

Upper Pecos River Water Quality Study, 1980-81

Gerald Z. Jacobi and Larry R. Smolka

Water Pollution Control Bureau

Environmental Improvement Division

New Mexico Health and Environment Department

July 1982

STATE OF
NEW MEXICO



NEW MEXICO
ENVIRONMENT
DEPARTMENT

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by

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Surveillance and Standards Section
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INTRODUCTION

The Surveillance and Standards Section has the responsibility to plan and implement statewide monitoring programs of which long-term background water quality studies are an integral part. Data from such studies are used to evaluate the water quality of high priority stream reaches, e.g., those having domestic water supply and high quality coldwater fishery use designations, which might have existing water quality problems, or are expected to receive culturally induced stresses.

In the past century, several minor and one major mining operation occurred in the Upper Pecos River watershed. The most well known was the old Terrero copper mine on Willow Creek in the 1880's. Early finds of high-grade ores containing zinc and lead and subsequent discoveries of high grade gold and silver bearing ores in the early 1900's made the mine one of the better multiple producers in the country. Ore-body depletion and water intrusion were partially responsible for abandonment of the mine and closure of the mill, 12 miles to the south, in the late 1930's.

New reconnaissance techniques and a demand for metals have encouraged, in part, the present mineral exploration in the upper Pecos River watershed.

The Conoco Oil Mining Branch has been conducting deep exploratory drilling on the west side of the watershed near the abandoned low-producing Jones Mine (Figure 1) since the mid-1970's. The purpose of the reconnaissance survey was to define the location, size, and composition of a major ore body. Exploratory drilling was on a random pattern rather than the standard grid pattern since the ores occur in folded Precambrian granite. Sulfides of zinc, copper and lead with some gold and silver have been found in very high concentrations. No information is available though as to the type of mining proposed, the location of the mine, mill, and disposal sites, or if and when mining would take place.

The purpose of this EID-WPCB monitoring study was to characterize background water quality of the Pecos River and some of its major tributaries upstream from the town of Pecos prior to any potential major environmental disturbances, such as the development of a mining and milling industry. Maintenance of the upper Pecos River watershed in its present condition is of utmost concern because of its high recreational potential as a relatively unspoiled environment. Streams in this watershed are indicative of the highest category of protection (designated uses) afforded New Mexico streams by the Water Quality Control Commission as indicated in the "Water Quality Standards for Interstate and Intrastate Streams in New Mexico" WQCC 81-1; June 4, 1982).

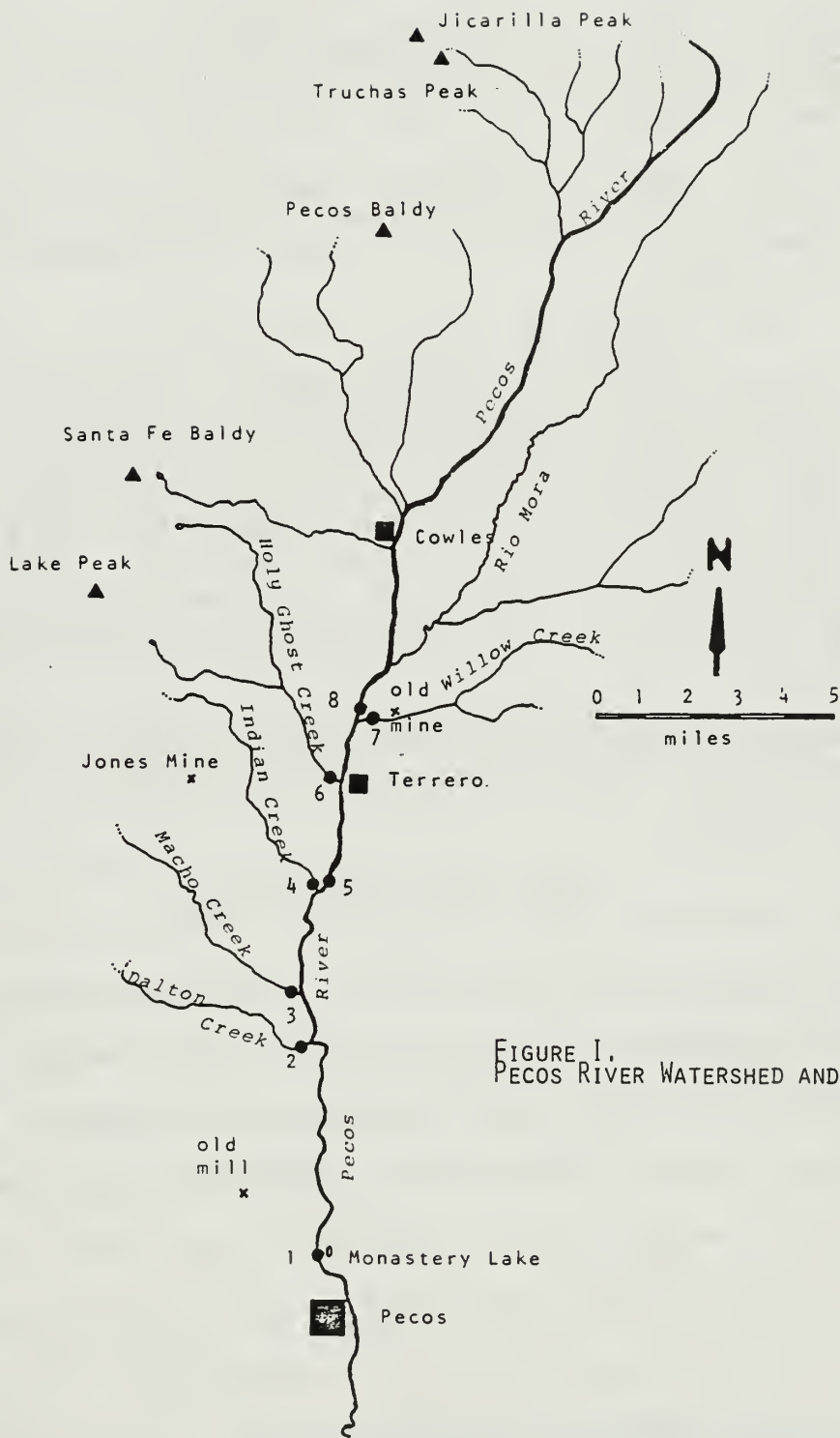


FIGURE I.
PECOS RIVER WATERSHED AND SAMPLE SITES.

The designated uses and standards are:

Section 2-200. PECOS RIVER BASIN.

2-214. Cow Creek and all its tributaries and the main stem of the Pecos River from one mile below the Town of Pecos upstream to its headwaters, including all tributaries thereto.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock and wildlife watering, and secondary contact recreation.

B. Standards:

1. In any single sample: un-ionized ammonia (as N) shall not exceed 0.02 mg/l; conductivity shall be less than 300 μ mhos; dissolved oxygen shall be greater than 6.0 mg/l or 85% of saturation, whichever is greater; total inorganic nitrogen (as N) shall be less than 1.0 mg/l; pH shall be within the range of 6.6 to 8.8; temperature shall be less than 20C (68F); total chlorine residual shall be less than 0.002 mg/l; total organic carbon shall be less than 7 mg/l; total phosphorus shall be less than 0.1 mg/l; and turbidity shall be less than 10 FTU.

2. The monthly logarithmic mean of fecal coliform bacteria shall be less than 100/100 ml, and no more than 10% of the samples shall exceed 200/100 ml.

STUDY AREA DESCRIPTION

The upper Pecos River watershed is in the Santa Fe National Forest in San Miguel County in north central New Mexico (Figure 1). The watershed lies essentially east of a major north-south fault. Headwater streams originate on the slopes of mountains which range in elevation from 12,500 to 13,000 ft. Western Santa Fe Baldy and Lake Peak are primarily composed of Precambrian granite while northern Pecos Baldy, Truchas Peak, and Jicarilla Peak are Precambrian quartzite. At upper elevations some Pleistocene glaciation occurred. The river beds in the study area are carboniferous sandstone and limestone and include boulders and smaller rocks comprised of

granite and some amphibolite washed down from higher elevations.

Precipitation amounts are as high as 30-35 inches per year, half coming during intense localized summer thunder storms at higher elevations. Up to 60 inches of snow can accumulate during winter months.

Pinon, juniper, and cottonwoods are the dominant forest vegetation at lower elevations but this changes gradually upstream to ponderosa pine, spruce, and fir with some cottonwoods along the stream course.

STUDY SITES

Water quality collection sites were established at six locations with perennial stream flows and two locations with ephemeral stream flows (Table 1, Figure 1). Sites were established to characterize Pecos River water quality: above and below the potential impact area - Nos. 1 and 8, respectively; above, within, and below impact areas on tributary streams - Nos. 2, 3, 4, and 6, respectively; within an old spoil-mining area - No. 7; and mid-watershed downstream from an old spoil mining area- No. 5.

Additional background water quality and quantity data are provided by a U.S. Geological Survey hydrologic bench-mark station established in 1962 at the mouth of Rio Mora Creek one and one-half miles above the study area and a USGS discharge gage located on the Pecos River near study site No. 5.

Table 1. Sample Sites in the Upper Pecos River Watershed.

<u>No.</u>	<u>Location</u>	<u>Elevation</u>	<u>Flow</u>
1.	Pecos River at Monastery Lake	7000'	perennial
2.	Dalton Creek upstream from Pecos River	7240'	ephemeral
3.	Macho Creek upstream from Pecos River	7360'	ephemeral
4.	Indian Creek upstream from Pecos River	7554'	perennial
5.	Pecos River upstream from Indian Creek	7554'	perennial
6.	Holy Ghost upstream from Pecos River	7656'	perennial
7.	Willow Creek upstream from Pecos River	7800'	perennial
8.	Pecos River upstream from Willow Creek	7800'	perennial

Also, a small water quality study was initiated by the Santa Fe National Forest Regional Office in the mid 1970's and the U.S. Geological Survey and Bureau of Mines recently completed a mineralization-water quality study of the upper watershed in the late 1970's (Harry Severtson, personal comm.).

METHODS AND MATERIALS

Three one-liter samples of water were collected at each site. One unpreserved and two preserved samples (one with 2 ml concentrated H_2SO_4 and the other with 5 ml of concentrated HNO_3) were stored on ice and sent to the New Mexico State Laboratory Division in Albuquerque for analysis of 29 water quality parameters. Basic water chemistry data were obtained on site (pH, temperature, and conductivity). A sample of water was fixed for dissolved oxygen analysis and percent dissolved oxygen concentration was calculated in the laboratory. All methods of collection and analysis followed procedures recommended by the USEPA (1979) and Standard Methods (APHA 1975).

Water samples were collected three to 10 times throughout the year commencing on October 30, 1980 and continued at approximately 6-week intervals until November 24, 1981. At some sites, one or two early sets of samples were analyzed for dissolved elements but analyses were later changed to total concentration. Measurements of total concentrations are consistent with the State's approach in establishing water quality standards.

Ten replicate samples of benthic macroinvertebrates were quantitatively collected at sites Nos. 1 and 8. These have not been

analyzed but should further document the high quality status given to the upper Pecos River watershed. A separate report should be completed in 1983.

RESULTS AND DISCUSSION

A cursory analysis of water quality data from all sites indicate these streams are cold, slightly alkaline and of medium hardness, with high dissolved oxygen and low amounts of total chemical constituents (Table 2). Water quality for most parameters was generally well below stream standards at all sites. Stream standards for total phosphorus were exceeded infrequently. Values greater than 0.1 mg/l for total phosphorus were observed on June 26, 1981 at all sites except Pecos River No. 5. Water temperatures on this date at all sites were also the highest recorded during the survey; up to 18°C at Indian Creek (No.4). Total phosphorus reached 0.13 mg/l in Macho Creek (No.3) on October 7, 1981.

Construction of a new road in the Indian Creek watershed and resulting erosion probably contributed to high values for total Kjeldahl nitrogen, total phosphorus, total non-filterable residue, calcium, and total bicarbonate at the Indian Creek site (No.4). High values for conductivity, total Kjeldahl nitrogen, nitrate and nitrite nitrogen, dissolved residue, calcium, and bicarbonate were present in Willow Creek (No.7) within the old Terrero mine site. Chemical dissolution and particle transport after soil and rock have been exposed may have contributed to elevated values (Buckman and Brady 1960; Hem 1970).

Water quality values for most heavy metals, e.g., arsenic, selenium, mercury, boron, cadmium, etc., were low or below the laboratory detection limit for the particular parameter. Total concentrations were well below values recommended for the protection of domestic water supplies and freshwater aquatic life (USEPA 1976; QCW and USEPA 1980; 45 FR, 79318).

REFERENCES

- American Public Health Association, American Water Works Association, and Water Pollution Control Federation. 1975. Standard Methods for the Examination of Water and Wastewater. 14th Edition. American Public Health Association, Washington, D.C. 1193 p.
- Buckman, H.O., and N.C. Brady. 1960. The Nature and Properties of Soils. The MacMillan Company, New York. 567 p.
- Hem, J.D. 1970. Study and Interpretation of the Chemical Characteristics of Natural Water. U.S. Geological Survey Water-Supply Paper 1473. U.S. Government Printing Office, Washington. 363 p.
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- U.S. Environmental Protection Agency. 1979. Methods for Chemical Analysis of Water and Wastes. Environ. Monit. and Supp. Lab. Cincinnati, Ohio. EPA-600/4-79-020.
- _____. 1976. Quality Criteria for Water. Office of Water and Hazardous Materials, USEPA, Washington, D.C. 256 p.
- _____. 1980. Federal Register. Vol. 45, No. 231. Nov. 28, Washington, D.C. 79318-79379 pp.

Table 2. Water quality of the upper Pecos River and tributaries, 1980-1981.

STORET RETRIEVAL DATE 02/07/15												
PECOSCO#01												
35 35 40.9 105 40 54.7 2												
PECOS RIVER DUE WEST OF MONASTERY LAKE												
35047 MEN MEXICO SALT HIGUEL												
HESTERH GULF 120800												
UPPER PECOS RIVER												
21N1EX 020109												
0003 FEET DEPTH CLASS 00 CSN-RSP 0642690-0653447												
/TYPA/AMBNT/STREAM												
DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00095 CONDUCTIVITY AT 25C MICROHMO	00300 DO MG/L	00301 DO SATUR PERCENT	00400 PH SU	00610 NH3+NH4-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00440 HCO3 ION MG/L
00/10/30	11 00		4.0	186	10.4	103.0	7.90	0.066	0.540	0.03	0.038	119
00/12/04	11 10		2.3	177			7.90	0.052	0.400	0.05	0.024	130
01/01/09	10 30		1.0	192			7.70	0.030	0.220	0.05	0.027	126
01/02/24	10 45		3.5	190	11.0	106.0	8.10	0.226	0.350	0.04	0.005	110
01/04/00	10 30		0.7	190	9.5	106.0	8.10	0.083	0.630	0.02	0.070	84
01/05/19	10 30		10.5	142	8.8	103.0	8.00	0.090	0.060	0.02	0.230	107
01/06/26	13 40		17.0	197	7.5	108.0	8.10	0.090	0.510	0.02	0.040	68
01/00/13	14 30		14.5	133	7.7	99.0	7.00	0.013	0.230	0.02	0.030	91
01/10/07	14 15		11.0	159	8.2	97.0	8.00	0.140	0.220	0.01K	0.040	106
01/11/24	13 30		6.1	194	9.8	104.0	8.20	0.059	0.040	0.03	0.040	
STATION NUMBER			10	10	8	8	10	10	10	10	9	9
MAXIMUM			17.000	197.000	11.000	108.000	8.200	0.226	0.630	0.050	0.230	129.600
MINIMUM			1.000	133.000	7.500	97.000	7.700	0.013	0.040	0.010	0.005	67.600
MEAN			7.860	176.000	9.112	103.250	7.900	0.085	0.320	0.029	0.056	104.533
STAND DEV			5.376	23.113	1.274	3.694	0.155	0.061	0.201	0.013	0.067	20.409
STAND ERR			1.700	7.309	0.451	1.306	0.049	0.019	0.063	0.004	0.022	6.603

STORET RETRIEVAL DATE 02/07/15

PECOSCON01
 35 35 40.9 105 40 54.7 2
 PECOS RIVER DUE WEST OF MONASTERY LAKE
 35047 NEW MEXICO SAN MIGUEL
 WESTERH GULF 120800
 UPPER PECOS RIVER
 21NHX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642690-0653447

/TYP/A/AMBINT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE MG/L	RESIDUE C	70300 DISS-180	00915 CALCIUM CA,DISS	00925 MGHSIUM MG/L	00930 SODIUM NA,DISS	00935 PTSSSIUM K,DISS	00940 CHLORIDE TOTAL	00945 SULFATE SO4-TOT	01000 ARSENIC AS,DISS	01002 ARSENIC AS,TOT
			MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L
80/10/30	11 00												
80/12/04	11 10	1K	136		39.6	3.7	2.30	0.00	2.30	2.940	21	5K	5K
81/01/09	10 30	1K			43.2	4.4	2.30	0.39	1	1.400	17	5K	5
81/02/24	10 45		127		44.8	1.3	2.30	1.95	2	2.129	20	5K	5K
81/04/08	10 30	1	129		38.0	3.7	0.00	0.00	3	0.619	19		
81/05/19	10 30	1	115		28.6	2.8	0.00	0.78	3	0.206	12		11
81/05/20	10 30	1	97		34.4	4.0	2.30	0.78	3	0.206	15		
81/06/26	13 40												
	14 00												
81/08/13	14 30	20	88		24.8	1.1	2.30	0.39	1	1.400	9		
81/10/07	14 15	11	131		26.5	5.4	0.00	0.00	2	2.129	13		
81/11/24	13 30	1K	90		36.8	1.9	0.00	0.39	3	0.619	16		
STATION NUMBER		8			9		9	9	9	2.940	9	2	8
MAXIMUM		20.000	136.000		44.800	5.370	2.300	1.950	21.200	5.000	21.200	5.000	11.000
MINIMUM		1.000	88.000		24.800	1.100	0.000	0.000	0.300	1.400	9.300	5.000	5.000
MEAN		4.625	115.125		35.189	3.149	1.278	0.520	15.711	2.129	15.711	5.000	5.750
STAND DEV		7.130	18.435		7.194	1.459	1.212	0.617	3.918	0.619	3.918	0.000	2.121
STAND ERR		2.521	6.518		2.398	0.486	0.404	0.206	1.306	0.206	1.306	0.000	0.750

SECRET RETRIEVAL DATE 82/07/15
 PECOSCOH01

35 35 40.9 105 40 54.7 2
 PECOS RIVER DUE WEST OF MONASTERY LAKE
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800

UPPER PECOS RIVER
 21N11EX 820109

/TYP/A/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642690-0653447

DATE FROM TO	TIME OF DAY	DEPTH FEET	01087 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
80/10/30	11 00					5K			0.5K		100K	
80/12/04	11 10			250K		5K			0.5K		100K	
81/01/09	10 30	10K		250K	250K	5K	5.0K			0.5K		305
81/02/24	10 45			100K	100K	5K				0.5K		220
81/04/08	10 30			30K	100K	5K				0.5K		110
81/05/20	10 30			100K	100K	5K	5.0K			0.5K		100K
81/06/26	14 00	10K		100K	100K	5K				0.5K		100K
81/08/13	14 30			100K	100K	5K				0.5K		120
81/10/07	14 15			100K	100K	5K				0.5K		100K
81/11/24	13 30			100K	100K	5K				0.5K		100K

STATION NUMBER	2	1	8	2	8	2	2	8	2	8	2	8
MAXIMUM	10.000	250.000	250.000	5.000	5.000	5.000	5.000	5.000	0.500	0.500	100.000	305.000
MINIMUM	10.000	250.000	30.000	5.000	5.000	5.000	5.000	5.000	0.500	0.500	100.000	100.000
MEAN	10.000	250.000	110.000	5.000	5.000	5.000	5.000	5.000	0.500	0.500	100.000	144.375
STAND DEV	0.000		61.644	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	76.692
STAND ERR	0.000		21.794	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.115

STORET RETRIEVAL DATE 82/07/15

PECOSCON01

35 35 40.9 105 40 54.7 2

PECOS RIVER DUE WEST OF MONASTERY LAKE

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21H1EX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642690-0653447

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLLIUM BE,DISS UG/L	01012 BERYLLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
80/10/30	11 00				1K		5K					250K
80/12/04	11 10		10.00K		1K		5K		10K		10K	250K
81/01/09	10 30		10.00K		1K		5K		10K		10K	250K
81/02/24	10 45		10.00K		1K		5K		10K		10K	250K
81/04/08	10 30		10.00K		1K		5K		10K		10K	250K
81/05/19	10 30		10.00K		1K		5K		10K		10K	250K
81/05/20	10 30		10.00K		1K		5K		10K		10K	250K
81/06/26	13 40		10.00K		1K		5K		10K		10K	250K
81/08/13	14 30		10.00K		1K		5K		10K		10K	250K
81/10/07	14 15		1.00K		1K		5K		10K		10K	250K
81/11/24	13 30		1.00K		1K		5K		10K		10K	250K
STATION NUMBER			1	8	2	8	2	8	1	8	8	1
MAXIMUM			10.000	10.000	1.000	1.000	5.000	5.000	10.000	100.000	800.000	250.000
MINIMUM			10.000	1.000	1.000	1.000	5.000	5.000	10.000	10.000	50.0000	250.000
MEAN			10.000	7.750	1.000	1.000	5.000	5.000	10.000	42.500	253.125	250.000
STAND DEV				4.166	0.000	0.000	0.000	0.000		39.551	255.580	
STAND ERR				1.473	0.000	0.000	0.000	0.000		13.983	90.3610	

STORET RETRIEVAL DATE 82/07/15

PECOSCO#01

35 35 40.9 105 40 54.7 2

PECOS RIVER DUE WEST OF MONASTERY LAKE

35047 REH MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

211HEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642690-0653447

/TYP/A/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD UG/L	01051 LEAD PB,TOT UG/L	01055 MANGHESE MN UG/L	01056 MANGHESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
80/10/30	11 00		5K							1.0K
80/12/04	11 10		5K			100.0K	5K		1.0K	
81/01/09	10 30		5K	100.0K				5K		1.0K
81/02/24	10 45		5K	100.0K				5K		1.0K
81/04/08	10 30		5K	50.0K				5K		1.0K
81/05/20	10 30		5K	50.0K				5K		1.0K
81/06/26	14 00		5K	50.0K				5K		1.0K
81/08/13	14 30		5K	50.0K				10K		1.0K
81/10/07	14 15		5K	50.0K				10K		1.0K
81/11/24	13 30		5K	50.0K				10K		1.0K

STATION NUMBER	2	8	8	1	1	1	8	2	7
MAXIMUM	5.000	5.000	100.000	100.000	5.000	5.000	10.000	1.000	1.000
MINIMUM	5.000	5.000	50.000	100.000	5.000	5.000	5.000	1.000	1.000
MEAN	5.000	5.000	62.500	100.000	5.000	5.000	6.250	1.000	1.000
STAND DEV	0.000	0.000	23.145				2.315	0.000	0.000
STAND ERR	0.000	0.000	8.183				0.818	0.000	0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCON02
 35 39 30.6 105 41 20.0 2
 DALTON CANYON CREEK 20 M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21N1EX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642691-0653448

/TTPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CEHT	00010	00095	00300	00301	00400	00610	00625	00630	00665	00640
			CONDUCTVY AT 25C	DO	DO SATUR PERCENT	PH	NH3+NH4-N TOTAL	TOT N KJEL	N02&N03 N-TOTAL	PHOS-TOT	HCO3 ION		
			MICROMHD	MG/L	PERCENT	SU	MG/L	MG/L	MG/L	MG/L P	MG/L		
81/08/17	08 25		10.9	203	98.0	7.90	0.005	0.470	0.01K	0.020	121		
81/10/07	13 00		10.1	183	97.0	8.00	0.150	0.220	0.01K	0.010	112		
81/11/24	13 10		1.5	207	95.0	8.10	0.016	0.080	0.02	0.030	165		
STATION NUMBER			3	3	3	3	3	3	3	3	3	3	3
MAXIMUM			10.900	207.000	98.000	8.100	0.150	0.470	0.020	0.030	164.500		
MINIMUM			1.500	183.000	95.000	7.900	0.005	0.080	0.010	0.010	112.300		
MEAN			7.500	197.667	96.667	8.000	0.057	0.257	0.013	0.020	132.433		
STAND DEV			5.212	12.860	1.127	0.101	0.081	0.198	0.006	0.010	28.072		
STAND ERR			3.009	7.425	0.885	0.058	0.047	0.114	0.003	0.006	16.208		

STORET RETRIEVAL DATE 82/07/15

PECOSCON02

35 39 30.6 105 41 20.0 2

DALTON CANYON CREEK 20 M WEST OF HWY 63 BRDG

35047 NEW MEXICO

SAN MIGUEL

120800

UPPER PECOS RIVER

21HHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642691-0653448

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00530 RESIDUE TOT NFLT MG/L	70300 RESIDUE DISS-160 C MG/L	00915 CALCIUM CA,DISS MG/L	00925 MNGSIUM MG,DISS MG/L	00930 SODIUM NA,DISS MG/L	00935 PTSSIUM K,DISS MG/L	00940 CHLORIDE TOTAL MG/L	00945 SULFATE SO4-TOT MG/L	01000 ARSENIC AS,DISS UG/L	01002 ARSENIC AS,TOT UG/L
81/08/17	08 25		1	149	38.4	3.7	4.60	0.78	2	13		5K
81/10/07	13 00		1	145	29.9	5.7	2.30	0.40	3	13		5K
81/11/24	13 10		1K	175	50.8	3.9	4.60	0.39	3	23		5K
STATION	NUMBER		3	3	3	3	3	3	3	3	3	3
	MAXIMUM		1.000	175.000	50.800	5.730	4.600	0.780	3.410	22.600		5.000
	MINIMUM		1.000	145.000	29.900	3.660	2.300	0.390	1.900	12.900		5.000
	MEAN		1.000	156.333	39.700	4.430	3.833	0.523	2.703	16.200		5.000
	STAND DEV		0.000	16.290	10.511	1.132	1.328	0.222	0.760	5.716		0.000
	STAND ERR		0.000	9.405	6.068	0.654	0.767	0.128	0.439	3.300		0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCON02

35 39 30.6 105 41 20.0 2

DALTON CANYON CREEK 20 M WEST OF HWY 63 BRDG

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21HHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642691-0653448

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01087 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
81/08/17 08 25					50K					0.5K		100K
81/10/07 13 00					100K					0.5K		100K
81/11/24 13 10					100K					0.5K		100K
STATION NUMBER												
MAXIMUM					3							3
MINIMUM					100.000							100.000
MEAN					50.000							100.000
STAND DEV					83.333							0.000
STAND ERR					28.868							0.000
					16.667							0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCO#02

35 39 30.6 105 41 20.0 2

DALTON CANYON CREEK 20 M WEST OF HWY 63 BRDG

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21NMEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642691-0653448

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLLIUM BE,DISS UG/L	01012 BERYLLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
81/08/17	08 25			10.00K			1K	5K		50K	140	
81/10/07	13 00			1.00K			1K	5K		100K	100K	
81/11/24	13 10			1.00K			1K	5K		100K	100K	
STATION NUMBER			3				3			3		3
MAXIMUM			10.000			1.000		5.000		100.000	140.000	
MINIMUM			1.000			1.000		5.000		50.000	100.000	
MEAN			4.000			1.000		5.000		83.333	113.333	
STAND DEV			5.196			0.000		0.000		28.868	23.0944	
STAND ERR			3.000			0.000		0.000		16.667	13.3335	

STORET RETRIEVAL DATE 82/07/15

PECOSCON02

35 39 30.6 105 41 20.0 2

DALTON CANYON CREEK 20 M WEST OF HWY 63 BRDG

35047 NEN MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

2INHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642691-0653448

/TYP/A/AMBNT/STREAM

DATE FROM	DATE TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
81/08/17	81/10/07	08 25				5K	50.0K		5K		1.0K
81/10/07	81/11/24	13 00				5K	50.0K		10K		1.0K
81/11/24		13 10				5K	50.0K		10K		1.0K
STATION NUMBER											
MAXIMUM	3			5.000	5.000	50.000	50.000	50.000	10.000	3	1.000
MINIMUM				5.000	5.000	50.000	50.000	50.000	5.000		1.000
MEAN				5.000	5.000	50.000	50.000	50.000	8.333		1.000
STAND DEV				0.000	0.000	0.000	0.000	0.000	2.887		0.000
STAND ERR				0.000	0.000	0.000	0.000	0.000	1.667		0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCON03

35 40 32.7 105 41 33.1 2

MACHO CANYON CREEK 10M WEST OF HWY 63 BRDG

35047 HEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21NMEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642692-0653449

/TYP/A/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CENT	CONDUCTIVITY AT 25C MICROMHO	DO MG/L	DO SATUR PERCENT	PH SU	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	HCO3 ION MG/L
81/09/17	08 45		10.6	134	7.8	98.0	7.70	0.010	0.370	0.01	0.030	74
81/10/07	12 45		9.5	135	8.0	93.5	7.80	0.050	0.260	0.01K	0.130	73
81/11/24	12 45		2.9	107	9.6	95.0	7.90	0.044	0.120	0.07	0.020	144
STATION NUMBER												
MAXIMUM	3	3	10.600	135.000	9.600	98.000	7.900	0.050	0.370	0.070	0.130	143.500
MINIMUM			2.900	107.000	7.800	93.500	7.700	0.010	0.120	0.010	0.020	72.500
MEAN			7.733	125.333	8.467	95.500	7.800	0.035	0.250	0.030	0.060	96.633
STAND DEV			4.236	15.886	0.987	2.291	0.101	0.022	0.125	0.035	0.061	40.594
STAND ERR			2.446	9.172	0.570	1.323	0.058	0.012	0.072	0.020	0.035	23.437

STORET RETRIEVAL DATE 62/07/15

PECOSCOH03

35 40 32.7 105 41 33.1 2

MACHO CANYON CREEK 10M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 120800

UPPER PECOS RIVER

2INMEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642692-0653449

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00530 RESIDUE TOT NFLT MG/L	70300 RESIDUE DISS-180 C MG/L	00915 CALCIUM CA,DISS MG/L	00925 MNGSIUM MG,DISS MG/L	00930 SODIUM NA,DISS MG/L	00935 PTSSIUM K,DISS MG/L	00940 CHLORIDE TOTAL MG/L	00945 SULFATE SO4-TOT MG/L	01000 ARSENIC AS,DISS UG/L	01002 ARSENIC AS,TOT UG/L
81/08/17	08 45	2	104	104	24.8	1.5	6.90	0.78	3	10		5K
81/10/07	12 45	1K	108	108	19.5	4.3	2.30	0.80	4	10		5K
81/11/24	12 45	1K	146	146	46.4	4.0	6.90	0.78	6	19		5K
		13 00										
STATION	NUMBER		3	3	3	3	3	3	3	3	3	3
	MAXIMUM		2.000	146.000	46.400	4.270	6.900	0.800	6.090	19.100		5.000
	MINIMUM		1.000	104.000	19.500	1.460	2.300	0.780	2.700	9.800		5.000
	MEAN		1.333	119.333	30.233	3.253	5.367	0.787	4.397	13.067		5.000
	STAND DEV		0.577	23.181	14.249	1.558	2.656	0.012	1.695	5.231		0.000
	STAND ERR		0.333	13.383	8.227	0.699	1.533	0.007	0.979	3.020		0.000

STORET RETRIEVAL DATE 82/07/15
 PECOSCOH03
 35 40 32.7 105 41 33.1 2
 MACHO CANYON CREEK 10M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 ZIMMEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642692-0653449
 /TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	ANALYTE	UNIT	CONC	ANALYTE	UNIT	CONC
81/08/17	08 45		01087 VANADIUM V, TOT	UG/L	100K	01092 ZINC ZN, TOT	UG/L	100K
81/10/07	12 45		01090 ZINC ZN, DISS	UG/L	100K	01145 SELENIUM SE, DISS	UG/L	5K
81/11/24	13 00		01092 ZINC ZN, TOT	UG/L	100K	01147 SELENIUM SE, TOT	UG/L	5K
			01090 ZINC ZN, DISS	UG/L	5K	28011 URANIUM NAT TOT	UG/L	5K
			01090 ZINC ZN, DISS	UG/L	5K	71890 MERCURY HG, DISS	UG/L	0.5K
			01090 ZINC ZN, DISS	UG/L	5K	71900 MERCURY HG, TOTAL	UG/L	0.5K
			01005 BARIUM BA, DISS	UG/L	0.5K	01007 BARIUM BA, TOT	UG/L	100K
			01005 BARIUM BA, DISS	UG/L	0.5K	01007 BARIUM BA, TOT	UG/L	100K
			01005 BARIUM BA, DISS	UG/L	350	01007 BARIUM BA, TOT	UG/L	350

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
3	100.000	100.000	100.000	0.000	0.000
3	5.000	5.000	5.000	0.000	0.000
3	5.000	5.000	5.000	0.000	0.000
3	0.500	0.500	0.500	0.000	0.000
3	350.000	100.000	183.333	144.338	83.333

STORE RETRIEVAL DATE 82/07/15

PECOS0003

35 40 32.7 105 41 33.1 2

MACHO CANYON CREEK 10M WEST OF HWY 63 BRDG

35047 NEH MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

2111MEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642692-0653449

/TTPA/AMBT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLLIUM BE,DISS UG/L	01012 BERYLLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
81/08/17	08 45			10.00K		1K		5K		50K	300	
81/10/07	12 45			1.00K		1K		5K		100K	100K	
81/11/24	13 00			1.00K		1K		5K		100K	100K	
STATION NUMBER				3		3		3		3	3	3
MAXIMUM				10.000		1.000		5.000		100.000	300.000	
MINIMUM				1.000		1.000		5.000		50.000	100.000	
MEAN				4.000		1.000		5.000		83.333	166.667	
STAND DEV				5.196		0.000		0.000		28.868	115.470	
STAND ERR				3.000		0.000		0.000		16.667	66.6668	

STORET RETRIEVAL DATE 82/07/15

PECOS0103

35 40 32.7 105 41 33.1 2

MACHO CANYON CREEK 10M WEST OF HWY 63 BRDG

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21NHX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642692-0653449

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
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81/08/17 08 45				5K	50.0K			5K		1.0K
81/10/07 12 45				5K	50.0K			10K		1.0K
81/11/24 13 00				5K	50.0K			10K		1.0K

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
3	5.000	5.000	5.000	0.000	0.000
3	50.000	50.000	50.000	0.000	0.000
3	10.000	5.000	8.333	2.887	1.667
3	1.000	1.000	1.000	0.000	0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCO104
 35 42 27.6 105 40 59.7 2
 INDIAN CREEK 3M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER

/TYPA/AMBHT/STREAM

21MEX 020109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642693-0653450

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00095 CONDUCTVY AT 25C MICROMHO	00300 DO MG/L	00301 DO SATUR PERCENT	00400 PH SU	00610 NH3+NH4-- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00440 HCO3 ION HCO3 MG/L
80/12/04	15 00		2.8	252			8.20	0.045	1.320	0.15	0.150	187
81/01/09	14 30		0.9	252			8.10	0.004	0.190	0.03	0.005	186
81/02/24	14 15		5.0	266	9.9	103.0	8.00	0.082	0.450	0.06	0.011	186
81/04/08	14 30		11.0	326	8.5	102.0	8.20	0.065	0.580	0.03	0.002K	165
81/05/20	15 00		11.8	268	8.2	101.0	8.10	0.080	0.120	0.01	0.060	164
81/06/26	13 10		18.0	355	6.5	93.0	8.10	0.190	0.810	0.03	0.310	197
81/08/13	12 55		14.0	311	7.7	100.0	8.10	0.031	0.210	0.13	0.030	191
81/10/07	12 30		11.5	307	8.2	100.0	8.20	0.060	0.150	0.01	0.050	202
81/11/24	12 30		5.5	278	9.7	102.0	8.20	0.061	0.010	0.02	0.060	191

STATION NUMBER	9	7	9	7	9	9	9	9	9	9	9	9
MAXIMUM	18.000	9.900	103.000	8.200	0.190	1.320	0.150	0.310	202.200			
MINIMUM	0.900	6.500	93.000	8.000	0.004	0.010	0.010	0.002	163.700			
MEAN	8.944	8.386	100.143	8.133	0.069	0.427	0.053	0.075	165.411			
STAND DEV	5.661	1.164	3.340	0.071	0.052	0.421	0.052	0.099	13.180			
STAND ERR	1.887	0.440	1.262	0.024	0.017	0.140	0.017	0.033	4.393			

STORET RETRIEVAL DATE 82/07/15

PECOSCON04

35 42 27.6 105 40 59.7 2

INDIAN CREEK 3M WEST OF HWY 63 BRDG

35047 HEN MEXICO

WESTERN GULF

UPPER PECOS RIVER

21HNEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642693-0653450

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE TOT MFLT	RESIDUE C	70300	00915	00925	00930	00935	00940	00945	01000	01002
			MG/L	MG/L	RESIDUE DISS-180	CALCIUM CA,DISS	MAGNESIUM MG,DISS	SODIUM NA,DISS	POTASSIUM K,DISS	CHLORIDE TOTAL	SULFATE SO4-TOT	ARSENIC AS,DISS	ARSENIC AS,TOT
					MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L
80/12/04	15 00		87	206	62.2	3.5	4.60	0.78	2	29	5K		
81/01/09	14 30		1K		63.4	2.7	2.30	0.78	1	28			
81/02/24	14 15			202	65.0	2.9	2.30	1.17	2	26			
81/04/08	14 30		1K	201	60.2	3.1	0.00	0.00	2	26			
81/05/20	15 00		2	206	54.8	4.1	0.00	0.78	3	20			
81/06/26	13 10		25	211	61.6	19.4	2.30	1.56	3	20			
81/08/13	12 55		2	197	62.0	3.8	4.60	0.78	2	17			
81/10/07	12 30		1K	221	57.9	7.2	2.30	0.40	2	21			
81/11/24	12 30		1K	197	64.2	3.2	4.60	0.78	4	25			

STATION	NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
	8	87.000	221.000	65.000	19.400	4.600
	9	1.000	197.000	54.800	2.680	0.000
	9	15.000	205.125	61.255	5.537	2.556
	9	30.251	7.990	3.220	5.372	1.798
	9	10.695	2.825	1.073	1.791	0.599
	8					
	9	4.040	28.900	1.560	1.560	4.600
	9	1.100	16.800	0.000	0.000	0.000
	9	2.524	23.444	0.781	0.781	2.556
	9	0.851	4.215	0.435	0.435	1.798
	9	0.284	1.405	0.145	0.145	0.599
	1	5.000	5.000	5.000	5.000	5.000
	8	5.000	5.000	5.000	5.000	5.000
	8	0.000	0.000	0.000	0.000	0.000
	8	0.000	0.000	0.000	0.000	0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCON04
 35 42 27.6 105 40 59.7 2
 INDIAN CREEK 3M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21NMEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642693-0653450

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01067 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
80/12/04	15 00			250K					0.5K		100K	
81/01/09	14 30	10K		250K	250K	5K	5K	5.0K	0.5K	0.5K		328
81/02/24	14 15			100K	100K	5K	5K		0.5K	0.5K		100K
81/04/08	14 30			30K	30K	5K	5K		0.5K	0.5K		110
81/05/20	15 00			100K	100K	5K	5K	5.0K	0.5K	0.5K		100K
81/06/26	13 10	10K		100K	100K	5K	5K		1.0	0.5K		100K
81/09/13	12 55			100K	100K	5K	5K		0.5K	0.5K		100K
81/10/07	12 30			100K	100K	5K	5K		0.5K	0.5K		100K
81/11/24	12 30			100K	100K	5K	5K		0.5K	0.5K		100K

STATION NUMBER	2	1	8	1	8	2	1	8	1	8	
MAXIMUM	10.000	250.000	250.000	5.000	5.000	5.000	0.500	5.000	1.000	100.000	328.000
MINIMUM	10.000	250.000	30.000	5.000	5.000	5.000	0.500	5.000	0.500	100.000	100.000
MEAN	10.000	250.000	110.000	5.000	5.000	5.000	0.500	5.000	0.562	100.000	129.750
STAND DEV	0.000		61.644						0.177		80.181
STAND ERR	0.000		21.794						0.062		28.348

STORET RETRIEVAL DATE 82/07/15

PECOSCOH04
 35 42 27.6 105 40 59.7 2
 INDIAN CREEK 3H WEST OF HWY 63 BRDG
 35047 NEM MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21NHEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642693-0653450

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLIUM BE,DISS UG/L	01012 BERYLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
80/12/04 15 00		10.00K										
81/01/09 14 30		10.00K	10.00K	10.00K	1K	1K	5K	5K	10K	10K	250K	250K
81/02/24 14 15		10.00K	10.00K	10.00K	1K	1K	5K	5K	10K	10K	250K	250K
81/04/08 14 30		10.00K	10.00K	10.00K	1K	1K	5K	5K	10K	10K	250K	250K
81/05/20 15 00		10.00K	10.00K	10.00K	1	1	5K	5K	50K	50K	650	650
81/06/26 13 10		10.00K	10.00K	10.00K	1K	1K	5K	5K	50K	50K	170	170
81/08/13 12 55		10.00K	10.00K	10.00K	1K	1K	5K	5K	100K	100K	100K	100K
81/10/07 12 30		10.00K	10.00K	10.00K	1K	1K	5K	5K	100K	100K	100K	100K
81/11/24 12 30		10.00K	10.00K	10.00K	1K	1K	5K	5K	100K	100K	100K	100K

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
1	10.000	10.000	10.000	0.000	0.000
8	10.000	1.000	1.000	0.000	0.000
1	1.000	1.000	1.000	0.000	0.000
8	1.000	1.000	1.000	0.000	0.000
1	10.000	10.000	10.000	0.000	0.000
8	10.000	5.000	5.000	0.000	0.000
1	10.000	10.000	10.000	0.000	0.000
8	10.000	5.000	5.000	0.000	0.000
1	100.000	100.000	100.000	0.000	0.000
8	100.000	10.000	10.000	0.000	0.000
1	42.500	42.500	42.500	0.000	0.000
8	39.551	39.551	39.551	0.000	0.000
1	168.438	168.438	168.438	0.000	0.000
8	59.5519	59.5519	59.5519	0.000	0.000

STORET RETRIEVAL DATE 82/07/15
 PECOSCOR04

35 42 27.6 105 40 59.7 2
 INDIAN CREEK 3M WEST OF HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 2INHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642693-0653450
 /TTPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
80/12/04	15 00		5K		100.0K	100.0K	5K	5K	1.0K	1.0K
81/01/09	14 30				100.0K			5K		
81/02/24	14 15				50.0K			5K		
81/04/08	14 30				50.0K			5K		
81/05/20	15 00				52.0			5K		
81/06/26	13 10				120.0			5K		
81/03/13	12 55				50.0K			10K		
81/10/07	12 30				50.0K			10K		
81/11/24	12 30				50.0K			10K		

STATION NUMBER	1	7	8	1	1	8	1	7
MAXIMUM	5.000	5.000	120.000	100.000	100.000	10.000	5.000	1.000
MINIMUM	5.000	5.000	50.000	100.000	100.000	5.000	5.000	1.000
MEAN	5.000	5.000	71.500	100.000	100.000	6.250	5.000	1.000
STAND DEV	0.000	0.000	29.775	0.000	0.000	2.315	0.000	0.000
STAND ERR	0.000	0.000	10.527	0.000	0.000	0.818	0.000	0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCO1105

35 42 29.3 105 40 55.3 2

PECOS RIVER AT USGS GAGE 90M UPSTREAM INDIAN CRK

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21NHX 820109

/TTPA/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642694-0653451

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CENT	00010	00095	00300	00301	00400	00610	00625	00630	00665	00440
			CONDUCTIVITY AT 25C MICROMHIO	DO MG/L	DO SATUR PERCENT	PH SU	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	HCO3 HCO3 MG/L		
81/01/09	11 50		0.0	173		7.90	0.010	0.220	0.02	0.005K			116
81/02/24	14 00		3.8	164	10.1	8.00	0.078	0.560	0.03	0.033			108
81/04/08	14 15		10.7	174	8.6	8.10	0.047	0.580	0.02	0.002K			94
81/05/20	14 30		10.5	123	8.3	7.90	0.120	0.090	0.01	0.050K			80
81/06/26	13 00		17.4	155	7.4	8.10	0.070	0.480	0.01K	0.080			87
81/08/13	12 35		11.9	116	8.0	7.70	0.001K	0.380	0.08	0.040			64
81/10/07	12 15		10.0	137	8.4	7.80	0.070	0.120	0.01K	0.010			79
81/11/24	12 20		3.7	144	10.1	8.00	0.097	0.100	0.05	0.040			90
STATION NUMBER			0	0	7	8	0	0	0	0	0	0	0
MAXIMUM			17.400	174.000	10.100	103.000	0.120	0.580	0.080	0.080	0.080	0.080	116.000
MINIMUM			0.000	116.000	7.400	99.000	0.001	0.090	0.010	0.002	0.002	0.002	64.300
MEAN			8.500	148.167	8.700	100.571	0.062	0.316	0.028	0.032	0.032	0.032	89.800
STAND DEV			5.596	21.932	1.030	1.620	0.041	0.209	0.025	0.026	0.026	0.026	16.587
STAND ERR			1.979	7.754	0.309	0.612	0.014	0.074	0.009	0.009	0.009	0.009	5.865

STORET RETRIEVAL DATE 82/07/15

PECOSCOH05
 35 42 29.3 105 40 55.3 2
 PECOS RIVER AT USGS GAGE 90M UPSTREAM INDIAN CRK
 35047 MEH MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21MHX 820109 /TYPA/AMBHT/STREAM
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642694-0653451

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE	70300	00915	00925	00930	00935	00940	00945	01000	01002
			TOT NFLT	RESIDUE	CALCIUM	MGNSIUM	SODIUM	PTISSIUM	CHLORIDE	SULFATE	ARSENIC	ARSENIC
			MG/L	MG/L	CA,DISS	MG,DISS	NA,DISS	K,DISS	TOTAL	SO4-TOT	AS,DISS	AS, TOT
			C	C	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L
81/01/09	11 50		1K		39.2	4.0	2.30	0.78	1	17		5K
81/02/24	14 00			136	38.0	3.1	2.30	0.78	1	20		5K
81/04/08	14 15		1K		32.2	4.0	0.00	0.00	2	17		5K
81/05/20	14 30		1	101	25.2	0.5	0.00	0.00	3	12		5K
81/06/26	13 00		1	89	31.8	1.5	0.00	0.39	2	14		5K
81/08/13	12 35		6	83	21.6	1.1	2.30	0.39	1	10		5K
81/10/07	12 15		1K	100	22.0	5.6	0.00	0.00	1	11		5K
81/11/24	12 20		1K	437	30.8	3.2	2.30	0.00	3	15		5K

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
7	6.000	1.000	1.714	1.890	0.714
7	437.000	68.000	144.857	130.521	49.332
8	39.200	21.600	30.100	6.707	2.371
8	5.610	0.500	2.871	1.733	0.613
8	2.300	0.000	1.150	1.229	0.435
8	0.780	0.000	0.292	0.346	0.122
8	3.290	1.000	1.675	0.793	0.280
8	20.200	9.600	14.450	3.527	1.247
8	5.000	5.000	5.000	0.000	0.000
8	5.000	5.000	5.000	0.000	0.000

STORET RETRIEVAL DATE 02/07/15
 PECOSCOH05

35 42 29.3 105 40 55.3 2

PECOS RIVER AT USGS GAGE 90M UPSTREAM INDIAN CRK
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER

21NMEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642694-0653451 /TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01087 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
81/01/09	11 50		10K		250K		5K	5.0K		0.5K		612
81/02/24	14 00				100K		5K			0.5K		100K
81/04/08	14 15				100K		5K			0.5K		100K
81/05/20	14 30				30K		5K			0.5K		100K
81/06/26	13 00		10K		100K		24	5.0K		0.5K		100K
81/08/13	12 35				180		5K			0.5		100K
81/10/07	12 15				100K		5K			0.5K		150
81/11/24	12 20		10K		100K		5K			0.5K		100K
STATION NUMBER			3				8					8
MAXIMUM			10.000		250.000		24.000					612.000
MINIMUM			10.000		30.000		5.000					100.000
MEAN			10.000		120.000		7.375					170.250
STAND DEV			0.000		66.117		6.718					179.349
STAND ERR			0.000		23.376		2.375					63.410

STORET RETRIEVAL DATE 82/07/15

PECOSCON05

35 42 29.3 105 40 55.3 2

PECOS RIVER AT USGS GAGE 90M UPSTREAM INDIAN CRK

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21HHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642694-0653451

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLLIUM BE,DISS UG/L	01012 BERYLLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
81/01/09	11 50		10.00K	10.00K	1K	1K	5K	5K	10K	10K	250K	250K
81/02/24	14 00		10.00K	10.00K	2	2	5K	5K	10K	10K	920	920
81/04/08	14 15		10.00K	10.00K	1K	1K	5K	5K	10K	10K	250K	250K
81/05/20	14 30		10.00K	10.00K	1K	1K	5K	5K	50K	50K	34	34
81/06/26	13 00		10.00K	10.00K	1	1	5K	5K	50K	50K	360	360
81/08/13	12 35		1.00K	1.00K	1K	1K	5K	5K	100K	100K	100K	100K
81/10/07	12 15		1.00K	1.00K	1K	1K	5K	5K	100K	100K	100K	100K
81/11/24	12 20		1.00K	1.00K	1K	1K	5K	5K	100K	100K	100K	100K
STATION NUMBER			8	8	8	8	8	8	8	8	8	8
MAXIMUM			10.000	10.000	2.000	2.000	5.000	5.000	100.000	100.000	920.000	920.000
MINIMUM			1.000	1.000	1.000	1.000	5.000	5.000	10.000	10.000	34.0000	34.0000
MEAN			7.750	7.750	1.125	1.125	5.000	5.000	42.500	42.500	283.000	283.000
STAND DEV			4.166	4.166	0.354	0.354	0.000	0.000	39.551	39.551	278.758	278.758
STAND ERR			1.473	1.473	0.125	0.125	0.000	0.000	13.983	13.983	98.5559	98.5559

STORET RETRIEVAL DATE 82/07/15

PECOSCON105

35 42 29.3 105 40 55.3 2

PECOS RIVER AT USGS GAGE 90M UPSTREAM INDIAN CRK

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21NMEX 820109

/TYP/A/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642694-0653451

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
81/01/09	11	50		5K	100.0K			5K		1.0K
81/02/24	14	00		5K	75.0			5K		1.0K
81/04/08	14	15		5K	50.0K			5K		1.0K
81/05/20	14	30		5K	50.0K			5K		1.0K
81/06/26	13	00		5K	50.0K			5K		1.0K
81/08/13	12	35		5K	50.0			10K		1.0K
81/10/07	12	15		5K	50.0K			10K		1.0K
81/11/24	12	20		5K	50.0K			10K		1.0K
STATION NUMBER			8	8				8		7
MAXIMUM			5.000	100.000				10.000		1.000
MINIMUM			5.000	50.000				5.000		1.000
MEAN			5.000	59.375				6.250		1.000
STAND DEV			0.000	18.601				2.315		0.000
STAND ERR			0.000	6.576				0.818		0.000

STORET RETRIEVAL DATE 82/07/15

PECOS0106

35 44 32.3 105 40 49.7 2

HOLY GHOST CR 300M UPSTRM HWY63 BR OVER PECOS R

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

ZIRNEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642695-0653452

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CENT	00010	00095	00300	00301	00400	00610	00625	00630	00665	00440
			CONDUCTIVITY AT 25C	DO	SATUR PERCENT	PH	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	HCO3 ION MG/L		
80/12/04	14	35	2.0	139		7.40	0.093	0.260	0.05	0.017	88		
81/01/09	14	10	1.2	155		7.50	0.010	0.160	0.01	0.005K	97		
81/02/24	13	45	1.0	141	10.7	7.80	0.075	0.390	0.05	0.012	90		
81/04/08	13	50	3.2	180	9.2	7.80	0.071	0.370	0.10	0.002K	87		
81/05/19	14	05	8.4	111	8.6	7.70	0.080	0.020K	0.02	0.020	61		
81/06/26	12	35	15.0	144	7.8	8.00	0.060	0.390	0.01	0.180	86		
81/08/13	12	15	11.4	134	7.9	7.70	0.005	0.290	0.01	0.020	70		
81/10/07	11	55	8.2	127	8.4	7.60	0.080	0.120	0.01K	0.010	72		
81/11/24	12	05	3.8	135	9.6	7.50	0.042	0.110	0.03	0.020	81		

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR	7	9	9	9	9	9	9	9
15.000	180.000	10.700	103.000	8.000	8.000	0.093	0.390	0.097	0.180	97.100			
1.000	110.560	7.800	92.000	7.400	7.400	0.005	0.020	0.010	0.002	61.200			
6.022	140.618	8.836	97.643	7.667	7.667	0.057	0.233	0.032	0.032	81.369			
4.968	19.158	1.030	3.451	0.187	0.187	0.032	0.136	0.029	0.056	11.383			
1.656	6.386	0.389	1.304	0.062	0.062	0.011	0.045	0.010	0.019	3.794			

STORET RETRIEVAL DATE 82/07/15

PECOSCOH06

35 44 32.3 105 40 49.7 2

HOLY GHOST CR 300M UPSTRM HWY63 BR OVER PECOS R

35047 NEW MEXICO SAN MIGUEL

HESTERN GULF 120800

UPPER PECOS RIVER

21HHEX 820109

/TYPA/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642695-0653452

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE TOT NFLT	RESIDUE C	RESIDUE DISS-180	00530	70300	00915	00925	00930	00935	00940	00945	01000	01002
			MG/L	MG/L	CA,DISS	MG,DISS	MG,DISS	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
					MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
80/12/04	14	35	2	106	29.2	4.1	2.30	0.00	1	21	5K				
81/01/09	14	10	0		31.6	5.6	2.30	0.39	0.5	19					
81/02/24	13	45		115	31.6	3.1	2.30	0.78	2	20					
81/04/08	13	50	1K	107	30.8	2.6	0.00	0.00	2	19					
81/05/19	14	05	1	94	21.2	1.6	2.30	0.78	3	11					
81/05/20	14	05													
81/06/26	12	35	1	76	29.8	2.2	2.30	0.00	2	14					
81/08/13	12	15	3	96	23.2	2.1	2.30	0.78	1	11					
81/10/07	11	55	1	89	19.7	4.8	0.00	0.00	2	11					
81/11/24	12	05	1	91	25.6	2.9	6.90	0.39	2	15					

STATION	NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
	8	3.000	0.000	1.250	0.886	0.313
	8	115.000	76.000	96.750	12.279	4.341
	9	31.600	19.700	26.967	4.647	1.549
	9	5.610	1.600	3.219	1.338	0.446
	9	6.900	0.000	2.300	1.992	0.664
	9	0.780	0.000	0.347	0.362	0.121
	9	3.060	0.500	1.764	0.768	0.256
	9	21.100	10.700	15.589	4.283	1.428
	1	5.000	5.000	5.000	0.000	0.000
	9	5.000	5.000	5.000	0.000	0.000

STORE RETRIEVAL DATE 82/07/15
 PECOSCON06

35 44 32.3 105 40 49.7 2
 HOLY GHOST CR 300M UPSTRM HWY63 BR OVER PECOS R
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 211MEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642695-0653452

/TYPE/AMBT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01087 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
80/12/04	14 35			250K					0.5K		100K	100K
81/01/09	14 10	10K		250K		5K	5K	5.0K	0.5K			100K
81/02/24	13 45			100K		5K	5K		0.5K			100K
81/04/08	13 50			100K		5K	5K		0.5K			110
81/05/19	14 05			30K		5K	5K		0.5K			100K
81/05/20	14 05			30K		5K	5K		0.5K			100K
81/06/26	12 35	10K		100K		5K	5K	5.0K	0.5K			100K
81/09/13	12 15			100K		5K	5K		0.6			100K
81/10/07	11 55			100K		5K	5K		0.5K			100K
81/11/24	12 05	10K		400		5K	5K		0.5K			100

STATION NUMBER	3	1	9	1	2	1	9	1	9	1	9
MAXIMUM	10.000	250.000	400.000	5.000	5.000	0.500	5.000	5.000	0.600	100.000	110.000
MINIMUM	10.000	250.000	30.000	5.000	5.000	0.500	5.000	5.000	0.500	100.000	100.000
MEAN	10.000	250.000	134.444	5.000	5.000	0.500	5.000	5.000	0.511	100.000	101.111
STAND DEV	0.000		118.122	0.000	0.000		0.000	0.000	0.033		3.334
STAND ERR	0.000		39.374	0.000	0.000		0.000	0.000	0.011		1.111

STORET RETRIEVAL DATE 82/07/15

PECOSCON06

35 44 32.3 105 40 49.7 2

HOLY GHOST CR 300M UPSTRM HWY63 BR OVER PECOS R

35047 NEW MEXICO

NESTERII GULF

UPPER PECOS RIVER

21N1EX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642695-0653452

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLIUM BE,DISS UG/L	01012 BERYLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
80/12/04	14 35		10.00K				5K		10K			250K
81/01/09	14 10		10.00K	10.00K		1K		5K		12	250K	
81/02/24	13 45		10.00K	10.00K		1K		5K		10K	250K	
81/04/08	13 50		10.00K	10.00K		1K		5K		10K	250K	
81/05/19	14 05		10.00K	10.00K		1K		5K		10K	50	
81/05/20	14 05		10.00K	10.00K		1K		5K		10K	100	
81/06/26	12 35		10.00K	10.00K		1K		5K		50K	150	
81/09/13	12 15		10.00K	10.00K		1K		5K		50K	100K	
81/10/07	11 55		1.00K	1.00K		1K		5K		100K	100K	
81/11/24	12 05		1.00K	1.00K		1K		5K		100K	100K	

STATION	RUNBER	1	9	1	9	1	5K	5K	8	1	9	8	1
	MAXIMUM	10.000	10.000	1.000	1.000	5.000		5.000	5.000	10.000	100.000	250.000	250.000
	MINIMUM	10.000	1.000	1.000	1.000	5.000		5.000	5.000	10.000	10.000	50.0000	250.000
	MEAN	10.000	8.000	1.000	1.000	5.000		5.000	5.000	10.000	39.111	156.250	250.000
	STAND DEV		3.969	0.000	0.000			0.000	0.000		38.368	82.1040	
	STAND ERR		1.323	0.000	0.000			0.000	0.000		12.789	29.0201	

STORET RETRIEVAL DATE 82/07/15

PECOSCON06

35 44 32.3 105 40 49.7 2

HOLY GHOST CR 300M UPSTRM HWY63 BR OVER PECOS R

35047 NEH MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

2111EX 820109

/TYPA/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642695-0653452

DATE FROM	DATE TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
80/12/04	14 35			5K		100.0K	100.0K	5K	5K	1.0K	1.0K
81/01/09	14 10				5K	100.0K					
81/02/24	13 45				5K	50.0K					
01/04/08	13 50				5K	52.0					
81/05/19	14 05				5K	5.0K					
81/05/20	14 05				5K	50.0K					
81/06/26	12 35				5K	50.0K					
81/08/13	12 15				5K						
81/10/07	11 55				5K	50.0K					
01/11/24	12 05				5K	50.0K					

STATION NUMBER	1	9	8	1	1	9	1	8
MAXIMUM	5.000	5.000	100.000	100.000	5.000	10.000	1.000	1.000
MINIMUM	5.000	5.000	100.000	100.000	5.000	5.000	1.000	1.000
MEAN	5.000	5.000	50.675	100.000	5.000	6.111	1.000	1.000
STAND DEV		0.000	25.419			2.205		0.000
STAND ERR		0.000	8.987			0.735		0.000

STORET RETRIEVAL DATE 82/07/15
 PECOSCO107

35 45 34.6 105 40 06.2 2
 WILLOW CRK 70M UPSTRM RHY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21HMEX 820109
 /TYPA/AMBNT/STREAM
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642696-0653453

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CENT	00010	00095	00300	00301	00400	00610	00625	00630	00665	00440
			CONDUCTIVITY AT 25C	DO	DO	SATUR PERCENT	PH	NH3+NH4-N TOTAL	TOT KJEL N	NO2&NO3 N-TOTAL	PHOS-TOT	HCO3 ION HCO3	
			MICROMHO	MG/L	PERCENT	SU	MG/L	MG/L	MG/L	MG/L	MG/L P	MG/L	
80/12/04	14	05	2.5	235			8.10	0.077	0.610	0.04	0.022	182	
81/01/09	13	40	1.2	251		8.10	0.050	0.163	0.160	0.01	0.005	194	
81/02/24	13	25	1.5	243	10.7	8.00	0.163	0.350	0.350	0.09	0.028	183	
81/04/08	13	30	4.0	298	9.2	8.10	0.041	0.650	0.650	0.02	0.002K	164	
81/05/20	14	00	10.0	276	8.5	8.30	0.090	0.020K	0.820	0.01	0.020	179	
81/06/26	12	15	14.8	301	7.9	8.10	0.120	0.004	0.330	0.01	0.030	187	
81/08/13	12	00	11.5	311	8.0	8.30	0.014	0.01K	0.120	0.01K	0.010	186	
81/10/07	11	40	7.9	285	8.4	8.20	0.030	0.02	0.150	0.02	0.060	180	
81/11/24	11	45	3.0	259	9.8	8.10							
STATION NUMBER	9	7	7	9	9	9	9	9	9	9	9	9	9
MAXIMUM	14.800	311.000	10.700	104.000	8.300	0.163	0.820	0.090	0.290	194.200			
MINIMUM	1.200	235.000	7.900	93.000	8.000	0.004	0.020	0.010	0.002	164.000			
MEAN	6.267	273.222	8.929	98.857	8.144	0.065	0.357	0.025	0.052	181.733			
STAND DEV	4.940	27.454	1.029	3.627	0.102	0.052	0.278	0.026	0.091	8.129			
STAND ERR	1.647	9.151	0.389	1.371	0.034	0.017	0.093	0.009	0.030	2.710			

STORET RETRIEVAL DATE 62/07/15

PECOSCON07
 35 45 34.6 105 40 06.2 2
 WILLOW CRK 70M UPSTRM HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21NMEX 620109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642696-0653453 /TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE MG/L	00530 TOT NFLT	70300 RESIDUE C	00915 CALCIUM CA,DISS	00925 MGNESIUM MG,DISS	00930 SODIUM NA,DISS	00935 PTSSIUM K,DISS	00940 CHLORIDE TOTAL	00945 SULFATE SO4-TOT	01000 ARSENIC AS,DISS	01002 ARSENIC AS,TOT
80/12/04	14 05		7	184	66.2	1.3	0.00	0.00	0.39	2	25	5K	5K
81/01/09	13 40		4	66.0	2.7	0.00	0.00	0.78	0.78	1	21	5K	5K
81/02/24	13 25		2	63.4	3.1	3.30	0.00	2.34	2.34	2	23	5K	5K
81/04/08	13 30		2	60.4	2.6	0.00	0.00	0.00	0.00	2	24	5K	5K
81/05/20	14 00		1	62.0	3.3	0.00	0.00	0.78	0.78	3	23	5K	5K
81/06/26	12 15		2	197	2.7	0.00	0.00	0.78	0.78	3	23	5K	5K
81/08/13	12 00		7	206	4.1	2.30	0.00	0.78	0.78	2	19	5K	5K
81/10/07	11 40		1K	206	6.0	0.00	0.00	0.80	0.80	2	19	5K	5K
81/11/24	11 45		1K	142	3.2	2.30	0.00	0.39	0.39	3	21	5K	5K

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
8	7.000	1.000	3.125	2.588	0.915
8	219.000	142.000	195.000	23.568	8.332
9	67.000	59.300	63.789	2.867	0.956
9	5.980	1.300	3.218	1.283	0.428
9	3.300	0.000	0.878	1.348	0.449
9	2.340	0.000	0.782	0.647	0.216
9	3.260	1.300	2.007	0.689	0.230
9	25.100	19.200	22.000	1.988	0.663
1	5.000	5.000	5.000	0.000	0.000
8	5.000	5.000	5.000	0.000	0.000

STORET RETRIEVAL DATE 02/07/15

PECOSCR07
 35 45 34.6 105 40 06.2 2
 WILLOW CRK 70M UPSTRM HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800

UPPER PECOS RIVER
 21N1EX 820109 /TYPA/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642696--0653453

DATE FROM TO	TIME OF DAY	DEPTH FEET	01087 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
80/12/04	14 05			250K	250K	5K			0.5K	0.5K	100K	288
81/01/09	13 40	10K		100K	100K	5K			0.5K	0.5K		169
81/02/24	13 25			100K	100K	5K			0.5K	0.5K		100K
81/04/08	13 30			30K	30K	5K			0.5K	0.5K		100K
81/05/20	14 00			100K	100K	5K		5.0K	0.5K	0.5K		100K
81/06/26	12 15	10K		100K	100K	5K			0.5K	0.5K		160
81/08/13	12 00			100K	100K	5K			0.5K	0.5K		100K
81/10/07	11 40			100K	100K	5K			0.5K	0.5K		400
81/11/24	11 45			100K	100K	5K			0.5K	0.5K		

STATION NUMBER	2	1	8	1	8	2	1	8
MAXIMUM	10.000	250.000	250.000	5.000	5.000	5.000	0.500	0.500
MINIMUM	10.000	250.000	30.000	5.000	5.000	5.000	0.500	0.500
MEAN	10.000	250.000	110.000	5.000	5.000	5.000	0.500	0.500
STAND DEV	0.000	0.000	61.644	0.000	0.000	0.000	0.000	0.000
STAND ERR	0.000	0.000	21.794	0.000	0.000	0.000	0.000	0.000

STORET RETRIEVAL DATE 82/07/15

PECOSCON07

35 45 34.6 105 40 06.2 2
 WILLOW CRK 70M UPSTRM HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800

UPPER PECOS RIVER
 21NMEX 820109

/TTPA/AMBNT/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642696-0653453

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLLIUM BE,DISS UG/L	01012 BERYLLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
80/12/04	14 05		10.00K		1K		5K				5K	250K
81/01/09	13 40		10.00K	10.00K		1K		5K		10K	250K	
81/02/24	13 25		10.00K	10.00K		1K		5K		50K	180	
81/04/08	13 30		10.00K	10.00K		1K		5K		10K	160	
81/05/20	14 00		10.00K	10.00K		1K		5K		10K	110	
81/06/26	12 15		10.00K	10.00K		1K		5K		50K	294	
81/08/13	12 00		10.00K	10.00K		18		5K		60	100K	
81/10/07	11 40		1.00K	1.00K		1K		5K		100K	100K	
81/11/24	11 45		1.00K	1.00K		1K		5K		100K	100K	

STATION NUMBER	1	8	1	8	1	8	1	8	1	8	1	
MAXIMUM	10.000	10.000	1.000	18.000	5.000	5.000	5.000	5.000	12.000	100.000	294.000	250.000
MINIMUM	10.000	1.000	1.000	1.000	5.000	5.000	5.000	5.000	12.000	5.000	10.0000	250.000
MEAN	10.000	7.750	1.000	3.125	5.000	5.000	5.000	5.000	12.000	48.125	150.500	250.000
STAND DEV		4.166		6.010				0.000		38.353	90.9741	
STAND ERR		1.473		2.125				0.000		13.560	32.1642	

STORET RETRIEVAL DATE 82/07/15

PECOSCON07
 35 45 34.6 105 40 06.2 2
 WILLOW CRK 70M UPSTRM HWY 63 BRDG
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 211MEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642696-0653453

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
80/12/04	14 05		5K		100.0K	100.0K	5K	5K	1.0K	10.0K
81/01/09	13 40			5K	100.0K			5K		
81/02/24	13 25			5K	50.0K			5K		
81/04/08	13 30			5K	50.0K			5K		1.0K
81/05/20	14 00			5K	50.0K			5K		1.0K
81/06/26	12 15			10	50.0K			5K		1.0K
81/08/13	12 00			5	50.0K			5K		1.0K
81/10/07	11 40			5K	50.0K			10K		1.0K
81/11/24	11 45			5K	89.0			10K		1.0K

STATION	NUMBER	1	8	8	1	1	8	1	7
MAXIMUM	5.000	10.000	100.000	100.000	100.000	5.000	10.000	1.000	10.000
MINIMUM	5.000	5.000	50.000	100.000	100.000	5.000	5.000	1.000	1.000
MEAN	5.000	5.625	61.125	100.000	100.000	5.000	6.250	1.000	2.286
STAND DEV		1.768	20.808				2.315		3.402
STAND ERR		0.625	7.357				0.818		1.286

STORET RETRIEVAL DATE 82/07/15

PECOSCO#08

35 45 40.3 105 40 16.1 2

PECOS RIVER 400M ABOVE CONFLUENCE W WILLOW CK

35047 NEW MEXICO SAN MIGUEL

WESTERN GULF 120800

UPPER PECOS RIVER

21#H#EX 820109

/TYP#/AMBNT#/STREAM

0003 FEET DEPTH CLASS 00 CSN-RSP 0642697-0653454

DATE FROM TO	TIME OF DAY	DEPTH FEET	WATER TEMP CENT	CONDUCTVY AT 25C MICROMHO	DO MG/L	DO SATUR PERCENT	PH SU	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	HCO3 ION MG/L
80/10/30	13 00		4.5	162	10.0	103.0	7.90	0.011	0.270	0.03	0.002K	00440
80/12/04	11 00		1.0	149			7.60	0.070	0.540	0.06	0.011	96
	13 00		1.0	147			7.60	0.020	0.110	0.04	0.005K	95
81/01/09	12 30		1.8	139	10.6	101.0	7.80	0.070	0.190	0.04	0.002	90
81/02/24	12 15		8.9	149	9.1	105.0	7.80	0.053	0.590	0.03	0.002K	87
81/04/08	13 00		8.5	110	8.7	100.0	7.70	0.100	0.140	0.01	0.010	64
81/05/20	13 00		13.8	143	8.0	104.0	8.00	0.250	0.670	0.01K	0.260	81
81/06/26	10 50		10.7	105	8.1	98.0	7.50	0.005	0.460	0.01	0.020	53
81/08/13	11 45		7.5	115	8.5	94.0	7.70	0.020	0.130	0.01K	0.005	70
81/10/07	10 45		3.0	144	9.7	97.0	7.80	0.041	0.090	0.04	0.030	87
81/11/24	11 30											
STATION NUMBER			10	10	8	8	10	10	10	10	10	9
MAXIMUM			13.800	162.000	10.600	105.000	8.000	0.250	0.670	0.060	0.260	96.100
MINIMUM			1.000	105.000	8.000	94.000	7.600	0.005	0.090	0.010	0.002	52.700
MEAN			6.070	136.300	9.087	100.250	7.770	0.064	0.319	0.027	0.035	80.278
STAND DEV			4.456	19.247	0.937	3.770	0.125	0.072	0.223	0.017	0.060	14.923
STAND ERR			1.409	6.087	0.331	1.333	0.040	0.023	0.071	0.005	0.025	4.974

STORET RETRIEVAL DATE 82/07/15
 PECOSCON08

35 45 40.3 105 40 16.1 2

PECOS RIVER 400M ABOVE CONFLUENCE W HILLOW CK

35047 NEW MEXICO

WESTERN GULF

UPPER PECOS RIVER

21N1EX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642697-0653454

/TYPA/AMBT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	RESIDUE MG/L	70300 RESIDUE DISS-160 C	00915 CALCIUM CA,DISS MG/L	00925 MGNSIUM MG,DISS MG/L	00930 SODIUM NA,DISS MG/L	00935 PTSSIUM K,DISS MG/L	00940 CHLORIDE TOTAL MG/L	00945 SULFATE SO4-TOT NG/L	01000 ARSENIC AS,DISS UG/L	01002 ARSENIC AS,TOT UG/L
80/10/30	13 00			101	33.0	3.9	0.00	0.39	1	19	5K	5K
80/12/04	11 00	IK										
81/01/09	12 30	IK			33.6	4.4	0.00	0.78	0.1K	15	5K	5K
81/02/24	12 15		108		31.0	3.0	0.05	1.17	1	17	5K	5K
81/04/08	13 00	IK			31.2	0.1	0.00	0.00	3	17	5K	5K
81/05/20	13 00	IK			21.2	2.4	0.00	0.00	3	11	5K	5K
81/06/26	10 50	1	87		27.0	2.1	0.00	0.39	2	14	5K	5K
81/08/13	11 45	5	68		19.6	1.3	0.00	0.97	1	10	5K	5K
81/10/07	10 45	1	89		23.1	2.7	0.00	0.00	1	11	5K	5K
81/11/24	11 30	IK	88		30.6	1.9	2.30	1.17	3	15	5K	5K

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR
8	5.000	1.000	1.525	1.406	0.497
8	108.000	68.000	92.375	12.351	4.367
9	33.600	19.600	27.811	5.290	1.763
9	4.390	0.100	2.426	1.293	0.431
9	2.300	0.000	0.261	0.765	0.255
9	1.170	0.000	0.541	0.494	0.165
9	3.100	0.100	1.744	1.035	0.345
9	19.200	9.600	14.333	3.214	1.071
2	5.000	5.000	5.000	0.000	0.000
8	5.000	5.000	5.000	0.000	0.000

STORET RETRIEVAL DATE 82/07/15
 PECOSCO#08

35 45 40.3 105 40 16.1 2
 PECOS RIVER 400M ABOVE CONFLUENCE W WILLOW CK
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 2111HEX 820109
 0003 FEET DEPTH CLASS 00 CSN-RSP 0642697-0653454

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01067 VANADIUM V,TOT UG/L	01090 ZINC ZN,DISS UG/L	01092 ZINC ZN,TOT UG/L	01145 SELENIUM SE,DISS UG/L	01147 SELENIUM SE,TOT UG/L	28011 URANIUM NAT TOT UG/L	71890 MERCURY HG,DISS UG/L	71900 MERCURY HG,TOTAL UG/L	01005 BARIUM BA,DISS UG/L	01007 BARIUM BA,TOT UG/L
80/10/30	13 00					5K			0.5K		100K	100K
80/12/04	11 00			250K		5K			0.5K		100K	100K
81/01/09	12 30	10K			250K			12.0		0.5K		270
81/02/24	12 15				100K					0.5K		100K
81/04/08	13 00				100K					0.5K		100K
81/05/20	13 00				30K					0.5K		100K
81/06/26	10 50	10K			100K			5.0K		0.5K		100K
81/08/13	11 45				100K					0.5		100K
81/10/07	10 45				100K					0.5K		100K
81/11/24	11 30	10K			100K					0.5K		100

STATION NUMBER	MAXIMUM	MINIMUM	MEAN	STAND DEV	STAND ERR	1	2	3	6	7	8	
	10.000	10.000	10.000	0.000	0.000	250.000	5.000	10.000	250.000	5.000	12.000	
	10.000	10.000	10.000	0.000	0.000	250.000	5.000	5.000	30.000	5.000	5.000	
	0.000	0.000	0.000	0.000	0.000	250.000	5.000	5.000	110.000	5.000	8.500	
	0.000	0.000	0.000	0.000	0.000	61.644	0.000	0.000	61.644	0.000	4.950	
	0.000	0.000	0.000	0.000	0.000	21.794	0.000	0.000	21.794	0.000	3.500	
												270.000
												100.000
												100.000
												121.250
												60.104
												21.250

STORET RETRIEVAL DATE 02/07/15
 PECO5CON03

35 45 40.3 105 40 16.1 2
 PECOS RIVER 400M ABOVE CONFLUENCE W HILLOW CK
 35047 NEW MEXICO SAN MIGUEL
 WESTERN GULF 120800
 UPPER PECOS RIVER
 21NHEX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642697-0653454
 /TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01010 BERYLIUM BE,DISS UG/L	01012 BERYLIUM BE,TOT UG/L	01025 CADMIUM CD,DISS UG/L	01027 CADMIUM CD,TOT UG/L	01030 CHROMIUM CR,DISS UG/L	01034 CHROMIUM CR,TOT UG/L	01040 COPPER CU,DISS UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
80/10/30	13 00				1K		5K					250K
00/12/04	11 00	10.00K			1K		5K					
81/01/09	12 30		10.00K		1K			10K		10K	250K	
81/02/24	12 15		10.00K		1K					10K	250K	
81/04/08	13 00		10.00K		1K					10K	250K	
01/05/20	13 00		10.00K		1					10K	30	
81/06/26	10 50		10.00K		1					50K	30	
81/08/13	11 45		10.00K		1K					50K	460	
01/10/07	10 45		1.00K		1					100K	100K	
01/11/24	11 30		1.00K		1K					100K	100K	

STATION	NUMBER	1	2	6	8	2	6	1	0	8	1	
MAXIMUM		10.000	1.000	10.000	1.000	5.000	5.000	10.000	10.000	100.000	460.000	250.000
MINIMUM		10.000	1.000	1.000	1.000	5.000	5.000	10.000	10.000	10.000	30.0000	250.000
MEAN		10.000	1.000	7.750	1.000	5.000	5.000	10.000	10.000	42.500	184.750	250.000
STAND DEV			0.000	4.166	0.000	0.000	0.000	0.000	0.000	39.551	145.594	
STAND ERR			0.000	1.473	0.000	0.000	0.000	0.000	0.000	13.983	51.4753	

STORET RETRIEVAL DATE 82/07/15
 PECOSCON08

35 45 40.3 105 40 16.1 2
 PECOS RIVER 400M ABOVE CONFLUENCE W WILLOW CK
 35047 NEW MEXICO
 WESTERN GULF
 UPPER PECOS RIVER
 21111EX 820109

0003 FEET DEPTH CLASS 00 CSN-RSP 0642697-0653454
 /TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	01049 LEAD PB,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01060 MOLY MO,DISS UG/L	01062 MOLY MO,TOT UG/L	01075 SILVER AG,DISS UG/L	01077 SILVER AG,TOT UG/L
80/10/30	13 00		5K						1.0K	
80/12/04	11 00		5K				5K		100.0K	
81/01/09	12 30			5K	100.0K			5K		1.0K
81/02/24	12 15			5K	50.0K			5K		1.0K
81/04/08	13 00			5K	50.0K			5K		1.0K
81/05/20	13 00			5K	50.0K			5K		1.0K
81/06/26	10 50			5K	50.0K			5K		1.0K
81/08/13	11 45			5K	50.0K			10K		1.0K
81/10/07	10 45			5K	50.0K			10K		1.0K
81/11/24	11 30			5K	50.0K			10K		1.0K

STATION NUMBER	2	8	8	1	8	2	7
MAXIMUM	5.000	5.000	100.000	5.000	10.000	100.000	1.000
MINIMUM	5.000	5.000	50.000	5.000	5.000	1.000	1.000
MEAN	5.000	5.000	56.250	5.000	6.250	50.500	1.000
STAND DEV	0.000	0.000	17.670	0.000	2.315	70.004	0.000
STAND ERR	0.000	0.000	6.250	0.000	0.818	49.500	0.000

os River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

January 1981

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*TQ
COPTERA - stoneflies										
<i>Chimemura banksii</i>	3	0	0	0	2	5	17	1.230	6	7.38
<i>Limnephila confusa</i>	1	1	2	0	0	4	14	1.146	32	36.68
<i>Limnephila</i>	0	3	2	4	0	9	31	1.491	48	71.59
Trichoptera	4	0	3	1	5	13	44	1.643	18	29.58
<i>Trichoptera badia</i>	0	0	1	0	2	3	10	1.000	24	24.00
<i>Trichoptera aestivalis</i>	1	0	1	1	0	3	10	1.000	12	12.00
<i>Trichoptera</i>	0	0	2	0	0	2	7	0.845	48	40.56
<i>Trichoptera</i>	1	2	1	0	0	4	14	1.146	24	27.51
<i>Trichoptera sabulosa</i>	9	2	9	4	12	36	122	2.086	6	12.52
<i>Trichoptera pacifica</i>	1	1	0	2	1	5	17	1.230	18	22.15
EMEROPTERA - mayflies										
<i>Trichoptera tricaudatus</i>	5	9	10	11	15	50	170	2.230	72	160.59
<i>Trichoptera throgna</i>	25	32	41	32	61	191	649	2.812	21	59.06
<i>Trichoptera</i>	7	2	5	3	4	21	71	1.851	21	38.88
<i>Trichoptera grandis</i>	0	0	2	0	2	4	14	1.146	24	27.51
<i>Trichoptera doddsi</i>	6	21	5	20	17	69	235	2.371	4	9.48
<i>Trichoptera infrequens</i>	17	9	7	4	8	45	153	2.185	48	104.87
TRICHOPTERA - caddisflies										
<i>Trichoptera acropedes</i>	4	1	0	1	1	7	24	1.380	18	24.84
<i>Trichoptera valuma</i>	0	0	0	0	2	2	7	0.845	18	15.21
<i>Trichoptera coloradensis</i>	1	4	1	0	0	6	20	1.301	18	23.42
<i>Trichoptera sosoma</i>	14	9	9	4	2	38	129	2.111	24	50.65
<i>Trichoptera oslari</i>	18	15	7	5	28	73	248	2.394	108	258.60
<i>Trichoptera grandis</i>	0	0	0	1	2	3	10	1.000	18	18.00
<i>Trichoptera phlebodes</i>	5	9	0	0	7	21	71	1.851	24	44.43
<i>Trichoptera hycentrus</i>	8	5	5	6	11	35	119	2.076	24	49.81
<i>Trichoptera pasema</i>	43	10	39	6	46	144	490	2.690	24	64.56
DIPTERA - true flies										
<i>Diptera anota</i>	3	0	0	0	0	3	10	1.000	24	24.00
<i>Diptera coma</i>	29	23	26	6	51	135	459	2.662	36	95.83
<i>Diptera ocephala grandis</i>	0	0	0	0	5	5	17	1.230	2	2.46
<i>Diptera enia</i>	1	1	1	0	4	7	24	1.380	108	149.06
<i>Diptera otopus</i>	1	0	1	1	1	4	14	1.146	108	123.78
<i>Diptera ospectra</i>	0	0	0	1	3	4	14	1.146	108	123.78
<i>Diptera phaenocladus</i>	5	7	4	5	0	21	71	1.851	108	199.94
<i>Diptera ia</i>	1	0	1	1	1	4	14	1.146	108	123.78
<i>Diptera erix pachypus</i>	1	6	4	9	10	30	102	2.009	24	48.21
COLEOPTERA - beetles										
<i>Coleoptera iraphia</i>	0	1	0	0	0	1	3	0.477	108	51.53
<i>Coleoptera erlimnius corpulentus</i>	1	5	0	1	1	8	27	1.431	108	154.59
ARACHNIDA - other arthropods										
<i>Arachnida acarina A - mites</i>	1	5	2	1	1	10	34	1.531	108	165.40
							3485	58.074	1652	2496.24

Taxa 37
 50 Stream gradient (% slope): 1.3 - 3.0
 44.6 Substrate (composition): rubble/boulder/leaf litter
 43 Sulfate (mg/l SO4): < 149
 116.32 Total Alkalinity (mg/l CaCO3): < 199
 Diversity Index 1.03

Pecos River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

24 February 81

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*TQ
PLECOPTERA - stoneflies										
<i>Capnia confusa</i>	2	0	4	0	1	7	24	1.380	32	44.17
<i>Taenionema</i>	0	1	0	0	2	3	10	1.000	48	48.00
Leuctridae	2	8	6	6	4	26	88	1.944	18	35.00
<i>Pteronarcella badia</i>	0	0	1	0	0	1	3	0.477	24	11.45
<i>Isoperla</i>	0	1	0	1	2	4	14	1.146	48	55.01
<i>Suwallia</i>	1	1	1	2	1	6	20	1.301	24	31.22
<i>Claassenia sabulosa</i>	0	4	4	0	1	9	31	1.491	6	8.95
<i>Hesperoperla pacifica</i>	0	3	0	0	1	4	14	1.146	18	20.63
EPHEMEROPTERA - mayflies										
<i>Baetis tricaudatus</i>	9	23	14	10	14	70	238	2.377	72	171.14
<i>Rhithrogena</i>	29	56	55	32	51	223	758	2.880	21	60.47
<i>Epeorus</i>	12	9	15	15	11	62	211	2.324	21	48.81
<i>Drunella grandis</i>	0	0	0	1	0	1	3	0.477	24	11.45
<i>Drunella doddsi</i>	3	12	4	3	8	30	102	2.009	4	8.03
<i>Ephemerella infrequens</i>	3	9	10	7	8	37	126	2.100	48	100.80
TRICHOPTERA - caddisflies										
<i>Rhyacophila valuma</i>	0	0	0	1	0	1	3	0.477	18	8.59
<i>Glossosoma</i>	5	2	0	17	3	27	92	1.964	24	47.12
<i>Hydropsyche oslari</i>	3	28	2	3	9	45	153	2.185	108	235.95
<i>Arctopsyche grandis</i>	0	0	1	0	0	1	3	0.477	18	8.59
<i>Oligophlebodes</i>	1	2	9	0	0	12	41	1.613	24	38.71
<i>Brachycentrus</i>	0	9	4	0	4	17	58	1.763	24	42.32
<i>Micrasema</i>	6	15	57	15	14	107	364	2.561	24	61.44
DIPTERA - true flies										
<i>Pericoma</i>	5	17	20	8	10	60	204	2.310	36	83.16
<i>Bibiocephala grandis</i>	0	2	0	0	0	2	7	0.845	2	1.69
Simuliidae	0	1	0	0	0	1	3	0.477	108	51.53
<i>Tvetenia</i>	0	3	1	5	3	12	41	1.613	108	174.18
<i>Cricotopus</i>	1	0	1	0	1	3	10	1.000	108	108.00
<i>Microspectra</i>	1	3	0	0	0	4	14	1.146	108	123.72
<i>Paraphaenocladus</i>	2	8	0	1	3	14	48	1.681	108	181.57
<i>Bezzia</i>	0	1	3	0	0	4	14	1.146	108	123.72
<i>Atherix pachypus</i>	3	11	9	4	2	29	99	1.996	24	47.90
<i>Hemerodromia</i>	0	0	1	1	0	2	7	0.845	95	80.23
COLEOPTERA - beetles										
<i>Heterlimnius corpuientus</i>	0	0	2	0	7	9	31	1.491	108	161.00
ARTHROPODA - other arthropods										
Hydracarina A - mites	1	0	5	0	0	6	20	1.301	108	140.10
Totals							2857	49.421	1669	2375.00
Total Taxa	34									
CTQp	50									
CTQa	49.1									
CTQd	48.1									
BCI	104.03									
Diversity Index	3.81									
Stream gradient (% slope):								1.3 - 3.0		
Substrate (composition):								rubble/boulder/leaf litter		
Sulfate (mg/l SO4):								< 149		
Total Alkalinity (mg/l CaCO3):								< 199		

Pecos River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

8 April 1981

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*TQ
PLECOPTERA - stoneflies										
<i>Amphinemura banksii</i>	0	1	0	0	0	1	3	0.477	6	2.86
<i>Capnia confusa</i>	2	1	0	6	1	10	34	1.531	32	49.01
<i>Taenionema</i>	0	1	2	1	1	5	17	1.230	48	59.06
Leuctridae	2	3	2	2	3	12	41	1.613	18	29.03
<i>Pteronarcella badia</i>	0	0	0	2	0	2	7	0.845	24	20.28
<i>Isoperla</i>	0	0	0	2	2	4	14	1.146	48	55.01
<i>Suwallia</i>	1	1	0	0	0	2	7	0.845	24	20.28
<i>Claassenia sabulosa</i>	3	2	2	2	5	14	48	1.681	6	10.09
EPHEMEROPTERA - mayflies										
<i>Ameletus</i>	0	0	0	0	3	3	10	1.000	48	48.00
<i>Baetis tricaudatus</i>	13	31	25	28	10	107	364	2.561	72	184.40
<i>Rhithrogena</i>	46	39	24	42	17	168	571	2.757	21	57.89
<i>Epeorus</i>	20	17	20	12	6	75	255	2.407	21	50.54
<i>Paraleptophlebia</i>	0	1	1	0	1	3	10	1.000	24	24.00
<i>Drunella doddsi</i>	2	6	0	6	6	20	68	1.833	4	7.33
<i>Ephemerella infrequens</i>	6	6	6	5	5	28	95	1.978	48	94.93
TRICHOPTERA - caddisflies										
<i>Rhyacophila acropedes</i>	1	0	0	0	0	1	3	0.477	18	8.59
<i>Rhyacophila valuma</i>	0	1	0	0	2	3	10	1.000	18	18.00
<i>Rhyacophila coloradensis</i>	0	0	0	1	0	1	3	0.477	18	8.59
<i>Glossosoma</i>	7	0	0	4	1	12	41	1.613	24	38.71
<i>Hydropsyche oslari</i>	1	1	6	2	1	11	37	1.568	108	169.37
<i>Arctopsyche grandis</i>	0	1	3	0	0	4	14	1.146	18	20.63
<i>Oligophlebodes</i>	4	10	16	13	12	55	187	2.272	24	54.52
<i>Brachycentrus</i>	5	14	14	6	3	42	143	2.155	24	51.73
<i>Micrasema</i>	64	96	45	26	46	277	942	2.974	24	71.38
DIPTERA - true flies										
<i>Antocha monticola</i>	0	1	0	0	1	2	7	0.845	24	20.28
<i>Pericoma</i>	8	11	9	14	7	49	167	2.223	36	80.02
Chironomidae D	0	0	0	1	0	1	3	0.477	108	51.53
<i>Tvetenia</i>	2	2	6	3	0	13	44	1.643	108	177.49
<i>Cricotopus</i>	0	3	1	0	0	4	14	1.146	108	123.78
<i>Microspectra</i>	2	2	0	9	0	13	44	1.643	108	177.49
<i>Parapnaenocladus</i>	3	4	5	3	4	19	65	1.813	108	195.79
<i>Bezzia</i>	1	1	1	1	0	4	14	1.146	108	123.78
<i>Atherix pachypus</i>	2	3	4	7	2	18	61	1.785	24	42.85
<i>Chelifera</i>	0	0	1	2	0	3	10	1.000	95	95.00
COLEOPTERA - beetles										
<i>Dubiraphia</i>	2	0	0	0	2	4	14	1.146	108	123.78
<i>Heterimnius corpulentus</i>	0	0	1	5	2	8	27	1.431	108	154.59
ASCHELMINTHES										
Nematoda	1	0	0	0	0	1	3	0.477	108	51.53
ARTHROPODA - other arthropods										
Hydracarina A - mites	2	1	1	2	0	6	20	1.301	108	140.51
Totals							3417	54.664	1979	2712.65
Total Taxa	38									
CTQp	50		Stream gradient (% slope): 1.3 - 3.0							
CTQa	52.1		Substrate (composition): rubble/boulder/leaf litter							
CTQd	49.6		Sulfate (mg/l SO4): < 149							
BCI	100.76		Total Alkalinity (mg/l CaCO3): < 199							
Diversity Index	3.71									

Pecos River upstream from Willow Creek; San Miguel Co., New Mexico

Station 1

19 May 19

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*
PLECOPTERA - stoneflies										
<i>Capnia</i>	0	0	1	0	0	1	3	0.477	32	15.27
Leuctridae	1	2	0	1	0	4	14	1.146	18	20.63
<i>Suwallia</i>	0	3	2	4	2	11	37	1.568	24	37.64
<i>Claassenia sabulosa</i>	2	2	3	1	4	12	41	1.613	6	9.68
EPHEMEROPTERA - mayflies										
<i>Baetis tricaudatus</i>	10	8	3	8	4	33	112	2.049	72	147.54
<i>Rhithrogena</i>	9	17	19	12	12	69	235	2.371	21	49.79
<i>Epeorus</i>	28	8	13	10	14	73	248	2.394	21	50.78
<i>Paraleptophlebia</i>	0	2	1	0	0	3	10	1.000	24	24.00
<i>Drunella grandis</i>	1	1	6	0	0	8	27	1.431	24	34.55
<i>Drunella doddsi</i>	1	5	0	3	0	9	31	1.491	4	5.97
<i>Ephemerella infrequens</i>	5	7	6	12	7	37	126	2.100	48	100.82
TRICHOPTERA - caddisflies										
<i>Rhyacophila valuma</i>	1	1	0	0	0	2	7	0.845	18	15.21
<i>Glossosoma</i>	3	2	1	1	1	8	27	1.431	24	34.55
<i>Hydropsyche oslari</i>	7	6	2	4	2	21	71	1.851	108	199.91
<i>Oligophlebodes</i>	11	5	5	1	0	22	75	1.875	24	45.00
<i>Psychoronia</i>	0	0	6	0	0	6	20	1.301	24	31.72
<i>Brachycentrus</i>	71	39	12	5	12	139	473	2.675	24	64.80
<i>Micrasema</i>	22	56	37	43	51	209	711	2.852	24	68.44
DIPTERA - true flies										
<i>Dicranota</i>	1	2	0	0	0	3	10	1.000	24	24.00
<i>Tipula</i>	1	4	2	1	1	9	31	1.491	36	53.69
<i>Pericoma</i>	3	3	2	0	4	12	41	1.613	36	58.06
Simuliidae	0	2	0	1	0	3	10	1.000	108	108.00
Chironomidae D	10	4	1	1	0	16	54	1.732	108	187.10
<i>Cricotopus</i>	0	0	0	2	12	14	48	1.681	108	181.57
<i>Microspectra</i>	0	2	3	3	1	9	31	1.491	108	161.07
<i>Paraphaenocladus</i>	2	11	9	1	1	24	82	1.914	108	206.69
<i>Bezzia</i>	0	2	2	0	3	7	24	1.380	108	149.06
<i>Atherix pachypus</i>	4	4	6	4	2	20	68	1.833	24	43.98
COLEOPTERA - beetles										
<i>Dubiraphia</i>	7	2	7	5	2	23	78	1.892	108	204.55
<i>Heterlimnius corpulentus</i>	2	3	1	0	1	7	24	1.380	108	149.06
ANNELIDA - segmented worms										
Lumbricidae	1	0	2	0	1	4	14	1.146	108	123.70
ARTHROPODA - other arthropods										
Hydracarina A - mites	1	0	0	0	2	3	10	1.000	108	108.00
NEMATOMORPHA - Gordian worms										
<i>Gordius</i>	1	0	0	0	0	1	3	0.477	108	51.30
Totals							2796	51.504	1848	2764.29

Total Taxa 33
CTQp 50
CTQa 56
CTQd 53.7
BCI 93.16
Diversity Index 3.85

Stream gradient (% slope): 1.3 - 3.0
Substrate (composition): rubble/boulder/leaf litter
Sulfate (mg/l SO₄): < 149
Total Alkalinity (mg/l CaCO₃): < 199

Los River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

June 1981

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*TQ
COPTERA - stoneflies										
<i>Trichoptera</i>	0	1	3	0	1	5	17	1.230	18	22.15
<i>Tronarcella badia</i>	0	2	1	2	0	5	17	1.230	24	29.53
<i>Callibaetis</i>	1	2	5	0	1	9	31	1.491	24	35.79
<i>Assania sabulosa</i>	1	6	5	1	1	14	48	1.681	6	10.09
EMEROPTERA - mayflies										
<i>Trichoptera</i>	1	2	3	3	2	11	37	1.568	72	112.91
<i>Trichoptera</i>	6	6	7	1	2	22	75	1.875	72	135.00
<i>Trichoptera</i>	3	10	15	11	9	48	163	2.212	21	46.46
<i>Trichoptera</i>	2	0	2	4	7	15	51	1.708	21	35.86
<i>Trichoptera</i>	0	1	2	4	0	7	24	1.380	24	33.12
<i>Trichoptera</i>	2	1	0	1	5	9	31	1.491	4	5.97
<i>Trichoptera</i>	0	5	3	2	0	10	34	1.531	48	73.51
TRICHOPTERA - caddisflies										
<i>Trichoptera</i>	0	4	1	2	1	8	27	1.431	24	34.35
<i>Trichoptera</i>	1	5	1	25	0	32	109	2.037	108	220.04
<i>Trichoptera</i>	1	0	0	0	0	1	3	0.477	24	11.45
<i>Trichoptera</i>	1	0	0	0	0	1	3	0.477	24	11.45
<i>Trichoptera</i>	2	3	2	14	2	23	78	1.892	24	45.41
<i>Trichoptera</i>	17	101	117	61	60	356	1210	3.083	24	73.99
DIPTERA - true flies										
<i>Trichoptera</i>	0	6	0	0	0	6	20	1.301	24	31.22
<i>Trichoptera</i>	0	1	0	0	0	1	3	0.477	24	11.45
<i>Trichoptera</i>	0	1	0	0	0	1	3	0.477	72	34.35
<i>Trichoptera</i>	0	28	7	15	8	58	197	2.294	108	247.80
<i>Trichoptera</i>	6	1	1	4	2	14	48	1.681	108	181.57
<i>Trichoptera</i>	0	1	20	0	0	21	71	1.851	108	199.94
<i>Trichoptera</i>	0	0	3	2	0	5	17	1.230	108	132.89
<i>Trichoptera</i>	1	0	0	0	0	1	3	0.477	108	51.53
<i>Trichoptera</i>	0	3	1	0	0	4	14	1.146	108	123.78
<i>Trichoptera</i>	3	3	2	1	1	10	34	1.531	24	36.76
<i>Trichoptera</i>	1	0	0	0	0	1	3	0.477	95	45.33
COLEOPTERA - beetles										
<i>Trichoptera</i>	0	0	2	0	1	3	10	1.000	108	108.00
<i>Trichoptera</i>	6	3	4	5	3	21	71	1.851	108	199.94
ARACHNIDA - other arthropods										
<i>Trichoptera</i>	1	0	0	0	0	1	3	0.477	108	51.53
Totals							2455	43.070	1773	2393.17

Taxa	31		
	50	Stream gradient (% slope):	1.3 - 3.0
	57.2	Substrate (composition):	rubble/boulder
	55.6	Sulfate (mg/l SO4):	< 149
	89.99	Total Alkalinity (mg/l CaCO3):	< 199
Diversity Index	3.12		

Pecos River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

13 August 1981

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*
PLECOPTERA - stoneflies										
<i>Cultus aestivalis</i>	1	0	0	0	1	2	7	0.845	12	10.14
<i>Isoperla</i>	0	1	0	0	0	1	3	0.477	48	22.90
<i>Suwallia</i>	1	4	1	1	0	7	24	1.380	24	33.13
<i>Claassenia sabulosa</i>	1	1	2	0	0	4	14	1.146	6	6.88
EPHEMEROPTERA - mayflies										
<i>Ameletus</i>	1	0	1	0	3	5	17	1.230	48	59.06
<i>Baetis tricaudatus</i>	10	25	5	18	17	75	255	2.407	72	173.27
<i>Rhithrogena</i>	7	6	22	5	5	45	153	2.185	21	45.88
<i>Epeorus</i>	2	4	6	2	5	19	65	1.813	21	38.07
<i>Paraleptophlebia</i>	0	1	0	0	0	1	3	0.477	24	11.45
<i>Drunella grandis</i>	8	2	0	2	2	14	48	1.681	24	40.35
<i>Drunella doddsi</i>	0	0	0	2	2	4	14	1.146	4	4.58
<i>Ephemerella infrequens</i>	0	1	1	0	0	2	7	0.845	48	40.56
TRICHOPTERA - caddisflies										
<i>Glossosoma</i>	0	0	0	1	0	1	3	0.477	24	11.45
<i>Hydropsyche oslari</i>	0	1	1	0	0	2	7	0.845	108	91.27
<i>Brachycentrus</i>	4	4	2	3	5	18	61	1.785	24	42.85
<i>Micrasema</i>	94	74	16	57	48	289	983	2.993	24	71.82
DIPTERA - true flies										
<i>Tipula</i>	1	0	0	0	0	1	3	0.477	36	17.18
Simuliidae	1	1	1	0	3	6	20	1.301	108	140.51
<i>Tvetenia</i>	0	1	0	1	0	2	7	0.845	108	91.27
<i>Cricotopus</i>	11	21	18	9	7	66	224	2.350	108	253.83
<i>Microspectra</i>	0	1	0	0	0	1	3	0.477	108	51.53
<i>Bezzia</i>	1	1	3	0	0	5	17	1.230	108	132.89
<i>Atherix pachypus</i>	1	2	0	2	0	5	17	1.230	24	29.53
COLEOPTERA - beetles										
<i>Helichus</i>	1	0	0	0	0	1	3	0.477	72	34.35
<i>Dubiraphia</i>	0	1	1	0	0	2	7	0.845	108	91.27
<i>Heterlimnius corpulentus</i>	2	0	1	0	0	3	10	1.000	108	108.00
ANNELIDA - segmented worms										
Lumbricidae	1	2	3	1	0	7	24	1.380	108	149.06
NEMATOMORPHA - Gordian worms										
<i>Gordius</i>	0	0	1	0	0	1	3	0.477	108	51.53
Totals							2002	33.824	1636	1854.62
Total Taxa	28									
CTQp	50									
CTQa	58.4									
CTQd	54.8									
BCI	91.19									
Diversity Index	2.74									
	Stream gradient (% slope):								1.3 - 3.0	
	Substrate (composition):								rubble/boulder	
	Sulfate (mg/l SO4):								< 149	
	Total Alkalinity (mg/l CaCO3):								< 199	

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Los River upstream from Willow Creek; San Miguel Co., New Mexico
Station 1

October 1981

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*TQ
COPTERA - stoneflies										
<i>Acinemura banksii</i>	1	0	0	0	1	2	7	0.845	6	5.07
<i>Pronarcella badia</i>	2	0	0	2	1	5	17	1.230	24	29.53
<i>Pteronarcys aestivalis</i>	5	0	4	2	4	15	51	1.708	12	20.49
<i>Pteronarcys</i>	0	0	7	2	1	10	34	1.531	24	36.76
<i>Pteronarcys sabulosa</i>	5	4	1	2	2	14	48	1.681	6	10.09
<i>Pteronarcys pacifica</i>	2	3	0	0	0	5	17	1.230	18	22.15
EMEROPTERA - mayflies										
<i>Ametopsia</i>	0	2	0	0	0	2	7	0.845	48	40.56
<i>Ametopsia tricaudatus</i>	0	1	1	3	3	8	27	1.431	72	103.06
<i>Ametopsia insignificans</i>	0	0	0	1	1	2	7	0.845	72	60.85
<i>Ametopsia throgna</i>	14	9	10	8	5	46	156	2.193	21	46.06
<i>Ametopsia</i>	0	0	0	0	1	1	3	0.477	21	10.02
<i>Ametopsia grandis</i>	2	5	5	5	2	19	65	1.813	24	43.51
<i>Ametopsia doddsi</i>	5	0	1	5	1	12	41	1.613	4	6.45
<i>Ametopsia infrequens</i>	0	2	5	3	5	15	51	1.708	48	81.96
TRICHOPTERA - caddisflies										
<i>Trichoptera hyalinata</i>	1	0	0	0	1	2	7	0.845	18	15.21
<i>Trichoptera sosoma</i>	1	0	2	3	4	10	34	1.531	24	36.76
<i>Trichoptera prosyche oslari</i>	7	4	0	5	3	19	65	1.813	108	195.79
<i>Trichoptera cophlebodes</i>	2	5	8	7	3	25	85	1.929	24	46.31
<i>Trichoptera thychocentrus</i>	1	0	2	3	3	9	31	1.491	24	35.79
<i>Trichoptera masema</i>	123	75	108	63	84	453	1540	3.188	24	76.50
DIPTERA - true flies										
<i>Diptera monticola</i>	1	1	0	0	1	3	10	1.000	24	24.00
<i>Diptera coma</i>	1	0	0	1	1	3	10	1.000	36	36.00
<i>Diptera aliidae</i>	0	0	0	3	0	3	10	1.000	108	108.00
<i>Diptera monomidae D</i>	0	1	0	0	0	1	3	0.477	108	51.53
<i>Diptera notopus</i>	1	0	0	0	0	1	3	0.477	108	51.53
<i>Diptera zia</i>	0	0	4	0	0	4	14	1.146	108	123.78
<i>Diptera erix pachypus</i>	2	11	5	11	3	32	109	2.037	24	48.90
COLEOPTERA - beetles										
<i>Coleoptera tiraphia</i>	0	3	6	1	0	10	34	1.531	108	165.40
<i>Coleoptera terlimnius corpulentus</i>	0	3	3	5	4	15	51	1.708	108	184.42
OLIGOCHAETA - segmented worms										
<i>Oligochaeta trichocidae</i>	5	2	2	0	0	9	31	1.491	108	161.07
PROTOPODA - other arthropods										
<i>Protozoa acarina A - mites</i>	0	2	1	1	0	4	14	1.146	108	123.78
Tota							2582	42.963	1570	2001.32

Tota	31		
Q1	50	Stream gradient (% slope):	1.3 - 3.0
Q2	50.6	Substrate (composition):	rubble/boulder
Q3	46.6	Sulfate (mg/l SO4):	< 149
Q4	107.34	Total Alkalinity (mg/l CaCO3):	< 199
Q5	2.71		
Index			

Pecos River upstream from Willow Creek; San Miguel Co., New Mexico
 Station 1

24 Oct 198

	Q1	Q2	Q3	Q4	Q5	Total	#/m2	log x	TQ	log x*T
PLECOPTERA - stoneflies										
<i>Cultus aestivalis</i>	2	2	0	0	0	4	14	1.146	12	13.75
<i>Suwallia</i>	3	0	1	1	2	7	24	1.380	24	33.13
<i>Claassenia sabulosa</i>	1	2	2	1	2	8	27	1.431	6	8.59
EPHEMEROPTERA - mayflies										
<i>Baetis tricaudatus</i>	0	0	0	2	0	2	7	0.845	72	60.85
<i>Rhithrogena</i>	28	23	39	27	14	131	445	2.648	21	55.62
<i>Epeorus</i>	0	0	0	0	2	2	7	0.845	21	17.75
<i>Paraleptophlebia</i>	3	0	0	1	0	4	14	1.146	24	27.51
<i>Drunella grandis</i>	0	0	3	2	0	5	17	1.230	24	29.53
<i>Drunella doddsi</i>	4	1	3	4	2	14	48	1.681	4	6.72
<i>Ephemerella infrequens</i>	12	1	4	3	1	21	71	1.851	48	88.86
TRICHOPTERA - caddisflies										
<i>Rhyacophila acropedes</i>	0	0	0	1	0	1	3	0.477	18	8.59
<i>Rhyacophila valuma</i>	0	0	1	0	0	1	3	0.477	18	8.59
<i>Glossosoma</i>	12	3	1	1	4	21	71	1.851	24	44.43
<i>Hydropsyche oslari</i>	1	1	2	1	0	5	17	1.230	108	132.89
<i>Arctopsyche grandis</i>	0	1	0	0	0	1	3	0.477	18	8.59
<i>Oligophlebodes</i>	1	0	0	0	2	3	10	1.000	24	24.00
<i>Brachycentrus</i>	11	3	7	8	3	32	109	2.037	24	48.90
<i>Micrasema</i>	47	56	50	57	16	226	768	2.885	24	69.25
DIPTERA - true flies										
<i>Antocha monticola</i>	1	0	1	1	0	3	10	1.000	24	24.00
<i>Pericoma</i>	14	2	15	3	8	42	143	2.155	36	77.59
Simuliidae	0	0	1	0	0	1	3	0.477	108	51.53
<i>Eukiefferiella</i>	0	0	1	0	0	1	3	0.477	108	51.53
<i>Tvetenia</i>	2	0	1	0	1	4	14	1.146	108	123.78
<i>Cricotopus</i>	0	1	0	0	0	1	3	0.477	108	51.53
<i>Bezzia</i>	2	0	0	0	0	2	7	0.845	108	91.27
<i>Atherix pachypus</i>	10	5	8	2	5	30	102	2.009	24	48.21
COLEOPTERA - beetles										
<i>Dubiraphia</i>	1	0	0	0	0	1	3	0.477	108	51.53
<i>Heterlimnius corpulentus</i>	2	3	0	1	1	7	24	1.380	108	149.06
ARTHROPODA - other arthropods										
Hydracarina A - mites	5	0	0	0	0	5	17	1.230	108	132.89
Totals							1987	36.316	1462	1540.45
Total Taxa	29									
CTQp	50									
CTQa	50.4									
CTQd	42.4									
BCI	117.87									
Diversity Index	3.04									
Stream gradient (% slope):	1.3 - 3.0									
Substrate (composition):	rubble/boulder									
Sulfate (mg/l SO4):	< 149									
Total Alkalinity (mg/l CaCO3):	< 199									

