

DIRECCION REGIONAL DE AREQUIPA**INFORME N° 49 - SENAMHI/DR6-2001**

Referencia (presupuesto N° 87)

Comprobante de depósito Banco de la Nación N° 12341012 - 12341204

INFORMACION METEOROLOGICA PREPARADO PARA:**Sres. Sociedad Minera Cerro Verde S. A. A.****ESTACION: MAP LA PAMPILLA**

PARAMETRO : TEMPERATURA MAXIMA MEDIA MENSUAL

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	22.7	21.3	23.4	23.3	22.7	21.9	22.4	22.4	22.9	22.6	22.4	22.7
1981	21.2	22.2	22.7	22.0	21.9	21.2	20.6	22.1				
1982			22.6	22.8	22.8	23.7	23.8	24.5	23.8	23.1	23.0	23.2
1983	23.4	23.8	23.1	24.7	24.7	24.0	24.2	23.7	23.0	22.4	22.9	21.0
1984	20.7	20.3	21.8	21.0	22.4	23.1	21.5	22.1	22.7	23.1	22.0	21.1
1985	19.9	20.7	21.4	22.1	22.3	21.9	22.2	22.0	22.2	22.1	21.2	22.2
1986	21.5	19.9	21.4	23.0	22.7	22.4	22.7	22.5	24.1	23.3	23.6	22.4
1987	22.5	24.0	23.3	23.0	22.5	22.8	22.1	22.5	23.3	23.3	23.9	24.0
1988	22.5	23.2	22.6	22.4	22.6	22.4	22.2	22.3	22.6	23.1	22.5	21.5
1989	22.2	20.7	19.8	22.5	22.5	22.4	22.8	23.0	22.9	22.7	23.3	22.8
1990	23.4	23.1	23.5	23.8	23.9	23.6	22.6	23.7	24.0	23.5	23.7	22.8
1991	22.8	23.9	23.0	23.3	23.8	23.6						
1992	24.0	23.3	24.0	23.6	22.6	23.1	22.6	23.2	23.4	24.3	23.8	23.5
1993	21.9	22.2	22.5	23.1	22.9	24.0	23.3	23.7	23.3	24.0	23.5	23.4
1994	21.4	21.2	22.9	22.9	23.7	23.7	23.9	24.0	24.2	23.6	23.5	23.6
1995	22.7	22.9	21.9	23.2	22.9	23.3	23.0	23.6	23.7	23.8	23.6	23.0
1996	22.0	22.4	22.6	23.0	23.5	23.0	23.2	23.3	23.8	23.6	23.6	23.0
1997	20.4	23.1	22.3	23.1	24.3	23.2	25.2	24.1	24.0	24.9	24.5	25.5
1998	25.5	29.4	24.3	24.3	23.8	23.1	22.9	22.4	22.9	23.8	22.4	22.3
1999	21.9	19.2	21.9	22.2	21.7	21.6	22.1	22.6	22.0	22.3	22.1	21.2
2000	19.1	19.6	20.4	21.2	21.8	22.0	21.4	22.8	22.0	23.3	22.3	22.2
2001	21.3	21.0	20.9	22.4	22.3	22.8	22.4	23.3	22.5	23.3		

PARAMETRO : TEMPERATURA MINIMA MENSUAL (°C)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	10.3	9.7	11.1	8.2	7.5	7.2	6.7	6.7	8.6	9.4	8.7	9.2
1981	9.5	10.9	9.7	9.5	6.8	5.2	4.6	5.8	6.8			
1982			6.5	6.8	6.4	6.9	6.8	8.0	9.0	8.7	9.7	9.6
1983	10.4	10.4	10.1	8.3	8.3	7.1	6.8	7.8	8.2	8.2	8.0	8.4
1984	8.7	10.2	10.5	11.5	9.0	9.1	6.0	6.9	8.7	8.6	9.2	10.0
1985	9.2	9.2	9.9	9.1	7.7	6.9	5.3	6.2	7.7	10.0	9.8	10.2
1986	11.0	10.1	10.8	10.4	7.9	6.8	6.7	8.1	9.5	8.7	10.0	10.3
1987	11.9	11.5	10.6	10.4	8.7	8.3	8.0	8.4	8.8	9.8	10.8	11.0
1988	12.1	11.1	11.3	9.6	8.8	6.1	6.6	7.0	8.2	8.5	8.6	9.6
1989	10.6	11.0	9.8	9.6	8.9	7.8	7.7	8.3	8.6	9.3	9.7	9.2
1990	11.0	10.5	11.1	10.2	9.5	9.2	7.3	8.7	8.5	9.7	10.8	11.0
1991	10.8	11.7	11.2	10.3	9.2	9.3						
1992	11.1	9.9	9.6	9.3	8.8	6.5	7.1	7.6	7.3	9.5	9.2	10.3
1993	10.8	10.0	10.5	10.0	8.2	7.5	6.7	7.5	8.2	9.8	9.9	10.9
1994	11.3	11.0	10.4	10.0	8.3	7.5	7.2	8.2	9.4	8.6	9.7	11.2
1995	11.2	11.1	11.0	9.7	8.5	7.5	7.3	8.3	9.8	9.1	10.1	9.6
1996	11.1	11.1	10.4	10.2	8.8	7.1	6.9	8.6	8.2	8.7	9.7	10.7
1997	10.6	11.4	10.8	9.7	8.6	6.6	8.3	9.1	10.9	10.0	10.8	12.0
1998	13.7	13.2	12.7	11.0	8.8	9.3	8.5	8.0	8.3	9.8	9.7	9.9
1999	9.9	11.8	9.9	10.2	7.7	6.3	7.2	8.0	7.5	9.5	7.9	9.4
2000	11.0	11.0	10.5	10.0	8.3	7.0	6.5	8.1	7.7	9.9	8.1	10.7
2001	11.2	12.0	11.2	10.6	8.3	7.9	7.1	8.8	8.7	10.2		

PARAMETRO : TEMPERATURA MEDIA ARITMETICA (°C)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	17.4	16.3	17.1	16.7	15.9	14.4	14.8	14.8	16.7	16.8	17.1	17.0
1981	15.6	16.5	16.4	16.3	14.8	13.8	12.8	13.5	16.2			
1982			15.4	16.0	15.6	15.6	15.4	16.2	16.5	16.6	17.7	17.5
1983	18.0	17.6	17.3	16.3	16.3	15.0	14.5	15.4	15.4	15.7	16.9	15.6
1984	15.9	14.8	15.9	15.3	16.1	15.8	13.7	14.7	16.5	17.2	16.6	16.1
1985	14.1	14.9	15.1	15.6	14.6	13.9	13.6	13.8	16.0	17.1	16.3	17.3
1986	16.4	14.8	16.1	16.8	15.6	14.5	14.8	15.4	17.3	16.8	17.9	17.2
1987	15.2	18.2	17.3	17.1	15.7	15.5	15.0	15.8	17.2	17.8	18.5	18.6
1988	16.8	17.2	16.9	16.1	15.6	14.4		16.6	15.9	17.1	17.2	16.2
1989	16.8	15.6	15.1	16.1	15.8	14.8	15.0	16.0	16.9	17.2	18.0	17.6
1990	17.6	16.9	17.5	17.4	16.8	16.1	14.6	16.1	17.3	17.8	18.6	17.3
1991	17.4	17.7	16.9	17.2	16.8							
1992	18.8	17.8	18.1	16.9	14.6	14.5	14.9	16.0	16.3	18.0	17.9	17.7
1993	16.6	16.6	17.1	17.3	15.0	14.9	15.3	15.6	16.6	17.9	18.1	17.8
1994	15.3	15.2	16.6	16.7	16.1	15.4	15.4	16.3	17.5	17.5	17.9	18.3
1995	17.5	17.6	16.4	16.8	16.0	15.5	15.2	16.2	17.2	17.7	18.0	17.6
1996	16.6	16.6	16.7	16.8	16.3	15.0	15.2	16.0	17.0	17.1	17.6	17.5
1997	14.8	17.2	16.8	16.8	16.9	14.7	16.6	16.8	17.5	18.3	18.5	19.5
1998	16.7	19.1	18.5	17.4	16.3	15.6	15.3	14.9	16.0	17.1	16.8	16.9
1999	19.9	14.6	16.6	16.2	15.2	13.9	14.4	15.2	14.8	16.7	16.3	16.0
2000	14.1	14.8	15.0	15.5	15.1	14.3	14.0	15.8	15.4	17.3	16.6	16.6
2001	15.6	15.6	15.7	16.2	15.0	14.2	14.2	15.8	15.7	17.3		

PARAMETRO : DIRECCION DE VIENTO MAXIMA MEDIA MENSUAL

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	WNW	W	WNW	WNW	W	W	W	W	W	W	W	W
1981	W	W	W	W	W	W	W	W	W			
1982			W	W	W	W	W	W	W	W	WNW	W
1983	WSW	WSW	W	W	W	W	W	W	W	WSW	W	W
1984	W	W	W	W	W	WNW	W	WNW	WNW	WNW	WNW	W
1985	W	W	W	W	W	W	W	W	W	WNW	W	W
1986	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W
1987	WNW	W	WNW	WNW	W	W	W	W	W	W	W	W
1988	WNW	W	WNW	WSW	W	W	WNW	WNW	W	W	W	W
1989	W	W	W	W	W	W	W	W	W	W	W	W
1990	W	W	W	W	W	W	W	W	W	W	W	W
1991	W	W	W	W	W	W						
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W	W	W	W
1994	W	W	W	W	W	W	W	W	W	W	W	W
1995	W	W	W	W	W	W	W	WSW	NNW	W	W	W
1996	WSW	W	W	W	W	W	WSW	W	WSW	W	WSW	W
1997	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	E	WSW
1998	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW		WSW
1999	WNW	WSW	WNW	WSW	WSW	WSW	WSW	N	N	N	N	N
2000	N	N	N	N	N	N	N	N	N	WNW	WNW	WSW
2001	WSW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	W		

PARAMETRO : DIRECCION DE VIENTO MINIMA MEDIA MENSUAL

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	W	W	W	E	SSE	E	E	E	E	E	E	W
1981	W	CAL	E	E	E	E	E	ENE	CAL			
1982			CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL
1983	CAL	CAL	CAL	E	E	CAL	CAL	CAL	CAL	CAL	CAL	CAL
1984	W	W	W	CAL	CAL	ESE	E	E	E	E	W	WNW
1985	CAL	CAL	CAL	CAL	CAL	E	E	E	W	W	W	W
1986	WNW	WNW	WNW	WNW	E	E	E	E	E	E	W	W
1987	W	W	SE	W	E	E	E	E	E	E	W	WNW
1988	WSW	W	WSW	CAL	E	E	NE	WNW	W	W	S	W
1989	W	SW	W	CAL	W	W	E	W	W	W	W	W
1990	W	CAL	W	W	W	E	W	W	W	W	W	W
1991	W	W	CAL	W	E	E						
1992	E	E	E	E	W	W	E	E	E	E	W	W
1993	W	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL
1994	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	CAL	W	CAL	CAL
1995	CAL	CAL	CAL	CAL	CAL	NE	ENE	NE	NNW	NNE	WSW	SSW
1996	SW	WSW	WSW	WSW	W	W	WSW	ENE	WSW	WSW	WSW	WSW
1997	WSW	WSW	S	N	ENE	ENE	ENE	NE	ENE	WSW	CAL	WSW
1998	WSW	WSW	WSW	WSW	WNW	WNW	WNW	WSW	WSW	WSW	WSW	WSW
1999	WSW	WSW	WSW	WSW	WSW	WNW	SE	ENE	ENE	N	N	N
2000	WNW	N	NE	NE	NE	NE	NE	NE	ENE	ENE	SSW	NNW
2001	NE	NW	NE	ENE	ESE	ENE	E	NE	ESE	SSE		

PARAMETRO: VELOCIDAD DE VIENTO MEDIA MENSUAL m/seg

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGS	SET	OCT	NOV	DIC
1980	3	3	3	3	3	3	3	3	3	3	3	3
1981	4	3	3	3	3	3	3	4	4			
1982			3	3	2	2	3	3	3	2	3	3
1983	4	4	4	5	4	3	4	3	4	4	4	4
1984	5	4	5	2	1	4	4	5	5	5	5	5
1985	5	3	3	3	4	5	4	5	4	5	6	6
1986	6	6	6	5	6	6	6	6	6	6	5	5
1987	6	3	4	4	3	3	4	4	5	5	4	5
1988	4	7	4	3	5	4	4	4	4	5	5	4
1989	4	3	3	2	3	3	4	3	3	4	4	4
1990	4	3	4	4	4	4	3	4	4	5	5	5
1991	5	5	2	4	4	5						
1992	4	4	4	4	4	4	4	4	4	4	4	2
1993	4	4	4	3	2	3	2	3	3	3	3	3
1994	3	3	3	3	3	2	3	4	4	5	5	5
1995	4	5	4	4	4	4	3	4	5	4	3	3
1996	4	4	4	4	4	4	3	4	4	4	4	4
1997	4	5	5	4	5	4	5	4	4	5	5	5
1998	4	5	5	5	4	4	5	4	5	5	3	5
1999	3	5	7	4	4	5	5	5	5	5	5	5
2000	4	4	5	6	5	5	5	4	4	4	4	5
2001	5	5	6	6	4	4	4	5	5	5		

PARAMETRO : PRECIPITACION TOTAL MENSUAL (mm.)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	0.8	10.9	8.3	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	6.8
1981	3.8	8.2	10.5	9.1	0.0	0.0	0.0	0.0	0.0			
1982			3.9	2.8	0.0	0.0	0.0	0.0	T	1.9	5.0	0.0
1983	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	1.5
1984	3.6	33.4	10.3	4.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0	17.3
1985	13.2	59.4	7.5	0.0	0.0	T	0.0	2.9	0.0	0.0	5.4	0.0
1986	18.3	67.2	5.3	0.0	1.5	0.0	0.0	5.0	0.0	0.0	5.8	16.6
1987	34.8	4.8	T	0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.0
1988	17.8	0.0	15.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
1989	2.4	110.5	27.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	T	15.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	1.7	7.2
1991	7.5	0.2	13.2	0.0	0.0	0.0	0.0	0.0	0.0			
1992	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
1993	44.3	2.1	0.0	0.0	0.0	0.0	0.0	3.1	0.0	1.8	0.0	0.0
1994	39.3	33.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
1995	33.4	0.0	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
1996	23.1	21.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	31.9	57.5	46.3	0.0	0.0	0.0	0.0	12.4	4.5	0.0	0.0	6.6
1998	25.0	1.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
1999	4.5	68.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	3.1
2000	84.7	19.6	48.9	0.3	0.9	0.7	0.0	0.0	0.0	0.0	0.0	0.9
2001	12.4	95.5	71.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0		

T = TRAZA (Precipitación menor a 0.1 mm)

PARAMETRO: PRECIPITACION TOTAL ANUAL mm.

AÑO	Pp
1980	26.8
1981	31.6
1982	13.6
1983	4.1
1984	69.6
1985	88.4
1986	119.7

AÑO	Pp
1987	40.3
1988	37.9
1989	140.5
1990	25.8
1991	20.9
1992	5.0
1993	51.3

AÑO	Pp
1994	84.7
1995	96.5
1996	45.2
1997	159.2
1998	31.4
1999	80.6
2000	156.0
2001	181.3

PARAMETRO : EVAPORACION MEDIA MENSUAL (mm)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
1980	5.6	4.1	4.4	5.1	6.0	6.9	7.5	7.5	6.4	5.8	5.9	5.1
1981	2.7	2.7	4.6	4.6	5.6	5.9	6.2	5.9	6.0			
1982			3.1	4.7	6.6	6.4	5.6	5.8	5.3	5.8	5.4	5.5
1983						6.0	6.1	4.9	4.9	5.9		
1984						6.2	7.7	8.1	7.8	8.0	7.2	3.8
1985												
1986	3.3	2.7	3.7	4.5	5.9	6.8	8.0	7.5	8.6	7.8	7.2	5.6
1987	2.1	3.1	4.4	6.0	6.2	6.9	7.2	7.3	7.1	6.6	6.2	0.0
1988	3.4	3.7	4.0	4.2	5.0	7.4	6.7	6.4	5.9	6.6	6.6	4.9
1989	3.8	2.1	2.1	4.3	5.4	5.3	6.3	6.7	6.4	5.4	6.0	5.6
1990	5.3	3.4	4.2	5.8	5.2	5.3	6.2	6.3	6.0	5.1	5.3	3.8
1991	4.0	4.4	3.5	4.6	5.5							
1992	3.8							3.4	4.8	5.1	6.0	6.0
1993	4.3	3.5	3.4	3.7	4.5	5.4	4.9	4.4	5.0	4.4	5.1	4.3
1994	2.9	2.5	3.4	2.8	4.8	6.4	5.4	6.9	7.3	7.2	6.8	6.8
1995	4.3	3.7	3.5	5.8	5.4	5.8	6.1	7.4	6.6	7.3	7.4	6.3
1996	6.0	3.3	4.3	4.5	6.6	5.5	6.2	6.2	6.4	7.4	5.9	5.6
1997	2.7	4.0	3.9	5.5	6.8	7.0	7.7	7.1	5.3	5.9	7.2	6.6
1998	4.0	4.4	3.9	5.2	5.8	5.5	5.1	6.1	6.4	6.9	6.9	4.1
1999	3.6	1.2	3.6	3.5	4.2	5.3	6.0	5.8	5.9	5.5	5.9	4.6
2000	1.8	2.3	2.5	2.8	3.9	4.9	6.0	6.4	5.7	5.5	4.6	3.5
2001	2.6	1.8	1.9	3.1	2.7	4.8	6.1	6.1	4.8	3.9		

Espacios en Blanco sin dato

Arequipa 23 de Noviembre del 2001