MASTER

**SCRANTON 1°×2° NTMS AREA
NEW JERSEY, NEW YORK,
AND PENNSYLVANIA**

PRELIMINARY BASIC DATA REPORT

**NATIONAL URANIUM RESOURCE
EVALUATION PROGRAM**

**HYDROGEOCHEMICAL AND STREAM
SEDIMENT RECONNAISSANCE**

R. B. FERGUSON AND P. L. JONES

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**SAVANNAH RIVER LABORATORY
AIKEN, SOUTH CAROLINA 29801**

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FOREWORD

This preliminary report is released without standard editorial and technical review in order to make the information available as soon as possible to interested organizations and to assist the search for uranium resources.

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by

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ABSTRACT

This report presents preliminary results of ground water, stream sediment, and stream water reconnaissance in the National Topographic Map Series (NTMS) Scranton 1° x 2° quadrangle. Stream sediment and stream water samples were collected from small streams at 980 sites for a nominal density of one site per 18 square kilometers (seven square miles) in rural areas. Ground water samples were collected at 1251 sites for a nominal density of one site per 13 square kilometers (five square miles). Neutron activation analysis (NAA) results are given for uranium and 16 other elements in sediments, and for uranium and 9 other elements in ground water and surface water. Field measurements and observations are reported for each site. Analytical data and field measurements are presented in tables and maps. Statistical summaries of data and a brief description of results are given. A generalized geologic map and a summary of the geology of the area are included.

Key data are presented in page-sized hard copy. Supplementary data are on microfiche.

Key data from ground water sites (Appendix A) include (1) water chemistry measurements (pH, conductivity, and alkalinity), (2) well depth, and (3) elemental analyses (U, Br, Cl, F, Mg, Mn, Na, and V). Supplementary data include site descriptors, (well age, frequency of use of well, etc.) and analytical data for Al and Dy.

Key data from stream sediment sites (Appendix B) include (1) water quality measurements (pH, conductivity, and alkalinity), and (2) important elemental analyses (U, Th, Hf, Al, Ce, Fe, Mn, Na, Sc, Ti, and V). Supplementary data from stream sediment sites include sample site descriptors (stream characteristics, vegetation, etc.) and additional elemental analyses (Dy, Eu, La, Lu, Sm, and Yb).

Key data from stream water sites (Appendix C) include (1) water chemistry measurements (pH, conductivity, and alkalinity) and (2) elemental analyses (Al, Br, Cl, Dy, F, Mg, Mn, Na, U, and V).

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PRELIMINARY BASIC DATA RELEASE: SCRANTON 1° x 2° NTMS
QUADRANGLE: NEW JERSEY, NEW YORK, AND PENNSYLVANIA

INTRODUCTION

The National Uranium Resource Evaluation (NURE) program was established to evaluate domestic uranium resources in the continental United States and to identify areas favorable for uranium exploration. The Grand Junction Office (GJ) of the Department of Energy (DOE) is responsible for administering and coordinating NURE program efforts. The Savannah River Laboratory (SRL) has responsibility for hydrogeochemical and stream sediment reconnaissance (HSSR) of 2.6 million square kilometers (1,000,000 square miles) in 37 eastern and western states. Other DOE laboratories are responsible for similar reconnaissance in the rest of the continental United States including Alaska. The significance of the distribution of uranium in natural waters and stream sediments will be assessed as an indicator of areas favorable for the location of uranium deposits.

The principal objectives of the NURE program are:

- Prepare, based on existing data, a preliminary evaluation of domestic uranium resources and favorable exploration areas.
- Assess the United States' uranium reserves.
- Improve the reliability of current uranium resource estimates.
- Identify new areas favorable for uranium exploration by industry.
- Apply new or improved uranium resource technology to support NURE. Provide improved exploration and production support for an expanding industry by technology transfer.

The Grand Junction (Colorado) Office of the Department of Energy (DOE-GJ) has completed the first objective.¹ DOE-GJ is responsible for administering and coordinating efforts to meet the other objectives including distribution of reports. Inputs to the NURE program come from DOE prime contractors, DOE-sponsored research and development, the uranium industry, U.S. Geological Survey, U.S. Bureau of Mines, other federal and state government agencies, and independent sources.

The NURE program consists of six parts:

1. Hydrogeochemical and Stream Sediment Reconnaissance Survey
2. Aerial Radiometric Survey
3. Intermediate Grade Resource Studies
4. World Class Geologic Studies
5. Subsurface Geologic Investigation
6. Technology Application

The data presented here are reconnaissance basic data intended for use in identifying broad areas for further study. While care has been taken to provide reliable sampling and analyses, verification of individual analyses is beyond the scope of this report. The data should be viewed statistically because "one-point anomalies" may be misleading. Regional trends, however, should be reliable. With careful consideration of regional geology, these data should provide reliable guides to areas warranting further study.

This report is one of a series presenting SRL reconnaissance basic data. In the interest of disseminating available data as soon as possible, only neutron activation analyses are reported here. Supplementary reports will be issued later. All data will be available on magnetic tape through the Technical Information Center in Oak Ridge, Tennessee.

A brief description of sampling and analytical procedures and a detailed description of the maps, tables, and figures contained in this report are presented in the SRL document **User's Guide to SRL Basic Data Reports**,² included as Appendix D in this report. A summary of the SRL development program in support of the reconnaissance is available in SRL-NURE progress reports.³ Preliminary reconnaissance basic data reports⁴ have been open-filed for five other quadrangles (Figure 1).

Table 1 summarizes the county abbreviations used in SRL sample identification numbers.

TABLE 1

State and County Abbreviations for SRL Site Codes

Site Code	County	Site Code	County
New Jersey			
NJBE	Bergen	NJSU	Sussex
NJMR	Morris	NJWA	Warren
NJPA	Passaic		
New York			
NYDE	Delaware	NYSL	Sullivan
NYOR	Orange	NYUL	Ulster
NYRO	Rockland		
Pennsylvania			
PACR	Carbon	PAPI	Pike
PALA	Lackawanna	PASS	Susquehanna
PALU	Luzerne	PAWO	Wyoming
PAMO	Monroe	PAWY	Wayne

GEOLOGY, TECTONICS, AND URANIUM OCCURRENCES

This section summarizes the geology, tectonics, and mineral occurrences that are relevant to uranium geochemistry of the Scranton quadrangle.

Geology

The Scranton quadrangle may be divided into five geologic provinces; each province being defined on the basis of physiography, stratigraphy, and rock structure. The boundaries of these provinces follow the general "Appalachian trend", which in this area is about NE-SW. From northwest to southeast, these five provinces are:

- The Pocono Plateau and the Southern Catskills
- The Wyoming Valley
- Kittatinny Ridge and the Great Valley
- The New Jersey Highlands
- The Newark Basin

The Pocono Plateau and the Southern Catskills

Nearly three-fourths of the Scranton quadrangle is located on a northeastern extension of the Allegheny Plateau into northeastern Pennsylvania and southeastern New York. Most of this region is referred to as the Pocono Plateau; in southeastern New York, the Pocono Plateau passes into the Catskill Mountains. This area is northwest of the Kittatinny Mountains - Shawangunk Mountains ridge-line shown on Plate 1. It is a broad plateau, deeply incised by rivers. The plateau is the topographic expression of a large foreland basin of the folded Appalachian Mountains, sometimes referred to as the Allegheny synclinorium.⁵

Surfacial materials in this area consist largely of Pleistocene glacial deposits. Consolidated rocks immediately underlying the surface materials are sandstones, conglomerates, and shales of the Upper Devonian Catskill Formation. These are fluvial deposits; many of the sandstones and conglomerates are channel-fill

deposits similar to those of the uranium-bearing sandstones of the Jurassic Morrison Formation of the Colorado Plateau.

Older Paleozoic rocks, unconformably overlying Precambrian crystalline rocks, occur in the subsurface.

Rocks of the Catskill Formation have been gently folded into broad open synclines and anticlines. Compared to the rocks of the adjacent Wyoming Valley and Kittatinny Ridge-Great Valley regions, the Catskill rocks are only slightly deformed. Dips of greater than 10° to 15° in this region are rare. Fold axes generally trend about $N60^{\circ}E$.

The Wyoming Valley

The Wyoming Valley of Pennsylvania is the topographic expression of a prominent southwestward plunging synclinalorium which extends onto the Pocono Plateau from the Valley and Ridge Province to the southwest. This area is immediately underlain by rocks of Mississippian and Pennsylvanian age, including the anthracite-bearing Lewellan Formation, and is sometimes referred to as the Northern Anthracite Basin of Pennsylvania. The anthracite deposits, representing ancient continental peat deposits are associated with fluviatile sandstones, conglomerates, and mudstones. Rocks of the underlying Mississippian system also consist of continental fluviatile sandstones, conglomerates, and mudstones.

Folds in this region are dominantly asymmetric, concentric, and of the flexural slip type. They are probably entirely of Appalachian (i.e., Late Paleozoic) age.

Kittatinny Ridge and the Great Valley

Kittatinny Ridge, its extension in New Jersey (Shawangunk Mountain), and the Great Valley, are part of the Valley and Ridge Province of the Appalachian Mountain Region. The Valley and Ridge Province consists of a series of more or less parallel valleys and ridges underlain by folded sedimentary rocks of Paleozoic age. These rocks are said by some to constitute the "sedimentary Appalachians" or the "miogeosynclinal deposits of the Appalachians."⁵

The Valley and Ridge rocks of Kittatinny Ridge and the Great Valley consist of Middle Devonian and older Paleozoic sedimentary deposits. Kittatinny Ridge is underlain by basal Silurian marine clastics. Rocks between it and the Pocono Plateau to the northwest consist of largely marine clastics of Silurian and Lower and Middle Devonian ages. The rocks of the Great Valley consist of

Cambro-Ordovician shelf carbonates (largely dolomites) overlain by the marine clastics of the Middle and Upper Ordovician Martinsburg Formation.

Folds in the Great Valley are asymmetric (overturned to the northwest), and are mainly of the similar type. Recumbent folds and nappe structures are not uncommon.⁶ These probably are a product of the Middle-Late Ordovician Taconic Orogeny, although some Appalachian (i.e., Late Paleozoic) folding may be superposed. Folds in Silurian and younger rocks of Kittatinny Ridge are probably entirely of Late Paleozoic age (i.e., a product of the Appalachian Orogeny).

The New Jersey Highlands

The most westerly exposures of the Precambrian age in Pennsylvania and New Jersey occur in a narrow belt extending from Reading, Pennsylvania, then northeast through the southern edges of Allentown and Bethlehem into northern New Jersey. The belt is bounded on the northwest by the Great Valley, and on the southeast by the Triassic Newark Basin. Topographically, the belt consists of a number of relatively low hills and ridges (elevations on the order of 700 to 1000 feet above sea level) separated in places by small intermontane valleys. In Pennsylvania, these hills are known as the Reading Hills; in New Jersey, they form the "New Jersey Highlands."

The ridges and hills generally are underlain by Pre-Cambrian crystalline rocks (gneisses, amphibolites, calc-silicates, and granitic and pegmatitic intrusions) which, in many places, occur with a thin veneer of basal Cambrian quartzite and conglomerate. The intermontane valleys generally are underlain by Cambro-Ordovician carbonate rocks, and in a few places younger Ordovician clastics.

Structural relations in this belt have long been the subject of controversy. Most modern workers believe that the Pre-Cambrian crystalline rocks were brought to their present position by Taconic folding and thrusting involving the crystalline basement.⁷ A high-angle normal fault system (the so-called "Border Fault") occurs along the southeastern boundary of the hills; high-angle normal faults also occur within the hills. These apparently are of Triassic and possibly also of Jurassic age.

The Newark Basin

The Triassic Newark Basin is a sediment-filled "half graben" bounded on the northwest by a high-angle normal fault system (the

"Border Fault") separating the Basin from the Reading Hills. In the Philadelphia area and to the southeast, this Basin is bounded to the southeast by the Crystalline Piedmont; northeast of Philadelphia, this Basin is bounded to the southeast by the Atlantic Coastal Plain.

The sediments of the Newark Series which fill the basin consist of gently inclined (to the north or northwest) continental red sandstones, conglomerates, and shales; dark-gray to black argillites; and pink-to-buff arkoses. Uranium occurs in the arkoses and in the black argillites. Triassic basalts and a number of intrusive diabase sheets and dikes of Triassic and Jurassic age are common in the northern part of the basin.

Rocks of the Newark Series rest unconformably on folded lower Paleozoic rocks.

Geologic History

The Precambrian Grenville orogenic event reached its peak about 1060 million years (m.y.) ago, during which time the Precambrian rocks of the Reading Prong of Pennsylvania and the New Jersey Highlands were "plastically deformed, metamorphosed, and intruded by syntectonic granitic rocks." Following Grenville metamorphism, the thermal history of the area appears to be one of slow cooling until the area was exhumed just before early Cambrian time.⁸

Thus, from about the time of the Grenville event until about 800 m.y. ago, "a large continental mass existed which included at least eastern North America, western Europe, and northwestern Africa."⁹

About 800 m.y. ago, lateral extension began and the "proto-Atlantic Ocean" began to open.¹⁰ Late Precambrian and early Paleozoic clastics, now part of the Crystalline Piedmont, accumulated along the edge of the newly separated North American continent. The area west of what is now called the Crystalline Piedmont formed a shallow shelf during the Cambrian and early Ordovician periods, during which time deposition was largely in the form of carbonates. This shelf carbonate area includes the Scranton region.

In Middle Ordovician times, the proto-Atlantic began to close and subduction began along the east coast of North America.¹¹ By the close of the Paleozoic, the North American plate, the African plate, and the European plate were sutured and again joined. The Taconic, Acadian, and Appalachian (or Alleghenian) Orogenies probably represent episodes of plate collisions.

During the Silurian and most of the Devonian ages, deposition in the area of the Great Valley and the Valley and Ridge Province was mainly marine and mainly clastic. With the advance of the Catskill Delta during Late Devonian times, the sea permanently withdrew from these areas and continental deposition prevailed until the close of the Paleozoic era and the final uplift of the Appalachian Mountain Chain. The post-Paleozoic history of the Pocono Plateau, Valley and Ridge, and New Jersey Highlands regions has been entirely one of erosion.

Triassic half-grabens superposed on the Appalachian Chain probably represent rifting, marking the beginning of the opening of the modern Atlantic Ocean. Sedimentation took place in these basins during Triassic and possibly early Jurassic times.

Uranium Mineral Occurrences

Reported occurrences of uranium minerals are shown on Plate 1B of this report and listed in Table 2. Fifty-seven localities are shown. Uranium has not been commercially produced at any of the localities listed. Seventeen of the localities are in the Precambrian rocks of the New Jersey Highlands. These are in gneisses, marbles, and the magnetite-bearing rocks of the Dover district. Twelve of the occurrences are in sandstones of the Catskill Formation (Pocono Plateau and southern Catskills) and in Pennsylvanian sandstones and coal of the Wyoming Valley. One uranium occurrence is reported in a sandstone of the Mississippian Mauch Chunk Formation of the Wyoming Valley. The remaining occurrences are scattered in the Kittatinny Ridge - Shawangunk Mountain area and the Great Valley.

Sources of Information

The state geologic maps of New Jersey,²⁴ New York,²⁵ and Pennsylvania²⁶ are the major information sources for the compilation of Plate 1A. Each of these maps lists the compilation references.

A summary of current research in the Scranton quadrangle primarily comprising geologic mapping is given in Table 3.

HYDROLOGY

Climate

The study area contains portions of Pennsylvania, New York, and New Jersey, all of which have humid climates. The average

TABLE 2

Occurrences of Uranium Minerals in the Scranton Quadrangle

<i>Number</i>	<i>Geologic Name</i>	<i>Location, Lat. & Long.</i>	<i>Geologic Formation</i>
1	Millen Occurrence ¹²	41°32.00' 75°26.90'	Mt. Pleasant Member Catskill Formation
2	Laurel Run Occurrence ¹²	41°13.50' 75°51.00'	Upper Pocono Formation
3	Fourth Run ¹²	41°03.00' 75°40.70'	Catskill Formation
4	Hickory Run ¹²	41°02.20' 75°39.85'	Catskill Formation
5	Davenport Mines ¹³	41°03.70' 74°34.55'	Franklin Limestone
7	White Haven ¹⁴	41°05.60' 75°48.85'	Catskill Formation
8	Nescopeck Occurrence ¹⁴	41°04.75' 75°58.30'	Catskill Formation
9	Flagstone Quarry ¹⁴	41°35.00' 75°16.00'	Catskill Shale
10	Jermyn No. 1 ¹⁵	41°32.30' 75°33.35'	Coal seam (unidentified) Post-Pottsville Formation
11	Jermyn No. 2 ¹⁵	41°32.00' 75°32.05'	Coal seam (unidentified) Post-Pottsville Formation
12	Carbondale ¹⁵	41°35.75' 75°30.30'	Shale (Post-Pottsville)
13	Wilkes-Barre ¹⁵	41°13.65' 75°52.15'	Ross/Top Ross coal units
14	Marshwood Reservoir ¹⁵	41°26.60' 75°33.45'	Duamore III coal unit
15	Scranton Courthouse ¹⁵	41°26.60' 75°42.20'	New County Line coal unit
16	Freeland ¹⁵	41°00.15' 75°55.50'	Mammoth coal unit
17	Wilkes-Barre No. 2 ¹⁵	41°13.80' 75°53.10'	Baltimore coal unit
18	Plymouth ¹⁵	41°14.35' 75°58.65'	Red Ash coal unit
19	Cochecton ¹³	41°42.40' 75°02.20'	Catskill Formation
20	Saperstein No. 1 Mine ¹³	41°40.20' 74°36.60'	Catskill Formation sand- stone and conglomerate
21	Feldman Quarry ¹³	41°30.05' 74°37.10'	Catskill Formation (Channel)
22	Lucky K No. 1 Mine ¹³	41°39.40' 74°35.45'	Catskill Formation (Channel)
23	Franklin Furnace ¹⁶	41°07.50' 74°35.20'	Reading Prong crystallines Franklin Limestone
25	Cedar Hill Mine ¹³	41°10.20' 74°34.30'	Franklin Limestone
26	Williams Mine ¹³	41°09.75' 74°29.10'	Magnetite Orebody Reading Prong crystallines
27	Roberts Mine ¹³	41°03.70' 74°34.55'	Magnetite Orebody in Quartz-Feldspar Gneiss
28	Wurtzboro ¹⁷	41°31.65' 74°32.65'	Marcellus Black Shale

(Continued)

TABLE 2, Continued

<i>Number</i>	<i>Geologic Name</i>	<i>Location, Lat. & Long.</i>	<i>Geologic Formation</i>
29	Ellenville ¹⁷	41°44.00' 74°23.00'	Marcellus Shale
30	Gardiner ¹⁷	41°45.45' 74°05.35'	Hudson River Snake Hill Formation
31	Sterling Furnace Mines ¹⁸	41°11.05' 74°19.02'	Magnetite Orebodies in Pre- cambrian Gneiss Reading Prong
32	Newburgh ¹⁷	41°32.80' 74°03.40'	Hudson River Snake Hill Formation
33	Pine Bush ¹⁷	41°35.90' 74°18.15'	Snake Hill Shale
34	Pine Bush No. 2 ¹⁷	41°35.40' 74°14.90'	Snake Hill Shale
35	Washingtonville ¹⁷	41°23.20' 74°14.15'	Hudson River Formation (slate)
36	Sterling Hill ¹⁶	41°04.85' 74°35.90'	Pochunk Gneiss
38	Raynor Mines ¹⁹	41°12.75' 74°21.60'	Reading Prong crystallines
39	Miles Standish Mine ¹³	41°13.35' 74°21.30'	Pochunk Gneiss
40	Colesville ²⁰	41°18.90' 74°40.25'	Shawangunk Conglomerate
41	Pahaquarry Copper Mine ¹³	41°02.50' 75°00.90'	Shawangunk Conglomerate
42	Guyard Mine ¹³	41°26.00' 74°35.40'	Shawangunk Conglomerate
43	Mombasha Mine ¹³	41°17.20' 74°12.85'	Pochunk Gneiss
44	Spring Glen Mine ¹³	41°40.40' 74°25.90'	Marcellus Formation
45	Shawangunk Mine ¹³	41°35.65' 74°26.90'	Shawangunk Formation
46	Goodwin No. 1 Mine ¹³	Location Uncertain	Catskill Formation
47	Old Centennial Mine ¹³	41°09.45' 74°21.70'	Reading Prong crystallines
48	Mt. Cobb ²¹	41°24.60' 75°30.51'	Catskill Formation
49	Ellenville Lead Mine ¹³	41°42.70' 74°23.00'	Shawangunk Formation
50	Jackson Mine ¹⁸	41°00.00' 74°18.20'	Magnetite bearing pegmatite in hornblende gneiss
51	West Point ²²	41°20.80' 74°00.00'	Pegmatites in quartz- feldspar biotite gneiss

(Continued)

TABLE 2, Continued

<i>Number</i>	<i>Geologic Name</i>	<i>Location, Lat. & Long.</i>	<i>Geologic Formation</i>
52	Bowling Green Mountain ¹³	41°00.15' 74°32.00'	Bryam pegmatite granite
54	Ringwood Mine ¹³	41°08.20' 74°16.60'	Reading Prong gneiss
55	Andover Mine ¹³	41°00.70' 74°43.60'	Pochunk Gneiss
56	Clove Mine ¹³	41°18.80' 74°12.45'	Pochunk Gneiss
57	Avery ²³	41°38.15' 75°55.75'	Susquehanna Group

TABLE 3

Current Research in the Scranton Quadrangle

<i>Investigator</i>	<i>Affiliation</i>	<i>Area</i>
—	Penn. Geol. Survey	Pennsylvania (state map)
Avery Drake	U.S.G.S.	Newark, N.J.
William Sevon	Penn. Geol. Survey	Northeastern Penn.
Jeffrey Griesemer	Lehigh Univ.	Wyoming Valley
Frank Markewicz	New Jersey Geol. Survey	Kittatinny Ridge
Henry L. Helenek	Bradley University	New Jersey Highlands
D. W. Fisher	New York State Museum	Southern New York
David Leveson	Brooklyn College (CUNY)	Southern New York
Martin Rutstein	New Paltz College (SUNY)	New Jersey Highlands

January temperature is -3°C , and the average July temperature is 22°C . Rainfall is fairly evenly distributed over the area, and ranges from 1016 mm to 1219 mm; the average annual rainfall for the area being about 1067 mm.²⁷ Snowfall throughout the area averages about 800 mm annually. Precipitation data for the months in which most field sampling took place are presented in Table 4.

Geography

The northern and western two-thirds of the area is a glaciated and dissected part of the Appalachian Plateau Province. The rugged hills, subdued mountains, and lakes of glacial origin are exemplified in the Pocono Mountains of the central part of the area, and these land features extend also to the west and north; altitudes generally range between 400 and 600 m. Two northeast elongated ridge and valley sequences are prominent, the ridges being formed of resistant sandstones, and the adjacent valleys of shale or limestone. One of the valleys extends from Wilkes-Barre through Scranton and is bordered by a series of mountains. The other ridge and valley sequence, farther eastward, is made prominent by the Kittatinny Mountains and their northeast extension, the Shawangunk Mountains. A broad low-land, about 20 kilometers wide, having moderate topographic relief, lies east of the mountains, and the narrower Delaware River valley lies to the west.

Approximately 400,000 hectares of the area are used for agricultural purposes.²⁸ Forage, grains, and corn are the main crops and require fertilization during April and May. The pasture crops are fertilized during September. Since more than half of the rainfall occurs during the warm half of the year, water quality in agricultural lands may vary seasonally.

Drainage and Hydrology

Three states and three drainage basins make up the study area.

The Susquehanna River flows into the area for a few miles in the northwestern corner and reenters the area west of Scranton. All of the western portion is drained by the main stem of this river and by its many small tributaries.

The Delaware River starts in the north center of the area, forming the boundary between Pennsylvania and New York and between Pennsylvania and New Jersey. This river flows through East Stroudsburg in the south center of the area. The area has

TABLE 4

Precipitation Totals for May Through December at Selected Weather Stations

<i>Weather Station; Elevation, m</i>	<i>Precipitation for 1977, mm</i>								<i>Departure from Normal (for period) May-December, mm water</i>
	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug</i>	<i>Sept</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	
W-Barre-Scranton; 283 m	43.7	80.3	87.4	107.4	151.6	133.9	101.1	87.4	+151.4
Montrose; 475 m	48.0	89.4	117.9	156.2	217.4	178.8	116.6	87.4	+327.4
Sussex; 119 m	37.1	71.6	55.6	96.3	164.1	106.2	119.4	130.8	+0.25

hundreds of lakes and reservoirs, both natural and man-made. Through a series of tributaries, the drainage from most of these lakes ends in the Delaware River.

The Hudson River is very close to the eastern boundary of the area. The Wallkill River starts in the southeastern part of the area and flows north to near Kingston, where it enters the Hudson River. Tributaries to the Wallkill River drain a large portion of the Hudson River basin found in this area.

Most of the rocks of the area, chiefly shales and sandstones and subordinate beds of limestones, yield some water to wells; the median yield of wells from bedrock in the area ranges between 100 and 200 liters per minute.²⁹ Permeable sands and gravels occur in scattered localities in the glacial deposits and also in alluvium along some streams; these permeable sands and gravels may yield more than 2000 liters per minute to wells. Most wells are in the uppermost (water-table) aquifer and commonly range in depth from 10 to 90 m. Deeper lying beds in many places contain water that is too mineralized for use.

Recharge to the water-table aquifer is on upland slopes at about the rate of 300 to 370 mm per year, or one-third of the total precipitation.

The quality of water in the water-table aquifer varies greatly from place to place, ranging from as little as 60 mg/L to more than 300 mg/L in total dissolved solids. Contamination of ground water can be a local problem; but the absence of large, permeable, and extensive aquifers prevents widespread contamination from a single source.

The surface waters in the area are classified as of the calcium bicarbonate and calcium sulfate types. Sewage and industrial waste pollute many of the rivers in and around areas of higher population. Many of the streams in the southwest portion of the area are polluted with acid mine drainage.

FACTORS AFFECTING THE DATA

Stream sediment and stream water samples and associated site data were collected during the period July through October 1977. The vast majority of streams contained flowing water at the time of sampling. Ground water samples were collected primarily during June 1977 through February 1978. Many of the ground water samples from mountainous areas are from springs, and it is unlikely that these samples represent deeply circulating ground water. Data from springs and wells are plotted on the same areal

distribution map. Sampled springs tend to be clustered in more mountainous, less-populated areas; and wells are in less mountainous, more highly populated areas. Separate areal distribution plots of these sample types would not provide additional geochemical information. Exact sampling dates for stream sediment and ground water are given in Tables B-2 and A-2, respectively.

QUALITY ASSURANCE

Sample Collection

At least five percent of the sampled sites were routinely checked by SRL personnel (or by a specified subcontractor) to assure that the reported field locations were accurate. Based on these quality assurance checks, more than 97% of the sampled sites were judged to be located as accurately as they could be plotted on county road maps. No evidence has been discovered of deliberate malfeasance by the sampling teams. Most sites that were mapped incorrectly were within 300 meters of their correct locations. Thus, the goals of a regional reconnaissance have not been compromised by mapping errors. Details of the quality assurance program are given elsewhere.³

Analytical Standards

Sediment Standard SRL 2.1 was analyzed along with NURE sediment samples primarily to provide precision data and routine systems checks for the analytical equipment and software. (Results for SRL 2.1 standard analyzed with sediment samples are presented in Table 5). The data reported in Table 5 give a good estimate of operating precision.

Three DOE intersite comparison standards containing nominal uranium concentrations of 5, 10, and 95 ppm were analyzed, one after each 230 sediment samples. Results are given in Table 6. An independent quality assurance program based on these standards is conducted for DOE by Ames (Iowa) Laboratory.³⁰

Every batch of twenty-five resin samples includes a blank resin sample. Resin blanks are not reacted with water samples. Every fifth batch includes a resin sample that was reacted with a standard solution containing nominally 0.278 ppb uranium. Analyses of standards and blanks are summarized in Table 7. Resins reacted with DOE standard solutions were analyzed along with samples. The uranium analyses of these standards are reported in Table 8. See Reference 30 for Ames Laboratory summary.

TABLE 5

Precision of SRL 2.1 Analyses

<i>Element</i>	<i>Number^a</i>	<i>Mean, ppm</i>	<i>Standard Deviation, ±1 σ</i>	<i>Coefficient of Variation, %</i>
U	99	7.42	0.26	3.5 ^b
Th	89	31.1	4.3	13.8 ^c
Hf	98	52.1	3.9	7.4 ^b
Ce	85	146	18.8	25.8 ^c
Dy	85	9.8	1.2	12.2 ^b
Ti	96	6520	1050	16.1 ^c
V	90	29.0	3.0	10.3 ^c
Fe	85	7900	2840	35.9 ^c
Mn	90	124	13	10.5 ^c
Al	98	16500	1720	10.4 ^b
Sc	99	3.45	0.96	27.8 ^c
La	89	76.4	17.6	23.0 ^c
Sm	96	15.5	3.7	23.9 ^c
Eu	26	2.67	1.3	48.7 ^c
Yb	83	6.64	2.4	36.1 ^b
Lu	84	0.93	0.25	26.9 ^c
Na	89	200	28.9	14.5 ^c

a. Number of determinations.

b. Precision is probably about the same for samples as for SRL 2.1 standard.

c. Precision is probably better for samples, because their concentrations are higher than those of SRL 2.1.

TABLE 6

Analyses for Uranium in DOE Sediment Standards

<i>Standard</i>	<i>No. of Samples</i>	<i>Uranium Concentration, ppm</i>		<i>Standard Deviation, ±1 σ</i>
		<i>Recommended^a</i>	<i>Found</i>	
A	10	5.2	5.25	0.16 (3.1%)
B	10	10.7	11.4	0.81 (7.4%)
C	8	93.7	96.4	6.41 (6.7%)

a. Recommended values are averages of analysis of these standards by two laboratories.

TABLE 7

Analyses of Resin Standards and Blanks

A. Standards

<i>No. of Analyses</i>	<i>Uranium Concentration, ppb</i>			<i>Standard Deviation, ±1 σ</i>
	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	
40	0.246	0.352	0.303 ^a	0.026 (8.5%)

B. Blanks

<i>Element</i>	<i>Number of Analyses Above Detection Limit</i>	<i>Mean Concentration,^b ppb</i>	<i>Standard Deviation, ±1 σ</i>
U	36	0.024	0.013
Cl	36	3700	370
Al	35	20	6
Na	21	150	70

- a. The standard solution was prepared to be 0.278 ppb. The value 0.303 ppb is not corrected for 0.024 ±0.013 ppb U in resin.
- b. Traces of chloride used in processing resin remain in the resin. The mean values listed here are expressed in ppb for one liter of ion-exchange water. These values can be considered background contribution in all analyzed water (resin) samples.

TABLE 8

Analyses of DOE Standard Uranium Solutions

<i>Standard</i>	<i>No. of Analyses</i>	<i>Uranium Concentration, ppb</i>		<i>Standard Deviation, ±1 σ</i>
		<i>Nominal</i>	<i>Mean</i>	
A-1	10	0.82	0.82	0.053 (6.4%)
B-1	5	7.77	7.58	a
C-1	4	100.2	94.8	a

- a. Too few analyses for standard deviations to be meaningful.

RESULTS AND DISCUSSION OF THE DATA

Stream Sediment Samples

SRL experience suggests that most uranium in stream sediment samples is present in resistate minerals. Interpretation of the areal distribution (Figure B-8) of uranium is best done by studying the areal distributions of the ratio of uranium to geochemically associated elements such as Th, Hf (Zr), Ce, etc. Elemental associations suggested here should be considered speculative pending detailed mineralogical investigations.

A scheme for deducing possible mineral hosts of uranium in stream sediment samples is discussed by Price and Ferguson.³¹ Uranium can occur as a minor constituent of several heavy resistate minerals such as zircon or monazite. These minerals have little current commercial potential as uranium ore minerals. Failure to consider the mineral host could lead to an inaccurate assessment of targets for more detailed study.

A map showing the total amount of uranium in a given stream sediment sample may be more a function of stream gradient or sampling conditions than of any proximity to a commercial uranium deposit. For example, if uranium were uniformly present in the mineral zircon at a concentration of 5000 ppm, then a uranium distribution map for stream sediment samples of less than 149 micrometers would have highs and lows which were functions of many factors. These include: (1) the areal distribution of zircon, (2) the areal distribution of zircon grain size, (3) the effectiveness of sampled streams in sorting and concentrating zircon relative to diluent minerals such as quartz or micas, and (4) the effectiveness of the sampling method in obtaining "representative" samples.

On the other hand, comparison of a map showing the distribution of uranium with a map showing the distribution of the U/Zr (or U/Hf) ratio should reveal the actual uranium-in-zircon concentration or any aberrance therefrom. The areal distribution of this ratio is presented in Figure 3. The ratio of (U/Hf) should be low where zircon is the primary mineral host of uranium in sediment samples. High values of the ratio indicate areas where uranium is present in minerals other than zircon or where zircon is particularly enriched in uranium.

Using the same logic, areas where the areal distribution of the U/Th ratio (Figure 5) is high indicates where uranium is present in minerals other than resistates such as monazite or where these resistates are particularly enriched in uranium. Anomalous areas which persist on several ratio figures may be areas where uranium is present in some mineral other than common

resistate minerals. If these anomalous areas are supported by other considerations (such as radioactivity highs, geologic conditions, or high values of dissolved uranium in natural waters), then they may warrant a detailed field examination or detailed geochemical sampling.

An evaluation of areal distribution of uranium ratio (Figures 3, 5, and 7 and regression models) indicated that most anomalous sediment samples are located in Sussex County, New Jersey, and Orange County, New York, in the Reading Prong - New Jersey Highlands areas. Particularly anomalous sediment samples are located in the Byram Gneiss (K-feldspar rich), Franklin Marble, and Beckmantown Group contacts.

Neutron activation analysis (NAA) results above the analytical detection limit are summarized in Table 10. The tabulated values are for sediments of less than 149 micrometers (U.S. Std. 100-mesh) collected from small streams. Sieved fractions of other sizes, or rock or soil samples, even though collected in the same region, might yield entirely different values because of mineralogical variations.

Stream and Ground Water Samples

Concentrations of uranium in stream and ground water samples are dependent on several factors: (1) the concentration of uranium in the rocks (soils) through which the water passes, (2) the rate at which the uranium-bearing minerals in the rocks (soils) will release uranium, (3) the hydrologic character of the rocks (soils), and (4) the chemistry of the water (especially Eh, pH, and alkalinity).

The interpretation of analyses of uranium in natural waters is not straightforward. In active roll-front deposits, solubility of uranium may be low. Concentrations of uranium in natural waters may be very low near areas of active uranium deposition or very high in oxidizing zones near dissolving ore bodies.

To eliminate the effect of increasing uranium with increasing dissolved solids, it is advisable to use the areal distribution of uranium/conductivity ratio instead of total uranium in natural waters. Figures 9 and 11 show the areal distribution of uranium/conductivity for ground water and stream water, respectively. The ratio has been multiplied by 1000 for convenience. The ratio gives an approximation of the proportion of uranium in the dissolved minerals in natural waters.

The areal distribution of uranium/conductivity ratio of stream water (Figure 11) shows a large grouping of anomalous samples in the Reading Prong-New Jersey Highlands of Sussex County, New Jersey, and Orange County, New York. The anomalous samples appear to be associated with the Byram Gneiss, Franklin Limestone, and Beekmantown Group. Particularly strong anomalies occur at the contacts of Franklin Limestone or Beekmantown Group with the Byram Gneiss, as is also indicated for the stream sediment samples. This area certainly appears to warrant further study.

The areal distribution of uranium/conductivity ratio of ground water (Figure 9) shows a large grouping of anomalous samples in the Catskill Formation-Honesdale Formation of Sullivan County, New York, and Wayne County, Pennsylvania, particularly north of $41^{\circ} 30'$. A smaller but significant group of ground water anomalies occur in the Reading Prong-New Jersey Highlands of Sussex County, New Jersey, and Orange County, New York. Both of these ground water anomaly areas appear to warrant further study.

NAA results above the detection limits are summarized in Tables 9 and 11 for ground water and stream water, respectively.

ACKNOWLEDGMENTS

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FIGURE 2. Histogram and Cumulative Frequency Plot of log (U/Hf) in Stream Sediment

SCRANTON 1°x2° Sheet
LOG U/HF In Sediments
892 Values Above D.L.

LOG U/HF					
+ < -0.47	• -0.17--0.11	○ 0.01- 0.06	⊙ 0.19- 0.26	● 0.42- 0.54	
x -0.47--0.27	○ -0.11--0.06	○ 0.06- 0.12	⊙ 0.26- 0.34	◆ 0.54- 0.68	
• -0.27--0.17	○ -0.06- 0.01	○ 0.12- 0.19	● 0.34- 0.42	★ > 0.68

FIGURE 3. Areal Distribution of log (U/Hf) in Stream Sediment

**FIGURE 4. Histogram and Cumulative Frequency Plot of log (U/Th)
in Stream Sediment**

SCRANTON 1x2' Sheet
LOG U/TH In Sediments
903 Values Above D.L.

LOG U/TH

+ < -0.91	o -0.66--0.62	○ -0.52--0.48	⊖ -0.40--0.36	● -0.25--0.18
x -0.91--0.75	o -0.62--0.57	○ -0.48--0.44	⊖ -0.36--0.30	◆ -0.18--0.10
• -0.75--0.66	○ -0.57--0.52	○ -0.44--0.40	● -0.30--0.25	★ > -0.10

FIGURE 5. Areal Distribution of log (U/Th) in Stream Sediment

FIGURE 6. Histogram and Cumulative Frequency Plot of log (Th/La) in Stream Sediment

SCRANTON 1x2' Sheet
LOG TH/LA In Sediments
904 Values Above E.L.

LOG

+ < -0.90	○ -0.77--0.73	○ -0.66--0.63	⊙ -0.56--0.52	● -0.46--0.43
x -0.90--0.83	○ -0.73--0.70	○ -0.63--0.59	⊙ -0.52--0.48	◆ -0.43--0.36
• -0.83--0.77	○ -0.70--0.66	○ -0.59--0.56	● -0.48--0.46	★ > -0.36

FIGURE 7. Areal Distribution of log (Th/La) in Stream Sediment

FIGURE 8. Log Histogram and Cumulative Frequency Plot of U/Conductivity Values of Ground Water

SCRANTON 1x2' Sheet
Ux1000/Cond. In Ground Water
1059 Values Above D.L.

Ux1000/Cond.

+ < 0.013	• 0.067- 0.105	○ 0.357- 0.653	⊙ 2.730- 5.120	● 11.600- 21.568
x 0.013- 0.030	○ 0.105- 0.206	○ 0.653- 1.378	⊙ 5.120- 8.333	◆ 21.568- 51.612
• 0.030- 0.067	○ 0.206- 0.357	○ 1.378- 2.730	● 8.333- 11.600	★ > 51.612

FIGURE 9. Areal Distribution of U/Conductivity Values of Ground Water

**FIGURE 10. Log Histogram and Cumulative Frequency Plot of
 U/Conductivity Values of Stream Water**

SCRANTON 1'x2' Sheet
Ux1000/Cond. In Surface Water
551 Values Above D.L.

Ux1000/Cond.					
+ < 0.009	○ 0.036- 0.056	○ 0.141- 0.236	⊙ 0.486- 0.696	● 1.235- 2.152	
x 0.009- 0.019	○ 0.056- 0.084	○ 0.236- 0.343	⊙ 0.696- 0.936	◆ 2.152- 6.694	
○ 0.019- 0.036	○ 0.084- 0.141	⊙ 0.343- 0.486	⊙ 0.936- 1.235	★ > 6.694

FIGURE 11. Areal Distribution of U/Conductivity Values of Stream Water

TABLE 9

Statistical Summary of Field Measurements and Elemental Analyses — Ground Water

Variable	n	Measured Values			Log Mean ^e ($\Sigma \log_{10} x$) n	Log Std. ^e Deviation	Standard Deviation ± 1σ
		Maximum ^b	Minimum ^c	Mean ^d			
pH	1206	9.6	4.3	7.1			0.9
Conductivity	1251	2000	1.0		2.1	0.3	
Alkalinity	1251	8.0	0.01		-0.09	0.5	
U	1059	27.4	0.001		-0.88	0.8	
Na	1232	290,050	270		3.7	0.4	
Cl	1229	645,500	2400		4.1	0.3	
Mg	435	583,100	390		3.7	0.4	
Al	1215	1225	3.0		1.4	0.4	
Mn	704	1993	3.3		1.8	0.5	
Br	603	7240	3.3		1.7	0.5	
V	127	6.9	0.1		-0.4	0.3	
F	893	1372	6.0		1.8	0.4	

a. Number of observations. Some values are missing for reasons other than being below detection limit.

b. Elemental concentrations in ppb; conductivity in $\mu\text{mhos/cm}$; alkalinity in meq/L .

c. Minimum or detection limit.

d. Mean of values above detection limit.

e. Log units.

TABLE 10

Statistical Summary of Field Measurements and Elemental Analyses — Sediment

Element	n^a	<u>Measured Values</u>		$\frac{\text{Log Mean}}{n}$ ($\frac{\sum \text{Log}_{10} x}{n}$)	Log Std. Deviation
		<u>Maximum</u> ^b	<u>Minimum</u> ^c		
U	903	20.8	0.7	0.54	0.13
Th	904	62	3.0	1.00	0.17
Hf	893	22.3	0.6	0.44	0.24
Ce	898	390	30	1.94	0.18
Dy	502	32.4	0.3	0.80	0.20
Ti	715	23,100	1200	3.71	0.15
V	891	330	10	1.65	0.18
Fe	904	415,000	1900	4.31	0.23
Mn	890	14,800	40	2.93	0.39
Al	854	86,500	1800	4.51	0.16
Sc	904	144.7	0.9	0.77	0.19
Eu	588	41.9	0.3	0.26	0.22
La	904	220	10	1.61	0.17
Sm	904	27.0	2.0	0.83	0.18
Lu	894	2.5	0.1	-0.28	0.18
Yb	842	16.8	0.9	0.52	0.19
Na	894	55,000	400	3.69	0.32

a. Number of observations.

b. Elemental concentrations in ppm.

c. Minimum or detection limit.

d. Mean of values above detection limit.

TABLE 11

Statistical Summary of Field Measurements and Elemental Analyses - Stream Water

Variable	n ^a	Measured Values			Log Mean ^e ($\Sigma \log_{10} x$) n	Log Std. ^e Deviation	Standard Deviation $\pm 1 \sigma$
		Maximum ^b	Minimum ^c	Mean ^d			
pH	976	9.9	3.8	7.1			0.8
Conductivity	976	1065	3.0		1.9	0.3	
Alkalinity	966	4.8	0.01		-0.62	0.5	
U	551	4.08	0.001		-1.6	0.6	
Na	965	67,670	250		3.6	0.4	
Cl	965	147,300	2200		4.1	0.3	
Mg	142	57,900	540		3.5	0.4	
Al	964	1610	9.9		1.8	0.3	
Mn	781	3260	3.3		1.8	0.4	
Br	569	5560	4.5		1.7	0.4	
V	261	2.7	0.1		-0.4	0.2	
F	709	6470	8.0		1.7	0.3	

a. Number of observations. Some values are missing for reasons other than being below detection limit.

b. Elemental concentrations in ppb; conductivity in $\mu\text{mhos/cm}$; alkalinity in meq/L .

c. Minimum or detection limit.

d. Mean of values above detection limit.

e. Log units.

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APPENDIX A: Ground Water Reconnaissance Data

Key data reported for ground water sites include:

- water chemistry measurements (pH, conductivity, and alkalinity)
- information on well-water source
- elemental analyses for U, Br, Cl, F, Mg, Mn, Na, V, Al, and Dy

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FIGURE A-1. Histogram and Cumulative Frequency Plot of Ground Water pH Values

SCRANTON 1x2° Sheet
pH In Ground Water
1206 Values Above D.L.

pH		-pH units		
+ < 5.0	o 5.7- 5.9	○ 6.6- 6.9	⊙ 7.7- 8.0	● 8.5- 8.7
x 5.0- 5.4	o 5.9- 6.2	○ 6.9- 7.3	⊙ 8.0- 8.3	◆ 8.7- 8.9
• 5.4- 5.7	o 6.2- 6.6	○ 7.3- 7.7	● 8.3- 8.5	★ > 8.9

FIGURE A-2. Areal Distribution of Ground Water pH Values

FIGURE A-3. Log Histogram and Cumulative Frequency Plot of Ground Water Conductivity

SCRANTON 1x2 Sheet
Conductivity In Ground Water
1251 Values Above D.L.

Conductivity - micro-mhos per cm.

+ < 11.0	• 30.0- 40.0	○ 80.0- 110.0	⊙ 190.0- 240.0	● 385.0- 550.0
× 11.0- 20.0	○ 40.0- 60.0	○ 110.0- 150.0	⊙ 240.0- 295.0	◆ 550.0- 750.0
• 20.0- 30.0	○ 60.0- 80.0	⊙ 150.0- 190.0	● 295.0- 385.0	★ > 750.0

FIGURE A-4. Areal Distribution of Ground Water Conductivity

FIGURE A-5. Log Histogram and Cumulative Frequency Plot of Values of Ground Water Alkalinity

FIGURE A-6. Areal Distribution of Values of Ground Water Alkalinity

FIGURE A-7. Log Histogram and Cumulative Frequency Plot of Uranium Concentrations in Ground Water

FIGURE A-8. Areal Distribution of Uranium Concentrations in Ground Water

FIGURE A-9. Log Histogram and Cumulative Frequency Plot of Bromine Concentrations in Ground Water

FIGURE A-10. Areal Distribution of Bromine Concentrations in Ground Water

FIGURE A-11. Log Histogram and Cumulative Frequency Plot of
 Chlorine Concentrations in Ground Water

FIGURE A-12. Areal Distribution of Chlorine Concentrations in Ground Water

FIGURE A-13. Log Histogram and Cumulative Frequency Plot of Fluorine Concentrations in Ground Water

FIGURE A-14. Areal Distribution of Fluorine Concentrations in Ground Water

FIGURE A-15. Log Histogram and Cumulative Frequency Plot of Magnesium Concentrations in Ground Water

FIGURE A-16. Areal Distribution of Magnesium Concentrations in Ground Water

FIGURE A-17. Log Histogram and Cumulative Frequency Plot of Manganese Concentrations in Ground Water

SCRANTON 1x2' Sheet
Manganese In Ground Water
704 Values Above D.L.

Manganese concentration - p.p.b.

+ < 3.4	○ 8.2- 11.0	○ 31.3- 52.1	⊙ 108.8- 162.5	● 365.1- 506.2
x 3.4- 5.8	○ 11.0- 15.6	○ 52.1- 77.5	⊙ 162.5- 228.6	◆ 506.2- 924.6
• 5.8- 8.2	○ 15.6- 31.3	○ 77.5- 108.8	● 228.6- 365.1	★ > 924.6

FIGURE A-18. Areal Distribution of Manganese Concentrations in Ground Water

FIGURE A-19. Log Histogram and Cumulative Frequency Plot of Sodium Concentrations in Ground Water

SCRANTON 1x2° Sheet
Sodium In Ground Water
1232 Values Above D.L.

Sodium concentration - p.p.b.

+ < 380.0	○ 960.0- 1270.0	○ 2870.0- 4140.0	⊙ 8570.0- 13260.0	● 29570.0- 52550.0
x 380.0- 570.0	○ 1270.0- 1890.0	○ 4140.0- 5910.0	⊙ 13260.0- 20300.0	◆ 52550.0- 99640.0
• 570.0- 960.0	○ 1890.0- 2870.0	○ 5910.0- 8570.0	● 20300.0- 29570.0	★ > 99640.0

FIGURE A-20. Areal Distribution of Sodium Concentrations in Ground Water

FIGURE A-21. Log Histogram and Cumulative Frequency Plot of Vanadium Concentrations in Ground Water

SCRANTON 1'x2' Sheet
Vanadium In Ground Water
127 Values Above D.L.

Vanadium concentration - p.p.b.

+ < 0.10	• 0.20- 0.20	○ 0.30- 0.30	⊙ 0.60- 0.90	● 1.90- 3.30
x 0.10- 0.10	○ 0.20- 0.20	○ 0.30- 0.40	⊙ 0.90- 1.70	◆ 3.30- 3.50
• 0.10- 0.20	○ 0.20- 0.30	○ 0.40- 0.60	● 1.70- 1.90	★ > 3.50

FIGURE A-23. Log Histogram and Cumulative Frequency Plot of Aluminum Concentrations in Ground Water

SCRANTON 1x2° Sheet
Aluminum In Ground Water
1215 Values Above D.L.

Aluminum concentration - p.p.b.

+ < 4.7	o 6.9- 8.1	○ 16.1- 22.8	⊙ 40.0- 51.7	● 87.2- 158.5
x 4.7- 5.7	o 8.1- 10.5	○ 22.8- 31.0	⊙ 51.7- 66.1	◆ 158.5- 338.3
• 5.7- 6.9	○ 10.5- 16.1	⊙ 31.0- 40.0	● 66.1- 87.2	★ > 338.3

FIGURE A-24. Areal Distribution of Aluminum Concentrations in Ground Water

FIGURE A-25. Log Histogram and Cumulative Frequency Plot of Dysprosium Concentrations in Ground Water

SCRANTON 1x2° Sheet
Dysprosium In Ground Water
94 Values Above D.L.

Dysprosium concentration - p.p.b.					
+ < 0.029	o 0.036- 0.037	○ 0.072- 0.101	⊙ 0.277- 0.541	● 1.850- 2.354	
x 0.029- 0.030	o 0.037- 0.049	○ 0.101- 0.151	⊙ 0.541- 1.186	◆ 2.354- 4.117	
• 0.030- 0.036	○ 0.049- 0.072	⊙ 0.151- 0.277	● 1.186- 1.850	★ > 4.117

FIGURE A-26. Areal Distribution of Dysprosium Concentrations in Ground Water

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

1

SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NJMR510R	34-41.0040-74.4812-4-52-000	6.4	140	0.60	0.074	.	.	7200	49	4700	.	3840	0.4	0.53
NJMR511R	34-41.0263-74.4538-4-52-000	7.1	45	0.75	0.009	.	.	2800	.	.	3.9	1250	0.1	0.20
NJMR512R	34-41.0304-74.4935-4-52-000	6.9	295	0.60	-0.002	32	.	44200	.	8150	.	13450	-0.1	.
NJMR519R	34-41.0045-74.3669-4-52-000	8.1	410	1.20	0.052	240	.	27600	.	9400	.	5110	-0.1	0.13
NJMR582R	34-41.0037-74.5897-4-53-000	7.3	190	0.90	0.046	0	.	14400	.	.	69.5	4360	-0.1	0.24
NJMR583R	34-41.0367-74.5337-4-52-000	7.8	50	0.10	-0.002	100	9.8	10700	35	.	25.1	3080	-0.1	.
NJMR584R	34-41.0504-74.5276-4-52-000	7.7	50	0.04	0.002	20	.	10000	.	.	23.4	3790	-0.1	0.04
NJPA508R	34-41.0299-74.3009-4-52-000	6.5	182	0.71	0.030	50	97.2	34600	65	7030	.	12010	-0.1	0.16
NJPA509R	34-41.0323-74.3255-4-52-000	6.6	89	0.42	-0.002	109	25.2	5500	.	2070	.	1970	-0.1	.
NJPA510R	34-41.0842-74.2771-4-52-000	6.4	217	0.92	0.052	290	364.9	29700	.	5560	.	7900	0.6	0.24
NJPA511R	34-41.0549-74.2917-4-52-000	5.7	204	0.54	-0.002	300	.	16100	.	.	23.1	6790	-0.1	.
NJPA512R	34-41.0468-74.4206-4-52-000	5.9	102	0.33	-0.002	80	.	13100	55	.	53.7	5550	-0.1	.
NJPA513R	34-41.0483-74.3855-4-52-000	6.4	210	0.92	0.003	.	.	17400	.	.	45.3	2430	-0.1	0.01
NJPA514R	34-41.0354-74.4039-4-52-000	6.8	204	0.79	0.198	129	115.3	29100	.	10700	.	5600	1.3	0.97
NJPA515R	34-41.0766-74.4085-4-52-000	6.4	209	0.73	-0.002	180	.	26600	.	.	43.2	4130	-0.1	.
NJPA516R	34-41.0783-74.4381-4-52-000	5.8	79	0.22	0.019	155	.	16900	.	.	54.5	5980	0.3	0.24
NJPA517R	34-41.0681-74.4481-4-52-000	5.8	183	0.31	-0.002	.	.	27400	.	2590	.	5190	-0.1	.
NJPA518R	34-41.1212-74.3997-4-52-000	6.8	116	0.88	0.034	85	.	9100	97	.	68.8	5960	-0.1	0.29
NJPA519R	34-41.0796-74.3768-4-52-000	6.0	258	0.44	0.024	170	.	32100	.	.	25.2	6030	-0.1	0.09
NJPA520R	34-41.0803-74.3291-4-52-000	6.0	204	0.40	0.020	.	645.4	29900	.	7520	.	6600	-0.1	0.10
NJPA521R	34-41.1311-74.3746-4-52-000	7.2	274	3.33	4.336	110	.	4000	176	.	48.3	5820	0.5	15.82
NJPA522R	34-41.1552-74.3703-4-52-000	6.9	153	1.31	0.222	.	53.2	8800	101	8660	.	3930	-0.1	1.45
NJPA523R	34-41.1570-74.4072-4-52-000	5.8	113	0.33	-0.002	.	.	11800	.	.	51.6	4400	-0.1	.
NJPA524R	34-41.1773-74.3798-4-52-000	6.2	89	0.42	0.019	75	.	12200	17	.	55.3	3810	-0.1	0.21
NJPA525R	34-41.1517-74.3437-4-52-000	6.8	166	1.41	0.182	.	20.2	8100	93	3650	.	2280	-0.1	1.10
NJPA526R	34-41.1357-74.3354-4-52-000	6.3	99	0.73	0.154	90	.	7900	198	4250	.	5040	-0.1	1.56
NJPA527R	34-41.1469-74.3031-4-52-000	7.0	138	1.00	0.360	165	21.4	4700	24	3150	.	2480	0.5	2.61
NJPA528R	34-41.1337-74.2730-4-52-000	7.0	580	0.93	0.225	298	.	22600	726	.	125.4	12940	-0.1	0.39
NJSU501R	34-41.2305-74.7864-4-52-000	7.4	180	3.00	0.818	175	49.4	15100	137	22760	.	8600	-0.1	4.54
NJSU502R	34-41.2545-74.7939-4-52-000	7.3	190	2.30	0.221	.	81.2	10400	30	.	106.5	4870	0.2	1.16
NJSU503R	34-41.2689-74.7863-4-52-000	7.5	205	3.10	0.690	417	45.6	10800	232	18260	.	20160	0.7	3.37
NJSU504R	34-41.2815-74.7564-4-52-000	7.3	255	4.10	0.380	100	.	11800	78	.	162.5	6540	-0.1	1.49
NJSU505R	34-41.2955-74.7080-4-52-000	8.0	215	2.30	0.587	87	41.5	11700	128	29070	.	7510	-0.1	2.73
NJSU506R	34-41.3060-74.6717-4-52-000	7.9	88	0.90	0.171	100	29.7	17000	47	.	138.2	5550	-0.1	1.94
NJSU507R	34-41.2779-74.6652-4-52-000	8.1	175	2.60	0.037	148	83.9	14800	109	.	171.1	12340	-0.1	0.21
NJSU508R	34-41.2777-74.6337-4-52-000	8.1	280	3.70	0.030	.	80.0	26800	515	.	178.8	42150	-0.1	0.11
NJSU509R	34-41.2556-74.6376-4-52-000	7.7	240	4.20	1.056	105	.	12500	151	.	290.8	19340	1.0	4.40
NJSU510R	34-41.2193-74.6254-4-52-000	7.3	160	0.90	0.091	13	.	35200	58	.	117.0	12100	-0.1	0.57
NJSU511R	34-41.2423-74.7136-4-52-000	7.9	95	2.60	0.311	375	85.2	10600	87	20790	.	4540	-0.1	3.27
NJSU512R	34-41.2604-74.7532-4-52-000	7.5	150	2.00	1.557	.	53.3	11600	81	18570	.	5870	-0.1	10.38
NJSU513R	34-41.2823-74.7150-4-52-000	7.8	130	1.60	1.453	220	51.9	10500	127	19460	.	7210	-0.1	11.18
NJSU514R	34-41.2420-74.6539-4-52-000	7.1	325	3.80	0.204	125	52.1	26700	68	.	319.6	13320	-0.1	0.63
NJSU515R	34-41.2291-74.6623-4-53-000	7.5	55	0.32	0.018	0	56.7	11100	89	.	85.6	5120	-0.1	0.33
NJSU516R	34-41.1993-74.6657-4-53-000	7.9	200	2.50	0.041	0	59.2	18100	1372	.	200.6	20760	0.5	0.21
NJSU517R	34-41.2111-74.8157-4-52-000	7.7	260	4.20	0.634	156	57.6	8100	119	24770	.	14600	-0.1	2.44
NJSU518R	34-41.1041-74.7770-4-52-000	6.2	440	1.50	-0.002	70	27.7	106300	.	.	.	30700	-0.1	.
NJSU519R	34-41.0897-74.7790-4-52-000	7.3	565	4.50	0.170	100	.	194100	.	39660	.	86560	1.3	0.30
NJSU520R	34-41.0834-74.8190-4-52-000	7.4	340	0.92	0.857	204	.	23100	150	.	261.9	10870	-0.1	2.52
NJSU521R	34-41.0777-74.8761-4-52-000	8.0	160	2.70	0.335	125	80.4	8900	204	.	214.1	15860	-0.1	2.09
NJSU522R	34-41.1055-74.9274-4-52-000	8.1	310	2.80	0.450	139	.	17600	71	.	335.7	5500	0.4	1.45
NJSU523R	34-41.1366-74.8600-4-52-000	6.2	45	0.70	-0.002	.	57.1	9800	20	.	108.5	3750	-0.1	.
NJSU524R	34-41.1682-74.8388-4-52-000	7.5	55	0.80	0.015	.	110.4	9900	.	.	103.8	4020	-0.1	0.27
NJSU525R	34-41.1700-74.8605-4-53-000	7.5	200	3.40	0.130	0	51.5	12100	22	.	89.4	5000	-0.1	0.65

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NJSU526R	34-41.2014-74.8237-4-52-000	6.8	90	1.20	0.046	50	73.3	14000	42		102.2	6720	-0.1	0.51
NJSU527R	34-41.1875-74.7901-4-52-000	7.6	200	2.50	0.396			37200	61	22700		14150	0.8	1.98
NJSU528R	34-41.1719-74.7843-4-52-000	7.5	60	1.00	0.005	185	87.4	10200	65		90.3	4530	-0.1	0.08
NJSU529R	34-41.1322-74.8243-4-52-000	7.1	60	1.10	0.010	150	114.6	9000	91		1447.0	3750	-0.1	0.17
NJSU530R	34-41.1023-74.8344-4-52-000	7.8	190	3.20	0.954	285	136.9	9500	177		183.3	18740	-0.1	5.02
NJSU531R	34-41.1422-74.8037-4-52-000	6.8	210	1.20	0.043	80		38500	33		103.3	26510	-0.1	0.20
NJSU532R	34-41.1379-74.7032-4-52-000	8.0	275	0.93	0.419		100.3	26600	249		243.5	24660	-0.1	1.52
NJSU533R	34-41.1411-74.7420-4-53-000	7.9	70	1.90	0.025	0	63.3	8600	193			10530	-0.1	0.36
NJSU534R	34-41.2716-74.5785-4-52-000	1.0	362	5.20	0.090	500	2424.0	34800	573		67.1	95330	0.7	0.25
NJSU535R	34-41.2505-74.6011-4-52-000	6.7	260	2.20	0.354	200		33600			426.6	16890	-0.1	1.36
NJSU536R	34-41.2485-74.5534-4-53-000	6.5	155	1.20	0.040	0		20500	70		115.3	8180	-0.1	0.26
NJSU537R	34-41.2255-74.5813-4-52-000	7.4	350	3.20	0.920	360		46800			142.3	20950	-0.1	2.63
NJSU538R	34-41.2387-74.5133-4-53-000	7.5	70	0.70	0.053	0	82.6	12600	311			8560	0.4	0.76
NJSU539R	34-41.2234-74.5346-4-53-000	6.6	60	0.30	0.285	0	64.7	10100	1072		70.4	5700	-0.1	4.75
NJSU540R	34-41.1928-74.5390-4-53-000	7.2	185	2.40	0.656	0	93.8	13900	158		255.1	6530	-0.1	3.55
NJSU541R	34-41.2192-74.5044-4-52-000	7.4	1950	5.60	7.180			515500				182400	6.9	3.68
NJSU542R	34-41.2180-74.4741-4-52-000	7.3	600	3.60	0.360	60		168600	579	33180		57020	-0.1	0.60
NJSU543R	34-41.1948-74.5157-4-52-000	7.5	100	0.90	0.604	120	81.7	22400	257	12900		10880	0.3	6.04
NJSU544R	34-41.1898-74.4678-4-52-000	7.7	210	4.30	0.830	300	46.8	14300	260	26690		6060	-0.1	3.95
NJSU545R	34-41.1906-74.4203-4-52-000	8.1	170	2.10	0.242	100	107.3	22500	107		228.6	5840	-0.1	1.42
NJSU546R	34-41.1988-74.5879-4-52-000	7.4	150	0.70	0.042	22	81.8	17400	37		107.2	12770	-0.1	0.28
NJSU547R	34-41.1976-74.6382-4-52-000	8.2	175	2.00	1.289		104.6	16900	286		91.8	10660	1.9	7.37
NJSU548R	34-41.1884-74.6997-4-52-000	6.9	290	2.10	0.087	20	689.9	73500				23220	-0.1	0.30
NJSU549R	34-41.1735-74.6986-4-53-000	7.8	140	0.90	0.021	0		36900	65		85.6	8830	-0.1	0.15
NJSU550R	34-41.1672-74.7577-4-52-000	8.1	190	2.60	0.833	176	48.1	17600	440		181.4	13490	-0.1	4.38
NJSU554R	34-41.0041-74.8267-4-52-000	7.9	295	2.30	0.201	130		57400			440.6	22610	-0.1	0.68
NJSU557R	34-41.0234-74.7549-4-52-000	8.2	442	4.40	0.303	75		47600		33230		16320	-0.1	0.69
NJSU558R	34-41.0226-74.7935-4-52-000	8.6	219	1.60	0.063	188	68.7	36400	49		202.4	9580	-0.1	0.30
NJSU559R	34-41.1674-74.6768-4-52-000	6.4	260	1.90	2.698	125		34800	76		125.9	10700	-0.1	10.38
NJSU560R	34-41.1683-74.6340-4-52-000	6.4	560	1.60	0.155			210600	99	27780		77760	-0.1	0.28
NJSU561R	34-41.1708-74.5982-4-53-000	6.3	135	0.80	-0.002	0	149.1	29600	35	11520		7330	0.6	
NJSU562R	34-41.1678-74.5190-4-52-000	7.1	240	3.10	0.064	66	87.3	22100	62	24790		6560	-0.1	0.27
NJSU563R	34-41.1554-74.4828-4-52-000	6.6	490	2.30	0.157	93	51.8	111600		13640		53000	3.5	0.32
NJSU564R	34-41.1760-74.4355-4-52-000	7.1	120	1.00	0.082	94	53.9	36500	108		76.8	6010	-0.1	0.68
NJSU565R	34-41.1327-74.4694-4-52-000	6.7	360	1.30	0.307	165	6998.0	117900		33920		32510	-0.1	0.85
NJSU566R	34-41.1098-74.4753-4-52-000	7.2	580	6.20	1.804			106700		31260		31820	-0.1	3.11
NJSU567R	34-41.0829-74.5049-4-52-000	7.6	100	1.20	0.094		61.8	12500	245		86.6	4960	1.1	0.94
NJSU568R	34-41.1246-74.4903-4-52-000	7.9	240	1.70	3.842			60400	574		108.5	5860	-0.1	16.01
NJSU569R	34-41.1586-74.5329-4-52-000	7.8	190	1.90	0.247			45100	233	14850		18840	-0.1	1.30
NJSU570R	34-41.1406-74.5388-4-52-000	8.1	130	2.40	0.090			10100	301			5600	0.4	0.69
NJSU571R	34-41.1278-74.5983-4-52-000	7.7	290	4.60	0.279			27000	169	37230		9440	-0.1	0.96
NJSU572R	34-41.1426-74.6212-4-53-000	7.3	190	2.90	0.035	0	66.0	15000		25290		5470	-0.1	0.18
NJSU573R	34-41.1370-74.6532-4-52-000	8.0	180	1.60	0.248	105	44.9	9500	129		111.7	7610	-0.1	1.38
NJSU574R	34-41.0412-74.7104-4-52-000	6.8	58	0.50	-0.002			11100	407		75.3	3520	0.5	
NJSU575R	34-41.0053-74.7292-4-52-000	7.9	282	3.50	0.453	55	66.9	34500	107	26610		10550	0.7	1.61
NJSU580R	34-41.0252-74.7103-4-52-000	8.1	216	3.50	1.559		59.5	9800	304	27640		5920	-0.1	7.22
NJSU581R	34-41.1163-74.6209-4-52-000	7.0	290	2.40	0.093	55		48900		13080		14020	-0.1	0.32
NJSU582R	34-41.1164-74.5871-4-52-000	7.6	310	4.70	0.553			17700	65	31710		5880	-0.1	1.78
NJSU583R	34-41.1071-74.5301-4-52-000	7.5	90	0.60	0.058	119	47.1	21000	108		146.9	5870	-0.1	0.64
NJSU584R	34-41.0831-74.5773-4-52-000	7.7	440	4.70	0.215			85900		22460		32470	-0.1	0.49
NJSU585R	34-41.0547-74.5985-4-53-000	8.2	60	0.90	0.038	0	70.2	10400	127	10770		5990	-0.1	0.63
NJSU586R	34-41.0433-74.5444-4-52-000	8.2	190	1.60	0.522	75		26700	336		126.1	6130	0.8	2.75
NJSU587R	34-41.0482-74.6337-4-52-000	8.2	100	1.00	0.117	148		12500	172		108.8	6250	0.5	1.17

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NJSU588R	34-41.0305-74.6626-4-52-000	7.6	450	4.00	0.794	65	.	95800	.	24930	.	38500	1.7	1.76
NJSU589R	34-41.0450-74.6661-4-53-000	8.0	285	3.80	1.219	0	34.0	25200	143	27440	.	9160	-0.1	4.28
NJSU590R	34-41.0835-74.6247-4-52-000	8.7	170	2.20	4.718	440	.	16600	891	.	138.9	12000	1.7	27.75
NJSU591R	34-41.1162-74.6642-4-52-000	8.2	280	2.50	0.246	85	81.3	25500	.	18160	.	10390	-0.1	0.88
NJSU592R	34-41.0519-74.7620-4-52-000	5.5	140	1.30	0.029	.	47.9	11700	34	.	109.6	7100	-0.1	0.21
NJSU593R	34-41.0444-74.7871-4-52-000	5.8	150	0.90	-0.002	.	.	33900	61	.	104.6	14480	-0.1	.
NJSU594R	34-41.0203-74.8246-4-52-000	6.7	220	1.80	0.249	45	.	44900	.	.	281.4	22150	-0.1	1.13
NJSU595R	34-41.0428-74.8177-4-52-000	6.5	90	1.10	0.061	98	58.1	10300	71	.	87.8	5090	-0.1	0.68
NJSU596R	34-41.0300-74.8709-4-53-000	7.4	180	2.60	0.070	0	.	17200	.	.	.	7120	-0.1	0.39
NJSU597R	34-41.0527-74.8702-4-52-000	7.1	190	1.40	0.097	.	.	44700	.	.	80.7	14720	-0.1	0.51
NJSU598R	34-41.1046-74.8579-4-52-000	8.1	110	1.70	0.034	150	62.8	9000	191	.	141.6	12900	-0.1	0.31
NJSU599R	34-41.1021-74.7585-4-52-000	7.3	580	5.50	0.247	75	320.6	242200	.	.	394.0	123180	-0.1	0.43
NJSU600R	34-41.1104-74.7209-4-53-000	7.6	190	1.30	0.121	0	.	24100	48	.	117.3	9340	-0.1	0.64
NJSU601R	34-41.0865-74.6774-4-52-000	7.6	550	5.80	0.839	.	.	66900	.	.	643.6	29760	-0.1	1.53
NJSU602R	34-41.0880-74.6975-4-52-000	8.0	400	2.00	0.221	80	1103.0	77500	.	.	164.6	30260	-0.1	0.55
NJSU603R	34-41.0924-74.7343-4-52-000	8.3	180	2.10	0.395	250	59.4	11100	53	.	133.0	10170	-0.1	2.19
NJWA534R	34-41.0052-75.1053-4-52-000	8.1	90	0.24	0.007	.	7.6	6300	38	.	69.8	1880	-0.1	0.08
NJWA535R	34-41.0135-75.0848-4-52-000	7.6	110	0.70	0.024	.	.	5400	29	5700	.	2060	-0.1	0.22
NJWA536R	34-41.0367-75.0322-4-52-000	7.8	100	0.14	-0.002	.	20.3	5300	69	2720	.	1390	-0.1	.
NJWA537R	34-41.0629-74.9895-4-52-000	7.6	80	0.08	-0.002	.	.	10400	75	.	38.8	2970	0.3	.
NJWA538R	34-41.0546-74.9615-4-53-000	6.8	50	0.01	M	0	M	M	M	M	M	M	M	M
NJWA539R	34-41.0357-74.9511-4-52-000	6.9	90	1.00	0.057	.	249.0	7300	65	.	100.2	1310	-0.1	0.63
NJWA540R	34-41.0318-74.9852-4-52-000	7.4	260	2.40	0.363	165	23.1	6000	130	.	617.4	8680	-0.1	1.40
NJWA541R	34-41.0331-74.9159-4-52-000	7.5	280	3.30	0.338	225	.	21900	56	.	152.7	10910	-0.1	1.21
NYOR501R	36-41.5128-74.3922-4-52-000	8.3	140	1.45	0.023	90	.	7200	508	.	12.1	2900	-0.1	0.16
NYOR502R	36-41.5512-74.3958-4-52-000	7.2	320	0.55	0.343	135	.	22900	596	14910	.	7870	-0.1	1.07
NYOR503R	36-41.5504-74.3573-4-52-000	7.4	130	0.85	0.003	100	.	11600	46	.	13.7	4720	-0.1	0.02
NYOR504R	36-41.5824-74.3423-4-53-000	6.0	190	0.55	0.003	0	72.9	22500	99	.	235.0	9330	-0.1	0.02
NYOR505R	36-41.5826-74.3172-4-53-000	6.7	110	0.35	0.009	0	.	18600	101	.	34.5	7720	-0.1	0.08
NYOR506R	36-41.5943-74.3068-4-53-000	6.5	170	0.35	0.022	0	111.2	16100	33	.	434.8	5940	-0.1	0.13
NYOR507R	36-41.5779-74.2654-4-52-000	7.8	270	2.95	1.830	200	.	5600	47	.	48.6	13000	-0.1	6.78
NYOR508R	36-41.5811-74.2186-4-52-000	8.0	340	4.80	0.183	210	.	22500	40	.	252.1	11630	-0.1	0.54
NYOR509R	36-41.5549-74.2274-4-52-000	7.3	220	0.70	-0.002	.	.	10900	.	.	39.9	3850	-0.1	.
NYOR510R	36-41.5483-74.2746-4-52-000	7.9	200	1.60	0.100	250	72.7	12500	76	.	.	8180	-0.1	0.50
NYOR511R	36-41.5270-74.3620-4-52-000	8.4	360	0.85	0.026	.	.	M	.	1250	.	24850	-0.1	0.07
NYOR512R	36-41.5420-74.3203-4-52-000	8.2	330	3.10	0.485	160	34.5	16500	144	.	202.8	20300	-0.1	1.47
NYOR513R	36-41.5222-74.3026-4-52-000	8.8	150	1.10	0.048	.	28.8	4800	38	2560	.	1930	-0.1	0.32
NYOR514R	36-41.5310-74.2581-4-52-000	8.6	270	2.70	M	.	M	M	M	M	M	M	M	M
NYOR515R	36-41.5238-74.2199-4-52-000	8.8	240	1.50	0.120	.	.	9900	.	.	27.7	2950	-0.1	0.50
NYOR516R	36-41.5571-74.1718-4-52-000	8.7	220	1.80	0.582	.	86.7	14900	108	10190	.	7880	-0.1	2.65
NYOR517R	36-41.5753-74.1733-4-52-000	8.5	240	1.60	0.131	.	.	4600	98	.	66.1	7080	-0.1	0.55
NYOR518R	36-41.5774-74.1272-4-52-000	7.7	290	2.30	1.379	.	6639.0	14600	121	.	169.3	37490	-0.1	4.76
NYOR519R	36-41.5554-74.0866-4-52-000	8.5	300	2.40	0.235	320	.	38500	.	.	91.6	17020	-0.1	0.78
NYOR520R	36-41.5811-74.0910-4-52-000	8.4	240	2.60	0.860	70	32.7	15600	162	.	52.2	60660	-0.1	3.58
NYOR521R	36-41.5538-74.0327-4-52-000	8.4	180	0.70	0.041	.	.	16500	30	4810	.	8610	-0.1	0.23
NYOR522R	36-41.5753-74.0352-4-52-000	8.4	190	1.20	0.344	60	32.4	7300	.	2890	.	2690	0.2	1.81
NYOR524R	36-41.5250-74.1701-4-52-000	8.2	270	1.80	0.267	50	.	24500	.	.	32.4	5680	-0.1	0.99
NYOR525R	36-41.5232-74.1394-4-52-000	8.6	380	2.40	0.211	.	.	71500	.	.	.	80460	-0.1	0.56
NYOR526R	36-41.5548-74.1233-4-52-000	8.1	200	1.30	0.282	180	.	11900	.	.	27.9	5650	-0.1	1.41
NYOR527R	36-41.5284-74.0767-4-52-000	8.4	240	2.30	2.258	.	116.8	14400	122	.	451.0	14560	-0.1	9.41
NYOR528R	36-41.4950-74.0808-4-52-000	8.6	500	2.30	0.368	.	31.0	91400	.	.	99.9	34650	-0.1	0.74
NYOR529R	36-41.4416-74.0385-4-52-000	8.5	310	2.50	2.396	.	13.0	4800	105	7190	.	9220	-0.1	7.73
NYOR530R	36-41.4359-74.0768-4-52-000	8.8	270	2.70	0.193	235	52.7	9100	110	18220	.	20930	-0.1	0.71

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYOR531R	36-41.4667-74.0903-4-52-000	8.5	130	0.70	-0.002	30	.	9200	.	.	12.4	3700	-0.1	.
NYOR532R	36-41.4865-74.1227-4-52-000	8.8	290	2.60	0.539	.	.	11100	112	.	368.2	26500	-0.1	1.86
NYOR533R	36-41.4679-74.1270-4-52-000	8.8	220	1.50	0.013	10	.	7500	24	.	38.4	4860	-0.1	0.06
NYOR534R	36-41.4682-74.1731-4-52-000	8.4	500	2.00	0.412	125	.	122400	.	17820	.	9020	-0.1	0.82
NYOR535R	36-41.4710-74.2156-4-52-000	8.0	190	2.00	0.394	60	50.3	9900	37	.	66.3	3180	-0.1	2.07
NYOR536R	36-41.5038-74.2276-4-52-000	8.8	260	1.80	0.153	200	.	19100	160	.	.	8720	-0.1	0.59
NYOR537R	36-41.5002-74.2583-4-53-000	8.6	170	0.60	-0.002	0	46.5	9200	.	4030	.	2240	-0.1	.
NYOR538R	36-41.4986-74.3147-4-52-000	8.4	200	1.50	0.094	45	97.5	13500	106	6900	.	5870	-0.1	0.47
NYOR539R	36-41.4676-74.4074-4-52-000	8.8	290	2.30	0.003	.	.	15400	26	.	26.5	25380	-0.1	0.01
NYOR540R	36-41.4649-74.4420-4-52-000	8.5	500	2.20	0.830	.	.	100400	.	22350	.	16750	-0.1	1.66
NYOR541R	36-41.4367-74.4582-4-52-000	7.5	220	0.70	0.012	.	.	19200	.	.	45.9	7540	-0.1	0.05
NYOR542R	36-41.4326-74.4838-4-52-000	7.7	150	0.90	0.075	.	60.1	9900	86	6470	.	5010	-0.1	0.50
NYOR543R	36-41.4363-74.5296-4-52-000	8.2	230	2.30	0.174	.	36.4	6800	63	3490	.	13500	-0.1	0.76
NYOR544R	36-41.4347-74.5773-4-52-000	7.5	120	0.70	0.002	110	69.2	16700	103	7280	.	7120	-0.1	0.02
NYOR545R	36-41.4364-74.6212-4-52-000	7.9	100	0.50	0.055	.	33.6	11100	.	.	34.9	3650	-0.1	0.55
NYOR546R	36-41.4608-74.5720-4-53-000	8.4	50	0.40	0.022	0	64.9	9200	35	1570	.	2260	-0.1	0.44
NYOR547R	36-41.4403-74.6586-4-52-000	8.2	150	1.30	0.007	.	23.5	6100	12	.	130.4	4020	-0.1	0.05
NYOR548R	36-41.4083-74.6587-4-52-000	8.1	130	0.80	0.014	.	.	35300	35	.	73.0	8120	-0.1	0.11
NYOR549R	36-41.4291-74.7208-4-52-000	8.0	90	1.00	0.114	115	27.8	4400	45	2320	.	2010	-0.1	1.27
NYOR550R	36-41.4448-74.7480-4-52-000	7.9	40	0.24	-0.002	50	.	12700	65	.	20.1	3740	-0.1	.
NYOR551R	36-41.4645-74.7657-4-52-000	7.9	90	0.30	0.050	130	16.7	5100	12	1500	.	2510	-0.1	0.56
NYOR552R	36-41.4127-74.7442-4-52-000	8.1	160	1.50	0.210	.	84.0	13300	19	8440	.	3880	-0.1	1.31
NYOR553R	36-41.4164-74.7172-4-52-000	7.8	120	0.90	0.253	.	30.2	4800	.	3680	.	1350	-0.1	2.11
NYOR554R	36-41.3857-74.7279-4-52-000	7.7	80	0.40	0.030	20	68.1	11100	53	.	47.4	4010	-0.1	0.38
NYOR555R	36-41.3804-74.6711-4-52-000	7.5	150	0.60	0.113	300	15.2	3200	103	.	28.4	7220	-0.1	0.75
NYOR556R	36-41.4693-74.6530-4-52-000	8.0	140	1.60	0.886	140	.	7400	71	7090	.	10030	-0.1	6.33
NYOR557R	36-41.4583-74.6358-4-53-000	8.7	70	0.40	0.055	0	5990.0	20800	40	.	.	9200	-0.1	0.79
NYOR558R	36-41.4649-74.5318-4-52-000	7.9	180	0.90	0.071	.	24.5	11200	.	1960	.	4070	-0.1	0.39
NYOR559R	36-41.4983-74.3553-4-52-000	8.0	250	1.50	0.184	20	79.7	18000	116	8360	.	6790	-0.1	0.74
NYOR560R	36-41.4344-74.4003-4-52-000	8.2	410	2.80	0.601	.	.	19300	.	.	62.1	10210	-0.1	1.47
NYOR561R	36-41.4684-74.4983-4-52-000	8.5	110	0.60	0.050	90	.	11900	89	2700	.	4040	-0.1	0.45
NYOR562R	36-41.4903-74.4469-4-52-000	8.2	230	2.40	0.006	160	.	21000	.	.	46.7	10560	-0.1	0.03
NYOR563R	36-41.4933-74.4880-4-52-000	8.8	150	1.40	0.073	88	36.7	10000	273	.	108.1	16530	-0.1	0.49
NYOR564R	36-41.5185-74.4423-4-52-000	8.6	320	2.00	0.224	50	.	8600	14	.	71.8	2620	-0.1	0.70
NYOR565R	36-41.4891-74.4057-4-52-000	8.1	250	2.00	0.107	400	.	14700	583	5540	.	51150	-0.1	0.43
NYOR566R	36-41.4629-74.3085-4-52-000	8.5	170	0.90	0.167	92	.	8200	108	.	20.6	3820	-0.1	0.98
NYOR567R	36-41.4799-74.2505-4-52-000	8.6	160	1.20	0.025	16	62.6	13300	55	19120	.	3640	-0.1	0.16
NYOR568R	36-41.4445-74.2568-4-52-000	8.9	240	2.10	1.326	200	.	18300	.	.	36.4	6280	-0.1	5.53
NYOR569R	36-41.4302-74.2230-4-52-000	8.3	330	2.20	0.784	.	.	8400	332	7660	.	55980	-0.1	2.38
NYOR570R	36-41.4425-74.1786-4-52-000	8.6	250	2.30	0.699	.	.	4700	19	.	31.2	19220	-0.1	2.80
NYOR571R	36-41.4436-74.1276-4-52-000	8.5	320	1.50	1.878	.	.	10100	206	10090	.	42830	0.3	5.87
NYOR572R	36-41.4209-74.1352-4-52-000	8.9	160	1.30	0.089	118	.	6400	31	.	40.9	2660	-0.1	0.56
NYOR573R	36-41.4159-74.1711-4-52-000	8.6	400	2.10	1.455	.	.	72800	.	14870	.	16630	-0.1	3.64
NYOR574R	36-41.4038-74.2230-4-52-000	8.5	230	2.40	1.255	190	53.9	15900	.	.	144.0	16020	-0.1	5.46
NYOR575R	36-41.4148-74.2604-4-52-000	8.8	650	2.50	0.700	.	.	58200	.	13160	.	15490	-0.1	1.08
NYOR576R	36-41.4130-74.2946-4-52-000	8.5	280	3.10	0.879	400	.	4600	64	.	75.1	30730	-0.1	3.14
NYOR577R	36-41.4107-74.3560-4-52-000	8.7	330	1.80	0.287	240	.	10800	175	.	282.0	39990	-0.1	0.87
NYOR578R	36-41.4437-74.3418-4-52-000	8.1	390	2.10	1.110	135	.	42000	.	.	.	9850	-0.1	2.85
NYOR579R	36-41.4384-74.3086-4-52-000	8.1	160	0.50	0.063	200	.	31200	.	5870	.	11770	-0.1	0.39
NYOR580R	36-41.4073-74.3942-4-52-000	8.3	230	1.90	0.379	375	.	10800	27	.	77.6	20800	-0.1	1.65
NYOR581R	36-41.4059-74.4398-4-52-000	8.7	290	1.70	0.190	230	.	12900	396	.	.	35290	0.5	0.66
NYOR582R	36-41.4119-74.4854-4-52-000	8.1	350	3.40	0.727	200	15.2	4300	64	.	85.0	19850	-0.1	2.08
NYOR583R	36-41.4092-74.5358-4-52-000	8.3	550	3.00	1.330	.	.	55200	.	.	365.2	11520	-0.1	2.42

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYOR584R	36-41.4017-74.5708-4-52-000	8.3	360	3.30	1.267	.	.	9700	73	.	178.7	10860	0.6	3.52
NYOR585R	36-41.4162-74.6093-4-52-000	8.9	180	1.60	0.650	210	92.1	13500	108	19570	.	7760	-0.1	3.61
NYOR586R	36-41.3773-74.6148-4-53-000	9.0	60	0.30	-0.002	0	.	4100	18	.	14.1	1650	-0.1	.
NYOR587R	36-41.3551-74.6203-4-52-000	8.4	210	1.60	0.030	130	83.9	14100	242	14560	.	26380	0.4	0.14
NYOR588R	36-41.3530-74.6602-4-52-000	7.3	40	0.50	-0.002	50	66.9	5500	.	.	72.8	1530	-0.1	.
NYOR589R	36-41.3821-74.5824-4-52-000	8.4	420	2.00	0.102	.	.	73300	.	23700	.	16330	-0.1	0.24
NYOR590R	36-41.3821-74.5363-4-52-000	8.6	360	2.50	0.968	.	.	25100	.	.	56.5	9270	-0.1	2.69
NYOR591R	36-41.3808-74.4852-4-52-000	8.8	240	2.30	0.224	.	44.4	14900	223	.	166.2	13400	-0.1	0.93
NYOR592R	36-41.3791-74.4352-4-52-000	8.2	430	4.20	0.440	298	18.2	29300	.	.	.	22450	-0.1	1.02
NYOR593R	36-41.3829-74.3930-4-52-000	8.9	340	2.20	1.864	170	.	23100	151	.	.	13260	-0.1	5.48
NYOR594R	36-41.3835-74.3470-4-52-000	8.4	150	0.90	0.043	28	.	7400	19	.	29.3	2470	-0.1	0.29
NYOR595R	36-41.3757-74.3041-4-53-000	8.2	170	1.10	0.034	0	27.9	15800	84	5570	.	6700	-0.1	0.20
NYOR596R	36-41.3946-74.2464-4-52-000	7.4	490	2.10	1.170	.	.	M	.	5600	.	M	-0.1	2.39
NYOR597R	36-41.3905-74.2125-4-53-000	7.9	190	0.60	0.019	0	104.4	27000	32	8340	.	7380	-0.1	0.10
NYOR598R	36-41.3805-74.1715-4-52-000	7.3	260	0.60	0.007	100	.	75100	.	.	.	15900	-0.1	0.03
NYOR599R	36-41.3807-74.1269-4-52-000	7.5	140	1.30	0.229	30	52.4	12500	136	.	503.5	6490	-0.1	1.64
NYOR600R	36-41.4107-74.0753-4-52-000	7.3	250	1.80	0.005	10	32.7	8200	.	.	.	3620	-0.1	0.02
NYOR601R	36-41.4146-74.0479-4-52-000	7.7	120	0.90	0.014	525	80.7	12500	751	.	126.0	5210	-0.1	0.12
NYOR602R	36-41.3547-74.0824-4-52-000	8.1	170	1.50	1.362	.	24.3	5700	116	3530	.	4290	0.3	8.01
NYOR603R	36-41.3518-74.1257-4-52-000	8.2	170	2.00	0.395	540	.	9300	69	.	133.9	6540	-0.1	2.32
NYOR604R	36-41.3332-74.1235-4-52-000	8.4	170	0.95	0.662	.	33.4	4600	72	7290	.	1780	-0.1	3.89
NYOR605R	36-41.3031-74.1321-4-52-000	8.6	160	1.20	1.327	130	.	16000	426	5920	.	6500	-0.1	8.29
NYOR606R	36-41.2945-74.1968-4-52-000	8.3	100	0.50	0.097	60	.	13100	.	.	.	2670	-0.1	0.97
NYOR607R	36-41.3244-74.1713-4-52-000	8.1	190	1.60	25.490	.	.	28700	347	4580	.	39390	-0.1	134.16
NYOR608R	36-41.3057-74.1537-4-53-000	8.7	40	0.30	0.377	0	.	11300	221	1620	.	5330	-0.1	9.43
NYOR609R	36-41.3568-74.2094-4-52-000	8.1	170	1.80	0.266	.	.	5200	80	3120	.	2500	-0.1	1.56
NYOR610R	36-41.3283-74.2114-4-52-000	8.0	200	0.50	0.042	.	40.2	37600	.	6110	.	13840	-0.1	0.21
NYOR611R	36-41.3288-74.2534-4-52-000	7.5	600	1.80	0.093	200	.	M	.	5000	.	M	-0.1	0.16
NYOR612R	36-41.3009-74.2594-4-52-000	8.3	220	2.40	0.259	155	.	16500	117	.	.	4570	-0.1	1.18
NYOR613R	36-41.2767-74.2675-4-52-000	8.0	260	2.10	0.956	425	28.0	21500	.	.	259.7	1700	-0.1	3.68
NYOR614R	36-41.2357-74.2774-4-52-000	8.6	160	1.30	8.258	100	71.8	15800	1313	9740	.	9640	0.4	51.61
NYOR615R	36-41.2786-74.2236-4-52-000	8.6	70	1.00	3.353	130	.	4500	692	.	11.6	2840	-0.1	47.90
NYOR616R	36-41.2662-74.1720-4-52-000	7.9	60	0.50	0.171	55	70.8	9900	56	3400	.	2900	-0.1	2.85
NYOR617R	36-41.2744-74.2887-4-52-000	8.1	220	1.90	0.588	.	19.6	4100	280	4930	.	2370	-0.1	2.67
NYOR618R	36-41.2479-74.3119-4-52-000	8.1	280	2.10	0.125	100	.	45400	.	14510	.	9290	-0.1	0.45
NYOR619R	36-41.2450-74.3412-4-52-000	7.0	90	0.50	0.123	65	.	7300	91	.	7.1	2140	-0.1	1.37
NYOR620R	36-41.2669-74.3600-4-52-000	8.0	260	2.30	0.538	.	80.0	13100	81	21950	.	3450	-0.1	2.07
NYOR621R	36-41.2722-74.3987-4-52-000	8.3	320	4.40	0.615	410	13.4	6300	16	16770	.	1350	-0.1	1.92
NYOR622R	36-41.2993-74.3902-4-52-000	8.7	308	3.70	1.066	140	48.6	18500	45	23260	.	7590	-0.1	3.55
NYOR623R	36-41.2945-74.3608-4-52-000	8.7	160	1.60	0.284	.	24.6	4700	59	4760	.	2170	-0.1	1.78
NYOR624R	36-41.2993-74.3102-4-52-000	8.3	470	3.70	0.148	.	.	28700	.	.	68.9	11330	-0.1	0.31
NYOR625R	36-41.3593-74.3882-4-52-000	8.1	480	2.40	0.396	.	.	76000	.	18800	.	38120	-0.1	0.83
NYOR626R	36-41.3519-74.3061-4-52-000	7.9	70	0.60	0.007	.	.	5300	30	.	15.3	1750	-0.1	0.10
NYOR627R	36-41.3539-74.2696-4-52-000	7.8	190	2.30	1.191	.	119.0	19900	467	.	137.2	27440	-0.1	6.27
NYOR628R	36-41.3252-74.3013-4-52-000	7.8	160	0.50	0.021	.	.	29800	.	.	19.4	5480	-0.1	0.13
NYOR629R	36-41.3291-74.3453-4-52-000	8.0	280	1.80	0.527	.	91.1	12500	73	11390	.	7150	-0.1	1.88
NYOR630R	36-41.3252-74.3865-4-53-000	8.3	390	2.30	1.444	0	11.2	6300	133	14250	.	2220	-0.1	3.70
NYOR631R	36-41.3057-74.4362-4-52-000	8.4	510	4.00	9.107	.	.	38900	770	.	506.2	17580	-0.1	17.86
NYOR632R	36-41.2734-74.4390-4-52-000	8.4	410	4.20	27.440	200	.	6700	164	.	.	1000	-0.1	66.93
NYOR633R	36-41.3043-74.4856-4-53-000	8.6	210	1.80	0.749	0	.	22500	219	16420	.	8380	-0.1	3.57
NYOR634R	36-41.3235-74.4364-4-52-000	8.4	370	3.30	2.332	225	.	6700	62	.	143.1	8140	-0.1	6.30
NYOR635R	36-41.3346-74.4894-4-52-000	8.1	700	4.80	2.582	175	.	72200	.	28120	.	17210	-0.1	3.69
NYOR636R	36-41.3220-74.5239-4-52-000	8.5	350	2.00	0.480	.	21.9	11100	.	9030	.	3160	-0.1	1.37

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA --GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYOR637R	36-41.3059- 74.5366-4-52-000	8.3	200	1.90	1.530	.	.	37800	.	27950	.	8170	-0.1	7.65
NYOR638R	36-41.3291- 74.5756-4-52-000	8.2	180	0.60	0.064	10	.	11700	.	.	24.0	1930	-0.1	0.36
NYOR639R	36-41.3261- 74.6154-4-52-000	8.3	200	1.60	0.070	.	.	M	.	M	.	M	0.3	0.35
NYOR640R	36-41.3534- 74.5816-4-52-000	8.4	290	2.80	0.274	80	.	11800	.	5200	.	2910	-0.1	0.94
NYOR641R	36-41.3578- 74.5341-4-52-000	8.4	280	2.10	0.186	88	.	38100	192	16640	.	23710	0.3	0.66
NYOR642R	36-41.3512- 74.4870-4-52-000	8.5	240	2.30	0.500	.	21.0	9300	23	7140	.	4850	-0.1	2.08
NYOR643R	36-41.3530- 74.4588-4-52-000	8.5	400	4.00	1.281	180	56.5	15700	113	39480	.	6530	-0.1	3.20
NYRO501R	36-41.2313- 74.0445-4-52-000	8.0	160	1.30	0.173	110	.	14000	.	3050	.	4810	0.2	1.08
NYRO502R	36-41.1183- 74.1528-4-52-000	7.8	410	1.30	0.145	100	.	89300	.	10330	.	26050	-0.1	0.35
NYRO506R	36-41.0756- 74.0660-4-52-000	7.9	230	1.50	0.116	402	.	23500	20	.	64.3	6260	0.9	0.50
NYRO507R	36-41.1112- 74.1082-4-52-000	8.0	240	2.00	0.946	432	.	13600	.	.	50.9	4010	-0.1	3.94
NYRO508R	36-41.1294- 74.1290-4-52-000	8.1	240	1.90	0.214	119	.	31100	.	9050	.	8190	-0.1	0.89
NYRO509R	36-41.1480- 74.0977-4-52-000	8.3	230	2.30	3.133	452	.	13100	.	7380	.	6330	1.8	13.62
NYRO510R	36-41.1524- 74.0782-4-52-000	8.1	310	2.70	0.185	350	901.6	42400	.	15970	.	11710	-0.1	0.60
NYRO511R	36-41.1486- 74.0449-4-52-000	8.0	310	2.50	0.392	300	415.5	19300	.	.	46.9	6030	-0.1	1.26
NYRO515R	36-41.1181- 74.0103-4-52-000	7.9	250	1.50	0.317	308	.	15600	.	.	21.7	3430	-0.1	1.27
NYSL501R	36-41.6702- 74.7478-4-52-000	6.8	80	0.20	0.167	150	.	35100	.	.	44.9	10060	-0.1	2.09
NYSL502R	36-41.6696- 74.7925-4-52-000	7.2	46	0.22	0.031	70	.	5300	17	.	8.2	1760	-0.1	0.67
NYSL503R	36-41.6846- 74.8223-4-52-000	7.3	92	1.10	1.300	300	5755.0	11800	120	4240	.	8910	-0.1	14.13
NYSL504R	36-41.6743- 74.8658-4-52-000	7.6	92	1.00	0.905	210	.	8200	72	.	9.3	8070	-0.1	9.84
NYSL505R	36-41.6959- 74.6687-4-52-000	7.0	90	1.10	0.976	155	87.5	11900	149	5170	.	6680	-0.1	10.84
NYSL506R	36-41.7216- 74.6673-4-52-000	6.8	70	0.70	0.262	400	35.7	6900	18	.	.	3560	-0.1	3.74
NYSL507R	36-41.7614- 74.6465-4-52-000	6.9	80	0.90	0.151	180	63.3	16100	109	3080	.	6610	-0.1	1.89
NYSL508R	36-41.7840- 74.6467-4-52-000	6.1	50	0.24	0.096	245	47.8	7400	11	.	.	2240	-0.1	1.92
NYSL509R	36-41.6177- 74.7522-4-52-000	5.3	110	2.00	0.836	400	5092.0	9900	102	.	73.4	6020	-0.1	7.60
NYSL510R	36-41.5754- 74.7621-4-52-000	5.1	80	0.50	0.014	98	.	7300	.	.	8.5	3320	-0.1	0.18
NYSL511R	36-41.5824- 74.7196-4-52-000	5.5	40	0.30	0.040	230	.	7700	.	.	6.9	1810	-0.1	1.00
NYSL512R	36-41.6467- 74.7362-4-52-000	7.0	152	1.10	0.340	310	.	17500	138	630	.	44130	-0.1	2.24
NYSL513R	36-41.6548- 74.7856-4-52-000	6.8	50	0.30	0.072	89	.	5800	.	.	7.9	1810	-0.1	1.44
NYSL514R	36-41.6428- 74.8143-4-52-000	6.4	30	0.12	0.032	150	.	13100	.	.	27.3	3320	-0.1	1.07
NYSL515R	36-41.6434- 74.8596-4-52-000	7.0	208	0.30	0.368	72	.	21100	.	.	73.6	14300	-0.1	1.77
NYSL516R	36-41.6707- 74.9028-4-52-000	7.3	101	1.00	1.104	165	.	13600	129	7440	.	5990	-0.1	10.93
NYSL517R	36-41.7025- 74.9019-4-52-000	7.9	111	1.30	2.394	.	27.5	4800	67	2440	.	3600	-0.1	21.57
NYSL518R	36-41.7016- 74.9457-4-52-000	7.8	39	0.40	0.263	.	.	8200	46	.	.	3120	0.2	6.74
NYSL519R	36-41.7028- 74.9823-4-52-000	7.4	111	0.70	0.220	230	.	11500	.	1440	.	4370	-0.1	1.98
NYSL520R	36-41.7052- 75.0201-4-52-000	7.8	248	3.50	8.068	175	.	7900	208	.	151.0	35550	-0.1	32.53
NYSL521R	36-41.6681- 75.0157-4-52-000	8.1	109	1.30	0.618	215	25.6	9500	.	2040	.	3420	-0.1	5.67
NYSL522R	36-41.6780- 74.9863-4-52-000	7.2	70	0.38	0.202	.	.	13700	110	.	44.9	5210	-0.1	2.89
NYSL523R	36-41.6739- 74.9528-4-53-000	6.7	97	0.10	0.078	0	24.2	9000	.	2580	.	2250	-0.1	0.80
NYSL524R	36-41.7334- 74.6071-4-52-000	6.4	60	0.70	0.089	180	85.2	12100	76	3180	.	4580	-0.1	1.48
NYSL525R	36-41.7172- 74.5768-4-52-000	6.0	30	0.14	0.064	75	24.7	3700	.	.	7.0	840	-0.1	2.13
NYSL526R	36-41.6890- 74.5658-4-52-000	6.6	101	1.20	0.593	210	65.1	12600	71	3990	.	4470	-0.1	5.87
NYSL527R	36-41.6884- 74.5384-4-52-000	6.3	42	0.40	0.013	145	.	4900	15	.	8.2	1360	-0.1	0.31
NYSL528R	36-41.6564- 74.5291-4-52-000	6.9	62	1.20	0.010	.	39.8	8000	178	4740	.	4780	-0.1	0.16
NYSL529R	36-41.6136- 74.5480-4-52-000	6.7	49	1.00	0.004	250	.	3800	33	.	10.6	1980	-0.1	0.08
NYSL530R	36-41.6213- 74.5706-4-52-000	7.5	105	2.10	1.312	.	57.2	8500	255	.	.	5930	-0.1	12.50
NYSL531R	36-41.6497- 74.5769-4-52-000	5.8	41	0.16	0.133	225	25.3	4300	13	.	14.6	1110	-0.1	3.24
NYSL532R	36-41.6638- 74.6144-4-52-000	6.2	57	0.40	0.782	200	.	12100	102	.	31.1	4210	-0.1	13.72
NYSL533R	36-41.6903- 74.6180-4-52-000	7.2	142	2.10	0.421	300	67.8	10700	55	.	17.0	13550	-0.1	2.96
NYSL534R	36-41.6047- 74.8836-4-52-000	5.7	35	0.16	0.038	60	62.2	10100	44	.	29.2	1880	-0.1	1.09
NYSL535R	36-41.5737- 74.8786-4-52-000	6.4	100	1.10	0.049	109	18.7	4500	.	.	6.9	990	0.2	0.49
NYSL536R	36-41.5253- 74.8512-4-52-000	7.7	105	1.80	1.218	.	3827.0	7700	171	5380	.	10940	-0.1	11.60
NYSL537R	36-41.5068- 74.8445-4-52-000	7.5	110	1.80	0.111	185	.	3600	137	.	27.0	5870	-0.1	1.01

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL538R	36-41.5094-74.8992-4-52-000	6.4	230	0.80	0.064	110	.	74700	.	.	1064.0	21470	-0.1	0.28
NYSL539R	36-41.4687-74.8997-4-52-000	8.0	180	2.40	0.596	155	42.6	17800	.	.	57.6	23050	-0.1	3.31
NYSL540R	36-41.4443-74.8772-4-52-000	6.6	35	0.34	0.007	110	76.5	11400	97	.	179.1	5810	-0.1	0.20
NYSL541R	36-41.4723-74.9248-4-52-000	6.7	65	0.60	-0.002	176	47.4	5100	41	.	.	2280	-0.1	.
NYSL542R	36-41.4579-74.9630-4-52-000	7.3	95	1.20	0.196	300	78.6	9900	148	7330	.	5690	-0.1	2.06
NYSL543R	36-41.5084-74.9664-4-52-000	7.2	62	1.10	0.249	162	.	3100	57	.	23.0	3020	-0.1	4.02
NYSL544R	36-41.5021-74.9415-4-52-000	6.0	72	0.26	-0.002	92	47.4	27200	48	.	53.9	6790	-0.1	.
NYSL545R	36-41.5417-74.9364-4-52-000	6.1	75	1.20	0.004	.	.	13500	15	.	16.2	3800	-0.1	0.05
NYSL546R	36-41.5766-74.9401-4-52-000	7.5	162	2.70	3.736	.	.	10200	291	.	70.3	25330	-0.1	23.06
NYSL547R	36-41.5685-74.9839-4-52-000	7.1	35	0.14	0.030	80	26.5	4400	.	.	.	1300	0.1	0.86
NYSL548R	36-41.5408-75.0124-4-52-000	8.1	110	1.70	0.887	190	42.2	9000	124	6850	.	7810	-0.1	8.06
NYSL549R	36-41.5705-75.0163-4-52-000	7.3	68	1.00	0.105	240	30.4	4000	39	1740	.	1970	-0.1	1.54
NYSL550R	36-41.5460-74.9655-4-52-000	7.7	88	1.00	0.588	235	86.1	8600	274	4360	.	9880	-0.1	6.68
NYSL551R	36-41.5351-74.8930-4-52-000	7.3	70	1.00	0.270	200	25.8	4700	66	1320	.	2180	-0.1	3.86
NYSL552R	36-41.7450-75.0219-4-52-000	7.3	70	0.80	0.095	185	50.5	17000	166	.	.	5300	-0.1	1.36
NYSL553R	36-41.7759-75.0412-4-52-000	6.6	100	2.50	0.003	220	26.0	5400	.	.	.	1070	-0.1	0.03
NYSL554R	36-41.7790-75.0691-4-52-000	6.7	60	0.90	0.196	185	.	9500	146	3900	.	4440	-0.1	3.27
NYSL555R	36-41.8139-75.0786-4-53-000	6.0	50	0.30	0.896	0	24.5	4200	60	.	209.6	3040	-0.1	17.92
NYSL556R	36-41.8042-75.0475-4-52-000	7.3	145	2.10	0.479	150	82.0	9300	165	.	.	7390	-0.1	3.30
NYSL557R	36-41.8448-75.0688-4-52-000	7.4	90	2.00	0.319	190	39.0	3800	34	.	73.5	3910	-0.1	3.54
NYSL558R	36-41.8468-75.1304-4-52-000	6.2	190	0.50	0.056	30	.	71600	.	4590	.	25910	-0.1	0.29
NYSL559R	36-41.8732-75.0771-4-53-000	6.6	40	0.30	-0.002	0	21.6	4200	.	.	20.4	530	-0.1	.
NYSL560R	36-41.8443-75.0310-4-52-000	7.1	100	2.20	0.077	.	.	8200	144	.	45.1	5800	-0.1	0.77
NYSL561R	36-41.8787-75.0241-4-52-000	7.1	40	0.60	-0.002	100	.	4400	13	.	8.9	740	-0.1	.
NYSL562R	36-41.8862-74.9910-4-52-000	6.4	20	0.24	-0.002	100	.	9400	21	.	6.9	740	-0.1	.
NYSL563R	36-41.9151-74.9995-4-53-000	6.8	40	0.24	4.036	0	25.5	4200	13	.	.	500	-0.1	100.90
NYSL564R	36-41.8406-74.9930-4-53-000	6.7	30	0.36	0.267	0	.	M	.	M	.	M	-0.1	8.90
NYSL565R	36-41.9148-74.9594-4-53-000	6.1	30	0.20	-0.002	0	.	4600	.	.	3.3	660	-0.1	.
NYSL566R	36-41.6390-74.9530-4-52-000	7.2	135	1.50	1.536	200	.	10400	145	.	33.2	8090	-0.1	11.38
NYSL567R	36-41.6430-74.9824-4-52-000	7.1	130	1.40	1.838	195	.	4500	29	.	11.8	4050	-0.1	14.14
NYSL568R	36-41.6378-75.0137-4-53-000	6.0	50	0.20	0.067	0	.	7100	46	3240	.	2080	-0.1	1.34
NYSL569R	36-41.5914-75.0257-4-52-000	6.5	190	1.30	0.333	145	.	27800	.	.	20.8	6580	-0.1	1.75
NYSL570R	36-41.6057-74.9724-4-52-000	7.3	110	1.40	0.478	250	.	10500	220	.	126.1	6810	-0.1	4.35
NYSL571R	36-41.6044-74.9534-4-52-000	6.4	45	0.16	0.027	37	14.8	2800	10	.	5.1	930	-0.1	0.60
NYSL572R	36-41.4732-74.8363-4-52-000	6.2	60	0.50	-0.002	160	74.8	15400	48	.	51.4	5030	-0.1	.
NYSL573R	36-41.4697-74.8038-4-52-000	7.2	90	1.10	0.444	1500	30.8	5000	.	1850	.	2730	-0.1	4.93
NYSL574R	36-41.4415-74.8152-4-52-000	7.5	115	1.50	0.062	100	.	6400	199	77810	.	11610	-0.1	0.54
NYSL575R	36-41.4225-74.8650-4-53-000	6.8	40	0.26	-0.002	0	12.4	2800	25	.	9.3	1370	-0.1	.
NYSL576R	36-41.4063-74.7763-4-52-000	7.7	128	2.00	0.668	135	41.4	5700	148	.	271.4	7720	-0.1	5.22
NYSL577R	36-41.4354-74.7623-4-52-000	6.7	60	0.30	-0.002	70	27.3	5400	.	.	11.0	2020	-0.1	.
NYSL578R	36-41.4822-74.7881-4-52-000	6.7	32	0.16	0.037	32	.	6600	26	.	17.5	1740	-0.1	1.16
NYSL579R	36-41.5024-74.8109-4-52-000	6.5	48	0.26	-0.002	150	29.1	4900	.	.	17.5	1180	-0.1	.
NYSL580R	36-41.5513-74.7741-4-52-000	6.2	40	0.12	-0.002	.	36.9	7800	50	.	30.4	2630	-0.1	.
NYSL581R	36-41.4938-74.7572-4-52-000	7.0	90	0.70	0.007	120	11.7	3300	12	.	22.7	1560	-0.1	0.08
NYSL582R	36-41.7470-74.6269-4-52-000	5.5	93	1.30	0.079	.	58.8	29200	.	.	269.4	10170	-0.1	0.85
NYSL583R	36-41.7980-74.6200-4-52-000	5.5	43	1.10	0.090	90	90.4	11000	18	.	34.4	4130	-0.1	2.09
NYSL584R	36-41.8227-74.6558-4-52-000	6.3	56	3.70	0.038	180	.	6200	22	.	10.5	3260	-0.1	0.68
NYSL585R	36-41.8576-74.6573-4-52-000	6.4	68	4.30	-0.002	140	67.9	13100	141	4140	.	5100	-0.1	.
NYSL586R	36-41.8679-74.6251-4-53-000	6.2	20	0.40	0.002	0	.	M	.	M	.	M	-0.1	0.10
NYSL587R	36-41.9147-74.7216-4-52-000	7.0	75	7.50	0.553	485	.	9800	131	.	7.8	16940	-0.1	7.37
NYSL588R	36-41.9034-74.7211-4-52-000	7.7	101	0.13	6.707	200	20.0	3300	44	2510	.	1550	-0.1	66.41
NYSL589R	36-41.9335-74.6033-4-52-000	7.8	22	0.80	0.064	45	86.6	9300	28	.	.	1800	-0.1	2.91
NYSL590R	36-41.8703-74.5889-4-52-000	7.8	81	7.90	0.035	280	30.9	3200	30	.	18.6	9170	-0.1	0.43

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL591R	36-41.8159- 74.5569-4-53-000	6.7	40	1.30	0.006	0	.	8200	18	.	14.0	2680	-0.1	0.15
NYSL592R	36-41.8198- 74.5789-4-52-000	6.9	120	7.10	0.019	500	17.3	30900	.	.	86.2	12310	-0.1	0.16
NYSL593R	36-41.8039- 74.5666-4-52-000	7.9	30	1.20	0.055	350	4633.0	6300	35	.	12.7	2120	-0.1	1.83
NYSL594R	36-41.6164- 74.6596-4-53-000	M	31	0.14	-0.002	0	16.2	2800	.	.	10.6	800	-0.1	.
NYSL595R	36-41.6127- 74.6040-4-52-000	M	140	1.70	0.732	200	.	11300	92	3380	.	4690	-0.1	5.23
NYSL596R	36-41.5893- 74.5953-4-52-000	M	68	0.80	0.012	.	12.2	4000	25	.	11.2	1700	-0.1	0.18
NYSL597R	36-41.5755- 74.5780-4-52-000	M	119	2.20	0.688	120	69.9	8000	169	.	287.3	7400	-0.1	5.78
NYSL598R	36-41.5894- 74.5449-4-52-000	M	81	0.50	-0.002	200	20.0	9100	.	.	22.7	2740	-0.1	.
NYSL599R	36-41.5894- 74.4897-4-52-000	M	128	2.20	0.023	.	77.6	8100	172	.	54.4	29450	-0.1	0.18
NYSL600R	36-41.6291- 74.4786-4-52-000	M	66	1.30	-0.002	239	20.7	2800	32	.	.	1940	-0.1	.
NYSL601R	36-41.6647- 74.4563-4-52-000	M	134	2.00	0.078	150	75.4	7500	39	4930	.	2890	-0.1	0.58
NYSL602R	36-41.6141- 74.4643-4-52-000	M	89	1.60	0.036	233	27.7	3400	35	1850	.	1230	-0.1	0.40
NYSL603R	36-41.7165- 74.7901-4-52-000	8.7	105	1.80	2.203	208	.	M	.	.	.	4530	-0.1	20.98
NYSL604R	36-41.7155- 74.8157-4-52-000	6.6	55	0.50	0.248	.	25.5	3200	7	.	14.5	2290	0.1	4.51
NYSL605R	36-41.7534- 74.7823-4-52-000	6.9	65	0.60	0.063	12	51.9	9800	54	1530	.	2430	-0.1	0.97
NYSL606R	36-41.7821- 74.7865-4-52-000	7.0	82	0.70	0.499	.	.	4000	11	.	4.4	3180	-0.1	6.09
NYSL607R	36-41.7853- 74.8266-4-52-000	7.3	105	1.20	1.766	200	.	9300	66	3130	.	4590	-0.1	16.82
NYSL608R	36-41.7544- 74.8394-4-52-000	7.1	68	0.50	0.140	300	20.5	6300	.	1060	.	3740	-0.1	2.06
NYSL609R	36-41.7422- 74.8745-4-52-000	7.7	172	2.60	4.601	409	33.4	7600	198	8610	.	18290	-0.1	26.75
NYSL610R	36-41.7171- 74.8689-4-52-000	7.8	105	1.40	0.767	140	22.3	3700	38	2230	.	2950	-0.1	7.30
NYSL611R	36-41.7807- 74.8763-4-52-000	7.0	50	0.38	0.026	7	41.9	6300	50	.	22.6	1930	-0.1	0.52
NYSL612R	36-41.7463- 74.9097-4-52-000	6.8	85	0.80	0.164	150	19.7	3900	11	1500	.	1340	-0.1	1.93
NYSL613R	36-41.7749- 74.9052-4-52-000	6.9	60	0.60	0.151	225	40.9	8400	50	2640	.	3230	-0.1	2.52
NYSL614R	36-41.7804- 74.9592-4-52-000	7.9	98	1.20	0.508	.	12.8	2700	60	720	.	990	-0.1	5.18
NYSL615R	36-41.7830- 74.9780-4-52-000	5.3	490	0.12	0.131	.	49.7	18400	364	.	787.1	11910	-0.1	0.27
NYSL616R	36-41.8044- 74.9487-4-52-000	6.8	140	1.30	2.131	289	.	5500	.	.	15.7	2130	-0.1	15.22
NYSL617R	36-41.8474- 74.9563-4-52-000	7.3	60	0.60	0.084	118	.	7000	62	.	13.4	2000	-0.1	1.40
NYSL618R	36-41.8116- 74.9818-4-52-000	7.3	62	0.70	0.273	278	.	3400	10	.	5.6	2010	-0.1	4.48
NYSL619R	36-41.7500- 74.9562-4-52-000	7.5	305	1.30	0.669	200	374.3	83100	.	.	139.1	27180	-0.1	2.19
NYSL620R	36-41.7410- 74.9837-4-52-000	7.8	170	2.00	0.492	180	39.9	10200	.	.	139.1	13310	-0.1	2.89
NYSL621R	36-41.8079- 74.9135-4-52-000	7.7	140	2.10	1.406	.	41.3	7000	156	.	.	9020	-0.1	10.04
NYSL622R	36-41.8218- 74.8616-4-52-000	7.6	90	1.00	0.314	300	.	2400	21	.	13.3	1990	-0.1	3.49
NYSL623R	36-41.8165- 74.8313-4-52-000	6.7	92	1.40	0.283	250	48.2	7100	166	3820	.	5920	-0.1	3.08
NYSL624R	36-41.8547- 74.8188-4-52-000	6.9	50	0.50	0.256	75	.	3500	8	.	4.7	600	-0.1	5.12
NYSL625R	36-41.8805- 74.8284-4-53-000	5.2	30	0.04	0.044	0	35.7	10800	41	.	175.9	2810	-0.1	1.47
NYSL626R	36-41.9056- 74.8465-4-53-000	6.5	45	0.20	1.189	0	.	3900	.	.	7.5	530	-0.1	26.42
NYSL627R	36-41.9085- 74.8692-4-52-000	7.2	112	1.60	0.498	386	43.7	7400	114	4850	.	3400	-0.1	4.45
NYSL628R	36-41.8880- 74.8705-4-53-000	7.2	30	0.16	0.054	0	22.5	3500	.	.	.	380	-0.1	1.80
NYSL629R	36-41.8431- 74.8797-4-52-000	6.5	55	0.50	0.009	325	71.3	8400	58	.	31.9	2010	-0.1	0.16
NYSL630R	36-41.8888- 74.9008-4-52-000	6.7	85	1.00	0.008	230	28.1	4300	8	1140	.	720	-0.1	0.09
NYSL631R	36-41.9207- 74.9135-4-52-000	7.1	30	0.08	0.053	.	.	5500	46	.	10.2	1060	-0.1	1.77
NYSL632R	36-41.9392- 74.9454-4-52-000	6.3	60	0.20	0.004	150	.	7600	.	.	5.8	2190	-0.1	0.07
NYSL633R	36-41.8680- 74.9445-4-53-000	6.9	100	0.90	0.053	0	65.2	13900	68	2870	.	3790	-0.1	0.53
NYSL634R	36-41.8517- 74.9182-4-52-000	6.8	100	1.00	0.355	245	16.1	3600	34	1150	.	1190	-0.1	3.55
NYSL635R	36-41.5913- 74.4459-4-52-000	M	184	3.50	0.078	200	69.8	6400	490	.	3.4	55740	-0.1	0.42
NYSL636R	36-41.5926- 74.4055-4-52-000	M	156	1.40	0.001	.	29.9	16600	.	.	60.2	7360	-0.1	0.01
NYSL637R	36-41.6225- 74.4104-4-52-000	M	159	2.70	0.041	75	.	8300	452	.	95.0	28730	-0.1	0.26
NYSL638R	36-41.5608- 74.4439-4-52-000	M	149	2.70	0.011	140	12.1	4800	67	.	.	4830	-0.1	0.07
NYSL639R	36-41.5383- 74.4900-4-52-000	M	217	2.40	0.137	.	30.6	14600	175	13090	.	5470	-0.1	0.63
NYSL640R	36-41.5193- 74.4835-4-52-000	M	160	2.30	0.293	.	19.1	4000	.	1310	.	5620	0.2	1.83
NYSL641R	36-41.5200- 74.5316-4-52-000	M	160	3.40	0.300	150	74.5	6500	154	17740	.	3970	-0.1	1.88
NYSL642R	36-41.5405- 74.5225-4-52-000	M	92	1.60	0.099	190	22.0	3900	32	.	43.5	2310	-0.1	1.08
NYSL643R	36-41.5103- 74.5659-4-52-000	M	101	2.10	0.483	200	52.7	8100	122	.	74.6	7140	-0.1	4.78

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL644R	36-41.5125- 74.6030-4-52-000	M	99	1.20	0.028	220	27.3	5600	22	2400	.	930	-0.1	0.28
NYSL645R	36-41.7109- 74.7371-4-53-000	5.4	107	1.20	0.059	0	.	42300	.	.	25.4	15490	-0.1	0.55
NYSL646R	36-41.7583- 74.7496-4-52-000	6.2	113	6.20	0.255	300	.	7200	.	.	9.8	4110	-0.1	2.26
NYSL647R	36-41.7803- 74.7478-4-52-000	6.3	116	3.70	0.008	.	.	38700	299	.	18.9	13470	-0.1	0.07
NYSL648R	36-41.7182- 74.7129-4-52-000	5.9	119	1.80	0.038	265	39.7	11700	.	.	110.1	6250	-0.1	0.32
NYSL649R	36-41.8177- 74.7903-4-52-000	6.4	65	4.30	0.887	200	.	10200	.	.	15.3	2170	-0.1	13.65
NYSL650R	36-41.8114- 74.7400-4-52-000	5.5	134	0.90	0.135	126	554.1	24200	.	.	126.3	8780	0.3	1.01
NYSL651R	36-41.8243- 74.7037-4-52-000	6.0	23	0.80	0.058	120	60.4	7300	41	.	13.9	1350	-0.1	2.52
NYSL652R	36-41.8513- 74.7119-4-53-000	6.3	27	0.80	0.009	0	.	3900	6	.	5.8	680	-0.1	0.33
NYSL653R	36-41.8576- 74.7610-4-53-000	6.9	29	0.80	0.052	0	.	8800	31	.	.	1380	-0.1	1.79
NYSL654R	36-41.8593- 74.7886-4-52-000	7.2	99	0.33	4.083	400	26.3	3700	49	.	15.6	3000	-0.1	41.24
NYSL655R	36-41.7801- 74.7039-4-52-000	7.0	28	0.70	0.024	200	50.9	9200	23	.	33.2	1680	-0.1	0.86
NYSL656R	36-41.7509- 74.7062-4-52-000	6.5	70	1.90	0.048	.	26.0	11400	.	.	15.5	3400	-0.1	0.69
NYSL657R	36-41.8206- 74.6133-4-52-000	7.5	79	4.80	0.717	280	.	8400	67	.	44.6	5800	-0.1	9.08
NYSL658R	36-41.8891- 74.5528-4-53-000	7.5	38	1.10	0.067	0	27.9	4900	.	740	.	750	-0.1	1.76
NYSL659R	36-41.8873- 74.5122-4-52-000	7.7	150	4.20	0.200	.	593.0	51000	.	.	.	24090	-0.1	1.33
NYSL660R	36-41.8622- 74.5356-4-53-000	7.8	31	1.40	0.070	0	22.7	4100	12	570	.	1040	-0.1	2.26
NYSL661R	36-41.8857- 74.5842-4-52-000	7.9	81	8.00	0.158	.	49.6	7300	257	.	176.3	4660	-0.1	1.95
NYSL662R	36-41.9071- 74.7607-4-52-000	7.9	130	0.40	3.260	230	.	3200	41	.	16.0	1690	-0.1	25.08
NYSL663R	36-41.9426- 74.7471-4-52-000	7.5	51	2.70	0.064	175	99.9	15000	37	2570	.	2310	-0.1	1.25
NYSL664R	36-41.8744- 74.7394-4-52-000	7.9	73	8.00	0.052	12	20.5	3400	52	.	.	690	-0.1	0.71
NYSL665R	36-41.8882- 74.7890-4-52-000	8.0	118	1.50	0.183	268	40.2	11400	74	3830	.	2640	-0.1	1.55
NYSL666R	36-41.9158- 74.7970-4-52-000	7.3	45	1.70	-0.002	3	18.4	3400	9	440	.	740	-0.1	.
NYSL667R	36-41.9628- 74.7932-4-52-000	7.5	58	0.60	0.116	.	50.5	7100	66	2200	.	1220	-0.1	2.00
NYSL668R	36-41.9434- 74.8264-4-52-000	7.3	85	1.10	0.236	200	13.6	2900	38	1240	.	1070	-0.1	2.78
NYSL669R	36-41.9771- 74.8338-4-53-000	7.3	30	0.22	0.035	0	.	6200	23	1250	.	990	-0.1	1.17
NYSL671R	36-41.9854- 74.8808-4-53-000	7.4	40	0.16	-0.002	0	33.9	5700	28	1100	.	1260	-0.1	.
NYSL672R	36-41.9423- 74.9219-4-53-000	6.7	85	0.26	-0.002	0	.	13100	.	.	4.1	4380	-0.1	.
NYSL673R	36-41.9600- 74.8877-4-52-000	6.4	60	0.14	0.016	12	7240.0	13800	70	.	29.6	2340	-0.1	0.27
NYSL674R	36-41.6528- 74.6612-4-52-000	M	90	0.90	0.236	.	.	7900	.	.	11.0	2340	-0.1	2.62
NYSL675R	36-41.5016- 74.6492-4-52-000	M	75	1.20	0.005	100	64.0	7900	107	3700	.	3680	-0.1	0.07
NYSL676R	36-41.5265- 74.7026-4-52-000	M	68	1.00	0.076	160	21.0	5300	.	390	.	1840	-0.1	1.12
NYSL677R	36-41.5325- 74.7345-4-52-000	M	101	1.70	0.610	78	.	9200	133	3990	.	6000	-0.1	6.04
NYSL678R	36-41.5093- 74.7394-4-52-000	M	41	0.60	0.014	105	.	9500	57	.	.	2780	-0.1	0.34
NYSL679R	36-41.5649- 74.6790-4-52-000	M	102	1.70	0.568	98	18.4	3700	55	.	.	3790	-0.1	5.57
NYSL680R	36-41.6074- 74.6850-4-52-000	M	107	1.70	1.618	165	59.8	12500	127	4950	.	8080	-0.1	15.12
NYSL681R	36-41.6155- 74.7701-4-52-000	M	76	1.20	0.922	.	.	3300	19	.	11.6	2190	-0.1	12.13
NYUL501R	36-41.7159- 74.4566-4-52-000	5.8	37	0.30	0.013	15	18.9	4900	15	930	.	2250	-0.1	0.35
NYUL502R	36-41.7010- 74.4270-4-52-000	6.7	130	1.30	0.028	.	59.7	10200	103	.	50.9	9620	-0.1	0.22
NYUL503R	36-41.6783- 74.4194-4-53-000	4.9	30	0.04	0.158	0	33.8	6600	12	.	36.4	1620	-0.1	5.27
NYUL504R	36-41.6478- 74.4173-4-52-000	7.7	119	2.30	0.209	.	47.7	8500	259	.	153.5	8040	0.2	1.76
NYUL505R	36-41.6007- 74.3783-4-52-000	7.9	220	3.50	0.046	.	9.2	4600	47	8070	.	12380	-0.1	0.21
NYUL506R	36-41.6143- 74.3522-4-52-000	8.9	212	3.30	0.056	.	.	11000	552	.	36.3	59540	-0.1	0.26
NYUL507R	36-41.6200- 74.3232-4-52-000	8.6	211	3.10	0.010	200	37.9	21100	.	.	.	34530	-0.1	0.05
NYUL508R	36-41.6485- 74.2800-4-53-000	7.7	241	1.30	0.035	0	.	63300	.	.	49.2	20240	-0.1	0.15
NYUL509R	36-41.6817- 74.2689-4-52-000	7.9	170	1.10	0.023	7	.	8000	34	.	41.1	2840	-0.1	0.14
NYUL510R	36-41.6678- 74.3017-4-52-000	8.2	194	3.20	0.014	220	.	8800	334	12040	.	41080	-0.1	0.07
NYUL511R	36-41.6456- 74.3066-4-52-000	8.4	220	3.30	0.018	150	13.0	8900	42	.	11.6	37620	-0.1	0.08
NYUL512R	36-41.6528- 74.3465-4-52-000	8.4	248	2.70	0.046	.	.	18400	185	.	174.4	31900	-0.1	0.19
NYUL513R	36-41.6701- 74.3498-4-52-000	8.9	1850	4.80	0.046	300	40.0	429200	.	4470	.	195640	1.8	0.02
NYUL514R	36-41.6372- 74.3769-4-52-000	8.3	109	0.54	0.551	112	39.1	12500	.	.	111.5	11060	-0.1	5.06
NYUL515R	36-41.6847- 74.4472-4-52-000	8.1	98	0.70	0.058	150	100.4	24400	58	4230	.	9640	0.6	0.59
NYUL516R	36-41.7434- 74.5231-4-52-000	M	99	1.40	0.905	285	.	5500	.	.	13.7	4920	-0.1	9.14

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET 10

SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYUL517R	36-41.7397-74.4823-4-52-000	M	81	0.60	0.214	78	83.0	16900	29	2330	.	7850	-0.1	2.64
NYUL518R	36-41.7757-74.5199-4-52-000	M	93	0.70	0.035	96	38.0	11300	.	.	22.9	4400	-0.1	0.38
NYUL519R	36-41.7767-74.4927-4-52-000	M	99	1.50	0.625	.	.	12200	67	4250	.	4110	-0.1	6.31
NYUL520R	36-41.8137-74.4962-4-52-000	M	45	0.50	0.291	300	.	4400	19	.	3.4	2450	-0.1	6.47
NYUL521R	36-41.7836-74.4404-4-52-000	M	54	0.48	0.005	105	.	13300	87	.	27.4	4200	-0.1	0.09
NYUL522R	36-41.8063-74.4273-4-52-000	M	73	0.50	-0.002	30	19.1	7100	.	.	30.6	3400	-0.1	.
NYUL523R	36-41.8248-74.4610-4-52-000	M	38	0.16	0.018	365	77.7	12300	.	.	21.1	4270	-0.1	0.47
NYUL524R	36-41.8474-74.4492-4-53-000	M	29	0.18	0.023	0	32.2	3800	.	.	.	940	-0.1	0.79
NYUL525R	36-41.7431-74.4107-4-52-000	M	92	1.50	0.033	265	.	16200	120	.	149.6	12130	-0.1	0.36
NYUL526R	36-41.7502-74.4480-4-53-000	M	45	0.32	-0.002	0	26.4	5600	.	.	.	1860	-0.1	.
NYUL527R	36-41.7792-74.2709-4-52-000	M	189	3.30	0.629	200	.	27400	462	25150	.	42940	-0.1	3.33
NYUL528R	36-41.7586-74.2657-4-52-000	M	101	1.60	-0.002	288	27.5	6400	8	2230	.	2310	0.2	.
NYUL529R	36-41.7907-74.2450-4-52-000	M	970	5.40	0.337	.	1463.0	129500	.	21910	.	21880	3.3	0.35
NYUL530R	36-41.7885-74.2054-4-52-000	M	89	1.00	0.003	60	47.6	7600	106	.	6.9	13580	-0.1	0.03
NYUL531R	36-41.7475-74.1992-4-52-000	M	413	6.40	0.500	.	107.6	10000	128	17720	.	15910	-0.1	1.21
NYUL532R	36-41.7162-74.1946-4-52-000	M	252	3.10	0.414	220	20.6	5000	27	4380	.	3000	-0.1	1.64
NYUL533R	36-41.7133-74.2357-4-52-000	M	421	7.60	0.073	75	74.6	26200	355	2630	.	78350	-0.1	0.17
NYUL534R	36-41.8446-74.2744-4-52-000	8.1	211	2.70	0.137	.	28.2	10100	.	.	39.2	14540	-0.1	0.65
NYUL535R	36-41.8840-74.3041-4-52-000	7.6	82	0.60	0.007	1	87.3	15300	29	4860	.	5710	-0.1	0.09
NYUL536R	36-41.9057-74.3118-4-52-000	8.3	126	1.10	0.004	300	19.0	10600	.	.	.	4950	-0.1	0.03
NYUL537R	36-41.9482-74.3054-4-52-000	8.1	220	2.80	0.020	130	92.5	8000	157	.	.	26280	-0.1	0.09
NYUL538R	36-41.9851-74.3237-4-52-000	8.7	181	2.90	0.199	602	23.4	7900	197	.	46.2	39600	-0.1	1.10
NYUL539R	36-41.9763-74.3420-4-52-000	8.2	132	1.40	-0.002	100	10.9	3000	42	.	160.3	3550	-0.1	.
NYUL540R	36-41.9522-74.3582-4-52-000	8.2	82	1.10	0.084	30	77.0	11500	153	4610	.	4520	-0.1	1.02
NYUL541R	36-41.9264-74.4115-4-53-000	8.3	21	0.10	-0.002	0	.	4100	10	.	3.3	550	-0.1	.
NYUL542R	36-41.9148-74.4557-4-52-000	8.3	20	0.06	-0.002	12	44.0	7400	28	2370	.	1350	-0.1	.
NYUL543R	36-41.8805-74.4800-4-52-000	5.8	33	0.08	-0.002	35	9.2	6800	9	.	.	2100	-0.1	.
NYUL544R	36-41.8405-74.2445-4-52-000	8.6	210	3.20	0.075	120	.	8200	296	1720	.	59180	0.4	0.36
NYUL545R	36-41.8811-74.2564-4-52-000	9.2	130	1.30	0.023	41	11.4	5200	38	.	.	6340	-0.1	0.18
NYUL546R	36-41.8856-74.2683-4-53-000	8.5	70	0.60	0.028	0	.	20100	28	.	.	5600	-0.1	0.40
NYUL547R	36-41.9164-74.2833-4-52-000	9.6	230	2.50	0.038	200	.	6400	77	.	22.5	15220	-0.1	0.17
NYUL548R	36-41.9195-74.2441-4-52-000	9.4	60	0.60	0.068	.	.	7900	69	.	.	4510	-0.1	1.13
NYUL549R	36-41.8784-74.2126-4-52-000	8.6	80	0.70	-0.002	.	34.3	4200	.	1010	.	1140	-0.1	.
NYUL550R	36-41.9141-74.2060-4-52-000	8.9	110	1.40	0.008	58	60.1	7300	182	.	211.7	21410	-0.1	0.07
NYUL551R	36-41.9436-74.2316-4-52-000	8.3	40	0.18	-0.002	139	17.3	3900	.	.	.	1110	0.1	.
NYUL552R	36-41.9537-74.2065-4-52-000	8.0	130	0.60	0.010	70	.	29600	.	.	40.0	9880	-0.1	0.08
NYUL553R	36-41.9789-74.1782-4-52-000	8.7	260	2.90	0.016	.	.	27900	.	.	96.1	8110	-0.1	0.06
NYUL554R	36-41.9556-74.1845-4-52-000	8.7	220	1.70	0.076	.	32.7	39500	.	.	.	11740	-0.1	0.35
NYUL555R	36-41.9765-74.2084-4-52-000	8.6	110	0.80	-0.002	190	.	12900	.	1200	.	5740	-0.1	.
NYUL556R	36-41.8847-74.4631-4-53-000	6.3	19	0.10	0.031	0	.	7200	.	.	9.5	1010	-0.1	1.63
NYUL557R	36-41.8750-74.4274-4-52-000	7.9	20	0.40	-0.002	18	13.4	3500	.	.	16.3	680	-0.1	.
NYUL558R	36-41.9199-74.1740-4-52-000	6.1	70	0.60	0.002	18	17.3	6500	.	.	106.5	2360	-0.1	0.03
NYUL560R	36-41.9574-74.1406-4-52-000	6.5	465	1.90	0.063	100	.	129400	97	10390	.	26680	-0.1	0.14
NYUL561R	36-41.9887-74.1333-4-52-000	6.4	66	0.50	-0.002	.	32.2	5100	35	2100	.	1860	-0.1	.
NYUL572R	36-41.8129-74.2805-4-52-000	6.8	150	2.80	0.671	184	16.0	3500	61	.	70.5	7140	-0.1	4.47
NYUL573R	36-41.8140-74.3103-4-52-000	6.1	125	0.80	0.033	20	404.9	21200	.	3850	.	4750	-0.1	0.26
NYUL574R	36-41.8513-74.3198-4-52-000	7.7	115	1.70	0.008	125	15.3	3600	35	.	33.7	4190	-0.1	0.07
NYUL575R	36-41.8559-74.3455-4-52-000	7.6	160	2.30	0.058	.	.	8000	201	.	122.3	13480	-0.1	0.36
NYUL576R	36-41.8797-74.3401-4-52-000	7.1	60	0.70	-0.002	89	19.6	3900	16	.	11.7	2030	-0.1	.
NYUL577R	36-41.8784-74.3740-4-52-000	7.0	40	0.16	0.020	9	47.1	9900	28	1990	.	2700	-0.1	0.50
NYUL578R	36-41.8464-74.3790-4-53-000	6.7	25	0.12	-0.002	0	15.2	2600	.	.	3.6	520	-0.1	.
NYUL579R	36-41.8163-74.3710-4-52-000	6.2	70	0.30	-0.002	207	50.2	7600	73	.	52.8	3180	-0.1	.
NYUL580R	36-41.8027-74.3497-4-52-000	6.4	70	0.24	-0.002	15	25.1	8800	.	640	.	2250	-0.1	.

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYUL581R	36-41.7878- 74.3734-4-52-000	6.8	40	0.28	-0.002	200	57.3	8500	142	1730	.	3190	-0.1	.
NYUL582R	36-41.7783- 74.3401-4-52-000	7.8	350	3.90	0.184	.	.	31000	.	.	.	39640	-0.1	0.53
NYUL583R	36-41.7919- 74.3117-4-52-000	7.5	115	1.60	-0.002	.	66.9	8700	80	2760	.	4670	-0.1	.
NYUL584R	36-41.7212- 74.2798-4-52-000	8.3	120	1.50	0.008	81	75.0	9100	307	.	171.7	19640	-0.1	0.07
NYUL585R	36-41.7480- 74.3180-4-53-000	7.8	90	0.50	-0.002	0	.	15100	.	.	11.5	5050	-0.1	.
NYUL586R	36-41.7533- 74.3491-4-52-000	7.2	30	0.20	0.202	180	66.6	8600	60	.	15.3	4870	-0.1	6.73
NYUL587R	36-41.7223- 74.3403-4-52-000	6.1	30	0.10	0.014	204	34.0	3700	9	.	33.5	930	-0.1	0.47
NYUL588R	36-41.7212- 74.3952-4-52-000	7.0	1	0.20	0.347	.	.	36000	61	.	164.2	13550	-0.1	347.00
NYUL589R	36-41.6737- 74.2412-4-52-000	7.6	412	6.50	0.038	60	21.5	6700	55	.	180.7	27870	-0.1	0.09
NYUL590R	36-41.6827- 74.1998-4-52-000	7.7	376	3.00	0.098	60	.	46300	272	.	.	73730	-0.1	0.26
NYUL591R	36-41.6504- 74.2459-4-52-000	7.5	690	6.70	0.024	.	.	5400	.	.	133.8	17790	-0.1	0.03
NYUL592R	36-41.6180- 74.2452-4-52-000	7.9	279	5.30	0.087	120	.	16900	168	.	340.6	12400	-0.1	0.31
NYUL593R	36-41.6027- 74.2136-4-53-000	7.8	109	1.20	-0.002	0	19.1	11500	.	1960	.	1890	-0.1	.
NYUL594R	36-41.6460- 74.2100-4-53-000	7.5	72	0.60	0.022	0	80.7	13800	72	5200	.	5060	-0.1	0.31
NYUL595R	36-41.6447- 74.1690-4-52-000	7.5	183	2.30	0.053	.	.	10000	.	.	21.1	2840	-0.1	0.29
NYUL596R	36-41.6137- 74.1721-4-52-000	7.4	152	1.70	0.091	.	89.2	15800	47	5190	.	7130	-0.1	0.60
NYUL597R	36-41.5790- 74.1305-4-52-000	7.4	70	0.90	0.012	.	.	4700	23	.	10.9	1900	-0.1	0.17
NYUL598R	36-41.5767- 74.0999-4-53-000	7.4	227	1.80	0.218	0	.	48200	.	6610	.	8480	-0.1	0.96
NYUL599R	36-41.6108- 74.0925-4-52-000	7.6	139	1.00	0.005	15	.	13800	.	.	10.9	5950	-0.1	0.04
NYUL600R	36-41.6213- 74.0739-4-52-000	7.1	402	2.90	0.200	90	.	M	.	M	.	M	-0.1	0.50
NYUL601R	36-41.6431- 74.0707-4-52-000	7.5	281	4.50	0.155	200	.	5900	57	.	52.4	11140	-0.1	0.55
NYUL602R	36-41.6817- 74.0683-4-52-000	7.7	310	3.50	1.275	100	28.0	40100	.	.	274.3	11570	-0.1	4.11
NYUL603R	36-41.8157- 74.2445-4-52-000	6.8	180	2.30	0.155	93	20.2	5500	65	.	66.5	5960	-0.1	0.86
NYUL604R	36-41.8156- 74.2036-4-52-000	6.6	280	3.70	1.011	63	64.0	17800	185	13510	.	6650	-0.1	3.61
NYUL605R	36-41.8518- 74.2079-4-52-000	9.4	295	4.00	0.081	230	.	12500	.	.	.	52550	-0.1	0.27
NYUL606R	36-41.8548- 74.1718-4-52-000	7.7	320	3.20	0.163	46	.	50100	.	5910	.	16540	-0.1	0.51
NYUL607R	36-41.8860- 74.1684-4-52-000	7.0	220	2.90	0.092	.	.	7300	.	7000	.	2800	-0.1	0.42
NYUL608R	36-41.8879- 74.1369-4-52-000	6.9	375	1.90	0.130	90	.	84900	.	.	.	27840	1.7	0.35
NYUL609R	36-41.8769- 74.1086-4-52-000	7.0	240	2.90	0.065	108	17.6	5700	25	.	42.5	1500	-0.1	0.27
NYUL610R	36-41.8562- 74.1259-4-52-000	7.5	560	4.60	0.381	.	.	39200	.	.	107.4	54900	-0.1	0.68
NYUL611R	36-41.8526- 74.1018-4-52-000	7.6	300	3.70	0.240	72	86.0	26400	49	.	410.9	11920	1.2	0.80
NYUL612R	36-41.8772- 74.0680-4-53-000	6.2	70	1.10	-0.002	0	.	3900	26	.	13.6	1500	-0.1	.
NYUL613R	36-41.8522- 74.0760-4-52-000	6.9	560	3.80	0.293	206	.	176200	.	.	139.3	54560	2.7	0.52
NYUL614R	36-41.7835- 74.0699-4-52-000	7.6	280	3.30	0.696	112	21.0	7100	37	4630	.	3010	-0.1	2.49
NYUL615R	36-41.8230- 74.0723-4-52-000	7.1	370	3.20	0.216	66	.	50700	62	.	.	19410	-0.1	0.58
NYUL616R	36-41.8242- 74.0958-4-52-000	8.0	96	1.50	0.014	64	12.3	4800	12	1150	.	1230	-0.1	0.15
NYUL617R	36-41.7948- 74.1075-4-52-000	7.1	75	0.90	0.020	100	65.4	10400	38	2590	.	4070	-0.1	0.27
NYUL618R	36-41.7790- 74.1309-4-52-000	7.2	310	1.20	0.101	20	.	M	.	.	.	33190	-0.1	0.33
NYUL619R	36-41.8146- 74.1332-4-52-000	7.2	200	1.80	0.059	.	.	36600	32	5340	.	12090	-0.1	0.30
NYUL620R	36-41.8136- 74.1637-4-52-000	7.8	170	3.90	0.004	312	.	7200	151	.	12.5	25730	-0.1	0.02
NYUL621R	36-41.7861- 74.1723-4-53-000	8.2	75	1.60	0.017	0	84.8	10800	70	3580	.	5310	-0.1	0.23
NYUL622R	36-41.6046- 74.2869-4-52-000	7.0	238	2.90	0.208	147	.	16500	.	5100	.	4620	-0.1	0.87
NYUL623R	36-41.6098- 74.1329-4-52-000	6.0	107	0.80	0.032	75	.	18500	29	.	18.2	6850	-0.1	0.30
NYUL624R	36-41.6508- 74.1260-4-52-000	6.4	140	1.40	0.064	.	22.2	5200	11	980	.	2100	-0.1	0.46
NYUL625R	36-41.6379- 74.1049-4-52-000	7.1	168	1.90	0.386	220	82.5	13800	165	14240	.	13010	-0.1	2.30
NYUL626R	36-41.6840- 74.0992-4-52-000	7.2	288	4.10	0.307	.	43.9	8300	.	.	77.6	4910	-0.1	1.07
NYUL627R	36-41.6833- 74.1357-4-52-000	6.7	121	1.50	0.067	70	73.6	11600	.	4890	.	5280	-0.1	0.55
NYUL628R	36-41.6805- 74.1684-4-52-000	7.1	191	2.70	0.862	.	.	7800	.	.	39.8	3480	-0.1	4.51
NYUL629R	36-41.7054- 74.1685-4-52-000	7.2	411	3.70	0.127	85	.	65800	72	.	181.2	23440	-0.1	0.31
NYUL630R	36-41.7143- 74.1385-4-52-000	6.9	690	5.90	0.564	90	.	71400	.	.	.	4600	-0.1	0.82
NYUL631R	36-41.7227- 74.1089-4-52-000	7.3	203	2.40	0.201	.	.	18800	.	5030	.	7910	-0.1	0.99
NYUL632R	36-41.7482- 74.0634-4-52-000	7.3	301	2.60	0.281	.	.	31700	.	.	47.8	5850	-0.1	0.93
NYUL633R	36-41.7488- 74.0955-4-52-000	7.0	93	1.40	0.059	80	.	5500	.	.	9.0	1410	-0.1	0.63

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D.	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYUL634R	36-41.7473-74.1311-4-52-000	6.8	111	1.70	0.230	106	53.1	10700	128	4680	.	10830	-0.1	2.07
NYUL645R	36-41.9800-74.2879-4-52-000	8.0	159	2.70	0.128	150	55.5	8400	259	.	146.7	37260	-0.1	0.81
NYUL646R	36-41.9879-74.2483-4-52-000	7.0	219	2.40	0.065	125	.	M	.	M	.	M	-0.1	0.30
NYUL647R	36-41.7294-74.5387-4-52-000	6.5	105	1.20	0.340	.	72.4	19100	89	.	57.1	8360	-0.1	3.24
NYUL648R	36-41.7090-74.4955-4-52-000	6.2	44	0.40	0.109	450	.	6400	.	.	10.3	1480	-0.1	2.48
NYUL653R	36-41.9469-74.0908-4-52-000	6.8	361	3.30	0.225	.	.	61600	50	12200	.	29090	-0.1	0.62
NYUL654R	36-41.9813-74.0676-4-52-000	7.1	580	5.80	0.579	75	.	54900	.	5940	.	14470	-0.1	1.00
NYUL664R	36-41.9089-74.1489-4-52-000	7.5	371	4.00	0.115	.	.	42900	.	.	84.1	8830	-0.1	0.31
NYUL676R	36-41.9968-74.4801-4-53-000	7.6	21	0.06	-0.002	0	28.3	4200	16	750	.	450	-0.1	.
NYUL677R	36-41.9792-74.5190-4-53-000	6.8	21	0.14	0.028	0	.	8000	45	.	11.5	940	-0.1	1.33
NYUL678R	36-41.9557-74.5457-4-53-000	7.0	28	0.16	0.063	0	15.6	2800	14	440	.	460	-0.1	2.25
NYUL679R	36-41.9423-74.4824-4-53-000	6.3	65	0.06	-0.002	0	69.4	8600	46	.	17.6	1080	-0.1	.
NYUL680R	36-41.9378-74.5228-4-52-000	6.6	38	0.10	-0.002	5	2924.0	10000	.	.	5.1	1740	-0.1	.
NYUL681R	36-41.9113-74.5162-4-52-000	6.7	42	0.50	0.048	100	68.3	8400	79	.	44.7	2500	-0.1	1.14
PACRS12R	42-41.0682-75.7053-4-52-000	6.3	73	0.87	-0.002	.	11.2	6900	107	.	368.3	1400	-0.1	.
PACRS13R	42-41.0882-75.6647-4-52-000	5.5	27	0.10	-0.002	200	.	12900	20	.	59.5	2950	-0.1	.
PACRS14R	42-41.1049-75.6443-4-52-000	6.4	122	0.93	-0.002	630	12.1	15300	179	.	154.7	3540	0.5	.
PACRS15R	42-41.0645-75.6164-4-52-000	5.2	79	0.10	0.038	.	.	29500	.	.	174.2	3200	-0.1	0.48
PACRS16R	42-41.0594-75.5914-4-52-000	6.2	69	0.55	-0.002	150	70.8	16400	.	.	1993.0	2580	-0.1	.
PACRS17R	42-41.0167-75.5918-4-53-000	5.5	59	0.06	-0.002	0	.	28100	.	.	81.7	8580	-0.1	.
PACRS19R	42-41.0002-75.5112-4-52-000	5.8	10	0.08	-0.002	.	16.1	7400	13	.	69.8	1100	-0.1	.
PACRS22R	42-41.0226-75.6227-4-52-000	5.4	15	0.10	-0.002	200	.	8000	.	.	60.9	1350	-0.1	.
PACRS23R	42-41.0098-75.6270-4-52-000	5.6	11	0.08	0.004	100	23.5	8300	.	.	63.3	1580	-0.1	0.36
PACRS24R	42-41.0304-75.6846-4-52-000	6.2	71	0.20	0.029	350	.	6800	101	.	360.5	2940	-0.1	0.41
PACRS25R	42-41.0260-75.7041-4-52-000	6.4	78	1.00	0.020	285	15.3	30500	.	.	201.4	7070	-0.1	0.26
PACRS26R	42-41.0398-75.7538-4-53-000	5.7	23	0.06	-0.002	0	.	8900	.	.	92.5	1540	-0.1	.
PACRS27R	42-41.0564-75.7503-4-52-000	6.6	750	1.80	0.369	.	.	196200	.	.	176.4	52380	-0.1	0.49
PALA501R	42-41.4825-75.7416-4-52-000	6.3	205	1.30	0.733	300	.	15700	26	.	60.1	7100	-0.1	3.59
PALA502R	42-41.4827-75.7714-4-52-000	6.9	200	1.80	1.290	250	.	9600	87	.	63.8	10700	0.3	6.45
PALA503R	42-41.4609-75.7978-4-52-000	7.1	170	1.10	0.577	135	751.0	12400	86	7240	.	5090	-0.1	3.39
PALA504R	42-41.4562-75.7694-4-52-000	6.7	205	1.05	0.040	50	.	17900	63	.	.	7210	-0.1	0.20
PALA505R	42-41.4574-75.7354-4-52-000	7.2	160	1.30	0.975	255	.	12200	127	7640	.	6940	-0.1	6.09
PALA506R	42-41.4641-75.6962-4-52-000	7.2	430	1.50	4.208	212	81.2	58400	.	19300	.	15430	-0.1	9.79
PALA507R	42-41.5158-75.7235-4-53-000	6.6	185	0.80	0.043	0	.	19500	29	3420	.	6720	-0.1	0.23
PALA508R	42-41.5512-75.7330-4-52-000	6.9	240	1.40	1.486	.	.	32000	75	6210	.	8480	-0.1	6.19
PALA509R	42-41.5512-75.7700-4-52-000	7.3	212	1.60	1.772	230	.	17800	105	5830	.	8970	-0.1	8.36
PALA510R	42-41.5149-75.7770-4-52-000	7.7	240	2.00	1.571	125	.	17700	128	7490	.	11800	-0.1	6.55
PALA511R	42-41.5866-75.7368-4-53-000	6.6	152	0.45	0.015	0	10.5	12300	15	5530	.	2830	-0.1	0.10
PALA512R	42-41.6107-75.7184-4-52-000	7.3	220	2.10	1.868	290	.	7900	65	8460	.	11810	-0.1	8.49
PALA513R	42-41.6149-75.6884-4-52-000	7.7	220	1.90	1.911	.	.	11300	48	6980	.	12030	0.4	8.69
PALA514R	42-41.6160-75.6464-4-52-000	8.1	195	2.00	2.103	250	.	8300	113	7310	.	10310	-0.1	10.78
PALA515R	42-41.5833-75.6823-4-52-000	6.6	290	1.60	1.134	250	.	14800	44	6130	.	6680	-0.1	3.91
PALA516R	42-41.5479-75.6821-4-52-000	7.0	220	2.30	0.701	276	.	6600	57	.	179.1	12000	-0.1	3.19
PALA517R	42-41.5273-75.6766-4-52-000	6.8	190	1.80	1.336	200	25.7	13400	84	7290	.	7790	-0.1	7.03
PALA518R	42-41.5486-75.6459-4-52-000	7.5	230	2.00	2.075	200	.	8900	102	8170	.	11800	-0.1	9.02
PALA519R	42-41.5833-75.6333-4-52-000	6.9	230	0.90	0.047	16	.	28100	.	7410	.	6050	-0.1	0.20
PALA520R	42-41.5895-75.6040-4-52-000	7.4	185	0.65	0.072	15	.	39900	.	.	132.2	16210	-0.1	0.39
PALA521R	42-41.6250-75.6097-4-52-000	7.5	200	1.90	1.952	440	17.7	12000	86	.	49.4	8730	-0.1	9.76
PALA522R	42-41.6255-75.5587-4-52-000	7.3	172	1.30	1.446	187	395.4	13800	67	.	42.3	4360	-0.1	8.41
PALA523R	42-41.6266-75.5177-4-52-000	8.0	115	1.00	2.291	200	.	13100	76	.	59.1	4280	-0.1	19.92
PALA524R	42-41.5885-75.5622-4-52-000	7.7	200	1.30	0.765	144	.	15100	45	.	41.1	6990	-0.1	3.83
PALA525R	42-41.5636-75.5716-4-53-000	6.5	130	0.65	0.116	0	15.9	12800	64	4540	.	4020	-0.1	0.89
PALA526R	42-41.4320-75.5221-4-52-000	7.8	155	1.80	0.020	210	.	7100	149	.	171.4	1660	-0.1	0.13

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PALA527R	42-41.4321-	75.4785-4-52-000	8.3	120	1.20	0.509	142	6800	44	3100	.	3940	-0.1	4.24
PALA528R	42-41.4464-	75.4743-4-52-000	7.1	70	0.40	0.032	140	11100	46	.	32.5	2590	-0.1	0.46
PALA529R	42-41.4797-	75.4654-4-52-000	7.0	90	0.55	0.279	140	9000	53	2720	.	3550	-0.1	3.10
PALA530R	42-41.5881-	75.4682-4-52-000	6.0	105	0.04	0.047	25	683.9	104	.	390.0	5150	-0.1	0.45
PALA531R	42-41.5554-	75.4886-4-52-000	6.2	50	0.28	-0.002	180	13.1	11400	30	1627.0	1600	-0.1	.
PALA532R	42-41.4891-	75.6475-4-52-000	7.2	175	1.10	0.586	.	10300	32	.	476.8	4440	-0.1	3.35
PALA533R	42-41.5251-	75.6384-4-52-000	7.5	215	1.90	1.969	240	11900	88	6870	.	6690	-0.1	9.16
PALA534R	42-41.5204-	75.5956-4-52-000	7.3	70	0.90	0.156	120	9800	15	.	53.7	1860	-0.1	2.23
PALA535R	42-41.3223-	75.6528-4-53-000	6.6	60	0.06	0.003	0	1483.0	26	.	43.3	700	-0.1	0.05
PALA536R	42-41.2998-	75.6412-4-52-000	6.9	120	0.90	1.416	.	7100	87	3930	.	2700	-0.1	11.80
PALA537R	42-41.2962-	75.6140-4-52-000	7.9	155	1.20	0.954	.	15800	22	3550	.	2010	-0.1	6.15
PALA538R	42-41.3011-	75.5680-4-52-000	7.5	75	0.55	0.034	.	8500	.	2580	.	1060	-0.1	0.45
PALA539R	42-41.2707-	75.5468-4-52-000	6.1	45	0.16	0.019	23	16.0	58	.	118.0	810	-0.1	0.42
PALA540R	42-41.1997-	75.5740-4-52-000	6.5	80	0.75	0.238	210	7100	17	3720	.	1560	-0.1	2.98
PALA541R	42-41.2071-	75.6102-4-52-000	6.8	40	0.28	-0.002	.	8100	55	.	33.1	460	-0.1	.
PALA542R	42-41.3919-	75.7688-4-52-000	6.6	120	0.20	0.018	251	18500	54	.	64.3	2330	-0.1	0.15
PALA543R	42-41.4168-	75.7628-4-52-000	7.0	110	0.75	0.256	200	9.8	26	.	.	3270	-0.1	2.33
PALA544R	42-41.4101-	75.8183-4-52-000	7.1	215	1.70	0.270	550	14900	88	.	.	5910	0.4	1.26
PALA545R	42-41.3964-	75.8111-4-52-000	7.5	245	1.70	0.195	223	30900	.	.	91.7	21370	-0.1	0.80
PALA546R	42-41.4265-	75.7224-4-52-000	6.8	75	0.50	-0.002	160	6500	250	.	888.3	1020	-0.1	.
PALA547R	42-41.3577-	75.5984-4-52-000	5.8	65	0.18	-0.002	120	13400	48	.	39.6	1250	-0.1	.
PALA548R	42-41.3598-	75.5641-4-52-000	6.1	125	0.24	0.053	.	41400	.	.	73.8	15940	-0.1	0.42
PALA549R	42-41.3929-	75.5535-4-52-000	6.8	95	0.75	0.081	.	8900	75	.	87.8	4730	-0.1	0.85
PALA550R	42-41.3856-	75.5226-4-52-000	6.5	140	0.65	0.148	140	13300	.	.	94.6	5050	-0.1	1.06
PALA551R	42-41.3884-	75.4707-4-52-000	6.2	85	0.40	0.010	.	9000	35	.	75.4	2920	-0.1	0.12
PALA552R	42-41.3608-	75.4752-4-52-000	6.5	100	0.50	-0.002	101	17400	.	.	87.2	3120	-0.1	.
PALA553R	42-41.3640-	75.5081-4-52-000	6.3	100	0.45	M	125	M	M	M	M	M	M	M
PALA554R	42-41.3259-	75.5293-4-52-000	6.7	115	0.90	0.442	210	23.8	8700	.	92.4	2850	-0.1	3.84
PALA555R	42-41.3352-	75.5548-4-52-000	6.4	150	0.45	0.081	150	24600	.	.	78.0	4870	-0.1	0.54
PALA556R	42-41.2945-	75.5228-4-52-000	6.2	280	0.60	0.030	135	98.6	82700	9510	.	6370	-0.1	0.11
PALA557R	42-41.3261-	75.4733-4-53-000	5.6	50	0.10	0.012	0	101.3	29	.	75.0	3170	-0.1	0.24
PALA558R	42-41.2926-	75.4788-4-52-000	6.0	90	0.26	-0.002	.	76.3	67	.	100.0	2860	-0.1	.
PALA559R	42-41.2608-	75.4725-4-52-000	6.0	75	0.24	-0.002	138	48.4	12400	28	93.7	4550	-0.1	.
PALA560R	42-41.2630-	75.5086-4-52-000	6.9	60	0.42	0.102	100	8400	42	.	77.9	1940	-0.1	1.70
PALA561R	42-41.2404-	75.5251-4-52-000	6.7	70	0.55	0.039	123	7500	87	.	83.9	4030	-0.1	0.56
PALA562R	42-41.2216-	75.5488-4-52-000	7.1	100	0.90	0.390	190	8300	75	.	90.1	2340	-0.1	3.90
PALA563R	42-41.1681-	75.6003-4-52-000	5.9	30	0.08	0.011	170	7500	15	.	87.1	1820	-0.1	0.37
PALU569R	42-41.0290-	75.9975-4-52-000	7.3	131	1.20	0.144	55	10900	60	2400	.	6280	0.9	1.10
PALU570R	42-41.0252-	75.9608-4-53-000	7.2	117	0.70	0.427	0	9300	.	.	27.5	2000	-0.1	3.65
PALU571R	42-41.0063-	75.9657-4-52-000	6.8	65	0.18	-0.002	250	11800	32	.	13.7	2080	-0.1	.
PALU572R	42-41.0577-	75.9609-4-52-000	6.7	60	0.65	-0.002	300	7200	51	2630	.	2140	0.3	.
PALU573R	42-41.0808-	75.9948-4-52-000	5.6	154	0.16	-0.002	135	14.8	38900	7840	.	8870	-0.1	.
PALU576R	42-41.0202-	75.9149-4-52-000	6.1	36	0.25	-0.002	127	.	9400	35	20.0	1230	-0.1	.
PALU577R	42-41.0234-	75.8543-4-52-000	6.6	25	0.18	0.017	.	13.4	4200	470	.	380	-0.1	0.68
PALU578R	42-41.0201-	75.8201-4-52-000	6.6	48	0.40	-0.002	155	39.2	10600	29	15.2	2910	-0.1	.
PALU579R	42-41.0047-	75.8197-4-52-000	6.5	45	0.14	-0.002	96	14.5	11800	13	26.8	2540	-0.1	.
PALU580R	42-41.0904-	75.9590-4-52-000	6.3	119	0.43	0.025	150	.	18900	42	34.7	5200	-0.1	0.21
PALU587R	42-41.1299-	75.9984-4-52-000	6.9	140	1.10	0.008	100	24000	178	.	66.9	11710	-0.1	0.06
PALU589R	42-41.1216-	75.9443-4-52-000	6.8	195	1.10	0.044	170	13.2	10800	83	7070	6510	-0.1	0.23
PALU590R	42-41.1185-	75.9084-4-53-000	5.5	81	0.26	0.005	0	.	16000	.	38.8	4180	-0.1	0.06
PALU591R	42-41.0989-	75.9260-4-52-000	7.0	70	0.73	0.244	.	6400	73	.	27.0	2580	0.5	3.49
PALU592R	42-41.1223-	75.8773-4-52-000	5.7	55	0.10	0.004	125	35.4	13400	25	46.3	3230	0.3	0.07
PALU593R	42-41.1390-	75.8702-4-53-000	6.2	55	0.12	-0.002	0	.	10100	.	32.9	1640	-0.1	.

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PALU594R	42-41.1473-	75.9656-4-52-000	6.6	78	0.73	-0.002	125	7200	145	.	499.6	4220	-0.1	
PALU595R	42-41.1628-	75.9295-4-52-000	7.0	131	1.10	0.308	220	7000	35	3840	.	3550	-0.1	2.35
PALU599R	42-41.2808-	75.9703-4-52-000	7.3	130	1.40	0.652	.	7500	82	.	51.5	8820	0.2	5.02
PALU600R	42-41.3097-	75.9731-4-52-000	7.3	200	1.70	0.117	.	13800	101	.	358.8	18820	-0.1	0.59
PALU607R	42-41.3495-	75.9985-4-52-000	7.3	206	2.30	0.362	225	6900	117	8420	.	10750	-0.1	1.76
PALU608R	42-41.3475-	75.9533-4-52-000	6.8	251	0.87	0.204	400	10800	.	.	47.9	4650	-0.1	0.81
PALU609R	42-41.3674-	75.9753-4-52-000	6.9	110	0.65	0.057	160	9500	.	.	9.7	2520	-0.1	0.52
PALU612R	42-41.3744-	75.9132-4-52-000	7.6	171	1.70	0.597	200	6000	71	.	12.5	11280	-0.1	3.49
PALU613R	42-41.3991-	75.9217-4-52-000	7.6	180	1.80	0.521	273	11800	126	.	198.6	8290	-0.1	2.89
PALU614R	42-41.4064-	75.8802-4-52-000	6.9	135	0.80	0.070	.	5700	29	.	14.5	1770	-0.1	0.52
PALU615R	42-41.4103-	75.8512-4-52-000	7.5	255	1.70	0.143	350	28700	426	2290	.	42550	-0.1	0.56
PALU616R	42-41.3770-	75.8425-4-52-000	6.9	180	1.00	0.068	70	12800	.	.	13.2	3620	-0.1	0.38
PALU617R	42-41.3823-	75.8788-4-52-000	7.8	385	2.20	0.100	.	70700	.	.	115.2	34350	-0.1	0.26
PALU618R	42-41.3447-	75.8747-4-52-000	7.3	104	0.67	0.404	.	4800	26	.	13.0	2450	-0.1	3.88
PALU619R	42-41.3418-	75.9101-4-52-000	7.7	220	1.50	0.917	.	18900	108	6750	.	11840	-0.1	4.17
PALU620R	42-41.2504-	75.9712-4-52-000	6.8	78	1.20	0.014	330	3500	58	.	52.1	1580	-0.1	0.18
PALU621R	42-41.3023-	75.9162-4-52-000	6.3	48	0.30	0.034	90	7800	33	4060	.	1630	-0.1	0.71
PALU622R	42-41.3172-	75.8825-4-52-000	6.8	149	0.70	0.009	.	9500	.	.	10.4	1070	-0.1	0.06
PALU623R	42-41.3452-	75.8372-4-53-000	6.4	50	0.14	-0.002	0	9000	35	2390	.	2040	-0.1	
PALU624R	42-41.3793-	75.8002-4-52-000	7.3	251	2.20	1.984	115	25900	.	.	13.3	12690	-0.1	7.90
PALU625R	42-41.3522-	75.8090-4-53-000	7.6	46	0.16	0.044	0	7800	64	2730	.	1420	-0.1	0.96
PALU626R	42-41.2889-	75.9303-4-52-000	6.5	196	0.65	0.193	152	11900	70	3990	.	3330	0.2	0.98
PALU627R	42-41.3039-	75.7286-4-52-000	7.1	246	1.40	0.287	90	59300	.	5060	.	10580	-0.1	1.17
PALU628R	42-41.0618-	75.7972-4-52-000	6.8	186	1.50	0.190	304	22000	56	5760	.	5450	-0.1	1.02
PALU629R	42-41.0573-	75.8317-4-52-000	6.7	31	0.12	0.060	250	8300	32	.	13.6	1660	0.2	1.94
PALU630R	42-41.0909-	75.7865-4-52-000	6.3	178	0.20	-0.002	137	17400	35	2300	.	3390	-0.1	
PALU631R	42-41.1225-	75.8064-4-52-000	7.1	75	0.80	0.143	143	6100	48	2310	.	1270	-0.1	1.91
PALU632R	42-41.1352-	75.8475-4-53-000	5.2	25	0.01	-0.002	0	3200	.	.	150.7	510	-0.1	
PALU633R	42-41.1778-	75.8842-4-52-000	6.4	74	0.26	0.038	200	5200	25	1450	.	560	-0.1	0.51
PALU634R	42-41.2083-	75.8339-4-52-000	6.4	79	0.24	0.032	100	20100	40	.	30.3	4760	-0.1	0.41
PALU635R	42-41.2114-	75.8568-4-52-000	6.0	30	0.06	0.020	75	8500	55	.	128.8	1310	-0.1	0.67
PALU636R	42-41.1950-	75.8104-4-52-000	6.3	23	0.12	-0.002	109	9300	52	1310	.	1120	-0.1	
PALU637R	42-41.2090-	75.7941-4-52-000	6.4	27	0.14	-0.002	250	3700	.	860	.	370	-0.1	
PALU638R	42-41.2445-	75.7780-4-52-000	5.9	28	0.08	0.012	127	5900	.	.	8.1	1120	-0.1	0.43
PALU639R	42-41.2544-	75.7478-4-52-000	5.4	63	0.06	-0.002	175	6900	.	.	20.1	1680	-0.1	
PALU640R	42-41.2467-	75.7231-4-52-000	6.8	155	0.80	0.122	.	15200	.	.	75.9	2680	-0.1	0.79
PALU641R	42-41.2949-	75.7069-4-52-000	7.6	220	1.60	1.863	305	30400	105	.	50.7	23860	-0.1	8.47
PALU642R	42-41.1223-	75.7502-4-52-000	7.1	70	0.55	0.330	.	3900	22	930	.	660	-0.1	4.71
PALU643R	42-41.0966-	75.8138-4-52-000	6.7	100	1.20	0.017	171	8700	47	3230	.	2580	-0.1	0.17
PALU644R	42-41.0910-	75.8789-4-52-000	6.6	69	0.80	-0.002	.	3400	27	.	52.2	440	-0.1	
PALU645R	42-41.0640-	75.9274-4-52-000	6.7	43	0.60	0.021	200	8000	15	1290	.	1430	-0.1	0.49
PALU646R	42-41.1333-	75.7255-4-53-000	7.3	18	0.10	0.007	0	3600	.	.	6.2	280	-0.1	0.39
PALU647R	42-41.1687-	75.7415-4-52-000	7.1	134	1.60	0.595	160	3900	38	.	218.2	3660	-0.1	4.44
PALU648R	42-41.1815-	75.7411-4-52-000	6.3	60	0.10	0.028	275	17400	34	.	43.5	4580	-0.1	0.47
PALU649R	42-41.1869-	75.7166-4-52-000	5.5	35	0.06	0.026	200	8700	.	.	112.2	1300	-0.1	0.74
PALU650R	42-41.2059-	75.7040-4-52-000	6.2	52	0.28	0.079	.	7200	8	3360	.	830	-0.1	1.52
PALU651R	42-41.2138-	75.6636-4-52-000	6.1	25	0.16	0.022	.	4400	.	.	12.7	300	-0.1	0.88
PALU652R	42-41.1907-	75.6614-4-52-000	5.4	35	0.08	-0.002	180	11800	40	.	86.0	3060	-0.1	
PALU653R	42-41.1651-	75.6630-4-52-000	5.9	15	0.12	0.004	.	3700	18	.	.	450	-0.1	0.27
PALU654R	42-41.1595-	75.6005-4-52-000	5.4	95	0.14	0.021	.	21200	38	.	483.0	7260	-0.1	0.22
PALU655R	42-41.1435-	75.6365-4-52-000	5.9	11	0.08	0.015	110	2800	.	.	6.2	270	-0.1	1.36
PALU656R	42-41.0285-	75.7866-4-52-000	6.1	89	0.26	-0.002	90	25600	.	.	24.3	5720	-0.1	
PAM0501R	42-41.0348-	75.1538-4-52-000	7.9	250	2.40	0.156	65	4000	24	.	6.2	390	-0.1	0.62

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAH0502R	42-41.0627- 75.1564-4-52-000	7.2	180	1.30	0.114	142	.	16300	144	6850	.	10360	-0.1	0.63
PAH0503R	42-41.0654- 75.1143-4-52-000	6.2	110	0.28	-0.002	60	.	11600	.	.	10.9	4310	-0.1	.
PAH0504R	42-41.1261- 75.1159-4-52-000	5.9	160	0.46	0.047	91	.	19000	.	.	47.1	5620	-0.1	0.29
PAH0505R	42-41.0926- 75.1227-4-52-000	6.6	90	0.80	-0.002	230	51.9	7700	73	.	153.3	3310	-0.1	.
PAH0506R	42-41.0866- 75.0833-4-52-000	8.0	165	1.70	0.003	173	.	7400	107	.	48.7	16690	-0.1	0.02
PAH0507R	42-41.0876- 75.0398-4-52-000	7.8	130	1.40	0.002	156	90.3	9400	176	.	105.8	7700	-0.1	0.02
PAH0508R	42-41.0642- 75.0297-4-52-000	7.6	160	1.30	0.101	150	47.4	9000	56	6460	.	3340	-0.1	0.63
PAH0509R	42-41.0563- 75.0798-4-52-000	7.5	380	3.30	0.147	.	262.9	23200	.	3210	.	9850	-0.1	0.39
PAH0510R	42-41.1250- 75.0908-4-52-000	6.4	60	0.60	0.002	168	.	6000	204	4390	.	5110	0.2	0.03
PAH0511R	42-41.0245- 75.1138-4-52-000	7.1	290	3.10	0.607	135	.	9400	23	.	47.5	2840	-0.1	2.09
PAH0512R	42-41.0206- 75.0836-4-53-000	7.4	240	2.50	0.143	0	.	8800	72	.	.	2320	-0.1	0.60
PAH0513R	42-41.1412- 75.1526-4-52-000	6.7	190	2.20	0.090	170	4331.0	6800	96	583100	.	1820	-0.1	0.47
PAH0514R	42-41.1266- 75.1546-4-52-000	7.3	70	1.00	0.023	.	59.2	8100	91	.	187.0	3800	0.2	0.33
PAH0515R	42-41.1017- 75.1453-4-52-000	7.7	145	1.40	0.585	125	.	6900	138	7300	.	8200	-0.1	4.03
PAH0516R	42-41.0580- 75.2001-4-52-000	6.0	85	0.28	-0.002	80	.	13000	64	.	45.6	3830	-0.1	.
PAH0517R	42-41.0904- 75.1953-4-52-000	7.0	120	1.00	0.256	175	.	8100	108	4860	.	4750	-0.1	2.13
PAH0518R	42-41.1456- 75.2470-4-52-000	6.7	125	1.20	0.179	.	.	10600	57	.	43.7	5220	0.2	1.43
PAH0519R	42-41.0299- 75.1971-4-52-000	6.3	200	1.10	0.037	.	512.3	21400	61	.	141.6	8350	-0.1	0.19
PAH0520R	42-41.0571- 75.2471-4-52-000	7.4	115	1.20	0.708	193	64.4	11300	79	5060	.	4940	0.5	6.16
PAH0521R	42-41.0914- 75.2491-4-52-000	8.0	145	1.70	0.529	.	408.2	10600	96	3310	.	20180	0.4	3.65
PAH0522R	42-41.1188- 75.2607-4-52-000	8.9	260	2.20	0.019	.	.	15500	169	.	6.7	43630	-0.1	0.07
PAH0523R	42-41.1526- 75.2823-4-52-000	7.6	125	1.40	0.065	200	40.2	9700	116	.	263.9	5690	-0.1	0.52
PAH0524R	42-41.1906- 75.2459-4-52-000	6.1	120	0.36	-0.002	70	68.3	19200	44	.	63.3	5700	-0.1	.
PAH0525R	42-41.2223- 75.2500-4-52-000	6.4	90	0.42	-0.002	.	.	13300	97	.	45.2	3840	-0.1	.
PAH0526R	42-41.2137- 75.2042-4-52-000	6.4	25	0.28	0.033	100	.	7100	55	.	14.8	2380	-0.1	1.32
PAH0527R	42-41.1564- 75.2057-4-52-000	6.6	50	0.40	-0.002	125	.	8000	74	.	21.0	3120	-0.1	.
PAH0528R	42-41.1932- 75.2044-4-52-000	6.5	90	0.75	-0.002	120	.	8100	42	.	388.8	2340	-0.1	.
PAH0529R	42-41.2097- 75.2775-4-52-000	6.1	80	0.36	-0.002	130	.	11100	16	.	82.3	3210	-0.1	.
PAH0530R	42-41.2319- 75.3244-4-52-000	5.4	12	0.10	-0.002	133	15.4	5000	.	.	104.5	5620	-0.1	.
PAH0531R	42-41.1898- 75.3439-4-52-000	5.5	20	0.14	0.004	250	59.5	7600	42	.	12.7	790	-0.1	0.20
PAH0532R	42-41.1546- 75.3577-4-52-000	5.5	55	0.14	0.036	.	83.5	17200	.	2330	.	2600	-0.1	0.65
PAH0533R	42-41.1283- 75.3422-4-53-000	5.8	125	0.18	0.010	0	.	41000	.	.	.	9370	-0.1	0.08
PAH0534R	42-41.1193- 75.2862-4-53-000	6.1	90	0.32	0.098	0	.	16700	74	.	23.9	4840	-0.1	1.09
PAH0535R	42-41.0930- 75.2921-4-52-000	7.3	165	1.40	1.350	214	74.4	18000	29	4720	.	8670	-0.1	8.18
PAH0536R	42-41.0941- 75.3452-4-52-000	6.5	60	0.42	0.022	.	37.6	7000	58	2540	.	2050	-0.1	0.37
PAH0537R	42-41.0547- 75.3007-4-52-000	6.5	135	0.65	0.009	143	65.8	16000	.	4640	.	5680	-0.1	0.07
PAH0538R	42-41.1814- 75.2849-4-52-000	6.0	20	0.16	-0.002	111	67.1	7300	48	.	9.8	1240	0.3	.
PAH0539R	42-41.1427- 75.3306-4-52-000	5.8	20	0.14	-0.002	230	45.0	7200	41	.	13.2	1300	0.2	.
PAH0540R	42-41.1139- 75.3864-4-52-000	5.2	55	0.10	0.003	125	.	8500	.	.	130.6	8360	-0.1	0.05
PAH0541R	42-41.1156- 75.4140-4-52-000	5.3	10	0.06	-0.002	68	84.4	7000	21	.	16.1	510	-0.1	.
PAH0542R	42-41.1110- 75.4475-4-52-000	6.2	45	0.38	-0.002	100	62.5	10800	11	.	.	840	0.3	.
PAH0543R	42-41.1864- 75.4072-4-52-000	5.8	18	0.16	-0.002	69	46.3	7500	26	.	18.4	630	0.2	.
PAH0544R	42-41.2328- 75.4443-4-52-000	6.3	60	0.36	0.090	90	.	8300	.	.	.	460	0.4	1.50
PAH0545R	42-41.0828- 75.3739-4-52-000	6.0	20	0.12	-0.002	.	11.3	4800	.	.	152.3	6390	-0.1	.
PAH0546R	42-41.1008- 75.4133-4-52-000	5.7	18	0.12	-0.002	.	28.8	8700	.	.	29.3	1300	-0.1	.
PAH0547R	42-41.1124- 75.4902-4-52-000	5.6	30	0.16	-0.002	90	36.3	9200	104	.	29.0	1100	-0.1	.
PAH0548R	42-41.1253- 75.5412-4-52-000	6.6	85	0.80	-0.002	100	.	9800	72	.	30.7	1190	-0.1	.
PAH0549R	42-41.1663- 75.5843-4-52-000	6.1	25	0.20	-0.002	150	55.5	7500	71	.	22.3	790	-0.1	.
PAH0550R	42-41.0551- 75.3354-4-52-000	6.4	65	0.26	0.035	107	.	15600	48	.	35.0	3700	0.5	0.54
PAH0551R	42-41.0528- 75.3561-4-52-000	6.3	80	0.28	-0.002	300	65.0	19400	.	4590	.	3300	0.3	.
PAH0552R	42-41.0574- 75.4604-4-52-000	4.8	65	0.06	-0.002	.	130.8	19200	31	.	628.1	6380	-0.1	.
PAH0553R	42-41.0570- 75.4914-4-52-000	4.9	50	0.04	-0.002	130	64.1	14200	20	.	129.9	4950	0.7	.
PAH0554R	42-41.0553- 75.5349-4-52-000	5.4	40	0.10	0.006	50	66.5	17100	.	.	87.2	3870	0.3	0.15

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	DEPTH	BR	CL	F	MG	MN	NA	V	U/COND
*****					UM/CM	MEQ/L	PPB	FEET	PPB	PPB	PPB	PPB	PPB	PPB	PPB	X 1000
PAM0555R	42-41.0921-	75.5781-4-52-000	5.5	25	0.12	-0.002	130	33.1	8700	.	.	.	62.7	1540	-0.1	.
PAM0556R	42-41.1169-	75.6095-4-52-000	5.7	40	0.18	0.023	87	33.9	13600	81	.	.	58.5	1200	-0.1	0.58
PAM0557R	42-41.0994-	75.4954-4-53-000	5.8	30	0.20	-0.002	0	42.4	8500	13	.	.	52.6	2030	-0.1	.
PAM0558R	42-41.0289-	75.3340-4-52-000	6.3	40	0.36	-0.002	90	62.2	7500	62	.	.	59.6	3190	-0.1	.
PAM0559R	42-41.0184-	75.3777-4-52-000	5.7	12	0.10	-0.002	.	38.5	8300	.	.	.	52.9	1200	-0.1	.
PAM0562R	42-41.0080-	75.4741-4-52-000	5.4	200	0.08	0.014	172	61.4	60900	.	21020	.	.	23890	-0.1	0.07
PAM0563R	42-41.0047-	75.4911-4-52-000	4.7	40	0.02	0.057	200	41.8	11600	50	.	.	130.1	2520	-0.1	1.43
PAM0564R	42-41.0289-	75.4972-4-52-000	5.9	15	0.14	0.006	320	43.9	7300	34	.	.	63.1	1000	0.2	0.40
PAM0565R	42-41.0206-	75.4035-4-52-000	5.8	10	0.10	-0.002	125	36.8	7900	41	.	.	66.7	1500	-0.1	.
PAM0566R	42-41.0323-	75.2882-4-52-000	6.1	50	0.28	0.011	132	41.8	8400	.	.	.	65.9	2610	-0.1	0.22
PAM0567R	42-41.0222-	75.2371-4-53-000	6.4	50	0.22	-0.002	0	.	7400	57	.	.	106.7	2420	-0.1	.
PAM0603R	42-41.0035-	75.1576-4-52-000	6.7	260	2.00	0.092	210	80.2	18200	.	.	.	.	5340	-0.1	0.35
PAM0605R	42-41.0087-	75.2161-4-52-000	7.4	150	1.20	0.034	.	16.1	6400	161	.	.	116.2	9830	-0.1	0.23
PAP1501R	42-41.3326-	74.7819-4-52-000	7.0	200	1.05	0.111	.	100.1	11000	146	.	.	198.6	16850	-0.1	0.56
PAP1502R	42-41.3508-	74.7404-4-52-000	8.6	260	2.30	0.045	650	69.7	10100	561	.	.	88.6	61990	-0.1	0.17
PAP1503R	42-41.3721-	74.7205-4-52-000	6.8	100	0.26	0.008	212	64.6	14200	75	.	.	127.0	5770	-0.1	0.08
PAP1504R	42-41.3764-	74.7059-4-52-000	6.3	85	0.12	-0.002	80	71.1	12900	34	.	.	121.3	6420	-0.1	.
PAP1505R	42-41.4087-	74.7393-4-52-000	6.8	125	0.90	0.029	.	85.9	15800	165	.	.	146.7	21630	-0.1	0.23
PAP1506R	42-41.3937-	74.7925-4-53-000	5.5	30	0.06	-0.002	0	.	8900	38	.	.	110.5	2930	-0.1	.
PAP1507R	42-41.3830-	74.7771-4-52-000	6.0	95	0.54	0.009	.	71.4	9900	235	.	.	155.7	6050	-0.1	0.09
PAP1508R	42-41.3125-	74.7910-4-52-000	6.7	125	0.70	0.082	.	59.8	10000	78	.	.	186.2	4680	-0.1	0.66
PAP1509R	42-41.3514-	74.8170-4-52-000	5.8	45	0.16	-0.002	160	35.3	13800	35	.	.	120.1	4360	0.2	.
PAP1510R	42-41.3487-	74.8848-4-52-000	6.0	90	0.48	-0.002	90	.	24400	52	.	.	96.6	8030	-0.1	.
PAP1511R	42-41.3853-	74.8958-4-52-000	6.2	115	0.32	-0.002	135	90.4	12000	91	.	.	152.4	5270	-0.1	.
PAP1512R	42-41.4016-	74.8916-4-52-000	5.7	40	0.16	-0.002	147	53.1	9000	35	.	.	112.2	3740	0.3	.
PAP1513R	42-41.4230-	74.8877-4-53-000	6.3	50	0.10	-0.002	0	72.8	10600	.	.	.	106.5	3200	0.5	.
PAP1514R	42-41.4047-	74.9143-4-52-000	5.1	60	0.10	-0.002	.	63.6	18500	20	.	.	180.3	5740	-0.1	.
PAP1515R	42-41.3795-	74.9498-4-52-000	5.6	120	0.24	-0.002	105	61.2	14800	64	.	.	125.5	5040	-0.1	.
PAP1516R	42-41.4098-	75.1022-4-52-000	5.9	60	0.44	-0.002	.	57.1	8700	86	.	.	245.6	5440	-0.1	.
PAP1517R	42-41.3882-	74.9675-4-52-000	6.4	200	0.90	0.833	.	33.4	36200	122	.	.	173.3	14000	-0.1	4.17
PAP1518R	42-41.3988-	75.0139-4-52-000	6.6	135	1.05	0.541	.	40.2	12700	208	.	.	365.1	8790	-0.1	4.01
PAP1519R	42-41.4308-	74.9497-4-52-000	6.4	130	1.00	0.184	.	71.7	8500	195	.	.	169.4	12680	-0.1	1.42
PAP1520R	42-41.4453-	74.9267-4-52-000	6.6	140	1.00	0.190	101	48.8	12100	84	.	.	136.5	14310	-0.1	1.36
PAP1521R	42-41.4563-	74.9216-4-52-000	6.7	140	1.00	0.201	.	60.2	8100	128	.	.	266.0	9290	0.4	1.44
PAP1522R	42-41.4291-	74.8216-4-53-000	6.3	60	0.22	0.018	0	.	9700	61	.	.	100.0	2750	0.3	0.30
PAP1523R	42-41.4577-	74.9501-4-52-000	6.0	125	0.70	0.143	80	28.2	15500	76	.	.	144.7	5680	-0.1	1.14
PAP1524R	42-41.4693-	74.9906-4-53-000	6.1	50	0.14	0.006	0	79.3	9400	65	.	.	105.3	3000	-0.1	0.12
PAP1525R	42-41.5013-	75.0135-4-52-000	6.3	210	1.55	0.220	252	.	7800	76	.	.	146.3	13740	-0.1	1.05
PAP1526R	42-41.5160-	75.0183-4-52-000	6.7	75	0.22	0.029	5	.	8900	22	.	.	84.8	3810	-0.1	0.39
PAP1527R	42-41.5253-	75.0393-4-52-000	6.6	170	1.15	1.587	.	.	8800	61	.	.	121.5	8460	-0.1	9.34
PAP1528R	42-41.5478-	75.0881-4-52-000	6.3	75	0.28	0.033	230	.	11000	91	9080	.	.	4260	-0.1	0.44
PAP1529R	42-41.5721-	75.0935-4-52-000	5.9	200	0.80	0.132	160	.	23200	104	.	.	10410	-0.1	0.66	
PAP1530R	42-41.5223-	75.1054-4-52-000	6.9	175	1.10	0.064	.	.	11800	190	.	.	77.5	16830	-0.1	0.37
PAP1531R	42-41.4903-	75.0968-4-52-000	5.3	50	0.14	0.008	120	62.7	9200	46	.	.	62.4	2950	-0.1	0.16
PAP1532R	42-41.4810-	75.0706-4-52-000	5.9	85	0.44	-0.002	150	59.2	9100	163	.	.	68.6	5990	-0.1	.
PAP1533R	42-41.4620-	75.0426-4-52-000	6.0	55	0.36	0.016	.	33.7	8800	137	.	.	78.9	5570	-0.1	0.29
PAP1534R	42-41.4424-	75.0429-4-52-000	5.2	55	0.14	-0.002	87	57.3	11500	46	.	.	62.8	3930	-0.1	.
PAP1535R	42-41.4232-	75.0221-4-52-000	5.2	70	0.18	0.026	180	35.5	22000	.	.	.	67.5	5300	-0.1	0.37
PAP1536R	42-41.4001-	75.0349-4-52-000	5.4	50	0.20	-0.002	100	71.9	9500	44	.	.	65.5	2760	0.3	.
PAP1537R	42-41.3420-	74.9017-4-52-000	5.5	120	0.26	0.001	160	51.0	23200	.	.	.	107.6	8450	-0.1	0.01
PAP1538R	42-41.3127-	74.8997-4-53-000	5.8	45	0.16	0.013	0	.	10700	17	.	.	71.6	3350	0.3	0.29
PAP1539R	42-41.3063-	74.8741-4-52-000	5.9	70	0.38	0.004	40	53.0	9800	84	.	.	72.2	4910	-0.1	0.06
PAP1540R	42-41.3163-	74.8221-4-52-000	6.7	130	0.90	0.107	100	45.8	9000	152	.	.	72.4	12700	0.3	0.82

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAP1541R	42-41.2871- 74.8301-4-52-000	6.0	50	0.12	-0.002	50	84.5	11300	42	.	62.8	3850	-0.1	.
PAP1542R	42-41.2466- 74.8589-4-52-000	6.3	165	0.70	0.026	180	91.7	9000	108	.	443.3	6290	-0.1	0.16
PAP1543R	42-41.2265- 74.8655-4-52-000	6.5	55	0.14	0.010	.	.	11500	56	.	98.7	4410	-0.1	0.18
PAP1544R	42-41.2689- 74.8735-4-52-000	6.3	110	0.60	0.026	162	91.8	8800	116	.	183.1	6650	-0.1	0.24
PAP1545R	42-41.2396- 74.9140-4-52-000	7.0	130	1.30	-0.002	.	25.0	8700	172	.	185.6	19060	-0.1	.
PAP1546R	42-41.2196- 74.9045-4-52-000	6.3	200	0.95	0.043	204	.	14500	113	.	108.5	15320	-0.1	0.22
PAP1547R	42-41.2252- 74.9387-4-52-000	7.1	60	0.22	M	78	M	M	M	M	M	M	M	M
PAP1548R	42-41.1995- 74.8768-4-52-000	7.0	110	0.65	-0.002	.	.	9800	100	.	186.3	3190	-0.1	.
PAP1549R	42-41.1808- 74.9117-4-52-000	7.0	150	1.00	0.043	.	44.8	11500	86	.	189.6	3800	-0.1	0.29
PAP1550R	42-41.1591- 74.9116-4-53-000	6.7	70	0.10	-0.002	0	62.8	12000	27	4340	.	3350	-0.1	.
PAP1551R	42-41.1290- 74.9544-4-52-000	7.0	100	0.30	-0.002	65	52.3	9600	62	3580	.	4960	-0.1	.
PAP1552R	42-41.1141- 74.9771-4-52-000	6.4	60	0.12	0.011	36	.	12500	18	.	17.0	2990	0.4	0.18
PAP1553R	42-41.1059- 75.0021-4-53-000	6.1	90	0.36	-0.002	0	70.3	11700	57	.	90.0	3250	-0.1	.
PAP1554R	42-41.1123- 75.0160-4-52-000	5.8	95	0.20	0.032	.	60.8	20000	.	4990	.	3720	-0.1	0.34
PAP1555R	42-41.0929- 75.0265-4-52-000	7.1	140	0.85	0.029	156	42.9	8800	200	.	134.4	8960	-0.1	0.21
PAP1556R	42-41.1602- 75.0204-4-52-000	6.2	75	0.32	-0.002	.	36.0	10900	51	.	78.3	4330	-0.1	.
PAP1557R	42-41.1959- 75.0254-4-53-000	5.0	45	0.02	0.004	0	4172.0	9200	70	.	63.3	1610	-0.1	0.09
PAP1558R	42-41.1573- 74.9457-4-52-000	6.0	175	0.65	0.058	100	.	12000	85	.	121.6	6750	-0.1	0.33
PAP1559R	42-41.3981- 75.1409-4-52-000	6.4	65	0.30	-0.002	70	.	9500	57	.	92.8	2160	0.4	.
PAP1560R	42-41.3648- 75.1251-4-52-000	6.1	35	0.08	-0.002	90	36.5	9700	.	.	58.2	1970	-0.1	.
PAP1561R	42-41.3251- 75.1311-4-52-000	6.1	80	0.54	0.025	160	.	8700	145	.	46.7	8550	-0.1	0.31
PAP1562R	42-41.3067- 75.1190-4-53-000	5.4	30	0.02	0.011	0	49.8	9500	45	.	31.5	1960	-0.1	0.37
PAP1563R	42-41.2888- 75.1238-4-52-000	5.4	20	0.02	-0.002	.	65.8	8600	.	.	38.2	950	0.7	.
PAP1564R	42-41.2797- 75.0837-4-52-000	6.5	105	0.86	0.055	.	.	8600	220	.	74.3	7540	-0.1	0.52
PAP1565R	42-41.3109- 75.0527-4-52-000	6.8	150	0.50	0.097	200	.	24500	68	11780	.	8460	-0.1	0.65
PAP1566R	42-41.3081- 75.0190-4-53-000	5.6	35	0.04	0.009	0	43.7	7800	58	.	65.9	1770	-0.1	0.26
PAP1567R	42-41.3418- 75.0471-4-52-000	5.4	50	0.04	-0.002	.	67.9	15100	.	.	77.5	3820	-0.1	.
PAP1568R	42-41.3101- 74.9411-4-52-000	6.8	170	1.18	0.320	150	46.9	9700	27	13420	.	2690	0.3	1.88
PAP1569R	42-41.2885- 74.9390-4-52-000	6.9	80	0.36	0.070	25	69.3	14300	73	.	58.0	3230	-0.1	0.88
PAP1570R	42-41.2698- 74.9173-4-52-000	5.6	60	0.14	-0.002	126	75.4	15200	23	.	52.2	3830	0.7	.
PAP1571R	42-41.3497- 74.9726-4-53-000	6.0	30	0.04	0.022	0	.	8200	37	.	.	1940	-0.1	0.73
PAP1572R	42-41.3594- 74.8142-4-52-000	6.1	45	0.18	-0.002	.	62.4	11500	29	.	91.3	5930	-0.1	.
PAP1573R	42-41.1824- 74.9304-4-52-000	6.9	150	1.00	0.166	160	43.5	10500	149	.	140.8	13310	-0.1	1.11
PAP1574R	42-41.1658- 74.9724-4-52-000	5.9	100	0.44	0.030	300	73.2	8800	.	.	115.3	4500	-0.1	0.30
PAP1575R	42-41.1838- 74.9993-4-52-000	7.3	145	0.96	0.098	500	42.8	10200	85	.	141.6	10470	-0.1	0.68
PAP1576R	42-41.2137- 75.0474-4-52-000	6.7	80	0.34	0.024	200	49.8	10100	40	.	103.4	4690	-0.1	0.30
PAP1577R	42-41.2525- 75.0717-4-52-000	6.6	100	0.72	0.032	.	48.0	8400	111	.	429.9	7310	-0.1	0.32
PAP1578R	42-41.2711- 75.0565-4-52-000	7.0	130	0.94	0.356	90	18.8	8800	159	.	136.7	9540	0.3	2.74
PAP1579R	42-41.2653- 75.0071-4-52-000	6.3	55	0.24	0.019	.	42.1	10800	.	.	121.1	5660	-0.1	0.35
PAP1580R	42-41.2591- 74.9950-4-52-000	6.1	105	0.56	0.111	.	99.4	8700	61	.	104.9	7250	-0.1	1.06
PAP1581R	42-41.2551- 74.9494-4-52-000	6.9	140	1.20	0.449	165	.	8200	140	.	136.8	13560	-0.1	3.21
PAP1582R	42-41.2395- 75.1099-4-52-000	7.1	120	0.46	0.021	.	59.3	8100	161	.	99.5	9210	0.2	0.18
PAP1583R	42-41.2279- 75.1061-4-52-000	7.1	110	0.80	0.139	.	.	9700	195	.	130.5	9910	-0.1	1.26
PAP1584R	42-41.2128- 75.0802-4-53-000	6.2	80	0.10	0.019	0	.	27700	19	.	78.5	9610	-0.1	0.24
PAP1585R	42-41.1667- 75.0818-4-52-000	6.2	80	0.34	-0.002	146	59.6	10800	14	.	81.6	6050	0.2	.
PAP1586R	42-41.1532- 75.1506-4-52-000	5.3	60	0.10	0.015	100	53.9	13700	.	.	97.9	6230	-0.1	0.25
PAP1587R	42-41.1611- 75.1266-4-53-000	5.6	35	0.02	-0.002	0	57.9	9800	68	.	91.4	4070	-0.1	.
PAP1588R	42-41.1787- 75.0740-4-53-000	5.6	40	0.04	-0.002	0	62.0	8300	37	.	81.5	4170	0.4	.
PAP1589R	42-41.4176- 75.1463-4-52-000	6.1	160	0.25	0.004	.	.	58700	.	.	.	11920	-0.1	0.03
PAP1590R	42-41.4238- 75.0976-4-53-000	5.3	30	0.02	0.012	0	93.7	8100	49	.	68.6	4250	-0.1	0.40
PAP1591R	42-41.3645- 75.0815-4-52-000	5.8	50	0.18	-0.002	123	72.5	11500	77	.	72.0	5580	-0.1	.
PAP1592R	42-41.3663- 75.0635-4-52-000	6.8	120	0.82	0.032	.	59.3	10000	125	.	95.3	17400	-0.1	0.27
PAP1593R	42-41.3474- 75.0863-4-52-000	6.8	75	0.58	0.062	.	20.1	8900	234	.	156.9	10690	-0.1	0.83

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKHXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAP1594R	42-41.3422-74.9927-4-53-000	6.8	30	0.08	0.027	0	82.6	8400	39	.	70.0	3980	-0.1	0.90
PAP1595R	42-41.3596-74.9853-4-52-000	5.9	50	0.12	0.013	155	.	9400	19	.	73.7	4850	-0.1	0.26
PAP1596R	42-41.4574-75.0930-4-53-000	5.9	55	0.10	-0.002	0	.	3800	35	.	10.6	1660	-0.1	.
PAP1597R	42-41.4577-75.1337-4-52-000	6.0	80	0.32	0.056	175	.	9000	95	4070	.	4160	-0.1	0.70
PAP1598R	42-41.4386-75.1883-4-52-000	6.7	70	0.60	-0.002	.	503.0	2400	50	.	170.8	3010	-0.1	.
PAP1599R	42-41.4805-75.1377-4-52-000	7.6	125	1.06	0.506	.	25.0	8200	127	.	924.6	8920	-0.1	4.05
PAP1600R	42-41.4751-75.1661-4-52-000	7.0	70	0.40	0.021	155	.	4500	.	.	21.5	1800	-0.1	0.30
PAP1601R	42-41.4506-75.1936-4-52-000	5.3	900	0.25	0.031	.	.	214000	58	37540	.	31580	-0.1	0.03
PAP1602R	42-41.4011-75.1939-4-52-000	6.7	145	0.80	0.008	367	15.6	10700	.	.	.	6210	-0.1	0.06
PAP1603R	42-41.3708-75.1716-4-52-000	7.0	110	0.90	0.108	100	49.0	8600	134	4750	.	8140	-0.1	0.98
PAP1604R	42-41.3688-75.2008-4-52-000	6.4	35	0.14	-0.002	145	30.8	4600	19	.	19.8	1230	-0.1	.
PAP1605R	42-41.4013-75.2274-4-52-000	6.2	100	0.65	-0.002	250	59.1	14800	.	.	120.9	2840	-0.1	.
PAP1606R	42-41.3957-75.2534-4-53-000	5.8	70	0.12	-0.002	0	14.1	8600	.	.	16.9	2580	-0.1	.
PAP1607R	42-41.3726-75.2627-4-52-000	6.0	60	0.30	0.016	.	.	10500	71	3730	.	3710	-0.1	0.27
PAP1608R	42-41.3552-75.2955-4-52-000	6.4	130	0.80	0.005	.	12.6	5900	16	1900	.	1380	-0.1	0.04
PAP1609R	42-41.3422-75.3219-4-52-000	6.4	120	0.55	M	508	M	M	M	M	M	M	M	M
PAP1610R	42-41.3581-75.3314-4-52-000	6.5	110	0.65	-0.002	.	32.0	7500	.	.	48.6	1470	-0.1	.
PAP1611R	42-41.3362-75.3338-4-52-000	6.3	95	0.30	-0.002	135	75.4	20300	13	.	40.6	4460	-0.1	.
PAP1612R	42-41.3058-75.3087-4-52-000	5.3	100	0.20	-0.002	110	21.4	7000	.	.	.	790	-0.1	.
PAP1613R	42-41.3109-75.2680-4-52-000	7.0	110	0.70	0.120	238	.	10200	51	3940	.	1960	-0.1	1.09
PAP1614R	42-41.2797-75.3123-4-52-000	6.8	50	0.18	0.013	209	.	M	1130	M	.	M	-0.1	0.26
PAP1615R	42-41.2620-75.3446-4-52-000	6.6	80	0.42	0.024	190	58.8	10400	37	2180	.	1610	-0.1	0.30
PAP1616R	42-41.2467-75.3500-4-52-000	6.8	95	0.60	-0.002	137	.	4000	34	.	10.4	900	-0.1	.
PAP1617R	42-41.2564-75.2882-4-53-000	7.0	65	0.22	0.020	0	79.0	9200	19	1900	.	1360	-0.1	0.31
PAP1618R	42-41.2781-75.2569-4-52-000	6.1	100	0.65	-0.002	150	.	6200	.	.	7.4	760	-0.1	.
PAP1619R	42-41.2553-75.2337-4-52-000	5.8	30	0.04	0.437	.	39.8	9100	32	.	27.4	1190	-0.1	14.57
PAP1620R	42-41.2855-75.2279-4-52-000	6.3	60	0.30	0.046	.	73.6	8800	73	.	73.9	3750	-0.1	0.77
PAP1621R	42-41.3135-75.2151-4-52-000	6.0	110	0.25	0.017	.	147.9	34500	.	.	99.3	9760	-0.1	0.15
PAP1622R	42-41.3054-75.1902-4-52-000	6.1	75	0.34	0.001	.	74.5	13200	22	.	73.7	3220	-0.1	0.01
PAP1623R	42-41.3298-75.2142-4-52-000	5.8	120	0.30	0.039	103	.	39300	.	.	102.0	8380	-0.1	0.33
PASS529R	42-41.7283-75.9925-4-52-000	7.8	260	2.10	2.224	400	9.4	4000	49	4390	.	8850	-0.1	8.55
PASS531R	42-41.7774-75.9944-4-52-000	7.6	260	2.00	1.422	175	14.1	18300	106	12620	.	6910	-0.1	5.47
PASS536R	42-41.9361-75.9939-4-53-000	7.6	220	2.00	0.106	0	.	3200	49	5530	.	4170	-0.1	0.48
PASS537R	42-41.9720-75.9530-4-52-000	7.2	180	0.90	0.119	532	.	7100	24	4500	.	2390	-0.1	0.66
PASS538R	42-41.9572-75.9551-4-52-000	6.7	110	0.50	0.032	300	.	32100	42	5920	.	8590	-0.1	0.29
PASS539R	42-41.9125-75.9754-4-53-000	6.7	70	0.38	-0.002	0	.	3400	.	.	.	1070	-0.1	.
PASS540R	42-41.8916-75.9618-4-52-000	7.2	200	1.10	0.370	212	.	35500	22	.	.	8360	-0.1	1.85
PASS541R	42-41.8590-75.9507-4-53-000	7.6	200	1.80	0.424	0	.	4200	31	3590	.	3230	-0.1	2.12
PASS542R	42-41.8105-75.9633-4-52-000	6.7	150	0.60	0.042	8	.	23800	.	.	25.9	10060	-0.1	0.28
PASS543R	42-41.7977-75.9776-4-53-000	7.1	100	0.55	0.226	0	.	4400	25	.	20.5	2320	-0.1	2.26
PASS544R	42-41.7495-75.9501-4-52-000	7.0	400	1.20	0.630	160	715.4	82300	.	6920	.	20700	-0.1	1.58
PASS545R	42-41.7317-75.9688-4-52-000	7.8	220	1.90	0.664	267	.	4100	.	.	36.5	4370	-0.1	3.02
PASS546R	42-41.6985-75.9826-4-52-000	7.1	160	1.10	0.297	.	.	15100	72	4550	.	6260	-0.1	1.86
PASS547R	42-41.6679-75.9750-4-52-000	7.9	220	2.00	0.075	.	.	3900	51	.	20.8	13840	-0.1	0.34
PASS548R	42-41.6645-75.9106-4-52-000	6.7	90	0.45	0.045	.	16.0	11300	33	3320	.	2730	-0.1	0.50
PASS549R	42-41.6581-75.8899-4-52-000	7.6	120	1.35	0.884	.	.	4400	15	2160	.	3560	-0.1	7.37
PASS550R	42-41.6889-75.8759-4-52-000	7.9	230	2.00	1.299	260	23.2	14500	54	4860	.	13460	-0.1	5.65
PASS551R	42-41.6975-75.9177-4-52-000	7.9	230	2.20	1.673	230	.	3600	29	3460	.	5840	-0.1	7.27
PASS552R	42-41.7182-75.9114-4-52-000	7.9	220	1.90	1.166	450	.	12200	146	.	.	10930	-0.1	5.30
PASS553R	42-41.7351-75.8982-4-53-000	7.5	160	0.45	0.009	0	.	16300	.	.	43.6	5090	-0.1	0.06
PASS554R	42-41.7471-75.8969-4-52-000	8.0	270	1.90	1.371	375	.	10600	.	.	32.9	10330	-0.1	5.08
PASS555R	42-41.7523-75.9356-4-52-000	7.6	150	1.40	1.711	323	.	10400	119	6350	.	7230	0.2	11.41
PASS556R	42-41.7854-75.9084-4-52-000	6.7	170	0.25	0.043	136	22.9	6900	.	2040	.	1830	-0.1	0.25

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PASS557R	42-41.7954-75.8909-4-52-000	6.5	340	1.10	0.087	.	94.7	62600	.	.	.	23910	-0.1	0.26
PASS558R	42-41.8215-75.8755-4-53-000	6.7	110	0.40	0.063	0	.	6100	.	1930	.	1670	-0.1	0.57
PASS559R	42-41.8501-75.8576-4-53-000	7.3	160	1.00	0.921	0	70.4	20900	28	7430	.	9300	-0.1	5.76
PASS560R	42-41.8727-75.8504-4-52-000	7.4	100	0.60	0.041	.	.	3400	47	.	20.9	1190	-0.1	0.41
PASS561R	42-41.9075-75.8466-4-53-000	7.7	80	0.35	0.036	0	.	7100	64	.	.	2680	0.3	0.45
PASS562R	42-41.9433-75.8374-4-53-000	7.8	280	2.50	0.369	0	.	4600	70	.	31.2	16030	-0.1	1.32
PASS563R	42-41.9855-75.8430-4-53-000	7.1	250	1.10	0.126	0	.	24000	107	12640	.	8840	-0.1	0.50
PASS564R	42-41.9841-75.8757-4-53-000	6.7	100	0.40	-0.002	0	.	4200	9	2110	.	1040	-0.1	.
PASS565R	42-41.9669-75.9137-4-52-000	6.2	50	0.16	0.023	17	.	7100	38	.	.	2040	-0.1	0.46
PASS566R	42-41.9566-75.9182-4-52-000	6.7	100	0.50	0.015	.	.	8600	.	2240	.	2370	-0.1	0.15
PASS567R	42-41.9450-75.8946-4-52-000	7.5	150	1.30	0.063	163	.	8100	253	.	100.7	6470	-0.1	0.42
PASS568R	42-41.9143-75.8680-4-53-000	7.4	190	1.30	0.240	0	.	3700	19	4040	.	2210	-0.1	1.26
PASS569R	42-41.9118-75.9046-4-53-000	7.7	110	1.05	0.398	0	.	7300	92	8060	.	4220	-0.1	3.62
PASS570R	42-41.8850-75.8894-4-53-000	7.3	90	0.45	0.051	0	6.0	3200	21	1670	.	930	-0.1	0.57
PASS571R	42-41.8531-75.8909-4-53-000	7.4	160	1.10	0.082	0	.	13000	43	6520	.	4810	-0.1	0.51
PASS572R	42-41.8714-75.9061-4-52-000	7.5	200	2.00	0.487	210	.	3000	37	4300	.	6490	-0.1	2.44
PASS573R	42-41.8267-75.9114-4-52-000	7.5	240	2.10	-0.002	173	75.9	21300	167	.	122.9	28310	-0.1	.
PASS574R	42-41.8532-75.9160-4-52-000	6.9	140	1.00	0.441	.	.	4800	14	3050	.	2140	-0.1	3.15
PASS575R	42-41.8166-75.8420-4-52-000	7.7	190	1.80	0.640	280	.	7500	86	.	51.9	10900	-0.1	3.37
PASS576R	42-41.7921-75.8428-4-53-000	7.1	90	0.45	0.073	0	.	3100	.	740	.	680	-0.1	0.81
PASS577R	42-41.7533-75.8513-4-53-000	7.3	160	1.30	1.060	0	.	7300	91	7440	.	6060	-0.1	6.63
PASS578R	42-41.7331-75.8445-4-52-000	6.4	180	0.50	M	260	M	M	M	M	M	M	M	M
PASS579R	42-41.6942-75.8333-4-52-000	7.6	200	1.60	0.454	225	.	14700	31	.	73.6	5880	-0.1	2.27
PASS580R	42-41.6658-75.8256-4-52-000	7.2	150	0.90	0.520	.	.	9800	59	.	90.0	10070	-0.1	3.47
PASS581R	42-41.6683-75.7845-4-53-000	6.6	100	0.50	0.001	0	.	6900	75	.	73.2	2450	-0.1	0.01
PASS582R	42-41.6838-75.8039-4-52-000	6.2	100	0.50	0.033	.	15.3	18400	.	.	95.6	6260	-0.1	0.33
PASS583R	42-41.7274-75.8160-4-52-000	6.9	180	1.40	0.288	136	9.4	9900	93	.	106.9	7130	-0.1	1.60
PASS584R	42-41.7464-75.8067-4-53-000	7.0	110	0.45	0.031	0	.	12700	18	.	88.5	4370	-0.1	0.28
PASS585R	42-41.7860-75.7893-4-53-000	6.3	140	0.30	0.044	0	.	31500	.	.	89.0	8120	-0.1	0.31
PASS586R	42-41.8176-75.8075-4-53-000	7.1	150	1.10	0.172	0	.	7500	96	.	99.7	4450	-0.1	1.15
PASS587R	42-41.8485-75.8033-4-52-000	7.1	170	1.00	0.258	200	.	17500	104	.	100.5	6270	-0.1	1.52
PASS588R	42-41.8848-75.7993-4-52-000	7.1	70	0.45	0.014	250	.	7900	20	.	91.1	2790	-0.1	0.20
PASS589R	42-41.9071-75.8030-4-53-000	7.2	220	1.90	0.930	0	.	6900	110	.	153.3	10360	-0.1	4.23
PASS590R	42-41.9485-75.7965-4-52-000	6.8	80	0.30	0.026	.	.	M	.	M	507.0	M	-0.1	0.33
PASS591R	42-41.9820-75.8089-4-52-000	6.1	110	0.30	0.005	12	.	9100	64	.	97.5	4320	-0.1	0.05
PASS592R	42-41.9806-75.7578-4-52-000	7.6	220	2.40	0.252	.	.	8000	172	67820	.	18520	-0.1	1.15
PASS593R	42-41.9720-75.7108-4-52-000	7.6	390	3.70	1.385	180	11.0	11400	270	.	207.4	36740	-0.1	3.55
PASS594R	42-41.9676-75.6678-4-52-000	7.4	300	2.50	-0.002	130	.	9700	74	.	472.5	17400	-0.1	.
PASS595R	42-41.9789-75.6253-4-52-000	8.0	700	2.70	0.196	280	1069.8	166100	.	.	241.6	122780	1.3	0.28
PASS596R	42-41.9487-75.7385-4-52-000	6.8	240	1.00	-0.002	.	.	45400	.	.	95.7	22280	-0.1	.
PASS597R	42-41.6915-75.7623-4-53-000	6.3	90	0.45	0.062	0	.	12200	31	.	98.7	5080	-0.1	0.69
PASS598R	42-41.6680-75.7614-4-52-000	7.2	320	1.40	2.896	325	.	9900	73	.	.	26430	-0.1	9.05
PASS599R	42-41.6531-75.7210-4-52-000	8.2	410	1.70	0.582	103	725.6	81000	82	.	98.3	50490	-0.1	1.42
PASS600R	42-41.6525-75.6754-4-52-000	8.0	480	1.70	0.078	.	984.4	124200	281	.	111.9	59220	-0.1	0.16
PASS601R	42-41.6642-75.6274-4-52-000	8.2	300	2.00	0.240	135	72.9	48800	106	.	167.1	46930	-0.1	0.80
PASS602R	42-41.6471-75.5795-4-52-000	8.1	170	1.70	1.058	.	.	9000	119	.	.	8220	-0.1	6.22
PASS603R	42-41.6513-75.5435-4-52-000	7.6	150	1.00	0.375	200	15.6	19300	.	3550	.	5640	-0.1	2.50
PASS604R	42-41.6573-75.5143-4-52-000	7.2	260	0.80	0.783	180	.	59400	.	.	.	21530	-0.1	3.01
PASS605R	42-41.6843-75.5406-4-52-000	6.5	140	0.35	0.844	318	.	28500	.	.	50.0	9590	-0.1	6.03
PASS606R	42-41.6812-75.5103-4-52-000	7.0	290	1.30	0.046	.	13.8	9000	42	.	107.0	3380	-0.1	0.16
PASS607R	42-41.6918-75.5858-4-52-000	6.9	150	1.00	-0.002	10	10.2	11500	.	.	43.5	3810	-0.1	.
PASS608R	42-41.6852-75.6172-4-52-000	6.5	100	0.40	0.887	.	.	58700	.	.	71.2	18770	-0.1	8.87
PASS609R	42-41.6900-75.6847-4-52-000	7.3	160	0.90	2.067	.	8.1	15500	61	12030	.	7680	-0.1	12.92

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PASS610R	42-41.6884-75.7236-4-52-000	7.6	250	1.90	-0.002	218	14.8	19100	.	.	66.2	7050	-0.1	
PASS611R	42-41.7347-75.7540-4-52-000	8.8	400	2.00	0.129	152	500.2	65200	172	.	36.8	64130	-0.1	0.32
PASS612R	42-41.7570-75.7547-4-53-000	7.5	150	0.80	0.121	0	.	12800	43	.	75.4	5760	-0.1	0.81
PASS613R	42-41.9559-75.7094-4-52-000	7.5	210	1.60	0.033	85	90.5	17900	204	.	187.5	18810	-0.1	0.16
PASS614R	42-41.9372-75.6252-4-52-000	6.9	120	1.00	0.061	48	32.4	9000	116	.	416.8	6940	-0.1	0.51
PASS615R	42-41.9789-75.5869-4-53-000	5.9	100	0.10	0.017	0	.	15200	14	.	68.1	2860	-0.1	0.17
PASS616R	42-41.9589-75.5456-4-52-000	7.6	250	2.00	0.024	.	77.8	33300	126	.	197.6	25710	-0.1	0.10
PASS617R	42-41.9708-75.5417-4-53-000	7.0	100	1.40	0.233	0	.	6900	76	.	81.5	4130	-0.1	2.33
PASS618R	42-41.9660-75.5170-4-52-000	7.4	180	1.70	0.099	.	.	7400	109	11510	.	15210	-0.1	0.55
PASS619R	42-41.9388-75.5093-4-52-000	8.2	190	1.70	0.017	110	37.1	18000	117	.	219.1	20200	-0.1	0.09
PASS620R	42-41.9202-75.4910-4-52-000	8.2	170	1.60	0.036	.	37.6	12600	102	.	292.1	18650	-0.1	0.21
PASS621R	42-41.8924-75.5165-4-52-000	6.9	100	0.50	0.012	.	.	8800	48	.	56.0	2830	-0.1	0.12
PASS622R	42-41.8517-75.5110-4-52-000	7.4	110	0.70	0.241	163	9.2	8100	59	.	72.7	3010	-0.1	2.19
PASS623R	42-41.8169-75.4974-4-52-000	7.2	210	1.30	0.293	160	.	20700	.	.	69.6	4320	-0.1	1.40
PASS624R	42-41.7986-75.4922-4-52-000	7.0	140	0.55	0.128	172	.	29500	32	.	.	5350	-0.1	0.91
PASS625R	42-41.7567-75.5101-4-52-000	7.7	140	1.20	0.665	200	.	2800	36	1160	.	2380	-0.1	4.75
PASS626R	42-41.7342-75.5132-4-52-000	7.2	220	2.10	3.010	170	.	13800	29	.	504.5	4900	-0.1	13.68
PASS627R	42-41.7334-75.5376-4-53-000	6.7	130	0.80	0.008	0	.	8200	.	.	9.1	2070	-0.1	0.06
PASS628R	42-41.9117-75.5369-4-52-000	7.5	290	3.00	2.320	165	.	3000	57	4420	.	10210	-0.1	8.00
PASS629R	42-41.8910-75.5374-4-52-000	7.2	180	1.10	0.300	185	.	15400	54	6370	.	5070	-0.1	1.67
PASS630R	42-41.8576-75.5413-4-52-000	7.5	170	1.10	0.422	300	.	5000	10	1120	.	2140	-0.1	2.48
PASS631R	42-41.8275-75.5416-4-52-000	7.2	100	0.55	0.004	145	.	9500	30	1620	.	2200	-0.1	0.04
PASS632R	42-41.7906-75.5402-4-52-000	6.7	140	0.55	0.069	.	.	7100	11	1430	.	1310	-0.1	0.49
PASS633R	42-41.7548-75.5436-4-52-000	7.1	120	0.90	0.169	95	50.1	9000	68	2940	.	3280	-0.1	1.41
PASS634R	42-41.7137-75.5893-4-52-000	7.4	170	1.40	0.378	240	.	6700	127	.	.	9140	-0.1	2.22
PASS635R	42-41.7535-75.5943-4-52-000	7.8	190	1.50	1.700	318	447.4	7100	75	.	38.8	9300	-0.1	8.95
PASS636R	42-41.8000-75.5864-4-53-000	7.4	150	1.10	0.658	0	.	6600	94	3780	.	5820	-0.1	4.39
PASS637R	42-41.8229-75.5928-4-52-000	7.4	130	1.00	0.163	81	.	8700	67	.	35.4	5700	-0.1	1.25
PASS638R	42-41.8456-75.5910-4-52-000	8.0	190	1.50	0.687	200	.	15200	152	.	140.0	3710	-0.1	3.62
PASS639R	42-41.8770-75.5900-4-52-000	7.9	210	1.20	0.455	90	.	15800	114	.	198.1	4820	-0.1	2.17
PASS640R	42-41.9176-75.5933-4-53-000	7.7	210	1.80	0.524	0	16.1	7600	125	10100	.	10520	-0.1	2.50
PASS641R	42-41.9017-75.6100-4-53-000	7.5	160	1.40	0.279	0	.	7600	124	8140	.	4890	0.3	1.74
PASS642R	42-41.8725-75.6211-4-52-000	7.6	150	1.00	0.297	285	12.0	11600	78	6380	.	4280	-0.1	1.98
PASS643R	42-41.8507-75.6357-4-52-000	7.8	210	2.20	1.574	117	.	7500	115	.	171.0	16860	-0.1	7.50
PASS644R	42-41.8978-75.7035-4-53-000	6.6	60	0.28	0.009	0	.	10100	53	.	27.3	2390	-0.1	0.15
PASS645R	42-41.9026-75.6995-4-52-000	6.6	80	0.45	0.002	220	.	8000	105	4850	.	2440	-0.1	0.03
PASS646R	42-41.9102-75.6794-4-53-000	7.4	70	0.38	0.003	0	23.1	7400	70	7460	.	1730	-0.1	0.04
PASS647R	42-41.8891-75.6698-4-53-000	6.8	70	0.40	-0.002	0	13.9	13800	63	4700	.	4700	-0.1	
PASS648R	42-41.8657-75.7005-4-52-000	7.5	260	2.50	0.808	95	30.4	8600	128	.	774.1	16910	-0.1	3.11
PASS649R	42-41.8618-75.6707-4-52-000	8.0	210	2.10	0.115	325	.	10500	122	.	187.3	22300	0.6	0.55
PASS650R	42-41.8277-75.6331-4-52-000	8.2	210	2.10	0.041	.	84.4	13500	205	.	122.2	26960	0.4	0.20
PASS651R	42-41.8123-75.6646-4-52-000	7.6	260	1.30	0.742	207	.	20700	33	.	116.9	8720	-0.1	2.85
PASS652R	42-41.8244-75.7082-4-52-000	8.0	210	1.90	0.749	210	.	7100	90	.	80.6	15870	-0.1	3.57
PASS653R	42-41.7875-75.7000-4-52-000	6.2	160	0.50	-0.002	6	.	21600	.	4320	.	5350	-0.1	
PASS654R	42-41.7926-75.6701-4-52-000	7.6	260	2.00	2.905	150	.	10600	124	.	333.4	10330	-0.1	11.17
PASS655R	42-41.7904-75.6386-4-52-000	7.1	190	1.10	0.310	280	9.0	13400	63	4920	.	5750	-0.1	1.63
PASS656R	42-41.7576-75.6405-4-52-000	7.7	350	3.20	4.837	250	.	6400	129	10400	.	29570	-0.1	13.82
PASS657R	42-41.7322-75.6353-4-53-000	7.3	170	0.70	0.349	0	.	25100	33	.	114.3	9120	-0.1	2.05
PASS658R	42-41.8280-75.7451-4-52-000	7.5	170	1.00	0.545	218	.	12800	75	3770	.	6650	-0.1	3.21
PASS659R	42-41.8021-75.7542-4-52-000	7.2	120	0.80	0.253	118	12.1	7100	50	4340	.	3900	-0.1	2.11
PASS660R	42-41.7466-75.6836-4-52-000	6.2	230	0.40	-0.002	9	12.1	26400	.	6440	.	6580	-0.1	
PASS661R	42-41.7244-75.6785-4-53-000	7.2	140	1.10	0.214	0	.	7800	30	2660	.	3110	-0.1	1.53
PASS662R	42-41.7236-75.6998-4-52-000	6.9	150	0.80	0.194	240	9.6	12500	74	3370	.	3870	-0.1	1.29

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	DEPTH	BR	CL	F	MG	MN	NA	V	U/COND
*****					UM/CM	MEQ/L	PPB	FEET	PPB	PPB	PPB	PPB	PPB	PPB	PPB	X 1000
PASS663R	42-41.7476-	75.7165-4-52-000	7.8	190	1.70	1.055	227	.	.	8800	82	3990	.	6180	-0.1	5.55
PASS664R	42-41.8840-	75.7568-4-53-000	7.3	100	0.35	-0.002	0	.	.	7200	62	4730	.	2940	-0.1	.
PASS665R	42-41.9122-	75.7392-4-53-000	6.5	90	0.35	-0.002	0	.	.	6800	37	3120	.	2290	-0.1	.
PASS666R	42-41.8651-	75.7431-4-52-000	7.8	200	1.20	0.132	118	677.1	.	26800	78	.	104.4	10000	-0.1	0.66
PAW0501R	42-41.5239-	75.9516-4-52-000	7.9	700	2.40	0.280	250	.	.	164300	.	28080	.	99640	-0.1	0.40
PAW0502R	42-41.5346-	75.9367-4-52-000	8.3	300	1.90	0.540	.	.	.	27400	24	.	56.5	22600	-0.1	1.80
PAW0503R	42-41.5322-	75.8714-4-52-000	8.2	190	1.50	1.043	.	.	.	9700	75	.	67.5	4980	0.3	5.49
PAW0504R	42-41.5099-	75.8398-4-53-000	8.1	130	0.50	0.046	0	.	.	15300	52	.	56.1	3900	-0.1	0.35
PAW0505R	42-41.5081-	75.8069-4-52-000	7.6	240	1.60	1.105	.	.	.	14600	96	.	.	9520	-0.1	4.60
PAW0506R	42-41.5347-	75.8226-4-52-000	8.2	110	0.55	0.007	.	.	.	10200	40	.	322.4	3380	-0.1	0.06
PAW0507R	42-41.5461-	75.8055-4-52-000	8.1	200	1.70	1.275	.	.	.	11000	103	.	98.3	10610	-0.1	6.38
PAW0508R	42-41.5683-	75.8384-4-52-000	8.2	270	3.10	1.856	90	.	.	14900	136	.	89.7	6210	-0.1	6.87
PAW0509R	42-41.5701-	75.8023-4-52-000	8.0	120	0.34	0.054	.	26.8	.	9600	.	.	58.8	2620	-0.1	0.45
PAW0510R	42-41.6090-	75.7950-4-52-000	8.0	120	0.38	0.097	200	13.7	.	11300	63	.	55.6	5580	-0.1	0.81
PAW0511R	42-41.6265-	75.7793-4-52-000	8.0	100	0.32	0.054	.	492.6	.	10900	40	.	51.5	2250	-0.1	0.54
PAW0512R	42-41.6323-	75.7464-4-52-000	8.0	100	0.20	0.084	70	.	.	9600	40	.	71.8	3640	1.6	0.84
PAW0513R	42-41.5953-	75.8413-4-53-000	8.0	80	0.34	-0.002	0	11.3	.	7800	.	.	49.8	2640	-0.1	.
PAW0514R	42-41.6258-	75.8335-4-52-000	7.9	290	2.70	2.287	230	32.1	.	14600	41	11980	.	12300	-0.1	7.89
PAW0515R	42-41.6320-	75.8872-4-52-000	8.4	90	1.60	0.024	180	.	.	7300	51	.	77.1	3220	-0.1	0.27
PAW0516R	42-41.6214-	75.9432-4-52-000	7.9	150	0.70	-0.002	.	.	.	21600	.	.	94.0	10070	-0.1	.
PAW0517R	42-41.5886-	75.9271-4-52-000	8.3	120	0.50	0.037	60	.	.	14000	29	.	86.1	4550	-0.1	0.31
PAW0518R	42-41.6053-	75.8978-4-52-000	8.5	80	0.34	-0.002	.	.	.	7000	.	.	67.3	1510	-0.1	.
PAW0519R	42-41.5595-	75.8706-4-52-000	8.2	240	1.90	2.356	200	72.7	.	21900	.	.	123.7	13680	-0.1	9.82
PAW0520R	42-41.5614-	75.9173-4-52-000	8.6	100	0.34	0.049	.	.	.	8800	37	.	69.0	3270	0.3	0.49
PAW0521R	42-41.5993-	75.9777-4-52-000	8.1	90	0.38	0.045	.	.	.	10100	79	.	.	3890	-0.1	0.50
PAW0522R	42-41.6232-	75.9825-4-52-000	8.2	130	0.50	0.011	230	.	.	6300	15	.	122.4	6650	0.6	0.08
PAW0523R	42-41.6218-	75.9978-4-52-000	8.3	90	0.30	0.008	265	.	.	9800	35	.	27.0	3100	0.3	0.09
PAW0526R	42-41.5647-	75.9634-4-52-000	8.0	250	1.60	1.113	200	31.6	.	30500	63	5610	.	6400	-0.1	4.46
PAW0527R	42-41.5052-	75.9848-4-52-000	8.0	20	0.06	0.005	172	19.5	.	5500	.	4010	.	1510	0.2	0.25
PAW0530R	42-41.4495-	75.9640-4-52-000	8.0	180	2.00	0.719	280	.	.	5500	87	5340	.	5640	-0.1	3.99
PAW0531R	42-41.4646-	75.9789-4-52-000	7.9	120	0.32	0.067	260	.	.	10400	14	.	64.0	3860	-0.1	0.56
PAW0534R	42-41.4096-	75.9982-4-52-000	7.7	90	0.26	-0.002	270	9.8	.	7500	44	.	21.2	3520	-0.1	.
PAW0535R	42-41.3971-	75.9798-4-53-000	7.8	50	0.12	-0.002	0	10.8	.	8000	51	.	74.3	2640	0.2	.
PAW0536R	42-41.4198-	75.9303-4-52-000	7.7	80	0.36	0.025	233	.	.	10500	27	.	88.4	3550	0.8	0.31
PAW0537R	42-41.4395-	75.9123-4-52-000	7.5	160	1.50	0.826	310	.	.	7900	96	.	48.6	6130	-0.1	5.16
PAW0538R	42-41.4483-	75.8917-4-53-000	7.9	110	0.34	0.006	0	390.2	.	11700	60	.	31.8	3810	-0.1	0.05
PAW0539R	42-41.4467-	75.8504-4-53-000	7.6	160	0.50	-0.002	0	.	.	12300	42	.	33.0	4110	-0.1	.
PAW0540R	42-41.4834-	75.8324-4-52-000	7.7	140	0.50	0.003	.	.	.	13200	46	.	81.8	5570	-0.1	0.02
PAW0541R	42-41.4648-	75.8634-4-52-000	7.6	160	0.55	M	311	M	M	M	M	M	M	M	M	M
PAW0542R	42-41.4804-	75.9145-4-53-000	7.6	100	0.38	0.028	0	.	.	5000	26	.	125.1	6300	1.7	0.28
PAW0543R	42-41.5127-	75.9129-4-52-000	7.4	130	0.65	0.010	216	.	.	8800	38	.	31.3	3700	-0.1	0.08
PAW0544R	42-41.5094-	75.8989-4-52-000	7.7	130	0.95	0.249	211	.	.	6400	59	.	34.5	3940	-0.1	1.92
PAWY501R	42-41.6005-	75.2665-4-52-000	7.8	600	1.90	0.178	200	.	.	M	.	1260	.	M	-0.1	0.30
PAWY502R	42-41.6317-	75.2579-4-53-000	6.7	60	0.44	0.036	0	.	.	7500	53	.	.	2390	-0.1	0.60
PAWY503R	42-41.6667-	75.2555-4-52-000	5.6	150	0.24	0.105	15	.	.	11300	.	.	52.0	4100	-0.1	0.70
PAWY504R	42-41.6962-	75.2482-4-52-000	7.2	170	1.70	0.545	170	.	.	7500	134	.	30.5	9340	-0.1	3.21
PAWY505R	42-41.7249-	75.2097-4-52-000	6.1	390	0.42	0.024	150	.	.	81000	.	3260	.	15270	-0.1	0.06
PAWY506R	42-41.7665-	75.1502-4-52-000	7.4	190	2.20	1.998	170	.	.	7500	171	6900	.	11780	-0.1	10.52
PAWY507R	42-41.7937-	75.1722-4-52-000	6.7	90	0.80	0.076	110	12.6	.	3500	55	1600	.	1510	-0.1	0.84
PAWY508R	42-41.8215-	75.1498-4-53-000	7.0	100	0.70	0.133	0	27.7	.	7700	83	3220	.	5290	-0.1	1.33
PAWY509R	42-41.8257-	75.1218-4-52-000	7.3	75	0.80	0.157	125	.	.	6800	95	3240	.	3150	0.3	2.09
PAWY510R	42-41.8248-	75.1993-4-52-000	6.8	150	1.30	0.825	125	.	.	3800	17	1300	.	2190	-0.1	5.50
PAWY511R	42-41.8634-	75.2161-4-52-000	8.2	2000	1.40	0.210	300	.	.	645500	.	.	.	290050	3.3	0.11

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKNOX MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MO PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAWY512R	42-41.8344-75.2332-4-53-000	6.6	85	0.26	-0.002	0	14.7	7700	.	.	20.0	2420	-0.1	.
PAWY513R	42-41.7905-75.2382-4-53-000	7.0	85	0.70	0.145	0	.	6900	68	.	.	2600	-0.1	1.71
PAWY514R	42-41.7680-75.2095-4-52-000	7.9	180	1.70	1.529	100	.	4500	33	1320	.	2130	-0.1	8.49
PAWY515R	42-41.6529-75.2684-4-53-000	7.0	70	0.48	0.232	0	9.6	7400	61	1480	.	3100	-0.1	3.31
PAWY516R	42-41.6995-75.2978-4-52-000	6.7	100	0.60	0.035	85	.	4000	12	1190	.	1070	-0.1	0.35
PAWY517R	42-41.7265-75.2978-4-52-000	7.7	170	1.70	1.648	185	.	5500	38	1990	.	2990	-0.1	9.69
PAWY518R	42-41.7975-75.2911-4-52-000	7.8	185	1.90	1.568	140	.	7200	56	3050	.	6830	-0.1	8.48
PAWY519R	42-41.8122-75.2805-4-53-000	7.3	40	0.24	-0.002	0	9.6	3600	26	.	12.6	570	-0.1	.
PAWY520R	42-41.8185-75.3311-4-53-000	6.6	80	0.38	0.029	0	.	12600	37	.	12.7	3250	0.2	0.36
PAWY521R	42-41.8542-75.3307-4-52-000	7.6	150	1.60	0.592	130	.	4700	8	.	7.9	2870	-0.1	3.95
PAWY522R	42-41.8887-75.3384-4-53-000	6.7	70	0.32	0.005	0	.	10000	64	.	26.7	2230	-0.1	0.07
PAWY523R	42-41.8575-75.2327-4-53-000	7.3	60	0.42	0.078	0	.	3300	29	950	.	1350	-0.1	1.27
PAWY524R	42-41.5644-75.2573-4-53-000	7.1	170	0.42	0.104	0	.	35200	.	2580	.	9780	-0.1	0.61
PAWY525R	42-41.7251-75.2635-4-53-000	6.6	90	0.46	0.006	0	.	5100	.	.	4.4	2500	-0.1	0.07
PAWY526R	42-41.7700-75.2538-4-52-000	6.2	40	0.10	0.030	32	9.7	6700	50	.	12.6	920	-0.1	0.75
PAWY527R	42-41.8851-75.2987-4-53-000	6.6	70	0.44	0.017	0	.	3100	.	610	.	730	-0.1	0.24
PAWY528R	42-41.8894-75.3015-4-52-000	7.3	130	1.30	0.776	194	.	7400	37	4060	.	2530	-0.1	5.97
PAWY529R	42-41.9085-75.3057-4-52-000	6.2	170	1.80	0.111	142	16.7	5900	52	.	49.6	7690	-0.1	0.65
PAWY530R	42-41.9126-75.3447-4-53-000	6.9	135	1.10	0.007	0	.	11300	43	.	.	4040	-0.1	0.05
PAWY531R	42-41.9437-75.3309-4-53-000	6.5	70	0.42	0.008	0	.	4600	.	1040	.	1120	-0.1	0.11
PAWY532R	42-41.9426-75.3750-4-53-000	7.1	90	0.80	0.058	0	.	6900	71	3420	.	2070	-0.1	0.62
PAWY533R	42-41.6045-75.2832-4-52-000	5.9	265	0.50	0.036	120	.	29600	.	.	12.8	6610	-0.1	0.14
PAWY534R	42-41.6338-75.2998-4-52-000	6.6	160	1.10	0.216	.	8.1	15400	36	2550	.	3820	-0.1	1.35
PAWY535R	42-41.6635-75.3214-4-52-000	7.0	150	1.20	0.139	240	.	4000	.	.	.	1140	-0.1	0.93
PAWY536R	42-41.6990-75.3301-4-52-000	7.3	120	1.40	0.631	.	.	6300	88	2940	.	3670	-0.1	5.26
PAWY537R	42-41.7334-75.3430-4-52-000	6.6	195	0.90	0.101	128	.	21100	.	.	7.1	4310	-0.1	0.52
PAWY538R	42-41.7625-75.3479-4-52-000	7.6	190	2.30	1.382	240	14.4	6500	91	3720	.	7020	-0.1	7.27
PAWY539R	42-41.7887-75.3390-4-52-000	7.5	250	3.00	1.003	400	.	3800	23	2840	.	3240	-0.1	4.02
PAWY540R	42-41.8217-75.3735-4-52-000	7.9	135	1.60	0.686	.	11.0	6500	59	2980	.	5830	-0.1	5.16
PAWY541R	42-41.8574-75.3752-4-52-000	7.8	155	1.80	0.532	188	12.9	7800	141	4600	.	7570	-0.1	3.43
PAWY542R	42-41.8815-75.3664-4-53-000	6.5	195	0.58	0.008	0	.	23600	.	.	11.0	5300	-0.1	0.04
PAWY543R	42-41.9233-75.3821-4-52-000	7.3	130	1.20	0.206	200	.	4600	.	1010	.	820	-0.1	1.58
PAWY544R	42-41.9460-75.4059-4-53-000	6.2	35	0.16	0.039	0	11.1	8400	40	1310	.	1410	-0.1	1.11
PAWY545R	42-41.9895-75.4186-4-52-000	7.5	130	1.00	0.208	125	.	2700	35	2140	.	1680	-0.1	1.60
PAWY546R	42-41.9854-75.4676-4-52-000	5.9	150	0.34	0.017	18	31.6	23200	.	.	.	4890	-0.1	0.11
PAWY547R	42-41.6410-75.3380-4-52-000	7.9	180	1.70	0.637	515	.	3700	62	.	10.8	9480	-0.1	3.54
PAWY548R	42-41.6422-75.3897-4-53-000	6.5	95	0.44	0.019	0	.	7400	.	710	.	1170	-0.1	0.20
PAWY549R	42-41.6608-75.3752-4-53-000	6.5	95	0.52	0.018	0	.	8500	31	.	28.2	2270	-0.1	0.19
PAWY550R	42-41.7017-75.3689-4-52-000	7.7	160	1.60	0.887	197	9.3	4200	53	950	.	4200	-0.1	5.54
PAWY551R	42-41.7354-75.3903-4-52-000	8.0	170	1.70	0.906	117	.	10900	44	2680	.	6320	-0.1	5.33
PAWY552R	42-41.7603-75.3858-4-52-000	7.7	200	1.80	2.693	375	6.7	4900	.	1090	.	2680	-0.1	13.47
PAWY553R	42-41.7796-75.3925-4-52-000	6.6	65	0.30	0.042	100	.	9900	18	1530	.	1830	-0.1	0.65
PAWY554R	42-41.7994-75.4164-4-52-000	6.9	100	1.00	0.060	160	12.7	4100	.	.	13.0	960	-0.1	0.60
PAWY555R	42-41.8208-75.4194-4-52-000	7.2	260	1.50	1.177	166	.	37400	.	4150	.	5550	-0.1	4.53
PAWY556R	42-41.8537-75.4037-4-52-000	6.6	110	0.70	0.087	35	.	10400	.	.	9.8	1440	-0.1	0.79
PAWY557R	42-41.8913-75.4153-4-53-000	6.5	80	0.80	0.033	0	.	6400	91	.	13.8	1500	0.4	0.41
PAWY558R	42-41.9096-75.4244-4-52-000	7.3	90	0.90	0.029	247	.	3700	31	.	16.8	1300	-0.1	0.32
PAWY559R	42-41.6649-75.4088-4-52-000	7.8	175	1.60	1.758	160	15.5	11100	67	3230	.	5870	-0.1	10.05
PAWY560R	42-41.6956-75.4191-4-53-000	6.6	85	0.48	0.027	0	.	5000	.	.	9.6	830	-0.1	0.32
PAWY561R	42-41.7316-75.4131-4-52-000	7.8	150	1.50	1.171	316	.	9500	57	3300	.	5160	-0.1	7.81
PAWY562R	42-41.7611-75.4061-4-53-000	6.9	85	0.80	0.065	0	.	4100	35	.	7.9	1070	-0.1	0.76
PAWY563R	42-41.9515-75.4577-4-52-000	7.5	130	1.50	0.262	.	17.8	6800	104	4820	.	4440	-0.1	2.02
PAWY564R	42-41.9048-75.4559-4-53-000	7.1	95	0.80	0.052	0	3.3	3900	.	460	.	600	-0.1	0.55

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TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKNOO	U	DEPTH	BR	CL	F	MG	MN	NA	V	U/COND
*****					UM/CM	MEQ/L	PPB	FEET	PPB	PPB	PPB	PPB	PPB	PPB	PPB	X 1000
PAWY565R	42-41.8902-	75.4652-4-53-000	6.7	340	0.80	0.061	0			66100				19940	-0.1	0.18
PAWY566R	42-41.8602-	75.4650-4-52-000	6.7	120	0.90	0.117	185			20500	62	3020		5550	-0.1	0.98
PAWY567R	42-41.8191-	75.4497-4-52-000	7.6	110	1.40	1.629	195	268.3		3700	32	1170		3180	-0.1	14.81
PAWY568R	42-41.7916-	75.4464-4-52-000	6.7	150	1.10	1.250	260			22300				6100	-0.1	8.33
PAWY569R	42-41.7687-	75.4570-4-52-000	7.6	130	1.10	0.621	260	4.0		5100	36	1210		1660	-0.1	4.78
PAWY570R	42-41.7246-	75.4534-4-52-000	7.6	140	1.40	2.825	215	1865.0		10300	75	4070		5240	-0.1	20.18
PAWY571R	42-41.6937-	75.4648-4-52-000	7.7	100	1.20	0.795	405			3300	43		57.7	350	-0.1	7.95
PAWY572R	42-41.6248-	75.4095-4-53-000	5.8	150	0.60	-0.002	0			27300		2680		5990	-0.1	
PAWY573R	42-41.6008-	75.4282-4-52-000	6.0	55	0.28	0.103	297	4.4		3500	15	610		960	-0.1	1.87
PAWY574R	42-41.6013-	75.3745-4-52-000	7.2	200	2.30	1.473	220	13.9		7800	86	3470		9910	-0.1	7.37
PAWY575R	42-41.5920-	75.3441-4-52-000	7.4	160	2.00	2.978		13.9		3800	53	1410		5060	-0.1	18.61
PAWY576R	42-41.5708-	75.3259-4-52-000	6.4	290	1.40	1.390	180			28600	93		171.2	10590	-0.1	4.79
PAWY577R	42-41.5594-	75.2916-4-52-000	7.1	180	1.60	2.337	40			5100	21		17.9	3140	-0.1	12.98
PAWY578R	42-41.5349-	75.2988-4-52-000	7.3	250	2.10	3.184	105			13800	158	5450		6350	-0.1	12.74
PAWY579R	42-41.5364-	75.3352-4-52-000	7.4	150	1.50	0.572		13.2		4000	81	1320		2260	-0.1	3.81
PAWY580R	42-41.5597-	75.3867-4-52-000	7.6	180	1.60	0.868	240			21500	138		237.8	10130	0.7	4.82
PAWY581R	42-41.5705-	75.4210-4-52-000	7.5	210	2.60	2.584	165			2700	21		71.8	5920	-0.1	12.21
PAWY582R	42-41.5320-	75.4206-4-52-000	6.8	265	1.70	0.656	150			25200	31	4240		7920	-0.1	2.48
PAWY583R	42-41.5322-	75.3716-4-52-000	6.5	215	0.80	0.197	80			30000			9.4	4140	-0.1	0.92
PAWY584R	42-41.5342-	75.2587-4-52-000	6.7	240	1.20	1.388	148	19.6		36200		3120		8440	-0.1	5.78
PAWY585R	42-41.5376-	75.2077-4-52-000	7.7	150	1.70	1.638	260			3800	46	1990		3770	-0.1	10.92
PAWY586R	42-41.5670-	75.2059-4-52-000	6.2	80	0.22	0.085	50			15100	47		26.5	3940	-0.1	1.06
PAWY587R	42-41.5954-	75.2119-4-52-000	7.5	150	1.60	5.402	300			3700		620		5890	-0.1	36.01
PAWY588R	42-41.6273-	75.2130-4-52-000	7.7	175	2.00	4.874	240	37.4		6200	126	3120		11450	-0.1	28.42
PAWY589R	42-41.6587-	75.2126-4-53-000	6.4	70	0.38	0.073	0			M		M		M	-0.1	1.04
PAWY590R	42-41.6992-	75.2117-4-53-000	5.9	135	0.52	0.030	0	33.1		15700	63		69.0	4510	-0.1	0.22
PAWY591R	42-41.6994-	75.1703-4-52-000	7.3	185	1.70	4.877	375			5200			8.8	3580	-0.1	29.56
PAWY592R	42-41.7345-	75.1724-4-52-000	7.6	155	1.50	6.112	300			9900	122	1470		11090	-0.1	39.43
PAWY593R	42-41.7527-	75.2024-4-52-000	7.6	170	1.80	2.085	500			3200	30		14.5	4960	-0.1	12.26
PAWY594R	42-41.7646-	75.1232-4-52-000	6.6	80	0.70	0.122	120			7200	66	3010		5550	-0.1	1.53
PAWY595R	42-41.7862-	75.1268-4-52-000	6.4	100	0.70	0.033	125			3100	19	1130		1160	-0.1	0.33
PAWY596R	42-41.7665-	75.0750-4-53-000	7.4	140	1.60	1.812	0	8.7		7400	89	4940		6900	-0.1	12.94
PAWY597R	42-41.7270-	75.0852-4-52-000	7.3	135	1.20	2.157	100			5200	22	1470		2460	-0.1	15.98
PAWY598R	42-41.7362-	75.1260-4-53-000	6.1	80	0.36	0.102	0	203.2		11100	29	1760		3490	-0.1	1.28
PAWY599R	42-41.5752-	75.1721-4-52-000	7.1	150	1.50	0.306	205			4900	37	2240		4150	-0.1	2.04
PAWY600R	42-41.5957-	75.1717-4-52-000	7.3	180	1.50	4.862	500			10100	91	3050		6320	-0.1	27.57
PAWY601R	42-41.6338-	75.1633-4-52-000	6.7	150	1.70	0.389	155			3900	40		13.6	5380	-0.1	2.59
PAWY602R	42-41.6651-	75.1701-4-52-000	6.3	130	0.24	0.087	21			M		M		M	-0.1	0.67
PAWY603R	42-41.6672-	75.1149-4-52-000	6.8	180	1.20	1.236	185			6600			13.9	2430	-0.1	6.87
PAWY604R	42-41.6702-	75.0721-4-52-000	7.5	170	1.90	0.851	115	55.8		7900	150		512.0	15730	-0.1	5.01
PAWY605R	42-41.7020-	75.0800-4-52-000	7.9	180	1.70	1.835				3200	38		27.6	8030	-0.1	10.19
PAWY606R	42-41.6929-	75.1179-4-52-000	7.2	215	2.00	8.868				14700	79		44.5	11800	-0.1	41.25
PAWY607R	42-41.6222-	75.1221-4-53-000	6.2	70	0.34	0.240	0	4.8		3900	22		20.5	1080	-0.1	3.43
PAWY608R	42-41.6284-	75.0751-4-52-000	6.9	150	1.60	3.462	127	14.0		6800	137	5080		10440	-0.1	23.08
PAWY609R	42-41.6011-	75.0868-4-52-000	6.1	110	0.28	0.164				16000			19.3	3020	-0.1	1.49
PAWY610R	42-41.5699-	75.1079-4-52-000	7.2	115	1.20	0.583		17.2		8200	113	4610		4700	-0.1	5.07
PAWY611R	42-41.5961-	75.1254-4-52-000	7.1	200	1.10	1.094	250			9500		2590		4240	-0.1	5.47
PAWY612R	42-41.5280-	75.1763-4-52-000	6.7	125	1.30	0.212				6800	157		57.0	4410	0.3	1.70
PAWY613R	42-41.4945-	75.1635-4-52-000	6.7	110	1.00	0.185	265			7100	96		45.3	2880	0.2	1.68
PAWY614R	42-41.4972-	75.1973-4-52-000	7.6	900	2.00	0.889	200	957.0		216000			793.8	117820	1.9	1.10
PAWY615R	42-41.5012-	75.2471-4-52-000	6.6	155	1.00	0.032	140	13.9		15400	88		73.5	5510	-0.1	0.21
PAWY616R	42-41.5077-	75.2999-4-52-000	7.1	175	1.20	0.606	242			25500				4900	-0.1	3.46
PAWY617R	42-41.4603-	75.2569-4-52-000	6.8	100	0.80	0.073	128			8900	29		42.5	3220	-0.1	0.73

TABLE A-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -GROUND WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	DEPTH FEET	BR PPB	CL PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAHY618R	42-41.4605-75.2084-4-52-000	5.8	45	0.36	0.006	.	10.3	8000	92	.	42.5	4060	-0.1	0.13
PAHY619R	42-41.4466-75.2167-4-52-000	6.4	110	0.80	0.138	106	.	22300	86	9200	.	7670	-0.1	1.25
PAHY620R	42-41.4323-75.2578-4-52-000	7.1	180	2.00	0.523	153	.	5900	186	.	269.9	14110	0.4	2.91
PAHY621R	42-41.4335-75.2954-4-52-000	7.8	205	2.10	0.785	230	.	8500	142	.	65.1	10140	-0.1	3.83
PAHY622R	42-41.4124-75.2824-4-52-000	7.6	290	2.30	1.428	150	56.4	30400	183	.	.	9360	-0.1	4.92
PAHY623R	42-41.3795-75.3103-4-52-000	7.3	130	1.50	0.334	.	25.9	6700	73	6000	.	4850	-0.1	2.57
PAHY624R	42-41.3803-75.3515-4-52-000	6.1	190	0.46	0.025	12	.	17200	46	.	64.8	6730	-0.1	0.13
PAHY625R	42-41.4021-75.3404-4-52-000	6.6	60	0.58	0.185	170	32.2	7700	64	.	36.7	3450	-0.1	3.08
PAHY626R	42-41.4398-75.3408-4-52-000	6.6	140	1.00	0.372	260	.	12100	34	.	51.2	4900	-0.1	2.66
PAHY627R	42-41.5015-75.3437-4-53-000	6.1	70	0.48	0.026	0	.	7600	61	.	41.6	2420	-0.1	0.37
PAHY628R	42-41.4756-75.3428-4-52-000	6.0	215	0.54	0.101	150	.	48100	.	.	57.0	10130	-0.1	0.47
PAHY629R	42-41.4689-75.3823-4-52-000	6.9	240	2.30	2.738	.	.	12100	65	9120	.	6610	-0.1	11.41
PAHY630R	42-41.4325-75.3785-4-53-000	6.0	180	0.70	0.177	0	.	15300	.	.	.	3940	-0.1	0.98
PAHY631R	42-41.4006-75.3834-4-52-000	6.5	190	1.30	0.266	200	.	20200	54	.	62.4	8570	-0.1	1.40
PAHY632R	42-41.3719-75.3743-4-52-000	6.2	130	0.80	0.073	120	.	24800	47	.	46.7	4340	-0.1	0.56
PAHY633R	42-41.3447-75.3777-4-52-000	7.0	140	1.50	0.375	210	.	9600	104	6600	.	6400	-0.1	2.68
PAHY634R	42-41.3280-75.3410-4-52-000	7.1	110	1.10	0.125	145	.	7800	46	.	46.0	3020	-0.1	1.14
PAHY635R	42-41.3098-75.3371-4-52-000	6.7	75	0.70	0.068	145	29.5	8100	56	.	45.8	3760	0.2	0.91
PAHY636R	42-41.2729-75.3355-4-52-000	7.6	200	1.70	0.517	145	.	16700	78	.	38.0	11480	0.2	2.59
PAHY637R	42-41.2747-75.3744-4-52-000	7.1	100	1.10	0.047	275	35.8	6900	24	2220	.	1240	-0.1	0.47
PAHY638R	42-41.2563-75.4176-4-52-000	5.8	170	0.20	0.075	.	.	43600	.	5780	.	9720	-0.1	0.44
PAHY639R	42-41.5067-75.3723-4-52-000	7.8	180	1.90	2.071	285	.	8900	142	.	.	10770	-0.1	11.51
PAHY640R	42-41.4906-75.4271-4-52-000	6.8	170	1.50	0.844	230	.	14600	21	2810	.	4500	-0.1	4.96
PAHY641R	42-41.4685-75.4202-4-52-000	7.7	180	1.60	0.750	200	31.8	8500	111	2200	.	13680	-0.1	4.17
PAHY642R	42-41.4308-75.4247-4-52-000	7.7	190	1.90	1.667	136	56.1	8900	116	3430	.	6740	-0.1	8.77
PAHY643R	42-41.3989-75.4166-4-52-000	6.5	95	0.42	0.072	110	.	13600	.	2720	.	5560	-0.1	0.76
PAHY644R	42-41.3692-75.4103-4-53-000	6.1	40	0.16	0.005	0	64.0	8800	50	.	41.3	2200	-0.1	0.13
PAHY645R	42-41.3451-75.4402-4-52-000	6.7	120	1.00	0.115	180	.	4700	11	.	103.8	7100	-0.1	0.96
PAHY646R	42-41.2993-75.3833-4-52-000	6.3	70	0.36	0.059	.	.	11700	19	1410	.	1310	-0.1	0.84
PAHY647R	42-41.2575-75.3700-4-52-000	6.1	35	0.32	-0.002	300	23.8	3900	.	430	.	430	-0.1	.
PAHY648R	42-41.2444-75.4468-4-52-000	5.2	30	0.08	0.005	40	18.5	3300	.	.	15.4	390	-0.1	0.17
PAHY649R	42-41.3203-75.4076-4-52-000	7.7	150	1.80	0.414	200	37.7	7100	116	.	63.1	5270	-0.1	2.76

APPENDIX B: Stream Sediment Reconnaissance Data

Key data reported for stream sediment sites include:

- water quality measurements (pH, conductivity, and alkalinity)
- elemental analyses for U, Th, Hf, Al, Ce, Fe, Mn, Na, Sc, Ti, and V
- analyses for the supplemental elements Dy, Eu, La, Lu, Sm, and Yb
- sampling site descriptors (stream characteristics, vegetation, etc.)

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FIGURE B-1. Histogram and Cumulative Frequency Plot of Stream Water pH Values

FIGURE B-2. Areal Distribution of Stream Water pH Values

FIGURE B-3. Log Histogram and Cumulative Frequency Plot of Stream Water Conductivity Values

SCRANTON 1x2° Sheet
Conductivity In Surface Water
976 Values Above D.L.

Conductivity - micro-mhos per cm.

+ < 6.0	○ 25.0- 30.0	○ 50.0- 63.0	⊙ 110.0- 153.0	● 270.0- 342.0
x 6.0- 20.0	○ 30.0- 39.0	○ 63.0- 85.0	⊙ 153.0- 210.0	◆ 342.0- 560.0
• 20.0- 25.0	○ 39.0- 50.0	○ 85.0- 110.0	⊙ 210.0- 270.0	★ > 560.0

FIGURE B-4. Areal Distribution of Stream Water Conductivity Values

FIGURE B-5. Log Histogram and Cumulative Frequency Plot of Stream Water Alkalinity Values

FIGURE B-6. Areal Distribution of Stream Water Alkalinity Values

FIGURE B-7. Log Histogram and Cumulative Frequency Plot of Uranium Concentrations in Stream Sediment

FIGURE B-9. Log Histogram and Cumulative Frequency Plot of Thorium Concentrations in Stream Sediment

SCRANTON 1x2 Sheet
Thorium In Sediments
904 Values Above D.L.

Thorium concentration - p.p.m.				
+ < 4.0	o 5.0- 6.0	○ 8.0- 9.0	⊙ 12.0- 14.0	● 19.0- 23.0
x 4.0- 5.0	o 6.0- 7.0	○ 9.0- 11.0	⊙ 14.0- 16.0	◆ 23.0- 33.0
• 5.0- 5.0	○ 7.0- 8.0	○ 11.0- 12.0	⊙ 16.0- 19.0	★ > 33.0

FIGURE B-10. Areal Distribution of Thorium Concentrations in Stream Sediment

FIGURE B-11. Log Histogram and Cumulative Frequency Plot of Hafnium Concentrations in Stream Sediment

SCRANTON 1'x2' Sheet
Hafnium In Sediments
893 Values Above D.L.

Hafnium concentration - p.p.m.				
+ < 0.6	o 1.1- 1.3	○ 2.0- 2.5	⊙ 3.7- 4.6	● 7.1- 9.1
x 0.6- 0.9	o 1.3- 1.6	○ 2.5- 3.0	⊙ 4.6- 5.9	◆ 9.1- 13.6
• 0.9- 1.1	○ 1.6- 2.0	○ 3.0- 3.7	● 5.9- 7.1	★ > 13.6

FIGURE B-12. Areal Distribution of Hafnium Concentrations in Stream Sediment

FIGURE B-13. Log Histogram and Cumulative Frequency Plot of Aluminum Concentrations in Stream Sediment

SCRANTON 1'x2' Sheet
Aluminum In Sediments
854 Values Above D.L.

Aluminum concentration - p.p.m.

+	< 10200.0	o	18500.0- 20000.0	○	27600.0- 30700.0	⊙	40600.0- 46300.0	●	57600.0- 66500.0
x	10200.0- 13400.0	o	20000.0- 23800.0	○	30700.0- 35300.0	⊙	46300.0- 51600.0	◆	66500.0- 76900.0
.	13400.0- 18500.0	○	23800.0- 27600.0	○	35300.0- 40600.0	⊙	51600.0- 57600.0	★	> 76900.0

FIGURE B-14. Areal Distribution of Aluminum Concentrations in Stream Sediment

FIGURE B-15. Log Histogram and Cumulative Frequency Plot of Cerium Concentrations in Stream Sediment

FIGURE B-16. Areal Distribution of Cerium Concentrations in Stream Sediment

FIGURE B-17. Log Histogram and Cumulative Frequency Plot of Sodium Concentrations in Stream Sediment

SCRANTON 1'x2' Sheet
Sodium In Sediments
894 Values Above D.L.

Sodium concentration - p.p.m.

+ < 500.0	o 1000.0- 1500.0	o 3500.0- 5300.0	o 7800.0- 9100.0	● 12300.0- 16400.0
x 500.0- 700.0	o 1500.0- 2300.0	o 5300.0- 6700.0	o 9100.0- 10900.0	◆ 16400.0- 25900.0
• 700.0- 1000.0	o 2300.0- 3500.0	o 6700.0- 7800.0	● 10900.0- 12300.0	★ > 25900.0

FIGURE B-18. Areal Distribution of Sodium Concentrations in Stream Sediment

FIGURE B-19. Log Histogram and Cumulative Frequency Plot of Iron Concentrations in Stream Sediment

SCRANTON *1x2' Sheet*
Iron *In Sediments*
904 *Values Above D.L.*

FIGURE B-20. Areal Distribution of Iron Concentrations in Stream Sediment

FIGURE B-21. Log Histogram and Cumulative Frequency Plot of Manganese Concentrations in Stream Sediment

SCRANTON 1x2' Sheet
Manganese In Sediments
890 Values Above D.L.

Manganese concentration - p.p.m.

+ < 60.0	○ 190.0- 260.0	○ 570.0- 740.0	⊙ 1310.0- 1920.0	● 3500.0- 6370.0
x 60.0- 110.0	○ 260.0- 400.0	○ 740.0- 1000.0	⊙ 1920.0- 2740.0	◆ 6370.0- 11050.0
• 110.0- 190.0	○ 400.0- 570.0	○ 1000.0- 1310.0	● 2740.0- 3500.0	★ > 11050.0

FIGURE B-22. Areal Distribution of Manganese Concentrations in Stream Sediment

FIGURE B-23. Log Histogram and Cumulative Frequency Plot of Scandium Concentrations in Stream Sediment

SCRANTON 1x2' Sheet
Scandium In Sediments
904 Values Above D.L.

Scandium concentration - p.p.m.

+ < 1.6	o 3.1- 3.5	○ 4.7- 5.5	⊙ 7.3- 8.5	● 11.3- 15.0
x 1.6- 2.2	o 3.5- 4.1	○ 5.5- 6.3	⊙ 8.5- 10.2	◆ 15.0- 23.5
• 2.2- 3.1	○ 4.1- 4.7	⊙ 6.3- 7.3	● 10.2- 11.3	★ > 23.5

FIGURE B-24. Areal Distribution of Scandium Concentrations in Stream Sediment

FIGURE B-25. Log Histogram and Cumulative Frequency Plot of Titanium Concentrations in Stream Sediment

SCRANTON 1x2° Sheet
Titanium In Sediments
715 Values Above D.L.

Titanium concentration - p.p.m.

+ < 1500.0	○ 2900.0- 3300.0	○ 4300.0- 4800.0	⊙ 6100.0- 7000.0	● 8500.0- 10400.0
× 1500.0- 2500.0	○ 3300.0- 3800.0	○ 4800.0- 5400.0	⊙ 7000.0- 7700.0	◆ 10400.0- 12300.0
• 2500.0- 2900.0	○ 3800.0- 4300.0	○ 5400.0- 6100.0	⊙ 7700.0- 8500.0	★ > 12300.0

FIGURE B-26. Areal Distribution of Titanium Concentrations in Stream Sediment

FIGURE B-27. Log Histogram and Cumulative Frequency Plot of
 Vanadium Concentrations in Stream Sediment

SCRANTON 1x2" Sheet
Vanadium In Sediments
891 Values Above D.L.

Vanadium concentration - p.p.m.

+ < 10.0	○ 30.0- 30.0	○ 40.0- 40.0	⊙ 60.0- 70.0	● 80.0- 100.0
x 10.0- 20.0	○ 30.0- 30.0	○ 40.0- 50.0	⊙ 70.0- 80.0	◆ 100.0- 160.0
• 20.0- 30.0	○ 30.0- 40.0	○ 50.0- 60.0	⊙ 80.0- 80.0	★ > 160.0

FIGURE B-28. Areal Distribution of Vanadium Concentrations in Stream Sediment

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

1

SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	TH	HF	AL	CE	FE	MN	NA	SC	TI	V
*****					UM/CM	MEQ/L	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
NJBE001S1	34-41.0100-	74.0838-4-50-000	5.5	148	0.90	4.3	15	65	28000	130	30800	770	5700	6.5	7600	60	
NJBE002S1	34-41.0304-	74.0922-4-50-000	6.3	135	0.90	3.5	13	61	29600	100	37700	740	7900	8.9	7200	60	
NJBE003S1	34-41.0471-	74.0382-4-50-000	6.4	99	0.54	3.4	10	22	45400	90	27700	1750	8800	9.5	4000	60	
NJBE004S1	34-41.0622-	74.0837-4-50-000	6.9	160	1.20	2.8	10	40	29900	100	30500	680	7400	6.7	6800	60	
NJBE005S1	34-41.0822-	74.1234-4-50-000	6.8	120	0.58	3.5	13	46	48100	100	30300	1970	16100	7.8	10500	70	
NJBE006S1	34-41.0484-	74.1051-4-50-000	7.1	185	0.30	4.3	19	59	37000	140	49000	980	10800	10.8	9000	90	
NJBE007S1	34-41.0563-	74.2137-4-50-000	5.7	40	0.10	3.1	17	47	76900	130	77200	1560	18700	27.0	13400	220	
NJBE008S1	34-41.0376-	74.1883-4-50-000	5.7	91	0.78	4.1	17	55	43900	100	31700	1020	16800	10.3	12100	70	
NJBE009S1	34-41.0705-	74.1774-4-50-000	6.8	95	0.90	3.2	11	36	45200	100	39700	700	13000	10.7	8400	90	
NJBE010S1	34-41.0672-	74.2106-4-50-000	7.1	28	0.04	3.7	17	44	72800	160	74800	1770	20600	19.4	11500	160	
NJBE011S1	34-41.1041-	74.1827-4-50-000	6.5	60	0.04	4.6	14	54	46600	110	46500	1160	15600	13.1	11300	100	
NJMR010S1	34-41.0490-	74.5188-4-50-000	7.8	91	0.30	4.0	18	45	60100	140	63400	2490	19800	12.4	9000	80	
NJMR011S1	34-41.0261-	74.4819-4-50-000	7.5	51	0.30	3.0	6	25	42200	80	29400	1120	11800	7.7	5000	50	
NJMR093S1	34-41.0201-	74.5563-4-50-000	5.8	29	0.06	5.8	16	72	M	110	40200	M	55000	9.4	M	M	
NJPA001S1	34-41.1291-	74.2597-4-50-000	6.2	50	0.34	3.9	22	33	44100	120	67200	3290	13800	17.5	11900	140	
NJPA002S1	34-41.0783-	74.3221-4-50-000	7.1	45	0.26	7.0	29	77	46300	160	75700	1540	14100	11.8	23100	250	
NJPA003S1	34-41.0905-	74.2649-4-50-000	7.2	108	1.60	2.7	11	29	46400	100	67100	2910	14100	15.1	8500	140	
NJPA004S1	34-41.0444-	74.3818-4-50-000	7.1	45	0.18	3.7	7	43	44500	80	27600	1300	12100	8.1	7300	50	
NJPA005S1	34-41.0683-	74.3653-4-50-000	5.6	38	0.02	2.3	11	24	47100	100	22200	440	9900	6.9	5300	70	
NJPA006S1	34-41.1349-	74.3526-4-50-000	6.6	55	0.16	4.4	21	30	38500	100	28200	940	8000	7.8	6000	70	
NJPA007S1	34-41.1044-	74.4043-4-50-000	6.4	39	0.02	3.0	9	15	42900	70	27300	1360	4800	8.2	4400	70	
NJPA008S1	34-41.1023-	74.3257-4-50-000	5.7	40	0.06	6.6	31	41	60200	200	32800	1110	25900	14.0	13900	120	
NJPA009S1	34-41.0860-	74.4133-4-50-000	6.3	50	0.20	2.9	7	13	34400	60	25800	490	3600	6.5	3200	60	
NJPA010S1	34-41.0474-	74.4300-4-50-000	6.1	50	0.06	3.1	14	27	37000	100	30100	510	5100	9.3	5700	70	
NJPA011S1	34-41.1019-	74.4621-4-50-000	5.9	32	0.02	5.9	10	40	65400	80	31800	3240	22800	10.2	8900	90	
NJPA012S1	34-41.0798-	74.4677-4-50-000	6.0	40	0.06	5.9	21	41	51600	190	53900	1270	21300	15.5	10400	80	
NJPA013S1	34-41.1376-	74.3341-4-50-000	8.4	68	0.22	3.5	7	20	35100	60	19700	680	8000	5.7	4100	40	
NJPA014S1	34-41.1551-	74.3569-4-50-000	7.7	38	0.10	2.6	7	17	53400	60	37800	1300	8200	9.1	5300	80	
NJPA015S1	34-41.1197-	74.2465-4-50-000	6.5	50	0.26	8.2	29	30	43400	110	85900	1730	12500	15.8	14200	260	
NJPA012S1	34-41.1382-	74.2594-4-50-000	6.7	70	0.60	5.2	26	.	29000	380	164500	2340	7000	22.3	M	330	
NJSU001S1	34-41.2766-	74.7827-4-50-000	6.6	130	1.60	3.5	12	35	51900	90	32600	750	5600	10.2	4800	70	
NJSU002S1	34-41.3129-	74.7806-4-50-000	7.8	244	1.76	2.7	5	22	22600	60	14000	1710	3700	3.4	M	30	
NJSU003S1	34-41.3196-	74.7266-4-50-000	7.6	70	0.54	3.1	11	17	34100	70	29000	1680	3400	8.4	2800	50	
NJSU004S1	34-41.2842-	74.7581-4-50-000	7.7	71	0.52	4.1	5	19	26900	50	9600	960	5800	3.9	4700	40	
NJSU005S1	34-41.2738-	74.6967-4-50-000	6.6	40	0.02	3.1	16	74	30600	150	36800	600	6700	12.6	M	40	
NJSU006S1	34-41.3257-	74.6784-4-50-000	7.1	90	0.36	2.4	5	18	24600	-20	18900	7720	4900	4.7	3800	30	
NJSU007S1	34-41.3458-	74.6874-4-50-000	7.0	125	0.70	3.2	9	22	42300	60	21500	1950	5200	6.0	5100	60	
NJSU008S1	34-41.3142-	74.6504-4-50-000	7.5	59	0.34	3.1	6	12	40900	-20	22500	930	7800	3.0	M	60	
NJSU009S1	34-41.2756-	74.6500-4-50-000	6.7	135	1.00	2.9	6	11	42300	50	23000	850	7300	6.6	4100	60	
NJSU010S1	34-41.2662-	74.5788-4-50-000	7.2	169	1.68	2.8	13	.	64300	80	39100	1920	10300	11.0	5300	90	
NJSU011S1	34-41.2888-	74.5534-4-50-000	7.7	245	1.80	2.5	17	43	40600	150	81800	1300	6500	20.2	M	60	
NJSU012S1	34-41.1933-	74.8522-4-50-000	8.1	224	2.64	2.2	5	15	26600	50	16400	370	3100	4.8	2800	40	
NJSU013S1	34-41.1558-	74.8699-4-50-000	8.1	40	0.40	2.9	5	23	39600	60	21700	1340	3700	7.2	5300	60	
NJSU014S1	34-41.1698-	74.8079-4-50-000	8.0	38	0.24	2.3	6	20	12800	30	3800	150	2400	2.3	3200	20	
NJSU015S1	34-41.1948-	74.8003-4-50-000	7.6	50	0.70	3.5	10	48	20400	60	25700	2940	M	5.0	1600	20	
NJSU016S1	34-41.2430-	74.8011-4-50-000	7.6	151	1.48	4.6	7	12	42600	50	14600	470	6700	5.5	4900	60	
NJSU017S1	34-41.2433-	74.7336-4-50-000	6.2	48	0.20	3.8	33	92	26400	170	62400	1760	5100	12.2	M	40	
NJSU018S1	34-41.1978-	74.7330-4-50-000	7.2	129	0.45	3.7	8	9	56800	70	31200	730	6600	9.5	3900	90	
NJSU019S1	34-41.1705-	74.7359-4-50-000	7.2	240	1.10	2.8	7	18	41800	70	21500	1770	8500	6.2	3400	50	
NJSU020S1	34-41.2132-	74.6908-4-50-000	7.6	680	3.17	2.2	4	17	32800	50	20300	2180	10500	4.9	4200	50	
NJSU021S1	34-41.2347-	74.6719-4-50-000	7.6	330	1.90	3.9	10	12	43700	90	34500	3390	8100	8.3	3400	50	
NJSU022S1	34-41.2375-	74.6570-4-50-000	7.9	289	1.29	2.7	6	16	35600	60	22800	870	7600	6.4	2700	50	
NJSU023S1	34-41.2191-	74.6549-4-50-000	7.7	300	3.30	3.9	5	21	36900	60	29300	2490	6700	7.7	M	50	

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NJSU024S1	34-41.1652-74.6824-4-50-000	8.1	251	1.70	2.9	11	12	44900	90	33000	660	8000	10.1	2700	60
NJSU025S1	34-41.1743-74.6337-4-50-000	7.6	155	1.40	3.0	8	10	45900	70	32500	1740	6800	8.4	M	70
NJSU026S1	34-41.1514-74.5851-4-50-000	8.1	440	4.00	2.6	6	21	40800	60	26500	2320	10200	6.3	5200	40
NJSU027S1	34-41.1593-74.5410-4-50-000	8.0	150	1.60	4.8	12	43	52700	70	27200	630	11400	5.6	7700	60
NJSU028S1	34-41.1867-74.5357-4-50-000	7.9	300	2.08	3.0	9	15	62900	70	37000	2290	17200	10.4	8300	100
NJSU029S1	34-41.1980-74.4809-4-50-000	8.0	480	4.70	6.1	16	108	32000	170	88300	1220	8800	9.5	10500	80
NJSU030S1	34-41.2287-74.4834-4-50-000	8.0	300	2.82	2.9	6	17	34100	60	26500	2270	6500	7.9	M	50
NJSU031S1	34-41.2387-74.5416-4-50-000	7.9	175	1.70	M	M	M	M	M	M	M	M	M	M	M
NJSU032S1	34-41.2377-74.5994-4-50-000	7.0	184	1.36	2.8	10	11	45600	60	29800	1170	8000	7.9	4000	70
NJSU033S1	34-41.2392-74.4407-4-50-000	7.8	345	4.20	2.2	10	6	43500	50	19300	380	6500	8.0	M	50
NJSU034S1	34-41.1883-74.4517-4-50-000	8.0	88	0.73	4.3	5	16	50200	80	29900	770	15100	10.8	4600	70
NJSU035S1	34-41.2104-74.3978-4-50-000	7.8	85	0.60	4.6	11	.	M	100	38600	7650	17400	0.5	5800	70
NJSU036S1	34-41.1639-74.4292-4-50-000	7.9	37	0.34	3.5	6	26	41100	80	23800	950	11800	7.4	M	50
NJSU037S1	34-41.1465-74.4954-4-50-000	8.4	1065	3.70	5.1	14	36	47600	110	27700	700	15900	6.9	6100	50
NJSU039S1	34-41.0901-74.5235-4-50-000	7.8	230	1.60	4.3	9	38	75000	80	25700	1420	24500	6.9	10400	70
NJSU040S1	34-41.1215-74.5397-4-50-000	8.2	110	0.75	4.8	7	61	47500	80	35400	1820	16000	6.9	M	50
NJSU041S1	34-41.0749-74.5957-4-50-000	6.5	115	1.20	2.4	4	27	64000	30	46500	2120	13100	10.4	6300	60
NJSU042S1	34-41.0366-74.6056-4-50-000	7.5	135	0.90	5.5	7	33	68900	100	34600	2410	18300	8.3	7400	80
NJSU043S1	34-41.1088-74.5804-4-50-000	8.1	555	4.80	4.9	13	76	32900	100	54600	1300	8700	10.4	12100	60
NJSU044S1	34-41.1395-74.6426-4-50-000	8.4	335	3.30	3.1	18	89	24900	190	51700	2050	4700	13.6	3400	40
NJSU045S1	34-41.1396-74.6812-4-50-000	7.8	178	1.20	2.6	12	15	55600	70	31600	610	9900	8.2	4400	60
NJSU046S1	34-41.1304-74.7594-4-50-000	7.8	258	1.50	3.6	6	11	34400	50	19200	1330	6700	5.7	3000	50
NJSU047S1	34-41.1324-74.7818-4-50-000	7.8	248	0.33	4.5	14	11	41800	70	21500	1000	7500	9.3	M	50
NJSU048S1	34-41.1120-74.8476-4-50-000	7.7	75	0.60	2.7	8	23	M	40	22000	4930	5900	5.1	5600	70
NJSU049S1	34-41.0884-74.8279-4-50-000	7.7	79	0.48	2.6	6	19	32300	30	24400	800	6000	6.7	3600	40
NJSU050S1	34-41.0560-74.8610-4-50-000	8.0	90	0.70	3.0	7	19	36800	50	30300	1220	5700	6.2	M	50
NJSU051S1	34-41.0046-74.8240-4-50-000	7.7	199	1.00	3.3	22	26	61700	200	105000	5300	6300	27.7	4000	90
NJSU052S1	34-41.0499-74.8133-4-50-000	7.2	170	1.40	3.3	8	10	51600	80	37400	1190	6600	11.3	3900	70
NJSU059S1	34-41.0099-74.7099-4-50-000	7.9	242	2.05	4.3	8	12	50400	80	32600	1200	13100	11.3	4400	90
NJSU060S1	34-41.0363-74.7008-4-50-000	7.9	338	3.00	1.9	5	13	44400	60	22600	790	12800	7.6	6300	80
NJSU061S1	34-41.0083-74.6407-4-50-000	8.0	230	2.12	6.9	30	44	49300	250	40500	1300	20300	11.2	10300	80
NJSU062S1	34-41.0495-74.6413-4-50-000	7.8	315	2.60	4.7	62	87	M	370	125900	M	M	45.1	M	M
NJSU063S1	34-41.0957-74.6257-4-50-000	7.9	250	2.10	3.4	8	.	66500	120	37800	1020	28100	12.7	7400	90
NJSU064S1	34-41.0757-74.6957-4-50-000	8.1	560	4.30	3.1	5	8	36800	50	18600	410	6600	6.4	3400	50
NJSU065S1	34-41.0985-74.7588-4-50-000	7.2	385	1.69	2.8	9	10	59100	90	38000	1330	6800	10.5	4100	80
NJSU066S1	34-41.0655-74.7560-4-50-000	7.2	370	1.50	5.8	10	13	65500	70	41500	6120	7300	10.7	4300	100
NJSU067S1	34-41.0255-74.7685-4-50-000	7.9	351	4.60	2.1	5	9	38200	50	22200	490	8300	5.9	2500	50
NJWA129S1	34-41.0035-74.9826-4-50-000	7.7	62	0.16	2.7	6	27	27300	40	17400	1830	6100	4.7	5200	50
NJWA130S1	34-41.0372-74.9663-4-50-000	7.3	52	0.08	2.9	7	28	22900	40	16300	650	2800	4.4	3800	40
NJWA131S1	34-41.0544-74.9434-4-50-000	7.2	31	0.04	3.4	9	73	13400	50	5100	480	2900	3.4	5000	20
NYDE251S1	36-41.9656-75.2932-4-50-000	8.2	65	0.10	3.9	11	32	34200	100	22500	1030	4000	6.3	4700	50
NYDE252S1	36-41.9736-75.2609-4-50-000	7.5	40	0.16	3.5	17	33	52200	120	28600	1330	5100	8.5	7400	70
NYDE253S1	36-41.9346-75.2404-4-50-000	7.2	47	0.08	4.3	12	32	43100	130	24800	790	4700	7.8	M	50
NYDE254S1	36-41.9317-75.2068-4-50-000	7.0	6	0.08	3.6	10	26	37300	110	22600	1130	3000	7.2	5100	50
NYDE255S1	36-41.9049-75.2308-4-50-000	7.1	49	0.08	4.8	21	71	M	200	29300	M	M	8.1	M	M
NYDE256S1	36-41.8740-75.2002-4-50-000	7.0	45	0.24	3.7	15	25	43300	110	28900	1270	3400	8.1	M	50
NYDE257S1	36-41.8996-75.1483-4-50-000	7.2	75	0.14	3.7	15	38	35800	170	32000	1330	2300	9.4	4400	40
NYDE258S1	36-41.8638-75.1411-4-50-000	7.3	50	0.30	4.1	12	45	25400	130	17000	750	2300	4.9	6700	50
NYDE259S1	36-41.9430-75.1351-4-50-000	8.1	60	0.12	3.7	12	33	28700	120	22200	830	2300	6.5	M	40
NYDE260S1	36-41.9644-75.1722-4-50-000	7.6	5	0.16	3.8	11	31	45800	110	19900	1290	2900	6.2	6200	60
NYDE261S1	36-41.9752-75.1955-4-50-000	7.5	50	0.12	4.4	14	29	49400	160	30900	1260	2500	10.2	5300	70
NYDE262S1	36-41.9369-75.1210-4-50-000	7.4	54	0.14	3.7	10	16	37800	100	25400	1510	2000	7.4	4300	50
NYDE263S1	36-41.8990-75.0977-4-50-000	7.3	55	0.14	4.1	11	41	24700	130	15400	670	1500	4.1	4900	40

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYDE264S1	36-41.9395-75.0584-4-50-000	7.3	49	0.22	3.6	17	18	M	130	51800	9970	3100	12.4	6100	80
NYDE265S1	36-41.9738-75.0968-4-50-000	7.6	51	0.14	3.7	8	25	30600	80	12800	570	2400	3.9	4500	40
NYDE266S1	36-41.9840-75.0561-4-50-000	7.5	53	0.18	3.3	12	27	24700	100	18400	500	2200	5.2	4800	30
NYDE267S1	36-41.9731-75.0172-4-50-000	7.3	70	0.20	4.3	15	41	M	140	21300	1040	3000	6.5	7100	60
NYDE268S1	36-41.9567-74.9343-4-50-000	7.4	45	0.14	4.0	9	35	36700	120	20900	1290	1900	6.5	5300	50
NYDE269S1	36-41.9654-74.9090-4-50-000	7.2	80	0.18	3.6	16	41	32200	140	24800	930	1600	6.9	M	40
NYDE270S1	36-41.9264-75.0147-4-50-000	7.6	43	0.28	3.9	7	23	30200	100	17600	5390	1900	5.0	5800	60
NYOR001S1	36-41.5482-74.3523-4-50-000	7.3	260	0.40	2.4	6	12	39800	50	23400	740	6700	7.4	M	60
NYOR002S1	36-41.5734-74.3407-4-50-000	7.3	140	0.48	2.4	19	67	28400	110	40800	270	6000	12.1	M	30
NYOR003S1	36-41.5912-74.2771-4-50-000	7.1	150	0.28	2.6	5	37	20600	40	12400	200	5100	3.5	3700	30
NYOR004S1	36-41.5900-74.2382-4-50-000	7.1	135	0.62	2.1	11	16	30500	50	18900	770	6100	7.0	1500	40
NYOR005S1	36-41.5544-74.2542-4-50-000	7.8	140	0.38	3.7	6	14	34000	40	17600	250	7900	6.4	3600	40
NYOR006S1	36-41.5662-74.2957-4-50-000	7.3	160	0.40	2.7	8	18	49200	40	22400	980	11200	5.7	4800	60
NYOR008S1	36-41.5831-74.2090-4-50-000	7.4	140	0.54	2.4	15	27	35200	130	54300	580	5700	18.9	M	50
NYOR009S1	36-41.5532-74.2014-4-50-000	7.3	155	0.68	3.1	7	10	44000	50	25700	1930	6800	7.5	M	60
NYOR010S1	36-41.5728-74.1379-4-50-000	7.4	123	0.34	1.7	7	10	26800	50	23300	2810	8100	6.4	3500	70
NYOR011S1	36-41.5585-74.1588-4-50-000	7.3	200	0.52	2.1	5	11	36300	40	20000	1600	7500	5.6	M	50
NYOR012S1	36-41.5311-74.0146-4-50-000	7.2	260	1.24	2.3	9	12	46800	70	28800	960	9100	7.6	4100	60
NYOR013S1	36-41.5649-74.0080-4-50-000	7.3	205	0.30	3.8	10	14	62900	90	34700	3350	10100	10.1	4800	100
NYOR014S1	36-41.5826-74.0006-4-50-000	7.4	150	0.78	3.0	9	11	44200	50	27400	M	8800	7.6	M	60
NYOR015S1	36-41.5795-74.0280-4-50-000	7.3	185	0.48	4.7	7	10	47900	70	45300	1400	6800	10.5	3600	70
NYOR016S1	36-41.5847-74.0789-4-50-000	7.3	185	0.58	2.7	11	23	64000	70	43800	3170	14600	8.8	4700	80
NYOR017S1	36-41.5420-74.0929-4-50-000	7.1	240	0.14	3.4	11	12	53700	80	26700	470	9200	10.5	M	70
NYOR018S1	36-41.5522-74.0443-4-50-000	7.2	125	0.42	2.7	7	18	42100	70	27100	650	9400	7.1	4300	60
NYOR019S1	36-41.5288-74.0578-4-50-000	7.1	205	0.30	3.1	7	.	79000	80	34800	1170	11700	10.6	5600	120
NYOR020S1	36-41.5239-74.1235-4-50-000	7.1	365	0.84	2.9	8	21	41600	50	29400	1470	8900	7.8	M	70
NYOR021S1	36-41.5210-74.1488-4-50-000	7.2	220	0.26	2.7	6	9	50300	60	29400	580	10200	7.6	3900	80
NYOR022S1	36-41.5296-74.2021-4-50-000	6.9	405	0.64	2.9	7	11	45600	60	25800	790	7800	7.6	3800	60
NYOR023S1	36-41.5259-74.2258-4-50-000	7.1	300	0.76	3.1	5	14	43000	60	26800	1010	7400	8.0	3700	60
NYOR024S1	36-41.5245-74.3114-4-50-000	7.2	185	0.50	2.6	6	12	56300	50	22400	1060	9600	7.1	4900	80
NYOR025S1	36-41.5490-74.4021-4-50-000	7.3	193	0.54	2.6	5	15	34000	60	26300	740	6200	1.6	3400	40
NYOR026S1	36-41.4968-74.4580-4-50-000	7.2	140	0.48	3.2	8	31	42000	50	21100	310	9100	6.2	M	50
NYOR027S1	36-41.5048-74.3784-4-50-000	7.2	120	0.26	2.3	6	10	45500	40	13100	230	10300	4.9	4100	60
NYOR028S1	36-41.4841-74.3900-4-50-000	7.1	95	0.30	3.3	10	36	49900	80	41700	2690	8200	10.0	5700	90
NYOR029S1	36-41.4443-74.3817-4-50-000	7.0	230	0.56	2.9	7	15	45000	60	31900	1670	7400	9.1	M	70
NYOR030S1	36-41.4475-74.4446-4-50-000	7.0	220	1.20	M	M	M	M	M	M	M	M	M	M	M
NYOR031S1	36-41.4586-74.4646-4-50-000	7.8	80	0.24	3.2	9	19	49400	80	39400	1280	8000	12.3	M	70
NYOR032S1	36-41.3844-74.5215-4-50-000	5.1	130	0.24	2.5	6	27	45500	70	21000	530	13100	6.0	3800	50
NYOR033S1	36-41.3898-74.5554-4-50-000	5.3	70	0.22	3.2	6	13	36600	40	16400	350	5200	7.1	M	40
NYOR034S1	36-41.4798-74.5841-4-50-000	7.5	30	0.08	2.8	7	22	39200	60	31300	2200	6400	6.3	4900	50
NYOR035S1	36-41.4326-74.5891-4-50-000	7.6	42	0.12	4.6	7	10	66600	80	61900	13130	3300	9.8	3100	120
NYOR036S1	36-41.4846-74.5562-4-50-000	7.0	30	0.06	3.3	6	18	33900	50	18900	1050	4800	5.9	3100	50
NYOR037S1	36-41.4291-74.5366-4-50-000	6.9	90	0.26	4.7	10	22	67800	60	22100	780	12800	9.7	4500	80
NYOR038S1	36-41.3890-74.5955-4-50-000	7.0	190	0.48	2.2	7	10	37300	50	22100	1330	9700	5.3	2500	50
NYOR039S1	36-41.4356-74.4954-4-50-000	7.2	100	0.30	3.0	5	35	21800	40	11600	210	5600	3.4	M	20
NYOR040S1	36-41.4750-74.5167-4-50-000	7.1	90	0.34	2.6	7	44	19800	50	16000	300	5500	3.8	3300	20
NYOR041S1	36-41.4072-74.4284-4-50-000	7.1	175	0.34	4.1	7	8	68300	70	24800	1350	11100	8.3	5900	90
NYOR042S1	36-41.3926-74.4158-4-50-000	7.1	95	0.22	3.0	6	11	45000	60	24200	1120	6300	7.8	3400	60
NYOR231S1	36-41.3576-74.1922-4-50-000	5.5	150	0.10	2.5	7	19	29100	80	21500	850	2800	7.2	2800	50
NYOR232S1	36-41.2185-74.3497-4-50-000	6.7	66	0.80	20.8	14	23	62500	160	29200	1000	13600	7.7	6000	80
NYOR233S1	36-41.2474-74.3431-4-50-000	6.5	250	2.08	3.4	12	35	40300	100	32600	760	6100	8.0	6000	60
NYOR234S1	36-41.2441-74.3118-4-50-000	6.2	80	0.38	4.2	23	29	40400	100	26700	990	9200	8.5	6400	60
NYOR235S1	36-41.2767-74.2502-4-50-000	6.2	60	0.12	4.2	9	17	41400	80	31200	800	7700	8.1	5500	70

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYOR236S1	36-41.2742-74.1945-4-50-000	6.3	70	0.20	5.3	25	47	50900	170	43500	2400	11900	13.6	7600	100
NYOR237S1	36-41.3132-74.1839-4-50-000	6.9	270	1.70	2.6	8	20	30800	60	16300	630	8100	4.6	M	30
NYOR238S1	36-41.2990-74.1569-4-50-000	5.6	185	0.40	7.7	10	18	41100	80	32800	2910	7900	6.4	4100	60
NYOR239S1	36-41.3349-74.1617-4-50-000	5.8	138	0.20	2.6	10	17	64000	100	35200	990	6900	11.7	5300	110
NYOR240S1	36-41.3575-74.1605-4-50-000	5.5	88	0.14	2.8	8	28	36700	70	19000	2060	7700	5.6	4400	40
NYOR241S1	36-41.2634-74.3008-4-50-000	5.9	280	1.90	4.6	20	54	34200	100	27200	660	8100	8.4	7100	70
NYOR242S1	36-41.2833-74.3671-4-50-000	5.9	181	0.60	5.0	4	23	38800	60	30900	970	6700	8.4	M	50
NYOR243S1	36-41.3087-74.3615-4-50-000	5.9	218	1.20	2.6	8	17	40100	60	19900	950	6600	6.4	4400	60
NYOR244S1	36-41.3020-74.3239-4-50-000	5.9	155	0.70	4.0	10	9	M	70	33500	3150	8600	9.1	4900	100
NYOR245S1	36-41.3110-74.2585-4-50-000	6.0	171	0.14	2.9	13	22	40000	100	46000	2120	8200	10.6	3800	60
NYOR246S1	36-41.3498-74.2639-4-50-000	6.1	261	0.60	2.7	7	17	48200	60	30600	470	9700	7.5	M	50
NYOR247S1	36-41.3656-74.2881-4-50-000	6.3	400	1.40	2.6	4	11	36800	50	23300	1210	6600	6.7	3200	50
NYOR248S1	36-41.3501-74.3476-4-50-000	6.3	295	1.00	3.0	10	17	72700	80	44500	2480	10600	11.8	5400	100
NYOR249S1	36-41.4835-74.1095-4-50-000	5.9	290	0.72	2.8	4	15	35400	40	19800	1500	8800	4.9	M	50
NYOR250S1	36-41.4572-74.0562-4-50-000	5.6	620	0.80	2.2	7	16	42900	70	27200	900	9200	7.4	4000	40
NYOR251S1	36-41.4241-74.0300-4-50-000	5.7	211	0.80	2.6	8	20	M	80	33000	1940	16100	8.7	6800	90
NYOR252S1	36-41.3902-74.0648-4-50-000	6.0	75	0.40	2.5	6	21	M	50	25200	2760	8300	6.3	M	50
NYOR253S1	36-41.4092-74.0712-4-50-000	6.5	135	0.40	2.6	5	22	37700	50	25400	640	10100	7.2	4400	40
NYOR254S1	36-41.4203-74.0887-4-50-000	6.8	39	0.08	2.4	6	21	52300	80	21000	1270	10500	6.2	5600	70
NYOR255S1	36-41.3983-74.1495-4-50-000	6.4	160	0.80	2.9	12	33	35700	70	32600	680	7600	8.8	1900	50
NYOR256S1	36-41.4371-74.1628-4-50-000	6.5	302	0.50	2.5	8	17	44100	70	33300	1990	9600	8.7	4600	60
NYOR257S1	36-41.4578-74.1523-4-50-000	6.4	291	0.90	2.1	8	24	45000	60	27500	2230	12300	7.5	4400	60
NYOR258S1	36-41.4699-74.2041-4-50-000	6.1	221	0.30	2.6	6	48	28200	60	24400	440	7400	6.2	M	50
NYOR259S1	36-41.4530-74.1842-4-50-000	6.8	222	0.26	2.2	6	14	30800	40	14500	180	8700	4.4	2900	30
NYOR260S1	36-41.3977-74.1864-4-50-000	7.4	305	1.10	2.6	7	22	52800	50	28600	1490	12000	6.4	5700	70
NYOR261S1	36-41.3875-74.2479-4-50-000	7.6	127	0.60	3.0	7	16	36800	70	24600	800	7500	6.7	M	50
NYOR262S1	36-41.4185-74.2433-4-50-000	7.0	230	0.50	3.2	7	13	46000	50	28500	1520	8700	8.2	4000	60
NYOR263S1	36-41.4652-74.2458-4-50-000	7.3	238	1.40	2.6	6	12	41100	60	20800	430	8600	6.8	2900	50
NYOR264S1	36-41.4906-74.2813-4-50-000	7.7	130	0.50	2.3	9	24	36600	110	28900	620	8000	7.7	3700	40
NYOR265S1	36-41.4660-74.3597-4-50-000	7.5	235	1.30	2.8	7	22	57600	60	26000	970	12500	6.7	5500	80
NYOR266S1	36-41.4404-74.3648-4-50-000	7.3	323	1.00	3.1	7	22	47600	90	33800	1280	7400	9.1	4100	80
NYOR267S1	36-41.4447-74.3045-4-50-000	7.0	206	0.24	2.6	7	12	39100	50	17800	440	7900	6.0	2900	50
NYOR268S1	36-41.4009-74.3031-4-50-000	7.1	342	1.20	2.5	6	20	42700	50	18800	610	10100	5.8	5500	60
NYOR269S1	36-41.4124-74.3642-4-50-000	7.0	190	0.26	2.3	5	24	38900	60	32400	750	7100	7.9	4400	70
NYOR270S1	36-41.3624-74.5926-4-50-000	6.3	200	0.80	3.1	10	34	38500	80	32500	840	9500	7.9	M	50
NYOR271S1	36-41.3192-74.5866-4-50-000	6.7	160	0.36	3.0	9	31	59900	100	33100	1330	13300	9.5	5000	80
NYOR272S1	36-41.3310-74.5571-4-50-000	7.0	170	0.60	2.5	10	36	30800	80	24100	320	9000	6.1	3500	40
NYOR273S1	36-41.3703-74.5468-4-50-000	6.9	225	0.80	3.7	11	.	82700	110	41400	890	9700	13.8	5800	130
NYOR274S1	36-41.3701-74.4927-4-50-000	7.1	211	1.04	2.5	7	23	30500	50	17300	470	8100	5.6	3600	30
NYOR275S1	36-41.3487-74.6221-4-50-000	7.6	79	0.14	2.8	7	33	29900	60	17900	400	8100	5.0	3400	40
NYOR276S1	36-41.3834-74.6462-4-50-000	7.4	51	0.20	3.4	8	17	50300	60	28200	1700	6100	7.2	4500	80
NYOR277S1	36-41.4047-74.7136-4-50-000	7.6	30	0.06	2.2	4	21	21100	50	19400	1120	2900	4.4	M	30
NYOR278S1	36-41.4355-74.7076-4-50-000	7.1	51	0.10	3.7	7	30	33300	90	18900	1580	3700	6.3	3700	60
NYOR279S1	36-41.4561-74.7204-4-50-000	7.2	39	0.04	3.0	9	18	55800	60	17500	1160	5000	7.1	5000	70
NYOR280S1	36-41.4296-74.6605-4-50-000	7.0	39	0.08	3.0	9	29	24600	70	17600	990	3200	4.7	3800	40
NYOR281S1	36-41.4874-74.6262-4-50-000	7.4	31	0.04	2.9	6	26	23600	60	15100	810	2800	4.2	3300	30
NYOR282S1	36-41.2868-74.4982-4-50-000	7.6	120	0.67	5.5	7	24	52100	70	25900	1710	8700	6.7	5600	80
NYOR283S1	36-41.2937-74.4359-4-50-000	7.5	461	2.60	2.9	9	42	33200	110	24100	1000	8400	2.1	3300	30
NYOR284S1	36-41.3014-74.3868-4-50-000	7.6	195	1.20	2.5	10	25	51700	60	22900	760	10500	6.3	5500	70
NYOR285S1	36-41.3073-74.3985-4-50-000	7.7	310	2.20	2.4	6	15	39500	60	22100	850	7500	6.9	M	60
NYOR286S1	36-41.3666-74.4538-4-50-000	7.8	130	0.67	2.9	9	29	35800	100	33000	880	7200	7.9	3700	50
NYOR287S1	36-41.3691-74.0854-4-50-000	7.9	69	0.18	2.0	7	19	50300	50	20700	560	16400	6.0	4300	50
NYOR288S1	36-41.3564-74.0430-4-50-000	7.3	91	0.12	2.7	10	26	40900	80	27100	850	11500	9.9	5300	70

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYOR289S1	36-41.3253- 74.0845-4-50-000	6.9	64	0.06	2.8	12	30	65900	130	44400	2490	18500	15.0	9900	140
NYOR290S1	36-41.3067- 74.0408-4-50-000	7.1	181	0.55	2.8	6	16	40800	70	25800	930	11300	8.0	4500	50
NYOR291S1	36-41.2985- 74.0494-4-50-000	7.9	47	0.04	3.3	8	29	46000	100	31300	1400	10600	10.0	5600	60
NYOR292S1	36-41.2846- 74.0783-4-50-000	7.4	35	0.02	M	M	M	M	M	M	M	M	M	M	M
NYOR293S1	36-41.2305- 74.1345-4-50-000	6.9	45	0.06	M	M	M	M	M	M	M	M	M	M	M
NYOR294S1	36-41.2249- 74.2047-4-50-000	7.2	93	0.24	M	M	M	M	M	M	M	M	M	M	M
NYOR295S1	36-41.2305- 74.2754-4-50-000	7.0	84	0.12	M	M	M	M	M	M	M	M	M	M	M
NYOR296S1	36-41.2217- 74.2815-4-50-000	7.2	49	0.12	M	M	M	M	M	M	M	M	M	M	M
NYOR297S1	36-41.2096- 74.2379-4-50-000	5.9	69	0.02	M	M	M	M	M	M	M	M	M	M	M
NYOR298S1	36-41.1787- 74.2568-4-50-000	6.5	75	0.16	M	M	M	M	M	M	M	M	M	M	M
NYOR299S1	36-41.2080- 74.2085-4-50-000	6.9	69	0.24	M	M	M	M	M	M	M	M	M	M	M
NYR0001S1	36-41.2644- 74.0066-4-50-000	7.6	80	0.42	6.4	14	71	39500	80	20600	420	15300	6.5	M	30
NYR0002S1	36-41.2523- 74.0671-4-50-000	7.6	23	0.02	0.7	8	46	9900	80	24800	1320	11400	8.5	8200	60
NYR0003S1	36-41.2379- 74.0313-4-50-000	7.0	49	0.14	3.1	17	91	26300	200	49600	830	13800	14.1	6500	50
NYR0004S1	36-41.1837- 74.0135-4-50-000	6.8	179	1.30	2.4	9	38	48200	110	32700	960	14800	8.3	8900	80
NYR0006S1	36-41.1371- 74.1267-4-50-000	7.2	43	0.08	0.7	12	39	10600	110	38200	1320	16000	11.1	9400	110
NYR0007S1	36-41.1801- 74.1645-4-50-000	8.2	42	0.12	3.0	12	29	50000	110	37700	600	19500	15.6	6600	90
NYR0008S1	36-41.1503- 74.0983-4-50-000	7.6	301	1.70	1.7	7	33	30200	70	20900	790	8600	6.5	4700	40
NYR0104S1	36-41.0932- 74.0838-4-50-000	7.7	215	1.10	-2.3	12	38	1800	100	38500	930	11000	10.0	M	M
NYR0105S1	36-41.0728- 74.0445-4-50-000	7.8	288	1.90	M	M	M	M	M	M	M	M	M	M	M
NYSL026S1	36-41.8872- 74.8383-4-50-000	7.6	70	0.26	3.6	17	44	28900	140	28600	1550	1100	7.4	M	40
NYSL027S1	36-41.9231- 74.8359-4-50-000	8.0	90	0.28	3.3	10	28	28900	90	20300	1130	1400	5.2	3900	30
NYSL028S1	36-41.9742- 74.8387-4-50-000	7.8	43	0.24	3.5	12	36	29200	130	19200	1440	1700	5.0	6200	50
NYSL029S1	36-41.9850- 74.8183-4-50-000	7.9	50	0.32	3.6	12	32	31100	120	19500	790	1600	5.5	M	40
NYSL030S1	36-41.9307- 74.7872-4-50-000	5.4	26	0.06	2.5	6	19	21500	70	16900	190	900	3.7	3200	30
NYSL031S1	36-41.9283- 74.8858-4-50-000	7.5	50	0.16	3.7	15	34	48400	130	27200	1770	2200	7.9	6700	70
NYSL032S1	36-41.9216- 74.9311-4-50-000	7.8	48	0.22	3.4	12	33	28300	110	17200	740	1200	5.0	4600	30
NYSL033S1	36-41.8843- 74.9393-4-50-000	6.7	30	0.14	3.5	9	36	24100	120	15500	570	900	4.3	4500	30
NYSL034S1	36-41.8656- 74.9492-4-50-000	7.1	70	0.40	2.5	11	17	34700	110	25300	520	3100	6.8	5700	50
NYSL035S1	36-41.8076- 74.9685-4-50-000	7.1	103	0.54	3.9	11	29	36000	100	23300	860	3200	6.4	4700	40
NYSL036S1	36-41.8306- 75.0843-4-50-000	8.2	80	0.36	5.2	13	61	32100	150	20900	620	2300	5.0	5600	40
NYSL037S1	36-41.8502- 75.1090-4-50-000	7.7	61	0.52	6.0	23	107	21500	310	23400	440	1400	5.9	5900	30
NYSL038S1	36-41.8858- 75.0457-4-50-000	8.3	60	0.20	4.2	15	45	41400	130	20400	1230	2000	6.0	6800	50
NYSL039S1	36-41.8879- 75.0153-4-50-000	7.5	35	0.18	4.0	13	36	29400	140	19300	1230	600	5.6	M	M
NYSL040S1	36-41.8452- 74.9832-4-50-000	7.7	68	0.58	3.0	8	18	21500	80	13200	890	800	3.5	3600	30
NYSL041S1	36-41.8257- 74.9912-4-50-000	7.7	95	0.76	3.4	12	28	26400	110	17500	840	2300	4.7	5200	30
NYSL042S1	36-41.8465- 75.0466-4-50-000	7.1	49	0.18	4.1	12	35	51200	110	30100	2050	2900	8.0	7000	70
NYSL043S1	36-41.8065- 75.0396-4-50-000	7.4	105	0.70	4.8	11	22	35700	90	21300	2340	4200	6.9	4200	50
NYSL044S1	36-41.7762- 75.0511-4-50-000	6.8	92	0.66	3.5	11	22	54400	80	25600	2850	8100	6.3	6600	60
NYSL045S1	36-41.7735- 75.0034-4-50-000	7.0	108	0.56	3.8	10	28	39900	80	21500	1190	4600	5.9	4700	50
NYSL046S1	36-41.7825- 74.9472-4-50-000	7.0	131	0.42	4.5	17	74	19400	180	18100	510	3100	4.6	M	30
NYSL047S1	36-41.7708- 74.9039-4-50-000	7.2	60	0.20	4.0	11	31	48300	120	22400	3340	5300	6.0	8000	60
NYSL048S1	36-41.8180- 74.8851-4-50-000	7.3	75	0.40	M	M	M	M	M	M	M	M	M	M	M
NYSL049S1	36-41.8446- 74.8861-4-50-000	7.2	88	0.53	M	M	M	M	M	M	M	M	M	M	M
NYSL050S1	36-41.9033- 74.8998-4-50-000	7.5	49	0.18	3.9	13	24	48600	110	29600	800	1400	8.8	4800	70
NYSL051S1	36-41.8054- 74.7084-4-50-000	7.1	50	0.16	3.6	10	28	33600	80	20300	1440	2700	5.6	4900	40
NYSL052S1	36-41.8076- 74.6389-4-50-000	7.5	45	0.22	3.4	9	28	30700	110	15900	360	4500	4.5	4500	30
NYSL053S1	36-41.8495- 74.6479-4-50-000	7.3	22	0.04	2.5	8	13	26300	50	16100	1040	1100	4.1	M	30
NYSL054S1	36-41.8536- 74.6788-4-50-000	7.4	39	0.16	3.3	13	22	35300	100	23000	940	1500	5.9	4400	50
NYSL055S1	36-41.8960- 74.6899-4-50-000	5.5	18	0.02	3.0	10	19	33600	70	19000	200	1200	5.6	M	40
NYSL056S1	36-41.8626- 74.7465-4-50-000	6.9	34	0.18	3.4	8	15	30000	80	22700	1880	1200	5.0	4300	50
NYSL057S1	36-41.8306- 74.7458-4-50-000	6.7	53	0.28	3.4	7	38	19000	100	20900	650	1100	4.3	4100	30
NYSL058S1	36-41.7734- 74.7391-4-50-000	7.8	279	0.95	3.8	12	35	24900	100	21000	420	3400	5.2	M	40

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYSL059S1	36-41.7772-74.7075-4-50-000	7.1	62	0.18	4.5	12	52	24500	100	11400	780	3200	4.0	4200	30
NYSL060S1	36-41.7672-74.6484-4-50-000	7.2	57	0.32	2.8	8	17	33400	70	10400	260	6400	4.4	4200	30
NYSL061S1	36-41.7838-74.8091-4-50-000	5.3	70	0.32	5.3	14	48	26700	120	16300	1680	3400	4.2	6600	50
NYSL062S1	36-41.7703-74.8533-4-50-000	5.5	50	0.20	3.7	16	27	42600	130	34400	960	3400	9.6	M	50
NYSL063S1	36-41.8201-74.8576-4-50-000	6.9	68	0.38	3.7	11	25	48100	90	23000	1560	3200	6.6	6600	60
NYSL064S1	36-41.8628-74.8555-4-50-000	7.0	43	0.22	5.3	15	50	48700	160	38000	1130	1400	9.7	M	60
NYSL065S1	36-41.8115-74.8187-4-50-000	7.0	180	0.49	3.5	10	31	26800	90	16200	410	2000	4.6	4700	40
NYSL066S1	36-41.8487-74.8062-4-50-000	7.3	56	0.30	4.0	11	25	40600	70	22800	1950	1900	6.0	4800	50
NYSL067S1	36-41.7366-75.0050-4-50-000	7.5	95	0.46	3.4	11	26	33700	80	22200	610	5000	5.6	5200	40
NYSL068S1	36-41.7040-74.9968-4-50-000	7.1	30	0.08	3.9	10	24	M	80	22100	3850	5600	6.1	M	40
NYSL069S1	36-41.7160-75.0445-4-50-000	7.0	50	0.22	3.0	8	23	25900	60	13400	200	4200	1.0	4100	30
NYSL070S1	36-41.7373-75.0441-4-50-000	7.1	31	0.20	4.0	10	19	44600	100	24300	1560	5500	7.8	M	50
NYSL071S1	36-41.6567-75.0443-4-50-000	7.1	70	0.17	4.0	12	25	51600	90	26500	1180	9400	7.3	6900	60
NYSL072S1	36-41.5626-75.0144-4-50-000	7.4	31	0.08	4.2	11	40	29700	90	16100	2170	8100	3.7	5800	30
NYSL073S1	36-41.6024-75.0365-4-50-000	7.4	71	0.28	4.1	11	31	33300	100	15600	1950	9600	4.8	7400	50
NYSL074S1	36-41.6391-75.0455-4-50-000	7.2	43	0.14	4.0	10	36	28100	80	11800	1180	7900	3.7	5000	30
NYSL075S1	36-41.6310-74.9887-4-50-000	5.9	47	0.22	6.0	15	74	44200	110	17000	2170	11200	4.9	8100	50
NYSL076S1	36-41.6268-74.9489-4-50-000	5.9	40	0.16	5.9	14	74	31200	130	15300	1510	8800	4.3	8200	40
NYSL077S1	36-41.6432-74.9184-4-50-000	5.3	72	0.04	6.1	19	73	38600	140	15200	260	10400	6.3	5500	40
NYSL078S1	36-41.6558-74.9865-4-50-000	6.3	132	0.30	4.7	12	43	31600	80	11500	1110	6700	4.0	4700	30
NYSL079S1	36-41.6594-74.9680-4-50-000	6.2	78	0.22	4.9	9	53	29300	90	10300	460	9600	3.9	6500	30
NYSL080S1	36-41.6953-74.9296-4-50-000	6.1	40	0.16	4.1	11	50	33100	90	18900	530	7100	6.8	M	40
NYSL081S1	36-41.7339-74.9440-4-50-000	6.2	50	0.22	3.6	10	30	47700	30	22800	2800	7100	6.0	6700	50
NYSL082S1	36-41.7235-74.8934-4-50-000	6.3	72	0.20	5.2	16	59	32800	170	13200	440	5500	4.6	5000	30
NYSL083S1	36-41.6886-74.8898-4-50-000	6.6	105	0.26	6.3	19	82	35400	140	12600	420	8000	5.2	5500	40
NYSL084S1	36-41.6801-74.8658-4-50-000	7.2	69	0.08	13.7	36	223	34900	330	13600	240	6700	6.4	7400	40
NYSL085S1	36-41.7142-74.8340-4-50-000	4.7	49	0.00	5.4	19	70	32400	120	11200	160	7200	4.7	2200	30
NYSL086S1	36-41.7419-74.8267-4-50-000	5.3	40	0.02	4.5	15	71	24100	150	22100	460	4000	4.6	4900	30
NYSL087S1	36-41.7337-74.8075-4-50-000	6.2	44	0.14	3.6	13	40	28700	80	18300	1010	4600	4.8	4000	20
NYSL088S1	36-41.7152-74.7920-4-50-000	6.3	71	0.02	4.6	12	40	31000	80	15400	M	3400	4.6	M	30
NYSL089S1	36-41.6695-74.7850-4-50-000	6.2	113	0.43	3.6	9	34	29000	80	18700	3500	5900	4.2	3300	30
NYSL090S1	36-41.6633-74.7439-4-50-000	6.5	379	0.36	5.2	15	57	47200	130	29600	580	6800	8.0	5400	50
NYSL091S1	36-41.6370-74.7287-4-50-000	6.4	101	0.20	4.3	14	28	45300	90	23600	570	6300	7.6	M	50
NYSL092S1	36-41.7166-74.7536-4-50-000	5.6	59	0.00	3.5	19	27	51600	110	45500	1700	6900	10.9	5200	60
NYSL093S1	36-41.7431-74.7323-4-50-000	6.3	295	1.29	4.8	18	57	25300	120	14000	260	4600	3.7	M	30
NYSL094S1	36-41.7210-74.7073-4-50-000	7.1	51	0.16	4.3	18	51	38800	120	25500	730	5900	7.8	5300	40
NYSL095S1	36-41.7423-74.6929-4-50-000	5.8	65	0.18	4.0	10	52	32600	110	12800	1150	5700	3.5	6100	30
NYSL096S1	36-41.7469-74.6688-4-50-000	6.2	119	0.30	3.8	11	37	32900	90	14800	240	6100	6.2	4500	30
NYSL097S1	36-41.6360-74.8728-4-50-000	6.3	53	0.08	4.1	15	38	35200	90	19700	260	6400	5.6	5400	40
NYSL098S1	36-41.5747-74.8730-4-50-000	6.1	62	0.10	4.9	14	51	30300	100	18300	1130	8000	3.8	M	30
NYSL099S1	36-41.6287-74.8152-4-50-000	6.1	52	0.06	4.5	13	M	M	100	31000	7870	7800	7.0	M	40
NYSL100S1	36-41.6008-74.7746-4-50-000	5.7	66	0.08	5.9	18	112	31100	170	21900	1890	6800	5.6	4700	30
NYSL133S1	36-41.5222-74.6657-4-50-000	6.6	57	0.32	M	M	M	M	M	M	M	M	M	M	M
NYSL134S1	36-41.5007-74.7105-4-50-000	6.6	29	0.10	2.3	7	17	13400	70	5200	130	3500	2.2	1200	20
NYSL135S1	36-41.5378-74.7011-4-50-000	6.4	28	0.04	3.8	12	29	M	110	30400	M	7100	6.1	M	M
NYSL136S1	36-41.5891-74.7182-4-50-000	7.3	48	0.04	M	M	M	M	M	M	M	M	M	M	M
NYSL137S1	36-41.5791-74.6686-4-50-000	6.6	48	0.10	M	M	M	M	M	M	M	M	M	M	M
NYSL138S1	36-41.6211-74.6259-4-50-000	7.6	78	0.10	3.4	12	25	30300	70	18300	1630	4800	4.8	M	40
NYSL139S1	36-41.6194-74.6841-4-50-000	7.1	49	0.08	3.1	10	19	37700	70	18100	710	5200	6.2	4300	40
NYSL140S1	35-41.6812-74.6810-4-50-000	7.5	110	0.30	2.6	5	19	25900	50	10600	200	6000	3.5	3800	30
NYSL141S1	35-41.6684-74.6269-4-50-000	7.0	238	0.60	3.7	11	25	49000	60	20800	900	7000	5.6	6300	60
NYSL142S1	35-41.7024-74.6381-4-50-000	6.7	90	0.04	3.9	9	41	34500	70	28500	2740	5300	6.0	4700	40
NYSL143S1	35-41.6588-74.5880-4-50-000	6.7	95	0.08	4.6	15	48	45000	170	33800	1210	5900	9.2	5100	60

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.		PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYSL144S1	36-41.6910-	74.5988-4-50-000	7.1	108	0.08	3.1	10	31	23900	90	10300	190	1900	3.2	4600	30
NYSL145S1	36-41.6731-	74.4608-4-50-000	7.1	61	0.32	2.5	8	16	24900	60	16900	1110	3000	5.1	3800	30
NYSL146S1	36-41.6731-	74.5145-4-50-000	8.0	55	0.24	3.4	10	29	25000	70	15500	880	2900	4.3	3600	30
NYSL147S1	36-41.6711-	74.5288-4-50-000	7.3	70	0.28	3.8	7	19	32300	60	20700	2690	3800	5.7	M	50
NYSL148S1	36-41.6418-	74.5066-4-50-000	6.4	5	0.04	2.2	8	19	21400	60	21800	4830	3000	5.4	3600	40
NYSL149S1	36-41.6225-	74.5303-4-50-000	7.3	35	0.12	3.1	9	16	M	80	19900	960	4100	7.5	4000	60
NYSL150S1	36-41.6082-	74.6166-4-50-000	6.5	12	0.18	3.5	12	35	31600	80	25800	9530	5500	5.3	5000	50
NYSL151S1	36-41.5694-	74.5518-4-50-000	4.9	115	0.00	2.7	9	13	42600	80	38900	630	4400	8.0	3800	60
NYSL152S1	36-41.5474-	74.5795-4-50-000	7.3	41	0.08	3.0	7	25	23500	80	15200	2100	5500	2.3	5400	50
NYSL153S1	36-41.5136-	74.5781-4-50-000	7.3	53	0.30	2.3	6	16	24200	50	15200	590	2900	4.5	2800	40
NYSL154S1	36-41.5241-	74.5229-4-50-000	5.9	49	0.18	4.0	8	44	26400	60	209100	1570	4600	65.7	5100	50
NYSL155S1	36-41.6165-	74.5960-4-50-000	7.2	97	0.36	3.4	10	43	31100	100	24700	1710	4700	6.6	4400	50
NYSL156S1	36-41.5071-	74.4819-4-50-000	7.3	195	0.60	2.6	4	28	26300	30	15300	410	4800	4.6	3300	40
NYSL157S1	36-41.5893-	74.4928-4-50-000	7.6	87	0.80	2.9	8	28	29300	60	22600	1260	2800	6.6	3800	40
NYSL158S1	36-41.6219-	74.3988-4-50-000	7.3	12	0.40	3.2	6	27	27000	40	15600	650	3100	4.7	3000	40
NYSL159S1	36-41.6191-	74.4557-4-50-000	7.7	57	0.40	2.8	8	13	32500	70	23000	740	4000	6.9	M	50
NYSL160S1	36-41.5964-	74.4691-4-50-000	8.3	58	0.22	3.2	5	51	19500	90	19500	420	2500	5.0	3500	30
NYSL161S1	36-41.5845-	74.3958-4-50-000	7.8	80	0.80	3.3	5	35	24500	40	17800	620	4100	5.2	3100	40
NYSL162S1	36-41.6945-	74.5419-4-50-000	7.4	150	0.60	3.1	7	32	19500	80	8500	160	4600	2.7	3900	20
NYSL163S1	36-41.7331-	74.5952-4-50-000	6.6	480	0.74	3.2	5	37	19700	60	8700	170	4700	3.1	3900	20
NYSL164S1	36-41.7794-	74.6027-4-50-000	6.9	60	0.20	3.5	10	28	39900	80	23400	350	6400	7.3	4100	50
NYSL165S1	36-41.7786-	74.5316-4-50-000	7.1	40	0.08	2.6	8	17	27100	60	13700	250	6500	4.1	5300	40
NYSL166S1	36-41.8050-	74.5383-4-50-000	6.7	43	0.12	2.9	7	27	15500	70	8100	200	2400	2.3	2500	20
NYSL167S1	36-41.8145-	74.6058-4-50-000	7.0	50	0.16	3.6	10	40	22900	80	12300	770	3600	3.4	4400	30
NYSL168S1	36-41.8569-	74.5948-4-50-000	6.8	35	0.10	4.3	11	40	36000	110	19400	380	3400	3.7	5100	40
NYSL169S1	36-41.8543-	74.5521-4-50-000	7.2	40	0.10	3.2	10	28	28900	80	27000	950	1100	6.4	3900	30
NYSL170S1	36-41.8663-	74.5082-4-50-000	7.5	35	0.14	3.5	14	36	32800	100	26900	570	2300	7.2	4500	40
NYSL171S1	36-41.5844-	74.9963-4-50-000	6.4	45	0.16	6.2	15	71	30600	110	14500	1100	6800	4.5	M	30
NYSL172S1	36-41.5861-	74.9464-4-50-000	5.5	31	0.08	4.4	16	44	32900	100	15400	390	8200	2.1	M	40
NYSL173S1	36-41.5720-	74.9104-4-50-000	7.1	45	0.18	5.9	12	76	31900	100	15900	1500	7400	4.6	5800	30
NYSL174S1	36-41.5332-	74.8948-4-50-000	6.8	50	0.32	5.2	16	44	56200	100	25100	2480	10500	6.5	8100	50
NYSL175S1	36-41.5390-	74.8687-4-50-000	6.8	60	0.22	4.3	11	37	25100	70	18000	3290	7500	3.7	5300	30
NYSL176S1	36-41.5067-	74.7892-4-50-000	5.8	65	0.08	4.7	19	68	25200	130	9700	410	11200	4.6	M	M
NYSL177S1	36-41.5509-	74.7877-4-50-000	6.3	40	0.08	3.5	9	23	34700	70	20500	4830	7400	4.7	6100	40
NYSL178S1	36-41.5806-	74.7570-4-50-000	6.0	30	0.06	3.8	13	35	M	90	24900	3830	6500	5.1	5300	50
NYSL179S1	36-41.5196-	74.7574-4-50-000	6.3	45	0.06	3.6	11	25	46900	100	35200	1990	5300	8.9	5100	60
NYSL180S1	36-41.5475-	74.7539-4-50-000	6.9	41	0.08	3.5	11	34	25900	60	15300	2580	7300	3.5	6100	40
NYSL181S1	36-41.9640-	74.7580-4-50-000	5.6	3	0.18	3.5	9	38	19800	120	10400	M	M	3.3	11	M
NYSL182S1	36-41.8841-	74.6370-4-50-000	6.8	38	0.12	3.5	11	23	27400	110	23900	930	1000	6.2	3900	30
NYSL183S1	36-41.8894-	74.5962-4-50-000	6.4	30	0.08	2.7	8	22	27400	80	17800	490	600	4.3	3700	40
NYSL184S1	36-41.8784-	74.5704-4-50-000	7.0	30	0.06	2.5	9	16	25200	70	14700	520	1100	4.3	3800	30
NYSL185S1	36-41.9388-	74.6020-4-50-000	6.1	30	0.10	5.3	8	11	31300	80	16900	140	1000	6.6	3000	40
NYSL186S1	36-41.9397-	74.6488-4-50-000	7.0	40	0.20	2.6	9	18	18600	100	12400	330	500	3.2	4000	30
NYSL187S1	36-41.9193-	74.6722-4-50-000	7.0	45	0.20	2.9	9	16	29200	80	18200	1170	700	5.0	4100	30
NYSL188S1	36-41.9138-	74.7312-4-50-000	7.2	40	0.20	2.7	8	20	27100	90	18100	940	1300	5.0	4200	40
NYSL189S1	36-41.9048-	74.7935-4-50-000	7.6	45	0.08	3.3	12	35	36500	120	23800	1550	1400	6.6	6300	60
NYSL190S1	36-41.4756-	74.7945-4-50-000	7.2	58	0.32	3.6	9	38	29600	80	15600	460	5200	4.0	4100	30
NYSL191S1	36-41.4739-	74.8473-4-50-000	7.1	45	0.10	3.3	10	36	24500	100	14900	1490	5300	4.4	M	20
NYSL192S1	36-41.5123-	74.8297-4-50-000	7.1	45	0.20	4.9	13	59	44100	110	16700	600	9900	4.3	7100	50
NYSL193S1	36-41.5125-	74.8870-4-50-000	7.2	70	0.18	7.1	15	100	28600	140	16000	580	6900	4.5	6100	40
NYSL194S1	36-41.5126-	74.9447-4-50-000	7.1	50	0.16	3.7	14	47	32300	110	19300	940	5900	6.1	4000	20
NYSL195S1	36-41.5453-	74.9352-4-50-000	7.1	50	0.16	5.4	42	162	32700	350	57100	2170	6800	15.4	5800	30
NYSL196S1	36-41.5119-	74.9836-4-50-000	7.1	65	0.20	4.6	12	40	33400	90	16600	1980	6300	5.0	5000	30

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYSL1975I	36-41.4831-74.9594-4-50-000	6.9	80	0.22	3.3	10	18	30900	70	17100	1020	7900	4.5	6000	40
NYSL1985I	36-41.4751-74.9062-4-50-000	7.6	55	0.08	3.5	11	31	27400	70	13300	700	5900	3.9	M	30
NYSL1995I	36-41.4420-74.8030-4-50-000	7.3	70	0.32	3.7	12	42	25800	100	18000	850	3800	5.4	4500	30
NYUL2015I	36-41.9573-74.6224-4-50-000	7.2	23	0.06	3.8	17	45	28400	190	26100	620	800	5.2	5600	50
NYUL2025I	36-41.9496-74.5819-4-50-000	6.6	22	0.02	3.1	11	27	20200	120	21600	430	500	4.3	4200	30
NYUL2035I	36-41.9564-74.5488-4-50-000	6.2	20	0.00	3.4	11	25	19600	100	18200	610	400	3.5	3400	30
NYUL2045I	36-41.9266-74.5519-4-50-000	6.8	20	0.02	2.3	4	10	18900	40	8000	670	700	2.2	3600	30
NYUL2055I	36-41.9473-74.4973-4-50-000	5.8	20	0.00	2.8	9	30	26200	90	18000	1300	600	4.6	3900	30
NYUL2065I	36-41.9589-74.4736-4-50-000	5.0	26	0.00	2.9	8	27	29000	110	25000	580	500	5.7	4100	40
NYUL2075I	36-41.9379-74.5042-4-50-000	5.8	20	0.00	2.3	7	19	20800	60	14500	590	500	3.6	3300	30
NYUL2085I	36-41.9036-74.4990-4-50-000	6.3	26	0.02	3.2	11	24	28900	80	19000	700	900	5.1	4200	40
NYUL2095I	36-41.8909-74.4447-4-50-000	6.7	25	0.06	3.9	10	35	28700	90	16400	630	1500	4.8	6400	50
NYUL2105I	36-41.8817-74.4070-4-50-000	6.2	40	0.02	4.6	23	45	70600	140	40000	3490	2600	9.8	6800	80
NYUL2115I	36-41.9161-74.4340-4-50-000	6.5	24	0.02	3.3	13	28	24000	100	16700	560	800	4.1	M	40
NYUL2125I	36-41.9256-74.3928-4-50-000	6.5	28	0.04	4.1	13	40	28800	120	23400	730	1100	5.9	4900	40
NYUL2135I	36-41.9339-74.3309-4-50-000	6.8	35	0.12	2.8	9	16	29200	90	19700	950	2400	5.5	M	40
NYUL2145I	36-41.9499-74.3199-4-50-000	7.0	28	0.10	2.9	7	12	30000	70	20000	650	2000	5.5	3700	40
NYUL2155I	36-41.9662-74.2953-4-50-000	7.2	22	0.06	2.0	5	16	20200	100	18300	530	1300	4.0	4400	40
NYUL2165I	36-41.8809-74.3410-4-50-000	7.0	29	0.14	2.2	6	13	29600	70	17300	620	3300	5.8	M	50
NYUL2175I	36-41.8795-74.3089-4-50-000	7.0	31	0.16	2.2	7	19	23400	80	12600	370	2700	4.6	3200	30
NYUL2185I	36-41.8938-74.2604-4-50-000	7.0	37	0.12	2.6	7	11	47800	60	21300	1030	5200	6.6	4200	70
NYUL2195I	36-41.9522-74.2622-4-50-000	7.0	29	0.10	2.1	9	10	32800	60	18200	1050	3600	6.1	M	50
NYUL2205I	36-41.9728-74.2356-4-50-000	6.7	39	0.12	2.3	9	17	M	50	25000	1770	38700	8.1	M	20
NYUL2215I	36-41.9802-74.2032-4-50-000	6.8	52	0.16	2.2	7	17	29100	90	20200	560	4300	6.0	M	40
NYUL2225I	36-41.9342-74.1835-4-50-000	6.8	72	0.28	3.0	9	17	33900	70	17600	310	4600	6.4	3400	50
NYUL2235I	36-41.9096-74.1811-4-50-000	7.0	61	0.10	3.1	9	50	27600	130	26700	410	4600	7.5	4400	40
NYUL2245I	36-41.9090-74.1569-4-50-000	6.9	54	0.12	1.9	4	17	22000	40	11400	210	3600	3.9	M	30
NYUL2255I	36-41.9180-74.1313-4-50-000	7.0	61	0.10	2.7	9	.	49200	70	31500	760	5600	9.2	4100	80
NYUL2265I	36-41.9031-74.1081-4-50-000	7.0	58	0.18	2.3	5	11	53200	60	29700	670	5600	10.6	4300	90
NYUL2275I	36-41.9216-74.0907-4-50-000	5.8	60	0.18	2.7	7	17	40300	70	23700	630	4700	7.9	M	70
NYUL2285I	36-41.9538-74.1325-4-50-000	6.6	55	0.12	2.3	3	21	26400	60	10900	330	4400	4.8	3100	40
NYUL2295I	36-41.9588-74.1194-4-50-000	6.6	80	0.08	2.7	8	23	37800	90	15000	580	4200	8.0	3600	60
NYUL2305I	36-41.8909-74.0153-4-50-000	6.9	195	1.33	2.1	6	20	25300	60	14800	750	5800	4.3	4600	50
NYUL2315I	36-41.9435-74.0722-4-50-000	7.5	79	0.30	2.6	7	16	35400	50	21100	1100	5000	7.0	M	60
NYUL2325I	36-41.9837-74.0356-4-50-000	7.3	45	0.12	M	M	M	M	M	M	M	M	M	M	M
NYUL2335I	36-41.8442-74.0501-4-50-000	7.2	181	0.60	3.0	10	24	44500	80	23900	1200	7200	6.9	5700	70
NYUL2345I	36-41.8252-74.0049-4-50-000	7.3	86	0.50	3.0	6	18	43300	50	25200	2810	9100	5.9	4900	70
NYUL2355I	36-41.7750-74.0297-4-50-000	6.9	206	0.22	M	M	M	M	M	M	M	M	M	M	M
NYUL2365I	36-41.7729-74.1100-4-50-000	7.3	130	0.90	3.0	9	.	52700	80	29400	400	6100	8.2	3900	80
NYUL3245I	36-41.6560-74.3293-4-50-000	6.2	25	0.06	3.8	5	39	30800	30	20400	780	2800	5.3	3100	40
NYUL3255I	36-41.6451-74.3637-4-50-000	6.1	35	0.12	2.4	10	33	22100	30	14500	390	2500	5.3	2400	40
NYUL3265I	36-41.6260-74.3088-4-50-000	5.7	150	0.12	2.2	7	27	19600	50	11300	290	4700	4.2	2500	20
NYUL3275I	36-41.6635-74.3064-4-50-000	5.7	55	0.20	2.8	9	28	40300	60	22600	880	8200	6.8	4700	60
NYUL3285I	36-41.6723-74.2541-4-50-000	7.2	35	0.06	3.2	9	12	66700	60	31100	1100	8500	10.0	5200	110
NYUL3295I	36-41.6596-74.1807-4-50-000	7.2	85	0.06	3.2	11	11	49200	110	50900	930	6700	11.6	3800	70
NYUL3305I	36-41.6377-74.1911-4-50-000	7.3	189	1.20	2.7	5	12	52700	60	26100	1340	7700	7.9	4700	80
NYUL3315I	36-41.6150-74.1570-4-50-000	7.0	160	0.90	2.2	5	8	40900	40	23600	370	6700	7.8	3100	60
NYUL3325I	36-41.6631-74.1616-4-50-000	7.1	146	0.88	2.8	10	15	M	50	42300	2110	11200	11.6	7000	90
NYUL3335I	36-41.7227-74.1349-4-50-000	6.6	100	0.48	3.1	7	16	51200	70	36100	1250	6400	10.1	4400	80
NYUL3345I	36-41.7166-74.1306-4-50-000	6.2	151	0.76	3.0	9	11	48800	70	31000	950	6900	8.9	4100	70
NYUL3355I	36-41.6946-74.1863-4-50-000	5.8	110	0.32	3.9	9	14	49000	70	36100	1310	5300	10.5	3800	80
NYUL3365I	36-41.7416-74.3592-4-50-000	4.8	26	0.00	2.4	4	21	19000	30	9800	220	2100	3.5	2700	30
NYUL3375I	36-41.7303-74.2139-4-50-000	4.5	35	0.00	2.3	5	34	18900	30	14200	420	3100	4.4	2700	20

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
NYUL338S1	36-41.7390-74.2563-4-50-000	4.6	31	0.00	2.6	7	24	25200	-20	14100	180	3600	3.7	3600	40
NYUL339S1	36-41.7579-74.2827-4-50-000	5.9	25	0.04	3.4	9	16	M	80	25200	1770	3400	9.0	3800	60
NYUL340S1	36-41.7818-74.2107-4-50-000	6.0	25	0.02	2.8	6	27	31400	70	15500	1780	4500	5.3	4500	50
NYUL341S1	36-41.7928-74.1410-4-50-000	6.9	75	0.28	3.0	6	18	50000	40	32100	1490	5800	8.5	4300	80
NYUL342S1	36-41.8235-74.1923-4-50-000	7.6	210	1.00	2.3	5	18	32200	40	24700	300	4300	7.8	3300	60
NYUL343S1	36-41.8222-74.1552-4-50-000	7.2	250	0.93	M	M	M	M	M	M	M	M	M	M	M
NYUL344S1	36-41.8642-74.1696-4-50-000	7.4	88	0.28	M	M	M	M	M	M	M	M	M	M	M
NYUL345S1	36-41.8593-74.2189-4-50-000	7.4	72	0.14	M	M	M	M	M	M	M	M	M	M	M
NYUL347S1	36-41.8285-74.2505-4-50-000	7.7	75	0.22	M	M	M	M	M	M	M	M	M	M	M
NYUL348S1	36-41.8254-74.3228-4-50-000	6.2	49	0.12	M	M	M	M	M	M	M	M	M	M	M
NYUL349S1	36-41.7956-74.2922-4-50-000	7.9	50	0.26	M	M	M	M	M	M	M	M	M	M	M
NYUL350S1	36-41.7947-74.2648-4-50-000	7.0	140	0.42	M	M	M	M	M	M	M	M	M	M	M
NYUL351S1	36-41.8579-74.2822-4-50-000	7.4	50	0.12	M	M	M	M	M	M	M	M	M	M	M
NYUL352S1	36-41.8721-74.3386-4-50-000	7.4	28	0.12	M	M	M	M	M	M	M	M	M	M	M
NYUL353S1	36-41.8201-74.3352-4-50-000	7.6	30	0.08	M	M	M	M	M	M	M	M	M	M	M
NYUL355S1	36-41.7879-74.3795-4-50-000	7.8	29	0.10	M	M	M	M	M	M	M	M	M	M	M
NYUL356S1	36-41.8347-74.4394-4-50-000	6.4	26	0.04	3.4	10	32	29000	100	16700	1790	1900	4.8	M	40
NYUL357S1	36-41.8513-74.4177-4-50-000	6.2	28	0.02	3.0	9	28	20400	80	12900	1060	1800	3.6	5400	40
NYUL358S1	36-41.8136-74.4063-4-50-000	5.8	50	0.02	1.8	6	14	19100	60	9300	1150	2800	3.6	2600	30
NYUL359S1	36-41.8094-74.4505-4-50-000	6.1	50	0.02	3.1	9	30	25900	90	16800	1300	2800	4.6	M	40
NYUL360S1	36-41.8170-74.4772-4-50-000	6.1	45	0.10	2.9	9	39	21600	100	16300	540	3700	4.3	5400	40
NYUL361S1	36-41.7745-74.4854-4-50-000	5.8	42	0.02	2.4	9	21	25600	80	15400	1140	3300	4.3	M	40
NYUL362S1	36-41.7822-74.4308-4-50-000	4.7	50	0.00	2.1	5	13	22900	70	4200	100	3500	4.4	2600	30
NYUL363S1	36-41.7414-74.3998-4-50-000	7.0	46	0.16	3.8	8	16	30700	60	20900	400	3200	6.7	3500	40
NYUL364S1	36-41.7260-74.4451-4-50-000	7.0	51	0.10	2.6	7	29	20100	80	14200	940	4000	0.9	4700	40
NYUL365S1	36-41.7424-74.5384-4-50-000	4.3	61	0.00	2.6	6	23	23900	70	5800	110	5000	3.3	3600	20
NYUL366S1	36-41.7259-74.4917-4-50-000	7.1	53	0.10	3.1	13	46	19300	140	18200	830	3000	4.5	3800	20
NYUL367S1	36-41.7188-74.4842-4-50-000	6.9	35	0.06	2.9	10	29	27500	90	21500	1850	3500	5.0	3700	50
NYUL368S1	36-41.7076-74.4338-4-50-000	7.5	65	0.18	M	M	M	M	M	M	M	M	M	M	M
NYUL369S1	36-41.6980-74.4152-4-50-000	7.7	75	0.34	2.6	7	19	27600	80	19000	M	3300	5.6	M	40
NYUL370S1	36-41.6632-74.3867-4-50-000	7.8	90	0.38	2.8	19	38	M	190	95900	M	4800	23.5	M	M
NYUL371S1	36-41.7271-74.0977-4-50-000	7.1	235	0.50	M	M	M	M	M	M	M	M	M	M	M
NYUL372S1	36-41.6964-74.1017-4-50-000	7.2	290	0.84	M	M	M	M	M	M	M	M	M	M	M
NYUL373S1	36-41.6411-74.1105-4-50-000	7.2	168	0.36	M	M	M	M	M	M	M	M	M	M	M
NYUL374S1	36-41.6556-74.0860-4-50-000	7.0	185	0.48	M	M	M	M	M	M	M	M	M	M	M
NYUL375S1	36-41.6387-74.0508-4-50-000	7.0	142	0.40	2.1	8	10	40800	60	26300	690	7300	7.7	M	60
NYUL376S1	36-41.6722-74.0681-4-50-000	7.1	130	0.56	2.7	8	34	35700	80	36100	870	9400	8.8	4800	50
NYUL377S1	36-41.6905-74.0317-4-50-000	7.0	190	0.58	2.2	15	31	52100	140	61400	660	10200	20.2	4500	80
NYUL378S1	36-41.7386-74.0169-4-50-000	7.1	170	0.80	1.4	3	10	24100	40	16500	750	4200	3.5	M	30
NYUL379S1	36-41.8671-74.1011-4-50-000	7.5	70	0.08	1.8	9	11	31000	60	23800	820	3600	8.3	3200	70
PACR001S1	42-41.0735-75.6920-4-50-000	7.0	18	0.06	3.2	7	27	22300	60	12300	820	1000	4.1	6600	40
PACR002S1	42-41.0970-75.6909-4-50-000	4.9	15	0.02	2.4	6	13	18700	40	10500	190	800	3.6	M	30
PACR003S1	42-41.1119-75.7157-4-50-000	5.3	19	0.02	1.8	3	9	13800	-20	9200	580	600	2.8	3100	30
PACR004S1	42-41.0837-75.6058-4-50-000	6.6	48	0.04	3.5	11	30	24800	90	26000	3300	800	6.3	7000	40
PACR005S1	42-41.0848-75.7329-4-50-000	4.2	25	0.00	M	M	M	M	M	M	M	M	M	M	M
PACR006S1	42-41.0364-75.7401-4-50-000	6.5	20	0.04	M	M	M	M	M	M	M	M	M	M	M
PACR007S1	42-41.0247-75.7097-4-50-000	6.3	32	0.04	M	M	M	M	M	M	M	M	M	M	M
PACR008S1	42-41.0471-75.6568-4-50-000	5.5	10	0.02	1.9	5	10	10300	30	3300	50	900	1.9	2300	20
PACR009S1	42-41.0190-75.5851-4-50-000	5.6	11	0.02	M	M	M	M	M	M	M	M	M	M	M
PACR011S1	42-41.0114-75.5447-4-50-000	5.2	17	0.00	3.3	12	31	4900	110	1900	M	M	1.7	3800	10
PALA001S1	42-41.6250-75.4957-4-50-000	6.6	90	0.08	3.0	7	18	32900	80	14500	420	3500	5.3	4400	40
PALA002S1	42-41.6312-75.5290-4-50-000	7.0	120	0.56	4.6	10	26	56200	110	25400	6370	8800	7.5	6700	70
PALA003S1	42-41.5992-75.5449-4-50-000	6.3	115	0.54	4.0	16	49	29600	140	22400	460	6100	6.0	M	40

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PALA004S1	42-41.6396-75.5997-4-50-000	6.8	118	0.72	3.9	9	24	29600	80	12800	420	6500	4.0	4600	30
PALA005S1	42-41.5996-75.6077-4-50-000	7.1	155	0.88	5.3	14	61	45000	150	17300	560	11000	7.0	8100	50
PALA006S1	42-41.5928-75.6501-4-50-000	7.2	138	0.60	4.2	13	48	31200	140	18400	460	7100	5.3	M	40
PALA007S1	42-41.5931-75.6870-4-50-000	7.2	150	0.34	4.4	14	34	41600	100	22600	1180	8300	6.3	5600	50
PALA008S1	42-41.5762-75.5001-4-50-000	7.5	55	0.06	4.0	14	22	52600	70	30500	540	6100	9.1	6800	90
PALA009S1	42-41.5376-75.5554-4-50-000	7.5	97	0.60	4.2	10	32	M	110	22600	M	M	6.3	M	M
PALA010S1	42-41.5627-75.5847-4-50-000	7.5	90	0.72	5.0	20	61	37900	170	27600	1070	8300	7.3	6300	50
PALA011S1	42-41.5711-75.5617-4-50-000	7.5	168	0.24	M	M	M	M	M	M	M	M	M	M	M
PALA012S1	42-41.5754-75.6408-4-50-000	7.8	130	0.68	3.9	10	34	29300	130	12800	610	7800	4.7	M	40
PALA013S1	42-41.6419-75.6480-4-50-000	7.1	90	0.52	3.0	8	27	22100	90	11700	200	6000	3.0	4200	20
PALA014S1	42-41.6030-75.7432-4-50-000	7.3	80	0.44	4.6	9	52	29900	120	16600	3240	10300	3.6	6400	50
PALA015S1	42-41.5693-75.7347-4-50-000	7.8	115	0.60	3.9	9	25	34000	90	19200	1540	7000	5.7	M	40
PALA016S1	42-41.5653-75.7027-4-50-000	8.8	260	0.80	3.9	11	35	30100	110	16500	360	7400	4.6	4900	30
PALA017S1	42-41.5278-75.7346-4-50-000	8.2	280	0.84	4.6	12	35	55000	110	22100	1820	10500	6.3	7900	70
PALA018S1	42-41.5384-75.6009-4-50-000	7.8	90	0.44	4.1	14	37	35300	140	25500	2270	8000	7.8	M	40
PALA019S1	42-41.5425-75.6498-4-50-000	7.7	270	0.80	4.3	11	34	33600	110	19700	770	7900	5.6	5400	40
PALA020S1	42-41.5258-75.6833-4-50-000	9.5	121	0.64	5.5	16	69	49900	170	30000	900	10300	6.3	8700	80
PALA021S1	42-41.4858-75.7499-4-50-000	7.9	475	2.16	4.0	10	29	30400	100	18800	740	7000	5.5	5500	30
PALA022S1	42-41.4849-75.7726-4-50-000	7.8	165	0.80	3.6	9	20	M	90	28600	5570	6900	6.4	5900	50
PALA023S1	42-41.4565-75.7661-4-50-000	8.1	171	1.00	3.9	10	23	27500	90	13800	570	7500	4.5	5700	30
PALA025S1	42-41.4569-75.6838-4-50-000	7.8	620	1.52	3.7	9	12	42000	70	24800	1910	4700	7.4	5200	60
PALA026S1	42-41.4826-75.6901-4-50-000	7.4	680	0.82	5.4	13	61	33100	150	26000	500	7300	3.1	6400	50
PALA027S1	42-41.5005-75.6254-4-50-000	7.9	160	0.72	3.3	12	36	31800	130	25000	410	6500	6.9	M	40
PALA028S1	42-41.4835-75.5887-4-50-000	7.6	100	0.24	4.4	13	33	43200	100	25700	480	4500	9.6	6100	70
PALA029S1	42-41.4364-75.4901-4-50-000	7.8	30	0.06	3.8	9	33	34200	90	19600	1000	4100	5.7	8100	60
PALA030S1	42-41.3988-75.4694-4-50-000	7.7	193	0.58	4.4	16	42	32100	160	24900	2140	6500	7.9	M	40
PALA031S1	42-41.3429-75.4923-4-50-000	7.5	72	0.30	3.5	12	30	19700	110	8500	420	4100	3.5	5900	30
PALA032S1	42-41.3115-75.6734-4-50-000	8.0	40	0.06	3.2	13	8	85400	80	40700	2380	2800	13.7	6900	130
PALA033S1	42-41.2929-75.5761-4-50-000	7.4	20	0.06	3.2	10	14	M	80	31500	M	M	9.9	M	M
PALA034S1	42-41.2982-75.6319-4-50-000	7.4	40	0.16	3.5	17	31	26800	140	25400	820	900	7.4	6900	40
PALA035S1	42-41.2851-75.5779-4-50-000	7.5	70	0.24	3.1	10	26	25300	100	15100	430	1900	5.0	1600	50
PALA036S1	42-41.3159-75.5829-4-50-000	7.6	85	0.22	3.8	12	27	31900	100	24100	1110	2000	7.0	M	50
PALA037S1	42-41.3784-75.5805-4-50-000	7.0	210	0.88	4.9	11	29	M	100	34900	11050	3500	8.1	M	70
PALA038S1	42-41.3526-75.5862-4-50-000	7.4	62	0.36	4.3	14	30	30700	130	26000	1260	2200	7.0	7300	50
PALA039S1	42-41.3487-75.6959-4-50-000	7.5	83	0.36	2.8	5	13	31100	50	20500	4010	1000	5.7	M	40
PALA041S1	42-41.4386-75.5567-4-50-000	4.7	65	0.00	3.1	7	29	22600	40	5300	50	1000	4.4	4400	30
PALA043S1	42-41.3798-75.6168-4-50-000	6.6	68	0.16	3.5	10	44	25900	90	18400	1070	1400	6.3	7000	50
PALA044S1	42-41.3891-75.7709-4-50-000	6.7	198	0.66	3.7	10		38600	90	36000	2790	4500	7.6	M	60
PALA046S1	42-41.4081-75.8100-4-50-000	7.5	164	0.70	4.9	14	49	36500	120	15600	610	9100	4.9	9200	60
PALA088S1	42-41.3899-75.5518-4-50-000	7.5	140	0.46	2.5	6	11	17300	50	16100	490	1400	4.1	4400	30
PALA089S1	42-41.3393-75.5438-4-50-000	7.3	125	0.57	3.6	12	32	30300	110	14100	570	3200	4.9	8400	50
PALA090S1	42-41.3182-75.4918-4-50-000	7.5	70	0.24	3.9	14	28	37400	100	27600	1740	3200	6.6	7800	60
PALA091S1	42-41.2881-75.4749-4-50-000	7.0	55	0.38	4.6	18	58	16900	160	10000	920	1600	4.6	7400	30
PALA092S1	42-41.3040-75.4897-4-50-000	7.3	43	0.16	3.7	11	31	31100	110	20100	2420	3600	5.2	7800	60
PALA093S1	42-41.3135-75.5174-4-50-000	7.0	200	0.30	6.1	17	79	19500	170	14600	220	2900	4.1	8100	30
PALA094S1	42-41.2783-75.5391-4-50-000	6.3	72	0.14	4.1	12	35	31200	120	12800	800	2000	4.9	9000	50
PALA095S1	42-41.2274-75.5856-4-50-000	6.0	25	0.04	3.0	11	24	21900	70	12400	480	1000	5.1	6500	40
PALA096S1	42-41.2333-75.6203-4-50-000	5.4	20	0.00	2.5	7	19	18900	60	3900	100	900	3.9	4600	30
PALA097S1	42-41.2082-75.6113-4-50-000	6.2	20	0.04	2.5	8	20	15800	50	4000	120	1100	3.5	5400	20
PALA098S1	42-41.1748-75.5953-4-50-000	6.9	26	0.06	3.8	14	38	34900	120	22800	1070	1600	6.6	9400	50
PALA099S1	42-41.2003-75.5708-4-50-000	6.3	25	0.08	4.3	15	38	30000	130	23700	810	1300	6.5	8000	50
PALA100S1	42-41.2334-75.5409-4-50-000	5.5	35	0.08	3.8	16	29	32600	130	25700	2810	1400	5.9	7600	50
PALU001S1	42-41.0363-75.9536-4-50-000	6.9	45	0.14	2.9	7	19	30000	50	15300	200	1600	6.5	4400	40

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PALU002S1	42-41.0591-75.9315-4-50-000	7.0	35	0.10	2.6	9	23	21300	60	16900	270	1600	5.7	4300	30
PALU003S1	42-41.0807-75.9007-4-50-000	5.0	22	0.04	2.8	7	20	25000	40	8600	60	2300	4.6	M	30
PALU004S1	42-41.0978-75.8729-4-50-000	5.7	20	0.04	2.9	13	29	19200	60	12600	690	1500	5.1	6500	40
PALU005S1	42-41.1062-75.8456-4-50-000	5.6	21	0.04	3.0	7	28	24900	50	17000	810	700	5.3	5200	40
PALU006S1	42-41.0925-75.8214-4-50-000	6.3	54	0.30	2.5	8	16	26900	50	17300	830	2200	5.8	4300	30
PALU007S1	42-41.0590-75.8076-4-50-000	6.8	70	0.28	2.8	5	22	32500	60	20700	1250	6300	6.3	M	40
PALU008S1	42-41.0386-75.8471-4-50-000	4.3	130	0.00	3.7	11	15	55100	90	50800	290	1900	12.7	4100	70
PALU009S1	42-41.0408-75.7843-4-50-000	6.5	140	0.44	3.0	8	11	46900	70	16000	360	3200	8.6	4400	60
PALU010S1	42-41.0069-75.7751-4-50-000	6.2	78	0.04	2.8	8	9	36100	50	24300	240	1900	6.0	3500	40
PALU011S1	42-41.0084-75.7995-4-50-000	6.5	25	0.10	2.5	5	16	29300	40	17100	520	2400	5.7	M	40
PALU012S1	42-41.0106-75.8305-4-50-000	3.8	151	0.00	3.3	13	29	31000	80	27900	180	1600	8.6	4800	40
PALU013S1	42-41.1477-75.8963-4-50-000	7.3	245	0.62	3.1	9	24	23000	70	11900	600	1800	4.1	8000	40
PALU014S1	42-41.1450-75.8604-4-50-000	8.0	25	0.06	2.8	10	8	61400	70	31400	2850	2500	10.3	5600	100
PALU015S1	42-41.1036-75.9521-4-50-000	7.2	85	0.26	2.7	9	13	30900	70	21900	2030	2000	5.5	M	50
PALU016S1	42-41.0742-75.9909-4-50-000	7.3	103	0.20	3.7	11	39	24900	130	18000	400	2100	6.6	M	40
PALU019S1	42-41.1459-75.9543-4-50-000	7.1	105	0.30	3.5	12	22	22000	90	15300	280	2300	4.6	6700	30
PALU024S1	42-41.0306-75.9995-4-50-000	7.3	83	0.20	3.2	14	25	41000	90	25900	1310	2300	8.8	7300	60
PALU086S1	42-41.0621-75.8716-4-50-000	7.0	90	0.16	3.1	7	14	44000	60	39700	840	4100	11.6	M	60
PALU087S1	42-41.1296-75.8069-4-50-000	5.3	50	0.00	2.7	11	24	43400	90	25700	230	1200	6.5	6200	60
PALU088S1	42-41.1476-75.6289-4-50-000	5.4	45	0.00	2.5	7	12	33500	50	8400	90	1800	6.0	4500	40
PALU089S1	42-41.1573-75.6650-4-50-000	6.5	80	0.14	2.7	8	15	25700	40	19200	140	1200	5.5	4300	40
PALU090S1	42-41.1540-75.7311-4-50-000	6.3	92	0.02	2.8	7	25	26200	40	14200	170	900	5.5	4800	40
PALU091S1	42-41.1196-75.7559-4-50-000	6.4	40	0.04	2.3	5	15	29100	70	20600	10960	900	6.0	M	30
PALU095S1	42-41.2012-75.7549-4-50-000	6.6	59	0.04	2.6	6	16	29200	40	16500	450	1300	5.4	4600	40
PALU096S1	42-41.2357-75.8108-4-50-000	7.2	185	0.14	2.9	6	14	27400	50	13300	1730	2300	5.2	5100	50
PALU097S1	42-41.2149-75.8418-4-50-000	7.5	85	0.06	3.7	10	12	58400	60	24100	3220	2900	9.8	4300	90
PALU098S1	42-41.2457-75.6985-4-50-000	6.0	78	0.04	3.2	6	37	27300	60	13700	590	800	4.9	4700	40
PALU099S1	42-41.3030-75.7255-4-50-000	7.1	290	0.64	3.1	8	15	37400	50	23300	1390	1600	7.1	4200	60
PALU100S1	42-41.2126-75.6859-4-50-000	6.3	90	0.04	3.0	10	33	30600	80	21400	560	1200	7.2	5100	40
PALU101S1	42-41.1782-75.7014-4-50-000	6.1	85	0.02	2.6	11	19	30300	60	25800	2050	1000	7.5	M	40
PALU102S1	42-41.1805-75.7653-4-50-000	5.3	80	0.00	2.7	7	13	39100	50	25100	1130	1600	7.0	4900	60
PALU103S1	42-41.1842-75.8038-4-50-000	5.7	79	0.04	2.5	6	18	29100	50	9400	440	2800	5.4	4300	40
PALU104S1	42-41.1646-75.8631-4-50-000	6.4	90	0.04	3.5	10	33	28600	80	21300	1960	2400	6.3	5100	40
PALU105S1	42-41.1815-75.9519-4-50-000	7.4	288	0.12	3.2	11	19	44400	70	36500	3620	2800	10.6	4400	70
PALU106S1	42-41.2540-75.9970-4-50-000	7.7	220	0.52	3.3	10	20	31600	70	17200	740	5800	5.9	M	40
PALU134S1	42-41.2941-75.9453-4-50-000	7.2	130	0.55	3.7	11	32	33400	100	22100	2240	5400	6.0	6500	50
PALU135S1	42-41.2868-75.9752-4-50-000	7.6	111	0.40	3.8	7	20	32500	60	13800	880	7800	5.2	4100	40
PALU136S1	42-41.3193-75.9975-4-50-000	7.5	115	0.42	3.1	10	20	31100	60	17500	550	6000	4.7	5000	40
PALU137S1	42-41.3658-75.9931-4-50-000	7.6	75	0.38	2.9	11	27	26300	90	21800	450	4900	6.0	5300	40
PALU139S1	42-41.2519-75.7720-4-50-000	8.1	50	0.08	M	M	M	M	M	M	M	M	M	M	M
PALU140S1	42-41.2645-75.7916-4-50-000	8.0	75	0.15	M	M	M	M	M	M	M	M	M	M	M
PALU141S1	42-41.2893-75.8052-4-50-000	8.0	210	0.16	M	M	M	M	M	M	M	M	M	M	M
PALU142S1	42-41.3355-75.7484-4-50-000	7.7	260	0.30	M	M	M	M	M	M	M	M	M	M	M
PALU143S1	42-41.3240-75.8515-4-50-000	8.2	112	0.40	3.5	12	26	32300	90	16000	640	6100	5.8	5600	40
PALU144S1	42-41.3200-75.9105-4-50-000	8.1	105	0.50	M	M	M	M	M	M	M	M	M	M	M
PALU145S1	42-41.3247-75.9426-4-50-000	8.1	195	0.62	3.2	13	31	24200	90	19700	410	5500	5.3	5100	40
PALU146S1	42-41.3634-75.9317-4-50-000	8.1	95	0.37	M	M	M	M	M	M	M	M	M	M	M
PALU147S1	42-41.3550-75.9082-4-50-000	9.9	120	0.38	M	M	M	M	M	M	M	M	M	M	M
PALU148S1	42-41.3990-75.8857-4-50-000	7.5	105	0.43	3.3	10	24	48300	90	23800	1220	7900	7.2	7000	70
PALU149S1	42-41.3917-75.8635-4-50-000	7.7	105	0.40	4.0	10	32	M	100	19700	860	6500	5.9	M	40
PALU150S1	42-41.3757-75.8498-4-50-000	7.8	125	0.63	3.4	9	22	38600	80	34400	4460	5800	7.9	M	50
PAM0022S1	42-41.0439-75.0797-4-50-000	7.2	183	0.74	2.9	9	23	21300	30	25800	280	2600	5.4	4700	40
PAM0023S1	42-41.0199-75.1849-4-50-000	7.8	140	0.65	3.8	11	49	31500	120	45300	2180	2900	11.1	M	60

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PAM0024S1	42-41.0170-75.2083-4-50-000	6.4	152	0.52	1.8	6	6	19300	50	19200	880	2600	4.7	3100	40
PAM0025S1	42-41.0093-75.2557-4-50-000	6.7	70	0.17	3.2	9	34	29400	50	9500	380	6100	4.4	6000	40
PAM0026S1	42-41.0106-75.3208-4-50-000	7.3	70	0.20	2.1	3	15	17500	40	10400	500	M	3.6	M	10
PAM0032S1	42-41.0258-75.1315-4-50-000	8.8	130	0.68	2.4	5	9	29800	60	18900	1040	3300	5.0	M	40
PAM0033S1	42-41.0538-75.2245-4-50-000	7.3	60	0.22	2.7	10	26	24000	60	16700	2480	2600	4.7	4600	40
PAM0034S1	42-41.0423-75.1633-4-50-000	7.6	80	0.34	3.3	8	40	28800	90	28600	2920	5200	6.4	5900	60
PAM0035S1	42-41.0453-75.2566-4-50-000	7.7	120	0.50	2.5	5	13	42800	50	11800	920	5900	8.0	3900	60
PAM0036S1	42-41.0639-75.3199-4-50-000	7.8	91	0.18	4.0	8	38	22400	90	10600	580	2700	3.8	5700	40
PAM0037S1	42-41.0544-75.3561-4-50-000	8.3	20	0.06	3.4	9	32	23000	80	10200	280	3600	3.6	8300	40
PAM0038S1	42-41.0179-75.3674-4-50-000	7.5	20	0.10	3.0	10	31	29400	70	20400	410	3800	8.3	5200	50
PAM0039S1	42-41.0141-75.3871-4-50-000	7.9	20	0.08	2.5	5	27	18500	70	7300	110	1700	4.5	3700	30
PAM0042S1	42-41.0124-75.4776-4-50-000	7.5	330	1.08	3.1	8	20	16400	70	5500	90	1100	3.2	6800	30
PAM0043S1	42-41.0361-75.4603-4-50-000	5.1	30	0.00	3.3	8	27	13100	100	5600	80	900	2.9	11000	40
PAM0044S1	42-41.0105-75.4363-4-50-000	6.5	10	0.06	2.5	6	15	20800	60	9700	450	1800	3.9	5500	40
PAM0102S1	42-41.0540-75.5504-4-50-000	7.6	35	0.08	3.2	11	21	15700	100	9500	2690	1300	3.0	9500	40
PAM0103S1	42-41.2253-75.1781-4-50-000	8.0	35	0.16	3.2	6	33	13200	70	4300	140	3500	2.2	4000	20
PAM0104S1	42-41.0760-75.0277-4-50-000	7.3	100	0.52	2.2	4	21	13000	40	5800	140	2100	2.4	2800	20
PAM0105S1	42-41.0725-75.0905-4-50-000	7.6	80	0.24	2.8	9	21	33300	80	23600	1260	4100	7.8	3900	50
PAM0106S1	42-41.0738-75.1164-4-50-000	7.7	50	0.14	1.8	5	15	18300	30	9000	250	2000	3.6	3100	40
PAM0107S1	42-41.1283-75.1086-4-50-000	7.4	9	0.02	4.4	8	48	30300	90	17200	410	5400	5.0	4700	40
PAM0108S1	42-41.1120-75.0979-4-50-000	7.4	55	0.20	3.0	14	27	29900	110	22100	1630	4000	7.1	M	40
PAM0109S1	42-41.2386-75.2307-4-50-000	7.0	65	0.10	3.3	14	25	54300	80	30200	1340	3200	11.1	5500	80
PAM0110S1	42-41.0813-75.1767-4-50-000	6.9	60	0.26	3.8	7	19	32300	70	19000	690	5400	5.8	5100	50
PAM0111S1	42-41.1258-75.1582-4-50-000	6.5	65	0.20	2.1	5	19	14700	50	5600	1300	5600	2.4	3100	20
PAM0112S1	42-41.1575-75.1653-4-50-000	5.8	51	0.08	3.6	7	22	44900	60	19400	440	4000	6.0	6200	70
PAM0113S1	42-41.1635-75.2657-4-50-000	7.1	50	0.16	3.4	8	43	17000	100	15700	590	1400	4.5	4100	30
PAM0114S1	42-41.1922-75.2187-4-50-000	7.1	40	0.18	3.4	13	38	21500	100	12700	830	4200	5.5	6600	40
PAM0115S1	42-41.2180-75.2658-4-50-000	7.0	80	0.28	3.9	11	37	34400	100	20900	1280	1800	6.5	6100	50
PAM0116S1	42-41.1978-75.2566-4-50-000	6.8	52	0.10	7.1	17	110	15600	150	19100	940	1400	3.9	7400	40
PAM0117S1	42-41.2232-75.3169-4-50-000	7.2	20	0.06	3.6	15	40	21600	100	18500	2910	2800	5.0	6800	40
PAM0118S1	42-41.2016-75.3039-4-50-000	7.1	22	0.10	2.9	7	16	20000	70	12100	640	2700	3.7	M	30
PAM0119S1	42-41.1687-75.2858-4-50-000	6.9	30	0.08	3.6	9	31	23800	80	14400	1490	1600	4.6	4800	30
PAM0120S1	42-41.1156-75.3467-4-50-000	6.6	198	0.18	4.2	14	52	29800	160	31800	960	2300	8.5	6200	60
PAM0121S1	42-41.1474-75.3634-4-50-000	6.3	65	0.10	3.0	7	19	25800	70	10300	120	2200	4.6	5700	40
PAM0122S1	42-41.2096-75.3599-4-50-000	5.7	56	0.08	3.7	9	18	M	100	39800	14810	1700	7.4	M	40
PAM0123S1	42-41.2328-75.3349-4-50-000	5.4	30	0.08	4.1	16	45	26900	130	15300	3390	2800	5.2	7200	40
PAM0124S1	42-41.1274-75.3081-4-50-000	8.1	50	0.16	3.4	9	26	29200	90	20700	1130	2200	6.4	M	40
PAM0125S1	42-41.1191-75.2627-4-50-000	8.4	110	0.00	2.3	7	17	12700	30	7200	350	2400	2.4	3400	20
PAM0126S1	42-41.1551-75.2061-4-50-000	8.7	39	0.12	3.4	7	31	35800	70	17500	1520	6100	5.6	5500	50
PAM0127S1	42-41.1150-75.2233-4-50-000	8.3	80	0.32	3.4	8	28	28600	60	16700	770	4100	5.2	M	40
PAM0128S1	42-41.0840-75.2125-4-50-000	8.3	3	0.14	1.9	5	8	19800	-20	11000	3020	3200	3.3	2700	30
PAM0129S1	42-41.0698-75.2586-4-50-000	8.4	50	0.16	4.6	13	62	45600	130	33100	870	4100	9.0	8700	80
PAM0130S1	42-41.0903-75.2867-4-50-000	8.7	73	0.18	3.0	11	34	23400	90	23400	590	3100	6.9	M	40
PAM0131S1	42-41.1003-75.3468-4-50-000	7.8	65	0.14	3.5	10	25	27600	70	17900	1340	2300	5.7	5900	40
PAM0132S1	42-41.2339-75.4383-4-50-000	5.9	29	0.06	5.1	17	59	21500	150	19100	200	1800	3.9	12300	60
PAM0133S1	42-41.1460-75.3894-4-50-000	6.0	39	0.10	3.1	10	24	15300	90	9300	240	700	3.7	6900	30
PAM0134S1	42-41.1220-75.3976-4-50-000	5.6	75	0.04	3.6	12	34	28400	80	7100	110	2800	6.1	9100	50
PAM0135S1	42-41.0796-75.3991-4-50-000	5.6	82	0.02	3.5	9	33	20600	90	10600	100	1000	4.0	7000	30
PAM0136S1	42-41.0764-75.4420-4-50-000	6.1	105	0.14	3.6	12	35	17000	120	18000	60	800	4.8	7200	40
PAM0137S1	42-41.2041-75.4572-4-50-000	5.7	74	0.10	3.7	10	24	19500	70	11900	260	2100	3.5	9200	40
PAM0138S1	42-41.2147-75.4010-4-50-000	5.8	30	0.06	2.7	7	23	15300	90	5800	110	1000	2.9	5200	30
PAM0139S1	42-41.1901-75.4013-4-50-000	5.4	29	0.06	3.8	10	42	24600	110	23800	4630	1300	5.5	9900	60
PAM0140S1	42-41.1621-75.4540-4-50-000	6.5	75	0.08	2.6	9	15	11100	80	9900	2500	500	3.0	2500	20

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	TH	HF	AL	CE	FE	MN	NA	SC	TI	V
*****					UM/CM	MEQ/L	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
PAMO141S1	42-41.1228-	75.4394-4-50-000	6.0	18	0.06	3.8	9	30	10900	120	2000	140	500	2.7	7700	20	
PAMO142S1	42-41.1399-	75.5191-4-50-000	4.8	32	0.00	3.3	12	24	18000	90	6900	90	800	3.8	7100	30	
PAMO143S1	42-41.0824-	75.5091-4-50-000	4.6	61	0.00	2.3	11	19	19300	90	10200	80	700	3.7	6900	40	
PAMO144S1	42-41.1073-	75.4894-4-50-000	6.7	45	0.06	4.9	16	42	18600	130	14700	300	600	4.1	7900	40	
PAMO145S1	42-41.1615-	75.5649-4-50-000	5.9	32	0.02	3.7	12	33	19200	110	18700	460	1300	4.3	7200	40	
PAMO146S1	42-41.1545-	75.5805-4-50-000	7.2	41	0.10	4.6	13	40	19000	120	17800	1300	1500	3.8	11100	50	
PAMO147S1	42-41.1199-	75.5413-4-50-000	7.2	80	0.10	4.6	21	37	25200	180	24200	410	1400	6.0	8500	50	
PAMO148S1	42-41.0956-	75.5411-4-50-000	7.3	45	0.08	3.9	13	38	12800	130	7200	180	700	3.5	7700	30	
PAMO149S1	42-41.1049-	75.6005-4-50-000	7.4	39	0.08	2.7	11	16	24600	80	10700	160	1500	5.3	6500	40	
PAMO150S1	42-41.0805-	75.5783-4-50-000	7.4	82	0.08	3.3	10	19	25100	100	18900	690	1400	5.7	7000	50	
PAP1001S1	42-41.0985-	75.0040-4-50-000	7.6	35	0.14	2.2	5	20	20600	50	15800	1760	2500	5.1	M	40	
PAP1002S1	42-41.1267-	74.9559-4-50-000	7.3	41	0.24	2.5	7	12	45100	50	17600	640	4400	6.1	5800	70	
PAP1003S1	42-41.1319-	75.0080-4-50-000	7.2	30	0.12	2.8	6	18	27900	70	20400	6580	3400	5.0	M	40	
PAP1004S1	42-41.1194-	75.0529-4-50-000	7.2	35	0.14	3.1	14	29	38800	50	32700	1180	4400	10.0	M	70	
PAP1005S1	42-41.1519-	75.1350-4-50-000	7.7	49	0.16	1.8	4	8	16700	-20	10000	3850	5500	3.0	3800	50	
PAP1006S1	42-41.1599-	75.1271-4-50-000	7.5	30	0.08	2.7	8	17	23300	70	10500	4090	6900	3.2	4200	30	
PAP1007S1	42-41.1690-	75.0735-4-50-000	7.9	35	0.16	2.4	8	20	25100	90	15500	620	6200	4.6	3500	40	
PAP1008S1	42-41.1776-	75.0095-4-50-000	6.7	38	0.12	2.1	5	18	32700	60	11900	400	7800	4.3	5100	50	
PAP1009S1	42-41.1737-	74.9702-4-50-000	7.1	33	0.14	2.9	7	24	23000	60	12500	1660	3500	3.5	3500	40	
PAP1010S1	42-41.1625-	74.9121-4-50-000	7.3	72	0.22	2.4	7	12	M	70	24400	1140	3300	7.0	M	60	
PAP1011S1	42-41.2215-	74.8737-4-50-000	8.2	49	0.20	2.9	8	13	59200	70	26400	3210	6000	8.3	5200	100	
PAP1012S1	42-41.2010-	74.9180-4-50-000	7.0	45	0.18	2.9	7	13	45700	70	35300	2400	3500	9.6	3500	70	
PAP1013S1	42-41.2071-	74.9488-4-50-000	7.0	49	0.24	2.9	9	17	31200	60	38900	13400	3700	8.7	M	50	
PAP1014S1	42-41.1977-	75.0031-4-50-000	5.2	25	0.04	2.6	6	15	18900	100	2200	630	8700	2.1	5000	30	
PAP1015S1	42-41.2081-	75.0392-4-50-000	6.9	45	0.32	3.1	14	37	26500	110	41100	1310	4300	6.2	4100	20	
PAP1016S1	42-41.2204-	75.1089-4-50-000	6.4	30	0.08	3.1	9	18	32500	70	12600	1280	7400	5.5	M	40	
PAP1017S1	42-41.2453-	75.0970-4-50-000	6.2	35	0.06	2.8	13	15	59900	70	27500	1200	6100	8.9	6100	100	
PAP1018S1	42-41.2319-	75.0681-4-50-000	6.7	30	0.14	3.1	5	12	29000	60	9700	2500	7200	4.5	4000	30	
PAP1019S1	42-41.2440-	75.0234-4-50-000	5.6	23	0.06	2.0	5	12	17600	50	10400	220	3400	3.1	3000	30	
PAP1020S1	42-41.2529-	74.9704-4-50-000	7.2	30	0.10	3.1	8	25	18500	100	9100	3390	7000	2.8	5500	40	
PAP1021S1	42-41.2330-	74.9136-4-50-000	7.6	44	0.20	2.9	7	21	26700	90	26100	3220	3200	7.4	M	40	
PAP1022S1	42-41.2399-	74.8690-4-50-000	8.1	48	0.20	2.8	7	16	35900	50	23400	1170	4100	7.3	M	50	
PAP1023S1	42-41.2681-	74.8812-4-50-000	7.1	48	0.10	2.9	9	6	86500	90	35000	390	6600	11.0	6200	130	
PAP1025S1	42-41.2925-	74.9562-4-50-000	6.3	29	0.12	3.2	8		35400	90	18600	6000	6200	5.8	4400	50	
PAP1026S1	42-41.2749-	75.0009-4-50-000	7.2	37	0.08	3.0	10	18	43800	90	33400	11690	7500	7.5	4900	70	
PAP1027S1	42-41.2715-	75.0570-4-50-000	7.6	34	0.10	3.8	14	43	32400	120	36000	4570	5600	8.0	M	50	
PAP1028S1	42-41.2839-	75.0959-4-50-000	7.3	50	0.06	4.2	11	40	M	90	28300	8670	4600	6.9	4800	60	
PAP1029S1	42-41.2855-	75.1576-4-50-000	4.6	25	0.02	1.3	5	10	10200	60	2600	40	1700	1.2	3800	10	
PAP1030S1	42-41.2798-	75.2295-4-50-000	7.2	30	0.04	3.5	12	30	23500	100	27900	7760	1400	4.4	M	40	
PAP1031S1	42-41.2716-	75.2528-4-50-000	7.2	59	0.34	5.2	15	48	36800	130	20500	850	2400	6.4	6100	50	
PAP1032S1	42-41.2706-	75.3023-4-50-000	7.5	90	0.48	3.5	11	23	30700	100	13300	1420	5200	4.6	7400	60	
PAP1033S1	42-41.3192-	75.3030-4-50-000	8.4	43	0.12	3.7	12	30	34200	110	25800	1890	4100	7.5	M	40	
PAP1034S1	42-41.3253-	75.2528-4-50-000	7.5	48	0.14	4.5	11	48	20500	130	7800	380	2400	3.1	5900	30	
PAP1035S1	42-41.3165-	75.1967-4-50-000	5.9	35	0.06	4.0	11	37	25600	100	9600	2260	3000	4.1	6900	50	
PAP1036S1	42-41.3112-	75.1590-4-50-000	5.1	22	0.02	2.6	8	19	23800	70	9600	3540	3400	3.4	4000	30	
PAP1037S1	42-41.3095-	75.1146-4-50-000	5.8	70	0.12	1.8	5	6	24000	30	5200	300	3500	3.2	2700	40	
PAP1038S1	42-41.3253-	75.0622-4-50-000	8.8	60	0.16	3.4	10	25	M	70	22500	9110	5500	5.1	M	40	
PAP1039S1	42-41.3222-	75.0006-4-50-000	5.9	25	0.12	3.1	9	23	45500	70	17200	730	8100	5.2	6100	50	
PAP1040S1	42-41.3115-	74.9552-4-50-000	6.1	108	0.84	3.4	8	11	M	60	22500	5290	M	6.5	4400	60	
PAP1041S1	42-41.2979-	74.9076-4-50-000	6.6	45	0.18	3.3	9	28	27400	110	25400	6310	3800	5.4	5200	20	
PAP1042S1	42-41.3244-	74.8648-4-50-000	8.8	50	0.30	5.6	8	11	31500	40	23600	5700	2500	5.5	3700	50	
PAP1043S1	42-41.3209-	74.8241-4-50-000	6.7	50	0.20	2.9	11	28	46000	80	29100	2920	5100	8.1	5600	80	
PAP1044S1	42-41.3587-	74.7338-4-50-000	7.4	70	0.28	2.2	8	16	16400	50	5600	70	5000	2.5	3700	20	

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PAP1045S1	42-41.3517- 74.7668-4-50-000	7.8	42	0.16	3.0	7	22	M	50	21900	1350	5700	7.2	5200	70
PAP1046S1	42-41.3481- 74.8117-4-50-000	7.7	50	0.30	2.9	9	25	29500	70	18200	710	3600	6.2	M	50
PAP1047S1	42-41.3532- 74.8512-4-50-000	6.6	71	0.22	3.4	14	35	17300	160	10600	270	4500	3.7	4000	20
PAP1048S1	42-41.3511- 74.9012-4-50-000	5.7	47	0.06	3.4	8	32	20400	80	10400	1410	5100	3.1	4200	20
PAP1049S1	42-41.3498- 74.9656-4-50-000	6.9	48	0.14	4.2	12	39	24300	80	11400	580	6400	4.1	7000	40
PAP1050S1	42-41.3479- 75.0096-4-50-000	6.9	50	0.16	2.5	8	19	12000	50	6700	280	3800	1.8	1200	10
PAP1051S1	42-41.3544- 75.0712-4-50-000	6.0	45	0.04	2.7	10	16	21400	70	4900	230	4900	3.3	4200	20
PAP1052S1	42-41.3535- 75.0954-4-50-000	7.0	45	0.04	3.5	10	36	27100	90	7000	170	6900	2.9	6600	30
PAP1053S1	42-41.3400- 75.1379-4-50-000	6.0	30	0.02	6.4	20	114	29300	190	11800	220	7400	5.2	5000	30
PAP1054S1	42-41.3458- 75.2285-4-50-000	7.2	40	0.10	5.2	19	82	23300	190	10200	280	3300	5.1	5200	30
PAP1055S1	42-41.3415- 75.2528-4-50-000	6.7	48	0.06	3.0	10	25	36500	80	22300	840	2100	6.1	6100	60
PAP1056S1	42-41.3371- 75.3134-4-50-000	6.8	100	0.30	7.7	21	109	23800	220	19800	640	4400	4.3	M	40
PAP1057S1	42-41.3865- 75.2372-4-50-000	6.1	45	0.14	M	M	M	M	M	M	M	M	M	M	M
PAP1058S1	42-41.3919- 75.1918-4-50-000	6.0	35	0.08	4.2	10	50	28300	100	12800	780	6600	3.5	6200	40
PAP1059S1	42-41.3770- 75.1626-4-50-000	6.3	45	0.10	5.6	14	73	28500	150	11600	480	6100	4.8	M	30
PAP1060S1	42-41.3936- 75.1101-4-50-000	5.9	55	0.10	2.2	5	17	13300	50	3300	440	3700	1.8	2600	10
PAP1061S1	42-41.3749- 75.0560-4-50-000	6.7	33	0.06	4.7	12	75	21100	130	5300	130	7600	3.4	7000	30
PAP1062S1	42-41.3852- 75.0293-4-50-000	7.4	60	0.10	6.6	16	78	35600	150	13600	190	6700	5.5	6000	40
PAP1063S1	42-41.3999- 74.9680-4-50-000	7.3	85	0.18	3.8	9	27	31700	80	16400	2470	6300	4.5	3900	30
PAP1064S1	42-41.3968- 74.9100-4-50-000	6.4	45	0.04	5.1	20	94	23200	220	21000	1520	5700	5.9	5600	30
PAP1065S1	42-41.3723- 74.8435-4-50-000	6.5	100	0.18	2.9	10	29	19900	90	8100	400	6400	2.7	4600	30
PAP1066S1	42-41.4043- 74.7993-4-50-000	6.6	32	0.12	2.3	6	20	14800	60	7300	170	3500	3.5	3100	20
PAP1067S1	42-41.4080- 74.7507-4-50-000	6.5	36	0.04	3.7	6	45	17500	90	13200	900	3500	3.0	4500	30
PAP1068S1	42-41.3938- 74.7263-4-50-000	6.5	85	0.34	3.4	12	54	20900	120	20500	1880	5200	4.5	5500	40
PAP1069S1	42-41.4109- 74.7651-4-50-000	6.8	39	0.14	2.7	6	23	23800	50	16100	1040	3300	4.6	M	30
PAP1070S1	42-41.4282- 74.8272-4-50-000	7.2	50	0.22	4.0	10	24	30200	90	18300	900	4200	5.0	5100	50
PAP1071S1	42-41.4153- 75.2253-4-50-000	6.8	40	0.04	10.4	26	157	21600	210	14500	280	4300	4.3	8800	40
PAP1072S1	42-41.4285- 74.9092-4-50-000	7.5	32	0.08	4.0	10	40	31100	90	18000	1520	5900	4.8	M	30
PAP1073S1	42-41.4292- 74.9674-4-50-000	6.9	48	0.18	4.6	11	41	32900	80	14300	1080	7700	4.3	M	30
PAP1074S1	42-41.4238- 75.0155-4-50-000	6.3	40	0.12	3.6	15	33	37600	130	22500	1870	5500	7.4	5600	40
PAP1075S1	42-41.4223- 75.0749-4-50-000	5.9	42	0.08	2.3	7	11	41500	60	14000	830	5500	5.0	4300	50
PAP1076S1	42-41.4324- 75.1091-4-50-000	5.6	48	0.10	4.7	11	55	31100	120	15300	870	6700	4.3	M	40
PAP1077S1	42-41.4366- 75.1538-4-50-000	6.2	48	0.12	3.9	14	50	M	160	27600	10750	7100	6.1	M	30
PAP1078S1	42-41.4200- 75.1886-4-50-000	5.9	49	0.14	5.6	15	74	22600	130	14200	900	5200	4.1	6000	30
PAP1079S1	42-41.4756- 75.1683-4-50-000	5.9	111	0.34	3.8	12	25	M	80	28400	8420	6700	7.7	4900	80
PAP1080S1	42-41.4643- 75.1300-4-50-000	6.1	60	0.28	4.7	12	59	28200	110	11600	1600	8600	4.1	7200	30
PAP1081S1	42-41.4630- 75.0533-4-50-000	5.9	45	0.18	4.1	12	35	31800	100	17500	1710	6200	4.3	5000	30
PAP1082S1	42-41.4768- 75.0079-4-50-000	6.8	55	0.20	5.1	22	77	33400	190	24100	770	6700	7.3	M	40
PAP1083S1	42-41.4788- 74.9414-4-50-000	6.7	35	0.08	4.2	12	24	55000	80	24900	8490	7800	6.0	6900	80
PAP1084S1	42-41.4663- 74.9203-4-50-000	7.1	56	0.10	2.0	6	16	15400	50	8900	1280	4400	2.6	3200	20
PAP1085S1	42-41.5111- 75.0164-4-50-000	6.7	40	0.12	3.9	13	31	M	100	29400	3160	6500	9.0	4500	50
PAP1086S1	42-41.4986- 75.0701-4-50-000	6.0	78	0.12	5.3	17	67	31800	120	10000	940	9100	3.3	6800	30
PAP1087S1	42-41.5047- 75.1149-4-50-000	5.6	48	0.14	3.8	11	27	36900	90	12000	3440	8400	4.4	5200	40
PAP1088S1	42-41.4906- 75.1564-4-50-000	7.0	50	0.28	4.7	18	73	30900	150	25700	610	7100	6.5	5600	40
PAP1089S1	42-41.5519- 75.1025-4-50-000	7.2	48	0.20	3.5	9	33	35700	70	8200	480	12800	3.8	7100	30
PAP1090S1	42-41.5461- 75.0505-4-50-000	7.5	33	0.38	3.6	14	33	29000	110	14500	1710	7800	4.6	5200	30
PAP1091S1	42-41.5359- 75.0343-4-50-000	7.2	46	0.46	4.4	13	41	M	140	33300	2390	6500	7.8	M	50
PAP1092S1	42-41.5687- 75.0757-4-50-000	7.1	50	0.22	6.5	17	68	51400	140	14400	1660	10500	5.2	7600	60
PASS001S1	42-41.6539- 75.8238-4-50-000	7.4	130	0.56	4.0	18	42	44400	130	22800	1030	11600	7.1	6900	50
PASS002S1	42-41.7080- 75.8129-4-50-000	7.9	80	0.42	3.4	12	28	34500	80	21300	570	6600	6.6	M	50
PASS003S1	42-41.7045- 75.7838-4-50-000	7.2	75	0.48	3.7	12	24	45200	90	25400	2090	8200	6.7	4900	60
PASS004S1	42-41.7335- 75.8174-4-50-000	7.4	90	0.40	4.2	12	41	38100	120	14900	390	11700	4.2	6500	40
PASS005S1	42-41.7700- 75.8181-4-50-000	7.2	110	0.48	4.8	14	62	29100	130	14600	320	7900	4.9	5000	30

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PASS006S1	42-41.7404-75.7581-4-50-000	7.5	140	0.44	3.8	17	22	57000	140	39800	1710	8300	12.4	5900	80
PASS007S1	42-41.7809-75.7464-4-50-000	7.4	130	0.54	3.7	10	24	40400	90	17700	700	7000	6.4	M	50
PASS008S1	42-41.7595-75.6918-4-50-000	7.5	80	0.30	3.6	9	31	28900	90	14300	310	7300	4.8	5000	30
PASS009S1	42-41.7355-75.7142-4-50-000	7.5	90	0.40	4.7	14	40	53500	110	20100	1850	11100	5.8	7600	60
PASS010S1	42-41.7105-75.7132-4-50-000	7.6	110	0.34	4.9	11	47	31200	130	12300	570	7600	4.1	M	30
PASS011S1	42-41.6572-75.7286-4-50-000	7.7	80	0.44	4.4	16	33	40200	130	26500	1150	6900	8.4	5500	50
PASS012S1	42-41.6642-75.7549-4-50-000	7.6	120	0.56	2.9	11	23	39300	100	12800	550	10600	4.2	6400	40
PASS013S1	42-41.7358-75.6667-4-50-000	8.2	90	0.36	5.5	13	64	29800	120	13500	290	7800	4.2	5200	30
PASS014S1	42-41.7396-75.6319-4-50-000	7.9	70	0.30	4.2	19	52	29600	170	21200	520	6600	6.2	5200	30
PASS015S1	42-41.7094-75.6060-4-50-000	7.8	90	0.38	3.9	12	38	37400	120	17600	690	10900	4.8	7600	50
PASS016S1	42-41.6996-75.6665-4-50-000	8.1	140	0.42	4.2	12	41	26900	100	11300	420	7000	3.7	4700	30
PASS017S1	42-41.6605-75.6510-4-50-000	7.8	110	0.32	3.4	11	17	40000	80	20600	900	6900	6.7	M	50
PASS018S1	42-41.6532-75.6079-4-50-000	7.8	130	0.52	5.5	14	72	35100	190	12900	740	9900	5.2	7700	40
PASS019S1	42-41.6709-75.5650-4-50-000	7.7	110	0.28	3.7	11	24	M	90	16200	1250	6800	5.5	5000	40
PASS020S1	42-41.6740-75.5269-4-50-000	7.9	60	0.16	7.0	18	89	26100	210	10800	270	6400	3.7	6200	30
PASS021S1	42-41.7082-75.5217-4-50-000	7.7	100	0.40	5.5	17	70	28200	230	12800	590	8800	3.9	9400	50
PASS022S1	42-41.7151-75.4836-4-50-000	8.0	80	0.28	3.7	10	29	29100	110	13800	250	4700	4.5	5500	40
PASS023S1	42-41.7399-75.5094-4-50-000	8.2	50	0.24	5.2	20	74	25200	260	13600	180	5600	5.0	3200	30
PASS024S1	42-41.7654-75.5669-4-50-000	8.1	80	0.28	5.5	15	29	58300	120	26600	1430	9200	7.2	7000	80
PASS025S1	42-41.7403-75.5690-4-50-000	8.2	60	0.22	4.5	13	41	30100	150	15400	640	7400	5.1	5700	30
PASS026S1	42-41.7132-75.5865-4-50-000	8.4	80	0.28	4.2	12	35	32300	120	16800	1250	9300	4.3	6200	40
PASS027S1	42-41.8088-75.8055-4-50-000	5.8	120	0.46	4.2	10	31	38200	90	23900	1060	8100	4.9	M	40
PASS028S1	42-41.8594-75.8185-4-50-000	6.9	110	0.36	3.2	13	23	41400	110	32800	900	8000	9.3	5200	50
PASS029S1	42-41.8571-75.7767-4-50-000	6.6	100	0.30	4.2	14	38	36800	120	26000	920	7500	4.8	2900	40
PASS030S1	42-41.8835-75.7630-4-50-000	7.2	90	0.46	3.7	15	27	37400	100	21200	980	8100	6.0	4500	40
PASS031S1	42-41.8923-75.8319-4-50-000	6.6	70	0.20	2.8	10	17	38100	70	17400	500	10100	5.0	5900	50
PASS032S1	42-41.9279-75.7947-4-50-000	6.6	75	0.32	3.8	16	29	43700	150	35500	2370	7000	11.1	M	50
PASS033S1	42-41.8517-75.7197-4-50-000	5.5	100	0.40	3.8	10	23	40700	90	23300	1030	7100	6.8	4500	50
PASS034S1	42-41.8126-75.7463-4-50-000	6.8	110	0.62	3.7	10	31	51600	100	20400	1040	11700	5.9	6700	50
PASS035S1	42-41.8158-75.7115-4-50-000	6.3	75	0.40	5.2	14	49	33600	130	15800	630	8600	4.8	5200	40
PASS036S1	42-41.7778-75.6622-4-50-000	6.9	100	0.40	4.0	10	34	32300	100	15100	220	7500	5.0	4700	30
PASS037S1	42-41.8040-75.6548-4-50-000	6.3	90	0.40	4.1	7	33	31300	70	16900	550	6600	4.5	M	30
PASS038S1	42-41.7682-75.6249-4-50-000	6.6	60	0.24	3.6	9	29	35800	90	19400	830	7800	5.7	6100	40
PASS039S1	42-41.8119-75.5724-4-50-000	6.8	100	0.42	3.4	7	36	28400	90	15600	830	7700	4.9	6100	40
PASS040S1	42-41.9564-75.6336-4-50-000	6.6	55	0.24	3.1	7	19	33400	70	17000	700	5300	5.5	M	40
PASS041S1	42-41.9692-75.6702-4-50-000	6.7	70	0.26	3.3	13	29	43800	110	34600	580	5800	11.2	5200	60
PASS042S1	42-41.9940-75.6698-4-50-000	6.7	110	0.44	3.5	11	18	72200	90	34500	2780	8300	10.9	7100	90
PASS043S1	42-41.9671-75.5730-4-50-000	7.0	60	0.22	3.9	8	31	26800	100	14800	340	5200	4.4	M	30
PASS044S1	42-41.9678-75.5057-4-50-000	7.0	60	0.36	4.1	13	44	32700	140	21500	650	5500	6.8	5200	40
PASS045S1	42-41.9223-75.5154-4-50-000	7.0	60	0.30	4.3	10	28	39400	110	22800	830	6500	6.6	5200	40
PASS046S1	42-41.8932-75.5629-4-50-000	7.1	90	0.36	4.2	12	39	41100	100	10800	280	9700	4.7	7600	50
PASS047S1	42-41.9330-75.5686-4-50-000	6.4	70	0.34	3.8	10	29	33600	80	20400	840	6200	6.2	1700	40
PASS048S1	42-41.9314-75.5976-4-50-000	6.9	80	0.30	4.0	11	29	M	110	30700	60	M	8.1	M	M
PASS049S1	42-41.8918-75.5968-4-50-000	7.8	110	0.24	3.8	10	24	63300	90	414900	1480	10200	144.7	7900	80
PASS050S1	42-41.8496-75.6364-4-50-000	7.1	80	0.22	4.6	14	55	26000	160	18100	320	7500	5.4	1300	30
PASS051S1	42-41.8583-75.6625-4-50-000	7.2	120	0.28	3.5	12	22	M	90	27400	1290	7000	8.2	5600	50
PASS052S1	42-41.8599-75.5800-4-50-000	7.4	100	0.36	4.8	14	48	37500	140	22700	770	6900	6.8	5200	50
PASS053S1	42-41.8084-75.5997-4-50-000	7.6	45	0.16	4.4	11	45	36400	110	15900	1810	7600	5.4	6200	40
PASS054S1	42-41.7844-75.5040-4-50-000	7.5	70	0.28	5.5	17	62	29200	190	17100	860	5400	4.8	M	40
PASS055S1	42-41.8032-75.5109-4-50-000	7.5	50	0.10	3.3	10	17	45500	100	20200	730	6000	6.2	6800	60
PASS056S1	42-41.8478-75.5060-4-50-000	7.2	40	0.16	4.2	11	35	30700	120	18200	2110	5500	4.7	5400	30
PASS057S1	42-41.8882-75.5261-4-50-000	7.3	40	0.16	3.8	11	37	31100	110	17600	1370	8400	4.8	6200	40
PASS135S1	42-41.8973-75.7071-4-50-000	9.5	100	0.60	6.1	16	71	M	160	20100	950	7300	7.7	5300	40

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	TH	HF	AL	CE	FE	MN	NA	SC	TI	V
*****					UM/CM	MEQ/L	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
PASS136S1	42-41.8772-	75.6829-4-50-000	9.0	60	0.34	3.5	7	22	48100	70	24700	3550	9400	5.5	6600	60	60
PASS137S1	42-41.9314-	75.6424-4-50-000	9.5	110	0.24	3.6	15	18	M	80	33700	M	6200	10.2	M	M	M
PASS138S1	42-41.9415-	75.7079-4-50-000	9.3	50	0.22	4.1	14	57	39400	150	23600	510	8400	7.4	6100	60	60
PASS139S1	42-41.9715-	75.7191-4-50-000	8.8	110	0.42	3.3	18	27	40500	110	36800	640	6200	10.7	M	60	60
PASS140S1	42-41.9275-	75.7718-4-50-000	9.3	70	0.28	3.6	13	31	34100	100	22400	490	7200	7.1	M	40	40
PASS141S1	42-41.9574-	75.8215-4-50-000	9.8	90	0.32	3.6	11	20	41600	80	23100	520	6800	7.6	5000	50	50
PASS142S1	42-41.9774-	75.7575-4-50-000	8.0	110	0.60	3.4	11	28	41800	80	20000	590	8000	5.9	6500	60	60
PASS143S1	42-41.9807-	75.8677-4-50-000	7.4	140	0.50	3.5	11	27	36200	90	20000	990	7300	5.7	5200	40	40
PASS144S1	42-41.9830-	75.9294-4-50-000	7.4	115	0.33	3.3	9	22	35800	70	22000	1290	6400	7.0	M	40	40
PASS145S1	42-41.9501-	75.8351-4-50-000	7.5	68	0.26	3.5	13	22	35400	90	24300	650	7200	7.7	4900	50	50
PASS146S1	42-41.8523-	75.8581-4-50-000	7.4	145	0.87	3.6	11	19	47100	90	31500	2110	7600	7.9	5100	50	50
PASS147S1	42-41.8035-	75.8389-4-50-000	7.6	110	0.60	3.8	13	31	M	110	27700	780	7600	8.0	4700	40	40
PASS148S1	42-41.8492-	75.9519-4-50-000	7.3	100	0.53	3.5	15	30	36400	130	33200	630	8300	9.2	M	40	40
PASS149S1	42-41.8890-	75.9846-4-50-000	6.9	80	0.46	3.3	9	27	30700	90	15800	670	7100	5.2	M	40	40
PASS150S1	42-41.9657-	75.9649-4-50-000	6.4	80	0.33	3.1	9	23	53500	100	25100	890	9200	6.4	6700	70	70
PASS152S1	42-41.9277-	75.9913-4-50-000	7.3	100	0.47	3.2	9	20	47300	90	28500	1020	7500	7.9	4900	60	60
PASS168S1	42-41.8424-	75.8959-4-50-000	7.6	128	0.67	3.7	12	28	36100	90	19200	650	7600	6.3	4600	40	40
PASS169S1	42-41.8891-	75.8939-4-50-000	7.4	95	0.47	4.5	19	49	63200	170	36000	1360	11900	9.8	7600	70	70
PASS170S1	42-41.9161-	75.9287-4-50-000	7.3	70	0.30	3.5	9	29	39900	90	20700	740	7700	5.9	6600	50	50
PASS171S1	42-41.9199-	75.8921-4-50-000	7.4	70	0.37	3.1	11	22	37800	100	21400	560	7300	6.4	M	50	50
PASS172S1	42-41.9178-	75.8519-4-50-000	7.4	85	0.42	3.1	10	17	59400	80	24300	960	10900	7.1	7000	80	80
PASS173S1	42-41.8847-	75.8423-4-50-000	7.6	110	0.55	3.8	11	27	37400	100	20900	1260	8100	6.2	5000	50	50
PASS174S1	42-41.7711-	75.8478-4-50-000	7.4	104	0.60	3.7	14	25	47100	100	37700	1030	7600	10.5	M	60	60
PASS175S1	42-41.7487-	75.8612-4-50-000	7.3	120	0.73	3.8	14	28	56900	120	22400	1460	12300	3.6	7000	60	60
PASS176S1	42-41.7167-	75.8715-4-50-000	7.8	100	0.57	2.7	8	16	M	60	13900	510	7700	4.4	M	30	30
PASS177S1	42-41.6558-	75.8653-4-50-000	7.5	182	1.00	3.8	15	37	38400	130	31000	1150	7300	8.8	M	40	40
PASS179S1	42-41.6639-	75.9695-4-50-000	7.9	115	0.77	3.1	12	16	39300	90	27000	970	8300	7.2	4800	50	50
PASS181S1	42-41.7085-	75.9992-4-50-000	8.1	100	0.67	3.8	12	19	75800	110	36000	1650	11900	9.5	7200	100	100
PASS182S1	42-41.7756-	75.9649-4-50-000	7.7	88	0.50	3.2	11	19	48400	100	38800	1340	7700	10.6	5100	60	60
PASS183S1	42-41.7506-	75.9987-4-50-000	7.6	90	0.50	3.5	14	44	M	130	30700	1070	10900	8.0	7300	60	60
PASS188S1	42-41.8018-	75.9919-4-50-000	8.0	80	0.47	3.8	13	31	M	100	22300	860	8200	7.1	4900	50	50
PASS189S1	42-41.8234-	75.9123-4-50-000	7.9	180	0.84	3.9	11	28	41800	100	23200	1170	8100	7.0	M	50	50
PASS190S1	42-41.8149-	75.9627-4-50-000	7.8	90	0.47	4.9	19	64	55000	180	34800	1090	10900	10.3	6300	60	60
PASS191S1	42-41.7927-	75.9284-4-50-000	7.6	122	0.63	3.9	12	27	53200	110	35500	1090	8500	8.5	5800	60	60
PASS192S1	42-41.7258-	75.9604-4-50-000	7.5	130	0.77	4.9	14	49	42400	140	21900	900	8600	7.1	M	40	40
PASS193S1	42-41.7311-	75.9310-4-50-000	7.5	105	0.71	4.0	11	37	40400	120	19500	1110	8900	5.2	6100	40	40
PASS194S1	42-41.7020-	75.8965-4-50-000	7.8	112	0.90	M	M	M	M	M	M	M	M	M	M	M	M
PASS195S1	42-41.6639-	75.9185-4-50-000	7.5	170	0.91	M	M	M	M	M	M	M	M	M	M	M	M
PAW0001S1	42-41.5058-	75.9856-4-50-000	7.8	98	0.56	2.9	9	17	33500	70	20300	640	6700	5.5	5700	40	40
PAW0003S1	42-41.4758-	75.9991-4-50-000	7.5	60	0.32	M	M	M	M	M	M	M	M	M	M	M	M
PAW0004S1	42-41.5246-	75.9653-4-50-000	7.3	108	0.45	M	M	M	M	M	M	M	M	M	M	M	M
PAW0005S1	42-41.4509-	75.9650-4-50-000	7.2	94	0.50	M	M	M	M	M	M	M	M	M	M	M	M
PAW0006S1	42-41.4402-	75.8925-4-50-000	7.5	110	0.68	3.4	8	28	29100	90	14900	1010	6800	4.3	M	30	30
PAW0007S1	42-41.4151-	75.8852-4-50-000	7.6	105	0.44	3.3	9	22	28700	80	14400	600	6500	4.6	5500	30	30
PAW0008S1	42-41.4427-	75.8467-4-50-000	7.4	180	0.73	4.4	17	50	24300	140	16600	460	6900	4.8	6000	30	30
PAW0009S1	42-41.4762-	75.8302-4-50-000	7.7	215	0.93	4.9	16	71	28500	140	21900	400	7700	5.8	6100	30	30
PAW0010S1	42-41.5078-	75.8103-4-50-000	7.7	130	0.43	4.2	11	31	M	80	22200	2490	8200	5.4	M	30	30
PAW0011S1	42-41.5136-	75.8786-4-50-000	7.7	170	0.73	4.3	10	23	30100	90	16800	1010	7900	5.0	5700	40	40
PAW0013S1	42-41.4636-	75.8731-4-50-000	7.8	98	1.00	4.0	11	27	45600	110	30000	1290	7400	8.1	6700	60	60
PAW0014S1	42-41.4794-	75.9091-4-50-000	7.5	140	0.80	4.0	12	39	31100	120	19100	670	6400	5.2	5500	40	40
PAW0015S1	42-41.5145-	75.9614-4-50-000	7.9	62	0.32	M	M	M	M	M	M	M	M	M	M	M	M
PAW0017S1	42-41.3981-	75.9777-4-50-000	7.3	62	0.30	3.7	11	35	27300	110	17900	1050	6000	1.8	2600	40	40
PAW0018S1	42-41.5858-	75.8189-4-50-000	7.4	130	0.77	2.8	11	17	46200	90	26300	670	8400	7.3	6500	60	60

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TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PAW0026S1	42-41.5641-75.9183-4-50-000	7.1	32	0.08	3.7	10	34	29400	80	24800	630	2100	6.7	5300	50
PAW0034S1	42-41.5195-75.9571-4-50-000	4.8	30	0.00	3.5	10	31	36600	90	32200	760	1000	10.0	5400	60
PAW0071S1	42-41.5762-75.9730-4-50-000	7.2	300	1.04	3.6	10	22	52600	100	21300	450	10600	7.2	8600	70
PAW0078S1	42-41.6269-75.9639-4-50-000	6.5	120	0.52	3.7	15	45	37200	130	18500	440	10100	6.0	6800	40
PAW0090S1	42-41.5531-75.9201-4-50-000	6.3	120	0.52	4.0	12	29	53100	90	22500	2050	11500	6.8	8000	60
PAW0091S1	42-41.5826-75.9145-4-50-000	7.3	120	0.32	3.6	11	29	30100	100	16500	640	7800	4.3	M	30
PAW0092S1	42-41.5888-75.8652-4-50-000	7.2	110	0.48	3.9	10	27	33900	90	17400	690	8000	1.3	5700	40
PAW0093S1	42-41.6186-75.8457-4-50-000	7.6	130	0.52	4.6	9	44	29800	120	16700	470	7000	4.2	5600	30
PAW0094S1	42-41.6176-75.8088-4-50-000	7.3	70	0.48	3.5	12	23	46800	90	19900	620	11500	5.1	7600	50
PAW0095S1	42-41.6304-75.7699-4-50-000	8.1	150	0.60	3.6	28	55	38300	260	52800	1070	6300	18.5	M	50
PAW0098S1	42-41.5857-75.8190-4-50-000	7.6	120	0.52	4.2	11	30	30500	90	11200	520	9900	3.7	5300	30
PAWY001S1	42-41.4852-75.2213-4-50-000	7.7	80	0.50	4.0	11	36	36700	110	16700	440	8600	5.4	5300	40
PAWY002S1	42-41.5035-75.2444-4-50-000	7.2	125	0.60	4.3	12	31	59600	80	22500	4380	10100	6.9	7800	60
PAWY003S1	42-41.5067-75.3245-4-50-000	8.1	85	0.57	3.6	12	41	27500	130	17000	1340	6800	4.9	4100	30
PAWY004S1	42-41.5013-75.3498-4-50-000	7.7	50	0.30	4.3	10	24	39400	90	19900	6210	7900	2.2	4600	40
PAWY005S1	42-41.4941-75.4101-4-50-000	7.9	50	0.28	4.1	32	91	33400	270	56900	450	7900	1.8	6100	40
PAWY006S1	42-41.4942-75.4374-4-50-000	7.7	95	0.60	3.0	8	13	38400	70	20000	950	5400	6.1	4100	50
PAWY007S1	42-41.4729-75.4002-4-50-000	7.3	130	0.96	4.8	12	47	37000	110	12900	240	12000	3.9	7900	40
PAWY008S1	42-41.4033-75.4379-4-50-000	7.8	140	0.68	3.4	11	27	27700	80	12400	230	7300	4.7	4300	20
PAWY009S1	42-41.3846-75.3877-4-50-000	8.3	120	0.68	4.1	9	39	23000	90	7400	210	7300	3.0	M	20
PAWY010S1	42-41.3758-75.3444-4-50-000	8.3	75	0.44	4.8	13	41	33900	90	12700	1810	7900	3.9	6100	40
PAWY011S1	42-41.3909-75.3247-4-50-000	8.3	100	0.40	3.4	8	28	33600	90	13900	890	8600	3.7	6300	40
PAWY012S1	42-41.4160-75.3727-4-50-000	7.8	70	0.34	2.7	22	57	29700	170	53000	400	5700	15.0	M	40
PAWY013S1	42-41.4262-75.2908-4-50-000	7.8	70	0.30	3.7	12	25	37800	90	24600	690	7500	6.3	5000	50
PAWY014S1	42-41.4380-75.2460-4-50-000	7.8	55	0.28	5.7	11	60	42800	90	19400	930	8600	4.9	7600	50
PAWY016S1	42-41.4533-75.2392-4-50-000	6.7	64	0.26	4.6	12	60	30500	120	24000	1750	6600	5.9	4300	40
PAWY017S1	42-41.4449-75.3069-4-50-000	7.2	80	0.42	3.5	8	27	29900	110	14200	490	7100	4.0	5500	30
PAWY018S1	42-41.4613-75.3561-4-50-000	7.1	153	0.76	3.9	9	21	M	110	26800	4510	8800	7.4	7100	70
PAWY019S1	42-41.5323-75.4294-4-50-000	7.5	75	0.44	4.9	34	145	29800	320	44100	470	5800	13.4	M	40
PAWY020S1	42-41.5291-75.4037-4-50-000	7.6	100	0.48	3.0	7	26	24300	80	10600	240	6800	3.5	4300	30
PAWY021S1	42-41.5358-75.3568-4-50-000	7.6	96	0.26	4.5	10	37	33300	100	13500	970	10200	3.5	5500	40
PAWY022S1	42-41.5420-75.3042-4-50-000	7.6	100	0.52	5.3	15	46	39600	130	24300	1090	11100	6.7	M	40
PAWY023S1	42-41.5489-75.2504-4-50-000	7.9	193	1.36	5.5	15	43	45200	110	22000	1570	7400	7.9	5900	70
PAWY024S1	42-41.5464-75.2109-4-50-000	8.0	121	0.42	4.3	33	121	42300	260	57500	720	10000	14.8	6400	60
PAWY025S1	42-41.6023-75.1452-4-50-000	7.4	102	0.36	5.7	14	60	31800	130	20500	550	6900	4.9	5000	40
PAWY026S1	42-41.6211-75.1013-4-50-000	7.3	76	0.24	4.3	17	42	74900	140	37000	2020	9800	10.6	7800	80
PAWY027S1	42-41.6142-75.0743-4-50-000	7.7	80	0.32	4.6	13	39	36500	100	24100	640	7600	6.3	M	40
PAWY028S1	42-41.5802-75.1241-4-50-000	7.8	112	0.40	4.6	12	42	38300	100	18600	340	8500	6.4	6000	40
PAWY029S1	42-41.5491-75.1556-4-50-000	5.7	33	0.06	3.2	4	27	21000	60	8700	580	6600	3.5	4500	30
PAWY030S1	42-41.5689-75.1622-4-50-000	6.0	58	0.20	5.0	13	51	29900	100	14900	340	9000	4.2	5400	30
PAWY031S1	42-41.5751-75.1984-4-50-000	7.0	52	0.40	4.9	10	55	30500	80	14400	300	10600	4.5	4800	30
PAWY032S1	42-41.5777-75.2961-4-50-000	7.3	121	0.70	4.8	17	49	34700	130	18600	1010	10200	5.9	6300	50
PAWY033S1	42-41.5987-75.3528-4-50-000	7.2	52	0.28	2.9	5	7	29700	50	11900	650	6100	4.1	4300	40
PAWY034S1	42-41.5588-75.3705-4-50-000	7.5	71	0.48	4.5	17	66	26000	150	8400	180	8200	4.7	4500	20
PAWY035S1	42-41.5553-75.4091-4-50-000	7.7	151	0.84	3.2	10	33	18500	80	5800	250	4400	3.5	3700	20
PAWY036S1	42-41.5988-75.4133-4-50-000	8.2	132	0.60	4.7	13	35	51100	100	25200	1310	8300	7.1	8300	70
PAWY037S1	42-41.6333-75.4037-4-50-000	7.6	61	0.36	4.9	11	41	34500	130	19100	520	6700	5.8	M	40
PAWY038S1	42-41.6497-75.4427-4-50-000	8.0	36	0.06	3.1	7	12	37000	70	19100	1040	3500	6.4	5300	40
PAWY039S1	42-41.6800-75.4498-4-50-000	7.2	60	0.38	3.5	10	21	34400	80	16500	540	2400	6.2	5300	50
PAWY040S1	42-41.7107-75.4426-4-50-000	7.6	59	0.24	4.4	15	35	41200	120	34700	1170	4100	10.0	5200	60
PAWY041S1	42-41.7207-75.4157-4-50-000	7.2	60	0.30	3.3	10	29	18700	130	15700	340	3100	3.5	3700	30
PAWY042S1	42-41.6898-75.3969-4-50-000	7.6	104	0.48	3.3	9	27	23600	80	13800	480	4900	4.1	4400	30
PAWY043S1	42-41.6437-75.3468-4-50-000	7.6	90	0.72	7.3	16	93	26900	240	10300	1440	6500	3.8	M	20

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PAWY044S1	42-41.6141-75.3083-4-50-000	8.0	105	0.73	4.2	10	42	26200	120	10200	570	11000	3.1	7000	40
PAWY045S1	42-41.6512-75.3093-4-50-000	8.3	62	0.24	3.2	11	20	M	70	20100	840	7000	5.5	4200	40
PAWY046S1	42-41.6789-75.3391-4-50-000	7.6	205	0.67	7.4	23	99	29300	260	18700	660	5400	5.5	5800	40
PAWY047S1	42-41.7323-75.3383-4-50-000	8.1	76	0.42	4.0	9	29	45000	110	16400	610	8600	4.9	7000	50
PAWY048S1	42-41.7292-75.3010-4-50-000	7.5	120	0.80	2.7	8	19	19000	60	13000	400	3800	3.2	M	30
PAWY049S1	42-41.7129-75.2691-4-50-000	8.0	125	0.64	3.9	12	29	39900	100	23700	1570	6800	6.7	4600	40
PAWY050S1	42-41.6879-75.2921-4-50-000	7.7	80	0.43	4.3	12	44	25900	130	13000	410	5000	4.4	4900	30
PAWY051S1	42-41.5465-75.2634-4-50-000	7.8	102	0.44	4.2	11	31	32000	90	15400	580	6100	4.5	4800	30
PAWY052S1	42-41.5885-75.2554-4-50-000	7.9	78	0.43	9.3	28	136	30600	340	21000	840	5800	5.4	M	40
PAWY053S1	42-41.7139-75.2223-4-50-000	7.8	118	0.28	3.7	10	23	60300	90	25700	1750	8300	6.8	7000	70
PAWY054S1	42-41.6962-75.2119-4-50-000	7.3	125	0.90	5.1	16	48	35200	160	24200	480	6000	5.8	5000	40
PAWY055S1	42-41.6769-75.1615-4-50-000	8.1	90	0.72	4.1	15	41	49400	120	29500	1240	14000	6.1	M	50
PAWY056S1	42-41.6880-75.0941-4-50-000	8.1	110	0.57	5.2	13	51	34900	90	23000	350	9400	5.1	5200	40
PAWY057S1	42-41.7206-75.1437-4-50-000	8.3	85	0.28	M	M	M	M	M	M	M	M	M	M	M
PAWY058S1	42-41.7163-75.1015-4-50-000	7.8	110	0.63	5.2	14	68	31600	100	25000	480	9500	6.2	5200	30
PAWY059S1	42-41.7158-75.0650-4-50-000	8.1	80	0.40	4.0	9	26	M	80	20700	1280	8300	6.1	5800	50
PAWY060S1	42-41.6735-75.0671-4-50-000	7.9	92	0.50	3.8	10	30	38700	90	20700	440	10100	5.7	5300	40
PAWY061S1	42-41.6050-75.2429-4-50-000	6.1	92	0.52	2.3	7	27	20400	100	13900	380	5800	4.0	3700	30
PAWY062S1	42-41.5958-75.2208-4-50-000	6.8	80	0.44	5.6	15	64	29400	150	18900	410	8200	4.4	5200	40
PAWY063S1	42-41.6507-75.1971-4-50-000	6.8	30	0.08	5.4	16	61	45500	120	19200	320	11700	6.7	4900	40
PAWY064S1	42-41.6445-75.1587-4-50-000	7.1	130	0.93	6.1	18	69	44500	130	27200	420	11400	6.5	5600	50
PAWY065S1	42-41.6455-75.1125-4-50-000	7.6	85	0.44	4.6	15	55	39600	130	31500	610	9700	7.9	4900	40
PAWY066S1	42-41.6416-75.0712-4-50-000	7.4	70	0.40	5.4	11	53	42900	80	17300	910	9600	5.3	7400	50
PAWY110S1	42-41.7864-75.4358-4-50-000	7.0	60	0.13	4.0	12	33	39200	120	22100	1620	4100	5.9	6300	60
PAWY111S1	42-41.7462-75.4482-4-50-000	7.2	50	0.20	4.2	11	30	35600	120	20800	1310	4200	6.6	6000	40
PAWY112S1	42-41.7492-75.3152-4-50-000	7.6	78	0.38	3.5	11	20	42600	100	24100	5370	5500	6.4	5500	60
PAWY113S1	42-41.7440-75.3475-4-50-000	8.4	58	0.32	2.6	9	17	27700	70	16300	360	4800	4.3	4100	30
PAWY114S1	42-41.7585-75.4049-4-50-000	8.1	130	0.58	3.9	11	31	47100	110	21900	730	8200	5.6	7500	60
PAWY115S1	42-41.7831-75.4048-4-50-000	7.8	200	1.64	4.3	11	31	31100	120	17000	1520	6300	4.3	6100	30
PAWY116S1	42-41.8091-75.3622-4-50-000	8.0	125	0.56	3.7	9	28	28500	90	17100	950	5400	4.6	6400	40
PAWY117S1	42-41.7907-75.3088-4-50-000	8.1	65	0.30	3.8	10	46	25600	150	15800	290	5200	4.7	M	30
PAWY118S1	42-41.7463-75.2643-4-50-000	8.0	90	0.62	8.1	38	131	37400	390	31600	980	7300	8.1	6700	40
PAWY119S1	42-41.7558-75.1839-4-50-000	7.9	51	0.28	5.5	16	62	41700	150	23500	940	9100	5.3	7400	50
PAWY120S1	42-41.7664-75.1508-4-50-000	7.8	75	0.36	5.9	13	72	21300	130	13600	260	4300	3.7	M	30
PAWY121S1	42-41.7478-75.0604-4-50-000	7.6	60	0.26	3.8	13	39	35000	120	23900	730	6200	6.5	5400	30
PAWY122S1	42-41.7598-75.0940-4-50-000	7.1	80	0.30	3.4	10	20	49100	80	19100	M	8000	5.8	M	60
PAWY123S1	42-41.8042-75.1127-4-50-000	7.3	46	0.22	4.1	10	30	31000	100	17300	1140	3400	4.5	M	40
PAWY124S1	42-41.8248-75.1214-4-50-000	7.1	68	0.30	4.1	15	35	36500	100	23100	650	4600	6.1	5400	40
PAWY125S1	42-41.8233-75.1514-4-50-000	7.1	70	0.48	2.3	6	15	18600	50	11400	810	3300	3.3	4300	40
PAWY126S1	42-41.7991-75.1712-4-50-000	6.2	100	0.32	3.9	12	25	36900	90	21800	690	4200	5.7	4400	40
PAWY127S1	42-41.8612-75.2013-4-50-000	7.2	41	0.30	M	M	M	M	M	M	M	M	M	M	M
PAWY128S1	42-41.8588-75.4623-4-50-000	7.5	125	0.50	M	M	M	M	M	M	M	M	M	M	M
PAWY129S1	42-41.8309-75.4563-4-50-000	7.6	90	0.38	3.4	9	25	42100	110	20200	930	6500	5.6	6900	60
PAWY130S1	42-41.8232-75.3731-4-50-000	6.4	130	0.36	3.1	9	26	25900	120	15700	480	30600	4.6	3400	30
PAWY131S1	42-41.8256-75.3966-4-50-000	6.6	60	0.14	M	M	M	M	M	M	M	M	M	M	M
PAWY132S1	42-41.9034-75.4530-4-50-000	7.2	115	0.50	M	M	M	M	M	M	M	M	M	M	M
PAWY133S1	42-41.8922-75.4075-4-50-000	7.1	70	0.30	M	M	M	M	M	M	M	M	M	M	M
PAWY134S1	42-41.8731-75.4041-4-50-000	7.1	70	0.38	M	M	M	M	M	M	M	M	M	M	M
PAWY135S1	42-41.8663-75.3674-4-50-000	7.3	85	0.48	M	M	M	M	M	M	M	M	M	M	M
PAWY136S1	42-41.8635-75.3066-4-50-000	7.1	60	0.36	4.0	13	22	M	110	36100	590	5100	10.5	5600	50
PAWY137S1	42-41.8197-75.3103-4-50-000	7.0	80	0.50	3.7	9	27	27500	90	13200	880	4200	3.9	M	30
PAWY138S1	42-41.8269-75.2498-4-50-000	6.7	70	0.38	2.8	9	18	21800	60	14300	560	3100	3.6	3100	30
PAWY139S1	42-41.7868-75.2426-4-50-000	6.5	60	0.42	3.9	10	38	23500	110	8600	330	6500	3.5	5900	30

TABLE B-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA - SEDIMENTS-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPM	TH PPM	HF PPM	AL PPM	CE PPM	FE PPM	MN PPM	NA PPM	SC PPM	TI PPM	V PPM
PAWY140S1	42-41.7866- 75.2034-4-50-000	6.6	122	0.66	2.4	9	18	28700	80	27400	740	4200	7.0	3600	40
PAWY141S1	42-41.8905- 75.3396-4-50-000	6.9	102	0.36	3.8	13	34	28900	120	13100	520	3900	4.7	M	30
PAWY142S1	42-41.9604- 75.4705-4-50-000	6.4	85	0.54	3.9	11	21	32600	100	21800	730	4900	6.0	1700	40
PAWY143S1	42-41.9770- 75.3954-4-50-000	7.4	92	0.50	4.3	12	29	M	110	17800	1370	6900	5.8	6400	50
PAWY144S1	42-41.9390- 75.4029-4-50-000	7.8	70	0.32	3.8	11	22	M	100	20100	1260	4300	5.4	M	40
PAWY145S1	42-41.9621- 75.3488-4-50-000	7.2	60	0.44	3.7	9	30	30700	110	19100	690	5600	5.6	5300	40
PAWY146S1	42-41.9482- 75.3497-4-50-000	7.2	60	0.32	3.6	12	23	49200	100	28200	940	6600	8.6	6300	70
PAWY147S1	42-41.9348- 75.2961-4-50-000	7.5	80	0.38	4.4	16	56	32200	170	24800	700	6300	6.5	7200	50
PAWY148S1	42-41.8960- 75.2904-4-50-000	6.5	40	0.24	3.7	10	20	39100	100	26700	1220	4100	7.7	4600	50
PAWY149S1	42-41.8685- 75.2701-4-50-000	7.0	40	0.24	4.0	7	35	31600	120	16100	1270	5600	5.0	6200	40
PAWY150S1	42-41.8211- 75.1939-4-50-000	5.8	95	0.42	3.9	13	29	33500	90	21400	1040	4500	6.3	5000	40

APPENDIX C: Stream Water Reconnaissance Data

Key data reported for stream water sites included:

- water chemistry measurements (pH, conductivity, and alkalinity)
- elemental analyses for U, Al, Br, Cl, Dy, F, Mg, Mn, Na, and V

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FIGURE C-3. Log Histogram and Cumulative Frequency Plot of Bromine Concentrations in Stream Water

SCRANTON 1x2° Sheet
Bromine In Surface Water
569 Values Above D.L.

Bromine concentration - p.p.b.				
+ < 5.9	○ 12.5- 15.6	○ 27.8- 40.0	⊙ 68.9- 82.1	● 150.9- 611.3
* 5.9- 10.3	○ 15.6- 20.6	○ 40.0- 56.3	⊙ 82.1- 100.0	◆ 611.3- 3788.0
• 10.3- 12.5	○ 20.6- 27.8	○ 56.3- 68.9	⊙ 100.0- 150.9	★ > 3788.0

FIGURE C-4. Areal Distribution of Bromine Concentrations in Stream Water

FIGURE C-5. Log Histogram and Cumulative Frequency Plot of Chlorine Concentrations in Stream Water

SCRANTON 1'x2' Sheet
Chlorine In Surface Water
965 Values Above D.L.

Chlorine concentration - p.p.b.

+ < 2900.0	o 4400.0- 4900.0	o 8500.0- 10200.0	o 14800.0- 20300.0	o 38100.0- 56900.0
x 2900.0- 3900.0	o 4900.0- 6100.0	o 10200.0- 12000.0	o 20300.0- 27600.0	o 56900.0- 94500.0
o 3900.0- 4400.0	o 6100.0- 8500.0	o 12000.0- 14800.0	o 27600.0- 38100.0	★ > 94500.0

FIGURE C-6. Areal Distribution of Chlorine Concentrations in Stream Water

FIGURE C-7. Log Histogram and Cumulative Frequency Plot of Fluorine Concentrations in Stream Water

FIGURE C-8. Areal Distribution of Fluorine Concentrations in Stream Water

FIGURE C-9. Log Histogram and Cumulative Frequency Plot of Magnesium Concentrations in Stream Water

FIGURE C-10. Areal Distribution of Magnesium Concentrations in Stream Water

FIGURE C-11. Log Histogram and Cumulative Frequency Plot of Manganese Concentrations in Stream Water

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FIGURE C-13. Log Histogram and Cumulative Frequency Plot of Sodium Concentrations in Stream Water

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FIGURE C-15. Log Histogram and Cumulative Frequency Plot of Vanadium Concentrations in Stream Water

FIGURE C-16. Areal Distribution of Vanadium Concentrations in Stream Water

FIGURE C-17. Log Histogram and Cumulative Frequency Plot of Aluminum Concentrations in Stream Water

SCRANTON 1x2° Sheet
Aluminum In Surface Water
964 Values Above D.L.

Aluminum concentration - p.p.b.

+ < 11.2	o 18.3- 22.0	○ 46.5- 60.1	⊙ 95.7- 129.4	● 226.1- 338.9
x 11.2- 14.8	o 22.0- 30.1	○ 60.1- 76.4	⊙ 129.4- 168.1	◆ 338.9- 663.9
• 14.8- 18.3	o 30.1- 46.5	○ 76.4- 95.7	⊙ 168.1- 226.1	★ > 663.9

FIGURE C-13. Areal Distribution of Aluminum Concentrations in Stream Water

FIGURE C-19. Log Histogram and Cumulative Frequency Plot of
Dysprosium Concentrations in Stream Water

FIGURE C-20. Areal Distribution of Dysprosium Concentrations in Stream Water

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000	
NJBE001R	34-41.0100-	74.0838-4-51-000	5.5	148	0.90	0.006	84	48.6	26800	-0.001	.	.	86.8	10610	0.5	0.04
NJBE002R	34-41.0304-	74.0922-4-51-000	6.3	135	0.90	0.027	31	.	10800	-0.001	.	.	23.8	4500	-0.1	0.20
NJBE003R	34-41.0471-	74.0382-4-51-000	6.4	99	0.54	-0.002	27	.	7500	-0.001	16	.	18.6	3580	0.2	.
NJBE004R	34-41.0622-	74.0837-4-51-000	6.9	160	1.20	0.025	57	97.3	23800	-0.001	.	.	89.7	9500	-0.1	0.16
NJBE005R	34-41.0822-	74.1234-4-51-000	6.8	120	0.58	-0.002	49	10.0	11500	-0.001	.	.	46.8	3440	0.3	.
NJBE006R	34-41.0484-	74.1051-4-51-000	7.1	185	0.30	0.215	77	.	27300	-0.001	51	16250	.	13190	0.8	1.16
NJBE007R	34-41.0563-	74.2137-4-51-000	5.7	40	0.10	M	M	M	M	M	M	M	M	M	M	M
NJBE008P	34-41.0376-	74.1883-4-51-000	5.7	91	0.78	0.024	92	67.9	17700	-0.001	55	.	191.4	6540	0.4	0.26
NJBE009R	34-41.0705-	74.1774-4-51-000	6.8	95	0.90	0.074	53	.	7600	-0.001	16	.	49.7	2910	0.8	0.78
NJBE010R	34-41.0672-	74.2106-4-51-000	7.1	28	0.04	-0.002	154	.	9200	-0.001	136	.	17.2	3200	0.8	.
NJBE011R	34-41.1041-	74.1827-4-51-000	6.5	60	0.04	-0.002	97	.	12700	-0.001	.	.	14.9	4700	-0.1	.
NJMR009R	34-41.0032-	74.3692-4-51-000	6.6	82	0.16	0.022	100	76.5	27900	-0.001	84	.	95.3	9470	-0.1	0.27
NJMR010R	34-41.0490-	74.5188-4-51-000	7.8	91	0.30	-0.002	17	13.7	12600	-0.001	.	.	22.2	4030	0.2	.
NJMR011R	34-41.0261-	74.4819-4-51-000	7.5	51	0.30	0.028	58	253.1	21600	-0.001	42	3900	.	5350	-0.1	0.55
NJMR093R	34-41.0201-	74.5563-4-51-000	5.8	29	0.06	-0.002	53	.	11100	-0.001	42	1490	.	2350	0.3	.
NJPA001R	34-41.1291-	74.2597-4-51-000	6.2	50	0.34	-0.002	61	17.4	6600	-0.001	22	.	21.7	1980	-0.1	.
NJPA002R	34-41.0783-	74.3221-4-51-000	7.1	45	0.26	-0.002	101	112.1	13400	-0.001	61	4880	.	4640	0.3	.
NJPA003R	34-41.0905-	74.2649-4-51-000	7.2	108	1.60	-0.002	18	60.3	17600	-0.001	.	.	44.3	6340	-0.1	.
NJPA004R	34-41.0444-	74.3818-4-51-000	7.1	45	0.18	0.014	66	.	16600	-0.001	43	.	23.0	5770	0.3	0.31
NJPA005R	34-41.0683-	74.3653-4-51-000	5.6	38	0.02	-0.002	158	20.7	5500	-0.001	20	.	73.9	1790	0.4	.
NJPA006R	34-41.1349-	74.3526-4-51-000	6.6	55	0.16	0.028	108	99.7	15600	-0.001	117	.	44.4	6610	0.3	0.51
NJPA007R	34-41.1044-	74.4043-4-51-000	6.4	39	0.02	0.016	47	22.6	5600	-0.001	15	.	24.2	1480	0.1	0.41
NJPA008R	34-41.1023-	74.3257-4-51-000	5.7	40	0.06	0.004	224	76.2	9500	-0.001	90	.	44.1	2320	-0.1	0.10
NJPA009R	34-41.0860-	74.4133-4-51-000	6.3	50	0.20	-0.002	62	5.6	5800	-0.001	.	.	24.4	1490	0.3	.
NJPA010R	34-41.0474-	74.4300-4-51-000	6.1	50	0.06	-0.002	77	.	11700	-0.001	14	.	15.6	4110	-0.1	.
NJPA011R	34-41.1019-	74.4621-4-51-000	5.9	32	0.02	-0.002	48	.	4200	-0.001	34	.	9.2	1090	-0.1	.
NJPA012R	34-41.0798-	74.4677-4-51-000	6.0	40	0.06	-0.002	46	18.4	4200	-0.001	47	920	.	1440	-0.1	.
NJPA013R	34-41.1376-	74.3341-4-51-000	8.4	68	0.22	-0.002	80	65.2	21600	-0.001	103	.	96.6	7620	-0.1	.
NJPA014R	34-41.1551-	74.3569-4-51-000	7.7	38	0.10	-0.002	98	14.8	4800	-0.001	.	.	62.4	1380	-0.1	.
NJPA101R	34-41.1197-	74.2465-4-51-000	6.5	50	0.26	0.027	94	.	12200	-0.001	87	.	31.4	5130	-0.1	0.54
NJPA102R	34-41.1382-	74.2594-4-51-000	6.7	70	0.60	0.078	20	.	4500	-0.001	38	.	115.2	2570	-0.1	1.11
NJSU001R	34-41.2766-	74.7827-4-51-000	6.6	130	1.60	M	M	M	M	M	M	M	M	M	M	M
NJSU002R	34-41.3129-	74.7806-4-51-000	7.8	244	1.76	0.230	13	.	9300	-0.001	.	.	43.6	2130	-0.1	0.94
NJSU003R	34-41.3196-	74.7266-4-51-000	7.6	70	0.54	-0.002	17	24.3	5200	-0.001	.	1330	.	1510	-0.1	.
NJSU004R	34-41.2842-	74.7581-4-51-000	7.7	71	0.52	0.029	55	.	10300	-0.001	53	.	29.5	3450	-0.1	0.41
NJSU005R	34-41.2738-	74.6967-4-51-000	6.6	40	0.02	0.008	95	27.3	5000	-0.001	14	.	63.4	800	-0.1	0.20
NJSU006R	34-41.3257-	74.6784-4-51-000	7.1	90	0.36	0.015	67	52.8	28100	-0.001	62	.	29.6	10560	-0.1	0.17
NJSU007R	34-41.3458-	74.6874-4-51-000	7.0	125	0.70	-0.002	14	.	18000	-0.001	.	.	69.7	5860	-0.1	.
NJSU008R	34-41.3142-	74.6504-4-51-000	7.5	59	0.34	-0.002	54	60.7	11300	-0.001	63	.	45.4	3570	0.3	.
NJSU009R	34-41.2756-	74.6500-4-51-000	6.7	135	1.00	0.013	16	49.8	12300	-0.001	.	.	.	4120	-0.1	0.10
NJSU010R	34-41.2662-	74.5788-4-51-000	7.2	169	1.68	0.055	45	59.5	17300	0.181	91	.	85.8	6650	-0.1	0.33
NJSU011R	34-41.2888-	74.5534-4-51-000	7.7	245	1.80	0.042	21	.	18300	-0.001	.	.	32.9	6980	-0.1	0.17
NJSU012R	34-41.1933-	74.8522-4-51-000	8.1	224	2.64	0.100	37	57.6	10300	-0.001	79	4630	.	2610	-0.1	0.45
NJSU013R	34-41.1558-	74.8699-4-51-000	8.1	40	0.40	-0.002	15	31.1	4800	-0.001	.	980	.	870	-0.1	.
NJSU014R	34-41.1698-	74.8079-4-51-000	8.0	38	0.24	-0.002	73	61.2	10900	-0.001	.	.	69.1	2130	0.4	.
NJSU015R	34-41.1948-	74.8003-4-51-000	7.6	50	0.70	-0.002	21	37.1	5500	-0.001	33	1760	.	1540	0.2	.
NJSU016R	34-41.2430-	74.8011-4-51-000	7.6	151	1.48	0.123	45	2145.0	16100	-0.001	65	.	64.4	4510	-0.1	0.81
NJSU017R	34-41.2433-	74.7336-4-51-000	6.2	48	0.20	0.007	43	23.1	4900	-0.001	39	.	11.1	1130	-0.1	0.15
NJSU018R	34-41.1978-	74.7330-4-51-000	7.2	129	0.45	0.026	73	.	11700	-0.001	105	.	79.4	3510	-0.1	0.20
NJSU019R	34-41.1705-	74.7359-4-51-000	7.2	240	1.10	0.035	23	.	30000	-0.001	.	.	65.9	8930	-0.1	0.15
NJSU020R	34-41.2132-	74.6908-4-51-000	7.6	680	3.17	0.881	65	.	84900	-0.001	.	.	106.5	44020	-0.1	1.30
NJSU021R	34-41.2347-	74.6719-4-51-000	7.6	330	1.90	0.402	17	.	20900	-0.001	.	.	53.9	6710	-0.1	1.22
NJSU022R	34-41.2375-	74.6570-4-51-000	7.9	289	1.29	0.093	39	.	38900	-0.001	104	.	170.6	11420	-0.1	0.32

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	HG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NJSU023R	34-41.2191-74.6549-4-51-000	7.7	300	3.30	0.517	15	54.8	9200	-0.001	28	.	107.4	2240	-0.1	1.72
NJSU024R	34-41.1652-74.6824-4-51-000	8.1	251	1.70	0.169	44	.	53500	-0.001	.	8690	.	15970	0.6	0.67
NJSU025R	34-41.1743-74.6337-4-51-000	7.6	155	1.40	0.013	19	26.5	10600	-0.001	.	.	69.3	3600	-0.1	0.08
NJSU026R	34-41.1514-74.5851-4-51-000	8.1	440	4.00	0.766	32	.	56200	-0.001	.	26070	.	20030	0.5	1.74
NJSU027R	34-41.1593-74.5410-4-51-000	8.0	150	1.60	0.084	14	.	5300	-0.001	84	.	29.2	1150	0.2	0.56
NJSU028R	34-41.1867-74.5357-4-51-000	7.9	300	2.08	0.954	32	114.1	38200	-0.001	90	15730	.	10740	-0.1	3.18
NJSU029R	34-41.1980-74.4809-4-51-000	8.0	480	4.70	0.593	72	.	43100	-0.001	.	9780	.	11800	-0.1	1.24
NJSU030R	34-41.2287-74.4834-4-51-000	8.0	300	2.82	0.802	49	184.7	48200	-0.001	68	.	318.4	13310	-0.1	2.67
NJSU031R	34-41.2387-74.5416-4-51-000	7.9	175	1.70	0.321	17	.	12800	-0.001	.	.	27.0	3450	-0.1	1.83
NJSU032R	34-41.2377-74.5994-4-51-000	7.0	184	1.36	0.026	46	25.7	14700	-0.001	45	.	97.6	6860	0.5	0.14
NJSU033R	34-41.2392-74.4407-4-51-000	7.8	345	4.20	0.332	30	.	8300	-0.001	.	10820	.	2510	-0.1	0.96
NJSU034R	34-41.1883-74.4517-4-51-000	8.0	88	0.73	0.060	95	.	12000	-0.001	115	.	82.7	3270	0.8	0.68
NJSU035R	34-41.2104-74.3978-4-51-000	7.8	85	0.60	0.008	25	.	9800	-0.001	.	.	23.0	2840	-0.1	0.09
NJSU036R	34-41.1639-74.4292-4-51-000	7.9	37	0.34	0.035	69	67.3	10600	-0.001	131	.	71.8	2440	0.4	0.95
NJSU037R	34-41.1465-74.4954-4-51-000	8.4	1065	3.70	1.742	93	.	96400	-0.001	.	.	204.3	28070	-0.1	1.64
NJSU039R	34-41.0901-74.5235-4-51-000	7.8	230	1.60	0.160	25	.	25900	-0.001	.	.	88.8	6360	-0.1	0.70
NJSU040R	34-41.1215-74.5397-4-51-000	8.2	110	0.75	0.001	55	113.3	16100	-0.001	96	.	.	4530	-0.1	0.01
NJSU041R	34-41.0749-74.5957-4-51-000	6.5	115	1.20	-0.002	21	35.7	7200	-0.001	35	2500	.	2150	-0.1	.
NJSU042R	34-41.0366-74.6056-4-51-000	7.5	135	0.90	0.027	42	.	30800	-0.001	99	.	56.4	10820	-0.1	0.20
NJSU043R	34-41.1088-74.5804-4-51-000	8.1	555	4.80	0.429	12	.	36900	-0.001	.	.	89.6	12350	-0.1	0.77
NJSU044R	34-41.1395-74.6426-4-51-000	8.4	335	3.30	0.405	47	.	33000	-0.001	29	18660	.	9020	0.6	1.21
NJSU045R	34-41.1396-74.6812-4-51-000	7.8	178	1.20	0.064	23	.	10300	-0.001	.	.	33.3	2740	-0.1	0.36
NJSU046R	34-41.1304-74.7594-4-51-000	7.8	258	1.50	0.200	40	.	46200	0.312	.	.	40.9	15190	-0.1	0.78
NJSU047R	34-41.1324-74.7818-4-51-000	7.8	248	0.33	0.025	18	9.9	10500	-0.001	.	.	71.3	3650	-0.1	0.10
NJSU048R	34-41.1120-74.8476-4-51-000	7.7	75	0.60	-0.002	36	58.7	12900	-0.001	50	2590	.	3190	0.3	.
NJSU049R	34-41.0884-74.8279-4-51-000	7.7	79	0.48	-0.002	15	35.8	7300	-0.001	15	1340	.	2260	-0.1	.
NJSU050R	34-41.0560-74.8610-4-51-000	8.0	90	0.70	0.019	46	.	22900	-0.001	38	3700	.	8610	0.4	0.21
NJSU051R	34-41.0046-74.8240-4-51-000	7.7	199	1.00	0.018	13	24.9	7600	-0.001	12	2650	.	2980	-0.1	0.09
NJSU052R	34-41.0499-74.8133-4-51-000	7.7	170	1.40	0.042	31	.	19700	-0.001	.	4380	.	8420	-0.1	0.25
NJSU059R	34-41.0099-74.7099-4-51-000	7.9	242	2.05	0.313	47	.	26000	-0.001	39	.	121.3	6210	1.2	1.29
NJSU060R	34-41.0363-74.7008-4-51-000	7.9	338	3.00	0.210	11	.	18700	-0.001	.	.	93.5	7340	0.5	0.62
NJSU061R	34-41.0083-74.6407-4-51-000	8.0	230	2.12	0.354	49	.	20800	-0.001	118	17640	.	5550	1.0	1.54
NJSU062R	34-41.0495-74.6413-4-51-000	7.8	315	2.60	0.281	15	.	28800	-0.001	.	.	52.9	7490	-0.1	0.89
NJSU063R	34-41.0957-74.6257-4-51-000	7.9	250	2.10	0.193	45	.	31800	0.069	59	.	130.8	11070	-0.1	0.77
NJSU064R	34-41.0757-74.6957-4-51-000	8.1	560	4.30	3.358	35	.	49400	-0.001	.	.	159.3	17000	-0.1	6.00
NJSU065R	34-41.0985-74.7588-4-51-000	7.2	385	1.69	0.118	27	.	101000	-0.001	.	13080	.	40520	-0.1	0.31
NJSU066R	34-41.0655-74.7560-4-51-000	7.2	370	1.50	0.031	M	.	69300	-0.001	.	.	.	21530	-0.1	0.08
NJSU067R	34-41.0255-74.7685-4-51-000	7.9	351	4.60	0.223	35	1398.0	18500	-0.001	22	.	216.6	5490	0.6	0.64
NJWA129R	34-41.0035-74.9826-4-51-000	7.7	62	0.16	0.028	82	88.1	14500	-0.001	59	.	79.0	6100	-0.1	0.45
NJWA130R	34-41.0372-74.9663-4-51-000	7.3	52	0.08	-0.002	157	59.6	11500	-0.001	40	.	92.2	4820	-0.1	.
NJWA131R	34-41.0544-74.9434-4-51-000	7.2	31	0.04	-0.002	303	65.0	9700	-0.001	106	.	172.6	4870	-0.1	.
NYDE251R	36-41.9656-75.2932-4-51-000	8.2	65	0.10	-0.002	115	110.0	15600	-0.001	57	.	85.5	5000	-0.1	.
NYDE252R	36-41.9736-75.2609-4-51-000	7.5	40	0.16	0.010	38	31.1	4400	-0.001	18	.	.	1190	-0.1	0.25
NYDE253R	36-41.9346-75.2404-4-51-000	7.2	47	0.08	0.006	60	72.4	10100	-0.001	33	2500	.	3210	-0.1	0.13
NYDE254R	36-41.9317-75.2068-4-51-000	7.0	6	0.08	-0.002	35	.	9700	-0.001	.	780	.	3210	-0.1	.
NYDE255R	36-41.9049-75.2308-4-51-000	7.1	49	0.08	0.011	60	51.8	14800	-0.001	22	.	148.1	5330	0.4	0.22
NYDE256R	36-41.8740-75.2002-4-51-000	7.0	45	0.24	-0.002	27	41.7	5100	-0.001	33	1250	.	1580	-0.1	.
NYDE257R	36-41.8996-75.1483-4-51-000	7.2	75	0.14	-0.002	59	87.1	14300	-0.001	.	3470	.	4540	-0.1	.
NYDE258R	36-41.8638-75.1411-4-51-000	7.3	50	0.30	-0.002	35	.	4400	-0.001	21	.	7.3	990	-0.1	.
NYDE259R	36-41.9430-75.1351-4-51-000	8.1	60	0.12	-0.002	33	28.1	5500	-0.001	.	.	.	1460	-0.1	.
NYDE260R	36-41.9644-75.1722-4-51-000	7.6	5	0.16	-0.002	76	77.8	9900	0.067	.	1420	.	2180	0.4	.
NYDE261R	36-41.9752-75.1955-4-51-000	7.5	50	0.12	-0.002	26	26.2	4300	-0.001	10	680	.	980	-0.1	.
NYDE262R	36-41.9369-75.1210-4-51-000	7.4	54	0.14	-0.002	64	55.8	11000	-0.001	22	1840	.	3530	-0.1	.

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA --SURFACE WATER-- SCRANTON SHEET

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SRL	I.D.	DOE	I.D.	PH	COND.	AKMXD	U	AL	BR	CL	DY	F	MG	MN	NA	V	U/COND
*****					UM/CM	MEQ/L	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	X 1000
NYDE263R	36-41.8990-	75.0977-4-51-000	7.3	55	0.14	-0.002	43	42.3	4200	-0.001	.	.	.	.	1200	-0.1	.
NYDE264R	36-41.9395-	75.0584-4-51-000	7.3	49	0.22	0.003	43	21.7	4900	-0.001	.	.	.	79.8	910	-0.1	0.06
NYDE265R	36-41.9738-	75.0968-4-51-000	7.6	51	0.14	0.025	41	.	8700	-0.001	.	21	.	20.0	2410	-0.1	0.49
NYDE266R	36-41.9840-	75.0561-4-51-000	7.5	53	0.18	-0.002	28	28.5	3700	-0.001	.	.	660	.	830	-0.1	.
NYDE267R	36-41.9731-	75.0172-4-51-000	7.3	70	0.20	0.021	209	.	16100	-0.001	.	.	2490	.	4940	-0.1	0.30
NYDE268R	36-41.9567-	74.9343-4-51-000	7.4	45	0.14	-0.002	135	.	5800	-0.001	.	.	.	7.5	1170	-0.1	.
NYDE269R	36-41.9654-	74.9090-4-51-000	7.2	80	0.18	0.002	226	.	23900	-0.001	.	.	.	.	9780	-0.1	0.03
NYDE270R	36-41.9264-	75.0147-4-51-000	7.6	43	0.28	-0.002	43	41.4	3900	-0.001	.	.	.	.	1130	-0.1	.
NYOR001R	36-41.5482-	74.3523-4-51-000	7.3	260	0.40	-0.002	31	.	27600	-0.001	.	.	.	26.3	9360	-0.1	.
NYOR002R	36-41.5734-	74.3407-4-51-000	7.3	140	0.48	0.020	M	.	M	-0.001	.	.	M	.	M	-0.1	0.14
NYOR003R	36-41.5912-	74.2771-4-51-000	7.1	150	0.28	1.275	38	.	7800	-0.001	.	.	.	23.9	2190	0.2	8.50
NYOR004R	36-41.5900-	74.2382-4-51-000	7.1	135	0.62	0.028	98	42.1	16800	-0.001	74	6320	.	.	5050	0.6	0.21
NYOR005R	36-41.5544-	74.2542-4-51-000	7.8	140	0.38	0.018	28	.	11800	-0.001	.	.	.	23.5	2920	0.4	0.13
NYOR006R	36-41.5662-	74.2957-4-51-000	7.3	160	0.40	0.014	65	.	19000	-0.001	38	7050	.	.	7030	0.5	0.09
NYOR007R	36-41.5258-	74.3347-4-51-000	7.7	130	0.20	0.011	57	.	7200	-0.001	14	.	.	14.8	2090	-0.1	0.08
NYOR008R	36-41.5831-	74.2090-4-51-000	7.4	140	0.54	0.087	47	338.8	16000	-0.001	96	.	.	171.3	4400	0.9	0.62
NYOR009R	36-41.5532-	74.2014-4-51-000	7.3	155	0.68	0.052	37	.	15500	-0.001	.	.	.	32.2	5010	-0.1	0.34
NYOR010R	36-41.5728-	74.1379-4-51-000	7.4	123	0.34	0.006	48	61.1	10300	-0.001	65	.	.	83.1	3560	-0.1	0.05
NYOR011R	36-41.5585-	74.1588-4-51-000	7.3	200	0.52	0.022	46	.	11000	-0.001	.	.	.	.	4380	-0.1	0.11
NYOR012R	36-41.5311-	74.0146-4-51-000	7.2	260	1.24	0.035	87	128.0	41500	-0.001	31	7970	.	.	16510	-0.1	0.13
NYOR013R	36-41.5649-	74.0080-4-51-000	7.3	205	0.30	0.009	M	.	M	-0.001	.	.	M	.	M	-0.1	0.04
NYOR014R	36-41.5826-	74.0006-4-51-000	7.4	150	0.78	0.038	56	50.1	17200	-0.001	.	.	4410	.	6910	0.4	0.25
NYOR015R	36-41.5795-	74.0280-4-51-000	7.3	185	0.48	0.016	24	22.2	13500	-0.001	.	.	.	194.3	5130	-0.1	0.09
NYOR016R	36-41.5847-	74.0789-4-51-000	7.3	185	0.58	0.053	50	.	35700	-0.001	.	.	7190	.	12540	-0.1	0.29
NYOR017R	36-41.5420-	74.0929-4-51-000	7.1	240	0.14	0.001	75	49.0	10400	-0.001	.	.	.	55.4	3360	-0.1	0.00
NYOR018R	36-41.5522-	74.0443-4-51-000	7.2	125	0.42	-0.002	43	58.2	12700	-0.001	.	.	.	31.5	4080	-0.1	.
NYOR019R	36-41.5288-	74.0578-4-51-000	7.1	205	0.30	-0.002	79	.	13200	-0.001	.	.	.	16.3	3450	-0.1	.
NYOR020R	36-41.5239-	74.1235-4-51-000	7.1	365	0.84	0.017	110	.	33600	-0.001	61	.	.	113.8	13710	-0.1	0.05
NYOR021R	36-41.5210-	74.1488-4-51-000	7.2	220	0.26	0.007	85	61.0	13400	-0.001	17	.	.	89.4	5440	0.4	0.03
NYOR022R	36-41.5296-	74.2021-4-51-000	6.9	405	0.64	0.064	124	.	57800	-0.001	.	.	.	705.2	19500	-0.1	0.16
NYOR023R	36-41.5259-	74.2258-4-51-000	7.1	300	0.76	0.323	34	.	21400	-0.001	.	.	.	62.0	6010	-0.1	1.08
NYOR024R	36-41.5245-	74.3114-4-51-000	7.2	185	0.50	0.058	72	91.2	18100	22.260	48	7340	.	.	7430	-0.1	0.31
NYOR025R	36-41.5490-	74.4021-4-51-000	7.3	193	0.54	1.292	113	.	12200	0.041	.	.	.	22.6	4470	-0.1	6.69
NYOR026R	36-41.4968-	74.4580-4-51-000	7.2	140	0.48	0.010	639	.	19000	-0.001	48	.	.	.	7000	1.6	0.07
NYOR027R	36-41.5048-	74.3784-4-51-000	7.2	120	0.26	-0.002	57	22.6	8500	-0.001	.	.	.	16.5	2290	-0.1	.
NYOR028R	36-41.4841-	74.3900-4-51-000	7.1	95	0.30	-0.002	69	40.6	15900	-0.001	56	4580	.	.	4880	-0.1	.
NYOR029R	36-41.4443-	74.3817-4-51-000	7.0	230	0.56	0.042	182	.	22700	-0.001	.	.	.	26.4	8010	-0.1	0.18
NYOR030R	36-41.4475-	74.4446-4-51-000	7.0	220	1.20	0.160	145	80.1	43100	-0.001	.	.	.	252.0	12920	-0.1	0.73
NYOR031R	36-41.4586-	74.4646-4-51-000	7.8	80	0.24	-0.002	98	.	5500	-0.001	.	.	.	9.4	1470	-0.1	.
NYOR032R	36-41.3844-	74.5215-4-51-000	5.1	130	0.24	0.022	70	82.2	20500	-0.001	.	.	6710	.	7330	-0.1	0.17
NYOR033R	36-41.3898-	74.5554-4-51-000	5.3	70	0.22	-0.002	36	.	5400	-0.001	41	.	.	14.2	1420	0.1	.
NYOR034R	36-41.4798-	74.5841-4-51-000	7.5	30	0.08	0.017	55	85.4	9800	-0.001	66	1760	.	.	2440	0.4	0.57
NYOR035R	36-41.4326-	74.5891-4-51-000	7.6	42	0.12	-0.002	81	17.0	4700	-0.001	18	.	.	.	970	-0.1	.
NYOR036R	36-41.4846-	74.5562-4-51-000	7.0	30	0.06	0.018	57	76.6	9200	-0.001	40	1040	.	.	2000	-0.1	0.60
NYOR037R	36-41.4291-	74.5366-4-51-000	6.9	90	0.26	-0.002	29	30.4	6700	-0.001	.	.	.	.	2270	-0.1	.
NYOR038R	36-41.3890-	74.5955-4-51-000	7.0	190	0.48	0.017	143	.	34900	-0.001	.	.	.	80.5	12440	-0.1	0.09
NYOR039R	36-41.4356-	74.4954-4-51-000	7.2	100	0.30	0.026	181	.	15900	-0.001	32	.	.	38.3	6360	-0.1	0.26
NYOR040R	36-41.4750-	74.5167-4-51-000	7.1	90	0.34	-0.002	60	39.7	7700	-0.001	.	.	.	26.1	2220	-0.1	.
NYOR041R	36-41.4072-	74.4284-4-51-000	7.1	175	0.34	0.014	78	80.0	22600	-0.001	35	4340	.	.	9620	-0.1	0.08
NYOR042R	36-41.3926-	74.4158-4-51-000	7.1	95	0.22	0.009	67	52.3	11900	-0.001	42	3570	.	.	4290	-0.1	0.09
NYOR231R	36-41.3576-	74.1922-4-51-000	5.5	150	0.10	-0.002	16	.	38100	-0.001	.	.	.	41.1	13440	-0.1	.
NYOR232R	36-41.2185-	74.3497-4-51-000	6.7	66	0.80	0.142	43	73.9	12000	-0.001	83	3840	.	.	4170	-0.1	2.15
NYOR233R	36-41.2474-	74.3431-4-51-000	6.5	250	2.08	0.234	20	.	9900	-0.001	.	.	8810	.	3520	0.2	0.94

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYOR234R	36-41.2441-74.3118-4-51-000	6.2	80	0.38	0.020	58	.	24400	-0.001	131	.	34.5	9300	-0.1	0.25
NYOR235R	36-41.2767-74.2502-4-51-000	6.2	60	0.12	0.011	25	.	6900	-0.001	40	.	13.7	2060	-0.1	0.18
NYOR236R	36-41.2742-74.1945-4-51-000	6.3	70	0.20	0.019	71	.	17600	-0.001	85	.	50.4	6500	-0.1	0.27
NYOR237R	36-41.3132-74.1839-4-51-000	6.9	270	1.70	0.739	29	.	37700	-0.001	.	.	175.1	14160	-0.1	2.74
NYOR238R	36-41.2990-74.1569-4-51-000	5.6	185	0.40	0.058	38	20.2	40200	-0.001	201	.	127.8	13470	-0.1	0.31
NYOR239R	36-41.3349-74.1617-4-51-000	5.8	138	0.20	-0.002	61	.	44400	-0.001	.	.	71.1	14040	-0.1	.
NYOR240R	36-41.3575-74.1605-4-51-000	5.5	88	0.14	-0.002	22	28.0	10300	-0.001	.	.	109.5	4120	-0.1	.
NYOR241R	36-41.2634-74.3008-4-51-000	5.9	280	1.90	0.348	47	.	25500	-0.001	71	20580	.	8980	-0.1	1.24
NYOR242R	36-41.2833-74.3671-4-51-000	5.9	181	0.60	-0.002	18	.	10200	-0.001	.	.	31.6	3890	-0.1	.
NYOR243R	36-41.3087-74.3615-4-51-000	5.9	218	1.20	0.066	29	71.7	17300	-0.001	55	11450	.	7250	-0.1	0.30
NYOR244R	36-41.3020-74.3239-4-51-000	5.9	155	0.70	0.023	39	98.4	17200	-0.001	46	5610	.	6900	-0.1	0.15
NYOR245R	36-41.3110-74.2585-4-51-000	6.0	171	0.14	-0.002	M	.	M	-0.001	.	M	.	M	-0.1	.
NYOR246R	36-41.3498-74.2639-4-51-000	6.1	261	0.60	0.022	24	.	21700	-0.001	.	.	62.9	6230	-0.1	0.08
NYOR247R	36-41.3656-74.2881-4-51-000	6.3	400	1.40	0.344	33	23.8	58400	-0.001	54	.	92.1	23650	-0.1	0.86
NYOR248R	36-41.3501-74.3476-4-51-000	6.3	295	1.00	0.021	10	.	22400	-0.001	.	.	37.7	7400	-0.1	0.07
NYOR249R	36-41.4835-74.1095-4-51-000	5.9	290	0.72	0.078	39	82.3	26000	-0.001	68	12820	.	12080	-0.1	0.27
NYOR250R	36-41.4572-74.0562-4-51-000	5.6	620	0.80	0.060	17	.	67600	-0.001	.	.	242.4	22860	-0.1	0.10
NYOR251R	36-41.4241-74.0300-4-51-000	5.7	211	0.80	0.011	25	.	58100	0.081	67	6120	.	18070	-0.1	0.05
NYOR252R	36-41.3902-74.0648-4-51-000	6.0	75	0.40	-0.002	18	42.6	5100	-0.001	22	.	30.2	1900	-0.1	.
NYOR253R	36-41.4092-74.0712-4-51-000	6.5	135	0.40	0.010	28	.	27100	-0.001	98	4870	.	9440	-0.1	0.07
NYOR254R	36-41.4203-74.0887-4-51-000	6.8	39	0.08	-0.002	21	26.2	4700	-0.001	12	.	.	770	-0.1	.
NYOR255R	36-41.3983-74.1495-4-51-000	6.4	160	0.80	0.041	52	22.8	38700	-0.001	55	.	135.5	11030	-0.1	0.26
NYOR256R	36-41.4371-74.1628-4-51-000	6.5	302	0.50	0.015	14	.	23900	-0.001	.	.	43.9	7880	-0.1	0.05
NYOR257R	36-41.4578-74.1523-4-51-000	6.4	291	0.90	0.044	40	.	47500	-0.001	.	.	75.0	17310	0.4	0.15
NYOR258R	36-41.4699-74.2041-4-51-000	6.1	221	0.30	0.020	23	.	7000	-0.001	.	.	49.9	2380	-0.1	0.09
NYOR259R	36-41.4530-74.1842-4-51-000	6.8	222	0.26	0.033	72	109.7	22900	-0.001	.	.	185.8	7580	-0.1	0.15
NYOR260R	36-41.3977-74.1864-4-51-000	7.4	305	1.10	0.082	10	26.1	51600	-0.001	.	.	169.6	23850	-0.1	0.27
NYOR261R	36-41.3875-74.2479-4-51-000	7.6	127	0.60	-0.002	38	62.8	20000	-0.001	61	4150	.	7080	-0.1	.
NYOR262R	36-41.4185-74.2433-4-51-000	7.0	230	0.50	0.002	18	.	16400	-0.001	.	.	33.9	4820	-0.1	0.01
NYOR263R	36-41.4652-74.2458-4-51-000	7.3	238	1.40	0.027	36	.	32500	0.307	65	.	115.2	9790	-0.1	0.11
NYOR264R	36-41.4906-74.2813-4-51-000	7.7	130	0.50	0.008	30	.	6900	-0.001	.	.	19.9	1760	-0.1	0.06
NYOR265R	36-41.4660-74.3597-4-51-000	7.5	235	1.30	0.071	55	.	41300	-0.001	25	12180	.	14240	-0.1	0.30
NYOR266R	36-41.4404-74.3648-4-51-000	7.3	323	1.00	0.106	112	.	37400	-0.001	.	.	187.8	17000	-0.1	0.33
NYOR267R	36-41.4447-74.3045-4-51-000	7.0	206	0.24	0.011	52	.	32800	-0.001	.	.	103.2	12860	-0.1	0.05
NYOR268R	36-41.4009-74.3031-4-51-000	7.1	342	1.20	0.161	14	12.6	28900	-0.001	.	.	58.6	10450	-0.1	0.47
NYOR269R	36-41.4124-74.3642-4-51-000	7.0	190	0.26	0.001	57	.	27800	-0.001	25	.	96.4	12180	0.4	0.01
NYOR270R	36-41.3624-74.5926-4-51-000	6.3	200	0.80	0.025	22	.	14800	-0.001	.	.	19.5	6840	-0.1	0.13
NYOR271R	36-41.3192-74.5866-4-51-000	6.7	160	0.36	0.025	63	10.4	27300	-0.001	48	5660	.	11200	0.6	0.16
NYOR272R	36-41.3310-74.5571-4-51-000	7.0	170	0.60	0.013	50	.	15000	-0.001	.	.	37.5	5830	-0.1	0.08
NYOR273R	36-41.3703-74.5468-4-51-000	6.9	225	0.80	0.037	61	12.5	23400	-0.001	61	6050	.	10540	0.4	0.16
NYOR274R	36-41.3701-74.4927-4-51-000	7.1	211	1.04	0.126	146	.	15700	-0.001	.	.	41.0	4710	0.3	0.60
NYOR275R	36-41.3487-74.6221-4-51-000	7.6	79	0.14	-0.002	41	40.0	6500	-0.001	11	.	.	2260	-0.1	.
NYOR276R	36-41.3834-74.6462-4-51-000	7.4	51	0.20	-0.002	50	78.8	13900	-0.001	71	4100	.	3870	-0.1	.
NYOR277R	36-41.4047-74.7136-4-51-000	7.6	30	0.06	-0.002	20	.	5000	-0.001	29	.	8.8	1740	-0.1	.
NYOR278R	36-41.4355-74.7076-4-51-000	7.1	51	0.10	0.013	84	.	12200	-0.001	53	3060	.	4610	-0.1	0.25
NYOR279R	36-41.4561-74.7204-4-51-000	7.2	39	0.04	-0.002	40	18.5	3800	-0.001	21	1020	.	950	-0.1	.
NYOR281R	36-41.4874-74.6262-4-51-000	7.4	31	0.04	-0.002	65	4137.0	9500	-0.001	29	.	12.5	2480	-0.1	.
NYOR282R	36-41.2868-74.4982-4-51-000	7.6	120	0.67	0.096	41	20.7	5300	-0.001	62	4140	.	1770	-0.1	0.80
NYOR283R	36-41.2937-74.4359-4-51-000	7.5	461	2.60	1.521	31	.	23800	-0.001	271	25750	.	7970	0.6	3.30
NYOR284R	36-41.3014-74.3868-4-51-000	7.6	195	1.20	0.103	17	.	10100	-0.001	.	5360	.	3430	0.2	0.53
NYOR285R	36-41.3073-74.3985-4-51-000	7.7	310	2.20	0.529	33	.	26800	-0.001	91	.	150.3	8680	0.9	1.71
NYOR286R	36-41.3666-74.4538-4-51-000	7.8	130	0.67	0.041	33	.	9000	-0.001	.	.	16.6	3620	-0.1	0.32
NYOR287R	36-41.3691-74.0854-4-51-000	7.9	69	0.18	0.002	42	.	11900	-0.001	138	2770	.	5040	-0.1	0.03

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYOR288R	36-41.3564-74.0430-4-51-000	7.3	91	0.12	-0.002	41	28.9	5300	-0.001	.	2090	.	1760	0.2	.
NYOR289R	36-41.3253-74.0845-4-51-000	6.9	64	0.06	-0.002	92	49.6	10000	-0.001	24	2630	.	3130	-0.1	.
NYOR290R	36-41.3067-74.0408-4-51-000	7.1	181	0.55	0.033	17	29.3	30900	-0.001	.	.	24.8	10630	-0.1	0.18
NYOR291R	36-41.2985-74.0494-4-51-000	7.9	47	0.04	-0.002	46	75.8	11100	-0.001	74	1640	.	3320	-0.1	.
NYOR292R	36-41.2846-74.0783-4-51-000	7.4	35	0.02	-0.002	35	.	4600	-0.001	22	.	6.6	1580	-0.1	.
NYOR293R	36-41.2305-74.1345-4-51-000	6.9	45	0.06	-0.002	186	59.1	13700	-0.001	145	.	26.8	7090	-0.1	.
NYOR294R	36-41.2249-74.2047-4-51-000	7.2	93	0.24	0.067	19	29.4	9400	-0.001	.	2410	.	2830	-0.1	0.72
NYOR295R	36-41.2305-74.2754-4-51-000	7.0	84	0.12	0.036	64	.	26000	-0.001	119	.	20.1	9430	-0.1	0.43
NYOR296R	36-41.2217-74.2815-4-51-000	7.2	49	0.12	0.010	22	.	5400	-0.001	51	1080	.	2100	0.1	0.20
NYOR297R	36-41.2096-74.2379-4-51-000	5.9	69	0.02	0.119	122	62.1	12900	-0.001	.	.	78.1	4440	0.6	1.72
NYOR298R	36-41.1787-74.2568-4-51-000	6.5	75	0.16	0.063	23	.	8400	-0.001	11	.	16.9	3090	-0.1	0.84
NYOR299R	36-41.2080-74.2085-4-51-000	6.9	69	0.24	0.057	45	65.4	11500	-0.001	313	3590	.	4620	-0.1	0.83
NYR0001R	36-41.2644-74.0066-4-51-000	7.6	80	0.42	0.121	131	70.4	15600	-0.001	99	5530	.	5580	-0.1	1.51
NYR0002R	36-41.2523-74.0671-4-51-000	7.6	23	0.02	-0.002	82	24.9	5000	-0.001	33	.	8.2	970	0.3	.
NYR0003R	36-41.2379-74.0313-4-51-000	7.0	49	0.14	-0.002	67	61.1	14000	0.054	128	.	22.3	5210	-0.1	.
NYR0004R	36-41.1837-74.0135-4-51-000	6.8	179	1.30	0.056	21	65.4	16100	-0.001	.	3900	.	6150	0.5	0.31
NYR0005R	36-41.1680-74.0975-4-51-000	5.5	30	0.02	-0.002	206	55.9	9000	-0.001	115	.	20.7	1790	0.4	.
NYR0006R	36-41.1371-74.1267-4-51-000	7.2	43	0.08	-0.002	111	38.1	5400	-0.001	23	.	10.7	1750	-0.1	.
NYR0007R	36-41.1801-74.1645-4-51-000	8.2	42	0.12	0.002	129	55.0	12400	-0.001	56	2000	.	3280	-0.1	0.05
NYR0008R	36-41.1503-74.0983-4-51-000	7.6	301	1.70	0.150	30	456.4	45400	-0.001	.	.	62.6	18220	0.7	0.50
NYR0104R	36-41.0932-74.0838-4-51-000	7.7	215	1.10	0.023	19	.	29600	-0.001	.	.	40.8	9970	-0.1	0.11
NYR0105R	36-41.0728-74.0445-4-51-000	7.8	288	1.90	0.244	78	.	55100	-0.001	.	.	149.2	18370	-0.1	0.85
NYSL026R	36-41.8872-74.8383-4-51-000	7.6	70	0.26	-0.002	50	123.9	20300	-0.001	85	.	27.0	5330	-0.1	.
NYSL027R	36-41.9231-74.8359-4-51-000	8.0	90	0.28	-0.002	23	.	13600	-0.001	.	.	10.0	4880	-0.1	.
NYSL028R	36-41.9742-74.8387-4-51-000	7.8	43	0.24	0.015	40	82.1	12600	-0.001	63	.	92.1	2290	-0.1	0.35
NYSL029R	36-41.9850-74.8183-4-51-000	7.9	50	0.32	-0.002	22	.	5400	-0.001	.	.	7.6	660	-0.1	.
NYSL030R	36-41.9307-74.7872-4-51-000	5.4	26	0.06	0.021	177	124.7	10200	-0.001	50	.	600.8	740	-0.1	0.81
NYSL031R	36-41.9283-74.8858-4-51-000	7.5	50	0.16	2.072	26	.	5900	-0.001	.	.	6.9	670	-0.1	41.44
NYSL032R	36-41.9216-74.9311-4-51-000	7.8	48	0.22	0.002	77	.	12500	-0.001	30	.	19.0	2530	-0.1	0.04
NYSL033R	36-41.8843-74.9393-4-51-000	6.7	30	0.14	-0.002	52	20.5	4600	-0.001	.	.	35.7	420	-0.1	.
NYSL034R	36-41.8656-74.9492-4-51-000	7.1	70	0.40	0.029	41	.	12100	0.082	42	.	20.2	2130	0.3	0.41
NYSL035R	36-41.8076-74.9685-4-51-000	7.1	103	0.54	-0.002	28	.	7600	-0.001	.	.	10.0	1370	-0.1	.
NYSL036R	36-41.8306-75.0843-4-51-000	8.2	80	0.36	0.027	66	.	14200	-0.001	61	2410	.	3670	0.9	0.34
NYSL037R	36-41.8502-75.1090-4-51-000	7.7	61	0.52	-0.002	28	25.5	4300	-0.001	12	870	.	760	-0.1	.
NYSL038R	36-41.8858-75.0457-4-51-000	8.3	60	0.20	0.019	M	.	M	-0.001	.	M	.	M	-0.1	0.32
NYSL039R	36-41.8879-75.0153-4-51-000	7.5	35	0.18	-0.002	33	25.1	4800	-0.001	14	.	.	290	-0.1	.
NYSL040R	36-41.8452-74.9832-4-51-000	7.7	68	0.58	0.008	67	.	10500	-0.001	17	.	17.9	2070	0.4	0.12
NYSL041R	36-41.8257-74.9912-4-51-000	7.7	95	0.76	-0.002	28	.	5700	-0.001	14	.	10.0	980	-0.1	.
NYSL042R	36-41.8465-75.0466-4-51-000	7.1	49	0.18	-0.002	107	83.6	10100	-0.001	42	.	27.5	1150	-0.1	.
NYSL043R	36-41.8065-75.0396-4-51-000	7.4	105	0.70	-0.002	23	.	5800	-0.001	26	.	17.2	1590	-0.1	.
NYSL044R	36-41.7762-75.0511-4-51-000	6.8	92	0.66	-0.002	33	.	6500	-0.001	30	.	17.6	2240	-0.1	.
NYSL045R	36-41.7735-75.0034-4-51-000	7.0	108	0.56	0.037	39	77.7	15000	0.194	104	3860	.	4670	0.4	0.34
NYSL046R	36-41.7825-74.9472-4-51-000	7.0	131	0.42	-0.002	51	82.1	24400	-0.001	50	3490	.	9130	-0.1	.
NYSL047R	36-41.7708-74.9039-4-51-000	7.2	60	0.20	-0.002	70	42.0	12600	-0.001	30	.	45.0	4030	-0.1	.
NYSL048R	36-41.8180-74.8851-4-51-000	7.3	75	0.40	-0.002	70	.	14900	-0.001	73	1960	.	4140	-0.1	.
NYSL049R	36-41.8446-74.8861-4-51-000	7.2	88	0.53	0.023	20	30.7	6200	-0.001	16	760	.	1350	-0.1	0.26
NYSL050R	36-41.9033-74.8998-4-51-000	7.5	49	0.18	0.020	50	.	12900	-0.001	18	.	18.4	3310	-0.1	0.41
NYSL051R	36-41.8054-74.7084-4-51-000	7.1	50	0.16	0.007	24	26.6	6800	-0.001	29	.	.	2110	-0.1	0.14
NYSL052R	36-41.8076-74.6389-4-51-000	7.5	45	0.22	-0.002	63	56.8	12900	-0.001	71	.	37.1	4020	-0.1	.
NYSL053R	36-41.8495-74.6479-4-51-000	7.3	22	0.04	-0.002	43	.	4600	-0.001	20	.	6.8	860	-0.1	.
NYSL054R	36-41.8536-74.6788-4-51-000	7.4	39	0.16	0.010	53	.	10800	-0.001	48	.	.	2360	-0.1	0.26
NYSL055R	36-41.8960-74.6899-4-51-000	5.5	18	0.02	-0.002	164	31.3	6800	-0.001	.	.	31.1	1610	-0.1	.
NYSL056R	36-41.8626-74.7465-4-51-000	6.9	34	0.18	0.033	75	72.2	10300	0.174	31	.	41.6	2410	-0.1	0.97

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL057R	36-41.8306-74.7458-4-51-000	6.7	63	0.28	0.003	29	38.8	8000	-0.001	.	.	44.3	3350	-0.1	0.05
NYSL058R	36-41.7734-74.7391-4-51-000	7.8	279	0.95	0.034	40	.	57400	0.229	.	.	253.9	29120	0.5	0.12
NYSL059R	36-41.7772-74.7075-4-51-000	7.1	62	0.18	-0.002	44	41.7	8700	-0.001	.	.	30.5	2930	-0.1	.
NYSL060R	36-41.7672-74.6484-4-51-000	7.2	57	0.32	-0.002	66	88.5	11400	-0.001	69	.	100.2	4650	0.3	.
NYSL061R	36-41.7838-74.8091-4-51-000	5.3	70	0.32	0.031	22	.	7400	-0.001	.	.	7.5	2750	-0.1	0.44
NYSL062R	36-41.7703-74.8533-4-51-000	5.5	50	0.20	-0.002	76	.	10400	-0.001	81	.	34.7	3370	-0.1	.
NYSL063R	36-41.8201-74.8576-4-51-000	6.9	68	0.38	-0.002	20	.	4900	-0.001	.	.	5.9	1100	-0.1	.
NYSL064R	36-41.8628-74.8555-4-51-000	7.0	43	0.22	0.004	57	100.0	11600	0.099	52	.	202.3	2270	-0.1	0.09
NYSL065R	36-41.8115-74.8187-4-51-000	7.0	180	0.49	0.002	23	27.5	4500	-0.001	18	.	27.1	1450	-0.1	0.01
NYSL066R	36-41.8487-74.8062-4-51-000	7.3	56	0.30	0.024	47	.	10900	-0.001	47	.	19.0	3090	-0.1	0.43
NYSL067R	36-41.7366-75.0050-4-51-000	7.5	95	0.46	-0.002	19	.	8200	-0.001	.	.	16.7	2520	-0.1	.
NYSL068R	36-41.7040-74.9968-4-51-000	7.1	30	0.08	-0.002	43	29.8	4700	-0.001	26	.	17.6	730	-0.1	.
NYSL069R	36-41.7160-75.0445-4-51-000	7.0	50	0.22	-0.002	32	47.0	5000	-0.001	28	.	.	1500	0.2	.
NYSL070R	36-41.7373-75.0441-4-51-000	7.1	31	0.20	0.034	53	27.5	4300	-0.001	23	.	41.7	880	-0.1	1.10
NYSL071R	36-41.6567-75.0443-4-51-000	7.1	70	0.17	-0.002	21	19.9	8400	-0.001	.	.	64.0	2100	-0.1	.
NYSL072R	36-41.5626-75.0144-4-51-000	7.4	31	0.08	0.015	129	.	9800	-0.001	96	.	18.1	2230	0.5	0.48
NYSL073R	36-41.6024-75.0365-4-51-000	7.4	71	0.28	-0.002	60	15.3	9900	-0.001	.	.	60.3	2830	-0.1	.
NYSL074R	36-41.6391-75.0455-4-51-000	7.2	43	0.14	-0.002	79	5560.0	9000	-0.001	74	.	26.1	2390	-0.1	.
NYSL075R	36-41.6310-74.9887-4-51-000	5.9	47	0.22	0.003	27	.	3800	-0.001	31	.	87.7	830	-0.1	0.06
NYSL076R	36-41.6268-74.9489-4-51-000	5.9	40	0.16	0.001	M	.	M	-0.001	.	M	.	M	-0.1	0.03
NYSL077R	36-41.6432-74.9184-4-51-000	5.3	72	0.04	4.082	106	26.0	4800	-0.001	18	.	57.5	970	-0.1	56.69
NYSL078R	36-41.6558-74.9865-4-51-000	6.3	132	0.30	0.010	87	.	23900	-0.001	81	5250	.	13890	-0.1	0.08
NYSL079R	36-41.6594-74.9680-4-51-000	6.2	78	0.22	-0.002	35	32.8	8400	-0.001	.	.	.	2000	-0.1	.
NYSL080R	36-41.6953-74.9296-4-51-000	6.1	40	0.16	0.016	72	91.1	10300	-0.001	74	.	62.5	2470	-0.1	0.40
NYSL081R	36-41.7339-74.9440-4-51-000	6.2	50	0.22	0.012	36	31.0	4700	-0.001	18	.	36.3	630	-0.1	0.24
NYSL082R	36-41.7235-74.8934-4-51-000	6.3	72	0.20	0.001	142	46.3	13900	-0.001	52	.	80.9	3120	0.3	0.01
NYSL083R	36-41.6886-74.8898-4-51-000	6.6	105	0.26	0.019	56	.	9900	-0.001	.	.	34.2	3320	0.1	0.18
NYSL084R	36-41.6801-74.8658-4-51-000	7.2	69	0.08	0.037	215	61.4	11700	-0.001	61	.	163.1	2850	-0.1	0.54
NYSL085R	36-41.7142-74.8340-4-51-000	4.7	49	0.00	-0.002	171	.	4500	-0.001	26	.	166.8	930	-0.1	.
NYSL086R	36-41.7419-74.8267-4-51-000	5.3	40	0.02	0.017	310	.	7900	-0.001	70	.	137.1	1580	-0.1	0.43
NYSL087R	36-41.7337-74.8075-4-51-000	6.2	44	0.14	0.002	38	33.4	5100	-0.001	9	.	24.7	790	-0.1	0.05
NYSL088R	36-41.7152-74.7920-4-51-000	6.3	71	0.02	0.015	59	129.2	18700	0.152	76	.	78.3	5190	-0.1	0.21
NYSL089R	36-41.6695-74.7850-4-51-000	6.2	113	0.43	0.006	22	.	9200	-0.001	.	.	.	2320	-0.1	0.05
NYSL090R	36-41.6633-74.7439-4-51-000	6.5	379	0.36	0.065	136	.	94500	-0.001	.	.	325.8	35470	-0.1	0.17
NYSL091R	36-41.6370-74.7287-4-51-000	6.4	101	0.20	0.009	38	.	8300	-0.001	.	.	26.1	2110	0.1	0.09
NYSL092R	36-41.7166-74.7536-4-51-000	5.6	59	0.01	-0.002	395	46.2	9500	-0.001	62	.	205.2	2490	-0.1	.
NYSL093R	36-41.7431-74.7323-4-51-000	6.3	295	1.29	0.033	26	.	23600	-0.001	.	.	47.0	8660	-0.1	0.11
NYSL094R	36-41.7210-74.7073-4-51-000	7.1	51	0.16	0.034	94	.	10100	-0.001	72	.	26.7	4360	-0.1	0.67
NYSL095R	36-41.7423-74.6929-4-51-000	5.8	65	0.18	-0.002	35	16.9	7500	-0.001	.	.	.	2140	-0.1	.
NYSL096R	36-41.7469-74.6688-4-51-000	6.2	119	0.30	0.020	47	92.2	32200	-0.001	.	.	94.7	12600	0.3	0.17
NYSL097R	36-41.6360-74.8728-4-51-000	6.3	53	0.08	-0.002	59	18.3	4500	-0.001	30	.	59.8	1310	-0.1	.
NYSL098R	36-41.5747-74.8730-4-51-000	6.1	62	0.10	0.014	65	57.8	13900	0.123	97	.	46.6	4350	0.4	0.23
NYSL099R	36-41.6287-74.8152-4-51-000	6.1	52	0.06	-0.002	34	24.7	5500	-0.001	.	.	28.1	1350	-0.1	.
NYSL100R	36-41.6008-74.7746-4-51-000	5.7	66	0.08	-0.002	62	34.5	9600	-0.001	46	.	97.1	3300	0.5	.
NYSL133R	36-41.5222-74.6657-4-51-000	6.6	57	0.32	-0.002	22	.	4200	-0.001	9	.	3.4	980	-0.1	.
NYSL134R	36-41.5007-74.7105-4-51-000	6.6	29	0.10	-0.002	55	.	9100	-0.001	43	.	10.9	2360	-0.1	.
NYSL135R	36-41.5378-74.7011-4-51-000	6.4	28	0.04	-0.002	46	32.2	4800	-0.001	22	.	13.4	990	-0.1	.
NYSL136R	36-41.5891-74.7182-4-51-000	7.3	48	0.04	-0.002	63	87.3	21600	-0.001	49	.	27.0	6160	-0.1	.
NYSL137R	36-41.5791-74.6686-4-51-000	6.6	48	0.10	-0.002	42	17.7	5600	-0.001	16	.	15.7	1260	-0.1	.
NYSL138R	36-41.6211-74.6259-4-51-000	7.6	78	0.10	0.065	81	.	21700	-0.001	38	.	18.4	7970	-0.1	0.83
NYSL139R	36-41.6194-74.6841-4-51-000	7.1	49	0.08	-0.002	31	28.7	4700	-0.001	.	.	164.6	1250	-0.1	.
NYSL140R	36-41.6812-74.6810-4-51-000	7.5	110	0.30	0.015	105	64.0	26300	0.059	69	.	133.3	14430	0.6	0.14
NYSL141R	36-41.6684-74.6269-4-51-000	7.0	238	0.60	0.018	60	.	37400	-0.001	.	.	44.1	14410	0.6	0.08

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL142R	36-41.7024-74.6381-4-51-000	6.7	90	0.04	-0.002	130	75.5	9200	-0.001	97	.	47.1	3550	0.3	.
NYSL143R	36-41.6588-74.5880-4-51-000	6.7	95	0.08	0.029	130	21.4	6100	-0.001	23	2130	.	2300	0.3	0.31
NYSL144R	36-41.6910-74.5988-4-51-000	7.1	108	0.08	0.010	19	29.2	12300	-0.001	.	.	20.8	4480	-0.1	0.09
NYSL145R	36-41.6731-74.4608-4-51-000	7.1	61	0.32	0.019	50	83.2	12900	-0.001	55	2890	.	4710	0.4	0.31
NYSL146R	36-41.6731-74.5145-4-51-000	8.0	55	0.24	0.009	17	.	4900	-0.001	15	.	9.3	1760	0.2	0.16
NYSL147R	36-41.6711-74.5288-4-51-000	7.3	70	0.28	-0.002	47	72.6	10600	-0.001	43	.	45.8	3690	-0.1	.
NYSL148R	36-41.6418-74.5066-4-51-000	6.4	5	0.04	-0.002	68	26.5	4400	-0.001	21	.	.	1000	0.2	.
NYSL149R	36-41.6225-74.5303-4-51-000	7.3	35	0.12	-0.002	58	67.3	9800	-0.001	53	.	26.7	2720	0.3	.
NYSL150R	36-41.6082-74.6166-4-51-000	6.5	12	0.18	-0.002	14	55.3	17600	-0.001	.	.	67.1	6550	-0.1	.
NYSL151R	36-41.5694-74.5518-4-51-000	4.9	115	0.01	-0.002	355	.	9200	0.214	82	.	1186.0	2970	0.4	.
NYSL152R	36-41.5474-74.5795-4-51-000	7.3	41	0.08	-0.002	24	19.0	4000	-0.001	.	.	6.3	900	-0.1	.
NYSL153R	36-41.5136-74.5781-4-51-000	7.3	53	0.30	-0.002	35	58.5	12400	-0.001	67	2100	.	4130	-0.1	.
NYSL154R	36-41.5241-74.5229-4-51-000	5.9	49	0.18	-0.002	30	23.3	4300	-0.001	11	.	.	930	0.2	.
NYSL155R	36-41.6165-74.5960-4-51-000	7.2	97	0.36	-0.002	39	111.7	22500	-0.001	.	.	17.8	6080	-0.1	.
NYSL156R	36-41.5071-74.4819-4-51-000	7.3	195	0.60	-0.002	19	.	11200	-0.001	.	.	17.1	3800	-0.1	.
NYSL157R	36-41.5893-74.4928-4-51-000	7.6	87	0.80	-0.002	41	89.9	15100	-0.001	.	2770	.	5560	-0.1	.
NYSL158R	36-41.6219-74.3988-4-51-000	7.3	12	0.40	0.036	M	.	M	-0.001	.	M	.	M	-0.1	3.00
NYSL159R	36-41.6191-74.4557-4-51-000	7.7	57	0.40	-0.002	122	16.4	6100	-0.001	42	.	31.3	7290	-0.1	.
NYSL160R	36-41.5964-74.4691-4-51-000	8.3	58	0.22	-0.002	21	.	4600	-0.001	15	.	5.9	1010	-0.1	.
NYSL161R	36-41.5845-74.3958-4-51-000	7.8	80	0.80	0.006	59	.	10700	-0.001	41	.	39.9	3670	-0.1	0.08
NYSL162R	36-41.6945-74.5419-4-51-000	7.4	150	0.60	0.081	77	.	31200	-0.001	1404	.	161.1	21010	0.9	0.54
NYSL163R	36-41.7331-74.5952-4-51-000	6.6	480	0.74	0.052	19	.	102600	-0.001	.	.	1326.0	11760	-0.1	0.11
NYSL164R	36-41.7794-74.6027-4-51-000	6.9	60	0.20	0.027	68	76.8	14100	-0.001	28	.	25.6	5440	-0.1	0.45
NYSL165R	36-41.7786-74.5316-4-51-000	7.1	40	0.08	-0.002	21	31.7	5000	-0.001	.	.	15.0	1230	-0.1	.
NYSL166R	36-41.8050-74.5383-4-51-000	6.7	43	0.12	-0.002	85	81.2	14300	-0.001	.	.	35.5	3630	-0.1	.
NYSL167R	36-41.8145-74.6058-4-51-000	7.0	50	0.16	-0.002	19	19.1	6300	-0.001	.	.	72.1	1170	0.1	.
NYSL168R	36-41.8569-74.5948-4-51-000	6.8	35	0.10	-0.002	20	.	4900	-0.001	14	.	7.7	700	-0.1	.
NYSL169R	36-41.8543-74.5521-4-51-000	7.2	40	0.10	-0.002	48	.	10400	-0.001	32	.	.	2200	0.2	.
NYSL170R	36-41.8663-74.5082-4-51-000	7.5	35	0.14	-0.002	18	30.3	5400	-0.001	12	630	.	770	-0.1	.
NYSL171R	36-41.5844-74.9963-4-51-000	6.4	45	0.16	-0.002	47	50.1	10400	-0.001	73	.	68.4	2580	-0.1	.
NYSL172R	36-41.5861-74.9464-4-51-000	5.5	31	0.08	-0.002	112	25.4	4000	-0.001	15	.	44.7	740	-0.1	.
NYSL173R	36-41.5720-74.9104-4-51-000	7.1	45	0.18	-0.002	53	51.1	9800	-0.001	118	.	23.2	3040	0.2	.
NYSL174R	36-41.5332-74.8948-4-51-000	6.8	50	0.32	0.017	20	29.0	4900	-0.001	40	.	25.9	1230	0.2	0.34
NYSL175R	36-41.5390-74.8687-4-51-000	6.8	60	0.22	-0.002	68	102.1	11900	0.136	55	.	390.9	2890	-0.1	.
NYSL176R	36-41.5067-74.7892-4-51-000	5.8	65	0.08	-0.002	48	32.4	6600	-0.001	.	.	30.3	1830	-0.1	.
NYSL177R	36-41.5509-74.7877-4-51-000	6.3	40	0.08	0.033	315	56.0	9500	-0.001	60	2910	.	1660	-0.1	0.83
NYSL178R	36-41.5806-74.7570-4-51-000	6.0	30	0.06	-0.002	20	35.1	5600	-0.001	16	.	16.2	500	-0.1	.
NYSL179R	36-41.5196-74.7574-4-51-000	6.3	45	0.06	0.007	59	79.8	15900	-0.001	76	1140	.	3470	0.3	0.16
NYSL180R	36-41.5475-74.7539-4-51-000	6.9	41	0.08	-0.002	69	.	7200	-0.001	40	.	4.7	2300	-0.1	.
NYSL181R	36-41.9640-74.7580-4-51-000	5.6	3	0.18	-0.002	69	67.0	9600	-0.001	11	.	133.9	700	-0.1	.
NYSL182R	36-41.8841-74.6370-4-51-000	6.8	38	0.12	0.019	30	22.7	4400	-0.001	30	.	.	610	-0.1	0.50
NYSL183R	36-41.8894-74.5962-4-51-000	6.4	30	0.08	0.016	73	58.3	10300	-0.001	16	.	27.3	1190	-0.1	0.53
NYSL184R	36-41.8784-74.5704-4-51-000	7.0	30	0.06	-0.002	50	38.9	5100	-0.001	27	.	10.4	540	-0.1	.
NYSL185R	36-41.9388-74.6020-4-51-000	6.1	30	0.10	0.003	188	62.8	9900	-0.001	75	.	145.8	1330	-0.1	0.10
NYSL186R	36-41.9397-74.6488-4-51-000	7.0	40	0.20	-0.002	29	29.0	4500	-0.001	.	.	31.2	400	-0.1	.
NYSL187R	36-41.9193-74.6722-4-51-000	7.0	45	0.20	-0.002	48	25.2	8300	-0.001	43	1610	.	990	-0.1	.
NYSL188R	36-41.9138-74.7312-4-51-000	7.2	40	0.20	-0.002	15	21.3	4400	-0.001	15	550	.	580	-0.1	.
NYSL189R	36-41.9048-74.7935-4-51-000	7.6	45	0.08	-0.002	25	.	5900	-0.001	16	.	3.6	900	-0.1	.
NYSL190R	36-41.4756-74.7945-4-51-000	7.2	58	0.32	-0.002	53	54.6	11700	-0.001	52	3200	.	3990	-0.1	.
NYSL191R	36-41.4739-74.8473-4-51-000	7.1	45	0.10	-0.002	27	21.7	5200	-0.001	40	.	17.8	1370	-0.1	.
NYSL192R	36-41.5123-74.8297-4-51-000	7.1	45	0.20	-0.002	77	36.4	11500	-0.001	130	.	245.7	2770	-0.1	.
NYSL193R	36-41.5125-74.8870-4-51-000	7.2	70	0.18	-0.002	22	35.4	8400	-0.001	.	.	20.2	3030	-0.1	.
NYSL194R	36-41.5126-74.9447-4-51-000	7.1	50	0.16	0.023	52	39.7	12300	-0.001	152	.	141.2	3690	-0.1	0.46

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	OY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
NYSL195R	36-41.5453-74.9352-4-51-000	7.1	50	0.16	-0.002	33	31.4	6700	-0.001	72	.	54.8	2100	0.3	.
NYSL196R	36-41.5119-74.9836-4-51-000	7.1	65	0.20	-0.002	61	93.9	16800	-0.001	95	2910	.	6630	-0.1	.
NYSL197R	36-41.4831-74.9594-4-51-000	6.9	80	0.22	-0.002	33	23.2	9800	-0.001	.	.	.	3450	0.2	.
NYSL198R	36-41.4751-74.9062-4-51-000	7.6	55	0.08	0.016	198	82.5	17000	-0.001	227	.	29.9	4860	0.5	0.29
NYSL199R	36-41.4420-74.8030-4-51-000	7.3	70	0.32	-0.002	18	33.3	5500	-0.001	.	1160	.	1530	0.2	.
NYUL201R	36-41.9573-74.6224-4-51-000	7.2	23	0.06	0.028	236	66.5	9800	-0.001	34	.	23.9	2080	0.5	1.22
NYUL202R	36-41.9496-74.5819-4-51-000	6.6	22	0.02	-0.002	124	20.8	4000	0.040	.	.	29.0	610	-0.1	.
NYUL203R	36-41.9564-74.5488-4-51-000	6.2	20	0.01	-0.002	330	39.2	8300	-0.001	48	.	88.9	1610	-0.1	.
NYUL204R	36-41.9266-74.5519-4-51-000	6.8	20	0.02	-0.002	74	28.7	4700	-0.001	.	.	21.3	850	-0.1	.
NYUL205R	36-41.9473-74.4973-4-51-000	5.8	20	0.01	0.012	339	43.2	8400	-0.001	60	.	111.6	1240	-0.1	0.60
NYUL206R	36-41.9589-74.4736-4-51-000	5.0	26	0.01	0.028	618	56.0	9100	-0.001	46	.	119.8	1480	-0.1	1.08
NYUL207R	36-41.9379-74.5042-4-51-000	5.8	20	0.01	-0.002	137	28.6	4700	-0.001	.	.	60.8	840	-0.1	.
NYUL208R	36-41.9036-74.4990-4-51-000	6.3	26	0.02	-0.002	94	71.3	9200	-0.001	46	.	17.2	2020	-0.1	.
NYUL209R	36-41.8909-74.4447-4-51-000	6.7	25	0.06	-0.002	44	.	4600	-0.001	.	.	3.3	760	-0.1	.
NYUL210R	36-41.8817-74.4070-4-51-000	6.2	40	0.02	0.011	151	13.0	7600	-0.001	.	.	55.2	2620	-0.1	0.28
NYUL211R	36-41.9161-74.4340-4-51-000	6.5	24	0.02	0.017	121	55.9	9100	-0.001	55	.	28.3	1690	-0.1	0.71
NYUL212R	36-41.9256-74.3928-4-51-000	6.5	28	0.04	-0.002	42	27.7	4400	-0.001	10	.	.	860	-0.1	.
NYUL213R	36-41.9339-74.3309-4-51-000	6.8	35	0.12	-0.002	53	.	13800	-0.001	.	2970	.	4360	-0.1	.
NYUL214R	36-41.9499-74.3199-4-51-000	7.0	28	0.10	-0.002	37	.	4400	-0.001	.	.	5.8	720	-0.1	.
NYUL215R	36-41.9662-74.2953-4-51-000	7.2	22	0.06	-0.002	86	.	8400	-0.001	63	.	18.7	1900	0.3	.
NYUL216R	36-41.8809-74.3410-4-51-000	7.0	29	0.14	-0.002	25	27.3	5000	-0.001	.	880	.	1030	-0.1	.
NYUL217R	36-41.8795-74.3089-4-51-000	7.0	31	0.16	0.013	50	51.2	11100	-0.001	.	.	44.1	3260	-0.1	0.42
NYUL218R	36-41.8938-74.2604-4-51-000	7.0	37	0.12	-0.002	27	.	5700	-0.001	.	.	7.1	1810	-0.1	.
NYUL219R	36-41.9522-74.2622-4-51-000	7.0	29	0.10	0.021	67	.	8700	-0.001	36	.	31.3	3090	-0.1	0.72
NYUL220R	36-41.9728-74.2356-4-51-000	6.7	39	0.12	0.003	44	66.3	12600	0.141	24	1990	.	4930	-0.1	0.08
NYUL221R	36-41.9802-74.2032-4-51-000	6.8	52	0.16	-0.002	35	.	7500	-0.001	.	.	7.8	2780	-0.1	.
NYUL222R	36-41.9342-74.1835-4-51-000	6.8	72	0.28	-0.002	59	45.6	11300	-0.001	42	.	57.6	4700	-0.1	.
NYUL223R	36-41.9096-74.1811-4-51-000	7.0	61	0.10	-0.002	34	31.8	5000	-0.001	.	1170	.	1490	-0.1	.
NYUL224R	36-41.9090-74.1569-4-51-000	6.9	54	0.12	0.003	103	81.8	10800	-0.001	.	3510	.	3610	0.7	0.06
NYUL225R	36-41.9180-74.1313-4-51-000	7.0	61	0.10	-0.002	57	42.6	6300	-0.001	.	1430	.	1900	-0.1	.
NYUL226R	36-41.9031-74.1081-4-51-000	7.0	58	0.18	-0.002	59	46.8	11100	-0.001	65	3180	.	4400	-0.1	.
NYUL227R	36-41.9216-74.0907-4-51-000	5.8	60	0.18	-0.002	19	27.8	6600	-0.001	.	1040	.	2280	-0.1	.
NYUL228R	36-41.9538-74.1325-4-51-000	6.6	55	0.12	-0.002	124	62.1	13300	-0.001	56	3030	.	4890	0.3	.
NYUL229R	36-41.9588-74.1194-4-51-000	6.6	80	0.08	0.003	81	.	5400	-0.001	.	.	20.7	1950	-0.1	0.04
NYUL230R	36-41.8909-74.0153-4-51-000	6.9	195	1.33	0.091	84	171.6	28900	-0.001	.	9290	.	9730	-0.1	0.47
NYUL231R	36-41.9435-74.0722-4-51-000	7.5	79	0.30	-0.002	27	.	7900	-0.001	.	.	12.1	3550	-0.1	.
NYUL232R	36-41.9837-74.0356-4-51-000	7.3	45	0.12	0.007	119	60.2	9900	-0.001	27	2800	.	2950	-0.1	0.16
NYUL233R	36-41.8442-74.0501-4-51-000	7.2	181	0.60	0.005	55	.	28400	-0.001	.	.	12.8	12910	0.4	0.03
NYUL234R	36-41.8252-74.0049-4-51-000	7.3	86	0.50	0.022	43	74.2	11400	-0.001	40	2060	.	3420	0.4	0.26
NYUL235R	36-41.7750-74.0297-4-51-000	6.9	206	0.22	0.014	26	.	6800	-0.001	.	.	24.0	2820	-0.1	0.07
NYUL236R	36-41.7729-74.1100-4-51-000	7.3	130	0.90	0.004	76	79.9	13000	-0.001	61	9120	.	6830	0.4	0.03
NYUL324R	36-41.6560-74.3293-4-51-000	6.2	25	0.06	-0.002	147	16.0	4700	0.028	.	.	13.9	1080	-0.1	.
NYUL325R	36-41.6451-74.3637-4-51-000	6.1	35	0.12	-0.002	24	15.1	3300	-0.001	11	890	.	1350	-0.1	.
NYUL326R	36-41.6260-74.3088-4-51-000	5.7	150	0.12	0.023	137	103.3	13700	-0.001	55	.	91.4	5840	0.3	0.15
NYUL327R	36-41.6635-74.3064-4-51-000	5.7	55	0.20	-0.002	77	.	10900	-0.001	55	.	25.3	3480	-0.1	.
NYUL328R	36-41.6723-74.2541-4-51-000	7.2	35	0.06	-0.002	78	11.5	2800	-0.001	13	.	14.1	1100	-0.1	.
NYUL329R	36-41.6596-74.1807-4-51-000	7.2	85	0.06	0.017	238	.	9000	-0.001	17	.	39.9	4000	-0.1	0.20
NYUL330R	36-41.6377-74.1911-4-51-000	7.3	189	1.20	0.121	42	.	6100	-0.001	34	.	36.5	2360	-0.1	0.64
NYUL331R	36-41.6150-74.1570-4-51-000	7.0	160	0.90	0.003	21	.	7200	-0.001	.	.	21.0	1800	-0.1	0.02
NYUL332R	36-41.6631-74.1616-4-51-000	7.1	146	0.88	0.024	56	51.0	16600	-0.001	61	7980	.	5210	0.4	0.16
NYUL333R	36-41.7227-74.1349-4-51-000	6.6	100	0.48	-0.002	68	17.7	6100	-0.001	15	1360	.	2070	-0.1	.
NYUL334R	36-41.7166-74.1306-4-51-000	6.2	151	0.76	0.039	97	.	12500	2.263	69	.	69.4	4450	0.3	0.26
NYUL335R	36-41.6946-74.1863-4-51-000	5.8	110	0.32	-0.002	78	.	6100	-0.001	10	.	18.9	1880	0.2	.

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/CONDO X 1000
NYUL336R	36-41.7416-74.3592-4-51-000	4.8	26	0.01	0.037	788	.	9700	-0.001	67	.	79.1	670	-0.1	1.42
NYUL337R	36-41.7303-74.2139-4-51-000	4.5	35	0.00	0.006	664	10.3	4400	-0.001	.	.	98.0	400	-0.1	0.17
NYUL338R	36-41.7390-74.2563-4-51-000	4.6	31	0.00	-0.002	673	12.8	4300	-0.001	.	.	93.4	250	-0.1	.
NYUL339R	36-41.7579-74.2827-4-51-000	5.9	25	0.04	-0.002	368	.	8900	-0.001	33	.	164.3	1040	-0.1	.
NYUL340R	36-41.7818-74.2107-4-51-000	6.0	25	0.02	-0.002	229	.	4100	-0.001	17	.	53.1	670	-0.1	.
NYUL341R	36-41.7928-74.1410-4-51-000	6.9	75	0.28	0.032	151	.	13700	-0.001	112	.	76.9	5080	0.7	0.43
NYUL342R	36-41.8235-74.1923-4-51-000	7.6	210	1.00	-0.002	49	.	17700	-0.001	.	.	51.7	5960	-0.1	.
NYUL343R	36-41.8222-74.1552-4-51-000	7.2	250	0.93	0.023	25	46.1	15000	-0.001	.	3390	.	5810	-0.1	0.09
NYUL344R	36-41.8642-74.1696-4-51-000	7.4	88	0.28	-0.002	20	28.2	6100	-0.001	.	1440	.	1680	-0.1	.
NYUL345R	36-41.8593-74.2189-4-51-000	7.4	72	0.14	0.015	98	73.3	14500	-0.001	30	.	80.0	4110	-0.1	0.21
NYUL346R	36-41.8734-74.2642-4-51-000	7.8	50	0.12	-0.002	98	86.5	12400	-0.001	18	3240	.	3640	-0.1	.
NYUL347R	36-41.8285-74.2505-4-51-000	7.7	75	0.22	-0.002	30	.	4500	-0.001	14	.	13.5	1470	-0.1	.
NYUL348R	36-41.8254-74.3228-4-51-000	6.2	49	0.12	0.025	108	.	12100	2.091	36	.	24.2	3190	0.3	0.51
NYUL349R	36-41.7956-74.2922-4-51-000	7.9	50	0.26	-0.002	14	.	4900	-0.001	.	.	9.0	1160	-0.1	.
NYUL350R	36-41.7947-74.2648-4-51-000	7.0	140	0.42	0.057	79	.	31400	-0.001	47	.	128.3	9210	0.4	0.41
NYUL351R	36-41.8579-74.2822-4-51-000	7.4	50	0.12	0.004	48	.	5600	-0.001	8	.	12.9	1000	-0.1	0.08
NYUL352R	36-41.8721-74.3386-4-51-000	7.4	28	0.12	-0.002	30	30.1	4500	-0.001	.	540	.	610	-0.1	.
NYUL353R	36-41.8201-74.3352-4-51-000	7.6	30	0.08	-0.002	69	63.3	10500	-0.001	31	2250	.	1490	-0.1	.
NYUL354R	36-41.7836-74.3595-4-51-000	7.1	28	0.04	-0.002	50	21.3	4400	-0.001	.	790	.	640	-0.1	.
NYUL355R	36-41.7879-74.3795-4-51-000	7.8	29	0.10	-0.002	110	67.7	9700	-0.001	22	1600	.	2640	-0.1	.
NYUL356R	36-41.8347-74.4394-4-51-000	6.4	26	0.04	-0.002	73	23.6	4700	-0.001	13	.	14.3	1180	-0.1	.
NYUL357R	36-41.8513-74.4177-4-51-000	6.2	28	0.02	0.017	237	59.9	10900	-0.001	.	.	68.5	2800	-0.1	0.61
NYUL358R	36-41.8136-74.4063-4-51-000	5.8	50	0.02	-0.002	160	47.0	7100	-0.001	.	.	49.7	1920	-0.1	.
NYUL359R	36-41.8094-74.4505-4-51-000	6.1	50	0.02	-0.002	266	39.0	8800	-0.001	86	.	180.7	2630	-0.1	.
NYUL360R	36-41.8170-74.4772-4-51-000	6.1	45	0.10	0.010	35	.	4700	-0.001	.	.	7.5	1240	0.1	0.22
NYUL361R	36-41.7745-74.4854-4-51-000	5.8	42	0.02	0.013	337	55.8	11100	-0.001	66	.	123.2	3430	-0.1	0.31
NYUL362R	36-41.7822-74.4308-4-51-000	4.7	50	0.00	-0.002	79	30.8	4500	-0.001	10	.	31.3	1050	-0.1	.
NYUL363R	36-41.7414-74.3998-4-51-000	7.0	46	0.16	0.001	90	63.1	10400	-0.001	42	.	26.1	3050	0.2	0.02
NYUL364R	36-41.7260-74.4451-4-51-000	7.0	51	0.10	0.021	106	35.4	6400	0.031	16	.	33.8	1870	-0.1	0.41
NYUL365R	36-41.7424-74.5384-4-51-000	4.3	61	0.00	0.017	404	45.3	11700	-0.001	56	.	204.5	3210	1.0	0.28
NYUL366R	36-41.7259-74.4917-4-51-000	7.1	53	0.10	0.021	186	29.5	6100	-0.001	.	.	85.2	2100	0.4	0.40
NYUL367R	36-41.7188-74.4842-4-51-000	6.9	35	0.06	0.020	120	62.2	10600	-0.001	35	.	51.0	3000	0.6	0.57
NYUL368R	36-41.7076-74.4338-4-51-000	7.5	65	0.18	0.007	39	42.8	5300	-0.001	.	1050	.	1380	0.3	0.11
NYUL369R	36-41.6980-74.4152-4-51-000	7.7	75	0.34	0.030	52	.	5700	-0.001	.	.	8.0	1910	-0.1	0.40
NYUL370R	36-41.6632-74.3867-4-51-000	7.8	90	0.38	0.004	122	.	16100	-0.001	93	.	44.1	7340	-0.1	0.04
NYUL371R	36-41.7271-74.0977-4-51-000	7.1	235	0.50	0.021	48	.	24900	-0.001	.	.	22.6	9270	-0.1	0.09
NYUL372R	36-41.6964-74.1017-4-51-000	7.2	290	0.84	0.061	59	150.9	62800	-0.001	.	.	36.2	26140	0.4	0.21
NYUL373R	36-41.6411-74.1105-4-51-000	7.2	168	0.36	0.024	73	73.3	15800	-0.001	52	.	130.7	6640	0.5	0.14
NYUL374R	36-41.6556-74.0860-4-51-000	7.0	185	0.48	0.009	45	.	9700	-0.001	.	.	33.7	3220	-0.1	0.05
NYUL375R	36-41.6387-74.0508-4-51-000	7.0	142	0.40	0.009	68	.	14500	0.077	88	.	111.6	5610	-0.1	0.06
NYUL376R	36-41.6722-74.0681-4-51-000	7.1	130	0.56	-0.002	25	.	4200	-0.001	15	.	12.7	1760	-0.1	.
NYUL377R	36-41.6905-74.0317-4-51-000	7.0	190	0.58	0.051	64	181.6	18900	-0.001	53	.	1314.7	10850	-0.1	0.27
NYUL378R	36-41.7386-74.0169-4-51-000	7.1	170	0.80	0.043	24	.	9400	-0.001	.	.	41.2	4430	0.2	0.25
NYUL379R	36-41.8671-74.1011-4-51-000	7.5	70	0.08	0.004	132	65.3	9400	-0.001	.	.	.	3130	-0.1	0.06
PACR001R	42-41.0735-75.6920-4-51-000	7.0	18	0.06	-0.002	91	.	10800	0.258	.	7080	.	3080	-0.1	.
PACR002R	42-41.0970-75.6909-4-51-000	4.9	15	0.02	-0.002	301	36.6	7500	-0.001	50	.	197.9	3250	-0.1	.
PACR003R	42-41.1119-75.7157-4-51-000	5.3	19	0.02	-0.002	214	.	8400	-0.001	24	.	208.6	3780	-0.1	.
PACR004R	42-41.0837-75.6058-4-51-000	6.6	48	0.04	0.001	72	.	24700	-0.001	.	.	83.4	9500	-0.1	0.02
PACR005R	42-41.0848-75.7329-4-51-000	4.2	25	0.00	0.024	260	.	9100	-0.001	23	.	128.3	3370	0.6	0.96
PACR006R	42-41.0364-75.7401-4-51-000	6.5	20	0.04	0.007	118	.	11000	0.114	15	.	102.0	4880	-0.1	0.35
PACR007R	42-41.0247-75.7097-4-51-000	6.3	32	0.04	-0.002	68	.	16900	0.138	17	.	88.3	6560	-0.1	.
PACR008R	42-41.0471-75.6568-4-51-000	5.5	10	0.02	-0.002	190	11.8	7500	-0.001	.	.	95.3	3720	0.4	.
PACR009R	42-41.0190-75.5851-4-51-000	5.6	11	0.02	-0.002	172	44.9	8100	-0.001	31	.	106.4	3690	0.3	.

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PACR011R	42-41.0114-75.5447-4-51-000	5.2	17	0.01	-0.002	347	34.8	7900	-0.001	49	.	124.9	3580	-0.1	.
PALA001R	42-41.6250-75.4957-4-51-000	6.6	90	0.08	0.011	96	.	9800	-0.001	97	.	18.9	4250	-0.1	0.12
PALA002R	42-41.6312-75.5290-4-51-000	7.0	120	0.56	0.075	75	41.7	14800	-0.001	55	.	50.4	4490	-0.1	0.63
PALA003R	42-41.5992-75.5449-4-51-000	6.3	115	0.54	0.021	79	16.0	11500	-0.001	98	3520	.	4560	-0.1	0.18
PALA004R	42-41.6396-75.5997-4-51-000	6.8	118	0.72	-0.002	70	17.3	11400	-0.001	55	.	63.5	4440	0.3	.
PALA005R	42-41.5996-75.6077-4-51-000	7.1	155	0.88	0.095	62	.	11900	-0.001	92	.	34.5	4160	0.3	0.61
PALA006R	42-41.5928-75.6501-4-51-000	7.2	138	0.60	0.086	58	116.8	15600	-0.001	75	.	37.3	4930	-0.1	0.62
PALA007R	42-41.5931-75.6870-4-51-000	7.2	150	0.34	0.019	120	.	33600	-0.001	.	.	.	8820	-0.1	0.13
PALA008R	42-41.5762-75.5001-4-51-000	7.5	55	0.06	-0.002	88	.	19400	-0.001	34	.	58.6	5940	-0.1	.
PALA009R	42-41.5376-75.5554-4-51-000	7.5	97	0.60	0.037	68	.	18700	-0.001	18	.	35.5	7170	-0.1	0.38
PALA010R	42-41.5627-75.5847-4-51-000	7.5	90	0.72	0.009	69	31.7	9700	-0.001	112	.	78.0	3940	-0.1	0.10
PALA011R	42-41.5711-75.5617-4-51-000	7.5	168	0.24	-0.002	83	56.4	12900	-0.001	42	.	98.8	5810	0.4	.
PALA012R	42-41.5754-75.6408-4-51-000	7.8	130	0.68	0.046	55	12.3	17200	-0.001	95	.	57.2	6340	-0.1	0.35
PALA013R	42-41.6419-75.6480-4-51-000	7.1	90	0.52	-0.002	98	23.4	10500	-0.001	77	.	381.1	4220	0.3	.
PALA014R	42-41.6030-75.7432-4-51-000	7.3	80	0.44	0.033	84	.	12900	-0.001	137	.	559.3	3560	-0.1	0.41
PALA015R	42-41.5693-75.7347-4-51-000	7.8	115	0.60	-0.002	71	18.2	15400	-0.001	63	.	40.1	5820	-0.1	.
PALA016R	42-41.5653-75.7027-4-51-000	8.8	260	0.80	0.066	62	.	61400	-0.001	.	.	101.8	23070	-0.1	0.25
PALA017R	42-41.5278-75.7346-4-51-000	8.2	280	0.84	0.242	92	.	65100	0.176	.	.	135.3	26490	0.6	0.86
PALA018R	42-41.5384-75.6009-4-51-000	7.8	90	0.44	-0.002	81	15.9	16000	-0.001	25	.	131.2	5500	-0.1	.
PALA019R	42-41.5425-75.6498-4-51-000	7.7	270	0.80	0.056	67	.	60900	-0.001	.	.	47.2	18890	-0.1	0.21
PALA020R	42-41.5258-75.6833-4-51-000	9.5	121	0.64	0.022	96	.	25900	-0.001	96	.	106.9	9540	-0.1	0.18
PALA021R	42-41.4858-75.7499-4-51-000	7.9	475	2.16	0.306	70	.	52500	-0.001	2393	.	172.7	43560	-0.1	0.64
PALA022R	42-41.4849-75.7726-4-51-000	7.8	165	0.80	0.050	88	.	22100	-0.001	98	.	142.1	7610	0.4	0.30
PALA023R	42-41.4565-75.7661-4-51-000	8.1	171	1.00	0.200	84	.	14100	-0.001	75	.	157.2	5560	-0.1	1.17
PALA024R	42-41.4535-75.7386-4-51-000	8.3	110	0.48	0.013	73	.	19400	-0.001	51	.	88.8	7010	0.4	0.12
PALA025R	42-41.4569-75.6838-4-51-000	7.8	620	1.52	0.012	69	.	147300	-0.001	.	.	277.3	39690	-0.1	0.02
PALA026R	42-41.4826-75.6901-4-51-000	7.4	680	0.82	0.091	84	177.3	147200	2.678	.	32620	.	67670	-0.1	0.13
PALA027R	42-41.5005-75.6254-4-51-000	7.9	160	0.72	0.055	73	18.2	25900	-0.001	96	.	55.7	8250	-0.1	0.34
PALA028R	42-41.4835-75.5887-4-51-000	7.6	100	0.24	-0.002	186	16.0	24000	-0.001	77	.	47.7	11520	0.6	.
PALA029R	42-41.4364-75.4901-4-51-000	7.8	30	0.06	-0.002	133	.	10800	-0.001	48	.	87.9	2290	-0.1	.
PALA030R	42-41.3988-75.4694-4-51-000	7.7	193	0.58	0.069	88	.	36600	-0.001	106	.	69.2	13670	-0.1	0.36
PALA031R	42-41.3429-75.4923-4-51-000	7.5	72	0.30	0.029	82	90.3	12300	-0.001	33	.	138.2	3460	0.5	0.40
PALA032R	42-41.3115-75.6734-4-51-000	8.0	40	0.06	0.002	73	.	10500	-0.001	33	.	51.4	2230	-0.1	0.05
PALA033R	42-41.2929-75.6761-4-51-000	7.4	20	0.06	-0.002	121	20.6	10200	-0.001	66	.	79.3	1790	-0.1	.
PALA034R	42-41.2982-75.6319-4-51-000	7.4	40	0.16	0.025	65	698.4	8700	-0.001	19	.	48.6	1980	0.3	0.63
PALA035R	42-41.2851-75.5779-4-51-000	7.5	70	0.24	-0.002	73	12.4	17100	-0.001	67	.	58.6	5200	-0.1	.
PALA036R	42-41.3159-75.5829-4-51-000	7.6	85	0.22	-0.002	60	47.0	20900	-0.001	41	.	99.9	5460	-0.1	.
PALA037R	42-41.3784-75.5805-4-51-000	7.0	210	0.88	-0.002	86	.	34700	-0.001	31	.	321.3	17790	-0.1	.
PALA038R	42-41.3526-75.5862-4-51-000	7.4	62	0.36	0.027	147	.	10700	-0.001	94	.	295.2	2400	-0.1	0.44
PALA039R	42-41.3487-75.6959-4-51-000	7.5	83	0.36	-0.002	104	.	9700	-0.001	53	.	44.3	1930	0.7	.
PALA040R	42-41.3514-75.7216-4-51-000	7.6	99	0.18	-0.002	135	17.2	21100	-0.001	48	.	70.8	7860	-0.1	.
PALA041R	42-41.4386-75.5567-4-51-000	4.7	65	0.00	-0.002	488	.	15200	-0.001	.	.	346.4	6720	-0.1	.
PALA042R	42-41.4159-75.6063-4-51-000	6.1	170	0.10	-0.002	103	.	46400	-0.001	.	.	547.8	16360	-0.1	.
PALA043R	42-41.3798-75.6168-4-51-000	6.6	68	0.16	-0.002	132	22.8	14500	-0.001	84	.	102.9	5210	-0.1	.
PALA044R	42-41.3891-75.7709-4-51-000	6.7	198	0.66	0.047	70	.	21300	-0.001	.	.	444.0	4640	-0.1	0.24
PALA045R	42-41.4071-75.7671-4-51-000	7.1	140	0.42	0.033	96	.	17100	-0.001	129	.	70.3	7580	-0.1	0.24
PALA046R	42-41.4081-75.8100-4-51-000	7.5	164	0.70	0.053	87	12.7	17500	-0.001	86	.	116.0	8360	-0.1	0.32
PALA088R	42-41.3899-75.5518-4-51-000	7.5	140	0.46	0.107	177	17.1	17400	-0.001	80	.	208.2	8050	0.5	0.76
PALA089R	42-41.3393-75.5438-4-51-000	7.3	125	0.57	-0.002	107	.	24900	-0.001	32	.	148.9	12000	-0.1	.
PALA090R	42-41.3182-75.4918-4-51-000	7.5	70	0.24	-0.002	104	12.9	8900	-0.001	57	.	98.7	4020	-0.1	.
PALA091R	42-41.2881-75.4749-4-51-000	7.0	55	0.38	-0.002	87	38.9	7300	-0.001	54	.	155.9	3400	-0.1	.
PALA092R	42-41.3040-75.4897-4-51-000	7.3	43	0.16	-0.002	123	23.0	8800	-0.001	67	.	106.8	4140	0.4	.
PALA093R	42-41.3135-75.5174-4-51-000	7.0	200	0.30	-0.002	143	.	51800	-0.001	73	.	139.2	20250	-0.1	.

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PALA094R	42-41.2783-	75.5391-4-51-000	6.3	72	0.14	-0.002	113	637.4	16000	-0.001	.	94.2	6380	0.3	.
PALA095R	42-41.2274-	75.5856-4-51-000	6.0	25	0.04	-0.002	157	.	7400	-0.001	112	106.8	3450	-0.1	.
PALA096R	42-41.2333-	75.6203-4-51-000	5.4	20	0.01	0.027	167	337.9	6400	-0.001	70	185.6	3180	0.8	1.35
PALA097R	42-41.2082-	75.6113-4-51-000	6.2	20	0.04	-0.002	126	21.6	7600	-0.001	86	101.6	3130	0.3	.
PALA098R	42-41.1748-	75.5953-4-51-000	6.9	26	0.06	0.022	85	.	7500	-0.001	50	89.1	3350	-0.1	0.85
PALA099R	42-41.2003-	75.5708-4-51-000	6.3	25	0.08	-0.002	108	.	8100	-0.001	65	113.4	3470	0.4	.
PALA100R	42-41.2334-	75.5409-4-51-000	5.5	35	0.08	-0.002	68	.	8400	-0.001	91	96.3	4200	-0.1	.
PALU001R	42-41.0363-	75.9536-4-51-000	6.9	45	0.14	0.024	88	456.7	10300	-0.001	17	50.0	3040	-0.1	0.53
PALU002R	42-41.0591-	75.9315-4-51-000	7.0	35	0.10	0.002	26	10.4	3000	-0.001	9	14.2	1290	-0.1	0.06
PALU003R	42-41.0807-	75.9007-4-51-000	5.0	22	0.04	-0.002	179	611.3	6500	-0.001	13	28.2	1850	-0.1	.
PALU004R	42-41.0978-	75.8729-4-51-000	5.7	20	0.04	-0.002	29	.	2200	-0.001	.	22.3	660	-0.1	.
PALU005R	42-41.1062-	75.8456-4-51-000	5.6	21	0.04	-0.002	57	19.1	7100	-0.001	31	15.7	2300	-0.1	.
PALU006R	42-41.0925-	75.8214-4-51-000	6.3	54	0.30	0.009	19	.	3900	-0.001	.	12.2	1170	-0.1	0.17
PALU007R	42-41.0590-	75.8076-4-51-000	6.8	70	0.28	-0.002	17	.	2900	-0.001	14	29.1	1010	-0.1	.
PALU008R	42-41.0386-	75.8471-4-51-000	4.3	130	0.00	0.046	486	3788.0	10900	-0.572	91	576.7	4780	-0.1	0.35
PALU009R	42-41.0408-	75.7843-4-51-000	6.5	140	0.44	0.012	41	22.3	9900	-0.001	.	224.2	7030	0.6	0.09
PALU010R	42-41.0069-	75.7751-4-51-000	6.2	78	0.04	-0.002	109	397.2	10000	-0.001	36	384.5	4300	-0.1	.
PALU011R	42-41.0084-	75.7995-4-51-000	6.5	25	0.10	0.002	26	13.2	3500	-0.001	8	68.3	1150	-0.1	0.08
PALU012R	42-41.0106-	75.8305-4-51-000	3.8	151	0.00	0.172	1613	.	6500	-0.001	47	568.2	2390	-0.1	1.14
PALU013R	42-41.1477-	75.8963-4-51-000	7.3	245	0.62	0.006	145	.	13300	-0.001	4188	131.1	11600	-0.1	0.02
PALU014R	42-41.1450-	75.8604-4-51-000	8.0	25	0.06	-0.002	31	.	2700	-0.001	22	5.5	670	-0.1	.
PALU015R	42-41.1036-	75.9521-4-51-000	7.2	85	0.26	-0.002	57	12.7	10800	-0.001	51	44.0	5580	0.4	.
PALU016R	42-41.0742-	75.9909-4-51-000	7.3	103	0.20	-0.002	26	.	12800	-0.001	.	18.5	3450	-0.1	.
PALU019R	42-41.1459-	75.9543-4-51-000	7.1	105	0.30	-0.002	46	133.7	18600	-0.001	112	255.7	6710	-0.1	.
PALU024R	42-41.0306-	75.9995-4-51-000	7.3	83	0.20	-0.002	23	11.0	11600	-0.001	.	28.7	3730	-0.1	.
PALU086R	42-41.0621-	75.8716-4-51-000	7.0	90	0.16	-0.002	146	57.7	11700	-0.001	64	122.4	5620	0.7	.
PALU087R	42-41.1296-	75.8069-4-51-000	5.3	50	0.01	-0.002	343	56.3	6600	-0.001	.	189.8	2870	0.6	.
PALU088R	42-41.1476-	75.6289-4-51-000	5.4	45	0.01	-0.002	312	60.0	7500	-0.001	39	145.6	2860	-0.1	.
PALU089R	42-41.1573-	75.6650-4-51-000	6.5	80	0.14	0.025	246	39.8	11700	-0.001	.	251.2	7760	-0.1	0.31
PALU090R	42-41.1540-	75.7311-4-51-000	6.3	92	0.02	0.037	217	.	20900	-0.001	38	135.2	8470	0.6	0.40
PALU091R	42-41.1196-	75.7559-4-51-000	6.4	40	0.04	-0.002	179	70.6	6700	-0.001	24	122.5	2900	0.3	.
PALU095R	42-41.2012-	75.7549-4-51-000	6.6	59	0.04	-0.002	305	24.3	10900	-0.001	38	181.6	3700	0.9	.
PALU096R	42-41.2357-	75.8108-4-51-000	7.2	185	0.14	0.011	130	32.8	50600	-0.001	.	138.0	17190	-0.1	0.06
PALU097R	42-41.2149-	75.8418-4-51-000	7.5	85	0.06	0.016	177	34.0	18700	-0.001	53	141.2	8280	0.3	0.19
PALU098R	42-41.2457-	75.6985-4-51-000	6.0	78	0.04	-0.002	228	52.3	9200	-0.001	28	181.3	3860	-0.1	.
PALU099R	42-41.3030-	75.7255-4-51-000	7.1	290	0.64	0.021	53	.	56900	-0.001	.	145.7	21370	-0.1	0.07
PALU100R	42-41.2126-	75.6859-4-51-000	6.3	90	0.04	-0.002	63	57.6	11300	0.176	64	144.4	5000	-0.1	.
PALU101R	42-41.1782-	75.7014-4-51-000	6.1	85	0.02	-0.002	149	46.3	16800	-0.001	.	30.6	4410	-0.1	.
PALU102R	42-41.1805-	75.7653-4-51-000	5.3	80	0.01	-0.002	136	31.4	5200	-0.001	.	93.2	860	-0.1	.
PALU103R	42-41.1842-	75.8038-4-51-000	5.7	79	0.04	0.032	246	.	8800	-0.001	51	88.3	1910	-0.1	0.41
PALU104R	42-41.1646-	75.8631-4-51-000	6.4	90	0.04	-0.002	44	42.5	5600	-0.001	.	20.6	1150	-0.1	.
PALU105R	42-41.1815-	75.9519-4-51-000	7.4	288	0.12	-0.002	47	.	55800	-0.001	.	.	19380	-0.1	.
PALU106R	42-41.2540-	75.9970-4-51-000	7.7	220	0.52	0.002	56	.	11500	-0.001	.	14.5	4130	0.4	0.01
PALU134R	42-41.2941-	75.9453-4-51-000	7.2	130	0.55	0.048	47	79.1	18700	-0.001	48	125.7	7130	-0.1	0.37
PALU135R	42-41.2868-	75.9752-4-51-000	7.6	111	0.40	-0.002	18	15.6	8400	-0.001	.	115.6	3040	-0.1	.
PALU136R	42-41.3193-	75.9975-4-51-000	7.5	115	0.42	-0.002	47	51.3	10900	-0.001	46	44.7	5160	-0.1	.
PALU137R	42-41.3658-	75.9931-4-51-000	7.6	75	0.38	0.017	56	75.6	22500	-0.001	.	.	5370	-0.1	0.23
PALU139R	42-41.2519-	75.7720-4-51-000	8.1	50	0.08	-0.002	49	87.7	14400	-0.001	55	31.0	4480	-0.1	.
PALU140R	42-41.2645-	75.7916-4-51-000	8.0	75	0.15	-0.002	37	.	9800	-0.001	.	19.5	3270	-0.1	.
PALU141R	42-41.2893-	75.8052-4-51-000	8.0	210	0.16	0.030	144	.	45600	-0.001	994	79.1	22580	-0.1	0.14
PALU142R	42-41.3355-	75.7484-4-51-000	7.7	260	0.30	0.011	63	.	25300	-0.001	.	23.8	11700	-0.1	0.04
PALU143R	42-41.3240-	75.8515-4-51-000	8.2	112	0.40	-0.002	47	85.8	18100	-0.001	86	.	6000	-0.1	.
PALU144R	42-41.3200-	75.9105-4-51-000	8.1	105	0.50	0.006	49	45.2	8700	-0.001	.	23.0	2540	0.2	0.06

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MG/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PALU145R	42-41.3247-	75.9426-4-51-000	8.1	195	0.62	0.050	67	64.1	42000	-0.001	.	69.3	15330	-0.1	0.26
PALU146R	42-41.3634-	75.9317-4-51-000	8.1	95	0.37	-0.002	48	42.7	10200	-0.001	15	21.3	3130	-0.1	.
PALU147R	42-41.3550-	75.9082-4-51-000	9.9	120	0.38	0.076	206	70.0	16200	-0.001	37	46.8	6200	0.6	0.63
PALU148R	42-41.3990-	75.8857-4-51-000	7.5	105	0.43	-0.002	30	.	6100	-0.001	.	10.8	2480	-0.1	.
PALU149R	42-41.3917-	75.8635-4-51-000	7.7	105	0.40	-0.002	109	62.4	20100	-0.001	65	96.9	7600	-0.1	.
PALU150R	42-41.3757-	75.8498-4-51-000	7.8	125	0.63	0.022	113	1734.0	24500	0.188	75	110.6	11730	0.9	0.18
PAM0021R	42-41.0495-	75.1157-4-51-000	6.8	130	0.96	0.025	71	.	17500	-0.001	74	.	7320	-0.1	0.19
PAM0022R	42-41.0439-	75.0797-4-51-000	7.2	183	0.74	0.251	124	19.7	11300	-0.001	61	153.6	5240	0.3	1.37
PAM0023R	42-41.0199-	75.1849-4-51-000	7.8	140	0.65	0.046	86	36.9	17400	-0.001	34	92.7	8640	-0.1	0.33
PAM0024R	42-41.0170-	75.2083-4-51-000	6.4	152	0.52	-0.002	82	217.9	43700	-0.001	.	84.3	17520	-0.1	.
PAM0025R	42-41.0093-	75.2557-4-51-000	6.7	70	0.17	0.006	64	10.3	18700	-0.001	.	83.2	8920	-0.1	0.09
PAM0026R	42-41.0106-	75.3208-4-51-000	7.3	70	0.20	0.008	80	.	15900	-0.001	55	96.8	7320	0.4	0.11
PAM0032R	42-41.0258-	75.1315-4-51-000	8.8	130	0.68	0.059	93	4720.0	15900	-0.001	53	79.1	8910	1.0	0.45
PAM0033R	42-41.0538-	75.2245-4-51-000	7.3	60	0.22	0.019	91	27.3	14600	-0.001	45	64.3	6720	0.3	0.32
PAM0034R	42-41.0423-	75.1633-4-51-000	7.6	80	0.34	0.007	81	13.1	12900	-0.001	125	115.9	6850	-0.1	0.09
PAM0035R	42-41.0453-	75.2566-4-51-000	7.7	120	0.50	0.029	78	.	24400	-0.001	206	.	15940	-0.1	0.24
PAM0036R	42-41.0639-	75.3199-4-51-000	7.8	91	0.18	-0.002	65	.	32100	-0.001	.	68.2	10900	-0.1	.
PAM0037R	42-41.0544-	75.3561-4-51-000	8.3	20	0.06	0.016	95	.	9500	-0.001	.	87.1	4310	0.3	0.80
PAM0038R	42-41.0179-	75.3674-4-51-000	7.5	20	0.10	0.014	166	.	11100	-0.001	.	84.5	4280	0.9	0.70
PAM0039R	42-41.0141-	75.3871-4-51-000	7.9	20	0.08	-0.002	91	.	8600	-0.001	.	62.9	3160	0.2	.
PAM0042R	42-41.0124-	75.4776-4-51-000	7.5	330	1.08	0.027	104	53.8	78200	0.367	.	124.3	56140	-0.1	0.08
PAM0043R	42-41.0361-	75.4603-4-51-000	5.1	30	0.01	-0.002	318	35.6	13500	-0.001	44	155.3	5500	0.8	.
PAM0044R	42-41.0105-	75.4363-4-51-000	6.5	10	0.06	-0.002	119	.	8100	-0.001	12	67.4	3740	0.6	.
PAM0102R	42-41.0540-	75.5504-4-51-000	7.6	35	0.08	-0.002	174	.	11500	-0.001	35	105.3	4920	-0.1	.
PAM0103R	42-41.2253-	75.1781-4-51-000	8.0	35	0.16	-0.002	144	12.1	7600	-0.001	140	90.6	4360	-0.1	.
PAM0104R	42-41.0760-	75.0277-4-51-000	7.3	100	0.52	0.014	105	19.3	14800	-0.001	233	179.7	6870	0.5	0.14
PAM0105R	42-41.0725-	75.0905-4-51-000	7.6	80	0.24	-0.002	61	.	12400	-0.001	75	188.9	5980	-0.1	.
PAM0106R	42-41.0738-	75.1164-4-51-000	7.7	50	0.14	-0.002	91	.	10400	-0.001	63	97.8	5460	-0.1	.
PAM0107R	42-41.1283-	75.1086-4-51-000	7.4	9	0.02	-0.002	127	15.6	7600	-0.001	73	167.4	4560	0.4	.
PAM0108R	42-41.1120-	75.0979-4-51-000	7.4	55	0.20	-0.002	68	12.5	9500	-0.001	61	103.7	6540	0.4	.
PAM0109R	42-41.2386-	75.2307-4-51-000	7.0	65	0.10	0.022	105	.	14400	-0.001	61	138.2	7260	-0.1	0.34
PAM0110R	42-41.0813-	75.1767-4-51-000	6.9	60	0.26	0.008	106	48.6	7400	-0.001	79	147.9	4570	-0.1	0.13
PAM0111R	42-41.1258-	75.1582-4-51-000	6.5	65	0.20	-0.002	129	97.8	7200	0.224	62	1114.0	4470	-0.1	.
PAM0112R	42-41.1575-	75.1653-4-51-000	5.8	51	0.08	-0.002	98	50.3	10800	-0.001	45	508.8	4940	-0.1	.
PAM0113R	42-41.1635-	75.2657-4-51-000	7.1	50	0.16	-0.002	104	65.2	12400	-0.001	21	78.9	5400	-0.1	.
PAM0114R	42-41.1922-	75.2187-4-51-000	7.1	40	0.18	0.029	156	.	8500	-0.001	66	188.1	4420	0.4	0.73
PAM0115R	42-41.2180-	75.2658-4-51-000	7.0	80	0.28	-0.002	100	.	17000	-0.001	44	81.7	7130	-0.1	.
PAM0116R	42-41.1978-	75.2566-4-51-000	6.8	52	0.10	-0.002	108	11.6	13600	-0.001	42	101.9	6510	0.6	.
PAM0117R	42-41.2232-	75.3169-4-51-000	7.2	20	0.06	-0.002	189	34.4	7000	-0.001	92	100.2	3320	-0.1	.
PAM0118R	42-41.2016-	75.3039-4-51-000	7.1	22	0.10	-0.002	69	21.9	7400	-0.001	69	64.5	3850	-0.1	.
PAM0119R	42-41.1687-	75.2858-4-51-000	6.9	30	0.08	-0.002	75	.	10500	-0.001	.	63.5	4160	-0.1	.
PAM0120R	42-41.1156-	75.3467-4-51-000	6.6	198	0.18	-0.002	328	.	51300	-0.001	.	168.9	28930	-0.1	.
PAM0121R	42-41.1474-	75.3634-4-51-000	6.3	65	0.10	0.027	279	11.4	11200	-0.001	107	232.4	4790	1.1	0.42
PAM0122R	42-41.2096-	75.3599-4-51-000	5.7	56	0.08	0.018	87	.	22900	-0.001	16	116.0	8230	-0.1	0.32
PAM0123R	42-41.2328-	75.3349-4-51-000	5.4	30	0.08	-0.002	129	524.8	7700	-0.001	47	200.6	3420	-0.1	.
PAM0124R	42-41.1274-	75.3081-4-51-000	8.1	50	0.16	-0.002	88	.	13100	-0.001	20	76.4	6550	-0.1	.
PAM0125R	42-41.1191-	75.2627-4-51-000	8.4	110	0.01	0.002	61	87.7	34000	-0.001	.	9660	13740	-0.1	0.02
PAM0126R	42-41.1551-	75.2061-4-51-000	8.7	39	0.12	0.010	76	22.8	8900	-0.001	103	83.6	5250	-0.1	0.26
PAM0127R	42-41.1150-	75.2233-4-51-000	8.3	80	0.32	-0.002	52	11.4	9900	-0.001	54	72.3	5360	-0.1	.
PAM0128R	42-41.0840-	75.2125-4-51-000	8.3	3	0.14	-0.002	57	30.0	9700	-0.001	86	71.6	4820	-0.1	.
PAM0129R	42-41.0698-	75.2586-4-51-000	8.4	50	0.16	-0.002	59	.	25700	0.038	.	62.5	9750	-0.1	.
PAM0130R	42-41.0903-	75.2867-4-51-000	8.7	73	0.18	0.005	74	54.4	28500	-0.001	.	60.5	10040	-0.1	0.07
PAM0131R	42-41.1003-	75.3468-4-51-000	7.8	65	0.14	0.017	78	.	29100	-0.001	.	79.7	8950	-0.1	0.26

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAMO132R	42-41.2339-75.4383-4-51-000	5.9	29	0.06	-0.002	184	89.3	13000	0.119	86	.	253.7	3980	0.4	.
PAMO133R	42-41.1460-75.3894-4-51-000	6.0	39	0.10	-0.002	114	178.7	12700	-0.001	42	.	534.4	5100	-0.1	.
PAMO134R	42-41.1220-75.3976-4-51-000	5.6	75	0.04	0.016	168	.	30900	-0.001	.	.	155.2	10100	-0.1	0.21
PAMO135R	42-41.0796-75.3991-4-51-000	5.6	82	0.02	0.038	252	55.6	31500	-0.001	.	.	322.9	12420	-0.1	0.46
PAMO136R	42-41.0764-75.4420-4-51-000	6.1	105	0.14	0.037	740	.	28500	-0.001	72	.	246.6	16780	0.7	0.35
PAMO137R	42-41.2041-75.4572-4-51-000	5.7	74	0.10	0.027	122	.	22300	-0.001	79	.	840.9	9740	-0.1	0.36
PAMO138R	42-41.2147-75.4010-4-51-000	5.8	30	0.06	0.024	153	32.3	7600	-0.001	31	.	89.7	3390	0.3	0.80
PAMO139R	42-41.1901-75.4013-4-51-000	5.4	29	0.06	-0.002	129	.	10700	-0.001	65	.	77.2	3840	-0.1	.
PAMO140R	42-41.1621-75.4540-4-51-000	6.5	75	0.08	-0.002	122	431.0	19600	-0.001	94	.	92.9	9920	0.8	.
PAMO141R	42-41.1228-75.4394-4-51-000	6.0	18	0.06	-0.002	192	.	8900	0.078	37	.	256.7	3000	0.6	.
PAMO142R	42-41.1399-75.5191-4-51-000	4.8	32	0.01	-0.002	239	.	9200	-0.001	56	.	148.2	2890	0.4	.
PAMO143R	42-41.0824-75.5091-4-51-000	4.6	61	0.00	0.026	528	.	15500	-0.001	55	.	179.1	6340	0.5	0.43
PAMO144R	42-41.1073-75.4894-4-51-000	6.7	45	0.06	0.019	118	.	15700	-0.001	45	.	86.0	6400	-0.1	0.42
PAMO145R	42-41.1615-75.5649-4-51-000	5.9	32	0.02	-0.002	260	.	7400	-0.001	66	.	260.0	3520	-0.1	.
PAMO146R	42-41.1545-75.5805-4-51-000	7.2	41	0.10	0.011	162	28.2	8900	-0.001	87	.	239.5	3760	-0.1	0.27
PAMO147R	42-41.1199-75.5413-4-51-000	7.2	80	0.10	-0.002	150	.	15100	-0.001	100	.	354.5	5880	1.3	.
PAMO148R	42-41.0956-75.5411-4-51-000	7.3	45	0.08	0.032	110	21.1	11600	-0.001	68	.	135.8	4450	-0.1	0.71
PAMO149R	42-41.1049-75.6005-4-51-000	7.4	39	0.08	0.031	232	.	10000	-0.001	106	.	250.9	4050	-0.1	0.79
PAMO150R	42-41.0805-75.5783-4-51-000	7.4	82	0.08	0.005	427	1203.0	20700	-0.001	31	.	377.3	8230	0.6	0.06
PAP1001R	42-41.0985-75.0040-4-51-000	7.6	35	0.14	-0.002	59	59.4	10300	-0.001	100	.	66.1	2930	0.4	.
PAP1002R	42-41.1267-74.9559-4-51-000	7.3	41	0.24	-0.002	52	76.5	11100	-0.001	50	.	60.2	3350	-0.1	.
PAP1003R	42-41.1319-75.0080-4-51-000	7.2	30	0.12	-0.002	59	56.1	10500	-0.001	92	.	59.1	2180	0.4	.
PAP1004R	42-41.1194-75.0529-4-51-000	7.2	35	0.14	0.037	59	45.7	10300	-0.001	79	.	61.9	2370	0.6	1.06
PAP1005R	42-41.1519-75.1350-4-51-000	7.7	49	0.16	0.029	47	94.9	13100	-0.001	37	.	64.5	3710	-0.1	0.59
PAP1006R	42-41.1599-75.1271-4-51-000	7.5	30	0.08	-0.002	102	58.2	10500	-0.001	85	.	59.8	2080	0.3	.
PAP1007R	42-41.1690-75.0735-4-51-000	7.9	35	0.16	0.017	96	59.3	10400	-0.001	122	.	84.4	2750	-0.1	0.49
PAP1008R	42-41.1776-75.0095-4-51-000	6.7	38	0.12	-0.002	95	59.3	9500	-0.001	66	.	88.4	2040	0.4	.
PAP1009R	42-41.1737-74.9702-4-51-000	7.1	33	0.14	-0.002	78	66.9	8000	-0.001	39	.	57.1	1870	-0.1	.
PAP1010R	42-41.1625-74.9121-4-51-000	7.3	72	0.22	0.013	54	.	13200	0.050	6470	.	60.5	4620	-0.1	0.18
PAP1011R	42-41.2215-74.8737-4-51-000	8.2	49	0.20	0.017	64	.	13200	-0.001	63	.	53.9	3510	-0.1	0.35
PAP1012R	42-41.2010-74.9180-4-51-000	7.0	45	0.18	-0.002	71	86.7	11700	-0.001	58	.	52.2	2380	-0.1	.
PAP1013R	42-41.2071-74.9488-4-51-000	7.0	49	0.24	-0.002	70	101.6	11700	-0.001	41	.	117.8	3020	-0.1	.
PAP1014R	42-41.1977-75.0031-4-51-000	5.2	25	0.04	0.022	115	30.4	7800	-0.001	92	.	210.2	1790	0.8	0.88
PAP1015R	42-41.2081-75.0392-4-51-000	6.9	45	0.32	0.022	93	107.4	12500	-0.001	59	.	1168.5	2250	0.5	0.49
PAP1016R	42-41.2204-75.1089-4-51-000	6.4	30	0.08	-0.002	55	78.6	14200	-0.001	60	.	51.4	2570	0.3	.
PAP1017R	42-41.2453-75.0970-4-51-000	6.2	35	0.06	-0.002	73	93.0	13500	-0.001	93	.	81.0	3280	0.7	.
PAP1018R	42-41.2319-75.0681-4-51-000	6.7	30	0.14	0.009	75	41.8	9600	0.258	63	.	244.1	1950	-0.1	0.30
PAP1019R	42-41.2440-75.0234-4-51-000	5.6	23	0.06	-0.002	84	56.8	9100	-0.001	41	.	122.5	2380	-0.1	.
PAP1020R	42-41.2529-74.9704-4-51-000	7.2	30	0.10	-0.002	159	83.0	8700	-0.001	78	.	177.8	2000	0.5	.
PAP1021R	42-41.2330-74.9136-4-51-000	7.6	44	0.20	-0.002	190	86.4	12000	-0.001	135	.	85.1	3130	-0.1	.
PAP1022R	42-41.2399-74.8690-4-51-000	8.1	48	0.20	0.018	59	23.4	9700	-0.001	51	.	83.6	3830	-0.1	0.38
PAP1023R	42-41.2681-74.8812-4-51-000	7.1	48	0.10	-0.002	528	61.8	13100	-0.001	93	.	299.0	3470	1.2	.
PAP1024R	42-41.2749-74.9049-4-51-000	7.5	35	0.14	0.023	277	62.3	9400	-0.001	41	.	133.3	3450	0.7	0.66
PAP1025R	42-41.2925-74.9562-4-51-000	6.3	29	0.12	-0.002	101	36.6	8800	-0.001	78	.	103.1	3140	0.4	.
PAP1026R	42-41.2749-75.0009-4-51-000	7.2	37	0.08	-0.002	122	72.7	9600	-0.001	38	.	202.3	2850	0.6	.
PAP1027R	42-41.2715-75.0570-4-51-000	7.6	34	0.10	0.044	48	81.0	10000	-0.001	87	.	116.8	3500	-0.1	1.29
PAP1028R	42-41.2839-75.0959-4-51-000	7.3	50	0.06	-0.002	66	94.6	16000	-0.001	30	.	184.8	5530	-0.1	.
PAP1029R	42-41.2855-75.1576-4-51-000	4.6	25	0.02	-0.002	140	38.8	7300	-0.001	20	.	148.1	1590	-0.1	.
PAP1030R	42-41.2798-75.2295-4-51-000	7.2	30	0.04	0.001	120	17.9	4700	-0.001	42	.	117.2	5940	-0.1	0.03
PAP1031R	42-41.2716-75.2528-4-51-000	7.2	59	0.34	-0.002	64	47.9	10400	-0.001	49	.	48.5	1960	-0.1	.
PAP1032R	42-41.2706-75.3023-4-51-000	7.5	90	0.48	-0.002	54	48.9	15400	-0.001	21	.	55.3	3410	-0.1	.
PAP1033R	42-41.3192-75.3030-4-51-000	8.4	43	0.12	-0.002	59	64.2	10700	-0.001	.	.	35.0	2280	-0.1	.
PAP1034R	42-41.3253-75.2528-4-51-000	7.5	48	0.14	-0.002	51	62.6	10200	-0.001	49	.	45.5	2250	-0.1	.

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAP1035R	42-41.3165-75.1967-4-51-000	5.9	35	0.06	-0.002	83	.	9200	-0.001	49	.	484.4	1670	-0.1	.
PAP1036R	42-41.3112-75.1590-4-51-000	5.1	22	0.02	-0.002	214	.	11600	-0.001	157	.	440.7	1490	1.3	.
PAP1037R	42-41.3095-75.1146-4-51-000	5.8	70	0.12	-0.002	101	63.4	9600	-0.001	30	.	37.2	1900	-0.1	.
PAP1038R	42-41.3253-75.0622-4-51-000	8.8	60	0.16	-0.002	65	91.3	17900	0.175	64	.	419.0	5140	-0.1	.
PAP1039R	42-41.3222-75.0006-4-51-000	5.9	25	0.12	0.005	134	.	4500	-0.001	43	.	476.4	6570	2.7	0.20
PAP1040R	42-41.3115-74.9552-4-51-000	6.1	108	0.84	-0.002	85	71.1	7600	0.114	30	.	1613.7	7730	-0.1	.
PAP1041R	42-41.2979-74.9076-4-51-000	6.6	45	0.18	-0.002	46	64.0	11200	-0.001	60	.	60.5	2390	-0.1	.
PAP1042R	42-41.3244-74.8648-4-51-000	8.8	50	0.30	-0.002	49	57.0	12400	-0.001	81	.	43.9	2870	-0.1	.
PAP1043R	42-41.3209-74.8241-4-51-000	6.7	50	0.20	-0.002	32	56.5	11500	-0.001	51	.	28.7	3680	-0.1	.
PAP1044R	42-41.3587-74.7338-4-51-000	7.4	70	0.28	0.044	65	65.2	8500	-0.001	72	2430	.	2920	-0.1	0.63
PAP1045R	42-41.3517-74.7668-4-51-000	7.8	42	0.16	-0.002	62	66.9	9700	-0.001	76	2410	.	2560	0.3	.
PAP1046R	42-41.3481-74.8117-4-51-000	7.7	50	0.30	-0.002	68	72.8	10700	-0.001	37	.	.	2950	-0.1	.
PAP1047R	42-41.3532-74.8512-4-51-000	6.6	71	0.22	-0.002	40	.	7600	-0.001	.	.	33.9	2120	-0.1	.
PAP1048R	42-41.3511-74.9012-4-51-000	5.7	47	0.06	-0.002	147	56.5	14600	-0.001	112	.	30.5	4230	-0.1	.
PAP1049R	42-41.3498-74.9656-4-51-000	6.9	48	0.14	0.002	137	23.8	4800	-0.001	.	.	59.8	960	-0.1	0.04
PAP1050R	42-41.3479-75.0096-4-51-000	6.9	50	0.16	-0.002	75	75.7	13200	0.114	65	.	67.3	3250	0.5	.
PAP1051R	42-41.3544-75.0712-4-51-000	6.0	45	0.04	-0.002	64	25.0	6800	-0.001	.	.	28.6	1320	-0.1	.
PAP1052R	42-41.3535-75.0954-4-51-000	7.0	45	0.04	-0.002	149	82.0	11000	-0.001	84	.	77.6	2840	-0.1	.
PAP1053R	42-41.3400-75.1379-4-51-000	6.0	30	0.02	-0.002	67	25.1	4400	-0.001	.	.	65.7	570	-0.1	.
PAP1054R	42-41.3458-75.2285-4-51-000	7.2	40	0.10	-0.002	123	70.3	10400	-0.001	22	.	198.8	1630	-0.1	.
PAP1055R	42-41.3415-75.2528-4-51-000	6.7	48	0.06	-0.002	90	24.3	5200	-0.001	24	.	84.4	530	-0.1	.
PAP1056R	42-41.3371-75.3134-4-51-000	6.8	100	0.30	0.007	67	.	25100	-0.001	46	.	.	5870	0.3	0.07
PAP1057R	42-41.3865-75.2372-4-51-000	6.1	45	0.14	-0.002	26	.	6200	-0.001	.	.	9.4	1500	-0.1	.
PAP1058R	42-41.3919-75.1918-4-51-000	6.0	35	0.08	0.009	216	48.8	8200	-0.001	61	.	108.7	1480	-0.1	0.26
PAP1059R	42-41.3770-75.1626-4-51-000	6.3	45	0.10	-0.002	52	14.1	5400	-0.001	29	.	14.3	1150	-0.1	.
PAP1060R	42-41.3936-75.1101-4-51-000	5.9	55	0.10	0.020	82	77.2	12900	-0.001	67	.	61.6	3320	0.4	0.36
PAP1061R	42-41.3749-75.0560-4-51-000	6.7	33	0.06	-0.002	66	15.5	6000	-0.001	.	.	24.4	770	-0.1	.
PAP1062R	42-41.3852-75.0293-4-51-000	7.4	60	0.10	0.008	128	79.1	10500	-0.001	99	.	129.0	2340	0.5	0.13
PAP1063R	42-41.3999-74.9680-4-51-000	7.3	85	0.18	-0.002	28	41.9	8200	-0.001	11	.	20.6	3050	0.2	.
PAP1064R	42-41.3968-74.9100-4-51-000	6.4	45	0.04	-0.002	72	74.7	11400	-0.001	65	.	34.1	2690	-0.1	.
PAP1065R	42-41.3723-74.8435-4-51-000	6.5	100	0.18	-0.002	26	.	17900	-0.001	.	.	33.2	4030	-0.1	.
PAP1066R	42-41.4043-74.7993-4-51-000	6.6	32	0.12	0.022	61	.	10000	-0.001	36	.	15.5	2160	-0.1	0.69
PAP1067R	42-41.4080-74.7507-4-51-000	6.5	36	0.04	-0.002	24	21.8	3900	-0.001	22	.	169.2	1040	-0.1	.
PAP1068R	42-41.3938-74.7263-4-51-000	6.5	85	0.34	-0.002	52	169.8	12300	-0.001	36	.	536.8	3000	-0.1	.
PAP1069R	42-41.4109-74.7651-4-51-000	6.8	39	0.14	-0.002	28	15.7	4100	0.036	18	.	9.1	1020	-0.1	.
PAP1070R	42-41.4282-74.8272-4-51-000	7.2	50	0.22	-0.002	77	72.2	8300	-0.001	54	.	39.1	1830	-0.1	.
PAP1071R	42-41.4153-75.2253-4-51-000	6.8	40	0.04	-0.002	100	65.1	10500	-0.001	85	.	60.3	2340	0.4	.
PAP1072R	42-41.4285-74.9092-4-51-000	7.5	32	0.08	-0.002	82	80.5	9600	-0.001	70	.	55.4	2130	-0.1	.
PAP1073R	42-41.4292-74.9674-4-51-000	6.9	48	0.18	0.001	82	51.0	7900	-0.001	72	.	67.4	1970	-0.1	0.02
PAP1074R	42-41.4238-75.0155-4-51-000	6.3	40	0.12	-0.002	150	80.2	9700	-0.001	94	.	76.6	2680	0.6	.
PAP1075R	42-41.4223-75.0749-4-51-000	5.9	42	0.08	-0.002	154	85.9	12900	-0.001	102	.	408.3	3520	-0.1	.
PAP1076R	42-41.4324-75.1091-4-51-000	5.6	48	0.10	-0.002	118	.	12700	-0.001	85	.	62.2	2840	-0.1	.
PAP1077R	42-41.4366-75.1538-4-51-000	6.2	48	0.12	-0.002	65	.	10800	-0.001	90	.	59.4	2860	0.3	.
PAP1078R	42-41.4200-75.1886-4-51-000	5.9	49	0.14	-0.002	69	36.8	12500	-0.001	69	.	215.0	3640	-0.1	.
PAP1079R	42-41.4756-75.1683-4-51-000	5.9	111	0.34	0.031	70	.	25500	-0.001	55	.	73.1	8880	0.5	0.28
PAP1080R	42-41.4643-75.1300-4-51-000	6.1	60	0.28	0.030	63	43.0	13400	-0.001	86	.	76.6	3710	0.6	0.50
PAP1081R	42-41.4630-75.0533-4-51-000	5.9	45	0.18	0.017	103	.	9900	-0.001	66	.	66.0	3080	-0.1	0.38
PAP1082R	42-41.4768-75.0079-4-51-000	6.8	55	0.20	0.017	194	41.5	11800	-0.001	37	.	64.4	3050	-0.1	0.31
PAP1083R	42-41.4788-74.9414-4-51-000	6.7	35	0.08	0.034	84	45.6	8000	0.104	64	.	54.3	1760	0.3	0.97
PAP1084R	42-41.4663-74.9203-4-51-000	7.1	56	0.10	0.043	86	63.0	12000	-0.001	57	.	79.7	3850	-0.1	0.77
PAP1085R	42-41.5111-75.0164-4-51-000	6.7	40	0.12	-0.002	55	63.5	9100	-0.001	85	.	70.8	2110	-0.1	.
PAP1086R	42-41.4986-75.0701-4-51-000	6.0	78	0.12	0.007	64	61.9	11300	-0.001	105	.	134.6	3480	-0.1	0.09
PAP1087R	42-41.5047-75.1149-4-51-000	5.6	48	0.14	0.003	68	68.9	12100	-0.001	77	.	195.5	3150	0.4	0.06

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.		PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAP1088R	42-41.4906-	75.1564-4-51-000	7.0	50	0.28	-0.002	205	33.6	9100	-0.001	88	.	413.0	2500	-0.1	.
PAP1089R	42-41.5519-	75.1025-4-51-000	7.2	48	0.20	0.053	137	65.0	8500	-0.001	69	.	136.1	1960	0.7	1.10
PAP1090R	42-41.5461-	75.0505-4-51-000	7.5	33	0.38	-0.002	78	53.0	8200	-0.001	53	.	57.9	2110	-0.1	.
PAP1091R	42-41.5359-	75.0343-4-51-000	7.2	46	0.46	0.040	104	72.0	13600	-0.001	65	.	66.8	2330	-0.1	0.87
PAP1092R	42-41.5687-	75.0757-4-51-000	7.1	50	0.22	0.042	113	72.1	11300	-0.001	99	.	195.9	2970	0.6	0.84
PASS001R	42-41.6539-	75.8238-4-51-000	7.4	130	0.56	0.083	68	.	10700	-0.001	55	.	80.8	3510	-0.1	0.64
PASS002R	42-41.7080-	75.8129-4-51-000	7.9	80	0.42	0.018	59	27.8	8500	-0.001	61	.	37.9	2860	0.4	0.23
PASS003R	42-41.7045-	75.7838-4-51-000	7.2	75	0.48	0.018	86	.	9700	-0.001	41	.	53.0	2660	-0.1	0.24
PASS004R	42-41.7335-	75.8174-4-51-000	7.4	90	0.40	0.017	77	41.9	11600	-0.001	111	.	88.6	3870	0.5	0.19
PASS005R	42-41.7700-	75.8181-4-51-000	7.2	110	0.48	0.012	79	.	18800	-0.001	21	.	160.4	5490	-0.1	0.11
PASS006R	42-41.7404-	75.7581-4-51-000	7.5	140	0.44	0.012	91	.	14300	0.088	50	.	43.1	3820	-0.1	0.09
PASS007R	42-41.7809-	75.7464-4-51-000	7.4	130	0.54	0.003	67	.	14600	-0.001	81	6930	.	4790	-0.1	0.02
PASS008R	42-41.7595-	75.6918-4-51-000	7.5	80	0.30	-0.002	80	.	11700	-0.001	54	.	30.2	3110	-0.1	.
PASS009R	42-41.7355-	75.7142-4-51-000	7.5	90	0.40	0.023	108	.	9300	-0.001	78	.	43.4	2510	-0.1	0.26
PASS010R	42-41.7105-	75.7132-4-51-000	7.6	110	0.34	-0.002	76	.	20600	-0.001	90	.	39.1	6120	-0.1	.
PASS011R	42-41.6572-	75.7286-4-51-000	7.7	80	0.44	0.045	91	21.5	9600	-0.001	85	.	39.9	3090	-0.1	0.56
PASS012R	42-41.6642-	75.7549-4-51-000	7.6	120	0.56	-0.002	77	34.5	10900	-0.001	107	.	48.6	3250	-0.1	.
PASS013R	42-41.7358-	75.6667-4-51-000	8.2	90	0.36	-0.002	235	13.8	11500	-0.001	23	.	48.8	3480	-0.1	.
PASS014R	42-41.7396-	75.6319-4-51-000	7.9	70	0.30	0.005	207	.	8900	-0.001	54	.	35.4	2960	0.5	0.07
PASS015R	42-41.7094-	75.6060-4-51-000	7.8	90	0.38	0.027	113	.	4800	-0.001	.	.	105.4	6780	-0.1	0.30
PASS016R	42-41.6996-	75.6665-4-51-000	8.1	140	0.42	0.079	54	.	17000	-0.001	.	.	.	5250	-0.1	0.56
PASS017R	42-41.6605-	75.6510-4-51-000	7.8	110	0.32	0.005	59	.	10400	-0.001	39	.	28.7	3560	-0.1	0.05
PASS018R	42-41.6532-	75.6079-4-51-000	7.8	130	0.52	0.087	104	.	13500	-0.001	23	.	66.4	5350	1.0	0.67
PASS019R	42-41.6709-	75.5650-4-51-000	7.7	110	0.28	-0.002	159	16.9	12500	-0.001	77	.	36.3	3880	0.7	.
PASS020R	42-41.6740-	75.5269-4-51-000	7.9	60	0.16	0.002	96	17.7	9000	-0.001	48	.	41.8	1700	-0.1	0.03
PASS021R	42-41.7082-	75.5217-4-51-000	7.7	100	0.40	0.063	112	15.9	12400	-0.001	44	.	78.5	3520	-0.1	0.63
PASS022R	42-41.7151-	75.4836-4-51-000	8.0	80	0.28	0.033	25	.	5400	-0.001	17	.	12.4	1540	-0.1	0.41
PASS023R	42-41.7399-	75.5094-4-51-000	8.2	50	0.24	0.009	59	8.4	6600	-0.001	58	.	32.1	1120	-0.1	0.18
PASS024R	42-41.7654-	75.5669-4-51-000	8.1	80	0.28	0.028	15	.	3200	-0.001	.	.	14.4	1040	-0.1	0.35
PASS025R	42-41.7403-	75.5690-4-51-000	8.2	60	0.22	0.023	44	.	6900	-0.001	15	.	28.6	1210	-0.1	0.38
PASS026R	42-41.7132-	75.5865-4-51-000	8.4	80	0.28	0.007	11	.	4400	-0.001	11	.	.	630	-0.1	0.09
PASS027R	42-41.8088-	75.8055-4-51-000	5.8	120	0.46	-0.002	204	.	17500	-0.001	.	4460	.	5490	0.5	.
PASS028R	42-41.8594-	75.8185-4-51-000	6.9	110	0.36	-0.002	16	5.9	3800	-0.001	.	.	35.0	640	-0.1	.
PASS029R	42-41.8571-	75.7767-4-51-000	6.6	100	0.30	-0.002	48	.	17200	-0.001	53	.	36.1	4170	-0.1	.
PASS030R	42-41.8835-	75.7630-4-51-000	7.2	90	0.46	0.012	24	14.4	2800	-0.001	23	.	33.1	1160	-0.1	0.13
PASS031R	42-41.8923-	75.8319-4-51-000	6.6	70	0.20	0.030	45	12.1	7500	-0.001	50	2330	.	1990	-0.1	0.43
PASS032R	42-41.9279-	75.7947-4-51-000	6.6	75	0.32	-0.002	16	.	3400	-0.001	22	.	8.3	950	-0.1	.
PASS033R	42-41.8517-	75.7197-4-51-000	5.5	100	0.40	-0.002	37	.	16600	-0.001	65	3110	.	5810	-0.1	.
PASS034R	42-41.8126-	75.7463-4-51-000	6.8	110	0.62	0.034	19	.	4900	-0.001	20	.	24.9	1850	-0.1	0.31
PASS035R	42-41.8158-	75.7115-4-51-000	6.3	75	0.40	0.005	49	16.0	8200	-0.001	93	.	116.8	1690	-0.1	0.07
PASS036R	42-41.7778-	75.6622-4-51-000	6.9	100	0.40	-0.002	14	.	4200	-0.001	9	.	27.0	1790	-0.1	.
PASS037R	42-41.8040-	75.6548-4-51-000	6.3	90	0.40	0.030	36	12.2	11000	-0.001	64	.	43.4	5650	-0.1	0.33
PASS038R	42-41.7682-	75.6249-4-51-000	6.6	60	0.24	-0.002	22	21.1	4300	-0.001	15	.	.	820	-0.1	.
PASS039R	42-41.8119-	75.5724-4-51-000	6.8	100	0.42	0.048	30	.	10500	-0.001	56	.	15.0	3780	-0.1	0.48
PASS040R	42-41.9564-	75.6336-4-51-000	6.6	55	0.24	-0.002	56	.	3100	-0.001	14	.	8.4	1200	-0.1	.
PASS041R	42-41.9692-	75.6702-4-51-000	6.7	70	0.26	0.019	51	.	9300	-0.001	63	.	18.2	3860	0.2	0.27
PASS042R	42-41.9940-	75.6698-4-51-000	6.7	110	0.44	0.103	44	.	8200	-0.001	13	.	23.8	2670	-0.1	0.94
PASS043R	42-41.9671-	75.5730-4-51-000	7.0	60	0.22	-0.002	98	.	8300	-0.001	41	2310	.	2610	-0.1	.
PASS044R	42-41.9678-	75.5057-4-51-000	7.0	60	0.36	0.011	154	7.9	3500	-0.001	15	1240	.	910	0.4	0.18
PASS045R	42-41.9223-	75.5154-4-51-000	7.0	60	0.30	0.032	67	.	8700	-0.001	27	.	.	2310	-0.1	0.53
PASS046R	42-41.8932-	75.5629-4-51-000	7.1	90	0.36	0.018	73	.	10400	-0.001	55	.	165.5	3280	-0.1	0.20
PASS047R	42-41.9330-	75.5686-4-51-000	6.4	70	0.34	0.045	78	.	9200	-0.001	74	.	44.5	3330	-0.1	0.64
PASS048R	42-41.9314-	75.5976-4-51-000	6.9	80	0.30	0.024	160	.	11800	-0.001	101	6460	.	3850	-0.1	0.30

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PASS049R	42-41.8918-75.5968-4-51-000	7.8	110	0.24	0.004	69	15.5	11700	-0.001	81	.	49.0	2650	-0.1	0.04
PASS050R	42-41.8496-75.6364-4-51-000	7.1	80	0.22	-0.002	95	15.6	15700	-0.001	70	.	104.9	4190	-0.1	.
PASS051R	42-41.8583-75.6625-4-51-000	7.2	120	0.28	0.019	70	.	12200	-0.001	49	.	107.6	3320	-0.1	0.16
PASS052R	42-41.8599-75.5800-4-51-000	7.4	100	0.36	0.044	74	.	11600	-0.001	27	3940	.	3270	-0.1	0.44
PASS053R	42-41.8084-75.5997-4-51-000	7.6	45	0.16	-0.002	87	.	9800	-0.001	48	.	116.0	1240	-0.1	.
PASS054R	42-41.7844-75.5040-4-51-000	7.5	70	0.28	0.036	88	29.2	11900	-0.001	72	.	38.0	2870	-0.1	0.51
PASS055R	42-41.8032-75.5109-4-51-000	7.5	50	0.10	0.017	122	.	13100	-0.001	58	.	139.7	2930	-0.1	0.34
PASS056R	42-41.8478-75.5060-4-51-000	7.2	40	0.16	-0.002	66	.	7600	-0.001	19	.	17.2	1260	0.4	.
PASS057R	42-41.8882-75.5261-4-51-000	7.3	40	0.16	-0.002	57	.	8100	-0.001	74	.	87.5	2260	-0.1	.
PASS135R	42-41.8973-75.7071-4-51-000	9.5	100	0.60	0.063	133	40.9	8000	-0.001	66	.	150.0	4000	0.5	0.63
PASS136R	42-41.8772-75.6829-4-51-000	9.0	60	0.34	-0.002	46	.	12900	-0.001	58	.	42.6	4160	-0.1	.
PASS137R	42-41.9314-75.6424-4-51-000	9.5	110	0.24	0.020	112	122.0	14900	-0.001	41	.	191.5	2440	0.4	0.18
PASS138R	42-41.9415-75.7079-4-51-000	9.3	50	0.22	0.012	55	33.5	8200	-0.001	74	1990	.	2170	-0.1	0.24
PASS139R	42-41.9715-75.7191-4-51-000	8.8	110	0.42	-0.002	46	55.1	12700	-0.001	41	3800	.	4790	-0.1	.
PASS140R	42-41.9275-75.7718-4-51-000	9.3	70	0.28	-0.002	56	52.1	9200	-0.001	66	2650	.	2390	-0.1	.
PASS141R	42-41.9574-75.8215-4-51-000	9.8	90	0.32	0.024	75	.	16400	-0.001	65	.	44.7	4650	-0.1	0.27
PASS142R	42-41.9774-75.7575-4-51-000	8.0	110	0.60	0.021	86	36.7	10300	-0.001	77	4830	.	4510	-0.1	0.19
PASS143R	42-41.9807-75.8677-4-51-000	7.4	140	0.50	0.041	109	12.0	11200	-0.001	76	.	163.2	4590	0.2	0.29
PASS144R	42-41.9830-75.9294-4-51-000	7.4	115	0.33	-0.002	76	13.3	16800	-0.001	53	.	69.9	5450	-0.1	.
PASS145R	42-41.9501-75.8351-4-51-000	7.5	68	0.26	0.007	100	.	8900	-0.001	63	2570	.	2810	0.3	0.10
PASS146R	42-41.8523-75.8581-4-51-000	7.4	145	0.87	0.059	77	80.0	26200	-0.001	46	.	118.2	10030	-0.1	0.41
PASS147R	42-41.8035-75.8389-4-51-000	7.6	110	0.60	0.057	138	.	14300	-0.001	86	.	41.0	5390	-0.1	0.52
PASS148R	42-41.8492-75.9519-4-51-000	7.3	100	0.53	0.061	63	.	14700	-0.001	86	.	.	5160	-0.1	0.61
PASS149R	42-41.8890-75.9846-4-51-000	6.9	80	0.46	0.012	81	.	13000	-0.001	53	.	59.3	4210	0.5	0.15
PASS150R	42-41.9657-75.9649-4-51-000	6.4	80	0.33	0.026	96	.	18400	-0.001	64	.	58.8	5440	-0.1	0.33
PASS152R	42-41.9277-75.9913-4-51-000	7.3	100	0.47	0.025	104	.	13800	-0.001	85	.	128.9	6150	-0.1	0.25
PASS168R	42-41.8424-75.8959-4-51-000	7.6	128	0.67	0.067	M	.	M	-0.001	.	M	.	M	-0.1	0.52
PASS169R	42-41.8891-75.8939-4-51-000	7.4	95	0.47	-0.002	144	.	12500	-0.001	47	.	78.7	5110	0.5	.
PASS170R	42-41.9161-75.9287-4-51-000	7.3	70	0.30	0.005	100	.	9900	0.269	54	.	63.7	3650	-0.1	0.07
PASS171R	42-41.9199-75.8921-4-51-000	7.4	70	0.37	-0.002	73	.	9200	0.028	49	.	61.7	3390	-0.1	.
PASS172R	42-41.9178-75.8519-4-51-000	7.4	85	0.42	-0.002	115	.	11100	-0.001	40	.	64.7	3910	0.4	.
PASS173R	42-41.8847-75.8423-4-51-000	7.6	110	0.55	-0.002	92	16.1	10900	-0.001	56	.	84.9	4430	-0.1	.
PASS174R	42-41.7711-75.8478-4-51-000	7.4	104	0.60	-0.002	93	.	12500	-0.001	121	.	73.2	5740	-0.1	.
PASS175R	42-41.7487-75.8612-4-51-000	7.3	120	0.73	0.023	75	.	12500	-0.001	78	.	72.4	5550	-0.1	0.19
PASS176R	42-41.7167-75.8715-4-51-000	7.8	100	0.57	0.031	97	.	11900	-0.001	69	.	180.1	4610	-0.1	0.31
PASS177R	42-41.6558-75.8653-4-51-000	7.5	182	1.00	M	M	M	M	M	M	M	M	M	M	M
PASS179R	42-41.6639-75.9695-4-51-000	7.9	115	0.77	0.004	67	.	11900	-0.001	75	.	72.9	4880	-0.1	0.03
PASS181R	42-41.7085-75.9992-4-51-000	8.1	100	0.67	0.041	97	9.5	12000	-0.001	89	.	65.3	4710	-0.1	0.41
PASS182R	42-41.7756-75.9649-4-51-000	7.7	88	0.50	0.013	116	.	7700	-0.001	79	.	72.6	3130	-0.1	0.15
PASS183R	42-41.7506-75.9987-4-51-000	7.6	90	0.50	0.029	84	15.9	10700	-0.001	62	.	116.2	4020	-0.1	0.32
PASS188R	42-41.8018-75.9919-4-51-000	8.0	80	0.47	0.005	91	.	5200	-0.001	83	.	77.6	4620	-0.1	0.06
PASS189R	42-41.8234-75.9123-4-51-000	7.9	180	0.84	-0.002	91	.	25800	-0.001	45	.	88.9	11710	-0.1	.
PASS190R	42-41.8149-75.9627-4-51-000	7.8	90	0.47	0.043	68	.	13000	-0.001	83	.	76.1	4740	-0.1	0.48
PASS191R	42-41.7927-75.9284-4-51-000	7.6	122	0.63	0.016	84	.	20500	-0.001	50	.	107.9	6670	0.6	0.13
PASS192R	42-41.7258-75.9604-4-51-000	7.5	130	0.77	-0.002	47	.	17300	-0.001	110	.	187.8	6790	-0.1	.
PASS193R	42-41.7311-75.9310-4-51-000	7.5	105	0.71	-0.002	63	17.8	13700	-0.001	68	.	168.6	5740	0.3	.
PASS194R	42-41.7020-75.8965-4-51-000	7.8	112	0.90	0.014	98	22.3	13900	-0.001	59	.	77.0	4860	-0.1	0.13
PASS195R	42-41.6639-75.9185-4-51-000	7.5	170	0.91	0.028	91	.	33100	-0.001	68	.	112.2	12260	-0.1	0.16
PAW0001R	42-41.5058-75.9856-4-51-000	7.8	98	0.56	0.048	88	12.8	13000	0.079	51	.	67.0	6890	-0.1	0.49
PAW0003R	42-41.4758-75.9991-4-51-000	7.5	60	0.32	0.008	55	14.6	7800	-0.001	70	.	60.8	4670	-0.1	0.13
PAW0004R	42-41.5246-75.9653-4-51-000	7.3	108	0.45	-0.002	48	.	16500	-0.001	51	.	67.2	7000	-0.1	.
PAW0005R	42-41.4509-75.9650-4-51-000	7.2	94	0.50	0.013	50	.	13000	-0.001	37	.	104.2	5670	0.4	0.14
PAW0006R	42-41.4402-75.8925-4-51-000	7.5	110	0.68	0.010	75	.	10800	-0.001	35	.	82.8	5280	-0.1	0.09

TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAW0007R	42-41.4151-	75.8852-4-51-000	7.6	105	0.44	0.036	101	19300	-0.001	40		69.3	8750	0.6	0.34
PAW0008R	42-41.4427-	75.8467-4-51-000	7.4	180	0.73	0.024	56	20100	-0.001	130		79.6	10270	-0.1	0.13
PAW0009R	42-41.4762-	75.8302-4-51-000	7.7	215	0.93	0.069	83	29700	-0.001	323		47.9	16900	-0.1	0.32
PAW0010R	42-41.5078-	75.8103-4-51-000	7.7	130	0.43	-0.002	82	13100	-0.001	61		90.5	7090	0.3	
PAW0011R	42-41.5136-	75.8786-4-51-000	7.7	170	0.73	0.467	292	20300	0.078			128.6	8610	0.9	2.75
PAW0013R	42-41.4636-	75.8731-4-51-000	7.8	98	1.00	0.098	85	19300	0.397	108		75.1	7580	0.5	1.00
PAW0014R	42-41.4794-	75.9091-4-51-000	7.5	140	0.80	0.228	79	12800	-0.001	94		77.9	7920	-0.1	1.63
PAW0015R	42-41.5145-	75.9614-4-51-000	7.9	62	0.32	-0.002	150	10400	-0.001	23		73.7	4770	-0.1	
PAW0017R	42-41.3981-	75.9777-4-51-000	7.3	62	0.30	0.021	83	10600	-0.001	22		105.5	5940	-0.1	0.34
PAW0018R	42-41.5858-	75.8189-4-51-000	7.4	130	0.77	0.077	91	14200	-0.001	50		89.1	7390	-0.1	0.59
PAW0026R	42-41.5641-	75.9183-4-51-000	7.1	32	0.08	0.016	74	8900	-0.001	42		69.0	4240	-0.1	0.50
PAW0034R	42-41.5195-	75.9571-4-51-000	4.8	30	0.01	-0.002	235	8300	-0.001	29		218.1	3620	-0.1	
PAW0071R	42-41.5762-	75.9730-4-51-000	7.2	300	1.04	0.081	83	505.1 58700	-0.001	113		74.8	36530	-0.1	0.27
PAW0078R	42-41.6269-	75.9639-4-51-000	6.5	120	0.52	0.014	76	12700	-0.001	86		72.7	6450	0.5	0.12
PAW0090R	42-41.5531-	75.9201-4-51-000	6.3	120	0.52	0.037	56	14000	-0.001	21		84.8	7200	-0.1	0.31
PAW0091R	42-41.5826-	75.9145-4-51-000	7.3	120	0.32	0.059	121	19200	-0.001	63		303.9	9700	-0.1	0.49
PAW0092R	42-41.5888-	75.8652-4-51-000	7.2	110	0.48	0.024	89	13700	-0.001	43		82.3	8320	-0.1	0.22
PAW0093R	42-41.6186-	75.8457-4-51-000	7.6	130	0.52	0.023	83	14500	-0.001	85	11400		7010	-0.1	0.18
PAW0094R	42-41.6176-	75.8088-4-51-000	7.3	70	0.48	0.079	66	13000	-0.001	121	10190		6620	-0.1	1.13
PAW0095R	42-41.6304-	75.7699-4-51-000	8.1	150	0.60	0.026	77	11100	-0.001	60		78.4	6500	-0.1	0.17
PAW0098R	42-41.5857-	75.8190-4-51-000	7.6	120	0.52	-0.002	79	15100	-0.001	39		247.4	8330	-0.1	
PAWY001R	42-41.4852-	75.2213-4-51-000	7.7	80	0.50	0.030	18	24.0 6200	-0.001	27		37.5	1340	-0.1	0.38
PAWY002R	42-41.5035-	75.2444-4-51-000	7.2	125	0.60	0.041	41	71.0 15700	-0.001	83		57.7	5110	-0.1	0.33
PAWY003R	42-41.5067-	75.3245-4-51-000	8.1	85	0.57	0.033	15	26.8 5100	-0.001			20.3	1620	-0.1	0.39
PAWY004R	42-41.5013-	75.3498-4-51-000	7.7	50	0.30	0.018	77	55.6 10700	-0.001	80		32.6	2820	-0.1	0.36
PAWY005R	42-41.4941-	75.4101-4-51-000	7.9	50	0.28	0.039	14	23.3 5300	-0.001	21		23.0	1120	-0.1	0.78
PAWY006R	42-41.4942-	75.4374-4-51-000	7.7	95	0.60	-0.002	31	20.6 11100	-0.001	57		714.6	3510	0.5	
PAWY007R	42-41.4729-	75.4002-4-51-000	7.3	130	0.96	0.064	18	20.6 8900	-0.001			328.7	3340	-0.1	0.49
PAWY008R	42-41.4033-	75.4379-4-51-000	7.8	140	0.68	0.038	72	89.2 14900	-0.001	100		108.1	4470	-0.1	0.27
PAWY009R	42-41.3846-	75.3877-4-51-000	8.3	120	0.68	0.071	98	40.9 20900	-0.001	28		110.5	6540	-0.1	0.59
PAWY010R	42-41.3758-	75.3444-4-51-000	8.3	75	0.44	-0.002	80	35.6 12400	-0.001	57		100.3	3490	-0.1	
PAWY011R	42-41.3909-	75.3247-4-51-000	8.3	100	0.40	0.046	42	32.0 18700	-0.001			157.1	4900	-0.1	0.46
PAWY012R	42-41.4160-	75.3727-4-51-000	7.8	70	0.34	0.037	95	80.7 13100	-0.001	130		111.3	4020	0.7	0.53
PAWY013R	42-41.4262-	75.2908-4-51-000	7.8	70	0.30	0.005	132	79.9 16600	-0.001	60		260.6	4240	-0.1	0.07
PAWY014R	42-41.4380-	75.2460-4-51-000	7.8	55	0.28	-0.002	101	100.1 12800	-0.001	107		174.1	3460	-0.1	
PAWY015R	42-41.4610-	75.2023-4-51-000	6.9	62	0.38	0.047	61	89.7 11100	-0.001	142		1174.7	2980	0.6	0.76
PAWY016R	42-41.4533-	75.2392-4-51-000	6.7	64	0.26	-0.002	66	71.7 13400	-0.001	384		189.3	3500	-0.1	
PAWY017R	42-41.4449-	75.3069-4-51-000	7.2	80	0.42	0.002	86	70.8 13200	-0.001	93		290.3	3230	0.3	0.03
PAWY018R	42-41.4613-	75.3561-4-51-000	7.1	153	0.76	0.016	113	23700	-0.001	164		374.9	7490	0.4	0.10
PAWY019R	42-41.5323-	75.4294-4-51-000	7.5	75	0.44	-0.002	130	54.3 10700	0.054	103		181.1	2580	-0.1	
PAWY020R	42-41.5291-	75.4037-4-51-000	7.6	100	0.48	-0.002	110	69.7 12500	-0.001	141		105.5	2980	0.4	
PAWY021R	42-41.5358-	75.3568-4-51-000	7.6	96	0.26	-0.002	106	55.6 10600	-0.001	67		287.5	3330	0.4	
PAWY022R	42-41.5420-	75.3042-4-51-000	7.6	100	0.52	-0.002	88	15700	-0.001	95		757.0	3420	1.1	
PAWY023R	42-41.5489-	75.2504-4-51-000	7.9	193	1.36	0.156	133	114.5 23300	0.097	74		188.6	7740	0.6	0.81
PAWY024R	42-41.5464-	75.2109-4-51-000	8.0	121	0.42	0.022	192	25200	-0.001	63		179.6	6930	0.9	0.18
PAWY025R	42-41.6023-	75.1452-4-51-000	7.4	102	0.36	0.033	78	100.2 19700	0.063	66		101.5	6770	-0.1	0.32
PAWY026R	42-41.6211-	75.1013-4-51-000	7.3	76	0.24	0.055	146	15400	-0.001	108		86.0	4790	-0.1	0.72
PAWY027R	42-41.6142-	75.0743-4-51-000	7.7	80	0.32	0.037	673	89.9 20000	-0.001	275		64.7	6090	-0.1	0.46
PAWY028R	42-41.5802-	75.1241-4-51-000	7.8	112	0.40	0.021	121	18200	-0.001	122		181.1	6100	-0.1	0.19
PAWY029R	42-41.5491-	75.1556-4-51-000	5.7	33	0.06	0.018	215	94.6 9600	-0.001	142		78.0	2090	0.4	0.55
PAWY030R	42-41.5689-	75.1622-4-51-000	6.0	68	0.20	0.009	116	19800	-0.001	91		122.5	3120	-0.1	0.13
PAWY031R	42-41.5751-	75.1984-4-51-000	7.0	62	0.40	-0.002	81	60.5 11900	-0.001	37		86.5	3140	-0.1	
PAWY032R	42-41.5777-	75.2961-4-51-000	7.3	121	0.70	0.058	104	69.3 16000	-0.001	98		84.9	5290	-0.1	0.48

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAWY033R	42-41.5987- 75.3528-4-51-000	7.2	52	0.28	0.025	105	91.8	9800	-0.001	105	.	126.0	2570	0.9	0.48
PAWY034R	42-41.5588- 75.3705-4-51-000	7.5	71	0.48	0.039	145	.	10600	-0.001	105	.	252.9	2780	0.6	0.55
PAWY035R	42-41.5553- 75.4091-4-51-000	7.7	151	0.84	0.075	224	640.1	23300	-0.001	149	.	249.3	10340	1.4	0.50
PAWY036R	42-41.5988- 75.4133-4-51-000	8.2	132	0.60	0.096	200	.	13400	-0.001	105	.	136.3	5400	-0.1	0.73
PAWY037R	42-41.6333- 75.4037-4-51-000	7.6	61	0.36	-0.002	109	58.7	9400	-0.001	78	.	112.6	2330	0.4	.
PAWY038R	42-41.6497- 75.4427-4-51-000	8.0	36	0.06	0.004	135	53.3	10100	0.035	95	.	88.2	1620	0.6	0.11
PAWY039R	42-41.6800- 75.4498-4-51-000	7.2	60	0.38	0.001	157	70.0	11900	-0.001	66	.	78.0	1890	-0.1	0.02
PAWY040R	42-41.7107- 75.4426-4-51-000	7.6	59	0.24	-0.002	88	43.3	8900	-0.001	89	.	73.1	1970	-0.1	.
PAWY041R	42-41.7207- 75.4157-4-51-000	7.2	60	0.30	-0.002	63	70.6	10100	-0.001	90	.	57.3	2770	-0.1	.
PAWY042R	42-41.6898- 75.3969-4-51-000	7.6	104	0.48	0.029	68	49.4	12800	-0.001	52	.	62.0	3680	-0.1	0.28
PAWY043R	42-41.6437- 75.3468-4-51-000	7.6	90	0.72	0.019	79	63.8	10000	0.294	80	.	91.7	3010	0.7	0.21
PAWY044R	42-41.6141- 75.3083-4-51-000	8.0	105	0.73	0.050	75	51.1	12600	-0.001	106	.	230.1	3660	0.6	0.48
PAWY045R	42-41.6512- 75.3093-4-51-000	8.3	62	0.24	0.016	147	.	8800	-0.001	88	.	100.7	2700	0.7	0.26
PAWY046R	42-41.6789- 75.3391-4-51-000	7.6	205	0.67	0.042	50	.	46600	0.106	.	.	127.9	14240	-0.1	0.20
PAWY047R	42-41.7323- 75.3383-4-51-000	8.1	76	0.42	0.035	82	70.2	10900	-0.001	62	.	167.4	2760	0.7	0.46
PAWY048R	42-41.7292- 75.3010-4-51-000	7.5	120	0.80	0.050	50	69.3	15900	-0.001	80	.	341.2	4620	-0.1	0.42
PAWY049R	42-41.7129- 75.2691-4-51-000	8.0	125	0.64	0.054	63	81.0	16800	-0.001	75	.	69.1	4720	-0.1	0.43
PAWY050R	42-41.6879- 75.2921-4-51-000	7.7	80	0.43	-0.002	68	78.4	10900	-0.001	88	.	78.8	3280	-0.1	.
PAWY051R	42-41.6465- 75.2634-4-51-000	7.8	102	0.44	0.012	83	85.8	14000	-0.001	61	.	60.4	4310	-0.1	0.12
PAWY052R	42-41.6885- 75.2554-4-51-000	7.9	78	0.43	0.039	75	68.7	11600	-0.001	63	.	57.3	3060	-0.1	0.50
PAWY053R	42-41.7139- 75.2223-4-51-000	7.8	118	0.28	-0.002	52	67.9	26400	-0.001	24	.	305.8	9160	0.7	.
PAWY054R	42-41.6962- 75.2119-4-51-000	7.3	125	0.90	0.040	74	60.5	11700	-0.001	41	.	810.3	4140	-0.1	0.32
PAWY055R	42-41.6769- 75.1615-4-51-000	8.1	90	0.72	0.029	73	60.6	10700	-0.001	63	.	100.6	3210	-0.1	0.32
PAWY056R	42-41.6880- 75.0941-4-51-000	8.1	110	0.57	0.017	70	107.9	14200	-0.001	122	.	72.0	4970	-0.1	0.15
PAWY057R	42-41.7206- 75.1437-4-51-000	8.3	85	0.28	0.007	39	58.9	8800	-0.001	43	.	30.2	1810	-0.1	0.08
PAWY058R	42-41.7163- 75.1015-4-51-000	7.8	110	0.63	0.024	85	.	5900	-0.001	21	.	9.4	1740	-0.1	0.22
PAWY059R	42-41.7158- 75.0650-4-51-000	8.1	80	0.40	-0.002	70	.	9400	-0.001	114	.	25.2	3210	0.2	.
PAWY060R	42-41.6735- 75.0671-4-51-000	7.9	92	0.50	0.006	21	.	5600	-0.001	15	.	8.5	1830	-0.1	0.07
PAWY061R	42-41.6050- 75.2429-4-51-000	6.1	92	0.52	-0.002	39	39.3	9400	-0.001	55	.	37.1	2320	-0.1	.
PAWY062R	42-41.5958- 75.2208-4-51-000	6.8	80	0.44	-0.002	15	20.5	3500	-0.001	31	.	15.8	1240	0.2	.
PAWY063R	42-41.6507- 75.1971-4-51-000	6.8	30	0.08	-0.002	158	22.8	7900	-0.001	83	.	78.9	660	0.4	.
PAWY064R	42-41.6445- 75.1587-4-51-000	7.1	130	0.93	0.012	28	.	6700	-0.001	14	.	40.4	1660	-0.1	0.09
PAWY065R	42-41.6455- 75.1125-4-51-000	7.6	85	0.44	0.045	59	54.4	10800	0.056	94	3350	.	3200	-0.1	0.53
PAWY066R	42-41.6416- 75.0712-4-51-000	7.4	70	0.40	0.013	27	24.0	4000	-0.001	60	.	72.0	1110	-0.1	0.19
PAWY110R	42-41.7864- 75.4358-4-51-000	7.0	60	0.13	-0.002	53	54.5	9600	-0.001	61	.	14.8	1310	-0.1	.
PAWY111R	42-41.7462- 75.4482-4-51-000	7.2	50	0.20	0.010	21	21.5	4600	-0.001	24	.	.	570	-0.1	0.20
PAWY112R	42-41.7492- 75.3152-4-51-000	7.6	78	0.38	-0.002	62	.	10200	-0.001	97	.	15.9	2180	0.6	.
PAWY113R	42-41.7440- 75.3475-4-51-000	8.4	58	0.32	0.004	15	27.9	3900	-0.001	13	.	10.0	610	-0.1	0.07
PAWY114R	42-41.7585- 75.4049-4-51-000	8.1	130	0.58	0.008	49	40.6	7800	-0.001	66	.	131.4	2460	-0.1	0.06
PAWY115R	42-41.7831- 75.4048-4-51-000	7.8	200	1.64	0.083	10	.	8400	-0.001	.	.	3262.2	2970	-0.1	0.42
PAWY116R	42-41.8091- 75.3622-4-51-000	8.0	125	0.56	0.057	67	.	11000	-0.001	40	.	36.1	3250	0.6	0.46
PAWY117R	42-41.7907- 75.3088-4-51-000	8.1	65	0.30	0.009	38	7.0	4500	-0.001	.	.	22.6	1000	-0.1	0.14
PAWY118R	42-41.7463- 75.2643-4-51-000	8.0	90	0.62	0.005	47	35.0	7200	-0.001	39	.	36.3	1750	-0.1	0.06
PAWY119R	42-41.7558- 75.1839-4-51-000	7.9	51	0.28	0.018	21	4.5	3100	-0.001	13	.	11.3	930	-0.1	0.35
PAWY120R	42-41.7664- 75.1508-4-51-000	7.8	75	0.36	0.051	124	.	10600	-0.001	72	.	.	3280	0.4	0.68
PAWY121R	42-41.7478- 75.0604-4-51-000	7.6	60	0.26	-0.002	20	.	6600	-0.001	27	.	6.5	1940	-0.1	.
PAWY122R	42-41.7598- 75.0940-4-51-000	7.1	80	0.30	0.033	48	75.5	13100	-0.001	46	1980	.	3540	-0.1	0.41
PAWY123R	42-41.8042- 75.1127-4-51-000	7.3	46	0.22	0.002	18	22.1	4200	-0.001	29	650	.	1070	-0.1	0.04
PAWY124R	42-41.8248- 75.1214-4-51-000	7.1	68	0.30	-0.002	107	48.8	12900	-0.001	90	.	71.4	3640	-0.1	.
PAWY125R	42-41.8233- 75.1514-4-51-000	7.1	70	0.48	-0.002	66	38.2	10100	-0.001	64	.	110.2	3360	-0.1	.
PAWY126R	42-41.7991- 75.1712-4-51-000	6.2	100	0.32	0.022	67	150.2	29200	-0.001	36	.	1395.0	6270	-0.1	0.22
PAWY127R	42-41.8612- 75.2013-4-51-000	7.2	41	0.30	-0.002	83	47.7	9700	-0.001	114	.	59.2	2180	0.6	.
PAWY128R	42-41.8588- 75.4623-4-51-000	7.5	125	0.50	0.049	117	55.0	14500	-0.001	34	.	110.7	2750	1.0	0.39

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TABLE C-1 TABULATION OF KEY FIELD MEASUREMENTS AND ANALYTICAL DATA -SURFACE WATER-- SCRANTON SHEET

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SRL I.D. *****	DOE I.D.	PH	COND. UM/CM	AKMXD MEQ/L	U PPB	AL PPB	BR PPB	CL PPB	DY PPB	F PPB	MG PPB	MN PPB	NA PPB	V PPB	U/COND X 1000
PAWY129R	42-41.8309-75.4563-4-51-000	7.6	90	0.38	0.024	76	78.8	9400	-0.001	66	.	72.6	2930	0.3	0.27
PAWY130R	42-41.8232-75.3731-4-51-000	6.4	130	0.36	-0.002	178	70.9	11600	-0.001	57	.	68.5	3190	-0.1	.
PAWY131R	42-41.8256-75.3966-4-51-000	6.6	60	0.14	0.022	134	47.1	9100	-0.001	71	.	74.7	1290	0.3	0.37
PAWY132R	42-41.9034-75.4530-4-51-000	7.2	115	0.50	0.004	58	42.3	16000	-0.001	.	.	72.1	3880	-0.1	0.03
PAWY133R	42-41.8922-75.4075-4-51-000	7.1	70	0.30	0.008	70	28.4	10300	-0.001	47	.	88.2	1800	-0.1	0.11
PAWY134R	42-41.8731-75.4041-4-51-000	7.1	70	0.38	M	M	M	M	M	M	M	M	M	M	M
PAWY135R	42-41.8663-75.3674-4-51-000	7.3	85	0.48	0.053	82	62.8	10200	-0.001	.	.	95.4	2250	0.6	0.62
PAWY136R	42-41.8635-75.3066-4-51-000	7.1	60	0.36	0.028	108	58.4	10700	-0.001	66	.	140.5	2190	-0.1	0.47
PAWY137R	42-41.8197-75.3103-4-51-000	7.0	80	0.50	0.020	63	73.1	13000	-0.001	65	.	79.5	3460	0.4	0.25
PAWY138R	42-41.8269-75.2498-4-51-000	6.7	70	0.38	-0.002	80	38.0	11400	-0.001	27	.	70.2	2640	-0.1	.
PAWY139R	42-41.7868-75.2426-4-51-000	6.5	60	0.42	-0.002	88	39.5	10100	-0.001	47	.	72.1	2130	-0.1	.
PAWY140R	42-41.7866-75.2034-4-51-000	6.6	122	0.66	0.094	29	76.5	14600	-0.001	80	.	50.3	3830	-0.1	0.77
PAWY141R	42-41.8905-75.3396-4-51-000	6.9	102	0.36	0.056	57	.	17200	-0.001	.	.	16.9	5910	0.6	0.55
PAWY142R	42-41.9604-75.4705-4-51-000	6.4	85	0.54	0.011	56	40.5	7200	-0.001	32	2990	.	1940	-0.1	0.13
PAWY143R	42-41.9770-75.3954-4-51-000	7.4	92	0.50	-0.002	62	.	10900	-0.001	30	.	31.7	2990	-0.1	.
PAWY144R	42-41.9390-75.4029-4-51-000	7.8	70	0.32	-0.002	68	55.9	11700	-0.001	37	.	124.6	1390	-0.1	.
PAWY145R	42-41.9621-75.3488-4-51-000	7.2	60	0.44	0.023	75	.	8800	-0.001	44	.	21.3	1720	-0.1	0.38
PAWY146R	42-41.9482-75.3497-4-51-000	7.2	60	0.32	-0.002	65	52.6	7900	-0.001	68	.	.	2050	-0.1	.
PAWY147R	42-41.9348-75.2961-4-51-000	7.5	80	0.38	-0.002	53	71.4	12800	-0.001	43	.	93.0	5240	-0.1	.
PAWY148R	42-41.8960-75.2904-4-51-000	6.5	40	0.24	-0.002	73	.	6000	-0.001	107	.	101.9	2870	-0.1	.
PAWY149R	42-41.8685-75.2701-4-51-000	7.0	40	0.24	-0.002	160	56.6	7600	-0.001	74	.	110.5	2270	-0.1	.
PAWY150R	42-41.8211-75.1939-4-51-000	5.8	95	0.42	-0.002	57	.	17700	-0.001	52	.	128.7	6670	-0.1	.

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APPENDIX D: User's Guide to SRL Basic Data Reports

ABSTRACT

This document provides a detailed description of Basic Data Reports prepared by Savannah River Laboratory (SRL) personnel for the National Uranium Resource Evaluation (NURE) program. The Guide includes descriptions of (1) sample collection and field measurements; (2) format, abbreviations, and codes used in data tables; (3) graphical presentation and maps; and (4) quality assurance programs for sample collection and analysis.

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INTRODUCTION

This document provides a detailed description of Basic Data Reports prepared by Savannah River Laboratory (SRL) personnel for the National Uranium Resource Evaluation (NURE) Program. The format described herein is that established for basic data releases in mid-1978. The descriptions of tables and figures are general enough to be applied to future data releases. However, some minor changes in format may be made as the program progresses.

SRL participation in the NURE Program is summarized elsewhere.¹

SAMPLE COLLECTION AND FIELD MEASUREMENTS

Sampling personnel were trained by SRL staff members according to procedures in published SRL documents. In areas where both stream water and stream sediment were collected, the **Field Manual for Stream Water and Sediment Reconnaissance**² was used. Where only stream sediment was collected from surface sites, the **Field Manual for Stream Sediment Reconnaissance**³ was used. The **Field Manual for Ground Water Reconnaissance**⁴ was used in all areas.

A minimum of five sediment sub-samples was composited from each stream site. Approximately 400 g of sediment passing a 420-micrometer screen (U.S. Std. 40-mesh) were collected at each ground water site. Dissolved ions in individual water samples were concentrated on portions of ion exchange resin,⁵ which were analyzed. Special procedures not included in the original field manuals were employed in certain areas. For example, ground water samples from Coastal Plain areas were collected for laboratory analysis of helium and neon.

Figures D-1 and D-2 illustrate the field forms completed at each ground water and stream sample collection site, respectively. Figure D-3 illustrates an alternate form that is used for surface sites from which only sediment is collected. Entries are self-explanatory. References 2 through 4 describe in detail the equipment and techniques (including criteria for site selection) for collecting samples and for making field measurements.

Nominal ground water and stream sampling density in rural areas varies from 13 to 25 square kilometers (5 to 10 sq mi) per site, depending upon the geology of the area. In areas of crystalline rock, surface sampling is generally denser than ground water sampling. In areas of sedimentary rock, the converse is true. Areas thought to have relatively high uranium potential

SRL GROUND WATER SITE FIELD DATA FORM

SITE CODE								DATE				TEAM NO.		GENERAL SITE DATA																									
State		Map Code		Site Number				Mo.	Day	Yr.	Hr.	Well or Spring		Depth of Well (feet)	Conf. of Depth	Age of Well (Yr)	Conf. of Age	Type of Well	Main Use	Freq. Use	Odor	Pipe Compos.	Where Samp. Taken	Classification	ml of Water Ion-exchanged														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Have a Good Day ☺																																							
<div style="display: flex; justify-content: space-between;"> 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 </div>																																							
pH		SPECIFIC CONDUCTANCE $\mu\text{mhos/cm}$		WATER TEMP (°C)		Drops H_2SO_4 ml Water		ALKALINITY		INSTRUMENT I.D. - pH		PH - PROBE I.D.		COND. INSTR. I.D.		COND. PROBE I.D.		SPARE (DO NOT USE)																Comments Inform. Request		Do Not Use		CARD CODE	

State								Map Code		Site Number		ADDRESS (use / to separate lines)																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
<div style="display: flex; justify-content: space-between;"> 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 </div>																																									

IN THE CASE OF EACH CIRCLED ENTRY SPACE, ENTER MOST APPROPRIATE DESIGNATORS LISTED BELOW

20	W - Well
S - SPRING
Q - Others (use comments)	31	1 Human drinking
2 Animal drinking
3 Irrigation
4 Others (use comments)	33	1 None
2 Weak H_2S
3 Strong H_2S
4 Others (use comments)	35	1 Immediately after storage tank
2 From pipe before storage tank
3 Direct from pump
4 Direct from well or spring
5 From Municipal system
6 Unknown
7 Others (use comments)
25	1 Certain
2 Probable
3 Possible
4 Educated Guess
5 Unknown	32	1 Continuous (> once per day)
2 Once per day
3 Once per week
4 Once per month
5 Less than once per month
6 Not in use	34	1 Galvanized
2 Copper
3 Plastic
4 Steel
5 Lead
6 Unknown
7 Others (use comments)	36	1 Private (<3 families)
2 Semi-Private (used by 3 to 10 families)
3 Public (used by >10 families)
4 Industrial
5 Commercial (motel, etc.)
6 Recreational
7 Agricultural
8 Unknown
9 Others (use comments)
76	Enter "C" when comments are made						
76	Comments (Explain all "other" designators used above, plus describe all unusual or significant conditions such as proximity of contaminants, general rock type, formation when known, problems with instruments, etc. Use back of form for additional space).						

77 Enter "X" when analysis information is requested

I certify that the above sample was taken by SRL procedures at the indicated site and the information listed is correct at time of sampling

Sampler(s) Signature(s)

I have checked this form and associated samples for accuracy, correct format, and legibility.

Field Supervisor (Initials)

Standard Letters and Numbers

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

FIGURE D-1. SRL Field Data Form for Ground Water Sites

IN THE CASE OF EACH CIRCLED ENTRY SPACE, ENTER MOST APPROPRIATE DESIGNATORS LISTED BELOW

- 39 Comments (Explain all "other" designators used above, plus describe all unusual or significant conditions such as proximity of contaminants, general rock type, formation when known, problems with instruments, etc. Use back of form for additional space).

Sampler(s) Signature(s)

Field Supervisor (initials) _____

0 1 2 3 4 5 6 7 8 9

FIGURE D-3. SRL Field Data Form for Stream Sediment Sites

are sampled more densely than those thought to have lower potential.

Sampling site locations were marked precisely on compilation maps. The maps were returned to SRL for determination of geographic coordinates. An electronic digitizer¹ was used to measure, verify, and enter latitude and longitude data for each site into the SRL-NURE data base. These data were recorded to four decimal places, but are considered reliable to only three decimal places.

Plate 2 is a 1:250,000 scale overlay of the 1° x 2° quadrangle showing ground water sampling sites and SRL identification (ID) numbers. On Plate 2, well and spring sites are distinguished by the use of a "plus" (+) for wells and a circle (o) for springs. Print modes for Plate 2 are shown on Figure D-4. Plate 3 is a 1:250,000 scale overlay of the quadrangle showing surface sampling sites and SRL ID numbers. Print modes for Plate 3 are shown on Figure D-5.

DATA PRESENTATION

In each Basic Data Report, the reconnaissance data are presented in appendices. Coordinates and the most important analytical data and field measurements are listed in full-size tables. Statistical summaries and areal distributions of these measurements are also given in full-sized figures. Other field and analytical data are given in tables on microfiche only. Statistical summaries and areal distributions of these elements are also given in figures on microfiche only.

Cumulative frequency plots included in the margin of the 1:250,000 scale maps are more detailed than those presented in the text. First, individual points are shown for the cumulative frequency plots on the maps, while about 15 intervals are calculated for figures shown in the text. Values are summed from highest to lowest for plots on the maps. Cumulative frequency plots on the maps also display the relationship between cumulative frequency and standard deviation and cover the complete range of samples. The legends and histograms in the text on the maps are quite similar.

The following section presents a brief explanation of the columnar entries for tables and descriptions of histograms, cumulative frequency, and areal symbol plots in the Appendices and on microfiche.

Print Modes for SURFACE SITES
NCAS + 058 + NCAS 058 NCAS 058 + NCAS 058 + + NCAS 058 NCAS + 058
+(Site Location)

FIGURE D-4. Print Modes for Surface Sampling Site Identifiers

Print Modes for WELLS	Print Modes for SPRINGS
NCAS + 558 + NCAS 558 NCAS 558 + NCAS 558 + + NCAS 558 NCAS + 558	NCAS ○ 558 ○ NCAS 558 NCAS 558 ○ NCAS 558 ○ ○ NCAS 558 NCAS ○ 558
+(Site Location)	○(Site Location)

FIGURE D-5. Print Modes for Ground Water Sampling Site Identifiers

I. Columnar Entries for Ground Water Data

The data for ground water will normally be presented in Table A-1 of Appendix A.

SRL Identification Number

Each SRL identification (ID) site code consists of seven characters. The first two characters give the state from which the sample was collected. Map name abbreviations are entered as Characters 3 and 4; normally these represent counties. State and county codes used are listed in Table 1 of each report. Sites are numbered sequentially within each map unit (Characters 5, 6, and 7). Numbers begin with 501 in each map unit for ground water sites and are generally consecutive. Columns 8 and 9 represent the sample analyzed. R means that ion exchange resin was analyzed for all elements reported except helium.

DOE Identification Number

Each sample is assigned a DOE ID number. The number consists of 28 characters as follows:

- 1-2 State (See Table D-1)
- 4-10 Latitude of site
- 12-19 Longitude of site
- 21 Laboratory code (4 = SRL)
- 23-24 Sample type (See Table D-2)
- 26-28 Replication code. Generally only original samples (-000) are reported in the Basic Data Releases.

pH

Normally, pH will be in the range of 4.0 to 9.5. Values far outside this range may suggest instrument malfunction or pollution. Missing data are indicated by "M".

COND

Conductivity, measured in micromhos/cm.

TABLE D-1

State Codes Used in DOE Identification Number

<i>State</i>	<i>Code</i>	<i>State</i>	<i>Code</i>
ALABAMA	01	NEW HAMPSHIRE	33
ARKANSAS	05	NEW JERSEY	34
CONNECTICUT	09	NEW YORK	36
DELAWARE	10	NORTH CAROLINA	37
DISTRICT OF COLUMBIA	11	OHIO	39
FLORIDA	12	OKLAHOMA	40
GEORGIA	13	PENNSYLVANIA	42
ILLINOIS	17	RHODE ISLAND	44
INDIANA	18	SOUTH CAROLINA	45
KENTUCKY	21	TENNESSEE	47
LOUISIANA	22	TEXAS	48
MAINE	23	VERMONT	50
MARYLAND	24	VIRGINIA	51
MASSACHUSETTS	25	WEST VIRGINIA	54
MICHIGAN	26		
MISSISSIPPI	28		
MISSOURI	29		

TABLE D-2 Type Codes Used in DOE Sample Identification Number^a

<i>Digit</i>	<i>Sample Type</i>
50	Stream sediment, sieved <149 μm and dried $\leq 110^{\circ}\text{C}$
51	Stream water, filtered through $\leq 0.8 \mu\text{m}$ filter at the site
52	Well water, filtered through $\leq 0.8 \mu\text{m}$ filter at the site
53	Spring water, filtered through $\leq 0.8 \mu\text{m}$ filter at the site
54	Lake water, filtered through $\leq 0.8 \mu\text{m}$ filter at the site
55	Lake sediment
56	Glacial till
57	Peat
58	Spare number ^b
59	Spare number ^b

a. The 28-character DOE-GJ identification number for NURE samples contains two digits to denote sample type. The digits 50 through 59 have been set aside for SRL use.

b. To be noted in individual reports as needed.

AKMXD

Alkalinity as milliequivalents of sulfuric acid required per liter of sample (meq/L) to titrate to a pH of approximately 4.5 (bromcresol-green/methyl-red end-point).

DPTH

Depth of the well in feet, if known. These data are generally provided by the householder. An estimate of the confidence in this number is given in the microfiche Table A-2. "U" indicates that the well depth is not known. Springs are coded as having a depth of 0 feet.

U

Uranium concentration is determined by delayed neutron counting of uranium from ground water concentrated on ion exchange resin. U is reported in parts per billion (ppb).

Values have been rounded to appropriate significant figures. Values for uranium are reported for all samples analyzed; however, analyses <0.040 ppb exhibit a high coefficient of variation. Missing data are indicated by "M". Where all analytical data for a sample are missing, samples will generally be analyzed and reported in a supplementary report.

U/COND

Uranium concentration in ppb multiplied by 1000 and divided by conductivity is listed in this column. This value gives an approximation of the ratio of uranium to total dissolved solids.

Helium

Helium (^4He) is determined for selected samples using a specially developed mass spectrometric procedure.⁶ Values reported are in standard cubic centimeters of helium per 1000 liters of air corrected to a constant ^{22}Ne content ($\text{cm}^3\text{He}/1000\text{L}$, i.e., ppm by volume). This method introduces a nearly constant 5.2 ppm helium background from air; thus, all samples analyzed are above detection limit.

Other Key Elemental Analyses

Other elements analyzed were determined by neutron activation analysis (unless otherwise noted) and are listed alphabetically. Concentrations are reported in ppb. Values below detection limit are indicated by a minus (-). For example, -3 means that the sample contains less than 3 ppb of that element.

II. Columnar Entries for Supplementary Ground Water Data

These data are presented on microfiche only.

SRL Identification Number

Same as in Table A-1.

Supplementary Elemental Analyses

Same as elements in Table A-1.

SAMPDATE

The date of sampling (month/day/year). For example, 7/15/77 is July 15, 1977.

TEAM

This code identifies the personnel who performed the sampling and is used by SRL for quality assurance monitoring.

TEMP

The water temperature at the time of sampling is recorded in this column. The water temperature is recorded in degrees Celsius (°C) to the nearest whole degree.

WELSPR

A "W" in this column denotes a ground water sample taken from a well; and "S" denotes a sample taken from a flowing spring.

DEPTHCON

Confidence in the values of well depths is listed in this column.
The possible entries are:

- 1 Certain
- 2 Probable
- 3 Possible
- 4 Educated Guess
- 5 Unknown

Any site with "U" listed in DPTH should have "5" listed for DEPTHCON.

AGE: AGECON

The ages of sampled wells are recorded to the nearest whole year. When only minimum ages are known, they are recorded. A "U" means the age of the well is unknown. Wells less than one year old are not sampled. The accuracy of the age determination is also entered; the possible entries are:

- 1 Certain
- 2 Probable
- 3 Possible
- 4 Educated Guess
- 5 Unknown

WELLTYPE

Sampled wells are classified by method of construction. The types listed are:

- 1 Drilled; denotes wells formed by rotary drills or augers.
- 2 Dug; denotes wells dug by manual or mechanical scooping equipment.
- 3 Driven; denotes wells formed by vertical pile drivers.
- 4 Unknown.

WELLUSE

This column describes the primary use of water from the wells.

- 1 Human drinking
- 2 Animal drinking
- 3 Irrigation
- 4 All other purposes

WELLFREQ

This column lists the frequency of use of sampled wells. The entries and their meaning are:

- 1 Continuous (more than once per day)
- 2 Once per day
- 3 Once per week
- 4 Once per month
- 5 Less than once per month
- 6 Not in use

Wells used less frequently than weekly are generally not sampled.

WELLODOR

Hydrogen sulfide odors in well water are noted. The entries in this column and their meanings are:

- 1 No odor
- 2 Weak H₂S odor
- 3 Strong H₂S odor
- 4 Others

PIPECOMP

The major materials used in pipes are listed in this column. The entries used and their meanings are:

- 1 Galvanized
- 2 Copper
- 3 Plastic
- 4 Steel
- 5 Lead
- 6 Unknown
- 7 Others

WELLOC

The positions at which samples are taken are listed in this column. The positions listed are relative positions in plumbing systems. The entries and their meanings are:

- 1 Immediately after storage tank
- 2 From pipe before storage tank
- 3 Direct from pump
- 4 Direct from well or spring
- 5 From municipal system
- 6 Unknown
- 7 Others

WELCLASS

Sampled wells are classified by use. The classes of wells recognized here are:

- 1 Private (less than 3 families)
- 2 Semiprivate (used by 3 to 10 families)
- 3 Public (used by more than 10 families)

- 4 Industrial
- 5 Commercial (motel, etc.)
- 6 Recreational
- 7 Agricultural
- 8 Unknown

III. Columnar Entries for Sediment Data

Sediment data (and accompanying water quality measurements) will normally be presented in Tables B-1 (full-sized tables) and B-2 (microfiche tables).

SRL Identification Number

Each SRL identification (ID) site code consists of seven characters. The first two characters give the state in which the sample was collected. Map name abbreviations are entered as Characters 3 and 4; normally these represent counties. State and county codes used are listed in Table 1 of each report. Sites are numbered sequentially within each map unit (Characters 5, 6, and 7). Numbers begin with 001 in each map unit for stream sites and are generally consecutive. Columns 8 and 9 represent the sample analyzed. In most reports, the S1 fraction [finer than 149 micrometers (U.S. Std. 100-mesh)] was analyzed. S0 and S2 mean that coarser or finer fractions, respectively, were analyzed. Specific fractions will be identified in individual reports as necessary.

DOE Identification Number

Each sample is assigned a 28-Character DOE ID number as described for Table A-1 on page D-7.

pH; COND, UM/CM; AKMXD, MEQ/L

Same as Table A-1.

Key Elemental Analyses

The first three elements are listed in order of importance; other key elements are listed alphabetically.

Concentrations of each element (in ppm) are determined by neutron activation analysis (unless otherwise noted). Values have been rounded to appropriate significant figures. Note that the elemental concentration (not oxide) is quoted in this table. Values below detection limit are indicated by a minus (-). For example, -3 means that the sample contains less than 3 ppm of that element. Missing data are indicated by "M". Where all analytical data for a sample are missing, samples will generally be analyzed and reported in a supplementary report.

IV. Columnar Entries for Supplementary Sediment Data

These data are presented on microfiche only.

SRL Identification Number

Same as Table B-1.

Supplementary Elemental Analyses

Same as Table B-1.

SAMPDATE

The date of sampling, month/day/year. For example, 7/15/77 is July 15, 1977.

TEAM

This code identifies the personnel who performed the sampling and is used by SRL or quality assurance monitoring.

SEDTYPE, etc.

This and following columns contain codes describing the stream characteristics. For example, 1 registered under SEDTYPE indicates that the stream bottom was composed primarily of boulders. Details of these descriptors are given below.

SEDTYPE**SEDCOLOR**

1	Boulders	1	White/Buff
2	Cobble	2	Yellow
3	Pebble	3	Orange
4	Sand	4	Pink/Red
5	Silt	5	Green
6	Clay	6	Brown
7	Organic Muck	7	Gray
8	Other	8	Black
		9	Other

The sediment entries reflect the nature of the loose sediment material sampled at the site.

STMWIDTH AND STMDEPTH

1	<1/2 ft	6	8-16 ft
2	1/2-1 ft	7	16-32 ft
3	1-2 ft	8	>32 ft
4	2-4 ft	9	Dry
5	4-8 ft		

An estimate of the AVERAGE width and depth of the stream over the 100 to 200 feet of stream length where the sample was taken.

STMFLOW**STMLEVEL****STMCOLOR**

1	Stagnant	1	Dry	1	Clear
2	Slow	2	Low	2	Brown Clear
3	Moderate	3	Normal	3	Cloudy
4	Fast	4	High	4	Muddy
5	Torrent	5	Flood	5	Algal
6	Dry			6	Other

The water description provides an indication of the general condition of the water at the time of sampling. STMFLOW indicates the rate of flow using the listed descriptors at the sampled location [i.e., if a stream is sampled in rapids, the 4 (Fast) or 5 (Torrent) may apply; but if the same stream were sampled above or below the rapids, the 2 (Slow) or 3 (Moderate) descriptors might be more accurate]. STMLEVEL describes the water level relative to its apparent normal level. STMCOLOR reflects the amount and type of dissolved or suspended load in the water on the basis of color. If a large amount of algae was suspended in the water, 5 (Algal) is entered. If the water was transparent, but had a definite brown or black color, then 2 (Brown-Clear) designator is entered.

STMCHANL

- 1 Depositing
- 2 Eroding
- 3 Unknown

The column labeled STMCHANL is coded with the appropriate descriptor listed above. A steeply inclined stream bed with fast-moving water can usually be considered as eroding; whereas a nearly-level, slow-moving stream may indicate a depositing channel (i.e., the stream is depositing its load of sand, silt, etc., in the calm water areas). The chosen descriptor applies to the general nature of the stream.

VEGTYPE

VEGDENS

1 Conifer	1 Barren
2 Deciduous	2 Sparse
3 Brush	3 Moderate
4 Grass/Pasture	4 Dense
5 Marsh/Swamp	5 Very Dense
6 Peat Bog	
7 Other	

These descriptions reflect the amount and type of plant growth in the immediate area of the sample location. The density is a subjective observation made in relation to visibility, ease of access, etc. The type of vegetation reflects the dominant plant type at or near the sample location. Conifers are broadly classed as evergreen trees and shrubs such as pine trees, etc. Deciduous plants are broadly classed as trees and shrubs that seasonally lose their leaves such as cottonwoods, maples, oaks, hickory, etc. Brush denotes relatively low-growing plants (which may or may not be deciduous) such as thorny bushes, etc. Grass denotes grasses of all types including natural and/or crops such as alfalfa, wheat, etc.

RELIEF

- 1 Flat
- 2 Low, 0-50'
- 3 Gentle, 50-200'
- 4 Moderate, 200-1000'
- 5 High, >1000'

Relief is an indicator of local surface expression. The area included around a sample location will usually not exceed a few hundred yards in mountainous terrains, but may exceed up to 1/2 mile in relatively flat areas.

WEATHER

- 1 Sunny/Clear
- 2 Overcast
- 3 Light Rain
- 4 Heavy Rain
- 5 Snowy
- 6 Other

The weather entry is a general indicator of the prevalent conditions at the time of sampling.

COMPOSIT

COMPOSIT refers to the number of subsamples taken at each site that are composited to give the sieved sample for that site.

CONTAMN

The activities/contaminants columns indicate those nearby activities which may influence the analytical results. It is a very important entry, chosen from the list of numerical designators shown. The major activity and/or contamination is always listed under CONTAMN4. A second activity, if considered important, is listed under CONTAMN3, etc.

CONTAMN1	1 Chemical	7 Power Generation
CONTAMN1	2 Smelting	8 Urban
CONTAMN3	3 Mining	9 Other Industrial
CONTAMN4	4 Sewage	A Recreational
	5 Dumps	B Residential
	6 Farming	

WATERTEM

The water temperature, taken at the time of sampling, is coded under WATERTEM. The water temperature is recorded in degrees Celsius (°C) to the nearest whole degree.

V. Columnar Entries for Stream Water Data

For areas in which stream water samples were collected for analysis, stream water data will be presented in Table C-1 (full-sized table). (Where only sediments are collected, stream water quality measurements are given in Table B-1).

SRL Identification Number

Each SRL identification (ID) site code consists of seven characters, as described for Table B-1. Columns 8 and 9 represent

the sample analyzed. For surface water, R means that ion exchange resin was analyzed.

DOE Identification Number

Same as Table A-1.

pH; COND, UM/CM; AKMXD, MEQ/L

Same as Table A-1

U, U/COND, Other Elemental Analyses

Same as Table A-1.

VI. Graphical Data and Maps

Histograms, cumulative frequency, and areal distribution of all measurements in Tables A-1, B-1, and C-1 are presented in hard copy. Graphical summaries of elemental data in Tables A-2 and B-2 are on microfiche only. Histograms and cumulative frequency plots are given on the same figure (for a given measurement) and face the areal distribution plots ("symbol plots"). The symbols used for areal distribution plots are derived from the statistical distribution of the measurements within the quadrangle being reported (Table D-3). Symbols are based upon statistical distribution rather than absolute values to permit convenient comparison of elements with widely differing concentration ranges.

QUALITY ASSURANCE FOR SAMPLE COLLECTIONS

Five to ten percent of the sampled sites were routinely checked by SRL personnel or by a separate subcontractor to assure that the reported field locations were accurate. Based on these quality assurance checks, the vast majority of sampled sites were judged to be located as accurately as they could be plotted on county road maps. Most sites that were mapped incorrectly were within 300 meters of their correct locations. Errors were generally more frequent for ground water than for surface sites. If more of the sites were judged to be significantly mismapped (based on the QA screening), all sites in the 80th percentile or above were remapped. Details of mapping errors are given in each Basic Data Release in the section on Factors Affecting the Data. Thus, the goals of a regional reconnaissance have not been

TABLE D-3

Statistical Distribution Symbols for Areal Maps

<i>Symbol</i>	<i>Percentile Range</i>	<i>Standard Deviation Above Mean^a</i>
★	>99.5	>2.6
◆	98.6 to 99.5	2.2 to 2.6
●	96.4 to 98.6	1.8 to 2.2
⊙	91.9 to 96.4	1.4 to 1.8
⊙	84.1 to 91.9	1.0 to 1.4
⊙	72.6 to 84.1	0.6 to 1.0
⊙	57.9 to 72.6	0.2 to 0.6
⊙	42.1 to 57.9	-0.2 to 0.2
○	27.4 to 42.1	-0.6 to -0.2
○	15.9 to 27.4	-1.0 to -0.6
○	8.1 to 15.9	-1.4 to -1.0
◐	3.6 to 8.1	-1.8 to -1.4
◑	1.4 to 3.6	-2.2 to -1.8
×	<1.4	<-2.2
+	—	below detection limit

^a. Signs are reversed relative to cumulative frequency plots. In the cumulative frequency plots, values are accumulated from the largest to the smallest value to ensure that the largest value is plotted. "Percentile" assumes accumulation from the smallest to the largest value.

compromised by mapping errors. Details of the quality assurance program are given in SRL Quarterly Reports.¹

Field measurements were checked for approximately 2% of the sites. Where important variations occurred, the sampling subcontractor was required to repeat measurements for the area in question. Only the corrected values are reported. Questionable data that would not be corrected are discussed in individual reports or omitted, depending upon the severity of the potential error.

REFERENCES FOR APPENDIX D

1. **Savannah River Laboratory Quarterly Reports. Hydrogeochemical and Stream Sediment Reconnaissance - Eastern United States. National Uranium Resource Evaluation Program. E. I. du Pont de Nemours & Co., Savannah River Laboratory, Aiken, South Carolina.**

<u>No.</u>	<u>Quarter</u>	<u>SRL Document No.</u>	<u>DOE-GJ Document No.</u>
a	January-March 1975	DPST-75-138-1	GJBX-5(76)
b	April-June 1975	DPST-75-138-2	GJBX-6(76)
c	July-September 1975	DPST-75-138-3	GJBX-7(76)
d	October-December 1975	DPST-75-138-4	GJBX-8(76)
e	January-March 1976	DPST-76-138-1	GJBX-17(76)
f	April-June 1976	DPST-76-138-2	GJBX-27(76)
g	July-September 1976	DPST-76-138-3	GJBX-63(76)
h	October-December 1976	DPST-76-138-4	GJBX-6(77)
i	January-March 1977	DPST-77-138-1	GJBX-35(77)
j	April-June 1977	DPST-77-138-2	GJBX-55(77)
k	July-September 1977	DPST-77-138-3	GJBX-90(77)
l	October-December 1977	DPST-77-138-4	GJBX-37(78)
m	January-March 1978	DPST-78-138-1	GJBX-66(78)

2. **Ferguson, R. B., Price, V., and Baucom, E. I. (1977) Field Manual for Stream Water and Sediment Reconnaissance: SRL Document DPST-77-363, E. I. du Pont de Nemours & Co., Savannah River Laboratory, Aiken, South Carolina. DOE-GJ Document No. GJBX-80(77).**
3. **Ferguson, R. B., Price, V., and Baucom, E. I. (1976) Field Manual for Stream Sediment Reconnaissance: SRL Document DPST-76-358, E. I. du Pont de Nemours & Co., Savannah River Laboratory, Aiken, South Carolina. DOE-GJ Document No. GJBX-26(77).**

4. Ferguson, R. B., Price, V., and Baucom, E. I. (1976) **Field Manual for Ground Water Reconnaissance:** SRL Document DPTS-76-416, E. I. du Pont de Nemours & Co., Savannah River Laboratory, Aiken, South Carolina. DOE-GJ Document No. GJBX-30(77).
5. **Proceedings of Symposium on Hydrogeochemical and Stream Sediment Reconnaissance for Uranium in the United States, Grand Junction, Colorado, March 16 and 17, 1977:** DOE-GJ Document No. GJBX-77(77).
6. Savannah River Laboratory Semiannual Report. **Hydrogeochemical and Stream Sediment Reconnaissance - Eastern United States. April-September 1978:** USDOE Report DPST-78-138-2, E. I. du Pont de Nemours and Co., Savannah River Laboratory, Aiken, SC. To be open-filed by DOE-GJ.

Uranium Occurrence Map of the
SCRANTON QUADRANGLE
Pennsylvania, New York, New Jersey

PLATE 3

SURFACE SAMPLE SITE LOCATIONS IN THE SCRANTON QUADRANGLE

Uranium - parts per billion					
+ < D.L.	○ 0.005- 0.009	○ 0.040- 0.087	● 0.455- 0.884	● 2.394- 4.601	
x < 0.003	○ 0.009- 0.021	○ 0.087- 0.209	● 0.884- 1.557	◆ 4.601- 8.068	
• 0.003- 0.005	○ 0.021- 0.040	○ 0.209- 0.455	● 1.557- 2.394	★ > 8.068	

URANIUM DISTRIBUTION IN THE GROUND WATERS
OF THE SCRANTON QUADRANGLE

 PLATE 5

Uranium - parts per million

+ < D.L.	○ 2.100- 2.400	○ 2.900- 3.300	⊙ 4.000- 4.500	● 5.900- 7.000
x < 1.800	○ 2.400- 2.600	○ 3.300- 3.700	⊙ 4.500- 5.200	◆ 7.000- 8.200
• 1.800- 2.100	○ 2.600- 2.900	⊙ 3.700- 4.000	⊙ 5.200- 5.900	★ > 8.200

URANIUM DISTRIBUTION IN THE SEDIMENTS
 OF THE SCRANTON QUADRANGLE

Thorium - parts per million				
+ < D.L.	○ 5.0- 6.0	○ 8.0- 9.0	⊙ 12.0- 14.0	● 20.0- 28.0
x < 4.0	○ 6.0- 7.0	○ 9.0- 11.0	⊙ 14.0- 17.0	◆ 28.0- 34.0
○ 4.0- 5.0	○ 7.0- 8.0	⊙ 11.0- 12.0	⊙ 17.0- 20.0	★ > 34.0

THORIUM DISTRIBUTION IN THE SEDIMENTS
OF THE SCRANTON QUADRANGLE

Conductivity - micro-mhos per cm.

+ < D.L.	○ 28.0- 40.0	○ 80.0- 110.0	⊙ 190.0- 240.0	● 413.0- 580.0
× < 20.0	○ 40.0- 60.0	○ 110.0- 150.0	⊙ 240.0- 310.0	◆ 580.0- 750.0
• 20.0- 28.0	○ 60.0- 80.0	⊙ 150.0- 190.0	⊙ 310.0- 413.0	★ > 750.0

PLATE 7

CONDUCTIVITY DISTRIBUTION IN THE GROUND WATERS OF THE SCRANTON QUADRANGLE

Uranium - parts per billion				
+ < D.L.	○ 0.002- 0.004	○ 0.014- 0.021	⊙ 0.043- 0.069	● 0.348- 0.881
x < 0.001	○ 0.004- 0.008	○ 0.021- 0.029	⊙ 0.069- 0.156	◆ 0.881- 1.742
• 0.001- 0.002	○ 0.008- 0.014	○ 0.029- 0.043	⊙ 0.156- 0.348	★ > 1.742

PLATE 8

URANIUM DISTRIBUTION IN THE SURFACE WATERS OF THE SCRANTON QUADRANGLE

Conductivity - micro-mhos per cm.

+ < D.L.	○ 22.0- 30.0	○ 48.0- 64.0	○ 112.0- 155.0	● 300.0- 385.0
x < 18.0	○ 30.0- 39.0	○ 64.0- 85.0	○ 155.0- 220.0	◆ 385.0- 560.0
○ 18.0- 22.0	○ 39.0- 49.0	○ 85.0- 112.0	○ 220.0- 300.0	★ > 560.0

PLATE 9

CONDUCTIVITY DISTRIBUTION IN THE SURFACE WATERS OF THE SCRANTON QUADRANGLE

PRELIMINARY BASIC DATA REPORT

SCRANTON 1°X2° NTMS QUADRANGLE
NEW JERSEY, NEW YORK, AND PENNSYLVANIA

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