



GL04316  
FILE\_CAB<sup>20</sup>DRAWER\_

GEOHERM:  
COLORADO



GL04316

RECORD 00329

RECORD IDENTIFICATION  
RECORD NO..... 0073225  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER  
NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. BOND WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-04-51N

COUNTRY NAME..... UNITED STATES  
LONGITUDE..... 107-04-06W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
33N            02W

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 30.      C  
WATER FLOW RATE..... SEEP

WATER ANALYSIS

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00330

RECORD IDENTIFICATION

RECORD NO.... 0073174  
CROSS INDEX NO.. ASSESS  
RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
DATE..... 1978/02  
ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL

NAME OF SAMPLE SOURCE.. SAND DUNES SWIMMING POOL: HOT WATER WELL

COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-46.42 N

COUNTRY NAME..... UNITED STATES  
COUNTY..... ALAMOSA  
LONGITUDE..... 105-51.20 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
41N            10E      27.      NW      NW

MAP REFERENCE: DEADMAN CAMP 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
WATER SAMPLING TEMP.... 44.      C

WATER ANALYSIS

PH 1)..... 08.3  
SPECIFIC CONDUCTANCE..... 385.      UMHO/CM  
ALKALINITY..... 176.      MG/L AS HCO3  
TOTAL DISSOLVED SOLIDS... 334.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.010	81.	8.6							
MC	CA	SR	BA	CA+MG					
0.4	3.2								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
	0.		0.010						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.010	0.	0.510				0.144			

F	CL	BR	I			
5.9	4.7					
O2	N2	CO2	SO2	H2S	H2	CH4
	0.					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
	0	0.18	120.	23.		176

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00331

RECORD IDENTIFICATION

RECORD NO..... 0073184  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. SPLASHLAND HOT WATER WELL  
 SAMPLE TYPE..... WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-29.32 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ALAMOSA  
 LONGITUDE..... 105-51.45 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
38N	10E	34	SE	SE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 40. C

WATER ANALYSIS

PH 1).....	08.3	
SPECIFIC CONDUCTANCE.....	365.	UMHO/CM
ALKALINITY.....	151.	MG/L AS HCO3
TOTAL DISSOLVED SOLIDS...	311.	MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.010	72.	9.9						
MG	CA	SR	BA	CA+MG				
0.4	4.1							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.0		0.020					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.	0.	0.340				0.065		
F	CL	BR	I					
4.2	6.4							



O2	N2	CO2	SO2	H2S	H2	CH4
	0.					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
		0.15	110.	29.		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00332

RECORD IDENTIFICATION

RECORD NO..... 0073122  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 58.      C  
 WATER FLOW RATE..... 265.      GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE.... 5810.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3200.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2900	790	90						
MG	CA	SR	BA	CA+MG				
25	230							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.08					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		1800				0.12		
F	CL	BP	I					
4.3	180							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.02	0.21	54	1400		855		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00333

RECORD IDENTIFICATION

RECORD NO..... 0073123  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 57.            C  
 WATER FLOW RATE..... 226.            GPM

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 4000.            UMHO/CM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
3.2	780	87						
MG	CA	SR	BA	CA+MG				
23	210							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.20		4.7				0.13		
F	CL	BR	I					
	180							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
				1500		859		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00334

RECORD IDENTIFICATION

RECORD NO..... 0073124  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY



GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 55.      C  
 WATER FLOW RATE..... 241.      GPM

WATER ANALYSIS

PH 11..... W      6.6  
 SPECIFIC CONDUCTANCE..... 4200.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3040.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	800	87							
MG	CA	SR	BA	CA+MG					
2.6	240								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		2.0							
F	CL	BR	I						
5	190								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
	0.01	0.09	800	1500		862			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00335

RECORD IDENTIFICATION

RECORD NO..... 0073188  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. STINKING SPRINGS  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-02-05N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 106-48-25W





OTHER SAMPLE INFORMATION: THIS IS AN OLD OIL TEST WELL, 1725 FEET DEEP

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 960. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00337

RECORD IDENTIFICATION  
 RECORD NO..... 0073232  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. EOFF ARTESIAN WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-11-26N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 106-59-36W

TOWNSHIP RANGE SECTION 1/4 1/4  
 34N 01W 07 SW SE SW  
 MAP REFERENCE: CHROMO 15 MIN. QUAD.

SAMPLE INFORMATION  
 WATER SAMPLING TEMP.... 39. C  
 WATER FLOW RATE..... 50. GPM

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 2500. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00338

RECORD IDENTIFICATION  
 RECORD NO..... 0073125  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15.87 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00.62 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 35N 02W 13 SE SW

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 54. C  
 WATER FLOW RATE..... 984. L/MIN

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 4340. UMHO/CM  
 ALKALINITY..... 856. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 3040. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	730.	85.							
MG	CA	SR	BA	CA+MG					
24.	230.								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
	0.200		0.020						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		2.300							
F	CL	BR	I						
4.8	180.								
O2	N2	CO2	SO2	H2S	H2	CH4			
	0.01								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
		0.21	59.	1300.					

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00339

RECORD IDENTIFICATION

RECORD NO..... 0073126  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: COURTHOUSE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ARCHULETA  
 LATITUDE..... 37-15.92 N LONGITUDE..... 107-00.62 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 35N 02W 13 SE SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 56. C  
 WATER FLOW RATE..... 114. L/MIN

WATER ANALYSIS

PH 1)..... 6.5



SPECIFIC CONDUCTANCE..... 6300. UMHO/CM  
 ALKALINITY..... 858. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 3300. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
2.800	780.	89.						
MG	CA	SR	BA	CA+MG				
25.	250.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.270		0.020					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
0.010	0.	1.800				0.093		
F	CL	BR	I					
4.5	170.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
		0.15	52.	1500.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00340

RECORD IDENTIFICATION

RECORD NO..... 0073127  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: SPA MOTEL HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ARCHULETA  
 LATITUDE..... 37-15.85 N LONGITUDE..... 107-00.58 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 35N 02W 13 SE SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 53. C

WATER ANALYSIS

PH 1)..... 06.5  
 SPECIFIC CONDUCTANCE..... 6000. UMHO/CM  
 ALKALINITY..... 753. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 3320. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ 2.900	NA 780.	K 91.	RB	CS	NA+K			
MG 24.	CA 230.	SR	BA	CA+MG				
MN+3	MN(TOT) 0.250	FE+3	FE(TOT) 0.210	CU				
ZN 0.010	HG 0.	B 1.900	HBO2	AL	PB	AS 0.080	SB	U
F 4.4	CL 160.	BR	J					
O2	N2 0.	CO2	SO2	H2S	H2	CH4		
NH4	NO3	PO4 0.12	SI02 51.	SO4 1600	CO3	HCO3		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00341

RECORD IDENTIFICATION

RECORD NO..... 0073033  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. ELDORADO SPRINGS: SPRING A  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 39-55-52N

COUNTRY NAME..... UNITED STATES  
COUNTY..... BOULDER  
LONGITUDE..... 105-16-46W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
O1S            71W            25            NE      SE  
MAP REFERENCE: ELDORADO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
WATER SAMPLING TEMP.... 24.      C  
OTHER SAMPLE INFORMATION: ACTUALLY A WELL LOCATED ON THE SOUTH SIDE OF THE CREEK, APPROX. 100 FEET EAST OF THE BRIDGE.

WATER ANALYSIS

PH 1)..... 6.9  
SPECIFIC CONDUCTANCE.... 152.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 101.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	6.9	3.2						
MG	CA	SR	BA	CA+MG				
4.8	15							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.03		0.02				14		
F	CL	BR	J					
0.2	1							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.54	0.09	16	20		63		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00342

RECORD IDENTIFICATION

RECORD NO..... 0073034  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ELDORADO SPRINGS: SPRING B  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-55-53N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... BOULDER  
 LONGITUDE..... 105-16-47W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 01S            71W            25            NE      SE  
 MAP REFERENCE: ELDORADO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 25.      C  
 OTHER SAMPLE INFORMATION: LOCATED WITHIN THE STONE BUILDING APPROX. 175 FEET NORTH OF CREEK AND 200 FEET NORTHWEST OF BRIDGE.

WATER ANALYSIS

	W		
PH    7)	.....	6.7	
SPECIFIC CONDUCTANCE.....	.....	122.	UMHO/CM
TOTAL DISSOLVED SOLIDS....	.....	84.	PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	6.3	3.1						
MG	CA	SR	BA	CA+MG				
2.9	12							

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.02		0.02				0.008			
F	CL	BR	J						
0.2	0.8								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.63	0.21	15	79		43			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00343

RECORD IDENTIFICATION

RECORD NO..... 0073035  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. ELDORADO SPRING: SPRING B	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... BOULDER
LATITUDE..... 39-55-53N	LONGITUDE..... 105-16-47W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 01S            71W            25            NE      SE  
 MAP REFERENCE: ELDORADO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/02/00  
 WATER SAMPLING TEMP.... 26.      C  
 OTHER SAMPLE INFORMATION: LOCATED WITHIN THE STONE BUILDING APPROX. 175 FEET NORTH OF CREEK AND 200 FEET NORTHWEST OF BRIDGE.

WATER ANALYSIS

PH 1).....	6.6	
SPECIFIC CONDUCTANCE.....	130.	UMHO/CM
TOTAL DISSOLVED SOLIDS...	91.	PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	7.3	3.3							
MG	CA	SR	BA	CA+MG					
3.3	11								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.01							

F	CL	BR	I			
0.4	1.5					
NH4	NO3	PO4	SI02	SO4	CO3	HCO3
	0.78	0.18	15	23		46

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00344

RECORD IDENTIFICATION

RECORD NO.... 0073036  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. ELDORADO SPRINGS: SPRING B

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 39-55-53N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... BOULDER  
 LONGITUDE..... 105-16-47W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 01S            71W            25            NE      SE

MAP REFERENCE: FLORENCE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00

WATER SAMPLING TEMP.... 24.      C

OTHER SAMPLE INFORMATION: LOCATED WITHIN THE STONE BUILDING APPROX. 175 FEET NORTH OF CREEK AND 200 FEET NORTHWEST OF BRIDGE.

WATER ANALYSIS

	W		
PH 1).....	6.6		
SPECIFIC CONDUCTANCE.....	135.	UMHO/CM	
TOTAL DISSOLVED SOLIDS...	84.	PPM	

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	6.7	3.0						
MG	CA	SR	BA	CA+MG				
3.0	11							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.03						
F	CL	BR	I					
0.3	0.8							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.76	0.18	15	19		43		



REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00345

RECORD IDENTIFICATION

RECORD NO..... 0073063  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. HAYSTACK BUTTE WARM WATER WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-05-48N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... BOULDER  
 LONGITUDE..... 105-14-16W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 02N            70W            33            NE        NW

MAP REFERENCE: NIWGT 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 28.            C  
 WATER FLOW RATE..... 4.E            GPM

WATER ANALYSIS

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE.... 1840.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1200.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.24	510	1.3						
MG	CA	SR	BA	CA+MG				
0.7	2.5							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.05					
ZN	HG	B	HR02	AL	PB	AS	SB	U
0		0.74				0		
F	CL	BR	I					
4.4	30							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.03	0.09	29	7.9		1250		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00346

RECORD IDENTIFICATION

RECORD NO..... 0073019  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. COTTONWOOD HOT SPRING AREA: JUMP STEADY HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-48-40N LONGITUDE..... 106-13-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 79W 21 SE SE  
 MAP REFERENCE: BUENA VISTA 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 54. C  
 OTHER SAMPLE INFORMATION: CONTAINS 9 MG/L OF CARBONATE.

WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 500. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 356. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.15	100	2.6						
MG	CA	SR	BA	CA+MG				
0.6	6.4							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.09				0.004		
F	CL	BR	I					
14	28							
NH4	NO3	PO4	SI02	S04	CO3	HCO3		
	0.12	0	58	110		73		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00347

RECORD IDENTIFICATION

RECORD NO.... 0073020  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. COTTONWOOD HOT SPRING AREA: JUMP STEADY HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-48-40N LONGITUDE..... 106-13-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 79W 21 SE SE  
 MAP REFERENCE: BUENA VISTA 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 52. C  
 WATER FLOW RATE..... 90. GPM  
 OTHER SAMPLE INFORMATION: CONTAINS 9 MG/L OF CARBONATE.

WATER ANALYSIS

PH 1)..... 6.0  
 SPECIFIC CONDUCTANCE..... 510. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 364. PPM

SOLUTE ANALYSIS (WATER)

		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
0.16	100	2.6			
MG	CA	SR	BA	CA+MG	
0.3	5.6				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0		
ZN	HG	B	HBO2	AL	PB
0.01		0.09			AS
					0.005
F	CL	BR	I		SB
13	30				U
NH4	NO3	PO4	SiO2	SO4	CO3
	0.12	0	54	110	HCO3
					76

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00348

RECORD IDENTIFICATION

RECORD NO..... 0073022  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. COTTONWOOD HOT SPRING AREA: JUMP STEADY HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-48-40N LONGITUDE..... 106-13-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 79W 21 SE SE  
 MAP REFERENCE: BUENA VISTA 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 53. C  
 WATER FLOW RATE..... 50. GPM  
 OTHER SAMPLE INFORMATION: CONTAINS 9 MG/L OF CARBONATE.

WATER ANALYSIS W  
 PH 1)..... 8.5  
 SPECIFIC CONDUCTANCE..... 540. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 302. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L			
LI	NA	K	RB	CS	NA+K		
	100	2.7					
MG	CA	SR	BA	CA+MG			
0	5.8						
MN+3	MN(TOT)	FE+3	FE(TOT)	CU			
			10				
ZN	HG	B	HB02	AL	PB	AS	SB U
		0.08					
F	CL	BR	I				
1.7	32						
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3	
	0.12	0	13	110		56	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00349

RECORD IDENTIFICATION  
 RECORD NO..... 0073093  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-58N LONGITUDE..... 106-09-40W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 78W 19 SW NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 54. C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 200 FT. EAST OF OLD SWIMMING POOL.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 326. UMHO/CM

TOTAL DISSOLVED SOLIDS... 245. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.09	57	2.1						
MG	CA	SR	BA	CA+MG				
0.5	11							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.02				0.01		
F	CL	BR	I					
9.1	4.4							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.14	0.15	60	65		71		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00350

RECORD IDENTIFICATION

RECORD NO..... 0073094  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-58N LONGITUDE..... 106-09-40W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 78W 19 SW NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 54. C  
 WATER FLOW RATE..... 18. GPM  
 OTHER SAMPLE INFORMATION: MERCURY 0.0001 MG/L.

WATER ANALYSIS

PH 1)..... W 8.6  
 SPECIFIC CONDUCTANCE..... 335. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 248. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K
0.09	58	2.1			



MG 0.2	CA 10	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN 0.01	HG	B 0.02	HBO2	AL	PB	AS 0.002	SB	U
F 8.3	CL 5.3	BR	I					
NH4	NO3 0.12	PO4 0.03	SI02 58	SO4 69	CO3 3	HCO3 67		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00351

RECORD IDENTIFICATION

RECORD NO..... 0073095  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-58N LONGITUDE..... 106-09-40W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 78W 19 SW NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 54. C  
 WATER FLOW RATE..... 20. GPM

WATER ANALYSIS W

PH 1)..... 7.9  
 SPECIFIC CONDUCTANCE..... 331. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 244. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA 100	K 3.1	RB	CS	NA+K
MG 0	CA 4.0	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0		

ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.04						
F	CL	BR	I					
19	11							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.01	0.03	74	99		82		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00352

## RECORD IDENTIFICATION

RECORD NO.... 0073098  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING B

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO

COUNTY..... CHAFFEE

LATITUDE..... 38-43-58N

LONGITUDE..... 106-09-41W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	78W	19	SW	NW

MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00

WATER SAMPLING TEMP.... 54. C

WATER FLOW RATE..... LARGE

OTHER SAMPLE INFORMATION: LOCATED AT EAST END OF OLD SWIMMING POOL.

## WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 320. UMHO/CM

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00353

## RECORD IDENTIFICATION

RECORD NO.... 0073099  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING D

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO

COUNTY..... CHAFFEE

LATITUDE..... 38-43-58N

LONGITUDE..... 106-09-39W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	78W	19	SW	NW

MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 44. C  
 OTHER SAMPLE INFORMATION: LOCATED 30 FEET EAST OF SPRING A.

## WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 320. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00354

## RECORD IDENTIFICATION

RECORD NO..... 0073100  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... PEARL, R. H.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS, SPRING E  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-43-58N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-09-39W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 78W 19 SW NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 50. C  
 OTHER SAMPLE INFORMATION: LOCATED 10 FEET EAST OF SPRING D

## WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 330. UMHO/CM  
 REFERENCES: CGS INFO SERIES NO 6, 1976

RECORD 00355

## RECORD IDENTIFICATION

RECORD NO..... 0073102  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: HORTENSE HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-43-59N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-10-26W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 24 SE NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 82. C  
 WATER FLOW RATE..... 18. GPM

WATER ANALYSIS W  
 PH 1)..... 8.5  
 SPECIFIC CONDUCTANCE..... 480. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 336. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L				
LI	NA	K	RB	CS	NA+K			
0.14	94	3.1						
MG	CA	SR	BA	CA+MG				
0.1	4.4							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.05				0.003		
F	CL	BR	I					
14	10							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.01	0.03	68	100		17		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00356

RECORD IDENTIFICATION  
 RECORD NO..... 0073103  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: HORTENSE HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-59N LONGITUDE..... 106-10-26W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 24 SE NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 83. C  
 WATER FLOW RATE..... 18. GPM

WATER ANALYSIS W  
 PH 1)..... 8.2  
 SPECIFIC CONDUCTANCE..... 469. UMHO/CM

TOTAL DISSOLVED SOLIDS... 351. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	100	3.1							
MG	CA	SR	BA	CA+MG					
0	4.0								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.04							
F	CL	BR	I						
19	11								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.01	0.03	74	99		82			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00357

RECORD IDENTIFICATION

RECORD NO.... 0073106  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: WOOLMINGTON HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-24N LONGITUDE..... 106-10-38W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 19 NW SE  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP..... 39. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 250. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 143. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
0.06	40	1.7			
MG	CA	SR	BA	CA+MG	
0.6	11				



MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
0.01		0.02				0.001			
F	CL	BR	I						
0.1	3.9								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.11	0.09	1	47		75			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00358

RECORD IDENTIFICATION

RECORD NO..... 0073109  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: YOUNG LIFE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-57N LONGITUDE..... 106-10-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 24 SE NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 66. C

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 320. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 259. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
0.09	60	2.3							
MG	CA	SR	BA	CA+MG					
0.3	8.5								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
0.03		0.02				0.002			
F	CL	BR	I						
9.2	3.9								

NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
	0.15	0.12	71	67		72

REFERENCES: CGS INFO SERIES 6, 1976

RECORD 00359

RECORD IDENTIFICATION

RECORD NO..... 0073143  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING A	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... CHAFFEE
LATITUDE..... 38-29-49N	LONGITUDE..... 106-04-37W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	08E	15	NW	SW

MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 71. C  
 OTHER SAMPLE INFORMATION: LOCATED 270 FEET SOUTHEAST OF HOUSE IN LOWEST COLLECTION BOX. DISCHARGE MAY REPRESENT TOTAL DISCHARGE OF ALL SPRINGS.

WATER ANALYSIS

	W	
SPECIFIC CONDUCTANCE.....	870.	UMHO/CM
TOTAL DISSOLVED SOLIDS....	667.	PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.19	190	8						
MG	CA	SR	BA	CA+MG				
0.7	20							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.08				0.08		
F	CL	BR	I					
11	49							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.05	0.15	81	200		216		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00360

RECORD IDENTIFICATION

RECORD NO..... 0073144  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-49N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 49N            08E            15            NW SW  
 MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 70.            C  
 OTHER SAMPLE INFORMATION: LOCATED 270 FEET SOUTHEAST OF HOUSE IN LOWEST COLLECTION BOX. DISCHARGE MAY REPRESENT TOTAL DISCHARGE OF ALL SPRINGS.

WATER ANALYSIS

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE..... 1040.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 678.      PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
0.18	190	8.1						
MG	CA	SR	BA	CA+MG				
0.5	17							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.07				0.003		
F	CL	BR	I					
11	50							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0	0.06	71	220		202		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00361

RECORD IDENTIFICATION

RECORD NO..... 0073145  
 CROSS INDEX NO..

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06

RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING A

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO

COUNTY..... CHAFFEE

LATITUDE..... 38-29-49N

LONGITUDE..... 106-04-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 49N            08E            15            NW SW

MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00

WATER SAMPLING TEMP.... 70.      C

OTHER SAMPLE INFORMATION: LOCATED 270 FEET SOUTHWEST IN LOWEST COLLECTION BOX. DISCHARGE MAY REPRESENT TOTAL DISCHARGE OF ALL SPRINGS.

WATER ANALYSIS

W

PH 1)..... 7.7

SPECIFIC CONDUCTANCE.... 996.

UMHO/CM

TOTAL DISSOLVED SOLIDS... 697.

PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	200	8.3							
MG	CA	SR	BA	CA+MG					
0.2	17								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.08							
F	CL	BR	I						
12	51								
NH4	NO3	PO4	SI02	SO4	CO3	HC03			
	0.01	0.03	100	200		219			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00362

RECORD IDENTIFICATION

RECORD NO..... 0073148

CROSS INDEX NO..

RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.

DATE..... 78/06

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING C

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-29-50N

COUNTY..... CHAFFEE  
LONGITUDE..... 106-04-31W

TOWNSHIP RANGE SECTION 1/4 1/4  
49N 08E 15 SW NW  
MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
WATER SAMPLING TEMP..... 63. C  
WATER FLOW RATE..... 2. GPM  
OTHER SAMPLE INFORMATION: UPPERMOST SPRING IN DRAW EAST OF SPRINGS A AND B.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 960. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 670. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.2	190	8.3						
MG	CA	SR	BA	CA+MG				
0.8	24							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.004		0.08				0.006		
F	CL	BR	I					
11	49							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.02	0.15	81	200		214		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00363

RECORD IDENTIFICATION

RECORD NO..... 0073149  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING C  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-29-50N

COUNTRY NAME..... UNITED STATES  
COUNTY..... CHAFFEE  
LONGITUDE..... 106-04-31W

TOWNSHIP RANGE SECTION 1/4 1/4  
49N 08E 15 SW NW  
MAP REFERENCE: BONANZA 15 MINUTE



SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 62. C  
 WATER FLOW RATE..... 30 GPM  
 OTHER SAMPLE INFORMATION: UPPERMOST SPRING IN DRAW EAST OF SPRINGS A AND B.

WATER ANALYSIS

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE..... 860. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 660. PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
0.18	190	8.1						
MG	CA	SR	BA	CA+MG				
0.4	17							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.07				0.004		
F	CL	BR	I					
8.9	50							
NH4	NO3	PO4	SI02	S04	CO3		HCO3	
	0.01	0.06	71	210			212	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00364

RECORD IDENTIFICATION

RECORD NO..... 0073152  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-50N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04-32W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 08E 15 SW NW  
 MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 56. C  
 WATER FLOW RATE..... 2. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 40 FEET NORTHWEST OF SPRING C

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 1000. UMHO/CM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00365

RECORD IDENTIFICATION

RECORD NO..... 0073221  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WELLSVILLE WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-07N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 105-54-36W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 10E 18

MAP REFERENCE: HOWARD 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP..... 32. C

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 670. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 470. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.11	51	6.2						
MG	CA	SR	BA	CA+MG				
24	79							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.1				0.01		
F	CL	BR	I					
0.5	61							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.27	0.06	32	65		304		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00366

RECORD IDENTIFICATION

RECORD NO..... 0073222  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. WELLSVILLE WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-29-07N

COUNTRY NAME..... UNITED STATES  
COUNTY..... CHAFFEE  
LONGITUDE..... 105-54-36W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
49N            10E            18

MAP REFERENCE: HOWARD 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 33.      C  
WATER FLOW RATE..... 160.      GPM

WATER ANALYSIS

PH 1)..... W      7.0  
SPECIFIC CONDUCTANCE.... 760.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 484.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.11	50	6.1						
MG	CA	SR	BA	CA+MG				
27	76							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.06					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.01		0.010				0.009		
F	CL	BR	I					
0.9	62							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.26	0	30	72		322		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00367

RECORD IDENTIFICATION

RECORD NO..... 0073223  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WELLSVILLE WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-07N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 105-54-36W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 49N            10E            18  
 MAP REFERENCE: HOWARD 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 28.      C  
 WATER FLOW RATE..... 175.      GPM

WATER ANALYSIS

PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE.... 816.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 482.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	49	6.3							
MG	CA	SR	BA	CA+MG					
25	81								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.1							
F	CL	BR	I						
0.6	63								
NH4	NO3	PO4	SI02	S04	CO3	HCO3			
	.33	0.03	31	63		328			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00368

RECORD IDENTIFICATION

RECORD NO..... 0073224  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WELLSVILLE WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-07N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 105-54-36W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 49N            10E            18  
 MAP REFERENCE: HOWARD 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP..... 28.      C  
 WATER FLOW RATE..... 200.      GPM

WATER ANALYSIS

PH 1)..... 7.2  
 SPECIFIC CONDUCTANCE..... 809.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 482.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K		
	52	6.3					
MG	CA	SR	BA	CA+MG			
26	76						
MN+3	MN(TOT)	FE+3	FE(TOT)	CU			
			0				
ZN	HC	B	HBO2	AL	PB	AS	SB      U
		0.09					
F	CL	BR	1				
	62						
NH4	NO3	PO4	S102	S04	CO3	HCO3	
	0.20	0.06	31	65		328	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00369

RECORD IDENTIFICATION

RECORD NO..... 0073228  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. BROWN'S CANYON WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-38-14N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04-17W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 51N            08E            23      NE SW SW  
 MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP..... 25.      C

F 13.	CL 49.	BR	I			
O2	N2 0.	CO2	SO2	H2S	H2	CH4
NH4	NO3	PO4 0.15	SiO2 79.	SO4 190.	CO3	HCO3

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00385

RECORD IDENTIFICATION

RECORD NO..... 0073072  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 7E/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. IDAHO HOT SPRING: SPRING A

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 39-44-20N

COUNTRY NAME..... UNITED STATES

COUNTY..... CLEAR CREEK

LONGITUDE..... 105-30-43W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
04S            73W            01            NE      SE

MAP REFERENCE: IDAHO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00

WATER SAMPLING TEMP.... 45.      C

WATER FLOW RATE..... 21.      GPM

OTHER SAMPLE INFORMATION: LOCATED 75 FEET SOUTH OF LODGE, EAST OF THE CREEK IN THE CLIFF.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 3400.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 2020.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI 0.64	NA 500	K 80	RB	CS	NA+K			
MG 36	CA 140	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN 0.01	HG	B 0.35	HBO2	AL	PB	AS 0.02	SB	U
F 4.8	CL 66	BR	I					

NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
0.13 0.34 68 380 1510

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00386

RECORD IDENTIFICATION

RECORD NO.... 0073073  
CROSS INDEX NO..  
RECORD TYPE..... R

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: SPRING A  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... CLEAR CREEK  
LATITUDE..... 39-44-20N LONGITUDE..... 105-30-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
04S 73W 01 NE SE  
MAP REFERENCE: IDAHO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 40. C  
OTHER SAMPLE INFORMATION: LOCATED 75 FEET SOUTH OF LODGE, EAST OF THE CREEK IN THE CLIFF.

WATER ANALYSIS

PH 1)..... 6.9  
SPECIFIC CONDUCTANCE..... 2800. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 2110. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI NA K RB CS NA+K  
0.9 530 84  
  
MG CA SR BA CA+MG  
40 150  
  
MN+3 MN(TOT) FE+3 FE(TOT) CU  
0.07  
  
ZN HG B HBO2 AL PB AS SB U  
0.10 0.36 0.019  
  
F CL BR I  
3.7 66  
  
NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
0.05 0.09 58 430 1520

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976



RECORD 00387

RECORD IDENTIFICATION

RECORD NO..... 0073074  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-44-20N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CLEAR CREEK  
 LONGITUDE.. 105-30-43W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 04S            73W            01            NE        SE  
 MAP REFERENCE: IDAHO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/02/00  
 WATER SAMPLING TEMP.... 40.            C  
 OTHER SAMPLE INFORMATION: LOCATED 75 FEET SOUTH OF LODGE, EAST OF THE CREEK IN THE CLIFF.

WATER ANALYSIS

PH 1)..... W            6.7  
 SPECIFIC CONDUCTANCE.... 2760.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1950.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	490	71						
MG 34	CA 130	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.30				0.30		
F 4.1	CL 64	BR	J					
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.20	0.06	74	400		1390		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00388

RECORD IDENTIFICATION

RECORD NO..... 0073077  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CLEAR CREEK  
 LATITUDE..... 39-44-19N LONGITUDE..... 105-30-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
 04S 73W 01 NE NW  
 MAP REFERENCE: IDAHO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 20. C  
 WATER FLOW RATE..... 1. GPM  
 OTHER SAMPLE INFORMATION: LOCATED 100 FEET SOUTH OF LODGE AND EAST OF THE CREEK.

WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 1620. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1070. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.34	260	44						
MG	CA	SR	BA	CA+MG				
23	77							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.17				0.002		
F	CL	BR	I					
2.9	36							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.13	0.03	45	210		759		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00389

RECORD IDENTIFICATION

RECORD NO..... 0073075  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CLEAR CREEK  
 LATITUDE..... 39-44.33 N LONGITUDE..... 105-30.72 W

TOWNSHIP 04S RANGE 73W SECTION 01 1/4 NE 1/4 NW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 40. C  
 OTHER SAMPLE INFORMATION: LOCATED 75 FT S OF LODGE EAST OF CREEK IN CLIFF

WATER ANALYSIS

PH 1)..... 06.9  
 SPECIFIC CONDUCTANCE..... 2600. UMHO/CM  
 ALKALINITY..... 1390. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 1940. MG/L

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L
LI	NA	K	RB	CS	NA+K	
	500.	76.				
MG	CA	SR	BA	CA+MG		
36.	130.					
MN+3	MN(TOT)	FE+3	FE(TOT)	CU		
	0.060		0.110			
ZN	HG	B	HBO2	AL	PB	AS SB U
		0.470				
F	CL	BR	I			
4.1	66.					
O2	N2	CO2	SO2	H2S	H2	CH4
	0.15					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
		0.18	60.	380.		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00390

RECORD IDENTIFICATION

RECORD NO..... 0073076  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CLEAR CREEK  
 LATITUDE..... 39-44.35 N LONGITUDE..... 105-30.72 W

TOWNSHIP 03S RANGE 73W SECTION 36 1/4 SE 1/4 SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 24. C  
 OTHER SAMPLE INFORMATION: LOCATED 50 FT E OF SE CORNER OF LODGE IN CLIFF.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 2900. UMHO/CM  
 ALKALINITY..... 1520. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2070. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.660	520.	82.						
MG	CA	SR	BA	CA+MG				
50.	130.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.020		0.020					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.010	.0001	0.370				0.012		
F	CL	BR	I					
4.8	69.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.08							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.18	68.	400.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00391

RECORD IDENTIFICATION

RECORD NO..... 0073078  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. IDAHO HOT SPRINGS: LODGE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CLEAR CREEK  
 LATITUDE..... 39-44.37 N LONGITUDE..... 105-30.72 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 03S 73W 36 SE SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 46. C

WATER FLOW RATE..... 114. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED AT S END OF SWIMMING POOL APPROXIMATELY 100 FT N OF LODGE .

WATER ANALYSIS

PH 1)..... 06.9  
 SPECIFIC CONDUCTANCE..... 2920. UMHO/CM  
 ALKALINITY..... 1490. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2070. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.870	520.	82.						
MG	CA	SR	BA	CA+MG				
38.	150.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.070		1.0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
10.	0.	0.360				0.046		
F	CL	BR	I					
3.5	66.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.15	58.	420.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00392

RECORD IDENTIFICATION

RECORD NO..... 0073230  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DEXTER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-17-41N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CONEJOS  
 LONGITUDE..... 105-47-05W

TOWNSHIP RANGE SECTION 1/4 1/4  
 35N 11E 08 NE SE NE  
 MAP REFERENCE: PIKES STOCKADE 7.5 MIN. GUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP..... 20. C  
 WATER FLOW RATE..... 50. GPM  
 OTHER SAMPLE INFORMATION: SEVERAL SPRINGS AND SEEPS IN MARSHY AREA. FLOW DIFFICULT TO ESTIMATE. EACH SPRING HAS A

DISCHARGE OVER 5 GPM.

WATER ANALYSIS W  
 PH 1)..... 7.9  
 SPECIFIC CONDUCTANCE..... 340. UMHG/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00393

## RECORD IDENTIFICATION

RECORD NO..... 0073234  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MCINTYRE WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-16-48N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CONEJOS  
 LONGITUDE..... 105-49-07W

TOWNSHIP RANGE SECTION 1/4 1/4  
 35N 11E 18 NW SW NW  
 MAP REFERENCE: PIKES STOCKADE 7.5 MIN. QUAD.

## SAMPLE INFORMATION

WATER SAMPLING TEMP..... 14. C  
 WATER FLOW RATE..... 5. GPM  
 OTHER SAMPLE INFORMATION: 15-20 SPRINGS IN AREA. TEMPERATURES RANGE FROM 10-14 C. FLOW FROM GROUP APPEARS TO BE  
 LARGE BUT DIFFICULT TO ESTIMATE DUE TO SURFACE WATER

WATER ANALYSIS W  
 PH 1)..... 7.9  
 SPECIFIC CONDUCTANCE..... 265. UMHG/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00394

## RECORD IDENTIFICATION

RECORD NO..... 0073058  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HARTSEL HOT SPRING: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-01-05N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DARK  
 LONGITUDE..... 105-47-40W

TOWNSHIP RANGE SECTION 1/4 1/4  
 12S 75W 08 NE SE  
 MAP REFERENCE: HARTSEL 7.5 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00

WATER SAMPLING TEMP..... 52. C  
 OTHER SAMPLE INFORMATION: WESTERN MOST SPRING.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 3780. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2280. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L
LI	NA	K	RB	CS NA+K
1.0	680	33		
MG	CA	SR	BA	CA+MG
20	120			
MN+3	MN(TOT)	FE+3	FE(TOT)	CU
			0.17	
ZN	HG	B	HBO2	AL PB AS SB U
0.01		0.56		0.002
F	CL	BR	I	
2.1	820			
NH4	NO3	PO4	SI02	SO4 CO3 HCO3
	0.22	0.12	41	320 479

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00395

RECORD IDENTIFICATION  
 RECORD NO..... 0073016  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. COLONEL CHINN HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... DELTA  
 LATITUDE..... 38-52-23N LONGITUDE..... 107-38-04W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 92W 14 SW SE NE  
 MAP REFERENCE: PAONIA 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP..... 42. C

WATER ANALYSIS W  
 PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 3560. UMHO/CM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA 570	K 41	RB	CS	NA+K				
MG 32	CA 110	SR	BA	CA+MG					
MN+3	MN(TOT)	FE+3	FE(TOT) 0.10	CU					
ZN	HG	B 1.7	HBO2	AL	PB	AS	SB	U	
F 2.5	CL 400	BR	I						
NH4	NO3 0	PO4 0.06	SI02 25	SO4	CO3	HCO3 764			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00396

RECORD IDENTIFICATION

RECORD NO..... 0073030  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DUNTON HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-46-18N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-05-38W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            11W            32  
 MAP REFERENCE: DOLORES PEAK 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 44.      C  
 WATER FLOW RATE..... 26.      GPM

WATER ANALYSIS      W

SPECIFIC CONDUCTANCE..... 1850.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1260.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
0.10	35	19			
MG	CA	SR	BA	CA+MG	
45	330				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	



			2.30						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		0.09				0.005			
F	CL	BR	I						
0.6	6.6								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.06	0.09	34	350		877			

REFERENCES: COLOPADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00397

RECORD IDENTIFICATION

RECORD NO..... 0073031  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DUNTON HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-46-18N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-05-38W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            11W            32  
 MAP REFERENCE: DOLORES PEAK 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 42.      C  
 WATER FLOW RATE..... 25.      GPM

WATER ANALYSIS

PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 1890.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1340.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	34	21							
MG	CA	SR	BA	CA+MG					
43	360								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.83						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.11							
F	CL	BR	I						
0.4	6.3								

NH4            NO3            PO4            SI02            SO4            CO3            HCO3  
                  0.01            0.15            32            340                                  1010  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00398

RECORD IDENTIFICATION

RECORD NO..... 0073032  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DUNTON HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-46-18N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-05-38W

TOWNSHIP        RANGE        SECTION        1/4    1/4  
 41N            11W            32

MAP REFERENCE: DOLORES PEAK 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 42.        C  
 WATER FLOW RATE..... 25.        GPM

WATER ANALYSIS

PH 1)..... 6.4  
 SPECIFIC CONDUCTANCE.... 1860.        UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1300.        PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	34	21							
MG	CA	SR	BA	CA+MG					
45	340								
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.09							
F	CL	BR	I						
1.10	7.0								

NH4            NO3            PO4            SI02            SO4            CO3            HCO3  
                  0.02            0.03            33            310                                  1020  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00399

RECORD IDENTIFICATION

RECORD NO..... 0073042  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. GEYSER WARM SPRING

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 37-44-48N

COUNTRY NAME..... UNITED STATES

COUNTY..... DOLORES

LONGITUDE..... 108-07-02W

TOWNSHIP RANGE SECTION 1/4 1/4  
40N 11W 06

MAP REFERENCE: RICO 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00

WATER SAMPLING TEMP.... 28. C

OTHER SAMPL INFORMATION: DUE TO GEYSER-LIKE ACTIVITY, DISCHARGE VARIES. WERE UNABLE TO MAKE ACCURATE MEASUREMENT OF DISCHARGE.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 2500. UMHO/CM

TOTAL DISSOLVED SOLIDS... 1620. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.28	400	29							
MG	CA	SR	BA	CA+MG					
40	170								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		0.12				0			
F	CL	BR	I						
0.4	2.4								
NH4	NO3	PO4	SI02	SO4	CO3	HC03			
	0.02	0.28	37	68		1770			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00400

RECORD IDENTIFICATION

RECORD NO..... 0073128

CROSS INDEX NO..

RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.

DATE..... 78/06

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. PARADISE HOT SPRING

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

COUNTRY NAME..... UNITED STATES

COUNTY..... DOLORES

LATITUDE..... 37-45-15N

LONGITUDE..... 108-07-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
40N 11W 06  
MAP REFERENCE: GROUNDHOG MOUNTAIN 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
WATER SAMPLING TEMP.... 46. C  
WATER FLOW RATE..... 26. GPM

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 9560. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 6070. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K	
9.6	1800	360				
MG	CA	SR	BA	CA+MG		
27	160					
MN+3	MN(TOT)	FE+3	FE(TOT)	CU		
			0.15			
ZN	HG	B	HBO2	AL	PB	AS SB U
0.05		9.3				0.14
F	CL	BR	I			
3.9	3100					
NH4	NO3	PO4	SI02	S04	CO3	HCO3
	0.07	0.31	150	140		628

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00401

RECORD IDENTIFICATION

RECORD NO..... 0073129  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. PARADISE HOT SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-45-15N

COUNTRY NAME..... UNITED STATES  
COUNTY..... DOLORES  
LONGITUDE..... 108-07-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
40N 11W  
MAP REFERENCE: GROUNDHOG MOUNTAIN 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00

WATER SAMPLING TEMP..... 40. C  
 WATER FLOW RATE..... 34. GPM

WATER ANALYSIS W  
 PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 10700. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 6530. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L			
LI	NA 1900	K 380	RB	CS	NA+K		
MG 30	CA 240	SR	BA	CA+MG			
MN+3	MN(TOT)	FE+3	FE(TOT) 0.06	CU			
ZN	HG	B 1.0	HBO2	AL	PB	AS	SB U
F 3.8	CL 3300	BR	I				
NH4	NO3 0.11	PO4 0.37	SI02 200	SO4 140	CO3	HCO3 685	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00402

RECORD IDENTIFICATION  
 RECORD NO..... 0073162  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RICO AREA: BIG GEYSER WARM SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... DOLORES  
 LATITUDE..... 37-41-15N LONGITUDE..... 108-01-44W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 11W  
 MAP REFERENCE: RICO 7.5 MINUTE

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP..... 34. C  
 WATER FLOW RATE..... 8. GPM

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 3250. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2750. PPM



MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			4.8					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.10		0.09				0.026		
F	CL	BR	I					
1.5	2.3							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.05	0.25	120	1000		1710		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00404

RECORD IDENTIFICATION

RECORD NO..... 0073164  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. RICO AREA  
 SAMPLE TYPE..... SPRING  
 NAME OF SAMPLE SOURCE.. GEYSER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-41.28 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-01.73 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 40N            11W

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 38.      C  
 WATER FLOW RATE..... 53.      L/MIN

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 3200.      UMHO/CM  
 ALKALINITY..... 1730.      MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2790.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.250	80.	32.						
MG	CA	SR	BA	CA+MG				
100.	680.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	1.900		8.500					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.080	0.	0.080				0.026		

F	CL	BR	I			
2.1	3.9					
O2	N2	CO2	SO2	H2S	H2	CH4
	0.02					
NH4	NO3	PO4	SI02	SO4	CO3	HCO3
		0.28	110.	920.		

REFERENCES: BARRETT, JAMES K., PEARL, HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO.  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00405

RECORD IDENTIFICATION

RECORD NO..... 0073166  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. RICO AREA  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. LITTLE SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-41.32 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-01.73 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 40N            11W

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 39.      C  
 WATER FLOW RATE..... 57.      L/MIN

WATER ANALYSIS

PH 1)..... 07.0  
 SPECIFIC CONDUCTANCE.... 3350.      UMHO/CM  
 ALKALINITY..... 1450.      MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2700.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	77.	32.						
MG	CA	SR	BA	CA+MG				
92.	690.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	1.600		7.400					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.070						
F	CL	BR	I					



4.8 3.  
 O2 N2 CO2 SO2 H2S H2 CH4  
 0.08  
 NH4 NO3 PO4 SiO2 SO4 CO3 HCO3  
 0.34 120. 960.

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00406

RECORD IDENTIFICATION

RECORD NO..... 0073130  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PARADISE HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45.25 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-07.88 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 11W 06

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 42. C  
 WATER FLOW RATE..... 114. L/MIN

WATER ANALYSIS

PH 1)..... 06.8  
 SPECIFIC CONDUCTANCE..... 10000. UMHO/CM  
 ALKALINITY..... 697. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 6180. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
	1900.	370.			
MG	CA	SR	BA	CA+MG	
28.	170.				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
	0.830		0.200		
ZN	HG	B	HBO2	AL	PB PAS SB U
		4.300			
F	CL	BR	I		
3.7	3100.				
O2	N2	CO2	SO2	H2S	H2 CH4







RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. DOTSERO WARM SPRINGS

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 39-37-39N

COUNTRY NAME..... UNITED STATES

COUNTY..... EAGLE

LONGITUDE..... 107-06-22W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 05S            87W            12            NW      SW

MAP REFERENCE: GLENWOOD SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00

WATER SAMPLING TEMP.... 31.            C

WATER FLOW RATE..... 525.E          GPM

OTHER SAMPLE INFORMATION: THIS SPRING LOCATED ON NORTH SIDE OF COLORADO RIVER.

WATER ANALYSIS

PH 1)..... 7.2

SPECIFIC CONDUCTANCE.... 17000.        UMHO/CM

TOTAL DISSOLVED SOLIDS... 10400.        PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	3500	95							
MG	CA	SR	BA	CA+MG					
79	260								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.21							
F	CL	BR	J						
0.8									
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.06	0.06	13	430		5800			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00411

RECORD IDENTIFICATION

RECORD NO..... 0073028

CROSS INDEX NO..

RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.

DATE..... 78/06

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. DOTSERO WARM SPRINGS

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO COUNTY..... EAGLE  
 LATITUDE..... 39-37-39N LONGITUDE..... 107-06-22W

TOWNSHIP RANGE SECTION 1/4 1/4  
 05S 87W 12 NW SW  
 MAP REFERENCE: GLENWOOD SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 OTHER SAMPLE INFORMATION: THIS SPRING LOCATED ON NORTH SIDE OF COLORADO RIVER.

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 18500. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 9940. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LJ	NA 3500	K 44	RB	CS	NA+K
MG 65	CA 240	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 0.04	CU	
ZN	HG	B 0.22	HBO2	AL	PB AS SB U
F 0.3	CL 5400	BR	I		
NH4	NO3 0.06	PO4 0.03	S102 13	S04 450	CO3 HCO3 454

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00412

RECORD IDENTIFICATION  
 RECORD NO.... 0073029  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DOTSERD WARM SPRINGS, SOUTH  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... EAGLE  
 LATITUDE..... 39-37-37N LONGITUDE..... 107-06-00W

TOWNSHIP RANGE SECTION 1/4 1/4  
 05S 87W 12 NW  
 MAP REFERENCE: GLENWOOD SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/12/00  
 WATER SAMPLING TEMP.... 32. C  
 WATER FLOW RATE..... 1000.E GPM  
 OTHER SAMPLE INFORMATION: THIS SPRING LOCATED ON SOUTH SIDE OF COLORADO RIVER.

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 15000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 9040. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
0.08	3100	37			
MG	CA	SR	BA	CA+MG	
54	250				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.01		
ZN	HG	B	HCO2	AL	PB AS SB U
0.01		0.19			0.001
F	CL	BR	I		
0.3	4900				
NH4	NO3	PO4	SiO2	SO4	CO3 HCO3
	0.09	0.06	13	480	421

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00413

RECORD IDENTIFICATION  
 RECORD NO..... 0073002  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... PEARL, R.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CANON CITY HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-25-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... FREMONT  
 LONGITUDE..... 105-15-46W

TOWNSHIP RANGE SECTION 1/4 1/4  
 18S 70W 31 SE  
 MAP REFERENCE: ROYAL GORGE 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 40. C  
 WATER FLOW RATE..... 5. GPM

WATER ANALYSIS W  
 PH 1)..... 6.3

SPECIFIC CONDUCTANCE..... 1900. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1230. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L				
LI	NA	K	RB	CS	NA+K			
0.230	190	15						
MG	CA	SR	BA	CA+MG				
62	190							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
0.010		0.19				0.011		
F	CL	BR	J					
1.5	180							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.55	2.2	22	130		687		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00414

RECORD IDENTIFICATION  
 RECORD NO..... 0073003  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CANYON CITY HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-25-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... FREMONT  
 LONGITUDE..... 105-15-46W

TOWNSHIP RANGE SECTION 1/4 1/4  
 18S 70W 31 SE  
 MAP REFERENCE: ROYAL GORGE 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 40. C  
 WATER FLOW RATE..... 1. GPM

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 2010. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1220. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L	
LI	NA	K	RB	CS	NA+K
	180	16			



55	190								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		0.022							
F	CL	BR	I						
1.5	190								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.65	0.30	21	130		888			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00415

RECORD IDENTIFICATION  
 RECORD NO..... 0073004  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CANON CITY HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-25-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... FREMONT  
 LONGITUDE..... 105-15-46W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 18S            70W            31            SE  
 MAP REFERENCE: ROYAL GORGE 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 40.      C  
 WATER FLOW RATE..... 2.      GPM

WATER ANALYSIS      W  
 PH 1)..... 6.1  
 SPECIFIC CONDUCTANCE.... 1980.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1210.      PPM

SOLUTE ANALYSIS (WATER)      UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
	190	15			
MG	CA	SR	BA	CA+MG	
61	170				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.20		

ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.20						
F	CL	BR	I					
1.5	190							
NH4	NO3	PO4	S102	SO4	CO3	HCO3		
	0.67	0.09	21	120		888		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00416

RECORD IDENTIFICATION

RECORD NO..... 0073025  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. DON K RANCH ARTESIAN WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-20N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... FREMONT  
 LONGITUDE..... 105-00-32W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 22S            68W            05            NE

MAP REFERENCE: WETMORE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 28.      C  
 WATER FLOW RATE..... 25.      GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE.... 2300.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1710.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.52	400	50						
MG	CA	SR	BA	CA+MG				
66	160							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			1.10					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.56				0.14		
F	CL	BR	I					
1.9	150							

NH4            NO3            PO4            SIO2            SO4            CO3            HCO3  
 0.01           0.06           40            64            1580  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00417

RECORD IDENTIFICATION

RECORD NO..... 0073037  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. FLORENCE ARTESIAN WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-24-53N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... FREMONT  
 LONGITUDE..... 105-02-43W

TOWNSHIP        RANGE        SECTION        1/4        1/4  
 19S            68W            07            NE        NW

MAP REFERENCE: FLORENCE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 28.            C  
 WATER FLOW RATE..... 130.            GPM

WATER ANALYSIS

PH 1)..... 6.3  
 SPECIFIC CONDUCTANCE.... 2200.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1480.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.24	270	32						
MG	CA	SR	BA	CA+MG				
78	180							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.50					
ZN	HG	B	HBO2	AL	PB	SAS	SB	U
0.01		0.16				0.001		
F	CL	BR	I					
1.1	98							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.01	0.03	21	210		1200		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00418

RECORD IDENTIFICATION

RECORD NO.... 0073038  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. FREMONT NATATORIUM HOT SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-27-38N

COUNTRY NAME..... UNITED STATES  
COUNTY..... FREMONT  
LONGITUDE..... 105-11-46W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
18S            70W            26  
MAP REFERENCE: CANON CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
WATER SAMPLING TEMP.... 35.      C  
WATER FLOW RATE..... 20.      GPM

WATER ANALYSIS

PH 1)..... 6.9  
SPECIFIC CONDUCTANCE.... 1900.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1370.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.12	220	13						
MG	CA	SR	BA	CA+MG				
70	150							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.88					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.09				0		
F	CL	BR	I					
0.5	36							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.03	0	16	550		628		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00419

RECORD IDENTIFICATION

RECORD NO.... 0073039  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. FREMONT NATATORIUM HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... FREMONT  
 LATITUDE..... 38-27-38N LONGITUDE..... 105-11-46W

TOWNSHIP RANGE SECTION 1/4 1/4  
 18S 70W 26  
 MAP REFERENCE: CANON CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 36. C  
 WATER FLOW RATE..... 20. GPM

WATER ANALYSIS

PH 1)..... 6.8  
 SPECIFIC CONDUCTANCE..... 1900. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1300. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	210	13							
MG	CA	SR	BA	CA+MG					
67	140								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.98						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.08							
F	CL	BR	I						
0.5	30								
NH4	NO3	PO4	S102	SO4	CO3	HCO3			
	0.01	0	15	510		633			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00420

RECORD IDENTIFICATION

RECORD NO..... 0073040  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. FREMONT NATATORIUM HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... FREMONT  
 LATITUDE..... 38-27-38N LONGITUDE..... 105-11-46W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 18S            70W            26  
 MAP REFERENCE: CANYON CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 35.      C  
 WATER FLOW RATE..... 18.      GPM

WATER ANALYSIS

PH 1)..... 6.7  
 SPECIFIC CONDUCTANCE..... 1850.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1330.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	210	12						
MG	CA	SR	BA	CA+MG				
67	140							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.99					
ZN	HG	B	HED2	AL	PB	AS	SB	U
		0.09						
F	CL	BR	I					
0.5	30							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.01	0.03	15	540		633		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00421

RECORD IDENTIFICATION

RECORD NO..... 0073189  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SWISSVALE WARM SPRINGS: SPRING A  
 COUNTRY CODE..... US      COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO      COUNTY..... FREMONT  
 LATITUDE..... 38-28-49N      LONGITUDE..... 105-53-25W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 49N            10E            20      NE SE SW  
 MAP REFERENCE: HOWARD 15 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 28.      C

WATER FLOW RATE..... 125. GPM  
 OTHER SAMPLE INFORMATION: LOCATED 30 FEET SOUTH OF U.S. BUREAU OF LAND MANAGEMENT CADASTRAL SURVEY MARKER

WATER ANALYSIS W  
 PH 1)..... 7  
 SPECIFIC CONDUCTANCE..... 880. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00422

## RECORD IDENTIFICATION

RECORD NO.... 0073190  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SWISSVALE WARM SPRINGS: SPRING F  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... FREMONT  
 LATITUDE..... 38-28-49N LONGITUDE..... 105-53-28W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 10E 20 NE SE SW  
 MAP REFERENCE: HOWARD 15 MIN. QUAD.

## SAMPLE INFORMATION

WATER SAMPLING TEMP.... 20. C  
 WATER FLOW RATE..... 20. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 350 FEET WEST OF SPRING A AND ABOUT 20 FEET ABOVE THE RIVER BANK

## WATER ANALYSIS W

PH 1)..... 7  
 SPECIFIC CONDUCTANCE..... 775. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00423

## RECORD IDENTIFICATION

RECORD NO.... 0073043  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: YAMPA SPRINGS (FEEDS SWIMMING POOL)  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N LONGITUDE..... 107-19-18W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 SE NE  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00

WATER SAMPLING TEMP..... 50. C  
 WATER FLOW RATE..... 2263. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON NORTH SIDE OF COLORADO RIVER.

WATER ANALYSIS W  
 PH 1)..... 6.3  
 SPECIFIC CONDUCTANCE..... 36800. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 20200. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LJ	NA	K	RB	CS	NA+K
0.80	6900	180			
MG	CA	SR	BA	CA+MG	
91	510				
MN+3	MN(TOT)	FE+3	FE(TGT)	CU	
			0.06		
ZN	HG	B	HBO2	AL	PB AS SB U
0.03		0.89			0
F	CL	BR	I		
2.3	11000				
NH4	NO3	PO4	SI02	SO4	CO3 HCO3
	0.01	0.12	32	1100	773

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00424

RECORD IDENTIFICATION

RECORD NO..... 0073044  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: DRINKING SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N LONGITUDE..... 107-19-19W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 SE NE  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP..... 50. C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 100 FEET EAST OF POOL.

WATER ANALYSIS W

PH 1)..... 6.3  
 TOTAL DISSOLVED SOLIDS... 20300. PPM



SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.81	7000	180						
MG	CA	SR	BA	CA+MG				
90	510							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.91				0.001		
F	CL	BR	I					
2.3	11000							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.01	0.09	32	1100		778		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00425

RECORD IDENTIFICATION

RECORD NO..... 0073045  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: DRINKING SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N LONGITUDE..... 107-19-19W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 SE NE  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 50. C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 100 FEET EAST OF POOL.

WATER ANALYSIS

PH 1)..... W 6.3  
 SPECIFIC CONDUCTANCE..... 30100. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 20200. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.90	6900	170						
MG	CA	SR	BA	CA+MG				

88	530								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.15						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.01		0.88				0.001			
F	CL	BR	I						
2.0	11000								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0	0.15	29	1100		777			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00426

RECORD IDENTIFICATION

RECORD NO..... 0073046  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: DRINKING SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N LONGITUDE..... 107-19-19W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 SE NE  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 51. C  
 WATER FLOW RATE..... 161. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 100 FEET EAST OF POOL.

WATER ANALYSIS

PH 1)..... 6.4  
 SPECIFIC CONDUCTANCE..... 31100. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 20500. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RE	CS	NA+K				
	7000	380							
MG	CA	SR	BA	CA+MG					
82	500								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	

0.92  
 F CL BR I  
 2.7 11000  
 NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
 0.01 0.18 30 1100 773

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00427

RECORD IDENTIFICATION

RECORD NO..... 0073048  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: VAPOR CAVES, MENS HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N LONGITUDE..... 107-19-17W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 SE NE

MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 50. C  
 WATER FLOW RATE..... 5.5 E GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON NORTH SIDE OF COLORADO RIVER.

WATER ANALYSIS

PH 1)..... W 6.7  
 SPECIFIC CONDUCTANCE.... 31000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 18000. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.67	6300	150						
MG	CA	SR	BA	CA+MG				
40	440							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.08					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.87				0.001		
F	CL	BR	I					
1.9	9600							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		

REFERENCES: 0.01 0.09 28 1100 744  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00428

RECORD IDENTIFICATION

RECORD NO..... 0073049  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: GRAVES SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-14N LONGITUDE..... 107-20-08W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 NW NW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 46. C  
 WATER FLOW RATE..... 5. GPM  
 OTHER SAMPLE INFORMATION: LOCATED AT 0281 164 ROAD IN GLENWOOD SPRINGS.

WATER ANALYSIS

PH 1)..... W 7.0  
 SPECIFIC CONDUCTANCE..... 33500. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 21500. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.69	70000	180						
MG	CA	SR	BA	CA+MG				
150	770							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.07					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		1.0				0		
F	CL	BR	I					
2.9	11000							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.04	0.15	32	2000		744		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00429

RECORD IDENTIFICATION

REPORTER

RECORD NO..... 0073050  
 CROSS INDEX NO..  
 RECORD TYPE..... B

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-58N LONGITUDE..... 107-19-10W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 09 NW NW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 44. C  
 WATER FLOW RATE..... 2-3.E GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER, 480 FEET WEST OF SIPHON.

WATER ANALYSIS

PH 1)..... 6.3  
 SPECIFIC CONDUCTANCE..... 31000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 17600. PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
0.73	6000	160						
MG	CA	SR	BA	CA+MG				
88	40							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	IAS	SB	U
0.02		0.80				0		
F	CL	BR	I					
2.2	9600							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.01	0.09	30	980		736		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00430

RECORD IDENTIFICATION

RECORD NO..... 0073051  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-02N LONGITUDE..... 107-19-04W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 10 NW SW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 51. C  
 WATER FLOW RATE..... 75. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER 27 FEET WEST OF SIPHON.

WATER ANALYSIS W

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 35000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 18300. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.80	6300	170						
MG	CA	SR	BA	CA+MG				
86	450							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.76				0		
F	CL	BR	I					
2.1	9900							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.02	0.03	30	1000		747		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00431

RECORD IDENTIFICATION

RECORD NO..... 0073052  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-02N LONGITUDE..... 107-19-04W

TOWNSHIP RANGE SECTION 1/4 1/4

06S 89W 10 NW SW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 50. C  
 WATER FLOW RATE..... 75. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER 27 FEET WEST OF SIPHON.

WATER ANALYSIS

PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 31000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 18400. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
0.86	6400	160							
MG	CA	SR	BA	CA+MG					
79	490								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.06						
ZN	HG	B	HE02	AL	PB	AS	SB	U	
0.02		0.83				0.001			
F	CL	BR	J						
2.3	9800								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.18	0.09	27	1100		752			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00432

RECORD IDENTIFICATION

RECORD NO.... 0073053  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-02N LONGITUDE..... 107-19-04W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 10 NW SW

MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 51. C

WATER FLOW RATE..... 100. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER 27 FEET WEST OF SIPHON.

WATER ANALYSIS W  
 PH 1)..... 6.7  
 SPECIFIC CONDUCTANCE..... 29100. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 17700. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
	6500	190			
MG	CA	SR	BA	CA+MG	
76	49				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.03		
ZN	HG	B	HBO2	AL	PB AS SB U
		0.84			
F	CL	BR	I		
2.1	9500				
NH4	NO3	PO4	SiO2	SO4	CO3 HCO3
	0.01	0.12	28	1000	749

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00433

RECORD IDENTIFICATION  
 RECORD NO..... 0073054  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-02N LONGITUDE..... 107-19-04W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 89W 10 NW SW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 51. C  
 WATER FLOW RATE..... 110. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER 27 FEET WEST OF SIPHON.

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 29700. UMHO/CM



TOTAL DISSOLVED SOLIDS... 17800. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
	6300	170						
MG	CA	SR	BA	CA+MG				
86	360							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.84						
F	CL	BR	I					
2.1	9500							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0	0.12	28	990		746		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00434

RECORD IDENTIFICATION

RECORD NO.... 0073055  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING D

COUNTRY CODE.....	US	COUNTRY NAME.....	UNITED STATES
STATE/PROVINCE.....	COLORADO	COUNTY.....	GARFIELD
LATITUDE.....	39-33-05N	LONGITUDE.....	107-19-00W

TOWNSHIP	RANGE	SECTION	1/4	1/4
06S	89W	10	NW	SW

MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 50. C  
 WATER FLOW RATE..... 74. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER, 225 FEET EAST OF SIPHON.

WATER ANALYSIS

PH 1).....	6.4	
SPECIFIC CONDUCTANCE.....	36000.	UMHO/CM
TOTAL DISSOLVED SOLIDS...	18000.	PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.80	89	160						

MG 82	CA 450	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 0.03	CU				
ZN 0.01	HG	B 0.81	HBO2	AL	PB	AS 0	SB	U
F 2.1	CL 9800	BR	I					
NH4	NO3 0.01	PO4 0.09	SIO2 30	SO4 1000	CO3	HCO3 745		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00435

RECORD IDENTIFICATION  
 RECORD NO..... 0073056  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: RAILROAD SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-16N LONGITUDE..... -107-18-51W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 88W 10 NW NE NW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 51. C  
 WATER FLOW RATE..... 75. GPM  
 OTHER SAMPLE INFORMATION: LOCATED ON SOUTH SIDE OF COLORADO RIVER WEST OF RAILROAD TUNNEL.

WATER ANALYSIS W  
 PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE..... 20500. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 18400. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA 6100	K 200	RB	CS	NA+K
MG 80	CA 460	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 0.02	CU	





RECORD 00438

RECORD IDENTIFICATION

RECORD NO..... 0073181  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. SOUTH CANYON HOT SPRINGS: SPRING A

COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-16N LONGITUDE..... 107-23-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 90W 02 SE SW

MAP REFERENCE: STORM KING MOUNTAIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 48. C  
 WATER FLOW RATE..... 9. GPM

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 1220. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 783. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	270	8.2							
MG	CA	SR	BA	CA+MG					
2.2	7.9								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.29							
F	CL	BR	I						
4.0	200								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
	0.01	0.03	45	94		306			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00439

RECORD IDENTIFICATION

RECORD NO..... 0073182  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SOUTH CANYON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-16N LONGITUDE..... 107-23-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 90W 02 SE SW  
 MAP REFERENCE: STROM KING MOUNTAIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 47. C  
 WATER FLOW RATE..... 17. GPM

WATER ANALYSIS W

PH 7)..... 7.3  
 SPECIFIC CONDUCTANCE.... 1220. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 772. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	270	8.2							
MG	CA	SR	BA	CA+MG					
0.9	7.8								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.26							
F	CL	BR	I						
3.5	190								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.07	0.03	41	100		305			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00440

RECORD IDENTIFICATION

RECORD NO..... 0073233  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-32-02N LONGITUDE..... 107-19-02W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 06S            89W          10            NW SW  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP..... 46.            C  
 WATER FLOW RATE..... 2-3            GPM  
 OTHER SAMPLE INFORMATION: LOCATED 170 FEET OF SIPHON PIPE ON SOUTH SIDE OF COLORADO RIVER.

WATER ANALYSIS

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00441

RECORD IDENTIFICATION

RECORD NO..... 0073047  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: DRINKING SPRING  
 COUNTRY CODE..... US                    COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO        COUNTY..... GARFIELD  
 LATITUDE..... 39-32-59N                LONGITUDE..... 107-19-19W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 06S            89W          09            SE    NE  
 MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP..... 51.            C  
 WATER FLOW RATE..... 140.            GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 100 FEET EAST OF POOL.

WATER ANALYSIS

PH 1)..... 6.4  
 SPECIFIC CONDUCTANCE..... 30000.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 18800.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	6600	180							
MG	CA	SR	BA	CA+MG					
15	480								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.04						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.87							

F	CL	BR	I			
2.2	10000					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
	0.01	0.15	30	1100		772

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00442

RECORD IDENTIFICATION

RECORD NO..... 0073183  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SOUTH CANYON HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
 LATITUDE..... 39-33-15N LONGITUDE..... 107-23-51W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 90W 02 SE SW  
 MAP REFERENCE: STORM KING MOUNTAIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 48. C  
 WATER FLOW RATE..... 1.6 GPM

WATER ANALYSIS

PH 7.1  
 SPECIFIC CONDUCTANCE.... 1300. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 757. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.15	260	7.8						
MG	CA	SR	BA	CA+MG				
0.9	7.1							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.23				0.002		
F	CL	BR	I					
4.0	190							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.01	0.03	43	100		291		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976



RECORD 00443

RECORD IDENTIFICATION

RECORD NO..... 0073064  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GRAND  
 LATITUDE..... 40-04-33N LONGITUDE..... 106-06-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01N 78W 03 SW SE  
 MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 44. C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 250 FEET NORTH OF LODGE.

WATER ANALYSIS

PH 1)..... 6.6  
 SPECIFIC CONDUCTANCE..... 1920. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1200. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
1.10	430	25						
MG	CA	SR	BA	CA+MG				
3.7	14							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.57				0.006		
F	CL	BR	I					
12	140							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.02	0.03	35	140		813		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00444

RECORD IDENTIFICATION

RECORD NO..... 0073065  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GRAND  
 LATITUDE..... 40-04-33N LONGITUDE..... 106-06-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01N 78W 03 SW SE  
 MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 44. C  
 WATER FLOW RATE..... 12. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 250 FEET NORTH OF LODGE.

WATER ANALYSIS

PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE..... 1800. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1210. PPM

SOLUTE ANALYSIS (WATER)

		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
1.5	440	23			
MG	CA	SR	BA	CA+MG	
3.6	15				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.08		
ZN	HC	B	HBO2	AL	PB AS SB U
		0.56			0.005
F	CL	BR	I		
9.4	140				
NH4	NO3	PO4	SiO2	SO4	CO3 HCO3
	0	0.03	31	140	815

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00445

RECORD IDENTIFICATION

RECORD NO..... 0073067  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GRAND

LATITUDE..... 40-04-33N

LONGITUDE..... 106-06-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
01N 78W 03 SW SE  
MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
WATER SAMPLING TEMP..... 44. C  
WATER FLOW RATE..... 13. GPM  
OTHER SAMPLE INFORMATION: LOCATED APPROX. 250 FEET NORTH OF LODGE.

WATER ANALYSIS

PH 1)..... 6.9  
SPECIFIC CONDUCTANCE..... 1900. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1160. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	420	23							
MG	CA	SR	BA	CA+MG					
3.9	15								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.56							
F	CL	BR	I						
12	120								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
	0.01	0.09	33	120		840			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00446

RECORD IDENTIFICATION

RECORD NO..... 0073068  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING B  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 40-04-33N

COUNTRY NAME..... UNITED STATES  
COUNTY..... GRAND  
LONGITUDE..... 106-06-44W

TOWNSHIP RANGE SECTION 1/4 1/4  
01N 78W 03 SW SE  
MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP..... 41. C  
 WATER FLOW RATE..... 1. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 75 FEET NORTHWEST OF 'SPRING A IN COLLECTION BOX.

WATER ANALYSIS

PH 1)..... W 6.7  
 SPECIFIC CONDUCTANCE..... 1850. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1200. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
1.1	430	24						
MG	CA	SR	BA	CA+MG				
3.1	15							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.10					
ZN	HG	B	HBB2	AL	PB	AS	SB	U
0		0.57				0.005		
F	CL	BR	I					
12	140							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0	0.12	35	140		817		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00447

RECORD IDENTIFICATION

RECORD NO..... 0073069  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING C  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-04-33N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GRAND  
 LONGITUDE..... 106-06-45W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01N 78W 03 SW SE  
 MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP..... 40. C  
 WATER FLOW RATE..... 3. GPM  
 OTHER SAMPLE INFORMATION: LOCATED AT BASE OF NORTH WALL OF INDOOR SWIMMING POOL BUILDING.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 1870. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1210. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... 6.8

LI	NA	K	RB	CS	NA+K			
1.10	440	25						
MC	CA	SR	BA	CA+MG				
3.5	15							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.06					
2N	HG	B	HBO2	AL	PB	AS	SB	U
0		0.53				0.004		
F	CL	BR	I					
12	140							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0	0	35	140		814		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00448

RECORD IDENTIFICATION  
 RECORD NO..... 0073070  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING C	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... GRAND
LATITUDE..... 40-04-33N	LONGITUDE..... 106-06-45W

TOWNSHIP	RANGE	SECTION	1/4	1/4
01N	78W	03	SW	SE

MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 40. C  
 WATER FLOW RATE..... 15. GPM  
 OTHER SAMPLE INFORMATION: LOCATED AT BASE OF NORTH WALL OF INDOOR SWIMMING POOL BUILDING.

WATER ANALYSIS W  
 PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE..... 1700. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1190. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
1.5	430	22						
MG	CA	SR	BA	CA+MG				
3.2	15							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.12					
ZN	HC	B	HB02	AL	PB	AS	SB	U
0.01		0.56				0.006		
F	CL	BR	I					
9.5	140							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0	0.03	31	130		828		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00449

RECORD IDENTIFICATION

RECORD NO..... 0073066  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GRAND  
 LATITUDE..... 40-04-33N LONGITUDE..... 106-06-43W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01N 78W 03 SW SE  
 MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 44. C  
 WATER FLOW RATE..... 12. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 250 FEET NORTH OF LODGE.

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 1930. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1220. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K		
	450	23					
MG	CA	SR	BA	CA+MG			
3.2	15						

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.48							
F	CL	BR	1						
13	140								
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3			
	0.13	0.03	31	130		829			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00450

RECORD IDENTIFICATION

RECORD NO..... 0073071  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. HOT SULPHUR SPRINGS: SPRING D  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GRAND  
 LATITUDE..... 40-04-32N LONGITUDE..... 106-06-45W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01N 78W 03 SW SE  
 MAP REFERENCE: HOT SULPHUR SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 40. C  
 WATER FLOW RATE..... 23. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 50 FEET SOUTH OF POOL BUILDING IN MARSHY AREA.

WATER ANALYSIS W

PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE..... 1800. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1190. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RE	CS	NA+K				
1.5	430	23							
MG	CA	SR	BA	CA+MG					
3.0	16								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.20						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.02		0.009				0.009			

F	CL	BR	I			
9.1	140					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
	0.02	0	30	150		790

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00451

RECORD IDENTIFICATION

RECORD NO..... 0073005  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANCNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING A

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 30-16-26N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 107-05-54W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 46N            02W            04            NW      NE

MAP REFERENCE: POWDERHORN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00

WATER SAMPLING TEMP.... 41.      C

OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS, APPROX. 300 FEET SOUTH OF ROAD. WESTERN POOL IN BUILDING.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 2100.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1450.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.0710	310	63						
MC	CA	SR	BA	CA+MG				
50	120							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.05					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.03		1.10				0.045		
F	CL	BR	I					
3.7	120							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.08	0.34	74	130		1170		

REFERENCES: CGS INFO. SERIES 6, 1976



RECORD 00452

RECORD IDENTIFICATION

RECORD NO..... 0073006  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING A  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 30-16-26N

COUNTRY NAME..... UNITED STATES  
COUNTY..... GUNNISON  
LONGITUDE..... 107-05-54W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
46N            02W            04            NW      NE  
MAP REFERENCE: POWDERHORN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 41.      C  
WATER FLOW RATE..... 3.      GPM  
OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS. APPROX. 300 FEET SOUTH OF ROAD. WESTERN POOL IN BUILDING.

WATER ANALYSIS

PH 1)..... 6.8  
SPECIFIC CONDUCTANCE..... 2000.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1440.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.0750	310	64						
MC	CA	SR	BA	CA+MG				
47	120							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.05					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.08		1.10				0.410		
F	CL	BR	I					
3.9	120							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.04	0.09	66	120		1180		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00453

RECORD IDENTIFICATION

RECORD NO..... 0073011

REPORTER

NAME..... MANGNALL, P.

CROSS INDEX NO..  
RECORD TYPE..... B

DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. CEMENT CREEK WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-50-06N

COUNTRY NAME..... UNITED STATES  
COUNTY..... GUNNISON  
LONGITUDE..... 106-49-34W

TOWNSHIP RANGE SECTION 1/4 1/4  
14S 84W 18 SE SW  
MAP REFERENCE: CEMENT MTN. 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
WATER SAMPLING TEMP..... 26. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 640. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 401. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.09	36	5.8							
MG	CA	SR	BA	CA+MG					
22	75								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.01		0.06				0.01			
F	CL	BR	I						
1.9	11								
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3			
	0.14	0.03	19	81		302			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00454

RECORD IDENTIFICATION

RECORD NO..... 0073012  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. CEMENT CREEK WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-50-06N

COUNTRY NAME..... UNITED STATES  
COUNTY..... GUNNISON  
LONGITUDE..... 106-49-34W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 84W 18 SE SW  
 MAP REFERENCE: CEMENT MTN. 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 26. C  
 WATER FLOW RATE..... 80. GPM

WATER ANALYSIS

PH 1)..... 7.2  
 SPECIFIC CONDUCTANCE..... 540. UMHO/CM  
 TOTAL DISSOLVED SOLIDS.... 389. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.09	41	6						
MG	CA	SR	BA	CA+MG				
18	69							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
0		0.06				0.01		
F	CL	ER	I					
1.4	10							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.11	0	17	74		308		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00455

RECORD IDENTIFICATION

RECORD NO.... 0073013  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEMENT CREEK WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-50-06N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-49-34W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 84W 18 SE SW  
 MAP REFERENCE: CEMENT MTN. 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00

WATER SAMPLING TEMP.... 25. C  
 WATER FLOW RATE..... 60. GPM

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 650. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 398. PPM

SOLUTE ANALYSIS (WATER)

LI	NA	K	RB	CS	NA+K			
	40	6						
MG	CA	SR	BA	CA+MG				
18	73							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.07						
F	CL	BR	I					
1.9	11							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.15	0	17	80		305		

REFERENCES: CGS INFO. SERIES. 6 1976

RECORD 00456

RECORD IDENTIFICATION

RECORD NO..... 0073014  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGMALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEMENT CREEK WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-50-06N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-49-34W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 84W 18 SE SW

MAP REFERENCE: CEMENT MTN. 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 26. C  
 WATER FLOW RATE..... 60. GPM

WATER ANALYSIS W  
 PH 1)..... 7.2  
 SPECIFIC CONDUCTANCE..... 625. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 382. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L			
LJ	NA 36	K 6.4	RB	CS	NA+K		
MG	CA 20	SR	BA	CA+MG			
MN+3	MN(TOT)	FE+3	FE(TOT) 0.01	CU			
ZN	HC	B 0.08	HBO2	AL	PB	AS	SB U
F	CL 11	BR	I				
NH4	NO3 0.15	PO4 0	SIO2 18	SO4 69	CO3	HCO3 306	
REFERENCES: CGS INFO. SERIES 6, 1976							

RECORD 00457

RECORD IDENTIFICATION

RECORD NO..... 0073155  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RANGER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-48-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-52-28W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 85W 22 SW SE  
 MAP REFERENCE: CEMENT MTN. 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 26. C  
 WATER FLOW RATE..... 132. GPM

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 700. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 461. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K		
0.14	59	7.2					
MG	CA	SR	BA	CA+MG			
22	73						

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.03		0.08				0.012			
F	CL	BR	I						
1.8	17								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
	0.10	0.03	20	89		347			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00458

RECORD IDENTIFICATION

RECORD NO..... 0073156  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RANGER WARM SP-ING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-48-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-52-28W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 14S            85W            22            SW      SE  
 MAP REFERENCE: CEMENT MTN. 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 27.      C  
 WATER FLOW RATE..... 250E      GPM

WATER ANALYSIS

PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE.... 730.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 465.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.160	61	7.7							
MG	CA	SR	BA	CA+MG					
20	70								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.015		0.08							

F	CL	BR	I			
0.2	18					
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3
	0.08	0	18	90		363

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00459

RECORD IDENTIFICATION

RECORD NO..... 0073157  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RANGER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-48-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-52-28W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 14S            85W            22            SW SE  
 MAP REFERENCE: CEMENT MTN. 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 27.      C  
 WATER FLOW RATE..... 225E      GPM

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE.... 760.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 466.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	62	8.1						
MG	CA	SR	BA	CA+MG				
20	72							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.08						
F	CL	BR	I					
1.5	19							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.12	0	19	100		332		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00460

## RECORD IDENTIFICATION

RECORD NO..... 0073158  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RANGER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-48-57N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-52-28W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 14S            85W          22          SW SE  
 MAP REFERENCE: CEMENT MTN. 7.5 MINUTE

## SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 27.      C  
 WATER FLOW RATE..... 175E      GPM

## WATER ANALYSIS

PH 1)..... 7.1  
 SPECIFIC CONDUCTANCE..... 760.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 474.      PPM

## SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	63	8.2							
MG	CA	SR	BA	CA+MG					
23	71								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.08							
F	CL	BR	I						
1.9	19								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.14	0	19	89		363			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00461

## RECORD IDENTIFICATION

RECORD NO..... 0073208  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY



GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAUNITA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-30-50N LONGITUDE..... 106-30-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 11 SW SW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 78. C  
 OTHER SAMPLE INFORMATION: CONTAINS 11 MG/L AND 9 MG/L OF CARBONATE RESPECTIVELY.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 720. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 557. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.20	150	10						
MG	CA	SR	BA	CA+MG				
0.2	11							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	SAS	SB	U
0		0.07				0		
F	CL	BR	I					
17	15							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.02	0.15	110	180				

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00462

RECORD IDENTIFICATION

RECORD NO..... 0073209  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAUNITA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-30-50N LONGITUDE..... 106-30-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 11 SW SW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 80. C  
 WATER FLOW RATE..... 30. GPM  
 OTHER SAMPLE INFORMATION: CONTAINS 11 MG/L AND 9 MG/L OF CARBONATE RESPECTIVELY.

WATER ANALYSIS W  
 PH 1)..... 8.4  
 SPECIFIC CONDUCTANCE..... 796. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 579. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L				
LI	NA	K	RB	CS	NA+K			
0.22	160	10						
MG	CA	SR	BA	CA+MG				
0	5.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.06				0.002		
F	CL	BR	I					
18	15							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0	0.03	110	190		119		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00463

RECORD IDENTIFICATION  
 RECORD NO..... 0073210  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAUNITA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-30-50N LONGITUDE..... 106-30-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 11 SW SW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 77. C  
 WATER FLOW RATE..... 55. GPM  
 OTHER SAMPLE INFORMATION: CONTAINS 11 MG/L AND 9 MG/L OF CARBONATE RESPECTIVELY.

WATER ANALYSIS W  
 PH 1)..... 8.5  
 SPECIFIC CONDUCTANCE..... 766. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 613. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
	160	9.8			
MG	CA	SR	BA	CA+MG	
0.3	11				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.01		
ZN	HG	B	HBO2	AL	PB AS SB U
		0.06			
F	CL	BR	I		
19	15				
NH4	NO3	PO4	SiO2	SO4	CO3 HCO3
	0.01	0.12	140	190	119

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00464

RECORD IDENTIFICATION  
 RECORD NO..... 0073213  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. WAUNITA HGT SPRINGS: SPRING A	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... GUNNISON
LATITUDE..... 38-30-50N	LONGITUDE..... 106-30-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 11 SW SW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 76. C  
 OTHER SAMPLE INFORMATION: LOCATED IN ROCK SHED IN FRONT OF LODGE.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 750. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00465

RECORD IDENTIFICATION

RECORD NO.... 0073214  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. WAUNITA HOT SPRINGS: SPRING B  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
LATITUDE..... 38-30-50N LONGITUDE..... 106-30-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
49N 04E 11 SW SW  
MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 78. C  
OTHER SAMPLE INFORMATION: LOCATED 75 FEET FROM SPRING A ALONG CREEK.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 720. UMHO/CM  
REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00466

RECORD IDENTIFICATION

RECORD NO.... 0073215  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. LOWER WAUNITA HOT SPRINGS: SPRING A  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
LATITUDE..... 38-31-02N LONGITUDE..... 106-30-56W

TOWNSHIP RANGE SECTION 1/4 1/4  
49N 04E 10 SW NW  
MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 70. C  
WATER FLOW RATE..... 75. GPM  
OTHER SAMPLE INFORMATION: AREA CONSISTS OF A SERIES OF SMALL TO MEDIUM-SIZED SPRINGS.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 765. UMHO/CM  
REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00467

## RECORD IDENTIFICATION

RECORD NO..... 0073216  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. LOWER WAUNITA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-30-27N LONGITUDE..... 106-30-55W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 10 SW NW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

## SAMPLE INFORMATION

WATER SAMPLING TEMP.... 70. C  
 WATER FLOW RATE..... 8. GPM  
 OTHER SAMPLE INFORMATION: LOCATED UNDER ROCK BUILDING.

## WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 780. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00468

## RECORD IDENTIFICATION

RECORD NO..... 0073217  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. LOWER WAUNITA HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-31-00N LONGITUDE..... 106-30-55W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 10 SW NW  
 MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 70. C  
 OTHER SAMPLE INFORMATION: LOCATED IN SMALL CEMENT POOL NEAR EAST MARGIN OF GROUP.

## WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 765. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 544. PPM

## SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI 0.2	NA 150	K 9.9	RB	CS	NA+K			
MG 0.7	CA 7.8	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 50	CU				
ZN 0.01	HG	B 0.07	HBO2	AL	PB	AS 0	SB	U
F 17	CL 15	BR	I					
NH4	NO3 0.04	PO4 0	SiO2 88	SO4 180	CO3	HCO3 152		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00469

RECORD IDENTIFICATION

RECORD NO..... 0073218  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. LOWER WAUNITA HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-31-00N LONGITUDE..... 106-30-55W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 04E 10 SW NW

MAP REFERENCE: PITKIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 70. C  
 WATER FLOW RATE..... 20. E GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN SMALL CEMENT POOL NEAR EAST MARGIN OF GROUP.

WATER ANALYSIS

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE.... 830. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 549. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI 0.2	NA 160	K 10	RB	CS	NA+K
MG 0.4	CA 8.6	SR	BA	CA+MG	

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		0.06				0			
F	CL	BR	I						
15	16								
NH4	NO3	PO4	S102	SO4	CO3	HC03			
	0	0.03	77	180		165			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00470

RECORD IDENTIFICATION

RECORD NO..... 0073007  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 30-16-26N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 107-05-54W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 02W 04 NW NE

MAP REFERENCE: POWDERHORN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 39. C  
 WATER FLOW RATE..... 3. GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS, APPROX. 300 FEET SOUTH OF ROAD. WESTERN POOL IN BUILDING.

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 2220. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1470. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
	330	58							
MG	CA	SR	BA	CA+MG					
48	120								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	

1.10  
 F CL BR I  
 4.6 120  
 NH4 NO3 PO4 S102 SO4 CO3 HCO3  
 0.06 0.18 85 130 1170  
 REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00471

RECORD IDENTIFICATION  
 RECORD NO.... 0073008  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B  
 REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 30-16.43 N LONGITUDE..... 107-05.90 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 02W 04 NW NE

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 38. C  
 WATER FLOW RATE..... 11. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS APPROXIMATELY 300 FT S OF ROAD; WESTERN POOL IN BUILDING.

WATER ANALYSIS  
 PH 1)..... 06.4  
 SPECIFIC CONDUCTANCE..... 2200. UMHO/CM  
 ALKALINITY..... 1180. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 1450. MG/L

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	310.	66.							
MG	CA	SR	BA	CA+MG					
51.	120.								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
	0.100		0.020						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		1.100							
F	CL	BR	I						
4.9	120.								



O2	N2 0.03	CO2	SO2	H2S	H2	CH4
NH4	NO3	PO4 0.31	SIO2 92.	SO4 120.	CO3	HCO3

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00472

RECORD IDENTIFICATION

RECORD NO..... 0073009  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
DATE..... 1978/02  
ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. CEROLLA HOT SPRINGS: SPRING B

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 30-16.43 N

COUNTRY NAME..... UNITED STATES

COUNTY..... GUNNISON

LONGITUDE..... 107-05.90 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
46N	02W	04	NW	NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00

WATER SAMPLING TEMP.... 38. C

OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS APPROXIMATELY 300 FT S OF ROAD WESTERN POOL IN BUILDING.

WATER ANALYSIS

SPECIFIC CONDUCTANCE.....	2050.	UMHO/CM
ALKALINITY.....	1180.	MG/L AS HCO3
TOTAL DISSOLVED SOLIDS...	1460.	MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.720	310.	64.						
MG	CA	SR	BA	CA+MG				
50.	120.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.050		0.050					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
0.020	.0002	1.100				0.040		
F	CL	BR	I					
5.8	120.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.08							



REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00474

RECORD IDENTIFICATION

RECORD NO..... 0073211  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAUNITA HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING C  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-30.83 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-30.45 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	04E	11	SW	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 77. C  
 WATER FLOW RATE..... 189. L/MIN

WATER ANALYSIS

PH 1)..... 07.9  
 SPECIFIC CONDUCTANCE.... 756. UMHO/CM  
 ALKALINITY..... 133. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 575. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	150.	0.010							
MG	CA	SR	BA	CA+MG					
7.3	5.8								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
	0.010		0.010						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.060							
F	CL	BR	I						
20	16.								
O2	N2	CO2	SO2	H2S	H2	CH4			
	0.01								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
		0.15	120.	180.					

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00475

RECORD IDENTIFICATION

RECORD NO..... 0073212  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BROOK, C.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAUNITA HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-30.83 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-30.47 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	04E	11	SW	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 54. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 770. UMHO/CM  
 ALKALINITY..... 132. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 594. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.210	160.	10.						
MG	CA	SR	BA	CA+MG				
0.	6.0							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.010					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.	0.	0.070				0.		
F	CL	BR	I					
18.	15.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.06	130.	190.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00476

RECORD IDENTIFICATION

REPORTER

RECORD TYPE..... B

ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAUNITA HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-31.02 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 106-31.00 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 49N            04E            10            SW      NW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 62.      C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 800.      UMH0/CM  
 ALKALINITY..... 153.      MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 535.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.200	150.	10.						
MC	CA	SR	BA	CA+MG				
0.5	6.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.020		0.170					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.	0.	0.070				0.		
F	CL	BR	I					
20.	15.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.05							
NH4	NO3	PO4	SiO2	SO4	CO3	HC03		
		0.12	86.	170.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00478

RECORD IDENTIFICATION

RECORD NO..... 0073227  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL

NAME OF SAMPLE SOURCE.. BRANDS RANCH ARTESTIAN WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... JACKSON  
 LATITUDE..... 40-42-17N LONGITUDE..... 106-32-05W

TOWNSHIP RANGE SECTION 1/4 1/4  
 09N 81W 31 SE SW SE  
 MAP REFERENCE: PITCHPINE MOUNTAIN 7.5 MINUTE

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 42. C  
 WATER FLOW RATE..... 80. GPM  
 OTHER SAMPLE INFORMATION: THIS IS AN OLD OIL WELL, 800 FEET DEEP

WATER ANALYSIS W

PH 1)..... 6.0  
 SPECIFIC CONDUCTANCE..... 405. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6. 1976

RECORD 00479

RECORD IDENTIFICATION

RECORD NO.... 0073135  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-26-50N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... LA PLATA  
 LONGITUDE..... 107-48-17W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N 09 NW NE  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 32. C  
 WATER FLOW RATE..... 54. GPM  
 OTHER SAMPLE INFORMATION: LOCATED SOUTH OF RESORT AND APPROX. 50 FEET EAST OF U.S. 550.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 5600. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3990. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
2.5	750	120			
MG	CA	SR	BA	CA+MG	
79	510				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	

4400

ZN 0	HG	B 3.0	HBO2	AL	PB	CAS 0.12	SB	U
F 2.1	CL 1000	BR	I					
NH4	NO3 0.10	PO4 0.15	SI02 28	SO4 690	CO3	HC03 1630		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00480

RECORD IDENTIFICATION

RECORD NO..... 0073136  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-26-50N LONGITUDE..... 107-48-17W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N 09W 25 NW NE  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 32. C  
 WATER FLOW RATE..... 54. GPM  
 OTHER SAMPLE INFORMATION: LOCATED SOUTH OF RESORT AND APPROX. 50 FEET EAST OF U.S. 550.

WATER ANALYSIS W

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE... 6060. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3880. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA 690	K 110	RB	CS	NA+K			
MG 69	CA 560	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 4.0	CU				
ZN	HG	B 2.8	HBO2	AL	PB	CAS	SB	U
F	CL	BR	I					

1.9 1000

NH4 NO3 PO4 SI02 SO4 CO3 HCO3  
 0.01 0.03 28 610 1620

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00481

RECORD IDENTIFICATION

RECORD NO..... 0073137  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS : SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-26-50N LONGITUDE..... 107-48-17W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N 09W 25 NW NE

MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 32. C  
 WATER FLOW RATE..... 54. GPM  
 OTHER SAMPLE INFORMATION: LOCATED SOUTH OF RESORT AND APPROX. 50 FEET EAST OF U.S. 550.

WATER ANALYSIS

PH 7)..... 6.4  
 SPECIFIC CONDUCTANCE..... 5930. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3770. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	720	120						
MG	CA	SR	BA	CA+MG				
72	530							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			4.5					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		2.8						
F	CL	BR	I					
3.9	1000							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0	0.21	29	540		1520		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976



RECORD 00482

## RECORD IDENTIFICATION

RECORD NO..... 0073138  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-27-58N LONGITUDE..... 107-48-18W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N 09W 25 NE  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

## SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 33. C  
 WATER FLOW RATE..... 20. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 1200 FEET WEST OF SPRING A.

## WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 6000. UMHO/CM

## SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
2.8	720	120							
MG	CA	SR	BA	CA+MG					
71	530								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			4.4						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.02		3.0				0.16			
F	CL	BR	I						
	990								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
		0.04		610		1640			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00483

## RECORD IDENTIFICATION

RECORD NO..... 0073139  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: MOUND SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-27-07N LONGITUDE..... 107-48-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N OSW 25 NE NW  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 30. C  
 WATER FLOW RATE..... 8.6 GPM

WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 5600. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3940. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RE	CS	NA+K			
2.8	730	120						
MG	CA	SR	BA	CA+MG				
74	550							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			4.1					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.01		3.0				0.18		
F	CL	BR	I					
2.1	1000							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.06	0.03	29	620		1630		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00484

RECORD IDENTIFICATION

RECORD NO..... 0073140  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: MOUND SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-27-07N LONGITUDE..... 107-48-20W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 37N            09W            25            NE NW  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP..... 29.      C  
 WATER FLOW RATE..... 5.8      GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 6050.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3880.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	710	120							
MG	CA	SR	BA	CA+MG					
68	550								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			4200						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		3.0							
F	CL	BR	I						
1.9	1000								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0	0.09	28	600		1610			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00485

RECORD IDENTIFICATION

RECORD NO..... 0073141  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: MOUND SPRING  
 COUNTRY CODE..... US      COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO      COUNTY..... LA PLATA  
 LATITUDE..... 37-27-07N      LONGITUDE..... 107-48-20W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 37N            09W            25            NE NW  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00

WATER SAMPLING TEMP..... 29. C  
 WATER FLOW RATE..... 5.8 GPM

WATER ANALYSIS W  
 PH 1)..... 6.4  
 SPECIFIC CONDUCTANCE..... 5890. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3840. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LJ	NA 710	K 120	RB	CS	NA+K
MG 72	CA 550	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 4.3	CU	
ZN	HG	B 2.9	HBO2	AL	PB AS SB U
F 3.0	CL 900	BR	I		
NH4	NO3	PO4 0	S102 28	S04 650	CO3 HCO3 1620

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00486

RECORD IDENTIFICATION  
 RECORD NO..... 0073142  
 CROSS INDEX NO..  
 RECORD TYPE..... R

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PINKERTON HOT SPRINGS: LITTLE MOUND SPRINGS  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... LA PLATA  
 LATITUDE..... 37-27-09N LONGITUDE..... 107-48-21W

TOWNSHIP RANGE SECTION 1/4 1/4  
 37N 09W 25 NE NW  
 MAP REFERENCE: HERMOSA 7.5 MINUTE

SAMPLE INFORMATION  
 WATER SAMPLING TEMP..... 26. C  
 WATER FLOW RATE..... 2. GPM

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 5500. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00487

RECORD IDENTIFICATION

RECORD NO.... 0073191  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. TRIMBLE HOT SPRING  
 SAMPLE TYPE..... SURFACE  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-23.47 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... LA PLATA  
 LONGITUDE..... 107-50.87 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 36N            09W            15            NW      NW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 36.      C  
 WATER FLOW RATE..... 4.      L/MIN

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 4400.      UMHO/CM  
 ALKALINITY..... 1090.      MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 3340.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
1.600	510.	47.						
MC	CA	SR	BA	CA+MG				
42.	510.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.080		0.050					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.010	0.	1.400				0.017		
F	CL	BR	I					
2.7	220.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.08							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.06	72.	1.400				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00488

RECORD IDENTIFICATION

REPORTER

RECORD NO..... 0073192  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. TRIPP HOT SPRING  
 SAMPLE TYPE..... SURFACE  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-23.50 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... LA PLATA  
 LONGITUDE..... 107-50.87 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 36N            09W          10            SW      SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 44.      C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 3900.      UMHO/CM  
 ALKALINITY..... 988.      MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 3240.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

L1	NA	K	RB	CS	NA+K			
1.600	500.	47.						
MG	CA	SR	BA	CA+MG				
41.	470.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.080		0.010					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.020	0.	1.500				0.017		
F	CL	BR	I					
2.7	220.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.16							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
		0.15	69.	1400.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00489

RECORD IDENTIFICATION

RECORD NO..... 0073000  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... PEARL, R.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY



40N 02W 01 SE SE  
 MAP REFERENCE: WORKMAN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 32. C  
 WATER FLOW RATE..... 3.5 GPM  
 OTHER SAMPLE INFORMATION: CONTAINS: 19 MG/L OF CARBONATE AND 0 MG/L OF HG.

WATER ANALYSIS

PH 1)..... 8.9  
 SPECIFIC CONDUCTANCE..... 160. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 150. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.008	43	0.3							
MG	CA	SR	BA	CA+MG					
0.6	1.7								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.06						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
0		.130				0			
F	CL	BR	I						
1.6	3.5								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.02	0.01	39	3.2	95	177			

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00491

RECORD IDENTIFICATION

RECORD NO..... 0073154  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RAINBOW HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-30-34N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MINERAL  
 LONGITUDE..... 106-56-52W

TOWNSHIP RANGE SECTION 1/4 1/4  
 38N 01W 09

MAP REFERENCE: SPAR CITY 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP..... 40. C



WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 220. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 161. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LJ	NA	K	RB	CS	NA+K
0.01	45	0.2			
MG	CA	SR	BA	CA+MG	
0.2	2.1				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.08		
ZN	HG	B	HBO2	AL	PB
0.01		0.05			AS
					0
F	CL	BR	I		SB
2.2					U
NH4	NO3	PO4	SI02	SO4	CO3
	0	0		39	HCO3

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00492

RECORD IDENTIFICATION  
 RECORD NO..... 0073201  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAGON WHEEL GAP HOT SPRINGS: 4UR RANCH SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... MINERAL  
 LATITUDE..... 37-41-06N LONGITUDE..... 106-49-47W

TOWNSHIP RANGE SECTION 1/4 1/4  
 41N 01E 35 SE SE  
 MAP REFERENCE: SPAR CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 57. C  
 WATER FLOW RATE..... 30.5 GPM

WATER ANALYSIS W  
 PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 2400. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1580. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LJ 2.2	NA 480	K 51	RB	CS	NA+K			
MG 15	CA 61	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 0.03	CU				
ZN 0.02	HG	B 2.5	HBO2	AL	PB	AS 0.021	SB	U
F 6.6	CL 200	BR	I					
NH4	NO3 0.01	PO4 0.06	SiO2 81	SO4 170	CO3	HCO3 1040		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00493

RECORD IDENTIFICATION

RECORD NO..... 0073202  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAGON WHEEL GAP HOT SPRINGS: 4UR RANCH SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... MINERAL  
 LATITUDE..... 37-41-06N LONGITUDE..... 106-49-47W

TOWNSHIP RANGE SECTION 1/4 1/4  
 41N 01E 35 SE SE  
 MAP REFERENCE: SPAR CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP..... 55. C  
 WATER FLOW RATE..... 30.E GPM

WATER ANALYSIS

PH 1)..... 7.0  
 SPECIFIC CONDUCTANCE..... 2240. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1550. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
14	460	48			
MG	CA	SR	BA	CA+MG	
14	60				

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.01						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		1.3							
F	CL	BR	I						
6.7	200								
NH4	NO3	PO4	S102	S04	CO3	HCO3			
	0.01	0.21	90	170					

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00494

RECORD IDENTIFICATION

RECORD NO..... 0073204  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANCENALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAGON WHEEL GAP HOT SPRINGS: CFI SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... MINERAL  
 LATITUDE..... 37-41-02N LONGITUDE..... 106-49-47W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 01E 02 NW NE  
 MAP REFERENCE: SPAR CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 50. C  
 WATER FLOW RATE..... 30. GPM

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 2800. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1510. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
1.8	450	48							
MG	CA	SR	BA	CA+MG					
16	67								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.21						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		2.6				0			
F	CL	BR	I						

7 200

NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
 0.01 0.15 74 140 1020

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00495

RECORD IDENTIFICATION

RECORD NO..... 0073205  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAGON WHEEL GAP HOT SPRINGS: CRI SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... MINERAL  
 LATITUDE..... 37-41-02N LONGITUDE..... 106-49-47W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 01E 02 NW NE

MAP REFERENCE: SPAR CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 51. C  
 WATER FLOW RATE..... 50. GPM

WATER ANALYSIS

PH 1)..... 6.4  
 TOTAL DISSOLVED SOLIDS... 1520. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2.0	460	47						
MG	CA	SR	BA	CA+MG				
15	68							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			250					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.002		2.5				0.002		
F	CL	BR	I					
6.3	200							

NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
 0.03 0.06 68 150 1020

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00496

RECORD IDENTIFICATION

RECORD NO..... 0073206  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. WAGON WHEEL GAP HOT SPRINGS: CFI SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... MINERAL  
 LATITUDE..... 37-41-02N LONGITUDE..#..... 106-49-47W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 01E 02 NW NE  
 MAP REFERENCE: SPAR CITY 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 48. C  
 WATER FLOW RATE..... 30. GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 2360. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1540. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	450	46						
MC	CA	SR	BA	CA+MG				
15	66							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.12					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		1.3						
F	CL	BR	I					
6.8	200							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.04	0.18	88	160		1020		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00497

RECORD IDENTIFICATION

RECORD NO..... 0073226  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. BIRDSIE WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-44-36N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MINERAL  
 LONGITUDE..... 107-02-14W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 40N            02W            14            SW NW NE  
 MAP REFERENCE: WORKMAN 7.5 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 30.      C  
 WATER FLOW RATE..... 15.      GPM

WATER ANALYSIS

PH 1)..... 8.6  
 SPECIFIC CONDUCTANCE..... 200.      UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00498

RECORD IDENTIFICATION

RECORD NO.... 0073203  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAGON WHEEL GAP HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. 4UR RANCH SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-41.10 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MINERAL  
 LONGITUDE..... 106-49.78 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            01E            35            SE      SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 57.      C  
 WATER FLOW RATE..... 106.      L/MIN

WATER ANALYSIS

PH 1)..... 06.7  
 SPECIFIC CONDUCTANCE..... 2200.      UMHO/CM  
 ALKALINITY..... 1020.      MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 1620.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
	490.	48.			
MG	CA	SR	BA	CA+MG	

15.	66.								
MN+3	MN(TOT) 0.300	FE+3	FE(TOT) 0.	CU					
ZN	HG	B 2.600	HBO2	AL	PB	AS	SB	U	
F 7.6	CL 200.	BR	I						
O2	N2 0.	CO2	SO2	H2S	H2	CH4			
NH4	NO3	PO4 0.31	SI02 84.	SO4 200.	CO3	HCO3			

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00499

RECORD IDENTIFICATION

RECORD NO..... 0073207  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
DATE..... 1978/02  
ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAGON WHEEL GAP HOT SPRINGS  
SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. CFI SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-41.03 N

COUNTRY NAME..... UNITED STATES  
COUNTY..... MINERAL  
LONGITUDE..... 106-49.78 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
40N            01E            02            NW      NE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
WATER SAMPLING TEMP.... 50.      C  
WATER FLOW RATE..... 121.      L/MIN

WATER ANALYSIS

PH 1)..... 06.4  
SPECIFIC CONDUCTANCE.... 2330.      UMHO/CM  
ALKALINITY..... 1030.      MG/L AS HCO3  
TOTAL DISSOLVED SOLIDS... 1470.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA 430.	K 46.	RB	CS	NA+K
MG 15.	CA 68.	SR	BA	CA+MG	

MN+3	MN(TOT) 0.540	FE+3	FE(TOT) 0.170	CU					
ZN	HG	B 2.600	HB02	AL	PB	AS	SB	U	
F 8.5	CL 190.	BR	I						
O2	N2 0.02	CO2	SO2	H2S	H2	CH4			
NH4	NO3	PO4 0.25	SI02 67.	SO4 130.	CO3	HCO3			

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00500

RECORD IDENTIFICATION

RECORD NO..... 0073024  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
NAME OF SAMPLE SOURCE.. CRAIG WARM WATER WELL  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 40-30-06N

COUNTRY NAME..... UNITED STATES  
COUNTY..... MOFFAT  
LONGITUDE..... 107-33-04W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
06N            91W            01            NW      SW      SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
WATER SAMPLING TEMP.... 39.      C  
WATER FLOW RATE..... 24.      GPM

WATER ANALYSIS

PH 1)..... 8.2  
SPECIFIC CONDUCTANCE.... 1440.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 896.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA 360	K 4.1	RB	CS	NA+K
MG 0.9	CA 5.8	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 0.06	CU	



ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.21						
F	CL	BR	I					
3.1	4.1							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.04	0.12	19	6.7		998		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00501

RECORD IDENTIFICATION

RECORD NO..... 0073079  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. JUNIPER HOT SPRINGS  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-28-01N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MOFFAT  
 LONGITUDE..... 107-57-10W

TOWNSHIP	RANGE	SECTION	1/4	1/4
06N	94W	16	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 38. C  
 WATER FLOW RATE..... 13. GPM

WATER ANALYSIS

PH 1)..... 7.8  
 SPECIFIC CONDUCTANCE.... 1900. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1150. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.17	460	2.3						
MG	CA	SR	BA	CA+MG				
0.8	3.7							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.54				0		
F	CL	BR	I					
4	94							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		

0.05 0.03 33 12 1100  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00502

RECORD IDENTIFICATION

RECORD NO.... 0073080  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. JUNIPER HOT SPRINGS  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-28-01N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MOFFAT  
 LONGITUDE..... 107-57-10W

TOWNSHIP	RANGE	SECTION	1/4	1/4
06N	94W	16	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 33. C  
 WATER FLOW RATE..... 14. GPM

WATER ANALYSIS

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE.... 1160. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1160. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.25	480	2.3						
MG	CA	SR	BA	CA+MG				
0.4	2.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.55				0.001		
F	CL	BR	I					
3.1	93							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.01	0.03	29	8.3		1090		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00503

RECORD IDENTIFICATION

RECORD NO.... 0073081  
 CROSS INDEX NO..

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06

RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. JUNIPER HOT SPRINGS  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 40-28-01N

COUNTRY NAME..... UNITED STATES  
COUNTY..... MOFFAT  
LONGITUDE..... 107-57-10W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
06N            94W          16            SE      SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
WATER SAMPLING TEMP.... 37.            C  
WATER FLOW RATE..... 13.            GPM

WATER ANALYSIS

PH 1)..... 8.2  
SPECIFIC CONDUCTANCE.... 1160.          UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1160.          PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K		
	470	2.2					
MG	CA	SR	BA	CA+MG			
0.3	3.9						
MN+3	MN(TOT)	FE+3	FE(TOT)	CU			
			0.01				
ZN	HC	B	HBO2	AL	PB	AS	SB      U
		0.48					
F	CL	BR	I				
3.3	8.9						
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3	
	0.10	0.09	31	20		1090	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00504

RECORD IDENTIFICATION

RECORD NO..... C073082  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. JUNIPER HOT SPRINGS  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 40-28-01N

COUNTRY NAME..... UNITED STATES  
COUNTY..... MOFFAT  
LONGITUDE..... 107-57-10W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 06N            94W          16            SE      SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 36.      C  
 WATER FLOW RATE..... 18.      GPM

WATER ANALYSIS

PH 1)..... W      7.9  
 SPECIFIC CONDUCTANCE..... 1850.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1150.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
	460	2.1							
MG	CA	SR	BA	CA+MG					
0.3	3.3								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.52							
F	CL	BR	I						
3.3	90								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.01	0.09	32	13		1100			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00505

RECORD IDENTIFICATION

RECORD NO..... 0073111  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ORVIS HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-07-59N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GURAY  
 LONGITUDE..... 107-44-01W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 45N            08W          22            SE      SW

MAP REFERENCE: DALLAS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 52.      C

WATER FLOW RATE..... 1.1 GPM

WATER ANALYSIS W

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 3180. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2490. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K		
	460	33					
MG	CA	SR	BA	CA+MG			
18	290						
MN+3	MN(TOT)	FE+3	FE(TOT)	CU			
			0.92				
ZN	HG	B	HBO2	AL	PB	AS	SB U
		0.99					
F	CL	BR	I				
4.1	88						
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3	
	0.01	0.21	60	1400		277	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00506

RECORD IDENTIFICATION

RECORD NO..... 0073113  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DURAY AREA: WESBADEN VAPOR CAVES AND MOTEL HOT SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... DURAY  
 LATITUDE..... 38-01-15N LONGITUDE..... 107-40-03W

TOWNSHIP RANGE SECTION 1/4 1/4  
 44N 07W 31

MAP REFERENCE: DURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 53. C  
 OTHER SAMPLE INFORMATION: LOCATED JUST INSIDE CAVE ENTRANCE TO THE LEFT.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 1900. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1580. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI 2.4	NA 120	K 11	RB	CS	NA+K				
MG 8	CA 350	SR	BA	CA+MG					
MN+3	MN(TOT)	FE+3	FE(TOT) 0.09	CU					
ZN 0.20	HG	B 0.15	HBO2	AL	PB	AS 0.16	SB	U	
F 2.7	CL 31	BR	I						
NH4	NO3 0.05	PO4 0.06	SI02 40	SO4 910	CO3	HCO3 213			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00507

RECORD IDENTIFICATION

RECORD NO..... 0073114  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. QURAY AREA: WESBADEN VAPOR CAVES AND MOTEL HOT SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... QURAY  
 LATITUDE..... 38-01-15N LONGITUDE..... 107-40-03W

TOWNSHIP RANGE SECTION 1/4 1/4  
 44N 07W 31

MAP REFERENCE: QURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 30. C  
 WATER FLOW RATE..... 2.5 GPM  
 OTHER SAMPLE INFORMATION: LOCATED 15 FEET INSIDE CAVE ON LEDGE ABOUT 8 FEET ABOVE FLOOR.

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 975. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 695. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ 1.2	NA 53	K 5	RB	CS	NA+K
MG 8.3	CA 150	SR	BA	CA+MG	

MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		0.06				0.004			
F	CL	BR	I						
1.1	14								
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3			
	0.04	0	29	340		189			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00508

RECORD IDENTIFICATION

RECORD NO..... 0073115  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. DURAY AREA: WESBADEN VAPOR CAVES AND MOTEL HOT SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... DURAY  
 LATITUDE..... 38-01-15N LONGITUDE..... 107-40-03W

TOWNSHIP RANGE SECTION 1/4 1/4  
 44N 07W 31

MAP REFERENCE: DURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 46. C

WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 1.6 UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1380. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K				
3.2	110	8.9							
MG	CA	SR	BA	CA+MG					
8.8	300								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.03						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.02		0.16				0.012			
F	CL	BR	I						
2.7	30								





RECORD NO..... 0073117  
CROSS INDEX NO..  
RECORD TYPE..... B

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. DURAY AREA: WESBADEN VAPOR CAVES AND MOTEL HOT SPRING C  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... DURAY  
LATITUDE..... 38-01-15N LONGITUDE..... 107-40-03W

TOWNSHIP RANGE SECTION 1/4 1/4  
44N 07W 31  
MAP REFERENCE: DURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
WATER SAMPLING TEMP.... 48. C  
WATER FLOW RATE..... 5.8 GPM

WATER ANALYSIS

PH 1)..... 7.1  
SPECIFIC CONDUCTANCE..... 1850. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1390. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	110	9.4							
MG	CA	SR	BA	CA+MG					
8.9	310								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
		0.17							
F	CL	BR	I						
3	34								
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3			
	0.04	0.15	39	780		192			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00511

RECORD IDENTIFICATION

RECORD NO..... 0073118  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. DURAY AREA: POOL SPRING

COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-01-00N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GURAY  
 LONGITUDE..... 107-40-41W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 44N            07W          31  
 MAP REFERENCE: GURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 67.      C  
 WATER FLOW RATE..... 125.      GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN BOX CANYON.

WATER ANALYSIS

PH 1)..... W      6.7  
 SPECIFIC CONDUCTANCE..... 2000.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1650.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2.8	110	9.2						
MG	CA	SR	BA	CA+MG				
8.9	370							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.20				0.013		
F	CL	BR	I					
3	41							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.01	0.03	47	990		129		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00512

RECORD IDENTIFICATION

RECORD NO..... 0073119  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. GURAY AREA: POOL SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-01-00N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... GURAY  
 LONGITUDE..... 107-40-41W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 44N            07W          31

MAP REFERENCE: DURAY 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 69. C  
 WATER FLOW RATE..... 60. GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN BOX CANYON.

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 2020. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1660. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	120	8.8						
MG	CA	SR	BA	CA+MG				
8.5	360							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
		0.20						
F	CL	BR	I					
3.6	44							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.01	0.06	49	1000		131		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00513

RECORD IDENTIFICATION

RECORD NO..... 0073110  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ORVIS HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-07-59N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DURAY  
 LONGITUDE..... 107-44-01W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 08W 22 SE SW  
 MAP REFERENCE: DALLAS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 53. C  
 WATER FLOW RATE..... 1. GPM

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 2900. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2270

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
1.4	420	28						
MG	CA	SR	BA	CA+MG				
19	260							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.92					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		1.0				0.24		
F	CL	BR	J					
3.6	85							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.02	0.03	51	1200		409		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00514

RECORD IDENTIFICATION  
 RECORD NO..... 0073112  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ORVIS HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-07.98 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DURAY  
 LONGITUDE..... 107-44.02 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 08W 22 SE SW

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 52. C  
 WATER FLOW RATE..... 3. L/MIN

WATER ANALYSIS  
 PH 1)..... 06.6  
 SPECIFIC CONDUCTANCE..... 3030. UMHO/CM  
 ALKALINITY..... 424. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2270. MG/L

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA 390.	K 30.	RB	CS	NA+K				
MG 19.	CA 280.	SR	BA	CA+MG					
MN+3	MN(TOT) 0.130	FE+3	FE(TOT) 0.960	CU					
ZN	HC	F 1.00	HBO2	AL	PB	AS	SB	U	
F 4.0	CL 86.	BR	I						
O2	N2 0.01	CO2	SO2	H2S	H2	CH4			
NH4	NO3	PO4 0.34	SiO2 53.	SO4 1200.	CO3	HCO3			

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00515

RECORD IDENTIFICATION

RECORD NO..... 0073059  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. HARTSEL HOT SPRINGS: SPRING B

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 39-01-05N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... PARK  
 LONGITUDE..... 105-47-39W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 12S            75W            08            NE        SE

MAP REFERENCE: HARTSEL 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 52.      C  
 OTHER SAMPLE INFORMATION: EASTERN MOST SPRING.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 3850.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2140.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
1.0	650	32			

MG 20	CA 120	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 520	CU				
ZN 0.01	HG	B 0.55	HBO2	AL	PB	AS 0.002	SB	U
F 2	CL 780	BR	I					
NH4	NO3 0.03	PO4 0.09	SIO2 38	SO4 260	CO3	HCO3 484		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00516

RECORD IDENTIFICATION	REPORTER
RECORD NO..... 0073060	NAME..... MANGNALL, P.
CROSS INDEX NO..	DATE..... 78/06
RECORD TYPE..... B	ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY	
SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. HARTSEL HOT SPRINGS: SPRING B	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... PARK
LATITUDE..... 39-01-05N	LONGITUDE..... 105-47-39W

TOWNSHIP	RANGE	SECTION	1/4	1/4
12S	75W	08	NE	SE

MAP REFERENCE: HARTSEL 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE.....	1975/10/00
WATER SAMPLING TEMP....	45. C
WATER FLOW RATE.....	40. GPM
OTHER SAMPLE INFORMATION:	EASTERN MOST SPRING.

WATER ANALYSIS

PH 1).....	7.0
SPECIFIC CONDUCTANCE....	3600. UMHO/CM
TOTAL DISSOLVED SOLIDS...	2260. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....	MG/L
LI 1.0	NA 670	K 33	RB CS NA+K
MG 20	CA 110	SR	BA CA+MG
MN+3	MN(TOT)	FE+3	FE(TOT) 0.57 CU

ZN 0.01	HC	B 0.54	HBO2	AL	PB	AS 0.001	SB	U
F 1.8	CL 820	BR	I					
NH4	NO3 0.03	PO4 0	SIO2 35	SO4 320	CO3	HCO3 503		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00517

RECORD IDENTIFICATION

RECORD NO..... 0073061  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. HARTSEL HOT SPRINGS: SPRING B	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... PARK
LATITUDE..... 39-01-05N	LONGITUDE..... 105-47-39W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 12S            75W          08          NE        SE  
 MAP REFERENCE: HARTSEL 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 45.            C  
 WATER FLOW RATE..... 48.            GPM  
 OTHER SAMPLE INFORMATION: EASTERN MOST SPRING

WATER ANALYSIS

PH 1)..... W            6.6  
 SPECIFIC CONDUCTANCE..... 3800.  
 TOTAL DISSOLVED SOLIDS... 2310.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA 710	K 34	RB	CS	NA+K			
MG 19	CA 120	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 0.45	CU				
ZN	HC	B 0.51	HBO2	AL	PB	AS	SB	U
F 2.0	CL 820	BR	I					

NH4	NO3	PO4	SI02	SO4	CO3	HCO3
	0.03	0.03	36	320		500

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00518

RECORD IDENTIFICATION

RECORD NO.... 0073062  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. HARTSEL HOT SPRINGS: SPRING B	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... PARK
LATITUDE..... 39-01-05N	LONGITUDE..... 105-47-39W

TOWNSHIP	RANGE	SECTION	1/4	1/4
12S	75W	08	NE	SE

MAP REFERENCE: HARTSEL 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 45. C  
 WATER FLOW RATE..... 50. GPM  
 OTHER SAMPLE INFORMATION: EASTERN MOST SPRING

WATER ANALYSIS

	W	
PH 1).....	6.6	
SPECIFIC CONDUCTANCE.....	3800.	UMHO/CM
TOTAL DISSOLVED SOLIDS...	2330.	PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....	MG/L	
LI	NA	K	RB	CS	NA+K	
	670	33				
MG	CA	SR	BA	CA+MG		
21	120					
MN+3	MN(TOT)	FE+3	FE(TOT)	CU		
			0.42			
ZN	HG	B	HBO2	AL	PB	
		0.38			AS	
					SB	
					U	
F	CL	BR	I			
2.0	820					
NH4	NO3	PO4	SI02	SO4	CO3	HCO3
	0.06	0.03	37	380		491

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976



RECORD 00519

RECORD IDENTIFICATION

RECORD NO..... 0073159  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RHODES WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 30-09-49N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... PARK  
 LONGITUDE..... 106-03-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
 10S 78W 24 NW SW  
 MAP REFERENCE: FAIRPLAY WEST 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 24. C

WATER ANALYSIS

PH 7)..... 8.2  
 SPECIFIC CONDUCTANCE..... 340. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 186. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	5.5	1						
MG	CA	SR	BA	CA+MG				
21	33							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.02		0.03				0.001		
F	CL	BR	I					
0.2	1.8							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.21	0	11	14		197		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00520

RECORD IDENTIFICATION

RECORD NO..... 0073160  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RHODES WARM SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... PARK  
 LATITUDE..... 30-09-49N LONGITUDE..... 106-03-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
 10S 78W 24 NW SW  
 MAP REFERENCE: FAIRPLAY WEST 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 25. C  
 WATER FLOW RATE..... 200. GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 340. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 194. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.02	8.6	1.2						
MG	CA	SR	BA	CA+MG				
1.9	32							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.02				0.001		
F	CL	BR	I					
0.3	4.1							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.16	0	12	16		202		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00521

RECORD IDENTIFICATION

RECORD NO..... 0073017  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CONUNDRUM HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... PITKIN  
 LATITUDE..... 39-00-44N LONGITUDE..... 106-53-26W



NH4            NO3            PO4            S102            SO4            CO3            HCO3  
 0.02           0.06           96            1300           570

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00523

RECORD IDENTIFICATION

RECORD NO..... 0073132  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PENNY HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-13-33N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... PITKIN  
 LONGITUDE..... 107-13-28W

TOWNSHIP        RANGE        SECTION        1/4    1/4  
 10S            88W           04            NE NW  
 MAP REFERENCE: REDSTONE 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 46.        C  
 WATER FLOW RATE..... 10.        GPM

WATER ANALYSIS

PH 1)..... 6.3  
 SPECIFIC CONDUCTANCE.... 3450.        UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2820.        PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	390	36						
MG	CA	SR	BA	CA+MG				
51	420							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			1000					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.64						
F	CL	BR	I					
3.4	250							
NH4	NO3	PO4	S102	SO4	CO3	HCO3		
	0.01	0.12	74	1300		593		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00524

RECORD IDENTIFICATION

RECORD NO..... 0073133  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PENNY HOT SPRINGS  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-13.55 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... PITKIN  
 LONGITUDE..... 107-13.47 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 10S            88W            04            NE        NW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 45.            C  
 WATER FLOW RATE..... 38.            L/MIN

WATER ANALYSIS

PH 1)..... 06.3  
 SPECIFIC CONDUCTANCE.... 3850.          UMHO/CM  
 ALKALINITY..... 599.            MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2750.          MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	380.	38.						
MG	CA	SR	BA	CA+MG				
53.	390.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.430		1.300					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
		0.690						
F	CL	BR	I					
3.4	240.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.15	150.	1200.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00525

RECORD IDENTIFICATION

RECORD NO..... 0073134  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PENNY HGT SPRINGS: GRANGES SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY#..... PITKIN  
 LATITUDE..... 39-13.83 N LONGITUDE..... 107-13.60 W

TOWNSHIP	RANGE	SECTION	1/4	1/4	
09S	88W	33	SW	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 56. C  
 WATER FLOW RATE..... 45. L/MIN  
 OTHER SAMPLE INFORMATION: BIGGEST SPRING ON W SIDE OF CRYSTAL RIVER APPROXIMATELY 100 YDS N OF RIVER .

WATER ANALYSIS

PH 1)..... 09.2  
 SPECIFIC CONDUCTANCE..... 3760. UMHO/CM  
 ALKALINITY..... 565. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 2960. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	400.	38.						
MG	CA	SR	BA	CA+MG				
55.	440.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.300		2.300					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.650						
F	CL	BR	I					
2.7	260.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
		0.15	81.	1400.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00526

RECORD IDENTIFICATION

RECORD NO..... 0073015  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
NAME OF SAMPLE SOURCE.. CLARK SPRING WARM WATER WELL  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-15-29N

COUNTRY NAME..... UNITED STATES  
COUNTY..... PUEBLO  
LONGITUDE..... 104-36-35W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
21S            65W            01            NE      NE  
MAP REFERENCE: NE PUEBLO 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
WATER SAMPLING TEMP.... 25.      C  
WATER FLOW RATE..... 12.      GPM

WATER ANALYSIS

PH 1)..... 6.8  
SPECIFIC CONDUCTANCE.... 1650.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 1210.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.22	250	18						
MG	CA	SR	BA	CA+MG				
45	75							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			2.7					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.10				0		
F	CL	BR	I					
1.4	28							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0	0	11	620		323		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD 00527

RECORD IDENTIFICATION

RECORD NO..... 0073167  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ROUTT HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ROUTT  
 LATITUDE..... 40-33-34N LONGITUDE..... 106-51-00W

TOWNSHIP RANGE SECTION 1/4 1/4  
 07N 84W 18 SW SE  
 MAP REFERENCE: ROCKY PEAK 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 64. C  
 WATER FLOW RATE..... 33. GPM  
 OTHER SAMPLE INFORMATION: LOCATED SOUTH OF CREEK AND APPROX. 100 FEET UP THE HILLSIDE.

WATER ANALYSIS

PH 1)..... W 7.6  
 SPECIFIC CONDUCTANCE..... 830. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 552. PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
0.29	160	9						
MG	CA	SR	BA	CA+MG				
0.4	13							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0		0.28				0.038		
F	CL	BR	J					
18	140							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0	0.03	97	47		136		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00528

RECORD IDENTIFICATION

RECORD NO..... 0073168  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ROUTT HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ROUTT



LATITUDE..... 40-33-34N

LONGITUDE..... 106-51-00W

TOWNSHIP RANGE SECTION 1/4 1/4  
07N 84W 18 SW SE  
MAP REFERENCE: ROCKY PEAK 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 64. C  
WATER FLOW RATE..... 50. GPM  
OTHER SAMPLE INFORMATION: LOCATED SOUTH OF CREEK AND APPROX. 100 FEET UP THE HILLSIDE.

WATER ANALYSIS

PH 1)..... W 6.5  
SPECIFIC CONDUCTANCE..... 890. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 518. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.420	160	8.3						
MG	CA	SR	BA	CA+MG				
0.2	7.3							
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.290				0.085		
F	CL	BR	I					
60	130							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0	0.06	80	49		138		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00529

RECORD IDENTIFICATION

RECORD NO..... 0073169  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. ROUTT HOT SPRINGS: SPRI ING A  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 40-33-34N

COUNTRY NAME..... UNITED STATES  
COUNTY..... ROUTT  
LONGITUDE!..... 106-51-00W

TOWNSHIP RANGE SECTION 1/4 1/4  
07N 84W 18 SW SE  
MAP REFERENCE: ROCKY PEAK 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
WATER SAMPLING TEMP.... 64. C

WATER FLOW RATE..... 25. GPM  
 OTHER SAMPLE INFORMATION: LOCATED SOUTH OF CREEK AND APPROX. 100. FEET UP THE HILLSIDE.

WATER ANALYSIS W  
 PH 1)..... 9.3  
 SPECIFIC CONDUCTANCE..... 810. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 521. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
	160	8.5			
MG	CA	SR	BA	CA+MG	
0.1	7.7				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0		
ZN	HG	B	HBO2	AL	PB AS SB U
		0.260			
F	CL	BR	I		
16	120				
NH4	NO3	PO4	SiO2	SO4	CO3 HCO3
	0.01	0.12	86	54	139

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00530

RECORD IDENTIFICATION  
 RECORD NO.... 0073172  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ROUTT HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-33-34N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ROUTT  
 LONGITUDE..... 106-50-59W

TOWNSHIP RANGE SECTION 1/4 1/4  
 07N 84W 18 SW SE  
 MAP REFERENCE: ROCKY PEAK 7.5 MINUTE

SAMPLE INFORMATION  
 WATER SAMPLING TEMP.... 54. C  
 WATER FLOW RATE..... 2. GPM  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 50 FEET EAST OF SPRING A.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 860. UMHO/CM  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00531

## RECORD IDENTIFICATION

RECORD NO..... 0073173  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. ROUTT HOT SPRINGS: SPRING D

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO

COUNTY..... ROUTT

LATITUDE..... 40-33-34N

LONGITUDE..... 106-50-58W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 07N            84W            18            SW SE

MAP REFERENCE: ROCKY PEAK 7.5 MINUTE

## SAMPLE INFORMATION

WATER SAMPLING TEMP.... 51.      C

WATER FLOW RATE..... 2.      GPM

OTHER SAMPLE INFORMATION: LOCATED APPROX. 40 FEET SOUTHEAST OF SPRING C.

## WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 830.      UMHO/CM

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00532

## RECORD IDENTIFICATION

RECORD NO..... 0073185  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. STEAMBOAT SPRINGS AREA: HEART HOT SPRING

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO

COUNTY..... ROUTT

LATITUDE..... 40-28-58N

LONGITUDE..... 106-49-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 06N            84W            17            NW SE NE

MAP REFERENCE: STEAMBOAT SPRINGS 7.5 MIN. QUAD.

## SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00

WATER SAMPLING TEMP.... 39.      C

WATER FLOW RATE..... 140.      GPM

OTHER SAMPLE INFORMATION: LOCATED AT EAST END OF MAIN STREET. SUPPLIES WATER TO SWIMMING POOL.

## WATER ANALYSIS

PH 1)..... 8.0

SPECIFIC CONDUCTANCE..... 1450.      UMHO/CM

TOTAL DISSOLVED SOLIDS... 903.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.35	300	11						
MG	CA	SR	BA	CA+MG				
1	18							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0		0.7				0.005		
F	CL	BR	I					
1.9	320							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.04	0.06	49	150		103		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00533

RECORD IDENTIFICATION

RECORD NO..... 0073186  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. STEAMBOAT SPRINGS AREA: SULPHUR CAVE SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ROUTT  
 LATITUDE..... 40-29-02N LONGITUDE..... 106-50-23W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06N 84W 17 NW SE NW  
 MAP REFERENCE: STEAMBOAT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 20. C  
 WATER FLOW RATE..... 10. GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 5800. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 4530. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
3.0	1600	110			
MG	CA	SR	BA	CA+MG	

24	90								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.06						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0.01		2.9				0.045			
F	CL	BR	I						
3.0	1000								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0	0.18	18	1600		2420			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00534

RECORD IDENTIFICATION	REPORTER
RECORD NO..... 0073187	NAME..... MANGNALL, P.
CROSS INDEX NO..	DATE..... 78/06
RECORD TYPE..... B	ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. STEAMBOAT SPRINGS AREA: STEAMBOAT SPRING	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... ROUTT
LATITUDE..... 40-29-18N	LONGITUDE..... 106-50-27W

TOWNSHIP	RANGE	SECTION	1/4	1/4
06N	04W	08	NE	SE SE

MAP REFERENCE: STEAMBOAT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE.....	1976/04/00	
WATER SAMPLING TEMP....	26.	C
WATER FLOW RATE.....	20.	GPM

WATER ANALYSIS W

PH 1).....	6.7	
SPECIFIC CONDUCTANCE....	9130.	UMHO/CM
TOTAL DISSOLVED SOLIDS...	6170.	PPM

SOLUTE ANALYSIS (WATER)

					UNITS USED.....	MG/L		
LI	NA	K	RB	CS	NA+K			
3.7	2200	140						
MG	CA	SR	BA	CA+MG				
31	0							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.03		3.2				0.13		

F CL BR I  
 2.9 1400

NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
 0.16 0.21 21 590 3390

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00535

RECORD IDENTIFICATION

RECORD NO..... 0073170  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. ROUTT HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-33.57 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ROUTT  
 LONGITUDE..... 106-51.00 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 07N 84W 18 SW SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 64. C  
 WATER FLOW RATE..... 132. L/MIN

WATER ANALYSIS

PH 1)..... 07.8  
 SPECIFIC CONDUCTANCE..... 1000. UMHO/CM  
 ALKALINITY..... 139. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 527. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	160.	8.8						
MG	CA	SR	BA	CA+MG				
0.1	7.7							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.110					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.280						
F	CL	BR	I					
17.	130.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.02							



0.06 98. 49.  
 REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00537

RECORD IDENTIFICATION

RECORD NO..... 0073041  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. FULLINWIDER WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-18-18N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-58-55W

TOWNSHIP RANGE SECTION 1/4 1/4  
 47N 09E 21 SE SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 18. C  
 WATER FLOW RATE..... 11. GPM

WATER ANALYSIS

PH 1)..... 6.7  
 SPECIFIC CONDUCTANCE..... 530. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 332. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.10	80	1.6						
MG	CA	SR	BA	CA+MG				
4.2	21							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.008		0.05				0.001		
F	CL	BR	I					
4.4	15							
NH4	NO3	PO4	S102	SO4	CO3	HCO3		
	0.29	0.06	27	120		116		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00538

RECORD IDENTIFICATION

RECORD NO..... 0073085

REPORTER

NAME..... MANGNALL, P.



CROSS INDEX NO..  
RECORD TYPE..... B

DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING A  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
LATITUDE..... 38-10-08N

TOWNSHIP RANGE SECTION 1/4 1/4  
45N 09E 12 SE NE  
MAP REFERENCE: VILLA GRIVE 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
WATER SAMPLING TEMP.... 60. C  
WATER FLOW RATE..... 100. GPM  
OTHER SAMPLE INFORMATION: ACTUALLY A WELL, LOCATED IN EASTERNMOST GROUP OF SPRINGS.

WATER ANALYSIS

W  
SPECIFIC CONDUCTANCE..... 970. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 643. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

Element	Value	Element	Value	Element	Value	Element	Value	Element	Value
LJ	0.30	NA	130	K	14	RB		CS	NA+K
MG	14	CA	57	SR		BA		CA+MG	
MN+3		MN(TOT)		FE+3		FE(TOT)	0.27	CU	
ZN	0	HG		B	0.36	HBO2		AL	PB
F	3.7	CL	39	BR		I		AS	SB
								AS	U
								0.028	
NH4		NO3	0.14	PO4	0.12	SIO2	48	S04	CO3
								170	HCO3
									335

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00539

RECORD IDENTIFICATION

RECORD NO..... 0073086  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING A  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES

STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-08N

COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55-05W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45W 09E 12 SE NE  
 MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 60. C  
 WATER FLOW RATE..... 167. GPM  
 OTHER SAMPLE INFORMATION: ACTUALLY A WELL, LOCATED IN EASTERNMOST GROUP OF SPRINGS.

WATER ANALYSIS

PH 1)..... W 6.5  
 SPECIFIC CONDUCTANCE..... 1000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 663. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K			
0.32	140	14						
MG	CA	SR	BA	CA+MG				
13	60							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.27					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.35				0.032		
F	CL	BR	I					
3.7	41							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.04	0.03	45	180		335		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00540

RECORD IDENTIFICATION

RECORD NO.... 0073087  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-08N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55-05W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 09E 12 SE NE  
 MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP..... 60. C  
 WATER FLOW RATE..... 70. GPM  
 OTHER SAMPLE INFORMATION: ACTUALLY A WELL, LOCATED IN EASTERMOST GROUP OF SPRINGS.

WATER ANALYSIS

PH 1)..... W 7.0  
 SPECIFIC CONDUCTANCE..... 1020. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 658. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K	
	140	15				
MG	CA	SR	BA	CA+MG		
13	57					
MN+3	MN(TOT)	FE+3	FE(TOT)	CU		
			0.15			
F	CL	BR	I			
3.9	39					
NH4	NO3	PO4	SI02	SO4	CO3	HCO3
	0	0	47	170		351

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00541

RECORD IDENTIFICATION

RECORD NO..... 0073088  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-10-08 LONGITUDE..... 105-55-05W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 09E 12 SE NE  
 MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP..... 60. C  
 WATER FLOW RATE..... 95. GPM  
 OTHER SAMPLE INFORMATION: ACTUALLY, LOCATED IN EASTERMOST GROUP OF SPRINGS.

WATER ANALYSIS

PH 1)..... W 6.8

SPECIFIC CONDUCTANCE..... 995. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 639. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L				
LI	NA	K	RB	CS	NA+K			
	140	14						
MG	CA	SR	BA	CA+MG				
13	59							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.25					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.45						
F	CL	BR	I					
4.6	37							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0	0.12	47	150		352		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00542

RECORD IDENTIFICATION  
 RECORD NO..... 0073089  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-04N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 09W 12 SE NE  
 MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION  
 COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 59. C  
 OTHER SAMPLE INFORMATION: LOCATED IN CONCRETE CISTERN APPROX. 1800 FEET EAST OF COLO. 17.

WATER ANALYSIS W  
 SPECIFIC CONDUCTANCE..... 995. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 665. PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L	
LI	NA	K	RB	CS	NA+K
0.33	140	14			

MG 13	CA 55	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 0.03	CU				
ZN 0.008	HG	B 0.37	HBO2	AL	PB	AS 0.026	SE	U
F 3.9	CL 39	BR	J					
NH4	NO3 2	PO4 0.09	SIO2 48	SO4 170	CO3	HCO3 349		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00543

RECORD IDENTIFICATION  
 RECORD NO..... 0073091  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... MANGNALL, P  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-04N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55-20W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 45N            09W            12            SE      NE  
 MAP REFERENCE: VILLA GROVE 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 60.      C.  
 WATER FLOW RATE..... 5.6      GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN CONCRETE CISTERN APPROX. 1800 FEET EAST OF COLO. 17.

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE.... 950.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 657      PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....	MG/L
LI	NA 140	K 14	RB	CS	NA+K
MG 13	CA 56	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 0.05	CU	

F	CL	BR	I			
3.8	40					
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3
	0.02	0	46	170		352

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00544

RECORD IDENTIFICATION

RECORD NO..... 0073092  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING D	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... SAGUACHE
LATITUDE..... 38-10-04N	LONGITUDE..... 105-55-20W

TOWNSHIP	RANGE	SECTION	1/4	1/4
45N	09W	12	SE	NE

MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 60. C  
 OTHER SAMPLE INFORMATION: LOCATED IN CONCRETE CISTERN APPROX. 1800 FEET EAST OF COLO. 17.

WATER ANALYSIS

PH 1).....	7.3	
SPECIFIC CONDUCTANCE.....	995.	UMHO/CM
TOTAL DISSOLVED SOLIDS....	648.	PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	140	14						
MG	CA	SR	BA	CA+MG				
13	58							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.06					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.4						
F	CL	BR	I					
4.6	38							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.01	0.12	47	160		351		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00545

RECORD IDENTIFICATION

RECORD NO..... 0073176  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. SHAWS WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-45-01N

COUNTRY NAME..... UNITED STATES  
COUNTY..... SAGUACHE  
LONGITUDE..... 106-19-01W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
41N            06E            33            SE      SE  
MAP REFERENCE: TWIN MOUNTAINS SE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 30.      C  
WATER FLOW RATE..... 34.      GPM  
OTHER SAMPLE INFORMATION: CARBONATE CONTENT (MG/L): 69,77,57, AND 69 MG/L RESPECTIVELY.

WATER ANALYSIS

PH 1)..... 9.3  
SPECIFIC CONDUCTANCE.... 540.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 402.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
0.01	130	1.4							
MG	CA	SR	BA	CA+MG					
0.3	0.5								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HBO2	AL	PB	AS	SB	U	
0		0.14				0			
F	CL	BR	I						
2.9	7.2								
NH4	NO3	PO4	SI02	SO4	CO3	HCO3			
	0.02	0.09	73	53		114			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00546

RECORD IDENTIFICATION

RECORD NO..... 0073177  
CROSS INDEX NO..

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06

RECORD TYPE..... B

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. SHAWS WARM SPRING

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 37-45-01N

COUNTRY NAME..... UNITED STATES

COUNTY..... SAGUACHE

LONGITUDE..... 106-19-01W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            06E            33            SE      SE

MAP REFERENCE: TWIN MOUNTAINS SE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00

WATER SAMPLING TEMP.... 30.      C

WATER FLOW RATE..... 52.      GPM

OTHER SAMPLE INFORMATION: CARBONATE CONTENT (MG/L): 69; 77; 57; AND 69 MG/L RESPECTIVELY.

WATER ANALYSIS

PH    7)..... 9.0

SPECIFIC CONDUCTANCE.... 569.      UMHO/CM

TOTAL DISSOLVED SOLIDS... 424.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LJ	NA	K	RB	CS	NA+K		
	130	1.5					
MG	CA	SR	BA	CA+MG			
0.7	2.7						
MN+3	MN(TOT)	FE+3	FE(TOT)	CU			
			0.01				
ZN	HG	B	HBO2	AL	PB	AS	SB      U
		0.12					
F	CL	BR	I				
3.0	7.3						
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3	
	0.02	0.15	100	46		154	

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00547

RECORD IDENTIFICATION

RECORD NO..... 0073193

CROSS INDEX NO..

RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.

DATE..... 78/06

ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING A

COUNTRY CODE..... US

COUNTRY NAME..... UNITED STATES



STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-11-32N

COUNTY..... SAGUACHE  
LONGITUDE..... 105-48-49W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
46N            10E            36            NW SE  
MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION  
COLLECTION DATE..... 1975/06/00  
WATER SAMPLING TEMP.... 37.      C  
OTHER SAMPLE INFORMATION: LOCATED APPROX. 300 FEET EAST OF OLD SWIMMING POOL

WATER ANALYSIS      W  
SPECIFIC CONDUCTANCE..... 390.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 252.      PPM

SOLUTE ANALYSIS (WATER)				UNITS USED..... MG/L				
LJ	NA	K	RB	CS	NA+K			
0	3.5	2.5						
MG	CA	SR	BA	CA+MG				
15	51							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0		0.008				0.001		
F	CL	BR	I					
0.4	0.8							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.57	0.03	21	96		120		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00548

RECORD IDENTIFICATION  
RECORD NO..... 0073194  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER  
NAME..... MANCNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING A  
COUNTRY CODE..... US      COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO      COUNTY..... SAGUACHE  
LATITUDE..... 38-11-32N      LONGITUDE..... 105-48-49W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
46N            10E            36            NW SE  
MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
WATER SAMPLING TEMP.... 36. C  
WATER FLOW RATE..... 60E GPM  
OTHER SAMPLE INFORMATION: LOCATED APPROX. 300 FEET EAST OF OLD SWIMMING POOL

WATER ANALYSIS W  
PH 1)..... 6.5  
SPECIFIC CONDUCTANCE..... 384. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 249. PPM

SOLUTE ANALYSIS (WATER)		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
0.01	3.7	2.6			
MG	CA	SR	BA	CA+MG	
14	50				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.02		
ZN	HG	R	HBO2	AL	PB
0.01		0.01			IAS
					0.001
F	CL	BR	I		SB
0.4	1.5				U
NH4	NO3	PO4	SI02	S04	CO3
	0.11	0	20	95	HCO3
					124

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00549

RECORD IDENTIFICATION  
RECORD NO..... 0073195  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER  
NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE	
NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING A	
COUNTRY CODE..... US	COUNTRY NAME..... UNITED STATES
STATE/PROVINCE..... COLORADO	COUNTY..... SAGUACHE
LATITUDE..... 38-11-32N	LONGITUDE..... 105-48-49W

TOWNSHIP RANGE SECTION 1/4 1/4  
49N 10E 36 NW SE  
MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
WATER SAMPLING TEMP.... 35. C  
OTHER SAMPLE INFORMATION: LOCATED APPROX. 300 FEET EAST OF OLD SWIMMING POOL.

WATER ANALYSIS W  
PH 1)..... 6.8

SPECIFIC CONDUCTANCE..... 385. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 243. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... 6.8

LI	NA	K	RB	CS	NA+K			
	3.9	2.7						
MG	CA	SR	BA	CA+MG				
14	50							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HC	B	HBO2	AL	PB	AS	SB	U
		0.007						
F	CL	BR	I					
0.3	1.1							
NH4	NO3	PO4	SI02	S04	CO3	HCO3		
	0.17	0.09	20	89		124		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00550

RECORD IDENTIFICATION

RECORD NO..... 0073196  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-11-32N LONGITUDE..... 105-48-49W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 10E 36 NW SE

MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 36. C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX. 300 FEET EAST OF OLD SWIMMING POOL.

WATER ANALYSIS

PH 1)..... 7.5  
 SPECIFIC CONDUCTANCE..... 381. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 234. PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K
	3.3	2.8			

MG 14	CA 50	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3 0.01	FE(TOT) 0.01	CU				
ZN	HC	B 0.31	HBO2	AL	PB	AS	SB	U
F 0.7	CL 0.9	BR	I					
NH4	NO3 0.14	PO4 0.03	SiO2 20	SO4 80	CO3	HCO3 125		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00551

RECORD IDENTIFICATION

RECORD NO..... 0073197  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-11-31N LONGITUDE..... 105-48-50W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 10E 36 NW SE

MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 32. C  
 OTHER SAMPLE INFORMATION: LOCATED 150 FEET SOUTHWEST OF SPRING A

WATER ANALYSIS

W  
 SPECIFIC CONDUCTANCE..... 350. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 234. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI 0.01	NA 3.7	K 2.2	RB	CS	NA+K			
MG 14	CA 46	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3 0.02	FE(TOT) 0.02	CU				
ZN	HC	B	HBO2	AL	PB	AS	SB	U

0 0.008 0.002  
 F CL BR I  
 0.3 2.6  
 NH4 NO3 PO4 SIO2 SO4 CO3 HCO3  
 0.22 0.03 19 82 128

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00552

RECORD IDENTIFICATION

RECORD NO.... 0073198  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-11-23N LONGITUDE..... 105-48-35W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 10E 36

MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 34. C  
 WATER FLOW RATE..... 120.E GPM  
 OTHER SAMPLE INFORMATION: LOCATED 1200 FEET SOUTHEAST OF SPRING A AND 300 FEET UP THE HILLSIDE.

WATER ANALYSIS

PH 1)..... W 6.0  
 SPECIFIC CONDUCTANCE..... 360. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 229. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	3.2	2.4						
MG	CA	SK	BA	CA+MG				
12	49							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.009				0.001		
F	CL	BR	I					
0.5	1.8							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		

0.12 0 17 82 122  
 REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00553

RECORD IDENTIFICATION

RECORD NO..... 0073199  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-11-23N LONGITUDE..... 105-48-35W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 10E 36

MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 35. C  
 WATER FLOW RATE..... 75. E GPM  
 OTHER SAMPLE INFORMATION: LOCATED 1200 FEET SOUTHEAST OF SPRING A AND 300 FEET UP THE HILLSIDE.

WATER ANALYSIS

PH 1)..... W 6.0  
 SPECIFIC CONDUCTANCE.... 360. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 247. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	4.3	2.48						
MG	CA	SR	BA	CA+MG				
13	51							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.06					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.02						
F	CL	BR	I					
0.2	2.5							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.17	0	18	93		124		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00554

RECORD IDENTIFICATION

REPORTER

RECORD NO..... 0073200  
 CROSS INDEX NO..  
 RECORD TYPE..... B

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. VALLEY VIEW HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-11-23N LONGITUDE..... 105-48-35W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 10E 36  
 MAP REFERENCE: VALLEY VIEW HOT SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 36. C  
 WATER FLOW RATE..... 75.5 GPM  
 OTHER SAMPLE INFORMATION: LOCATED 1200 FEET SOUTHEAST OF SPRING A AND 300 FEET UP THE HILLSIDE

WATER ANALYSIS

PH 7.5  
 SPECIFIC CONDUCTANCE.... 361. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 223. PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
	2.6	2.5						
MG	CA	SR	BA	CA+MG				
13	50							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
		0.22						
F	CL	BR	I					
0.4	0.6							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.15	0.03	18	73		125		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00555

RECORD IDENTIFICATION

RECORD NO..... 0073175  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. SHAWS WARM SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45-01N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 106-19-01W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            06E            33            SE SE  
 MAP REFERENCE: TWIN MNTS SE 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP..... 30.      C  
 WATER FLOW RATE..... 34.      GPM  
 OTHER SAMPLE INFORMATION: CARBONATE CONTENT (69;77;57; AND 69 MG/L RESPECTIVELY).

WATER ANALYSIS

PH 1)..... 9.3  
 SPECIFIC CONDUCTANCE..... 550.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 406.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	130	1.5						
MG	CA	SR	BA	CA+MG				
0.6	0.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HEO2	AL	PB	AS	SB	U
0		0.13				0		
F	CL	BR	I					
3.1	7.5							
NH4	NO3	PO4	SI02	SO4	CO3	HCO3		
	0.01	0.12	83	50		121		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00556

RECORD IDENTIFICATION

RECORD NO..... 0073180  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SOUTH CANYON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-33-16N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 107-23-53W

TOWNSHIP      RANGE      SECTION      1/4      1/4



06S 90W 02 SE SW  
 MAP REFERENCE: STORM KING MOUNTAIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 48. C  
 WATER FLOW RATE..... 7. GPM

WATER ANALYSIS

PH 1)..... W 7.6  
 SPECIFIC CONDUCTANCE..... 1300. UMHO/CM  
 TOTAL DISSOLVED SOLIDS.... 800. FPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.15	280	8.0						
MG	CA	SR	BA	CA+MG				
1.4	7.7							
MN+2	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.26				0.001		
F	CL	BR	I					
3.0	210							
NH4	NO3	PO4	SiO2	SO4	CO3	HCO3		
	0.19	0.06	39	100		303		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00557

RECORD IDENTIFICATION

RECORD NO..... 0073090  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10-04N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 09W 12 SE NE

MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 60. C  
 OTHER SAMPLE INFORMATION: LOCATED IN CONCRETE CISTERN APPROX. 1800 FEET EAST OF COLD. 17.

WATER ANALYSIS W  
 PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 1000.  
 TOTAL DISSOLVED SOLIDS... 690. UMHO/CM  
 PPM

SOLUTE ANALYSIS (WATER) UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.32	150	14						
MG	CA	SR	BA	CA+MG				
13	59							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.13					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.01		0.35				0.036		
F	CL	BR	I					
3.4	40							
NH4	NO3	PO4	SIO2	SO4	CO3	HCO3		
	0.05	0.03	45	190		354		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00558

RECORD IDENTIFICATION  
 RECORD NO..... 0073178  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY  
 GEOTHERMAL FIELD-AREA.. SHAWS WARM SPRING  
 SAMPLE TYPE..... SURFACE  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45.02 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 106-19.02 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 41N 06E 33 SE SE

SAMPLE INFORMATION  
 COLLECTION DATE..... 1976/04/00  
 WATER FLOW RATE..... 151. L/MIN  
 OTHER SAMPLE INFORMATION: CARBONATE CONTENT 69 MG/L .

WATER ANALYSIS  
 PH 1)..... 08.9  
 SPECIFIC CONDUCTANCE..... 556. UMHO/CM  
 ALKALINITY..... 127. MG/L AS HCO3  
 TOTAL DISSOLVED SOLIDS... 398. MG/L



4.4	730	84						
MG 11	CA 140	SR	BA	CA+MG				
MN+3	MN(TOT)	FE+3	FE(TOT) 0.850	CU				
ZN 0	HG	B 2600	HBO2	AL	PB	AS 0.24	SB	U
F 4.7	CL 260	BR	I					
NH4	NO3 0	PO4 0.15	SiO2 95	SO4 880	CO3	HCO3 1100		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00560

RECORD IDENTIFICATION

RECORD NO..... 0073084  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. LEMON HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-51-00N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAN MIGUEL  
 LONGITUDE..... 108-03-11W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 44N            11W            34            SE      SE  
 MAP REFERENCE: PLACERVILLE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 33            C  
 WATER FLOW RATE..... 8            GPM

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE.... 3950          UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2810          PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA 780	K 80	RB	CS	NA+K
MG 10	CA 150	SR	BA	CA+MG	
MN+3	MN(TOT)	FE+3	FE(TOT) 0.89	CU	

ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.49						
F	CL	BR	I					
4.9	280							
NH4	NO3	PO4	SI02	SO4	CO3	HC03		
	0.08	0.25	100	860		1100		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00561

## RECORD IDENTIFICATION

RECORD NO..... 0073235  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE

NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING B

COUNTRY CODE..... US

STATE/PROVINCE..... COLORADO

LATITUDE..... 38-10-07N

COUNTRY NAME..... UNITED STATES

COUNTY..... SSAGUACHE

LONGITUDE..... 105-55-06W

TOWNSHIP	RANGE	SECTION	1/4	1/4
45N	09E	12	SE	NE

MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

## SAMPLE INFORMATION

WATER SAMPLING TEMP.... 51. C

WATER FLOW RATE..... SMALL

OTHER SAMPLE INFORMATION: LOCATED APPROX. 25 FEET NORTHWEST OF SPRING A

## WATER ANALYSIS

W

SPECIFIC CONDUCTANCE..... 1000. UMHO/CM

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00562

## RECORD IDENTIFICATION

RECORD NO..... 0070029  
 CROSS INDEX NO..  
 RECORD TYPE..... B

## REPORTER

NAME..... LOKESH, CHATURVEDI  
 DATE..... 78/06  
 ORGANIZATION.. NEW MEXICO STATE UNIVERSITY

## GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL

NAME OF SAMPLE SOURCE.. ARTHUR CANE #1 JAMES A. TALLEY CO.

COUNTRY CODE..... US

STATE/PROVINCE..... N&amp;W MEXICO

LATITUDE..... 35-33-00N

COUNTRY NAME..... UNITED STATES

COUNTY..... HARDING

LONGITUDE..... 103-26-00W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15N	33E	10	NW	OF NW

## SAMPLE INFORMATION

RECORD 00798

RECORD IDENTIFICATION

RECORD NO.... 0073225  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. BOND WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-04-51N

COUNTRY NAME..... UNITED STATES

LONGITUDE..... 107-04-06W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
33N            02W

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 30.      C  
WATER FLOW RATE..... SEEP

WATER ANALYSIS

W

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073184  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. SPLASHLAND HOT WATER WELL  
 SAMPLE TYPE..... WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-29.32 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ALAMOSA  
 LONGITUDE..... 105-51.45 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 38N            10E            34            SE      SE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 40.      C

WATER ANALYSIS

PH 1)..... 08.3  
 SPECIFIC CONDUCTANCE..... 365.      UMHO/CM  
 ALKALINITY..... 151.      MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 311.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.010	72.	9.9						
MG	CA	SR	BA	CA+MG				
0.4	4.1							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.0		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.	0.	0.340				0.065		
F	CL	BR	I					
4.2	6.4							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.15	110.	29.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073174  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. SAND DUNES SWIMMING POOL: HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ALAMOSA  
 LATITUDE..... 37-46.42 N LONGITUDE..... 105-51.20 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 41N 10E 27. NW NW  
 MAP REFERENCE: DEADMAN CAMP 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 44. C

WATER ANALYSIS

PH 1)..... 08.3  
 SPECIFIC CONDUCTANCE..... 385. UMHO/CM  
 ALKALINITY..... 176. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 334. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.010	81.	8.6						
MG	CA	SR	BA	CA+MG				
0.4	3.2							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.010					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.010	0.	0.510				0.144		
F	CL	BR	I					
5.9	4.7							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.							
NH4	NO3	P04	SI02	S04	CO3	HC03		
	0	0.18	120.	23.		176		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6





RECORD IDENTIFICATION

RECORD NO..... 0073232  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
NAME OF SAMPLE SOURCE.. EOFF ARTESIAN WELL  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-11-26N

COUNTRY NAME..... UNITED STATES  
COUNTY..... ARCHULETA  
LONGITUDE..... 106-59-36W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
34N            01W            07            SW SE SW  
MAP REFERENCE: CHROMO 15 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 39.      C  
WATER FLOW RATE..... 50.      GPM

WATER ANALYSIS

PH 1)..... W      7.0  
SPECIFIC CONDUCTANCE..... 2500.      UMHO/CM  
REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073124  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 55.            C  
 WATER FLOW RATE..... 241.            GPM

WATER ANALYSIS

PH 1)..... 6.6  
 SPECIFIC CONDUCTANCE.... 4200.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3040.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	800	87							
MG	CA	SR	BA	CA+MG					
2.6	240								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.02						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		2.0							
F	CL	BR	I						
5	190								
NH4	NO3	P04	SI02	S04	C03	HC03			
	0.01	0.09	800	1500		862			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073123  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 57.            C  
 WATER FLOW RATE..... 226.            GPM

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 4000.            UMHO/CM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
3.2	780	87						
MG	CA	SR	BA	CA+MG				
23	210							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.02					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.20		4.7				0.13		
F	CL	BR	I					
	180							
NH4	NO3	P04	SI02	S04	C03	HC03		
				1500		859		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073122  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15-52N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00-37W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 35N            02W            13            SE SW  
 MAP REFERENCE: PAGOSA SPRINGS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 58.            C  
 WATER FLOW RATE..... 265.            GPM

WATER ANALYSIS

PH 1)..... W            6.5  
 SPECIFIC CONDUCTANCE..... 5810.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 3200.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2900	790	90						
MG	CA	SR	BA	CA+MG				
25	230							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.08					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.01		1800				0.12		
F	CL	BR	I					
4.3	180							
NH4	N03	P04	SI02	S04	C03	HC03		
	0.02	0.21	54	1400		855		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO.... 0073125  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS: BIG SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-15.87 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ARCHULETA  
 LONGITUDE..... 107-00.62 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
35N	02W	13	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 54. C  
 WATER FLOW RATE..... 984. L/MIN

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 4340. UMHO/CM  
 ALKALINITY..... 856. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 3040. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	730.	85.						
MG	CA	SR	BA	CA+MG				
24.	230.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.200		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		2.300						
F	CL	BR	I					
4.8	180.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.01							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.21	59.	1300.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 00807

RECORD IDENTIFICATION

RECORD NO..... 0073127  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS; SPA MOTEL HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ARCHULETA  
 LATITUDE..... 37-15.85 N LONGITUDE..... 107-00.58 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
35N	02W	13	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 53. C

WATER ANALYSIS

PH 1)..... 06.5  
 SPECIFIC CONDUCTANCE..... 6000. UMHO/CM  
 ALKALINITY..... 753. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 3320. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2.900	780.	91.						
MG	CA	SR	BA	CA+MG				
24.	230.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.250		0.210					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.010	0.	1.900				0.080		
F	CL	BR	I					
4.4	160.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.							
NH4	N03	P04	SI02	S04	CO3	HC03		
		0.12	51.	1600				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073126  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. PAGOSA SPRINGS; COURTHOUSE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... ARCHULETA  
 LATITUDE..... 37-15.92 N LONGITUDE..... 107-00.62 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
35N	02W	13	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 56. C  
 WATER FLOW RATE..... 114. L/MIN

WATER ANALYSIS

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 6300. UMHO/CM  
 ALKALINITY..... 858. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 3300. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
2.800	780.	89.						
MG	CA	SR	BA	CA+MG				
25.	250.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.270		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.010	0.	1.800				0.093		
F	CL	BR	I					
4.5	170.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.01							
NH4	N03	P04	SI02	S04	CO3	HC03		
		0.15	52.	1500.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6





RECORD IDENTIFICATION

RECORD NO..... 0073033  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ELDORADO SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... BOULDER  
 LATITUDE..... 39-55-52N LONGITUDE..... 105-16-46W

TOWNSHIP RANGE SECTION 1/4 1/4  
 01S 71W 25 NE SE  
 MAP REFERENCE: ELDORADO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP..... 24. C  
 OTHER SAMPLE INFORMATION: ACTUALLY A WELL LOCATED ON THE SOUTH SIDE OF THE CREEK, APPROX. 100 FEET EAST OF THE BRIDGE.

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 152. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 101. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	6.9	3.2						
MG	CA	SR	BA	CA+MG				
4.8	15							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.01					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.03		0.02				14		
F	CL	BR	I					
0.2	1							
NH4	NO3	PO4	SI02	S04	C03	HC03		
	0.54	0.09	16	20		63		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073036  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. ELDORADO SPRINGS: SPRING B  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 39-55-53N

COUNTRY NAME..... UNITED STATES  
COUNTY..... BOULDER  
LONGITUDE..... 105-16-47W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
01S            71W            25            NE      SE  
MAP REFERENCE: FLORENCE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
WATER SAMPLING TEMP.... 24.      C  
OTHER SAMPLE INFORMATION: LOCATED WITHIN THE STONE BUILDING APPROX. 175 FEET NORTH OF CREEK AND 200 FEET NORTHWEST OF BRIDGE.

WATER ANALYSIS

PH 1)..... W      6.6  
SPECIFIC CONDUCTANCE..... 135.      UMHO/CM  
TOTAL DISSOLVED SOLIDS... 84.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	6.7	3.0							
MG	CA	SR	BA	CA+MG					
3.0	11								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		0.03							
F	CL	BR	I						
0.3	0.8								
NH4	NO3	P04	SI02	S04	C03	HC03			
	0.76	0.18	15	19		43			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073035  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ELDORADO SPRING: SPRING B  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 39-55-53N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... BOULDER  
 LONGITUDE..... 105-16-47W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 01S            71W            25            NE    SE  
 MAP REFERENCE: ELDORADO SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/02/00  
 WATER SAMPLING TEMP.... 26.      C  
 OTHER SAMPLE INFORMATION: LOCATED WITHIN THE STONE BUILDING APPROX. 175 FEET NORTH OF CREEK AND 200 FEET NORTHWEST OF BRIDGE.

WATER ANALYSIS      W

PH 1)..... 6.6  
 SPECIFIC CONDUCTANCE..... 130.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 91.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	7.3	3.3							
MG	CA	SR	BA	CA+MG					
3.3	11								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		0.01							
F	CL	BR	I						
0.4	1.5								
NH4	NO3	P04	SI02	S04	C03	HC03			
	0.78	0.18	15	23		46			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 00814

RECORD IDENTIFICATION

RECORD NO..... 0073063  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. HAYSTACK BUTTE WARM WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... BOULDER  
 LATITUDE..... 40-05-48N LONGITUDE..... 105-14-16W

TOWNSHIP RANGE SECTION 1/4 1/4  
 02N 70W 33 NE NW  
 MAP REFERENCE: NIWOT 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP..... 28. C  
 WATER FLOW RATE..... 4.6 GPM

WATER ANALYSIS W

PH 1)..... 8.0  
 SPECIFIC CONDUCTANCE..... 1840. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1200. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.24	510	1.3						
MG	CA	SR	BA	CA+MG				
0.7	2.5							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.05					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0		0.74				0		
F	CL	BR	I					
4.4	30							
NH4	N03	P04	SI02	S04	C03	HC03		
	0.03	0.09	29	7.9		1250		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073228  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. BROWN'S CANON WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-38-14N

COUNTRY NAME..... UNITED STATES  
COUNTY..... CHAFFEE  
LONGITUDE..... 106-04-17W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
51N            08E            23          NE SW SW  
MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP..... 25.      C

WATER ANALYSIS                      W

PH 1)..... 8.0  
SPECIFIC CONDUCTANCE..... 775.      UMHO/CM  
REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO.... 0073229  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. BROWN'S GROTTO WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 38-37-50N

COUNTRY NAME..... UNITED STATES  
COUNTY..... CHAFFEE  
LONGITUDE..... 106-04-10W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
51N            08E            34          NW NE NW  
MAP REFERENCE: PONCHA SPRINGS 15 MIN. QUAD.

SAMPLE INFORMATION

WATER SAMPLING TEMP.... 23.      C  
WATER FLOW RATE..... 5.            GPM

WATER ANALYSIS                    W

PH 1)..... 7.0  
SPECIFIC CONDUCTANCE..... 720.      UMHO/CM

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073021  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. COTTONWOOD HOT SPRING AREA: JUMP STEADY HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-48.67 N LONGITUDE..... 106-13.33 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 14S 79W 21 SE SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 53. C  
 WATER FLOW RATE..... 189. L/MIN

WATER ANALYSIS

PH 1)..... 8.2  
 SPECIFIC CONDUCTANCE..... 547. UMHO/CM  
 ALKALINITY..... 74. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 368. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	110.	2.7						
MG	CA	SR	BA	CA+MG				
0.3	5.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.110						
F	CL	BR	I					
14.	30.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.10							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.03	58.	110.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO.... 0073018  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. COTTONWOOD HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-48.80 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-13.35 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
14S	79W	21	SW	SE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 58. C  
 WATER FLOW RATE..... 38. L/MIN

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 510. UMHO/CM  
 ALKALINITY..... 73. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 370. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.160	110.	2.8						
MG	CA	SR	BA	CA+MG				
0.5	6.2							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.010	0.	0.090				0.002		
F	CL	BR	I					
14.	30.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.08							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.12	60.	110.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0015213  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. MT PRINCETON HOT SPRINGS AREA  
 SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. HORTENSE HOT WATER WELL  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-43.97 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-10.45 W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 15S            79W          24.          SE     NW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 82.      C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 420.      UMHO/CM  
 ALKALINITY..... 75.            MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 318.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.120	84.	2.8						
MG	CA	SR	BA	CA+MG				
1.	6.4							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.040					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.	0.	0.030				0.002		
F	CL	BR	I					
14.	8.3							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.02							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.03	72.	92.				

REFERENCES: BARRETT, JAMES K., PEARL, HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO.  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073108  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: WRIGHT HOT WATER WELL (WEST)  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43.97 N LONGITUDE..... 106-10.42 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	79W	24	SW	NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 72. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 370. UMHO/CM  
 ALKALINITY..... 72. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 313. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.100	73.	2.5						
MG	CA	SR	BA	CA+MG				
0.3	5.8							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.020	.0002	0.030				0.001		
F	CL	BR	I					
13.	6.4							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.09							
NH4	NO3	P04	SI02	S04	C03	HC03		
		2.7	68.	81.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073096  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43.97 N LONGITUDE..... 106-09.67 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	78W	19	SW	NW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 56. C  
 WATER FLOW RATE..... 87. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED APPROX 200 FT E OF OLD SWIMMING POOL.

WATER ANALYSIS

PH 1)..... 7.8  
 SPECIFIC CONDUCTANCE..... 327. UMHO/CM  
 ALKALINITY..... 76. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 248. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	58.	2.2						
MG	CA	SR	BA	CA+MG				
0.8	10.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.010					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.020						
F	CL	BR	I					
10	5.2							
O2	N2	C02	S02	H2S	H2	CH4		
	0.19							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.15	59.	64.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073107  
 CROSS INDEX NO..  
 RECORD TYPE..... R

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: WRIGHT HOT WATER WELL (EAST)  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-44.00 N LONGITUDE..... 106-10.00 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	79W	24	SE	NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
 WATER SAMPLING TEMP.... 67. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 240. UMHO/CM  
 ALKALINITY..... 68. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 234. MG/L

SOLUTE ANALYSIS (WATER)

				UNITS USED.....	MG/L			
LI	NA	K	RB	CS	NA+K			
0.100	61.	2.1						
MG	CA	SR	BA	CA+MG				
0.3	8.3							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.050					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.020	0.	0.020				0.001		
F	CL	BR	I					
10.	4.9							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.15							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.	53.	60.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION  
 RECORD NO.... 0073101  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: YOUNG LIFE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43.95 N LONGITUDE..... 106-10.45 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 24 SE NW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 66. C

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 320. UMHO/CM  
 ALKALINITY..... 72. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 259. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.090	60.	2.3						
MG	CA	SR	BA	CA+MG				
0.3	8.5							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.030					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.030	0.	0.020				0.002		
F	CL	BR	I					
9.2	3.9							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.15							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.12	71.	67.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073105  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... WELL  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: HORTENSE HOT WATER WELL  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43-58N LONGITUDE..... 106-10-27W

TOWNSHIP RANGE SECTION 1/4 1/4  
 15S 79W 24 SE NW  
 MAP REFERENCE: PONCHA SPRINGS 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 82. C

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 420. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 318. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.12	84	2.8						
MG	CA	SR	BA	CA+MG				
1	6.4							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0		0.03				0.002		
F	CL	BR	I					
14	8.3							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.02	0.03	72	92		75		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073104  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS AREA: HORTENSE HOT SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43.98 N LONGITUDE..... 106-10.43 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	79W	24	SE	NW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 83. C  
 WATER FLOW RATE..... 64. L/MIN

WATER ANALYSIS

PH 1)..... 08.2  
 SPECIFIC CONDUCTANCE..... 471. UMHO/CM  
 ALKALINITY..... 86. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 341. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	94.	3.2						
MG	CA	SR	BA	CA+MG				
0.	4.7							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.		0.010					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.040						
F	CL	BR	I					
15.	10.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.01							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.21	88.	98.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO..... 0073097  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MT. PRINCETON HOT SPRINGS: SPRING F  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-43.97 N LONGITUDE..... 106-09.72 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
15S	78W	19	SW	NW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 49. C  
 WATER FLOW RATE..... 45. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED AT SE CORNER OF SWIMMING POOL .

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 310. UMHO/CM  
 ALKALINITY..... 73. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 229. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.080	50.	1.9						
MG	CA	SR	BA	CA+MG				
0.5	12.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.010					
ZN	HG	B	HBO2	AL	PB	AS	SB	U
0.	0.	0.010				0.001		
F	CL	BR	I					
8.3	3.8							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.24							
NH4	N03	P04	SI02	S04	CO3	HC03		
		0.12	57.	58.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO.... 0073150  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29-50N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04-31W

TOWNSHIP RANGE SECTION 1/4 1/4  
 49N 08E 15 SW NW  
 MAP REFERENCE: BONANZA 15 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 63. C  
 WATER FLOW RATE..... 2. GPM  
 OTHER SAMPLE INFORMATION: UPPERMOST SPRING IN DRAW EAST OF SPRINGS A AND B.

WATER ANALYSIS

PH 1)..... 7.5  
 SPECIFIC CONDUCTANCE..... 998. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 685. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	200	8.3						
MG	CA	SR	BA	CA+MG				
0.3	17							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.06						
F	CL	BR	I					
12	52							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.02	0.09	88	200		218		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO.... 0073151  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... CHAFFEE  
 LATITUDE..... 38-29.83 N LONGITUDE..... 106-04.52 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	08E	15	SW	NW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 62. C  
 WATER FLOW RATE..... 15. L/MIN  
 OTHER SAMPLE INFORMATION: UPPERMOST SPRING IN DRAW E OF SPRINGS A AND B

WATER ANALYSIS

PH 1)..... 7.5  
 SPECIFIC CONDUCTANCE..... 999. UMHO/CM  
 ALKALINITY..... 219. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 655. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	190.	8.6						
MG	CA	SR	BA	CA+MG				
0.4	17.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.040		0.					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.150						
F	CL	BR	I					
13.	49.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.15	79.	190.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073147  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRING: SPRING B  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29.82 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04.60 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	08E	15	NW	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 66. C  
 WATER FLOW RATE..... 114. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED APPROX 140 FT SE OF SPRING A AND APPROXIMATELY 50 FT HIGHERUP HILL.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 940. UMHO/CM  
 ALKALINITY..... 214. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 655. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.180	190.	7.8						
MG	CA	SR	BA	CA+MG				
0.5	18.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.040		0.050					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.	.0001	0.070				0.002		
F	CL	BR	I					
12.	48.							
O2	N2	C02	S02	H2S	H2	CH4		
	0.02							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.12	83.	190.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073146  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PONCHA HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-29.82 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... CHAFFEE  
 LONGITUDE..... 106-04.62 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
49N	08E	15	NW	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 50. C  
 WATER FLOW RATE..... 757. L/MIN

WATER ANALYSIS

PH 1)..... 7.5  
 SPECIFIC CONDUCTANCE..... 995. UMHO/CM  
 ALKALINITY..... 219. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 654. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	190.	8.7						
MG	CA	SR	BA	CA+MG				
0.2	17.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.030		0.					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.060						
F	CL	BR	I					
14.	49.							
O2	N2	C02	S02	H2S	H2	CH4		
	0.01							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.12	77.	190.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO..... 0073128  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PARADISE HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45-15N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-07-53W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 40N            11W            06

MAP REFERENCE: GROUNDHOG MOUNTAIN 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 46.      C  
 WATER FLOW RATE..... 26.      GPM

WATER ANALYSIS      W

SPECIFIC CONDUCTANCE..... 9560.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 6070.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
9.6	1800	360						
MG	CA	SR	BA	CA+MG				
27	160							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.15					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.05		9.3				0.14		
F	CL	BR	I					
3.9	3100							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.07	0.31	150	140		628		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976



RECORD 00873

RECORD IDENTIFICATION

RECORD NO..... 0073129  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. PARADISE HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45-15N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... DOLORES  
 LONGITUDE..... 108-07-53W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 40N            11W

MAP REFERENCE: GROUNDHOG MOUNTAIN 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 40.      C  
 WATER FLOW RATE..... 34.      GPM

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 10700.      UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 6530.      PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	1900	380						
MG	CA	SR	BA	CA+MG				
30	240							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.06					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		1.0						
F	CL	BR	I					
3.8	3300							
NH4	NO3	PO4	SI02	S04	C03	HC03		
	0.11	0.37	200	140		685		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073162  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. RICO AREA: BIG GEYSER WARM SPRING  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... DOLORES  
 LATITUDE..... 37-41-15N LONGITUDE..... 108-01-44W

TOWNSHIP RANGE SECTION 1/4 1/4  
 40N 11W  
 MAP REFERENCE: RICO 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 34. C  
 WATER FLOW RATE..... 8. GPM

WATER ANALYSIS W

SPECIFIC CONDUCTANCE..... 3250. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2750. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.25	78	30						
MG	CA	SR	BA	CA+MG				
98	680							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			8.3					
ZN	HG	B	HB02	AL	PB	AS	SB	U
1.0		0.08				0.031		
F	CL	BR	I					
2.1	4.1							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.05	0.25	110	900		1700		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073047  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA: DRINKING SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 39-32-59N  
COUNTRY NAME..... UNITED STATES  
COUNTY..... GARFIELD  
LONGITUDE..... 107-19-19W

TOWNSHIP RANGE SECTION 1/4 1/4  
06S 89W 09 SE NE

MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
WATER SAMPLING TEMP.... 51. C  
WATER FLOW RATE..... 140. GPM  
OTHER SAMPLE INFORMATION: LOCATED APPROX. 100 FEET EAST OF POOL.

WATER ANALYSIS

PH 1)..... 6.4  
SPECIFIC CONDUCTANCE..... 30000. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 18800. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	6600	180							
MG	CA	SR	BA	CA+MG					
15	480								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.04						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		0.87							
F	CL	BR	I						
2.2	10000								
NH4	NO3	P04	SI02	S04	C03	HC03			
	0.01	0.15	30	1100		772			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO.... 0073043  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. GLENWOOD SPRINGS AREA; YAMPA SPRINGS (FEEDS SWIMMING POOL)  
COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
STATE/PROVINCE..... COLORADO COUNTY..... GARFIELD  
LATITUDE..... 39-32-59N LONGITUDE..... 107-19-18W

TOWNSHIP RANGE SECTION 1/4 1/4  
06S 89W 09 SE NE  
MAP REFERENCE: GLENWOOD SPRINGS 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
WATER SAMPLING TEMP.... 50. C  
WATER FLOW RATE..... 2263. GPM  
OTHER SAMPLE INFORMATION: LOCATED ON NORTH SIDE OF COLORADO RIVER.

WATER ANALYSIS

PH 1)..... 6.3  
SPECIFIC CONDUCTANCE.... 36800. UMHO/CM  
TOTAL DISSOLVED SOLIDS... 20200. PPM

SOLUTE ANALYSIS (WATER)

		UNITS USED.....		MG/L	
LI	NA	K	RB	CS	NA+K
0.80	6900	180			
MG	CA	SR	BA	CA+MG	
91	510				
MN+3	MN(TOT)	FE+3	FE(TOT)	CU	
			0.06		
ZN	HG	B	HB02	AL	PB AS SB U
0.03		0.89			0
F	CL	BR	I		
2.3	11000				
NH4	NO3	P04	SI02	S04	C03 HC03
	0.01	0.12	32	1100	773

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073007  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS; SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 30-16-26N LONGITUDE..... 107-05-54W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 02W 04 NW NE  
 MAP REFERENCE: POWDERHORN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1976/01/00  
 WATER SAMPLING TEMP.... 39. C  
 WATER FLOW RATE..... 3. GPM  
 OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS, APPROX. 300 FEET SOUTH OF ROAD. WESTERN POOL IN BUILDING.

WATER ANALYSIS

PH 1)..... 6.9  
 SPECIFIC CONDUCTANCE..... 2220. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 1470. PPM

SOLUTE ANALYSIS (WATER)

				UNITS USED.....		MG/L		
LI	NA	K	RB	CS	NA+K			
	330	58						
MG	CA	SR	BA	CA+MG				
48	120							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		1.10						
F	CL	BR	I					
4.6	120							
NH4	N03	P04	SI02	S04	C03	HC03		
	0.06	0.18	85	130		1170		

REFERENCES: CGS INFO. SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO..... 0073008  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS; SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 30-16.43 N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... GUNNISON  
 LONGITUDE..... 107-05.90 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
46N	02W	04	NW	NE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 38. C  
 WATER FLOW RATE..... 11. L/MIN  
 OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS APPROXIMATELY 300 FT S OF ROAD; WESTERN POOL IN BUILDING.

WATER ANALYSIS

PH 1)..... 06.4  
 SPECIFIC CONDUCTANCE..... 2200. UMHO/CM  
 ALKALINITY..... 1180. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 1450. MG/L

SOLUTE ANALYSIS (WATER)

				UNITS USED.....	MG/L			
LI	NA	K	RB	CS	NA+K			
	310.	66.						
MG	CA	SR	BA	CA+MG				
51.	120.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.100		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		1.100						
F	CL	BR	I					
4.9	120.							
O2	N2	C02	S02	H2S	H2	CH4		
	0.03							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.31	92.	120.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO; COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073010  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING C  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 38-16.43 N LONGITUDE..... 107-05.90 W

TOWNSHIP RANGE SECTION 1/4 1/4  
 46N 02W 04 NW NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 40. C  
 OTHER SAMPLE INFORMATION: LOCATED IN NORTHERN CABIN APPROXIMATELY 200 FT S OF ROAD AND APPROXIMATELY 75 FT NW OF SPRINGS A AND B.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 2100. UMHO/CM  
 ALKALINITY..... 1170. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 1460. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.710	300.	63.						
MG	CA	SR	BA	CA+MG				
51.	130.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.040		0.040					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.010	0.	1.100				0.040		
F	CL	BR	I					
4.6	120.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.03							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.15	79.	130.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073009  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. CEBOLLA HOT SPRINGS: SPRING B  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... GUNNISON  
 LATITUDE..... 30-16.43 N LONGITUDE..... 107-05.90 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
46N	02W	04	NW	NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 38. C  
 OTHER SAMPLE INFORMATION: LOCATED IN SOUTHERN MOST OF TWO CABINS APPROXIMATELY 300 FT S OF ROAD WESTERN POOL IN BUILDING.

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 2050. UMHO/CM  
 ALKALINITY..... 1180. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 1460. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.720	310.	64.						
MG	CA	SR	BA	CA+MG				
50.	120.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.050		0.050					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.020	.0002	1.100				0.040		
F	CL	BR	I					
5.8	120.							
O2	N2	CO2	S02	H2S	H2	CH4		
	0.08							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.06	77.	130.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO.... 0073203  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. WAGON WHEEL GAP HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. 4UR RANCH SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-41.10 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... MINERAL  
 LONGITUDE..... 106-49.78 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 41N            01E            35            SE      SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 57.      C  
 WATER FLOW RATE..... 106.      L/MIN

WATER ANALYSIS

PH 1)..... 06.7  
 SPECIFIC CONDUCTANCE.... 2200.      UMHO/CM  
 ALKALINITY..... 1020.      MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 1620.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
	490.	48.							
MG	CA	SR	BA	CA+MG					
15.	66.								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
	0.300		0.						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
		2.600							
F	CL	BR	I						
7.6	200.								
O2	N2	CO2	S02	H2S	H2	CH4			
	0.								
NH4	N03	P04	SI02	S04	CO3	HC03			
		0.31	84.	200.					

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073110  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ORVIS HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-07-59N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... OURAY  
 LONGITUDE..... 107-44-01W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 45N            08W            22            SE SW  
 MAP REFERENCE: DALLAS 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/09/00  
 WATER SAMPLING TEMP.... 53.            C  
 WATER FLOW RATE..... 1.            GPM

WATER ANALYSIS            W

SPECIFIC CONDUCTANCE..... 2900.            UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 2270

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K				
1.4	420	28							
MG	CA	SR	BA	CA+MG					
19	260								
MN+3	MN(TOT)	FE+3	FE(TOT)	CU					
			0.92						
ZN	HG	B	HB02	AL	PB	AS	SB	U	
0.01		1.0				0.24			
F	CL	BR	I						
3.6	85								
NH4	N03	P04	SI02	S04	C03	HC03			
	0.02	0.03	51	1200		409			

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD IDENTIFICATION

RECORD NO.... 0073112  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. ORVIS HOT SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-07.98 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... OURAY  
 LONGITUDE..... 107-44.02 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
45N	08W	22	SE	SW

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 52. C  
 WATER FLOW RATE..... 3. L/MIN

WATER ANALYSIS

PH 1)..... 06.6  
 SPECIFIC CONDUCTANCE.... 3030. UMHO/CM  
 ALKALINITY..... 424. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 2270. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	390.	30.						
MG	CA	SR	BA	CA+MG				
19.	280.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.130		0.960					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		1.00						
F	CL	BR	I					
4.0	86.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	P04	SI02	S04	CO3	HC03		
		0.34	53.	1200.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 01002

RECORD IDENTIFICATION

RECORD NO.... 0073170  
 CROSS INDEX NO.. ASSESS  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. ROUTT HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING A  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-33.57 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ROUTT  
 LONGITUDE..... 106-51.00 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
07N	84W	18	SW	SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 64. C  
 WATER FLOW RATE..... 132. L/MIN

WATER ANALYSIS

PH 1)..... 07.8  
 SPECIFIC CONDUCTANCE..... 1000. UMHO/CM  
 ALKALINITY..... 139. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 527. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	160.	8.8						
MG	CA	SR	BA	CA+MG				
0.1	7.7							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.110					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.280						
F	CL	BR	I					
17.	130.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.02							
NH4	NO3	PO4	SI02	S04	CO3	HC03		
		0.15	89.	45.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073171  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. ROUTT HOT SPRINGS  
 SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SPRING B  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 40-33.58 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... ROUTT  
 LONGITUDE..... 106-50.98 W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
 07N            84W          18            SW    SE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/07/00  
 WATER SAMPLING TEMP.... 62.      C  
 WATER FLOW RATE..... 114.      L/MIN

WATER ANALYSIS

PH 1)..... 07.1  
 SPECIFIC CONDUCTANCE.... 770.      UMHO/CM  
 ALKALINITY..... 135.      MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 539.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.310	160.	9.1						
MG	CA	SR	BA	CA+MG				
0.5	7.8							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.080					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.006	.0001	0.280				0.100		
F	CL	BR	I					
17.	130.							
O2	N2	C02	S02	H2S	H2	CH4		
	0.							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.06	98.	49.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO.... 0073178  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. SHAWS WARM SPRING  
 SAMPLE TYPE..... SURFACE  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 37-45.02 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 106-19.02 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
41N	06E	33	SE	SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER FLOW RATE..... 151. L/MIN  
 OTHER SAMPLE INFORMATION: CARBONATE CONTENT 69 MG/L .

WATER ANALYSIS

PH 1)..... 08.9  
 SPECIFIC CONDUCTANCE..... 556. UMHO/CM  
 ALKALINITY..... 127. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 398. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	130.	1.5						
MG	CA	SR	BA	CA+MG				
0.1	0.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.010		0.					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		0.270						
F	CL	BR	I					
4.2	7.0							
02	N2	C02	S02	H2S	H2	CH4		
	0.01							
NH4	N03	P04	SI02	S04	C03	HC03		
		0.12	76.	46.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD IDENTIFICATION

RECORD NO..... 0073090  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRINGS: SPRING D  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 38-10-04N LONGITUDE..... 105-55-20W

TOWNSHIP RANGE SECTION 1/4 1/4  
 45N 09W 12 SE NE  
 MAP REFERENCE: VILLA GROVE 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP..... 60. C  
 OTHER SAMPLE INFORMATION: LOCATED IN CONCRETE CISTERN APPROX. 1800 FEET EAST OF COLO. 17.

WATER ANALYSIS W

PH 1)..... 6.5  
 SPECIFIC CONDUCTANCE..... 1000. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 690. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.32	150	14						
MG	CA	SR	BA	CA+MG				
13	59							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.13					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.01		0.35				0.036		
F	CL	BR	I					
3.4	40							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.05	0.03	45	190		354		

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6

RECORD 01017

RECORD IDENTIFICATION  
 RECORD NO.... 0015209  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER  
 NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. MINERAL HOT SPRING: SPRING C  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-10.10 N  
 COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAGUACHE  
 LONGITUDE..... 105-55.18 W

TOWNSHIP      RANGE      SECTION      1/4      1/4  
 45N            09E            12            SE      NE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/06/00  
 WATER SAMPLING TEMP.... 60.      C  
 OTHER SAMPLE INFORMATION: LOCATED APPROX 2300 FT E OF COLO 17 AND 150 FT NW OF SPRING A .

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 1060.      UMHO/CM  
 ALKALINITY..... 341.      MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 723.      MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.330	150.	14.						
MG	CA	SR	BA	CA+MG				
14.	60.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.030		0.020					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.	0.	0.370				0.028		
F	CL	BR	I					
4.2	43.							
O2	N2	CO2	S02	H2S	H2	CH4		
	6.5							
NH4	N03	P04	SI02	S04	CO3	HC03		
		0.12	50.	190.				

REFERENCES: BARRETT, JAMES K., AND PEARL, R., HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO:  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6



RECORD IDENTIFICATION

RECORD NO.... 0073175  
CROSS INDEX NO..  
RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
DATE..... 78/06  
ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
NAME OF SAMPLE SOURCE.. SHAWS WARM SPRING  
COUNTRY CODE..... US  
STATE/PROVINCE..... COLORADO  
LATITUDE..... 37-45-01N

COUNTRY NAME..... UNITED STATES  
COUNTY..... SAGUACHE  
LONGITUDE..... 106-19-01W

TOWNSHIP      RANGE      SECTION      1/4    1/4  
41N            06E            33            SE SE  
MAP REFERENCE: TWIN MNTS SE 7.5 MINUTE

SAMPLE INFORMATION

COLLECTION DATE..... 1975/08/00  
WATER SAMPLING TEMP.... 30.            C  
WATER FLOW RATE..... 34.            GPM  
OTHER SAMPLE INFORMATION: CARBONATE CONTENT (69;77;57; AND 69 MG/L RESPECTIVELY).

WATER ANALYSIS

PH 1)..... W            9.3  
SPECIFIC CONDUCTANCE..... 550.            UMHO/CM  
TOTAL DISSOLVED SOLIDS... 406.            PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.01	130	1.5						
MG	CA	SR	BA	CA+MG				
0.6	0.9							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.04					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0		0.13				0		
F	CL	BR	I					
3.1	7.5							
NH4	N03	P04	SI02	S04	C03	HC03		
	0.01	0.12	83	50		121		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 01021

RECORD IDENTIFICATION

RECORD NO..... 0073180  
 CROSS INDEX NO..  
 RECORD TYPE..... B

REPORTER

NAME..... MANGNALL, P.  
 DATE..... 78/06  
 ORGANIZATION.. COLORADO GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

SAMPLE TYPE..... SURFACE  
 NAME OF SAMPLE SOURCE.. SOUTH CANYON HOT SPRINGS: SPRING A  
 COUNTRY CODE..... US COUNTRY NAME..... UNITED STATES  
 STATE/PROVINCE..... COLORADO COUNTY..... SAGUACHE  
 LATITUDE..... 39-33-16N LONGITUDE..... 107-23-53W

TOWNSHIP RANGE SECTION 1/4 1/4  
 06S 90W 02 SE SW  
 MAP REFERENCE: STORM KING MOUNTAIN 7.5 MIN. QUAD.

SAMPLE INFORMATION

COLLECTION DATE..... 1975/10/00  
 WATER SAMPLING TEMP.... 48. C  
 WATER FLOW RATE..... 7. GPM

WATER ANALYSIS

PH 1)..... 7.6  
 SPECIFIC CONDUCTANCE..... 1300. UMHO/CM  
 TOTAL DISSOLVED SOLIDS... 800. PPM

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
0.15	280	8.0						
MG	CA	SR	BA	CA+MG				
1.4	7.7							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
			0.03					
ZN	HG	B	HB02	AL	PB	AS	SB	U
0.01		0.26				0.001		
F	CL	BR	I					
3.0	210							
NH4	NO3	P04	SI02	S04	C03	HC03		
	0.19	0.06	39	100		303		

REFERENCES: COLORADO GEOLOGICAL SURVEY INFORMATION SERIES 6, 1976

RECORD 01030

RECORD IDENTIFICATION

RECORD NO..... 0015208  
 CROSS INDEX NO.. CF  
 RECORD TYPE..... B

REPORTER

NAME..... BURKHARDT, H.  
 DATE..... 1978/02  
 ORGANIZATION.. U.S. GEOLOGICAL SURVEY

GEOGRAPHIC LOCALITY

GEOHERMAL FIELD-AREA.. LEMON HOT SPRING  
 SAMPLE TYPE..... SPRING  
 COUNTRY CODE..... US  
 STATE/PROVINCE..... COLORADO  
 LATITUDE..... 38-51.00 N

COUNTRY NAME..... UNITED STATES  
 COUNTY..... SAN MIGUEL  
 LONGITUDE..... 108-03.18 W

TOWNSHIP	RANGE	SECTION	1/4	1/4
44N	11W	34.	SE	SE

SAMPLE INFORMATION

COLLECTION DATE..... 1976/04/00  
 WATER SAMPLING TEMP.... 33. C  
 WATER FLOW RATE..... 38. L/MIN

WATER ANALYSIS

PH 1)..... 06.2  
 SPECIFIC CONDUCTANCE..... 3950. UMHO/CM  
 ALKALINITY..... 1110. MG/L AS HC03  
 TOTAL DISSOLVED SOLIDS... 2740. MG/L

SOLUTE ANALYSIS (WATER)

UNITS USED..... MG/L

LI	NA	K	RB	CS	NA+K			
	760.	84.						
MG	CA	SR	BA	CA+MG				
11.	150.							
MN+3	MN(TOT)	FE+3	FE(TOT)	CU				
	0.390		0.840					
ZN	HG	B	HB02	AL	PB	AS	SB	U
		2.500						
F	CL	BR	I					
5.0	270.							
O2	N2	CO2	SO2	H2S	H2	CH4		
	0.01							
NH4	NO3	PO4	SI02	S04	CO3	HC03		
		4.3	94.	810.				

REFERENCES: BARRETT, JAMES K., PEARL, HYDROGEOLOGICAL DATA OF THERMAL SPRINGS AND WELLS IN COLORADO.  
 COLORADO GEOLOGICAL SURVEY INFORMATION SERIES NO. 6