10	.350	--	--	50	10	1.0	30	100
GC183851	--	140	.950	--	--	260	40	--	55	210
GC157650	--	100	.500	--	--	70	100	10.0	25	500
GC049851	--	20	.200	--	--	50	15	--	50	150
GC183651	--	100	.770	--	--	99	38	--	40	420
GC183251	--	70	.850	--	--	72	31	--	25	420
GC051050	--	N	.350	--	--	30	23	--	20	280
GC049251	--	150	1.500	--	--	150	20	--	150	150
GC049551	--	20	.500	--	--	30	10	--	25	500
GC051351	--	50	--	--	--	100	20	--	70	100
GC049651	--	70	.500	--	--	70	20	2.0	50	300
GC067450	2.62	100	.300	9.32	3.25	70	20	--	64	200
GC050750	--	140	.760	--	--	82	54	3.0	30	600
GC157550	--	100	.700	--	--	150	70	7.0	25	300
GC051150	--	60	.410	--	--	30	44	--	30	330
GC157250	--	150	.700	--	--	100	70	10.0	25	500
GC182451	--	30	.670	--	--	50	20	2.0	20	300
GC157350	--	20	.300	--	--	30	50	7.0	--	700
GC181951	--	50	.720	--	--	50	20	2.0	50	300
GC051250	--	70	.830	--	--	52	55	--	20	560
GC049451	--	50	.500	--	--	50	20	--	25	300
GC049751	--	50	.700	--	--	70	20	--	50	300
GC050950	--	30	.960	--	--	40	43	--	--	890

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC050850	KY	TODD	36 48	87 17	67 6	3 MI SE FAIRVIEW, .9 MI W RED RIVER; SOIL NOT DESCRIBED
GC049351	KY	UNION	37 45	87 52	62 8	RT 1179 7 MI NW MORGANFIELD; YELLOWISH LOAM TO CLAY
GC067350	KY	WOLFE	37 44	83 33	72 10	RT 15 1 MI N CAMPTON; YELLOW CLAY
GC151550	LA	ASCENSION	30 17	90 57	63 7	US 61 15 MI S BATON ROUGE; YELLOWISH LOAM
GC151850	LA	CALCASIEU	30 14	93 26	63 7	US 90 1 MI W SULPHUR IN PINE WOODS; DARK ALLUVIAL SOIL
GC005850	LA	CAMERON	29 47	93 18	62 11	RT 87 .1 MI E CAMERON; ORGANIC PEAT OF OYSTER GRASS DEBRIS
GC193950	LA	CONCORDIA	31 34	91 30	65 6	US 84 1 MI E SYCAMORE; SANDY ALLUVIUM
GC194250	LA	EAST FELICIANA	30 51	91 6	65 6	RT 19 6 MI N ETHEL; FINE SANDY ALLUVIUM
GC151750	LA	JEFFERSON DAVIS	30 28	92 44	63 7	US 190 4 MI W ELTON; SANDY SOIL IN PINE WOODS
GC069650	LA	LA SALLE	31 26	92 7	73 1	RT 96 20 MI W JONESVILLE; SWAMPY CLAY SOIL
GC193850	LA	LA SALLE	31 39	92 7	65 6	US 84 1 MI E JENA; TAN SAND 9-IN. DEPTH
GC069550	LA	RAPIDES	31 8	92 47	73 1	RT 28 AT JCT RT 463; BROWN SANDY SOIL
GC193650	LA	SABINE	31 37	93 28	65 6	RT 175 6 MI N MANY; YELLOW SAND
GC005150	LA	ST BERNARD	29 59	89 56	62 11	RT 47 2-1/2 MI N CHALMETTE; MARSH PEAT
GC151450	LA	ST CHARLES	29 48	90 18	63 7	US 61 1 MI N INTERNATIONAL AIRPORT; DARK ALLUVIAL, MANY SHELLS
GC151650	LA	ST LANDRY	30 33	91 48	63 7	US 190 8 MI W KROTZ SPRING; MOTTLED GRAY AND YELLOW CLAY
GC005651	LA	VERMILION	29 37	92 26	62 11	RT 87 .5 MI E PECAN ISLAND; ORGANIC CLAY FROM SALINE MUDFLAT
GC069450	LA	VERNON	31 4	93 31	73 1	RT 8 1 MI W BURR FERRY; DARK GRAY SANDY SOIL
GC193750	LA	WINN	31 53	92 46	65 6	US 84 10 MI W WINFIELD; TAN SAND
GC074250	MA	BARNSTABLE	41 37	70 34	73 8	JCT RT 28 & 151 AT N. FALMOUTH; LOAM ON GLACIAL MORaine
GC003950	MA	BERKSHIRE	42 17	73 14	62 5	I 90 9 MI E NY ST LINE; ORANGE-BROWN TILL FROM RIDGE S SERVICE AREA
GC004250	MA	ESSEX	42 44	70 57	62 5	I 95 2 MI N JCT RT 133; B HORIZON IN TILL OVER METAMORPHIC ROCK
GC004050	MA	HAMPDEN	42 10	72 28	62 5	I-90 1 MI E INTERCHANGE 7; ORANGE-BROWN IN BOULDER GLACIAL SAND
GC004150	MA	MIDDLESEX	42 19	71 21	62 5	I-90 AT INTERCHANGE 13; SANDY B HORIZON
GC074150	MA	NANTUCKET	41 17	69 58	73 8	OTTER ROCK RD, NANTUCKET ISLAND; BEACH SAND
GC032750	MD	ANNE ARUNDEL	39 5	76 41	72 9	RT 175 2 MI N E ODENTON; YELLOW SANDY SOIL
GC032850	MD	BALTIMORE	39 36	76 40	72 9	RT 45 2 MI N HEREFORD; YELLOW SILT
GC032950	MD	MONTGOMERY	39 14	79 7	72 9	RT 27 2.5 MI S CEDAR GROVE; LIGHT BROWN LOAM
GC032550	MD	QUEEN ANNES	39 8	76 0	72 9	US 213 2 MI S CHURCH HILL; GRAY SANDY SOIL
GC032650	MD	TALBOT	38 40	76 3	73 9	US 50 1.5 MI N TRAPPE; GRAY SANDY SOIL
GC014450	MD	WASHINGTON	39 35	77 39	58 10	SITE AND SOIL DESCRIPTION NOT RECORDED
GC032350	MD	WORCESTER	38 11	75 25	72 9	RT 12 2 MI N SNOW HILL; DARK GRAY SANDY SOIL
GC039550	ME	AROOSTOOK	47 0	68 0	66 10	US 1 11.3 MI S VAN BUREN; B HORIZON ON METASEDIMENTS
GC039650	ME	AROOSTOOK	46 10	67 50	66 10	US 1 9.5 MI S MONTICELLO; STONY CLAY LOAM, CULTIVATED
GC004350	ME	CUMBERLAND	43 40	70 18	62 5	I-95 AT INTERCHANGE 7; BROWN WATERLOGGED B HORIZON SOIL
GC039850	ME	FRANKLIN	44 50	70 30	66 10	RT 4 2.5 MI NW MADRID; B HORIZON ON GRAVEL OF IRON-STAINED PEBBLES
GC004450	ME	KENNEBEC	44 10	69 52	62 5	I-95 9 MI S INTERCHANGE 14; OLIVE-GRAY CLAY TILL POOR SOIL DEVELOPMENT
GC039150	ME	PENOBSCOT	44 45	68 45	66 10	US 1A 2.5 MI E BREWER; YELLOW-BROWN B HORIZON
GC025250	ME	PISCATAQUIS	45 53	69 26	71 5	RAGGED LAKE QUAD W EDGE OF PINE STREAM; SOIL ON GRAVELLY TILL
GC004550	ME	SOMERSET	44 48	69 45	62 5	US 201 3 MI N SKOWHEGAN; PEBBLY YELLOWISH-BROWN TILL
GC025150	ME	SOMERSET	45 25	69 53	71 5	5 MI N OF N END LAKE MOXIE; YELLOW-ORANGE SOIL ON TILL OVER SILTSTONE
GC039250	ME	WASHINGTON	44 30	68 0	66 10	US 1 AT STEUBEN; B HORIZON ON TILL OVER GRANITE
GC039350	ME	WASHINGTON	44 45	67 25	66 10	US 1 10.9 MI E EAST MACHIAS; B HORIZON ON TILL OVER RHYOLITE
GC039450	ME	WASHINGTON	45 10	67 17	66 10	US 1 4 MI SW CALAIS; B HORIZON ON TILL OVER GRANITE
GC039750	ME	WASHINGTON	45 39	67 46	66 10	US 1 AT EATON; B HORIZON
GC056650	MI	ALCONA	44 40	83 24	70 6	US 23 3 MI S BLACK RIVER TURNOFF; YELLOW SAND
GC030250	MI	ALLEGAN	42 27	86 14	72 9	I-196 .5 MI N ALLEGAN CO LINE; ORGANIC & SANDY FOREST SOIL
GC056750	MI	ARENAC	44 7	83 40	70 6	US 23 4 MI S ALABASTER; YELLOW SAND
GC046251	MI	BARAGA	46 30	88 31	62 7	US 141 4 MI S COVINGTON; YELLOWISH SANDY
GC246450	MI	BARAGA	46 45	88 15	66 8	RT 28 1 MI W JCT US 41-US 141, 3 MI E COVINGTON; SOIL NOT DESCRIBED

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC050850	--	6.1	68	360	N	--	--	.86	--	16	59.0	13.0
GC049351	--	9.3	70	300	2.0	--	--	.36	--	15	50.0	10.0
GC067350	10.00	8.9	50	500	2.0	.7	2.7	.08	<150	15	50.0	30.0
GC151550	3.00	4.8	30	700	N	--	--	.45	N	7	100.0	15.0
GC151850	7.00	4.1	50	500	N	--	--	.26	150	15	100.0	150.0
GC005850	3.00	32.0	50	500	N	--	--	4.90	N	15	50.0	100.0
GC193950	7.00	8.7	50	500	1.5	--	--	1.10	N	15	70.0	30.0
GC194250	3.00	5.8	70	300	N	--	--	.40	N	10	50.0	15.0
GC151750	1.50	1.4	50	300	N	--	--	.18	N	N	50.0	5.0
GC069650	5.00	2.7	20	500	N	<.5	3.1	.33	N	5	70.0	20.0
GC193850	1.50	4.3	150	200	N	--	--	.30	N	5	30.0	10.0
GC069550	1.00	1.3	N	300	N	<.5	.3	--	N	N	7.0	7.0
GC193650	1.50	11.0	30	200	N	--	--	.28	N	5	30.0	10.0
GC005150	7.00	11.0	50	700	N	--	--	1.50	N	10	70.0	30.0
GC151450	7.00	12.0	30	700	1.5	--	--	.74	N	15	100.0	50.0
GC151650	7.00	5.7	30	700	N	--	--	--	N	7	100.0	20.0
GC005651	>10.00	5.6	50	500	N	--	--	1.90	N	15	100.0	50.0
GC069450	1.00	1.7	20	300	N	<.5	1.2	.09	N	5	15.0	10.0
GC193750	2.00	9.1	50	150	N	--	--	.40	N	5	30.0	10.0
GC074250	3.00	5.8	50	200	3.0	1.5	.9	.17	N	N	10.0	2.0
GC003950	7.00	8.0	150	300	1.5	--	--	.12	150	15	70.0	30.0
GC004250	3.00	22.0	30	150	1.0	--	--	2.07	N	15	70.0	30.0
GC004050	3.00	5.6	30	300	1.0	--	--	1.43	N	7	50.0	15.0
GC004150	3.00	7.9	30	300	1.0	--	--	1.07	N	7	30.0	15.0
GC074150	1.50	2.0	100	100	N	.9	.8	.13	N	N	7.0	1.0
GC032750	1.50	7.1	50	150	N	.9	1.3	.08	N	N	20.0	10.0
GC032850	7.00	6.0	20	500	2.0	.9	1.5	.18	<150	20	70.0	70.0
GC032950	>10.00	5.4	20	500	3.0	1.6	5.5	.09	<150	10	100.0	20.0
GC032550	1.00	1.1	30	300	N	.5	2.1	.08	N	N	15.0	7.0
GC032650	2.00	1.4	30	300	N	.7	1.5	.23	N	<3	15.0	7.0
GC014450	--	--	100	700	2.0	--	--	.40	--	15	100.0	20.0
GC032350	2.00	1.7	20	300	N	2.1	3.2	.16	N	N	15.0	5.0
GC039550	7.00	7.9	30	200	1.0	--	--	.10	N	10	70.0	30.0
GC039650	7.00	18.0	50	300	1.0	--	--	.50	N	20	100.0	100.0
GC004350	3.00	2.9	30	300	7.0	--	--	.49	N	N	15.0	3.0
GC039850	7.00	9.7	30	300	1.5	--	--	1.20	N	10	50.0	15.0
GC004450	7.00	11.0	50	300	1.5	--	--	.50	N	15	100.0	30.0
GC039150	7.00	8.7	30	300	1.5	--	--	.20	N	10	100.0	15.0
GC025250	3.00	7.8	30	200	N	3.0	4.3	.21	N	<3	70.0	7.0
GC004550	5.00	19.0	30	300	1.0	--	--	.71	N	15	100.0	30.0
GC025150	10.00	1.4	70	500	1.5	.7	2.3	.98	N	15	100.0	70.0
GC039250	7.00	4.4	N	700	1.0	--	--	1.40	N	15	70.0	20.0
GC039350	10.00	6.5	N	150	1.0	--	--	.40	N	3	30.0	7.0
GC039450	7.00	15.0	30	300	1.5	--	--	.40	N	7	50.0	15.0
GC039750	5.00	10.0	50	300	1.0	--	--	.45	N	10	70.0	15.0
GC056650	5.00	6.8	30	300	N	--	.6	.40	N	3	20.0	5.0
GC030250	5.00	5.4	20	500	N	2.1	3.7	.84	N	5	30.0	20.0
GC056750	.70	2.1	<20	150	N	--	1.3	.30	N	N	5.0	1.5
GC046251	--	5.9	50	700	3.0	--	--	.32	--	7	70.0	15.0
GC246450	3.00	4.5	50	700	N	--	--	.32	N	7	20.0	15.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued'

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC050850	.001	2.00	11	--	.05	--	1.20	N	23	--	850	N
GC049351	.014	1.50	7	--	.10	--	1.60	50	20	.100	200	<3
GC067350	--	5.00	15	1.56	.05	1.4	2.03	50	55	.300	100	N
GC151550	.001	1.50	10	--	.40	--	1.30	50	17	.300	700	N
GC151850	.023	2.00	10	--	.33	--	.46	100	25	.300	100	N
GC005850	.025	3.00	N	--	2.50	--	1.20	N	16	.700	1,000	N
GC193950	.041	2.00	20	--	.06	--	1.90	50	35	.700	500	N
GC194250	.011	1.00	10	--	.07	--	1.30	30	18	.150	500	N
GC151750	.002	.50	N	--	.06	--	.34	70	13	.070	200	N
GC069650	--	1.50	10	1.53	.06	<.5	1.23	30	20	.200	100	N
GC193850	<.001	1.00	7	--	.07	--	.75	N	14	.100	200	N
GC069550	--	.50	N	1.02	.07	.7	.22	N	6	.020	500	N
GC193650	<.001	3.00	<5	--	.06	--	.30	N	14	.100	150	N
GC005150	.043	3.00	20	--	.43	--	2.00	N	40	1.000	700	N
GC151450	.082	3.00	30	--	.23	--	2.00	70	43	1.000	700	N
GC151650	.044	2.00	20	--	.29	--	1.90	70	43	1.000	300	N
GC005651	.035	5.00	30	--	.54	--	1.70	N	43	1.000	1,500	N
GC069450	--	.50	N	1.21	.08	.9	.63	N	8	.050	300	N
GC193750	.060	2.00	5	--	.08	--	.30	30	30	.150	70	N
GC074250	--	1.50	10	1.42	.04	2.8	.79	N	10	.050	100	N
GC003950	.050	5.00	30	--	.11	--	2.77	70	<5	1.500	700	N
GC004250	.028	3.00	15	--	.41	--	1.14	N	32	1.500	700	N
GC004050	.019	3.00	15	--	.08	--	1.42	30	18	1.500	700	N
GC004150	.009	1.50	15	--	.18	--	1.83	30	17	.700	700	N
GC074150	--	1.00	5	1.43	.02	<.5	.36	N	7	.050	300	N
GC032750	--	1.00	N	1.37	.04	1.2	.45	N	10	.050	70	N
GC032850	.040	7.00	15	2.03	.05	2.4	2.01	50	35	.700	500	N
GC032950	.040	3.00	20	1.31	.08	1.6	2.09	70	30	.200	500	N
GC032550	--	.50	5	1.20	.07	1.4	.79	<30	8	.050	70	N
GC032650	--	1.00	5	1.03	.04	1.8	.75	N	5	.100	100	N
GC014450	--	7.00	--	--	--	--	--	--	--	1.000	700	--
GC032350	--	.50	5	.73	.14	3.4	1.24	N	--	.050	100	N
GC039550	.026	5.00	30	--	.38	--	1.20	N	53	.700	300	N
GC039650	.054	7.00	30	--	.10	--	1.90	30	42	1.500	1,000	N
GC004350	.024	1.00	30	--	.21	--	2.61	30	15	.150	300	N
GC039850	.018	7.00	30	--	.08	--	1.40	N	27	1.500	700	N
GC004450	.028	5.00	30	--	.26	--	2.21	30	57	1.500	700	N
GC039150	.070	3.00	30	--	.13	--	1.70	30	37	1.000	700	N
GC025250	--	5.00	15	1.57	.07	2.3	.80	N	16	.200	150	N
GC004550	.021	5.00	20	--	.07	--	1.54	50	36	1.500	500	N
GC025150	.120	5.00	20	1.53	.06	1.6	1.76	N	55	3.000	300	N
GC039250	.033	3.00	30	--	.13	--	3.00	30	26	1.000	500	N
GC039350	.021	5.00	30	--	.60	--	.70	N	21	.700	700	N
GC039450	.024	5.00	30	--	.11	--	2.00	30	45	.700	1,000	N
GC039750	.028	3.00	30	--	.30	--	1.30	30	36	1.000	700	N
GC056650	.007	1.00	10	--	.03	<.5	1.20	N	10	.150	100	N
GC030250	--	1.50	10	1.17	.08	4.7	1.46	N	20	.200	1,500	N
GC056750	.003	.15	N	--	.30	<.5	.60	N	<5	.050	30	N
GC046251	.011	5.00	10	--	.34	--	2.30	--	18	.500	300	<3
GC246450	.037	2.00	10	--	.53	--	2.15	N	18	.500	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC050850	--	25	--	13	.030	17	--	--	--	N	.4	--
GC049351	--	--	--	15	.030	15	--	--	--	5	.4	--
GC067350	.50	10	70	20	--	20	120	<.08	1	15	<.1	28
GC151550	.70	15	N	10	.024	30	--	--	--	7	.5	--
GC151850	.50	20	70	200	.012	10	--	--	--	10	.9	--
GC005850	--	N	--	50	.075	30	--	--	--	N	1.3	--
GC193950	1.00	15	70	30	.016	20	--	--	--	10	.6	--
GC194250	.30	15	N	20	.012	15	--	--	--	7	.5	--
GC151750	.15	20	N	N	.006	N	--	--	--	5	.4	--
GC069650	.70	10	70	15	--	15	65	.10	1	7	.3	32
GC193850	.15	15	N	15	.002	15	--	--	--	N	.3	--
GC069550	<.05	<10	--	5	--	20	20	.11	<1	N	<.1	41
GC193650	.05	15	N	10	.008	N	--	--	--	5	1.0	--
GC005150	--	N	--	50	.040	20	--	--	--	10	.9	--
GC151450	1.00	10	N	30	.024	20	--	--	--	15	1.1	--
GC151650	1.00	15	N	30	.012	15	--	--	--	15	1.0	--
GC005651	--	N	--	50	.075	30	--	--	--	10	.8	--
GC069450	<.05	10	--	N	--	10	25	<.08	<1	7	<.1	43
GC193750	N	30	N	10	.006	N	--	--	--	N	.8	--
GC074250	.50	<10	--	30	--	10	40	.09	<1	N	<.1	36
GC003950	.70	15	70	30	.065	15	--	--	--	15	.2	--
GC004250	1.00	10	N	15	.083	15	--	--	--	15	.7	--
GC004050	1.00	10	N	15	.079	15	--	--	--	15	.5	--
GC004150	1.00	10	N	15	.087	15	--	--	--	7	.3	--
GC074150	.20	15	--	N	--	N	25	<.08	<1	N	<.1	36
GC032750	<.05	10	--	N	--	10	25	<.08	1	<5	<.1	41
GC032850	.30	10	70	30	--	20	95	<.08	<1	10	.1	28
GC032950	.70	10	<70	10	--	50	125	<.08	<1	10	.5	25
GC032550	.20	<10	N	<5	--	15	25	.10	<1	7	.2	41
GC032650	.20	10	--	5	--	15	30	<.08	<1	N	.4	38
GC014450	--	--	--	30	.040	30	--	--	--	15	--	--
GC032350	.30	N	--	5	--	15	40	<.08	2	15	.3	38
GC039550	.70	15	--	30	.060	20	--	--	--	N	.6	--
GC039650	1.00	15	N	70	.090	30	--	--	--	15	.3	--
GC004350	1.00	10	N	N	.122	30	--	--	--	5	.4	--
GC039850	1.00	10	--	15	.080	15	--	--	--	15	.3	--
GC004450	.70	10	N	30	.079	20	--	--	--	15	.6	--
GC039150	.70	15	N	50	.040	15	--	--	--	15	.2	--
GC025250	.70	<10	--	7	--	15	50	.12	<1	5	.2	31
GC004550	.70	10	N	30	.057	15	--	--	--	15	.6	--
GC025150	1.50	<10	--	50	--	10	115	<.08	<1	10	.3	34
GC039250	1.00	10	N	50	.090	15	--	--	--	10	.7	--
GC039350	.70	<10	--	7	.050	15	--	--	--	10	3.9	--
GC039450	1.00	15	N	15	.180	30	--	--	--	15	.6	--
GC039750	1.00	15	N	30	.050	<10	--	--	--	10	.6	--
GC056650	--	N	--	5	.079	20	--	--	--	<5	.1	41
GC030250	.70	<10	--	15	--	20	75	<.08	1	5	.5	33
GC056750	--	N	--	N	.044	N	--	--	--	N	<.1	43
GC046251	--	--	--	15	.030	15	--	--	--	10	.6	--
GC246450	.70	<10	--	15	.026	10	--	--	--	5	.3	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC050850	--	90	.720	--	--	47	39	--	30	530
GC049351	--	50	.500	--	--	70	20	--	50	700
GC067350	2.87	100	.700	14.13	4.43	150	20	2.0	85	150
GC151550	--	150	.300	--	--	50	30	3.0	50	500
GC151850	--	100	.500	--	--	50	50	5.0	25	300
GC005850	--	700	.100	--	--	70	20	2.0	80	70
GC193950	--	150	.300	--	--	150	30	3.0	65	150
GC194250	--	50	.500	--	--	50	30	5.0	--	300
GC151750	--	20	.500	--	--	20	50	7.0	--	1,000
GC069650	1.28	150	.300	10.76	3.92	70	20	2.0	47	300
GC193850	--	20	.200	--	--	30	20	3.0	--	200
GC069550	.17	7	.100	--	1.24	10	15	1.0	30	200
GC193650	--	15	.300	--	--	50	20	2.0	20	300
GC005150	--	150	.300	--	--	200	30	2.0	70	100
GC151450	--	200	.300	--	--	150	30	3.0	100	100
GC151650	--	200	.300	--	--	100	30	3.0	50	150
GC005651	--	200	.300	--	--	150	20	3.0	100	100
GC069450	5.90	15	.200	5.45	2.30	15	15	2.0	23	500
GC193750	--	15	.500	--	--	50	30	3.0	--	300
GC074250	1.50	30	.200	5.48	1.42	30	10	1.0	12	150
GC003950	--	70	.300	--	--	150	70	7.0	120	300
GC004250	--	150	.300	--	--	150	30	3.0	55	150
GC004050	--	150	.200	--	--	100	30	3.0	84	200
GC004150	--	150	.150	--	--	70	30	3.0	44	150
GC074150	7.68	15	.300	8.46	1.70	20	N	1.0	10	200
GC032750	2.23	10	.700	8.29	3.20	30	15	2.0	26	700
GC032850	2.72	50	.500	13.64	3.29	100	30	5.0	113	300
GC032950	2.23	200	.300	15.10	3.46	150	50	5.0	66	100
GC032550	.86	30	.200	--	1.63	20	20	1.5	15	200
GC032650	.56	30	.300	5.09	1.25	20	10	1.0	25	200
GC014450	--	70	.700	--	--	100	30	--	20	300
GC032350	.95	50	.500	4.88	1.32	20	<10	1.0	8	200
GC039550	--	30	.300	--	--	70	20	3.0	80	150
GC039650	--	150	.300	--	--	150	30	3.0	70	150
GC004350	--	70	.150	--	--	30	15	1.5	10	150
GC039850	--	150	.300	--	--	150	30	3.0	40	150
GC004450	--	100	.300	--	--	150	30	3.0	110	300
GC039150	--	70	.300	--	--	70	30	3.0	150	200
GC025250	1.42	70	.500	7.60	2.21	70	15	3.0	43	300
GC004550	--	150	.300	--	--	150	30	3.0	91	300
GC025150	1.27	70	.500	--	2.89	150	15	2.0	101	200
GC039250	--	500	.300	--	--	70	30	3.0	130	150
GC039350	--	70	.200	--	--	70	30	3.0	80	150
GC039450	--	70	.300	--	--	70	30	5.0	90	150
GC039750	--	100	.300	--	--	70	30	3.0	50	200
GC056650	--	100	.150	--	--	30	N	<1.0	30	70
GC030250	1.52	100	.200	5.46	2.23	50	10	1.5	79	100
GC056750	--	30	.020	--	--	7	N	N	--	30
GC046251	--	150	.700	--	--	100	15	--	50	300
GC246450	--	70	.500	--	--	50	15	2.0	60	500

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC030550	MI	BARRY	42 27	85 8	72 9	RT 66 2 MI S ASSYRIA; SANDY ORGANIC SOIL
GC056850	MI	BAY	43 31	83 54	70 6	RT 15 1 MI S BAY CITY; BLACK CLAY LOAM
GC030750	MI	BERRIEN	41 57	86 20	72 9	DEANS HILL RD .5 MI E BERRIEN SPRINGS; ORGANIC & SANDY FOREST SOIL
GC056450	MI	CHEBOYGAN	45 38	84 28	70 6	US 23 13 MI E CHEBOYGAN; GRAY SAND
GC215250	MI	CHEBOYGAN	45 22	84 35	65 9	I-75 2 MI S INDIAN RIVER EXIT; SANDY, 9-IN. DEPTH
GC215450	MI	CLARE	44 4	84 49	65 9	I-75 5 MI S ROSCOMMON-CLARE CO LINE; SANDY, 9-IN. DEPTH
GC215350	MI	CRAWFORD	44 44	84 41	65 9	I-75 6 MI N GRAYLING; SANDY, 9-IN. DEPTH
GC246250	MI	DELTA	46 0	87 7	66 8	CO RD OFF RT 35 AT BEAVER; SOIL NOT DESCRIBED
GC246750	MI	GOGEBIC	46 30	90 0	66 8	US 2 W EDGE WAKEFIELD BY LAKE AND RIVER; SOIL NOT DESCRIBED
GC030850	MI	HILLSDALE	42 2	84 35	72 9	US 12.5 MI W MOSCOW; SANDY ORGANIC FOREST SOIL
GC046150	MI	HOUGHTON	47 8	88 33	62 7	ARCADIA COPPER MINE DUMP, NEAR HANCOCK; FROM BASE TAILINGS PILE
GC057350	MI	LENAWEE	41 58	84 2	70 6	RT 52 1 MI S US 50 JCT; DARK WET CLAY
GC057250	MI	LIVINGSTON	42 25	84 0	70 6	1 MI W PINKNEY 1 MI S RT 36; SANDY LOAM AND GRAVEL
GC215150	MI	MACKINAC	46 3	84 39	65 9	I-75 AND RT 134 JCT UPPER PENINSULA; SANDY LOAM, 9-IN. DEPTH
GC246050	MI	MACKINAC	46 0	84 0	66 8	N SHORE CARIBOU LAKE; SOIL NOT DESCRIBED
GC246350	MI	MARQUETTE	46 30	87 40	66 8	US 41 AT RT 28BR JCT W OF ISHPEMING; SOIL NOT DESCRIBED
GC056350	MI	MENOMINEE	45 40	87 30	70 5	US 2 3 MI E POWERS; B HORIZON BELOW MUCK OF BOG
GC030450	MI	MONTCALM	43 11	85 12	72 9	RT 57 5 MI E GREENVILLE; SANDY ORGANIC SOIL
GC215550	MI	MONTCALM	43 17	85 4	65 9	RT 66 IN STANTON; SANDY LOAM, 9-IN. DEPTH
GC057150	MI	OAKLAND	42 38	83 35	70 6	RT 59 15 MI W PONTIAC; YELLOW SANDY
GC046051	MI	ONTONAGON	46 54	89 16	62 7	LAKE SHORE DR 2 MI E ONTONAGEN; GRAY SANDY OVER SANDSTONE
GC246550	MI	ONTONAGON	46 30	89 15	66 8	US 45 1.7 MI N BRUCE CROSSING; SOIL NOT DESCRIBED
GC030350	MI	OTTAWA	43 4	86 10	72 9	RT 104 3 MI E SPRING LAKE; GRAY SANDY SOIL
GC056550	MI	PRESQUE ISLE	45 18	83 42	70 6	US 23 NEAR GRAND LAKE; BLACK MUCK
GC056950	MI	SANILAC	42 24	83 3	70 6	RT 46 8 MI W SANDUSKY; DARK GLACIAL CLAY
GC057050	MI	ST CLAIR	42 52	82 36	70 6	I-94 EXIT AT PINE RIVER SW PORT HURON; DARK HEAVY CLAY WITH HARDPAN
GC030650	MI	ST JOSEPH	41 55	85 27	72 9	RT 86 2 MI E NOTTAWA; SILTY LOAM WITH CHERT
GC247050	MN	AITKIN	47 0	93 0	66 8	US 2 AT RT 34 JCT; SOIL NOT DESCRIBED
GC027550	MN	ANOKA	45 12	93 7	72 6	I-35W & US 8 NEAR LINO LAKES; DARK BROWN LOAM
GC086250	MN	BENTON	45 45	93 58	75 5	CO. RD 25 1 MI NW GILMAN; MILAN FINE SANDY LOAM
GC055450	MN	BROWN	43 57	94 42	70 5	US 14 2 MI E SLEEPY EYE; BLACK PRAIRIE
GC247150	MN	CASS	46 25	93 50	66 8	RT 34 IN REMER; SOIL NOT DESCRIBED
GC247250	MN	CASS	46 30	94 45	66 8	RT 34.7 MI W CENTER OF WALKER; SOIL NOT DESCRIBED
GC084650	MN	CHIPPEWA	45 7	95 45	75 5	JCT CO. RD 29 & 40 9 MI E MILAN; HEQUE SILTY CLAY LOAM
GC056150	MN	CHISAGO	45 24	92 55	70 5	1.5 MI N LINDSTROM; BROWN SANDY
GC247350	MN	CLAY	46 55	96 35	66 8	US 10 1 MI W GLYNDON IN BEET FIELD; SOIL NOT DESCRIBED
GC087950	MN	COOK	47 56	90 18	75 7	ON GUNFLINT TRAIL 17 MI N GRAND MARAIS; LIGHT BROWN LOAM
GC055950	MN	CROW WING	45 58	94 6	70 5	US 210 3 MI E BRAINERD; YELLOW SAND
GC047050	MN	FILLMORE	43 35	92 4	62 7	CO RD 1.2 MI W JCT WITH US 52 1.4 MI N HARMONY; DARK FRIABLE
GC027350	MN	FREEBORN	43 48	93 19	72 6	I-35 N OF CLARKS GROVE S END GENEVA LAKE; BLACK PRAIRIE SOIL
GC048051	MN	HOUSTON	43 46	91 18	61 7	US 16 3 MI E HOKAH; LIGHT YELLOWISH, SANDY
GC087350	MN	KITTSON	48 46	96 52	75 6	NR HALLOCK; SEC 16 2.5 MI E T161N, R37W; BLACK ORGANIC
GC084750	MN	KOOCHICHI	47 55	94 12	75 5	AT MIZPAH; POORLY DRAINED LOAMY SOIL
GC084850	MN	KOOCHICHI	48 37	92 54	75 5	2 MI W BIRCHDALE; VERY POORLY DRAINED ORGANIC SOIL
GC087850	MN	LAKE	47 50	91 40	75 7	OFF RT 1 16 MI SE ELY; LIGHT BROWN LOAM
GC055350	MN	LYON	43 53	96 4	70 5	US 14 3 MI E FLORENCE; DARK PRAIRIE OVER TILL
GC087250	MN	MAHOMEN	47 7	95 34	75 6	LITTLE ELBOW LAKE, WHITE EARTH INDIAN RES.; BROWNISH-GRAY CLAY
GC067750	MN	MARTIN	43 39	94 44	72 6	US 16 .25 MI W SHERBURN; DARK PRAIRIE LOAM
GC055550	MN	MC LEOD	44 18	94 20	70 5	RT 15 3 MI N MC LEOD CO LINE; BLACK PRAIRIE
GC055650	MN	MEeker	44 45	94 45	70 5	US 12 3 MI W GROVE CITY; BLACK PRAIRIE

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC030550	2.00	2.1	50	300	N	<.5	1.9	.41	N	N	10.0	5.0
GC030850	7.00	2.9	30	500	N	--	5.1	1.00	N	5	30.0	15.0
GC030750	3.00	1.9	<20	500	N	<.5	.7	.28	N	N	10.0	5.0
GC030450	.70	4.4	20	150	N	--	.1	.07	N	N	3.0	<1.0
GC215250	2.00	1.0	N	300	N	--	--	.50	N	N	10.0	5.0
GC215450	2.00	3.7	N	300	N	--	--	.45	N	N	10.0	3.0
GC215350	2.00	4.0	N	300	N	--	--	.60	N	N	15.0	5.0
GC246250	3.00	2.8	<20	700	N	--	--	.29	N	3	10.0	5.0
GC246750	3.00	3.4	20	500	N	--	--	.76	N	10	30.0	30.0
GC030850	3.00	3.0	30	500	N	<.5	1.8	.67	N	5	30.0	10.0
GC046150	--	6.6	20	700	2.0	--	--	.48	--	--	20.0	70.0
GC057350	10.00	7.4	50	500	1.5	--	2.2	.90	N	7	70.0	15.0
GC057250	7.00	6.1	20	500	N	--	.9	.60	N	5	30.0	7.0
GC215150	2.00	1.3	N	300	N	--	--	5.60	--	N	20.0	10.0
GC246050	2.00	2.8	N	300	N	--	--	.55	N	N	10.0	5.0
GC246350	3.00	4.6	20	500	N	--	--	.24	N	5	20.0	15.0
GC056350	7.00	4.2	30	300	N	--	9.4	4.00	N	7	30.0	10.0
GC030450	2.00	1.7	<20	200	N	<.5	2.0	.35	N	N	10.0	5.0
GC215550	2.00	3.6	N	500	N	--	--	.60	N	N	15.0	10.0
GC057150	7.00	5.0	30	700	N	--	.5	.70	N	7	50.0	7.0
GC046051	--	2.8	50	500	2.0	--	--	.48	--	7	50.0	5.0
GC246550	7.00	4.7	50	700	1.0	--	--	.44	N	15	50.0	30.0
GC030350	2.00	1.3	<20	500	N	<.5	1.2	.13	N	N	7.0	2.0
GC056550	1.50	2.2	20	100	N	--	19.7	.90	N	N	15.0	10.0
GC056950	10.00	10.0	70	700	1.0	--	2.2	.70	N	10	70.0	15.0
GC057050	7.00	4.8	50	500	N	--	1.5	.40	N	5	30.0	7.0
GC030650	2.00	6.0	<20	300	N	.5	2.4	.56	N	3	20.0	7.0
GC247050	3.00	2.6	<20	500	N	--	--	1.26	N	7	30.0	10.0
GC027550	3.00	1.7	<20	500	N	<.5	2.1	.69	N	N	70.0	5.0
GC086250	3.00	9.6	N	700	N	<.5	.4	.77	N	10	50.0	15.0
GC055450	5.00	4.6	30	500	N	--	8.3	6.40	N	5	30.0	15.0
GC247150	3.00	2.0	20	700	N	--	--	.85	N	N	30.0	10.0
GC247250	5.00	2.2	20	500	N	--	--	.94	N	7	30.0	20.0
GC084650	5.00	10.4	30	1,000	1.0	.8	2.4	1.10	N	10	50.0	20.0
GC056150	5.00	2.9	30	700	N	--	.9	.90	N	7	30.0	7.0
GC247350	2.00	10.0	50	500	N	--	--	5.37	N	5	50.0	15.0
GC087950	10.00	3.1	N	700	N	.7	1.9	.92	N	10	70.0	20.0
GC055950	3.00	2.8	20	300	N	--	.7	.60	N	N	15.0	3.0
GC047050	--	7.1	30	700	5.0	--	--	.72	--	15	100.0	10.0
GC027350	5.00	3.6	50	700	N	.7	4.6	.92	N	10	70.0	30.0
GC048051	--	5.8	<20	300	--	--	--	.60	--	5	20.0	--
GC087350	5.00	4.6	30	500	N	<.5	3.5	1.11	N	7	50.0	15.0
GC084750	5.00	4.0	20	700	N	<.5	.5	.90	N	7	30.0	5.0
GC084850	.10	.5	N	30	N	1.2	37.1	2.32	N	N	2.0	2.0
GC087850	10.00	2.0	N	500	1.0	.5	1.9	1.90	N	15	100.0	700.0
GC055350	7.00	9.7	50	500	N	--	3.9	6.10	N	7	50.0	15.0
GC087250	7.00	6.4	50	700	1.0	<.5	.9	.62	N	10	70.0	15.0
GC067750	3.00	5.1	30	300	N	1.3	5.3	3.02	N	5	50.0	30.0
GC055550	7.00	23.0	30	500	<1.0	--	4.4	1.30	N	3	50.0	10.0
GC055650	3.00	15.0	20	700	N	--	11.3	15.90	N	10	20.0	15.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC030550	--	.70	5	.94	.04	.6	.96	N	5	.100	700	N
GC056850	.021	1.50	10	--	.90	<.5	1.60	N	24	.500	100	N
GC030750	--	2.00	7	1.04	.03	<.5	1.14	N	5	.100	150	N
GC056450	.001	.10	N	--	.02	<.5	.60	N	<5	.020	20	N
GC215250	<.001	1.00	N	--	.09	--	.85	N	5	.150	200	N
GC215450	.006	.70	N	--	.04	--	1.10	N	6	.100	300	N
GC215350	.022	1.50	N	--	.05	--	1.10	N	7	.100	300	N
GC246250	.004	1.50	10	--	.14	--	3.05	N	9	.300	200	N
GC246750	.011	5.00	15	--	.62	--	1.54	N	23	1.000	300	N
GC030850	--	1.50	7	.87	.04	<.5	1.31	N	10	.200	700	N
GC046150	.006	2.00	7	--	.56	--	2.60	--	7	.150	200	<3
GC057350	.023	3.00	20	--	.10	<.5	1.80	30	39	.700	200	N
GC057250	.014	2.00	10	--	.05	<.5	1.10	N	14	.300	700	N
GC215150	.019	1.00	N	--	.78	--	1.30	N	15	1.500	70	N
GC246050	.005	1.00	5	--	.65	--	1.30	N	12	.200	300	N
GC246350	.061	3.00	10	--	.10	--	1.80	N	12	.500	500	N
GC056350	.024	2.00	15	--	1.20	<.5	2.40	30	17	1.500	300	N
GC030450	--	.70	5	.76	.04	<.5	1.03	N	5	.070	200	N
GC215550	.004	.70	N	--	.19	--	1.20	N	6	.100	200	N
GC057150	.017	2.00	10	--	.04	<.5	1.20	N	13	.500	500	N
GC046051	<.001	2.00	10	--	.03	--	1.60	--	<5	.200	500	<3
GC246550	.009	5.00	15	--	.12	--	2.81	30	32	1.500	700	N
GC030350	--	.50	5	1.11	.03	<.5	1.05	N	<5	.050	50	N
GC056550	.014	.50	<5	--	1.20	<.5	.60	N	8	.700	200	N
GC056950	.066	2.00	20	--	.03	<.5	1.70	30	77	.700	150	N
GC057050	.032	1.50	10	--	.06	<.5	1.50	N	28	.300	200	N
GC030650	--	1.00	7	1.27	.03	.6	1.07	N	--	.200	500	N
GC247050	.008	1.50	10	--	1.00	--	1.48	N	12	.500	500	N
GC027550	--	1.00	7	1.00	.04	.5	1.08	N	<5	.100	200	N
GC086250	--	2.00	10	1.32	.04	<.5	1.54	N	16	.700	500	N
GC055450	.043	1.50	10	--	.50	<.5	.90	N	15	.700	500	N
GC247150	.008	1.00	15	--	.90	--	1.48	N	12	.300	150	N
GC247250	.013	2.00	15	--	.41	--	1.44	N	12	.500	1,000	N
GC084650	.040	2.00	15	1.42	.06	2.1	1.54	30	29	1.000	500	N
GC056150	.009	1.50	15	--	.03	<.5	1.50	N	12	.200	700	N
GC247350	.037	1.50	10	--	.17	--	1.32	N	20	1.500	2,000	N
GC087950	.040	5.00	15	1.37	.08	<.5	1.51	N	32	.700	300	N
GC055950	.001	1.00	10	--	.03	<.5	1.20	N	7	.150	150	N
GC047050	.021	3.00	15	--	.25	<.5	.20	100	17	.500	1,500	<3
GC027350	.040	2.00	10	.97	.08	1.6	1.44	<30	17	.500	1,000	N
GC048051	.024	.70	<5	--	.05	--	1.10	--	7	.070	150	N
GC087350	--	1.50	15	1.12	.04	<.5	1.46	N	22	.700	300	N
GC084750	--	1.50	15	1.01	.05	<.5	1.62	N	19	.500	500	N
GC084850	--	.05	N	<.10	.09	1.4	.11	N	<5	.200	10	N
GC087850	.040	5.00	20	.71	.05	<.5	1.12	N	21	1.500	300	N
GC055350	.024	2.00	15	--	.02	<.5	1.20	N	23	1.000	700	N
GC087250	.040	3.00	15	1.12	.07	1.0	1.80	30	39	.700	200	N
GC067750	--	2.00	10	1.12	.03	.9	1.27	N	18	.500	500	N
GC055550	.062	1.50	15	--	.52	<.5	1.30	N	22	.500	200	N
GC055650	.017	2.00	7	--	.45	<.5	.50	N	8	.500	2,000	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC030550	.50	N	--	<5	--	10	40	<.08	<1	N	.4	37
GC056850	--	N	--	15	.135	10	--	--	--	7	1.3	34
GC030750	.50	<10	--	5	--	15	45	<.08	<1	N	<.1	32
GC056450	--	N	--	N	--	N	--	--	--	N	<.1	45
GC215250	.70	N	--	5	.006	N	--	--	--	N	<.1	--
GC215450	.50	N	--	5	.012	N	--	--	--	N	<.1	--
GC215350	.50	N	--	5	.008	N	--	--	--	N	<.1	--
GC246250	1.00	N	--	7	.048	15	--	--	--	N	.3	--
GC246750	1.00	<10	--	20	.131	10	--	--	--	10	.2	--
GC030850	.70	<10	--	7	--	15	50	<.08	<1	7	.5	--
GC046150	--	--	--	7	.020	20	--	--	--	<5	.2	38
GC057350	--	<10	<70	30	.074	10	--	--	--	15	.6	--
GC057250	--	N	--	15	.070	10	--	--	--	15	.6	32
GC215150	1.00	N	--	7	.016	N	--	--	--	7	.2	37
GC246050	.70	N	--	10	.035	10	--	--	--	N	.4	--
GC246350	.50	<10	--	10	.044	10	--	--	--	N	.4	--
GC056350	--	N	N	15	.113	15	--	--	--	5	.5	--
GC030450	.50	N	--	<5	--	30	40	<.08	3	7	1.0	24
GC215550	1.00	N	--	5	.008	N	--	--	--	N	<.1	38
GC057150	--	<10	--	20	.065	10	--	--	--	7	.4	39
GC046051	--	<10	--	7	.010	15	--	--	--	15	<.1	--
GC246550	.70	<10	--	30	.017	10	35	<.08	<1	7	.6	--
GC030350	.50	N	N	N	.218	10	--	--	--	N	.7	39
GC056550	--	<10	<70	30	.013	15	--	--	--	<5	3.7	14
GC056950	--	<10	--	15	.035	10	--	--	--	15	.5	31
GC057050	--	<10	--	7	--	20	40	--	--	7	.3	38
GC030650	.70	<10	--	15	.031	15	--	.09	<1	N	.3	36
GC247050	1.50	N	--	5	--	15	40	<.08	<1	N	.6	--
GC027550	1.00	10	--	15	--	15	55	<.08	<1	7	.5	36
GC086250	1.50	N	--	15	.118	10	--	--	--	7	<.1	36
GC053450	--	<10	--	20	.031	15	--	--	--	5	.9	25
GC247150	1.50	<10	--	10	.039	15	--	--	--	7	.5	--
GC247250	1.00	<10	--	20	--	15	--	--	--	10	.2	--
GC084650	1.00	10	N	30	--	15	65	<.08	2	7	.3	32
GC056150	--	<10	--	10	.044	10	--	--	--	5	.5	37
GC247350	1.00	N	--	15	.061	15	--	--	--	7	.9	--
GC087950	2.00	10	--	15	--	10	70	<.08	<1	10	.3	30
GC055950	--	N	--	5	.031	10	--	--	--	N	<.1	38
GC047050	--	<10	N	30	.040	20	--	--	--	10	.4	--
GC027350	.70	--	--	15	.020	15	85	<.08	<1	10	<.1	31
GC048051	--	--	--	5	--	<10	--	--	--	10	<.1	--
GC087350	2.00	N	--	15	--	15	70	<.08	<1	7	<.1	33
GC084750	2.00	N	--	10	--	20	70	<.08	<1	5	.1	36
GC084850	N	N	--	N	--	N	<20	<.08	<1	N	<.1	2
GC087850	3.00	N	--	200	--	10	35	<.08	<1	10	.2	26
GC055350	--	N	--	30	.074	10	--	--	--	10	.5	28
GC087250	1.00	10	N	15	--	15	95	<.08	<1	15	.1	32
GC067750	1.00	<10	--	15	--	15	60	<.08	<1	5	.1	29
GC055550	--	<10	--	15	.057	10	--	--	--	7	.4	32
GC055650	--	N	--	10	.196	N	--	--	--	<5	1.2	15

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC030550	.97	50	.100	6.13	.65	10	N	1.0	33	70
GC056850	--	100	.150	--	--	50	15	1.5	60	100
GC030750	.54	70	.070	--	.69	15	10	1.0	47	100
GC056450	--	30	.050	--	--	N	N	N	--	70
GC215250	--	70	.070	--	--	15	N	N	--	100
GC215450	--	50	.070	--	--	15	N	N	--	100
GC215350	--	50	.150	--	--	30	N	N	--	50
GC246250	--	70	.150	--	--	15	10	1.0	30	150
GC246750	--	100	.500	--	--	70	20	2.0	60	200
GC030850	.24	150	.200	4.15	1.75	50	15	2.0	56	150
GC046150	--	150	.500	--	--	50	10	--	50	300
GC057350	--	150	.300	--	--	150	20	3.0	95	100
GC057250	--	150	.300	--	--	50	15	1.5	58	100
GC215150	--	100	.100	--	--	20	N	N	20	70
GC246050	--	50	.100	--	--	10	N	N	40	100
GC246350	--	70	.300	--	--	30	15	2.0	40	200
GC056350	--	150	.200	--	--	70	15	1.5	61	150
GC030450	3.11	50	.050	--	.78	15	N	1.0	26	50
GC215550	--	70	.150	--	--	20	N	N	--	150
GC057150	--	150	.300	--	--	50	15	1.5	50	200
GC046051	--	100	1.500	--	--	100	10	--	25	100
GC246550	--	100	.500	--	--	70	20	3.0	80	300
GC030350	.49	70	.100	--	.47	20	10	1.5	9	50
GC056550	--	150	.100	--	--	15	15	1.0	37	50
GC056950	--	150	.500	--	--	150	20	3.0	80	200
GC057050	--	70	.300	--	--	50	10	1.0	48	150
GC030650	.79	70	.100	2.75	1.02	20	<10	1.0	27	100
GC247050	--	150	.200	--	--	30	15	2.0	40	200
GC027550	1.32	150	.100	3.74	.31	20	N	1.0	26	100
GC086250	.98	200	.300	6.25	1.58	70	10	1.5	37	200
GC055450	--	300	.150	--	--	70	15	1.5	90	70
GC247150	--	200	.300	--	--	30	10	1.0	30	200
GC247250	--	200	.300	--	--	30	10	1.0	50	150
GC084650	1.45	200	.300	8.67	2.41	100	20	2.0	84	150
GC056150	--	200	.200	--	--	50	10	1.5	39	100
GC247350	--	200	.200	--	--	70	20	2.0	70	200
GC087950	.69	200	.500	6.81	2.58	100	15	1.5	177	150
GC055950	--	150	.100	--	--	20	N	<1.0	20	70
GC047050	--	200	.700	--	--	100	30	--	50	1,000
GC027350	.58	150	.200	10.10	2.97	100	20	3.0	86	300
GC048051	--	100	.100	--	--	15	<10	--	25	200
GC087350	.98	200	.150	7.20	1.63	100	10	1.0	65	100
GC084750	1.00	200	.200	5.92	1.31	50	10	1.0	41	150
GC084850	.41	15	.007	--	--	N	N	N	10	N
GC087850	<.10	500	.300	3.67	.98	100	10	--	100	100
GC055350	--	300	.200	--	--	100	15	2.0	73	150
GC087250	.85	150	.300	12.93	2.13	150	15	1.5	97	150
GC067750	.40	150	.150	7.68	2.79	100	15	1.5	70	100
GC055550	--	200	.200	--	--	100	15	1.5	52	100
GC055650	--	150	.070	--	--	30	10	1.0	88	70

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC067850	MN	NOBLES	43 33	95 40	72 6	RT 60 4 MI N BIGELOW; DARK BROWN PRAIRIE LOAM
GC266850	MN	NORMAN	47 25	96 45	68 8	5 MI E US 75 AND 2 MI S SHELLY; LACUSTRINE GRAY CLAY 8-10 IN. DEPTH
GC087550	MN	PENNINGTON	47 58	95 42	75 6	3 MI E ROLAND; ORGANIC & SANDY SOIL; ROLISS SERIES
GC087650	MN	PINE	46 5	92 44	75 7	CO. RD 8 MI E SANDSTONE; YELLOW LOAM
GC266750	MN	RED LAKE	47 54	96 30	68 8	CO RD 2 MI SW DOROTHY; SANDY WITH ABUNDANT ORGANIC MATTER
GC027450	MN	RICE	44 27	93 16	72 6	CO RD 19 NEAR NORTHFIELD EXIT 1-35; BROWN FOREST SOIL
GC087450	MN	ROSEAU	48 47	95 20	75 6	8 MI S WARROOD; GRAY SANDY SOIL; SPOONER SERIES
GC084950	MN	ST LOUIS	47 32	92 54	75 5	CO. RD NW OF CHISHOLM; MODERATELY WELL DRAINED LOAMY SOIL
GC087750	MN	ST LOUIS	47 14	92 0	75 7	CO RD 10 MI W BRIMSON; REDDISH-BROWN BLOCKY LOAM
GC055750	MN	STEARNS	45 4	95 0	70 5	US 71 2 MI N BELGRADE; DARK BROWN SANDY
GC086350	MN	STEELE	44 3	93 14	75 5	1 MI S OMATONNA; LOESS; HAPLUDALF
GC055850	MN	TODD	45 42	94 56	70 5	US 71 2 MI N BROWERVILLE; YELLOW SANDY
GC088050	MN	TRAVERSE	46 0	96 24	75 7	2 MI W TINTAH; DARK BLOCKY CLAY LOAM
GC086550	MN	WRIGHT	40 29	93 12	69 8	CO. RD 1 MI N US 136, 4.5 MI E LUCERNE; PRAIRIE SOIL AT 12-IN. DEPTH
GC058750	MO	BARRY	36 40	93 58	70 10	NEAR RT 76 2 MI NW RIDGELEY; BROWN FOREST SOIL
GC059350	MO	BENTON	38 18	93 19	70 9	RT 7 3 MI E US 65 JCT; LITHOSOL IN CHERT
GC155650	MO	BENTON	38 10	93 20	63 10	US 65 2 MI S WARSAN; DARK SOIL OVER LIMESTONE
GC049151	MO	BOLLINGER	37 9	90 4	62 7	CO RD OFF RT 51 .5 MI E CASTOR RIVER; FINE LIGHT GRAY
GC155450	MO	BOONE	38 52	92 30	63 10	I-70 10 MI W COLUMBIA; SOIL OVER LIMESTONE
GC059150	MO	BUTLER	36 46	90 17	70 9	US 60 8 MI E POPLAR BLUFF; ALLUVIAL
GC155750	MO	CEDAR	37 52	94 0	63 10	US 54 1 MI W EL DORADO SPRINGS; DARK SOIL OVER LIMESTONE
GC086850	MO	CHRISTIAN	36 56	93 10	69 8	CO. RD .5 MI S VICTOR CHURCH; ASHY LITHOSOL WITH CHERT
GC155350	MO	COLE	38 30	92 0	63 10	US 50 4 MI N WESTPHALIA; GRAY ALLUVIAL
GC086750	MO	DADE	37 27	94 1	69 8	CO. RD VV 1 MI W EDGAR CEMETERY; PRAIRIE SOIL AT 16-IN. DEPTH
GC001250	MO	DE KALB	39 46	94 29	62 5	US 36 1 MI E STEWARTSVILLE; BROWN-GRAY SILTY LOAM
GC085550	MO	FRANKLIN	37 22	103 18	75 6	CO. RD 8 MI N 3 MI E KIM; ARIDISOL ON SANDSTONE
GC086450	MO	HARRISON	40 29	93 58	69 8	CO. RD 1.5 MI NE EAGLEVILLE; PRAIRIE SOIL AT 16-IN. DEPTH
GC049051	MO	IRON	37 41	90 57	62 7	RT 32 KEITH SPRING 12 MI E BIXBY; VERY LIGHT YELLOW SILT
GC001350	MO	LIVINGSTON	39 47	93 29	62 5	US 36 4 MI SW CHILLICOTHE; BROWN-GRAY CLAY LOAM
GC001450	MO	MACON	39 45	92 35	62 5	US 36 1 MI W BEVIER; MEDIUM BROWN SILTY CLAY
GC048851	MO	MADISON	37 37	90 25	62 7	CO RD K N RT 72 OAK-HICKORY WOODS; YELLOW-RED
GC086650	MO	MILLER	38 20	92 20	69 8	CO. RD 1.5 MI SW HENLEY; CLAY WITH CHERT
GC087150	MO	MONITEAU	38 42	92 33	69 8	CO. RD 4.5 MI N CALIFORNIA; ORGANIC SOIL ON CHERT COLLUVIUM
GC058950	MO	OREGON	36 46	91 32	70 9	US 160 1 MI E THOMASVILLE; B HORIZON IN CHERT FLOAT
GC198950	MO	PEMISCOT	36 3	89 46	65 7	RT E 4 MI E COOTER; RIVER ALLUVIUM
GC155550	MO	PETTIS	38 45	93 7	63 10	US 65 10 MI N SEDALIA; SOIL OVER LIMESTONE
GC155250	MO	PHELPS	37 52	91 45	63 10	RT 63 1 MI N ROLLA; LITHOSOL
GC059050	MO	RIPLEY	36 53	90 50	70 9	US 160 2 MI E DONIPHAN; B HORIZON SOIL
GC087050	MO	SCHUYLER	40 24	92 25	69 8	CO. RD E 8 MI E QUEEN CITY; DARK PRAIRIE SOIL
GC059250	MO	SCOTT	37 0	89 50	70 9	RT 91 1 MI S BELL CITY; B HORIZON SOIL
GC086950	MO	SHANNON	37 18	91 37	69 8	NEAR BLACK VALLEY SCHOOL, 5 MI W HARTSHORN; ASHY LITHOSOL 6-IN. DEPTH
GC001550	MO	SHELBY	39 40	91 54	62 5	US 36 2 MI W HUNNEWELL; OLIVE-GRAY SILTY CLAY LOAM
GC058850	MO	TANEY	36 33	92 48	70 9	US 160 AT REUTER; CEDAR GLADE SOIL
GC048951	MO	WASHINGTON	37 56	90 51	62 7	RT 8 3.5 MI W POTOSI; YELLOW-GRAY, DOLOMITE AND CHERT FRAGMENTS
GC194350	MS	AMITE	31 12	90 59	65 6	RT 33 2 MI E GLOSTER; ORANGE SAND
GC069750	MS	CLAIBORNE	32 19	90 53	73 1	US 61 S EDGE OF VICKSBURG; LOESS
GC275650	MS	COAHOMA	34 26	90 30	69 1	US 49 AT LULA; MOTTLED ALLUVIAL CLAY
GC194450	MS	FRANKLIN	31 34	90 36	65 6	US 84 2 MI E LUCIEN; YELLOW SANDY SOIL
GC151350	MS	HANCOCK	30 18	89 27	63 7	US 90 7 MI E LA. STATE LINE; DARK CLAY LOAM
GC273450	MS	HOLMES	33 6	89 57	69 1	RT 12 6 MI E LEXINGTON; REDDISH-BROWN CLAY LOAM FROM LOESS

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC067850	7.00	11.0	30	700	1.5	1.5	3.2	1.54	<150	10	70.0	50.0
GC266850	7.00	13.0	50	700	N	--	--	7.90	N	10	100.0	70.0
GC087550	5.00	2.7	20	700	N	.6	1.0	1.58	N	5	50.0	7.0
GC087650	3.00	3.4	N	500	N	<.5	.9	.30	N	5	20.0	10.0
GC266750	5.00	7.3	20	500	N	--	--	1.10	N	3	20.0	7.0
GC027450	5.00	4.6	30	700	N	.9	5.0	1.32	N	7	70.0	30.0
GC087450	3.00	.9	<20	500	N	.7	3.3	5.29	N	3	20.0	5.0
GC084950	7.00	1.1	N	700	N	1.9	.6	1.06	N	7	50.0	7.0
GC087750	7.00	3.2	N	700	N	<.5	1.6	1.40	N	15	70.0	20.0
GC055750	7.00	3.8	30	700	<1.0	--	.6	1.10	N	7	30.0	10.0
GC086350	3.00	4.2	30	700	N	<.5	.6	.54	N	7	30.0	10.0
GC055850	5.00	2.4	20	500	N	--	.8	.90	N	5	30.0	7.0
GC088050	5.00	1.4	50	500	N	<.5	9.0	2.38	N	5	50.0	30.0
GC086550	5.00	5.6	20	300	1.0	.5	.9	.42	N	15	50.0	15.0
GC058750	2.00	6.6	30	200	N	--	--	.11	N	10	15.0	7.0
GC059350	1.00	2.6	50	300	N	--	--	.18	N	3	15.0	7.0
GC155650	3.00	4.2	50	300	N	--	--	.24	N	10	70.0	50.0
GC049151	--	3.2	30	300	2.0	--	--	.32	--	20	30.0	--
GC155450	7.00	10.0	50	700	N	--	--	.36	N	10	70.0	20.0
GC059150	7.00	10.0	30	700	1.0	--	--	.42	<150	10	30.0	15.0
GC155750	7.00	4.9	50	700	N	--	--	.40	N	15	50.0	15.0
GC086850	2.00	1.9	50	500	N	<.5	1.2	.09	N	5	50.0	5.0
GC153350	7.00	2.9	50	500	N	--	--	.24	N	7	50.0	20.0
GC086750	2.00	8.4	30	200	N	<.5	.4	--	N	3	50.0	10.0
GC001250	5.00	14.0	30	700	N	--	--	.64	N	15	50.0	30.0
GC083550	5.00	6.8	20	700	1.0	<.5	1.1	.63	N	7	50.0	20.0
GC086450	7.7	7.7	20	500	1.0	.9	.8	.41	N	7	100.0	20.0
GC049051	--	5.4	30	200	2.0	--	--	.28	--	10	30.0	10.0
GC001350	3.00	8.0	70	700	N	--	--	.43	N	7	30.0	20.0
GC001450	3.00	15.0	70	500	N	--	--	.32	150	20	30.0	30.0
GC048851	--	7.2	30	300	2.0	--	--	.28	--	20	70.0	7.0
GC086650	3.00	4.5	30	700	N	<.5	.7	.09	N	10	50.0	10.0
GC087150	2.00	6.5	20	300	N	--	5.7	8.38	N	5	50.0	15.0
GC058950	3.00	5.0	30	300	N	--	--	.09	<150	7	20.0	7.0
GC198950	7.00	7.1	30	700	N	--	--	.60	N	15	50.0	20.0
GC155550	7.00	5.5	50	700	N	--	--	.44	N	7	50.0	15.0
GC155250	7.00	2.9	50	500	N	--	--	.52	N	15	70.0	15.0
GC059050	3.00	15.0	30	500	N	--	--	.08	<150	15	30.0	10.0
GC087050	10.00	12.8	30	700	1.0	<.5	.8	.31	N	7	70.0	20.0
GC059250	7.00	9.2	30	700	<1.0	--	--	.44	N	10	50.0	15.0
GC086950	2.00	7.2	50	500	N	<.5	.5	--	N	5	30.0	10.0
GC001550	2.00	8.0	70	300	N	--	--	.40	N	7	30.0	20.0
GC058850	3.00	6.7	<20	150	N	--	--	8.86	N	3	30.0	10.0
GC048951	--	4.8	20	300	2.0	--	--	.28	--	10	50.0	5.0
GC194350	7.00	14.0	50	500	N	--	--	.40	N	10	70.0	20.0
GC069750	7.00	8.5	50	700	1.5	.6	1.0	.32	<150	7	70.0	20.0
GC275650	5.00	8.8	50	700	1.5	--	--	.55	N	7	30.0	30.0
GC194450	7.00	10.0	50	500	N	--	--	.60	N	10	70.0	20.0
GC151350	1.50	2.9	30	200	N	--	--	.16	N	N	50.0	7.0
GC273450	7.00	16.0	50	500	1.5	--	--	.16	N	10	50.0	30.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC067850	--	3.00	15	1.46	.04	2.8	1.47	50	25	.500	700	N
GC266850	.041	3.00	20	--	.10	--	1.80	30	32	2.000	500	N
GC087550	.040	1.50	15	1.09	.04	1.4	1.39	50	23	1.000	150	N
GC087650	--	2.00	7	1.00	.06	.6	1.69	N	15	.300	150	N
GC266750	.012	1.50	15	--	.02	--	1.30	N	9	.300	300	N
GC027450	.040	2.00	15	1.18	.05	1.8	1.41	<30	15	.300	700	N
GC087450	--	.70	10	.61	.04	.9	1.02	N	11	.300	700	N
GC084950	--	2.00	15	1.04	.05	1.5	1.68	N	16	.700	200	N
GC087750	--	3.00	15	1.35	.07	.5	1.61	N	19	.700	1,500	N
GC055750	.009	2.00	15	--	.04	<.5	1.20	N	20	.500	500	N
GC086350	--	1.50	10	1.02	.05	<.5	1.48	N	17	.300	700	N
GC055850	.022	1.50	10	--	.03	<.5	1.30	N	<5	.200	500	N
GC088050	--	1.50	10	.59	.05	<.5	1.48	N	25	1.000	300	N
GC086550	--	3.00	15	1.22	.06	<.5	1.04	N	33	.300	200	N
GC058750	.002	.70	<5	--	.02	--	.47	30	12	.070	1,000	N
GC059350	.006	.50	N	--	.06	--	.46	N	13	.070	500	N
GC155650	.017	1.50	7	--	.03	--	.95	70	27	.150	300	N
GC049151	.012	.70	5	--	.13	--	1.50	50	16	.070	700	<3
GC155450	.033	2.00	15	--	.07	--	1.90	50	24	.500	700	N
GC059150	<.001	2.00	7	--	.06	--	1.41	30	19	.200	1,500	N
GC155750	.016	2.00	10	--	.18	--	1.40	70	27	.200	1,500	N
GC086850	--	.50	5	.68	.06	<.5	1.05	30	17	.100	70	N
GC155350	.030	1.50	15	--	.15	--	1.70	50	27	.300	500	N
GC086750	--	1.50	5	1.47	.10	<.5	.44	30	20	.100	100	N
GC001250	.038	3.00	30	--	.10	--	1.57	30	29	1.500	700	N
GC085550	--	2.00	15	1.36	.05	<.5	1.63	50	25	.700	200	N
GC086450	--	5.00	20	.98	.08	.9	.88	30	40	.500	70	N
GC049051	.025	.70	7	--	.13	--	1.20	50	19	.070	50	<3
GC001350	.026	1.50	15	--	.07	--	1.68	30	20	.300	700	N
GC001450	.027	2.00	30	--	.09	--	1.16	70	26	.500	700	3
GC048851	.077	1.00	7	--	.12	--	1.80	50	27	.100	500	<3
GC086650	--	.70	7	--	.09	.7	1.32	30	23	.150	500	N
GC087150	.050	1.50	10	1.03	.05	--	1.26	N	22	5.000	200	N
GC058950	.042	1.00	N	.68	.02	--	.92	N	15	.100	700	N
GC198950	.043	2.00	15	--	.08	--	1.90	50	31	.700	700	N
GC155550	.025	1.50	15	--	.06	--	1.60	50	19	.500	500	N
GC155250	.020	2.00	10	--	.07	--	2.10	50	23	.300	1,000	N
GC059050	.018	1.50	5	--	.03	--	.96	30	18	.100	2,000	N
GC087050	.040	3.00	15	1.34	.06	<.5	1.35	30	28	.700	150	N
GC059250	.024	2.00	7	1.25	.11	.9	1.52	30	21	.300	2,000	N
GC086950	--	1.00	5	--	.11	--	.73	N	20	.100	200	N
GC001550	.024	1.50	15	--	.08	--	1.24	30	22	.300	500	N
GC058850	.043	1.00	7	--	.12	--	1.39	N	18	5.000	1,000	N
GC048951	<.001	7.00	7	--	.09	--	1.60	50	21	.070	100	<3
GC194350	.019	3.00	20	--	.09	--	1.40	30	31	.500	150	N
GC069750	--	2.00	15	1.14	.05	1.2	1.56	<30	20	.500	500	N
GC275650	.040	2.00	20	--	.05	--	1.80	30	34	.700	150	N
GC194450	.025	2.00	20	--	.03	--	1.50	30	28	.500	300	N
GC151350	.010	.50	5	--	.72	--	.31	70	12	.100	50	N
GC273450	.034	3.00	20	--	.15	--	1.50	30	27	.700	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC067850	1.00	10	70	30	--	20	80	<.08	1	10	.3	29
GC266850	1.00	10	N	30	.030	15	--	--	--	10	.2	--
GC087550	1.00	N	N	15	--	15	60	<.08	<1	7	.2	34
GC087650	.50	N	--	10	--	10	60	<.08	<1	5	<.1	39
GC266750	1.00	10	--	7	.030	10	--	--	--	5	.3	--
GC027450	1.00	<10	N	15	--	15	70	<.08	<1	7	<.1	30
GC087450	1.00	N	--	5	--	10	35	<.08	<1	<5	<.1	32
GC084950	3.00	N	--	20	--	15	65	<.08	<1	7	.1	35
GC087750	3.00	N	--	30	--	15	70	<.08	<1	15	<.1	33
GC057550	--	N	--	15	.031	10	--	--	--	7	<.1	35
GC086350	1.00	10	--	10	--	10	65	<.08	<1	5	<.1	38
GC058550	--	N	--	10	.052	10	--	--	--	5	.2	38
GC088050	2.00	N	--	20	--	20	60	<.08	<1	7	.1	26
GC086550	.50	10	--	20	--	15	55	<.08	<1	10	<.1	35
GC058750	.15	<10	N	10	--	15	--	--	--	N	.3	--
GC059350	.15	<10	N	N	--	15	--	--	--	N	--	--
GC155650	.70	30	N	20	.012	20	--	--	--	7	.2	--
GC049151	--	--	--	10	.015	15	--	--	--	<5	.4	--
GC155450	1.00	15	N	20	.016	20	--	--	--	7	.6	--
GC059150	1.50	10	70	10	--	20	--	--	--	7	.3	--
GC155750	1.00	20	70	30	.030	20	--	--	--	10	.5	--
GC086850	.30	15	N	7	--	10	45	<.08	<1	<5	<.1	42
GC155350	1.00	20	N	15	.016	20	--	--	--	10	.3	--
GC086750	.10	10	N	10	--	10	35	<.08	<1	5	.4	41
GC001250	.70	15	N	15	.031	30	--	--	--	15	1.5	--
GC085550	.70	10	N	15	--	15	80	<.08	<1	7	<.1	33
GC086450	.50	10	N	20	--	15	60	<.08	<1	10	.2	31
GC049051	--	--	--	7	.010	10	--	--	--	<5	.4	--
GC001350	.70	30	N	15	.026	20	--	--	--	10	1.0	--
GC001450	.70	20	N	15	.022	30	--	--	--	10	1.4	--
GC048851	--	--	--	10	.015	10	--	--	--	7	.5	--
GC086650	.50	15	N	7	--	15	60	<.08	<1	5	<.1	39
GC087150	.50	N	--	15	--	50	40	<.08	<1	<5	<.1	23
GC058950	.10	<10	N	7	--	15	--	--	--	N	.4	--
GC198950	1.00	20	N	30	.030	30	--	--	--	10	.8	--
GC155550	1.50	20	N	15	.016	20	--	--	--	7	.6	--
GC155250	1.00	20	N	20	.012	30	--	--	--	7	.6	--
GC059050	.20	10	70	10	--	15	--	--	--	7	.5	--
GC087050	.70	10	N	15	--	15	65	<.08	<1	10	.2	33
GC059250	1.50	10	70	15	--	15	--	--	--	10	.7	--
GC086950	.30	15	--	7	--	10	40	<.08	1	<5	.1	42
GC001550	.70	15	N	7	.035	15	--	--	--	7	.8	--
GC058850	.50	<10	N	10	--	15	--	--	--	<5	.7	--
GC048951	--	--	--	7	.010	10	--	--	--	5	.3	--
GC194350	.70	15	N	30	.008	20	--	--	--	10	.6	33
GC069750	.70	<10	N	15	--	20	85	<.08	<1	7	.5	--
GC275650	.50	10	N	20	.030	20	--	--	--	10	.4	--
GC194450	.70	15	N	30	.012	20	--	--	--	10	.4	--
GC151350	.20	15	N	5	.012	10	--	--	--	5	.8	--
GC273450	.50	15	70	30	.030	20	--	--	--	10	.7	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC067850	1.83	150	.200	8.72	2.98	150	20	2.0	73	200
GC266850	--	300	.300	--	--	150	30	3.0	75	100
GC087550	.27	200	.200	5.90	2.19	70	15	1.0	44	150
GC087650	.36	70	.300	7.29	1.48	50	15	1.5	30	200
GC266750	--	300	.150	--	--	30	10	1.5	30	70
GC027450	.92	200	.200	9.12	2.75	100	15	2.0	66	100
GC087450	.83	200	.070	--	2.37	20	N	N	29	70
GC084950	.60	300	.200	4.83	1.20	70	10	1.0	41	150
GC087750	1.30	300	.500	4.88	1.71	150	15	2.0	99	200
GC055750	--	200	.200	--	--	70	15	1.5	53	100
GC086350	.85	150	.300	8.46	2.44	50	15	1.5	41	200
GC055850	--	200	.300	--	--	30	10	1.0	30	100
GC088050	.76	200	.150	--	6.33	100	10	1.0	107	100
GC086550	1.27	100	.200	8.60	2.59	70	15	1.5	44	150
GC058750	--	20	.150	--	--	15	15	2.0	29	150
GC059350	--	30	.150	--	--	15	15	1.5	32	200
GC155650	--	150	.500	--	--	30	50	7.0	25	500
GC049151	--	50	.150	--	--	30	15	--	50	300
GC155450	--	150	.300	--	--	70	20	3.0	50	300
GC059150	--	150	.300	--	--	50	20	3.0	49	300
GC155750	--	70	.500	--	--	50	50	7.0	50	500
GC086850	.46	50	.300	11.11	3.28	30	15	2.0	33	300
GC155350	--	150	.300	--	--	70	30	5.0	25	200
GC086750	.84	15	.300	9.92	4.13	30	20	3.0	48	300
GC001250	--	100	.200	--	--	70	50	7.0	79	300
GC085550	1.12	150	.200	14.70	3.08	70	20	2.0	72	200
GC086450	.27	150	.200	11.80	3.00	150	15	1.5	59	150
GC049051	--	50	.500	--	--	30	10	--	50	200
GC001350	--	70	.300	--	--	70	30	7.0	45	500
GC001450	--	70	.300	--	--	70	30	7.0	55	300
GC048851	--	50	.500	--	--	50	15	--	25	200
GC086650	1.43	70	.300	--	7.07	30	20	2.0	35	300
GC087150	.98	100	.100	4.70	1.99	70	10	N	108	70
GC058950	--	30	.200	--	--	20	10	1.5	49	300
GC198950	--	200	.300	--	--	70	30	3.0	70	200
GC155550	--	100	.500	--	--	70	30	5.0	25	500
GC155250	--	100	.500	--	--	50	30	5.0	25	300
GC059050	--	30	.500	--	--	30	30	3.0	38	700
GC087050	.64	150	.300	13.16	3.42	100	20	2.0	71	200
GC059250	--	100	.500	--	--	50	30	3.0	58	500
GC086950	1.11	30	.500	9.41	3.44	30	15	3.0	34	300
GC001550	--	50	.300	--	--	70	30	5.0	45	300
GC058850	--	70	.100	--	--	30	10	1.5	55	70
GC048951	--	50	.300	--	--	30	10	--	25	200
GC194350	--	70	.500	--	--	100	30	5.0	30	200
GC069750	.65	100	.300	21.05	3.53	100	30	5.0	71	300
GC275650	--	200	.300	--	--	70	20	3.0	60	200
GC194450	--	70	.500	--	--	100	30	3.0	40	200
GC151350	--	20	.200	--	--	20	20	3.0	--	500
GC273450	--	100	.700	--	--	100	30	5.0	65	300

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC273350	MS	HUMPHREYS	33 9	90 40	69 1	RT 12 AT SUNFLOWER RIVER; DARK BROWN ALLUVIAL SILT
GC151250	MS	JACKSON	30 22	88 35	63 7	US 90 2 MI W PASCAGOULA; SANDY CLAY
GC194550	MS	JEFFERSON DAVIS	31 38	89 49	65 6	US 84 2 MI E PRENTISS; RED SAND
GC194650	MS	JONES	31 42	89 1	65 6	US 84 3 MI E LAUREL; YELLOW SAND
GC070050	MS	LAUDERDALE	32 25	88 30	73 1	I-20 AT TOOMSUBA EXIT; RED SANDY LOAM
GC069950	MS	NEWTON	32 21	89 18	73 1	I-20 3 MI E LAKE; WET YELLOW CLAY
GC273350	MS	NOXUBEE	33 6	88 25	69 1	RT 14 6 MI E MACON; DARK BROWN CLAY LOAM OVER LIMESTONE
GC273350	MS	PRENTISS	34 38	88 28	69 1	RT 30 6 MI E BOONEVILLE; GREENISH-GRAY CLAY OVER SANDSTONE
GC069850	MS	RANKIN	32 19	90 1	73 1	I-20 10 MI E JACKSON AT AIRPORT EXIT; ORANGE LOESSIAL SOIL
GC275550	MS	TATE	34 40	89 45	69 1	RT 4 2 MI W BARR; YELLOW CLAY
GC275450	MS	UNION	34 34	89 8	69 1	US 78 2 MI W MYRTLE; YELLOWISH-RED CLAY
GC194050	MS	WILKINSON	31 12	91 21	65 6	US 61 10 MI N WOODVILLE; LOESS
GC273550	MS	WINSTON	33 6	89 13	69 1	RT 14 19 MI E KOSCIUSCO; SANDY ALLUVIAL LOAM
GC037750	MT	BEAVERHEAD	45 11	112 41	65 10	US 91 4 MI S DILLON; SANDY GRAVEL
GC037850	MT	BEAVERHEAD	44 37	112 35	65 10	US 91 1 MI S LIMA; BROWN-GRAY SILTY SAND
GC264050	MT	BIG HORN	45 14	107 22	68 8	US 87 2 MI S LODGE GRASS; B HORIZON BELOW DARK A HORIZON
GC264150	MT	BIG HORN	45 46	107 48	68 8	US 87 14 MI W HARDIN; VERY FINE SAND-SILT, B HORIZON CALCAREOUS VEINS
GC082150	MT	BLAINE	48 33	108 48	74 11	RT 2 1 MI N HARLEM; ALLUVIUM FROM GLACIAL TILL
GC079550	MT	CARBON	45 1	109 3	73 9	RT 397 1.5 MI N OF STATE LINE, 5 MI S BELFRY; ALLUVIUM & SANDSTONE
GC011551	MT	CARTER	45 25	104 26	64 9	SITE NOT RECORDED; 32 IN. BELOW SURFACE
GC012151	MT	CARTER	45 40	104 32	64 8	13 MI S EKALAKA; ALLUVIAL SOIL
GC012651	MT	CARTER	45 4	104 30	64 8	SITE NOT RECORDED; 4-16 IN. BELOW SURFACE
GC023550	MT	CASCADE	47 32	111 10	71 5	1 MI N MALSTROM AIR BASE; CULTIVATED, PLOW ZONE
GC264650	MT	CASCADE	47 0	111 23	68 8	ULM-LINGSHERE CO RD 3 MI N CO LINE; DARK RESIDUAL OVER SANDSTONE
GC264750	MT	CASCADE	47 14	111 32	68 8	CASCADE-EDEN CO RD 5 MI E CASCADE; RESIDUAL OVER SANDSTONE
GC081750	MT	CHOUTEAU	47 57	110 31	74 11	RT 87 1 MI N LOMA; LOESS SOIL IN GLACIAL TERRAIN
GC073650	MT	CUSTER	45 55	105 42	73 5	BY PUMPKIN CREEK 2.5 MI W US 312; LIGHT YELLOW CLAY ON ALLUVIUM
GC083250	MT	CUSTER	45 48	106 8	74 11	SW CORNER CUSTER CO; LIGHT BROWN PRAIRIE LOAM ON SILTY ALLUVIUM
GC265450	MT	CUSTER	46 40	106 5	68 8	RT 22 15 MI NW MILES CITY; CALCAREOUS B HORIZON
GC265550	MT	CUSTER	46 36	105 30	68 8	I-94 13 MI NE MILES NE MILES CITY; NONCALCAREOUS SANDY B HORIZON
GC082650	MT	DANIELS	48 44	105 25	74 11	RT 13 5 MI S SCOBAY; BROWN PRAIRIE SOIL ON ALLUVIUM FROM TILL
GC265650	MT	DAWSON	47 2	104 45	68 8	US 10 5 MI SW GLENDIVE ON WHOOPUP CR; SILTY SANDY B HORIZON
GC083350	MT	FALLON	46 25	104 38	74 11	RT 12 6 MI W PLEVNA; COLLUVIUM FROM SANDSTONE, SILTSTONE & CLINKER BEDS
GC264850	MT	FERGUS	47 3	109 20	68 8	US 87-RT 20 10 MI E LEWISTOWN; SANDY
GC187250	MT	GALLATIN	44 41	111 6	65 6	.5 MI S WEST YELLOWSTONE; BROWN HUMIC SAND 8-IN. DEPTH
GC083050	MT	GARFIELD	47 9	106 18	74 11	13 MI S RT 200, N OF LITTLE DRY CREEK; LIGHT BROWN PRAIRIE SOIL
GC265050	MT	GARFIELD	47 10	107 13	68 8	RT 20 15 MI NE SAND SPRINGS; B HORIZON, IRONSTONE GRAVEL ON SURFACE
GC265150	MT	GARFIELD	47 27	106 44	68 8	CO RD 5 MI E JORDAN AND 11 MI N RT 20; B HORIZON FINE GRAINED SOME CLAY
GC265250	MT	GARFIELD	47 52	106 22	68 8	CO RD 1 MI N HAXBY S FT PECK RES; SANDY ALLUVIUM
GC265350	MT	GARFIELD	47 22	107 13	68 8	JORDAN-BRUSSETT CO RD 15 MI NW JORDAN; SANDY SILTY ALLUVIUM
GC023850	MT	GLACIER	48 54	113 35	71 5	RT 17 .5 MI E BOUNDARY GLACIER NAT PARK; SILT BELOW MULL, CONIFER WOOD
GC023950	MT	GLACIER	48 30	112 46	71 5	US 89 3.8 MI SE TWO MEDICINE RIVER; PRAIRIE LOAM OVER VOLCANIC SEDIMENT
GC024050	MT	GLACIER	47 47	112 12	71 5	RT 287 3 MI SE CHOTEAU; CULTIVATED SOIL, CRETACEOUS VOLCANIC SEDIMENT
GC264350	MT	GOLDEN VALLEY	46 18	109 12	68 8	US 12 2 MI W RYEGATE; NONCALCAREOUS SANDY ALLUVIUM
GC037450	MT	GRANITE	46 44	113 35	65 10	US 10 AT BONITA; SILTY CLAY LOAM ON COLLUVIUM
GC081950	MT	HILL	48 31	109 44	74 11	RT 87 5 MI SW HAVRE AT FT ASSINIBOINE; PRAIRIE SOIL ON GLACIAL OUTWASH
GC082050	MT	HILL	48 56	110 12	74 11	RT 232 1 MI S SIMPSON IN SPRING COULEE CEMETERY; SOIL ON GLACIAL TILL
GC023450	MT	LEWIS AND CLARK	47 1	112 1	71 5	W SIDE MISSOURI RIVER .5 MI DOWNSTREAM FROM HOLTER DAM; LIGHT BROWN
GC081850	MT	LIBERTY	48 31	110 59	74 11	RT 2 & 223 .5 MI NW CHESTER; CALCAREOUS LOAM ON GLACIAL TILL
GC082950	MT	MC CONE	47 26	105 33	74 11	RT 13 2 MI NE CIRCLE; LIGHT BROWN PRAIRIE LOAM

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC273350	5.00	5.6	50	700	1.0	--	--	.70	N	10	50.0	20.0
GC151250	1.50	2.7	50	150	N	--	--	.16	N	N	50.0	5.0
GC194550	5.00	6.5	N	200	N	--	--	.40	N	7	50.0	15.0
GC194650	1.00	5.8	30	150	N	--	--	.15	N	N	15.0	7.0
GC070050	.70	2.4	50	200	N	.5	.6	.08	N	7	20.0	5.0
GC069950	7.00	15.3	50	300	2.0	1.0	1.5	.45	300	70	100.0	20.0
GC273650	10.00	21.0	30	300	2.0	--	--	.55	200	30	150.0	50.0
GC275350	1.50	2.8	50	300	N	--	--	.08	N	3	15.0	3.0
GC069850	3.00	4.2	20	200	N	.7	.5	.11	N	N	30.0	10.0
GC275550	2.00	8.8	30	300	N	--	--	.18	N	5	20.0	15.0
GC275450	5.00	11.0	50	500	1.0	--	--	.65	N	7	50.0	50.0
GC194050	7.00	15.0	50	500	N	--	--	.40	N	15	70.0	30.0
GC273550	3.00	6.5	50	500	1.5	--	--	.13	150	15	50.0	15.0
GC037750	7.00	1.3	N	700	N	--	--	2.20	N	5	30.0	15.0
GC037850	3.00	5.8	N	300	N	--	--	11.00	N	N	50.0	15.0
GC264050	5.00	4.8	20	500	N	--	--	7.00	N	3	70.0	20.0
GC264150	5.00	9.4	20	500	N	--	--	9.00	N	3	50.0	30.0
GC082150	7.00	10.5	70	1,000	2.0	<.5	1.5	1.60	N	7	70.0	30.0
GC079550	3.00	10.8	30	500	N	<.5	1.4	3.36	N	7	70.0	30.0
GC011551	>10.00	17.0	30	1,000	N	--	--	1.50	N	15	100.0	50.0
GC012151	7.00	9.8	N	1,000	N	--	--	1.60	N	10	70.0	20.0
GC012651	7.00	1.3	70	700	N	--	--	.82	N	10	150.0	150.0
GC023550	>10.00	46.5	50	1,000	3.0	<.5	1.0	1.01	<150	10	70.0	50.0
GC264650	10.00	7.6	20	700	1.5	--	--	.55	N	7	50.0	30.0
GC264750	10.00	16.0	50	700	1.5	--	--	.30	N	7	70.0	30.0
GC081750	5.00	6.4	50	700	N	<.5	1.4	2.08	<150	7	50.0	20.0
GC073650	7.00	11.1	70	500	2.0	<.5	2.5	2.62	N	10	70.0	50.0
GC083250	10.00	6.6	50	700	2.0	1.1	2.6	4.14	--	7	70.0	50.0
GC265450	5.00	4.5	20	700	N	--	--	13.00	N	5	100.0	20.0
GC265550	7.00	6.4	20	1,000	1.0	--	--	1.30	N	7	30.0	15.0
GC082650	10.00	7.5	50	1,000	2.0	<.5	2.2	2.57	N	7	100.0	20.0
GC265650	10.00	6.5	50	700	1.0	--	--	4.00	N	10	70.0	50.0
GC083350	5.00	1.5	100	500	1.5	<.5	1.2	1.31	N	7	70.0	50.0
GC264850	2.00	5.5	50	300	N	--	--	.10	N	N	30.0	10.0
GC187250	3.00	8.6	30	300	1.5	--	--	.50	150	5	15.0	10.0
GC083050	10.00	7.8	50	500	1.5	.5	2.4	3.30	N	7	70.0	20.0
GC265050	10.00	17.0	30	1,000	N	--	--	1.70	N	10	50.0	50.0
GC265150	>10.00	10.0	50	700	2.0	--	--	.70	N	10	70.0	50.0
GC265250	>10.00	7.2	20	1,000	1.0	--	--	1.10	N	10	100.0	15.0
GC265350	7.00	5.6	30	700	1.0	--	--	6.80	N	7	70.0	50.0
GC023850	10.00	13.1	100	700	2.0	.7	1.2	.55	<150	10	100.0	30.0
GC023950	7.00	9.6	20	700	2.0	<.5	1.7	.94	N	5	30.0	20.0
GC024050	3.00	4.2	20	300	N	1.1	4.2	9.61	N	5	30.0	20.0
GC264350	10.00	7.7	30	1,000	1.0	--	--	2.80	N	7	30.0	15.0
GC037450	7.00	7.5	70	700	N	--	--	.40	N	7	30.0	15.0
GC081950	5.00	2.1	20	1,000	N	<.5	.9	1.56	N	10	150.0	15.0
GC082050	3.00	6.1	30	700	N	<.5	7.1	.66	N	7	30.0	15.0
GC023450	10.00	6.9	20	700	1.5	<.5	.8	1.89	N	10	100.0	70.0
GC081850	7.00	9.2	50	700	1.5	.7	.8	.77	N	10	30.0	20.0
GC082950	10.00	8.6	70	700	2.0	.7	1.9	1.81	N	10	50.0	50.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC273350	.026	2.00	20	--	.07	--	1.80	30	25	1.000	500	N
GC151250	.005	1.00	<5	--	.11	--	.12	70	18	.100	70	N
GC194550	.016	2.00	15	--	.09	--	.65	N	19	.200	100	N
GC194650	.005	.50	N	--	.05	--	.20	N	9	.050	70	N
GC070050	--	.70	5	1.16	.04	.7	.65	N	9	.100	500	N
GC069950	--	5.00	10	1.33	.08	2.0	.52	70	40	.500	2,000	N
GC273650	.032	5.00	20	--	.05	--	.44	100	88	.500	1,500	N
GC273350	.006	.70	5	--	.08	--	1.20	50	10	.150	200	N
GC069850	--	1.00	5	1.44	.08	3.4	.67	N	15	.100	50	N
GC275550	.009	1.00	7	--	.03	--	.95	30	18	.200	200	N
GC275450	.019	2.00	10	--	.06	--	1.40	30	27	.200	300	N
GC194050	.034	3.00	15	--	.11	--	1.70	30	27	.500	300	N
GC273550	.029	1.00	15	--	.03	--	1.10	50	22	.300	1,500	N
GC037750	.024	2.00	10	--	.11	--	1.50	N	12	.500	500	N
GC037850	.033	1.00	7	--	.05	--	.90	N	13	.500	500	N
GC264050	<.001	2.00	15	--	.05	--	2.10	30	24	2.000	200	N
GC264150	.046	2.00	20	--	.08	--	1.60	30	29	1.500	200	N
GC082150	.070	3.00	15	1.90	.05	<.5	1.93	<30	31	1.000	200	N
GC079550	.070	2.00	15	1.27	.05	<.5	1.76	N	23	1.000	500	N
GC011551	.060	2.00	20	--	.04	--	2.10	N	45	.700	200	N
GC012151	.020	1.50	10	--	.03	--	1.60	N	21	.500	200	N
GC012651	.074	2.00	15	--	.08	--	2.30	N	72	.500	70	N
GC023550	--	5.00	20	1.51	.17	.6	1.98	50	25	1.000	500	N
GC264650	.032	3.00	20	--	.04	--	1.50	50	30	.700	500	N
GC264750	.055	3.00	20	--	.08	--	1.90	30	73	.700	150	N
GC081750	.040	2.00	15	1.39	.03	<.5	1.75	<30	20	.700	200	N
GC073650	.060	5.00	20	2.09	.02	.8	2.58	N	35	1.500	300	N
GC083250	.070	2.00	20	1.59	.03	1.4	1.87	50	26	1.500	200	N
GC265450	.031	3.00	15	--	.02	--	1.50	50	15	1.500	500	N
GC265550	.020	3.00	15	--	.04	--	2.10	30	16	1.000	300	N
GC082650	.050	3.00	20	1.50	.02	<.5	1.79	50	23	1.000	500	N
GC265650	.045	3.00	20	--	.06	--	1.90	30	27	2.000	300	N
GC083350	.050	3.00	10	1.75	.03	1.2	2.04	50	21	1.000	300	N
GC264850	.017	.70	5	--	.05	--	.50	30	14	.100	30	N
GC187250	.081	1.50	30	--	.05	--	3.48	70	40	.300	500	3
GC083050	.060	2.00	20	1.01	.02	.9	2.06	<30	30	1.500	300	N
GC265050	.040	5.00	20	--	.06	--	1.90	50	29	1.500	300	N
GC265150	.052	5.00	30	--	.04	--	2.30	30	35	2.000	200	N
GC265250	.006	3.00	20	--	.03	--	1.90	50	21	1.000	300	N
GC265350	.042	3.00	30	--	.06	--	1.90	30	32	2.000	200	N
GC023850	.060	3.00	20	2.32	.07	<.5	2.33	50	42	1.000	300	7
GC023950	--	2.00	15	1.72	.03	.7	1.80	N	23	1.000	500	N
GC024050	.050	2.00	10	.69	.03	2.1	1.43	N	20	1.500	200	N
GC264350	.010	3.00	20	--	.02	--	1.70	30	24	1.500	300	N
GC037450	.068	3.00	20	--	.08	--	2.90	N	49	1.000	500	N
GC081950	.050	3.00	7	1.23	.02	.6	1.85	<30	13	1.000	500	N
GC082050	--	2.00	7	1.45	.02	.5	1.54	N	10	.500	300	N
GC023450	--	5.00	30	1.75	.04	<.5	1.91	N	40	1.000	300	N
GC081850	--	2.00	15	2.50	.02	.7	1.63	N	15	.700	500	N
GC082950	.060	3.00	15	1.47	.03	<.5	2.05	50	25	2.000	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC273350	.70	10	N	30	.060	20	--	--	--	10	.9	--
GC151250	N	30	N	7	.006	N	--	--	--	7	1.1	--
GC194550	.05	15	N	20	.004	15	--	--	--	7	.7	--
GC194650	N	15	N	<5	.002	N	--	--	--	N	.1	--
GC070050	.10	<10	--	5	--	<10	30	<.08	<1	N	.2	40
GC069950	.20	10	100	20	--	50	35	.10	<1	10	.3	33
GC273650	.30	20	100	70	.030	30	--	--	--	15	1.2	--
GC273350	.20	15	70	--	.020	10	--	--	--	5	.4	--
GC069850	.20	10	--	5	--	N	50	<.08	<1	<5	.5	37
GC275550	.30	10	N	15	.012	10	--	--	--	7	.2	--
GC275450	.30	15	70	20	.016	30	--	--	--	10	.4	--
GC194050	.70	20	N	30	.016	20	--	--	--	10	.5	--
GC273550	.30	15	70	15	.024	15	--	--	--	10	.5	--
GC037750	1.50	N	--	10	.024	N	--	--	--	N	.2	--
GC037850	1.00	N	--	7	.012	N	--	--	--	N	.6	--
GC264050	1.00	10	N	10	.040	10	--	--	--	5	.4	--
GC264150	1.00	10	N	20	.050	15	--	--	--	5	1.5	--
GC082150	1.00	10	N	20	--	15	95	.08	<1	15	<.1	32
GC079550	.70	<10	--	20	--	15	70	<.08	<1	7	.3	32
GC011551	1.50	N	--	30	.030	20	--	--	--	15	1.6	--
GC012151	1.50	N	--	15	.030	15	--	--	--	5	.9	--
GC012651	1.00	N	--	50	.030	20	--	--	--	15	<.1	30
GC023550	1.00	10	N	20	--	50	105	.09	3	10	.3	--
GC264650	.70	10	N	20	.060	15	--	--	--	10	.9	--
GC264750	.50	10	N	20	.040	10	--	--	--	7	.3	--
GC081750	.70	<10	N	20	--	15	75	<.08	<1	7	.2	30
GC073650	.70	<10	--	20	--	20	140	<.08	2	10	.2	26
GC083250	1.00	<10	N	15	--	20	105	.12	<1	10	.1	27
GC265450	7.00	N	--	20	.060	15	--	--	--	10	.4	--
GC265550	1.00	10	N	20	.030	15	--	--	--	10	.2	--
GC082650	1.00	10	N	20	--	15	85	<.08	1	7	<.1	30
GC265650	1.00	10	N	30	.030	15	--	--	--	10	.3	--
GC083350	.70	<10	N	15	--	10	80	<.08	<1	10	.3	34
GC264850	.05	10	N	<5	.016	10	--	--	--	5	.5	--
GC187250	1.50	50	70	10	.026	30	--	--	--	7	<.1	--
GC083050	.70	<10	N	10	--	20	110	<.08	<1	7	<.1	29
GC265050	1.00	10	N	50	.040	10	--	--	--	10	.7	--
GC265150	1.50	10	N	50	.030	15	--	--	--	15	1.1	--
GC265250	1.50	10	N	50	.030	10	--	--	--	15	.6	--
GC265350	2.00	10	N	30	.030	15	--	--	--	10	.8	--
GC023850	.70	<10	<70	20	--	15	115	<.08	<1	15	1.0	31
GC023950	1.00	<10	--	15	--	15	75	<.08	<1	7	.2	33
GC024050	1.00	<10	--	10	--	10	65	<.08	<1	5	.5	23
GC264350	1.50	10	N	15	.060	15	--	--	--	7	.4	--
GC037450	2.00	N	--	15	.012	N	--	--	--	7	<.1	--
GC081950	1.00	<10	N	20	--	10	70	<.08	<1	15	.2	34
GC082050	.70	<10	--	10	--	10	65	<.08	1	5	.2	35
GC023450	1.00	<10	--	20	--	15	55	<.08	2	15	.2	27
GC081850	.70	<10	--	20	--	10	60	.09	<1	7	.4	35
GC082950	1.00	10	N	20	--	15	105	<.08	<1	10	.3	30

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC273350	--	200	.500	--	--	100	30	3.0	55	300
GC151250	--	15	.500	--	--	30	30	5.0	--	700
GC194550	--	30	.300	--	--	70	20	3.0	--	150
GC194650	--	10	.300	--	--	15	30	3.0	--	500
GC070050	<.10	15	.200	7.04	2.39	20	15	1.5	23	300
GC069950	1.19	70	.500	13.10	4.29	100	30	5.0	64	500
GC273650	--	150	1.000	--	--	150	70	7.0	65	300
GC275350	--	30	.300	--	--	30	50	5.0	15	500
GC069850	1.27	20	.200	8.35	2.74	30	10	2.0	27	200
GC275550	--	70	.300	--	--	30	30	3.0	30	300
GC275450	--	70	.500	--	--	50	30	5.0	35	500
GC194050	--	100	.500	--	--	100	30	5.0	60	200
GC273550	--	70	.700	--	--	70	30	5.0	30	200
GC037750	--	500	.200	--	--	50	10	1.0	20	100
GC037850	--	200	.150	--	--	30	N	N	35	70
GC264050	--	200	.150	--	--	70	20	2.0	70	150
GC264150	--	300	.150	--	--	100	20	2.0	75	100
GC082150	1.32	200	.300	10.54	2.92	150	20	3.0	96	150
GC079550	1.07	150	.100	10.27	2.93	70	20	2.0	71	150
GC011551	--	500	.200	--	--	200	20	2.0	85	70
GC012151	--	500	.200	--	--	70	20	2.0	30	100
GC012651	--	200	.200	--	--	150	20	2.0	100	70
GC023550	2.14	300	.300	13.48	2.78	150	30	3.0	306	150
GC264650	--	150	.300	--	--	70	30	3.0	70	200
GC264750	--	200	.300	--	--	150	30	3.0	105	200
GC081750	.83	200	.200	8.61	2.48	100	20	2.0	70	150
GC073650	2.41	70	.300	13.72	2.89	100	15	2.0	77	150
GC083250	1.38	150	.200	7.67	2.92	100	20	3.0	66	200
GC265450	--	300	.150	--	--	70	20	2.0	50	70
GC265550	--	300	.200	--	--	50	30	3.0	35	150
GC082650	1.79	200	.200	8.24	2.37	100	20	3.0	63	150
GC265650	--	200	.300	--	--	70	30	2.0	60	150
GC083350	.90	70	.300	9.88	2.74	70	20	2.0	56	200
GC264850	--	150	.200	--	--	30	20	2.0	15	200
GC187250	--	50	.150	--	--	30	50	7.0	80	200
GC083050	1.05	100	.150	14.64	3.00	100	20	3.0	70	100
GC265050	--	200	.300	--	--	100	30	3.0	70	150
GC265150	--	300	.300	--	--	150	30	3.0	85	150
GC265250	--	300	.300	--	--	70	30	2.0	60	100
GC265350	--	300	.200	--	--	70	30	1.5	65	70
GC023850	1.20	150	.300	12.54	4.29	300	20	3.0	106	200
GC023950	.76	150	.200	7.64	2.44	70	15	2.0	56	100
GC024050	.53	70	.150	6.57	2.16	70	10	1.0	60	150
GC264350	--	700	.300	--	--	70	30	2.0	50	200
GC037450	--	100	.300	--	--	70	30	3.0	50	200
GC081950	.33	200	.200	7.27	2.00	100	15	2.0	55	150
GC082050	.93	150	.200	7.52	2.13	50	10	2.0	47	200
GC023450	1.46	150	.300	7.96	2.63	200	20	3.0	132	50
GC081850	.29	150	.200	6.60	1.79	100	15	2.0	68	100
GC082950	.97	100	.300	--	3.17	100	20	3.0	67	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC264550	MT	MEAGHER	46 42	111 10	68 8	CO RD 2 MI E FT LOGAN AND SMITH R; CALCAREOUS SUBSOIL
GC037250	MT	MINERAL	47 17	115 20	65 10	US 10 12 MI NW SUPERIOR; GRAY-BROWN SILTY SOIL
GC037350	MT	MISSOULA	47 2	114 23	65 10	US 10 3 MI W HUSON, NINEMILE TOWER; PINKISH GRAY-BROWN SILTY CLAY
GC079450	MT	MUSSELSHELL	46 22	108 31	73 9	US 87 7 MI S ROUNDUP; PRAIRIE SOIL ON SANDSTONE
GC264950	MT	PETROLEUM	46 58	108 8	68 8	4 MI S RT 20 AND 9 MI E WINNETT AT BOX ELDER CR; GRAVELLY B HORIZON
GC082250	MT	PHILLIPS	47 53	108 41	74 11	RT 376 6 MI N JCT WITH RT 191; SOIL FROM GRAY SHALE & SANDSTONE
GC082350	MT	PHILLIPS	48 23	107 46	74 11	RD TO BOWDOIN WILDLIFE REFUGE 7 MI E MALTA; SOIL ON GLACIAL TILL
GC023650	MT	PONDERA	48 5	111 52	71 5	US 91 6.8 MI N BRADY; LIGHT BROWN PRAIRIE SOIL ON GRAVEL DEPOSIT
GC073750	MT	POWDER RIVER	45 26	105 17	73 5	3 MI E RT 59 BY BELL CREEK; TAN SILT
GC037550	MT	POWELL	46 31	112 46	65 10	US 105 2 MI SE JCT WITH US 10N; MED BROWN SILTY SAND
GC083450	MT	PRAIRIE	46 39	104 56	74 11	2 MI SE MILDRED; PRAIRIE SOIL OVER FINE GRAINED SANDSTONE
GC265750	MT	RICHLAND	47 45	104 7	68 8	RT 20 2 MI NE SIDNEY; NONCALCAREOUS SANDY ALLUVIUM, CULTIVATED
GC082750	MT	ROOSEVELT	48 7	105 43	74 11	RT 2 5 MI W, 1 MI N WOLF POINT; DARK PRAIRIE LOAM OVER GLACIAL TILL
GC082850	MT	ROOSEVELT	48 9	104 46	74 11	RT 2 5 MI E 1 MI N BROCKTON; LIGHT BROWN LOAM ON GLACIAL TILL
GC079250	MT	ROSEBUD	46 17	106 40	73 9	CO RD OFF US 12 2.7 MI NW FORSYTH; PRAIRIE SOIL ON LOESS DEPOSIT
GC079350	MT	ROSEBUD	46 36	107 23	73 9	SIDE RD OFF US 12 .25 MI N INGOMAR; SOIL ON CRETACEOUS CLAY SHALE
GC080850	MT	ROSEBUD	45 54	106 38	74 8	RT 315 2 MI N COLSTRIP; LIGHT BROWN PRAIRIE SOIL
GC081650	MT	ROSEBUD	45 18	106 28	74 11	2 MI S, 3 MI E BIRNEY; COLLUVIUM & ALLUVIUM, MX TERTIARY SED. & IGN.RX
GC080950	MT	SHERIDAN	48 42	104 27	74 8	RT 16 AT ANTELOPE; LIGHT BROWN PRAIRIE SOIL
GC037650	MT	SILVER BOW	45 55	112 40	65 10	US 91 4 MI N BEAUDINGS; SANDY GRAVEL
GC023750	MT	TOOLE	49 0	111 57	71 5	1 MI W 1-15 AT S SIDE SWEETGRASS; CULTIVATED PRAIRIE LOAM
GC083150	MT	TREASURE	46 28	107 36	74 11	NW CORNER TREASURE CO; LIGHT BROWN PRAIRIE LOAM ON SANDSTONE
GC010051	MT	VALLEY	48 0	107 12	64 8	SITE NOT RECORDED; 4-16 IN. BELOW SURFACE
GC010551	MT	VALLEY	48 2	106 44	64 7	25 MI SW GLASGOW; ALLUVIAL SOIL
GC082450	MT	VALLEY	48 22	106 46	74 11	RT 2 12 MI NW GLASGOW; BROWN PRAIRIE LOAM ON GLACIAL TILL
GC082550	MT	VALLEY	48 57	106 23	74 11	RT 247 6.5 MI N OPHEIM; COLLUVIAL GLACIAL TILL
GC264450	MT	WHEATLAND	46 16	110 15	68 8	US 12 2 MI E WHEATLAND-MEAGHER CO LINE; GRAVELLY SANDY B HORIZON
GC264250	MT	YELLOWSTONE	45 52	108 36	68 8	RT 3 9 MI NW BILLINGS; LOESSIC, CALCAREOUS IN RESEDED PASTURE
GC043950	NB	BUFFALO	40 43	99 16	66 10	1-80 2 MI W ODESSA EXIT; GRAY SILTY LOAM ON ALLUVIUM
GC043650	NB	CASS	40 56	96 26	66 10	1-80 3 MI SW GREENWOOD EXIT; BROWN SILTY LOAM
GC067550	NB	COLFAX	41 28	97 3	72 6	RT 15 1 MI N SCHUYLER; LOESS
GC028550	NB	DAWES	42 50	103 3	72 9	JCT US 385 & 20 2 MI W CHADRON; DARK CLAY LOAM
GC044050	NB	DAWSON	40 53	100 10	66 10	RT 47 2.5 MI N GOTHENBURG; BROWNISH-GRAY SILTY LOAM
GC044250	NB	DEUEL	41 3	102 5	66 10	US 138 1.5 MI SW BIG SPRINGS; BROWN SILTY CLAY LOAM
GC067650	NB	DIXON	42 15	96 53	72 6	JCT E 7TH ST & RT 35 IN WAKEFIELD; DARK BROWN PRAIRIE SOIL
GC043850	NB	HAMILTON	40 52	98 15	66 10	1-80 AT EAST GRAND ISLAND EXIT; BROWNISH-GRAY SILTY LOAM
GC267950	NB	HOLT	42 25	98 40	68 8	US 281 2 MI S O'NEILL; DEEP SAND DEPOSIT CULTIVATED-GRASS PASTURE
GC268350	NB	HOOKER	42 3	101 20	68 8	RT 2 18 MI W MULLEN; SAND, GRASSLAND
GC044150	NB	LINCOLN	41 10	101 8	66 10	US 30 1 MI E UTHLERLAND; BLACK CLAY LOAM
GC268150	NB	LOUP	41 48	99 36	68 8	RT 91 2 MI W ALMERIA .5 MI S HWY; WELL SORTED SAND, GRASSLAND
GC268550	NB	MORRILL	41 58	103 1	68 8	US 385 16 MI SW ALLIANCE; SAND, GRASSLAND
GC268650	NB	MORRILL	41 34	103 17	68 8	RT 88 1 MI W 1 MI S REDINGTON; GRAVELLY SAND ALLUVIUM, SILTY LOESS CAP
GC043750	NB	SEWARD	40 50	97 18	66 10	1-80 BEAVER CROSSING EXIT; BROWNISH-GRAY SILTY LOAM
GC268450	NB	SHERIDAN	42 2	102 10	68 8	RT 2 5 MI W BINGHAM; SAND, GRASSLAND
GC028450	NB	SIOUX	42 41	103 42	72 9	US 20 12 MI E HARRISON; DARK PRAIRIE LOAM
GC268250	NB	THOMAS	41 56	100 22	68 8	RT 2 5 MI W HALSEY; WELL SORTED SAND, GRASSLAND
GC268050	NB	WHEELER	41 47	98 42	68 8	RT 91 3 MI W ERICSON; WELL SORTED SAND, GRASSLAND
GC197250	NC	BEAUFORT	35 39	77 3	65 7	US 17 3 MI S MARTIN CO. LINE; YELLOW SAND
GC196950	NC	BRUNSWICK	34 3	78 6	65 7	US 17 2 MI N BOLIVIA; YELLOW SAND
GC212050	NC	BUNCOMBE	35 36	82 33	65 7	US 74 ASHEVILLE CITY LIMIT E OF BRIDGE; SOIL NOT DESCRIBED

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC264550	7.00	6.8	20	700	N	--	--	13.00	N	5	30.0	20.0
GC037250	>10.00	4.0	70	1,000	N	--	--	.50	N	15	70.0	30.0
GC037350	>10.00	5.8	70	700	N	--	--	.30	N	15	70.0	50.0
GC079450	5.00	8.6	50	500	1.5	.6	1.9	1.69	<150	7	70.0	30.0
GC264950	7.00	16.0	50	1,000	1.0	--	--	3.60	N	7	30.0	20.0
GC082250	10.00	7.3	100	1,500	3.0	--	--	1.03	N	10	100.0	50.0
GC082350	5.00	4.1	50	1,000	N	<.5	1.5	.64	<150	5	50.0	15.0
GC023650	10.00	14.5	50	1,000	2.0	<.5	1.4	.71	<150	7	70.0	20.0
GC073750	5.00	2.7	20	1,000	N	<.5	1.9	3.95	N	7	100.0	20.0
GC037550	2.00	16.0	20	200	N	--	--	7.10	N	N	15.0	15.0
GC083450	2.00	2.6	20	300	N	1.9	4.5	10.78	N	5	30.0	15.0
GC265750	5.00	7.7	20	1,000	N	--	--	3.80	N	3	20.0	10.0
GC082750	7.00	12.0	50	700	2.0	1.4	9.8	.89	<150	7	70.0	30.0
GC082850	10.00	7.0	30	500	1.5	<.5	1.3	.99	N	7	100.0	15.0
GC079250	7.00	9.9	20	500	1.5	1.0	2.4	5.10	--	5	100.0	20.0
GC079350	7.00	5.8	70	1,000	2.0	<.5	4.5	1.48	N	10	100.0	50.0
GC080850	3.00	3.1	30	200	N	2.2	1.4	9.86	N	5	30.0	20.0
GC081650	7.00	10.0	50	500	2.0	.9	2.7	.58	<150	10	70.0	50.0
GC080950	7.00	8.6	50	500	N	.7	--	4.98	--	7	70.0	50.0
GC037650	>10.00	8.0	N	1,000	N	--	--	2.10	150	7	30.0	20.0
GC023750	10.00	6.7	30	1,000	1.5	<.5	1.8	1.19	N	7	70.0	20.0
GC083150	7.00	5.1	20	1,500	N	1.5	3.7	7.05	--	7	50.0	30.0
GC010051	7.00	14.0	30	700	N	--	--	.46	N	10	150.0	20.0
GC010551	7.00	22.0	N	700	N	--	--	.70	N	15	70.0	50.0
GC082450	7.00	10.4	30	1,500	2.0	.6	1.7	1.07	N	10	70.0	20.0
GC082550	10.00	3.9	20	1,000	1.5	1.0	1.5	1.48	<150	10	70.0	20.0
GC264450	7.00	8.3	20	500	N	--	--	8.60	N	5	30.0	20.0
GC264250	3.00	8.0	30	500	N	--	--	3.40	N	5	20.0	7.0
GC043950	3.00	6.7	30	700	N	--	--	6.30	N	3	30.0	15.0
GC043650	10.00	12.0	30	700	2.0	--	--	.60	N	15	70.0	30.0
GC067550	7.00	5.4	50	1,000	2.0	<.5	1.2	.81	<150	10	70.0	30.0
GC028550	7.00	5.1	30	1,000	1.0	<.5	3.8	4.43	N	7	50.0	20.0
GC044050	5.00	8.9	30	700	1.5	--	--	1.10	150	5	30.0	15.0
GC044250	5.00	6.2	30	700	1.5	--	--	1.30	150	7	30.0	15.0
GC067650	10.00	12.9	30	1,000	1.5	1.1	2.6	.75	<150	7	70.0	30.0
GC043850	10.00	6.3	30	700	1.5	--	--	.70	N	15	70.0	30.0
GC267950	3.00	1.6	20	700	N	--	--	.60	N	N	7.0	3.0
GC268350	3.00	3.0	20	500	N	--	--	.70	N	N	5.0	2.0
GC044150	3.00	3.5	30	700	2.0	--	--	1.10	150	7	30.0	20.0
GC268150	3.00	2.0	20	700	N	--	--	.75	N	N	5.0	3.0
GC268550	3.00	3.4	20	700	N	--	--	.60	N	N	7.0	5.0
GC268650	>10.00	8.2	30	1,000	1.0	--	--	1.70	N	5	30.0	3.0
GC043750	7.00	7.7	30	700	2.0	--	--	.60	150	15	70.0	30.0
GC268450	7.00	2.2	20	700	N	--	--	.75	N	N	5.0	3.0
GC028450	10.00	5.2	20	100	1.5	<.5	2.0	1.45	N	5	30.0	20.0
GC268250	2.00	2.4	20	500	N	--	--	.65	N	N	3.0	3.0
GC268050	5.00	1.9	20	700	N	--	--	.75	N	N	5.0	3.0
GC197250	5.00	4.4	50	150	N	--	--	.20	N	N	30.0	10.0
GC196950	1.00	3.7	50	70	N	--	--	--	N	N	7.0	5.0
GC212050	>10.00	1.0	N	1,000	N	--	--	.75	<150	15	50.0	30.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC264550	.041	2.00	20	--	.06	--	1.80	30	26	1.500	300	N
GC037250	.057	3.00	15	--	.06	--	2.50	30	34	.700	1,000	N
GC037350	.025	5.00	20	--	.03	--	3.00	N	49	1.000	700	N
GC079450	--	2.00	10	1.46	.02	<.5	2.02	50	24	1.000	500	N
GC264950	.029	5.00	10	--	.03	--	2.00	30	23	.700	700	S
GC082250	.080	7.00	20	2.06	.07	<.5	2.04	50	50	.700	700	N
GC082350	--	2.00	10	.91	.02	<.5	1.76	50	15	.500	200	N
GC023650	.050	3.00	20	1.72	.05	.9	1.82	<30	30	.700	100	N
GC073750	.050	2.00	15	1.03	.05	<.5	1.57	N	16	1.000	500	N
GC037550	.034	1.00	7	--	.04	--	.95	N	17	.700	200	N
GC083450	.050	1.00	10	.87	.02	.6	1.40	N	16	1.500	150	N
GC265750	.017	2.00	10	--	.02	--	2.20	N	10	1.500	200	N
GC082750	--	2.00	15	1.70	.03	1.1	1.77	<30	21	1.000	500	N
GC082850	--	3.00	20	.98	.03	.7	1.52	N	20	1.500	500	N
GC079250	.040	2.00	20	1.18	.05	1.6	1.43	N	30	1.000	150	N
GC079350	.070	5.00	20	1.85	.04	.9	2.39	<30	45	1.000	300	N
GC080850	.050	1.00	10	1.27	.03	<.5	1.62	N	13	1.500	200	N
GC081650	.050	5.00	10	1.79	.04	1.2	2.04	50	25	.700	500	N
GC080950	--	3.00	15	1.01	.06	.9	1.38	<30	25	2.000	500	N
GC037650	.029	7.00	15	--	.04	--	2.90	100	13	.300	500	N
GC023750	--	2.00	20	1.10	.04	.8	1.55	<30	20	1.000	300	N
GC083150	.060	3.00	15	.90	.04	3.2	1.65	<30	20	1.000	500	N
GC010051	.041	3.00	15	--	.04	--	1.50	N	44	.300	150	N
GC010551	.044	2.00	20	--	.06	--	1.90	30	44	.500	700	N
GC082450	.050	3.00	10	1.08	.05	2.4	1.64	50	22	.500	500	N
GC082550	--	2.00	15	1.30	.04	.8	1.70	N	16	.500	700	N
GC264450	.038	2.00	20	--	.10	--	1.50	30	22	1.000	300	N
GC264250	.025	2.00	10	--	.03	--	1.00	50	26	.500	150	N
GC043950	.047	1.50	20	--	.03	--	1.80	30	21	.700	300	N
GC043650	.028	2.00	30	--	.08	--	2.10	70	24	.500	300	N
GC067550	.050	3.00	20	.87	.04	.7	2.02	50	30	.700	700	N
GC028550	.080	3.00	15	1.29	.03	1.5	2.07	30	30	1.000	500	N
GC044050	.032	2.00	30	--	.04	--	2.40	70	18	.500	300	N
GC044250	.031	3.00	30	--	.04	--	2.50	70	22	.700	500	N
GC067650	.050	2.00	15	1.16	.04	2.2	1.99	50	20	.500	500	N
GC043850	.051	1.50	30	--	.04	--	1.80	70	24	.500	300	N
GC267950	.110	.50	5	--	.05	--	1.70	<30	9	.070	100	N
GC268350	<.001	.30	10	--	.02	--	1.60	N	8	.070	70	N
GC044150	.020	3.00	30	--	.05	--	2.30	70	22	.700	500	N
GC268150	<.001	.50	10	--	.02	--	1.50	50	8	.070	100	N
GC268550	.010	.70	5	--	.02	--	1.60	30	9	.100	100	N
GC268650	.023	3.00	30	--	.05	--	2.50	50	24	1.500	500	N
GC043750	.022	1.50	30	--	.04	--	2.10	70	22	.300	300	N
GC268450	.013	.30	10	--	.06	--	1.50	<30	9	.150	70	N
GC028450	--	2.00	15	1.63	.02	<.5	2.38	50	20	.500	500	N
GC268250	.009	.30	10	--	.05	--	1.40	30	8	.070	70	N
GC268050	.005	.30	15	--	.02	--	1.70	N	8	.070	100	N
GC197250	.012	1.00	5	--	.13	--	.32	30	18	.100	100	N
GC196950	.003	.30	N	--	.03	--	.17	N	8	.030	70	N
GC212050	.010	5.00	30	--	.03	--	3.10	70	14	1.000	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC264550	2.00	10	N	10	.040	15	--	--	--	7	.2	--
GC037250	1.50	N	--	20	.016	N	--	--	--	10	<.1	--
GC037350	1.50	N	--	30	.012	15	--	--	--	15	.2	--
GC079450	.70	<10	N	15	--	15	95	<.08	<1	10	.1	32
GC264950	.30	10	N	30	.090	15	--	--	--	7	.8	--
GC082250	.30	10	N	30	--	20	120	<.08	<1	15	.8	26
GC082350	.70	N	N	10	--	15	60	.10	<1	7	.3	35
GC023650	.70	<10	N	15	--	15	90	<.08	<1	10	.5	29
GC073750	1.00	<10	--	20	--	15	55	<.08	<1	10	<.1	31
GC037550	.70	N	--	5	.016	N	--	--	--	N	<.1	--
GC083450	.70	<10	--	10	--	<10	55	<.08	<1	<5	.7	24
GC265750	1.00	<10	--	10	.024	10	--	--	--	<5	.2	--
GC082750	.70	<10	N	20	--	10	80	<.08	<1	10	.2	32
GC082850	.70	<10	--	20	--	15	80	<.08	<1	7	.3	33
GC079250	1.00	<10	--	15	--	15	70	<.08	<1	5	.1	28
GC079350	.70	<10	N	30	--	20	115	<.08	<1	15	.3	29
GC080850	1.00	<10	--	10	--	10	65	<.08	<1	7	.5	23
GC081650	.70	<10	70	30	--	15	90	<.08	1	10	<.1	31
GC080950	1.50	<10	N	20	--	10	65	<.08	<1	10	.3	25
GC037650	3.00	N	N	7	.016	15	--	--	--	5	<.1	--
GC023750	1.00	<10	N	15	--	20	70	<.08	<1	7	.3	32
GC083150	1.00	<10	N	20	--	20	60	<.08	<1	7	<.1	27
GC010051	1.00	N	--	20	.040	N	--	--	--	7	.8	--
GC010551	1.00	N	--	50	.020	20	--	--	--	10	1.7	--
GC082450	1.00	10	N	20	--	15	80	.10	<1	7	.3	32
GC082550	1.00	<10	--	20	--	15	60	<.08	<1	10	.8	33
GC264450	1.00	10	N	10	.040	15	--	--	--	7	.5	--
GC264250	.50	N	N	10	.024	10	--	--	--	5	.7	--
GC043950	.70	10	N	7	.035	15	--	--	--	7	.3	--
GC043650	.70	15	70	50	.040	20	--	--	--	15	1.2	--
GC067550	.70	<10	70	30	--	20	90	<.08	<1	10	.4	31
GC028550	1.00	<10	N	15	--	20	90	.09	<1	7	<.1	26
GC044050	.70	15	70	15	.030	15	--	--	--	10	.2	--
GC044250	.70	15	70	15	.040	20	--	--	--	10	.6	--
GC067650	.70	<10	N	15	--	30	100	<.08	<1	5	.6	29
GC043850	.70	15	70	30	.040	20	--	--	--	15	.5	--
GC267950	.70	10	N	5	.008	10	--	--	--	N	<.1	--
GC268350	.70	N	--	5	.004	10	--	--	--	N	.3	--
GC044150	.70	15	N	15	.040	15	--	--	--	10	.3	--
GC268150	.70	10	N	5	.004	10	--	--	--	N	<.1	--
GC268550	.70	10	N	5	.004	10	--	--	--	N	.1	--
GC268650	1.50	10	70	7	.020	20	--	--	--	15	.4	--
GC043750	.70	15	70	30	.020	15	--	--	--	10	.5	--
GC268450	1.00	10	N	5	.004	10	--	--	--	N	.6	32
GC028450	1.00	<10	N	15	--	15	115	<.08	<1	7	<.1	--
GC268250	.70	N	N	5	.004	10	--	--	--	N	.3	--
GC268050	.70	N	--	N	.004	10	--	--	--	N	.6	--
GC197250	N	30	N	N	.002	10	--	--	--	7	<.1	--
GC196950	N	15	N	N	.002	N	--	--	--	N	.4	--
GC212050	1.50	15	100	30	.024	15	--	--	--	15	.4	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC264550	--	300	.200	--	--	70	30	2.0	40	100
GC037250	--	200	.700	--	--	100	30	3.0	50	200
GC037350	--	200	.500	--	--	100	30	3.0	50	150
GC079450	.34	100	.200	11.92	2.97	70	20	3.0	67	150
GC264950	--	300	.200	--	--	70	30	3.0	80	150
GC082250	3.19	700	.200	21.21	7.86	150	30	3.0	119	100
GC082350	.32	200	.200	5.68	2.66	70	15	2.0	52	200
GC023650	1.62	200	.200	11.49	2.69	200	20	3.0	92	100
GC073750	1.40	300	.200	8.65	2.64	100	15	2.0	68	200
GC037550	--	200	.100	--	--	30	N	N	35	70
GC083450	.35	150	.100	7.62	2.47	50	10	1.5	37	100
GC265750	--	200	.100	--	--	30	10	1.0	25	100
GC082750	.56	150	.200	10.42	2.42	100	20	2.0	86	200
GC082850	.77	200	.200	--	2.33	150	20	3.0	64	100
GC079250	1.15	150	.150	10.36	2.85	150	20	2.0	72	100
GC079350	1.92	200	.200	11.06	3.49	200	20	3.0	118	150
GC080850	1.42	150	.150	8.53	2.53	70	15	2.0	51	70
GC081650	.98	150	.200	10.07	2.82	100	20	2.0	95	200
GC080950	.67	300	.200	--	2.89	150	20	1.5	68	100
GC037650	--	700	.300	--	--	200	30	3.0	20	100
GC023750	3.79	300	.200	8.96	2.24	100	20	3.0	72	100
GC083150	.54	150	.200	--	2.99	100	15	2.0	52	100
GC010051	--	200	.150	--	--	150	20	2.0	50	100
GC010551	--	200	.150	--	--	150	20	2.0	105	70
GC082450	.63	200	.200	12.57	2.60	100	20	2.0	68	150
GC082550	<.10	300	.200	7.65	2.72	150	15	2.0	84	150
GC264450	--	300	.200	--	--	70	20	2.0	55	70
GC264250	--	200	.200	--	--	50	30	3.0	50	200
GC043950	--	300	.150	--	--	50	20	3.0	35	200
GC043650	--	200	.300	--	--	150	70	7.0	60	150
GC067550	.66	200	.300	8.24	4.00	150	30	5.0	77	300
GC028550	1.33	200	.300	13.79	3.63	100	20	2.0	70	150
GC044050	--	300	.200	--	--	50	30	5.0	30	300
GC044250	--	200	.300	--	--	70	50	7.0	120	300
GC067650	2.26	150	.200	12.18	3.64	150	20	3.0	110	150
GC043850	--	300	.300	--	--	100	50	7.0	40	150
GC267950	--	150	.070	--	--	20	10	1.0	15	70
GC268350	--	150	.050	--	--	15	10	1.5	10	200
GC044150	--	300	.150	--	--	50	30	3.0	220	300
GC268150	--	150	.070	--	--	15	10	1.0	10	200
GC268550	--	200	.100	--	--	10	10	1.0	30	100
GC268650	--	500	.300	--	--	70	30	3.0	40	300
GC043750	--	200	.200	--	--	70	70	7.0	30	200
GC268450	--	300	.100	--	--	15	15	1.5	10	100
GC028450	.57	300	.200	11.78	3.93	70	15	3.0	96	200
GC268250	--	200	.050	--	--	10	10	1.5	10	150
GC268050	--	150	.070	--	--	15	10	2.0	20	500
GC197250	--	15	.700	--	--	70	20	3.0	--	500
GC196950	--	10	.300	--	--	15	10	1.5	--	500
GC212050	--	300	.500	--	--	100	50	7.0	100	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC197850	NC	BURKE	35 41	81 38	65 7	US 64 5 MI W HICKORY; RED CLAY
GC197550	NC	CHATHAM	35 45	78 59	65 7	US 64 9 MI E PITTSBORO; RED AND YELLOW CLAY
GC210650	NC	CHATHAM	35 44	79 30	65 7	US 64 AND US 15 JCT 2.2 MI W PITTSBORO; SOIL NOT DESCRIBED
GC210950	NC	CLEVELAND	35 23	81 45	65 7	RT 226 .1 MI W HWY, SE MARTIN MICA MINE; B HORIZON SOIL
GC197150	NC	CRAVEN	35 4	77 6	65 7	US 17 5 MI S NEW BERNE; BLACK SAND
GC197750	NC	DAVIE	35 54	80 38	65 7	US 64 1 MI W MOCKSVILLE; RED CLAY
GC210550	NC	DURHAM	36 40	79 0	65 7	I-85 AND US 70 JCT W EDGE DURHAM; SOIL NOT DESCRIBED
GC197350	NC	EDGEcombe	35 46	77 37	65 7	RT 42 2 MI SE PINETOPS; GRAY SAND
GC198050	NC	HAYWOOD	35 29	83 0	65 7	US 19 AT DELLWOOD; YELLOW MICACEOUS LOAM
GC063250	NC	HOKE	34 58	79 10	70 10	US 401 2 MI E RAEFORD; INTRAZONAL; SANDY, OLD PINE-DECID. FOREST
GC197450	NC	JOHNSTON	35 28	78 16	65 7	US 70 AT SMITHFIELD; YELLOW-GRAY SAND
GC080250	NC	MECKLENBURG	35 18	80 52	73 10	BEATTLES FORD RD 1.5 MI N I-85 AT CHARLOTTE; RESIDUAL SOIL ON GRANITE
GC197050	NC	ONslow	34 37	77 27	65 7	US 17 5 MI N FOLKSTONE; BLACK SAND
GC197650	NC	RANDOLPH	35 40	79 53	65 7	US 64 2.5 MI W ASHEBORO; YELLOW CLAY WITH QUARTZ
GC210850	NC	STANLY	35 30	80 8	65 7	RT 49 4.6 MI E OF US 52; B HORIZON SOIL
GC080350	NC	SURRY	36 32	80 31	73 10	RT 103 .2 MI W JCT STATE MOUNTAIN RD; STONY RESIDUAL ON PHYLLITE
GC211950	NC	WATAUGA	36 14	81 39	65 7	US 321 3 MI W BOONE WHERE LINVILLE CR. ROAD GOES NE; B HORIZON SOIL
GC084050	ND	ADAMS	46 0	102 27	74 11	1 MI E JCT RT 8 & RT 12, 9 MI E HETTINGER; PRAIRIE LOAM ON SILTSTONE
GC247850	ND	BARNES	47 5	98 0	66 8	I-94 AT VALLEY CITY; SOIL NOT DESCRIBED
GC247450	ND	BOWMAN	46 15	103 25	66 8	US 85 1 MI N BOWMAN; SOIL NOT DESCRIBED
GC247650	ND	BURLEIGH	46 45	100 45	66 8	US 10 IN BISMARCK; SOIL NOT DESCRIBED
GC267050	ND	CASS	46 45	97 15	68 8	RT 18 1 MI S 1 MI E LYNCHBURG; BLACK ORGANIC TOPSOIL CLAY TEXTURE
GC267250	ND	DICKEY	46 0	98 4	68 8	RT 1 9 MI S OAKES; IMMATURE A-C HOR. PROFILE SOME IRON STAINING
GC081050	ND	DIVIDE	48 54	103 5	74 8	RT 5 5 MI W NOONAN; LIGHT BROWN PRAIRIE SOIL
GC083850	ND	DUNN	47 20	102 22	74 11	JCT RT 200 & 8 3 MI SW HOLLIDAY; PRAIRIE SOIL OVER TILL
GC083550	ND	GOLDEN VALLEY	46 45	103 55	74 11	RT 16 1.5 MI N, 4 MI E, GOLVA; SOIL ON COLLUVIUM FROM CLINKER BED
GC266650	ND	GRAND FORKS	47 53	97 23	68 8	US 2 1 MI N EMERADO 1 MI S US2; BLACK ORGANIC TOPSOIL SANDY SUBSOIL
GC266250	ND	MC HENRY	48 15	100 55	68 8	US 2 3 MI E AND .5 MI S NORWICH; BLACK CLAY CULTIVATED FIELD
GC083650	ND	MC KENZIE	47 34	103 49	74 11	LITTLE MISSOURI NAT GRASSLAND; LIGHT BROWN PRAIRIE SOIL
GC083750	ND	MC KENZIE	47 24	103 15	74 11	RT 85 1.5 MI NW GRASSY BUTTE; LIGHT BROWN LOAM
GC265850	ND	MC KENZIE	48 6	103 35	68 8	US 85 4 MI N JCT US 2 S WILLISTON; SILTY TEXTURE CULTIVATED FIELD
GC081250	ND	MC LEAN	47 30	101 15	74 8	JCT RT 48 & 200 3 MI E BIG BEND; LIGHT BROWN LOAM, CULTIVATED
GC081350	ND	MORTON	46 53	101 47	74 8	RT 49 1 MI N I-94; LIGHT BROWN PRAIRIE LOAM
GC266550	ND	NELSON	48 0	98 17	68 8	US 2 2 MI E LAKOTA; BLACK ORGANIC TOPSOIL LIGHT SANDY SUBSOIL
GC266350	ND	PIERCE	48 22	99 58	68 8	US 2 1 MI E AND .5 MI S RUGBY; SILTY TOPSOIL, SANDY SUBSOIL
GC267150	ND	SARGENT	46 13	97 30	68 8	CO RD 2 MI SW MILNOR .5 MI SW RT 13; DARK TOPSOIL SUBSOIL IRON-STAINS
GC083950	ND	STARK	46 37	102 20	74 11	RT 8 5 MI S OF HEART RIVER; LIGHT BROWN LOAM OVER SHALE
GC247550	ND	STARK	46 50	103 20	66 8	US 85 IN BELFIELD; SOIL NOT DESCRIBED
GC247750	ND	STUTSMAN	46 55	99 20	66 8	I-94 IN MEDINA FIELD; SOIL NOT DESCRIBED
GC266450	ND	TOWNER	48 24	99 11	68 8	US 281 1 MI E MAZA ON CO RD; BLACK SANDY TOPSOIL HIGH ORGANIC
GC266950	ND	TRAILL	47 19	97 25	68 8	CO RD 1 MI S .5 MI W CLIFFORD; SAND AND SILT CULTIVATED
GC081150	ND	WARD	48 48	102 8	74 8	US 52 7 MI E BOWBELLS; LIGHT BROWN PRAIRIE SOIL
GC266150	ND	WARD	48 17	101 40	68 8	CO RD 2 MI E AND .5 MI S BERTHOLD; CLAYEY TEXTURE WITH GRAVELS
GC265950	ND	WILLIAMS	48 19	103 13	68 8	US 2 6 MI W RAY .5 MI S HWY; PRAIRIE SOIL, GRASSLAND
GC266050	ND	WILLIAMS	48 23	103 0	68 8	CO RD 2 MI W TIOGA; CLAYEY MARL B HORIZON, CULTIVATED FIELD
GC041150	NH	CARROLL	43 40	71 15	66 10	RT 25 1.1 MI W WEST OSSISPEE; SANDY B HORIZON ON SANDY TILL
GC039950	NH	COOS	44 40	71 10	66 10	RT 16 8 MI S ERROL; B HORIZON
GC041050	NH	GRAFTON	43 35	72 5	66 10	US 4 1 MI E WEST CANAAN; OLIVE CLAYEY SAND
GC031950	NJ	ATLANTIC	39 36	74 35	72 9	RT 563 .5 MI S GREEN BANK; GRAY SANDY SOIL
GC032150	NJ	CAPE MAY	38 59	74 57	72 9	CAPE MAY FERRY RD; YELLOW SANDY SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC197850	7.00	6.5	N	500	N	--	--	.20	200	7	70.0	30.0
GC197550	>10.00	5.6	N	700	N	--	--	.75	150	15	70.0	30.0
GC210650	7.00	7.6	N	300	N	--	--	.85	N	50	20.0	20.0
GC210950	>10.00	7.7	N	200	N	--	--	.30	N	10	300.0	50.0
GC197150	2.00	1.7	30	200	N	--	--	.20	N	N	20.0	7.0
GC197750	7.00	4.2	N	100	N	--	--	.70	N	30	70.0	70.0
GC210550	5.00	6.5	N	500	N	--	--	.25	N	7	30.0	15.0
GC197350	.70	2.0	50	150	N	--	--	--	N	N	10.0	5.0
GC198050	7.00	1.5	N	700	N	--	--	.20	150	20	70.0	50.0
GC063250	--	1.2	--	--	--	--	--	--	--	--	--	--
GC197450	1.50	2.4	30	150	N	--	--	.15	N	N	20.0	15.0
GC080250	10.00	4.6	N	300	N	1.4	.6	.60	N	15	70.0	70.0
GC197050	1.00	7.1	30	50	N	--	--	.10	N	N	10.0	3.0
GC197650	5.00	4.1	N	300	N	--	--	.40	N	10	15.0	30.0
GC210850	5.00	18.0	N	200	N	--	--	1.20	N	20	70.0	50.0
GC080350	>10.00	1.5	100	700	2.0	1.0	1.9	.09	300	50	100.0	100.0
GC211950	>10.00	3.8	N	500	N	--	--	.55	N	20	200.0	50.0
GC084050	5.00	3.9	50	300	N	.7	4.1	8.03	--	5	50.0	20.0
GC247850	5.00	8.4	50	1,000	1.0	--	--	2.19	N	7	30.0	30.0
GC247450	5.00	10.0	30	500	1.0	--	--	1.30	N	7	20.0	15.0
GC247650	5.00	9.4	70	1,000	1.0	--	--	1.99	N	7	50.0	20.0
GC267050	>10.00	7.9	50	700	N	--	--	1.10	N	10	100.0	50.0
GC267250	5.00	3.1	20	700	N	--	--	.90	N	3	20.0	3.0
GC081050	3.00	5.0	30	700	N	<.5	1.5	1.00	N	7	30.0	15.0
GC083850	5.00	5.8	<20	500	1.5	.5	1.3	.79	N	7	50.0	10.0
GC083550	10.00	4.0	50	700	N	1.4	3.8	7.98	--	7	70.0	20.0
GC266650	3.00	2.2	20	500	N	--	--	1.40	N	5	30.0	7.0
GC266250	5.00	8.1	30	700	N	--	--	1.20	N	7	70.0	20.0
GC083650	7.00	7.7	30	700	1.5	<.5	3.2	4.30	--	5	70.0	20.0
GC083750	>10.00	7.6	30	1,000	2.0	<.5	1.7	.55	N	10	100.0	20.0
GC265850	5.00	12.0	50	700	1.0	--	--	2.90	N	7	30.0	20.0
GC081250	5.00	6.5	50	700	1.5	1.2	3.2	1.23	<150	7	50.0	30.0
GC081350	7.00	6.6	50	700	1.5	<.5	3.7	1.67	<150	10	50.0	50.0
GC266550	5.00	5.6	30	700	N	--	--	.85	N	3	50.0	20.0
GC266350	7.00	6.7	50	1,000	N	--	--	2.00	N	7	50.0	15.0
GC267150	10.00	7.9	30	700	1.0	--	--	.70	N	10	70.0	50.0
GC083950	10.00	2.7	30	700	2.0	.7	2.0	4.03	--	10	100.0	50.0
GC247550	5.00	12.0	50	700	1.0	--	--	.62	N	7	30.0	20.0
GC247750	2.00	6.7	N	300	N	--	--	8.00	N	5	20.0	5.0
GC266450	5.00	3.3	30	500	1.5	--	--	.90	N	5	30.0	15.0
GC266950	5.00	2.8	20	700	1.5	--	--	.95	N	5	20.0	10.0
GC081150	10.00	7.5	20	700	1.5	<.5	2.8	1.19	N	5	100.0	15.0
GC266150	10.00	9.4	20	1,000	1.0	--	--	4.00	N	10	100.0	30.0
GC265950	5.00	4.5	20	500	N	--	--	9.10	N	5	30.0	20.0
GC266050	7.00	18.0	30	500	N	--	--	8.60	N	10	70.0	50.0
GC041150	7.00	1.6	N	300	3.0	--	--	.80	150	3	15.0	7.0
GC039950	3.00	6.0	50	200	1.0	--	--	.50	N	3	30.0	15.0
GC041050	10.00	4.2	30	1,000	3.0	--	--	1.80	150	10	30.0	15.0
GC031950	.20	.9	20	30	N	<.5	.2	--	N	N	5.0	2.0
GC032150	2.00	.6	50	200	N	.9	1.7	.28	N	N	15.0	5.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC197850	.017	3.00	30	--	.06	--	1.50	100	27	.200	150	N
GC197550	.033	3.00	70	--	.06	--	2.60	100	52	.700	300	N
GC210650	.009	7.00	15	--	.10	--	.50	N	13	.500	3,000	N
GC210950	.004	7.00	30	--	.10	--	.50	30	51	.300	100	N
GC197150	.024	.70	5	--	.08	--	.35	30	11	.070	100	N
GC197750	.010	5.00	20	--	.11	--	.17	N	11	.500	1,000	N
GC210550	.004	1.50	10	--	.52	--	.65	N	13	.200	700	N
GC197350	<.001	3.00	N	--	.41	--	.07	N	8	.050	100	N
GC198050	.028	3.00	30	--	.03	--	2.00	50	13	.700	500	N
GC063250	.018	--	--	--	.03	--	--	--	<5	--	--	--
GC197450	.004	.70	5	--	.22	--	.26	N	6	.070	100	N
GC080250	--	7.00	10	1.46	.05	7.0	.33	N	10	.200	300	N
GC197050	.001	.20	N	--	.06	--	.05	N	6	.030	70	N
GC197650	.003	2.00	15	--	.05	--	.65	N	21	.500	200	N
GC210850	.009	7.00	10	--	.11	--	.31	N	24	.700	2,000	N
GC080350	.050	7.00	30	1.52	.08	6.0	2.22	100	80	.150	700	N
GC211950	.028	7.00	30	--	.16	--	.85	N	18	.500	700	N
GC084050	.070	1.50	15	1.25	.04	<.5	1.76	N	25	3.000	300	N
GC247850	.023	2.00	15	--	.19	--	1.64	30	20	1.000	2,000	N
GC247450	.030	2.00	15	--	.07	--	2.10	50	25	1.000	500	N
GC247650	.035	2.00	15	--	.06	--	1.75	50	23	1.500	300	N
GC267050	.033	5.00	20	--	.08	--	1.80	50	29	1.500	700	N
GC267250	.011	1.00	7	--	.03	--	1.40	30	10	.300	300	N
GC081050	--	1.50	10	1.10	.03	<.5	1.56	N	12	.500	300	N
GC083850	--	1.50	10	1.37	.03	.6	1.56	N	14	.300	300	N
GC083550	.060	2.00	20	.97	.02	1.2	1.80	N	25	2.000	200	N
GC266650	.006	1.50	10	--	.03	--	1.20	N	9	.300	300	N
GC266250	.020	2.00	15	--	.05	--	1.80	50	18	.700	700	N
GC083650	.050	2.00	20	1.34	.04	.7	1.97	N	30	2.000	300	N
GC083750	.050	7.00	20	1.26	.04	<.5	1.71	50	25	.700	700	N
GC265850	.020	3.00	15	--	.05	--	1.80	50	21	1.500	300	N
GC081250	.040	2.00	10	1.39	.03	.9	1.80	<30	16	.700	500	N
GC081350	.040	2.00	15	1.25	.04	1.1	1.82	<30	20	1.000	500	N
GC266550	.020	3.00	10	--	.05	--	1.60	<30	16	.700	150	N
GC266350	.016	3.00	15	--	.06	--	1.60	30	20	.700	500	N
GC267150	.017	5.00	15	--	.05	--	1.90	30	23	.700	500	N
GC083950	.060	3.00	30	.66	.08	<.5	1.84	N	30	1.500	700	N
GC247550	.043	5.00	15	--	.05	--	2.07	50	26	.700	700	N
GC247750	.105	1.00	10	--	.06	--	1.15	N	11	2.000	1,500	N
GC266450	.016	2.00	15	--	.03	--	1.40	N	12	.500	500	N
GC266950	.012	2.00	15	--	.03	--	1.50	N	11	.300	300	N
GC081150	--	2.00	15	1.44	.02	.6	1.40	N	20	.500	500	N
GC266150	.033	3.00	20	--	.08	--	1.90	N	28	2.000	500	N
GC265950	.037	2.00	15	--	.02	--	1.50	N	20	2.000	300	N
GC266050	.044	2.00	20	--	.06	--	1.70	30	29	2.000	500	N
GC041150	.002	2.00	30	--	.03	--	2.50	50	21	.300	700	N
GC039950	.003	5.00	30	--	.23	--	.95	N	15	.500	500	N
GC041050	.017	3.00	30	--	.05	--	2.00	50	16	1.000	700	N
GC031950	--	.20	N	1.06	.01	<.5	--	N	<5	.010	30	N
GC032150	--	1.00	5	1.03	.05	1.6	.73	<30	8	.200	300	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC197850	.20	30	70	15	.008	30	--	--	--	10	.8	--
GC197550	1.50	20	70	20	.004	50	--	--	--	15	.3	--
GC210650	1.00	N	--	7	.024	15	--	--	--	10	.5	--
GC210950	.07	N	N	150	.012	15	--	--	--	15	.8	--
GC197150	.15	15	N	N	.004	15	--	--	--	N	.3	--
GC197750	.20	15	N	20	.008	20	--	--	--	15	.4	--
GC210550	.10	N	--	15	.012	20	--	--	--	N	.5	--
GC197350	N	20	N	N	.004	N	--	--	--	N	.2	--
GC198050	.15	20	N	20	.016	30	--	--	--	10	.2	--
GC063250	--	--	--	--	--	--	--	--	--	--	.3	--
GC197450	.05	20	N	7	.004	15	--	--	--	5	.2	--
GC080250	.50	N	--	15	--	10	<20	.12	<1	15	.1	31
GC197050	N	15	N	N	.004	N	--	--	--	N	.5	--
GC197650	.50	10	N	7	.002	N	--	--	--	10	.4	--
GC210350	.70	N	--	20	.016	20	--	--	--	15	.6	--
GC080350	1.00	10	100	70	--	20	110	<.08	<1	20	.3	26
GC211950	.70	N	--	50	.044	15	--	--	--	20	.8	--
GC084050	1.00	<10	--	15	--	15	90	<.08	1	5	.4	23
GC247850	1.00	<10	N	20	.118	20	--	--	--	10	.9	--
GC247450	.70	<10	N	15	.057	10	--	--	--	10	.4	--
GC247650	1.00	<10	N	20	.048	15	--	--	--	10	.3	--
GC267050	1.00	10	N	50	.030	15	--	--	--	15	.2	--
GC267250	1.50	<10	N	7	.016	10	--	--	--	5	.1	--
GC081050	.70	<10	--	10	--	15	50	<.08	<1	7	<.1	37
GC083850	.70	<10	--	20	--	10	55	<.08	<1	7	.2	35
GC083550	1.00	<10	--	20	--	10	95	<.08	<1	7	<.1	23
GC266650	1.00	10	--	15	.020	10	--	--	--	5	.2	--
GC266250	1.00	10	N	20	.020	15	--	--	--	10	.4	--
GC083650	.70	<10	--	15	--	15	60	<.08	<1	7	.3	26
GC083750	1.00	<10	N	20	--	15	55	<.08	<1	10	.3	27
GC265850	1.00	10	N	20	.030	10	--	--	--	10	.3	--
GC081250	.70	<10	<70	20	--	15	70	<.08	<1	7	.1	32
GC081350	1.00	<10	N	20	--	15	85	<.08	<1	10	.1	28
GC266550	.70	10	N	10	.008	15	--	--	--	7	.7	--
GC266350	1.00	10	N	20	.030	10	--	--	--	10	.1	--
GC267150	1.00	10	N	30	.016	10	--	--	--	15	.5	--
GC083950	1.00	<10	--	20	--	20	95	<.08	<1	10	.4	24
GC247550	1.00	<10	N	20	.061	15	--	--	--	10	.5	--
GC247750	1.50	N	--	15	.070	N	--	--	--	N	.2	--
GC266450	1.00	10	--	15	.016	10	--	--	--	5	.9	--
GC266950	1.50	10	--	15	.016	10	--	--	--	5	.2	--
GC081150	1.00	<10	--	10	--	15	65	<.08	<1	5	.5	29
GC266150	1.00	10	--	30	.030	15	--	--	--	10	.2	--
GC265950	1.50	10	--	20	.030	10	--	--	--	7	.3	--
GC266050	1.50	10	N	30	.040	10	--	--	--	7	.5	--
GC041150	1.50	30	70	7	.030	30	--	--	--	7	.2	--
GC039950	1.00	15	--	15	.040	20	--	--	--	7	.5	--
GC041050	1.50	10	N	15	.030	30	--	--	--	15	.1	--
GC031950	N	<10	--	N	--	N	<20	<.08	1	N	<.1	42
GC032150	.50	10	N	N	--	15	30	.09	<1	5	.2	39

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC197850	--	50	.500	--	--	100	30	5.0	--	150
GC197550	--	200	.300	--	--	150	30	3.0	30	100
GC210650	--	150	.500	--	--	150	15	2.0	75	70
GC210950	--	15	.500	--	--	200	15	2.0	30	150
GC197150	--	15	.300	--	--	20	10	1.5	--	200
GC197750	--	50	.500	--	--	150	10	2.0	--	150
GC210550	--	30	.300	--	--	70	20	2.0	25	300
GC197350	--	N	.500	--	--	15	20	2.0	--	700
GC198050	--	20	.300	--	--	70	30	5.0	95	200
GC063250	--	--	--	--	--	--	--	--	--	--
GC197450	--	15	.500	--	--	30	20	3.0	--	300
GC080250	.79	70	.500	4.41	2.69	150	<10	1.5	39	200
GC197050	--	N	.300	--	--	15	15	1.5	--	300
GC197650	--	30	.300	--	--	70	15	2.0	25	100
GC210850	--	200	.300	--	--	300	10	2.0	40	150
GC080350	1.70	200	.500	10.67	5.26	150	50	5.0	124	200
GC211950	--	70	.500	--	--	200	15	2.0	60	100
GC084050	1.82	200	.150	10.65	2.87	100	15	2.0	56	70
GC247850	--	200	.300	--	--	70	20	2.0	170	150
GC247450	--	70	.300	--	--	50	15	2.0	70	150
GC247650	--	200	.300	--	--	50	50	5.0	70	300
GC267050	--	300	.300	--	--	150	30	3.0	80	200
GC267250	--	300	.300	--	--	30	15	1.5	20	150
GC081050	.46	150	.150	6.28	1.78	70	15	2.0	49	100
GC083850	.70	150	.200	7.96	1.68	70	10	1.5	56	100
GC083550	1.59	200	.150	11.94	1.60	100	15	2.0	59	50
GC266650	--	200	.100	--	--	30	10	2.0	30	100
GC266250	--	200	.300	--	--	70	30	3.0	55	200
GC083650	1.06	150	.150	7.76	3.25	100	15	2.0	88	70
GC083750	.20	200	.300	11.43	2.48	150	20	3.0	85	100
GC265850	--	300	.200	--	--	70	30	3.0	55	500
GC081250	.18	150	.300	9.79	2.44	100	20	2.0	79	200
GC081350	.83	150	.300	10.68	2.19	100	15	2.0	83	150
GC266550	--	150	.300	--	--	70	30	1.5	40	200
GC266350	--	300	.300	--	--	70	30	2.0	50	200
GC267150	--	300	.300	--	--	150	50	3.0	65	200
GC083950	.79	200	.200	9.32	2.30	150	20	3.0	118	70
GC247550	--	100	.500	--	--	70	20	3.0	80	200
GC247750	--	200	.050	--	--	30	N	N	40	50
GC266450	--	200	.200	--	--	50	20	2.0	35	100
GC266950	--	200	.200	--	--	30	15	2.0	30	150
GC081150	.99	200	.150	9.85	1.61	100	15	1.5	60	70
GC266150	--	300	.200	--	--	100	30	3.0	60	100
GC265950	--	200	.150	--	--	50	20	2.0	35	70
GC266050	--	200	.200	--	--	150	20	2.0	60	150
GC041150	--	200	.300	--	--	30	30	3.0	20	200
GC039950	--	70	.150	--	--	70	15	2.0	30	150
GC041050	--	300	.300	--	--	70	10	3.0	20	150
GC031950	.15	N	.300	--	.43	15	10	1.5	9	700
GC032150	.60	30	.500	4.15	1.16	20	10	2.0	22	300

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC041250	NJ	MERCER	40 10	74 37	66 10	NJ IPK 5.4 MI N EXIT 7; YELLOW-ORANGE CLAY LOAM
GC031850	NJ	OCEAN	39 57	74 28	72 9	RT 70 4 MI W WHITING; GRAY SANDY SOIL
GC032050	NJ	SALEM	39 32	75 22	72 9	RT 49 3 MI S QUINTON; BROWN SANDY SOIL
GC031750	NJ	SOMERSET	40 33	74 38	72 9	RT 206 3 MI S SOMERVILLE; LIGHT BROWN CLAY
GC031650	NJ	SUSSEX	41 2	74 40	72 9	RT 517 3 MI SW SPARTA; LIGHT BROWN FOREST LOAM
GC280450	NM	CATRON	33 43	108 45	69 1	RT 12 AT RESERVE CITY DUMP; W OF TOWN; BROWN FOREST SOIL
GC280550	NM	CATRON	33 55	108 8	69 1	RT 12 ALLUVIAL FAN E OLD HORSE SPRINGS; ALLUVIUM
GC191250	NM	CHAVES	33 54	104 33	65 6	US 285 30 MI N ROSWELL; SEMI-DESERT RED LOAM WITH CALCITE FRAGMENTS
GC191350	NM	CHAVES	33 22	104 50	65 6	US 70 18 MI SW ROSWELL; VERY DRY, TAN, WITH MANY CHERT FRAGMENTS
GC271150	NM	CURRY	34 48	103 18	69 1	RT 18 4 MI S GRADY; DARK BROWN PRAIRIE SOIL OVER SANDSTONE
GC191150	NM	DE BACA	34 27	104 17	65 6	RT 20 1 MI S FT. SUMNER; ALMOST PURE SAND
GC153750	NM	DONA ANA	32 7	106 38	63 7	I-10 AT VALDO; VERY SANDY REGOSOL
GC153850	NM	DONA ANA	32 40	107 6	63 7	US 35 6 MI S HATCH; SANDY REGOSOL
GC170750	NM	DONA ANA	32 25	106 33	64 5	US 70 S MISSILE RANGE NEAR SAN AGUSTIN PASS; ARID LIGHT SOIL
GC192050	NM	EDDY	32 20	104 16	65 6	US 62 5 MI W CARLSBAD; TAN DESERT SILT
GC280250	NM	GRANT	32 47	108 20	69 1	US 180 4 MI W SILVER CITY; ORGANIC ALLUVIUM
GC280350	NM	GRANT	32 12	108 50	69 1	US 180 9 MI S PLEASANTON AT LEOPOLD MONUMENT; BROWN SOIL ON GRANITE
GC080750	NM	GUADALUPE	34 31	104 59	74 5	RT 219 11 MI N PASTURA; LIGHT BROWN SILT
GC170250	NM	GUADALUPE	34 54	104 43	64 5	US 54 5 MI SW SANTA ROSA; ARID LIGHT SOIL
GC084550	NM	HARDING	36 1	104 10	75 5	.8 MI N RT 120 AT E BOUNDARY OF CHICOSA LAKE STATE PK.; DESERT SOIL
GC190850	NM	HARDING	35 54	104 50	65 6	US 85 11 MI S WAGON MOUND; RED CLAY IN BASALT BOULDER FIELD
GC200950	NM	HARDING	36 9	104 15	65 7	RT 39 7 MI S ABBOTT; DARK BROWN PRAIRIE SOIL
GC271050	NM	HARDING	35 46	103 56	69 1	RT 39 1 MI S MOSQUERO; DARK PRAIRIE SOIL OVER GRANITE
GC271350	NM	LEA	33 25	103 19	69 1	RT 18 8 MI S CROSSROADS; RED SILT OVER LIMESTONE
GC271450	NM	LEA	32 45	103 10	69 1	RT 18 1 MI N HOBBS; BROWN SILT OVER LIMESTONE
GC271550	NM	LEA	32 5	103 10	69 1	RT 18 2 MI S JAL; FINE RED SAND OVER LIMESTONE
GC170450	NM	LINCOLN	33 58	105 46	64 5	US 54 AT LUNA; ARID LIGHT SOIL
GC170550	NM	LINCOLN	33 28	106 4	64 5	US 54 AT OSCURA; ARID LIGHT SOIL
GC191450	NM	LINCOLN	33 24	105 30	65 6	US 70 AT GLENCOE; BROWN LITHOSOL IN LIMESTONE COLLUVIUM
GC073450	NM	LUNA	32 12	107 51	73 5	9 MI SW DEMING S OF RED MT; YELLOW DESERT LOAM
GC073550	NM	LUNA	32 21	107 53	73 5	11 MI NW DEMING, N OF BLACK MT; SALINE DESERT SOIL
GC084450	NM	LUNA	31 49	107 23	75 5	15 MI E COLUMBUS; SANDY DESERT SOIL
GC170850	NM	LUNA	32 14	107 20	64 5	US 70-80 30 MI W LAS CRUCES; ARID LIGHT SOIL
GC180050	NM	MC KINLEY	35 30	108 45	64 7	US 66 W EDGE GALLUP; 1-4 IN. DEPTH
GC191550	NM	OTERO	33 2	106 0	65 6	US 54 5 MI S TULAROSA; DESERT RED SILT
GC191650	NM	OTERO	32 18	106 9	65 6	US 54 6 MI S OROGRANDE; RED DESERT DUNE SAND
GC200750	NM	QUAY	35 15	103 19	65 7	RT 39 10 MI S LOGAN; YELLOW SANDY LITHOSOL
GC154450	NM	RIO ARriba	36 15	105 48	63 7	US 64 1 MI N RINCONADO; SANDY, ROCKY, MIXED BASALT AND CONGLOMERATE
GC261950	NM	RIO ARriba	36 40	107 14	68 5	RT 17 15 MI S DULCE; LITHOSOL OVER SANDSTONE
GC262050	NM	RIO ARriba	36 59	106 47	68 5	RT 17 3 MI E MONERO; LITHOSOL OVER SANDSTONE
GC271250	NM	ROOSEVELT	34 7	103 19	69 1	RT 18 4 MI S PORTALES; RED SILT OVER LIMESTONE
GC051450	NM	SAN JUAN	36 24	108 43	61 5	SITE NOT RECORDED; DESERT SOIL
GC051550	NM	SAN JUAN	36 46	108 23	61 5	SITE NOT RECORDED; DESERT SOIL
GC051650	NM	SAN JUAN	36 6	108 50	61 8	SITE NOT RECORDED; DESERT SOIL
GC051750	NM	SAN JUAN	36 24	108 15	61 8	SITE NOT RECORDED; DESERT SOIL
GC051850	NM	SAN JUAN	36 8	107 54	61 5	SITE NOT RECORDED; DESERT SOIL
GC051950	NM	SAN JUAN	36 46	107 38	62 5	SITE NOT RECORDED; DESERT SOIL
GC052050	NM	SAN JUAN	36 47	108 42	62 5	SITE NOT RECORDED; DESERT SOIL
GC190950	NM	SAN MIGUEL	35 22	105 13	65 6	US 84 47 MI N SANTA ROSA; LITHOSOL OVER SANDSTONE
GC007951	NM	SANDOVAL	36 0	107 35	64 10	CO RD 16 MI SW COUNSELOR; ALLUVIAL SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC041250	7.00	8.5	70	300	1.5	--	--	.15	150	7	70.0	20.0
GC031850	.30	<.1	50	70	N	<.5	.4	--	N	N	30.0	2.0
GC032050	3.00	5.0	30	200	N	1.3	1.6	.13	<150	<3	30.0	20.0
GC031750	7.00	9.4	70	300	2.0	1.3	2.6	.42	N	20	100.0	70.0
GC031650	10.00	6.9	30	500	1.5	1.9	2.2	.51	<150	7	50.0	15.0
GC280450	10.00	4.1	N	500	1.0	--	--	2.30	N	15	50.0	20.0
GC280550	>10.00	1.5	N	1,000	1.0	--	--	4.00	150	15	30.0	20.0
GC191250	5.00	11.0	70	500	N	--	--	8.30	--	20	50.0	15.0
GC191350	5.00	11.0	N	500	N	--	--	9.50	--	10	30.0	15.0
GC271150	5.00	5.5	30	500	1.0	--	--	.70	N	5	30.0	20.0
GC191150	1.50	8.9	N	1,000	N	--	--	7.20	N	5	15.0	10.0
GC153750	7.00	5.2	N	1,000	1.5	--	--	1.40	N	7	100.0	15.0
GC153850	7.00	5.9	N	700	N	--	--	4.90	N	15	100.0	50.0
GC170750	>10.00	3.7	30	700	7.0	--	--	1.10	150	15	50.0	15.0
GC192050	7.00	7.8	N	500	N	--	--	9.20	N	10	50.0	20.0
GC280250	7.00	4.6	N	700	1.5	--	--	1.60	150	7	20.0	15.0
GC280350	7.00	6.4	N	500	1.5	--	--	.35	150	7	20.0	15.0
GC080750	3.00	2.0	20	500	N	<.5	1.4	2.31	N	<3	30.0	10.0
GC170250	3.00	5.7	50	500	N	--	--	6.20	--	7	50.0	15.0
GC084550	>10.00	6.2	20	500	1.0	.8	3.3	4.65	N	7	30.0	15.0
GC190850	7.00	5.4	50	700	N	--	--	1.00	N	15	100.0	30.0
GC200950	7.00	7.9	50	700	N	--	--	.95	N	15	70.0	30.0
GC271050	3.00	4.5	20	500	1.0	--	--	1.10	N	7	30.0	20.0
GC271350	1.00	3.1	<20	300	N	--	--	1.10	N	3	7.0	10.0
GC271450	2.00	4.4	<20	300	N	--	--	6.40	N	N	20.0	15.0
GC271550	.50	3.6	N	200	N	--	--	.12	N	N	5.0	7.0
GC170450	3.00	3.8	50	300	N	--	--	2.60	N	7	30.0	15.0
GC170550	7.00	3.8	30	700	2.0	--	--	4.20	N	10	20.0	15.0
GC191450	3.00	2.0	N	500	N	--	--	18.00	--	10	20.0	10.0
GC073450	10.00	<.1	<20	1,000	2.0	<.5	.5	1.78	N	7	50.0	20.0
GC073550	7.00	2.8	<20	1,000	2.0	<.5	.4	1.90	N	10	100.0	20.0
GC084450	5.00	1.2	N	1,000	1.0	<.5	.7	2.28	N	3	30.0	7.0
GC170850	7.00	3.6	N	1,000	1.5	--	--	1.50	N	15	70.0	10.0
GC180050	7.00	--	30	700	N	--	--	1.50	N	10	50.0	10.0
GC191550	5.00	4.3	N	500	N	--	--	13.00	--	10	50.0	15.0
GC191650	2.00	3.9	30	500	N	--	--	.80	N	5	15.0	10.0
GC200750	2.00	3.0	N	300	N	--	--	.75	N	5	10.0	10.0
GC154450	7.00	15.0	N	1,000	N	--	--	2.80	N	7	70.0	20.0
GC261950	7.00	3.1	20	1,500	N	--	--	.60	N	7	20.0	30.0
GC262050	>10.00	11.0	70	1,000	2.0	--	--	.80	<150	10	70.0	70.0
GC271250	1.50	2.5	<20	300	N	--	--	.50	N	N	20.0	15.0
GC051450	--	8.8	70	700	<1.0	--	--	3.00	--	10	200.0	100.0
GC051550	--	7.6	50	700	<1.0	--	--	3.40	--	10	70.0	70.0
GC051650	--	5.4	<20	2,000	3.0	--	--	1.80	--	20	500.0	30.0
GC051750	--	18.0	<20	1,000	<1.0	--	--	3.00	--	5	10.0	5.0
GC051850	--	5.1	50	500	2.0	--	--	.80	--	5	20.0	15.0
GC051950	--	--	30	1,000	2.0	--	--	4.00	--	15	30.0	10.0
GC052050	--	--	30	1,500	2.0	--	--	11.00	--	7	70.0	20.0
GC190950	7.00	6.2	N	1,000	N	--	--	.70	N	15	30.0	30.0
GC007951	>10.00	6.0	N	500	N	--	--	.96	N	10	30.0	20.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC041250	.017	3.00	30	--	.09	--	1.20	70	61	.300	300	N
GC031850	--	.20	N	.75	.01	<.5	.03	N	<5	.020	50	N
GC032050	--	1.00	7	1.33	.06	1.0	.76	<30	16	.100	100	N
GC031750	.050	7.00	15	2.00	.06	1.2	1.69	50	45	.700	2,000	N
GC031650	--	3.00	15	1.79	.08	3.6	1.52	50	25	.500	500	N
GC280450	.029	3.00	20	--	.03	--	2.20	50	21	.700	700	N
GC280550	.036	3.00	30	--	.05	--	1.90	70	18	1.000	500	N
GC191250	.078	2.00	20	--	.01	--	1.70	N	59	3.000	700	N
GC191350	.025	2.00	15	--	.05	--	1.80	N	19	1.000	500	N
GC271150	.006	1.00	15	--	.03	--	1.50	30	21	.300	500	N
GC191150	.008	1.00	7	--	.04	--	.90	N	9	.200	700	N
GC153750	.032	5.00	20	--	.04	--	2.10	70	24	1.500	500	N
GC153850	.065	3.00	20	--	.07	--	2.00	50	44	1.000	300	N
GC170750	.081	3.00	30	--	.04	--	3.20	100	27	.700	500	N
GC192050	.034	2.00	10	--	.03	--	1.30	N	22	1.500	300	N
GC280250	.026	2.00	20	--	.03	--	3.10	50	22	.500	500	N
GC280350	.016	2.00	15	--	.06	--	3.90	70	29	.300	500	3
GC080750	--	1.00	10	.93	.03	<.5	1.12	N	15	1.500	200	N
GC170250	.016	1.50	20	--	.05	--	1.40	N	16	.500	200	N
GC084550	.060	1.50	15	1.22	.02	1.8	1.89	30	36	1.000	200	N
GC190850	.036	3.00	30	--	.04	--	1.90	50	40	1.000	500	N
GC200950	.039	2.00	30	--	.02	--	2.10	30	25	.700	500	N
GC271050	.023	1.50	15	--	.04	--	1.60	30	25	.500	500	N
GC271350	.047	.50	5	--	.03	--	.55	N	10	.150	70	N
GC271450	.013	.70	10	--	.04	--	1.20	N	15	.300	300	N
GC271550	<.001	.30	N	--	.04	--	.37	N	9	.050	70	N
GC170450	.011	1.00	15	--	.04	--	.75	30	20	.700	150	N
GC170550	.055	2.00	20	--	.06	--	2.30	50	23	.700	500	N
GC191450	.041	2.00	10	--	.03	--	.80	N	17	3.000	500	N
GC073450	.060	2.00	20	--	.02	.6	3.14	<30	19	.700	500	N
GC073550	.040	5.00	15	1.48	.03	<.5	2.81	<30	19	.700	500	N
GC084450	--	1.00	15	.84	.02	.9	2.43	N	23	.700	150	N
GC170850	.023	3.00	20	--	.02	--	2.70	30	24	.700	500	N
GC180050	--	2.00	20	--	--	--	2.10	30	--	.700	200	N
GC191550	.021	2.00	10	--	.03	--	1.20	70	17	1.000	500	N
GC191650	.016	.70	10	--	.02	--	1.80	N	14	.150	100	N
GC200750	.002	.70	7	--	.02	--	1.00	N	12	.150	150	N
GC154450	.050	3.00	20	--	.02	--	1.80	70	29	.700	200	N
GC261950	.016	2.00	15	--	.06	--	1.70	<30	19	1.500	700	N
GC271250	.055	3.00	30	--	.07	--	2.00	70	43	.200	700	N
GC271250	.002	.70	7	--	.03	--	.90	N	15	.200	150	N
GC051450	.042	5.00	--	--	.23	--	2.00	50	24	1.000	500	--
GC051550	.035	5.00	--	--	.11	--	1.70	50	23	1.000	700	--
GC051650	.065	3.00	20	--	.32	--	5.30	150	12	3.000	300	<3
GC051750	.031	1.50	15	--	.08	--	2.70	--	9	.150	150	<3
GC051850	.057	2.00	15	--	.11	.4	1.80	50	23	.500	200	<3
GC051950	.025	2.00	15	--	.20	--	1.80	70	23	.700	300	3
GC052050	--	2.00	10	--	.15	--	1.50	70	21	1.500	200	N
GC190950	.020	2.00	20	--	.11	--	.75	50	36	1.000	500	N
GC007951	.020	2.00	15	--	.04	--	1.80	50	21	.300	200	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC041250	.70	20	70	15	.030	20	--	--	--	10	.9	--
GC031850	N	10	--	N	--	N	<20	<.08	<1	N	<.1	41
GC032050	.20	<10	N	5	--	20	40	<.08	<1	5	.2	39
GC031750	.70	10	70	30	--	50	95	<.08	3	15	<.1	27
GC031650	.70	10	N	15	--	20	55	.08	1	7	.4	32
GC280450	1.00	10	70	20	.040	20	--	--	--	10	.2	--
GC280550	1.50	10	70	20	.060	20	--	--	--	10	.3	--
GC191250	1.00	N	N	30	.024	N	--	--	--	10	.2	--
GC191350	1.00	N	N	15	.024	N	--	--	--	10	.2	--
GC271150	.70	10	N	15	.016	15	--	--	--	10	.2	--
GC191150	7.00	N	N	7	.012	10	--	--	--	N	.2	--
GC153750	2.00	15	N	10	.024	15	--	--	--	10	.4	--
GC153850	2.00	N	N	30	.044	20	--	--	--	15	.2	--
GC170750	2.00	30	70	30	.044	70	--	--	--	20	.4	--
GC192050	.70	N	N	20	.024	N	--	--	--	10	.2	--
GC280250	1.00	10	N	10	.030	50	--	--	--	7	.1	--
GC280350	.70	20	70	7	.020	30	--	--	--	7	<.1	--
GC080750	.70	<10	--	<5	--	15	55	<.08	<1	<5	<.1	30
GC170250	1.00	10	N	20	.024	15	--	<.08	--	7	.2	--
GC084550	1.00	N	N	15	--	15	70	<.08	<1	7	.1	28
GC190850	1.00	20	N	30	.016	20	--	--	--	15	.4	--
GC200950	1.50	20	N	20	.030	30	--	--	--	10	.5	--
GC271050	.70	10	N	15	.030	15	--	--	--	10	.2	--
GC271350	.20	<10	--	5	.008	N	--	--	--	N	.1	--
GC271450	.50	N	--	5	.030	10	--	--	--	5	.1	--
GC271550	.10	<10	--	<5	.004	N	--	--	--	N	.3	--
GC170450	1.00	10	N	20	.016	10	--	--	--	7	.4	--
GC170550	1.50	20	N	20	.044	20	--	--	--	15	.2	--
GC191450	1.50	N	N	10	.090	N	--	--	--	10	.4	--
GC073450	2.00	10	N	10	--	20	140	<.08	<1	10	.2	30
GC073550	1.50	10	N	20	--	20	120	<.08	<1	10	.1	31
GC084450	2.00	N	--	7	--	15	95	<.08	<1	5	<.1	35
GC170850	1.50	30	N	30	.008	20	--	--	--	10	.1	--
GC180050	1.00	10	N	15	.004	20	--	--	--	10	.3	--
GC191550	1.50	N	N	15	.016	N	--	--	--	10	<.1	--
GC191650	.70	15	N	5	.004	10	--	--	--	N	<.1	--
GC200750	.70	N	N	7	.004	N	--	--	--	N	.3	--
GC154450	1.50	15	N	15	.030	15	--	--	--	10	.2	--
GC261950	1.00	10	--	10	.016	20	--	--	--	10	.8	--
GC262050	1.00	10	--	70	.040	15	--	--	--	15	<.1	--
GC271250	.30	10	--	5	.008	10	--	--	--	N	.5	--
GC051450	--	--	--	15	.060	50	--	--	--	10	.4	--
GC051550	--	--	--	700	.040	20	--	--	--	10	.2	--
GC051650	--	--	--	7	.220	50	--	--	--	5	.9	--
GC051750	--	--	--	7	.005	15	--	--	--	<5	.8	--
GC051850	--	--	--	15	--	20	--	--	--	7	<.1	--
GC051950	--	--	--	10	.016	15	--	--	--	10	.1	--
GC052050	--	--	--	30	.090	15	--	--	--	10	.1	--
GC190950	1.50	15	N	20	.024	30	--	--	--	10	.2	--
GC007951	1.00	15	--	15	.015	15	--	--	--	7	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC041250	--	70	.700	--	--	70	70	7.0	40	300
GC031850	.62	N	.500	--	.63	10	N	N	6	200
GC032050	.91	50	.500	7.00	2.73	50	15	3.0	29	300
GC031750	3.08	100	.500	13.33	3.39	150	20	2.0	105	300
GC031650	2.84	100	.500	9.30	2.74	70	20	3.0	86	300
GC280450	--	500	.500	--	--	150	30	5.0	40	200
GC280550	--	1,000	.300	--	--	150	30	3.0	40	100
GC191250	--	150	.200	--	--	100	30	3.0	40	200
GC191350	--	200	.200	--	--	70	30	2.0	35	200
GC271150	--	200	.200	--	--	50	30	5.0	35	300
GC191150	--	150	.070	--	--	30	20	2.0	--	30
GC153750	--	500	.300	--	--	50	50	--	50	700
GC153850	--	700	.300	--	--	100	30	3.0	75	150
GC170750	--	200	.070	--	--	100	100	10.0	50	700
GC192050	--	200	.150	--	--	100	20	3.0	40	200
GC280250	--	200	.200	--	--	50	30	3.0	50	200
GC280350	--	150	.500	--	--	70	50	7.0	35	300
GC080750	.51	70	.100	6.56	2.13	50	10	2.0	30	200
GC170250	--	100	.200	--	2.80	70	15	5.0	25	200
GC084550	1.42	500	.150	9.88	--	100	50	1.5	73	150
GC190850	--	200	.300	--	--	100	50	5.0	50	200
GC200950	--	200	.300	--	--	100	30	3.0	60	150
GC271050	--	150	.300	--	--	50	30	3.0	35	300
GC271350	--	50	.070	--	--	15	<10	1.0	15	150
GC271450	--	150	.100	--	--	30	15	2.0	30	150
GC271550	--	20	.070	--	--	10	15	1.5	10	200
GC170450	--	100	.200	--	--	50	30	3.0	25	300
GC170550	--	500	.300	--	--	100	30	3.0	50	150
GC191450	--	500	.150	--	--	100	N	N	40	100
GC073450	.92	500	.200	13.48	3.02	70	20	3.0	65	150
GC073550	1.22	300	.300	12.12	2.92	150	20	3.0	79	150
GC084450	.74	300	.150	7.28	1.80	30	10	1.5	31	150
GC170850	--	700	.300	--	--	100	50	7.0	50	300
GC180050	--	150	.150	--	--	70	30	5.0	25	300
GC191550	--	700	.200	--	--	100	50	5.0	40	300
GC191650	--	100	.100	--	--	20	15	1.5	--	150
GC200750	--	50	.070	--	--	15	10	1.0	--	100
GC154450	--	500	.300	--	--	70	50	5.0	50	300
GC261950	--	300	.150	--	--	70	30	3.0	60	300
GC262050	--	300	.300	--	--	150	30	7.0	110	300
GC271250	--	70	.100	--	--	20	10	1.5	20	200
GC051450	--	500	.700	--	--	150	50	--	50	1,000
GC051550	--	300	.700	--	--	100	50	--	50	1,500
GC051650	--	2,000	.300	--	--	70	15	--	50	300
GC051750	--	200	.150	--	--	30	15	--	25	700
GC051850	--	200	.300	--	--	70	15	--	25	300
GC051950	--	300	.500	--	--	70	20	--	50	700
GC052050	--	500	.200	--	--	150	30	--	50	300
GC190950	--	100	.200	--	--	70	50	--	35	500
GC007951	--	200	.300	--	--	50	30	3.0	20	100

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC009551	NM	SANDOVAL	35 49	107 10	64 10	10 MI W LA VENTANA; ALLUVIAL SOIL
GC154250	NM	SANDOVAL	35 15	106 35	63 7	I-25 10 MI N ALBUQUERQUE; FINE SANDY WITH MANY PEBBLES
GC154350	NM	SANTA FE	35 49	105 59	63 7	US 64 1 MI N SANTA FE; RED, SANDY, FROM WEATHERED CONGLOMERATE
GC153950	NM	SIERRA	33 12	107 14	63 7	US 35 3 MI N TRUTH OR CONSEQUENCES; SANDY-PEBBLY REGOSOL
GC154050	NM	SOCORRO	33 52	106 55	63 7	US 35 12 MI S SAN ANTONIO; MIXED SAND-CLAY-PEBBLES
GC154550	NM	TAOS	36 38	105 54	63 7	RT 111 4 MI S TRES PIEDROS; LIGHT SANDY REGOSOL
GC080650	NM	TORRANCE	34 31	106 13	74 5	US 60 1 MI E MOUNTAINAIR; LIGHT BROWN SILT
GC170350	NM	TORRANCE	34 30	105 22	64 5	US 54 1.8 MI N DURAN; ARID LIGHT SOIL
GC085650	NM	UNION	36 58	103 21	75 6	RT 325 12 MI E JCT RT 37; RED DESERT SOIL FROM SANDSTONE
GC190550	NM	UNION	36 38	103 40	65 6	US 64-87 4 MI NW GRENVILLE; DARK CLAYEY SOIL 9-IN. DEPTH
GC190650	NM	UNION	36 19	103 43	65 6	US 56 30 MI W CLAYTON; REDDISH-BROWN DRY PRAIRIE
GC260250	NM	UNION	36 50	104 30	67 11	US 64-87 40 MI E RATON; DARK COBBLY SOIL 3-6 IN. DEPTH
GC044550	NM	VALENCIA	35 7	107 48	67 2	US 66 2.1 MI W CASA BLANCA; SANDY ORANGE-TAN
GC154150	NM	VALENCIA	34 31	106 49	63 7	US 35 AT MOUNTAINAIR, 17 MI S BELEN; DESERT SAND
GC241950	NV	CHURCHILL	39 55	118 45	66 7	I 80-US95 INTERCHANGE 20 MI S LOVELOCK; B HORIZON SOIL
GC242150	NV	CHURCHILL	39 28	118 47	66 7	US 95 2 MI N PARRAN, W OF WILDLIFE REFUGE; SOIL NOT DESCRIBED
GC045050	NV	CLARK	36 7	115 14	67 2	I-15 9 MI SW LAS VEGAS; ORANGE-TAN SANDY DESERT
GC045150	NV	CLARK	36 36	114 37	67 2	I-15 HIDDEN VALLEY EXIT; RED-ORANGE-BUFF STONY, ON ALLUVIUM
GC250950	NV	DOUGLAS	38 59	119 50	66 6	US 395 2 MI N MINDEN .5 MI W ON CO RD; SOIL 10 FT FROM RD
GC240450	NV	ELKO	40 44	114 3	66 7	ALT. 50 ABOUT 20 MI SW WENDOVER; SOIL NOT DESCRIBED
GC240550	NV	ELKO	41 3	114 30	66 7	1 MI N I-80 AND 2 MI W WENDOVER; SOIL NOT DESCRIBED
GC240650	NV	ELKO	41 6	114 58	66 7	I-80 AT US 93-40 JCT NEAR WELLS; SOIL NOT DESCRIBED
GC240750	NV	ELKO	40 42	115 9	66 7	CO RD OFF RT 11, ABOUT 11 MI S TO RUBY VALLEY MTS; SOIL NOT DESCRIBED
GC240850	NV	ELKO	40 17	115 28	66 7	CO RD 3 MI S RUBY VALLEY; SOIL NOT DESCRIBED
GC240950	NV	ELKO	40 30	115 40	66 7	RT 46 25 MI S ELKO; SOIL NOT DESCRIBED
GC241050	NV	ELKO	40 54	115 43	66 7	I-80 W EDGE OF ELKO; SOIL NOT DESCRIBED
GC241150	NV	ELKO	40 43	116 8	66 7	I-80 NEAR CARLIN; SOIL NOT DESCRIBED
GC004950	NV	ESMERALDA	37 59	118 12	62 10	US 6 6 MI E BASALT; UNCONSOLIDATED CLAYEY SEDIMENT
GC262550	NV	ESMERALDA	37 23	117 7	68 7	US 95 16 MI NW SCOTTYS JUNCTION; LITHOSOL FROM VOLCANIC ROCK
GC262750	NV	ESMERALDA	37 43	118 6	68 7	RT 3A 19 MI NW OASIS, CALIF; ALLUVIUM, SILTY
GC241250	NV	EUREKA	40 43	116 31	66 7	I-80 3 MI E DUNPHY; SOIL NOT DESCRIBED
GC062850	NV	HUMBOLDT	41 38	117 47	70 10	US 95 6 MI N GROVADA; GRAY SILT VALLEY FILL
GC241450	NV	HUMBOLDT	40 55	117 23	66 7	I-80 SUMMIT GOLCONDA PASS; SOIL NOT DESCRIBED
GC241650	NV	HUMBOLDT	40 58	117 44	66 7	I-80 AT WINNEMUCCA; SOIL NOT DESCRIBED
GC241350	NV	LANDER	40 38	116 55	66 7	SITE AND SOIL DESCRIPTION NOT RECORDED
GC262950	NV	LANDER	39 20	117 1	68 7	RT 8A 1 MI S JCT WITH US 50; HEAVY SILTY ALLUVIUM
GC078450	NV	LINCOLN	37 45	115 53	73 9	RT 25 1 MI E NYE-LINCOLN CO LINE; BROWN SILT UNDER DESERT PAVEMENT
GC078550	NV	LINCOLN	37 33	115 12	73 9	RT 93 1.5 MI E JCT WITH RT 25; GRAVELLY SAND
GC078650	NV	LINCOLN	37 42	114 27	73 9	US 93 8 MI NE CALIENTE; LIGHT BROWN ALLUVIAL SILT, ALKALI
GC078750	NV	LINCOLN	38 21	114 36	73 9	US 93 58 MI N CALIENTE; GRITTY LOAM UNDER THIN DESERT PAVEMENT
GC242350	NV	LYON	38 55	119 10	66 7	ALT 95 NEAR YERINGTON; SOIL NOT DESCRIBED
GC242450	NV	LYON	39 24	119 13	66 7	US ALT 95 W LAHONTAN RESERVOIR AT SILVER SPRINGS; SOIL NOT DESCRIBED
GC242250	NV	MINERAL	38 57	118 49	66 7	US 95 NEAR US ALT 95 JCT NEAR SCHURZ; SOIL NOT DESCRIBED
GC004650	NV	NYE	38 45	115 41	62 7	US 6 5 MI S CURRENT 1/2 MI NW HI; HIGH-ALKALI CLAY 8-IN. DEPTH
GC004750	NV	NYE	38 20	116 25	62 7	US 6 5 MI N WARM SPGS MOUTH OF TYBO CANYON; BROWN LITHOSOL FROM SHALE
GC004850	NV	NYE	38 5	117 17	62 10	US 6 8 MI W TONOPAH; UNCONSOLIDATED SAND IN ALLUVIATED VALLEY
GC052150	NV	NYE	37 45	116 10	63 6	SITE AND SOIL DESCRIPTION NOT RECORDED
GC052250	NV	NYE	37 41	116 58	63 11	SITE AND SOIL DESCRIPTION NOT RECORDED
GC052350	NV	NYE	37 23	116 32	64 7	DEATH VALLEY; SOIL NOT DESCRIBED
GC052450	NV	NYE	37 8	115 52	62 8	SITE AND SOIL DESCRIPTION NOT RECORDED

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC009551	7.00	9.9	N	700	N	--	--	1.80	N	10	70.0	20.0
GC154250	3.00	5.5	N	1,000	1.5	--	--	1.90	N	7	70.0	15.0
GC154350	3.00	10.0	N	1,000	N	--	--	14.00	--	N	50.0	20.0
GC153950	3.00	6.7	N	700	N	--	--	11.00	--	N	70.0	20.0
GC154050	3.00	8.8	N	700	N	--	--	8.40	--	N	50.0	20.0
GC154550	7.00	6.9	N	700	N	--	--	4.00	N	7	50.0	20.0
GC080650	5.00	4.3	20	1,000	1.5	.5	1.8	1.11	N	5	30.0	50.0
GC170350	5.00	5.3	30	700	N	--	--	.88	N	7	30.0	15.0
GC085650	3.00	6.5	<20	500	N	1.1	1.4	2.72	N	5	15.0	10.0
GC190550	7.00	7.6	N	700	N	--	--	1.10	N	20	150.0	20.0
GC190650	5.00	5.1	30	700	N	--	--	.70	N	7	50.0	15.0
GC260250	7.00	4.5	20	700	1.5	--	--	2.50	N	30	70.0	30.0
GC044550	1.50	3.9	20	300	N	--	--	2.20	N	3	7.0	10.0
GC154150	7.00	7.5	30	1,000	N	--	--	2.90	N	7	50.0	15.0
GC241950	3.00	14.0	150	1,000	N	--	--	.82	--	10	30.0	15.0
GC242150	7.00	5.4	<20	1,000	1.0	--	--	2.39	N	7	20.0	15.0
GC045050	1.00	3.3	<20	150	N	--	--	8.00	N	3	15.0	10.0
GC045150	1.50	6.5	<20	200	N	--	--	17.00	N	3	30.0	15.0
GC250950	7.00	8.4	N	1,500	N	--	--	1.90	N	7	30.0	20.0
GC240450	1.50	5.6	N	300	N	--	--	.22	--	3	20.0	15.0
GC240550	3.00	9.5	30	700	N	--	--	.06	--	7	30.0	30.0
GC240650	3.00	10.0	70	700	N	--	--	.20	150	7	20.0	30.0
GC240750	3.00	2.9	N	700	3.0	--	--	3.57	N	7	15.0	15.0
GC240850	3.00	6.5	N	700	1.0	--	--	1.80	N	5	15.0	15.0
GC240950	5.00	6.9	30	700	1.5	--	--	1.30	N	7	30.0	15.0
GC241050	5.00	3.9	30	3,000	1.0	--	--	1.22	150	7	15.0	20.0
GC241150	5.00	9.9	70	1,000	1.5	--	--	1.52	150	15	30.0	30.0
GC004950	>10.00	--	N	700	2.0	--	--	2.60	N	15	70.0	50.0
GC262550	>10.00	9.9	30	500	3.0	--	--	3.40	150	5	20.0	10.0
GC262750	>10.00	4.5	20	700	3.0	--	--	4.20	150	7	15.0	15.0
GC241250	5.00	5.5	70	1,500	1.0	--	--	1.81	N	15	30.0	30.0
GC062850	7.00	11.0	50	1,000	1.5	--	--	1.29	<150	10	50.0	50.0
GC241450	7.00	10.0	70	700	N	--	--	1.85	N	15	30.0	30.0
GC241650	3.00	5.9	30	700	1.5	--	--	1.49	150	5	15.0	15.0
GC241350	5.00	17.0	150	500	N	--	--	.59	N	15	30.0	30.0
GC262950	>10.00	21.0	50	1,000	2.0	--	--	2.50	150	10	30.0	30.0
GC078450	10.00	6.1	20	1,000	2.0	<.5	.4	1.46	<150	7	15.0	10.0
GC078550	10.00	3.2	N	1,000	1.5	1.0	2.5	7.29	--	<3	15.0	5.0
GC078650	10.00	5.6	50	500	N	1.3	3.3	9.12	--	7	50.0	30.0
GC078750	7.00	14.9	50	300	1.5	1.8	2.3	6.31	N	10	100.0	50.0
GC242350	7.00	24.0	150	700	N	--	--	2.02	N	15	30.0	70.0
GC242450	7.00	16.0	N	700	N	--	--	1.73	N	15	20.0	30.0
GC242250	7.00	6.6	N	1,500	N	--	--	1.79	N	10	30.0	20.0
GC004650	7.00	--	100	500	N	--	--	6.50	N	10	50.0	30.0
GC004750	7.00	--	50	500	N	--	--	5.00	N	10	50.0	30.0
GC004850	7.00	--	30	1,000	2.0	--	--	2.30	N	10	30.0	30.0
GC052150	7.00	--	N	1,000	1.5	--	--	.16	N	7	20.0	10.0
GC052250	>10.00	--	30	700	2.0	--	--	--	150	10	50.0	20.0
GC052350	>10.00	6.7	50	700	5.0	--	--	2.90	200	7	150.0	15.0
GC052450	--	--	50	500	2.0	--	--	4.60	N	N	70.0	30.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC009551	.032	1.50	20	--	.05	--	1.90	N	32	.300	200	N
GC154250	.036	2.00	15	--	.03	--	1.90	50	24	.700	300	N
GC154350	.029	1.50	10	--	.11	--	.90	50	26	.700	500	N
GC153950	.039	2.00	15	--	.10	--	1.50	30	30	1.000	200	N
GC154050	.030	2.00	15	--	.05	--	1.70	50	23	1.000	200	N
GC154550	.054	2.00	15	--	.05	--	1.70	50	30	1.000	200	N
GC080650	--	2.00	10	1.11	.03	.7	1.56	N	20	.500	300	N
GC170350	.010	1.50	15	--	.11	--	1.60	N	17	.300	150	N
GC085650	--	1.00	7	.94	.03	2.3	1.07	N	19	.500	150	N
GC190550	.035	3.00	20	--	.04	--	1.90	50	29	1.000	500	N
GC190650	.017	1.50	15	--	.08	--	1.80	30	21	.500	300	N
GC260250	.022	5.00	30	--	.05	--	2.00	70	28	1.000	1,000	3
GC044550	.022	.70	10	--	.03	--	.95	N	14	.200	150	N
GC154150	.042	2.00	20	--	.10	--	1.80	50	32	.700	200	N
GC241950	.006	2.00	30	--	.05	--	1.82	N	38	1.500	500	N
GC242150	.016	1.50	30	--	.06	--	2.69	30	18	.700	300	N
GC045050	.002	.70	7	--	.03	--	.45	N	10	1.000	100	N
GC045150	.049	.70	10	--	.03	--	.90	N	14	.700	150	N
GC250950	.013	3.00	30	--	.04	--	3.05	30	20	.700	300	N
GC240450	.043	1.50	10	--	.04	--	.92	N	21	2.000	300	N
GC240550	.017	2.00	30	--	.82	--	1.88	30	28	3.000	500	N
GC240650	.052	2.00	30	--	.05	--	1.25	50	41	1.500	700	N
GC240750	.041	2.00	30	--	.04	--	2.22	30	25	1.500	500	N
GC240850	.030	1.50	30	--	.03	--	2.94	30	32	1.500	500	N
GC240950	.044	2.00	30	--	.08	--	2.63	70	32	.700	700	N
GC241050	.055	2.00	30	--	.07	--	2.71	70	41	1.500	700	N
GC241150	.042	3.00	30	--	.06	--	2.43	70	38	1.500	700	3
GC004950	--	3.00	30	--	--	--	2.80	70	--	1.500	300	N
GC262550	.080	1.50	30	--	.04	--	3.70	150	40	.700	700	3
GC262750	.064	1.50	30	--	.03	--	3.40	70	41	1.500	700	5
GC241250	.063	3.00	30	--	.08	--	2.32	70	32	1.000	700	3
GC062850	.046	3.00	20	--	.03	--	2.28	50	47	.700	500	3
GC241450	.019	3.00	30	--	.03	--	2.16	70	37	1.500	700	3
GC241650	.040	1.50	30	--	.05	--	2.56	70	23	.500	300	N
GC241350	.088	2.00	30	--	.04	--	2.49	30	75	1.500	300	3
GC262950	.066	2.00	20	--	.03	--	2.60	70	38	1.500	500	5
GC078450	.040	3.00	20	1.37	.04	1.3	2.98	50	30	1.000	500	N
GC078550	.050	1.50	20	.90	.02	2.0	2.72	50	15	1.500	200	N
GC078650	.120	2.00	15	1.60	.07	2.1	2.35	<30	60	2.000	500	N
GC078750	.090	2.00	15	.70	.04	1.8	1.59	70	33	.700	300	N
GC242350	.052	3.00	30	--	.07	--	2.50	70	39	1.500	700	7
GC242450	.027	3.00	30	--	.16	--	2.18	30	28	1.500	700	3
GC242250	.019	2.00	20	--	.04	--	2.96	30	19	.700	300	N
GC004650	--	1.50	20	--	--	--	2.50	30	--	3.000	300	N
GC004750	--	1.50	30	--	--	--	2.70	50	--	1.000	200	N
GC004850	--	2.00	30	--	--	--	3.10	50	--	1.000	300	N
GC052150	--	3.00	30	--	--	--	3.10	70	--	1.000	500	N
GC052250	--	5.00	30	--	--	--	--	100	--	1.000	500	N
GC052350	.100	2.00	30	--	.04	--	3.20	150	53	1.000	700	7
GC052450	--	--	50	--	--	--	3.40	50	--	1.800	--	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC009551	1.00	N	--	15	.040	N	--	--	--	10	.2	--
GC154250	1.50	15	N	10	.044	15	--	--	--	10	.2	--
GC154350	1.00	N	N	10	.044	15	--	--	--	10	.6	--
GC153950	1.50	N	N	10	.030	15	--	--	--	7	.6	--
GC154050	2.00	N	N	10	.044	15	--	--	--	10	.3	--
GC154550	1.00	15	N	15	.030	15	--	--	--	10	.2	--
GC080650	.70	<10	--	10	--	15	65	.11	<1	7	.2	34
GC170350	1.00	10	N	15	.012	15	45	<.08	<1	7	.1	--
GC085650	.50	10	--	7	--	10	--	--	--	5	<.1	37
GC190550	1.00	20	70	30	.030	30	--	--	--	15	.4	--
GC190650	1.00	15	70	15	.004	20	--	--	--	7	.2	--
GC260250	1.00	30	70	70	.100	30	--	--	--	15	.6	--
GC044550	.30	<10	--	<5	.008	15	--	--	--	<5	<.1	--
GC154150	1.50	N	N	10	.016	15	--	--	--	10	.3	--
GC241950	3.00	10	N	15	.144	15	--	--	--	15	.4	--
GC242150	2.00	10	N	10	.096	20	--	--	--	7	<.1	--
GC045050	.30	N	--	7	.016	<10	--	--	--	N	<.1	--
GC045150	.70	N	--	7	.030	10	--	--	--	N	.3	--
GC250950	1.50	10	N	15	.052	30	--	--	--	7	.2	--
GC240450	.70	N	N	7	.083	N	--	--	--	5	.2	--
GC240550	1.50	10	N	15	.109	30	--	--	--	7	.7	--
GC240650	.70	15	N	15	.092	30	--	--	--	7	.2	--
GC240750	1.00	10	N	15	.092	30	--	--	--	7	<.1	--
GC240850	1.50	15	N	7	.079	30	--	--	--	7	<.1	--
GC240950	1.00	30	N	15	.044	30	--	--	--	7	.2	--
GC241050	.70	30	70	10	.061	30	--	--	--	7	.1	--
GC241150	1.00	15	70	15	.083	30	--	--	--	15	.5	--
GC004950	3.00	20	N	30	.060	50	--	--	--	10	--	--
GC262550	3.00	20	70	10	.030	70	--	--	--	7	<.1	--
GC262750	1.50	10	70	7	.070	30	--	--	--	7	<.1	--
GC241250	.70	20	70	15	.175	20	--	--	--	15	.5	--
GC062850	1.50	10	70	30	--	20	--	--	--	15	.4	--
GC241450	1.00	15	70	15	.074	15	--	--	--	15	.2	--
GC241650	1.00	15	N	10	.092	30	--	--	--	7	.1	--
GC241350	10.00	N	N	15	.113	15	--	--	--	15	.3	--
GC262950	.70	15	70	30	.070	15	--	--	--	10	.8	--
GC078450	2.00	10	70	10	--	20	145	<.08	<1	7	.2	27
GC078550	2.00	N	N	5	--	15	100	<.08	<1	<5	.2	25
GC078650	1.50	<10	N	15	--	115	80	<.08	<1	7	.3	22
GC078750	.70	<10	N	30	--	15	--	<.08	<1	10	1.1	27
GC242350	3.00	10	N	15	.175	30	--	--	--	15	.2	--
GC242450	1.00	N	N	15	.100	20	--	--	--	15	.2	--
GC242250	2.00	10	N	15	.083	20	--	--	--	15	<.1	--
GC004650	5.00	N	N	30	.060	30	--	--	--	10	--	--
GC004750	1.50	N	N	20	.044	30	--	--	--	10	--	--
GC004850	3.00	10	N	15	.044	30	--	--	--	10	--	--
GC052150	3.00	10	--	5	.170	15	--	--	--	10	--	--
GC052250	3.00	20	70	20	--	30	--	--	--	15	--	--
GC052350	2.00	50	150	15	.030	20	--	--	--	15	<.1	--
GC052450	--	15	--	20	.024	30	--	--	--	15	--	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC009551	--	200	.100	--	--	70	20	2.0	50	150
GC154250	--	500	.300	--	--	70	50	5.0	50	500
GC154350	--	200	.070	--	--	50	20	2.0	50	70
GC153950	--	700	.300	--	--	50	30	3.0	75	150
GC154050	--	500	.200	--	--	50	20	3.0	50	200
GC154550	--	500	.200	--	--	50	30	3.0	50	300
GC080650	1.09	200	.500	--	2.85	50	20	2.0	48	300
GC170350	--	150	.200	--	--	70	20	2.0	25	150
GC085650	.79	150	.150	--	3.63	30	15	1.5	41	200
GC190550	--	200	.300	--	--	100	30	3.0	55	150
GC190650	--	100	.150	--	--	70	20	2.0	30	100
GC260250	--	500	.300	--	--	70	50	7.0	45	200
GC044550	--	150	.150	--	--	20	30	3.0	45	200
GC154150	--	500	.200	--	--	70	50	5.0	50	300
GC241950	--	700	.150	--	--	70	30	3.0	80	70
GC242150	--	300	.150	--	--	70	15	1.5	50	70
GC045050	--	100	.070	--	--	30	15	1.5	50	150
GC045150	--	150	.070	--	--	30	15	1.5	55	150
GC250950	--	500	.200	--	--	150	15	1.5	47	150
GC240450	--	150	.070	--	--	30	15	1.5	50	150
GC240550	--	150	.150	--	--	70	30	3.0	90	150
GC240650	--	150	.150	--	--	70	30	3.0	60	150
GC240750	--	200	.200	--	--	70	30	3.0	70	150
GC240850	--	150	.150	--	--	30	30	3.0	60	150
GC240950	--	150	.300	--	--	70	30	3.0	60	150
GC241050	--	700	.200	--	--	50	30	3.0	80	150
GC241150	--	150	.300	--	--	150	30	5.0	110	200
GC004950	--	500	.300	--	--	100	30	5.0	60	200
GC262550	--	300	.150	--	--	30	70	7.0	35	300
GC262750	--	700	.150	--	--	50	30	3.0	55	150
GC241250	--	150	.300	--	--	150	30	5.0	110	200
GC062850	--	200	.500	--	--	100	30	3.0	98	200
GC241450	--	200	.300	--	--	150	30	5.0	90	200
GC241650	--	200	.150	--	--	70	30	3.0	60	150
GC241350	--	500	.150	--	--	70	30	3.0	90	150
GC262950	--	300	.300	--	--	100	30	3.0	70	150
GC078450	.93	500	.200	10.04	4.17	70	20	2.0	62	200
GC078550	1.29	300	.100	9.52	2.78	30	20	2.0	45	70
GC078650	.51	150	.200	8.87	3.80	70	20	2.0	70	100
GC078750	1.11	200	.200	14.07	3.92	100	30	3.0	128	150
GC242350	--	300	.200	--	--	150	30	3.0	120	150
GC242450	--	200	.200	--	--	150	20	3.0	90	100
GC242250	--	500	.200	--	--	100	20	3.0	40	150
GC004650	--	500	.100	--	--	70	20	2.0	85	50
GC004750	--	300	.100	--	--	50	20	2.0	55	30
GC004850	--	500	.300	--	--	100	20	3.0	45	150
GC052150	--	700	.200	--	--	50	20	2.0	50	200
GC052250	--	1,000	.500	--	--	150	50	5.0	25	500
GC052350	--	500	.200	--	--	70	50	7.0	100	300
GC052450	--	500	--	--	--	70	30	5.0	100	100

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC052550	NV	NYE	36 45	116 15	63	SITE AND SOIL DESCRIPTION NOT RECORDED
GC072250	NV	NYE	36 36	116 0	73	US 95.5 MI NW OF CO LINE NEAR MERCURY EXIT; GRAY DESERT ALKALI SOIL
GC262450	NV	NYE	38 40	116 15	68	DIRT RD IN HOT CREEK VALLEY ABOUT 45 MI NE WARM SPRINGS; LIGHT ROCKY
GC262650	NV	NYE	36 52	116 45	68	US 95.2 MI S BEATTY; ALLUVIUM BELOW DESERT PAVEMENT
GC262850	NV	NYE	38 45	117 7	68	RT 8A 3 MI S JCT RT 92 TO ROUND MOUNTAIN; HEAVY ALLUVIUM
GC241750	NV	PERSHING	40 40	118 4	66	I-80 AT MILL CITY; SOIL NOT DESCRIBED
GC241850	NV	PERSHING	40 21	118 19	66	I-80 AT RT 50 EXIT 14 MI N LOVELOCK; SOIL NOT DESCRIBED
GC060150	NV	WASHOE	39 56	119 22	70	RT 34 40 MI S GERLACH; GRAY DESERT OVER OLD PLAYA
GC062750	NV	WASHOE	40 39	119 23	70	RT 81 8 MI N GERLACH; GRAY DESERT IN PLAYA
GC242550	NV	WASHOE	39 31	119 52	66	US 395.5 MI E PURDY; SOIL NOT DESCRIBED
GC015450	NV	WHITE PINE	39 1	114 32	62	US 6 29 MI SE ELY; 8 IN. ON PEDIMENT SURFACE
GC065650	NV	WHITE PINE	39 24	115 28	72	US 50 AT LITTLE ANTELOPE SUMMIT; BROWN SOIL WITH ANDESITE FLOAT
GC065750	NV	WHITE PINE	39 10	114 40	72	US 50, 6, 8 93 AT SCHELL CREEK TURNOFF; LGHT BRWN SOIL ON GRAVEL TILL
GC065850	NV	WHITE PINE	39 5	114 8	72	US 50 AT SCHELL CREEK TURNOFF; LIGHT BROWN SILT IN TERT/QUAT ALLUVIUM
GC078850	NV	WHITE PINE	39 4	114 30	73	RT 50 4 MI E JCT RT 93; LIGHT BROWN SILT UNDER DESERT PAVEMENT
GC263050	NV	WHITE PINE	39 40	114 15	68	US 93-US ALT 50.5 MI S JCT OF THESE HIGHWAYS; ALLUVIUM HIGH IN CLAY
GC003850	NV	ALBANY	42 45	73 56	62	I-90 AT INTERCHANGE 25; SANDY B HORIZON
GC003150	NY	CHAUTAUQUA	42 15	79 45	62	I-90 1 MI E NY STATE LINE; WELL DEVELOPED YELLOWISH-ORANGE SOIL
GC031050	NY	CHAUTAUQUA	42 32	79 10	72	I-90 2 MI S SILVER CREEK; LIGHT BROWN CLAY
GC031250	NY	CHENANGO	42 41	75 28	72	RT 80 2.5 MI E SHERBOURNE; LIGHT BROWN SILT
GC184350	NY	CHENANGO	42 17	75 29	76	RT 7 1 MI S BAINBRIDGE; SOIL NOT DESCRIBED
GC040250	NY	CLINTON	44 58	73 40	66	US 11 3.5 MI W MOORE; B HORIZON IN SANDY DRIFT
GC003250	NY	ERIE	42 39	78 58	62	I-90 9 MI E INTERCHANGE 58; CLAYEY B HORIZON
GC040350	NY	FRANKLIN	44 45	74 35	66	US 11 .8 MI W MOIRA; GRAY CLAYEY SAND DEVELOPED ON OUTWASH
GC003350	NY	GENESEE	43 0	78 21	62	I-90 7 MI W INTERCHANGE 48; ORANGE-BROWN TO BROWN SANDY LOAM
GC040750	NY	HAMILTON	43 45	74 20	66	RT 28 3 MI W INDIAN LAKE; B HORIZON ON SANDY TILL
GC003750	NY	HERKIMER	43 2	74 37	62	I-90 AT INDIAN CASTLE SERVICE AREA; ORANGE-BROWN SANDY B HORIZON
GC040550	NY	JEFFERSON	43 58	75 50	66	RT 12 1 MI S RT 3 JCT NEAR WATERTOWN; BLACK SANDY LOAM
GC040650	NY	LEWIS	43 35	75 10	66	CO RD 3 MI NE PORTER; SANDY ORANGE-BROWN B HORIZON
GC003650	NY	ONEIDA	43 7	75 25	62	I-90 1 MI W INTERCHANGE 32; BROWN SAND
GC003550	NY	ONONDAGA	43 6	76 3	62	I-90 AT INTERCHANGE 35; SANDY LOAM
GC003450	NY	ONTARIO	43 0	77 9	62	I-90 3 MI E INTERCHANGE 43; B HORIZON IN PEBBLY SAND
GC031350	NY	SCHOHARIE	42 25	74 35	72	RT 23 2 MI E STAMFORD; LIGHT BROWN SANDY SOIL
GC040450	NY	ST LAWRENCE	44 30	75 20	66	US 11 2.5 MI W DEKALB JCT; POORLY DEVELOPED B HORIZON IN CLAYEY SAND
GC061550	NY	STEBEN	42 10	77 8	70	RT 415 .7 MI N US 15 INTERCHANGE; SOIL NOT DESCRIBED
GC031550	NY	SULLIVAN	41 34	74 30	72	US 209 2 MI SW WURTSBORO; SILTY LOAM, ROCKY
GC184150	NY	TIOGA	42 0	76 30	67	RT 17 NEAR WAVERLY; LITHOSOL DERIVED FROM SHALE
GC184250	NY	TOMPKINS	42 25	76 30	67	RT 34 NEAR ITHACA; SOIL FROM DEVONIAN SHALE
GC031450	NY	ULSTER	41 55	74 11	72	RT 213 2 MI S OLIVEBRIDGE; LIGHT BROWN SANDY LOAM
GC040850	NY	WASHINGTON	43 25	73 37	66	RT 149 .3 MI E US 9-L JCT SE LAKE GEORGE; B HORIZON ON SANDY DRIFT
GC031150	NY	WAYNE	43 16	77 0	72	LAKE RD 1 MI W SODUS POINT; YELLOW-BROWN SANDY LOAM
GC006950	OH	ATHENS	39 17	82 8	62	US 50 5 MI SW ATHENS; YELLOW-ORANGE SILT SUBSOIL
GC042250	OH	AUGLAIZE	40 30	83 55	66	US 33 1 MI NW LAKE VIEW; BROWN SILTY LOAM CULTIVATED
GC002850	OH	CUYAHOGA	41 18	81 42	62	OHIO TPK 2 MI W INTERCHANGE 11; YELLOW-BROWN CLAY
GC007150	OH	FAYETTE	39 35	83 35	62	US 35 8 MI NW WASHINGTON C.H.; ORANGE AND GRAY CLAY LOAM
GC042150	OH	FRANKLIN	40 7	83 7	66	US 33 .8 MI W JCT RT 161 AT DUBLIN; OLIVE-GRAY CLAY LOAM
GC002650	OH	FULTON	41 36	83 53	62	OHIO TPK FALLEN TIMBERS SERV AREA; SANDY YELLOW-BROWN SUBSOIL
GC041950	OH	GUERNSEY	40 3	81 15	66	US 40 17 MI W ST CLAIRSVILLE; SANDY LOAM
GC057450	OH	HENRY	41 11	84 3	70	RT 109 3 MI S HAMLER; BLACK CLAY LOAM
GC002950	OH	LAKE	41 40	81 17	62	I-90 4 MI E RT 306 INTERCHANGE; YELLOW CLAYEY SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC052550	7.00	--	30	1,000	1.5	--	--	2.10	N	7	50.0	15.0
GC072250	10.00	4.2	20	500	2.0	<.5	-.8	2.68	200	5	50.0	10.0
GC262450	>10.00	7.9	30	1,500	2.0	--	--	.50	200	3	7.0	7.0
GC262650	>10.00	14.0	30	700	1.5	--	--	4.10	150	10	30.0	15.0
GC262850	>10.00	8.7	30	1,000	2.0	--	--	1.20	150	7	15.0	15.0
GC241750	7.00	8.7	30	700	N	--	--	2.96	150	10	30.0	30.0
GC241850	3.00	20.0	70	500	1.0	--	--	3.50	N	10	30.0	30.0
GC060150	7.00	11.0	N	1,000	N	--	--	15.44	N	7	30.0	70.0
GC062750	7.00	6.0	30	2,000	N	--	--	15.01	N	7	50.0	30.0
GC242550	7.00	5.7	70	700	N	--	--	2.69	N	15	70.0	30.0
GC015450	7.00	--	N	300	N	--	--	9.60	--	5	50.0	30.0
GC065650	>10.00	7.7	50	1,000	2.0	<.5	1.3	1.91	<150	20	100.0	70.0
GC065750	3.00	10.2	<20	300	N	3.1	5.4	15.60	N	5	30.0	20.0
GC065850	3.00	5.1	20	500	N	3.0	2.8	9.13	N	5	50.0	30.0
GC078850	5.00	8.0	<20	500	1.5	1.5	3.4	9.82	--	5	30.0	10.0
GC263050	>10.00	7.2	20	1,000	3.0	--	--	2.70	150	7	20.0	15.0
GC003850	2.00	2.6	30	300	N	--	--	.55	N	5	15.0	7.0
GC003150	3.00	9.2	70	300	N	--	--	.38	N	7	30.0	30.0
GC031050	10.00	8.8	50	500	N	2.1	5.4	.36	<150	5	70.0	50.0
GC031250	10.00	8.4	100	500	2.0	.9	2.9	.19	<150	10	100.0	20.0
GC184350	7.00	8.2	70	200	1.0	--	--	.20	N	10	30.0	15.0
GC040250	1.50	4.9	N	300	N	--	--	.10	N	3	15.0	7.0
GC003250	3.00	13.0	70	500	N	--	--	.28	N	15	30.0	20.0
GC040350	5.00	1.6	30	500	1.5	--	--	.90	150	10	30.0	7.0
GC003350	2.00	2.0	N	300	N	--	--	.71	N	3	15.0	7.0
GC040750	5.00	3.8	30	300	1.5	--	--	2.80	N	15	30.0	7.0
GC003750	2.00	9.6	30	200	N	--	--	.30	N	7	20.0	30.0
GC040550	3.00	2.6	50	300	1.5	--	--	1.00	N	7	30.0	15.0
GC040650	5.00	1.5	N	500	1.5	--	--	.85	N	3	7.0	3.0
GC003650	3.00	13.0	70	300	N	--	--	.41	N	15	30.0	70.0
GC003550	2.00	7.6	30	200	N	--	--	.36	N	3	15.0	30.0
GC003450	3.00	2.5	70	300	N	--	--	.59	N	15	30.0	70.0
GC031350	7.00	10.9	50	300	N	1.7	5.8	.13	<150	5	70.0	20.0
GC040450	3.00	5.9	150	500	1.5	--	--	.75	N	10	30.0	10.0
GC061550	7.00	7.2	30	300	1.0	--	--	.19	N	10	30.0	20.0
GC031550	10.00	7.1	30	300	N	1.1	3.9	.10	200	7	50.0	30.0
GC184150	7.00	16.0	70	300	1.5	--	--	.15	N	15	30.0	15.0
GC184250	7.00	16.0	70	300	N	--	--	.35	N	7	30.0	15.0
GC031450	5.00	5.3	50	200	N	2.4	3.1	.08	N	5	50.0	20.0
GC040850	1.50	2.7	30	300	N	--	--	.60	N	7	30.0	15.0
GC031150	5.00	4.1	50	300	N	.7	2.1	.68	<150	5	30.0	20.0
GC006950	7.00	9.8	30	500	N	--	--	.30	N	15	50.0	20.0
GC042250	7.00	13.0	70	700	2.0	--	--	1.00	150	15	100.0	70.0
GC002850	3.00	10.0	70	300	N	--	--	.21	N	15	30.0	15.0
GC007150	7.00	22.0	50	500	N	--	--	.42	N	15	50.0	30.0
GC042150	7.00	18.0	70	700	2.0	--	--	.50	150	20	70.0	30.0
GC002650	2.00	7.5	30	300	N	--	--	.61	N	7	15.0	7.0
GC041950	3.00	7.3	30	500	1.5	--	--	.25	N	10	70.0	20.0
GC057450	10.00	5.2	50	500	1.5	--	4.4	1.10	N	7	50.0	30.0
GC002950	3.00	27.0	70	300	N	--	--	.11	N	10	30.0	20.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC052550	--	3.00	30	--	--	--	2.90	70	--	1.500	700	N
GC072250	--	3.00	15	1.23	--	1.0	1.92	150	25	1.000	300	N
GC262450	.038	1.00	30	--	.02	--	4.20	200	39	.300	700	3
GC262650	.056	2.00	30	--	.05	--	3.60	150	36	1.000	700	N
GC262850	.042	1.00	20	--	.06	--	3.80	70	37	.700	300	<3
GC241750	.035	3.00	30	--	.08	--	2.34	70	42	1.500	700	N
GC241850	.049	2.00	30	--	.16	--	2.34	30	46	1.500	500	N
GC060150	.074	5.00	20	--	.02	--	1.30	30	22	1.500	700	N
GC062750	.041	2.00	15	--	.01	--	1.48	30	45	2.000	300	N
GC242550	.006	3.00	30	--	.03	--	2.19	N	18	1.500	700	N
GC015450	--	1.50	20	--	--	--	1.80	30	--	1.000	300	N
GC065650	.060	7.00	20	1.62	.04	1.0	2.09	50	30	1.500	1,000	N
GC065750	.060	1.00	10	1.13	.04	3.8	1.15	N	23	1.500	300	N
GC065850	.050	2.00	10	1.12	.08	4.6	1.62	N	30	1.500	200	N
GC078850	--	1.50	10	1.47	.02	1.9	1.36	N	20	1.000	300	N
GC263050	.071	2.00	30	--	.03	--	4.30	70	30	.700	500	3
GC003850	.006	2.00	15	--	.05	--	1.39	N	15	.300	500	N
GC003150	.015	2.00	15	--	.06	--	1.21	N	31	.500	300	3
GC031050	.060	5.00	20	1.62	.07	1.6	1.22	50	30	.500	150	10
GC031250	--	5.00	15	1.64	.13	1.7	1.73	70	55	.500	300	N
GC184350	.018	1.50	15	--	.08	--	1.00	30	44	.300	700	N
GC040250	.018	1.00	7	--	.06	--	1.80	N	7	.150	150	N
GC003250	.037	3.00	30	--	.04	--	1.66	N	37	.700	300	3
GC040350	.041	3.00	20	--	.06	--	2.00	70	22	.700	300	N
GC003350	.015	1.50	15	--	.25	--	1.18	N	18	.300	300	N
GC040750	.095	7.00	30	--	.35	--	1.90	N	24	1.500	700	N
GC003750	.028	2.00	15	--	.08	--	1.47	N	29	.700	1,500	N
GC040550	.047	3.00	30	--	.48	--	1.80	30	18	.500	700	N
GC040650	.027	3.00	30	--	.06	--	3.70	30	13	.300	300	N
GC003650	.036	3.00	20	--	.38	--	1.20	30	49	.700	2,000	N
GC003550	.006	1.50	15	--	.60	--	1.08	N	22	.300	300	N
GC003450	.055	3.00	30	--	.09	--	1.92	30	57	1.500	700	N
GC031350	.050	3.00	20	1.83	.08	1.3	1.38	50	40	.300	700	N
GC040450	.043	3.00	30	--	.08	--	2.50	30	17	.700	700	N
GC061550	.032	3.00	15	--	.03	--	1.21	30	43	.300	700	N
GC031550	.080	5.00	15	1.59	.06	2.2	.71	150	32	.300	500	N
GC184150	.039	1.50	15	--	.08	--	2.10	30	64	.700	300	N
GC184250	.031	1.50	15	--	.37	--	1.60	30	40	.300	300	N
GC031450	--	2.00	10	1.81	.07	3.1	.44	N	27	.200	70	N
GC040850	.016	2.00	10	--	.05	--	1.00	N	11	.300	700	N
GC031150	.040	2.00	10	1.47	.06	1.4	1.53	<30	20	.500	200	N
GC006950	.015	3.00	20	--	.13	--	1.60	30	32	.300	500	N
GC042250	.081	5.00	30	--	.10	--	2.50	70	46	.700	300	7
GC002850	.079	2.00	20	--	.18	--	1.42	30	28	.700	700	3
GC007150	.061	3.00	20	--	.22	--	1.90	30	45	.500	300	5
GC042150	.018	5.00	30	--	.08	--	1.60	70	32	.300	1,000	7
GC002650	.005	1.50	15	--	.08	--	1.18	N	10	.300	700	N
GC041950	.024	3.00	20	--	.03	--	1.30	50	25	.300	500	N
GC057450	.034	2.00	20	--	.59	<.5	2.00	30	39	.700	150	N
GC002950	.030	2.00	20	--	.06	--	1.62	30	44	.300	300	3

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC052550	2.00	10	--	15	.050	20	--	--	--	10	--	--
GC072250	.70	<10	150	10	--	10	90	<.08	<1	7	.5	31
GC262450	.70	15	100	7	.016	70	--	--	--	<5	.2	--
GC262650	3.00	20	70	20	.040	30	--	--	--	7	<.1	--
GC262850	1.00	10	70	10	.016	30	--	--	--	7	.2	--
GC241750	1.50	15	70	15	.135	30	--	--	--	15	.3	--
GC241850	1.00	15	N	15	.131	70	--	--	--	10	.8	--
GC060150	3.00	N	N	10	--	10	--	--	--	10	<.1	--
GC062750	2.00	N	N	15	--	15	--	--	--	15	.1	--
GC242550	1.50	N	N	30	.096	50	--	--	--	15	.4	--
GC015450	1.50	15	N	15	.044	15	--	--	--	7	--	--
GC065650	1.50	10	70	50	--	15	115	<.08	1	15	.5	27
GC065750	1.00	N	--	10	--	10	60	<.08	<1	5	.2	18
GC065850	1.00	N	--	15	--	15	75	.09	<1	5	<.1	24
GC078850	.70	<10	--	5	--	10	70	<.08	<1	5	.3	25
GC263050	.70	15	70	7	.050	20	--	--	--	7	.2	--
GC003850	.70	15	--	7	.057	N	--	--	--	7	.1	--
GC003150	.70	15	--	15	.035	15	--	--	--	10	.4	--
GC031050	.70	10	N	20	--	30	95	.31	<1	10	<.1	26
GC031250	.70	<10	70	20	--	20	120	<.08	<1	15	.2	29
GC184350	.70	10	70	20	.120	30	--	--	--	7	.6	--
GC040250	.30	<10	--	N	.016	10	--	--	--	N	<.1	--
GC003250	.70	15	--	15	--	30	--	--	--	15	.4	--
GC040350	1.00	10	70	15	.050	15	--	--	--	15	.4	--
GC003350	.70	15	--	7	.039	15	--	--	--	15	.4	--
GC040750	1.50	15	--	7	.090	15	--	--	--	15	<.1	--
GC003750	.70	15	--	15	.013	15	--	--	--	7	.2	--
GC040550	1.00	10	70	15	.100	30	--	--	--	7	.5	--
GC040650	1.50	15	N	N	.030	30	--	--	--	7	.4	--
GC003650	.70	15	N	20	.052	15	--	--	--	15	.5	--
GC003550	.70	15	--	7	.070	15	--	--	--	7	.6	--
GC003450	.70	15	70	15	.039	30	--	--	--	15	.5	--
GC031350	.50	10	N	15	.684	50	105	.08	1	7	<.1	27
GC040450	1.00	10	N	15	.040	15	--	--	--	7	.2	--
GC061550	.70	10	70	30	--	15	--	--	--	7	.3	--
GC031550	.50	<10	150	15	--	50	--	--	--	5	<.1	32
GC184150	.70	15	70	30	.050	15	60	.09	1	15	.4	--
GC184250	.70	15	N	20	.060	30	--	--	--	7	.5	--
GC031450	.50	10	--	5	--	20	30	<.08	1	5	<.1	36
GC040850	.50	10	--	15	.040	15	--	--	--	7	.1	--
GC031150	.70	<10	N	10	--	15	55	<.08	<1	7	.2	33
GC006950	.70	15	N	20	.020	20	--	--	--	10	1.1	--
GC042250	.70	15	70	30	.080	30	--	--	--	15	1.2	--
GC002850	.70	15	N	15	.022	30	--	--	--	10	.8	--
GC007150	.70	N	N	50	.020	30	--	--	--	10	.5	--
GC042150	.70	15	70	30	.030	30	--	--	--	15	.3	--
GC002650	.70	15	--	15	.035	15	--	--	--	7	<.1	--
GC041950	.70	15	70	20	.030	30	--	--	--	7	.1	--
GC057450	--	<10	<70	30	.109	15	--	--	--	15	1.0	29
GC002950	.50	15	N	15	.031	30	--	--	--	10	.3	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC052550	--	500	.200	--	--	70	20	3.0	50	300
GC072250	.81	200	.200	12.74	2.87	70	20	3.0	58	150
GC262450	--	200	.150	--	--	30	30	3.0	45	150
GC262650	--	500	.300	--	--	50	50	5.0	45	300
GC262850	--	500	.150	--	--	30	30	3.0	45	200
GC241750	--	300	.200	--	--	70	30	5.0	90	150
GC241850	--	150	.150	--	--	70	30	3.0	110	150
GC060150	--	1,500	.300	--	--	100	20	2.0	79	70
GC062750	--	1,500	.200	--	--	100	30	3.0	73	100
GC242550	--	300	.300	--	--	150	30	3.0	90	100
GC015450	--	300	.150	--	--	50	20	2.0	45	100
GC065650	1.35	300	.500	8.51	3.25	150	20	2.0	113	300
GC065750	1.14	100	.100	8.25	1.99	30	10	2.0	60	70
GC065850	1.14	500	.200	11.49	1.87	30	10	1.0	51	100
GC078850	.72	300	.100	10.42	2.01	50	15	2.0	55	50
GC263050	--	300	.300	--	--	50	30	5.0	55	200
GC003850	--	30	.300	--	--	30	30	3.0	39	300
GC003150	--	70	.300	--	--	50	30	5.0	93	300
GC031050	1.91	150	.500	--	4.91	150	20	3.0	95	200
GC031250	1.89	150	.500	12.37	3.85	150	30	5.0	101	200
GC184350	--	70	.300	--	--	50	30	5.0	80	300
GC040250	--	70	.100	--	--	20	10	1.5	25	200
GC003250	--	70	.300	--	--	70	30	7.0	63	300
GC040350	--	200	.300	--	--	70	70	7.0	50	300
GC003350	--	70	.150	--	--	30	15	1.5	49	150
GC040750	--	200	.700	--	--	150	50	7.0	40	200
GC003750	--	30	.300	--	--	30	20	5.0	81	300
GC040550	--	150	.300	--	--	50	30	5.0	50	300
GC040650	--	150	.300	--	--	30	30	5.0	30	200
GC003650	--	30	.150	--	--	70	30	7.0	100	300
GC003550	--	50	.150	--	--	30	20	3.0	41	300
GC003450	--	70	.300	--	--	70	30	7.0	120	300
GC031350	2.71	100	.200	7.62	2.59	100	30	3.0	88	150
GC040450	--	150	.300	--	--	50	30	5.0	30	200
GC061550	--	70	.500	--	--	50	30	3.0	77	500
GC031550	1.74	70	.300	9.70	2.05	70	20	3.0	76	150
GC184150	--	100	.300	--	--	70	30	5.0	75	200
GC184250	--	100	.300	--	--	50	30	3.0	85	150
GC031450	2.16	30	.200	9.65	2.28	70	20	3.0	38	200
GC040850	--	70	.300	--	--	30	30	3.0	20	200
GC031150	1.19	150	.300	6.05	1.94	70	15	2.0	47	300
GC006950	--	70	.300	--	--	70	20	3.0	50	200
GC042250	--	300	.300	--	--	150	30	5.0	90	150
GC002850	--	70	.300	--	--	70	30	7.0	81	200
GC007150	--	100	.200	--	--	100	30	5.0	110	150
GC042150	--	200	.300	--	--	100	70	7.0	80	200
GC002650	--	70	.150	--	--	20	15	1.5	25	200
GC041950	--	150	.300	--	--	70	30	3.0	30	200
GC057450	--	200	.300	--	--	150	20	2.0	96	100
GC002950	--	30	.300	--	--	70	30	7.0	76	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date colln.	Site and Soil Descriptions
GC007250	OH	MONTGOMERY	39 44	84 29	62 10	US 35 5 MI W NEW LEBANON; MEDIUM BROWN SILTY CLAY LOAM
GC042050	OH	MUSKINGUM	39 58	82 7	66 10	US 40 5 MI W ZANESVILLE; YELLOWISH-ORANGE SILTY LOAM
GC007050	OH	ROSS	39 17	82 51	62 10	US 50 3 MI W LONDONDERRY; MEDIUM BROWN LOAM
GC002750	OH	SANDUSKY	41 21	82 56	62 5	OHIO TPK COMM PERRY SERV AREA; OLIVE BROWNISH-GRAY CLAY
GC005350	OK	BEAVER	36 37	100 22	72 10	US 270 14 MI W SLAPOUT; CLAY LOAM
GC277450	OK	CIMARRON	36 45	102 30	69 1	US 385 1 MI N BOISE CITY; TAN PRAIRIE SOIL
GC199850	OK	CREEK	36 5	96 22	65 7	RT 51 6 MI W MANFORD; YELLOW SANDSTONE LITHOSOL
GC200150	OK	CUSTER	35 47	98 43	65 7	RT 33 6 MI E THOMAS; LIGHT BROWN VERY SANDY LOAM
GC199650	OK	DELAWARE	36 11	94 53	65 7	RT 33 3 MI W FLINT; YELLOW LOAM LITHOSOL
GC065050	OK	GARFIELD	36 24	97 58	72 10	US 60 1 MI W ENID; BROWN SANDY SOIL
GC276650	OK	GARVIN	34 35	97 18	69 1	RT 7 11 MI S DAVIS; DARK BROWN ALLUVIUM
GC276950	OK	JACKSON	34 40	99 32	69 1	US 62 2 MI E DUKE; BLACK PRAIRIE SOIL
GC200050	OK	KINGFISHER	35 54	97 56	65 7	US 81 12 MI S HENNESEY; CHOCOLATE BROWN LOAM
GC276850	OK	KIOWA	34 37	98 43	69 1	US 62 4 MI W CACHE; BLACK PRAIRIE SOIL
GC276350	OK	LATIMER	34 55	95 15	69 1	US 270 3 MI E WILBURTON; LITHOSOL OVER SANDSTONE
GC276250	OK	LE FLORE	34 38	94 30	69 1	RT 128 2 MI W STATE LINE; RED AND GRAY MOTTLED CLAY OVER SHALE
GC065150	OK	MAJOR	36 25	98 48	72 10	RT 15 8 MI E JCT US 281; RED SANDY SOIL
GC064950	OK	NOBLE	36 18	97 10	72 10	US 64 8 MI E PERRY; BROWN SILTY LOAM
GC064850	OK	PAWNEE	36 14	96 25	72 10	US 64 8 MI SE CLEVELAND; BROWN SAND
GC199950	OK	PAYNE	36 5	97 10	65 7	RT 51 10 MI W STILLWATER; MEDIUM BROWN LOAM
GC276450	OK	PITTSBURG	34 57	96 1	69 1	US 270 4 MI W APELAR; LITHOSOL OVER SANDSTONE
GC276550	OK	PONTOTOC	34 44	96 41	69 1	RT 12 3 MI S ADA; LITHOSOL OVER SANDSTONE
GC200250	OK	ROGER MILLS	35 48	99 23	65 7	RT 47 3 MI E ANGORA; DARK BROWN SOIL OVER SANDSTONE
GC199750	OK	ROGERS	36 8	95 46	65 7	RT 33 AT CATOOSA; ORANGE, SANDY, OVER SANDSTONE
GC064750	OK	SEQUOYAH	35 30	95 0	72 10	I-40 1 MI W VIAN; BROWN SILTY LOAM
GC276750	OK	STEPHENS	34 35	98 2	69 1	RT 7 22 MI E LAWTON; DARK BROWN LOAM OVER SANDSTONE
GC065450	OK	TEXAS	36 37	101 14	72 10	RT 3 3 MI W HARDESTY; WHITE ALLUVIAL SAND
GC065550	OK	TEXAS	36 45	102 0	72 10	US 64 7 MI W RT 95 JCT; BROWN LOAM
GC065250	OK	WOODWARD	36 32	99 30	72 10	US 270 12 MI W WOODWARD; TAN SANDY SOIL
GC035050	OR	BAKER	44 53	117 55	65 8	US 30 7 MI NW BAKER; DARK GRAY CLAY LOAM
GC269650	OR	BENTON	44 36	123 32	68 9	US 20 2 MI W BLODGETT; B HORIZON SOIL
GC076550	OR	COLUMBIA	46 8	123 20	73 9	US 30 2 MI E WESTPORT; REDDISH-YELLOW LOAM
GC076850	OR	COOS	43 9	124 24	73 9	US 101 4 MI N BRANDON; SAND OF OLD BEACH DUNE
GC076950	OR	CURRY	42 30	124 24	72 9	US 101 12 MI N GOLD BEACH; DUNE SAND
GC060450	OR	DESCHUTES	43 48	120 28	70 10	US 20 AT BROTHERS; GRAY SILT DEVELOPED FROM PUMICE
GC269850	OR	DOUGLAS	43 28	123 25	68 9	RT 38 2 MI E REEDSPORT; B HORIZON SOIL
GC269950	OR	DOUGLAS	43 20	122 56	68 9	RT 138 7 MI SE KELLOGG; B HORIZON SOIL
GC270050	OR	DOUGLAS	43 15	122 10	68 9	RT 138 5 MI E IDLEVOLD PARK; B HORIZON SOIL
GC035450	OR	GILLIAM	45 43	120 33	65 8	I-80N 3 MI W QUINTON; BROWN COLLUVIAL SILT AT FOOT OF BASALT WALL
GC269250	OR	GRANT	43 58	118 59	68 9	US 395 AT SENECA; B HORIZON SOIL
GC269350	OR	GRANT	44 24	119 4	68 9	US 395 AT BEACH CK. RECREATION AREA MALHEUR NAT. FOR.; B HORIZON SOIL
GC059850	OR	HARNEY	43 15	119 37	70 10	US 395 AT WAGONTIRE; SHALLOW GRAY SILT OVER PUMICE-BRECCIA
GC269150	OR	HARNEY	43 37	118 43	68 9	US 20 6 MI W BUCHANAN; B HORIZON SOIL
GC060550	OR	JEFFERSON	44 32	121 8	70 10	US 97 10 MI S MADRAS; SHALLOW GRAY SILT OVER VOLCANIC ROCK
GC270150	OR	KLAMATH	42 41	122 0	68 9	RT 138 5 MI N DIAMOND LAKE; B HORIZON SOIL
GC270250	OR	KLAMATH	42 2	121 35	68 9	RT 62 AT JCT WITH RT 232 2 MI S FT KLAMATH; B HORIZON SOIL
GC060350	OR	LAKE	42 28	120 16	70 10	US 395 2 MI S VALLEY FALLS; DARK SILT OVER BASALT
GC269750	OR	LINCOLN	44 30	124 5	68 9	US 101 AT SEAL ROCK; B HORIZON SOIL
GC034950	OR	MALHEUR	44 12	117 9	65 8	I-80N 15 MI NW ONTARIO; BROWNISH-GRAY SILT
GC060050	OR	MALHEUR	42 20	117 50	70 10	US 95 AT BLUE MT PASS; TAN SILT OVER BASALT

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC007250	5.00	9.8	30	300	N	--	--	3.10	N	10	50.0	30.0
GC042050	7.00	9.9	70	700	1.5	--	--	.25	150	15	100.0	30.0
GC007050	5.00	8.0	30	500	N	--	--	.44	N	15	50.0	15.0
GC002750	5.00	9.1	70	300	N	--	--	.86	150	15	50.0	50.0
GC065350	5.00	5.1	20	700	1.5	.5	1.4	2.13	N	5	50.0	15.0
GC277450	5.00	3.8	<20	500	N	--	--	1.20	N	5	20.0	15.0
GC199850	2.00	3.4	50	200	N	--	--	.25	N	5	50.0	15.0
GC200150	2.00	1.9	N	500	N	--	--	.35	N	5	50.0	15.0
GC199650	1.50	12.0	N	300	N	--	--	.20	N	10	100.0	15.0
GC065050	3.00	2.4	20	500	N	<.5	.9	.31	N	3	15.0	7.0
GC276650	5.00	4.3	30	500	1.0	--	--	.65	N	5	30.0	20.0
GC276950	7.00	6.1	30	700	1.0	--	--	.45	150	7	50.0	20.0
GC200050	5.00	5.8	70	500	N	--	--	.45	N	7	70.0	15.0
GC276850	7.00	5.7	30	500	3.0	--	--	1.20	150	10	50.0	20.0
GC276350	3.00	30.0	20	300	3.0	--	--	.12	N	15	70.0	15.0
GC276250	>10.00	19.0	50	300	3.0	--	--	.06	150	15	100.0	50.0
GC065150	5.00	2.2	100	500	2.0	<.5	1.0	.86	N	7	70.0	15.0
GC064950	3.00	4.3	30	300	1.5	2.0	1.7	.42	<150	5	50.0	50.0
GC064850	2.00	2.0	20	200	N	<.5	.7	.21	<150	5	50.0	10.0
GC199950	2.00	3.3	50	150	N	--	--	.30	N	7	30.0	10.0
GC276450	2.00	27.0	N	200	2.0	--	--	.08	N	20	50.0	20.0
GC276550	3.00	7.7	20	150	N	--	--	5.30	N	3	30.0	10.0
GC200250	5.00	2.5	70	500	N	--	--	4.50	N	10	70.0	15.0
GC199750	2.00	6.4	30	150	N	--	--	.20	N	10	15.0	10.0
GC064750	3.00	7.7	50	300	N	<.5	1.3	.19	N	7	70.0	10.0
GC276750	1.50	3.4	20	300	N	--	--	.13	N	3	20.0	7.0
GC065450	2.00	2.1	<20	1,000	N	<.5	.7	1.94	N	N	20.0	3.0
GC065550	10.00	6.8	20	1,000	2.0	1.2	1.7	1.28	<150	10	50.0	20.0
GC065250	2.00	<.1	20	500	N	<.5	.4	.29	N	N	10.0	3.0
GC035050	7.00	3.9	N	500	N	--	--	10.20	--	10	50.0	30.0
GC269650	10.00	10.0	20	300	1.0	--	--	.45	N	3	100.0	70.0
GC076550	>10.00	4.5	<20	700	1.5	9.1	3.5	.45	N	7	100.0	20.0
GC076850	3.00	1.1	<20	500	N	.9	6.1	.36	N	N	150.0	10.0
GC076950	7.00	4.7	70	200	N	<.5	.3	3.03	--	10	2,000.0	7.0
GC060450	>10.00	3.5	N	1,000	1.5	--	--	1.52	N	7	20.0	20.0
GC269850	>10.00	2.8	20	1,500	N	--	--	.65	N	10	70.0	10.0
GC269950	>10.00	4.5	<20	300	1.0	--	--	4.10	N	15	3.0	7.0
GC270050	>10.00	2.6	20	700	N	--	--	2.40	N	10	20.0	70.0
GC035450	>10.00	2.3	N	700	N	--	--	3.80	N	30	50.0	30.0
GC269250	>10.00	12.0	30	70	1.0	--	--	2.40	N	15	30.0	150.0
GC269350	7.00	1.2	N	500	N	--	--	6.30	N	30	150.0	200.0
GC059850	10.00	7.8	20	700	1.5	--	--	1.16	<150	7	30.0	30.0
GC269150	>10.00	5.5	20	700	1.5	--	--	1.60	N	15	30.0	30.0
GC060550	10.00	3.2	<20	500	1.0	--	--	2.77	N	15	30.0	50.0
GC270150	>10.00	2.4	20	700	1.0	--	--	3.00	N	10	20.0	70.0
GC270250	>10.00	5.8	20	700	1.0	--	--	4.60	N	20	70.0	70.0
GC060350	>10.00	6.0	N	1,000	1.0	--	--	2.68	<150	15	30.0	50.0
GC269750	10.00	4.3	20	700	1.0	--	--	1.30	N	3	100.0	7.0
GC034950	>10.00	12.0	30	700	2.0	--	--	1.80	N	20	70.0	30.0
GC060050	10.00	8.9	N	1,500	1.5	--	--	1.58	<150	15	50.0	50.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC007250	.043	1.50	15	--	.08	--	1.80	30	29	1.000	500	N
GC042050	.026	3.00	30	--	.13	--	1.80	70	31	.300	700	3
GC007050	.013	1.50	15	--	.08	--	1.50	50	24	.300	1,000	N
GC002750	.018	3.00	30	--	.08	--	2.51	70	30	1.500	500	7
GC065350	--	2.00	10	1.36	.02	.7	2.05	N	15	.500	300	N
GC277450	.008	1.00	10	--	.03	--	1.90	N	13	.200	200	N
GC199850	.029	1.00	7	--	.06	--	.50	30	16	.150	150	N
GC200150	.013	.70	7	--	.02	--	1.40	N	8	.100	150	N
GC199650	.009	3.00	10	--	.05	--	.60	N	15	.100	700	N
GC065050	--	1.00	7	1.32	.03	.8	1.84	N	--	.100	100	N
GC276650	.023	1.50	10	--	.03	--	1.70	30	21	.300	700	N
GC276950	.040	2.00	15	--	.05	--	2.00	50	29	.700	500	N
GC200050	.003	1.50	10	--	.03	--	1.60	30	23	.500	300	N
GC276850	.038	3.00	15	--	.03	--	1.10	70	33	1.000	500	N
GC276350	.024	3.00	7	--	.11	--	.65	30	24	.150	2,000	N
GC276250	.007	5.00	30	--	.08	--	2.00	50	98	.700	500	N
GC065150	.050	3.00	15	.85	.03	.7	2.57	<30	38	1.500	300	N
GC064950	--	1.00	10	1.39	.02	1.3	1.10	50	16	.200	300	N
GC064850	--	.70	5	1.09	.02	<.5	.63	N	13	.100	200	N
GC199950	.005	1.00	5	--	.03	--	.40	30	16	.150	200	N
GC276450	.013	7.00	7	--	.06	--	.43	N	20	.100	2,000	N
GC276550	.004	1.00	7	--	.15	--	.55	N	16	.200	300	N
GC200250	.025	1.50	15	--	.03	--	2.20	N	46	3.000	300	N
GC199750	.017	1.50	5	--	.02	--	.37	30	10	.100	300	N
GC064750	--	2.00	7	1.55	.05	<.5	.81	50	16	.100	700	N
GC276750	.006	.50	5	--	.03	--	.60	N	11	.150	200	N
GC065450	--	.70	5	1.27	.01	1.4	2.17	N	--	.200	70	N
GC065550	.050	3.00	20	1.56	.04	1.7	1.92	70	22	.700	500	N
GC065250	--	.70	5	.96	.01	<.5	1.84	N	6	.100	150	N
GC035050	.042	1.50	15	--	.03	--	1.30	N	20	3.000	500	N
GC269650	.005	5.00	20	--	.19	--	1.00	N	29	.700	700	<3
GC076550	--	5.00	30	--	.09	9.6	1.56	N	25	.500	700	N
GC076850	--	1.00	15	.90	.02	.9	.77	N	15	.100	100	N
GC076950	--	3.00	10	1.51	.02	<.5	.44	N	15	1.500	500	N
GC060450	.032	3.00	20	--	.02	--	2.06	30	32	.700	500	3
GC269850	.020	3.00	15	--	.03	--	2.60	30	24	.700	700	3
GC269950	.090	7.00	30	--	.03	--	.85	N	16	2.000	700	3
GC270050	.018	5.00	20	--	.70	--	1.30	N	24	1.500	700	3
GC035450	.028	7.00	30	--	.06	--	1.40	N	15	2.000	1,000	5
GC269250	.046	5.00	15	--	.03	--	2.40	N	25	1.500	700	7
GC269350	.013	10.00	20	--	.04	--	.65	N	11	2.000	1,000	N
GC059850	.021	3.00	20	--	.03	--	2.53	50	33	.500	500	N
GC269150	<.001	5.00	30	--	.02	--	2.80	50	26	.700	700	5
GC060550	.018	5.00	20	--	.01	--	1.14	30	25	1.000	500	N
GC270150	.025	3.00	30	--	.08	--	1.40	N	23	2.000	700	3
GC270250	.015	7.00	20	--	.04	--	1.30	N	21	2.000	500	N
GC060350	.026	5.00	20	--	.06	--	1.30	50	15	.700	1,000	N
GC269750	.004	1.00	10	--	.04	--	1.70	N	19	.300	150	N
GC034950	.025	3.00	20	--	.07	--	1.90	50	30	.700	700	N
GC060050	.025	5.00	20	--	.04	--	2.63	70	27	.500	1,000	3

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC007250	1.00	N	N	20	.040	15	--	--	--	7	.6	--
GC042050	.70	15	70	30	.030	30	--	--	--	15	.5	--
GC007050	.70	15	N	20	.040	20	--	--	--	7	.3	--
GC002750	.70	15	70	30	.065	15	--	--	--	15	.5	--
GC065350	.70	<10	--	10	--	20	65	<.08	<1	7	.4	32
GC277450	.50	10	--	10	.016	15	--	--	--	5	.2	--
GC199850	.30	20	N	10	.008	N	--	--	--	5	<.1	--
GC200150	.70	N	N	5	.004	N	--	--	--	N	<.1	--
GC199650	.20	20	N	10	.024	30	--	--	--	N	.6	--
GC065050	.70	N	--	5	--	15	65	.09	<1	<5	<.1	36
GC276650	1.00	15	70	15	.040	20	--	--	--	7	.3	--
GC276950	.70	15	70	15	.030	20	--	--	--	10	.7	--
GC200050	.70	20	N	20	.012	15	--	--	--	7	.3	--
GC276850	.70	20	70	30	.016	15	--	--	--	10	.4	--
GC276350	.20	10	N	20	.100	15	--	--	--	7	.7	--
GC276250	.30	10	70	50	.040	30	--	--	--	15	.7	--
GC065150	.70	10	N	20	--	15	95	<.08	<1	10	<.1	34
GC064950	.70	10	N	10	--	20	50	.11	<1	7	.6	38
GC064850	.30	<10	--	7	--	N	35	<.08	<1	5	.1	41
GC199950	.15	20	N	10	.006	10	--	--	--	5	.1	--
GC276450	.15	10	--	30	.070	30	--	--	--	7	.9	--
GC276550	.20	10	--	15	.016	50	--	--	--	5	.2	--
GC200250	1.00	15	N	20	.024	20	--	--	--	10	.2	--
GC199750	.15	10	N	15	.012	10	--	--	--	5	.2	--
GC064750	.30	10	N	10	--	15	45	<.08	1	5	<.1	39
GC276750	.70	10	--	7	.008	<10	--	--	--	N	.2	--
GC065450	.70	N	--	<5	--	15	65	<.08	<1	N	<.1	33
GC065550	.70	10	70	20	--	20	100	.11	<1	10	<.1	30
GC065250	.50	<10	--	<5	--	15	55	<.08	<1	N	<.1	41
GC035050	3.00	N	N	15	.030	15	--	--	--	10	.3	--
GC269650	.30	10	--	15	.090	15	--	--	--	10	1.0	--
GC076550	1.00	<10	--	10	--	15	65	<.08	<1	10	1.1	26
GC076850	.70	<10	--	7	--	10	35	<.08	<1	N	.2	33
GC076950	.70	N	--	20	--	20	20	<.08	<1	10	<.1	33
GC060450	3.00	10	70	15	--	15	--	--	--	15	<.1	--
GC269850	1.50	15	N	15	.060	15	--	--	--	7	<.1	--
GC269950	1.50	10	--	<5	.040	10	--	--	--	30	<.1	--
GC270050	3.00	N	--	15	.060	10	--	--	--	10	.1	--
GC035450	2.00	15	N	20	.090	15	--	--	--	30	<.1	--
GC269250	1.00	10	--	30	.090	10	--	--	--	15	2.6	--
GC269350	1.50	20	--	50	.060	N	--	--	--	50	<.1	--
GC059850	3.00	<10	70	15	--	15	--	--	--	15	.3	--
GC269150	1.50	15	<70	20	.030	10	--	--	--	10	<.1	--
GC060550	2.00	<10	N	20	--	15	--	--	--	20	<.1	--
GC270150	3.00	10	--	15	.120	10	--	--	--	15	<.1	--
GC270250	1.50	10	--	50	.030	10	--	--	--	20	<.1	--
GC060350	3.00	10	70	20	--	15	--	--	--	15	<.1	--
GC269750	1.50	10	--	15	.016	10	--	--	--	7	.3	--
GC034950	1.50	30	N	30	.016	30	--	--	--	15	.2	--
GC060050	1.50	10	70	15	--	15	--	--	--	15	.1	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC007250	--	150	.200	--	--	70	20	2.0	70	100
GC042050	--	200	.700	--	--	70	70	7.0	50	300
GC007050	--	100	.300	--	--	50	30	5.0	45	300
GC002750	--	100	.300	--	--	150	50	7.0	91	200
GC063350	1.42	150	.300	8.15	3.04	70	20	3.0	36	500
GC277450	--	100	.200	--	--	30	10	2.0	30	150
GC199850	--	70	.300	--	--	30	20	3.0	--	300
GC200150	--	70	.100	--	--	20	10	1.0	--	200
GC199650	--	50	.300	--	--	70	30	3.0	--	200
GC065050	.94	70	.200	5.69	1.93	20	10	1.0	33	500
GC276650	--	70	.500	--	--	30	50	5.0	35	300
GC276950	--	150	.300	--	--	50	30	5.0	40	300
GC200050	--	70	.300	--	--	70	20	3.0	20	300
GC276850	--	150	.500	--	--	70	70	7.0	50	300
GC276350	--	70	.200	--	--	30	50	5.0	70	150
GC276250	--	100	.500	--	--	150	50	3.0	90	150
GC065150	.43	100	.200	7.30	2.03	70	15	3.0	60	150
GC064950	.40	100	.300	7.59	3.36	50	20	5.0	96	700
GC064850	.12	50	.300	8.69	2.56	20	15	3.0	21	700
GC199950	--	20	.300	--	--	50	20	3.0	--	300
GC276450	--	30	.150	--	--	30	20	3.0	85	100
GC276550	--	50	.150	--	--	30	20	2.0	95	150
GC200250	--	150	.200	--	--	70	20	3.0	35	150
GC199750	--	70	.200	--	--	30	15	1.5	--	100
GC064750	1.62	70	.500	9.49	3.43	50	50	5.0	65	500
GC276750	--	30	.150	--	--	20	30	3.0	15	500
GC065450	.47	100	.150	5.77	1.49	20	<10	1.0	15	150
GC065550	1.31	300	.200	10.34	3.04	150	50	7.0	97	300
GC065250	<.10	50	.150	--	1.34	20	15	2.0	20	200
GC035050	--	1,000	.200	--	--	100	15	2.0	35	70
GC269650	--	100	.300	--	--	70	15	2.0	50	150
GC076550	1.34	300	.300	11.02	2.25	150	10	2.0	93	100
GC076850	1.74	150	.100	3.09	1.07	70	<10	1.5	16	100
GC076950	.28	200	.150	--	.68	150	15	3.0	39	200
GC060450	--	500	.300	--	--	70	30	3.0	75	150
GC269850	--	300	.300	--	--	50	30	2.0	55	200
GC269950	--	500	.700	--	--	200	30	3.0	65	70
GC270050	--	500	.300	--	--	70	30	2.0	35	150
GC035450	--	700	1.000	--	--	200	30	5.0	75	150
GC269250	--	300	.300	--	--	200	30	3.0	310	150
GC269350	--	300	1.000	--	--	500	30	5.0	65	70
GC059850	--	500	.200	--	--	70	50	5.0	99	100
GC269150	--	300	1.000	--	--	70	70	7.0	50	200
GC060550	--	500	.500	--	--	150	30	3.0	88	100
GC270150	--	700	.300	--	--	70	20	3.0	40	100
GC270250	--	700	.500	--	--	150	30	2.0	50	100
GC060350	--	700	.700	--	--	150	30	3.0	97	150
GC269750	--	300	.200	--	--	30	10	1.5	20	70
GC034950	--	500	.700	--	--	150	30	5.0	45	500
GC060050	--	300	.700	--	--	100	50	3.0	116	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC268950	OR	MALHEUR	44 0	117 0	68 9	US 20-26 10 MI E VALE; B HORIZON SOIL
GC269050	OR	MALHEUR	43 47	117 56	68 9	US 20 ABOUT 10 MI E JUNTURA; B HORIZON SOIL
GC026950	OR	MARION	45 1	122 59	71 9	I-5 2.6 MI N JCT T-5 & US 99E; SOIL ON SILT DEPOSIT
GC269550	OR	MARION	44 50	123 5	68 9	I-5 S OF TURNER; B HORIZON SOIL
GC035350	OR	MORROW	45 50	119 36	65 8	I-80-US30 3 MI E US 730 JCT; MED BROWN SAND
GC035650	OR	MULTNOMAH	45 32	122 17	65 8	AT CORBETT OFF I-80; BROWN SILT
GC060650	OR	SHERMAN	45 20	120 46	70 10	US 97 1 MI S GRASS VALLEY; DARK GRAY SILT OVER BASALT
GC076650	OR	TILLAMOOK	45 44	123 56	73 9	RT 101 1 MI N MANZANITA; REDDISH-YELLOW LOAM
GC076750	OR	TILLAMOOK	45 12	123 55	73 9	US 101 4 MI S CLOVERDALE; PEBBLY LOAM
GC035250	OR	UMATILLA	45 40	118 45	65 8	US 30 1 MI E PENDLETON; GRAY SILT ON BASALT
GC269450	OR	UMATILLA	45 3	118 59	68 9	US 395 ABOUT 8 MI N DALE; B HORIZON SOIL
GC035150	OR	UNION	45 20	118 6	65 8	US 30 N EDGE LA GRANDE; GRAY-BROWN CLAY LOAM
GC035550	OR	WASCO	45 42	121 21	65 8	I-80N 3 MI W ROMENA; BROWN SILT; RESIDUAL ON BASALT
GC041650	PA	BEDFORD	39 57	78 20	66 10	PA TPK 6 MI W EXIT 12; LIGHT ORANGE-BROWN SANDY LOAM
GC059550	PA	CENTRE	41 2	77 57	70 9	I-80 .5 MI S JCT RT 144 ON GRAVEL TRAIL; SOIL NOT DESCRIBED
GC041350	PA	CHESTER	40 7	75 50	66 10	PA TPK 5 MI E EXIT 22; BROWN CLAY LOAM
GC041550	PA	CUMBERLAND	40 10	77 30	66 10	PA TPK 10 MI E EXIT 15; YELLOWISH CLAY LOAM
GC003050	PA	DAUPHIN	40 10	76 37	66 10	PA TPK 8 MI W EXIT 20; RED SANDY CLAY LOAM
GC030950	PA	ERIE	41 56	80 29	62 5	I-90 AT US 6N INTERCHANGE; YELLOWISH-ORANGE SAND
GC041750	PA	FAYETTE	42 11	79 50	72 9	RT 89 3 MI S OF NORTH EAST; HEAVY CLAY FOREST SOIL
GC061150	PA	JEFFERSON	40 5	79 20	66 10	PA TPK 2 MI E EXIT 9; YELLOWISH BROWN SILTY CLAY LOAM
GC184550	PA	LEHIGH	40 44	75 37	67 11	US 322 2.5 MI E RT 28 JCT; SOIL NOT DESCRIBED
GC061350	PA	LYCOMING	41 12	77 8	70 9	NE EXIT PENN. TPK NEAR SLATINGTON; SOIL NOT DESCRIBED
GC061050	PA	MERCER	41 12	80 17	70 9	RT 645 3.9 MI W JCT US 15; SOIL NOT DESCRIBED
GC184050	PA	SULLIVAN	41 23	76 30	67 10	4.5 MI W JCT US 62 AND US 19; SOIL NOT DESCRIBED
GC184450	PA	SUSQUEHANNA	41 38	75 38	67 11	US 220 2 MI S LAPORTE; B HORIZON FROM SANDSTONE
GC061450	PA	TIOGA	41 40	77 5	70 9	I-81 5 MI S LENOX; SOIL NOT DESCRIBED
GC041850	PA	WASHINGTON	40 10	80 15	66 10	US 15 2.7 MI S OF N TURNOFF TO ARNOT; SOIL NOT DESCRIBED
GC006050	RI	PROVIDENCE	41 49	71 43	62 10	I-70 AT WASHINGTON; YELLOWISH-ORANGE SILTY LOAM
GC062950	SC	AIKEN	33 24	81 33	70 10	US 6 AT JCT RT 102; SANDY B HORIZON
GC196650	SC	CLARENDON	33 52	80 0	65 7	US 78 2 MI S WINDSOR; SANDY, AZONAL, YOUNG PINE STAND
GC063050	SC	DARLINGTON	34 18	79 50	70 10	US 378 2 MI E TURBEVILLE; LIGHT YELLOW SAND
GC196750	SC	HORRY	33 50	79 14	65 7	CO RD 1 MI E DOWESVILLE; SANDY, AZONAL, PINE PLANTATION
GC196850	SC	HORRY	33 50	78 40	65 7	US 378 11 MI W CONWAY; BLACK SAND AND MUCK
GC196350	SC	MC CORMICK	33 51	82 22	65 7	US 17 AT LITTLE RIVER; YELLOW SAND
GC063150	SC	ORANGEBURG	33 20	80 57	70 10	US 378 1 MI E GEORGIA STATE LINE; RED CLAY WITH QUARTZ FRAGMENTS
GC196550	SC	RICHLAND	33 56	80 56	65 7	CO RD 1 MI E COPE; SANDY, AZONAL, MATURE PINE FOREST
GC196450	SC	SALUDA	34 0	81 39	65 7	US 378 10 MI E COLUMBIA; YELLOW SAND
GC211050	SC	SPARTANBURG	34 55	82 0	65 7	US 378 10 MI E SALUDA; RED LITHOSOL WITH QUARTZ FRAGMENTS
GC267550	SD	BEADLE	44 33	98 19	68 8	US 29 .4 MI W I-85 AT SPARTANBURG; SOIL NOT DESCRIBED
GC028850	SD	BENNETT	43 13	101 27	72 9	RT 37 7 MI S RT 28 JCT, N HURON; DARK BROWN GRAVELLY, CULTIVATED
GC029250	SD	BON HOMME	43 5	98 5	72 9	US 18 11 MI E MARTIN; DARK SILT LOAM
GC055250	SD	BROOKINGS	44 0	96 45	70 5	RT 46 12 MI E WAGNER; BLACK CLAY LOAM
GC267450	SD	BROWN	45 25	98 7	68 8	US 14 2 MI W BROOKINGS; BLACK PRAIRIE
GC054450	SD	BUTTE	44 35	103 24	70 5	RT 37 1 MI S GROTON; GRAY MOTTLED B HORIZON LACUSTRINE CLAY, GRASSLAND
GC055150	SD	CODINGTON	44 30	97 3	70 5	US 212 JCT RT 79; DARK CLAYEY SOIL
GC084150	SD	CORSON	45 51	101 55	74 11	US 81 3 MI S WATERTOWN; BLACK PRAIRIE
GC054750	SD	DEWEY	44 54	100 42	70 5	STANDING ROCK INDIAN RESERVATION; SOIL DERIVED FROM SANDSTONE
GC267750	SD	DOUGLAS	43 17	98 20	68 8	US 212 6 MI E RIDGEVIEW; PRAIRIE CLAY LOAM
						US 281 1 MI S .5 MI E ARMOUR; DARK CLAY LOAM, PRAIRIE GROUP, CULT.

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC268950	>10.00	4.3	20	1,000	1.0	--	--	2.60	N	15	70.0	30.0
GC269050	>10.00	3.8	<20	700	1.0	--	--	4.50	N	30	30.0	150.0
GC026950	>10.00	6.2	30	1,500	3.0	1.9	2.2	1.21	<150	20	70.0	30.0
GC269550	>10.00	6.0	N	300	N	--	--	.20	N	30	70.0	100.0
GC035350	>10.00	2.6	N	700	N	--	--	2.40	N	20	50.0	20.0
GC035650	>10.00	4.4	N	700	N	--	--	3.20	N	15	100.0	20.0
GC060650	>10.00	5.7	<20	700	1.5	--	--	2.32	<150	15	50.0	50.0
GC076650	>10.00	10.3	30	500	N	10.8	4.2	.54	N	10	70.0	70.0
GC076750	>10.00	5.5	<20	300	N	7.4	10.4	.19	N	5	150.0	70.0
GC035250	>10.00	6.9	N	700	N	--	--	2.20	N	20	50.0	30.0
GC269450	7.00	1.7	N	500	N	--	--	4.60	N	30	100.0	150.0
GC035150	>10.00	4.2	N	700	N	--	--	1.80	N	30	100.0	30.0
GC035550	>10.00	1.9	N	700	N	--	--	3.40	N	30	50.0	30.0
GC041650	7.00	29.0	70	300	2.0	--	--	.05	150	30	70.0	50.0
GC059550	5.00	6.1	30	300	N	--	--	.06	N	3	30.0	10.0
GC041350	7.00	5.2	20	500	1.5	--	--	.30	150	20	50.0	70.0
GC041550	10.00	9.9	50	500	1.5	--	--	.20	150	15	100.0	50.0
GC041450	7.00	7.0	70	300	3.0	--	--	.20	150	20	70.0	50.0
GC003050	1.50	6.3	30	300	N	--	--	.53	N	7	15.0	15.0
GC030950	7.00	15.7	50	500	N	5.3	4.1	.43	<150	10	70.0	50.0
GC041750	7.00	10.0	50	500	2.0	--	--	.45	150	30	70.0	50.0
GC061150	3.00	3.8	30	200	N	--	--	.03	N	3	15.0	7.0
GC184550	5.00	16.0	70	300	1.5	--	--	.10	N	15	30.0	50.0
GC061350	10.00	17.0	50	500	2.0	--	--	.04	<150	15	100.0	50.0
GC061050	7.00	14.0	50	500	1.0	--	--	.15	150	10	50.0	20.0
GC184050	3.00	11.0	30	150	N	--	--	.05	N	7	15.0	15.0
GC184450	5.00	14.0	70	200	1.5	--	--	.25	N	10	30.0	15.0
GC061450	7.00	10.0	50	300	1.0	--	--	.06	<150	10	30.0	20.0
GC041850	10.00	31.0	50	500	3.0	--	--	.25	150	30	100.0	70.0
GC006050	>10.00	3.5	N	500	N	--	--	1.10	N	10	50.0	15.0
GC062950	--	4.9	--	--	--	--	--	--	--	--	--	--
GC196650	1.50	1.1	50	70	N	--	--	.10	N	N	15.0	5.0
GC063050	--	3.2	--	--	--	--	--	--	--	--	--	--
GC196750	.70	1.0	50	70	N	--	--	.10	N	N	5.0	3.0
GC196850	.70	--	50	50	N	--	--	.10	N	N	5.0	5.0
GC196350	>10.00	4.3	N	300	N	--	--	.40	N	7	50.0	50.0
GC063150	--	6.8	--	--	--	--	--	--	--	--	--	--
GC196550	1.50	7.4	50	70	7.0	--	--	--	N	N	15.0	5.0
GC196450	3.00	2.9	N	200	N	--	--	.20	N	N	10.0	15.0
GC211050	>10.00	3.4	N	300	N	--	--	.25	N	10	50.0	30.0
GC267550	7.00	15.0	20	700	1.0	--	--	.80	N	10	50.0	50.0
GC028850	5.00	1.7	<20	1,000	N	<.5	.9	.76	N	<3	15.0	7.0
GC029250	7.00	13.5	50	700	1.5	1.4	3.5	1.27	<150	10	70.0	50.0
GC055250	5.00	7.0	30	500	N	1.8	1.8	1.00	N	7	30.0	10.0
GC267450	7.00	3.9	30	500	1.0	--	--	7.00	N	7	50.0	30.0
GC054450	7.00	17.0	70	1,000	1.0	--	1.5	1.20	N	10	70.0	30.0
GC055150	7.00	10.0	30	700	1.0	--	4.9	1.00	N	7	70.0	15.0
GC084150	7.00	1.9	50	1,000	2.0	<.5	2.2	1.22	N	10	70.0	20.0
GC054750	10.00	12.0	70	1,000	1.0	--	1.6	1.10	N	7	70.0	20.0
GC267750	>10.00	15.0	50	700	1.0	--	--	.55	N	10	70.0	50.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC268950	.039	5.00	30	--	.03	--	2.20	50	23	1.500	700	N
GC269050	.043	7.00	30	--	.02	--	1.40	50	12	3.000	1,000	5
GC269550	.070	7.00	20	1.78	.06	1.0	1.78	50	18	.700	1,000	N
GC269550	.016	>10.00	70	--	.11	--	.45	N	18	.300	1,500	N
GC035350	.031	3.00	30	--	.05	--	2.00	30	16	1.500	700	N
GC035650	.019	3.00	30	--	.28	--	1.80	30	20	1.000	700	N
GC060650	.037	7.00	20	--	.02	--	1.30	50	25	1.000	500	N
GC076650	.050	7.00	20	1.37	.07	4.8	1.34	<30	25	.700	700	N
GC076750	--	5.00	20	1.21	.06	2.1	.62	N	28	.500	100	N
GC035250	.043	5.00	30	--	.02	--	1.80	50	27	1.500	700	N
GC269450	.015	7.00	30	--	.03	--	.90	N	14	1.500	1,500	N
GC035150	.037	5.00	30	--	.11	--	1.20	50	23	1.000	1,000	5
GC035550	.030	7.00	30	--	.38	--	1.10	N	16	1.500	1,000	N
GC041650	.033	3.00	30	--	.06	--	2.00	70	37	.500	500	N
GC059550	.009	1.50	5	--	.13	--	.78	30	18	.100	150	N
GC041350	.026	5.00	30	--	.07	--	1.90	100	28	.700	1,000	3
GC041550	.080	5.00	30	--	.12	--	2.00	70	55	1.000	200	N
GC041450	.053	5.00	30	--	.07	--	1.30	70	47	1.000	1,500	N
GC003050	.009	1.50	15	--	.04	--	1.08	N	14	.300	300	N
GC030950	--	3.00	15	1.82	.11	2.2	1.51	<30	39	.500	700	N
GC041750	.040	7.00	30	--	.06	--	1.90	70	64	.700	700	N
GC061150	.004	.70	N	--	.05	--	.36	30	12	.070	300	N
GC184550	.061	3.00	15	--	.08	--	2.30	30	27	.300	300	3
GC061350	.008	7.00	30	--	.08	--	3.26	50	78	.700	700	N
GC061050	.027	3.00	15	--	.06	--	1.25	70	35	.300	700	N
GC184050	.034	1.50	15	--	.10	--	.75	30	41	.300	200	N
GC184450	.026	1.50	15	--	.14	--	1.20	30	40	.300	700	N
GC061450	.029	3.00	15	--	.25	--	1.29	50	39	.300	1,500	N
GC041850	.060	7.00	50	--	.05	--	2.50	70	80	.500	300	N
GC006050	.061	3.00	20	--	.24	--	1.50	N	24	.700	500	N
GC062950	.061	--	--	--	.03	--	--	--	6	--	--	--
GC196650	.002	.30	N	--	.05	--	.02	30	7	.050	20	N
GC063050	.017	--	--	--	.03	--	--	--	<5	--	--	--
GC196750	<.001	.15	N	--	.09	--	.04	N	<5	.020	20	N
GC196850	.011	.30	N	--	.03	--	.03	N	6	.030	70	N
GC196350	.012	3.00	30	--	.13	--	.65	N	12	.200	100	N
GC063150	<.001	--	--	--	.06	--	--	--	<5	--	--	--
GC196550	<.001	.50	N	--	.07	--	.05	30	10	.050	50	N
GC196450	<.001	1.50	10	--	.07	--	.60	N	10	.070	200	N
GC211050	.003	3.00	15	--	.06	--	.36	N	17	.100	150	N
GC267550	.022	5.00	15	--	.08	--	2.00	30	23	1.500	5,000	3
GC028850	--	1.00	10	1.06	.02	.6	1.41	N	10	.200	200	N
GC029250	.050	2.00	15	1.52	.05	2.1	1.93	50	25	.500	1,000	N
GC055250	.017	1.50	15	--	.05	<.5	1.40	N	17	.500	500	N
GC267450	.030	2.00	15	--	.03	--	1.70	30	27	.500	3,000	N
GC054450	.100	3.00	20	--	.08	.6	2.00	30	61	1.000	200	N
GC055150	.028	2.00	15	--	.53	<.5	1.60	N	21	.700	1,000	N
GC084150	.040	3.00	15	1.04	.07	1.4	1.98	<30	17	.700	1,500	N
GC054750	.062	3.00	20	--	.06	.6	1.60	30	41	.700	200	N
GC267750	.041	5.00	20	--	.11	--	2.10	50	34	1.500	700	3

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC268950	1.50	10	<70	30	.030	10	--	--	--	15	.3	--
GC269050	1.00	10	70	20	.090	10	--	--	--	30	<.1	--
GC026950	2.00	10	N	15	--	100	100	.13	<1	15	.2	29
GC269550	.30	20	--	30	.120	20	--	--	--	30	.8	--
GC035350	1.50	20	N	20	.030	15	--	--	--	20	<.1	--
GC035650	2.00	20	N	30	.060	20	--	--	--	15	.2	--
GC060650	2.00	10	70	20	--	15	--	--	--	20	<.1	--
GC076650	1.00	10	N	7	--	20	60	<.08	<1	20	.8	24
GC076750	.50	10	--	15	--	15	55	.10	2	10	.3	20
GC035250	1.50	20	N	30	.024	20	--	--	--	20	.4	--
GC269450	2.00	20	--	70	.060	N	--	--	--	30	<.1	--
GC035150	1.50	30	N	50	.016	30	--	--	--	20	.4	--
GC035550	2.00	15	N	20	.090	30	--	--	--	20	<.1	--
GC041650	.50	15	70	30	.040	30	--	--	--	15	.3	--
GC059550	.20	10	N	<5	--	15	--	--	--	5	.4	--
GC041350	.70	10	150	30	.080	30	--	--	--	15	1.3	--
GC041550	.70	15	70	30	.030	20	--	--	--	15	.4	--
GC041450	1.00	15	70	30	.030	30	--	--	--	15	.4	--
GC003050	.70	10	--	15	.052	15	--	--	--	7	.1	--
GC030950	.70	<10	<70	20	--	30	85	<.08	<1	10	.2	31
GC041750	.50	15	70	50	.040	30	--	--	--	15	.7	--
GC061150	<.05	10	N	N	--	<10	--	--	--	5	.3	--
GC184550	.15	10	70	30	.040	30	--	--	--	15	1.1	--
GC061350	.50	10	70	50	--	10	--	--	--	15	.4	--
GC061050	.50	10	100	15	--	20	--	--	--	10	.4	--
GC184050	.15	15	70	15	.024	15	--	--	--	7	.5	--
GC184450	.70	15	70	15	.050	30	--	--	--	7	.4	--
GC061450	.30	10	70	10	--	20	--	--	--	7	.6	--
GC041850	.50	15	70	30	.060	30	--	--	--	15	.3	--
GC006050	1.50	15	N	15	.040	15	--	--	--	10	.9	--
GC062950	--	--	--	--	--	--	--	--	--	--	<.1	--
GC196650	N	20	N	N	.004	--	--	--	--	N	.2	--
GC063050	--	--	--	--	--	--	--	--	--	--	.1	--
GC196750	N	N	N	N	.012	N	--	--	--	N	.1	--
GC196850	N	15	N	N	.002	N	--	--	--	N	.1	--
GC196350	.15	N	N	15	.004	N	--	--	--	15	1.3	--
GC063150	--	--	--	--	--	--	--	--	--	--	<.1	--
GC196550	N	20	N	7	.004	N	--	--	--	N	.2	--
GC196450	.30	N	N	5	.008	N	--	--	--	10	.5	--
GC211050	.07	10	--	20	.006	N	--	--	--	10	.5	--
GC267550	1.00	10	N	70	.030	15	--	--	--	10	.7	--
GC028850	1.00	N	--	5	--	15	70	<.08	<1	5	<.1	28
GC029250	1.00	<10	70	50	--	20	75	<.08	2	10	<.1	29
GC055250	--	N	--	15	.065	15	--	--	--	5	.4	36
GC267450	1.50	10	<70	30	.030	10	--	--	--	7	.4	--
GC054450	--	<10	N	30	.052	15	--	--	--	10	1.9	29
GC055150	--	<10	--	20	.161	70	--	--	--	7	.6	30
GC084150	1.00	10	N	30	--	15	80	<.08	<1	10	<.1	31
GC054750	--	<10	N	30	.052	15	--	--	--	15	.4	29
GC267750	1.00	10	<70	70	.024	15	--	--	--	10	.9	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC268950	--	500	.500	--	--	150	50	3.0	50	200
GC269050	--	300	.700	--	--	500	70	7.0	70	150
GC026950	1.79	500	1.000	9.23	3.15	200	30	3.0	89	150
GC269550	--	70	.700	--	--	500	20	3.0	85	150
GC035350	--	500	.700	--	--	150	30	5.0	40	150
GC035650	--	700	.500	--	--	150	30	3.0	70	150
GC060650	--	500	.700	--	--	150	50	3.0	88	200
GC076650	1.44	150	1.000	7.76	3.58	150	20	3.0	77	200
GC076750	.22	70	.500	--	3.01	200	10	2.0	59	100
GC035250	--	500	.700	--	--	150	30	5.0	50	200
GC269450	--	300	.700	--	--	300	30	5.0	65	100
GC035150	--	300	.700	--	--	150	30	5.0	55	150
GC035550	--	700	1.000	--	--	200	30	5.0	75	150
GC041650	--	150	.700	--	--	100	50	7.0	60	200
GC059550	--	30	.300	--	--	20	15	2.0	24	200
GC041350	--	70	.700	--	--	150	100	10.0	130	150
GC041550	--	150	.700	--	--	150	30	3.0	60	150
GC041450	--	150	.700	--	--	150	30	3.0	80	150
GC003050	--	70	.150	--	--	30	15	3.0	42	200
GC030950	1.79	150	.300	12.79	3.10	100	20	3.0	155	200
GC041750	--	150	.700	--	--	100	30	5.0	110	200
GC061150	--	10	.500	--	--	15	20	3.0	31	500
GC184550	--	30	.300	--	--	70	30	3.0	115	200
GC061350	--	150	.700	--	--	100	20	3.0	67	150
GC061050	--	70	.500	--	--	70	30	3.0	113	300
GC184050	--	30	.200	--	--	30	20	3.0	55	200
GC184450	--	30	.300	--	--	50	30	3.0	90	300
GC061450	--	50	.500	--	--	50	30	3.0	80	200
GC041850	--	150	.500	--	--	100	30	5.0	80	150
GC006050	--	150	.300	--	--	70	20	2.0	30	150
GC062950	--	--	--	--	--	--	--	--	--	--
GC196650	--	N	.500	--	--	15	20	3.0	--	500
GC063050	--	--	--	--	--	--	--	--	--	--
GC196750	--	N	.100	--	--	N	N	N	--	150
GC196850	--	N	.200	--	--	N	N	1.0	--	700
GC196350	--	N	.200	--	--	150	N	1.0	25	50
GC063150	--	--	--	--	--	--	--	--	--	--
GC196550	--	N	.300	--	--	15	30	3.0	--	500
GC196450	--	50	.200	--	--	30	20	3.0	--	100
GC211050	--	20	.200	--	--	100	N	1.0	--	100
GC267550	--	200	.300	--	--	100	30	3.0	60	150
GC028850	.34	200	.150	--	1.99	30	10	1.5	31	150
GC029250	1.48	200	.200	8.59	3.13	150	20	3.0	107	200
GC055250	--	150	.200	--	--	50	15	1.5	54	150
GC267450	--	300	.200	--	--	100	20	2.0	60	150
GC054450	--	200	.300	--	--	200	30	3.0	134	100
GC055150	--	150	.300	--	--	70	20	3.0	150	200
GC084150	.62	200	.200	9.86	2.23	150	20	3.0	79	100
GC054750	--	300	.300	--	--	150	20	3.0	100	100
GC267750	--	200	.300	--	--	150	30	5.0	75	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC028650	SD	FALL RIVER	43 11	103 13	72 9	US 18 1 MI E OELRICHS; DARK CLAY LOAM
GC054950	SD	FAULK	44 36	98 55	70 5	US 212 6 MI W ROCKHAM; DARK LOAM OVER TILL
GC029150	SD	GREGORY	43 2	98 54	72 9	RT 18 1 MI W FAIRFAX; DARK PRAIRIE LOAM
GC0267850	SD	GREGORY	43 2	98 42	68 8	US 281 5 MI W FT RANDALL DAM; TEXTURAL B HORIZON, OLD ALLUVIUM, LOESS
GC081450	SD	HARDING	45 33	103 33	74 8	US 85 3 MI S BUFFALO; LIGHT BROWN PRAIRIE LOAM
GC0267650	SD	JERAULD	44 5	98 23	68 8	US 281 2 MI S RT 34 JCT; DARK CLAY TILL GRAVEL THROUGHOUT, CULTIVATED
GC188250	SD	LAWRENCE	44 13	103 54	65 6	US 85 20 MI S DEADWOOD; BLACK HUMIC SILT 4-IN. DEPTH
GC267350	SD	MARSHALL	45 48	97 42	68 8	RT 10 2 MI E AND 1 MI N BRITTON; VERY DARK HIGHLY ORGANIC SILTY CLAY
GC054550	SD	MEADE	44 52	102 30	70 5	US 212 1 MI E MAURINE; DARK LOAM
GC084350	SD	MEADE	44 42	102 7	74 11	1 MI W JCT RT 73 & 34; LIGHT BROWN PRAIRIE SOIL
GC247950	SD	PENNINGTON	44 0	103 0	66 8	I-90 RAPID CITY; SOIL NOT DESCRIBED
GC084250	SD	PERKINS	45 25	102 10	74 11	3 MI E 3 MI S JCT RT 73 & 20; LIGHT BROWN PRAIRIE SOIL
GC054850	SD	POTTER	44 48	99 40	70 5	US 212 1 MI E LEBANON; DARK PRAIRIE LOAM OVER TILL
GC028750	SD	SHANNON	43 2	102 27	72 9	US 18 5 MI E PINE RIDGE; DARK SILT LOAM
GC055050	SD	SPINK	44 36	98 0	70 5	US 212 2 MI E DOLAND; BLACK LOAM
GC028950	SD	TODD	43 18	100 38	72 9	US 18 1 MI E MISSION; DARK PRAIRIE LOAM
GC029050	SD	TRIPP	43 15	99 42	72 9	US 18 AT COLOME; DARK PRAIRIE LOAM
GC029450	SD	UNION	43 5	96 30	72 9	RT 46 5 MI S HUDSON; ALLUVIAL SOIL
GC029350	SD	YANKTON	43 5	97 12	72 9	RT 46 3 MI W IRENE; DARK BROWN CLAY
GC054650	SD	ZIEBACH	44 52	101 36	70 5	US 212 1 MI W DUPREE; ORGANIC CLAY LOAM
GC157850	TN	ANDERSON	36 4	84 11	64 8	RT 61 3 MI N OAK RIDGE; BROWN FOREST, WITH CHERT AND LIMESTONE
GC198750	TN	BENTON	36 3	88 3	65 7	US 70 3 MI E CAMDEN; LIGHT YELLOW LOAM OVER LIMESTONE
GC198350	TN	CUMBERLAND	35 55	84 54	65 7	US 70 2 MI W CRAB ORCHARD; SHALLOW LIGHT BROWN LOAM OVER SANDSTONE
GC198650	TN	DICKSON	36 6	87 15	65 7	US 70 1 MI W WHITE BLUFF; LIGHT YELLOW LOAM OVER LIMESTONE
GC063650	TN	FRANKLIN	35 10	86 8	72 10	US 64 3 MI W WINCHESTER; RED CLAY
GC198850	TN	GIBSON	35 56	88 51	65 7	RT 104 3 MI W MILAN; YELLOW SAND AND LOESS
GC063450	TN	HAMBLEN	36 21	83 8	72 9	US 11W 4 MI E MOORESBURG; BROWN CLAY
GC064050	TN	HARDEMAN	35 19	89 8	72 10	US 64 2 MI E WHITEVILLE; REDDISH-BROWN CLAY
GC063750	TN	LINCOLN	35 11	86 49	72 10	US 64 1 MI W MCBURG; RED CLAY OVER LIMESTONE
GC211850	TN	LOUDON	35 37	84 26	65 7	4 MI N JCT US 11-RT 68 IN SWEETWATER; SOIL NOT DESCRIBED
GC063950	TN	MC NAIRY	35 14	88 23	72 10	US 64 1 MI E ADAMSVILLE; LIGHT BROWN SILT
GC198450	TN	PUTNAM	36 8	85 35	65 7	I-40 5 MI W COKEVILLE; YELLOW SANDY LOAM
GC157450	TN	SCOTT	36 22	84 35	64 8	RT 27 1/2 MI S ROBBINS; BROWN PODZOLIC OVER SANDSTONE
GC198150	TN	SEVIER	35 37	83 26	65 7	US 441 4 MI W NEWFOUND GAP; SANDY ORGANIC LOAM
GC063350	TN	SULLIVAN	36 34	82 21	72 9	RT 11 NEAR SYLVICOLA; YELLOW CLAY
GC157750	TN	UNION	36 18	83 46	64 8	RT 33 4 MI S CLINCH RIVER; BROWN FOREST, WITH CHERT AND LIMESTONE
GC063550	TN	WARREN	35 40	85 48	72 10	RT 55 3 MI S MC MINNVILLE; LIGHT BROWN CHERTY CLAY
GC063850	TN	WAYNE	35 20	87 35	72 10	US 64 2 MI W OVILLA; LIGHT BROWN SILT OVER CHERT
GC198550	TN	WILSON	36 14	86 14	65 7	US 70 1 MI E LEBANON; YELLOW CLAY LOAM WITH LIMESTONE FRAGMENTS
GC193350	TX	ANDERSON	31 36	95 27	65 6	RT 294 3 MI E ELKHART; TAN SAND
GC271750	TX	ANDREWS	32 17	102 34	69 1	RT 115 2 MI S ANDREWS; RED SAND OVER LIMESTONE
GC054150	TX	ARANSAS	28 8	97 3	70 5	RT 35 2 MI N COPANO BAY BRIDGE; CALCAREOUS CLAY
GC068950	TX	BELL	31 6	96 40	73 1	RT 53 4 MI E TEMPLE; BLACK PRAIRIE SOIL
GC152550	TX	BEXAR	29 23	98 40	63 7	US 90 8 MI W SAN ANTONIO; DARK CLAYEY WITH LIMESTONE FRAGMENTS
GC272850	TX	BOWIE	33 21	94 17	69 1	RT 67 4 MI E MAUD; YELLOWISH-BROWN LOAM
GC070750	TX	BRAZORIA	29 25	95 14	73 2	RT 35 1 MI E ALVIN; DARK CLAY LOAM
GC080450	TX	BREWSTER	29 18	103 53	74 2	RT 170 25 MI W JCT RT 170 & 118; LITHOSOL OVERLYING BASALT
GC080550	TX	BREWSTER	29 41	104 21	74 2	US 67 9 MI N PRESIDIO; GRAVELLY ALLUVIAL INCEPTISOL
GC153250	TX	BREWSTER	30 24	103 35	63 7	US 90 7 MI E ALPINE; LOAM FROM BASALT
GC220450	TX	BREWSTER	29 16	103 2	66 3	2.8 MI NE GENERAL STORE BIG BEND NAT PK; BROWN ROCKY PEDIMENT SOIL

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC028650	7.00	10.0	50	1,500	15.0	.6	1.3	1.00	<150	10	70.0	50.0
GC054950	7.00	5.6	30	700	<1.0	--	3.9	.90	N	5	30.0	15.0
GC029150	7.00	9.4	50	700	N	.8	3.3	2.08	N	10	70.0	30.0
GC267850	10.00	12.0	50	700	1.0	--	--	4.50	N	10	50.0	50.0
GC081450	10.00	5.0	<20	1,500	1.5	<.5	.5	1.05	N	5	100.0	10.0
GC267650	>10.00	7.7	30	700	1.0	--	--	.75	N	10	70.0	50.0
GC188250	2.00	7.9	30	200	N	--	--	9.15	--	7	30.0	20.0
GC267350	10.00	7.5	30	700	1.0	--	--	1.10	N	10	50.0	50.0
GC054550	7.00	7.2	30	1,000	1.0	--	1.3	1.10	N	7	100.0	15.0
GC084350	10.00	17.3	50	3,000	2.0	<.5	2.5	5.47	--	7	100.0	30.0
GC247950	3.00	5.9	50	5,000	N	--	--	4.20	N	5	50.0	7.0
GC084250	10.00	7.5	20	1,500	N	<.5	.6	.82	<150	10	70.0	50.0
GC054850	7.00	7.6	30	700	<1.0	--	4.6	7.00	N	5	50.0	15.0
GC028750	5.00	1.8	20	1,000	N	<.5	1.0	1.32	N	<3	15.0	10.0
GC055050	7.00	7.9	50	700	<1.0	--	3.0	1.10	N	10	50.0	15.0
GC028950	7.00	4.8	20	700	N	.6	1.7	1.05	N	5	20.0	15.0
GC029050	7.00	15.0	50	700	N	.9	2.8	1.01	<150	10	50.0	50.0
GC029450	5.00	3.5	50	500	N	.8	7.9	10.75	--	5	70.0	20.0
GC029350	10.00	12.8	50	1,000	1.5	1.7	4.3	4.54	--	10	100.0	50.0
GC054650	10.00	1.9	30	1,000	N	--	1.0	1.00	N	7	50.0	20.0
GC157850	5.00	--	50	700	N	--	--	.50	150	20	70.0	30.0
GC198750	3.00	17.0	30	200	N	--	--	.25	N	7	50.0	20.0
GC198350	>10.00	9.9	70	500	2.0	--	--	3.40	N	20	70.0	20.0
GC198650	5.00	8.9	70	500	N	--	--	.35	N	15	70.0	20.0
GC063650	7.00	8.2	20	300	1.5	.8	2.2	.28	<150	10	100.0	20.0
GC063450	3.00	8.6	30	300	N	--	--	.35	N	10	50.0	20.0
GC064050	10.00	13.7	50	700	N	<.5	2.3	.27	<150	10	30.0	30.0
GC063750	3.00	19.2	50	500	2.0	.6	.7	.27	<150	10	70.0	50.0
GC211850	7.00	73.0	50	500	N	1.4	1.9	.30	200	20	50.0	50.0
GC063950	5.00	5.7	50	500	1.5	<.5	--	.70	N	30	70.0	20.0
GC198450	2.00	7.9	70	100	N	--	1.2	.09	<150	10	70.0	10.0
GC157450	>10.00	--	100	700	N	--	--	.25	N	N	30.0	15.0
GC198150	>10.00	15.0	70	700	N	--	--	.20	200	50	200.0	15.0
GC063350	3.00	3.1	50	300	N	1.1	--	.25	N	10	50.0	30.0
GC157750	5.00	--	70	500	N	--	1.6	.11	N	5	30.0	10.0
GC063550	3.00	4.9	50	300	1.5	.9	--	.60	N	15	70.0	10.0
GC063850	3.00	5.5	50	300	N	1.0	1.9	.35	N	10	30.0	20.0
GC198550	5.00	8.7	70	200	N	--	2.4	.09	N	5	50.0	20.0
GC193350	.70	2.8	N	300	N	--	--	.55	N	20	50.0	15.0
GC271750	.70	2.0	N	200	N	--	--	.15	N	N	10.0	7.0
GC054150	2.00	3.0	30	200	N	--	.3	.10	N	N	3.0	7.0
GC068950	3.00	13.9	20	200	N	.9	4.3	11.67	N	7	70.0	20.0
GC152550	3.00	5.4	N	500	N	--	--	4.20	--	N	70.0	7.0
GC272850	.70	3.9	30	300	1.0	--	--	.03	150	5	20.0	7.0
GC070750	2.00	2.0	20	200	N	1.6	1.2	.41	<150	N	15.0	10.0
GC080450	10.00	2.1	N	500	N	<.5	.6	6.22	--	30	30.0	30.0
GC080550	10.00	3.8	<20	700	5.0	.6	1.3	4.19	--	<3	20.0	7.0
GC153250	7.00	9.1	N	700	N	--	--	8.10	--	N	30.0	15.0
GC220450	7.00	5.4	N	300	7.0	--	--	.90	<150	5	15.0	5.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC028650	.050	3.00	20	1.56	.04	1.0	2.16	50	30	.700	300	N
GC054950	.049	1.50	15	--	.10	<.5	1.40	N	17	.500	700	N
GC029150	.050	3.00	15	1.28	.04	1.4	1.99	N	25	1.000	1,500	N
GC267850	.048	3.00	20	--	.05	--	2.10	30	28	2.000	1,500	N
GC081450	--	2.00	15	1.37	.02	<.5	1.59	N	15	.500	200	N
GC267650	.033	5.00	20	--	.07	--	2.20	50	25	1.500	1,000	N
GC188250	.011	1.50	15	--	.28	--	1.25	30	21	5.000	300	N
GC267350	.055	3.00	15	--	.06	--	1.90	50	22	1.500	1,500	N
GC054550	.017	2.00	15	--	.03	.6	1.70	N	20	.500	300	N
GC084350	.060	5.00	20	1.34	.07	<.5	1.47	50	29	2.000	1,500	N
GC247950	.048	1.00	10	1.22	.05	--	1.92	N	33	.500	1,500	N
GC084250	--	3.00	15	--	.05	.6	1.68	<30	20	.500	300	N
GC054850	.022	2.00	10	--	.08	<.5	1.20	N	17	1.500	1,500	N
GC028750	--	1.00	10	.83	.02	<.5	1.96	N	15	.200	200	N
GC055050	.044	2.00	15	--	.06	<.5	1.60	N	22	.700	1,500	N
GC028950	--	2.00	10	1.56	.03	.7	1.88	30	10	.500	300	N
GC029050	.050	3.00	15	1.54	.05	1.3	2.08	50	25	.500	1,000	N
GC029450	--	1.50	10	.64	.04	2.0	1.02	N	20	.700	700	N
GC029350	.050	3.00	15	1.26	.04	.9	1.38	50	22	1.000	1,000	N
GC054650	.002	2.00	20	--	.07	.6	1.60	30	25	.700	300	N
GC157850	--	1.50	7	--	--	--	.65	150	--	.500	7,000	N
GC198750	.040	2.00	15	--	.06	--	.70	N	16	.150	200	N
GC198350	.038	3.00	50	--	.06	--	2.10	50	93	.700	1,000	N
GC198650	.026	1.50	15	--	.10	--	1.10	30	26	.300	200	N
GC063650	--	2.00	15	.98	.07	2.0	.71	50	25	.200	1,500	N
GC198850	.003	1.50	7	--	.05	--	.90	N	16	.200	200	N
GC063450	--	2.00	7	1.39	.05	.8	.73	50	20	.150	700	N
GC064050	--	5.00	15	1.88	.05	3.7	1.50	50	20	.500	1,000	N
GC063750	--	5.00	10	1.04	.09	1.7	1.19	70	21	1.500	2,000	15
GC211850	.067	>10.00	20	--	.11	--	1.40	30	52	.300	7,000	N
GC063950	--	1.50	10	1.39	.12	2.7	.75	70	15	.100	1,500	N
GC198450	.052	1.00	5	--	.10	--	.35	N	18	.150	70	N
GC157450	--	3.00	30	--	--	--	1.30	100	--	.700	1,000	N
GC198150	.052	2.00	50	--	.05	--	2.60	30	71	.700	700	N
GC063350	--	1.00	7	1.12	.05	1.9	1.45	<30	21	.150	50	N
GC157750	--	2.00	30	--	--	--	.55	50	--	.300	5,000	N
GC063550	--	1.00	5	1.36	.07	2.1	.58	70	18	.100	1,500	N
GC063850	--	1.50	7	1.33	.07	2.0	.94	<30	15	.100	200	N
GC198550	.027	2.00	10	--	.05	--	.60	30	31	.200	300	N
GC193350	.002	.30	N	--	.03	--	.30	N	7	.020	70	N
GC271750	.029	.30	<5	--	.20	--	.43	N	11	.050	500	N
GC054150	.018	1.00	5	--	.03	<.5	.70	N	11	.200	150	N
GC068950	--	2.00	15	.84	.03	2.9	.69	N	25	.500	500	N
GC152550	.015	2.00	10	--	.11	--	.70	30	38	.700	300	N
GC272850	.064	.50	N	--	.05	--	.30	70	11	.070	500	N
GC070750	--	.70	7	1.31	.02	1.1	.68	<30	19	.150	70	N
GC080450	.060	7.00	20	1.10	.02	1.8	1.18	N	40	3.000	700	N
GC080550	--	3.00	20	1.16	.03	<.5	2.89	50	20	.500	500	N
GC153250	.053	1.50	20	--	.06	--	2.00	50	29	1.000	300	N
GC220450	.032	2.00	30	--	.07	--	3.50	70	36	.200	500	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC028650	.70	<10	70	20	---	20	75	<.08	1	10	.3	31
GC054950	---	N	---	15	.074	10	---	---	---	---	.7	34
GC029150	1.00	<10	---	20	---	15	80	<.08	<1	7	.7	30
GC267850	1.00	10	N	50	.040	15	---	---	---	10	1.2	---
GC081450	2.00	<10	---	15	---	10	40	<.08	<1	5	.9	33
GC267650	.70	10	<70	50	.016	15	---	---	---	15	.3	---
GC188250	.70	N	---	15	.048	15	---	---	---	7	.6	---
GC267350	1.00	10	<70	50	.030	15	---	---	---	10	.7	---
GC054550	---	<10	---	20	.074	15	---	---	---	7	.3	35
GC084350	1.00	<10	N	20	---	20	85	.12	1	10	<.1	23
GC247950	.50	N	---	10	.096	N	---	---	---	10	.3	---
GC084250	2.00	<10	N	50	---	60	60	.09	<1	7	.2	32
GC054850	---	N	---	30	.074	10	---	---	---	7	.6	29
GC028750	1.00	<10	---	5	---	20	60	<.08	<1	5	.1	34
GC055050	---	<10	---	30	.179	15	---	---	---	7	.4	33
GC028950	.70	<10	N	7	---	20	80	.08	1	5	.2	34
GC029050	.70	<10	70	30	---	20	70	<.08	2	10	.5	29
GC029450	.70	<10	---	10	---	10	55	<.08	<1	5	.5	21
GC029350	.70	10	N	30	---	15	75	<.08	1	7	.3	26
GC054650	---	<10	N	20	.065	15	---	---	---	10	.3	33
GC157850	.30	10	70	50	.150	70	---	---	---	N	---	---
GC198750	.30	20	N	15	.004	20	---	---	---	5	.6	---
GC198350	1.00	15	N	30	.012	30	---	---	---	15	.3	---
GC198650	.50	20	N	20	.008	30	---	---	---	7	.7	---
GC063650	.20	<10	N	10	---	50	65	<.08	<1	5	.3	35
GC198850	.50	20	N	15	.008	15	---	---	---	7	.3	---
GC063450	.10	<10	70	10	---	20	45	<.08	<1	5	.1	36
GC064050	.50	15	70	20	---	15	75	<.08	2	10	.2	32
GC063750	.50	10	100	50	---	20	60	<.08	<1	7	.2	35
GC211850	.30	N	N	70	.044	30	---	---	---	10	.2	---
GC063950	.30	<10	<70	5	---	15	45	<.08	<1	5	.7	36
GC198450	.05	20	N	7	.006	N	---	---	---	5	.6	---
GC157450	.50	20	70	30	.020	20	---	---	---	20	---	---
GC198150	1.50	20	N	10	.020	30	---	---	---	15	1.1	39
GC063350	.30	15	N	7	---	15	40	<.08	<1	5	<.1	---
GC157750	.20	10	N	10	.040	30	---	---	---	5	<.1	39
GC063550	.10	10	N	10	---	15	35	.09	<1	5	.1	39
GC063850	.30	<10	N	7	---	15	45	<.08	2	7	.3	37
GC198550	.15	20	N	20	.004	20	---	---	---	N	.4	---
GC193350	.10	15	N	N	.006	N	---	---	---	N	.4	---
GC271750	.07	<10	---	<5	.008	N	---	---	---	N	.4	---
GC054150	---	<10	---	<5	---	20	---	---	---	<5	.1	43
GC068950	.20	N	---	15	---	20	50	<.08	<1	7	.4	22
GC152550	.30	10	N	7	.012	15	---	---	---	7	.3	---
GC272850	.07	10	70	5	.004	10	---	---	---	N	.2	---
GC070750	.20	<10	N	5	---	10	45	<.08	<1	5	.4	40
GC080450	2.00	<10	---	50	---	10	50	.09	<1	20	.2	22
GC080550	2.00	10	N	5	---	15	120	<.08	<1	5	.2	26
GC153250	2.00	10	N	7	.024	30	---	---	---	7	.3	---
GC220450	2.00	30	70	<5	.016	20	---	---	---	5	.1	---

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC028650	1.21	200	.300	11.69	2.94	150	20	3.0	84	200
GC054950	--	200	.200	--	--	70	15	2.0	81	150
GC029150	1.22	200	.200	--	3.79	150	20	3.0	77	200
GC267850	--	200	.300	--	--	100	30	3.0	70	200
GC081450	<.10	500	.200	6.44	1.43	70	15	2.0	49	100
GC267650	--	300	.500	--	--	150	50	3.0	80	300
GC188250	--	100	.150	--	--	70	20	3.0	71	150
GC267350	--	200	.300	--	--	100	30	3.0	75	200
GC054550	--	300	.200	--	--	70	20	2.0	68	150
GC084350	1.61	200	.200	--	3.09	150	20	3.0	84	150
GC247950	--	300	.200	--	--	70	30	2.0	60	300
GC084250	.39	500	.500	4.32	3.45	150	20	2.0	65	200
GC054850	--	200	.150	--	--	100	15	1.5	63	150
GC028750	.37	300	.150	7.22	2.71	30	15	1.5	33	200
GC055050	--	300	.300	--	--	100	20	3.0	95	200
GC028950	1.35	200	.200	10.01	3.10	50	10	1.5	43	200
GC029050	1.95	150	.200	14.81	3.65	150	20	3.0	92	150
GC029450	.30	300	.100	8.79	2.66	100	15	2.0	61	100
GC029350	1.95	300	.200	11.32	3.00	150	20	3.0	91	150
GC054650	--	500	.200	--	--	100	20	3.0	71	150
GC157850	--	70	.200	--	--	50	150	1.0	75	150
GC198750	--	50	.200	--	--	70	20	3.0	--	200
GC198350	--	150	.300	--	--	100	50	5.0	80	100
GC198650	1.34	70	.500	--	--	70	30	5.0	25	300
GC063650	--	70	.300	13.72	4.82	70	30	5.0	65	200
GC198850	--	70	.300	--	--	50	30	3.0	--	500
GC063450	1.29	30	.300	8.77	2.75	30	20	3.0	45	200
GC064050	2.78	100	1.000	--	4.74	100	20	5.0	62	700
GC063750	<.10	150	.500	10.42	10.69	100	50	5.0	69	200
GC211850	--	100	.300	--	--	100	30	3.0	65	150
GC063950	1.27	50	.500	7.23	4.32	50	30	5.0	31	500
GC198450	--	15	.500	--	--	50	20	3.0	--	500
GC157450	--	150	1.000	--	--	100	100	10.0	--	500
GC198150	--	200	.300	--	--	70	30	5.0	25	500
GC063350	.61	50	.500	4.75	3.47	30	20	3.0	50	100
GC157750	--	50	.300	--	--	70	30	50.0	31	200
GC063550	1.69	30	.300	6.01	3.59	50	50	5.0	25	300
GC063850	1.87	50	.500	8.15	3.90	30	20	3.0	44	300
GC198550	--	50	.500	--	--	70	30	3.0	30	500
GC193350	--	10	.150	--	--	10	20	2.0	25	300
GC271750	--	15	.070	--	--	10	<.10	1.0	--	200
GC054150	--	30	.150	--	--	20	10	2.0	10	100
GC068950	1.07	70	.150	7.28	2.79	100	20	2.0	22	150
GC152550	--	100	.200	--	--	30	20	3.0	108	150
GC272850	--	10	.500	--	--	20	30	5.0	50	200
GC070750	.95	30	.150	7.30	2.30	20	10	3.0	15	500
GC080450	1.02	500	.700	5.75	1.10	200	20	3.0	26	300
GC080550	1.48	300	.500	14.56	3.13	100	30	5.0	89	150
GC153250	--	500	.200	--	--	30	20	2.0	92	300
GC220450	--	100	.200	--	--	30	50	7.0	50	150
									100	700

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date colln.	Site and Soil Descriptions
GC220550	TX	BREWSTER	29 52	103 16	66 3	US 385 16-2 MI N BIG BEND NAT PK BOUNDARY; DARK BROWN ROCKY, SANDY
GC054250	TX	CALHOUN	28 51	96 33	70 5	RT 35 AT PT COMFORT; DARK ORGANIC LOAM
GC279350	TX	CALLAHAN	32 23	99 18	69 1	I-20 AT ADMIRAL EXIT; RED-BROWN RESIDUAL ON LIMESTONE
GC053650	TX	CAMERON	25 54	97 28	70 5	RT 4 0-1 MI E BROWNSVILLE; CLAYEY ALLUVIAL SOIL
GC070850	TX	CAMERON	26 0	97 10	73 2	RT 4 AT BOCA CHICA; BEACH SAND
GC277350	TX	CASTRO	34 33	102 17	69 1	RT 86 1 MI E DIMMITT; DARK BROWN COARSE GRANULAR SOIL
GC277050	TX	CHILDRESS	34 28	100 12	69 1	US 83 4 MI N CHILDRESS; REDDISH-BROWN LOAM
GC261050	TX	CLAY	33 40	98 0	67 11	US 82 2 MI W US 81 JCT; PALE RED-BROWN SILT
GC071750	TX	COKE	31 52	100 29	73 2	RT 208 3 MI S ROBERT LEE; RED CLAY
GC192850	TX	COLEMAN	31 39	99 12	65 6	US 67 8 MI E SANTA ANNA; RED CLAY OVER LIMESTONE
GC152250	TX	COLORADO	29 43	96 29	63 7	US 90 4 MI W BERNARDO; DARK MOIST CLAY
GC260950	TX	COOKE	33 30	97 20	67 11	US 82 6 MI W LINDSEY; BLACK SOIL ON STREAM GRAVEL 6-IN. DEPTH
GC193050	TX	CORYELL	31 24	97 45	65 6	US 84 1 MI E GATESVILLE; BLACK GUMBO SOIL
GC068150	TX	CROSBY	33 40	101 11	73 1	US 82 4 MI E CROSBYTON; RED SANDY SOIL
GC153450	TX	CULBERSON	30 57	104 49	63 7	US 90 10 MI E VAN HORN; LOAMY, WITH BASALT AND RHYOLITE FRAGMENTS
GC191950	TX	CULBERSON	31 49	104 52	65 6	US 62 58 MI W CARLSBAD; DRY LITHOSOL IN LIMESTONE
GC260350	TX	DALLAM	36 20	103 0	67 11	US 87 3 MI E TEXLINE EDGE NATIONAL GRASSLAND; SANDY RED-BROWN SOIL
GC272550	TX	DALLAS	32 46	96 37	69 1	I-30 10 MI E FROM DOWNTOWN DALLAS; BLACK PLASTIC CLAY
GC271950	TX	DAWSON	32 44	101 51	69 1	US 180 8 MI E LAMESA; RED SANDY SOIL
GC260850	TX	DENTON	33 5	97 10	67 11	I-35E .75 MI S RT 121 JCT; DARK BROWN SANDY 8-IN. DEPTH
GC053050	TX	DIMMIT	28 31	99 55	70 5	RT 2644 5 MI W CARRIZO SPRINGS; SOIL OVER SANDSTONE
GC261350	TX	DONLEY	34 55	100 50	67 11	US 287 AT CITY LIMITS S SIDE MEMPHIS; PALE RED CALICHE 8-IN. DEPTH
GC071150	TX	DUVAL	27 47	98 37	73 2	RT 16 7 MI S FREER; BROWN SILT OVER LIMESTONE
GC279250	TX	EASTLAND	32 29	98 35	69 1	I-20 7 MI E RANGER; RED-BROWN RESIDUAL ON LIMESTONE
GC191750	TX	EL PASO	31 46	106 18	65 6	US 62 5 MI E EL PASO; REDDISH-TAN SAND, FROM MOUNDS HELD BY MESQUITE
GC220050	TX	EL PASO	31 30	106 7	66 3	I-10 1 MI SE JCT US 10 AND CROSSROAD TO FABENS; LIGHT BROWN SAND
GC068650	TX	ERATH	32 23	98 10	73 1	US 281 1 MI S MORGAN MILL; RED CLAY
GC069050	TX	FALLS	31 18	96 40	73 1	RT 7 1 MI W KOSSE; ORGANIC & CLAY SOIL
GC152350	TX	FAYETTE	29 41	97 9	63 7	US 90 4 MI W FLATONIA; BROWNISH-YELLOW SANDY LOAM
GC272150	TX	FISHER	32 44	100 10	69 1	US 180 11 MI E ROBY; REDDISH-BROWN LOAM
GC193250	TX	FREESTONE	31 40	96 18	65 6	US 84 3 MI W TEAGUE; GRAY FOREST SOIL
GC271850	TX	GAINES	32 43	102 39	69 1	US 180 1 MI E SEMINOLE; BROWN LOAM OVER LIMESTONE
GC200450	TX	GRAY	35 31	100 58	65 7	US 60 .5 MI W PAMPA; DARK BROWN PRAIRIE SOIL
GC152450	TX	GUADALUPE	29 28	98 2	63 7	US 90 6 MI W SEGUIN; BLACK, HEAVY, LIMESTONE SOIL
GC068050	TX	HALE	34 11	101 39	73 1	US 70 4 MI E PLAINVIEW; REDDISH SANDY SOIL
GC277150	TX	HALL	34 24	100 58	69 1	RT 86 1 MI W TURKEY; DARK RED LITHOSOL OVER GRAVEL
GC068750	TX	HAMILTON	31 41	98 7	73 1	US 281 1 MI S HAMILTON; BLACK HEAVY CLAY
GC261250	TX	HARDEMAN	34 5	99 55	67 11	US 275 3.5 MI W QUANAH; DARK GRAY-BROWN 8-IN. DEPTH
GC152150	TX	HARRIS	29 47	95 38	63 7	US 90 2 MI E ADDICKS; DARK ALLUVIAL CLAY
GC260450	TX	HARTLEY	35 55	102 30	67 11	US 87 3 MI E HARTLEY; SANDY 8-IN. DEPTH
GC200350	TX	HEMPHILL	35 45	100 8	65 7	RT 33 14 MI W OKLA. STATE LINE; DARK BROWN PRAIRIE SOIL
GC053550	TX	HIDALGO	26 5	98 8	70 5	US 281 7 MI W PROGRESO; CALCAREOUS ALLUVIAL SOIL
GC070950	TX	HIDALGO	26 34	98 13	73 2	CO RD 1017 10 MI W LINN; ORANGE-RED SILT
GC279650	TX	HOWARD	32 13	101 34	69 1	I-20 AT W EXIT TO BIG SPRINGS; LIGHT TAN CLAY SOIL
GC191850	TX	HUDSPETH	31 44	105 34	65 6	US 62 55 MI E EL PASO; GRAY DESERT SOIL
GC220150	TX	HUDSPETH	31 11	105 30	66 3	I-10 .8 MI NW JCT CO RD TO LASCA; DARK BROWN SANDY LOAM
GC272650	TX	HUNT	33 9	95 57	69 1	I-30 10 MI E GREENVILLE; DARK ALLUVIAL CLAY
GC192650	TX	IRION	31 20	101 44	65 6	US 67 2 MI W TANKERSLY; GRAY-BROWN LOAM
GC068550	TX	JACK	33 3	98 4	73 1	US 281 2 MI N PERRIN; DARK BROWN SANDY LOAM
GC151950	TX	JEFFERSON	30 4	94 12	63 7	US 90 6 MI W BEAUMONT; DARK HARD CLAY

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC220550	3.00	6.2	20	300	N	--	--	.50	N	5	30.0	15.0
GC054250	2.00	5.3	50	200	<1.0	--	.8	.20	N	3	20.0	15.0
GC279350	2.00	8.3	20	200	N	--	--	.65	N	3	20.0	20.0
GC053650	10.00	13.0	30	500	1.5	--	3.8	9.00	N	7	50.0	20.0
GC070850	3.00	2.6	50	500	N	--	5.0	1.85	N	N	7.0	5.0
GC277350	7.00	8.5	30	500	1.0	--	--	.60	150	7	50.0	30.0
GC277050	5.00	5.1	30	500	1.0	--	--	.39	N	5	30.0	15.0
GC261050	1.50	3.7	30	150	N	--	--	.20	N	3	30.0	15.0
GC071750	7.00	5.6	30	500	2.0	.7	1.2	.75	N	5	70.0	15.0
GC192850	7.00	12.0	N	300	N	--	--	.65	N	10	70.0	30.0
GC152250	3.00	6.1	50	500	N	--	--	.24	150	7	50.0	15.0
GC260950	3.00	11.0	30	200	1.0	--	--	12.00	N	10	50.0	15.0
GC193050	2.00	10.0	30	200	N	--	--	7.70	N	7	70.0	15.0
GC068150	2.00	2.6	<20	300	N	<.5	1.6	4.03	N	N	70.0	7.0
GC153450	7.00	5.5	N	1,000	2.0	--	--	3.90	--	N	70.0	10.0
GC191950	3.00	5.2	N	200	N	--	--	7.60	N	3	30.0	15.0
GC260350	3.00	4.2	20	500	1.0	--	--	.85	N	N	30.0	15.0
GC272550	7.00	8.2	20	300	1.0	--	--	.95	150	10	30.0	30.0
GC271950	1.00	6.7	<20	200	N	--	--	.60	N	N	7.0	7.0
GC260850	1.50	18.0	30	150	N	--	--	1.40	N	7	20.0	20.0
GC053050	3.00	2.1	30	200	N	--	.5	.30	N	3	15.0	5.0
GC261350	5.00	4.0	30	500	1.5	--	--	4.40	N	10	50.0	15.0
GC071150	3.00	3.1	20	500	N	1.0	3.8	3.85	N	5	20.0	10.0
GC279250	3.00	8.0	30	300	N	--	--	1.70	N	5	30.0	20.0
GC191750	2.00	3.7	30	700	N	--	--	1.00	N	N	15.0	10.0
GC220050	3.00	4.6	N	700	N	--	--	1.70	N	3	15.0	5.0
GC063650	3.00	3.4	20	200	N	1.0	.5	.26	N	N	20.0	10.0
GC069050	3.00	4.1	50	300	N	.7	1.1	.30	N	5	30.0	15.0
GC152350	3.00	11.2	30	700	N	--	--	.34	N	7	100.0	10.0
GC272150	7.00	9.2	30	700	1.5	--	--	.45	N	7	70.0	20.0
GC193250	7.00	6.5	N	300	N	--	--	.95	N	7	50.0	20.0
GC271850	3.00	3.5	<20	500	N	--	--	6.60	N	5	50.0	20.0
GC200450	7.00	9.4	50	500	1.5	--	--	1.80	150	10	70.0	30.0
GC152450	7.00	6.2	N	500	N	--	--	3.00	--	N	100.0	20.0
GC068050	5.00	1.8	20	500	N	1.7	1.7	4.00	--	5	30.0	10.0
GC277150	2.00	5.9	30	300	N	--	--	2.80	N	3	20.0	10.0
GC068750	5.00	10.5	20	200	N	2.3	5.0	11.57	N	7	70.0	20.0
GC261250	3.00	8.2	50	500	1.5	--	--	1.00	N	7	30.0	20.0
GC152150	1.50	6.2	30	300	N	--	--	.22	N	N	30.0	7.0
GC260450	3.00	16.0	30	300	N	--	--	.70	N	7	30.0	15.0
GC200350	5.00	8.1	50	700	N	--	--	.50	150	7	30.0	20.0
GC053550	10.00	7.2	30	500	1.5	--	3.8	10.00	N	7	50.0	20.0
GC070950	3.00	3.5	20	500	N	<.5	.4	.43	N	<3	20.0	10.0
GC279650	2.00	7.8	30	200	N	--	--	8.00	N	3	20.0	10.0
GC191850	3.00	4.7	N	700	N	--	--	8.10	N	N	50.0	10.0
GC220150	>10.00	5.0	N	500	3.0	--	--	2.00	<150	10	10.0	7.0
GC272650	2.00	7.6	30	500	1.0	--	--	.50	N	5	30.0	20.0
GC192650	5.00	5.0	N	700	N	--	--	12.00	N	10	50.0	20.0
GC068550	3.00	2.4	<20	300	N	.6	.7	.13	N	<3	70.0	10.0
GC151950	7.00	4.0	30	300	1.5	--	--	.64	N	7	70.0	20.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC220550	.018	2.00	15	--	.69	--	1.50	30	30	.500	300	N
GC054250	.014	1.00	5	--	.03	<.5	.70	30	14	.150	500	N
GC279350	.017	1.00	7	--	.04	--	.75	30	24	.150	300	N
GC053650	.055	3.00	15	--	.03	<.5	1.60	30	38	1.000	300	N
GC070850	--	1.00	10	.89	.05	--	1.04	N	8	.700	150	N
GC277350	.039	2.00	20	--	.03	--	2.00	70	34	.500	300	N
GC277050	.067	1.50	15	--	.04	--	2.00	30	6	.700	300	N
GC261050	<.001	1.00	7	--	.06	--	.70	30	14	.150	300	N
GC071750	--	2.00	15	1.17	.03	.6	1.95	N	35	.700	200	N
GC192850	.029	5.00	20	--	.26	--	1.10	30	43	.500	150	N
GC152250	<.001	1.50	5	--	.09	--	.42	100	18	.150	700	N
GC260950	.022	2.00	15	--	.04	--	.90	30	23	.500	700	N
GC193050	.024	1.50	15	--	.06	--	.65	30	23	.500	300	N
GC068150	--	.70	5	1.06	.01	2.0	.86	N	10	.300	100	N
GC153450	.039	3.00	20	--	.03	--	2.20	70	25	1.000	500	N
GC191950	.032	1.00	7	--	.03	--	1.30	N	23	1.000	150	N
GC260350	.028	1.50	15	--	.05	--	1.90	N	13	.300	300	N
GC272550	.025	1.50	15	--	.08	--	.65	50	33	.700	1,000	N
GC271950	.010	.50	<5	--	.02	--	.60	N	14	.100	100	N
GC260850	.012	1.50	7	--	.03	--	.35	30	19	.200	500	3
GC053050	.002	.70	5	--	.01	<.5	.60	N	13	.100	70	N
GC261350	.050	3.00	15	--	.07	--	1.80	70	35	1.000	700	N
GC071150	.060	1.00	10	1.07	.01	4.5	1.18	N	15	.200	150	N
GC279250	.020	1.00	7	--	.05	--	.80	30	25	.200	500	N
GC191750	.004	.70	7	--	<.01	--	1.80	N	13	.200	200	N
GC220050	.015	1.50	10	--	.01	--	2.10	N	13	.300	200	N
GC068650	--	1.00	7	--	.02	3.8	.82	N	15	.200	100	N
GC069050	.040	1.50	7	1.12	.04	2.5	1.00	N	18	.100	200	N
GC152350	.016	2.00	10	--	.18	--	1.00	70	17	.300	500	N
GC272150	.023	1.50	20	--	.09	--	1.90	50	32	.500	500	N
GC193250	.017	1.50	15	--	.08	--	.85	30	27	.500	150	N
GC271850	.084	1.00	15	--	.05	--	1.30	N	46	1.000	200	N
GC200450	.043	3.00	20	--	.05	--	1.90	50	33	.700	300	N
GC152450	.014	2.00	15	--	.19	--	.80	30	26	.700	200	N
GC068050	--	1.00	10	.75	.01	3.5	1.37	<30	25	.500	150	N
GC277150	.011	1.00	7	--	.03	--	1.30	30	15	.200	200	N
GC068750	--	2.00	10	1.37	.04	5.4	.99	N	20	.500	500	N
GC261250	.031	2.00	20	--	.02	--	2.20	70	34	1.000	300	N
GC152150	.006	1.00	<5	--	.07	--	.15	50	17	.200	150	N
GC260450	.019	1.50	15	--	.06	--	1.60	30	22	.300	300	N
GC200350	.013	1.50	15	--	.02	--	1.90	50	15	.300	500	N
GC053550	.005	3.00	15	--	.05	<.5	1.60	30	35	.700	500	N
GC070950	--	1.50	10	1.42	.03	.9	1.85	N	15	.200	150	N
GC279650	.029	.70	7	--	.02	--	.70	30	15	.500	150	N
GC191850	.024	1.50	7	--	.05	--	1.60	N	18	.500	200	N
GC220150	.063	5.00	30	--	.04	--	3.30	50	24	.700	1,000	N
GC272650	.016	1.00	10	--	.02	--	.65	30	21	.500	300	N
GC192650	.017	1.50	10	--	.03	--	.90	N	14	.700	300	N
GC068550	--	1.00	10	.94	.03	.5	.76	N	20	.200	150	N
GC151950	.024	2.00	15	--	.51	--	.50	70	37	.500	100	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC220550	.70	N	N	10	.016	10	--	--	--	10	.2	--
GC054250	--	10	N	5	--	15	--	--	--	<5	.4	43
GC279350	.20	N	N	10	.020	20	--	--	--	5	.4	--
GC053650	--	<10	N	15	.065	15	--	--	--	10	.3	23
GC070850	1.00	<10	--	N	--	10	45	<.08	<1	<5	<.1	28
GC277350	.70	15	70	20	.040	30	--	--	--	10	.2	--
GC277050	.50	10	N	10	.016	20	--	--	--	7	1.1	--
GC261050	.50	15	--	10	.012	10	--	--	--	5	<.1	--
GC071750	.50	<10	--	10	--	10	75	<.08	<1	7	.7	33
GC192850	.20	15	N	30	.012	20	--	--	--	10	.4	--
GC152250	.30	20	70	5	.012	15	--	--	--	10	.4	--
GC260950	.50	10	--	30	.030	20	--	--	--	7	.7	--
GC193050	.20	10	N	15	.012	10	--	--	--	7	.6	--
GC068150	.50	<10	--	10	--	10	30	<.08	<1	N	<.1	33
GC153450	1.50	30	70	10	.044	15	--	--	--	15	.2	--
GC191950	.70	N	N	15	.016	N	--	--	--	N	.8	--
GC260350	.70	15	--	15	.020	15	--	--	--	5	.3	--
GC272550	.15	10	70	30	.008	20	--	--	--	10	.3	--
GC271950	.10	<10	--	5	.008	N	--	--	--	<5	<.1	--
GC260850	.15	20	--	20	.020	15	--	--	--	7	.5	--
GC053050	--	<10	--	5	.017	10	--	--	--	<5	<.1	--
GC261350	.70	15	--	30	.020	15	--	--	--	10	.2	44
GC071150	.70	<10	--	5	--	10	50	<.08	<1	5	.2	31
GC279250	.30	<10	N	15	.016	15	--	--	--	7	.6	--
GC191750	.70	15	N	5	.006	10	--	--	--	5	<.1	--
GC220050	.70	N	N	<5	.012	10	--	--	--	5	.2	--
GC068650	.10	<10	--	7	--	10	60	<.08	<1	<5	.6	39
GC069050	.30	10	--	5	--	15	55	<.08	<1	5	.4	39
GC152350	.70	20	70	5	.012	20	--	--	--	7	.5	--
GC272150	.70	N	70	20	.030	20	--	--	--	10	.5	--
GC193250	.20	20	N	20	.004	15	--	--	--	10	.5	--
GC271850	.50	<10	--	10	.024	30	--	--	--	5	.3	--
GC200450	1.00	20	N	20	.008	30	--	--	--	10	.5	--
GC152450	1.00	10	N	10	.016	10	--	--	--	10	.5	34
GC068050	.50	<10	N	7	--	15	55	<.08	<1	5	.2	--
GC277150	.30	10	N	7	.012	15	--	--	--	5	.2	--
GC068750	.30	N	--	15	--	15	70	<.08	2	7	.2	22
GC261250	.70	15	70	30	.030	15	--	--	--	10	.5	--
GC152150	.15	15	N	N	.006	10	--	--	--	7	.2	--
GC260450	.50	30	--	15	.020	20	--	--	--	7	.1	--
GC200350	1.00	30	N	15	.012	15	--	--	--	7	.2	--
GC053550	--	<10	N	20	.100	15	--	--	--	10	.7	22
GC070950	.50	<10	--	5	--	10	55	<.08	1	5	.2	26
GC279650	.30	10	N	7	.016	10	--	--	--	5	.2	--
GC191850	1.00	N	N	10	.012	N	--	--	--	5	.2	--
GC220150	2.00	20	70	5	.120	10	--	--	--	10	.3	--
GC272650	.30	10	N	10	.008	15	--	--	--	7	.5	--
GC192650	.70	N	N	15	.012	N	--	--	--	N	.1	--
GC068550	.20	<10	--	7	--	10	55	<.08	<1	5	.1	37
GC151950	.30	15	N	15	.008	15	--	--	--	10	.8	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC220550	--	70	.150	--	--	30	20	2.0	25	300
GC054250	--	50	.300	--	--	30	20	3.0	22	500
GC279350	--	30	.100	--	--	30	20	2.0	35	200
GC053650	--	700	.200	--	--	100	20	3.0	97	150
GC070850	.52	200	.150	--	1.24	20	15	2.0	14	200
GC277350	--	150	.300	--	--	70	50	5.0	45	200
GC277050	--	100	.300	--	--	30	30	3.0	30	200
GC261050	--	50	.300	--	--	20	50	5.0	15	500
GC071750	.52	100	.300	11.19	1.66	100	20	2.0	49	200
GC192850	--	100	.200	--	--	70	30	3.0	30	150
GC152250	--	50	.500	--	--	30	50	7.0	25	1,000
GC260950	--	200	.150	--	--	70	50	3.0	30	150
GC193050	--	70	.150	--	--	70	20	2.0	30	150
GC068150	.45	100	.100	3.94	1.31	30	10	1.0	15	200
GC153450	--	500	.500	--	--	50	50	7.0	75	500
GC191950	--	100	.100	--	--	50	N	N	40	200
GC260350	--	150	.150	--	--	30	30	5.0	25	150
GC272550	--	50	.500	--	--	70	50	5.0	40	500
GC271950	--	30	.100	--	--	20	10	1.5	20	200
GC260850	--	50	.200	--	--	30	30	3.0	35	200
GC053050	--	20	.200	--	--	20	10	1.0	22	500
GC261350	--	300	.300	--	--	70	50	5.0	30	150
GC071150	.88	100	.150	5.28	1.85	30	10	2.0	26	300
GC279250	--	70	.200	--	--	30	30	3.0	30	200
GC191750	--	150	.150	--	--	20	10	1.5	--	150
GC220050	--	150	.150	--	--	30	10	2.0	25	500
GC068650	1.03	20	.100	13.32	1.45	30	15	2.0	26	200
GC069050	.76	30	.200	10.25	2.98	30	15	2.0	30	300
GC152350	--	150	.300	--	--	30	30	5.0	50	1,000
GC272150	--	150	.300	--	--	70	30	5.0	35	300
GC193250	--	70	.300	--	--	70	30	3.0	25	200
GC271850	--	300	.150	--	--	50	20	2.0	55	150
GC200450	--	200	.300	--	--	100	30	3.0	55	200
GC152450	--	150	.200	--	--	50	20	3.0	50	300
GC068050	.42	300	.150	3.26	2.13	70	15	2.0	35	100
GC277150	--	70	.200	--	--	30	20	2.0	25	200
GC068750	2.66	100	.200	11.60	2.23	100	10	1.5	48	150
GC261250	--	150	.300	--	--	70	50	5.0	40	300
GC152150	--	20	.300	--	--	20	50	5.0	25	1,000
GC260450	--	100	.200	--	--	30	30	3.0	30	200
GC200350	--	100	.300	--	--	70	20	3.0	20	300
GC053550	--	700	.300	--	--	100	20	3.0	106	100
GC070950	1.20	70	2.000	--	1.89	30	10	1.5	26	500
GC279650	--	150	.150	--	--	30	20	3.0	20	200
GC191850	--	300	.150	--	--	70	20	2.0	25	100
GC220150	--	500	1.000	--	--	150	30	7.0	50	1,000
GC272650	--	100	.300	--	--	50	30	5.0	20	500
GC192650	--	300	.200	--	--	50	20	2.0	30	200
GC068550	.58	30	.200	9.42	1.70	50	15	2.0	25	200
GC151950	--	100	.300	--	--	50	30	5.0	25	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Coln.	Site and Soil Descriptions
GC071050	TX	JIM HOGG	26 52	98 37	73 2	CO RD 1017 32 MI N LA GLORIA; LIGHT BROWN SANDY SOIL
GC260750	TX	KAUFMAN	32 30	96 0	67 11	I-20 3.5 MI W FM 47 EXIT W OF MYRTLE SPRINGS; BLACK, CLAY AT 8 IN.
GC071350	TX	KENDALL	29 57	98 52	73 2	I-10 AT COMFORT EXIT; BLACK CLAY
GC053850	TX	KENEDY	27 12	97 49	70 5	US 77 AT SARITA; SANDY SOIL FROM DUNES
GC071450	TX	KERR	30 13	99 25	73 2	RT 27 8 MI N MOUNTAIN HOME; HEAVY BLACK CLAY
GC068250	TX	KING	33 37	99 25	73 1	US 82 7 MI W GUTHRIE; DARK RED CLAY
GC152750	TX	KINNEY	29 14	100 11	63 7	US 90 4 MI W CLINE; LIGHT, SHALLOW, 4 IN. TO LIMESTONE
GC068350	TX	KNOX	33 36	99 36	73 1	US 82 11 MI E BENJAMIN; DARK BROWN LOAM
GC068850	TX	LAMPASAS	31 4	98 5	73 1	US 190 7 MI E LAMPASAS; SHALLOW LITHOSOL
GC069150	TX	LEON	31 19	95 50	73 1	RT 7 10 MI E CENTERVILLE; LIGHT BROWN SANDY SOIL
GC054050	TX	LIVE OAK	28 18	97 54	70 5	RT 59 BY NEUCES RIVER; SANDY SILT
GC192150	TX	LOVING	31 54	104 3	65 6	US 285 7 MI S NEW MEXICO STATE LINE; TAN DESERT SILT
GC054350	TX	MATAGORDA	29 4	96 58	70 5	RT 60 10 MI N BAY CITY; LIGHT COLORED SANDY SOIL
GC052950	TX	MAVERICK	28 48	100 32	70 5	US 277 8 MI N EAGLE PASS; SILTY SOIL
GC193150	TX	MC LENNAN	31 38	97 4	65 6	US 84 5 MI E WACO; DARK ALLUVIAL LOAM
GC152650	TX	MEDINA	28 27	98 33	73 2	RT 16 1 MI S TILDEN; BLACK CLAY
GC071550	TX	MENARD	29 19	99 17	63 7	US 90 7 MI W D'HANIS; DARK CLAYEY WITH LIMESTONE FRAGMENTS
GC279750	TX	MIDLAND	30 53	99 47	73 2	US 83 3 MI S MENARD; DARK PRAIRIE SOIL
GC192950	TX	MILLS	31 56	102 10	69 1	US 80 MIDLAND AIRPORT RD; RED-BROWN
GC192950	TX	MITCHELL	31 24	99 28	65 6	US 84 3 MI E GOLDTHWAITE; LITHOSOL OVER LIMESTONE
GC279550	TX	MONTGOMERY	32 22	100 57	69 1	I-20 AT LAKE W COLORADO CITY; RED SOIL
GC152050	TX	NACOGDOCHES	29 56	95 1	63 7	US 90 30 MI E HOUSTON IN DECID. FOREST; DARK HARD GUMBO
GC193450	TX	NACOGDOCHES	31 37	94 48	65 6	RT 21 5 MI W NACOGDOCHES; TAN SAND
GC200650	TX	OLDHAM	35 15	102 44	65 7	US 66 1 MI W ADRIAN; DARK BROWN PRAIRIE SOIL
GC272350	TX	PALO PINTO	32 45	98 34	69 1	US 180 18 MI W PALO PINTO; BROWN LOAM OVER LIMESTONE
GC272450	TX	PARKER	32 45	97 49	69 1	US 180 1 MI E WEATHERFORD; BROWN LOAM OVER LIMESTONE
GC192350	TX	PECOS	30 53	102 50	65 6	US 67 1 MI NE FT. STOCKTON; GRAY SILT WITH LIMESTONE FRAGMENTS
GC220650	TX	PECOS	30 11	102 47	66 3	US 90 24 MI W SANDERSON; LIGHT BROWN ROCKY LOAM
GC200550	TX	POTTER	35 9	102 4	65 7	US 66 5 MI W AMARILLO; DARK BROWN PRAIRIE SOIL
GC260550	TX	POTTER	35 30	102 0	67 11	US 87-287 47 MI S DUMAS SAND DUNE AREA; FREE SAND
GC153350	TX	PRESIDIO	30 19	104 6	63 7	US 90 20 MI E VALENTINE; PEBBLY LOAM FROM WEATHERED BASALT & RHYOLITE
GC192550	TX	REAGAN	31 6	101 19	65 6	US 67 5 MI E BIG LAKE; MEDIUM BROWN LOAM
GC192250	TX	REEVES	31 21	103 29	65 6	US 285 3 MI S PECOS; SOIL IN SALT FLAT
GC192750	TX	RUNNELS	31 37	100 0	65 6	US 67 3 MI W BALLINGER; DARK BROWN PRAIRIE PLOW ZONE
GC193550	TX	SAN AUGUSTINE	31 27	94 3	65 6	RT 21 5 MI E SAN AUGUSTINE; RED SAND
GC053950	TX	SAN PATRICIO	27 52	97 39	70 5	US 77 1 MI N JCT I-37; SANDY ALLUVIAL
GC272050	TX	SCURRY	32 43	100 59	69 1	US 180 6 MI W SNYDER; RED LOAM OVER SANDSTONE
GC272250	TX	SHACKELFORD	32 44	99 25	69 1	US 180 6 MI W ALBANY; DARK BROWN LOAM OVER LIMESTONE
GC053450	TX	STARR	26 18	98 42	70 5	US 83 7 MI E RIO GRANDE CITY; LITHOSOL OVER CALCAREOUS CONGLOMERATE
GC277250	TX	SWISHER	34 32	101 44	69 1	RT 86 2 MI E TULIA; DARK BROWN LOAM OVER LIMESTONE
GC279450	TX	TAYLOR	32 28	100 0	69 1	I-20 2 MI E NOODLE EXIT; RED-BROWN SOIL
GC220750	TX	TERRELL	30 0	102 2	66 3	US 90 5 MI E DRYDEN; LIGHT BROWN LOAMY SOIL
GC272750	TX	TITUS	33 10	94 59	69 1	I-30 1 MI W MT. PLEASANT; RED CLAY
GC071650	TX	TOM GREEN	31 20	100 10	73 2	US 87 AT S LIMIT OF VANCOURT; BLACK SILTY LOAM
GC069250	TX	TRINITY	31 1	95 1	73 1	US 287 2 MI E WOODLAKE; DARK HEAVY CLAY
GC069350	TX	TYLER	30 50	94 18	73 1	US 190 10 MI E WOODVILLE; DARK GRAY PLASTIC CLAY
GC260650	TX	UPSHUR	32 25	94 50	67 11	I-20 16 MI W US 259 JCT; YELLOW-BROWN 8-IN. DEPTH, SURFACE SANDY
GC192450	TX	UPTON	31 7	102 8	65 6	US 67 3 MI E MCCAMEY; TAN SILT
GC052850	TX	VAL VERDE	29 20	100 51	70 5	US 277 4 MI SE DEL RIO; SOIL FROM ARROYO TERRACE
GC152850	TX	VAL VERDE	29 26	100 55	63 7	US 90 1 MI W DEL RIO; LIGHT, SHALLOW, LIMY

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC071050	1.50	1.7	N	300	N	<.5	3.3	.13	N	N	50.0	5.0
GC260750	3.00	4.8	30	300	1.5	--	--	.35	N	7	30.0	15.0
GC071350	10.00	11.7	20	500	2.0	2.3	3.2	1.24	<150	7	70.0	20.0
GC053850	2.00	10.0	<20	300	N	--	.2	.07	N	N	5.0	5.0
GC071450	7.00	8.7	30	700	1.0	2.8	4.7	1.98	<150	7	50.0	30.0
GC068250	10.00	5.0	50	700	2.0	.5	1.0	.34	<150	7	100.0	20.0
GC152750	3.00	8.4	N	300	N	--	--	14.00	--	N	100.0	15.0
GC068350	3.00	1.5	50	300	N	<.5	.4	.14	<150	5	20.0	7.0
GC068850	3.00	4.3	20	150	N	<.5	7.9	18.10	N	5	30.0	15.0
GC069150	.50	1.9	20	200	N	1.1	.4	.07	<150	N	10.0	5.0
GC054050	5.00	6.0	30	300	N	--	.6	.50	N	3	15.0	7.0
GC192150	7.00	9.2	N	700	N	--	--	9.30	N	15	70.0	30.0
GC054350	2.00	4.3	20	150	N	--	.5	.07	N	<3	20.0	10.0
GC052950	5.00	4.6	20	500	<1.0	--	3.3	10.00	N	3	15.0	5.0
GC193150	1.50	5.2	30	500	N	--	--	.55	N	7	20.0	10.0
GC071250	10.00	8.1	50	700	1.5	2.1	2.4	4.88	--	5	30.0	15.0
GC152650	3.00	10.0	N	300	N	--	--	9.40	--	N	70.0	20.0
GC071550	5.00	8.0	30	300	1.5	1.3	4.9	2.39	N	7	20.0	15.0
GC279750	1.50	5.3	30	200	N	--	--	3.70	N	N	20.0	20.0
GC192950	5.00	13.0	30	300	N	--	--	3.20	N	10	70.0	20.0
GC279550	2.00	5.8	30	500	N	--	--	.55	N	3	15.0	10.0
GC152050	7.00	6.7	30	500	2.0	--	--	.60	N	7	150.0	30.0
GC193450	.50	1.7	N	150	N	--	--	.10	N	N	5.0	3.0
GC200650	7.00	3.8	70	700	1.5	--	--	1.80	N	10	50.0	30.0
GC272350	5.00	9.2	30	500	1.5	--	--	.65	N	10	70.0	20.0
GC272450	.70	11.0	<20	150	N	--	--	13.00	N	N	20.0	7.0
GC192350	1.50	6.7	N	500	N	--	--	30.00	--	N	20.0	7.0
GC220650	2.00	4.5	N	150	N	--	--	22.00	--	N	20.0	7.0
GC200550	7.00	8.8	50	500	1.5	--	--	.85	N	15	70.0	30.0
GC260550	3.00	4.2	<20	300	N	--	--	.70	N	3	20.0	7.0
GC153350	7.00	11.0	N	1,000	3.0	--	--	2.20	--	7	100.0	30.0
GC192550	7.00	8.8	N	500	N	--	--	10.00	N	10	70.0	20.0
GC192250	1.00	5.0	N	100	N	--	--	16.00	N	N	10.0	10.0
GC192750	5.00	11.3	30	300	N	--	--	1.00	N	7	50.0	15.0
GC193550	1.50	2.9	N	200	N	--	--	.20	N	10	50.0	10.0
GC053950	5.00	4.2	20	500	N	--	.3	.40	N	3	15.0	7.0
GC272050	2.00	4.4	20	300	1.0	--	--	1.20	N	3	20.0	15.0
GC272250	7.00	11.0	30	700	1.5	--	--	1.20	150	10	70.0	30.0
GC053450	5.00	11.0	20	1,000	1.0	--	4.5	13.00	N	7	10.0	7.0
GC272250	7.00	6.6	30	500	1.0	--	--	1.40	150	7	30.0	30.0
GC279450	3.00	6.1	50	300	N	--	--	4.30	N	5	20.0	20.0
GC220750	3.00	11.0	N	150	N	--	--	26.00	--	N	20.0	10.0
GC272750	>10.00	7.6	30	700	1.5	--	--	.07	N	15	100.0	50.0
GC071650	5.00	2.0	30	300	N	1.4	3.8	6.84	N	5	70.0	20.0
GC069250	2.00	2.2	<20	500	N	<.5	1.1	.32	N	N	15.0	5.0
GC069350	10.00	6.8	30	300	3.0	.7	1.8	1.93	N	15	70.0	30.0
GC260650	1.50	1.1	<20	300	N	--	--	.10	N	N	7.0	7.0
GC192450	3.00	6.9	N	200	N	--	--	18.00	N	N	30.0	15.0
GC052850	7.00	9.7	50	200	<1.0	--	5.6	16.00	N	7	70.0	7.0
GC152850	1.50	6.2	N	500	N	--	--	23.00	--	N	30.0	7.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC071050	--	.20	5	1.04	.02	<.5	.89	N	5	.050	30	N
GC260750	.015	2.00	20	--	.05	--	.85	50	29	.500	150	N
GC071350	--	5.00	20	1.06	.04	8.0	1.38	50	30	.500	500	N
GC053850	.005	.30	N	--	.04	<.5	.70	N	8	.070	100	N
GC071450	.040	3.00	10	1.47	.03	8.3	1.64	30	20	.700	700	N
GC068250	.040	3.00	20	1.49	.02	1.5	1.94	50	32	1.000	500	N
GC152750	.018	1.50	7	--	.10	--	.85	30	14	.500	200	N
GC068350	--	1.00	5	.89	.02	1.1	1.17	50	10	.200	150	N
GC068850	--	1.00	7	.66	.02	<.5	.81	N	10	.500	300	N
GC069150	--	.30	N	.97	.02	<.5	.43	<30	7	.020	50	N
GC054050	.009	1.50	7	--	.02	<.5	1.00	30	16	.200	200	N
GC192150	.031	2.00	15	--	.04	--	1.70	N	27	1.500	500	N
GC054350	.003	1.00	5	--	.07	<.5	.50	30	11	.100	200	N
GC052950	.021	1.50	10	--	.05	<.5	1.10	N	14	.200	200	N
GC193150	.001	1.00	5	--	.06	--	.80	30	13	.150	150	N
GC071250	--	2.00	20	1.31	.02	6.2	1.39	<30	20	.700	200	N
GC152650	.019	1.50	15	--	.06	--	1.10	30	19	1.000	300	N
GC071550	--	3.00	10	1.14	.02	4.3	1.54	50	19	.700	500	N
GC279750	.012	.70	7	--	.03	--	.70	50	15	.300	150	N
GC192950	.018	2.00	20	--	.50	--	1.20	30	27	.700	300	N
GC279550	.021	.70	7	--	.03	--	1.00	30	23	.500	150	N
GC152050	.032	3.00	20	--	.14	--	.60	50	38	.700	150	N
GC193450	<.001	.30	N	--	.04	--	.10	N	6	.020	200	N
GC200650	.042	2.00	20	--	.04	--	1.70	30	25	.700	500	N
GC272350	.069	2.00	20	--	.03	--	1.30	70	34	.500	500	N
GC272450	.004	.70	5	--	.04	--	.55	N	6	.100	300	N
GC192350	.082	.70	N	--	.03	--	.50	N	15	.700	150	N
GC220650	.014	1.00	7	--	.06	--	.50	30	10	.300	150	N
GC200550	.028	3.00	20	--	.40	--	1.80	30	31	.700	300	N
GC260550	.014	.70	7	--	.03	--	1.50	N	8	.150	150	N
GC153350	.047	5.00	30	--	.10	--	2.50	70	41	1.000	500	N
GC192550	.010	2.00	15	--	.08	--	1.50	N	24	1.000	500	N
GC192250	.088	.30	N	--	.02	--	.40	N	32	2.000	100	N
GC192750	.007	1.50	15	--	.03	--	1.10	30	22	.700	300	N
GC193550	<.001	3.00	5	--	.06	--	.20	50	11	.100	300	N
GC053950	.018	.70	7	--	.02	<.5	.90	30	14	.150	200	N
GC272050	.012	.70	10	--	.03	--	1.20	N	21	.300	300	N
GC272250	.040	3.00	20	--	.03	--	1.70	70	36	.700	700	N
GC053450	.018	.15	10	--	.04	5.2	1.20	N	16	.300	200	N
GC277250	.059	2.00	15	--	.03	--	1.70	70	26	.500	300	N
GC279450	.021	1.00	10	--	.02	--	1.20	30	29	.700	200	N
GC220750	.015	1.00	7	--	.09	--	.45	N	12	.700	150	N
GC272750	.039	3.00	30	--	.04	--	1.30	70	37	.700	100	N
GC071650	--	2.00	10	1.05	.01	5.4	1.58	<30	17	.700	300	N
GC069250	--	.50	5	1.03	.03	<.5	1.41	N	5	.050	50	N
GC069350	.050	3.00	15	1.28	.03	<.5	.89	70	17	.500	500	N
GC260650	.003	.30	<5	--	.08	--	1.10	N	8	.030	150	N
GC192450	.007	1.00	7	--	.03	--	.90	N	13	.700	300	N
GC052850	.028	2.00	10	--	.02	<.5	1.00	30	23	.500	500	N
GC152850	.013	.70	7	--	.06	--	.70	N	12	.700	200	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC071050	.30	N	--	N	--	N	30	<.08	<1	N	.1	39
GC260750	.70	20	--	15	.008	20	--	--	--	7	.5	--
GC071350	.30	<10	70	15	--	30	80	<.08	<1	10	.9	27
GC053850	--	<10	--	<5	.022	10	--	--	--	N	<.1	44
GC071450	.30	<10	N	20	--	15	100	<.08	2	7	.1	27
GC068250	1.00	10	N	20	--	15	90	<.08	<1	10	.1	32
GC152750	.70	N	--	10	.024	15	--	--	--	7	.4	--
GC068350	.30	<10	N	5	--	N	50	<.08	<1	5	.3	37
GC068850	.30	N	--	10	--	15	45	<.08	<1	5	.2	18
GC069150	.05	10	N	N	--	N	20	<.08	<1	N	.4	44
GC054050	--	<10	N	5	.026	10	--	--	--	<5	.2	38
GC192150	1.00	N	N	30	.016	N	--	--	--	15	.2	--
GC054350	--	<10	N	<5	.013	10	--	--	--	<5	.3	43
GC052950	--	15	--	<5	.044	10	--	--	--	<5	.3	27
GC193150	.30	15	N	10	.006	10	--	--	--	N	.5	--
GC071250	1.50	<10	N	7	--	15	65	<.08	<1	7	.3	26
GC152650	.70	N	N	10	.030	10	--	--	--	7	.5	--
GC071550	.50	<10	N	15	--	20	90	<.08	<1	10	<.1	27
GC279750	.30	10	N	7	.008	15	--	--	--	<5	.1	--
GC192950	.70	15	N	20	.024	30	--	--	--	10	.5	--
GC279550	.30	<10	N	7	.008	10	--	--	--	5	.2	--
GC152050	.30	15	N	15	.012	15	--	--	--	15	.5	--
GC193450	N	15	N	N	.004	N	--	--	--	N	<.1	--
GC200650	1.00	20	N	20	.016	30	--	--	--	10	.2	--
GC272350	.30	10	70	30	.016	15	--	--	--	10	.4	--
GC272450	.20	N	--	5	.008	15	--	--	--	N	.2	--
GC192350	.70	N	N	N	.016	N	--	--	--	N	.3	--
GC220650	.50	N	N	7	.030	N	--	--	--	N	.6	--
GC200550	1.00	20	N	20	.012	30	--	--	--	10	.4	--
GC260550	.70	15	--	7	.008	15	--	--	--	N	.3	--
GC153350	2.00	30	N	15	.024	20	--	--	--	15	.1	--
GC192550	.70	N	N	20	.016	N	--	--	--	15	.3	--
GC192250	2.00	N	N	N	.008	N	--	--	--	N	.2	--
GC192750	.50	20	N	15	.012	15	--	--	--	7	.7	--
GC193550	N	15	N	30	.012	N	--	--	--	7	.5	--
GC053950	--	10	N	<5	.022	15	--	--	--	N	.1	42
GC272050	.50	<10	--	7	.008	10	--	--	--	5	.2	--
GC272250	.50	10	70	30	.030	30	--	--	--	15	.7	--
GC053450	--	10	--	5	.035	20	--	--	--	<5	.2	26
GC272250	.50	10	70	15	.030	20	--	--	--	7	.2	--
GC279450	.50	N	N	10	.020	30	--	--	--	7	.1	--
GC220750	.50	N	N	10	.050	N	--	--	--	N	.5	--
GC272750	.50	10	70	30	.008	15	--	--	--	15	.7	--
GC071650	.70	<10	N	10	--	15	70	<.08	<1	10	.4	27
GC069250	.70	10	--	N	--	15	45	<.08	<1	N	<.1	38
GC069350	.20	15	N	20	--	20	70	<.08	<1	15	.3	31
GC260650	.15	<10	--	<5	.004	15	--	--	--	N	<.1	--
GC192450	1.00	N	N	7	.016	N	--	--	--	N	.3	--
GC052850	--	20	N	10	.052	10	--	--	--	7	.5	19
GC152850	.70	N	--	N	.024	20	--	--	--	N	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC071050	.77	30	.070	--	.78	7	N	1.0	10	200
GC260750	--	100	.300	--	--	70	50	3.0	15	200
GC071350	1.12	70	.200	20.52	1.25	150	20	3.0	72	100
GC053850	--	30	.070	--	--	10	N	1.0	11	200
GC071450	2.13	70	.300	11.99	2.57	50	20	2.0	63	200
GC068250	1.56	150	.500	5.57	2.14	100	30	3.0	51	200
GC152750	--	200	.200	--	--	50	20	3.0	50	200
GC068350	.28	30	.150	9.13	1.17	30	20	2.0	18	300
GC068850	1.15	70	.150	5.38	3.27	50	20	2.0	34	100
GC069150	<.10	10	.200	3.98	2.18	15	10	2.0	7	500
GC054050	--	70	.200	--	--	30	10	2.0	32	150
GC192150	--	300	.200	--	--	100	20	3.0	45	150
GC054350	--	20	.200	--	--	30	15	3.0	14	200
GC052950	--	200	.200	--	--	30	15	2.0	52	100
GC193150	--	50	.100	--	--	30	20	2.0	25	200
GC071250	1.74	300	.200	15.76	1.96	70	50	7.0	54	100
GC152650	--	100	.200	--	--	30	20	2.0	50	150
GC071550	1.02	100	.300	12.06	2.91	70	30	3.0	39	200
GC279750	--	100	.100	--	--	20	10	3.0	25	200
GC192950	--	100	.150	--	--	70	20	3.0	60	150
GC279550	--	50	.150	--	--	30	15	2.0	30	300
GC152050	--	150	.300	--	--	100	30	5.0	50	200
GC193450	--	N	.100	--	--	10	10	1.0	--	150
GC200650	--	150	.300	--	--	100	30	5.0	50	300
GC272350	--	100	.300	--	--	70	30	5.0	35	300
GC272450	--	150	.070	--	--	30	15	2.0	15	100
GC192350	--	700	.070	--	--	50	N	N	25	50
GC220650	--	150	.100	--	--	20	10	1.5	75	150
GC200550	--	150	.300	--	--	100	30	5.0	45	200
GC260550	--	70	.100	--	--	20	15	3.0	15	200
GC153350	--	500	.500	--	--	70	50	--	75	500
GC192550	--	200	.200	--	--	70	20	2.0	45	200
GC192250	--	3,000	.050	--	--	30	N	N	20	N
GC192750	--	70	.200	--	--	50	30	3.0	30	200
GC193550	--	15	.150	--	--	70	30	3.0	30	200
GC053950	--	100	.200	--	--	20	30	3.0	21	150
GC272050	--	100	.200	--	--	30	20	3.0	20	300
GC272250	--	100	.300	--	--	100	30	5.0	55	200
GC053450	--	150	.150	--	--	30	20	2.0	61	200
GC277250	--	100	.300	--	--	50	30	3.0	35	300
GC279450	--	200	.150	--	--	50	20	3.0	50	150
GC220750	--	500	.070	--	--	70	10	1.5	25	100
GC272750	--	150	.300	--	--	200	30	3.0	55	150
GC071650	.63	150	.200	7.61	2.53	70	20	3.0	66	200
GC069250	.55	70	.200	4.09	2.83	15	10	2.0	12	500
GC069350	.63	100	.300	13.72	2.72	150	50	5.0	64	200
GC260650	--	30	.100	--	--	7	10	1.5	5	150
GC192450	--	300	.100	--	--	50	N	N	30	100
GC052850	--	300	.200	--	--	50	20	3.0	79	200
GC152850	--	200	.100	--	--	20	15	2.0	50	100

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC220850	TX	VAL VERDE	29 43	101 22	66 3	US 90 1.6 MI NW BRIDGE OVER PECOS RIVER; LIGHT BROWN LOAMY SOIL
GC279850	TX	WARD	31 37	102 53	69 1	CO RD 441 AT MONAHANS SANDHILLS; SAND
GC053150	TX	WEBB	27 58	99 32	70 5	US 83 37 MI N LAREDO; SOIL OVER SANDSTONE
GC053250	TX	WEBB	27 25	99 28	70 5	US 83 8 MI S LAREDO; LITHOSOL OVER SANDSTONE
GC261150	TX	WICHITA	33 50	98 45	67 11	US 287 4 MI W ELECTRA; RED-BROWN SILT SOME CLAY 8-IN. DEPTH
GC053750	TX	WILLACY	26 32	97 40	70 5	US 77 4 MI N RAYMONDVILLE; DARK ALLUVIAL CLAY
GC068450	TX	YOUNG	33 22	98 46	73 1	RT 199 2 MI W OLNEY; BLACK LOAM
GC053350	TX	ZAPATA	26 48	99 9	70 5	US 83 10 MI S ZAPATA; FINE SANDY SOIL
GC034150	UT	BOX ELDER	41 22	112 2	65 8	US 89-91 2 MI S WILLARD; BROWN-GRAY SILT ON ALLUVIAL GRAVEL FAN
GC034250	UT	BOX ELDER	41 51	112 27	65 8	I-80N 19 MI NW TREMARTON; GRAY SILT IN SILTY LIMESTONE DEBRIS
GC079050	UT	CARBON	39 44	110 52	73 9	US 50 AT CASTLE GATE; HIGHLY ORGANIC LITHOSOL
GC033850	UT	DUCHESNE	40 11	110 34	65 8	US 40 8 MI W DUCHESNE; GRAY-TAN B HORIZON OF SILTY GRAVEL COLLUVIUM
GC185650	UT	DUCHESNE	40 10	110 2	65 6	US 40 AT MYTON; RED-BROWN SILT WITH ABUNDANT ROUNDED ROCK FRAGMENTS
GC015950	UT	EMERY	38 59	110 15	62 5	I-70 5 MI W GREEN RIVER; CLAY SOIL
GC066350	UT	EMERY	38 56	110 27	72 9	I-80 REST STOP 19 MI W GREEN RIVER; REDDISH-BROWN SILT
GC073850	UT	EMERY	38 40	110 39	73 5	CO RD 6 MI W JCT RT 24, 20 MI N HANKSVILLE; LIGHT BROWN LOAM
GC079150	UT	EMERY	39 15	110 21	73 9	US 50 23 MI N GREEN RIVER; GRITTY LOAM SOIL
GC025350	UT	GARFIELD	37 51	110 40	71 6	OLD STARR RANCH AT FOOT OF MT HILLERS, HENRY MTS; LITHOSOL
GC071950	UT	GARFIELD	37 52	112 26	73 2	US 89 5 MI N PANGUITCH; LIGHT BROWN SILT
GC072050	UT	GARFIELD	37 40	111 54	73 2	RT 12 10 MI NE HENRIEVILLE; CLAYEY COLLUVIUM FROM CRETACEOUS SHALE
GC010951	UT	GRAND	38 52	109 50	64 9	2 MI S CRESCENT JUNCTION; ALLUVIAL SOIL
GC016050	UT	GRAND	39 10	109 9	62 5	US 6-50 6 MI W UTAH-COLO LINE; SANDY SOIL
GC066450	UT	GRAND	38 56	109 41	72 9	JCT US 6-50 & US 163; BROWN SILT
GC045450	UT	IRON	37 52	112 48	67 2	US 91 1 MI N PAROWAN; ORANGE-BROWN SANDY, ON GRAVEL
GC072150	UT	KANE	37 13	112 41	73 2	JCT US 89 & RT 15 AT MT CARMEL JCT; SANDY COLLUVIAL SOIL
GC180650	UT	KANE	37 10	112 8	64 7	US 89 45 MI NW PAGE, ARIZ; SAND
GC013651	UT	MILLARD	39 10	112 36	64 8	SITE NOT RECORDED; 8-16 IN. BELOW SURFACE
GC015150	UT	MILLARD	38 37	112 40	62 8	SITE AND SOIL DESCRIPTION NOT RECORDED
GC015250	UT	MILLARD	39 15	113 0	62 8	US 6 21.6 MI W DELTA; ON VALLEY FILL
GC015350	UT	MILLARD	39 7	113 45	62 8	US 6 69 MI W DELTA; AEOLIAN SAND TOP SOIL
GC065950	UT	MILLARD	39 6	112 57	72 9	US 50-6 2 MI NW SEVIER DRY LAKE; LIGHT BROWN SILT, HIGH CARBONATE
GC066050	UT	MILLARD	39 22	112 30	72 9	RT 26 5 MI E DELTA; LIGHT BROWN SILT ON ALLUVIUM
GC066150	UT	MILLARD	39 2	112 3	72 9	RT 630 AT JCT RD TO MAPLE GROVE CAMPGROUND; BROWN SILT WITH SANDSTONE
GC081550	UT	MILLARD	39 23	113 18	74 9	ANTELOPE SPRING, HOUSE RANGE, 25 MI W DELTA; DRY COLLUVIAL SOIL
GC185950	UT	MORGAN	41 10	111 50	65 6	US 305 15 MI SE OGDEN NEAR COTTENWOOD CREEK; BROWN SILT 6-IN. DEPTH
GC013150	UT	RICH	41 30	111 15	64 8	SITE NOT RECORDED; 0-32 IN. BELOW SURFACE
GC034050	UT	SALT LAKE	40 45	111 44	65 8	US 40 1 MI W JCT RT 239; BROWNISH GRAY SILTY CLAY COLLUVIAL SOIL
GC240050	UT	SALT LAKE	40 45	112 10	66 7	I-80 10 MI W SALT LAKE; SOIL NOT DESCRIBED
GC015650	UT	SAN JUAN	37 52	109 15	62 5	US 160 7 MI SE MOAB; LOESS ON ALLUVIUM
GC080050	UT	SAN JUAN	37 17	109 33	73 10	US 163 AT BLUFF; LITHOSOL ON SANDSTONE
GC015050	UT	SEVIER	38 31	111 52	62 8	RT 24 16 MI E FREMONT JCT; 8 IN. OVER VOLCANIC ROCK
GC066250	UT	SEVIER	38 47	111 21	72 9	I-70 2 MI E FREMONT JCT; LIGHT BROWN WEAK ORGANIC, MESOZOIC SS & SH
GC071850	UT	SEVIER	38 34	112 15	73 2	US 89 36 MI S SALINA; DARK ORGANIC OVER ANDESITE
GC263150	UT	SUMMIT	40 52	111 15	68 7	I 80 2 MI S RT 133 EXIT NEAR STREAM BED; BLACK ORGANIC ALLUVIUM
GC240150	UT	TOOELE	40 38	112 30	66 7	I-80 AT GRANTSVILLE; SOIL NOT DESCRIBED
GC240250	UT	TOOELE	40 44	113 11	66 7	I-80 ABOUT 45 MI E WENDOVER; SOIL NOT DESCRIBED
GC013051	UT	UINTAH	40 35	109 23	64 8	SITE NOT RECORDED; 4-8 IN. BELOW SURFACE
GC078950	UT	UTAH	40 3	111 35	73 9	US 50 6 MI E SPANISH FORK; DARK BROWN LOAM & LITHOSOL
GC033950	UT	WASATCH	40 21	111 17	65 8	US 40 12 MI SE HEBER; MED BROWN COLLUVIAL SANDY GRAVEL
GC185750	UT	WASATCH	40 10	110 54	65 6	US 40 2 MI W FRUITLAND; RED-BROWN CLAYEY SILT AND SAND

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC220850	3.00	7.0	N	200	N	--	--	17.00	--	3	30.0	7.0
GC279850	.50	1.6	N	200	N	--	--	1.00	N	N	3.0	3.0
GC053150	2.00	6.4	30	300	N	--	.3	.10	N	5	15.0	3.0
GC053250	2.00	11.0	30	300	<1.0	--	.2	.40	<150	7	15.0	5.0
GC261150	3.00	4.7	30	700	1.5	--	--	4.60	N	7	30.0	15.0
GC053750	7.00	6.2	30	500	1.5	--	.7	1.20	N	7	30.0	20.0
GC068450	3.00	3.7	20	300	1.5	--	.9	.26	<150	5	70.0	10.0
GC053350	7.00	4.2	20	500	1.0	<.5	.3	1.20	N	3	10.0	5.0
GC034150	7.00	4.0	N	1,000	5.0	--	--	.80	300	10	20.0	20.0
GC034250	5.00	5.3	70	500	N	--	--	7.20	--	10	70.0	30.0
GC079050	3.00	2.9	30	200	N	<.5	8.4	.93	N	<3	30.0	15.0
GC033850	3.00	7.5	N	200	N	--	--	16.00	--	5	30.0	15.0
GC185650	1.50	6.5	70	200	N	--	--	2.14	N	5	15.0	20.0
GC015950	7.00	--	70	300	N	--	--	7.20	--	7	70.0	20.0
GC066350	3.00	7.6	20	300	N	1.3	5.9	16.05	N	5	30.0	20.0
GC073850	3.00	20.2	30	1,000	N	<.5	1.6	4.54	--	N	30.0	20.0
GC079150	3.00	6.7	20	300	N	<.5	3.0	9.44	--	<3	30.0	10.0
GC025350	5.00	3.4	50	1,000	N	.8	1.7	1.20	N	5	150.0	50.0
GC071950	>10.00	3.6	<20	1,000	1.5	<.5	.6	3.32	--	15	100.0	20.0
GC072050	7.00	19.3	20	500	1.5	.6	3.1	5.56	--	5	50.0	15.0
GC010951	3.00	12.0	N	200	N	--	--	5.90	N	5	50.0	15.0
GC016050	7.00	--	50	500	1.5	--	--	5.10	N	10	50.0	30.0
GC066450	5.00	5.9	20	1,000	N	<.5	1.2	2.50	N	<3	50.0	10.0
GC045450	1.50	7.5	<20	150	N	--	--	11.00	N	3	30.0	15.0
GC072150	5.00	3.7	70	300	N	1.1	6.4	19.17	--	5	30.0	15.0
GC180650	3.00	--	50	300	N	--	--	.56	N	7	30.0	7.0
GC013651	5.00	7.1	N	500	N	--	--	7.50	N	5	30.0	15.0
GC015150	>10.00	--	N	1,000	2.0	--	--	2.00	150	15	150.0	30.0
GC015250	7.00	--	30	500	N	--	--	16.00	--	5	50.0	20.0
GC015350	3.00	--	N	300	N	--	--	11.00	--	5	30.0	15.0
GC065950	7.00	4.4	<20	300	N	1.1	4.5	15.27	--	<3	30.0	10.0
GC066050	5.00	2.7	<20	300	N	.5	3.1	8.96	--	5	30.0	20.0
GC066150	2.00	4.7	<20	300	N	1.4	5.6	15.57	N	5	30.0	15.0
GC081550	3.00	3.8	20	300	N	2.3	6.8	18.26	N	5	50.0	15.0
GC185950	1.50	8.9	70	300	N	--	--	1.43	N	7	30.0	30.0
GC013150	7.00	6.4	N	300	N	--	--	7.50	N	N	70.0	30.0
GC034050	7.00	19.0	100	500	1.5	--	--	2.60	N	15	50.0	50.0
GC240050	2.00	7.0	30	300	N	--	--	.16	--	7	30.0	30.0
GC015650	7.00	--	50	500	1.5	--	--	.40	N	7	30.0	30.0
GC080050	2.00	1.9	20	500	N	<.5	1.5	2.19	N	N	15.0	15.0
GC015050	7.00	--	N	1,000	2.0	.8	2.0	1.70	150	15	50.0	70.0
GC066250	3.00	4.4	30	300	N	.7	10.0	5.36	--	5	50.0	30.0
GC071850	10.00	1.5	20	1,500	2.0	--	--	6.38	--	7	30.0	50.0
GC263150	2.00	48.0	20	300	N	--	--	9.00	N	3	30.0	100.0
GC240150	3.00	9.3	30	500	N	--	--	3.81	150	10	30.0	30.0
GC240250	1.50	6.2	30	300	N	--	--	.12	--	3	15.0	15.0
GC013051	2.00	6.3	30	300	N	--	--	.75	N	5	50.0	20.0
GC078950	5.00	12.0	50	500	2.0	<.5	2.2	2.16	<150	7	100.0	50.0
GC033950	2.00	3.9	70	300	N	--	--	.30	N	5	20.0	10.0
GC185750	3.00	5.0	150	150	N	--	--	6.79	--	7	30.0	50.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC220850	.011	1.50	15	--	.08	--	.95	30	13	.500	200	N
GC279850	.010	.15	N	--	.12	--	.47	N	11	.150	30	N
GC053150	.009	1.00	5	--	.02	<.5	.60	N	14	.100	100	N
GC053250	.017	3.00	10	--	.05	<.5	.70	30	25	.200	100	N
GC261150	.020	2.00	15	--	.05	--	1.20	70	25	.700	500	N
GC053750	.032	2.00	15	--	.04	<.5	1.80	30	24	.500	700	N
GC068450	--	1.00	5	1.22	.03	1.1	.91	<30	20	.200	300	N
GC053350	.003	.10	15	--	.03	<.5	1.20	30	19	.300	150	N
GC034150	.025	3.00	30	--	.02	--	3.70	100	24	.700	1,000	N
GC034250	.059	1.50	20	--	.04	--	2.10	30	37	1.000	700	N
GC079050	--	1.00	10	.93	.05	.6	.93	N	20	.300	200	N
GC033850	.073	1.00	15	--	.02	--	1.10	N	130	>10.000	500	N
GC185650	.025	1.50	15	--	.04	--	1.41	30	27	1.000	300	N
GC015950	--	1.50	20	--	--	--	1.90	N	--	1.500	200	N
GC066350	.040	1.00	10	.87	.02	2.6	1.36	N	20	2.000	500	N
GC073850	--	1.00	10	1.45	.03	1.2	1.24	N	15	.700	300	N
GC079150	.040	1.50	10	.88	.02	.9	.93	N	20	.700	200	N
GC025350	--	2.00	15	.94	.03	.6	2.08	N	20	1.000	500	N
GC071950	.050	10.00	30	1.35	.02	1.3	1.80	70	20	1.000	700	N
GC072050	--	1.50	15	.87	.04	<.5	1.76	<30	20	1.500	200	N
GC010951	.056	1.00	10	--	.07	--	1.90	N	29	.500	150	N
GC016050	--	2.00	30	--	--	--	2.00	30	--	1.000	200	N
GC066450	--	2.00	10	1.21	.02	<.5	1.59	N	15	1.000	200	N
GC045450	.069	.70	10	--	.06	--	.60	N	15	1.000	150	N
GC072150	.090	1.00	10	.80	.02	1.8	1.83	N	40	3.000	300	N
GC180650	--	1.50	10	--	--	--	2.20	50	--	.300	300	N
GC013651	.041	1.00	15	--	.05	--	2.10	50	38	.700	200	N
GC015150	--	5.00	30	--	--	--	2.50	70	--	1.500	700	N
GC015250	--	1.50	20	--	--	--	1.60	30	--	2.000	500	N
GC015350	--	1.00	15	--	--	--	1.30	N	--	2.000	200	N
GC065950	.040	1.00	15	.74	.01	1.7	1.29	N	25	1.000	200	N
GC066050	.060	2.00	20	.72	.01	1.2	1.29	N	30	2.000	200	N
GC066150	--	1.00	7	.71	.02	2.4	.82	N	15	1.500	500	N
GC081550	.090	1.50	10	.71	.03	3.3	1.52	<30	23	1.500	200	N
GC185950	.038	1.50	15	--	.04	--	1.49	30	24	1.000	300	N
GC013150	.016	.70	10	--	.04	--	1.20	N	20	1.000	150	N
GC034050	.090	3.00	30	--	.05	--	2.80	30	51	1.500	1,000	N
GC240050	.101	1.50	15	--	.09	--	1.42	N	81	3.000	300	N
GC015650	--	1.50	15	--	--	--	2.20	30	--	.500	300	N
GC080050	--	.70	5	.99	.01	.8	1.68	N	25	.700	200	N
GC015050	--	3.00	30	--	--	--	2.70	50	--	1.000	700	N
GC066250	.040	2.00	7	1.10	.02	1.3	1.60	N	15	1.000	100	N
GC071850	.050	3.00	20	.58	.03	1.1	1.64	<30	25	1.000	500	N
GC263150	.042	1.00	7	--	4.60	--	1.20	30	20	.500	300	N
GC240150	.044	2.00	30	--	.09	--	2.23	50	39	1.500	700	N
GC240250	.044	1.50	15	--	.03	--	1.41	30	41	3.000	300	N
GC013051	.026	1.00	10	--	.06	--	1.70	N	21	.300	150	N
GC078950	.040	3.00	15	1.21	.04	1.5	1.65	50	28	1.000	500	N
GC033950	.014	.70	10	--	.05	--	1.70	N	18	.300	300	N
GC185750	.104	1.50	30	--	.11	--	2.69	30	45	1.500	300	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC220850	.70	N	N	7	.020	10	--	--	--	7	.4	--
GC279850	.07	N	N	N	.008	N	--	--	--	N	.3	--
GC053150	--	<10	--	5	.022	15	--	--	--	<5	.1	42
GC053250	--	<10	N	7	.048	30	--	--	--	5	.6	37
GC261150	.70	15	70	20	.016	15	--	--	--	7	.2	--
GC053750	--	10	N	15	.052	15	--	--	--	7	.3	35
GC068450	.30	<10	N	7	--	<10	50	<.08	<1	5	.3	36
GC053350	--	<10	N	5	--	10	--	--	--	<5	.1	38
GC034150	2.00	50	150	15	.044	50	--	--	--	15	.2	--
GC034250	1.50	20	N	20	.024	30	--	--	--	10	.1	--
GC079050	.20	<10	--	5	--	20	45	<.08	<1	<5	.1	29
GC033850	1.50	N	N	10	.012	N	--	--	--	5	.1	--
GC185650	.50	N	N	10	.057	15	--	--	--	7	.1	--
GC015950	2.00	15	N	20	.044	30	--	--	--	7	.1	--
GC066350	.50	<10	--	10	--	15	50	<.08	<1	5	.3	19
GC073850	.30	<10	--	5	--	15	50	.11	<1	<5	.1	35
GC079150	.70	N	--	10	--	10	50	<.08	<1	<5	.2	29
GC025350	1.00	<10	--	10	--	15	55	.08	<1	20	.4	33
GC071950	1.50	<10	100	10	--	15	55	<.08	<1	5	.1	28
GC072050	1.00	10	N	10	--	15	85	<.08	1	5	1.2	--
GC010951	1.00	N	--	15	.060	20	--	--	--	10	--	--
GC016050	1.00	15	N	20	.016	70	--	--	--	5	--	--
GC066450	1.00	<10	--	7	--	15	80	<.08	1	5	.2	32
GC045450	.70	N	--	7	.030	15	--	<.08	--	N	.1	15
GC072150	.30	N	--	10	--	10	60	--	1	5	.4	--
GC180650	.70	10	--	15	.024	15	--	--	--	10	--	--
GC013651	1.50	N	--	7	.030	N	--	--	--	5	.3	--
GC015150	2.00	20	N	50	.060	30	--	--	--	15	--	--
GC015250	3.00	10	N	15	.030	10	--	--	--	7	--	--
GC015350	1.50	15	N	10	.030	10	--	--	--	5	--	--
GC065950	1.00	N	--	5	--	10	--	--	--	5	--	--
GC066050	1.00	<10	--	10	--	15	70	<.08	<1	<5	.2	20
GC066150	.50	N	--	10	--	15	70	<.08	<1	5	.2	24
GC081550	1.00	<10	N	10	--	10	40	<.08	<1	5	.3	22
GC185950	.30	10	N	15	.105	15	65	<.08	<1	7	.1	16
GC013150	.70	15	--	15	.075	N	--	--	--	N	.3	--
GC034050	1.50	15	N	20	.024	70	--	--	--	15	.2	--
GC240050	1.50	N	N	15	.092	30	--	--	--	7	.6	--
GC015650	1.00	20	N	20	.030	30	--	--	--	7	--	--
GC080050	.50	N	--	<5	--	N	45	<.08	<1	<5	.2	37
GC015050	2.00	20	N	20	.060	20	--	<.08	<1	10	--	--
GC066250	.50	N	--	10	--	10	65	<.08	<1	5	.2	30
GC071850	2.00	<10	N	5	--	15	70	<.08	<1	10	.1	19
GC263150	.70	N	N	7	.090	700	--	--	--	<5	1.5	--
GC240150	1.00	10	N	15	.092	70	--	--	--	7	.3	--
GC240250	1.50	N	N	7	.092	15	--	--	--	7	.1	--
GC013051	.70	N	--	10	.030	N	--	--	--	5	.1	--
GC078950	.70	10	N	15	--	30	80	<.08	1	10	.1	33
GC033950	.50	N	N	7	.012	15	--	--	--	N	.1	--
GC185750	.70	N	N	15	.122	15	--	--	--	15	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC220850	--	200	.150	--	--	50	10	1.5	25	150
GC279850	--	30	.070	--	--	7	10	1.5	15	150
GC053150	--	30	.500	--	--	20	15	3.0	42	500
GC053250	--	70	.150	--	--	30	15	2.0	80	200
GC261150	--	200	.300	--	--	70	70	7.0	25	300
GC053750	--	150	.200	--	--	50	20	3.0	69	150
GC068450	.93	50	.200	10.15	2.45	30	20	3.0	39	300
GC053350	--	200	.150	--	--	30	10	2.0	34	200
GC034150	--	150	.300	--	--	50	100	15.0	110	300
GC034250	--	300	.200	--	--	50	30	3.0	50	150
GC079050	.82	100	.100	7.68	2.41	30	15	2.0	72	100
GC033850	--	100	.070	--	--	50	15	1.5	20	30
GC185650	--	100	.100	--	--	30	20	3.0	45	300
GC015950	--	300	.150	--	--	150	20	2.0	50	100
GC066350	.99	100	.100	6.27	2.09	50	15	2.0	47	70
GC073850	.80	150	.070	4.07	1.27	30	15	2.0	30	70
GC079150	1.14	150	.070	--	2.85	70	10	1.5	55	70
GC025350	.63	500	.300	7.48	2.01	70	20	2.0	55	500
GC071950	.78	1,000	.500	14.29	2.04	300	30	5.0	109	100
GC072050	1.07	200	.150	10.66	3.27	100	20	2.0	72	100
GC010951	--	150	.070	--	--	70	10	1.5	60	70
GC016050	--	200	.200	--	--	100	30	3.0	55	200
GC066450	1.15	150	.150	12.57	1.30	70	10	1.5	55	70
GC045450	--	150	.100	--	--	30	15	1.5	70	100
GC072150	1.13	200	.150	6.36	2.21	50	10	1.0	35	50
GC180650	--	100	.150	--	--	50	30	3.0	25	70
GC013651	--	200	.150	--	--	50	15	1.5	40	70
GC015150	--	500	.500	--	--	150	30	5.0	50	300
GC015250	--	300	.150	--	--	70	15	1.5	40	70
GC015350	--	300	.150	--	--	50	15	2.0	25	300
GC065950	.94	500	.150	7.89	2.40	50	20	2.0	47	50
GC066050	.74	300	.150	9.62	2.30	70	10	1.5	56	50
GC066150	.46	100	.100	5.13	2.01	50	10	1.5	39	70
GC081550	.77	150	.100	8.28	2.26	50	15	1.5	57	100
GC185950	--	70	.150	--	--	30	20	3.0	44	200
GC013150	--	200	.100	--	--	50	10	N	60	70
GC034050	--	150	.300	--	--	100	30	3.0	85	150
GC240050	--	1,000	.070	--	--	30	15	1.5	80	70
GC015650	--	100	.300	--	--	50	30	3.0	30	300
GC080050	.56	200	.100	--	2.15	20	<10	1.0	41	150
GC015050	--	500	.300	--	--	100	30	5.0	65	200
GC066250	1.04	150	.200	7.51	2.86	70	10	1.5	48	300
GC071850	.39	1,000	.200	5.77	2.49	150	15	2.0	87	70
GC263150	--	300	.070	--	--	30	15	1.5	2,000	70
GC240150	--	200	.150	--	--	70	30	3.0	80	150
GC240250	--	300	.100	--	--	30	15	2.0	40	150
GC013051	--	70	.100	--	--	30	10	1.5	30	100
GC078950	1.47	200	.200	10.07	3.10	100	30	5.0	70	200
GC033950	--	70	.100	--	--	20	10	1.5	20	150
GC185750	--	70	.150	--	--	70	20	3.0	75	100

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC185850	UT	WASATCH	40 35	111 25	65	US 40 AT HAILSTONE; BROWN SILT AND CLAY RICH IN ROOT MATERIAL
GC045250	UT	WASHINGTON	37 0	113 54	67 2	US 91 AT UTAH-ARIZ LINE; ORANGE-BROWN STONY DESERT
GC045350	UT	WASHINGTON	37 19	113 15	67 2	1-15 AT RT 15 JCT; ORANGE-BROWN, ON LATIC VOLCANICS
GC014850	UT	WAYNE	38 25	110 40	62 8	RT 24 IN MUDDY R. FLOOD PLAIN, 1 MI N HANKSVILLE; ALLUVIUM
GC014950	UT	WAYNE	38 18	111 24	62 8	RT 24 2 MI E TORREY; WEATHERED SURFACE ROCK
GC033050	VA	AUGUSTA	38 12	79 7	72 9	US 250 4 MI W STAUNTON; REDDISH-BROWN CLAY ON LIMESTONE
GC061850	VA	CAMPBELL	37 4	78 55	70 10	US 501 2 MI N JCT RT 40; SOIL NOT DESCRIBED
GC210250	VA	CHESTERFIELD	37 32	77 37	65 7	US 60 5 MI E MIDLOTHIAN; SOIL NOT DESCRIBED
GC022550	VA	CRAIG	37 51	80 32	72 9	US 60 .5 MI S ALTA; YELLOW SANDY SOIL
GC210050	VA	FAIRFAX	38 40	77 10	65 7	US 1 1.2 MI S JCT RT 241 IN ALEXANDRIA; SOIL NOT DESCRIBED
GC006350	VA	FAUQUIER	39 0	77 55	62 10	US 50 1.5 MI W UPPERVILLE; YELLOW-ORANGE SUBSOIL
GC061750	VA	FLUVANNA	37 46	78 12	70 10	RT 6 2.5 MI E JCT US 15; SOIL NOT DESCRIBED
GC022450	VA	HIGHLAND	38 24	79 36	72 9	US 220 3 MI S MONTEREY; BROWN SANDY SOIL
GC210450	VA	MECKLENBURG	36 35	78 35	65 7	US 15 AND US 58 FORKS IN CLARKSVILLE; SOIL NOT DESCRIBED
GC080150	VA	NOTTOWAY	37 12	78 12	73 10	NE CORNER BURKEVILLE QUARRY; RESIDUAL SOIL ON GRANITIC ROCK
GC210350	VA	NOTTOWAY	37 3	77 13	65 7	RT 360 ABOUT 1 MI W US 360-460 FORK; B HORIZON SOIL
GC061650	VA	RAPPAHANNOCK	38 42	78 12	70 10	US 522 2.6 MI NE JCT US 211; SOIL NOT DESCRIBED
GC061950	VA	ROANOKE	37 20	80 8	70 10	US 311 3 MI W CATANBA; SOIL NOT DESCRIBED
GC022850	VA	SMYTH	36 45	81 39	72 9	RT 762 AT ST. CLARE BOTTOM; GRAY TO BROWN CLAY
GC210150	VA	SPOTSYLVANIA	38 17	77 29	65 7	US 1 .5 MI S JCT WITH VA 3-20; SOIL NOT DESCRIBED
GC022750	VA	WYTHE	36 58	80 57	72 9	RT 121 AT MAX MEADOWS; MUCK
GC040050	VT	CALEDONIA	44 55	72 5	66 10	US 2 3 MI W ST JOHNSBURY; SILTY LOAM, OLIVE BROWN
GC040150	VT	LAMOILLE	44 35	72 50	66 10	RT 104 .5 MI W CAMBRIDGE; OLIVE-BROWN SILTY LOAM
GC040950	VT	RUTLAND	43 35	72 55	66 10	US 4 1.3 MI E MENDON; OLIVE-GRAY SILTY CLAY LOAM
GC059450	WA	ADAMS	46 45	118 12	70 10	RT 26 5 MI E WASHTUCNA; GRAY SILT OVER BASALT
GC036250	WA	CHELAN	47 45	121 5	65 8	US 2 KING-CHELAN CO LINE; MIXED A-B ZONE IN POOR PODZOLIC PROFILE
GC036350	WA	CHELAN	47 30	120 25	65 8	US 97 2 MI SE CASHMERE; GRAY SILT FROM NONMARINE CLASTIC SEDIMENTS
GC036450	WA	CHELAN	47 54	119 56	65 8	US 97 8 MI N CHELAN FALLS; MED GRAY SILT ON GRANITE
GC035750	WA	COWLITZ	45 56	122 45	65 8	US 830 1 MI N WOODLAND; ORANGE-BROWN SAND
GC076450	WA	COWLITZ	46 17	122 54	73 9	I-5 AT CASTLE ROCK EXIT; CLAY OVER GLACIAL BOULDERS
GC036750	WA	DOUGLAS	47 56	119 20	65 10	RT 10A 2 MI NE LEAHY; GRAY SILT ON BASALT
GC060950	WA	GRANT	46 47	119 26	70 10	RT 26 3 MI E RAPID CITY; GRAY DESERT SANDY OVER BASALT
GC060850	WA	KITTITAS	46 50	120 35	70 10	US 97 4 MI S INTERSTATE EXIT AT ELLENBURY; TAN LITHOSOL OVER VOLCANICS
GC076250	WA	LEWIS	46 39	121 24	73 9	US 12 AT WHITE PASS; MOR HUMUS, VOLCANIC ASH, & RESIDUAL SOIL
GC076350	WA	LEWIS	46 33	122 18	73 9	US 12 2 MI W MORTON; FOREST LOAM UNDER MOR HUMUS
GC036850	WA	LINCOLN	47 45	118 42	65 10	US 2 1 MI E WILBUR; GRAY SILT ON BASALT
GC036550	WA	OKANOGAN	48 22	120 11	65 8	OFF RT 16 2.5 MI W TWISP; B HORIZON
GC036650	WA	OKANOGAN	48 59	119 42	65 10	CO RD 10 MI NW OROVILLE; BROWNISH-GRAY COLLUVIAL
GC035950	WA	PACIFIC	46 38	123 55	65 8	US 101 9 MI SW SOUTH BEND; B HORIZON ON MARINE SEDIMENTS
GC076150	WA	PIERCE	46 54	121 30	73 9	RT 410 AT CHINOOK PASS; MULL LITHOSOL
GC036150	WA	SNOHOMISH	47 52	121 55	65 8	US 2 3 MI E MONROE; ORANGE-BROWN B HORIZON ON GLACIAL DRIFT
GC036950	WA	SPOKANE	47 38	117 42	65 10	US 2 11 MI W SPOKANE; MED BROWN SILTY SAND ON GLACIAL OUTWASH
GC036050	WA	THURSTON	47 3	122 49	65 8	US 410 3 MI E OLYMPIA; SANDY B HORIZON
GC035850	WA	WAHKIAKUM	46 14	123 22	65 8	US 830 2 MI N CATHLAMET; OLIVE-BROWN CLAY LOAM
GC027050	WA	WHATCOM	48 48	122 22	71 9	5.4 MI NE JCT RT 542 & I-5; LOAM ON GLACIAL TILL
GC060750	WA	YAKIMA	46 21	120 17	70 10	US 97 2 MI S TOPPENISH; GRAY LITHOSOL OVER BASALT
GC048651	WI	ADAMS	43 40	89 47	61 7	RT 13 3 MI N WISCONSIN DELLS; ORANGE SAND
GC246850	WI	ASHLAND	46 35	90 55	66 8	US 2 1 MI W ASHLAND; SOIL NOT DESCRIBED
GC056250	WI	BARRON	45 16	91 41	70 5	US 53 2 MI S CHETEK; BROWN CLAY LOAM
GC048151	WI	BUFFALO	44 26	91 17	61 7	RT 121 2 MI W BUFFALO-TREMPEALEAU CO LINE IN WOODS; REDDISH

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC185850	7.00	4.1	N	1,500	1.5	--	--	2.00	150	15	30.0	30.0
GC045250	1.50	5.4	N	150	N	--	--	24.00	N	3	30.0	7.0
GC045350	7.00	7.6	<20	500	2.0	--	--	2.60	N	15	70.0	30.0
GC014850	7.00	--	50	500	N	--	--	5.60	--	7	70.0	30.0
GC014950	3.00	--	50	500	N	--	--	3.80	--	7	30.0	20.0
GC033050	10.00	18.4	30	500	2.0	1.9	3.5	.64	<150	20	70.0	70.0
GC061850	5.00	2.3	20	500	N	--	--	.02	N	N	7.0	7.0
GC210250	1.50	4.7	20	200	N	--	--	.52	N	N	30.0	15.0
GC022550	3.00	4.3	50	200	N	.6	2.9	--	N	<3	30.0	10.0
GC210050	5.00	5.9	50	500	N	--	--	.50	N	7	50.0	20.0
GC006350	7.00	4.2	N	200	N	--	--	1.20	N	30	50.0	100.0
GC061750	7.00	1.0	30	500	1.0	--	--	.85	150	5	7.0	7.0
GC022450	.70	3.5	20	100	N	<.5	1.3	.09	N	3	7.0	5.0
GC210450	7.00	5.7	N	500	N	--	--	1.20	N	30	70.0	30.0
GC080150	>10.00	.7	N	1,500	2.0	<.5	.3	.67	<150	<3	10.0	10.0
GC210350	>10.00	3.6	N	200	N	--	--	1.60	N	15	300.0	100.0
GC061650	7.00	6.9	20	500	N	--	--	.16	150	7	30.0	20.0
GC061950	1.50	3.2	30	70	N	--	--	.01	N	N	7.0	7.0
GC022850	7.00	5.2	20	700	2.0	1.7	4.8	.65	<150	15	50.0	20.0
GC210150	>10.00	3.4	20	500	N	--	--	.45	N	5	100.0	30.0
GC022750	5.00	7.9	70	300	2.0	--	19.3	2.32	--	7	50.0	70.0
GC040050	3.00	2.4	150	200	1.5	--	--	.80	N	10	70.0	20.0
GC040150	7.00	5.9	70	300	1.5	--	--	.60	N	10	100.0	20.0
GC040950	7.00	2.5	50	500	2.0	--	--	.50	150	15	30.0	15.0
GC059450	10.00	3.5	<20	1,000	1.0	--	--	2.06	<150	15	30.0	20.0
GC036250	7.00	2.5	N	300	N	--	--	2.10	N	10	15.0	20.0
GC036350	7.00	5.8	N	500	N	--	--	1.20	N	15	70.0	30.0
GC036450	>10.00	3.0	N	700	N	--	--	2.60	N	15	50.0	30.0
GC035750	7.00	4.3	N	700	N	--	--	1.30	N	15	50.0	15.0
GC076450	10.00	5.7	30	700	N	2.0	2.7	1.00	N	20	70.0	70.0
GC036750	>10.00	2.1	N	700	N	--	--	2.70	N	20	30.0	30.0
GC060950	10.00	6.0	<20	1,000	1.0	--	--	3.08	N	15	30.0	20.0
GC060850	10.00	8.6	N	500	<1.0	--	--	4.60	N	20	100.0	50.0
GC076250	>10.00	.4	N	300	N	--	6.1	3.50	N	7	20.0	15.0
GC076350	10.00	1.5	N	200	N	--	8.5	2.01	N	15	30.0	100.0
GC036850	>10.00	2.5	N	700	N	--	--	2.90	N	30	20.0	30.0
GC036550	>10.00	5.3	N	700	N	--	--	2.40	N	20	100.0	30.0
GC036650	>10.00	1.3	N	700	N	--	--	2.20	N	10	150.0	15.0
GC035950	>10.00	7.4	N	500	N	--	--	.20	N	10	100.0	50.0
GC076150	10.00	.6	N	300	N	<.5	6.5	3.54	N	10	30.0	15.0
GC036150	7.00	8.5	N	500	N	--	--	1.60	N	15	150.0	30.0
GC036950	>10.00	8.5	70	700	N	--	--	.70	N	10	50.0	20.0
GC036050	>10.00	5.2	N	500	N	--	--	1.40	N	20	100.0	30.0
GC035850	>10.00	6.8	N	500	N	--	--	1.80	N	30	70.0	70.0
GC027050	>10.00	3.4	<20	500	N	2.9	2.7	1.45	N	10	150.0	50.0
GC060750	10.00	6.2	<20	700	1.5	--	--	2.95	<150	15	50.0	50.0
GC048651	--	1.6	<20	200	--	--	--	.30	--	--	15.0	--
GC246850	2.00	2.8	N	300	N	--	--	.42	--	N	7.0	3.0
GC056250	7.00	3.8	50	500	<1.0	--	1.1	.30	N	7	30.0	20.0
GC048151	--	8.8	30	700	--	--	--	.40	--	10	50.0	7.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC185850	.076	5.00	30	--	.11	--	2.52	150	23	1.500	700	N
GC045250	.024	.70	7	--	.02	--	.85	N	9	5.000	150	N
GC045350	.068	3.00	30	--	.06	--	2.60	70	25	1.000	500	5
GC014850	--	2.00	20	--	--	--	1.90	N	--	1.500	200	N
GC014950	--	1.50	15	--	--	--	2.20	N	--	1.500	500	N
GC033050	.070	5.00	15	1.02	.04	1.6	2.99	70	37	.500	700	7
GC061850	.012	1.00	5	--	.03	--	1.59	N	11	.030	150	N
GC210250	.004	1.50	5	--	.57	--	.75	N	10	.070	150	N
GC022550	--	.70	7	1.58	.04	.6	.88	<30	25	.100	100	N
GC210050	.016	3.00	7	--	.07	--	.95	30	25	.200	300	N
GC006350	.007	3.00	20	--	.19	--	.80	N	20	.700	1,000	N
GC061750	.005	1.50	7	--	.10	--	.47	100	6	.150	1,000	N
GC022450	--	.70	N	1.34	.03	.9	.35	N	10	.070	70	N
GC210450	.022	5.00	15	--	.15	--	.75	N	10	.500	1,000	N
GC080150	--	1.50	20	1.00	.01	1.0	3.59	50	10	.200	150	N
GC210350	.001	7.00	20	--	.13	--	.32	N	20	.500	150	N
GC061650	.015	2.00	15	--	.04	--	1.39	70	17	.020	700	N
GC061950	.004	1.00	N	--	.04	--	.27	30	18	.030	20	N
GC022850	.070	1.50	15	.95	.06	3.4	2.93	50	100	.500	1,000	N
GC210150	.039	7.00	30	--	.15	--	1.20	70	12	.300	70	N
GC022750	.060	3.00	15	1.07	.08	--	1.72	50	75	1.500	500	10
GC040050	.045	3.00	30	--	.11	--	.75	N	34	1.500	1,000	N
GC040150	.063	3.00	30	--	.43	--	1.50	30	26	.700	700	N
GC040950	.048	3.00	30	--	.05	--	2.80	50	34	1.000	700	N
GC059450	.031	5.00	15	--	.01	--	1.56	50	25	1.500	500	N
GC036250	.006	3.00	30	--	1.20	--	1.10	N	18	.500	300	N
GC036350	.021	3.00	30	--	.04	--	1.60	30	29	.700	300	N
GC036450	.019	3.00	30	--	.04	--	1.60	N	23	1.000	700	N
GC035750	.038	2.00	20	--	.02	--	2.00	N	14	.700	500	N
GC076450	--	5.00	15	1.60	.03	.9	1.42	N	20	.700	500	N
GC036750	.029	7.00	20	--	.02	--	1.40	N	19	1.000	1,000	N
GC060950	.020	7.00	15	--	.02	--	1.48	30	18	1.500	1,000	N
GC060850	.030	10.00	20	--	.04	--	.76	30	13	2.000	1,500	3
GC076250	--	2.00	20	--	.02	--	.91	N	15	1.000	300	N
GC076350	--	5.00	20	.78	.07	--	.78	N	15	1.000	1,000	N
GC036850	.036	7.00	30	.68	.04	--	1.10	N	19	1.000	1,500	N
GC036550	.013	3.00	30	--	.04	--	1.20	N	25	1.500	700	N
GC036650	.036	5.00	20	--	.03	--	2.30	N	29	.700	1,000	N
GC035950	.049	3.00	50	--	1.20	--	1.00	30	29	.500	300	N
GC076150	--	5.00	20	.72	.04	<.5	.85	N	15	1.500	700	N
GC036150	.012	3.00	30	--	.36	--	.90	N	21	.500	700	N
GC036950	.052	5.00	15	--	.02	--	2.60	N	33	.700	700	N
GC036050	.045	3.00	50	--	.06	--	1.10	N	22	1.500	700	N
GC035850	.013	5.00	30	1.43	.09	--	1.30	50	31	1.000	700	5
GC027050	--	3.00	20	--	.05	2.4	.95	N	30	2.000	300	N
GC060750	.013	5.00	20	--	.02	--	1.47	50	21	1.500	700	N
GC048651	.014	.50	<5	--	.05	--	.70	--	7	.070	150	--
GC246850	<.001	1.00	<5	--	.06	--	.79	N	<5	.300	150	N
GC056250	.023	2.00	15	--	.06	<.5	1.50	30	19	.300	300	N
GC048151	.024	2.00	5	--	.14	--	3.50	--	14	.300	200	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC185850	1.50	15	100	15	.157	30	--	--	--	15	.4	--
GC045250	.70	N	--	7	.030	10	--	--	--	N	.3	--
GC045350	2.00	15	70	30	.080	30	--	--	--	15	.2	--
GC014850	1.50	15	N	20	.060	30	--	--	--	7	--	--
GC014950	.70	15	N	15	.016	15	--	--	--	7	--	--
GC033050	.20	10	70	30	--	50	85	.13	1	10	.2	32
GC061850	.07	10	N	N	--	<10	--	--	--	N	.2	--
GC210250	.10	10	--	N	.030	30	--	--	--	N	.3	--
GC022550	.10	<10	N	<5	--	15	60	<.08	1	<5	.2	36
GC210050	.30	15	N	20	.016	15	--	--	--	10	.2	--
GC006350	.70	N	N	20	.060	15	--	--	--	10	.7	--
GC061750	1.00	<10	70	<5	--	<10	--	--	--	7	.4	--
GC022450	N	N	--	7	--	N	20	.12	1	N	<.1	40
GC210450	1.00	N	--	20	.016	20	--	--	--	10	.5	--
GC080150	2.00	10	N	<5	--	20	165	<.08	<1	5	<.1	32
GC210350	.70	N	--	100	.008	N	--	--	--	30	.7	--
GC061650	.30	15	70	7	--	20	--	--	--	7	.4	--
GC061950	N	10	N	N	--	N	--	--	--	N	.4	--
GC022850	.30	<10	N	10	--	30	80	<.08	<1	5	.4	30
GC210150	.10	10	N	15	.016	30	--	--	--	15	2.0	--
GC022750	.50	<10	N	15	--	300	90	<.08	2	5	.1	22
GC040050	.70	15	--	30	.030	20	--	--	--	7	.3	--
GC040150	1.00	15	70	30	.060	20	--	--	--	10	.5	--
GC040950	.70	15	70	15	.040	20	--	--	--	15	.4	--
GC059450	2.00	10	70	15	--	10	--	--	--	20	.3	--
GC036250	3.00	N	N	10	.024	15	--	--	--	7	.3	--
GC036350	1.50	20	N	50	.024	20	--	--	--	10	.2	--
GC036450	3.00	N	N	20	.024	20	--	--	--	10	<.1	--
GC035750	1.50	15	N	20	.024	20	--	--	--	10	<.1	--
GC076450	1.00	<10	--	20	--	30	65	<.08	1	15	<.1	28
GC036750	2.00	N	--	20	.044	N	--	--	--	20	.1	--
GC060950	1.50	10	N	15	--	10	--	--	--	20	.2	--
GC060850	2.00	<10	N	30	--	10	--	--	--	30	.4	--
GC076250	3.00	<10	--	5	--	N	30	<.08	<1	7	.2	24
GC076350	2.00	<10	--	20	--	10	25	<.08	<1	10	.5	18
GC036850	3.00	N	--	15	.060	N	--	--	--	30	<.1	--
GC036550	3.00	N	N	50	.030	15	--	--	--	15	.1	--
GC036650	3.00	N	--	10	.030	N	--	--	--	7	<.1	--
GC035950	1.00	20	N	20	.030	20	--	--	--	15	1.5	--
GC076150	2.00	N	--	10	--	N	<20	<.08	<1	10	<.1	24
GC036150	2.00	15	N	30	.044	30	--	--	--	10	.6	--
GC036950	1.50	N	--	20	.024	N	--	--	--	10	.2	--
GC036050	2.00	15	N	50	.030	20	--	--	--	15	.2	--
GC035850	1.50	30	N	50	.060	15	--	--	--	20	.9	--
GC027050	2.00	N	--	30	--	10	30	<.08	<1	10	.5	27
GC060750	2.00	10	N	20	--	15	--	--	--	15	<.1	--
GC048651	--	--	--	5	.015	<10	--	--	--	--	<.1	--
GC246850	.50	N	--	7	.026	10	--	--	--	N	.2	--
GC056250	--	<10	N	15	.262	15	--	--	--	7	.4	37
GC048151	--	--	--	15	.020	<10	--	--	--	10	.3	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC185850	--	300	.300	--	--	100	30	3.0	92	200
GC045250	--	150	.070	--	--	30	15	1.5	50	70
GC045350	--	700	.500	--	--	150	50	5.0	65	150
GC014850	--	300	.150	--	--	100	20	3.0	40	100
GC014950	--	200	.150	--	--	50	20	3.0	30	150
GC033050	1.77	150	.300	9.95	4.99	150	30	3.0	98	150
GC061850	--	15	.500	--	--	15	10	1.5	15	300
GC210250	--	15	.300	--	--	30	15	1.5	25	700
GC022550	2.86	30	.300	7.06	4.30	30	20	3.0	30	200
GC210050	--	50	.500	--	--	100	30	3.0	40	500
GC006350	--	100	.500	--	--	100	15	2.0	85	100
GC061750	--	150	.300	--	--	20	15	2.0	27	200
GC022450	.76	10	.200	5.12	1.92	10	10	1.0	43	500
GC210450	--	500	.500	--	--	150	15	2.0	25	300
GC080150	1.31	300	.200	10.74	3.17	50	10	1.0	40	200
GC210350	--	150	.300	--	--	200	N	1.5	35	100
GC061650	--	50	1.000	--	--	70	20	3.0	72	500
GC061950	--	7	.500	--	--	15	15	2.0	13	300
GC022850	.47	70	.200	--	3.49	70	20	3.0	55	100
GC210150	--	200	.500	--	--	150	15	2.0	--	200
GC022750	5.96	150	.150	6.65	4.40	70	20	3.0	2,890	70
GC040050	--	150	.150	--	--	70	20	3.0	50	150
GC040150	--	150	.200	--	--	70	30	5.0	50	200
GC040950	--	150	.500	--	--	150	50	5.0	30	200
GC059450	--	500	.700	--	--	70	30	3.0	86	150
GC036250	--	500	.300	--	--	70	10	1.5	--	70
GC036350	--	500	.300	--	--	100	20	3.0	60	150
GC036450	--	1,000	.300	--	--	150	20	3.0	30	100
GC035750	--	700	.300	--	--	70	20	2.0	35	150
GC076450	1.81	200	.500	8.52	2.66	150	10	1.5	73	200
GC036750	--	1,000	1.000	--	--	200	30	3.0	40	150
GC060950	--	500	.700	--	--	150	70	7.0	82	150
GC060850	--	500	.700	--	--	200	20	3.0	108	100
GC076250	.64	500	.300	--	1.08	100	10	1.5	62	70
GC076350	.38	200	.500	3.44	1.47	150	10	1.5	73	100
GC036850	--	500	1.000	--	--	300	30	3.0	70	150
GC036550	--	700	.500	--	--	150	30	3.0	65	100
GC036650	--	1,000	.300	--	--	100	15	1.5	55	70
GC035950	--	100	.500	--	--	150	20	3.0	40	100
GC076150	.79	500	.300	--	.96	100	10	1.0	69	100
GC036150	--	200	.300	--	--	100	15	2.0	55	70
GC036950	--	300	.500	--	--	100	30	3.0	55	200
GC036050	--	300	.300	--	--	100	15	2.0	45	100
GC035850	--	700	.700	--	--	150	30	3.0	85	100
GC027050	.82	200	.300	9.81	1.93	200	20	3.0	131	70
GC060750	--	500	.700	--	--	150	30	3.0	97	150
GC048651	--	50	.100	--	--	20	<10	--	25	200
GC246850	--	30	.070	--	--	10	N	N	20	70
GC056250	--	100	.300	--	--	70	15	2.0	75	150
GC048151	--	150	.200	--	--	20	15	--	50	200

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC048351	WI	CHIPPewa	44 56	91 15	61 7	RT 29 8.5 MI E CHIPPEWA FALLS; LIGHT YELLOW SANDY
GC048451	WI	CLARK	44 28	90 45	61 7	RT 95 5 MI E MERRILLAN; YELLOWISH SANDY
GC046751	WI	DANE	43 15	89 7	62 7	US 151 7 MI S COLUMBUS; YELLOWISH LOAM
GC246950	WI	DOUGLAS	46 20	92 0	66 8	US 2 IN SUPERIOR; SOIL NOT DESCRIBED
GC048251	WI	DUNN	45 11	91 41	61 7	CO RD 1 1.5 MI N SAND CREEK; HUMUS AND LIGHT REDDISH-YELLOW SAND
GC046351	WI	FLORENCE	45 56	88 16	62 7	US 141 5 MI S MICH-WIS LINE; LIGHT GRAYISH SAND
GC046651	WI	FOND DU LAC	43 49	88 30	62 7	US 41 4 MI N JCT RT 23, N FOND DU LAC; MOTTLED GRAY-RED
GC047151	WI	GRANT	42 47	90 25	61 7	ALONG CHICAGO-NORTHWESTERN RR 1.1 MI SW IPSWICH; YELLOW LOESS
GC047251	WI	GRANT	42 10	90 27	61 7	IN S SIDE MUSCODA PINE WOODS; REDDISH-YELLOW, SANDY
GC047651	WI	GREEN	42 50	89 45	61 7	RT 39.7 MI W NEW GLARUS; EDGE OAK WOODS; LIGHT TAN LOAM
GC047951	WI	KENOSHA	42 38	87 52	61 7	CO RD E 1.5 MI E SONERS; VERY LIGHT CALCAREOUS B HORIZON OVER RED CLAY
GC045651	WI	MARATHON	44 34	89 37	62 7	US 51 19 MI N STEVENS POINT; REDDISH SANDY OVER SANDSTONE
GC045751	WI	MARATHON	45 15	89 40	62 7	US 51 6 MI N MERRILL; YELLOWISH SANDY
GC046451	WI	MARINETTE	45 20	87 58	62 7	US 141 3 MI S WAUSAUKEE; REDDISH SANDY OVER SANDSTONE
GC048751	WI	MONROE	44 2	90 35	61 7	CO RD E .5 MI N JCT RT 21, E OF CAMP MCCOY; CHOC. BROWN SANDY, COMPACT
GC046551	WI	OCONTO	44 34	88 5	62 7	US 141 5 MI S SUAMICO; LIGHT BROWN
GC045851	WI	ONEIDA	45 42	89 20	62 7	RT 17 12 MI N RHINELANDER; YELLOWISH SANDY
GC056050	WI	POLK	45 31	92 35	70 5	RT 35 2 MI S LUCK; YELLOW SANDY LOAM
GC048551	WI	PORTAGE	44 17	89 27	61 7	CO RD W 7 MI N PLAINFIELD; YELLOW-ORANGE SANDY
GC027650	WI	PRICE	45 51	90 38	72 6	RT 70 BETWEEN LORETTA & FIFIELD; FOREST LOAM
GC047751	WI	ROCK	42 33	88 53	61 7	RT 15 AT JCT TOWNSHIP RD AND MILWAUKEE RD; LIGHT WITH SOME CLAY
GC047351	WI	VERNON	43 35	90 22	61 7	RT 80 2 MI N YUBA; REDDISH-BROWN
GC045951	WI	VILAS	46 4	89 15	62 7	US 45 1 MI N CONOVER; REDDISH SANDY
GC006750	WV	DODDRIDGE	39 17	80 39	62 10	US 50 2 MI E MORGANSVILLE; YELLOWISH-BROWN LITHOSOL
GC006550	WV	GRANT	39 18	79 15	62 10	US 50 2 MI W MT STORM; YELLOW-ORANGE SILT SUBSOIL
GC006450	WV	HAMPSHIRE	39 17	78 30	62 10	US 50 2 MI E HANGING ROCK; YELLOW-ORANGE SUBSOIL
GC062250	WV	MARION	39 33	80 20	70 9	US 250 2 MI S METZ; SOIL NOT DESCRIBED
GC022650	WV	MONROE	37 24	80 48	72 9	US 219 N EDGE OF PETERSTOWN; YELLOW CLAY OVER SHALE
GC062050	WV	NICHOLAS	38 17	80 58	70 10	RT 39 1.7 MI W ZELA; SOIL NOT DESCRIBED
GC062150	WV	RITCHIE	38 55	79 46	70 9	US 33 3.6 MI E US 250 JCT; SOIL NOT DESCRIBED
GC006650	WV	TAYLOR	39 21	79 56	62 10	US 50 E EDGE THORNTON; SILTY YELLOWISH LITHOSOL
GC062350	WV	WIRT	39 5	81 24	70 10	RT 14 .2 MI N BRIDGE AT N EDGE ELIZABETH; SOIL NOT DESCRIBED
GC006850	WV	WOOD	39 19	81 27	62 10	US 50 1 MI E DALLISON; YELLOWISH-ORANGE LITHOSOL
GC038950	WY	ALBANY	41 39	105 47	65 10	US 287 6 MI N BOSLER; ORANGE-BROWN SAND
GC075450	WY	ALBANY	41 24	106 0	73 9	1-80 AT QUEALEY DOME EXIT 18 MI W LARAMIE; BROWN LOAM ON GRAVEL OUTWASH
GC010251	WY	BIG HORN	44 37	108 13	64 7	SITE NOT RECORDED; 20 IN. BELOW SURFACE
GC187950	WY	CAMPBELL	44 17	105 25	65 6	1-90 5 MI E GILLETTE; BROWN CLAY 3-IN. DEPTH
GC012251	WY	CARBON	41 12	107 45	64 8	WYO 789 13 MI N BAGGS; ALLUVIAL SOIL
GC038750	WY	CARBON	41 46	107 28	65 10	1-80 10 MI W RAWLINS; MED BROWN SAND
GC038850	WY	CARBON	41 51	106 32	65 10	US 30 1 MI E ELK MOUNTAIN RD JCT; MED BROWN CLAYEY SAND
GC079850	WY	CARBON	42 21	107 27	73 10	US 287 .6 MI S JCT RT 220 AT MUDDY GAP; SANDY ARKOSIC COLLUVIUM
GC263550	WY	CONVERSE	42 48	105 27	68 8	1-25 4 MI W DOUGLAS 1 MI N LAPERLE RD; CALCAREOUS, SILTY TEXTURE
GC188050	WY	CROOK	44 18	104 33	65 6	1-90 20 MI E MOORCROFT; BROWN CLAY AND SILT 8-IN. DEPTH
GC013251	WY	FREMONT	42 37	108 13	64 8	SITE NOT RECORDED; 8-16 IN. BELOW SURFACE
GC013351	WY	FREMONT	43 3	108 1	64 8	SITE NOT RECORDED; 8-16 IN. BELOW SURFACE
GC188550	WY	GOSHEN	42 15	104 15	65 6	US 85 10 MI N LINGLE; BROWN SAND 8-IN. DEPTH
GC188650	WY	GOSHEN	41 43	104 15	65 6	US 85 36 MI S TORRINGTON; BROWN SILT 8-IN. DEPTH
GC079650	WY	HOT SPRINGS	44 3	108 42	73 9	RT 120 3.6 MI S PARK CO-HOT SPRINGS CO LINE; SOIL FROM SANDSTONE
GC079750	WY	HOT SPRINGS	43 40	108 11	73 10	3 MI NE THERMOPOLIS IN BIG HORN RIVER VALLEY; COLLUVIUM FROM SANDSTONE
GC187750	WY	JOHNSON	44 13	106 48	65 6	US 16 3 MI E POWER R. PASS; BROWN SAND 4-IN. DEPTH

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC048351	--	3.6	<20	700	--	--	--	.65	--	10	70.0	7.0
GC048451	--	1.4	20	300	--	--	--	.15	--	--	100.0	--
GC046751	--	6.8	70	1,000	3.0	--	--	.56	--	10	100.0	10.0
GC246950	5.00	10.0	30	700	1.0	--	--	.63	N	15	70.0	50.0
GC048251	--	3.3	<20	300	--	--	--	.35	--	--	20.0	5.0
GC046351	--	2.0	30	500	2.0	--	--	.28	--	--	20.0	--
GC046651	--	5.1	70	700	3.0	--	--	.68	--	15	100.0	20.0
GC047151	--	9.6	30	700	--	--	--	.57	--	7	70.0	15.0
GC047251	--	4.4	<20	200	--	--	--	.25	--	--	15.0	--
GC047651	--	8.1	30	500	--	--	--	.55	--	10	50.0	10.0
GC047951	--	4.7	20	700	--	--	--	.60	--	10	50.0	10.0
GC045651	--	2.6	30	500	2.0	--	--	.64	--	5	50.0	5.0
GC045751	--	2.5	50	500	3.0	--	--	.72	--	7	70.0	7.0
GC046451	--	1.5	20	700	3.0	--	--	.20	--	--	20.0	--
GC048751	--	--	<20	150	--	--	--	.40	--	--	10.0	--
GC046551	--	1.6	30	700	3.0	--	--	.72	--	5	30.0	5.0
GC045851	--	2.6	30	500	3.0	--	--	.60	--	5	30.0	7.0
GC056050	5.00	2.8	20	500	N	--	.5	.50	N	7	30.0	15.0
GC048551	--	1.8	<20	500	--	--	--	.40	--	5	20.0	7.0
GC027650	5.00	2.9	20	500	N	<.5	7.2	.80	N	7	20.0	20.0
GC047751	--	9.9	30	700	--	--	--	.55	--	7	50.0	10.0
GC047351	--	7.2	20	700	--	--	--	.60	--	5	50.0	7.0
GC045951	--	3.2	50	700	3.0	--	--	.40	--	5	30.0	5.0
GC006750	7.00	9.0	N	500	N	--	--	.20	N	20	50.0	20.0
GC006550	5.00	7.0	30	300	N	--	--	.10	N	10	50.0	20.0
GC006450	5.00	13.0	N	300	N	--	--	.25	N	10	50.0	20.0
GC062250	>10.00	9.1	50	500	1.5	--	--	.04	<150	15	70.0	30.0
GC022650	5.00	7.0	50	300	2.0	.6	3.2	.16	<150	15	30.0	30.0
GC062050	7.00	13.0	20	300	1.5	--	--	.04	<150	15	30.0	20.0
GC062150	7.00	6.5	30	300	1.0	--	--	.11	<150	7	30.0	15.0
GC006650	7.00	6.3	N	300	N	--	--	.25	N	15	50.0	15.0
GC062350	7.00	5.9	30	300	1.5	--	--	.16	<150	10	30.0	30.0
GC006850	7.00	9.6	30	500	N	--	--	.20	N	20	70.0	20.0
GC038950	>10.00	4.8	N	700	N	--	--	1.10	N	10	70.0	20.0
GC075450	7.00	2.9	20	1,000	N	.6	1.1	.68	N	5	50.0	15.0
GC010251	7.00	19.0	N	500	N	--	--	.60	N	10	70.0	50.0
GC187950	2.00	5.8	30	500	N	--	--	.25	N	7	15.0	20.0
GC012251	7.00	8.3	N	700	N	--	--	1.70	N	10	70.0	30.0
GC038750	3.00	9.1	20	3,000	N	--	--	.60	N	5	30.0	15.0
GC038850	7.00	8.6	30	700	N	--	--	.50	N	7	50.0	20.0
GC079850	7.00	2.8	30	700	1.5	<.5	.5	.63	N	5	30.0	10.0
GC263550	7.00	5.1	20	700	1.0	--	--	6.90	N	3	30.0	20.0
GC188050	1.50	5.0	70	150	N	--	--	.20	N	15	15.0	20.0
GC013251	7.00	6.7	N	1,500	N	--	--	5.50	N	10	70.0	15.0
GC013351	5.00	6.4	N	700	N	--	--	3.10	N	10	100.0	15.0
GC188550	3.00	4.6	30	700	1.0	--	--	2.50	N	7	15.0	15.0
GC188650	3.00	5.0	50	500	N	--	--	1.79	N	7	20.0	15.0
GC079650	5.00	2.1	30	300	2.0	<.5	.6	.35	N	7	70.0	20.0
GC079750	3.00	3.6	30	500	N	<.5	.7	.95	N	5	30.0	10.0
GC187750	7.00	2.8	N	700	N	--	--	2.14	N	15	30.0	15.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC048351	.001	1.00	5	--	.46	--	2.00	--	16	.200	300	--
GC048451	.091	.20	<5	--	.07	--	1.00	--	5	.030	10	--
GC046751	.021	3.00	10	--	.07	--	2.30	100	22	.700	1,000	<3
GC246950	.042	5.00	20	--	.43	--	2.13	30	33	1.000	700	N
GC048251	.006	.50	<5	--	.58	--	1.40	--	8	.070	700	--
GC046351	<.001	1.50	7	--	.05	--	2.20	--	5	.050	300	<3
GC046651	.022	5.00	10	--	.10	--	3.20	50	25	1.000	700	<3
GC047151	.037	1.50	10	--	.15	--	1.80	--	25	.300	700	--
GC047251	<.001	.30	<5	--	.07	--	.75	--	<5	.100	150	--
GC047651	.021	1.00	7	--	.22	--	1.80	--	25	.200	500	--
GC047951	.018	1.00	7	--	.16	--	2.90	--	26	.300	300	--
GC045651	.009	1.50	10	--	.05	--	2.00	--	12	.300	500	--
GC045751	<.001	3.00	10	--	.10	--	2.00	50	16	.200	300	<3
GC046451	<.001	1.00	7	--	.04	--	1.80	--	<5	.030	70	<3
GC048751	<.001	.10	<5	--	.29	--	.63	--	6	.030	20	--
GC046551	.017	1.00	10	--	.10	--	2.90	--	14	.200	150	<3
GC045851	<.001	1.50	10	--	.22	--	2.00	50	12	.150	200	<3
GC056050	.024	2.00	10	--	.02	<.5	1.50	N	11	.300	300	N
GC048551	.019	1.00	<5	--	.09	--	1.20	--	11	.150	500	--
GC027650	--	3.00	7	1.29	.03	.8	1.58	N	--	.500	500	N
GC047751	.026	1.00	7	--	.17	--	2.00	--	28	.300	500	--
GC047351	.017	.70	5	--	.08	--	3.10	--	19	.200	500	--
GC045951	.022	1.00	10	--	.20	--	2.30	50	10	.150	150	<3
GC006750	.024	2.00	20	--	.17	--	1.50	50	47	.500	700	N
GC006550	.015	2.00	15	--	.20	--	1.00	30	31	.200	700	N
GC006450	.025	3.00	15	--	.14	--	1.10	30	38	.200	1,000	N
GC062250	.039	3.00	30	--	.03	--	1.87	70	49	.300	300	N
GC022650	--	3.00	15	1.81	.04	.8	1.70	50	35	.500	300	N
GC062050	.024	7.00	15	--	.05	--	1.21	50	26	.300	1,500	N
GC062150	.010	1.50	10	--	.08	--	.81	50	21	.200	1,000	N
GC006650	.022	2.00	20	--	.44	--	1.40	30	26	.200	500	N
GC062350	.024	3.00	15	--	.02	--	1.15	50	33	.500	700	N
GC006850	.018	2.00	20	--	.24	--	1.40	30	37	.300	500	N
GC038950	.028	5.00	20	--	.02	--	1.90	N	19	.700	500	N
GC075450	--	2.00	20	.91	.01	1.0	2.07	N	13	.500	300	N
GC010251	.053	2.00	15	--	.10	--	2.00	N	47	.700	500	N
GC187950	.017	10.00	15	--	.04	--	1.40	30	13	.300	700	N
GC012251	.020	2.00	20	--	.08	--	1.70	N	31	.500	200	N
GC038750	.016	1.50	10	--	.05	--	1.40	N	17	.300	300	N
GC038850	.035	3.00	20	--	.11	--	1.90	N	32	.700	300	N
GC079850	--	2.00	15	1.05	<.01	<.5	2.12	50	16	.700	200	N
GC263550	.057	1.50	30	--	.02	--	2.40	30	31	1.500	500	N
GC188050	.037	3.00	7	--	.06	--	.71	30	26	.150	1,000	N
GC013251	.041	1.50	10	--	.05	--	2.10	N	30	.500	150	N
GC013351	.021	1.00	15	--	.04	--	1.90	N	26	.700	150	N
GC188550	.065	1.50	30	--	.03	--	2.43	30	31	1.500	500	N
GC188650	.061	2.00	30	--	.06	--	2.32	50	32	1.500	700	N
GC079650	.050	1.50	15	1.74	.01	.7	1.57	<30	24	.500	150	N
GC079750	--	1.00	10	.85	<.01	<.5	1.27	<30	12	.500	150	N
GC187750	.014	3.00	30	--	.05	--	1.63	N	19	1.000	300	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC048351	--	--	--	15	.040	10	--	--	--	--	.3	--
GC048451	--	--	--	<5	.002	<10	--	--	--	--	.4	--
GC046751	--	--	--	20	.040	15	--	--	--	10	.3	--
GC246950	1.00	<10	N	50	.061	30	--	--	--	15	1.0	--
GC048251	--	--	--	7	.040	10	--	--	--	--	.4	--
GC046351	--	--	--	5	.020	10	--	--	--	<5	.3	--
GC046651	--	--	--	20	.030	20	--	--	--	15	.3	--
GC047151	--	--	--	15	.020	10	--	--	--	--	.6	--
GC047251	--	--	--	5	.015	<10	--	--	--	--	<.1	--
GC047651	--	--	--	15	.030	15	--	--	--	--	.6	--
GC047951	--	--	--	15	.020	10	--	--	--	--	.3	--
GC045651	--	--	--	7	.010	15	--	--	--	7	.3	--
GC045751	--	--	--	10	.020	10	--	--	--	5	.5	--
GC046451	--	--	--	5	.005	10	--	--	--	<5	<.1	--
GC048751	--	--	--	<5	.020	<10	--	--	--	--	.5	--
GC046551	--	--	--	7	.020	10	--	--	--	5	.3	--
GC045851	--	--	--	7	.020	10	--	--	--	5	.2	--
GC056050	--	--	--	15	.061	10	--	--	--	5	.2	38
GC048551	--	<10	--	10	.030	<10	--	--	--	--	.2	--
GC027650	.70	<10	--	20	--	50	--	<.08	1	5	<.1	36
GC047751	--	--	--	50	.020	15	--	--	--	--	.6	--
GC047351	--	--	--	15	.020	<10	--	--	--	--	.4	--
GC045951	--	--	--	5	.010	10	--	--	--	5	.4	--
GC006750	.70	15	N	30	.020	15	--	--	--	10	.5	--
GC006550	.20	15	N	15	.030	10	--	--	--	7	.6	--
GC006450	.20	N	N	15	.030	10	--	--	--	7	.7	--
GC062250	.50	10	70	30	--	20	--	--	--	15	.4	--
GC022650	.20	15	70	30	--	20	90	.12	1	10	<.1	31
GC062050	.15	10	70	20	--	20	--	--	--	10	.8	--
GC062150	.15	10	70	15	--	15	--	--	--	5	.4	--
GC006650	.50	N	N	15	.030	20	--	--	--	7	.4	--
GC062350	.50	10	70	30	--	15	--	--	--	10	.6	--
GC006850	.70	20	N	30	.030	20	--	--	--	10	.4	--
GC038950	1.50	10	--	30	.016	15	--	--	--	10	.4	--
GC075450	1.00	<10	--	10	--	15	--	<.08	<1	5	.2	32
GC010251	1.00	N	--	20	.060	20	85	--	--	10	1.0	--
GC187950	.30	10	N	15	.083	15	--	--	--	7	4.3	--
GC012251	1.00	N	--	20	.020	15	--	--	--	10	<.1	--
GC038750	.30	N	--	10	.008	N	--	--	--	5	.4	--
GC038850	1.00	N	--	20	.012	20	--	--	--	10	.4	--
GC079850	.70	<10	N	10	--	20	110	<.08	<1	5	<.1	32
GC263550	2.00	10	N	7	.040	30	--	--	--	5	.5	--
GC188050	.07	10	N	15	.030	10	--	--	--	10	.7	--
GC013251	1.50	N	--	15	.020	20	--	--	--	7	.1	--
GC013351	1.50	N	--	30	.010	15	--	--	--	7	.1	--
GC188550	.70	15	N	10	.044	15	--	--	--	15	.1	--
GC188650	1.00	15	N	15	.044	30	--	--	--	15	.4	--
GC079650	.30	<10	N	15	--	20	85	<.08	<1	7	.2	34
GC079750	.50	<10	N	10	--	10	55	<.08	<1	5	.1	37
GC187750	2.00	N	N	15	.061	15	--	--	--	15	.2	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC048351	--	150	.200	--	--	50	20	--	50	300
GC048451	--	50	.070	--	--	15	<10	--	25	150
GC046751	--	200	.700	--	--	100	20	--	50	700
GC246950	--	150	.300	--	--	70	20	2.0	180	150
GC048251	--	70	.100	--	--	20	10	--	50	150
GC046351	--	--	.300	--	--	50	<10	--	25	300
GC046651	--	150	.700	--	--	100	20	--	50	500
GC047151	--	150	.300	--	--	100	15	--	50	300
GC047251	--	30	.070	--	--	15	<10	--	25	70
GC047651	--	100	.150	--	--	30	20	--	50	200
GC047951	--	150	.150	--	--	50	15	--	50	200
GC045651	--	200	.700	--	--	100	15	--	50	300
GC045751	--	150	.700	--	--	70	15	--	25	500
GC046451	--	100	.300	--	--	50	10	--	25	500
GC048751	--	15	.070	--	--	15	<10	--	25	150
GC046551	--	200	.300	--	--	30	<10	--	25	300
GC045851	--	100	.500	--	--	50	10	--	25	700
GC056050	--	150	.300	--	--	70	15	2.0	39	150
GC048551	--	70	.200	--	--	30	10	--	50	150
GC027650	.76	70	.500	5.22	1.08	70	<10	1.5	31	200
GC047751	--	100	.200	--	--	50	15	--	50	200
GC047351	--	150	.200	--	--	30	20	--	50	300
GC045951	--	100	.500	--	--	50	15	--	25	500
GC006750	--	100	.300	--	--	70	30	--	60	200
GC006550	--	70	.500	--	--	70	30	3.0	40	300
GC006450	--	70	.200	--	--	50	20	3.0	40	150
GC062250	--	70	.700	--	--	100	50	3.0	98	300
GC022650	2.41	70	.700	8.05	3.73	70	20	2.0	68	200
GC062050	--	50	.500	--	--	70	20	3.0	77	200
GC062150	--	70	.300	--	--	30	30	3.0	53	200
GC006650	--	100	.300	--	--	50	20	3.0	45	150
GC062350	--	50	.500	--	--	70	30	3.0	65	300
GC006850	--	70	.500	--	--	70	30	3.0	55	200
GC038950	--	300	.700	--	--	150	15	1.5	35	200
GC075450	.61	200	.300	7.69	2.28	70	15	2.0	42	100
GC010251	--	200	.150	--	--	200	20	3.0	95	50
GC187950	--	70	.150	--	--	50	30	--	65	200
GC012251	--	200	.200	--	--	100	30	3.0	50	100
GC038750	--	70	.150	--	--	50	15	1.5	30	150
GC038850	--	200	.150	--	--	100	15	1.5	60	150
GC079850	.60	150	.150	9.53	2.86	70	20	2.0	43	200
GC263550	--	300	.150	--	--	50	20	3.0	50	70
GC188050	--	30	.300	--	--	30	30	5.0	33	300
GC013251	--	300	.150	--	--	70	10	1.0	40	70
GC013351	--	300	.100	--	--	50	10	1.0	40	50
GC188550	--	300	.150	--	--	30	30	3.0	54	150
GC183650	--	200	.200	--	--	70	30	3.0	62	300
GC079650	1.53	70	.200	11.91	3.17	100	20	2.0	79	200
GC079750	<.10	100	.150	5.84	1.97	50	15	2.0	43	150
GC187750	--	200	.200	--	--	70	30	3.0	44	150

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	State	County	Latitude	Longitude	Date Colln.	Site and Soil Descriptions
GC187850	WY	JOHNSON	44 15	106 23	65 6	I-90 15 MI E BUFFALO; BROWN CLAY 8-IN. DEPTH
GC263750	WY	JOHNSON	43 30	106 24	68 8	I-25 1 MI NW JOHNSON CO LINE; CALCAREOUS B HORIZON
GC263850	WY	JOHNSON	44 7	106 39	68 8	US 87 17 MI S BUFFALO; FINE SANDY ALLUVIUM
GC075650	WY	LINCOLN	41 50	110 56	73 9	US 30 20 MI W KEMMERER; DARK BROWN ALLUVIAL CLAY LOAM
GC011851	WY	NATRONA	43 12	107 15	64 7	1 MI N ARMINTO; ALLUVIAL SOIL
GC263650	WY	NATRONA	42 54	106 15	68 8	I-25 1 MI N CASPER; CALCAREOUS B HORIZON
GC013451	WY	NIOBRARA	42 31	106 23	64 8	SITE NOT RECORDED; 4-14 IN. BELOW SURFACE
GC073950	WY	NIOBRARA	43 3	104 42	73 5	RT 270 3 MI W LANCE CREEK; DRY LOAM WITH SAGEBRUSH COVER
GC188450	WY	NIOBRARA	42 53	104 22	65 6	US 85 12 MI N LUSK; BROWN SAND 8-IN. DEPTH
GC187350	WY	PARK	44 30	109 55	65 6	US 14-20 .5 MI E EAST ENTRANCE YELLOWSTONE N.P.; BLACK HUMIC SAND
GC187450	WY	PARK	44 30	109 0	65 6	US 14-20 4.5 MI E CODY; BROWN SAND 8-IN. DEPTH
GC263350	WY	PLATTE	41 38	104 51	68 8	US 87 .25 MI E ON PLATTE CO LINE RD; ALLUVIUM CALICHE IN SUBSOIL
GC263450	WY	PLATTE	42 14	104 57	68 8	I-25 1.5 MI S US 26 JCT; GRAVELLY SILTY SANDY ALLUVIUM
GC263950	WY	SHERIDAN	44 57	107 0	68 8	I-90 8 MI NW SHERIDAN .5 MI E ACME RD; CALCAREOUS B HORIZON, SANDY
GC038250	WY	SUBLETTE	43 9	110 19	65 10	US 187-189 44 MI SE JACKSON; CLAYEY SILT LOAM
GC038350	WY	SUBLETTE	42 51	109 52	65 10	US 187 1 MI S PINEDALE; BROWN SANDY LOAM ON GRAVEL
GC038450	WY	SUBLETTE	42 14	109 28	65 10	US 187 8 MI N FARSON; MED BROWN SILT
GC038550	WY	SWEETWATER	41 37	109 14	65 10	US 187 2 MI N ROCK SPRINGS; ORANGE-BROWN SANDY ON SANDSTONE
GC038650	WY	SWEETWATER	41 38	108 22	65 10	I-80 5 MI W TIPTON; GRAY-BROWN SILTY SAND ON SILTSTONE AND SHALE
GC075550	WY	SWEETWATER	41 40	110 4	73 9	US 30W 33 MI S KEMMERER; SANDY SOIL OVER GRAVEL DEPOSIT
GC079950	WY	SWEETWATER	41 4	109 34	73 10	RT 530 11 MI N UTAH STATE LINE; LITHOSOL ON TERTIARY SANDSTONE
GC187650	WY	WASHAKIE	44 2	107 46	65 6	US 16 11 MI E WORLAND; BROWN CLAY AND SILT 8-IN. DEPTH
GC188350	WY	WESTON	43 37	104 8	65 6	US 85 17 MI S NEWCASTLE; BROWN SILT 8-IN. DEPTH

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Al %	As ppm	B ppm	Ba ppm	Be ppm	Br ppm	C %	Ca %	Ce ppm	Co ppm	Cr ppm	Cu ppm
GC187850	3.00	9.4	70	300	N	--	--	3.57	--	7	70.0	30.0
GC263750	5.00	6.9	30	700	1.0	--	--	1.60	N	3	30.0	15.0
GC263850	5.00	8.1	30	500	N	--	--	2.60	N	5	70.0	15.0
GC075650	10.00	3.8	50	500	1.5	<.5	6.8	11.69	--	7	100.0	50.0
GC011851	5.00	8.2	30	500	N	--	--	3.60	N	7	70.0	20.0
GC263650	5.00	7.4	20	500	N	--	--	5.40	N	5	50.0	20.0
GC013451	7.00	4.8	N	700	N	--	--	1.50	N	10	50.0	20.0
GC073950	5.00	7.7	30	700	N	<.5	2.3	2.63	N	7	30.0	20.0
GC188450	3.00	3.1	N	500	N	--	--	1.86	N	7	20.0	7.0
GC187350	7.00	5.1	N	1,000	N	--	--	3.57	--	30	70.0	50.0
GC187450	2.00	3.6	30	500	N	--	--	1.72	N	10	30.0	30.0
GC263350	>10.00	6.6	20	700	N	--	--	2.40	N	5	30.0	20.0
GC263450	7.00	3.3	<20	700	N	--	--	6.80	N	5	50.0	15.0
GC263950	3.00	8.5	20	500	N	--	--	5.40	N	3	30.0	20.0
GC038250	5.00	5.2	50	500	N	--	--	.45	N	7	70.0	20.0
GC038350	>10.00	1.6	N	1,500	N	--	--	1.60	150	5	30.0	10.0
GC038450	>10.00	4.4	20	1,000	N	--	--	2.50	N	15	70.0	20.0
GC038550	5.00	12.0	70	500	N	--	--	5.10	N	5	70.0	20.0
GC038650	7.00	8.9	30	1,000	N	--	--	1.60	N	7	50.0	20.0
GC075550	3.00	6.5	50	1,000	N	.6	1.0	.32	<150	5	30.0	15.0
GC079950	10.00	4.9	30	1,500	2.0	.5	1.0	4.17	<150	15	50.0	30.0
GC187650	3.00	7.7	70	700	1.0	--	--	3.57	--	10	50.0	30.0
GC188350	3.00	19.0	70	700	N	--	--	3.07	N	15	30.0	30.0

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	F %	Fe %	Ga ppm	Ge ppm	Hg ppm	I ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
GC187850	.045	2.00	30	--	.11	--	1.98	30	43	1.000	150	N
GC263750	.049	2.00	20	--	.08	--	2.10	30	28	.700	150	N
GC263850	.032	2.00	20	--	.03	--	2.10	30	19	1.000	200	N
GC075650	.120	3.00	20	1.11	.02	1.4	1.69	N	32	2.000	500	N
GC011851	.040	1.50	20	--	.02	--	2.00	N	35	.700	300	N
GC263650	.033	2.00	20	--	.06	--	2.10	30	23	1.500	150	N
GC013451	.018	2.00	15	--	.06	--	2.20	N	35	.700	200	N
GC073950	.060	2.00	10	1.53	.07	1.0	1.94	N	20	.700	300	N
GC188450	.016	3.00	20	--	.03	--	1.78	50	15	.700	500	N
GC187350	.021	5.00	30	--	.48	--	1.54	50	16	3.000	700	N
GC187450	.029	3.00	15	--	.03	--	1.37	30	15	1.000	700	N
GC263350	.044	2.00	30	--	.07	--	2.30	30	30	1.500	500	N
GC263450	.013	2.00	20	--	.03	--	2.50	N	12	1.000	500	N
GC263950	.047	2.00	20	--	.04	--	1.60	N	20	1.000	200	N
GC038250	.010	2.00	15	--	.12	--	1.60	N	31	.500	500	N
GC038350	.010	3.00	20	--	.03	--	2.40	100	8	.500	300	N
GC038450	.056	5.00	20	--	.03	--	2.10	50	30	1.500	700	N
GC038550	.038	2.00	15	--	.06	--	1.40	N	40	1.000	500	N
GC038650	.033	2.00	15	--	.04	--	2.00	N	21	1.000	300	N
GC075550	.050	2.00	10	.98	.03	1.2	.34	50	15	1.000	300	N
GC079950	--	3.00	20	.71	.03	.9	1.86	50	35	1.500	1,000	N
GC187650	.044	2.00	30	--	.04	--	1.68	30	28	1.500	500	S
GC188350	.023	3.00	30	--	.06	--	1.70	30	38	1.000	700	N

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	Rb ppm	S %	Sb ppm	Sc ppm	Se ppm	Si %
GC187850	.30	N	N	15	.026	30	--	--	--	15	2.7	--
GC263750	.70	10	N	10	.030	10	--	--	--	7	.8	--
GC263850	.70	10	N	15	.040	15	--	--	--	7	.1	--
GC075650	1.00	<10	--	15	--	20	85	.10	<1	10	.1	19
GC011851	1.00	N	--	20	.040	15	--	--	--	7	.3	--
GC263650	.70	10	N	15	.040	15	--	--	--	7	.4	--
GC013451	1.00	N	--	15	.030	15	--	--	--	7	.2	--
GC073950	.70	N	--	10	--	20	85	<.08	2	7	.2	30
GC188450	.70	30	N	7	.026	15	--	--	--	15	<.1	--
GC187350	1.50	N	N	30	.109	20	--	--	--	15	.3	--
GC187450	.50	10	N	15	.061	15	--	--	--	10	.4	--
GC263350	1.50	10	N	15	.016	20	--	--	--	10	.2	--
GC263450	1.50	10	--	15	.016	20	--	--	--	7	.2	--
GC263950	.70	10	--	10	.040	10	--	--	--	5	.3	--
GC038250	.30	15	--	20	.024	30	--	--	--	7	.9	--
GC038350	.30	N	--	10	.016	15	--	--	--	5	<.1	--
GC038450	1.50	15	N	20	.012	15	--	--	--	10	<.1	--
GC038550	.70	N	--	15	.024	15	--	--	--	7	.3	--
GC038650	1.50	N	--	15	.016	N	--	--	--	7	.2	--
GC075550	.70	<10	N	10	--	10	40	<.08	<1	5	.2	17
GC079950	2.00	10	70	20	--	20	95	<.08	<1	10	.1	23
GC187650	.70	10	N	15	.074	20	--	--	--	15	.9	--
GC188350	.70	10	N	30	.057	20	--	--	--	15	1.1	--

Table 1.--Location, description, and concentration of elements for samples of surficial materials--continued

Sample No.	Sn ppm	Sr ppm	Ti %	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn %	Zr ppm
GC187850	--	100	.150	--	--	150	30	3.0	94	150
GC263750	--	200	.200	--	--	70	30	3.0	50	200
GC263850	--	150	.200	--	--	50	50	5.0	45	300
GC075650	4.20	200	.200	4.55	2.38	100	20	2.0	108	100
GC011851	--	200	.150	--	--	70	15	2.0	50	100
GC263650	--	150	.150	--	--	70	20	2.0	50	150
GC013451	--	200	.150	--	--	70	15	1.5	50	150
GC073950	2.18	200	.300	11.82	3.70	70	10	2.0	43	200
GC188450	--	300	.300	--	--	70	30	5.0	56	300
GC187350	--	500	.300	--	--	150	20	3.0	86	150
GC187450	--	150	.150	--	--	70	30	3.0	67	200
GC263350	--	500	.300	--	--	100	30	3.0	45	300
GC263450	--	300	.200	--	--	70	15	2.0	25	150
GC263950	--	150	.100	--	--	50	20	2.0	55	200
GC038250	--	100	.200	--	--	100	20	2.0	100	200
GC038350	--	1,000	.200	--	--	100	20	2.0	20	300
GC038450	--	1,000	.300	--	--	150	20	2.0	55	150
GC038550	--	300	.100	--	--	100	15	1.5	75	100
GC038650	--	200	.150	--	--	70	20	2.0	40	200
GC075550	.67	200	.150	5.69	2.05	50	10	1.0	38	200
GC079950	.96	700	.300	--	3.27	100	20	2.0	62	200
GC187650	--	150	.150	--	--	100	30	3.0	70	200
GC188350	--	150	.150	--	--	100	30	5.0	110	150