3.3 SUSTAINABILITY OF EXISTING WATER SOURCES ASSESSED FROM THE VIEWPOINT OF PRODUCTION VOLUMES AND WATER QUALITY

3.3.1 Present Conditions of Water Sources Used by ENACAL

(1) General

As of December 2004, water sources of ENACAL in the Study Area consist of 116 wells and Asososca Lake. Four of these wells were suspended of their use indefinitely because of technical problems and eleven were suspended temporarily for maintenance. An inventory of the wells is provided in **Annex 3A**. Their locations are shown in **Figure 3.3.1**.

Seven wells that are supplying water to Sandino City and three Wells (No.60, 95, 117) were not the subject of this evaluation. In addition, four wells in Ticuantepe and Nindiri are considered in this study (**Table 3.3.1(c)**).

Table 3.3.1(a) Wells Supplying Water to SANDINO City

No.	Name of Wells	Serial Number	No.	Name of Wells	Serial Number
6	Satelite Asososca	26	94	San Fransisco Javier No.4	30
1	San Fransisco Javier No.1	27	113	Nueva Vida	51
2	San Fransisco Javier No.2	28	102	Bello Amanecer(JICA No.5)	31
3	San Fransisco Javier No.3	29			

Table 3.3.1 (b) Wells Located Outside the Study Area

No.	Name of Wells	Serial Number
60	KM 14.5 C. Sur	60
95	KM 13.5 C. Sur	78
117	KM 17 C. Sur	87

Table 3.3.1 (c) Wells in Ticuantepe and Nindiri

No.	Name of Wells	Serial Number
155	La Borgona	125
156	Las Conchitas	126
158	San Joaquin	128
159	El Gavilan/Campuzano	129

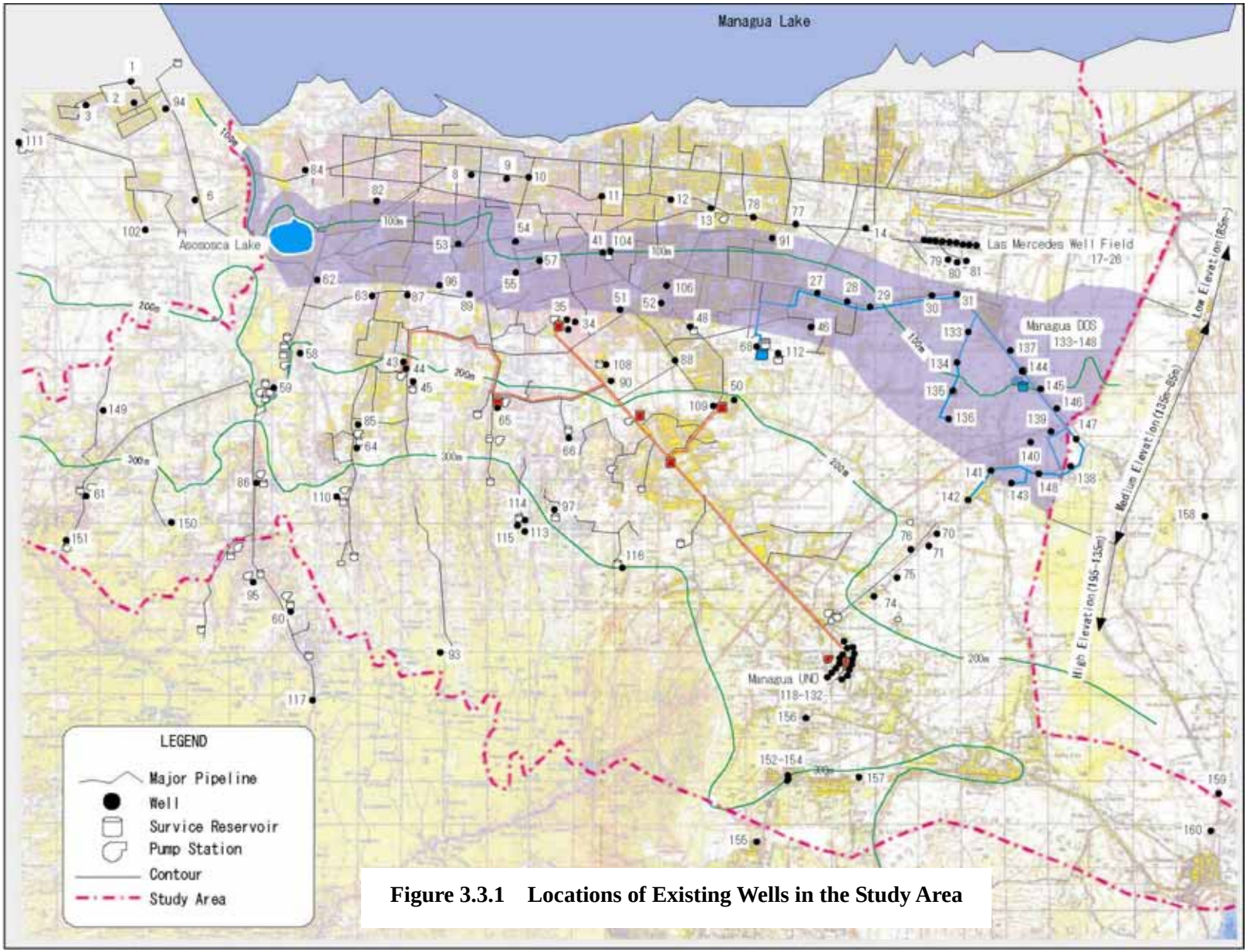


Figure 3.3.1 Locations of Existing Wells in the Study Area

(2) Production from Existing Wells and Asososca Lake

The amount of production from wells and Asososca Lake are shown on **Table 3.3.2** and **Figure 3.3.2.** The volume of production in 1993 was about 100.8 million m^3 (276,000m^3/day). The volume however, increased in 2003 to 145.6 million m^3 (398,800m^3/day), 44% more than that of 1993.

Table 3.3.2 Annual Production from Wells and Asososca Lake (1,000 M^3)

YEAR	ASOSOSCA LAKE	ALL WELLS	TOTAL
1990	25,910	67,851	93,761
1991	23,972	74,433	98,405
1992	14,878	85,774	100,651
1993	11,196	89,603	100,799
1994	9,370	90,153	99,523
1995	3,694	95,943	99,637
1996	5,437	95,466	100,904
1997	13,349	100,969	114,318
1998	11,278	108,915	120,194
1999	11,471	107,491	118,962
2000	17,907	88,699	106,605
2001	25,468	105,643	131,111
2002	19,684	115,038	134,722
2003	16,733	128,830	145,563

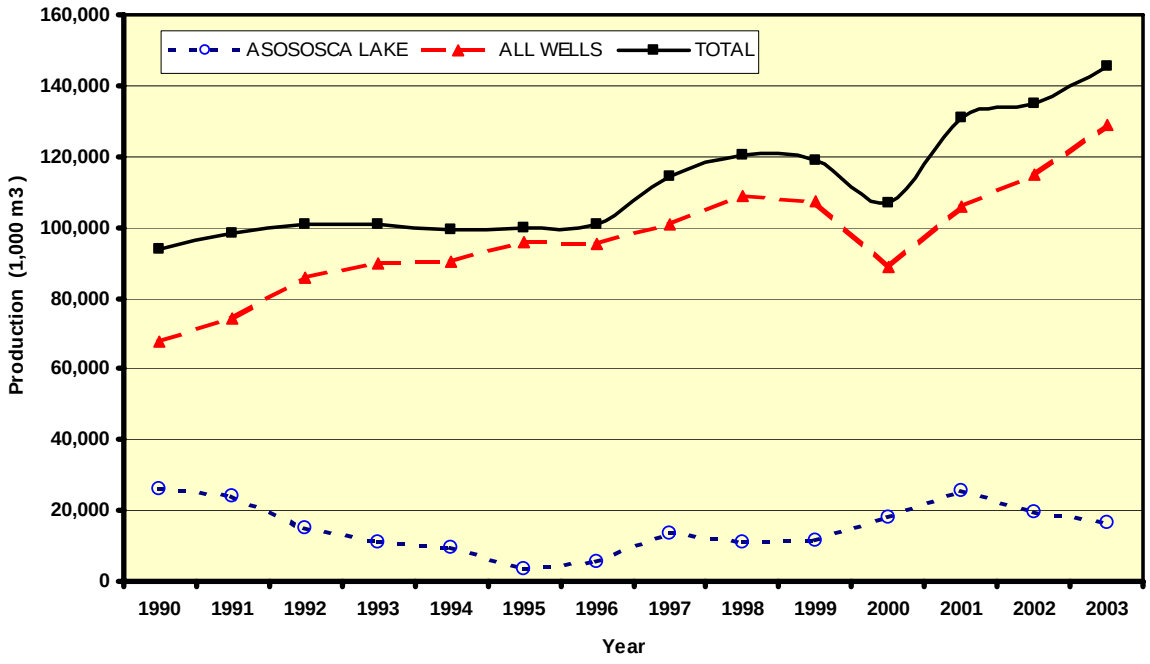


Figure 3.3.2 Annual Production (1990 to 2003)

(3) Correction of Extraction by Water Flow Measurement

ENACAL estimates the production volume from each well by two methods:

- Measurement with a flow meter (method A)
- Estimate with capacity of pumps and working hours (method B): this method is applied to wells that do not have a flow meter.

Both estimates generally lead to the same volume when the well is free discharge type, pumped to a take directly. However, in case the well discharges to a distribution line directly, the differences appears between A and B caused by distribution network pressure. **Table 3.3.3** shows comparison of method A and method B in wells with network discharge. **Annex 3D** shows each well for the comparison of both methods.

Basically, in case of a well with free discharge, the value by method B is similar to the value of method A. In case of a well with direct pumping to distribution network, the value of production calculated with method B is 8% more than that of method A.
The proportion of production volume of wells with discharge in the network is 60% of the total volume from wells. The total production of wells estimated by ENACAL, therefore, is calculated 5% in excess to the real production, as shown in **Table 3.3.4**.

Table 3.3.3 Estimated Excess Ratio of Extraction in Wells

No.	Well Name	Serial Number	Ratio B/A
77	VILLA FRATERNIDAD	1	1.08
41	SAN CRISTOBAL No.1	2	1.27
6	SATERITE ASOSOSCA No.3	3	0.99
1	SAN FRANCISCO J. No.1	4	0.90
2	SAN FRANCISCO J. No.2	5	1.26
3	SAN FRANCISCO J. No.3	6	1.09
94	SAN FRANCISCO J. No.4	7	1.09
106	NICARAO No.3	8	1.33
28	SABANA GRANDE No 2	9	1.01
30	SABANA GRANDE No 4	10	0.96
52	LA MASCOTA	11	1.04
57	PLAZA EL SOL	12	1.05
50	REPORTO SHICK No. 2	13	0.92
44	SAN JUDAS No.2	14	0.95
97	SAN ISIDRO DE LA CRUZ VERDE 2	15	1.11
115	ALPES No. 3	16	1.15
63	BERTA CALDERON	17	1.20
62	VELEZ PAIZ	18	1.06
Average			1.05

A: measured extraction by a flow meter
B: calculated extraction by ability of pump (temporary method)

Table 3.3.4 Estimated Excess Ratio

Method	Ratio of Extraction in Amount (%)	Ratio of Difference (%)
A	40	0
B	60	8
Average of Difference		5

Note: JICA Study Team estimation

(4) Precipitation

Precipitation of various areas in Managua is listed in **Annex 3E.** **Table 3.3.5** is the summarized list. As shown on the table, there is not much difference between the amounts of rainfalls of each area. In years of heavy rain the precipitation level is between 1,200mm to 1,700mm and in dry year it is between 500mm and 900 mm. Dry years comes almost every three years.

Table 3.3.5 Average of Annual Precipitation of Each Area

Year	OCCIDENTAL	CENTRAL	ORIENTAL
1993	1,319	1.299	1,186
1994	856	802	844
1995	1,314	1,126	1,180
1996	1,763	1,777	1,632
1997	757	760	899
1998	1,632	1,381	1,526
1999	1,353	1,159	1,178
2000	691	719	639
2001	488	500	576
2002	1,031	1,260	1,219

3.3.2 Evaluation of Wells According to the Types of Variation in Water Level

Data of extraction volume and water level are shown in **Annex 3C**.

(1) Type of Water Level Variation

The number of wells whose water level is monitored for more than 3 years is 76. In many of the 76 wells water level is lowering between 2000 and 2002. In order to determine if this phenomenon is the effect of aging of wells or the effect of volume of rainfall, a graph showing the relation between the extraction volume and dynamic water level was made and analyzed.

a) Present Condition of the Variations in Water Level

Figure 3.3.3(a) shows the sample of variation in dynamic water level. In the figure, the relation between the extraction volume and dynamic water level measured during the pumping test is also shown. As shown in the results of pumping test, within a certain range of extraction volume, dynamic water level lowers in proportion to the volume of extraction. Their relation is shown in a straight line. In 1998, the lower limit of the dynamic water level was approximately 140m when the extraction was $3.0m^3$/min. If the result of pumping test was taken into consideration, the depth is estimated as 143.5m when the extraction is $3.5m^3$/min. However, as the water depth of 2000 and 2001, which is 147m, shows, the water depth was lower than that of 1998. The fact that the tendency of dynamic water level of each year is different indicates the volume of rainfall of precedent years affects that dynamic water level. Based on these analyses, the tendency of variation in dynamic water level in the wells in Managua City can be divided into a few types as summarized in **Table 3.3.6**.

b) Annual Variation in Water Level Indicating Seasonal Changes

1998 data in **Figure 3.3.3(a)** shows that the water level was 131m on January 15. The level lowered to 137m on March 16, 142m on April 2 and 145m, which was the lowest level, on April 21 and restored to 136m-131m from May 5 to May 11. This phenomenon is considered to be reflecting the seasonal variation, in other words variation in the amount of rainfall, rather than caused by the variation in extraction volume. Therefore, the difference between the upper and lowest limit of dynamic water level of each year represents the variation in the amount of rainfall. In many wells annual variation in water level is large. However, there are 8 wells (Original No. of Wells 12,34,45,53,66, 87and 102) whose water level did not vary so much (the variation is less than 8m).

Figures 3.3.3 (a) to 3.3.3 (d) show four different cases. The four cases are:

(a) Analysis Example of water level variation caused by rainfall is observed

(b) Wells where water level variation is small and large extraction wells
(c) Large extraction wells in condition of small variation of water level caused by rainfall
(d) Small extraction wells

c) Wells Classified as Water Level Variation Type A and their Affection by Rainfall in the Precedent Two Years.

Characteristics of each well are formed by the quality of aquifers. And the water level of the wells is most strongly affected by the water level of the major aquifers. In the wells classified as variation type A, the effect of small rainfall in 2000 and 2001 emerged after approximately two years. It is assumed that wells categorized as Type A collect water from almost the same aquifers. As for Type B, variation in water level does not show clear relation with the precedent rainfall. This may indicate that in the case of Type B wells, quality of multiple aquifers is compounded.

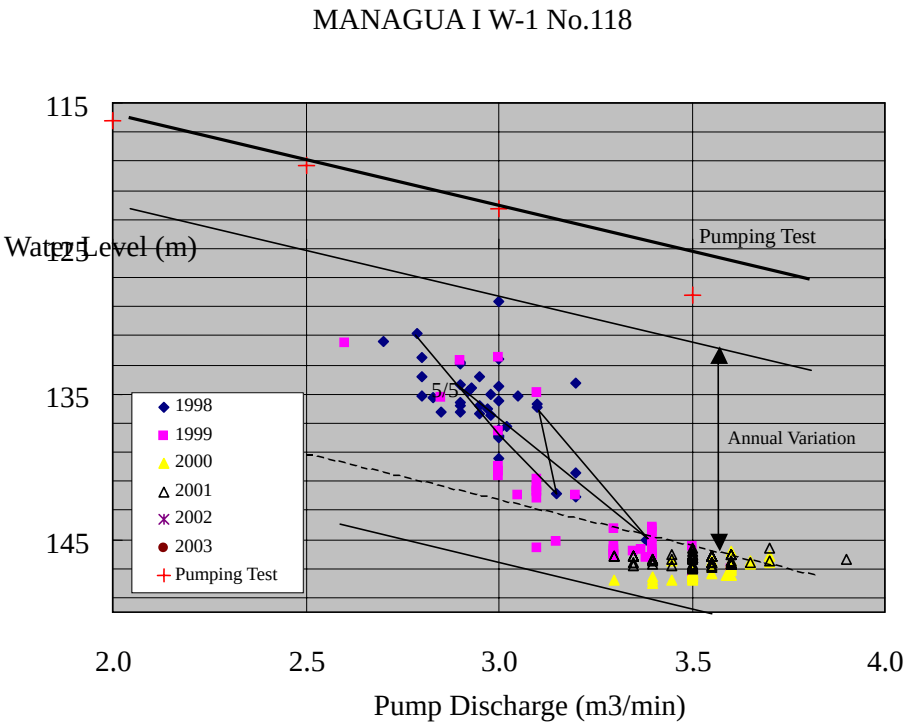


Figure 3.3.3 (a) Analysis Example of Water Level Variation Caused by Rainfall

Managua UNO W-6 No.123

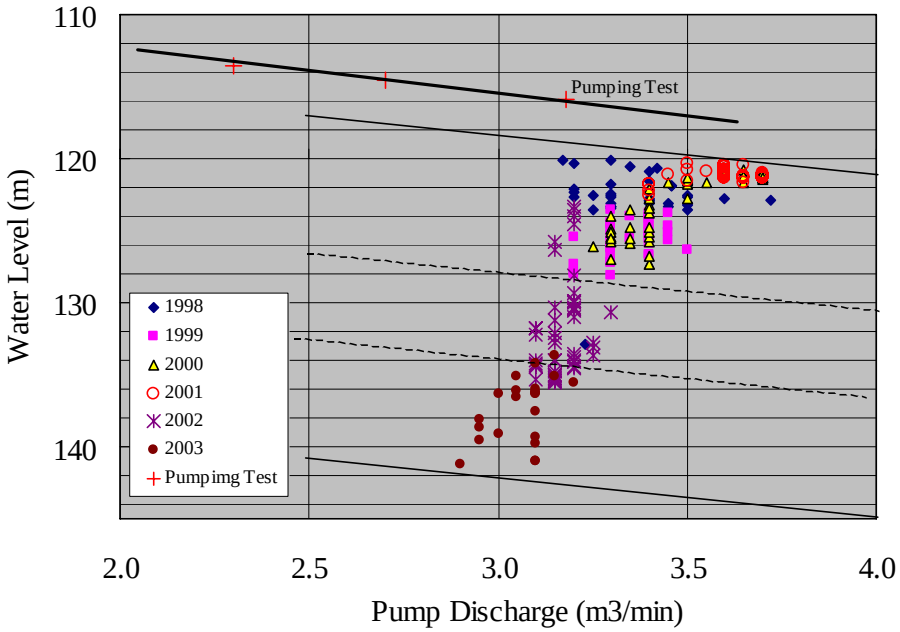


Figure 3.3.3 (b) Example of Large Water Level Variation Wells Caused by Rainfall

LAS BRISAS No.84

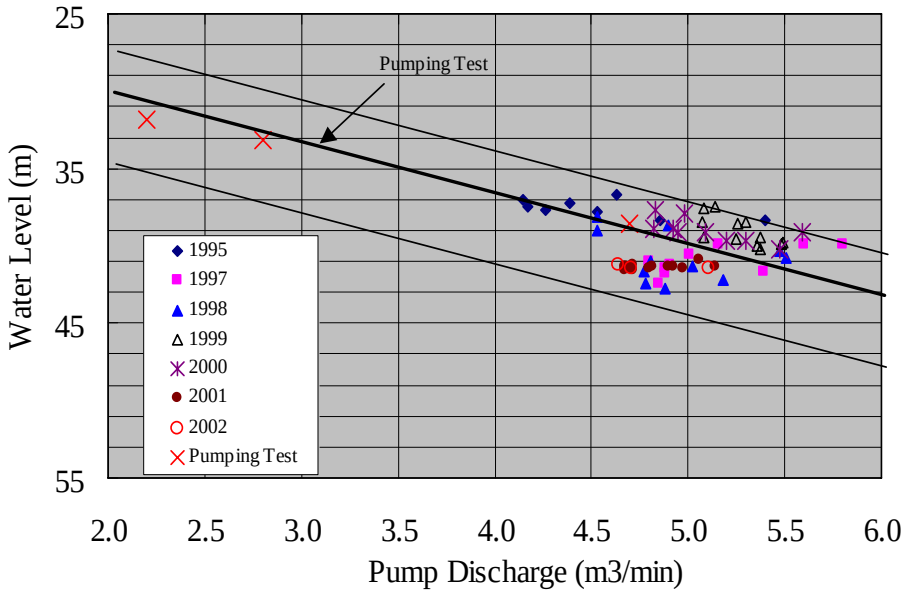


Figure 3.3.3 (c) Examples of Large Extraction and Small Water Level Variation Wells

VILLA AUSTRIA No.68

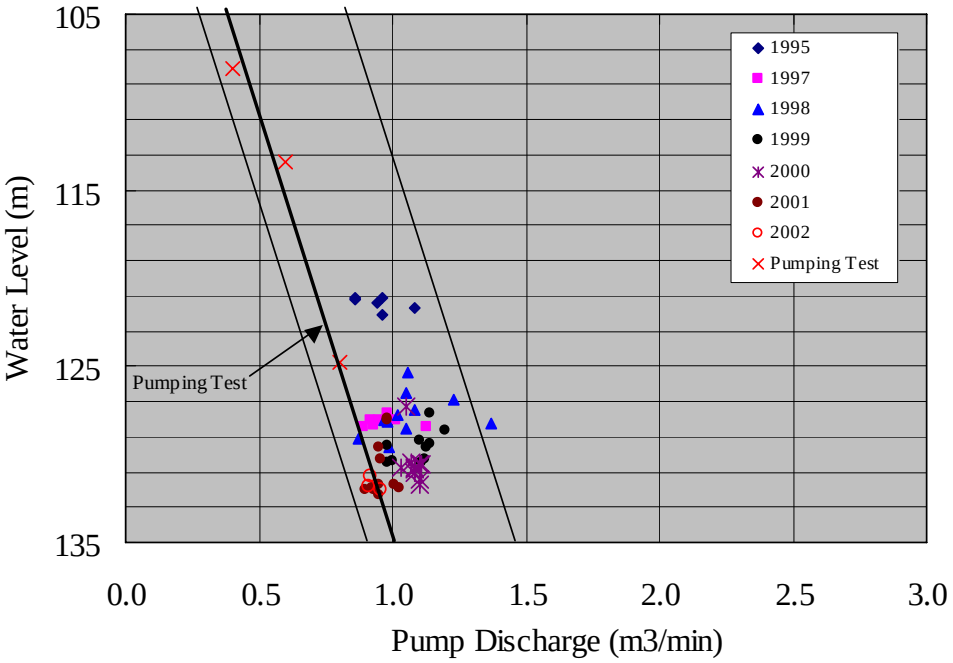


Figure 3.3.3 (d) Example of Small Extraction Wells

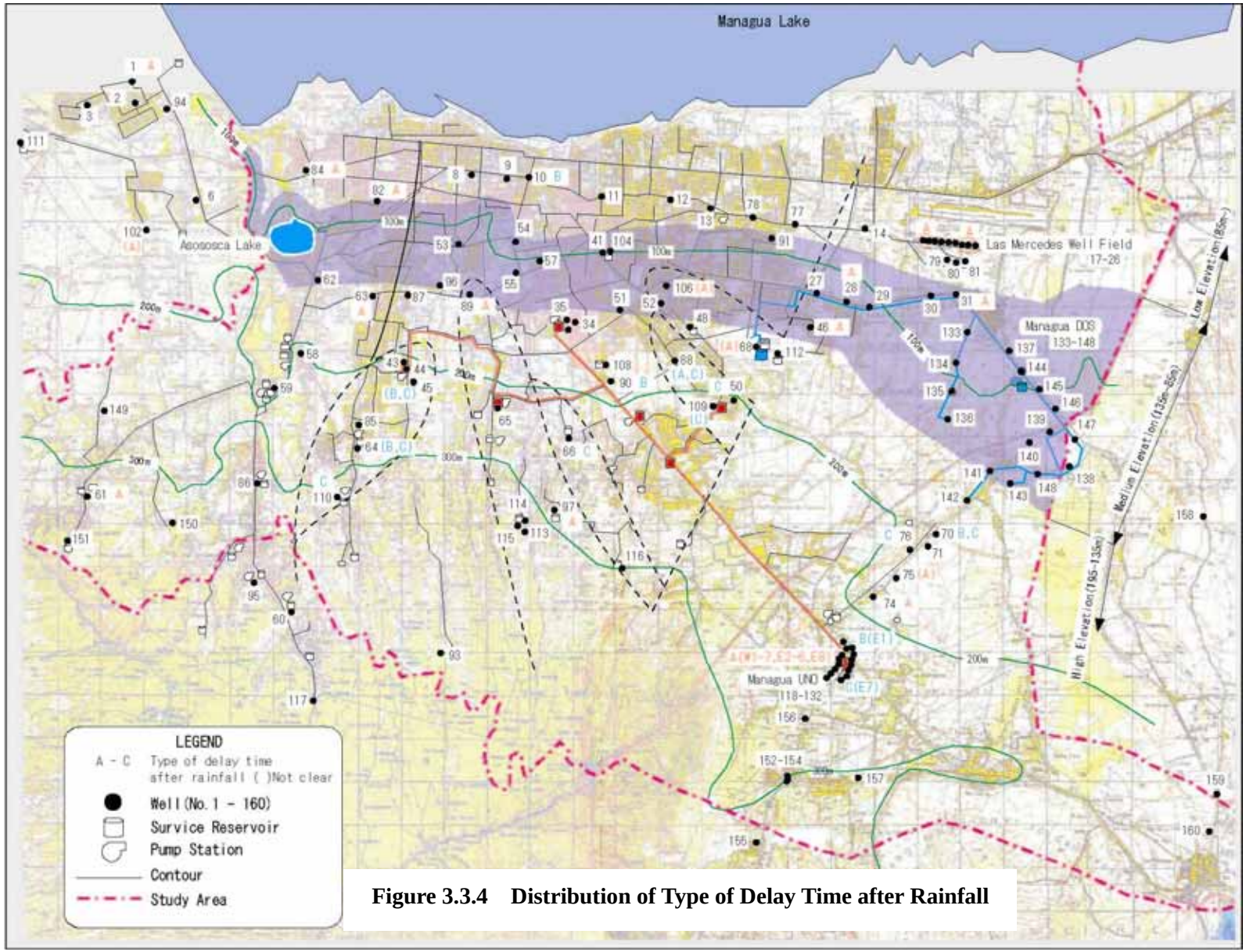


Figure 3.3.4 Distribution of Type of Delay Time after Rainfall

d) Effect of Hurricane on the Well Water Level Appearing after 5 Months to 2 Years

The time lag between rainfall and their effect on the ground water level was confirmed by the time of appearance of the effect of a hurricane, as observed in Asososca Lake. Although clear conclusion was not reached due to the absence of ground water level monitoring data, variation in dynamic water level of some wells show the effect of the hurricane of October 1998. According to the evidence, the increase in the ground water level (1-4m) caused by the hurricane appeared after 5 months to 2 years for both Type A and Type B wells.

The distribution of well categorized as Type A, B and C is as shown in **Figure 3.3.4**. In Oriental area, which includes Managua-Uno, Veracruz, Managua-Dos, Sabana Grande and Mercedes, and Occidental area, which include Asososca Lake and Carretera Sur, majority of the wells are Type A. In Central there are many Type B wells. Type A and Type C wells also exist in Central but their distribution is not clear.

Table 3.3.6 Type of Water Level Variation

Type	Variation of Water Level	Delay Time	Number of Wells	Evidence for Delay Time
A	Water level at 2001, 2002 year are lower	5 Months to 2 years	28	Variation of water level Increase of water level caused by Hurricane
B	Water level at only 1995 year are lower		12	Increase of water level caused by Hurricane
C	Variation of water level is not clear	-	27*	-

e) Importance of Ground Water Monitoring for the Management of Extraction

High accuracy analysis of the time required for the ground water recharge becomes possible by accumulating water level monitoring data as discussed in **Section 3.6**. If ground water recharge time becomes clear, suitable guideline for the management of extraction can be established and it becomes possible to carry out comprehensive maintenance including the evaluation of well conditions.

(2) Evaluation of Wells According to the Types of Water Level Variation

The result of analysis of overall variation in ground water level, in which the ground water recharge time is taken into consideration, leads to the conclusion that the evaluated wells are generally in good condition except for 23 wells for which no sufficient monitoring data were available. The result of the evaluation focused on the water level restored during the period of pumping stopped is summarized for major well groups as follows:

a) Managua Uno

Comparing with 1998, water level restored in 2002 or 2003 was lower by 1 - 3m. As for 2002 and 2003, water level was lower than other years when the pumps were working. Therefore, it is considered that the difference in the water level is caused by the change in the amount of rainfall. Conditions of the wells that are 5 years old are good and there is no problem in their sustainability.

b) Managua Dos

The difference between the initial water level of May 2001 and the level when the pump was stopped in September 2002 was less than 0.5m. Therefore, the wells in this group are

considered to be in good conditions.

(3) List of Wells Which Need Close Attention

Among the wells subject to this evaluation, those wells whose water level is significantly low and almost reaching the position of pump or to the bottom are listed on **Table 3.3.7**.

Table 3.3.7 List of wells which need attention

No.	Name of Wells	Serial No.	Extraction (m^3/day)	Dynamic Water Level (m)	Well Depth (m)
24	Mercedes No.8	20	2,004	80	74
48	14 De Septiembre	52	1,415	128	182
59	Km9.2 C.Sur	54	1,519	219	243
86	Km11.5 C.Sur	55	1,218	266	340
95	Km13.5 C.Sur	56	2,332	264	320
75	Veracruz No.5	63	2,816	76	94
108	Centroamerica No.4	65	1,378	144	199
43	San Judas No.1	69	2,066	203	259
64	Torres Molina No.1	73	2,093	254	308
97	S.I.D. La Cruz Verde No.2	81	1,330	254	289
65	Unan	87	1,899	176	198

Note：Extraction shows the volume in 2003 year

3.3.3 Evaluation of Water Quality

(1) Groundwater

Arsenic concentrations in Las Mercedes No.5 and Managua II No.15 is over CAPRE guidelines. The excessive withdrawal and lowering of water tables in Las Mercedes might have lead to the reduction of Fe/As oxyhydroxides, which could be the main cause of arsenic contamination in groundwater. Most common of the arsenic minerals is arsenopyrite, FeAsS, and arsenic is found to be associated with many types of mineral deposits, especially those including sulfide mineralization.

Arsenic in Managua II No.15 is probably derived from volcanic rocks because this well has high sulfate concentration and high temperature. Arsenic concentration in mixed water of Managua II well field was analyzed and it was found to be well under CAPRE guideline. Aluminum concentration in Managua I E3 is over the guideline. However, CAPRE guideline for Aluminum is established for color of drinking water and usage of Aluminum treatment, not for health perspectives.

Some wells in Zona Baja have been increasing in the concentration of Nitrates. This is probably because the past earthquake heavily damages wastewater pipelines. Nitrates concentration of Mercado Oriental (No.10) and Olof Palme (No.9) already exceeds the recommendation value of CAPRE guideline. Nitrates concentration in San Antonio (No.8) has doubled in ten years. The use of these wells needs to be discontinued in the near future.

(2) Asososca Lake

Water samples from Asososca Lake were taken from 2 places, pumped water and water after chlorination. The analytical results are summarized followed:

- One pesticide, Heptachlor, was detected. However, this concentration is less than the guideline. Concentrations of other parameters are under the guideline.

- Any BTEX, Trihalomethanes, and Chlorophenols are not detected. There is no possibility of contamination.

3.3.4 Evaluation of the Sustainability of Lake Asososca

(1) The Present Condition

Asososca Lake has a surface area of about 0.8 km^2, a maximum depth of about 100 m. Asososca Lake is in the west of the city, and its water quality is suited for drinking. Because of this, the lake is the first water source in Managua. Still now, the disinfected water of Asososca Lake is the one of the main water source in Managua city.

The data of extraction, water level and precipitation at Asososca Lake are shown in **Annex 3G**, **Annex 3H** and **Annex 3I**. **Figure 3.3.5** shows extraction and water level at Asososca Lake for about 30 years. Water level at Asososca Lake responds sensitively with extraction from the Lake. In a case of extraction of about 120,000m^3/day, the water level at the Lake is 34 meters. In a case of extraction of about 80,000m^3/day, the water level is 36 meters. In other case of extraction decreased to 30,000m^3/day, the water level is restored to 38 meters. After 1998 year water level at Asososca Lake has been high by the effect of Hurricane Mitch.

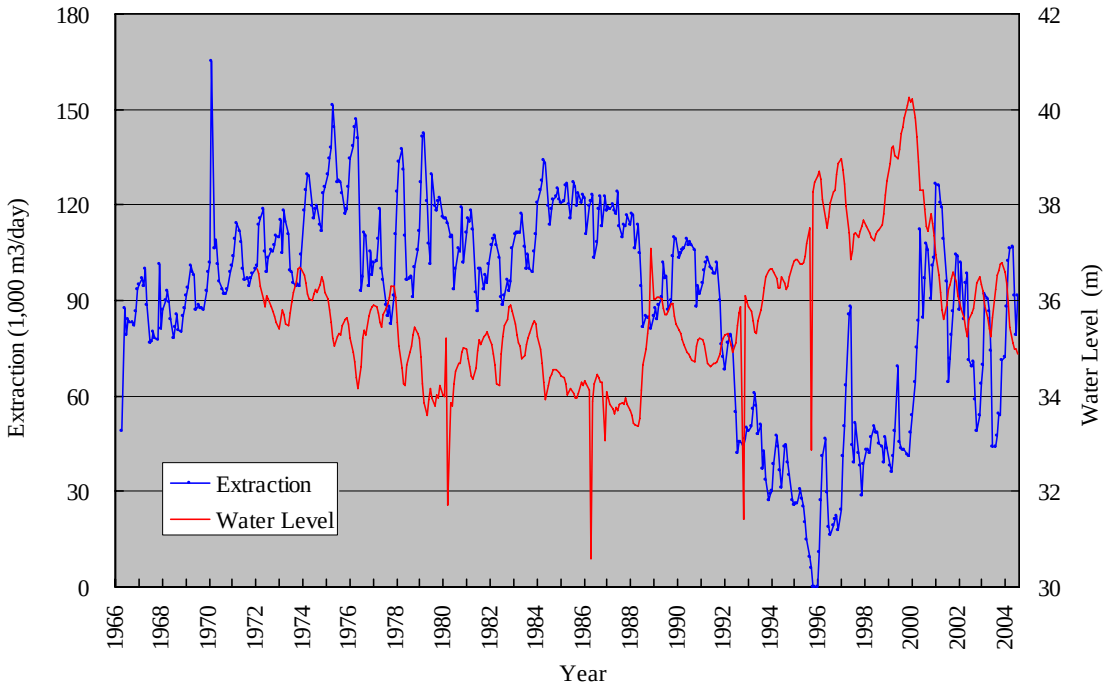


Figure 3.3.5 Extraction and Water Level at Asososca Lake

Water levels of Asososca Lake and Managua Lake from 1990 to 2004 are shown in **Figure 3.3.6**. In 2004, the water level of Asososca Lake is about 5.5 m lower than its peak level in 2000 year and, as a result, it is 3 m lower than that of Managua Lake, 2 km distant. The amount of precipitation in the drainage basin and the rate of extraction from the lake largely control the water level of Asososca Lake.

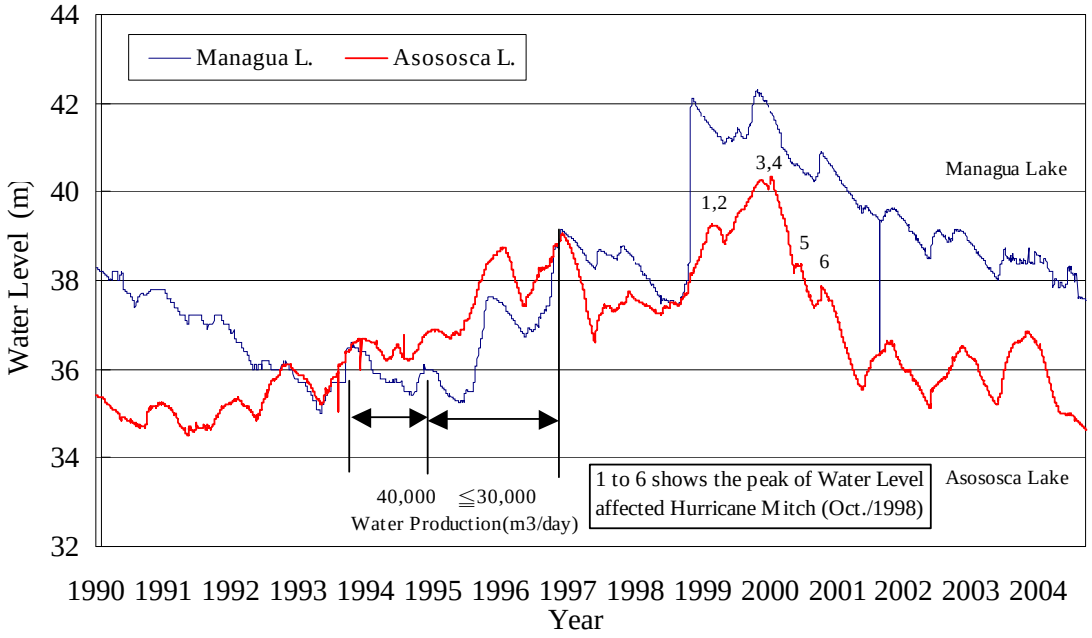


Figure 3.3.6 Water Levels of Asososca Lake and Managua Lake

(2) The Effect in the Water Level by Hurricane Mitch

As can be seen in **Figure 3.3.6**, Hurricane Mitch (1998) gave a significant impact on the water level of Managua Lake. The water level of the lake rose about 4.5m by Hurricane and it took 6 years to decrease to its normal water level. However, it took only 2 years in the case of Asososca Lake. Most probably, the large volume of extraction from Asososca Lake during the period caused this difference from 2000 to 2001. Extraction volume during that period was approximately double of 1998.

At Asososca Lake, after the October 1998 Hurricane, the elevation of lake surface shows several peaks as shown on **Table 3.3.6**. And major water level rise caused by the hurricane is observed continuously between four months and one year and three months after the hurricane (1,2 and 3,4 in **Table 3.3.8**). Ground water flows into the lake from many aquifers. The example of Hurricane Mitch (October 1998) indicates that it takes 4 months to approximately one year and three months before the rainwater infiltrates into each aquifer to become ground water and then affects the water level of the lake.

Table 3.3.8 Variation of the Lake Surface Affected by Hurricane Mitch at Asososca Lake

No.			1	2	3	4	5	6
Date	1998 Sep.	1998 Oct.	1999 2/20～26	1999 3/15～20	1999 11/12	2000 1/6	2000 5/20	2000 10/9
Level(m)	37.60	Hurricane	39.26	39.25	40.27	40.36	38.36	37.87
Delay Time	—	0	4 Months	5 Months	about 1 Year	1 Year 3 Months	1 Year 7 Months	about 2Year

Figure 3.3.7 shows the relation between extraction and water level at Asososca Lake for 1972 to 2004 years too. In **Figure 3.3.7** water level at the lake shows large variation of 5 meters in same extraction because the precipitation is not considered. In the 1970's to the early 1990's extraction from the lake is above 80,000m^3/day, after that period extraction is below 50,000m^3/day, and in the last years extraction increase again.

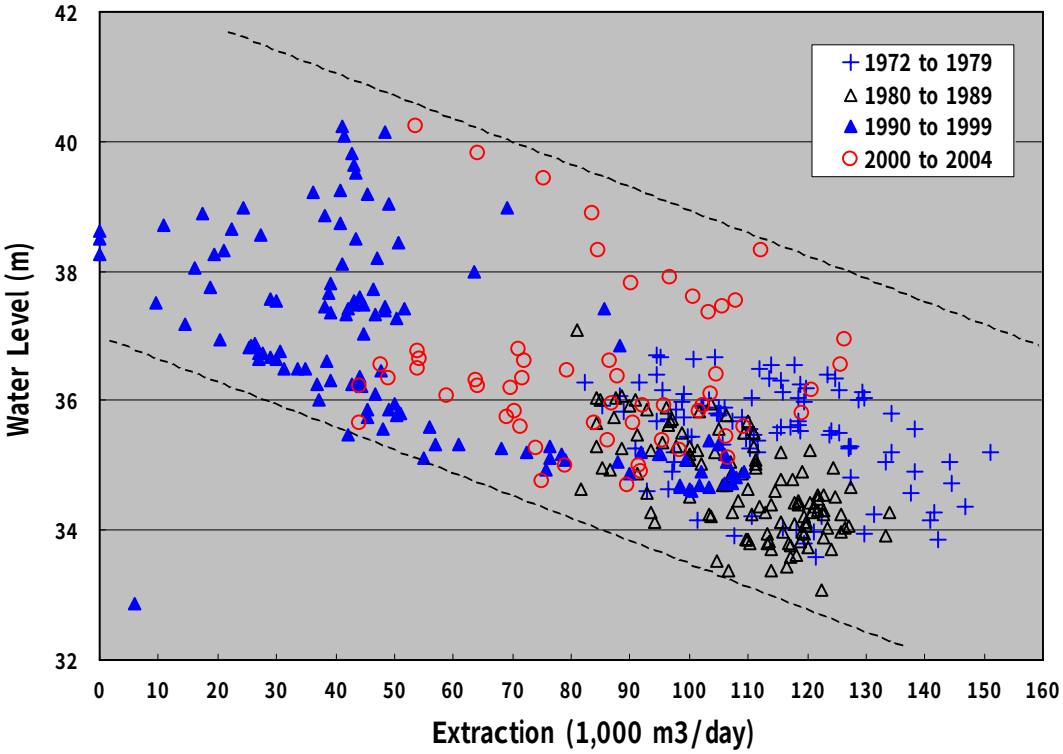


Figure 3.3.7 Relation between Extraction and Water Level in Asososca Lake

(3) Investigation on Optimum Extraction from Asososca Lake

In **Figure 3.3.8** the relation of extraction and water level of each year, each month in the period 1990 to 2004. The result considered how rainfall and extraction affect water level in the period are as follow.

a) The Optimum Extraction

The results of this investigation were as follows:

- In the dry season in each year (December, January to April; hereinafter called "high water season") water level at the lake is high, in the season of large rainfall (June to October; hereinafter called "low water season") water level is lower.
- The solid line (hereinafter called "standard line") in **Figure 3.3.8** shows the relation between extraction and water level at the lake in the condition that precipitation and inflow of groundwater in the lake is constant. The gradient of standard line is based on area of Asososca Lake (about 0.8 km2).
  And the water level in the high water season can be shown as a parallel break line to standard line for two to three months of constant amount of inflow. Then, the water level in low water season also can be concluded as the same result.
- The water level in high water season and in low water season each year varies 1.0 to 2.0 meters. It appeared to be that the variation of Water level shows difference of precipitation.
- Because groundwater from many aquifers flow into the Lake, water level in the Asososca Lake relate to precipitation before few months to a year and few months. It is concluded that mainly 5 months to 9 months are required before rainwater infiltrate into each aquifer and ground water flow into the lake. In this study, 7 months is

considered as delay time for evaluation on extraction from the lake.

- The difference between water level at the lake in low water season of a certain year and in next year is determined by the amount of precipitation and extraction of one year during low water season to next low water season. In the case that extraction from the lake is more than inflow water level in low water season of next year is lower than the previous year. To the contrary in the case that extraction is less than inflow water level in low water season of next year is higher than in the same season of last year.

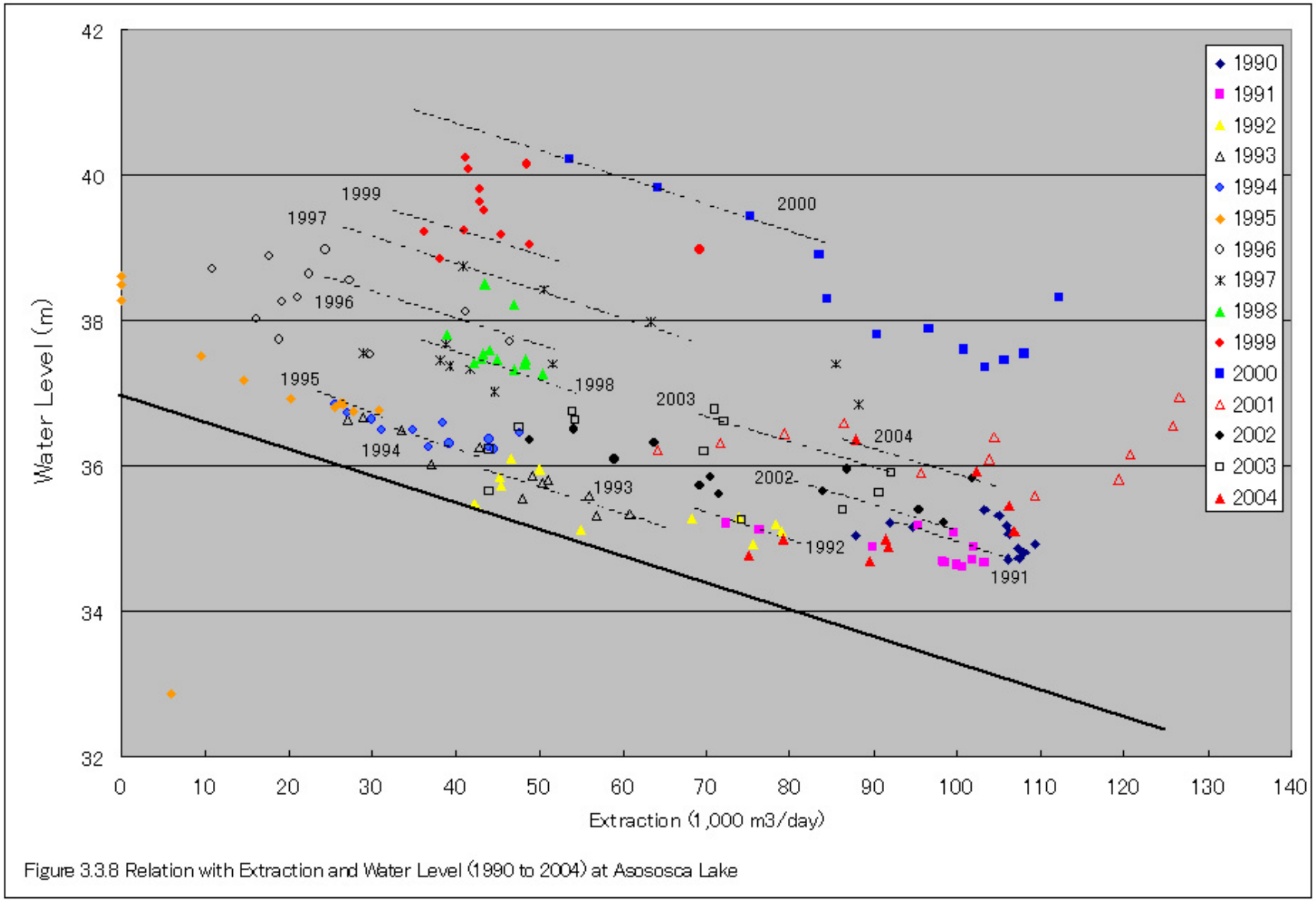


Figure 3.3.8 Relation with Extraction and Water Level (1990 to 2004) at Asososca Lake

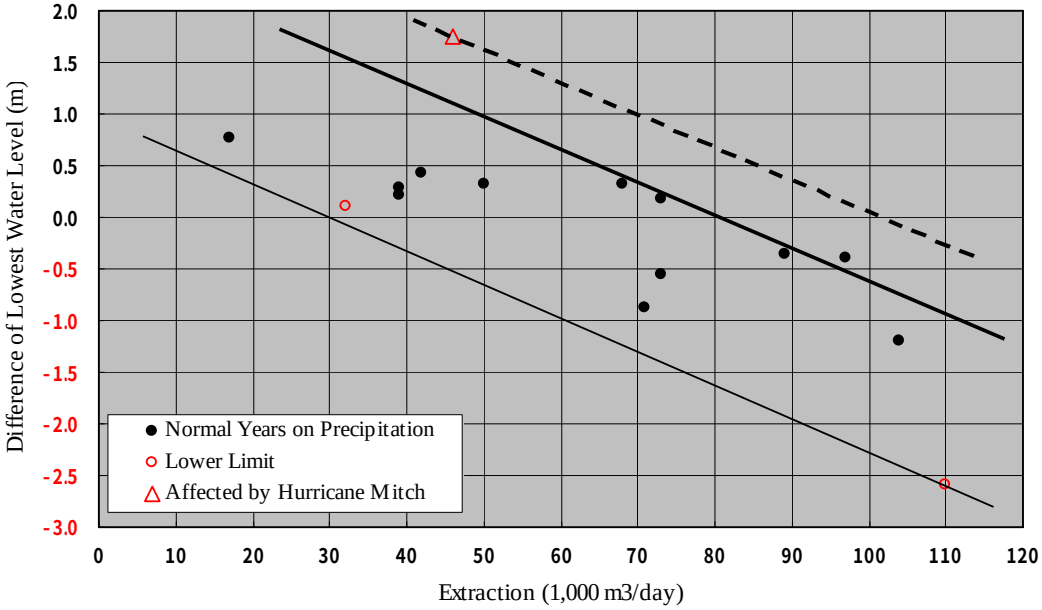


Figure 3.3.9 Lower Limit of Discharge

- **Figure 3.3.9** shows the relation with annual extraction and a difference of water level in low water season for two years running. According to **Figure 3.3.9** it is concluded that the optimum extraction that water level does not vary in the lake is from 35,000m^3/day to 80,000m^3/day. The optimum extraction is in connection largely with precipitation, extraction (35,000m^3/day) in 1995 year that is affected by precipitation of 1994 year (annual precipitation; 550mm) is taken as critical extraction value.
- Considering extremely drought year and balance of water level between Asososca Lake and Managua Lake shown in **Figure 3.3.6**, it is considered that the optimum extraction at Asososca Lake is 30,000m^3/day.

b) Rising Amount of The Water Level from Low Water Season to High Water Season

The water level in low water season increase mainly by rainfall of May to October and it reach to the water level in high water season. **Figure 3.3.10** shows the relation between the increase of water level and the precipitation of the period. The data of precipitation at Asososca Lake is used in **Figure 3.3.10**, due to absence of precipitation data in upper stream areas of the lake. In addition, because the data of precipitation is not sufficient at the lake, the relation with the increase of water level and precipitation cannot be briefly analyzed. Therefore only upper limit and lower limit is shown in **Figure 3.3.10**. Using this chart water level in the next high water season is able to forecast for controlling the discharge from Asososca Lake.

Table 3.3.9 Upper Limit and Lower Limit of Increase of Water Level

Precipitation (May to September)		600mm	1,000mm
Increase of water level	Upper limit	0.75m	1.45m
	Lower limit	0.30m	0.55m

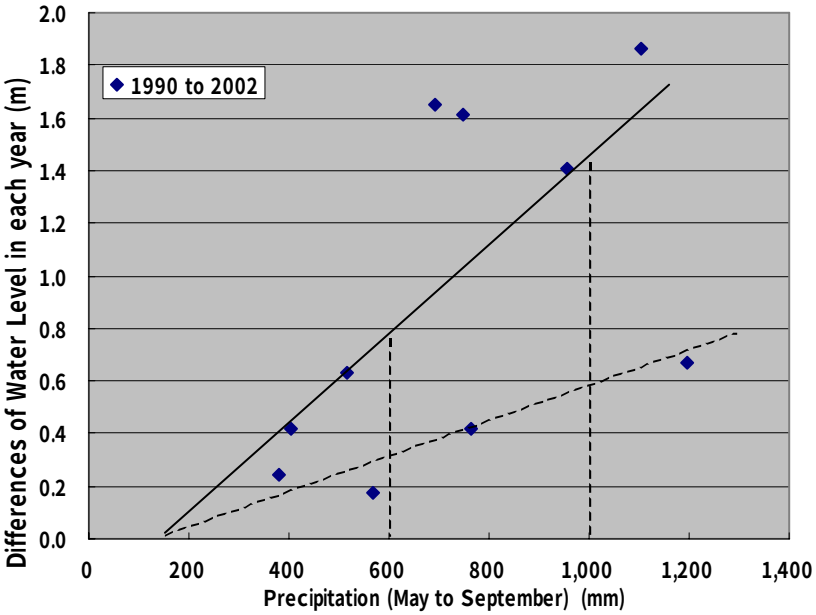


Figure 3.3.10 Differences between Low Water Level and High Water Level (m)

c) Guideline for Management of Extraction at Asososca Lake

- On the next year of drought year, it is recommended that the extraction is 30,000m^3/day.
- Because the water level at the lake is usually higher in dry season that demand of water increase, it is suitable that extraction in dry season is more than in low water season. However average of annual extraction is fixed to 30,000m^3/day in principle.
- As described before the extraction (30,000m^3/day) is lower limit, increasing extraction is allowed in consideration of precipitation in last year. However upper limit of annual extraction is fixed 80,000m^3/day without extraordinary weather.
- For decide the extraction in high water season (for example 2006 year), by using the chart (**Figure 3.3.10**) in considered to precipitation in low water season (May to September) of preceding year (2005 year) the increase of water level to high water season is estimated.
- A line on a parallel to the standard line at this forecasted increase is plotted in the chart (**Figure 3.3.8**) indicate the relation with extraction and water level at the lake at next high water season.
- Decision of the extraction must be made in consideration of ground water level in industrial zone around Asososca Lake and moreover water levels at the lake remain above in industrial zone. As described before, lowering of the water level at Asososca Lake increases the risk of intrusion of contaminated groundwater into the lake from the industrial zone to Asososca Lake.
- The charts **Figure 3.3.9**, **Figure 3.3.10** are provisional therefore it is essential that the charts are improved based on each data obtained; precipitation, extraction, water level.

(4) Problems to be Tackled

It is very important to obtain the latest data and information of ground water level around Asososca Lake.

3.3.5 Evaluation of Wells Based on the Corrosion of Casings and Screens

Considering some previous studies on corrosion of pumps, the examination was conducted in the four wells shown in **Table 3.3.10** for confirming the advance of corrosion for water quality. Wells that don't work now and will be scheduled to work after the test were selected, because at working well there is the pump in the borehole and test pieces are not able to be installed.

Table 3.3.10 Examination Sites and Measurement Schedule

No.	Examination site	Depth of Test	Setting	Measurement		
1	MANAGUA I E-4	147m to153m	8/Oct. /2004	Dec. 2004 (2 months later)	Mar.2005 (5 months later)	Jun.2005 (8 months later)
2	MANAGUA I JICA No.1	145m to 151m				
3	MANAGUA II P-6	60m to 66m				
4	MANAGUA II P-16	78m to 84m				

Two pieces of each of the three types of metal testing plate were placed in one PVC pipe (2 inch diameter and 60cm length) and suspended at the certain depth in the 4 wells(**photo 3.3.2**). The approximate size of each piece is 2cm x 6cm x 1cm (**Photo 3.3.1**). They were hung by nylon strings in a way that they do not touch each other. Three PCV pipes with testing plates were set at a 3m interval of depth in one well.

Three sets (each consisting of a PVC pipe with six plates) were placed under water level of each well on October 8. The each first set in the 4 wills were removed after 2 month on December 2004, the second set will be taken out at 5 month after, on March 2005, and the remaining set will be placed for a long term. All test pieces are weighted before their installation in the test wells.

Photo 3.3.1 Setting of test pieces (Oct./2004)

Photo 3.3.2 Measurement unit (PVC pipe) (Oct./2004)

This time, test pieces of first sets were recovered after two months and the surface was cleaned by ACETON to remove corroded parts. After this cleaning, the weight was measured. The comparison of original weight and weight measured after two months are listed on **Table 3.3.11**. While some corrosion or oxidation were observed on the surface of iron and cast iron test pieces, the change of the same degree was not observed on stainless steel pieces. (**Photo 3.3.3(a)-(d)**)

Photo 3.3.3(a) JICA No.1(Dec./2004)

Photo 3.3.3(b) E-4(Dec./2004)

Photo 3.3.3(c) P-6 (Dec./2004)

Photo 3.3.3(d) P-16 (Dec./2004)

Among iron and cast iron test pieces, black significant corrosion was found on the surface of the piece from P-6 well. Test pieces from JICA-1 and E-1 show some degree of oxidation. Almost no change was observed on test pieces of P-16.

The results of measurement shows similar trend found in visual observation. In E-4, less oxidation was found in Cast Iron pieces than in E-4. In other wells, no difference was observed between two types of iron. The followings are the summary of the observation.

(1) In ordinary ground water, corrosion or oxidation rarely happens
(2) Oxidation tends to occur in the water of Well E-4 and JICA-1 of Managua Uno group
(3) Temperature of water of Managua Dos P-6 was high compared to other wells in the same area. This water causes severe corrosion.
(4) Stainless steel resists corrosion and oxidation regardless of the type of water in this region.

These are the result of the two months test. If the corrosion and oxidation testing is continued for a long period, the results become clearer. Therefore, use of stainless steel pumps in Managua Uno is effective for the prevention of the corrosion and oxidation problem and for Managua Dos, use of stainless pumps or pumps with material resistant to high temperature must be used for wells with high temperature.

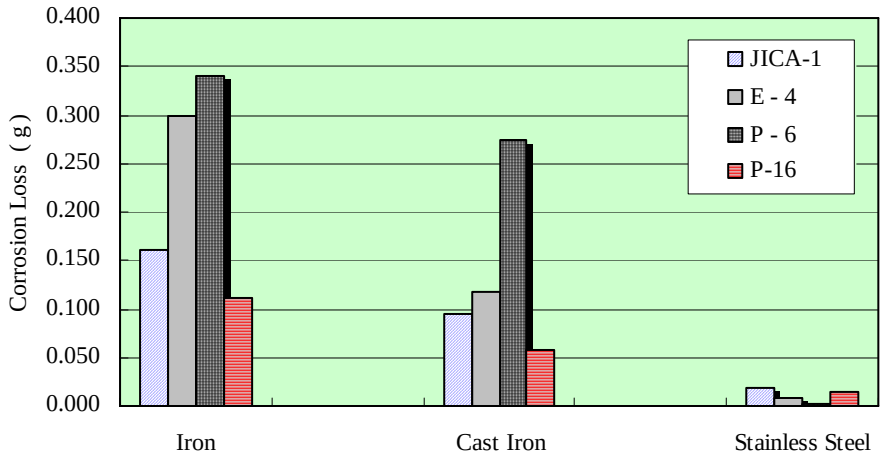


Figure 3.3.11 Results of Corrosion Tests

Table 3.3.11 Results of Corrosion Tests (2 months) (Unit: g)

Site	Kind of Steel	No. of Piece	Initial Weight (a)	Weight after 2 months (b)	Corrosion Loss (b – a)
MANAGUA UNO JICA No.1	Iron	1	57.422	57.252	0.170
		2	57.121	56.970	0.151
	Cast Iron	1	51.060	50.968	0.092
		2	45.472	45.373	0.099
	Stainless Steel	1	41.002	40.985	0.017
		2	41.020	41.000	0.020
MANAGUA UNO E - 4	Iron	9	55.504	55.202	0.302
		10	58.183	57.888	0.295
	Cast Iron	9	55.533	55.414	0.119
		10	63.087	62.970	0.117
	Stainless Steel	9	40.723	40.714	0.009
		10	39.899	39.890	0.009
MANAGUA DOS P - 6	Iron	13	66.489	66.182	0.307
		14	69.041	68.668	0.373
	Cast Iron	13	42.901	42.661	0.240
		14	49.500	49.193	0.307
	Stainless Steel	13	35.687	35.684	0.003
		14	39.306	39.303	0.003
MANAGUA DOS P - 16	Iron	19	54.597	54.491	0.106
		20	55.219	55.104	0.115
	Cast Iron	19	48.080	48.029	0.051
		20	50.834	50.768	0.066
	Stainless Steel	19	42.712	42.697	0.015
		20	39.612	39.597	0.015

3.4 FUTURE CAPABILITY OF EXISTING WATER SOURCES

Table 3.4.1 shows the supply of water of 116 wells managed by ENACAL in the study area. As discussed in section 3.3 there is no significant problem on the sustainability of existing water sources, therefore, the average of the supply of the last four years (2000-2004) will be used as the potential supply capacity. Water level of wells in Managua City varies largely by the amount of rain. Their extraction capacity depends on the amount of rainfalls of last one to two years. The precipitation which becomes ground water for the year 2000 to 2004 was of the year 1999 – 2002. Of the four years from 1999 to 2002, two years had average rainfall while the remaining two years were relatively dry. This may indicate that the rainfall of the four years from 1999 to 2002 can be regarded as average volume.

Table 3.4.1 Future Supply Capability (m^3/day)

No.	Wells Field	Actual Production (m^3/day)	Planned Production (m^3/day)	Comments
1	Asososca Lake	45,800	30,000	
2	Managua Uno	45,667	71,000	15 wells
3	Managua Dos	53,603	56,000	16 wells
4	Zona Baja	92,802	85,817	20 wells excluding 5 wells w/quality problems
5	Zona Alta	56,532	40,770	14 wells excluding 6 wells w/quality problems
6	Zona Alta Superior	67,778	76.128	Exclude wells No60, 95 and 117 out of Study Area demand (35wells)
7	Ticuantepe&Nindiri	6,966	6,634	4 wells
8	In Equipment, new wells	7,767	7.397	3 wells in San Judas area
7	Sub total（1 to7）	371,846	373,747	107 wells + Asosca
8	Relocated Wells	0	29,200	12 wells (3 wells in Sierra Maestra, 2 wells in Esquipulas, 5 wells in Las Jaguitas, 1 well in Nindiri and 1 well in Ticuantepe)
9	TOTAL		402,947	

Note: For Actual Production volume see **Annex 3L**.

It is assumed that the production capacity of those wells that are currently producing less than 3,000m^3/day would be able to increase its production by 25% after the replacement of their well pumps.

3.5 REHABILITATION AND RENEWAL PLANS OF EXISTING WELLS

3.5.1 Basic Policies for Rehabilitation and Renewal

- Water productions of Managua I and II are restored to the originally designed level.
- Water productions of other existing wells are restored to original production level or are maintained at the current production level.
- To keep current water supply in Managua city, important well fields shown below are given special priority for rehabilitation.
  - Las Mercedes Well Fields

- Veracruz Well Fields
- Sabana Grande Well Fields

- Serviceable life for pump equipments generally is 15 years. However, a renewal plan for well equipments will be made under the condition that an average service life for existing pumps is 20 years and system for operation and management will be established in future.
- To keep pumping efficiently, well cleanings should be done while pumps are renewed.
- A renewal plan for wells should be made under the condition that life span of wells is 30 years. However, well renewing can be accelerated a few years ahead of the schedule when the renewal period of well is drawing on.
- Detail design of pumps, well cleanse and rehabilitation of wells such as chemical cleaning are also considered when basic and detail designs for wells are planned. Renewal plan for wells in this study should be reconsidered in each phase of detail design and implementation because Bore Hole Camera is needed to assess whether the well is stopped or renewed.
- **Annex 3M** includes following documents;
  - Current situations and Rehabilitation plans for Managua I and II Well Fields
  - Rehabilitation plans for Zona Baja, Zona Alta, and Zona Alta Superior
  - Comprehensive Rehabilitation plan

3.5.2 Relocation of Wells

To compensate the decrease of water supplied from Asososca Lake and the eleven wells excluded from the calculation of the future supply capability. The proposed relocation are three wells in SAN JUDAS area , two wells in TICUANTEPE area, 2 wells in EAQUIPULAS area and 5 wells in LAS JAGUITAS area. The estimated characteristic of these twelve proposed wells, were estimated considering existing wells in respective areas, this estimation are shown in **Table 3.5.1**.

Table 3.5.1 Specifications of Replacing wells and Their Estimated Volume of Production

Area	Block/ No.	Ground Level(m)	Depth of Wells (m)	Ground Water Level (Depth: m)	Maxim Volume of Production (m^3/day)
SANJUDAS/ SIERRA MAESTRA	SJ-1	200 to 280	250 to 400	140 to 220	2,500 to 3,500
	SJ-2	200 to 280	250 to 400	140 to 220	2,500 to 3,500
	SJ-3	200 to 280	250 to 400	140 to 220	2,500 to 3,500
TICUANTEPE/ NINDIRI	T-1	200 to 320	350 to 400	200 to 250	2,000 to 2,600
	T-2	200 to 320	350 to 400	200 to 250	2,000 to 2,600
ESQUIPULAS	E-1	240 to 260	200 to 400	120 to 140	2,500 to 3,000
	E-2	240 to 260	200 to 400	120 to 140	2,500 to 3,000
LAS JAGUITAS	LJ-1	180 to 230	200 to 400	80 to 120	2,500 to 3,000
	LJ-2	180 to 230	200 to 400	80 to 120	2,500 to 3,000
	LJ-3	180 to 230	200 to 400	80 to 120	2,500 to 3,000
	LJ-4	180 to 230	200 to 400	80 to 120	2,500 to 3,000
	LJ-5	180 to 230	200 to 400	80 to 120	2,500 to 3,000

Approximate locations of the relocation wells are shown in **Figure 3.5.1**. It is necessary to determine the most suitable location of the wells by electric prospecting and also drilling test wells to confirm the well capacity by pumping tests and electrical logging conducting extraction tests. Further, distance from other existing wells operated by private sectors in the region should be paid proper attention. Further, distance from other existing wells operated by private sectors in the region should be paid proper attention.

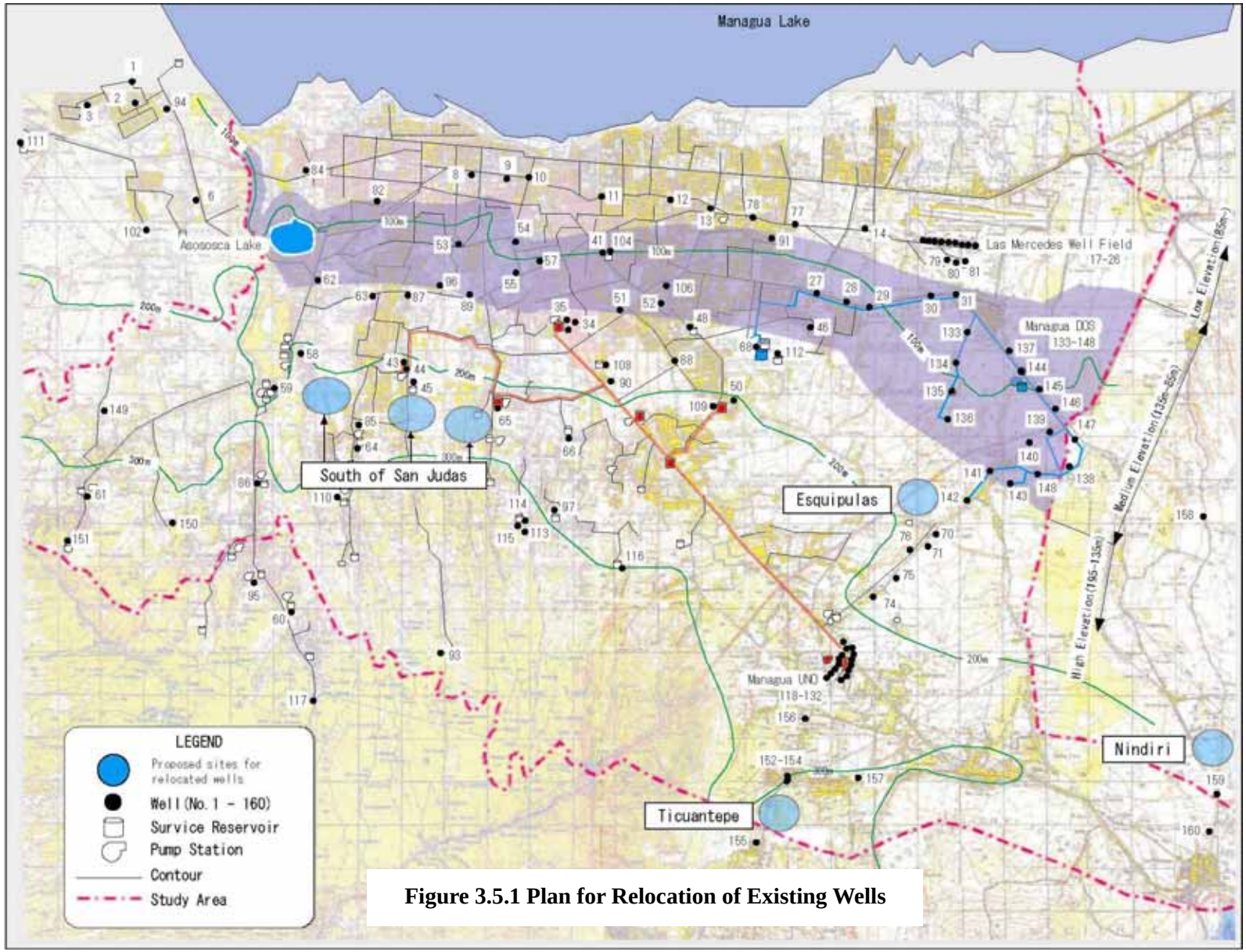


Figure 3.5.1 Plan for Relocation of Existing Wells

3.5.3 Rehabilitation and Renewal Plans of Existing Wells

(1) Replacement of Pumps

Pumps now being used in existing wells are divided into four groups according to the length of their use. **Table 3.5.2** shows the result of the classification. Most of the pumps listed are not operating at their maximum performance due to aging. Pumps are removed, received some corrective maintenance at the ENACAL workshop and then re-installed at the rate of a few pumps per year. This corrective maintenance work contributes to prevent significant pump troubles to some extent. But corrective repair and maintenance work have limited effect on the aging of machines and facilities. Therefore, level of emergency of pump replacement was classified into five categories according to the length of their use. Water resources needed urgently by demand needs, as Managua Uno and Managua Dos wells fields pumps and emergency diagnosis effected by ENACAL were classified Urgent. Other pumps were classified by expected machine life. Proposed time of replacement is also shown in **Table 3.5.2**. It will be appropriate to undertake replacement according to the proposed schedule.

Table 3.5.2 Classification of pumps based on the year of use and urgency of replacement

Urgency	High	Medium	Low	Others	Total
Number of Pumps	18	22	28	39	107

(2) Rehabilitation of wells

It is common that wells being used for long time have problems of the clogging of screen and filter, which eventually results in the drop in extraction. In general, wells need to be cleaned every 10 to 20 years and if is necessary development of wells. Clogged screen and filter are cleaned to improve permeability. Cleaning is effective for the sustainable use of wells. But if the cleaning cannot solve the decrease in the extraction, more fundamental counter measures such as well renewal needs to be considered. Effective life of wells is 30 years and they need renewals

Table 3.5.3 Schedule of well renewals

Urgency	High	Medium	Low	Total
Number of Wells	2	10	6	18

(3) Detail Study for Rehabilitation Plan of Managua I and Managua II Well Fields

1) Situation of Managua I wells

As of February 2005, situation of the installed equipment is as shown in **Table 3.5.4**

Table 3.5.4 Situation of Managua I Wells as of Feb 1, 2005

Well No.	Motor Currently Installed	Pump Currently Installed	Condition of Equipment	Evaluation of Equipment & Well
E1	Hitachi	Goulds	Motor/Pump bought in 2004	Good
E2	Hitachi	Goulds	Motor/Pump bought in 2004	Good
E3	Hitachi	Goulds	Motor/Pump bought in 2004	Good
E4	No Motor	No Pump		New Motor/Pump needed
E5	Hitachi	Grundfos	Motor/Pump refurbished	Good
E6	Hitachi	Goulds	Motor/Pump bought in 2004	Good
E7	Hitachi	Goulds	New Pump donated by Goulds in Nov. 2001, Using old motor.	Good
W1	Hitachi	Goulds	Motor/Pump bought in 2004	Good
W2	Hitachi	Goulds	Motor/Pump bought in 2004	Good
W3	EBARA	Grundfos	Motor/Pump refurbished	New Motor/Pump needed
W4	Hitachi	Goulds	Motor/Pump bought in 2004	Good
W5	Hitachi	Goulds	Motor/Pump bought in 2004	Good
W6	EBARA	EBARA	Motor/Pump refurbished	New Motor/Pump needed
W7	Hitachi	Grundfos	Motor/Pump refurbished	New well is required
W8	Hitachi	Grundfos	Motor/Pump refurbished	New Motor/Pump needed

i) Wells No. E-4
Well E-4 does not have pumping equipment; significant change of dynamic water level did not observe with design pumping rate. Detailed design must confirm this analysis. Test piece evaluation for the selection of pump material is important.

ii) Wells W-3, W-6 and W-8
Pump and motor are provisionally reconstructed and dynamic water level looks stable. Detailed design must confirm this analysis. Test piece evaluation for the selection of pump material is important.

iii) Well W-7
Pump and motor are provisionally reconstructed and dynamic water level is unstable, actual pump was downed, screen of this well must be downed and increased for obtain more pumping capacity (See **Figure3.5.2**). Detailed design for well design must confirm this analysis.

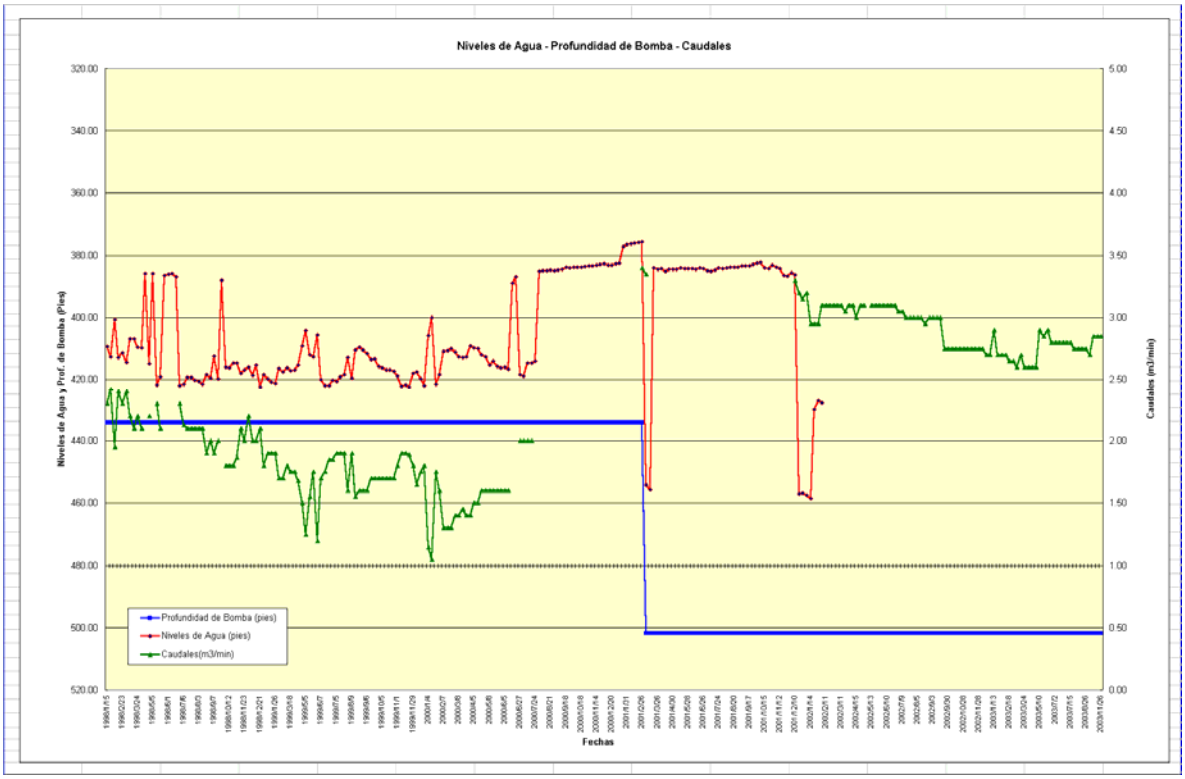


Figure 3.5.2 Pumping and Water Level Record of Managua Uno W-7 Well

2) Situation of Managua II wells

As February 2005, situation of the installed equipment is as shown in **Table 3.5.5**.

Table 3.5.5 Situation of Managua II Wells as of Feb 1, 2005

Well	Operation	Pump	Motor	Panel
P1	in operation	ORIGINAL		
P2	in operation	ORIGINAL		
P3	in operation	ORIGINAL		
P4	in operation	ORIGINAL		
P5	in operation	ORIGINAL		
P6	-	Trasferred to Managua I and corroded.		Trasferred to P-13
P7	in operation	ORIGINAL		
P8	in operation	Being operated with No 9 pump, as No8 pump is out of service and being kept at ENACAL's Santa Clara workshop.		
P9	in operation	Being operating with pump of Well 14.		
P10	in operation	ORIGINAL		
P11	-	Transformer and motor were burned and are being kept at electromechanical workshop.		
P12	in operation	ORIGINAL		
P13	in operation	ORIGINAL		Damaged by abnormal electric voltage
P14	-	Pump was transferred to well 9.		
P15	in operation	ORIGINAL		
P16	-	Transferred to Managua I and corroded.		

In this well field, 4 pumps, one panel and one transformer are needed for the restoration of the design production. But there are some problems to be corrected in high tension transmission line constructed and maintained by ENACAL.

3.6 MAINTENANCE PLAN OF EXISTING AND NEW WELLS

The principle of water source management is to understand the present conditions of ground water and pumping facilities and to take necessary measures to keep facilities and machines functioning properly.

The following points are important for the management of ground water.

- Periodical monitoring of extraction volume, ground water level and water quality.
- Evaluation of the capacity of wells by comparing present data with past data and analyzing water levels by taking rainfalls into consideration.

For the maintenance of equipment and machines the following points are important.

- Periodical rehabilitation of wells (Once every 20years)
- Overhaul of pumps (once every 10 years) and replacement (once every 20years)

3.7 LONG TERM MONITORING OF EXTRACTION VOLUMES, WATER LEVELS, WATER QUALITY AND CORROSION FOR MANAGEMENT OF WATER SOURCES

3.7.1 Monitoring of Extraction Volumes and Water Levels

In order to use water sources for long time at proper conditions, it is proposed that long term monitoring of extraction, ground water level is conducted as summarized on **Table 3.7.1.**

Table 3.7.1 Scope of the Proposed Long-term Monitoring Plan

Item	Contents	Target	Frequency
Volume of Production	Records of operating of wells	All wells Asososca Lake	Every Day
Water level	Manual measurement	All wells	Each 3 Month
	Measure of water level	Asososca Lake	Every Day
	Recorder Type Water Level Gauge（with pressure gauge）	Shown in table 3.7.2	Constantly （one day）
Corrosion	Weight of test pieces	Shown in table 3.3.9	March/2005 June/2005

The measurement of the water level targets all wells and Asososca Lake. The water level data of the well measured manually with a water level meter is collected once every three months in each well. Wells of 1/3 whole are actually regularly measured once every month. At the wells shown in **Table3.7.2**, water level is recorded by setting up the recorder type water level gauge with hydraulic pressure gauge in the well. This water level record collects once a month and arranges data. The water level of the Asososca Lake is possible by reading water level staff set up in the lakeside.

The installation well of the recorder type water level gauge was selected from the well of Zona Baja, Zona Alta and Zona Superior in various places of Occidental Central and main well group as shown in **Figure 3.7.1**. It is considered for the installation of water level gauge to evaluate

the flow of underground water to face the downstream from the upstream in various places to use the water level data. However, because the well was few, two wells were selected to Occidental Central with Zona Alta Superior. The new well that had been completed in 2001 planned the installation of the water level of hydraulic pressure type meter with the difficulty for measurement of underground water place from the winding of the pipe for the water level measurement.

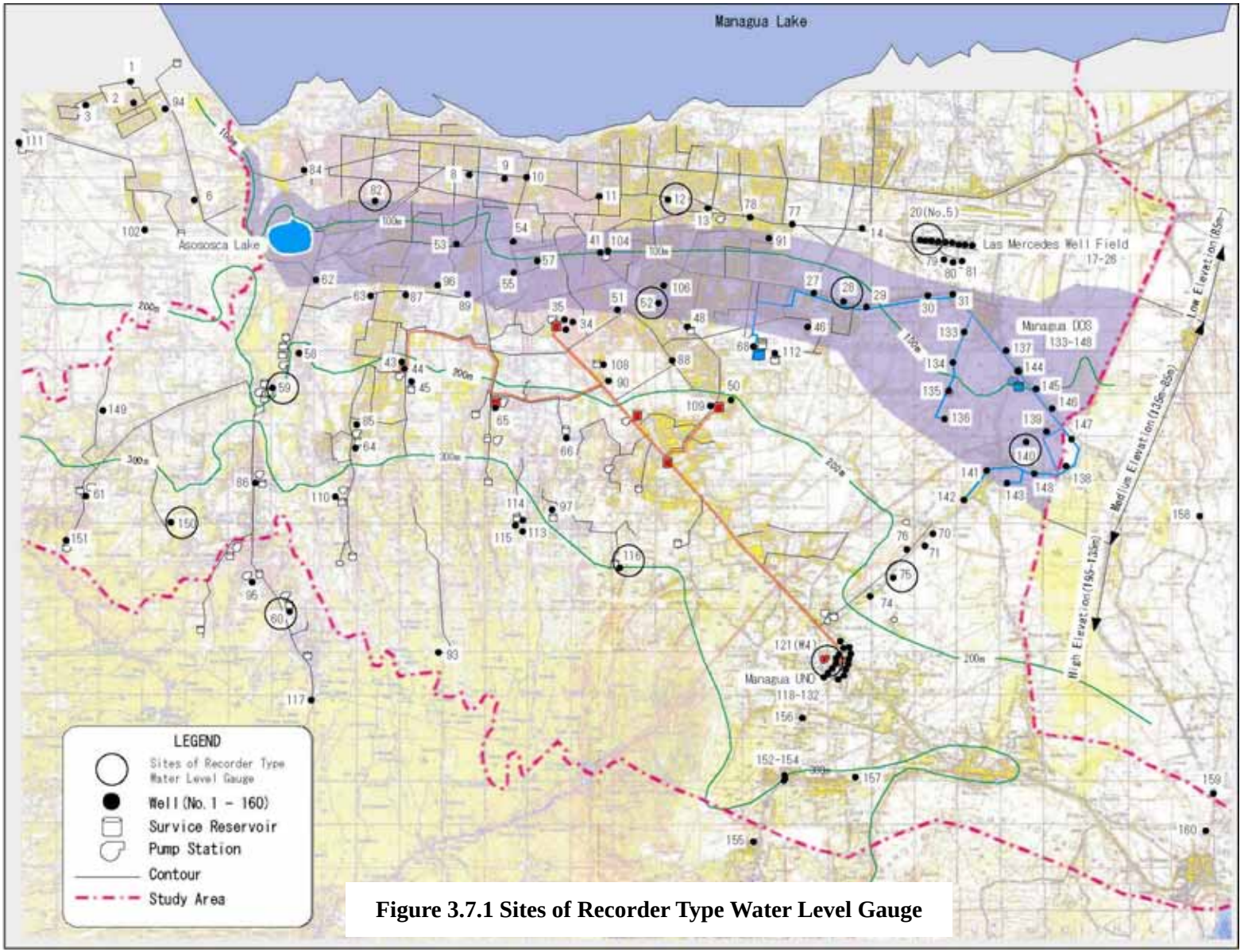


Figure 3.7.1 Sites of Recorder Type Water Level Gauge

Table 3.7.2 Monitoring Target Wells (Self-Registering Water Level Meter and Water Quality)

	Well No.	Area	Zone	Serial Number	Name of Wells
1	82	Occidental	BAJA	2	Mosenor Lezcano
2	59		ALTO Superior	54	Km9.2 C.Sur
3	60			57	Km14.5 C.Sur
4	150			120	Cedro Galam
5	12	Central	BAJA	7	Bello Horizonte
6	52		ALTO	45	La Mascota
7	116		ALTO Superior	85	Altos De Santo Domingo17
8	20	Oriental	BAJA	17	Las Mercedes No.5
9	28		ALTO	35	Sabana Grande No.2
10	140			95	Managua Dos P-8
11	75		ALTO Superior	63	Veracruz No.5
12	121			107	Managua Uno W-4

After test pieces set up in the well shown in **Table 3.3.10** at this time is taken out at fixed time, cleans test piece with the acetone, and measured of its weight, concerning the monitor of the corrosion of the metal. The progress situation of corrosion is evaluated by the comparison with original weight. Original weight of test pieces, which scheduled the measurement for the future, was shown in **Annex 3J**.

It is necessary to execute the above-mentioned monitoring so as not to lack data as much as possible because it is the one that important data is offered after the head of a river is controlled as described in **Section 3.3**.

3.7.2 Monitoring of Water Quality

(1) General

Generally, objectives of monitoring for groundwater quality can broadly be categorized as follows:

- Periodical monitoring to know background values of groundwater quality or trends of groundwater quality
- Special monitoring to know causes and areas of high concentration.
- Long-term monitoring to know the trends of polluted substances or effect of treatment measures.
- Comprehensive monitoring to know the existing pollution and the needs to take measures, including the survey of previous documents.

(2) Current Situation

a) Parameters

ENACAL basically analyzes only 16 parameters which are: temperature, pH, electronic conductivity, total dissolved solids, sodium, potassium, magnesium, calcium, total iron, bicarbonates, carbonates, sulfates, chlorides, nitrates, nitrites, fluoride. From time to time, ENACAL analyzes aluminum.

b) Frequency

ENACAL has monitoring plans for each region of Nicaragua. However, because of budgetary

constraints, monitoring is not conducted periodically.

c) Equipment

Water sampling is carried out by one car. The car is broken once a month during which no sampling is undertaken. Lack of chemical reagents for analysis sometimes occurs depending on how often ENACAL analyzes water quality. ENACAL has recently received an atomic absorption photometer from the UNICEF. ENACAL will be able to use this equipment from mid 2005.

(3) Proposed Monitoring Plan

To supply safe water to each resident, basic policies for monitoring plan for water quality is subject to the Law of water quality standard for drinking water, "Norma Regional de Calidad del Agua Comite Coordinador Regional de Instituciones de Agua Potable y Saneamiento de Centroamerica, Panama y Republica Dominicana".

a) Parameters

121 parameters are listed in CAPRE guidelines. In principle, these parameters should be monitored for all existing wells. Wells in low lying areas can easily be affected by human activities such as infiltration of wastewater or leakage of petroleum from gas stations. On the other hand, wells in high areas have a possibility of contamination with pesticides and fertilizers. Asososca Lake must be protected from contamination from IZ. To know variation of the water quality, major ion parameters should be also analyzed. When there is a possibility of contamination, EC, TDS, nitrates, nitrites and chloride should be monitored more frequently. The most important thing is to know true value of water quality in each water source. To know that the value is correct or not, each result should be checked by the ion balance and compare with the past value. When water sample is taken, water level should be measured at the same time.

b) Frequency

CAPRE guidelines classify parameters under three categories. The number of samples in each category is shown in **Table 3.7.3**. It is recommended that ENACAL should establish a water quality monitoring plan in accordance with the CAPRE guidelines. An ideal frequency for all wells is twice in a year - once in dry season and the other in wet season because water quality varies seasonal. To know yearly trend, each well should be analyzed at least once a year. Since Asososca Lake, Managua I Well Fields, Managua II Well Fields and Las Mercedes Well Fields are important water sources, the monitoring of these major sources should be conducted more frequently, at least 4 times a year. When the water level of Lake Asososca decreases, the frequency of monitoring should be increased. **Figure 3.7.1** shows the first priority wells which must periodically be monitored. When contamination is detected, the frequency of monitoring should be increased to once a month.

Table 3.7.3 Frequency in Each Categories in CAPRE standards

	Basic Control	Normal Control	Advance Control
Frequency	Every year	Every 2 – 3 years	Every 5 years
The Minimum Number of Samples	360	120	20
Parameters	Odor, Taste, Turbidly, Color, Electric Conductivity, pH, Temperature, Residual Chlorine, Total Coliform, Feacal Coliform	Included the left column	Included the left column
		Chloride, Hardness, Sulfate, Calcium, Magnesium, Sodium, Potassium, Zinc, Aluminum, Copper, Nitrate, Nitrite, Ammonia, Iron, Manganese, Fluoride, Hydrogen Sulfide, Arsenic, Cadmium, Cyanide, Chromium, Mercury, Nickel, Lead, Antimony, Selenium, E. Coli	Included the left column
			Organic substances causing damage to human health, Disinfections, Chlorination by-products

c) Sampling Location

In principle, samples should be taken from all water sources. Special attention should be given to the water sources that are large in production volume, or that can easily be affected by pollutants such as those located in Zona Baja. Wells in **Figure 3.7.1** are also important places for monitoring. To understand the ramifications of water quality roughly, water quality in major tanks should also be analyzed.

ANNEX 3A

List of Existing Wells in Managua City

ANNEX 3.A (a) LI ST OF EXISTING WELLS IN MANAGUA CITY

No.	Zona BAJA Well Name	Serial Number	Coordinates Est	North
8	SAN ANTONIO	1	578	1,343
9	OLOF PALME	2	579	1,343
10	MERCADO ORIENTAL	3	579	1,343
11	COL. TENDERI	4	581	1,342
12	BELLO HORIZONTE	5	583	1,342
13	RAFAELA HERRERA	6	584	1,342
14	MERCEDES Nº-9	7	587	1,341
17	MERCEDES Nº-1	8	589	1,341
18	MERCEDES Nº-3	9	589	1,341
19	MERCEDES Nº-4	10	589	1,341
20	MERCEDES Nº-5	11	589	1,341
21	MERCEDES Nº-7	12	589	1,341
22	MERCEDES Nº-6	13	589	1,341
24	MERCEDES Nº-8	14	590	1,341
25	MERCEDES Nº-14	15	590	1,341
26	MERCEDES Nº-15	16	590	1,341
41	SAN CRISTOBAL Nº-1	17	581	1,341
77	VILLA FRATERNIDAD	18	586	1,341
78	BUENOS AIRES	19	585	1,342
79	MERCEDES Nº-16	20	589	1,341
80	MERCEDES Nº-17	21	589	1,341
81	MERCEDES Nº-18	22	590	1,341
82	MONSEÑOR LEZCANO	23	576	1,342
84	LAS BRISAS	24	574	1,343
104	SAN CRISTOBAL Nº-3	25	581	1,341

Note:

Colored Wells : Water is used in Sandino City

No.60, No.95, No.117 at Carretera Sur are out of this study area

No.	Zona ALTA Superior Well Name	Serial Number	Coordinates Est	North
43	SAN JUDAS Nº- 1	53	577	1,338
44	SAN JUDAS Nº- 2	54	577	1,338
45	SAN JUDAS Nº- 3 (v. hermosa)	55	577	1,338
50	REPTO. SHICK Nº- 2	56	584	1,337
	(VILLA CUBA No.2)		REPTO.SHICK No.2	
51	MANOLO MORALES	57	582	1,339
58	KM 8.5 C. SUR(S Patr)	58	574	1,338
59	KM 9.2 C. SUR	59	573	1,337
60	KM 14.5 C. SUR	60	574	1,332
61	KM 14.5 C. VIEJA A LEON	61	569	1,335
62	(HOSP.) VELEZ PAIZ	62	574	1,340
63	(HOSP.) BERTA CALDERON	63	576	1,340
	(TORRES MOLINA)		(HOSP.) BERTA CALDERON	
64	TORRES MOLINA Nº-1	64	575	1,336
65	UNAN	65	579	1,337
66	VILLA PANAMA	66	580	1,337
70	VERACRUZ Nº- 2	67	589	1,335
	(VALLE GOTHEL Nº- 2)		VERACRUZ Nº- 2	
71	VERACRUZ Nº- 3	68	589	1,334
	(VALLE GOTHEL Nº- 3)		VERACRUZ Nº- 3	
74	VERACRUZ Nº- 4	69	589	1,334
75	VERACRUZ Nº- 5	70	588	1,333
76	VERACRUZ Nº- 6	71	587	1,333
85	LOMA LINDA	72	576	1,337
	(SIERRA MAESTRA)		LOMA LINDA	
86	KM 11.5 C. SUR	73	573	1,335
87	JULIO MARTINEZ	74	577	1,340
88	REPARTO. SHICK Nº- 3	75	583	1,339
90	Km 7 C. MASAYA	76	581	1,338
93	PADRE FABRETO	77	577	1,332
95	KM 13.5 C. SUR	78	573	1,333
97	SAN ISIDRO DE LA CRUZ VERDE 2	79	580	1,335
108	CENTROAMERICA Nº- 4	80	581	1,338
109	REPARTO. SHICK Nº- 4	81	584	1,337
110	TORRES MOLINA Nº-2	82	575	1,335
113	ALPES No. 1	83	579	1,335
114	ALPES No. 2	84	579	1,335
	(LOS ALPES)		ALPES No. 2	
115	ALPES No. 3	85	579	1,335
116	ALTOS DE SANTO DOMINGO	86	582	1,333
117	KM. 17 CARRETERA SUR	87	575	1,331

No.	Zona ALTA Well Name	Serial Number	Coordinates Est	North
1	SAN FRANCISCO J.Nº1	26	570	1,345
	(C.SANDINO No.1)		SAN FRANCISCO J.Nº1	
2	SAN FRANCISCO J.Nº2	27	570	1,344
	(C.SANDINO No.2)		SAN FRANCISCO J.Nº2	
3	SAN FRANCISCO J.Nº3	28	569	1,344
	(C.SANDINO No.3)		SAN FRANCISCO J.Nº3	
6	SATERITE ASOSOSCA Nº3	29	572	1,342
	(E.CONTRERAS No.3)		SATERITE ASOSOSCA Nº3	
27	SABANA GRANDE No 1	30	586	1,340
28	SABANA GRANDE No 2	31	587	1,340
29	SABANA GRANDE No 3	32	587	1,340
30	SABANA GRANDE No 4	33	589	1,340
31	SABANA GRANDE No 5	34	589	1,340
34	ALTAMIRA Nº- 4	35	580	1,339
35	ALTAMIRA Nº- 5	36	580	1,339
46	VILLA LIBERTAD	37	586	1,339
48	14 DE SEPTIEMBRE	38	583	1,339
52	LA MASCOTA	39	582	1,340
	(HOSP. DEL NINO LA MASCOTA)		LA MASCOTA	
53	PARQUE LAS MADRES	40	578	1,341
54	LOS GAUCHOS	41	579	1,341
55	SHELL METROCENTRO	42	579	1,340
57	PLAZA EL SOL	43	580	1,340
	(LA CATEDRAL)		PLAZA EL SOL	
68	V. AUSTRIA (JICA No 4)	44	585	1,339
89	I.N.E CENTRAL	45	578	1,340
91	LAUREANO MAIRENA	46	585	1,341
94	SAN FRANCISCO J.Nº4	47	571	1,344
	(SN.CARLOS)	47	SAN FRANCISCO J.Nº4	
96	EL RETIRO	48	577	1,340
	(RENE CISNEROS)		EL RETIRO	
102	JICA Nº 5	49	571	1,341
106	NICARAO No.3	50	583	1,340
	(COLONIA NICARAO)	51	NICARAO No.3	
111	NUEVA VIDA		568	1,343
112	ANEXO V. LIVERTAD	52	585	1,338

No.	Zona ALTA Superior Well Name	Serial Number	Coordinates East	North
118	W-1	88	587	1,332
119	W-2	89	587	1,332
120	W-3	90	587	1,332
121	W-4	91	587	1,331
122	W-5	92	587	1,331
123	W-6	93	587	1,331
124	W-7	94	587	1,331
125	W-8	95	587	1,331
126	E-1	96	587	1,331
127	E-2	97	587	1,331
128	E-3	98	587	1,331
129	E-4	99	587	1,331
130	E-5	100	587	1,331
131	E-6	101	587	1,331
132	E-7	102	587	1,331
133	P-1	103	590	1,339
134	P-2	104	589	1,338
135	P-3	105	589	1,338
136	P-4	106	589	1,337
137	P-5	107	591	1,339
138	P-6 (stop)	108	592	1,336
139	P-7	109	592	1,337
140	P-8	110	591	1,336
141	P-9	111	590	1,336
142	P-10	112	590	1,335
143	P-11	113	591	1,335
144	P-12	114	591	1,338
145	P-13	115	591	1,338
146	P-14	116	592	1,337
147	P-15	117	592	1,337
148	P-16	118	591	1,336
149	Chiquistagua	119	569	1,337
150	Cedro Galan	120	571	1,334
151	Planetanium	121	569	1,334

ANNEX 3A(b) LIST OF EXISTING WELLS IN TICUANTEPE & NINDIRI

No.	Well Name	Zona	Serial Number	Coordinates East	Coordinates North	Management Organization
152	SANTA MATILDE No.1 (Stop)	Nindri	130	596	1,327	Nindiri City
153	SANTA MATILDE No.2 (Stop)	Ticuantepe	122	586	1,329	ENACAL
154	SANTA MATILDE No.3 (stop)	Ticuantepe	123	586	1,329	ENACAL
155	LA BORGONA	Ticuantepe	124	585	1,329	ENACAL
156	LAS CONCHITAS	Ticuantepe	125	585	1,327	ENACAL
157	LOS LARIOS (Stop)	Ticuantepe	126	586	1,330	ENACAL
158	SAN JOAQUIN	Nindri	127	587	1,329	ENACAL
159	EL GAVILAN / CAMPUZANO	Nindri	128	595	1,335	Nindiri City
160	NINDIRI No.3 (Stop)	Nindri	129	596	1,328	ENACAL

ANNEX 3A(c) LIST OF NEW WELLS IN IMPLEMENTATION PROCESS

No.	Well Name	Zona	Serial Number	Coordinates East	Coordinates North	Management Organization
161	Hialeah	Zona Alta Superior				ENACAL
162	Memorial Sandino	Zona Alta Superior				ENACAL
163	La BOLSA	Zona Alta Superior				ENACAL
164	Km14.5 Carretera Masaya	Zona Alta Superior				ENACAL
165	Bosques de Nejapa	Zona Alta Superior				ENACAL
166	Lomas del Valle	Zona Alta Superior				ENACAL
167	Los Alpes No.4	Zona Alta Superior				ENACAL
168	Reparto Los Cocos	Zona Alta Superior		5'86'955	13'38'547	NGO
169	Los Corteses	Zona Alta Superior		5'87'292	13'38'355	NGO (Iglesia de Cristo)
170	Vista de Esquipulas	Zona Alta Superior		5'87'049	13'35'396	Planned
171	Solidaridad	Zona Alta Superior		5'89'010	13'32'850	Planned

ANNEX 3B

Details of Existing Wells

ANNEX 3.B Detail Data of Existing Wells (1/13)

(Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min) (m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)		
1	Well Name	LAS BRISAS				28.05	25.60		2.2 3,131	6.2	31.80	505		6,993		39.63		
	Year of Construction	1990	Elevation (m)	91.9	-/03/96	25.61			2.8 4,041	7.6	33.19	533						
(84)	Depth of Well (m)	149.35	Screen (Dep..)	50.3～131.1	-03/96	25.61			4.7 6,764	13.0	38.60	520						
	Diameter of Well(inch)	18	Screen (Elev.)	41.6～-39.2														
2	Well Name	MONSEÑOR LEZCANO			-/04/95	53.57			2.2 3,159	48.9	48.94	65		6,546		76.2		
	Year of Construction	1990	Elevation (m)	175.7	-/02/96	52.49			3.1 4,466	56.5	56.53	79						
(82)	Depth of Well (m)	182.88	Screen (Dep..)	64～180	-/03/96	52.54			4.6 6,573	58.9	58.92	112						
	Diameter of Well(inch)	20	Screen (Elev.)	112～-04														
3	Well Name	SAN ANTONIO			-/06/87	22.36	24.20		1.1 1,541	6.3	30.51	244		4,690		51.92		
	Year of Construction	1987	Elevation (m)	61.93	-/06/95	25.74	(04/87)		1.6 2,276	8.8	33.01	258						
(8)	Depth of Well (m)	182.88	Screen (Dep..)	43～180	-/04/96	24.24			2.6 3,741	15.2	39.44	245						
	Diameter of Well(inch)	-	Screen (Elev.)	18～-118					3.1 4,493	18.79	42.99	239						
4	Well Name	OLOF PALME ?BANCO DE AMERICA?																
	Year of Construction	1987	Elevation (m)															
(9)	Depth of Well (m)	152	Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
5	Well Name	MERCADO ORIENTAL				18.29	21.22		1.4 2,010	6.5	27.71	310		4,144		70.12		
	Year of Construction	1987	Elevation (m)	59.98			(05/96)		2.1 2,979	10.6	31.87	280						
(10)	Depth of Well (m)	152.4	Screen (Dep..)	30～101, 125～149					2.8 4,019	18.5	39.76	217						
	Diameter of Well(inch)	-	Screen (Elev.)	30～-41, -65～-89					3.4 4,827	28.97	50.19	167						
6	Well Name	(COL.) TENDERI			-/07/87	22.56	29.23		1.5 2,105	10.8	40.05	195		5,046		76.21		
	Year of Construction	1987	Elevation (m)	70.8	07/02/94	29.92	(05/96)		2.2 3,121	15.9	45.14	196						
(11)	Depth of Well (m)	213.36	Screen (Dep..)	49～210	-/05/96	29.26	30.99		3.3 4,727	25.7	54.92	184						
	Diameter of Well(inch)	18	Screen (Elev.)	22～-139			(03/95)		4.4 6,355	26.7	57.72	238						
7	Well Name	BELLO HORIZONTE			-/09/87	34.95												
	Year of Construction	1987	Elevation (m)															
(12)	Depth of Well (m)	213	Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
8	Well Name	RAFAELA HERRERA																
	Year of Construction	1993	Elevation (m)	82.9														
(13)	Depth of Well (m)	188.98	Screen (Dep..)	61～85,101～115,otra														
	Diameter of Well(inch)	-	Screen (Elev.)	22～-2, -18～-32														
9	Well Name	VILLA FRATERNIDAD			1980	44.81	49.30		0.5 703	9.9	59.21	71		2,206		91.46		
	Year of Construction	1990	Elevation (m)	146.96	11/05/95	49.31			0.7 1,008	13.4	62.66	75						
(77)	Depth of Well (m)	152.4	Screen (Dep..)	88～151					1.1 1,612	25.6	74.86	63						
	Diameter of Well(inch)	20	Screen (Elev.)	59～-04														
10	Well Name	BUENOS AIRES																
	Year of Construction	1990	Elevation (m)		No Existe Datos del Pozo													
(78)	Depth of Well (m)	183	Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (2/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
11	Well Name	SAN CRISTOBAL N°-1			13/02/94	53.72											No Existe Deseno del Pozo	
	Year of Construction	1992	Elevation (m)	104.58														
(41)	Depth of Well (m)	198.12	Screen (Dep..)															
	Diameter of Well(inch)	-	Screen (Elev.)															
12	Well Name	SAN CRISTOBAL N°-3																
	Year of Construction	1993	Elevation (m)															
(104)	Depth of Well (m)		Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
13	Well Name	MERCEDES N°-9			1982	30.43												
	Year of Construction	1982	Elevation (m)	76.38														
(14)	Depth of Well (m)	176.78	Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
14	Well Name	MERCEDES N°-1				13.8	18.8		0.9	1,330	10.04	28.84	132	1,668		51.82		
	Year of Construction	1975	Elevation (m)	-			(07/95)		1.2	1,717	13.61	32.41	126					
(17)	Depth of Well (m)	107.59	Screen (Dep..)	42-105					1.8	2,589	28.38	47.18	91					
	Diameter of Well(inch)	20	Screen (Elev.)						2.2	3,107	45.79	64.59	68					
15	Well Name	MERCEDES N°-3					21.99		2.4	3,485	6.2	28.16	565	4,004				
	Year of Construction	1974	Elevation (m)	62.4			(06/96)		3.5	4,972	12.0	34.02	413					
(19)	Depth of Well (m)	107.59	Screen (Dep..)	-					5.1	7,319	19.4	41.36	378					
	Diameter of Well(inch)	20	Screen (Elev.)						0.0									
16	Well Name	MERCEDES N°-4					19.84		3.3	4,722	6.5	26.37	724	11,519				
	Year of Construction	1974	Elevation (m)	62.4			(06/96)		4.6	6,677	11.2	31.06	595					
(20)	Depth of Well (m)	109.73	Screen (Dep..)	-					7.8	11,235	22.5	42.34	499					
	Diameter of Well(inch)	20	Screen (Elev.)						0.0									
17	Well Name	MERCEDES N°-5					17.81		4.2	6,012	8.1	25.86	747	10,211				
	Year of Construction	1973	Elevation (m)	62.6			(06/96)		5.4	7,837	11.3	29.15	691					
(21)	Depth of Well (m)	152.4	Screen (Dep..)	-					8.8	12,607	16.9	34.75	744					
	Diameter of Well(inch)	20	Screen (Elev.)															
18	Well Name	MERCEDES N°-6				10.67	18.01		1.8	2,538	4.3	22.34	586	4,923		50.91		
	Year of Construction	1975	Elevation (m)	62.38	27/01/94	17.7	(06/96)		2.8	4,014	10.3	28.26	392					
(22)	Depth of Well (m)	103.63	Screen (Dep..)	38-104	-/07/95	18.11			3.9	5,680	16.5	34.54	344					
	Diameter of Well(inch)	22	Screen (Elev.)	24～-42	-/07/96	18.01			4.7	6,822	22.64	40.65	301					
19	Well Name	MERCEDES N°-7			17/01/94	28.2	17.45		1.1	1,553	8.36	25.81	186	3,171				
	Year of Construction	1975	Elevation (m)	62.11	-/06/95	12.4	(06/96)		1.7	2,420	15.6	33.05	155					
(23)	Depth of Well (m)	103.63	Screen (Dep..)	-	-/07/95	18.02			2.5	3,570	29.78	47.23	120					
	Diameter of Well(inch)	12	Screen (Elev.)		-/01/96	18.27			3.0	4,284	42.25	59.70	101					
20	Well Name	MERCEDES N°-8				9.75	13.71		1.1	1,613	8.37	22.08	193	2,768				
	Year of Construction	1976	Elevation (m)	-	27/01/94	14.01	(06/96)		1.9	2,736	14.01	27.72	195					
(24)	Depth of Well (m)	74.7	Screen (Dep..)		-/08/95	18.08			2.7	3,957	20.76	34.47	191					
	Diameter of Well(inch)	28	Screen (Elev.)		-/12/95	14.53			3.3	4,746	25.44	39.15	187					

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (3/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge			s	D.W.L	S.Cap.	Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
21	Well Name	MERCEDES N°-14			1977	10.67	13.14		2.0	2,875	10.9	24.03	264	2,512		45.13		
	Year of Construction	1977	Elevation (m)	34.99					2.9	4,172	16.9	30.07	246					
(25)	Depth of Well (m)	124.97	Screen (Dep..)	79-91, 102-108,Otro					4.2	6,040	33.2	46.38	182					
	Diameter of Well(inch)	20	Screen (Elev.)															
22	Well Name	MERCEDES N°-15					12.89		2.2	3,205	11.4	24.30	281	6,454		45.73		
	Year of Construction	1982	Elevation (m)	35.51			(06/9)		3.2	4,671	20.4	33.31	229					
(26)	Depth of Well (m)	121.92	Screen (Dep..)	46～117					4.7	6,704	34.9	47.82	192					
	Diameter of Well(inch)	20	Screen (Elev.)						5.6	8,045	47.32	60.21	170					
23	Well Name	MERCEDES N°-16			05/11/90	13.72	19.56		2.1	2,984	8.1	27.65	369	5,849		60.97		
	Year of Construction	1990	Elevation (m)	44.99			(06/9)		2.9	4,221	14.2	33.73	298					
(79)	Depth of Well (m)	175.26	Screen (Dep..)	67～169					3.9	5,582	24.3	43.89	229					
	Diameter of Well(inch)	18	Screen (Elev.)															
24	Well Name	MERCEDES N°-17							1.2	1,799	5.29							
	Year of Construction	1990	Elevation (m)						1.9	2,799	11.31							
(80)	Depth of Well (m)		Screen (Dep..)						2.9	4,213	28.08							
	Diameter of Well(inch)		Screen (Elev.)						3.5	5,056	42.38							
25	Well Name	MERCEDES N°-18																
	Year of Construction	1990	Elevation (m)															
(81)	Depth of Well (m)		Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
26	Well Name	SATERITE ASOSOSCA N°3. (E.CONTRERAS No.3)				95.10	93.85		2.7	3,872	2.8	96.65	1,384	6,018		103.65		
	Year of Construction	1987	Elevation (m)	134.36			(11/92)		3.5	4,999	2.7	96.53	1,868					
(6)	Depth of Well (m)	213.36	Screen (Dep..)	113～210			95.12		4.1	5,914	2.2	96.07	2,665					
	Diameter of Well(inch)	18	Screen (Elev.)	21～-76			(12/87)		4.7	6,704	2.9	96.77	2,296					
27	Well Name	(SAN) FRANCISCO J.N°1 (C.SANDINO No.1)				53.34								1,626		91.46		
	Year of Construction	1975	Elevation (m)	93.7													No tiene Prueba de Bombeo	
(1)	Depth of Well (m)	124.66	Screen (Dep..)	75～122														
	Diameter of Well(inch)	16	Screen (Elev.)	19～-28														
28	Well Name	SAN FRANCISCO J.N°2 (C.SANDINO No.2)			31/07/74	53.34	55.02		1.2	1,679	4.12	59.14	408	4,964		91.46		
	Year of Construction	1974	Elevation (m)	93.7	04/10/84	55.66	(03/96)		1.7	2,458	6.68	61.70	368					
(2)	Depth of Well (m)	134.11	Screen (Dep..)	80～128					2.5	3,652	10.72	65.74	341					
	Diameter of Well(inch)	16	Screen (Elev.)	14～-34					3.0	4,382	13.8	68.82	318					
29	Well Name	SAN FRANCISCO J.N°3 (C.SANDINO No.3)					53.39		2.3	3,270	13.74	67.13	238	3,770				
	Year of Construction		Elevation (m)				(03/91)		3.0	4,360	20.05	73.44	217					
(3)	Depth of Well (m)	173.72	Screen (Dep..)						3.8	5,450	25.69	79.08	212					
	Diameter of Well(inch)		Screen (Elev.)						4.5	6,540	32.87	86.26	199			'(91)		
30	Well Name	SAN FRANCISCO J.N°4 (SAN.CARLOS) (休止)				50.0								4,561		73.17		
	Year of Construction	1993	Elevation (m)	163.95	13/01/94	49.78												
(94)	Depth of Well (m)	182.88	Screen (Dep..)	94.5～179														
	Diameter of Well(inch)	-	Screen (Elev.)	69～ -15														

Note S.W.L.: Static Water Level , D.W.L.: Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)	(m3/min)	(m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)		
31	Well Name	JICA No.5				99.36	100.63	1.4	2,031	3.5	104.08	589		2,298		112.8		
	Year of Construction	1992	Elevation (m)	328.58				2.1	3,050	5.4	106.04	564						
(102)	Depth of Well (m)	205.74	Screen (Dep..)	115～181				3.1	4,438	8.3	108.94	534						
	Diameter of Well(inch)	-	Screen (Elev.)	213～147				3.6	5,184	10.37	111.00	500						
32	Well Name	RENE CISNEROS (EL RETIRO)				87.80	91.66	1.1	1,645	7.16	98.82	230		2,233		121.95		
	Year of Construction	1988	Elevation (m)	287.93	-/05/95	92.20	(04/96)	1.7	2,451	11.84	103.50	207						
(96)	Depth of Well (m)	213.36	Screen (Dep..)	104～210	-/08/95	92.37		2.5	3,627	18.67	110.33	194						
	Diameter of Well(inch)	16	Screen (Elev.)	184～78	11/04/96	91.66		3.0	4,356	23.59	115.25	185						
33	Well Name	NICARAO No.3																
	Year of Construction	1993	Elevation (m)															
(106)	Depth of Well (m)		Screen (Dep..)															
	Diameter of Well(inch)		Screen (Elev.)															
34	Well Name	SABANA GRANDE No 1				48.78	57.30	0.7	1,036	4.97	62.27	208		2,396		73.17		
	Year of Construction	1987	Elevacion (m)	159.99			(04/96)	1.1	1,532	7.76	65.06	197						
(27)	Depth of Well (m)	283.46	Screen (Dep.)	133-139,158-170,				1.5	2,213	12.12	69.42	183						
	Diameter of Well(inch)	19		228-237, 250-264				1.8	2,655	15.37	72.67	173						
35	Well Name	SABANA GRANDE No 2			-/11/87	58.84	62.56	1.7	2,404	3.93	66.49	612		4,952				
	Year of Construction	1987	Elevation (m)	-	-/10/92	60.9	(04/96)	2.5	3,586	7.16	69.72	501						
(28)	Depth of Well (m)	-	Screen (Dep.)	-	-/02/94	62		3.7	5,287	12.72	75.28	416						
	Diameter of Well(inch)	-	Screen (Elev.)		-/02/96	62.9		4.4	6,344	17.02	79.58	373						
36	Well Name	SABANA GRANDE No 3			1987	49.39	57.94	0.9	1,363	6.65	64.59	205		2,797		79.26		
	Year of Construction	1987	Elevation (m)	161.99	01/02/94	59.8	(10/92)	1.4	1,979	9.01	66.95	220						
(29)	Depth of Well (m)	307.85	Screen (Dep.)	83～304	29/08/95	57.95		2.3	3,287	16.73	74.67	196						
	Diameter of Well(inch)	-	Screen (Elev.)		-/04/96	59.12		2.7	3,943	21.8	79.74	181						
37	Well Name	SABANA GRANDE No 4			1987	20.12										48.78		
	Year of Construction	1987	Elevation (m)	65.97	1992	21.92												
(30)	Depth of Well (m)	213.36	Screen (Dep.)	34-210														
	Diameter of Well(inch)	-	Screen (Elev.)															
38	Well Name	SABANA GRANDE No 5				17.03	19.32	1.4	1,979	1.59	20.91	1244		6,274		36.58		
	Year of Construction	1988	Elevation (m)	69.71	1988	17.07	(04/96)	2.1	3,047	2.46	21.78	1239						
(31)	Depth of Well (m)	198.12	Screen (Dep.)	27-195	1992	18.71		4.0	5,805	5.54	24.86	1048						
	Diameter of Well(inch)	18	Screen (Elev.)		1994	18.95		4.8	6,966	7.58	26.90	919						
39	Well Name	V. AUSTRIA (JICA No 4)				94.21	96.10	0.4	610	12.02	108.12	51		1,383		134.14		
	Year of Construction	1992	Elevation (m)	308.92	17/06/96	96.13		0.6	844	17.33	113.43	49						
(68)	Depth of Well (m)	207.26	Screen (Dep.)	109 ～192				0.8	1,193	28.68	124.78	42						
	Diameter of Well(inch)	16.5	Screen (Elev.)	199～117														
40	Well Name	VILLA LIBERTAD			-/08/86	70.12	79.13	0.7	965	12.43	91.56	78		1,691		121.95		
	Year of Construction	1987	Elevacion (m)	132.6	26/02/87	70.12	(05/96)	1.0	1,368	20.61	99.74	66						
(46)	Depth of Well (m)	190.5	Screen (Dep.)	98-102, 116-119, 130-	-/03/96	79.13		1.5	2,229	43.33	122.46	51						
	Diameter of Well(inch)	20		156 ,174-179				1.9	2,675	58.41	137.54							

Note S.W.L.: Static Water Level , D.W.L.: Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (5/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge			s	D.W.L	S.Cap.	Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
41	Well Name	SHELL METROCENTR			11/04/88	49.68												
	Year of Construction	1988	Elevation (m)	102.3														
(55)	Depth of Well (m)	213.36	Screen (Dep.)	-														
	Diameter of Well(inch)	18	Screen (Elev.)	-														
42	Well Name	LOS GAUCHOS			07/09/87	35.60												
	Year of Construction	1987	Elevation (m)		13/01/95	42.52												
(54)	Depth of Well (m)	213.36	Screen (Dep.)															
	Diameter of Well(inch)	18	Screen (Elev.)															
43	Well Name	PARQUE LAS MADRE			1987	59.14	62.95		2.2	3,191	2.3	65.23	1398	3,543				
	Year of Construction	1988	Elevation (m)	-	1992	62.39	(06/96)		3.1	4,460	4.3	67.25	1037					
(53)	Depth of Well (m)	151.94	Screen (Dep.)	-	-/01/94	62.39												
	Diameter of Well(inch)	-	Screen (Elev.)		-/02/96	63.12												
44	Well Name	INE CENTRAL				60.38	68.45		1.2	1,661	4.2	72.70	391	3,747		96.03		
	Year of Construction	1990	Elevation (m)	199.95	14/01/94	66.70			1.7	2,402	5.4	73.81	448					
(89)	Depth of Well (m)	243.84	Screen (Dep.)	81~231	-/04/96	68.47			4.1	5,958	13.7	82.14	435					
	Diameter of Well(inch)	20	Screen (Elev.)	118~-31						-								
45	Well Name	LA MASCOTA				59.45	69.4		1.2	1,737	5.09	74.49	341	3,263		91.46		
	Year of Construction	1987	Elevation (m)	179.44	25/01/94	67.00	(06/96)		1.6	2,284	8.61	78.01	265					
(52)	Depth of Well (m)	268.22	Screen (Dep.)	82-265	-/06/96	81.72			2.9	4,230	15.31	84.71	276					
	Diameter of Well(inch)	18	Screen (Elev.)						3.5	5,075	20.59	89.99	246					
46	Well Name	ALTAMIRA N°- 4			1987	81.86	81.96		1.0	1,384	4.03	85.99	344	1,688			No Existe Deseno del Pozo	
	Year of Construction	1972	Elevation (m)	141.05	1992	81.76	(05/96)		1.4	2,011	5.23	87.19	385					
(34)	Depth of Well (m)	179.83	Screen (Dep.)	-	25/08/95	84.17			2.1	3,036	8.84	90.80	343					
	Diameter of Well(inch)	-	Screen (Elev.)	-	-/01/96	87.68			2.5	3,643	11.35	93.31	321					
47	Well Name	ALTAMIRA N°- 5			1986	82.31	77.94		0.6	817	21.5	99.40	38	1,554		121.95		
	Year of Construction	1986	Elevation (m)	141.05	1992	87.09	(05/96)		0.9	1,263	27.0	104.94	47					
(35)	Depth of Well (m)	204.22	Screen (Dep.)	116~183	26/01/94	89.28			1.3	1,928	41.2	119.18	47					
	Diameter of Well(inch)	20	Screen (Elev.)	25~-42														
48	Well Name	PLAZA EL SOL			-/04/95	56.68	56.69		1.5	2,129	6.0	62.73	352	5,969		79.3		
	Year of Construction	1990	Elevation (m)	154.96	10/04/96	56.71			2.1	3,017	9.3	65.96	326					
(57)	Depth of Well (m)	185.93	Screen (Dep.)	83~178	-/03/96	56.17			3.4	4,929	16.1	72.84	305					
	Diameter of Well(inch)	18	Screen (Elev.)	72 ~-23														
49	Well Name	LAUREANO MAIRENA				51.82	56.02		0.5	659	5.8	61.86	113	2,189		89.45		
	Year of Construction	1990	Elevation (m)	169.96	-/04/95	56.2	(15/05/96)		0.7	969	9.3	65.28	105					
(91)	Depth of Well (m)	167.64	Screen (Dep.)	91~161	-/01/96	52.77			1.0	1,438	16.8	72.81	86					
	Diameter of Well(inch)	19	Screen (Elev.)	78~08	-/05/96	56.02												
50	Well Name	ANEXO V. LIVERTAD																
	Year of Construction	2001	Elevation (m)		No Existe Datos del Pozo													
(112)	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		S	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
51	Well Name	NUEVA VIDA (3年前に			No Existe Datos del Pozo													
	Year of Construction	2000	Elevation (m)															
(111)	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
52	Well Name	14 DE SEPTIEMBRE				76.83	84.53		0.7	997	7.32	91.85	136	1,439		118.9		
	Year of Construction	1986	Elevation (m)	140.26	09/02/94	82.94	(06/96)		0.9	1,286	11.28	95.81	114					
(48)	Depth of Well (m)	182.88	Screen (Dep.)	134-149, 168-179	-/04/95	84.00			1.4	1,995	19.14	103.67	104					
	Diameter of Well(inch)	19	Screen (Elev.)	6～-9, -28～-29	-/12/95	85.27			1.7	2,394	24.83	109.36	96					
53	Well Name	KM 8.5 C. SUR(S Patr)			08/04/83	160.58	161.58		0.4	572	4.17	165.75	137	2,315		204.26		
	Year of Construction	1988	Elevation (m)	201.11	23/08/95	161.59	(08/95)		0.6	850	7.55	169.13	113					
(58)	Depth of Well (m)		Screen (Dep.)	183～271	-/01/96	176.01			1.1	1,597	15.58	177.16	103					
	Diameter of Well(inch)		Screen (Elev.)	18～-70	-/02/96	160.41			1.3	1,916	19.85	181.43	97					
54	Well Name	KM 9.2 C. SUR			04/02/87	197.86	197.00		0.2	256	15.09	212.09	17	1,552		225.6		
	Year of Construction	1987	Elevation (m)	201.06	-/07/95	196.95	(08/95)		0.3	458	28.96	225.96	16					
(59)	Depth of Well (m)	374.9	Screen (Dep.)	262～369	-/02/96	191.63			0.6	888	62.12	259.12	14					
	Diameter of Well(inch)	20	Screen (Elev.)	-61～-168	-/03/96	196.74			0.7	1,066	77.32	274.32	14					
55	Well Name	KM 11.5 C. SUR				219.51	231.15		0.3	468	10.1	241.25	46	1,568		292.68		
	Year of Construction	1990	Elevation (m)	719.82	28/03/96	231.21			0.5	735	16.2	247.37	45					
(86)	Depth of Well (m)	340.16	Screen (Dep.)	253～334					0.9	1,253	33.8	264.94	37					
	Diameter of Well(inch)	18 1/4	Screen (Elev.)	446～385					1.0	1,504	50.4	281.53	30					
56	Well Name	KM 13.5 CARRETERA				227.44	239.09		0.7	1,065	7.53	246.62	141	2,343		265.24		
	Year of Construction	1993	Elevation (m)	745.54	29/02/96	239.09			1.1	1,583	12.03	251.12	132					
(95)	Depth of Well (m)	320.04	Screen (Dep.)	268～317					1.7	2,385	21.32	260.41	112					
	Diameter of Well(inch)	22	Screen (Elev.)	477～428														
57	Well Name	KM 14.5 C. SUR					267.07		0.7	1,036	1.86	268.93	557	2,178		-		
	Year of Construction	1974	Elevation (m)	469.34	31/05/96	267.14	(05/96)		1.1	1,581	3.07	270.14	515					
(60)	Depth of Well (m)	356.62	Screen (Dep.)	-					1.6	2,316	4.65	271.72	498					
	Diameter of Well(inch)	-	Screen (Elev.)	-					1.9	2,780	5.77	272.84	482					
58	Well Name	KM 14.5 Carretera VIEJA A LEON			23/04/88	89.31	114.72		0.8	1,209	9.8	124.51	124	2,505		164.63		
	Year of Construction	1987	Elevation (m)	441.6	13/02/94	110.79			1.2	1,770	18.7	133.37	95					
(61)	Depth of Well (m)	304.9	Screen (Dep.)	125-302	01/06/96	114.75			1.9	2,696	41.5	156.21	65					
	Diameter of Well(inch)	18	Screen (Elev.)	316-140														
59	Well Name	Km 7 C. MASAYA				106.71	104.39		0.8	1,160	10.6	115.03	109	2,987		155.43		
	Year of Construction	1990	Elevation (m)	348.39	19/01/94	102.85			1.2	1,666	16.8	121.23	99					
(90)	Depth of Well (m)	243.84	Screen (Dep.)	130～241	-/06/95	103.96			1.8	2,647	33.3	137.73	79					
	Diameter of Well(inch)	18	Screen (Elev.)	218～107	-/11/95	103.41			2.3	3,279	45.73	150.12	72					
60	Well Name	VERACRUZ Nº- 2 (VALLE GOTHEL Nº- 2)			1974	54.25	58.07		1.1	1,654	2.5	60.57	662	3,159		76.21		
	Year of Construction	1976	Elevation (m)	139	24/01/94	104			1.6	2,360	3.9	61.97	605					
(70)	Depth of Well (m)	121.92	Screen (Dep.)	70～119	1996	57.34			2.4	3,513	6.8	64.89	515					
	Diameter of Well(inch)	16	Screen (Elev.)	69～20														

Note S.W.L.: Static Water Level , D.W.L.: Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (7/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump	
					Date	(m)	(m)	(m3/min)	(m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)	
61	Well Name	VERACRUZ Nº- 3 (VALLE GOTHEL Nº- 3)			10/03/76	58.83	56.08	0.6	904	6.3	62.41	143		2,070		65.36	este Pozo resrulto improductivo
	Year of Construction	1976	Elevation (m)	136.7				1.0	1,427	12.0	68.05	119					
(71)	Depth of Well (m)	112.78	Screen (Dep.)	63～109				2.0	2,930	19.4	75.46	151					
	Diameter of Well(inch)	18	Screen (Elev.)	73～28													
62	Well Name	VERACRUZ Nº- 4			10/08/89	67.67	70.15	0.7	975	2.1	72.28	458		3,594		97.56	
	Year of Construction	1989	Elevation (m)	137.05				1.0	1,449	4.7	74.89	306					
(74)	Depth of Well (m)	152.4	Screen (Dep.)	106～134				1.5	2,184	8.7	78.81	252					
	Diameter of Well(inch)	18	Screen (Elev.)	31～03													
63	Well Name	VERACRUZ Nº- 5			11/11/89	56.39										86.87	
	Year of Construction	1989	Elevation (m)	154.17													
(75)	Depth of Well (m)	94.183	Screen (Dep.)	76.7～91.2													
	Diameter of Well(inch)	18	Screen (Elev.)	78.5～63													
64	Well Name	VERACRUZ Nº- 6			Nov./90	48.77	52.75	1.0	1,432	1.5	54.29	931		3,186		79.26	
	Year of Construction	1989	Elevation (m)	178.1	17/11/89	48.77		1.4	2,069	2.7	55.42	778					
(76)	Depth of Well (m)	97.536	Screen (Dep.)	59～82				2.1	3,033	4.9	57.68	615					
	Diameter of Well(inch)	18	Screen (Elev.)	119～96				0.0									
65	Well Name	CENTROAMERICA Nº- 4				91.44	91.46							1,411		176.8	
	Year of Construction	1994	Elevation (m)	299.92													
(108)	Depth of Well (m)	243.84	Screen (Dep.)	157～242													
	Diameter of Well(inch)	19	Screen (Elev.)	143～58													
66	Well Name	REPARTO. SHICK Nº- 2 (VILLA CUBA No.2)			13/02/88	118.87	136.00	1.6	2,267	7.54	143.54	301		2,408			
	Year of Construction	1988	Elevation (m)	-			(11/95)	1.9	2,736	9.68	145.68	283					
(50)	Depth of Well (m)	298.7	Screen (Dep.)	-				2.3	3,287	12.42	148.42	265					
	Diameter of Well(inch)	18	Screen (Elev.)					2.7	3,944	16.13	152.13	245					
67	Well Name	REPTO. SHICK Nº- 3				103.66	110.28	0.5	784	14.2	124.47	55		1,495		164.63	
	Year of Construction	1990	Elevation (m)	150	13/01/94	10.94		0.8	1,111	20.9	131.17	53					
(88)	Depth of Well (m)	304.8	Screen (Dep.)	143～302	02/02/96	110.21		1.1	1,634	31.9	142.20	51					
	Diameter of Well(inch)	20	Screen (Elev.)	7 ～-150				1.4	1,962	39.4	149.68	50					
68	Well Name	REPARTO. SHICK Nº- 4				135.03	138.32	0.6	915	17.8	156.13	51		840		135.06	
	Year of Construction	1994	Elevation (m)	442.87	-/02/96	136.89		1.0	1,400	30.8	169.08	46					
(109)	Depth of Well (m)	274.32	Screen (Dep.)	195～262	29/05/96	138.36		1.4	2,048	51.0	189.30	40					
	Diameter of Well(inch)	17.5	Screen (Elev.)	248～281				1.7	2,459	65.84	204.16	37					
69	Well Name	SAN JUDAS Nº- 1			-/03/84	153.96	159.23	0.8	1,188	15.4	174.63	77		2,026			
	Year of Construction	1984	Elevation (m)	213.97	-/02/96	163.06	(11/92)	0.9	1,330	17.6	176.83	76					
(43)	Depth of Well (m)	259.08	Screen (Dep.)	198～259				1.2	1,788	25.6	184.83	70					
	Diameter of Well(inch)	20	Screen (Elev.)	16～-45				1.6	2,374	34.97							
70	Well Name	SAN JUDAS Nº- 2				148.63	155.94	1.1	1,597	6.6	162.51	243		2,730		189.02	
	Year of Construction	1985	Elevation (m)	487.38				1.4	2,060	11.4	167.35	181					
(44)	Depth of Well (m)	259.08	Screen (Dep.)	182～254				2.0	2,867	16.9	172.82	170					
	Diameter of Well(inch)	19	Screen (Elev.)	305～233				2.4	3,440	22.7	178.64	152					

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (8/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)	(m3/min)	(m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)		
71	Well Name	SAN JUDAS N°- 3 (v. hermosa)			07/04/88	150.30	152.94	0.9	1,232	4.65	157.59	265		2,377				
	Year of Construction	1988	Elevation (m)	195.8	03/02/94	152.00	(05/95)	1.3	1,864	7.62	160.56	245						
(45)	Depth of Well (m)	289.56	Screen (Dep.)					1.8	2,556	13.82	166.76	185						
	Diameter of Well(inch)	18	Screen (Elev.)					2.1	3,067	22.16	175.10	138						
72	Well Name	SIERRA MAESTRA (LOMA LINDA)				195.07	198.91	0.6	909	3.9	202.80	234		1,856		225.61		
	Year of Construction	1990	Elevation (m)	639.8	-/01/96	200.53		0.9	1,356	5.2	204.14	259						
(85)	Depth of Well (m)	335.28	Screen (Dep.)	207~333				1.4	2,053	8.5	207.36	243						
	Diameter of Well(inch)	18	Screen (Elev.)	433~307				1.7	2,466	10.45	209.36	236						
73	Well Name	TORRES MOLINA N°-1			30/11/84	213.41	215.53	0.9	1,280	9.3	224.82	138		2,127		213.41		
	Year of Construction	1984	Elevation (m)	(250)	Junio/95	215.70		1.3	1,917	13.5	229.03	142						
(64)	Depth of Well (m)	286.51	Screen (Dep.)	232~284	Agost0/95	215.71		2.0	2,930	35.7	251.20	82						
	Diameter of Well(inch)	20	Screen (Elev.)		22/05/96	215.59												
74	Well Name	TORRES MOLINA N°-2				203.96	207.86	0.5	664	3.9	211.78	170		1,398		243.9		
	Year of Construction	1995	Elevation (m)	670.35	-/06/95	215.71	(05/96)	0.7	975	7.3	215.18	133						
(110)	Depth of Well (m)	307.85	Screen (Dep.)	232~253, 283~ 301	-/09/95	215.71		1.4	2,059	15.9	223.74	130						
	Diameter of Well(inch)	14	Screen (Elev.)		23/05/96	207.92												
75	Well Name	VILLA PANAMA				161.59	164.00	0.8	1,149	2.7	166.66	431		2,942		282.92		
	Year of Construction	1988	Elevation (m)	247	-/04/95	164.99												
(66)	Depth of Well (m)	335.28	Screen (Dep.)	183~332	-/02/96	165.62												
	Diameter of Well(inch)	18	Screen (Elev.)	64~-85	20/06/96	164.04												
76	Well Name	MANOLO MORALES				61.28	69.05	0.8	1,210	1.84	70.89	658		2,933		79.26		
	Year of Construction	1987	Elevation (m)	129		67.07	(04/96)	1.3	1,815	3.45	72.50	526						
(51)	Depth of Well (m)	213.36	Screen (Dep.)	85~210				1.6	2,349	5.87	74.92	400						
	Diameter of Well(inch)	18	Screen (Elev.)					2.0	2,819	9.32	78.37	302				×		
77	Well Name	HOSP. BERTA CALDERON			SEP./87	105.79	107.90	0.6	833	6.3	114.23	132		2,998		152.44		
	Year of Construction	1987	Elevation (m)	(200)	15/01/94	108.88		0.8	1,176	9.2	117.09	128						
(63)	Depth of Well (m)	237.74	Screen (Dep.)	125~226	16/03/84	107.00		1.7	2,391	18.0	125.88	133						
	Diameter of Well(inch)	18	Screen (Elev.)	-	15/04/90	107.93												
78	Well Name	HOSP. VELEZ PAIZ			28/05/88	112.8								2,777		128.04		
	Year of Construction	1988	Elevation (m)	145.98	15/01/94	109.4												
(62)	Depth of Well (m)	246.89	Screen (Dep.)	134~244	-/08/95	106.5												
	Diameter of Well(inch)	18	Screen (Elev.)	12~ -102														
79	Well Name	JULIO MARTINEZ			1990	99.01	103.57	1.7	2,385	1.9	105.42	1289		5,861		121.95		
	Year of Construction	1990	Elevation (m)	324.46	-/07/95	104.42		2.6	3,769	3.9	107.43	977						
(87)	Depth of Well (m)	222.81	Screen (Dep.)	130~223	-/02/96	105.76		3.7	5,332	6.2	109.78	859						
	Diameter of Well(inch)	-	Screen (Elev.)	196~101				4.4	6,403	8.32	111.89	770						
80	Well Name	PADRE FABRETO															Se Desconoce Toda Informacion Hidrogeologia Area de este Pozo	
	Year of Construction	1998	Elevation (m)	-														
(93)	Depth of Well (m)	-	Screen (Dep.)	-														
	Diameter of Well(inch)	-	Screen (Elev.)	-														

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (9/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge			s	D.W.L	S.Cap.	Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
81	Well Name	SAN ISIDRO DE LA CRUZ VERDE 2				228.87	233.65		0.6	885	2.69	236.34	329	1,400		256.09		
	Year of Construction	1993	Elevation (m)	749.81	-/01/94	230.27	(06/96)		0.9	1,316	4.76	238.41	277					
(97)	Depth of Well (m)	289.56	Screen (Dep.)	259～286	-/07/95	232.93			1.4	1,986	8.52	242.17	233					
	Diameter of Well(inch)	17	Screen (Elev.)	489～462					1.7	2,384	11.83	245.48	202					
82	Well Name	ALPES Nº- 1																
	Year of Construction	1987	Elevation (m)															
(113)	Depth of Well (m)	378	Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
83	Well Name	ALPES Nº- 2																
	Year of Construction	1995	Elevation (m)															
(114)	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
84	Well Name	ALPES Nº- 3																
	Year of Construction	1991	Elevation (m)															
(115)	Depth of Well (m)	387	Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
85	Well Name	ALTOS DE SANTO DOMINGO																
	Year of Construction	2000	Elevation (m)															
(116)	Depth of Well (m)	366	Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
86	Well Name	KM. 17 CARRETERA SUR							0.9	1,296	2.82							
	Year of Construction	2001	Elevacion						1.0	1,382	3.31							
(117)	Depth of Well (m)	361	Screen(Elev.)	310-333,346-355					1.3	1,814	3.98							
	Diameter of Well(inch)								1.5	2,177	5.00							
87	Well Name	UNAN			08/05/92	152.74	152.73		0.6	806	8.2	160.93	98	1,936		-		
	Year of Construction	1984	Elevation (m)	-	16/02/96	152.77			0.8	1,171	13.0	165.76	90					
(65)	Depth of Well (m)	228.6	Screen (Dep.)	-					1.2	1,743	21.3	174.07	82					
	Diameter of Well(inch)	18	Screen (Elev.)	-														
88	Well Name	MANAGUA II P-1 (MJP-1)				22.73			2.5	3,600	6.57	30.27	548		22.7			
	Year of Construction	2001	Elevacion	78.05			23.70		3.0	4,320	8.35	32.05	517					
(133)	Depth of Well (m)	188.9	Screen(Elev.)				23.68		3.5	5,040	10.36	34.06	486	3.0				
	Diameter of Well(inch)								4.0	5,760	12.24	35.94	471	2.8	33.3	51.2		
89	Well Name	MANAGUA II P-2 (MJP-2)				26.62			1.9	2,743	31.64	58.22	87		22.7?			
	Year of Construction	2001	Elevacion	81.92			26.58		2.6	3,812	48.66	75.24	78					
(134)	Depth of Well (m)	199.5	Screen(Elev.)				26.62		3.1	4,478	65.49	92.07	68	3.0				
	Diameter of Well(inch)								3.5	5,054	73.72	100.30	69	2.8	45.47	51.2		
90	Well Name	MANAGUA II P-3 (MJP-3)				34.07			2.0	2,880	6.14	40.21	469		34.1			
	Year of Construction	2001	Elevacion	92.58			34.07		2.5	3,600	9.62	43.69	374					
(135)	Depth of Well (m)	188	Screen(Elev.)				34.01		3.0	4,320	13.07	47.14	331	2.3				
	Diameter of Well(inch)								3.5	5,054	23.41	57.48	216	2.4	-	57.73		

Note S.W.L.: Static Water Level , D.W.L.: Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (10/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge			s	D.W.L	S.Cap.	Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
91	Well Name	MANAGUA II P-4 (MJP-4)				48.76			2.0	2,880	2.59	51.6	1,112		49.2			
	Year of Construction	2001	Elevation (m)	109.94			48.96		2.5	3,600	3.71	52.7	970					
(136)	Depth of Well (m)	200.6	Screen (Dep.)				48.96		3.0	4,320	4.88	53.8	885					
	Diameter of Well(inch)		Screen (Elev.)						3.5	5,054	6.53	55.5	774	2.2	52.0	66.75		
92	Well Name	MANAGUA II P-5 (MJP-5)				31.15			1.5	2,160	0.64	31.8	3,375					
	Year of Construction	2001	Elevation (m)	84.39			31.15		2.0	2,880	0.91	32.1	3,165					
(137)	Depth of Well (m)	189	Screen (Dep.)				31.15		2.5	3,600	1.31	32.5	2,748					
	Diameter of Well(inch)		Screen (Elev.)						3.0	4,320	1.72	32.9	2,512	2.9	35.8	60.48		
93	Well Name	MANAGUA II P-6 (MJP-6)				40.87			1.5	2,160	4.27	45.1	506					
	Year of Construction	2001	Elevation (m)	99.13			40.87		2.0	2,880	7.22	48.1	399					
(138)	Depth of Well (m)	178	Screen (Dep.)				40.87		2.5	3,600	9.33	50.2	386					
	Diameter of Well(inch)		Screen (Elev.)						3.0	4,320	11.11	52.0	389	-	-	63.23		
94	Well Name	MANAGUA II P-7 (MJP-7)				40.75			2.0	2,880	0.78	41.5	3,692					
	Year of Construction	2001	Elevation (m)	94.15			40.75		2.5	3,600	0.96	41.7	3,750					
(139)	Depth of Well (m)	200	Screen (Dep.)				40.75		3.0	4,320	1.14	41.9	3,789					
	Diameter of Well(inch)		Screen (Elev.)						3.5	5,054	1.33	42.1	3,800	2.8		60.5		
95	Well Name	MANAGUA II P-8 (MJP-8)				45.72			2.0	2,880	1	46.7	2,880					
	Year of Construction	2001	Elevation (m)	103.87			45.72		2.5	3,600	1.5	47.2	2,400					
(140)	Depth of Well (m)	200.6	Screen (Dep.)				45.72		3.0	4,320	2.02	47.7	2,139					
	Diameter of Well(inch)		Screen (Elev.)						3.5	5,054	2.56	48.3	1,974	3	51.5	60.5		
96	Well Name	MANAGUA II P-9 (MJP-9)				44.00			3.4	4,910	6.48	53.7	758					
	Year of Construction	2001	Elevation (m)				47.18		3.8	5,463	7.34	54.5	744					
(141)	Depth of Well (m)	191.8	Screen (Dep.)				47.18		4.5	6,450	9.40	56.6	686					
	Diameter of Well(inch)		Screen (Elev.)											3.45	57.2	60.5		
97	Well Name	MANAGUA II P-10 (MJP-10)				51.45			3.4	4,910	3.94	54.7	1,246		52.19			
	Year of Construction	2001	Elevation (m)				50.76		3.8	5,463	4.32	55.1	1,265					
(142)	Depth of Well (m)	194	Screen (Dep.)				50.76		4.2	6,017	4.78	55.5	1,259					
	Diameter of Well(inch)		Screen (Elev.)											2.8	61.8	77.0		
98	Well Name	MANAGUA II P-11 (MJP-11)				37.20			3.0	4,380	16.51	56.3	265		40.79			
	Year of Construction	2001	Elevation (m)				39.81		3.4	4,909	21.09	60.9	233					
(143)	Depth of Well (m)	196	Screen (Dep.)						3.8	5,462	24.06	63.9	227					
	Diameter of Well(inch)		Screen (Elev.)											2.1	72.7	71.48		
99	Well Name	MANAGUA II P-12 (MJP-12)				32.71			2.0	2,880	1.15	33.5	2,504		32.91			
	Year of Construction	2001	Elevation (m)	87.02			32.31		2.5	3,600	1.52	33.8	2,368					
(144)	Depth of Well (m)	188	Screen (Dep.)						3.0	4,320	2.20	34.5	1,964					
	Diameter of Well(inch)		Screen (Elev.)						3.5	5,054	2.70	35.0	1,872	2.9	40.4	60.5		
100	Well Name	MANAGUA II P-13 (MJP-13)				34.65			2.5	3,610	1.99	36.5	1,814		34.92			
	Year of Construction	2001	Elevation (m)	94.15			34.47		3.0	4,332	2.53	37.0	1,712					
(145)	Depth of Well (m)	200	Screen (Dep.)						3.5	5,054	3.13	37.6	1,615					
	Diameter of Well(inch)		Screen (Elev.)						4.0	5,775	3.63	38.1	1,591	3.2	39.51	55.0		

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (11/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)	(m3/min)	(m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)		
101	Well Name	MANAGUA II P-14 (MJP-14)				34.65		2.6	3,744	9.06	47.5	413			39.24			
	Year of Construction	2001	Elevation (m)	94.15			38.45	3.5	5,040	13.46	51.9	374		2.3				
(146)	Depth of Well (m)	199.5	Screen (Dep.)					4.0	5,760	16.72	55.2	344		1.7				
	Diameter of Well(inch)		Screen (Elev.)											1.5	49.69	54.98		
102	Well Name	MANAGUA II P-15 (MJP-15)				40.40		2.6	3,744	4.85	45.3	772			41.12			
	Year of Construction	2001	Elevation (m)	97.4			40.40	3.5	5,040	7.65	48.1	659						
(147)	Depth of Well (m)	193.5	Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)											2.6	-	60.48		
103	Well Name	MANAGUA II P-16 (MJP-16)=JICA No.2						2.6	3,744						45.32			
	Year of Construction		Elevation (m)					3.5	5,040									
(148)	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)												-	65.98		
104	Well Name	MANAGUA I W-1 (MJW-1)				105.12	104.33	2.0	2,880	11.84	116.17	243				149.55		
	Year of Construction	1996	Elevation (m)	214.15				2.5	3,600	14.94	119.27	241						
(118)	Depth of Well (m)	200	Screen (Dep.)	119 ～147				3.0	4,320	17.87	122.20	242						
	Diameter of Well(inch)		Screen (Elev.)					3.5	5,040	23.85	128.18	211						
105	Well Name	MANAGUA I W-2 (MJW-2)				106.49	105.74	2.0	2,880	9.62	115.36	299				140		
	Year of Construction	1996	Elevation (m)	214.85				2.5	3,600	11.01	116.75	327						
(119)	Depth of Well (m)	200	Screen (Dep.)	119 ～140, 160～174				3.0	4,320	13.31	119.05	325						
	Diameter of Well(inch)		Screen (Elev.)					3.5	5,040	15.84	121.58	318						
106	Well Name	MANAGUA I W-3 (MJW-3)				109.1	108.35	2.5	3,600	1.23	109.58	2927				136		
	Year of Construction	1996	Elevation (m)	217.45				3.0	4,320	1.61	109.96	2683						
(120)	Depth of Well (m)	200	Screen (Dep.)	120～134, 139～187				3.5	5,040	2.03	110.38	2483						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	3.05	111.4	2030						
107	Well Name	MANAGUA I W-4 (MJW-4)				111.28	110.53	3.0	4,320	2.83	113.36	1527				133.9		
	Year of Construction	1996	Elevation (m)	219.65				3.5	5,040	3.63	114.16	1388						
(121)	Depth of Well (m)	200	Screen (Dep.)	119～133, 140～160				4.0	5,760	4.52	115.05	1274						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	5.38	115.91	1151						
108	Well Name	MANAGUA I W-5 (MJW-5)				111.08	110.33	2.5	3,600	5.47	115.8	658				148		
	Year of Construction	1996	Elevation (m)	219.75				3.0	4,320	7.04	117.37	614						
(122)	Depth of Well (m)	200	Screen (Dep.)	119～147, 160～167				3.5	5,040	8.99	119.32	561						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	10.87	121.20	570						
109	Well Name	MANAGUA I W-6 (MJW-6)				112.99	112.24	1.6	2,333	0.54	112.78	4320				136.06		
	Year of Construction	1996	Elevation (m)	221.85				2.3	3,269	1.29	113.53	2534						
(123)	Depth of Well (m)	200	Screen (Dep.)	117～134, 140～168				2.7	3,924	2.37	114.61	1656						
	Diameter of Well(inch)		Screen (Elev.)					3.18	4,579	3.6	115.84	1272						
110	Well Name	MANAGUA I W-7 (MJW-7)				113.79	113.04	2.0	2,880	2.9	115.94	993				136.06		
	Year of Construction	1996	Elevation (m)	223.35				2.5	3,600	4.31	117.35	835						
(124)	Depth of Well (m)	200	Screen (Dep.)	119～150, 156 ～180				3.0	4,320	6.12	119.16	706						
	Diameter of Well(inch)		Screen (Elev.)					3.5	5,040	9.15	122.19	551						

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3.B Detail Data of Existing Wells (12/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L	Discharge		s	D.W.L	S.Cap.		Q-Actual	D.W.L	Pump		
					Date	(m)	(m)	(m3/min)	(m3/day)	(m)	(m)	(L/min/m)		(m3/dia)	(m)	(m)		
111	Well Name	MANAGUA I W-8 (MJW-8)				114.39	113.64	1.0	1,440	1.81	115.45	796				134.73		
	Year of Construction	1996	Elevation (m)	223.45				1.5	2,183	3.35	116.99	652						
(125)	Depth of Well (m)	200	Screen (Dep.)	119~153, 160~180				2.1	3,002	5.00	118.64	600						
	Diameter of Well(inch)		Screen (Elev.)					2.5	3,642	6.42	120.06	567						
112	Well Name	MANAGUA I E-1 (MJE-1)				106.98	106.23									144.3		
	Year of Construction	1996	Elevation (m)	214.95				3.5	5,040	6.33	112.56	796						
(126)	Depth of Well (m)	200	Screen (Dep.)	119~143, 156~166				4.0	5,760	7.82	114.05	737						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	8.63	114.86	717						
113	Well Name	MANAGUA I E-2 (MJE-2)				108.43	107.68	2.5	3,600	6.99	114.67	515				148.0		
	Year of Construction	1996	Elevation (m)	216.95				3.0	4,320	8.96	116.64	482						
(127)	Depth of Well (m)	200	Screen (Dep.)	119~147, 160~187				3.5	5,040	10.94	118.62	461						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	13.95	121.63	444						
114	Well Name	MANAGUA I E-3 (MJE-3)				111.00	110.25	2.5	3,600	5.51	115.76	653				144.5		
	Year of Construction	1996	Elevation (m)	217.85				3.0	4,320	7.05	117.3	613						
(128)	Depth of Well (m)	200	Screen (Dep.)	119~144, 150~171				3.5	5,040	9.01	119.26	559						
	Diameter of Well(inch)		Screen (Elev.)					4.0	5,760	10.86	121.11	530						
115	Well Name	MANAGUA I E-4 (MJE-4)				111.03	110.28	3.0	4,320	5.41	115.69	799				149.15		
	Year of Construction	1996	Elevation (m)	219.55				3.5	5,040	6.85	117.13	736						
(129)	Depth of Well (m)	200	Screen (Dep.)	119~148, 161~168				4.0	5,760	8.38	118.66	687						
	Diameter of Well(inch)		Screen (Elev.)					4.3	6,192	9.96	120.24	622						
116	Well Name	MANAGUA I E-5 (MJE-5)				112.37	111.62	2.3	3,269	1.56	113.18	2095				134.6		
	Year of Construction	1996	Elevation (m)	221.95				2.8	3,960	2.44	114.06	1623						
(130)	Depth of Well (m)	200	Screen (Dep.)	119~133, 140~153				3.2	4,579	3.07	114.69	1492						
	Diameter of Well(inch)		Screen (Elev.)					3.4	4,831	3.74	115.36	1292						
117	Well Name	MANAGUA I E-6 (MJE-6)				112.04	111.35	2.5	3,600	5.11	116.46	705				140.0		
	Year of Construction	1996	Elevation (m)	223.55				3.0	4,320	7.14	118.49	605						
(131)	Depth of Well (m)	200	Screen (Dep.)	126~140, 146~160				3.5	5,040	9.74	121.09	517						
	Diameter of Well(inch)		Screen (Elev.)					4.0	5,760	11.46	122.81	503						
118	Well Name	MANAGUA I E-7 (MJE-7)				114.37		2.5	3,600	9.85	124.22	365				140.4		
	Year of Construction	1996	Elevation (m)	224.25				3.0	4,320	11.69	126.06	370						
(132)	Depth of Well (m)	200	Screen (Dep.)	126~140, 146~160				3.5	5,040	14.85	129.22	339						
	Diameter of Well(inch)		Screen (Elev.)					4.0	5,760	18.94	133.31	304						
119	Well Name	CHIQUISTAGUA			11/07/2001	135.9		1.3	1,913	4.87	140.77	393						
	Year of Construction	2001	Elevation (m)	188-206, 210-221				1.5	2,186	5.46	141.36	400						
(149)	Depth of Well (m)	241.9	Screen (Dep.)					1.7	2,459	6.55	142.45	375						
	Diameter of Well(inch)		Screen (Elev.)															
120	Well Name	CEDRO GALAN			02/11/2001	160.02	165.94	1.1	1,645	7.47	173.41	220						
	Year of Construction	2001	Elevation (m)	183-200, 206-221				1.3	1,920	9.14	175.08	210						
(150)	Depth of Well (m)	254.8	Screen (Dep.)					1.5	2,194	10.36	176.3	212						
	Diameter of Well(inch)		Screen (Elev.)					1.8	2,633	12.65	178.59	208						

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

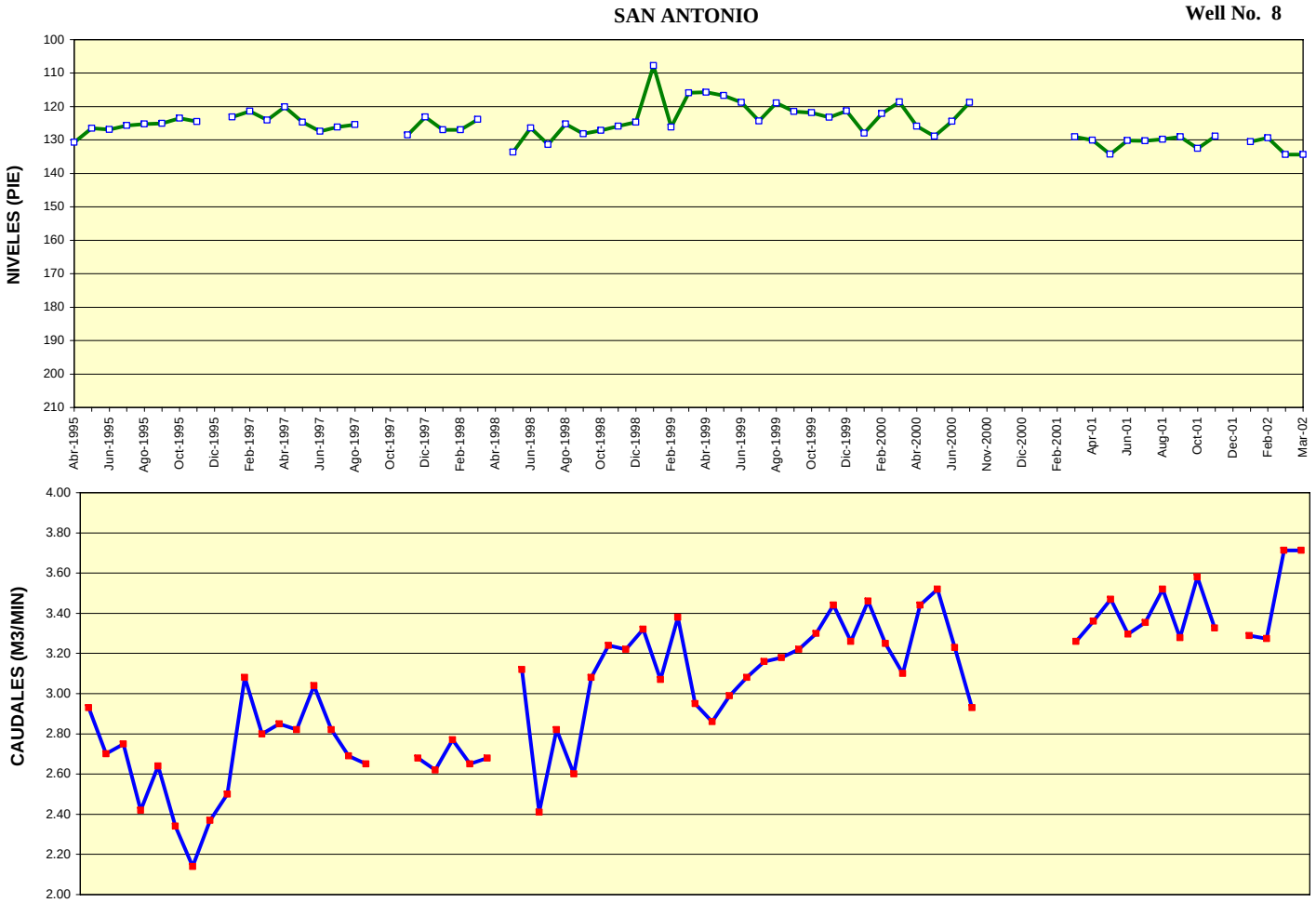
ANNEX 3.B Detail Data of Existing Wells (13/13)

No. (Well No.)	Basic Data of Wells				Static Water Level S.W.L.(Initial)		PIPUMPING TEST							Present Condition			EVALUATION	
							S.W.L		Discharge		s	D.W.L	S.Cap.	Q-Actual	D.W.L	Pump		
					Date	(m)	(m)		(m3/min)	(m3/day)	(m)	(m)	(L/min/m)	(m3/dia)	(m)	(m)		
121 (151)	Well Name	PLANETANIUM			03/10/2001	130.66	130.45		1.1	1,640	4.73	135.18	347					
	Year of Construction	2001	Elevation (m)						1.3	1,913	5.77	136.22	332					
	Depth of Well (m)	256	Screen (Dep.)	175-194, 211-245					1.5	2,186	6.60	137.26	331					
	Diameter of Well(inch)		Screen (Elev.)						1.7	2,460	7.62	138.07	323					
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															
	Well Name																	
	Year of Construction		Elevation (m)															
	Depth of Well (m)		Screen (Dep.)															
	Diameter of Well(inch)		Screen (Elev.)															

Note S.W.L. : Static Water Level , D.W.L. : Dynamic Water Level, S.Cap. : Specific Capacity, s : Drawdown, Q-Actual : Actual Extraction, Pump D. : Pump Depth

ANNEX 3C

Relations between Pumping Discharges and Water Levels



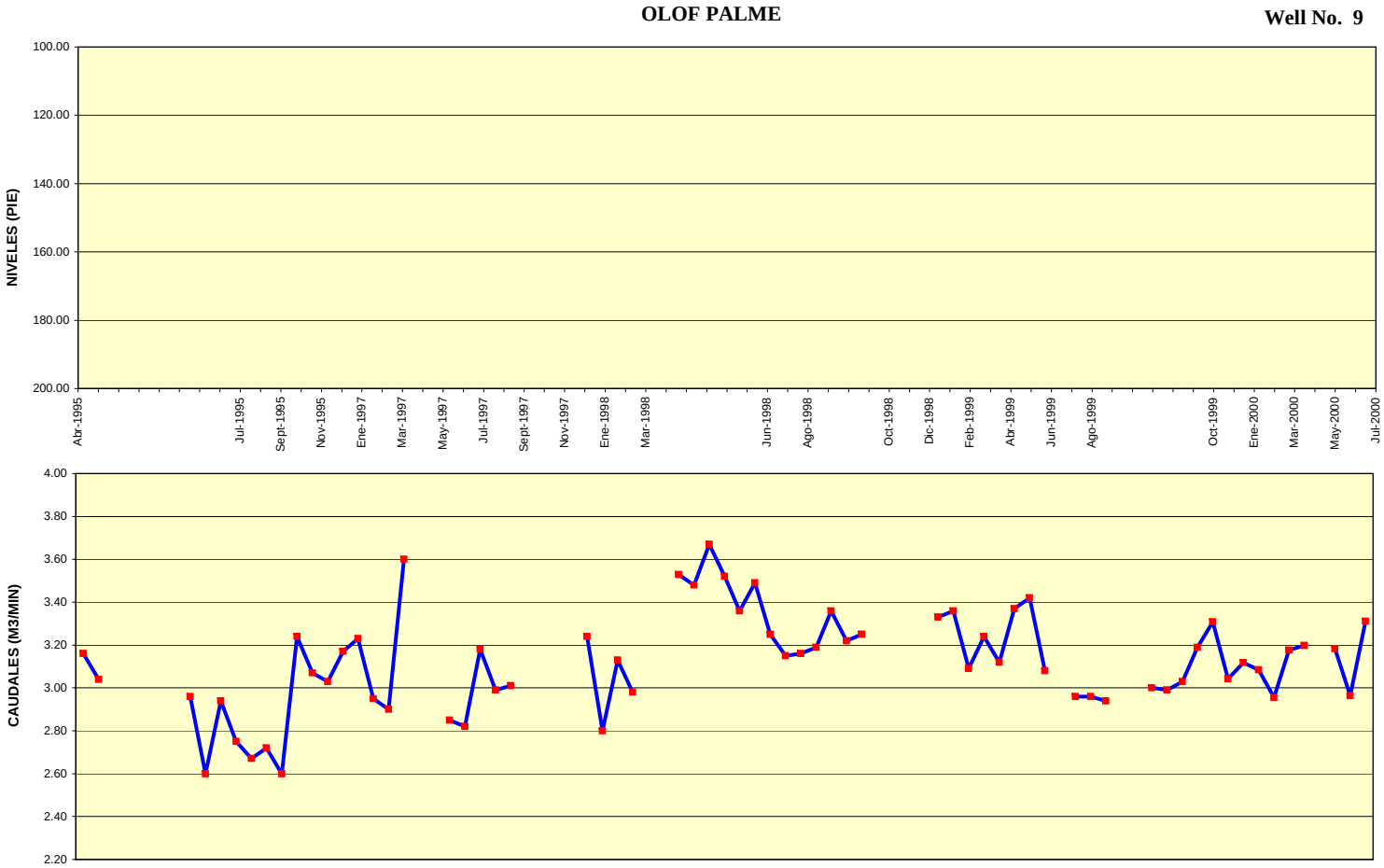
ANNEX 3.C(1) Punping Discharge and Water Level in Wells

ANNEX 3.C(2) Punping Discharge and Water Level in Wells

SAN ANTONIO (Well No. 8)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.93	130.71
May-1995	2.70	126.47
Jun-1995	2.75	126.87
Jul-1995	2.42	125.65
Ago-1995	2.64	125.23
Sept-1995	2.34	125.00
Oct-1995	2.14	123.50
Nov-1995	2.37	124.50
Dic-1995	2.50	
Ene-1997	3.08	123.08
Feb-1997	2.80	121.41
Mar-1997	2.85	124.00
Abr-1997	2.82	120.08
May-1997	3.04	124.66
Jun-1997	2.82	127.42
Jul-1997	2.69	126.16
Ago-1997	2.65	125.42
Sept-1997		
Oct-1997		
Nov-1997	2.68	128.50
Dic-1997	2.62	123.08
Ene-1998	2.77	126.92
Feb-1998	2.65	126.92
Mar-1998	2.68	123.83
Abr-1998		
May-1998	3.12	133.62
Jun-1998	2.41	126.41
Jul-1998	2.82	131.33
Ago-1998	2.60	125.20
Sept-1998	3.08	128.16
Oct-1998	3.24	127.16
Nov-1998	3.22	125.83
Dic-1998	3.32	124.66
Ene-1999	3.07	107.75
Feb-1999	3.38	126.16
Mar-1999	2.95	115.92

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.86	115.70
May-1999	2.99	116.75
Jun-1999	3.08	118.75
Jul-1999	3.16	124.33
Ago-1999	3.18	118.92
Sept-1999	3.22	121.50
Oct-1999	3.30	121.83
Nov-1999	3.44	123.25
Dic-1999	3.26	121.25
Ene-2000	3.46	128.00
Feb-2000	3.25	122.08
Mar-2000	3.10	118.66
Abr-2000	3.44	125.83
May-2000	3.52	128.84
Jun-2000	3.23	124.41
Jul-2000	2.90	117.66
Ago-2000	2.94	118.80
Sept-2000	2.91	119.58
Oct-2000	2.93	118.75
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001		
Mar-2001	3.26	129.04
Apr-01	3.36	130.08
May-01	3.47	134.25
Jun-01	3.30	130.16
Jul-01	3.35	130.25
Aug-01	3.52	129.75
Sep-01	3.28	129.08
Oct-01	3.58	132.50
Nov-01	3.33	128.83
Dec-01		
Jan-02	3.29	130.50
Feb-02	3.27	129.33
Mar-02	3.71	134.37



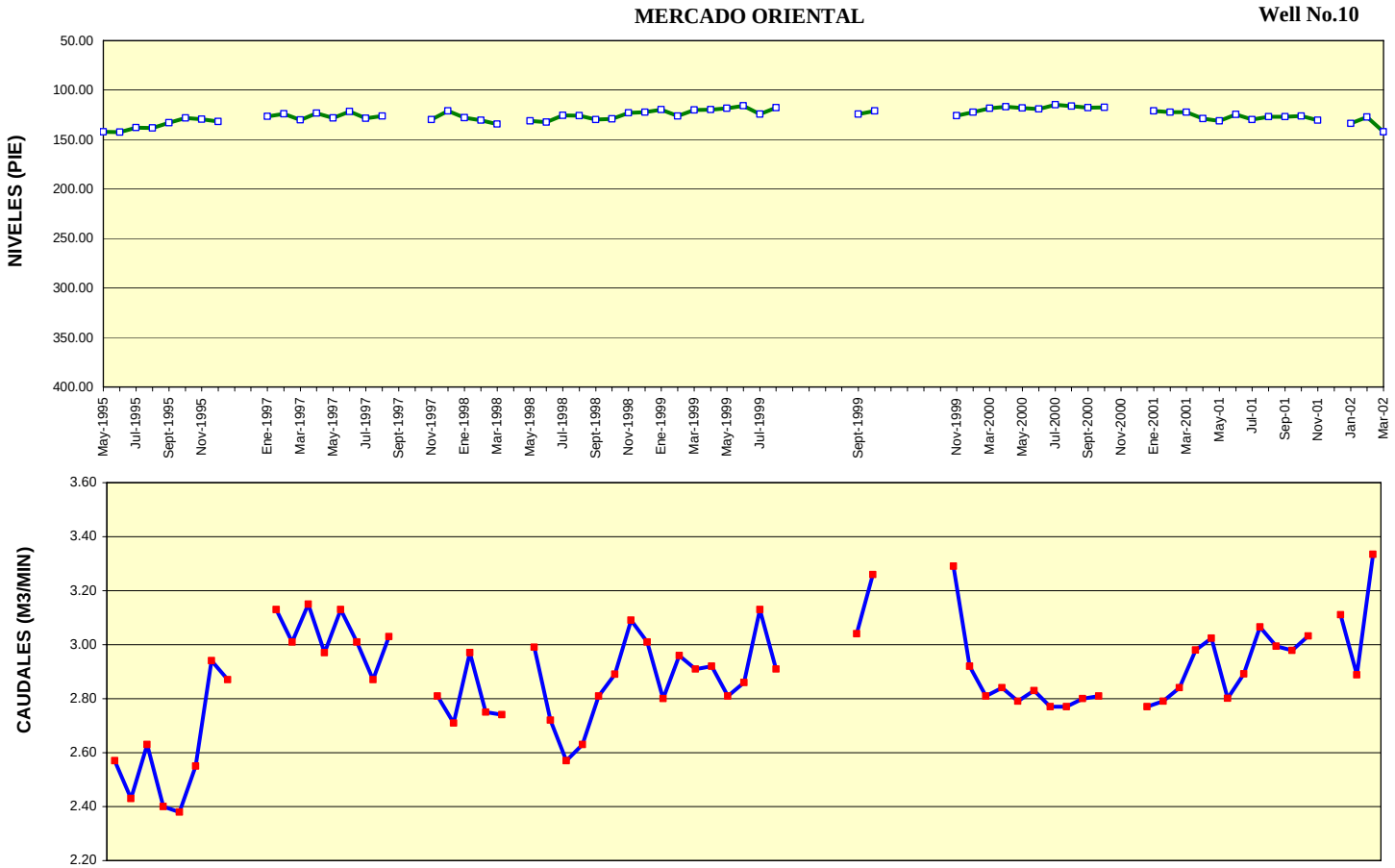
ANNEX 3.C(3) Punping Discharge and Water Level in Wells

ANNEX 3.C(4) Punping Discharge and Water Level in Wells

OLOF PALME (Well No.9)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	3.16	
May-1995	3.04	
Jun-1995	2.96	
Jul-1995	2.60	
Ago-1995	2.94	
Sept-1995	2.75	
Oct-1995	2.67	
Nov-1995	2.72	
Dic-1995	2.60	
Ene-1997	3.24	
Feb-1997	3.07	
Mar-1997	3.03	
Abr-1997	3.17	
May-1997	3.23	
Jun-1997	2.95	
Jul-1997	2.90	
Ago-1997	3.60	
Sept-1997		
Oct-1997		
Nov-1997	2.85	
Dic-1997	2.82	
Ene-1998	3.18	
Feb-1998	2.99	
Mar-1998	3.01	
Abr-1998		
May-1998	3.24	
Jun-1998	2.80	
Jul-1998	3.13	
Ago-1998	2.98	
Sept-1998	3.53	
Oct-1998	3.48	
Nov-1998	3.67	
Dic-1998	3.52	
Ene-1999	3.36	
Feb-1999	3.49	
Mar-1999	3.25	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.15	
May-1999	3.16	
Jun-1999	3.19	
Jul-1999	3.36	
Ago-1999	3.22	
Sept-1999	3.25	
Oct-1999	3.33	
Nov-1999	3.50	
Dic-1999	3.36	
Ene-2000	3.09	
Feb-2000	3.24	
Mar-2000	3.12	
Abr-2000	3.37	
May-2000	3.42	
Jun-2000	3.08	
Jul-2000		
Ago-2000	2.96	
Sept-2000	2.96	
Oct-2000	2.94	
Nov-2000		
Dic-2000		
Ene-2001	3.00	
Feb-2001	2.99	
Mar-2001	3.03	
Apr-01	3.19	
May-01	3.31	
Jun-01	3.04	OBST
Jul-01	3.12	OBST
Aug-01	3.08	OBST
Sep-01	2.96	OBST
Oct-01	3.18	OBST
Nov-01	3.20	OBST
Dec-01		OBST
Jan-02	3.18	OBST
Feb-02	2.96	OBST
Mar-02	3.31	OBST



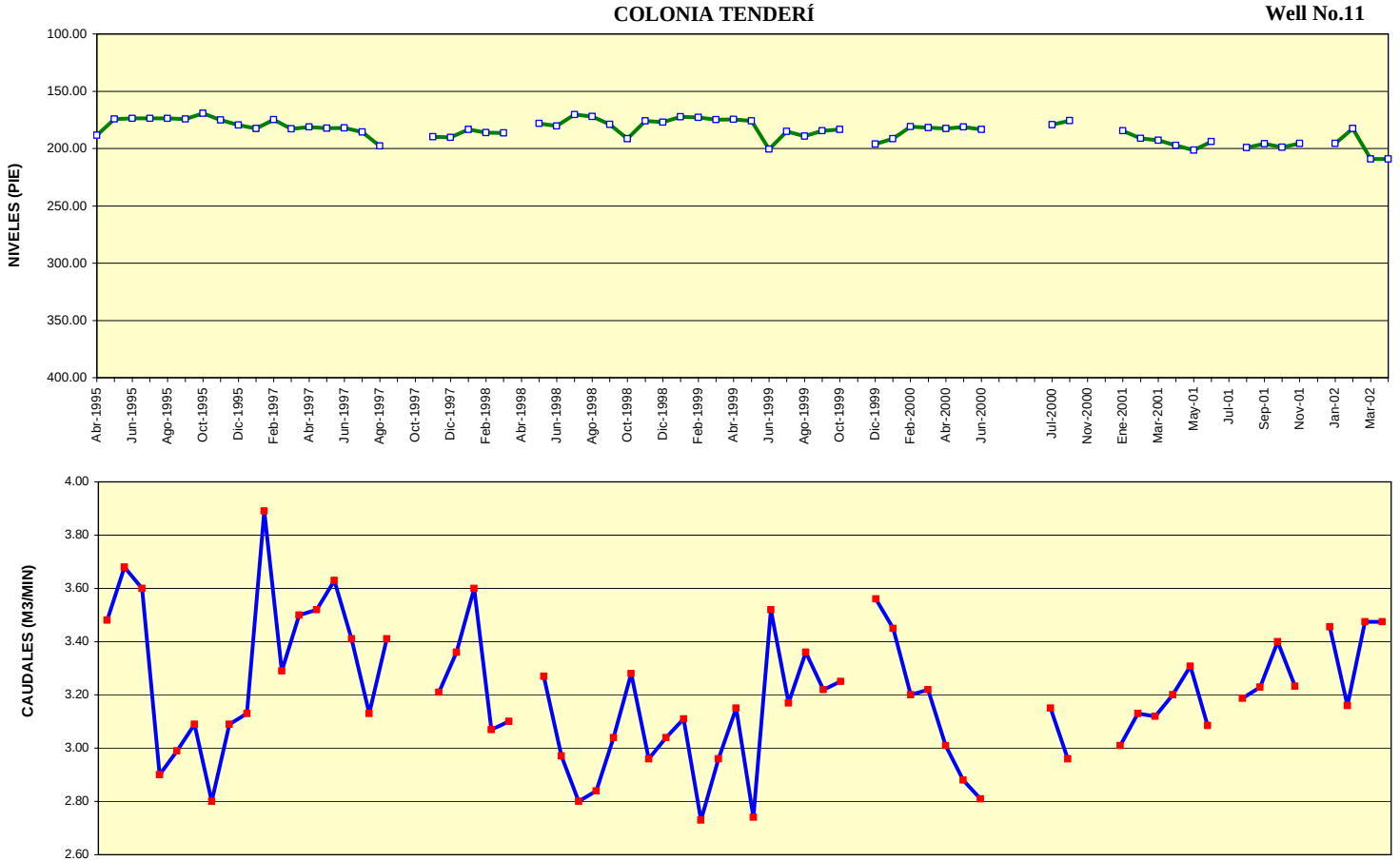
ANNEX 3.C(5) Punping Discharge and Water Level in Wells

ANNEX 3.C(6) Punping Discharge and Water Level in Wells

MERCADO ORIENTAL (Well No.10)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	2.57	142.32
Jun-1995	2.43	142.51
Jul-1995	2.63	138.09
Ago-1995	2.40	138.35
Sept-1995	2.38	133.04
Oct-1995	2.55	128.16
Nov-1995	2.94	129.67
Dic-1995	2.87	131.75
Ene-1997	3.13	126.75
Feb-1997	3.01	123.92
Mar-1997	3.15	130.16
Abr-1997	2.97	123.50
May-1997	3.13	128.16
Jun-1997	3.01	121.83
Jul-1997	2.87	128.66
Ago-1997	3.03	126.33
Sept-1997		
Oct-1997		
Nov-1997	2.81	129.75
Dic-1997	2.71	120.96
Ene-1998	2.97	128.00
Feb-1998	2.75	130.42
Mar-1998	2.74	134.29
Abr-1998		
May-1998	2.99	131.08
Jun-1998	2.72	132.33
Jul-1998	2.57	125.62
Ago-1998	2.63	125.92
Sept-1998	2.81	129.75
Oct-1998	2.89	129.16
Nov-1998	3.09	123.16
Dic-1998	3.01	122.29
Ene-1999	2.80	119.75
Feb-1999	2.96	126.33
Mar-1999	2.91	120.04
Abr-1999	2.92	119.82

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	2.81	118.58
Jun-1999	2.86	116.00
Jul-1999	3.13	124.33
Ago-1999	2.91	117.83
Sept-1999	3.04	124.50
Oct-1999	3.26	121.16
Nov-1999	3.29	125.83
Dic-1999	3.24	127.00
Ene-2000	2.87	119.83
Feb-2000	2.92	122.25
Mar-2000	2.81	118.50
Abr-2000	2.84	116.84
May-2000	2.79	118.08
Jun-2000	2.83	119.20
Jul-2000	2.77	114.83
Ago-2000	2.77	116.25
Sept-2000	2.80	117.75
Oct-2000	2.81	117.67
Nov-2000		
Dic-2000		
Ene-2001	2.77	121.04
Feb-2001	2.79	122.50
Mar-2001	2.84	122.30
Apr-01	2.98	128.83
May-01	3.02	131.25
Jun-01	2.80	124.83
Jul-01	2.89	129.83
Aug-01	3.07	126.92
Sep-01	2.99	127.00
Oct-01	2.98	126.20
Nov-01	3.03	130.46
Dec-01		
Jan-02	3.11	133.92
Feb-02	2.89	127.33
Mar-02	3.33	142.20



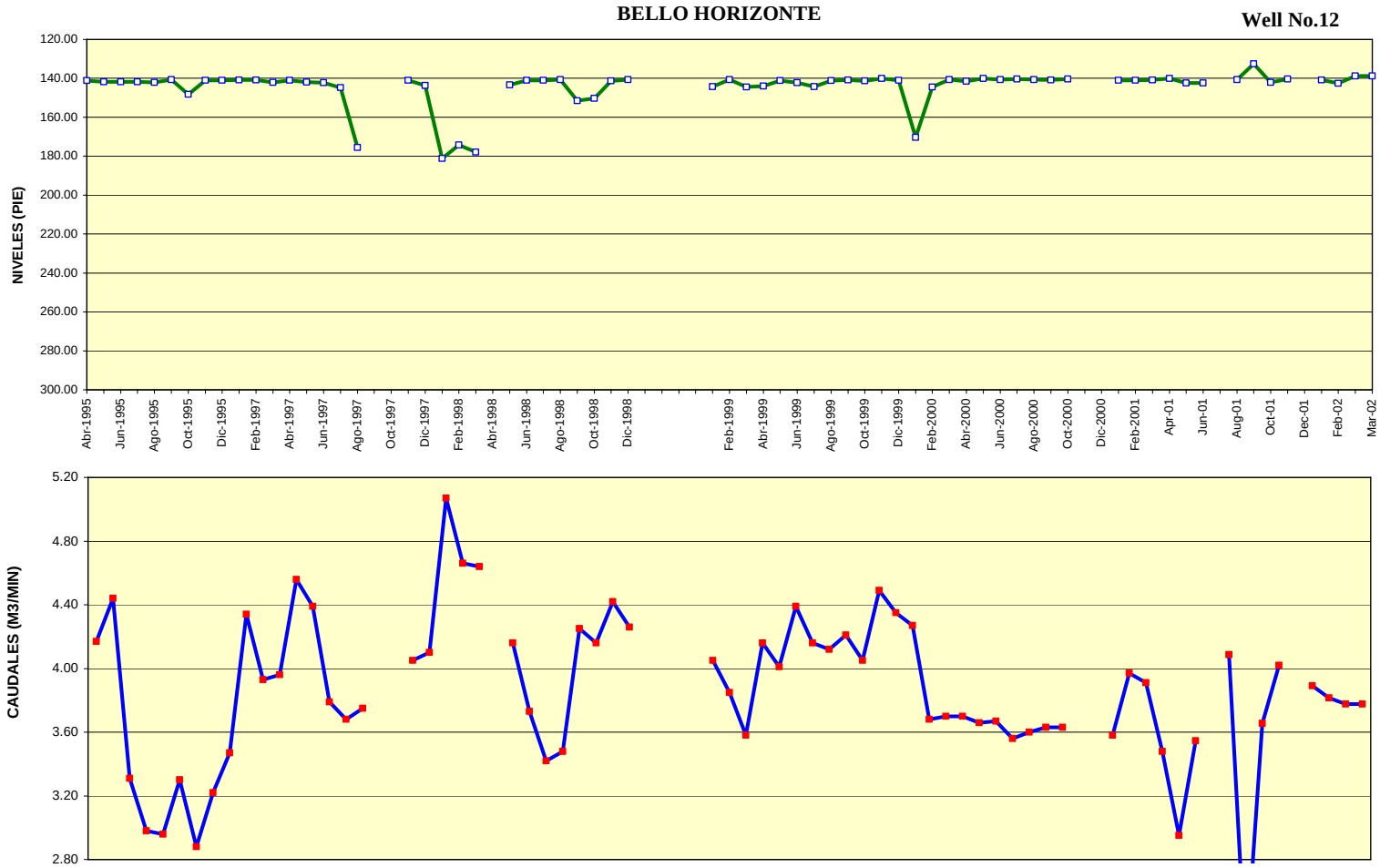
ANNEX 3.C(7) Punping Discharge and Water Level in Wells

ANNEX 3.C(8) Punping Discharge and Water Level in Wells

COLONIA TENDRI (Well No.11)

TIEMPO	CAUDALES M3/MIN	NIVELES DINAMICOS (PIE)
Abr-1995	3.48	188.40
May-1995	3.68	174.23
Jun-1995	3.60	173.75
Jul-1995	2.90	173.74
Ago-1995	2.99	173.80
Sept-1995	3.09	174.17
Oct-1995	2.80	169.25
Nov-1995	3.09	175.10
Dic-1995	3.13	179.41
Ene-1997	3.89	182.50
Feb-1997	3.29	174.75
Mar-1997	3.50	182.92
Abr-1997	3.52	181.08
May-1997	3.63	182.25
Jun-1997	3.41	182.00
Jul-1997	3.13	185.58
Ago-1997	3.41	197.92
Sept-1997		
Oct-1997		
Nov-1997	3.21	189.75
Dic-1997	3.36	190.25
Ene-1998	3.60	183.25
Feb-1998	3.07	186.25
Mar-1998	3.10	186.50
Abr-1998		
May-1998	3.27	178.08
Jun-1998	2.97	180.33
Jul-1998	2.80	170.45
Ago-1998	2.84	172.08
Sept-1998	3.04	179.08
Oct-1998	3.28	191.41
Nov-1998	2.96	175.83
Dic-1998	3.04	177.09
Ene-1999	3.11	172.33
Feb-1999	2.73	172.83
Mar-1999	2.96	174.75

TIEMPO	CAUDALES M3/MIN	NIVELES DINAMICOS (PIE)
Abr-1999	3.15	174.50
May-1999	2.74	175.83
Jun-1999	3.52	200.42
Jul-1999	3.17	184.92
Ago-1999	3.36	189.16
Sept-1999	3.22	184.41
Oct-1999	3.25	183.33
Nov-1999		
Dic-1999	3.56	196.16
Ene-2000	3.45	191.37
Feb-2000	3.20	180.92
Mar-2000	3.22	181.75
Abr-2000	3.01	182.50
May-2000	2.88	181.04
Jun-2000	2.81	183.50
Jul-2000	3.15	179.34
Ago-2000	3.14	181.41
Sept-2000	3.22	180.58
Oct-2000	2.96	175.50
Nov-2000		
Dic-2000		
Ene-2001	3.01	184.50
Feb-2001	3.13	191.08
Mar-2001	3.12	192.66
Apr-01	3.2	197.25
May-01	3.31	201.42
Jun-01	3.08	193.83
Jul-01		
Aug-01	3.19	199.16
Sep-01	3.23	195.96
Oct-01	3.40	198.92
Nov-01	3.23	195.54
Dec-01		
Jan-02	3.46	195.54
Feb-02	3.16	182.66
Mar-02	3.47	209.16



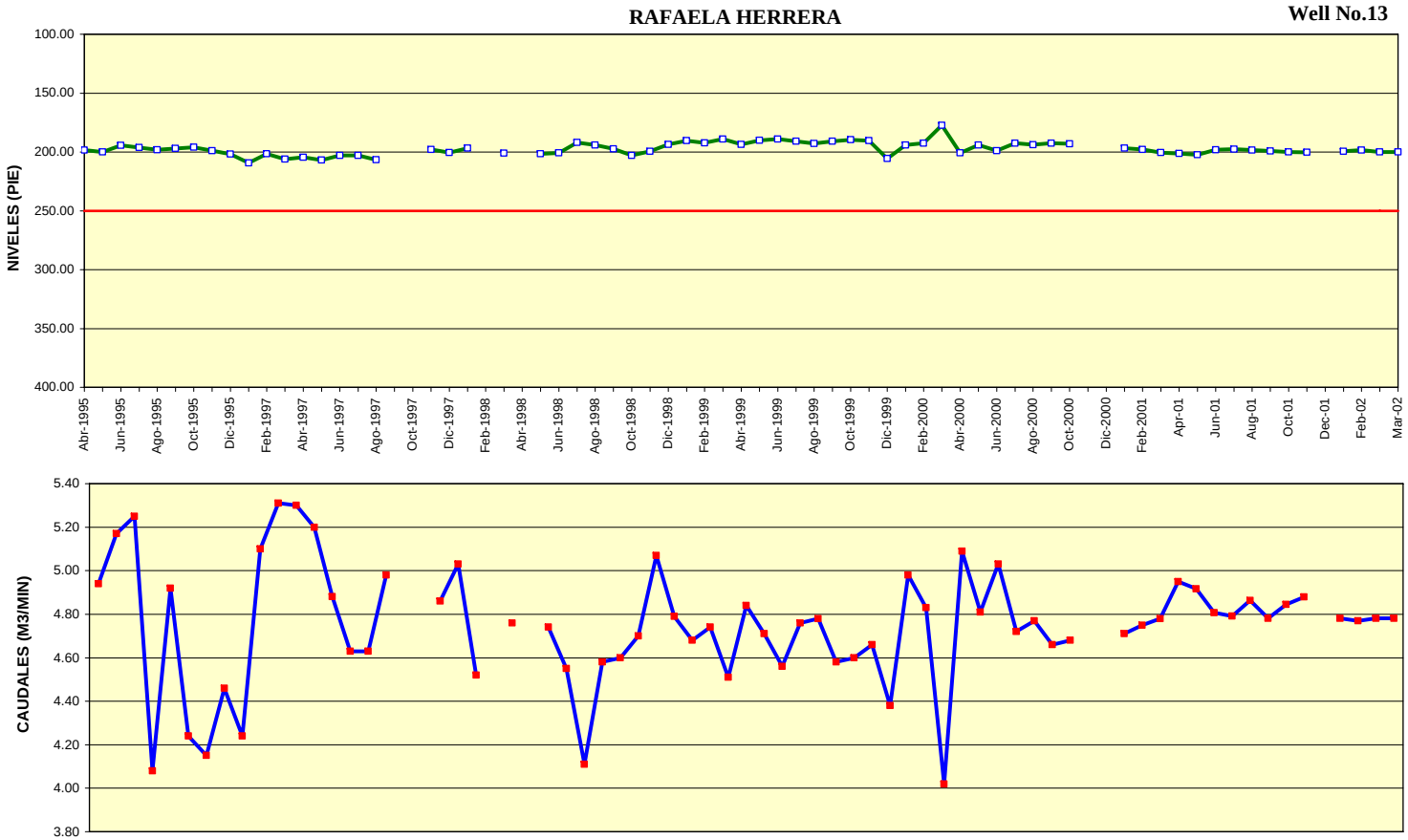
ANNEX 3.C(9) Punping Discharge and Water Level in Wells

ANNEX 3.C(10) Punping Discharge and Water Level in Wells

BELLO HORIZONTE (Well No.12)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	4.17	141.23
May-1995	4.44	141.89
Jun-1995	3.31	141.81
Jul-1995	2.98	141.81
Ago-1995	2.96	142.15
Sept-1995	3.30	140.64
Oct-1995	2.88	148.25
Nov-1995	3.22	141.00
Dic-1995	3.47	141.04
Ene-1997	4.34	140.83
Feb-1997	3.93	140.83
Mar-1997	3.96	142.16
Abr-1997	4.56	140.96
May-1997	4.39	141.92
Jun-1997	3.79	142.25
Jul-1997	3.68	144.75
Ago-1997	3.75	175.50
Sept-1997		
Oct-1997		
Nov-1997	4.05	141.00
Dic-1997	4.10	143.75
Ene-1998	5.07	181.16
Feb-1998	4.66	174.25
Mar-1998	4.64	177.83
Abr-1998		
May-1998	4.16	143.33
Jun-1998	3.73	141.08
Jul-1998	3.42	141.00
Ago-1998	3.48	140.66
Sept-1998	4.25	151.50
Oct-1998	4.16	150.25
Nov-1998	4.42	141.41
Dic-1998	4.26	140.75
Ene-1999	4.05	144.33
Feb-1999	3.85	140.76
Mar-1999	3.58	144.50

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	4.16	144.06
May-1999	4.01	141.25
Jun-1999	4.39	142.33
Jul-1999	4.16	144.33
Ago-1999	4.12	141.16
Sept-1999	4.21	140.83
Oct-1999	4.05	141.41
Nov-1999	4.49	140.16
Dic-1999	4.35	141.00
Ene-2000	4.27	170.41
Feb-2000	3.68	144.41
Mar-2000	3.70	140.75
Abr-2000	3.70	141.50
May-2000	3.66	140.08
Jun-2000	3.67	140.75
Jul-2000	3.56	140.41
Ago-2000	3.60	140.75
Sept-2000	3.63	140.83
Oct-2000	3.63	140.42
Nov-2000		
Dic-2000		
Ene-2001	3.58	141.00
Feb-2001	3.97	140.96
Mar-2001	3.91	140.83
Apr-01	3.48	140.08
May-01	2.95	142.42
Jun-01	3.55	142.42
Jul-01		
Aug-01	4.09	140.75
Sep-01	2.14	132.58
Oct-01	3.66	142.08
Nov-01	4.02	140.46
Dec-01		
Jan-02	3.89	140.83
Feb-02	3.82	142.58
Mar-02	3.78	138.80



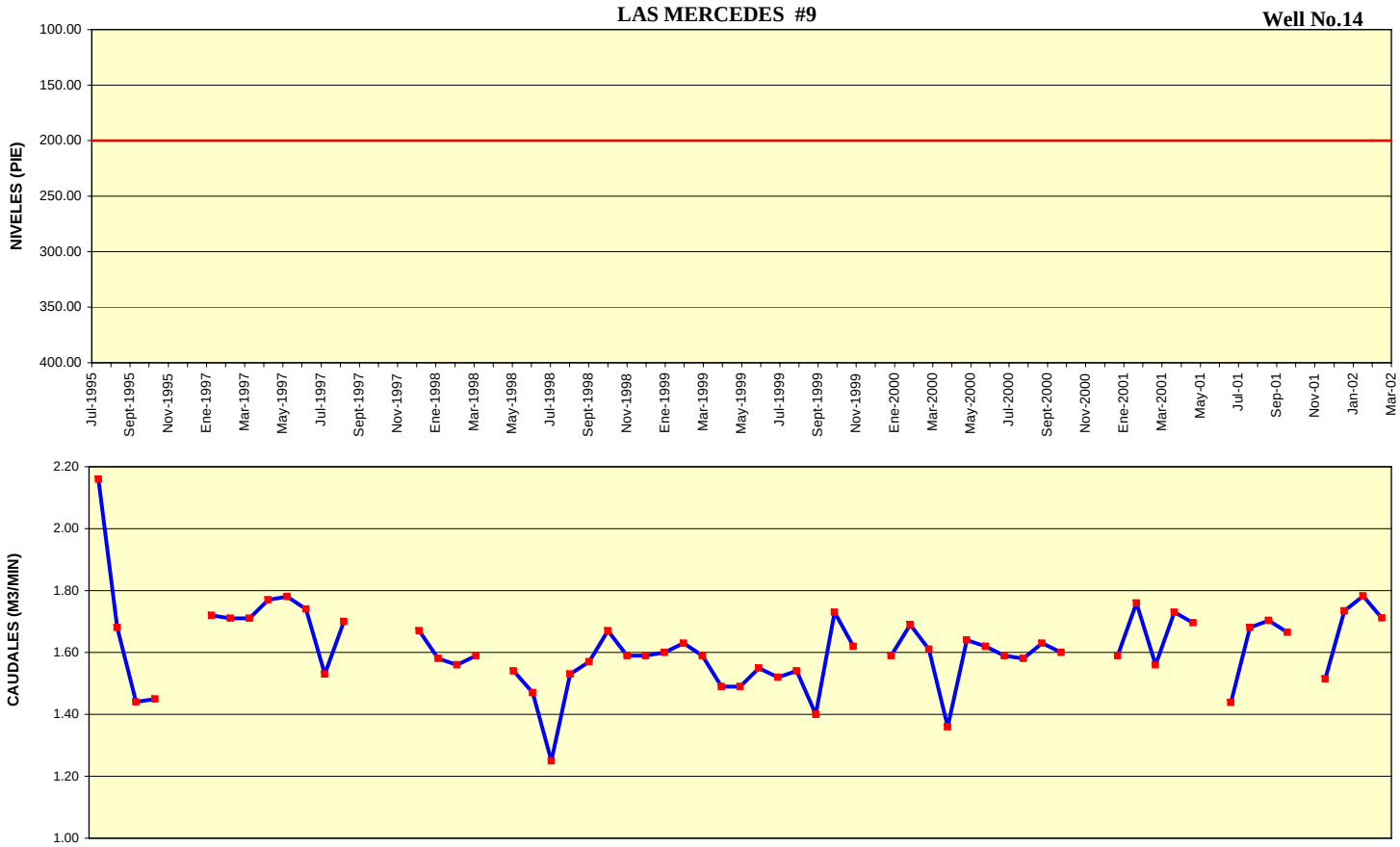
ANNEX 3.C(11) Punping Discharge and Water Level in Wells

ANNEX 3.C(12) Punping Discharge and Water Level in Wells

RAFAELA HERRERA (Well No.13)

TIEMPO	CAUDALES M3/MIN	NIVELES DINAMICOS (PIE)
Abr-1995	4.94	198.34
May-1995	5.17	199.91
Jun-1995	5.25	194.41
Jul-1995	4.08	196.24
Ago-1995	4.92	198.01
Sept-1995	4.24	197.00
Oct-1995	4.15	196.00
Nov-1995	4.46	199.00
Dic-1995	4.24	201.98
Ene-1997	5.10	209.25
Feb-1997	5.31	201.50
Mar-1997	5.30	206.25
Abr-1997	5.20	204.66
May-1997	4.88	206.83
Jun-1997	4.63	202.96
Jul-1997	4.63	203.00
Ago-1997	4.98	206.75
Sept-1997		
Oct-1997		
Nov-1997	4.86	197.92
Dic-1997	5.03	200.50
Ene-1998	4.52	196.70
Feb-1998		
Mar-1998	4.76	201.16
Abr-1998		
May-1998	4.74	201.54
Jun-1998	4.55	200.79
Jul-1998	4.11	191.92
Ago-1998	4.58	194.16
Sept-1998	4.60	197.37
Oct-1998	4.70	203.00
Nov-1998	5.07	199.50
Dic-1998	4.79	193.62
Ene-1999	4.68	190.50
Feb-1999	4.74	192.39
Mar-1999	4.51	189.06

TIEMPO	CAUDALES M3/MIN	NIVELES DINAMICOS (PIE)
Abr-1999	4.84	193.50
May-1999	4.71	190.16
Jun-1999	4.56	189.16
Jul-1999	4.76	191.04
Ago-1999	4.78	192.92
Sept-1999	4.58	191.00
Oct-1999	4.60	189.58
Nov-1999	4.66	190.45
Dic-1999	4.38	205.66
Ene-2000	4.98	194.08
Feb-2000	4.83	192.58
Mar-2000	4.02	177.25
Abr-2000	5.09	200.67
May-2000	4.81	194.00
Jun-2000	5.03	198.96
Jul-2000	4.72	192.58
Ago-2000	4.77	193.80
Sept-2000	4.66	192.66
Oct-2000	4.68	193.08
Nov-2000		
Dic-2000		
Ene-2001	4.71	196.87
Feb-2001	4.75	197.75
Mar-2001	4.78	200.42
Apr-01	4.95	201.25
May-01	4.92	202.42
Jun-01	4.81	198.00
Jul-01	4.79	197.66
Aug-01	4.86	198.50
Sep-01	4.78	199.33
Oct-01	4.84	200.08
Nov-01	4.88	200.33
Dec-01		
Jan-02	4.78	199.46
Feb-02	4.77	198.50
Mar-02	4.78	200.00



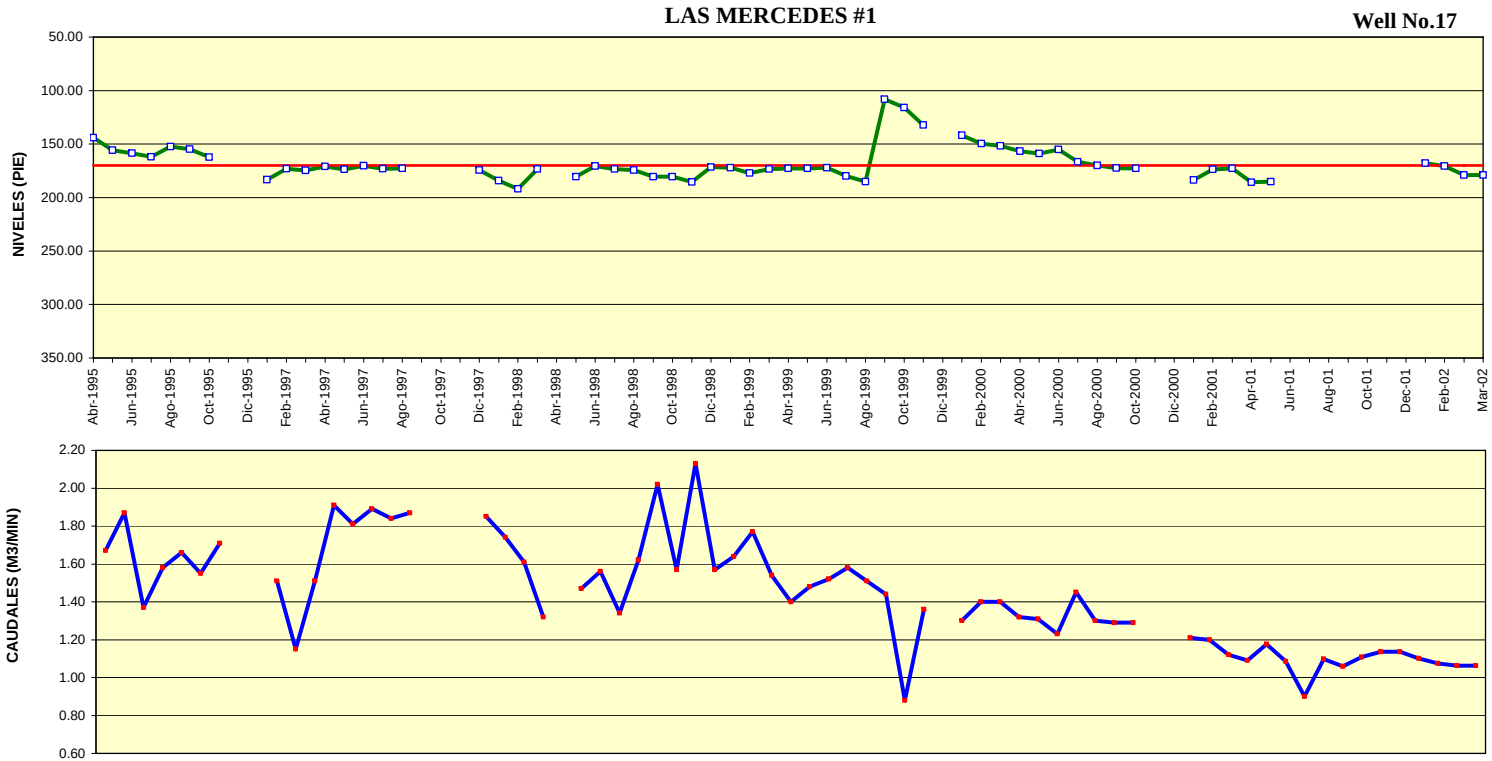
ANNEX 3.C(13) Punping Discharge and Water Level in Wells

ANNEX 3.C(14) Punping Discharge and Water Level in Wells

LAS MERCEDES #9 (Well No.14)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Jul-1995	2.16	
Ago-1995	1.68	
Sept-1995	1.44	
Oct-1995	1.45	
Nov-1995		
Dic-1995		
Ene-1997	1.72	
Feb-1997	1.71	
Mar-1997	1.71	
Abr-1997	1.77	
May-1997	1.78	
Jun-1997	1.74	
Jul-1997	1.53	
Ago-1997	1.70	
Sept-1997		
Oct-1997		
Nov-1997		
Dic-1997	1.67	
Ene-1998	1.58	
Feb-1998	1.56	
Mar-1998	1.59	
Abr-1998		
May-1998	1.54	
Jun-1998	1.47	
Jul-1998	1.25	
Ago-1998	1.53	
Sept-1998	1.57	
Oct-1998	1.67	
Nov-1998	1.59	
Dic-1998	1.59	
Ene-1999	1.60	
Feb-1999	1.63	
Mar-1999	1.59	
Abr-1999	1.49	
May-1999	1.49	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Jun-1999	1.55	
Jul-1999	1.52	
Ago-1999	1.54	
Sept-1999	1.40	
Oct-1999	1.73	
Nov-1999	1.62	
Dic-1999		
Ene-2000	1.59	
Feb-2000	1.69	
Mar-2000	1.61	
Abr-2000	1.36	
May-2000	1.64	
Jun-2000	1.62	
Jul-2000	1.59	
Ago-2000	1.58	
Sept-2000	1.63	
Oct-2000	1.60	
Nov-2000		
Dic-2000		
Ene-2001	1.59	
Feb-2001	1.76	
Mar-2001	1.56	
Apr-01	1.73	
May-01	1.70	
Jun-01		OBST
Jul-01	1.44	OBST
Aug-01	1.68	OBST
Sep-01	1.70	OBST
Oct-01	1.67	OBST
Nov-01		OBST
Dec-01	1.51	OBST
Jan-02	1.73	OBST
Feb-02	1.78	OBST
Mar-02	1.71	OBST



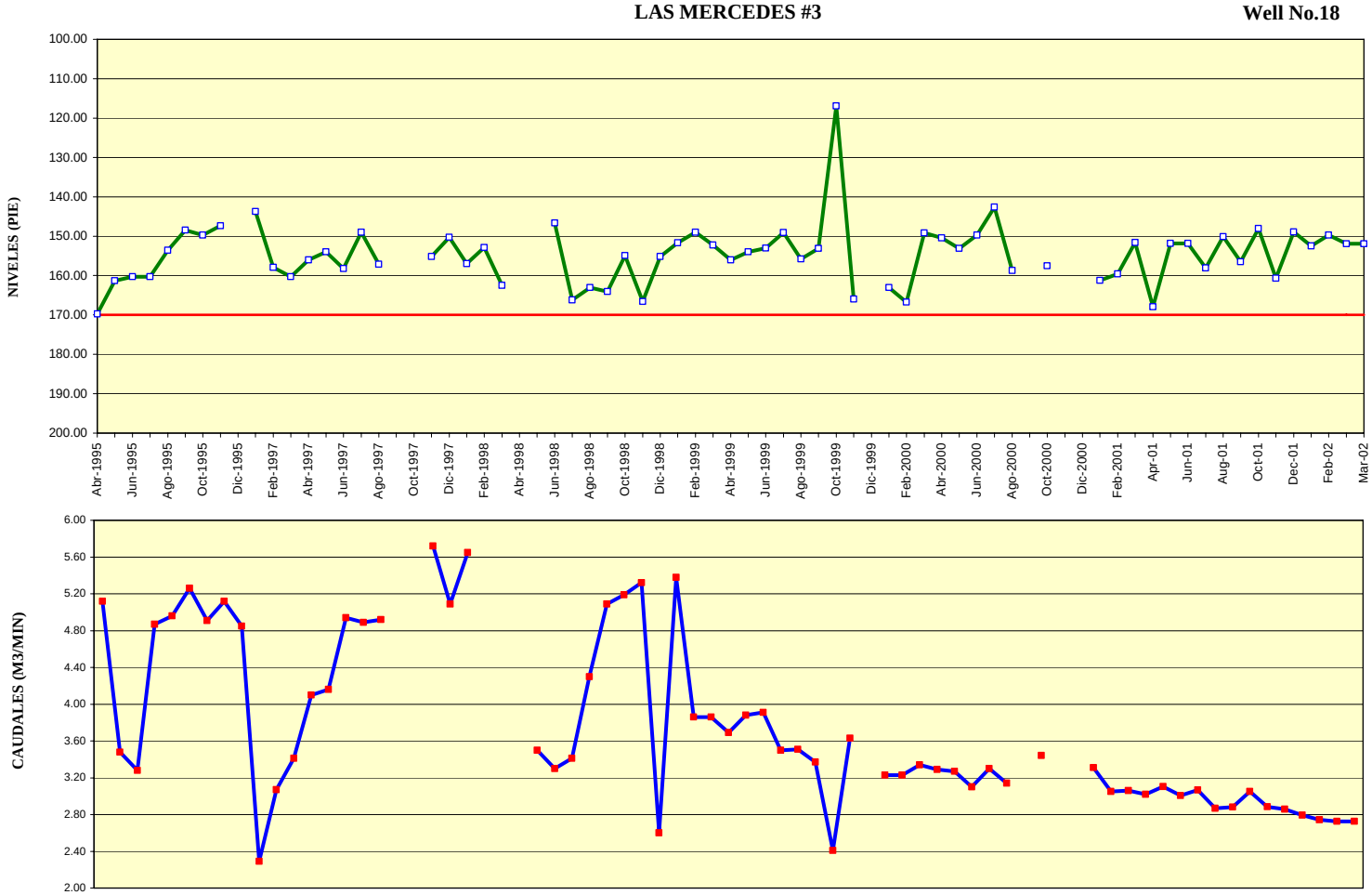
ANNEX 3.C(15) Punping Discharge and Water Level in Wells

ANNEX 3.C(16) Punping Discharge and Water Level in Wells

LAS MERCEDES #1 (Well No.17)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.67	144.09
May-1995	1.87	155.64
Jun-1995	1.37	158.50
Jul-1995	1.58	162.00
Ago-1995	1.66	152.32
Sept-1995	1.55	154.91
Oct-1995	1.71	162.26
Nov-1995		
Dic-1995		
Ene-1997	1.51	183.16
Feb-1997	1.15	173.00
Mar-1997	1.51	174.50
Abr-1997	1.91	170.92
May-1997	1.81	173.66
Jun-1997	1.89	170.16
Jul-1997	1.84	173.16
Ago-1997	1.87	172.83
Sept-1997		
Oct-1997		
Nov-1997		
Dic-1997	1.85	174.33
Ene-1998	1.74	184.29
Feb-1998	1.61	191.83
Mar-1998	1.32	173.33
Abr-1998		
May-1998	1.47	180.66
Jun-1998	1.56	170.50
Jul-1998	1.34	173.25
Ago-1998	1.62	174.25
Sept-1998	2.02	180.66
Oct-1998	1.57	180.41
Nov-1998	2.13	185.33
Dic-1998	1.57	171.42
Ene-1999	1.64	172.16
Feb-1999	1.77	177.17
Mar-1999	1.54	173.42

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.40	172.66
May-1999	1.48	172.75
Jun-1999	1.52	172.16
Jul-1999	1.58	180.00
Ago-1999	1.51	185.04
Sept-1999	1.44	108.08
Oct-1999	0.88	116.00
Nov-1999	1.36	132.25
Dic-1999		
Ene-2000	1.30	141.92
Feb-2000	1.40	149.58
Mar-2000	1.40	151.75
Abr-2000	1.32	156.83
May-2000	1.31	159.00
Jun-2000	1.23	155.16
Jul-2000	1.45	166.54
Ago-2000	1.30	169.90
Sept-2000	1.29	172.50
Oct-2000	1.29	172.92
Nov-2000		
Dic-2000		
Ene-2001	1.21	183.68
Feb-2001	1.20	173.80
Mar-2001	1.12	172.66
Apr-01	1.09	185.66
May-01	1.18	185.30
Jun-01	1.09	179.83
Jul-01	0.90	178.84
Aug-01	1.10	170.20
Sep-01	1.06	173.25
Oct-01	1.11	170.75
Nov-01	1.14	170.58
Dec-01	1.14	175.25
Jan-02	1.10	167.92
Feb-02	1.07	170.75
Mar-02	1.06	178.83



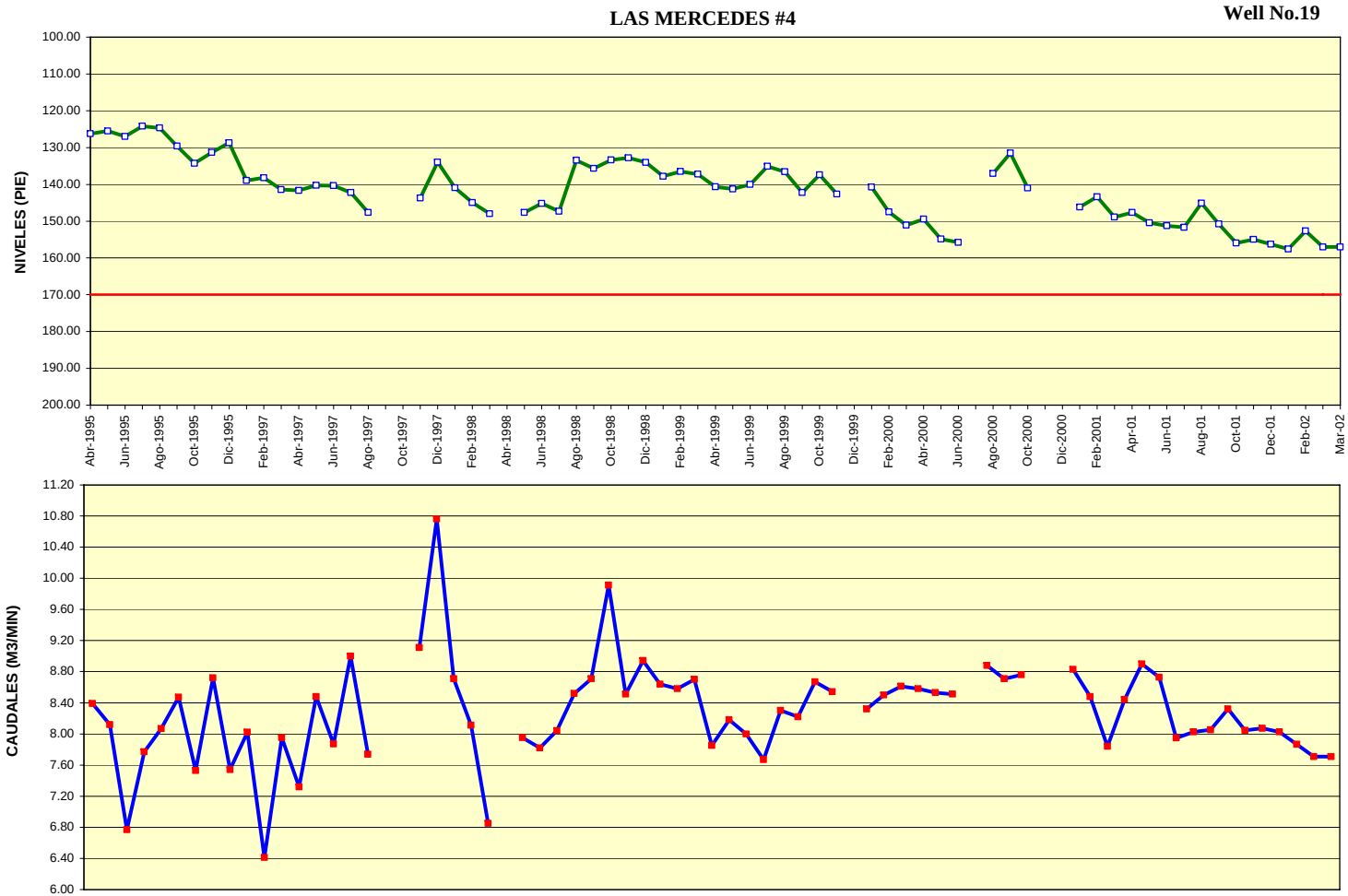
ANNEX 3.C(17) Punping Discharge and Water Level in Wells

ANNEX 3.C(18) Punping Discharge and Water Level in Wells

LAS MERCEDES #3 (Well No.18)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	5.12	169.74
May-1995	3.48	161.28
Jun-1995	3.28	160.25
Jul-1995	4.87	160.25
Ago-1995	4.96	153.57
Sept-1995	5.26	148.48
Oct-1995	4.91	149.76
Nov-1995	5.12	147.34
Dic-1995	4.85	
Ene-1997	2.29	143.75
Feb-1997	3.07	157.92
Mar-1997	3.41	160.25
Abr-1997	4.10	156.00
May-1997	4.16	154.00
Jun-1997	4.94	158.25
Jul-1997	4.89	149.00
Ago-1997	4.92	157.16
Sept-1997		
Oct-1997		
Nov-1997	5.72	155.16
Dic-1997	5.09	150.25
Ene-1998	5.65	157.00
Feb-1998		152.87
Mar-1998		162.48
Abr-1998		
May-1998	3.50	
Jun-1998	3.30	146.66
Jul-1998	3.41	166.16
Ago-1998	4.30	163.04
Sept-1998	5.09	164.08
Oct-1998	5.19	154.92
Nov-1998	5.32	166.58
Dic-1998	2.60	155.16
Ene-1999	5.38	151.66
Feb-1999	3.86	149.00
Mar-1999	3.86	152.25

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.69	156.00
May-1999	3.88	154.00
Jun-1999	3.91	153.00
Jul-1999	3.50	149.08
Ago-1999	3.51	155.83
Sept-1999	3.37	153.08
Oct-1999	2.41	116.92
Nov-1999	3.63	165.92
Dic-1999		
Ene-2000	3.23	163.04
Feb-2000	3.23	166.75
Mar-2000	3.34	149.17
Abr-2000	3.29	150.42
May-2000	3.27	153.08
Jun-2000	3.10	149.75
Jul-2000	3.30	142.66
Ago-2000	3.14	158.67
Sept-2000		
Oct-2000	3.44	157.50
Nov-2000		
Dic-2000		
Ene-2001	3.31	161.25
Feb-2001	3.05	159.58
Mar-2001	3.06	151.58
Apr-01	3.02	167.92
May-01	3.10	151.83
Jun-01	3.01	151.83
Jul-01	3.07	158.08
Aug-01	2.87	150.13
Sep-01	2.88	156.50
Oct-01	3.05	148.08
Nov-01	2.88	160.66
Dec-01	2.86	148.96
Jan-02	2.79	152.50
Feb-02	2.74	149.75
Mar-02	2.73	151.92



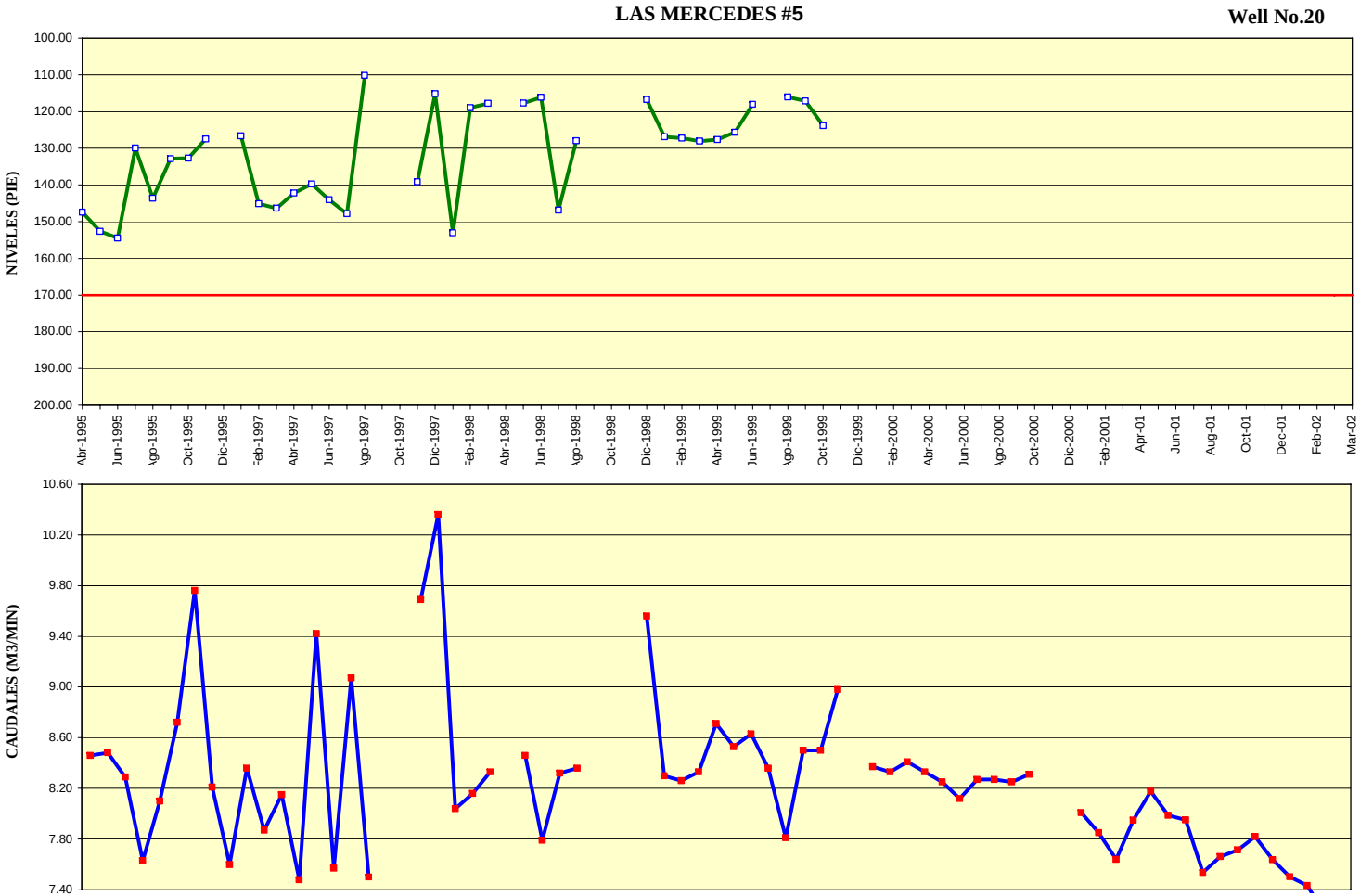
ANNEX 3.C(19) Punping Discharge and Water Level in Wells

ANNEX 3.C(20) Punping Discharge and Water Level in Wells

LAS MERCEDES #4 (Well No.19)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	8.39	126.27
May-1995	8.12	125.49
Jun-1995	6.77	127.00
Jul-1995	7.77	124.24
Ago-1995	8.07	124.67
Sept-1995	8.47	129.59
Oct-1995	7.53	134.29
Nov-1995	8.72	131.33
Dic-1995	7.54	128.74
Ene-1997	8.02	139.00
Feb-1997	6.41	138.25
Mar-1997	7.95	141.42
Abr-1997	7.32	141.66
May-1997	8.48	140.25
Jun-1997	7.87	140.33
Jul-1997	9.00	142.25
Ago-1997	7.74	147.66
Sept-1997		
Oct-1997		
Nov-1997	9.11	143.75
Dic-1997	10.76	134.00
Ene-1998	8.71	140.96
Feb-1998	8.11	144.92
Mar-1998	6.85	148.00
Abr-1998		
May-1998	7.95	147.66
Jun-1998	7.82	145.20
Jul-1998	8.04	147.33
Ago-1998	8.52	133.50
Sept-1998	8.71	135.70
Oct-1998	9.91	133.41
Nov-1998	8.51	132.83
Dic-1998	8.94	134.08
Ene-1999	8.64	137.79
Feb-1999	8.58	136.50
Mar-1999	8.70	137.25

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	7.85	140.66
May-1999	8.18	141.25
Jun-1999	8.00	140.00
Jul-1999	7.67	135.08
Ago-1999	8.30	136.58
Sept-1999	8.22	142.25
Oct-1999	8.67	137.41
Nov-1999	8.54	142.66
Dic-1999		
Ene-2000	8.32	140.80
Feb-2000	8.50	147.50
Mar-2000	8.61	151.08
Abr-2000	8.58	149.50
May-2000	8.53	154.92
Jun-2000	8.51	155.75
Jul-2000		
Ago-2000	8.88	137.04
Sept-2000	8.71	131.50
Oct-2000	8.76	141.00
Nov-2000		
Dic-2000		
Ene-2001	8.83	146.20
Feb-2001	8.48	143.42
Mar-2001	7.84	148.92
Apr-01	8.44	147.66
May-01	8.9	150.42
Jun-01	8.73	151.25
Jul-01	7.95	151.66
Aug-01	8.02	145.08
Sep-01	8.05	150.80
Oct-01	8.32	155.92
Nov-01	8.04	154.96
Dec-01	8.07	156.30
Jan-02	8.02	157.58
Feb-02	7.87	152.66
Mar-02	7.71	157.00



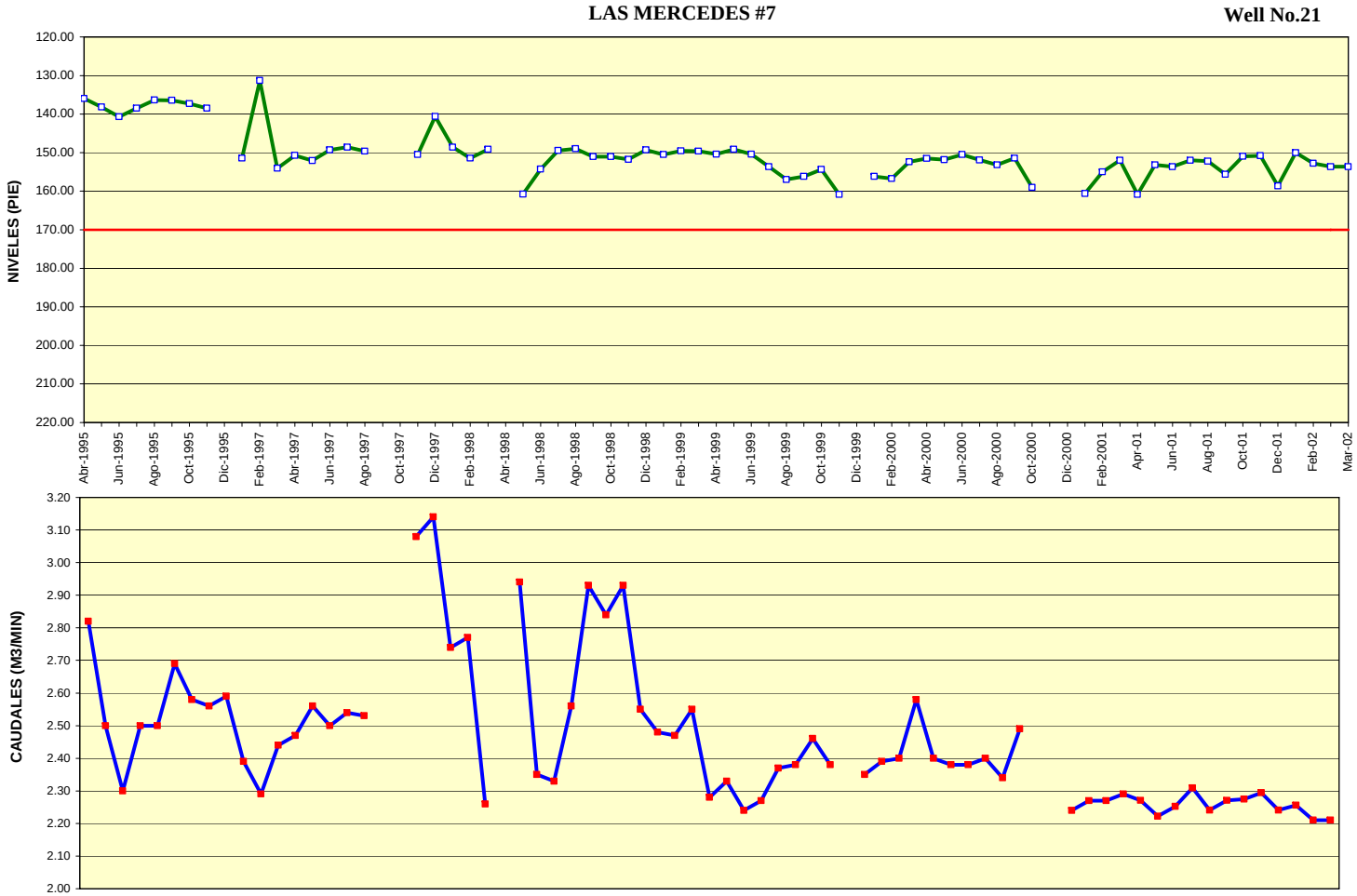
ANNEX 3.C(21) Punping Discharge and Water Level in Wells

ANNEX 3.C(22) Punping Discharge and Water Level in Wells

LAS MERCEDES #5 (Well No.20)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	8.46	147.47
May-1995	8.48	152.65
Jun-1995	8.29	154.49
Jul-1995	7.63	129.99
Ago-1995	8.10	143.66
Sept-1995	8.72	132.84
Oct-1995	9.76	132.74
Nov-1995	8.21	127.50
Dic-1995	7.60	
Ene-1997	8.36	126.66
Feb-1997	7.87	145.08
Mar-1997	8.15	146.33
Abr-1997	7.48	142.25
May-1997	9.42	139.75
Jun-1997	7.57	144.08
Jul-1997	9.07	147.83
Ago-1997	7.50	110.16
Sept-1997		
Oct-1997		
Nov-1997	9.69	139.16
Dic-1997	10.36	115.16
Ene-1998	8.04	153.08
Feb-1998	8.16	118.96
Mar-1998	8.33	117.83
Abr-1998		
May-1998	8.46	117.75
Jun-1998	7.79	116.16
Jul-1998	8.32	146.83
Ago-1998	8.36	128.00
Sept-1998		
Oct-1998		
Nov-1998		
Dic-1998	9.56	116.75
Ene-1999	8.30	126.92
Feb-1999	8.26	127.25
Mar-1999	8.33	128.08

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	8.71	127.66
May-1999	8.53	125.66
Jun-1999	8.63	118.08
Jul-1999	8.36	
Ago-1999	7.81	116.08
Sept-1999	8.50	117.16
Oct-1999	8.50	123.83
Nov-1999	8.98	
Dic-1999		
Ene-2000	8.37	
Feb-2000	8.33	
Mar-2000	8.41	
Abr-2000	8.33	
May-2000	8.25	
Jun-2000	8.12	
Jul-2000	8.27	
Ago-2000	8.27	
Sept-2000	8.25	
Oct-2000	8.31	
Nov-2000		
Dic-2000		
Ene-2001	8.01	
Feb-2001	7.85	
Mar-2001	7.64	
Apr-01	7.95	
May-01	8.18	
Jun-01	7.99	OBST
Jul-01	7.95	OBST
Aug-01	7.54	OBST
Sep-01	7.66	OBST
Oct-01	7.71	OBST
Nov-01	7.82	OBST
Dec-01	7.64	OBST
Jan-02	7.50	OBST
Feb-02	7.43	OBST
Mar-02	7.21	OBST



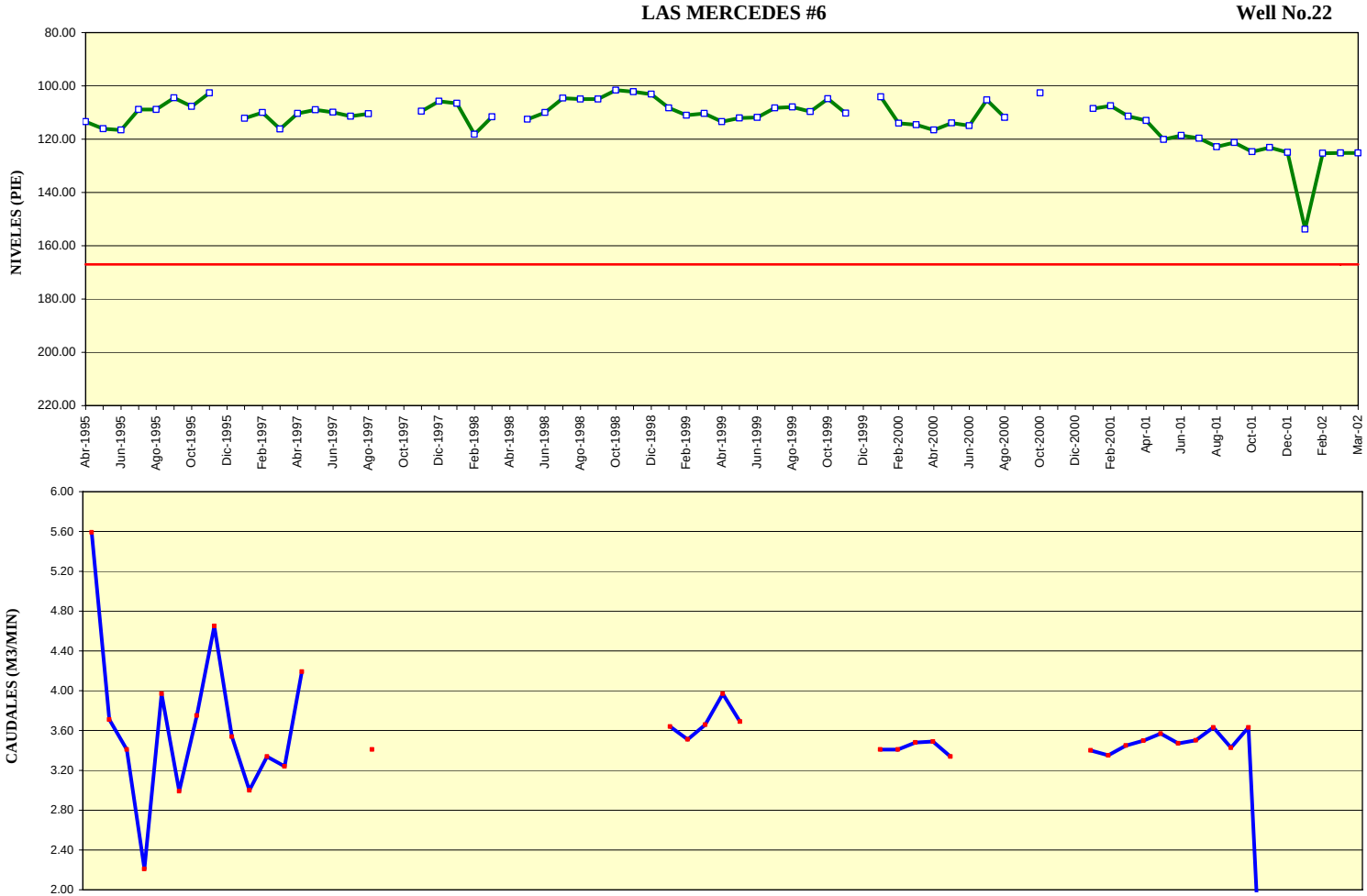
ANNEX 3.C(23) Punping Discharge and Water Level in Wells

ANNEX 3.C(24) Punping Discharge and Water Level in Wells

LAS MERCEDES #7 (Well No.21)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.82	135.99
May-1995	2.50	138.15
Jun-1995	2.30	140.68
Jul-1995	2.50	138.48
Ago-1995	2.50	136.39
Sept-1995	2.69	136.41
Oct-1995	2.58	137.33
Nov-1995	2.56	138.50
Dic-1995	2.59	
Ene-1997	2.39	151.42
Feb-1997	2.29	131.33
Mar-1997	2.44	154.08
Abr-1997	2.47	150.75
May-1997	2.56	152.08
Jun-1997	2.50	149.33
Jul-1997	2.54	148.58
Ago-1997	2.53	149.66
Sept-1997		
Oct-1997		
Nov-1997	3.08	150.50
Dic-1997	3.14	140.58
Ene-1998	2.74	148.58
Feb-1998	2.77	151.41
Mar-1998	2.26	149.16
Abr-1998		
May-1998	2.94	160.75
Jun-1998	2.35	154.25
Jul-1998	2.33	149.50
Ago-1998	2.56	149.00
Sept-1998	2.93	151.08
Oct-1998	2.84	151.08
Nov-1998	2.93	151.75
Dic-1998	2.55	149.33
Ene-1999	2.48	150.50
Feb-1999	2.47	149.58
Mar-1999	2.55	149.66

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.28	150.42
May-1999	2.33	149.16
Jun-1999	2.24	150.42
Jul-1999	2.27	153.66
Ago-1999	2.37	157.00
Sept-1999	2.38	156.16
Oct-1999	2.46	154.37
Nov-1999	2.38	160.83
Dic-1999		
Ene-2000	2.35	156.16
Feb-2000	2.39	156.76
Mar-2000	2.40	152.41
Abr-2000	2.58	151.51
May-2000	2.40	151.83
Jun-2000	2.38	150.50
Jul-2000	2.38	151.91
Ago-2000	2.40	153.16
Sept-2000	2.34	151.42
Oct-2000	2.49	159.00
Nov-2000		
Dic-2000		
Ene-2001	2.24	160.58
Feb-2001	2.27	155.00
Mar-2001	2.27	152.00
Apr-01	2.29	152.00
May-01	2.27	152.00
Jun-01	2.22	153.66
Jul-01	2.25	152.00
Aug-01	2.31	152.25
Sep-01	2.24	155.62
Oct-01	2.27	151.00
Nov-01	2.27	150.83
Dec-01	2.29	158.66
Jan-02	2.24	150.00
Feb-02	2.26	152.75
Mar-02	2.21	153.66



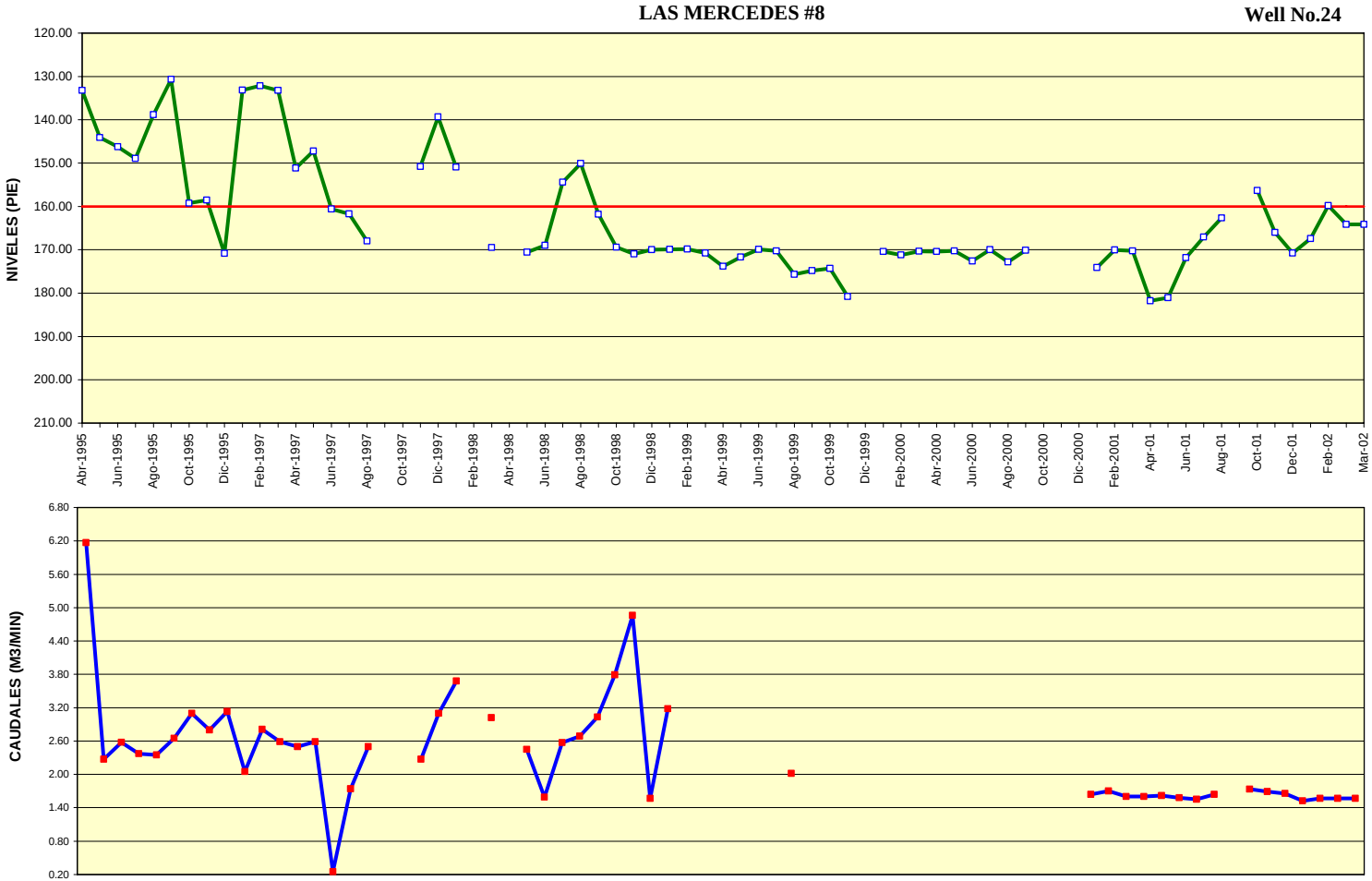
ANNEX 3.C(25) Punping Discharge and Water Level in Wells

ANNEX 3.C(26) Punping Discharge and Water Level in Wells

LAS MERCEDES #6 (Well No.22)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	5.59	113.42
May-1995	3.71	116.14
Jun-1995	3.41	116.57
Jul-1995	2.21	108.83
Ago-1995	3.97	108.81
Sept-1995	2.99	104.50
Oct-1995	3.75	107.75
Nov-1995	4.65	102.66
Dic-1995	3.54	
Ene-1997	3.00	112.16
Feb-1997	3.34	110.00
Mar-1997	3.24	116.16
Abr-1997	4.19	110.33
May-1997		108.92
Jun-1997		109.92
Jul-1997		111.42
Ago-1997	3.41	110.50
Sept-1997		
Oct-1997		
Nov-1997		109.50
Dic-1997		105.79
Ene-1998		106.58
Feb-1998		118.16
Mar-1998		111.66
Abr-1998		
May-1998		112.50
Jun-1998		110.00
Jul-1998		104.58
Ago-1998		105.00
Sept-1998		105.00
Oct-1998		101.66
Nov-1998		102.16
Dic-1998		103.08
Ene-1999	3.64	108.33
Feb-1999	3.51	111.08
Mar-1999	3.66	110.33

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.97	113.46
May-1999	3.69	112.08
Jun-1999		111.83
Jul-1999		108.33
Ago-1999		107.92
Sept-1999		109.66
Oct-1999		104.79
Nov-1999		110.25
Dic-1999		
Ene-2000	3.41	104.16
Feb-2000	3.41	114.00
Mar-2000	3.48	114.58
Abr-2000	3.49	116.50
May-2000	3.34	113.92
Jun-2000		114.92
Jul-2000		105.33
Ago-2000		111.80
Sept-2000		
Oct-2000		102.66
Nov-2000		
Dic-2000		
Ene-2001	3.40	108.50
Feb-2001	3.35	107.50
Mar-2001	3.45	111.33
Apr-01	3.50	113.00
May-01	3.57	120.16
Jun-01	3.47	118.58
Jul-01	3.50	119.66
Aug-01	3.63	122.83
Sep-01	3.43	121.25
Oct-01	3.63	124.66
Nov-01	NPA	123.08
Dec-01	NPA	125.00
Jan-02	NPA	153.75
Feb-02	NPA	125.25
Mar-02	NPA	125.16



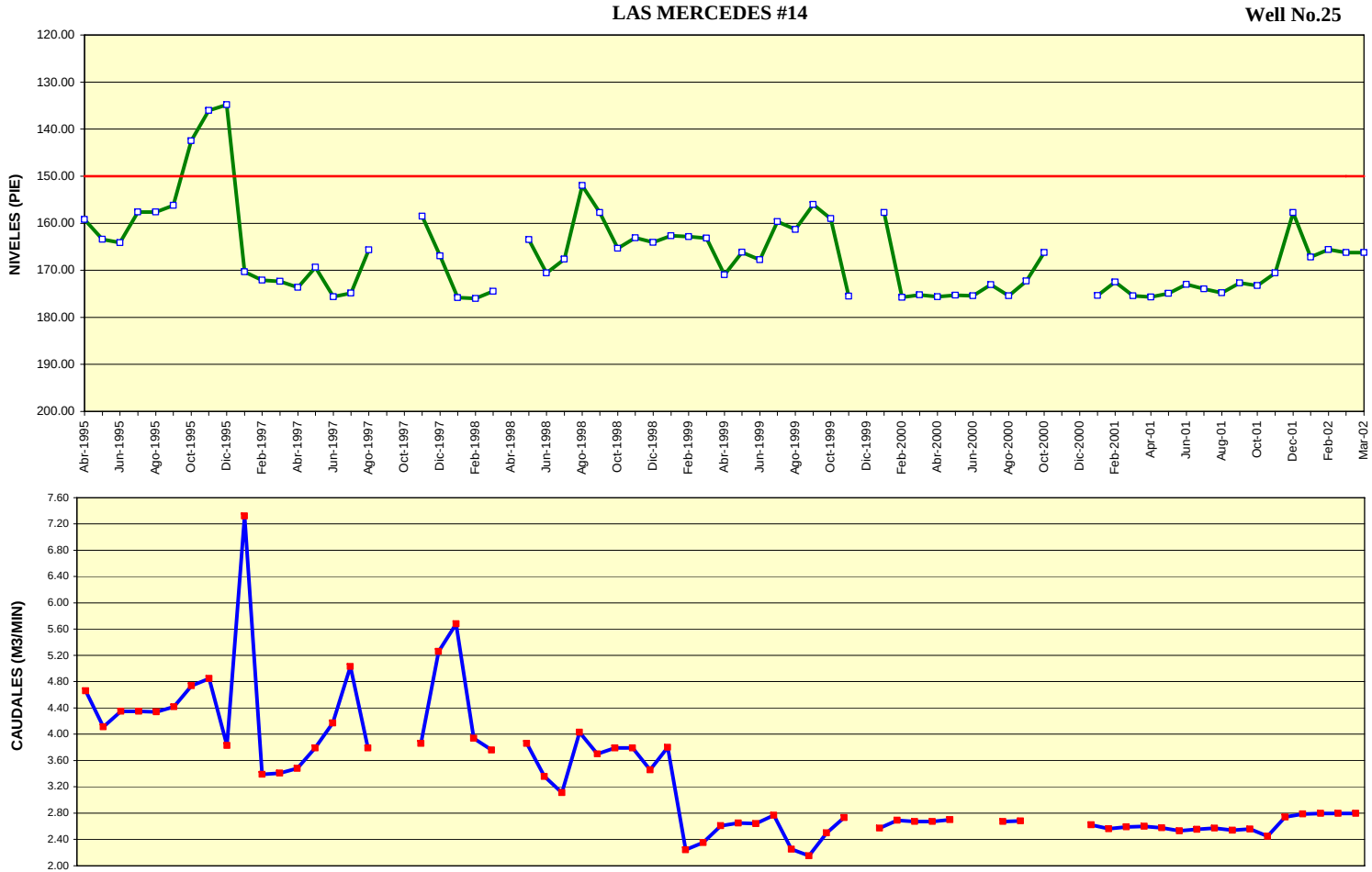
ANNEX 3.C(27) Punping Discharge and Water Level in Wells

ANNEX 3.C(28) Punping Discharge and Water Level in Wells

LAS MERCEDES #8 (Well No.24)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	6.17	133.23
May-1995	2.27	144.09
Jun-1995	2.58	146.25
Jul-1995	2.37	148.91
Ago-1995	2.35	138.84
Sept-1995	2.65	130.64
Oct-1995	3.10	159.24
Nov-1995	2.80	158.50
Dic-1995	3.13	170.82
Ene-1997	2.05	133.16
Feb-1997	2.81	132.16
Mar-1997	2.59	133.25
Abr-1997	2.50	151.16
May-1997	2.59	147.25
Jun-1997	0.25	160.58
Jul-1997	1.74	161.75
Ago-1997	2.50	168.00
Sept-1997		
Oct-1997		
Nov-1997	2.27	150.75
Dic-1997	3.10	139.37
Ene-1998	3.68	150.92
Feb-1998		
Mar-1998	3.02	169.50
Abr-1998		
May-1998	2.45	170.58
Jun-1998	1.59	169.00
Jul-1998	2.57	154.41
Ago-1998	2.69	150.08
Sept-1998	3.03	161.83
Oct-1998	3.79	169.42
Nov-1998	4.86	171.00
Dic-1998	1.57	170.00
Ene-1999	3.18	169.92
Feb-1999		169.83
Mar-1999		170.75

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		173.81
May-1999		171.66
Jun-1999		169.92
Jul-1999		170.25
Ago-1999	2.02	175.66
Sept-1999		174.83
Oct-1999		174.33
Nov-1999		180.75
Dic-1999		
Ene-2000		170.41
Feb-2000		171.20
Mar-2000		170.33
Abr-2000		170.42
May-2000		170.25
Jun-2000		172.58
Jul-2000		170.00
Ago-2000		172.83
Sept-2000		170.12
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001	1.64	174.08
Feb-2001	1.70	170.08
Mar-2001	1.60	170.25
Apr-01	1.60	181.75
May-01	1.62	181.08
Jun-01	1.58	171.83
Jul-01	1.55	167.08
Aug-01	1.64	162.66
Sep-01		
Oct-01	1.74	156.33
Nov-01	1.69	166.00
Dec-01	1.66	170.75
Jan-02	1.53	167.42
Feb-02	1.57	159.83
Mar-02	1.57	164.12



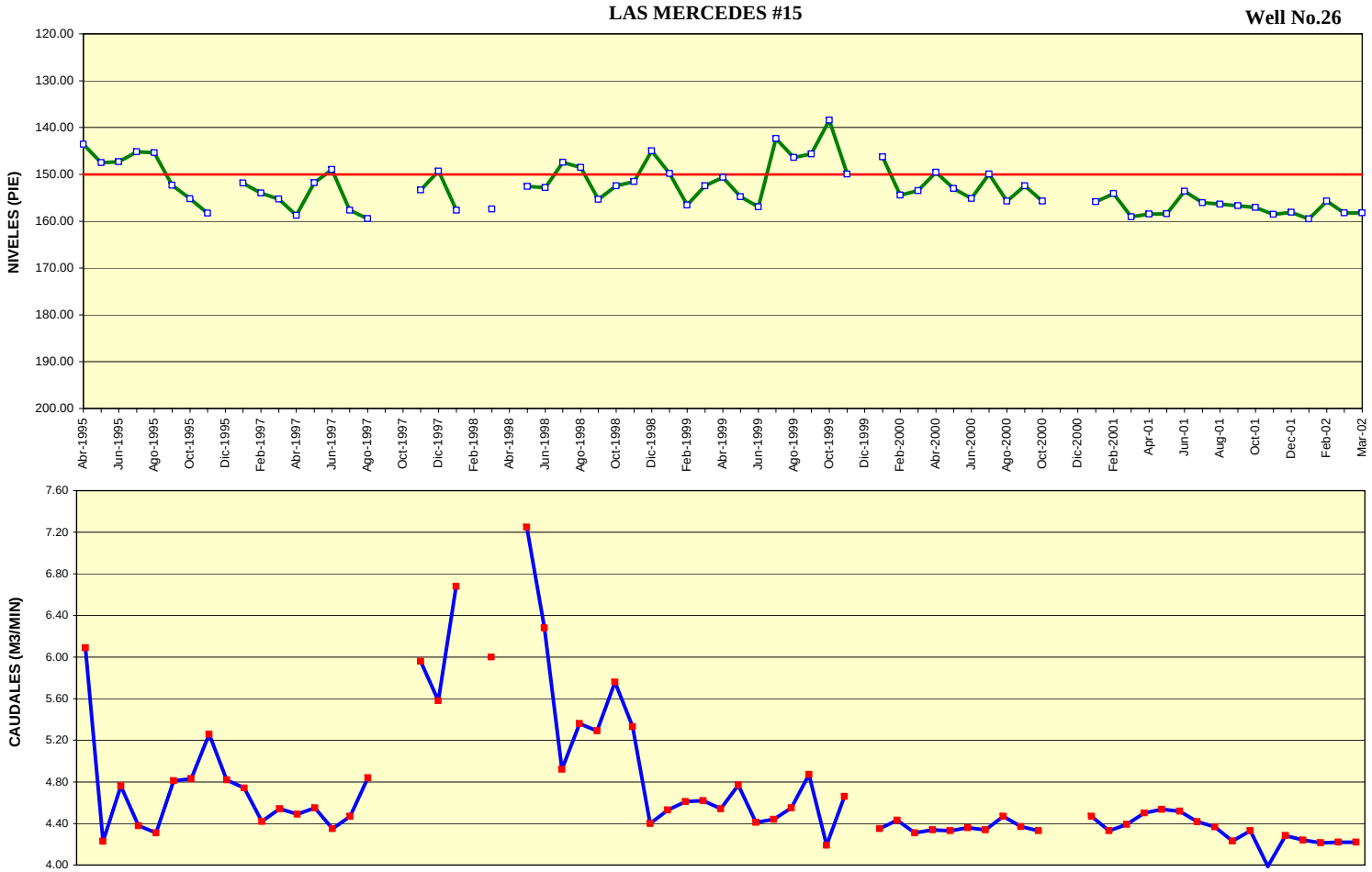
ANNEX 3.C(29) Punping Discharge and Water Level in Wells

ANNEX 3.C(30) Punping Discharge and Water Level in Wells

LAS MERCEDES #14 (Well No.25)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	4.66	159.20
May-1995	4.11	163.40
Jun-1995	4.35	164.10
Jul-1995	4.35	157.60
Ago-1995	4.34	157.60
Sept-1995	4.42	156.20
Oct-1995	4.74	142.50
Nov-1995	4.85	136.00
Dic-1995	3.83	134.80
Ene-1997	7.32	170.33
Feb-1997	3.39	172.08
Mar-1997	3.41	172.33
Abr-1997	3.48	173.66
May-1997	3.79	169.33
Jun-1997	4.17	175.58
Jul-1997	5.03	174.83
Ago-1997	3.79	165.66
Sept-1997		
Oct-1997		
Nov-1997	3.86	158.50
Dic-1997	5.26	166.92
Ene-1998	5.68	175.83
Feb-1998	3.94	176.00
Mar-1998	3.76	174.48
Abr-1998		
May-1998	3.86	163.50
Jun-1998	3.36	170.58
Jul-1998	3.11	167.66
Ago-1998	4.03	152.00
Sept-1998	3.70	157.75
Oct-1998	3.79	165.33
Nov-1998	3.79	163.08
Dic-1998	3.46	164.08
Ene-1999	3.80	162.66
Feb-1999	2.24	162.84
Mar-1999	2.35	163.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.61	170.92
May-1999	2.65	166.16
Jun-1999	2.64	167.75
Jul-1999	2.77	159.66
Ago-1999	2.25	161.29
Sept-1999	2.15	156.00
Oct-1999	2.50	159.00
Nov-1999	2.73	175.50
Dic-1999		
Ene-2000	2.57	157.75
Feb-2000	2.69	175.75
Mar-2000	2.67	175.25
Abr-2000	2.67	175.58
May-2000	2.70	175.30
Jun-2000		175.41
Jul-2000		173.08
Ago-2000	2.67	175.42
Sept-2000	2.68	172.30
Oct-2000		166.25
Nov-2000		
Dic-2000		
Ene-2001	2.62	175.33
Feb-2001	2.56	172.50
Mar-2001	2.59	175.42
Apr-01	2.60	175.66
May-01	2.58	174.92
Jun-01	2.53	173.00
Jul-01	2.55	173.92
Aug-01	2.57	174.75
Sep-01	2.54	172.66
Oct-01	2.56	173.25
Nov-01	2.45	170.58
Dec-01	2.74	157.75
Jan-02	2.79	167.17
Feb-02	2.79	165.58
Mar-02	2.79	166.24



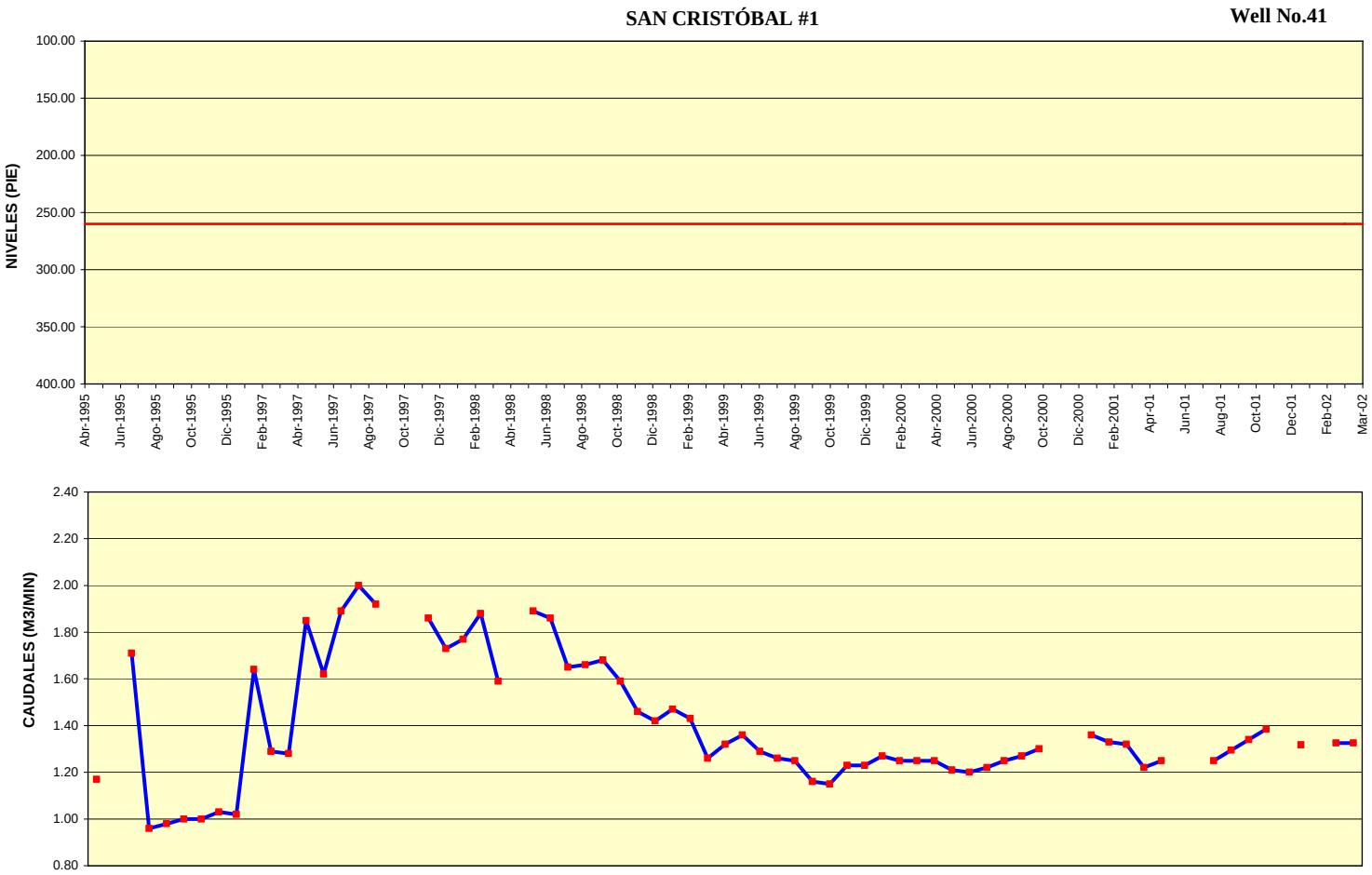
ANNEX 3.C(31) Punping Discharge and Water Level in Wells

ANNEX 3.C(32) Punping Discharge and Water Level in Wells

LAS MERCEDES #15 (Well No.26)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	6.09	143.60
May-1995	4.23	147.50
Jun-1995	4.76	147.30
Jul-1995	4.38	145.20
Ago-1995	4.31	145.40
Sept-1995	4.81	152.30
Oct-1995	4.83	155.20
Nov-1995	5.26	158.30
Dic-1995	4.82	
Ene-1997	4.74	151.90
Feb-1997	4.42	154.00
Mar-1997	4.54	155.25
Abr-1997	4.49	158.75
May-1997	4.55	151.83
Jun-1997	4.35	149.00
Jul-1997	4.47	157.66
Ago-1997	4.84	159.43
Sept-1997		
Oct-1997		
Nov-1997	5.96	153.33
Dic-1997	5.58	149.29
Ene-1998	6.68	157.66
Feb-1998		
Mar-1998	6.00	157.42
Abr-1998		
May-1998	7.25	152.58
Jun-1998	6.28	152.83
Jul-1998	4.92	147.41
Ago-1998	5.36	148.50
Sept-1998	5.29	155.33
Oct-1998	5.76	152.42
Nov-1998	5.33	151.58
Dic-1998	4.40	144.97
Ene-1999	4.53	149.83
Feb-1999	4.61	156.58
Mar-1999	4.62	152.42

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	4.54	150.67
May-1999	4.77	154.75
Jun-1999	4.41	156.92
Jul-1999	4.44	142.33
Ago-1999	4.55	146.41
Sept-1999	4.87	145.62
Oct-1999	4.19	138.41
Nov-1999	4.66	149.92
Dic-1999		
Ene-2000	4.35	146.25
Feb-2000	4.43	154.41
Mar-2000	4.31	153.50
Abr-2000	4.34	149.58
May-2000	4.33	153.00
Jun-2000	4.36	155.16
Jul-2000	4.34	149.92
Ago-2000	4.47	155.75
Sept-2000	4.37	152.46
Oct-2000	4.33	155.75
Nov-2000		
Dic-2000		
Ene-2001	4.47	155.87
Feb-2001	4.33	154.12
Mar-2001	4.39	159.08
Apr-01	4.50	158.50
May-01	4.53	158.42
Jun-01	4.52	153.62
Jul-01	4.42	156.08
Aug-01	4.37	156.37
Sep-01	4.23	156.66
Oct-01	4.33	157.08
Nov-01	3.99	158.58
Dec-01	4.28	158.08
Jan-02	4.24	159.50
Feb-02	4.21	155.75
Mar-02	4.22	158.25



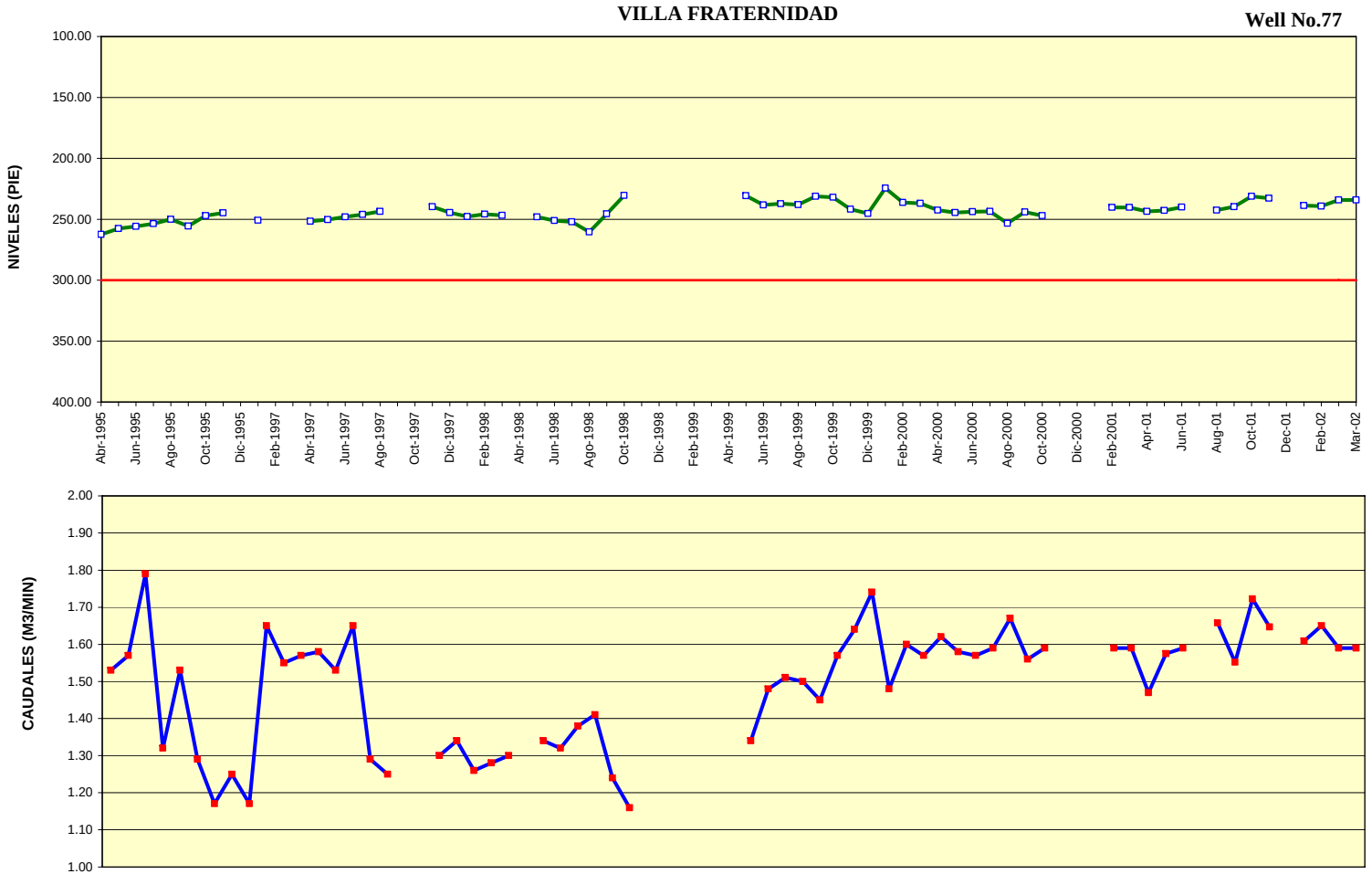
ANNEX 3.C(33) Punping Discharge and Water Level in Wells

ANNEX 3.C(34) Punping Discharge and Water Level in Wells

SAN CRISTÓBAL #1 (Well No.41)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.17	
May-1995		
Jun-1995	1.71	
Jul-1995	0.96	
Ago-1995	0.98	
Sept-1995	1.00	
Oct-1995	1.00	
Nov-1995	1.03	
Dic-1995	1.02	
Ene-1997	1.64	
Feb-1997	1.29	
Mar-1997	1.28	
Abr-1997	1.85	
May-1997	1.62	
Jun-1997	1.89	
Jul-1997	2.00	
Ago-1997	1.92	
Sept-1997		
Oct-1997		
Nov-1997	1.86	
Dic-1997	1.73	
Ene-1998	1.77	
Feb-1998	1.88	
Mar-1998	1.59	
Abr-1998		
May-1998	1.89	
Jun-1998	1.86	
Jul-1998	1.65	
Ago-1998	1.66	
Sept-1998	1.68	
Oct-1998	1.59	
Nov-1998	1.46	
Dic-1998	1.42	
Ene-1999	1.47	
Feb-1999	1.43	
Mar-1999	1.26	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.32	
May-1999	1.36	
Jun-1999	1.29	
Jul-1999	1.26	
Ago-1999	1.25	
Sept-1999	1.16	
Oct-1999	1.15	
Nov-1999	1.23	
Dic-1999	1.23	
Ene-2000	1.27	
Feb-2000	1.25	
Mar-2000	1.25	
Abr-2000	1.25	
May-2000	1.21	
Jun-2000	1.20	
Jul-2000	1.22	
Ago-2000	1.25	
Sept-2000	1.27	
Oct-2000	1.30	
Nov-2000		
Dic-2000		
Ene-2001	1.36	
Feb-2001	1.33	
Mar-2001	1.32	
Apr-01	1.22	
May-01	1.25	
Jun-01		OBST
Jul-01		OBST
Aug-01	1.25	OBST
Sep-01	1.29	OBST
Oct-01	1.34	OBST
Nov-01	1.39	OBST
Dec-01		
Jan-02	1.32	OBST
Feb-02		OBST
Mar-02	1.32	OBST



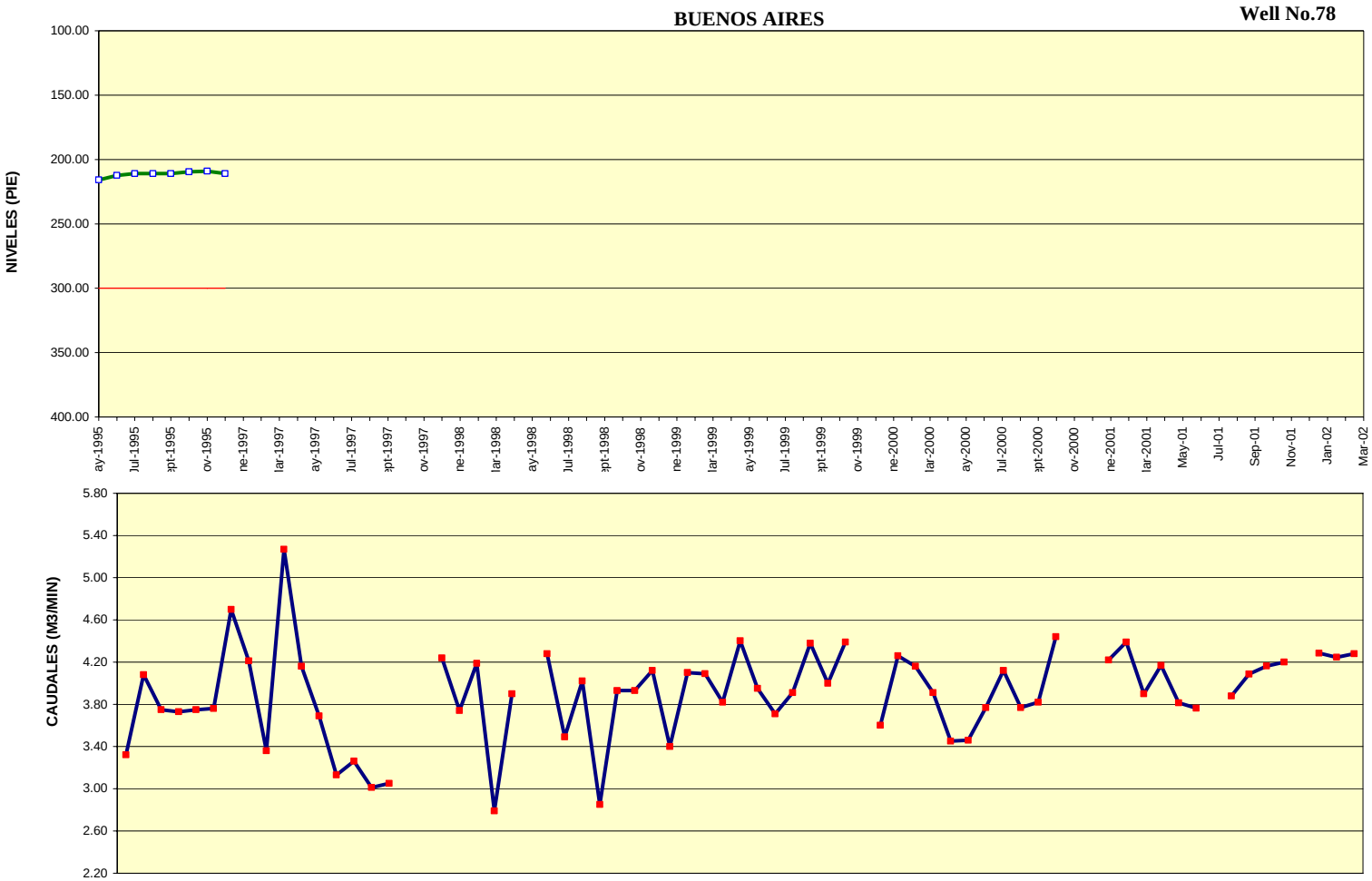
ANNEX 3.C(35) Punping Discharge and Water Level in Wells

ANNEX 3.C(36) Punping Discharge and Water Level in Wells

VILLA FRATERNIDAD (Well No.77)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.53	262.40
May-1995	1.57	257.74
Jun-1995	1.79	255.84
Jul-1995	1.32	253.58
Ago-1995	1.53	250.10
Sept-1995	1.29	255.74
Oct-1995	1.17	246.98
Nov-1995	1.25	244.83
Dic-1995	1.17	
Ene-1997	1.65	250.80
Feb-1997	1.55	
Mar-1997	1.57	
Abr-1997	1.58	251.58
May-1997	1.53	250.42
Jun-1997	1.65	248.08
Jul-1997	1.29	246.00
Ago-1997	1.25	243.58
Sept-1997		
Oct-1997		
Nov-1997	1.30	239.80
Dic-1997	1.34	244.50
Ene-1998	1.26	247.87
Feb-1998	1.28	245.75
Mar-1998	1.30	246.83
Abr-1998		
May-1998	1.34	248.08
Jun-1998	1.32	251.16
Jul-1998	1.38	252.25
Ago-1998	1.41	260.50
Sept-1998	1.24	245.50
Oct-1998	1.16	230.50
Nov-1998		
Dic-1998		
Ene-1999		
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999	1.34	230.83
Jun-1999	1.48	238.25
Jul-1999	1.51	237.16
Ago-1999	1.50	238.16
Sept-1999	1.45	231.33
Oct-1999	1.57	231.96
Nov-1999	1.64	241.83
Dic-1999	1.74	245.41
Ene-2000	1.48	224.50
Feb-2000	1.60	236.37
Mar-2000	1.57	236.92
Abr-2000	1.62	242.66
May-2000	1.58	244.46
Jun-2000	1.57	243.75
Jul-2000	1.59	243.50
Ago-2000	1.67	253.50
Sept-2000	1.56	244.12
Oct-2000	1.59	247.08
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	1.59	240.25
Mar-2001	1.59	240.33
Apr-01	1.47	243.66
May-01	1.57	242.92
Jun-01	1.59	240.16
Jul-01		
Aug-01	1.66	242.50
Sep-01	1.55	239.83
Oct-01	1.72	231.16
Nov-01	1.65	232.62
Dec-01		
Jan-02	1.61	238.70
Feb-02	1.65	239.25
Mar-02	1.59	234.16



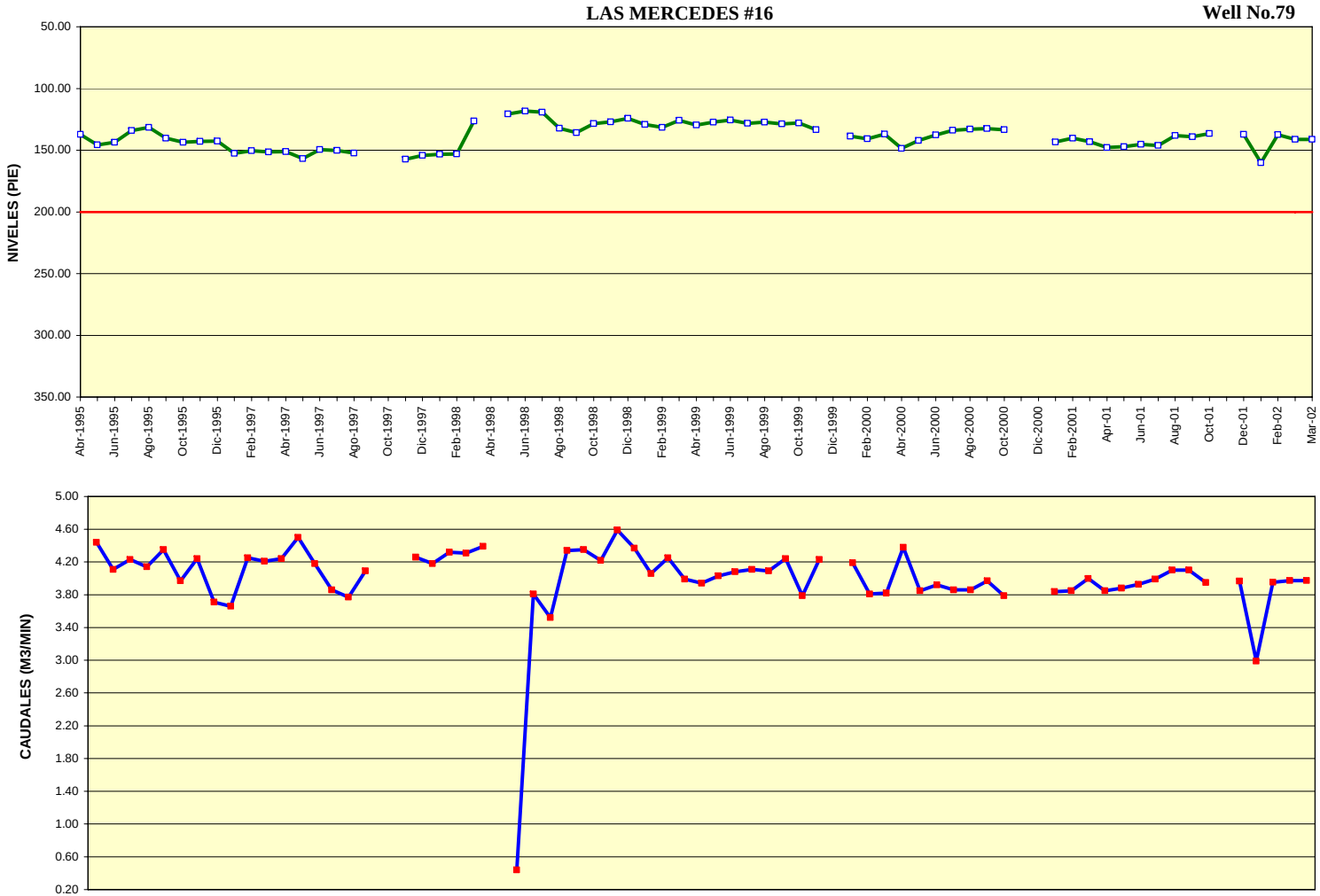
ANNEX 3.C(37) Punping Discharge and Water Level in Wells

ANNEX 3.C(38) Punping Discharge and Water Level in Wells

BUENOS AIRES (Well No.78)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS PIE
May-1995	3.32	215.76
Jun-1995	4.08	212.41
Jul-1995	3.75	210.90
Ago-1995	3.73	210.97
Sept-1995	3.75	210.97
Oct-1995	3.76	209.65
Nov-1995	4.70	209.10
Dic-1995	4.21	210.90
Ene-1997	3.36	
Feb-1997	5.27	
Mar-1997	4.16	
Abr-1997	3.69	
May-1997	3.13	
Jun-1997	3.26	
Jul-1997	3.01	
Ago-1997	3.05	
Sept-1997		
Oct-1997		
Nov-1997	4.24	
Dic-1997	3.74	
Ene-1998	4.19	
Feb-1998	2.79	
Mar-1998	3.90	
Abr-1998		
May-1998	4.28	
Jun-1998	3.49	
Jul-1998	4.02	
Ago-1998	2.85	
Sept-1998	3.93	
Oct-1998	3.93	
Nov-1998	4.12	
Dic-1998	3.40	
Ene-1999	4.10	
Feb-1999	4.09	
Mar-1999	3.82	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS PIE
Abr-1999	4.40	
May-1999	3.95	
Jun-1999	3.71	
Jul-1999	3.91	
Ago-1999	4.38	
Sept-1999	4.00	
Oct-1999	4.39	
Nov-1999		
Dic-1999	3.60	
Ene-2000	4.26	
Feb-2000	4.16	
Mar-2000	3.91	
Abr-2000	3.45	
May-2000	3.46	
Jun-2000	3.77	
Jul-2000	4.12	
Ago-2000	3.77	
Sept-2000	3.82	
Oct-2000	4.44	
Nov-2000		
Dic-2000		
Ene-2001	4.22	
Feb-2001	4.39	
Mar-2001	3.90	
Apr-01	4.17	
May-01	3.82	
Jun-01	3.76	OBST
Jul-01		OBST
Aug-01	3.88	OBST
Sep-01	4.09	OBST
Oct-01	4.16	OBST
Nov-01	4.20	OBST
Dec-01		OBST
Jan-02	4.28	OBST
Feb-02	4.25	OBST
Mar-02	4.28	OBST



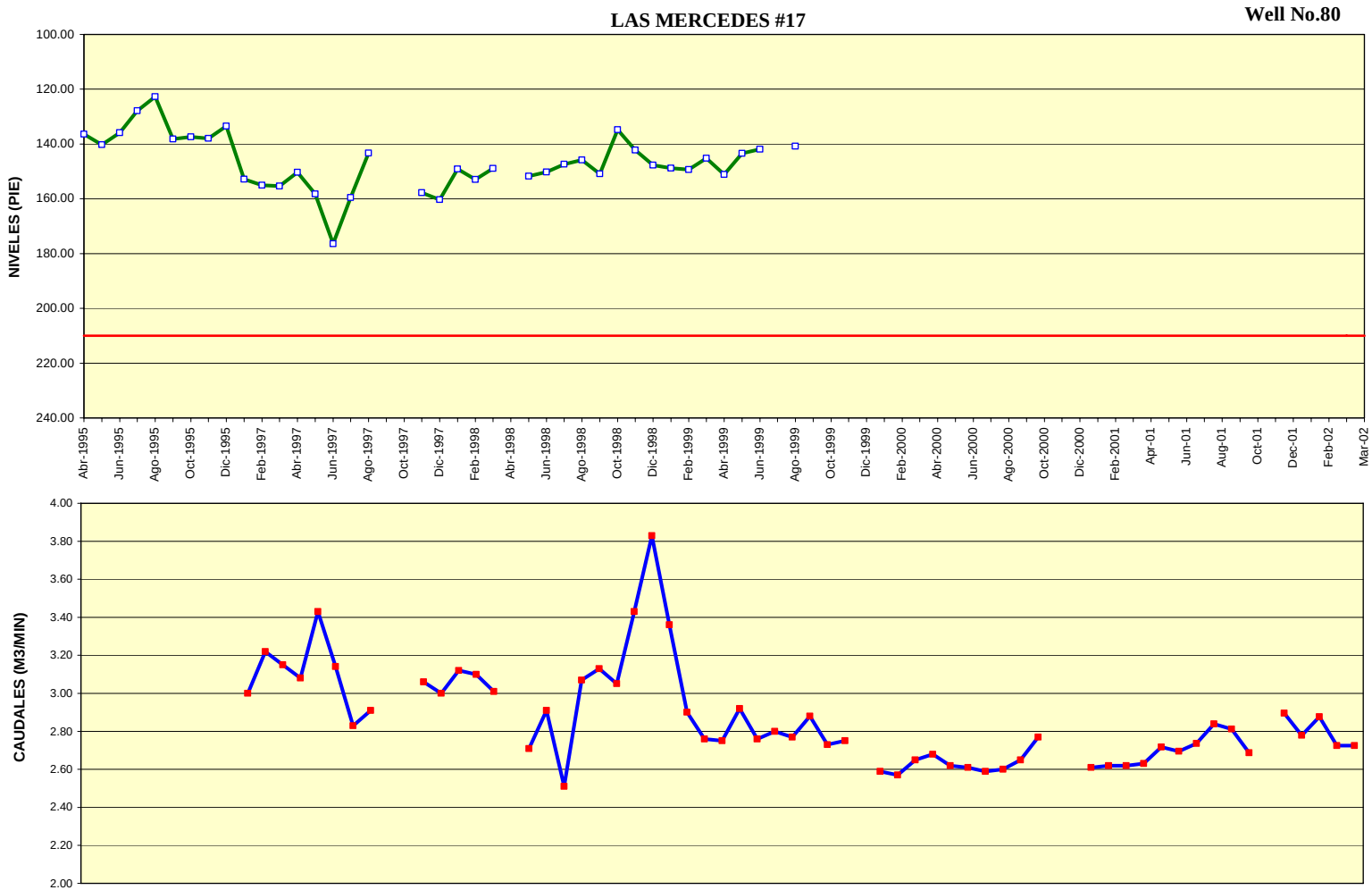
ANNEX 3.C(39) Punping Discharge and Water Level in Wells

ANNEX 3.C(40) Punping Discharge and Water Level in Wells

LAS MERCEDES #16 (Well No.79)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	4.44	137.20
May-1995	4.11	145.70
Jun-1995	4.23	143.70
Jul-1995	4.14	134.10
Ago-1995	4.35	131.60
Sept-1995	3.97	140.20
Oct-1995	4.24	143.70
Nov-1995	3.71	142.80
Dic-1995	3.66	142.60
Ene-1997	4.25	152.50
Feb-1997	4.21	150.58
Mar-1997	4.24	151.33
Abr-1997	4.50	151.25
May-1997	4.18	156.92
Jun-1997	3.86	149.43
Jul-1997	3.77	150.15
Ago-1997	4.09	152.33
Sept-1997		
Oct-1997		
Nov-1997	4.26	157.25
Dic-1997	4.18	154.16
Ene-1998	4.32	153.25
Feb-1998	4.31	153.16
Mar-1998	4.39	126.41
Abr-1998		
May-1998	0.44	120.79
Jun-1998	3.81	118.33
Jul-1998	3.52	119.25
Ago-1998	4.34	132.16
Sept-1998	4.35	135.70
Oct-1998	4.22	128.50
Nov-1998	4.59	127.00
Dic-1998	4.37	124.33
Ene-1999	4.06	129.16
Feb-1999	4.25	131.58
Mar-1999	3.99	125.92

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.94	129.75
May-1999	4.03	127.33
Jun-1999	4.08	125.54
Jul-1999	4.11	128.25
Ago-1999	4.09	127.20
Sept-1999	4.24	128.83
Oct-1999	3.79	127.96
Nov-1999	4.23	133.41
Dic-1999		
Ene-2000	4.19	138.66
Feb-2000	3.81	140.75
Mar-2000	3.82	137.08
Abr-2000	4.38	148.50
May-2000	3.85	142.16
Jun-2000	3.92	137.70
Jul-2000	3.86	133.83
Ago-2000	3.86	133.00
Sept-2000	3.97	132.60
Oct-2000	3.79	133.50
Nov-2000		
Dic-2000		
Ene-2001	3.84	143.37
Feb-2001	3.85	140.33
Mar-2001	4.00	143.08
Apr-01	3.85	147.92
May-01	3.88	147.08
Jun-01	3.93	145.25
Jul-01	3.99	146.33
Aug-01	4.10	138.16
Sep-01	4.10	139.20
Oct-01	3.95	136.42
Nov-01		
Dec-01	3.97	137.12
Jan-02	2.99	160.25
Feb-02	3.95	137.50
Mar-02	3.97	141.25



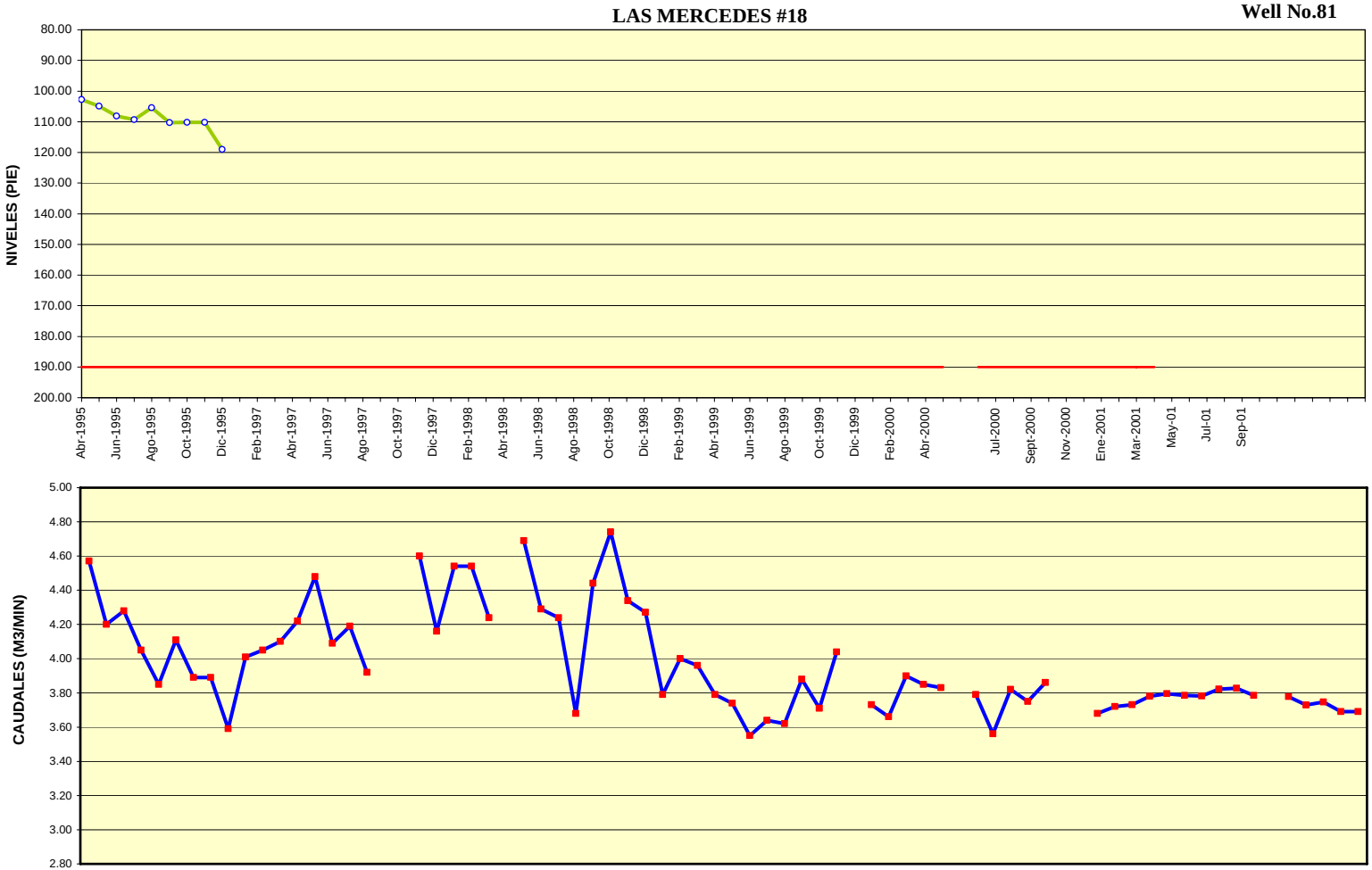
ANNEX 3.C(41) Punping Discharge and Water Level in Wells

ANNEX 3.C(42) Punping Discharge and Water Level in Wells

LAS MERCEDES #17 (Well No.80)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		136.40
May-1995		140.20
Jun-1995		135.80
Jul-1995		127.80
Ago-1995		122.70
Sept-1995		138.20
Oct-1995		137.40
Nov-1995		137.90
Dic-1995		133.40
Ene-1997	3.00	152.80
Feb-1997	3.22	155.08
Mar-1997	3.15	155.33
Abr-1997	3.08	150.29
May-1997	3.43	158.25
Jun-1997	3.14	176.43
Jul-1997	2.83	159.50
Ago-1997	2.91	143.25
Sept-1997		
Oct-1997		
Nov-1997	3.06	157.83
Dic-1997	3.00	160.33
Ene-1998	3.12	149.08
Feb-1998	3.10	152.95
Mar-1998	3.01	148.92
Abr-1998		
May-1998	2.71	151.75
Jun-1998	2.91	150.16
Jul-1998	2.51	147.33
Ago-1998	3.07	145.83
Sept-1998	3.13	150.92
Oct-1998	3.05	134.75
Nov-1998	3.43	142.18
Dic-1998	3.83	147.66
Ene-1999	3.36	148.83
Feb-1999	2.90	149.33
Mar-1999	2.76	145.13

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.75	151.08
May-1999	2.92	143.42
Jun-1999	2.76	141.87
Jul-1999	2.80	
Ago-1999	2.77	140.79
Sept-1999	2.88	
Oct-1999	2.73	
Nov-1999	2.75	
Dic-1999		
Ene-2000	2.59	
Feb-2000	2.57	
Mar-2000	2.65	
Abr-2000	2.68	
May-2000	2.62	
Jun-2000	2.61	
Jul-2000	2.59	
Ago-2000	2.60	
Sept-2000	2.65	
Oct-2000	2.77	
Nov-2000		
Dic-2000		
Ene-2001	2.61	
Feb-2001	2.62	
Mar-2001	2.62	
Apr-01	2.63	
May-01	2.72	
Jun-01	2.69	OBST
Jul-01	2.74	OBST
Aug-01	2.84	OBST
Sep-01	2.81	OBST
Oct-01	2.69	OBST
Nov-01		OBST
Dec-01	2.90	OBST
Jan-02	2.78	OBST
Feb-02	2.88	OBST
Mar-02	2.73	OBST



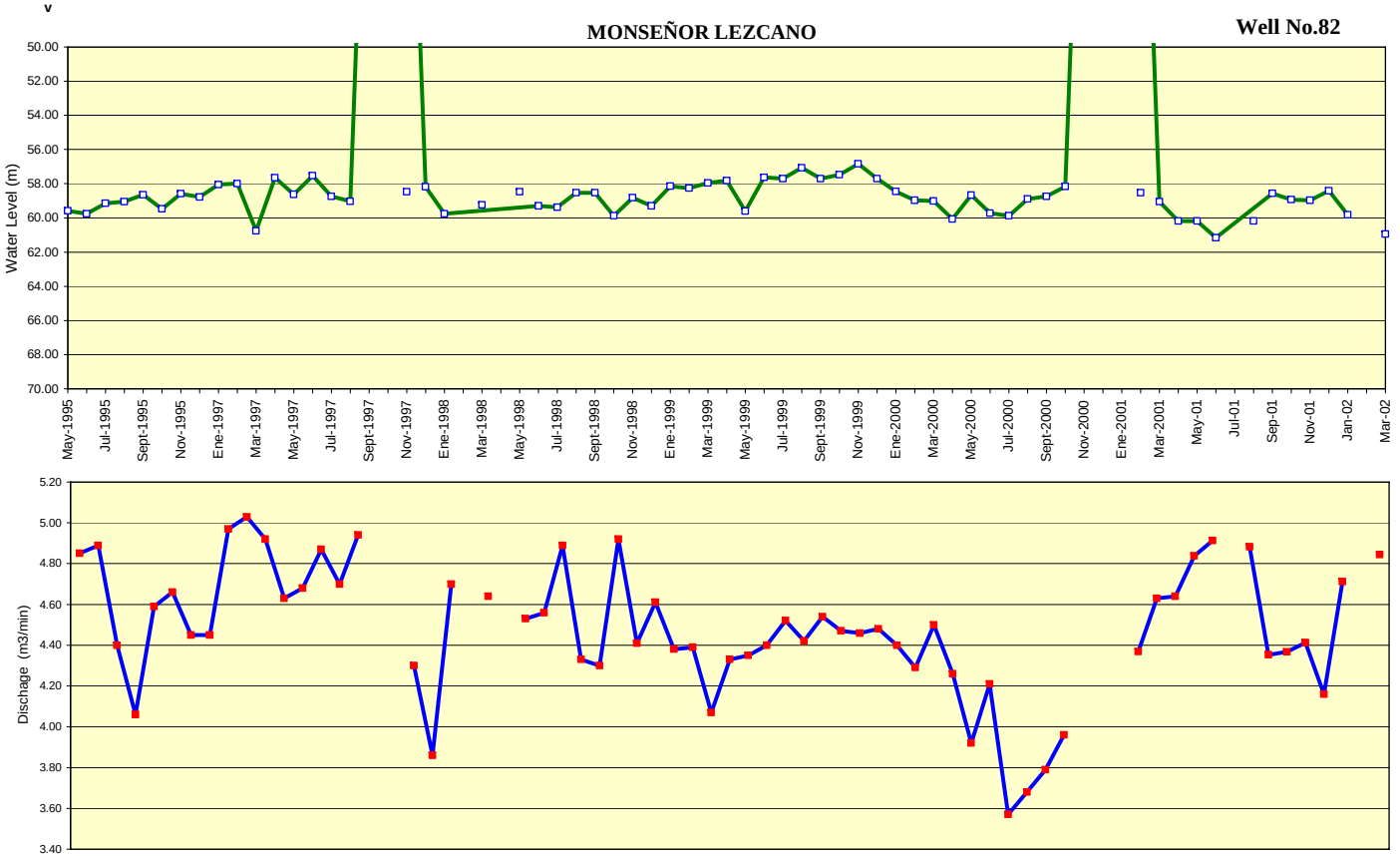
ANNEX 3.C(43) Punping Discharge and Water Level in Wells

ANNEX 3.C(44) Punping Discharge and Water Level in Wells

LAS MERCEDES #18 (Well No.81)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	4.57	102.80
May-1995	4.20	104.90
Jun-1995	4.28	108.20
Jul-1995	4.05	109.30
Ago-1995	3.85	105.40
Sept-1995	4.11	110.30
Oct-1995	3.89	110.20
Nov-1995	3.89	110.20
Dic-1995	3.59	119.00
Ene-1997	4.01	
Feb-1997	4.05	
Mar-1997	4.10	
Abr-1997	4.22	
May-1997	4.48	
Jun-1997	4.09	
Jul-1997	4.19	
Ago-1997	3.92	
Sept-1997		
Oct-1997		
Nov-1997	4.60	
Dic-1997	4.16	
Ene-1998	4.54	
Feb-1998	4.54	
Mar-1998	4.24	
Abr-1998		
May-1998	4.69	
Jun-1998	4.29	
Jul-1998	4.24	
Ago-1998	3.68	
Sept-1998	4.44	
Oct-1998	4.74	
Nov-1998	4.34	
Dic-1998	4.27	
Ene-1999	3.79	
Feb-1999	4.00	
Mar-1999	3.96	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.79	
May-1999	3.74	
Jun-1999	3.55	
Jul-1999	3.64	
Ago-1999	3.62	
Sept-1999	3.88	
Oct-1999	3.71	
Nov-1999	4.04	
Dic-1999		
Ene-2000	3.73	
Feb-2000	3.66	
Mar-2000	3.90	
Abr-2000	3.85	
May-2000	3.83	
Jun-2000	3.79	
Jul-2000	3.56	
Ago-2000	3.82	
Sept-2000	3.75	
Oct-2000	3.86	
Nov-2000		
Dic-2000		
Ene-2001	3.68	
Feb-2001	3.72	
Mar-2001	3.73	
Apr-01	3.78	
May-01	3.80	OBST
Jun-01	3.79	OBST
Jul-01	3.78	OBST
Aug-01	3.82	OBST
Sep-01	3.83	OBST
Oct-01	3.79	OBST
Nov-01		OBST
Dec-01	3.78	OBST
Jan-02	3.73	OBST
Feb-02	3.75	OBST
Mar-02	3.69	OBST



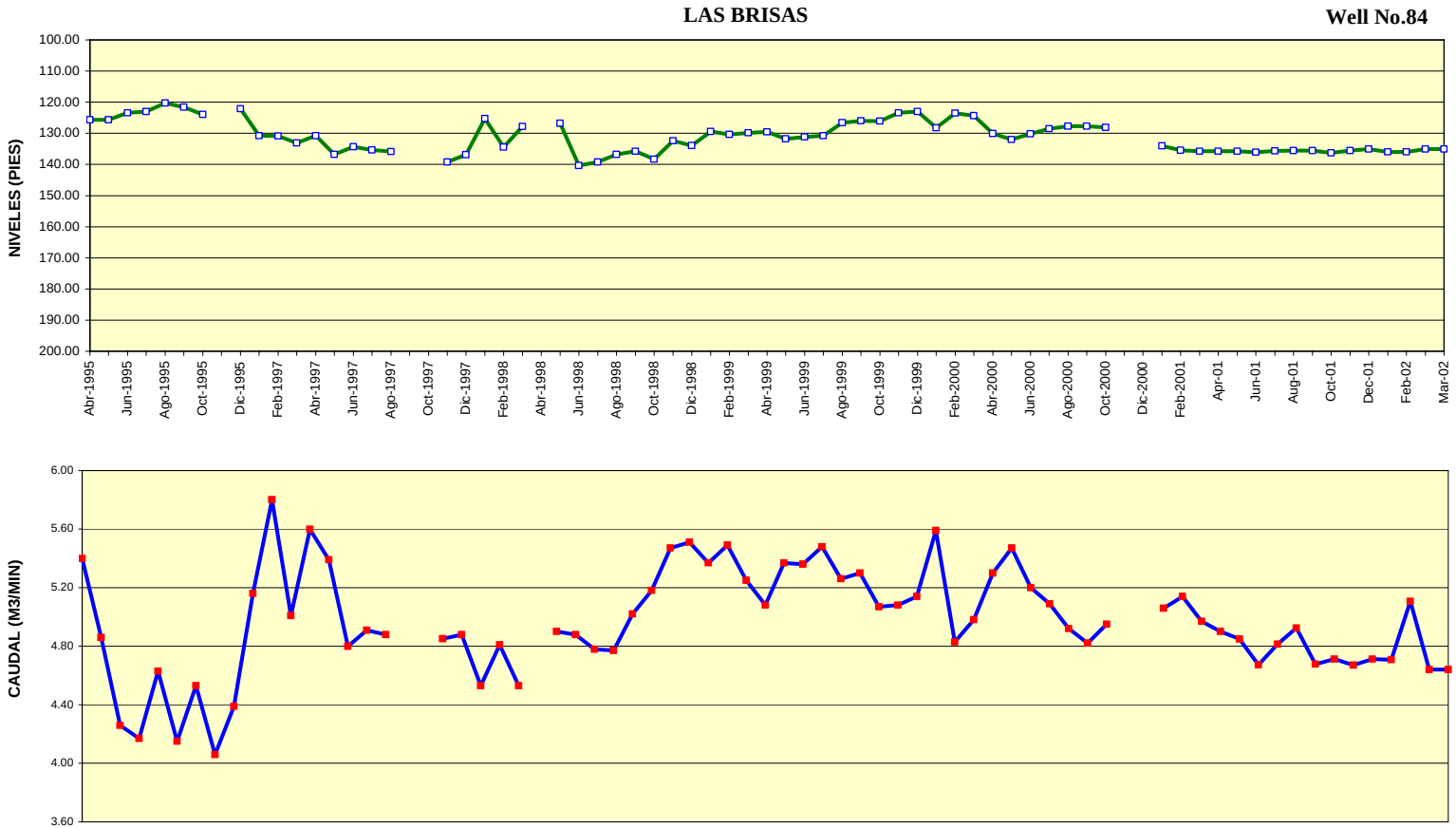
ANNEX 3.C(45) Punping Discharge and Water Level in Wells

ANNEX 3.C(46) Punping Discharge and Water Level in Wells

MONSEÑOR LEZCANO (Well No.82)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	4.85	195.48
Jun-1995	4.89	196.08
Jul-1995	4.40	194.07
Ago-1995	4.06	193.75
Sept-1995	4.59	192.40
Oct-1995	4.66	195.09
Nov-1995	4.45	192.20
Dic-1995	4.45	192.83
Ene-1997	4.97	190.48
Feb-1997	5.03	190.25
Mar-1997	4.92	199.33
Abr-1997	4.63	189.16
May-1997	4.68	192.33
Jun-1997	4.87	188.75
Jul-1997	4.70	192.75
Ago-1997	4.94	193.66
Sept-1997		
Oct-1997		
Nov-1997	4.30	191.83
Dic-1997	3.86	190.92
Ene-1998	4.70	196.04
Feb-1998		
Mar-1998	4.64	194.33
Abr-1998		
May-1998	4.53	191.83
Jun-1998	4.56	194.58
Jul-1998	4.89	194.79
Ago-1998	4.33	192.00
Sept-1998	4.30	192.04
Oct-1998	4.92	196.45
Nov-1998	4.41	193.00
Dic-1998	4.61	194.58
Ene-1999	4.38	190.76
Feb-1999	4.39	191.16
Mar-1999	4.07	190.16
Abr-1999	4.33	189.71

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	4.35	195.58
Jun-1999	4.40	189.08
Jul-1999	4.52	189.33
Ago-1999	4.42	187.25
Sept-1999	4.54	189.33
Oct-1999	4.47	188.58
Nov-1999	4.46	186.50
Dic-1999	4.48	189.33
Ene-2000	4.40	191.75
Feb-2000	4.29	193.46
Mar-2000	4.50	193.59
Abr-2000	4.26	197.09
May-2000	3.92	192.50
Jun-2000	4.21	195.92
Jul-2000	3.57	196.46
Ago-2000	3.68	193.25
Sept-2000	3.79	192.75
Oct-2000	3.96	190.83
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	4.37	192.00
Mar-2001	4.63	193.75
Apr-01	4.64	197.42
May-01	4.84	197.42
Jun-01	4.91	200.66
Jul-01		
Aug-01	4.88	197.46
Sep-01	4.35	192.16
Oct-01	4.37	193.33
Nov-01	4.41	193.46
Dec-01	4.16	191.66
Jan-02	4.71	196.25
Feb-02		
Mar-02	4.84	200.00



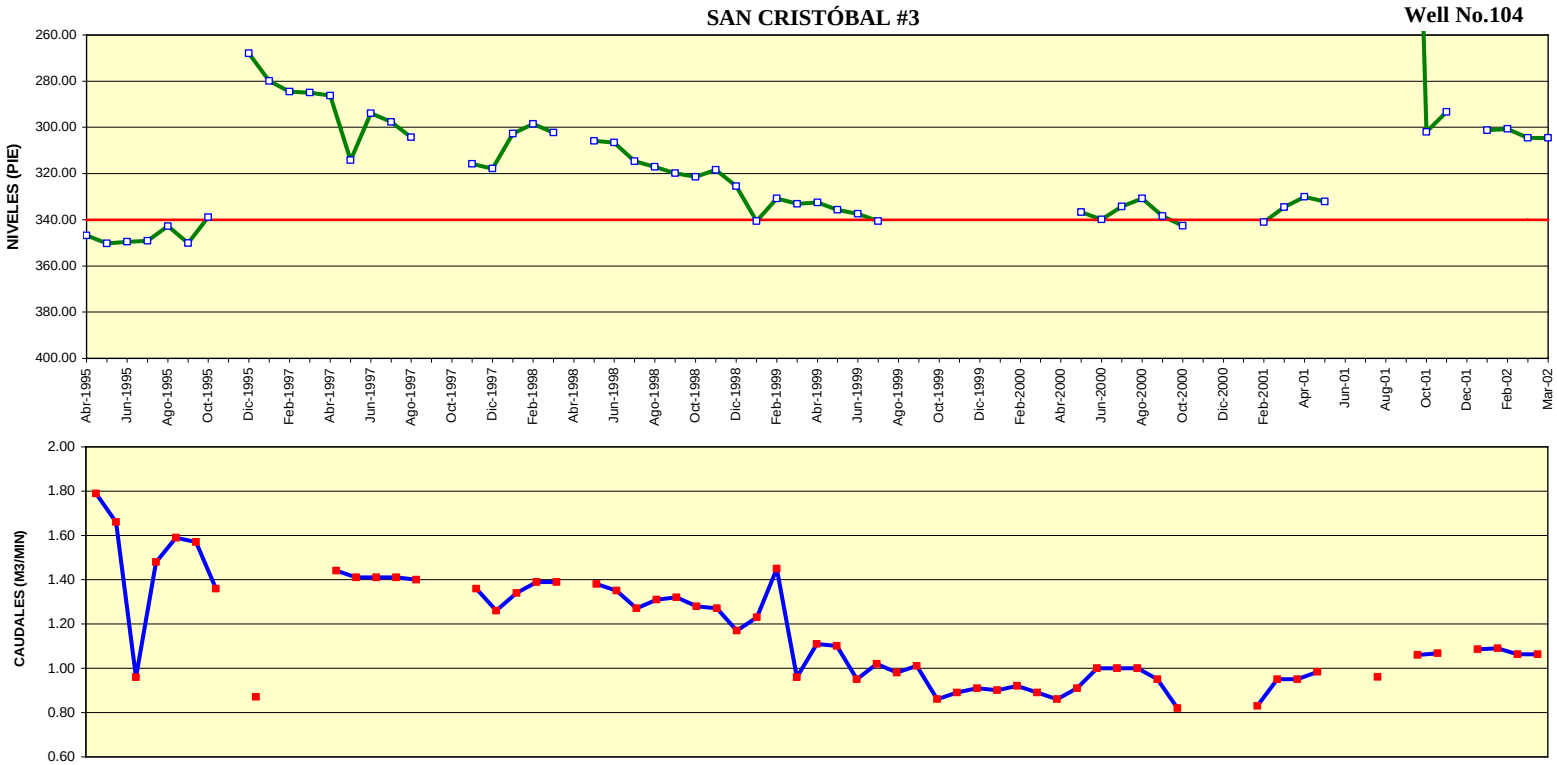
ANNEX 3.C(47) Punping Discharge and Water Level in Wells

ANNEX 3.C(48) Punping Discharge and Water Level in Wells

LAS BRISAS (Well No.84)

TIEMPO	CAUDAL (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	5.40	125.66
May-1995	4.86	125.72
Jun-1995	4.26	123.49
Jul-1995	4.17	123.06
Ago-1995	4.63	120.27
Sept-1995	4.15	121.59
Oct-1995	4.53	123.98
Nov-1995	4.06	
Dic-1995	4.39	122.14
Ene-1997	5.16	130.83
Feb-1997	5.80	130.88
Mar-1997	5.01	133.16
Abr-1997	5.60	130.75
May-1997	5.39	136.75
Jun-1997	4.80	134.33
Jul-1997	4.91	135.33
Ago-1997	4.88	135.92
Sept-1997		
Oct-1997		
Nov-1997	4.85	139.21
Dic-1997	4.88	136.92
Ene-1998	4.53	125.25
Feb-1998	4.81	134.50
Mar-1998	4.53	127.83
Abr-1998		
May-1998	4.90	126.83
Jun-1998	4.88	140.33
Jul-1998	4.78	139.25
Ago-1998	4.77	136.75
Sept-1998	5.02	135.75
Oct-1998	5.18	138.29
Nov-1998	5.47	132.42
Dic-1998	5.51	133.92
Ene-1999	5.37	129.50
Feb-1999	5.49	130.42
Mar-1999	5.25	129.89

TIEMPO	CAUDAL (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	5.08	129.58
May-1999	5.37	131.83
Jun-1999	5.36	131.16
Jul-1999	5.48	130.79
Ago-1999	5.26	126.58
Sept-1999	5.30	126.00
Oct-1999	5.07	126.08
Nov-1999	5.08	123.41
Dic-1999	5.14	123.00
Ene-2000	5.59	128.25
Feb-2000	4.83	123.50
Mar-2000	4.98	124.41
Abr-2000	5.30	130.08
May-2000	5.47	132.04
Jun-2000	5.20	130.16
Jul-2000	5.09	128.50
Ago-2000	4.92	127.75
Sept-2000	4.82	127.75
Oct-2000	4.95	128.17
Nov-2000		
Dic-2000		
Ene-2001	5.06	134.04
Feb-2001	5.14	135.50
Mar-2001	4.97	135.83
Apr-01	4.9	135.75
May-01	4.8	135.80
Jun-01	4.67	136.12
Jul-01	4.81	135.66
Aug-01	4.92	135.58
Sep-01	4.68	135.58
Oct-01	4.71	136.25
Nov-01	4.67	135.54
Dec-01	4.71	135.04
Jan-02	4.71	135.96
Feb-02	5.11	136.00
Mar-02	4.64	135.08



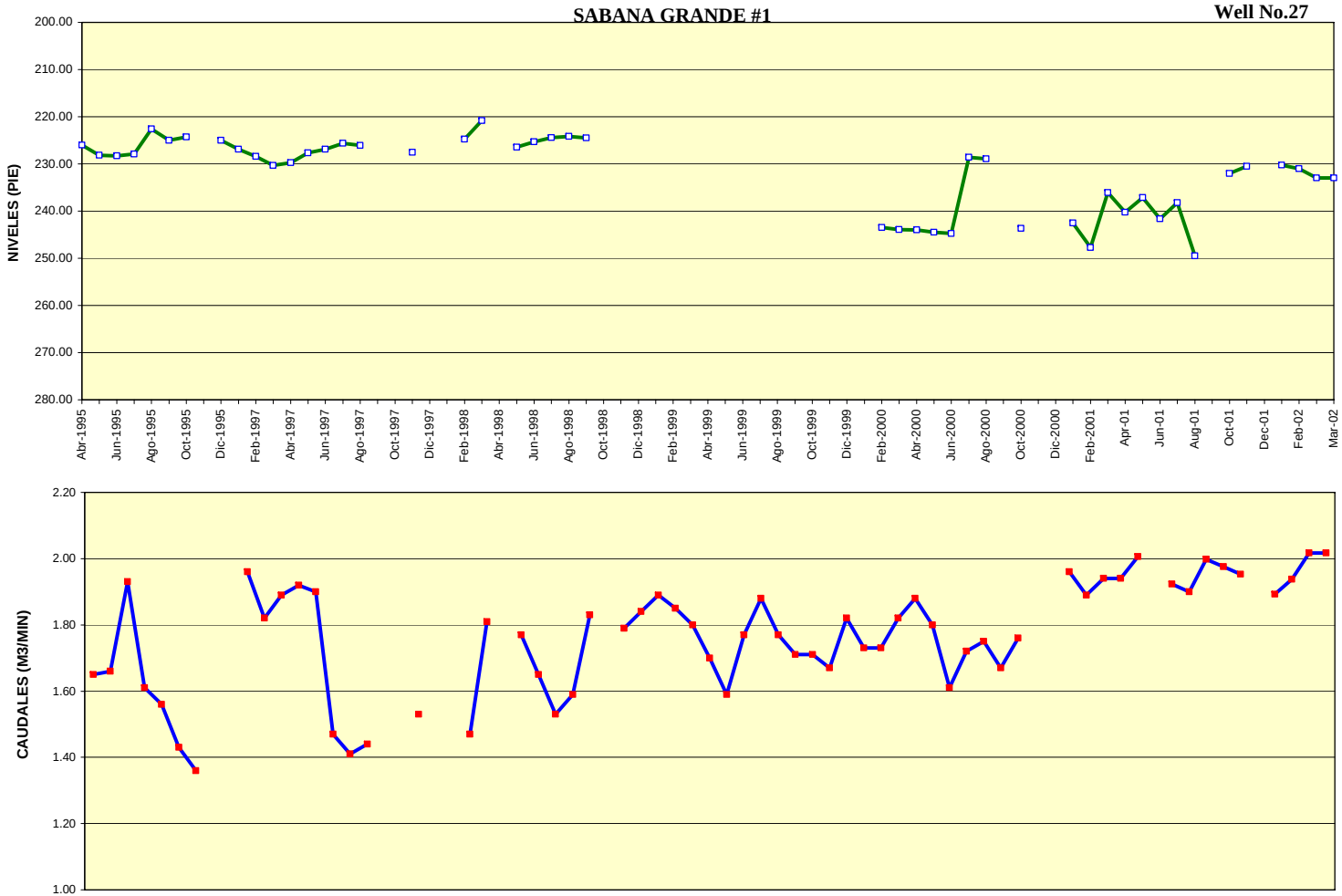
ANNEX 3.C(49) Punping Discharge and Water Level in Wells

ANNEX 3.C(50) Punping Discharge and Water Level in Wells

SAN CRITÓBAL #3 (Well No.104)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.79	346.86
May-1995	1.66	350.30
Jun-1995	0.96	349.58
Jul-1995	1.48	349.09
Ago-1995	1.59	342.83
Sept-1995	1.57	350.14
Oct-1995	1.36	338.80
Nov-1995		
Dic-1995	0.87	267.91
Ene-1997		279.90
Feb-1997		284.58
Mar-1997		285.00
Abr-1997	1.44	286.25
May-1997	1.41	314.16
Jun-1997	1.41	293.92
Jul-1997	1.41	297.66
Ago-1997	1.40	304.33
Sept-1997		
Oct-1997		
Nov-1997	1.36	315.83
Dic-1997	1.26	317.83
Ene-1998	1.34	302.66
Feb-1998	1.39	298.50
Mar-1998	1.39	302.21
Abr-1998		
May-1998	1.38	305.92
Jun-1998	1.35	306.62
Jul-1998	1.27	314.66
Ago-1998	1.31	317.16
Sept-1998	1.32	319.83
Oct-1998	1.28	321.45
Nov-1998	1.27	318.42
Dic-1998	1.17	325.42
Ene-1999	1.23	340.66
Feb-1999	1.45	330.76
Mar-1999	0.96	333.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Ene-2000	0.90	
Feb-2000	0.92	
Mar-2000	0.89	
Abr-2000	0.86	
May-2000	0.91	336.75
Jun-2000	1.00	339.83
Jul-2000	1.00	334.25
Ago-2000	1.00	330.80
Sept-2000	0.95	338.42
Oct-2000	0.82	342.58
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	0.83	341.08
Mar-2001	0.95	334.58
Apr-01	0.95	330.08
May-01	0.98	332.16
Jun-01		
Jul-01		
Aug-01	0.96	OBST
Sep-01		OBST
Oct-01	1.06	301.92
Nov-01	1.07	293.30
Dec-01		
Jan-02	1.09	301.25
Feb-02	1.09	300.66
Mar-02	1.06	304.58
Abr-1999	1.11	332.58
May-1999	1.10	335.66
Jun-1999	0.95	337.42
Jul-1999	1.02	340.66
Ago-1999	0.98	
Sept-1999	1.01	
Oct-1999	0.86	
Nov-1999	0.89	
Dic-1999	0.91	



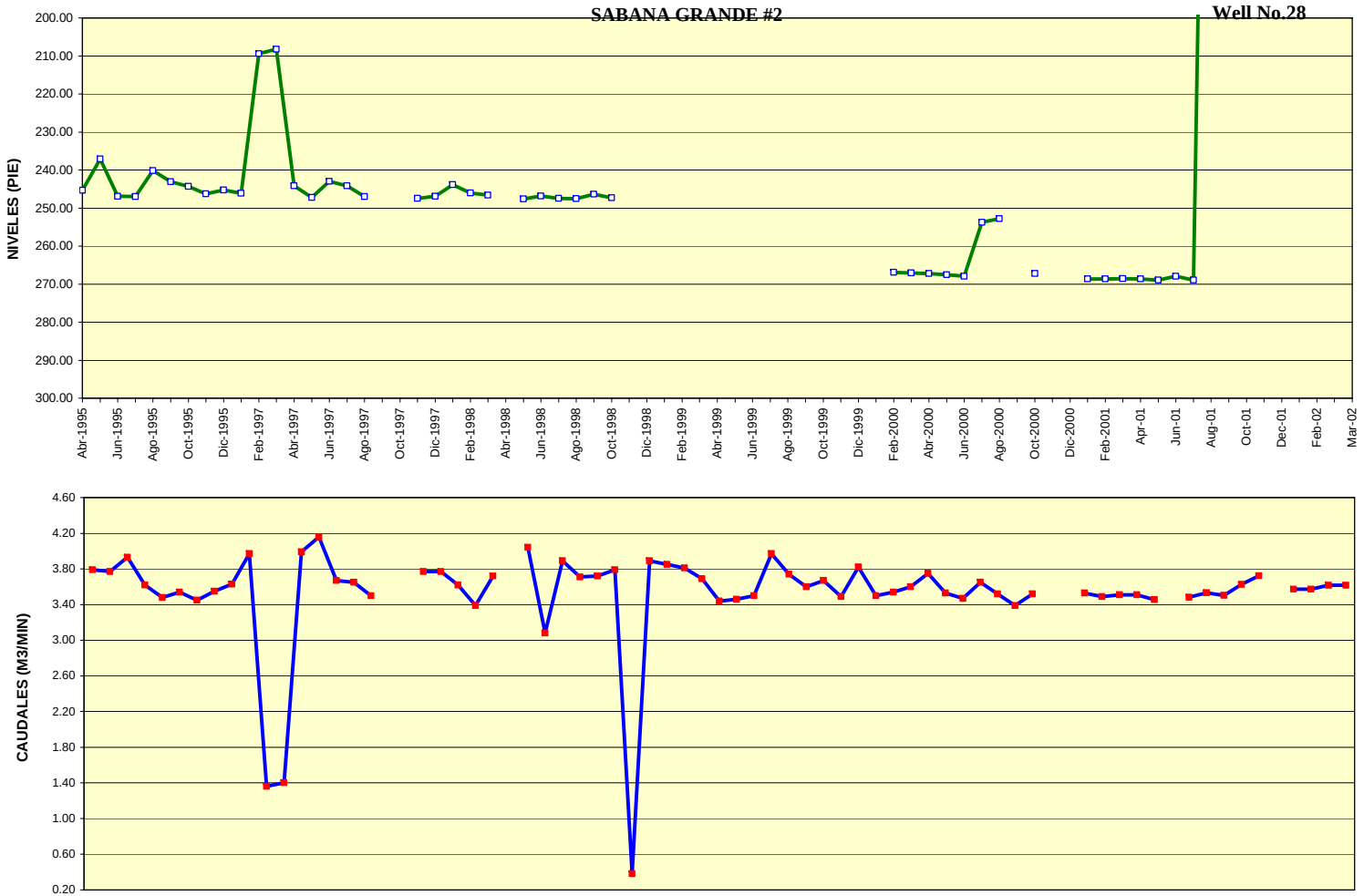
ANNEX 3.C(51) Punping Discharge and Water Level in Wells

ANNEX 3.C(52) Punping Discharge and Water Level in Wells

Sabana Grande #1 (Well No.27)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.65	225.99
May-1995	1.66	228.16
Jun-1995	1.93	228.32
Jul-1995	1.61	227.93
Ago-1995	1.56	222.58
Sept-1995	1.43	225.01
Oct-1995	1.36	224.30
Nov-1995		
Dic-1995		225.01
Ene-1997	1.96	226.92
Feb-1997	1.82	228.41
Mar-1997	1.89	230.33
Abr-1997	1.92	229.75
May-1997	1.90	227.66
Jun-1997	1.47	226.92
Jul-1997	1.41	225.65
Ago-1997	1.44	226.08
Sept-1997		
Oct-1997		
Nov-1997	1.53	227.50
Dic-1997		
Ene-1998		
Feb-1998	1.47	224.75
Mar-1998	1.81	220.83
Abr-1998		
May-1998	1.77	226.43
Jun-1998	1.65	225.33
Jul-1998	1.53	224.41
Ago-1998	1.59	224.16
Sept-1998	1.83	224.50
Oct-1998		
Nov-1998	1.79	
Dic-1998	1.84	
Ene-1999	1.89	
Feb-1999	1.85	
Mar-1999	1.80	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.70	
May-1999	1.59	
Jun-1999	1.77	
Jul-1999	1.88	
Ago-1999	1.77	
Sept-1999	1.71	
Oct-1999	1.71	
Nov-1999	1.67	
Dic-1999	1.82	
Ene-2000	1.73	
Feb-2000	1.73	243.47
Mar-2000	1.82	243.93
Abr-2000	1.88	244.00
May-2000	1.80	244.50
Jun-2000	1.61	244.75
Jul-2000	1.72	228.62
Ago-2000	1.75	228.91
Sept-2000	1.67	
Oct-2000	1.76	243.67
Nov-2000		
Dic-2000		
Ene-2001	1.96	242.50
Feb-2001	1.89	247.70
Mar-2001	1.94	236.06
Apr-01	1.94	240.25
May-01	2.01	237.16
Jun-01		241.66
Jul-01	1.92	238.25
Aug-01	1.90	249.50
Sep-01	2.00	
Oct-01	1.98	232.04
Nov-01	1.95	230.50
Dec-01		
Jan-02	1.89	230.25
Feb-02	1.94	231.00
Mar-02	2.02	233.00



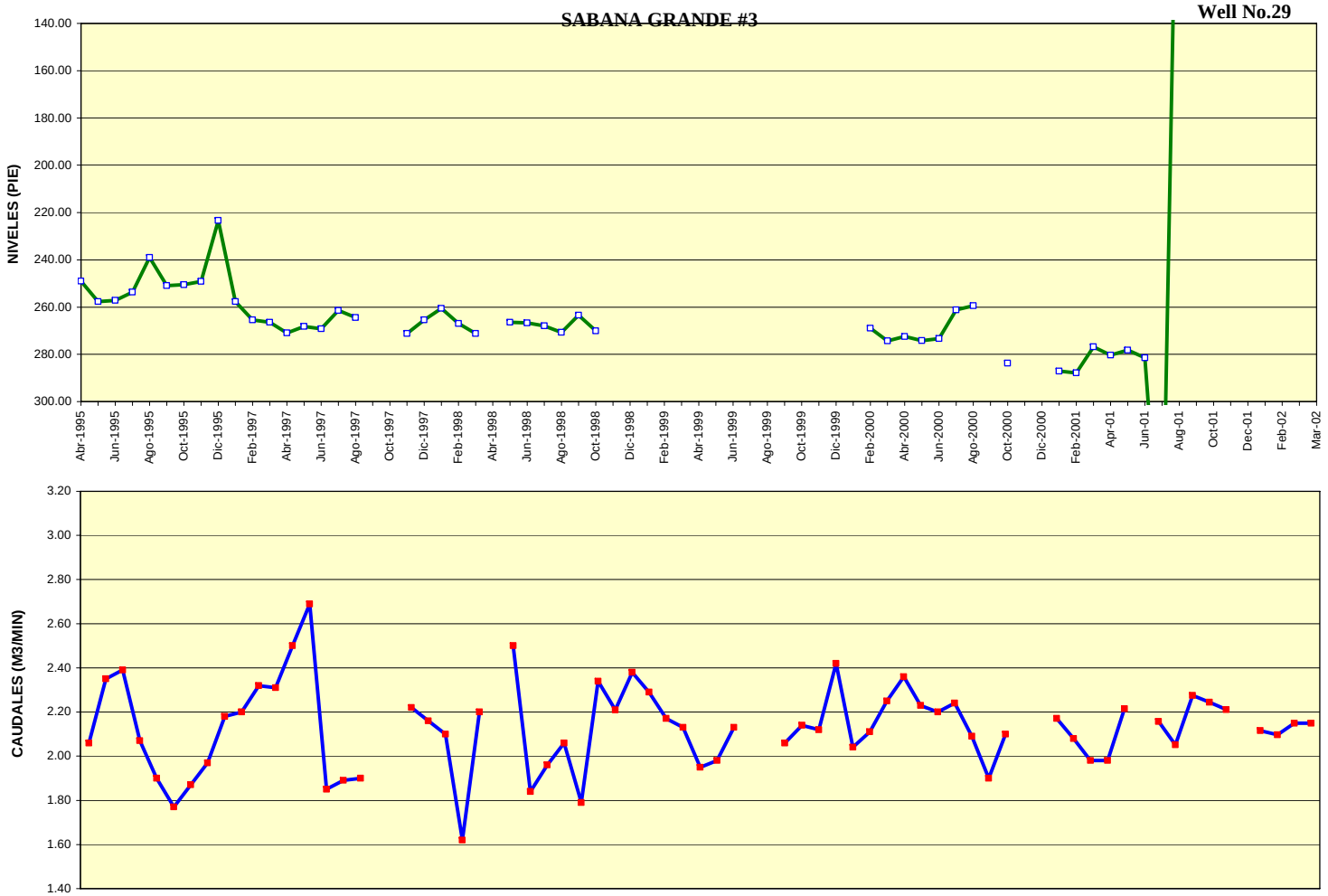
ANNEX 3.C(53) Punping Discharge and Water Level in Wells

ANNEX 3.C(54) Punping Discharge and Water Level in Wells

Sabana Grande #2 (Well No.28)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	3.79	245.34
May-1995	3.77	237.08
Jun-1995	3.93	246.92
Jul-1995	3.62	246.95
Ago-1995	3.48	240.16
Sept-1995	3.54	243.08
Oct-1995	3.45	244.30
Nov-1995	3.55	246.26
Dic-1995	3.63	245.24
Ene-1997	3.97	246.08
Feb-1997	1.36	209.41
Mar-1997	1.40	208.23
Abr-1997	3.99	244.16
May-1997	4.16	247.25
Jun-1997	3.67	243.00
Jul-1997	3.65	244.15
Ago-1997	3.50	247.00
Sept-1997		
Oct-1997		
Nov-1997	3.77	247.42
Dic-1997	3.77	246.92
Ene-1998	3.62	243.83
Feb-1998	3.39	246.00
Mar-1998	3.72	246.62
Abr-1998		
May-1998	4.04	247.58
Jun-1998	3.08	246.83
Jul-1998	3.89	247.45
Ago-1998	3.71	247.50
Sept-1998	3.72	246.37
Oct-1998	3.79	247.33
Nov-1998	0.38	
Dic-1998	3.89	
Ene-1999	3.85	
Feb-1999	3.81	
Mar-1999	3.69	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.44	
May-1999	3.46	
Jun-1999	3.50	
Jul-1999	3.97	
Ago-1999	3.74	
Sept-1999	3.60	
Oct-1999	3.67	
Nov-1999	3.49	
Dic-1999	3.82	
Ene-2000	3.50	
Feb-2000	3.54	266.93
Mar-2000	3.60	267.06
Abr-2000	3.75	267.25
May-2000	3.53	267.50
Jun-2000	3.47	267.92
Jul-2000	3.65	253.71
Ago-2000	3.52	252.76
Sept-2000	3.39	
Oct-2000	3.52	267.25
Nov-2000		
Dic-2000		
Ene-2001	3.53	268.66
Feb-2001	3.49	268.60
Mar-2001	3.51	268.56
Apr-01	3.51	268.66
May-01	3.46	268.92
Jun-01		267.92
Jul-01	3.48	268.92
Aug-01	3.53	OBST
Sep-01	3.50	OBST
Oct-01	3.63	OBST
Nov-01	3.72	OBST
Dec-01		
Jan-02	3.57	OBST
Feb-02	3.57	OBST
Mar-02	3.61	OBST



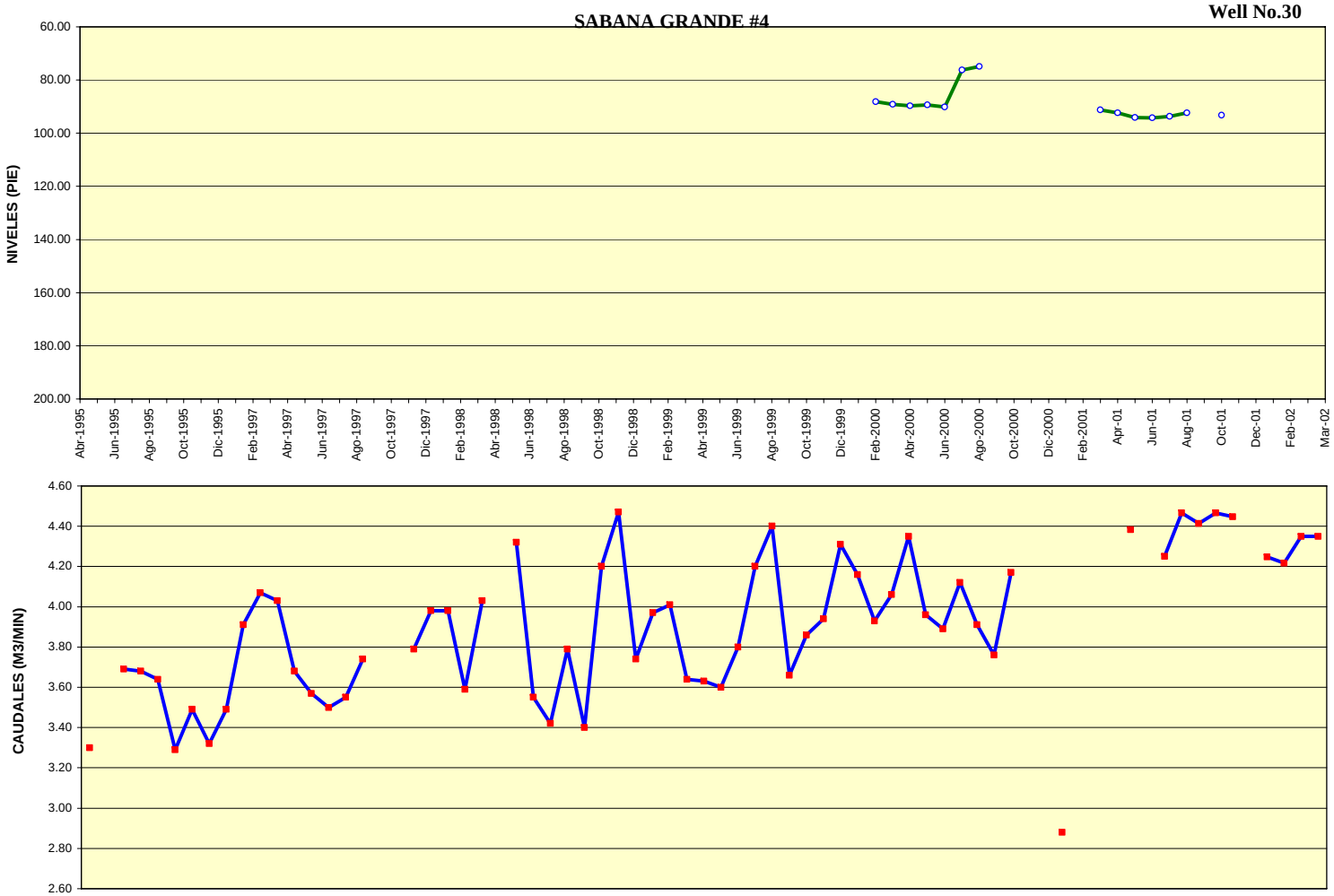
ANNEX 3.C(55) Punping Discharge and Water Level in Wells

ANNEX 3.C(56) Punping Discharge and Water Level in Wells

Sabana Grande #3 (Well No.29)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.06	249.08
May-1995	2.35	257.68
Jun-1995	2.39	257.15
Jul-1995	2.07	253.64
Ago-1995	1.90	239.08
Sept-1995	1.77	250.92
Oct-1995	1.87	250.50
Nov-1995	1.97	249.15
Dic-1995	2.18	223.40
Ene-1997	2.20	257.66
Feb-1997	2.32	265.41
Mar-1997	2.31	266.41
Abr-1997	2.50	270.92
May-1997	2.69	268.16
Jun-1997	1.85	269.16
Jul-1997	1.89	261.45
Ago-1997	1.90	264.41
Sept-1997		
Oct-1997		
Nov-1997	2.22	271.25
Dic-1997	2.16	265.50
Ene-1998	2.10	260.62
Feb-1998	1.62	266.92
Mar-1998	2.20	271.25
Abr-1998		
May-1998	2.50	266.50
Jun-1998	1.84	266.70
Jul-1998	1.96	268.00
Ago-1998	2.06	270.75
Sept-1998	1.79	263.50
Oct-1998	2.34	270.08
Nov-1998	2.21	
Dic-1998	2.38	
Ene-1999	2.29	
Feb-1999	2.17	
Mar-1999	2.13	
Abr-1999	1.95	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	1.98	
Jun-1999	2.13	
Jul-1999		
Ago-1999		
Sept-1999	2.06	
Oct-1999	2.14	
Nov-1999	2.12	
Dic-1999	2.42	
Ene-2000	2.04	
Feb-2000	2.11	269.00
Mar-2000	2.25	274.31
Abr-2000	2.36	272.50
May-2000	2.23	274.16
Jun-2000	2.20	273.33
Jul-2000	2.24	261.25
Ago-2000	2.09	259.45
Sept-2000	1.90	
Oct-2000	2.10	283.77
Nov-2000		
Dic-2000		
Ene-2001	2.17	287.16
Feb-2001	2.08	287.85
Mar-2001	1.98	276.89
Apr-01	1.98	280.33
May-01	2.21	278.25
Jun-01		281.42
Jul-01	2.16	379.83
Aug-01	2.05	OBST
Sep-01	2.27	OBST
Oct-01	2.24	OBST
Nov-01	2.21	OBST
Dec-01		
Jan-02	2.12	OBST
Feb-02	2.10	OBST
Mar-02	2.15	OBST
Mar-02	2.15	OBST



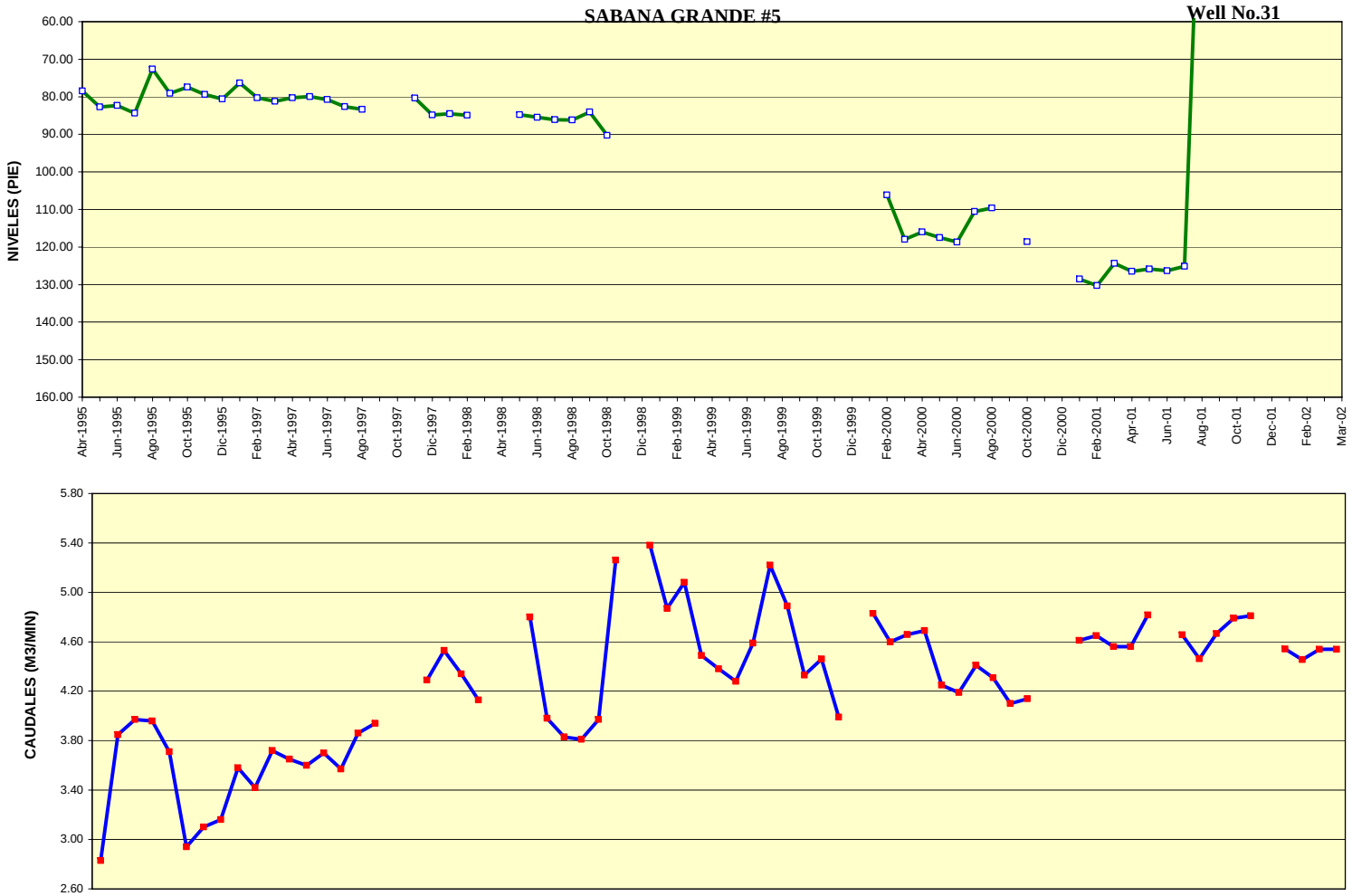
ANNEX 3.C(57) Punping Discharge and Water Level in Wells

ANNEX 3.C(58) Punping Discharge and Water Level in Wells

Sabana Grande #4 (Well No.30)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	3.30	
May-1995		
Jun-1995	3.69	
Jul-1995	3.68	
Ago-1995	3.64	
Sept-1995	3.29	
Oct-1995	3.49	
Nov-1995	3.32	
Dic-1995	3.49	
Ene-1997	3.91	
Feb-1997	4.07	
Mar-1997	4.03	
Abr-1997	3.68	
May-1997	3.57	
Jun-1997	3.50	
Jul-1997	3.55	
Ago-1997	3.74	
Sept-1997		
Oct-1997		
Nov-1997	3.79	
Dic-1997	3.98	
Ene-1998	3.98	
Feb-1998	3.59	
Mar-1998	4.03	
Abr-1998		
May-1998	4.32	
Jun-1998	3.55	
Jul-1998	3.42	
Ago-1998	3.79	
Sept-1998	3.40	
Oct-1998	4.20	
Nov-1998	4.47	
Dic-1998	3.74	
Ene-1999	3.97	
Feb-1999	4.01	
Mar-1999	3.64	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	3.63	
May-1999	3.60	
Jun-1999	3.80	
Jul-1999	4.20	
Ago-1999	4.40	
Sept-1999	3.66	
Oct-1999	3.86	
Nov-1999	3.94	
Dic-1999	4.31	
Ene-2000	4.16	
Feb-2000	3.93	88.20
Mar-2000	4.06	89.15
Abr-2000	4.35	89.66
May-2000	3.96	89.42
Jun-2000	3.89	90.16
Jul-2000	4.12	76.23
Ago-2000	3.91	74.88
Sept-2000	3.76	
Oct-2000	4.17	
Nov-2000		
Dic-2000		
Ene-2001	2.88	
Feb-2001		
Mar-2001		91.25
Apr-01		92.33
May-01	4.38	94.16
Jun-01		94.25
Jul-01	4.25	93.66
Aug-01	4.47	92.30
Sep-01	4.41	
Oct-01	4.47	93.25
Nov-01	4.45	
Dec-01		
Jan-02	4.25	OBST
Feb-02	4.22	OBST
Mar-02	4.35	OBST



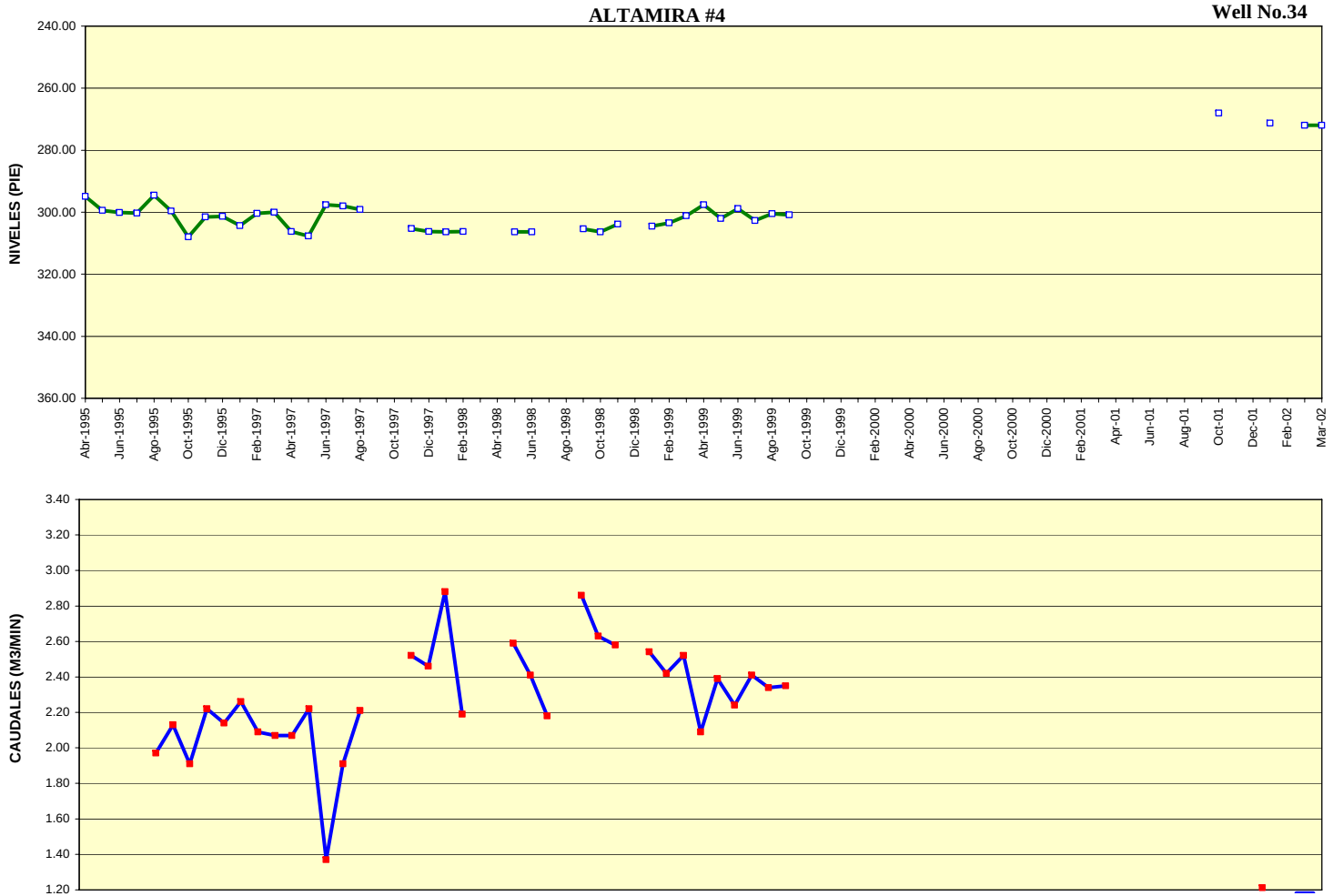
ANNEX 3.C(59) Punping Discharge and Water Level in Wells

ANNEX 3.C(60) Punping Discharge and Water Level in Wells

Sabana Grande #5 (Well No.31)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.83	78.49
May-1995	3.85	82.75
Jun-1995	3.97	82.33
Jul-1995	3.96	84.33
Ago-1995	3.71	72.59
Sept-1995	2.94	79.08
Oct-1995	3.10	77.40
Nov-1995	3.16	79.41
Dic-1995	3.58	80.58
Ene-1997	3.42	76.33
Feb-1997	3.72	80.25
Mar-1997	3.65	81.25
Abr-1997	3.60	80.25
May-1997	3.70	79.92
Jun-1997	3.57	80.75
Jul-1997	3.86	82.60
Ago-1997	3.94	83.37
Sept-1997		
Oct-1997		
Nov-1997	4.29	80.33
Dic-1997	4.53	84.83
Ene-1998	4.34	84.50
Feb-1998	4.13	84.92
Mar-1998		
Abr-1998		
May-1998	4.80	84.75
Jun-1998	3.98	85.50
Jul-1998	3.83	86.08
Ago-1998	3.81	86.16
Sept-1998	3.97	84.08
Oct-1998	5.26	90.25
Nov-1998		
Dic-1998	5.38	
Ene-1999	4.87	
Feb-1999	5.08	
Mar-1999	4.49	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	4.38	
May-1999	4.28	
Jun-1999	4.59	
Jul-1999	5.22	
Ago-1999	4.89	
Sept-1999	4.33	
Oct-1999	4.46	
Nov-1999	3.99	
Dic-1999		
Ene-2000	4.83	
Feb-2000	4.60	106.17
Mar-2000	4.66	118.00
Abr-2000	4.69	116.00
May-2000	4.25	117.50
Jun-2000	4.19	118.66
Jul-2000	4.41	110.53
Ago-2000	4.31	109.62
Sept-2000	4.10	
Oct-2000	4.14	118.57
Nov-2000		
Dic-2000		
Ene-2001	4.61	128.50
Feb-2001	4.65	130.24
Mar-2001	4.56	124.34
Apr-01	4.56	126.50
May-01	4.82	125.83
Jun-01		126.33
Jul-01	4.66	125.16
Aug-01	4.46	OBST
Sep-01	4.67	OBST
Oct-01	4.79	OBST
Nov-01	4.81	OBST
Dec-01		
Jan-02	4.54	OBST
Feb-02	4.45	OBST
Mar-02	4.54	OBST



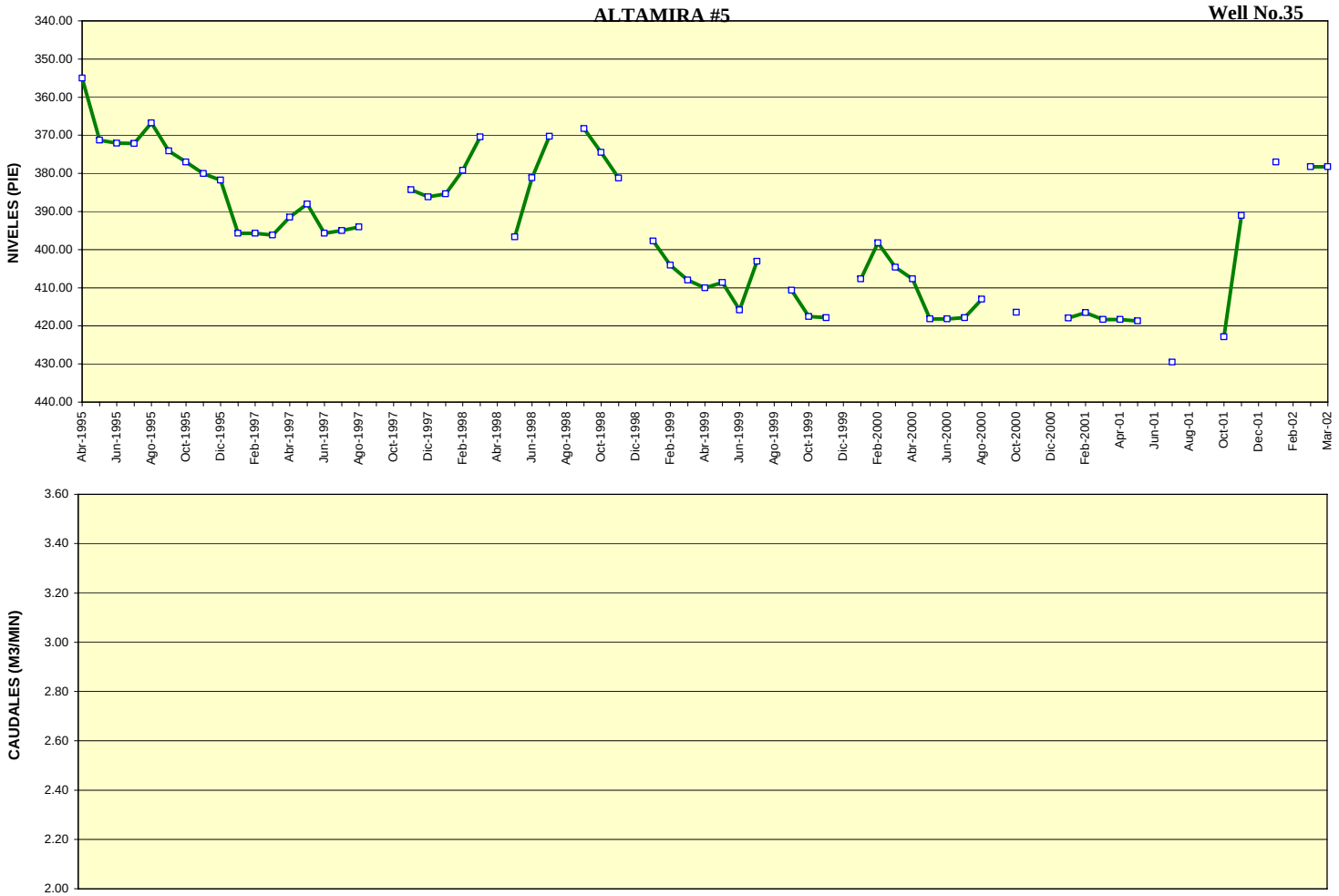
ANNEX 3.C(61) Punping Discharge and Water Level in Wells

ANNEX 3.C(62) Punping Discharge and Water Level in Wells

Altamira #4 (Well No.34)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		294.87
May-1995		299.40
Jun-1995		300.05
Jul-1995		300.32
Ago-1995	1.97	294.51
Sept-1995	2.13	299.60
Oct-1995	1.91	307.93
Nov-1995	2.22	301.58
Dic-1995	2.14	301.33
Ene-1997	2.26	304.33
Feb-1997	2.09	300.41
Mar-1997	2.07	300.00
Abr-1997	2.07	306.25
May-1997	2.22	307.66
Jun-1997	1.37	297.58
Jul-1997	1.91	298.00
Ago-1997	2.21	299.16
Sept-1997		
Oct-1997		
Nov-1997	2.52	305.25
Dic-1997	2.46	306.27
Ene-1998	2.88	306.33
Feb-1998	2.19	306.25
Mar-1998		
Abr-1998		
May-1998	2.59	306.33
Jun-1998	2.41	306.37
Jul-1998	2.18	
Ago-1998		
Sept-1998	2.86	305.41
Oct-1998	2.63	306.33
Nov-1998	2.58	303.83
Dic-1998		
Ene-1999	2.54	304.50
Feb-1999	2.42	303.42
Mar-1999	2.52	301.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.09	297.58
May-1999	2.39	302.00
Jun-1999	2.24	298.83
Jul-1999	2.41	302.66
Ago-1999	2.34	300.45
Sept-1999	2.35	300.83
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001		
Mar-2001		
Apr-01		
May-01		
Jun-01		
Jul-01		
Aug-01		
Sep-01		
Oct-01	1.07	268.00
Nov-01		
Dec-01		
Jan-02	1.21	271.33
Feb-02		
Mar-02	1.18	272.00



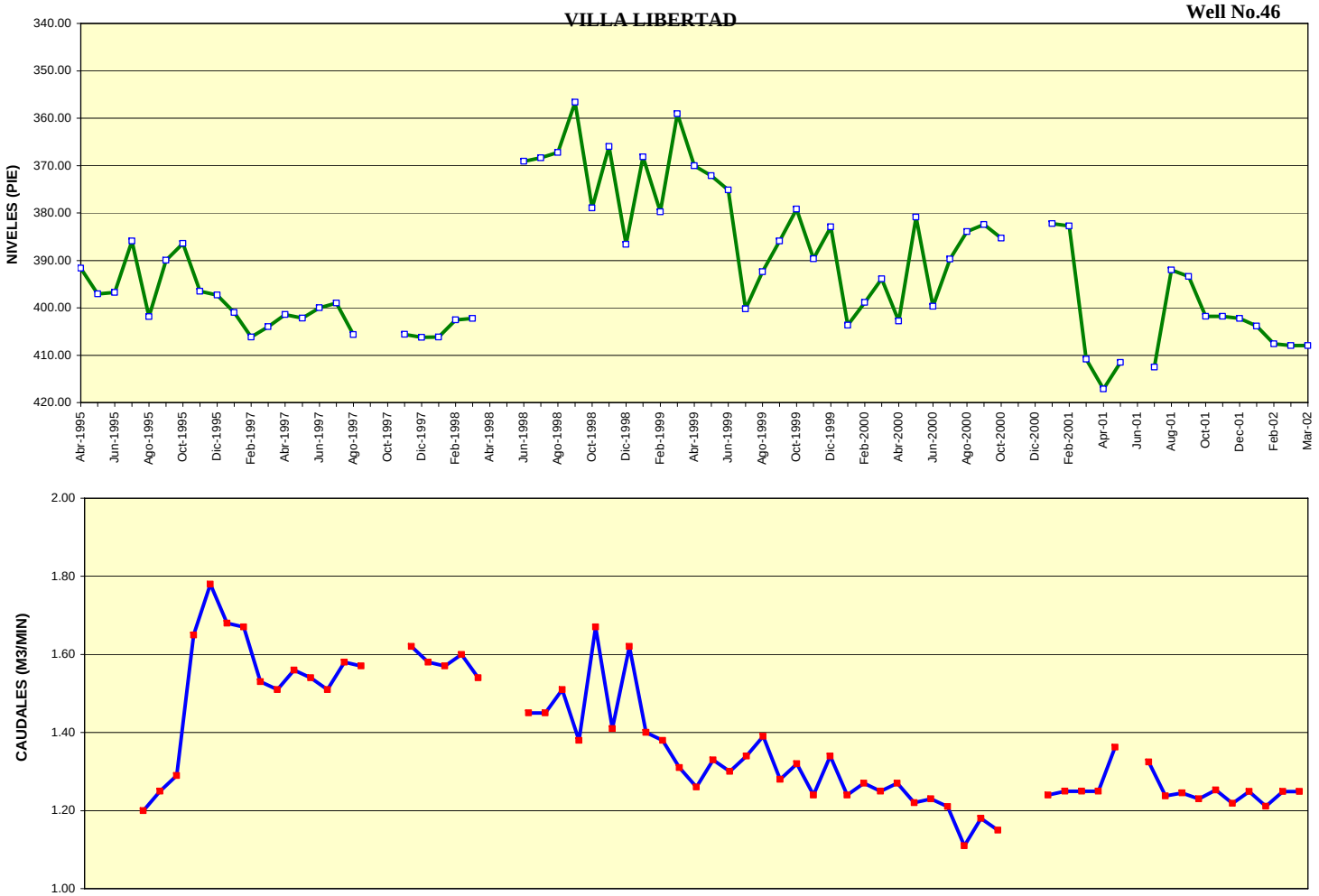
ANNEX 3.C(63) Punping Discharge and Water Level in Wells

ANNEX 3.C(64) Punping Discharge and Water Level in Wells

Altamira #5 (Well No.35)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		354.99
May-1995		371.33
Jun-1995		372.05
Jul-1995		372.15
Ago-1995		366.74
Sept-1995		374.15
Oct-1995		377.00
Nov-1995		380.08
Dic-1995		381.82
Ene-1997		395.75
Feb-1997		395.75
Mar-1997		396.16
Abr-1997		391.50
May-1997		388.08
Jun-1997		395.70
Jul-1997		395.00
Ago-1997		394.08
Sept-1997		
Oct-1997		
Nov-1997		384.25
Dic-1997		386.16
Ene-1998		385.41
Feb-1998		379.20
Mar-1998		370.42
Abr-1998		
May-1998		396.66
Jun-1998		381.16
Jul-1998		370.25
Ago-1998		
Sept-1998		368.25
Oct-1998		374.50
Nov-1998		381.25
Dic-1998		
Ene-1999		397.75
Feb-1999		404.09
Mar-1999		408.00

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		410.00
May-1999		408.66
Jun-1999		415.83
Jul-1999		403.08
Ago-1999		
Sept-1999		410.66
Oct-1999		417.58
Nov-1999		417.83
Dic-1999		
Ene-2000		407.67
Feb-2000		398.20
Mar-2000		404.66
Abr-2000		407.66
May-2000		418.16
Jun-2000		418.16
Jul-2000		417.83
Ago-2000		413.00
Sept-2000		
Oct-2000		416.42
Nov-2000		
Dic-2000		
Ene-2001		417.96
Feb-2001		416.50
Mar-2001		418.33
Apr-01		418.33
May-01	1.06	418.75
Jun-01		
Jul-01	1.06	429.50
Aug-01		
Sep-01		
Oct-01	1.07	422.83
Nov-01	1.11	391.00
Dec-01		
Jan-02	1.34	377.00
Feb-02		
Mar-02	1.36	378.25



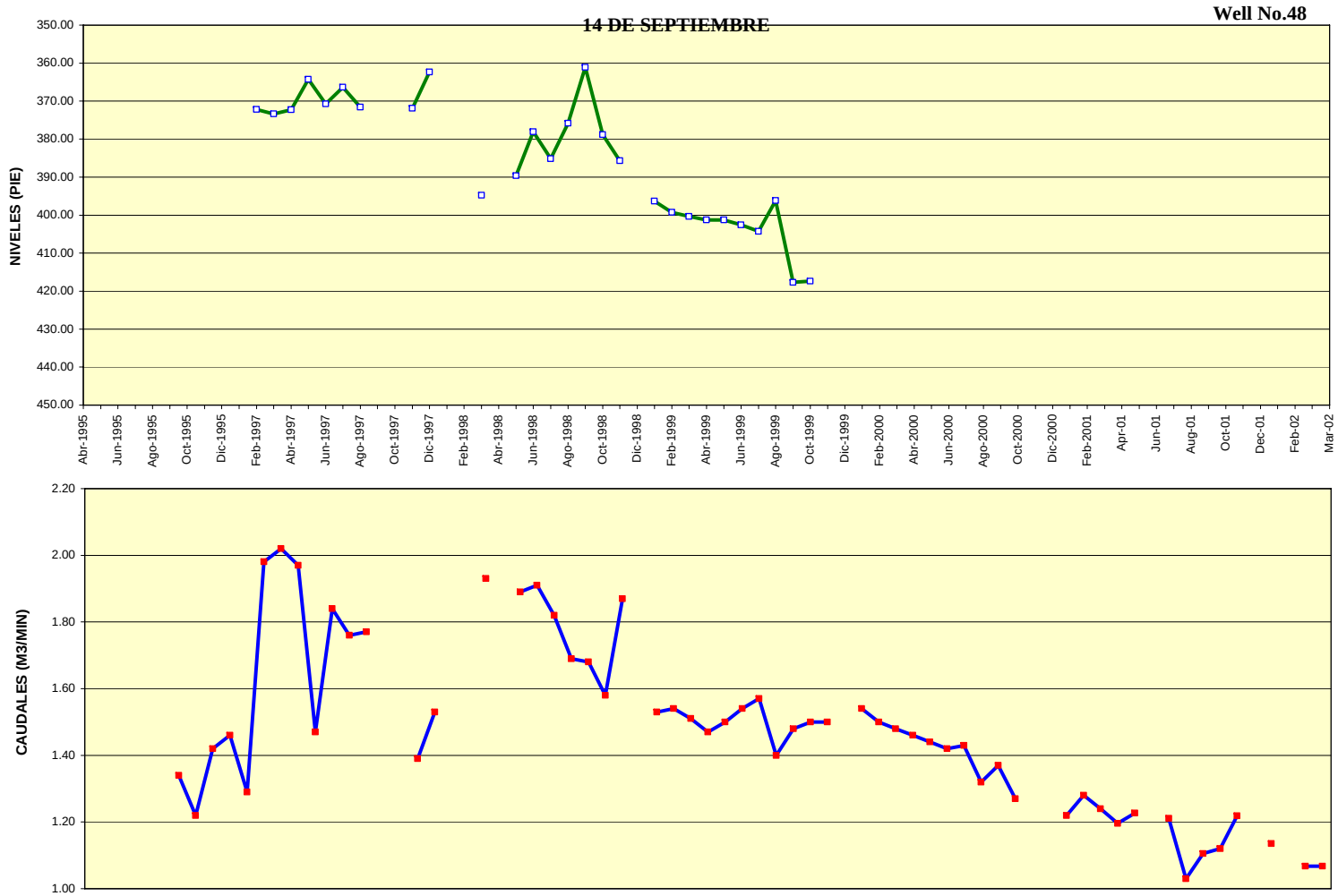
ANNEX 3.C(65) Punping Discharge and Water Level in Wells

ANNEX 3.C(66) Punping Discharge and Water Level in Wells

Villa Libertad (Well No.46)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		391.66
May-1995		397.08
Jun-1995		396.75
Jul-1995	1.20	385.92
Ago-1995	1.25	401.90
Sept-1995	1.29	389.99
Oct-1995	1.65	386.40
Nov-1995	1.78	396.50
Dic-1995	1.68	397.31
Ene-1997	1.67	401.00
Feb-1997	1.53	406.16
Mar-1997	1.51	404.00
Abr-1997	1.56	401.42
May-1997	1.54	402.16
Jun-1997	1.51	400.00
Jul-1997	1.58	399.00
Ago-1997	1.57	405.66
Sept-1997		
Oct-1997		
Nov-1997	1.62	405.58
Dic-1997	1.58	406.20
Ene-1998	1.57	406.16
Feb-1998	1.60	402.58
Mar-1998	1.54	402.25
Abr-1998		
May-1998		
Jun-1998	1.45	369.08
Jul-1998	1.45	368.33
Ago-1998	1.51	367.25
Sept-1998	1.38	356.66
Oct-1998	1.67	378.92
Nov-1998	1.41	366.00
Dic-1998	1.62	386.58
Ene-1999	1.40	368.16
Feb-1999	1.38	379.75
Mar-1999	1.31	359.08

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.26	370.00
May-1999	1.33	372.16
Jun-1999	1.30	375.16
Jul-1999	1.34	400.25
Ago-1999	1.39	392.41
Sept-1999	1.28	385.92
Oct-1999	1.32	379.16
Nov-1999	1.24	389.66
Dic-1999	1.34	382.92
Ene-2000	1.24	403.66
Feb-2000	1.27	398.88
Mar-2000	1.25	393.92
Abr-2000	1.27	402.80
May-2000	1.22	380.87
Jun-2000	1.23	399.67
Jul-2000	1.21	389.70
Ago-2000	1.11	383.92
Sept-2000	1.18	382.42
Oct-2000	1.15	385.30
Nov-2000		
Dic-2000		
Ene-2001	1.24	382.25
Feb-2001	1.25	382.75
Mar-2001	1.25	410.83
Apr-01	1.25	417.16
May-01	1.36	411.50
Jun-01		
Jul-01	1.32	412.50
Aug-01	1.24	392.00
Sep-01	1.25	393.42
Oct-01	1.23	401.83
Nov-01	1.25	401.83
Dec-01	1.22	402.25
Jan-02	1.25	403.87
Feb-02	1.21	407.58
Mar-02	1.25	408.00



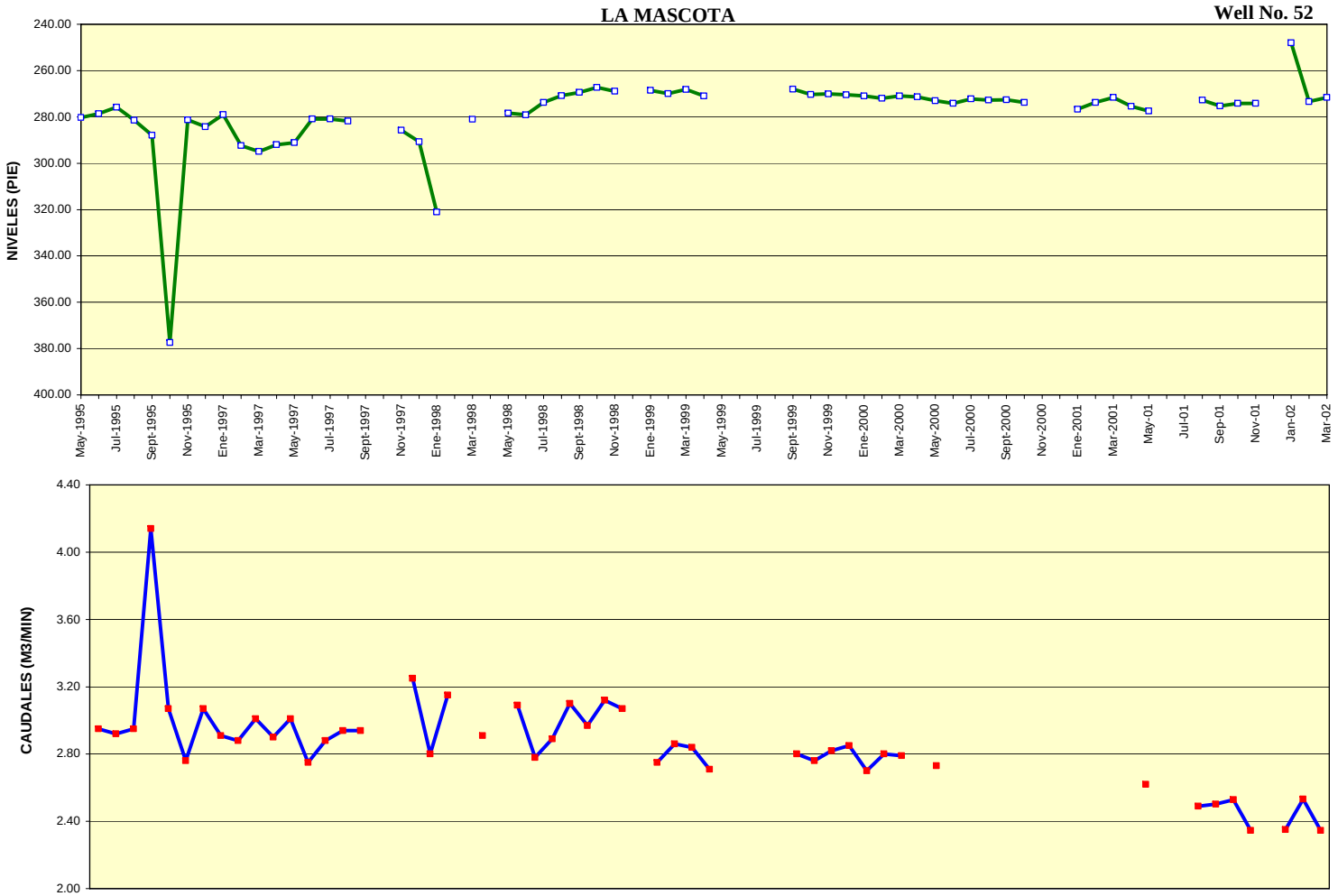
ANNEX 3.C(67) Punping Discharge and Water Level in Wells

ANNEX 3.C(68) Punping Discharge and Water Level in Wells

14 de Septiembre (Well No.48)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		282.01
May-1995		
Jun-1995		
Jul-1995		282.08
Ago-1995		
Sept-1995	1.34	334.00
Oct-1995	1.22	330.40
Nov-1995	1.42	342.83
Dic-1995	1.46	343.33
Ene-1997	1.29	
Feb-1997	1.98	372.20
Mar-1997	2.02	373.33
Abr-1997	1.97	372.30
May-1997	1.47	364.25
Jun-1997	1.84	370.75
Jul-1997	1.76	366.32
Ago-1997	1.77	371.58
Sept-1997		
Oct-1997		
Nov-1997	1.39	371.92
Dic-1997	1.53	362.33
Ene-1998		
Feb-1998		
Mar-1998	1.93	394.83
Abr-1998		
May-1998	1.89	389.66
Jun-1998	1.91	378.08
Jul-1998	1.82	385.16
Ago-1998	1.69	375.83
Sept-1998	1.68	361.08
Oct-1998	1.58	378.83
Nov-1998	1.87	385.66
Dic-1998		
Ene-1999	1.53	396.34
Feb-1999	1.54	399.26
Mar-1999	1.51	400.33

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.47	401.25
May-1999	1.50	401.25
Jun-1999	1.54	402.58
Jul-1999	1.57	404.25
Ago-1999	1.40	396.16
Sept-1999	1.48	417.66
Oct-1999	1.50	417.37
Nov-1999	1.50	
Dic-1999		
Ene-2000	1.54	
Feb-2000	1.50	
Mar-2000	1.48	
Abr-2000	1.46	
May-2000	1.44	
Jun-2000	1.42	
Jul-2000	1.43	
Ago-2000	1.32	
Sept-2000	1.37	
Oct-2000	1.27	
Nov-2000		
Dic-2000		
Ene-2001	1.22	
Feb-2001	1.28	
Mar-2001	1.24	OBST
Apr-01	1.20	OBST
May-01	1.23	OBST
Jun-01		OBST
Jul-01	1.21	OBST
Aug-01	1.03	OBST
Sep-01	1.11	OBST
Oct-01	1.12	OBST
Nov-01	1.22	OBST
Dec-01		
Jan-02		
Feb-02		



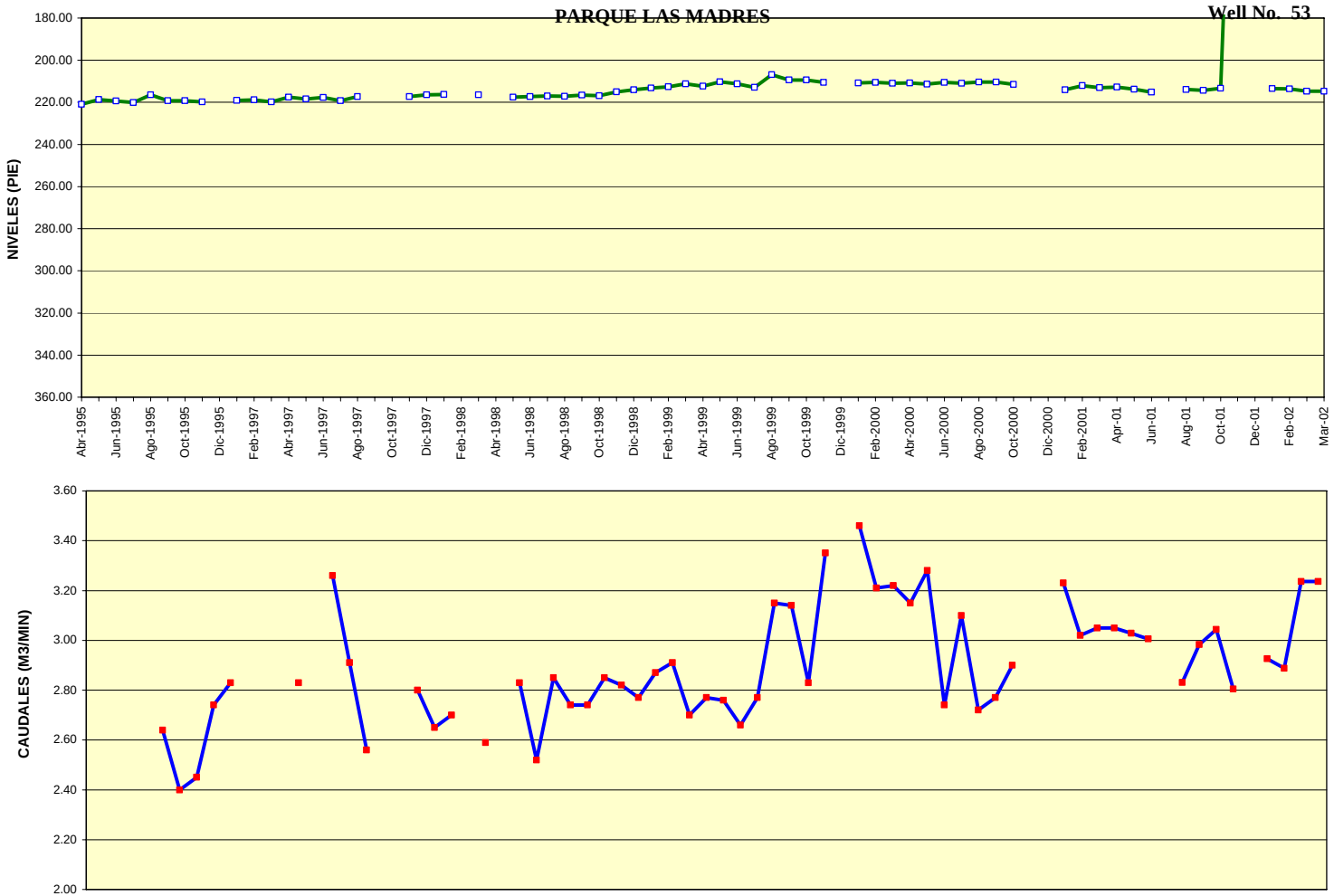
ANNEX 3.C(69) Punping Discharge and Water Level in Wells

ANNEX 3.C(70) Punping Discharge and Water Level in Wells

La mascota (Well No.52)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	2.95	280.34
Jun-1995	2.92	278.57
Jul-1995	2.95	275.82
Ago-1995	4.14	281.42
Sept-1995	3.07	287.92
Oct-1995	2.76	377.40
Nov-1995	3.07	281.25
Dic-1995	2.91	284.21
Ene-1997	2.88	279.00
Feb-1997	3.01	292.41
Mar-1997	2.90	294.92
Abr-1997	3.01	292.00
May-1997	2.75	291.16
Jun-1997	2.88	280.92
Jul-1997	2.94	280.98
Ago-1997	2.94	281.83
Sept-1997		
Oct-1997		
Nov-1997	3.25	285.80
Dic-1997	2.80	290.75
Ene-1998	3.15	321.08
Feb-1998		
Mar-1998	2.91	281.00
Abr-1998		
May-1998	3.09	278.42
Jun-1998	2.78	279.16
Jul-1998	2.89	273.83
Ago-1998	3.10	270.83
Sept-1998	2.97	269.41
Oct-1998	3.12	267.25
Nov-1998	3.07	268.92
Dic-1998		
Ene-1999	2.75	268.59
Feb-1999	2.86	269.92
Mar-1999	2.84	268.16
Abr-1999	2.71	271.00

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999	2.80	268.00
Oct-1999	2.76	270.30
Nov-1999	2.82	270.12
Dic-1999	2.85	270.41
Ene-2000	2.70	271.00
Feb-2000	2.80	272.00
Mar-2000	2.79	270.92
Abr-2000		271.33
May-2000	2.73	273.00
Jun-2000		274.16
Jul-2000		272.30
Ago-2000		272.75
Sept-2000		272.58
Oct-2000		273.83
Nov-2000		
Dic-2000		
Ene-2001		276.66
Feb-2001		273.75
Mar-2001		271.66
Apr-01		275.42
May-01	2.62	277.42
Jun-01		
Jul-01		
Aug-01	2.49	272.75
Sep-01	2.50	275.30
Oct-01	2.53	274.16
Nov-01	2.35	274.12
Dec-01		
Jan-02	2.35	248.04
Feb-02	2.53	273.42
Mar-02	2.35	271.58



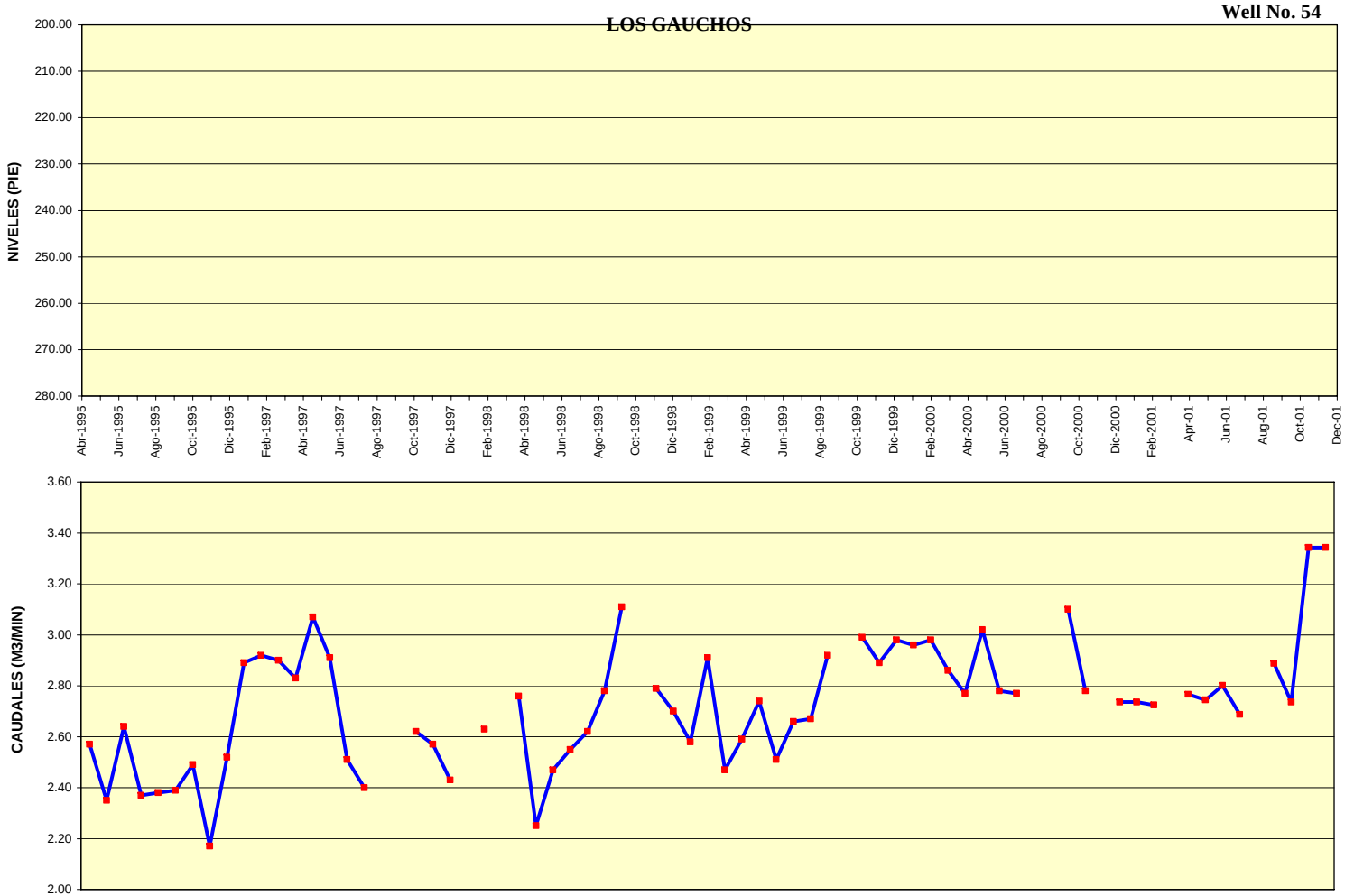
ANNEX 3.C(71) Punping Discharge and Water Level in Wells

ANNEX 3.C(72) Punping Discharge and Water Level in Wells

Parque Las Madres (Well No.53)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		220.91
May-1995		218.74
Jun-1995		219.40
Jul-1995		220.06
Ago-1995	2.64	216.41
Sept-1995	2.40	219.24
Oct-1995	2.45	219.25
Nov-1995	2.74	219.75
Dic-1995	2.83	
Ene-1997		219.16
Feb-1997		218.75
Mar-1997		219.75
Abr-1997	2.83	217.50
May-1997		218.42
Jun-1997	3.26	217.66
Jul-1997	2.91	219.20
Ago-1997	2.56	217.33
Sept-1997		
Oct-1997		
Nov-1997	2.80	217.25
Dic-1997	2.65	216.41
Ene-1998	2.70	216.25
Feb-1998		
Mar-1998	2.59	216.42
Abr-1998		
May-1998	2.83	217.58
Jun-1998	2.52	217.25
Jul-1998	2.85	216.92
Ago-1998	2.74	217.08
Sept-1998	2.74	216.50
Oct-1998	2.85	216.83
Nov-1998	2.82	215.08
Dic-1998	2.77	214.00
Ene-1999	2.87	213.17
Feb-1999	2.91	212.59
Mar-1999	2.70	211.20

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.77	212.41
May-1999	2.76	210.18
Jun-1999	2.66	211.16
Jul-1999	2.77	212.87
Ago-1999	3.15	206.92
Sept-1999	3.14	209.41
Oct-1999	2.83	209.41
Nov-1999	3.35	210.50
Dic-1999		
Ene-2000	3.46	210.75
Feb-2000	3.21	210.50
Mar-2000	3.22	211.00
Abr-2000	3.15	210.83
May-2000	3.28	211.33
Jun-2000	2.74	210.54
Jul-2000	3.10	211.00
Ago-2000	2.72	210.33
Sept-2000	2.77	210.42
Oct-2000	2.90	211.50
Nov-2000		
Dic-2000		
Ene-2001	3.23	214.04
Feb-2001	3.02	212.08
Mar-2001	3.05	213.00
Apr-01	3.05	212.75
May-01	3.03	213.70
Jun-01	3.01	215.16
Jul-01		
Aug-01	2.83	213.87
Sep-01	2.98	214.25
Oct-01	3.04	213.33
Nov-01	2.80	213..33
Dec-01		
Jan-02	2.93	213.50
Feb-02	2.89	213.66
Mar-02	3.24	214.75



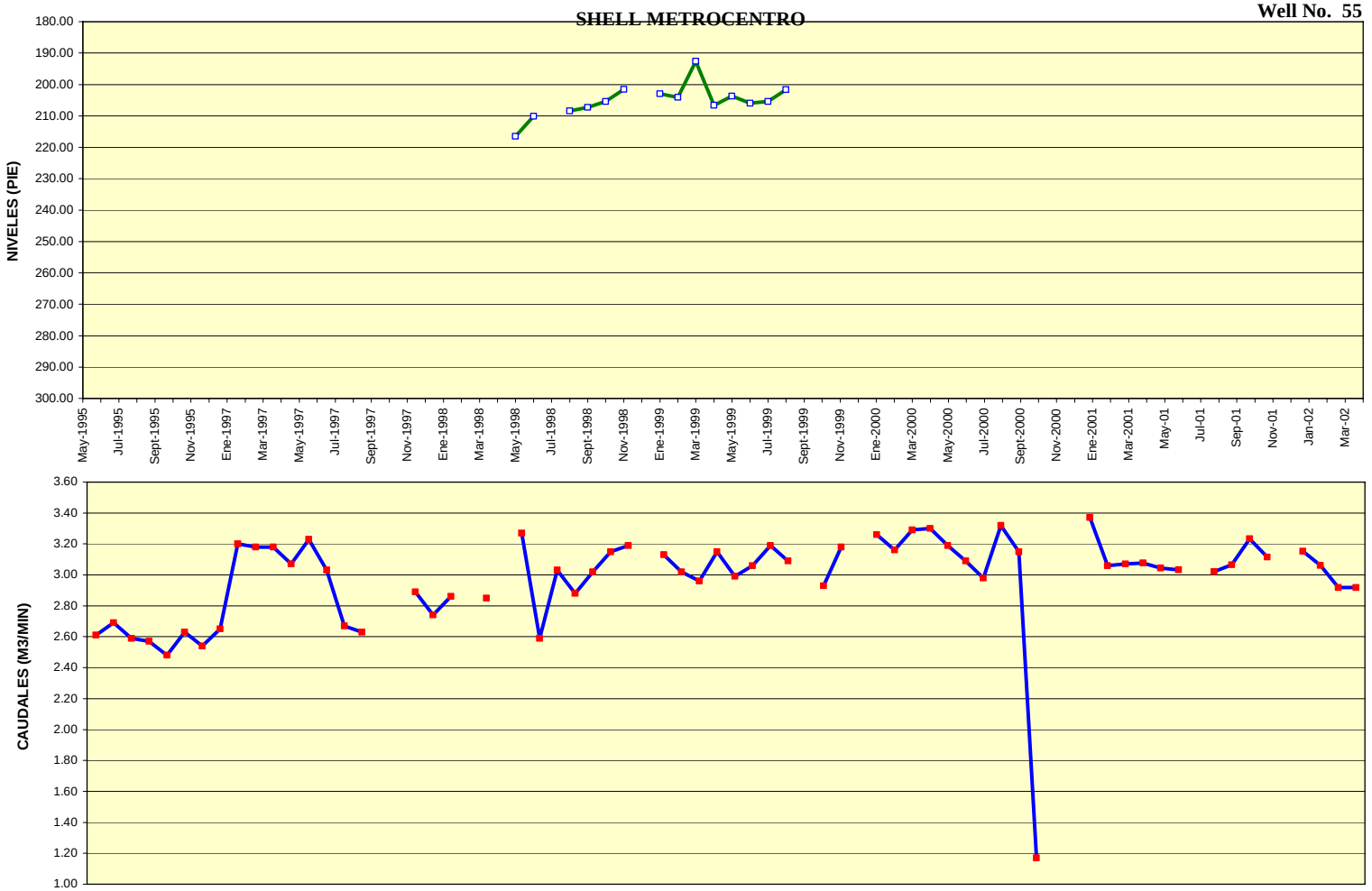
ANNEX 3.C(73) Punping Discharge and Water Level in Wells

ANNEX 3.C(74) Punping Discharge and Water Level in Wells

Los Gauchos (Well No.54)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.57	
May-1995	2.35	
Jun-1995	2.64	
Jul-1995	2.37	
Ago-1995	2.38	
Sept-1995	2.39	
Oct-1995	2.49	
Nov-1995	2.17	
Dic-1995	2.52	
Ene-1997	2.89	
Feb-1997	2.92	
Mar-1997	2.90	
Abr-1997	2.83	
May-1997	3.07	
Jun-1997	2.91	
Jul-1997	2.51	
Ago-1997	2.40	
Sept-1997		
Oct-1997		
Nov-1997	2.62	
Dic-1997	2.57	
Ene-1998	2.43	
Feb-1998		
Mar-1998	2.63	
Abr-1998		
May-1998	2.76	
Jun-1998	2.25	
Jul-1998	2.47	
Ago-1998	2.55	
Sept-1998	2.62	
Oct-1998	2.78	
Nov-1998	3.11	
Dic-1998		
Ene-1999	2.79	
Feb-1999	2.70	
Mar-1999	2.58	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.91	
May-1999	2.47	
Jun-1999	2.59	
Jul-1999	2.74	
Ago-1999	2.51	
Sept-1999	2.66	
Oct-1999	2.67	
Nov-1999	2.92	
Dic-1999		
Ene-2000	2.99	
Feb-2000	2.89	
Mar-2000	2.98	
Abr-2000	2.96	
May-2000	2.98	
Jun-2000	2.86	
Jul-2000	2.77	
Ago-2000	3.02	
Sept-2000	2.78	
Oct-2000	2.77	
Nov-2000		
Dic-2000		
Ene-2001	3.10	OBST
Feb-2001	2.78	OBST
Mar-2001		OBST
Apr-01	2.74	OBST
May-01	2.74	OBST
Jun-01	2.73	OBST
Jul-01		OBST
Aug-01	2.77	OBST
Sep-01	2.74	OBST
Oct-01	2.80	OBST
Nov-01	2.69	OBST
Dec-01		OBST
Jan-02	2.89	OBST
Feb-02	2.74	OBST
Mar-02	3.34	OBST



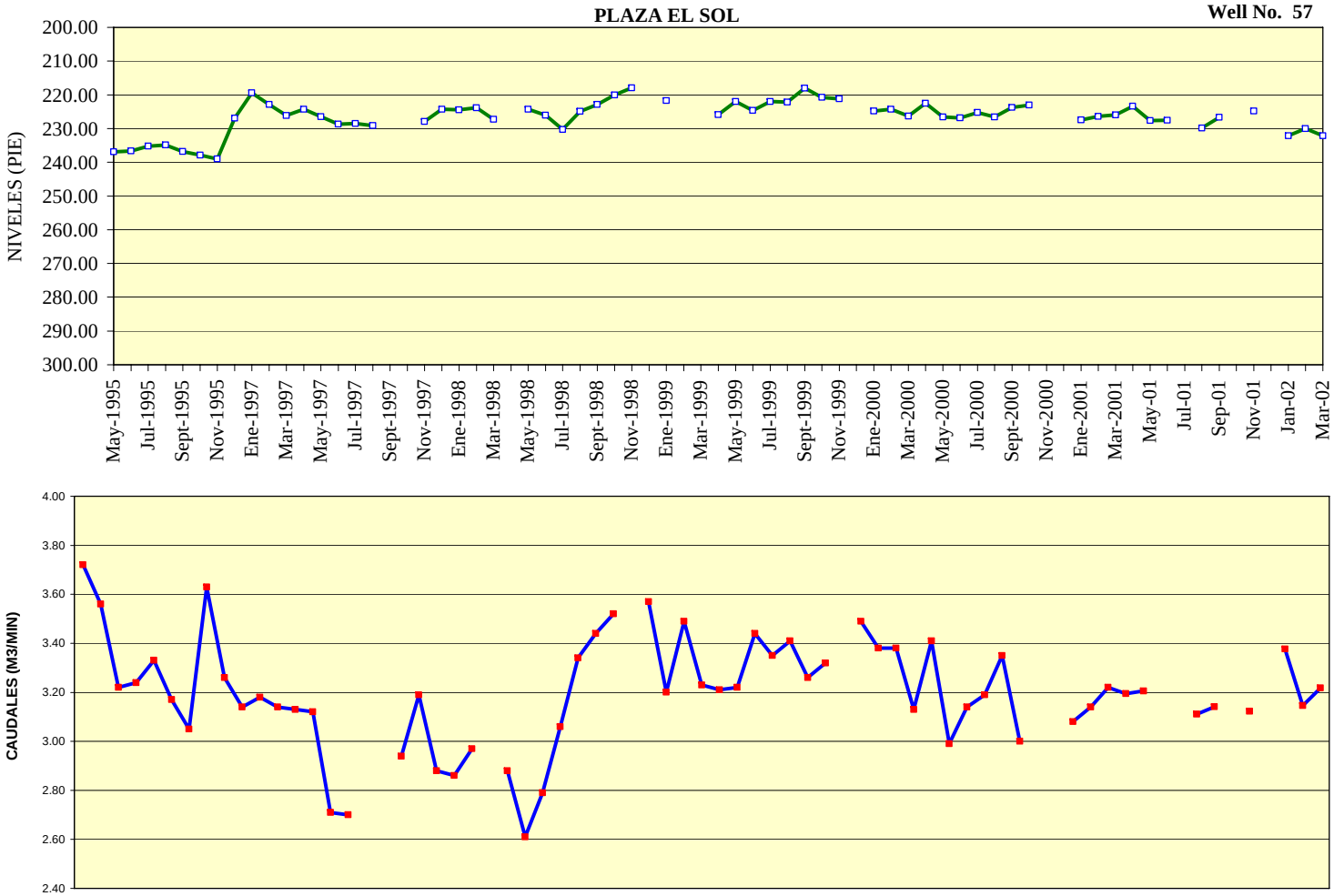
ANNEX 3.C(75) Punping Discharge and Water Level in Wells

ANNEX 3.C(76) Punping Discharge and Water Level in Wells

Shell Metrocentro (Well No.55)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	2.61	
Jun-1995	2.69	
Jul-1995	2.59	
Ago-1995	2.57	
Sept-1995	2.48	
Oct-1995	2.63	
Nov-1995	2.54	
Dic-1995	2.65	
Ene-1997	3.20	
Feb-1997	3.18	
Mar-1997	3.18	
Abr-1997	3.07	
May-1997	3.23	
Jun-1997	3.03	
Jul-1997	2.67	
Ago-1997	2.63	
Sept-1997		
Oct-1997		
Nov-1997	2.89	
Dic-1997	2.74	
Ene-1998	2.86	
Feb-1998		
Mar-1998	2.85	
Abr-1998		
May-1998	3.27	216.50
Jun-1998	2.59	210.16
Jul-1998	3.03	
Ago-1998	2.88	208.41
Sept-1998	3.02	207.33
Oct-1998	3.15	205.41
Nov-1998	3.19	201.58
Dic-1998		
Ene-1999	3.13	202.92
Feb-1999	3.02	204.09
Mar-1999	2.96	192.57
Abr-1999	3.15	206.66

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	2.99	203.72
Jun-1999	3.06	206.00
Jul-1999	3.19	205.41
Ago-1999	3.09	201.66
Sept-1999		
Oct-1999	2.93	
Nov-1999	3.18	
Dic-1999		
Ene-2000	3.26	
Feb-2000	3.16	
Mar-2000	3.29	
Abr-2000	3.30	
May-2000	3.19	
Jun-2000	3.09	
Jul-2000	2.98	
Ago-2000	3.32	
Sept-2000	3.15	
Oct-2000	1.17	
Nov-2000		
Dic-2000		
Ene-2001	3.37	OBST
Feb-2001	3.06	OBST
Mar-2001	3.07	OBST
Apr-01	3.08	OBST
May-01	3.04	OBST
Jun-01	3.03	OBST
Jul-01		OBST
Aug-01	3.02	OBST
Sep-01	3.07	OBST
Oct-01	3.23	OBST
Nov-01	3.12	OBST
Dec-01		OBST
Jan-02	3.15	OBST
Feb-02	3.06	OBST
Mar-02	2.92	OBST



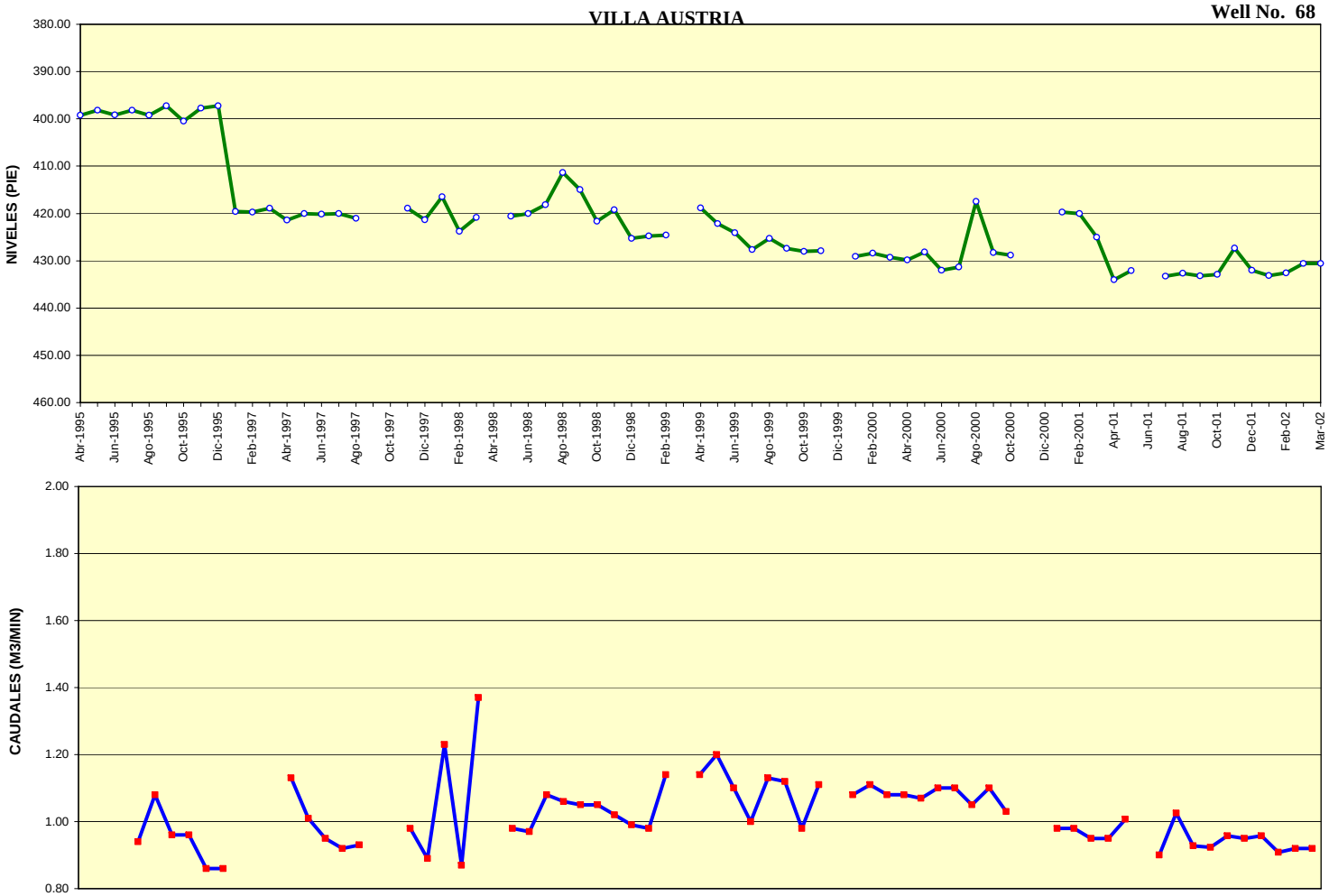
ANNEX 3.C(77) Punping Discharge and Water Level in Wells

ANNEX 3.C(78) Punping Discharge and Water Level in Wells

Plaza El Sol (Well No.57)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	3.72	236.91
Jun-1995	3.56	236.59
Jul-1995	3.22	235.18
Ago-1995	3.24	234.88
Sept-1995	3.33	236.82
Oct-1995	3.17	237.90
Nov-1995	3.05	239.00
Dic-1995	3.63	226.91
Ene-1997	3.26	219.42
Feb-1997	3.14	222.83
Mar-1997	3.18	226.16
Abr-1997	3.14	224.25
May-1997	3.13	226.50
Jun-1997	3.12	228.66
Jul-1997	2.71	228.50
Ago-1997	2.70	229.16
Sept-1997		
Oct-1997		
Nov-1997	2.94	227.92
Dic-1997	3.19	224.25
Ene-1998	2.88	224.41
Feb-1998	2.86	223.83
Mar-1998	2.97	227.25
Abr-1998		
May-1998	2.88	224.25
Jun-1998	2.61	226.08
Jul-1998	2.79	230.25
Ago-1998	3.06	224.87
Sept-1998	3.34	222.87
Oct-1998	3.44	220.00
Nov-1998	3.52	217.96
Dic-1998		
Ene-1999	3.57	221.75
Feb-1999	3.20	
Mar-1999	3.49	
Abr-1999	3.23	225.83

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	3.21	222.02
Jun-1999	3.22	224.66
Jul-1999	3.44	222.00
Ago-1999	3.35	222.16
Sept-1999	3.41	218.00
Oct-1999	3.26	220.75
Nov-1999	3.32	221.16
Dic-1999		
Ene-2000	3.49	224.83
Feb-2000	3.38	224.25
Mar-2000	3.38	226.33
Abr-2000	3.13	222.50
May-2000	3.41	226.59
Jun-2000	2.99	226.87
Jul-2000	3.14	225.25
Ago-2000	3.19	226.58
Sept-2000	3.35	223.75
Oct-2000	3.00	223.04
Nov-2000		
Dic-2000		
Ene-2001	3.08	227.42
Feb-2001	3.14	226.42
Mar-2001	3.22	225.96
Apr-01	3.19	223.42
May-01	3.21	227.66
Jun-01		227.50
Jul-01		
Aug-01	3.11	229.80
Sep-01	3.14	226.66
Oct-01		
Nov-01	3.12	224.83
Dec-01		
Jan-02	3.38	232.16
Feb-02	3.15	230.00
Mar-02	3.22	232.16



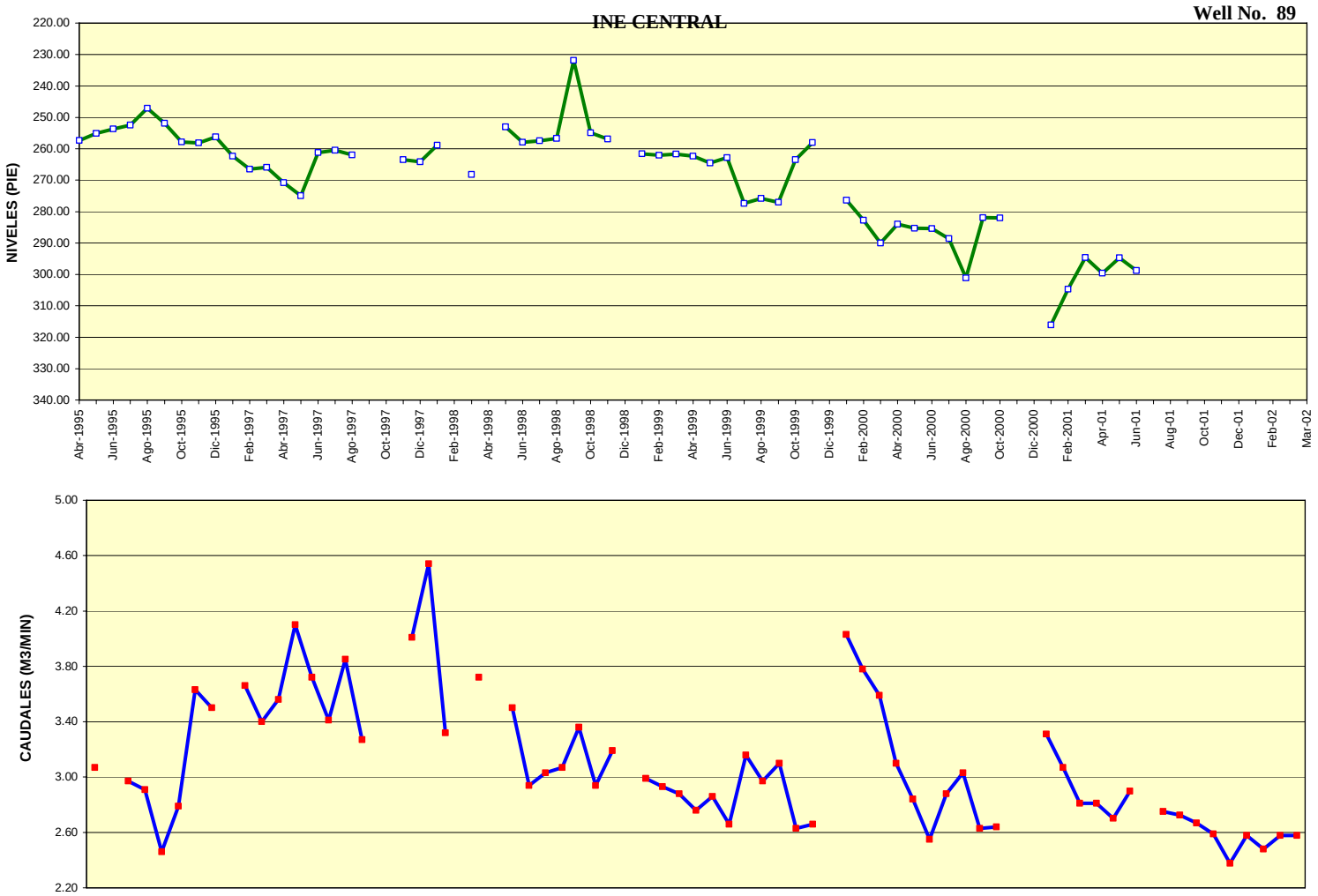
ANNEX 3.C(79) Punping Discharge and Water Level in Wells

ANNEX 3.C(80) Punping Discharge and Water Level in Wells

Villa Austria (Well No.68)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		399.24
May-1995		398.19
Jun-1995		399.18
Jul-1995	0.94	398.16
Ago-1995	1.08	399.24
Sept-1995	0.96	397.24
Oct-1995	0.96	400.49
Nov-1995	0.86	397.75
Dic-1995	0.86	397.24
Ene-1997		419.58
Feb-1997		419.75
Mar-1997		418.92
Abr-1997	1.13	421.42
May-1997	1.01	420.00
Jun-1997	0.95	420.16
Jul-1997	0.92	420.00
Ago-1997	0.93	421.00
Sept-1997		
Oct-1997		
Nov-1997	0.98	418.92
Dic-1997	0.89	421.33
Ene-1998	1.23	416.45
Feb-1998	0.87	423.75
Mar-1998	1.37	420.83
Abr-1998		
May-1998	0.98	420.58
Jun-1998	0.97	420.00
Jul-1998	1.08	418.16
Ago-1998	1.06	411.33
Sept-1998	1.05	415.00
Oct-1998	1.05	421.66
Nov-1998	1.02	419.25
Dic-1998	0.99	425.25
Ene-1999	0.98	424.79
Feb-1999	1.14	424.59
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.14	418.83
May-1999	1.20	422.16
Jun-1999	1.10	424.08
Jul-1999	1.00	427.66
Ago-1999	1.13	425.25
Sept-1999	1.12	427.37
Oct-1999	0.98	428.00
Nov-1999	1.11	427.92
Dic-1999		
Ene-2000	1.08	429.08
Feb-2000	1.11	428.38
Mar-2000	1.08	429.25
Abr-2000	1.08	429.83
May-2000	1.07	428.16
Jun-2000	1.10	432.00
Jul-2000	1.10	431.33
Ago-2000	1.05	417.50
Sept-2000	1.10	428.30
Oct-2000	1.03	428.84
Nov-2000		
Dic-2000		
Ene-2001	0.98	419.75
Feb-2001	0.98	420.00
Mar-2001	0.95	425.04
Apr-01	0.95	434.00
May-01	1.01	432.08
Jun-01		
Jul-01	0.90	433.25
Aug-01	1.03	432.66
Sep-01	0.93	433.20
Oct-01	0.92	432.92
Nov-01	0.96	427.33
Dec-01	0.95	432.04
Jan-02	0.96	433.16
Feb-02	0.91	432.58
Mar-02	0.92	430.58



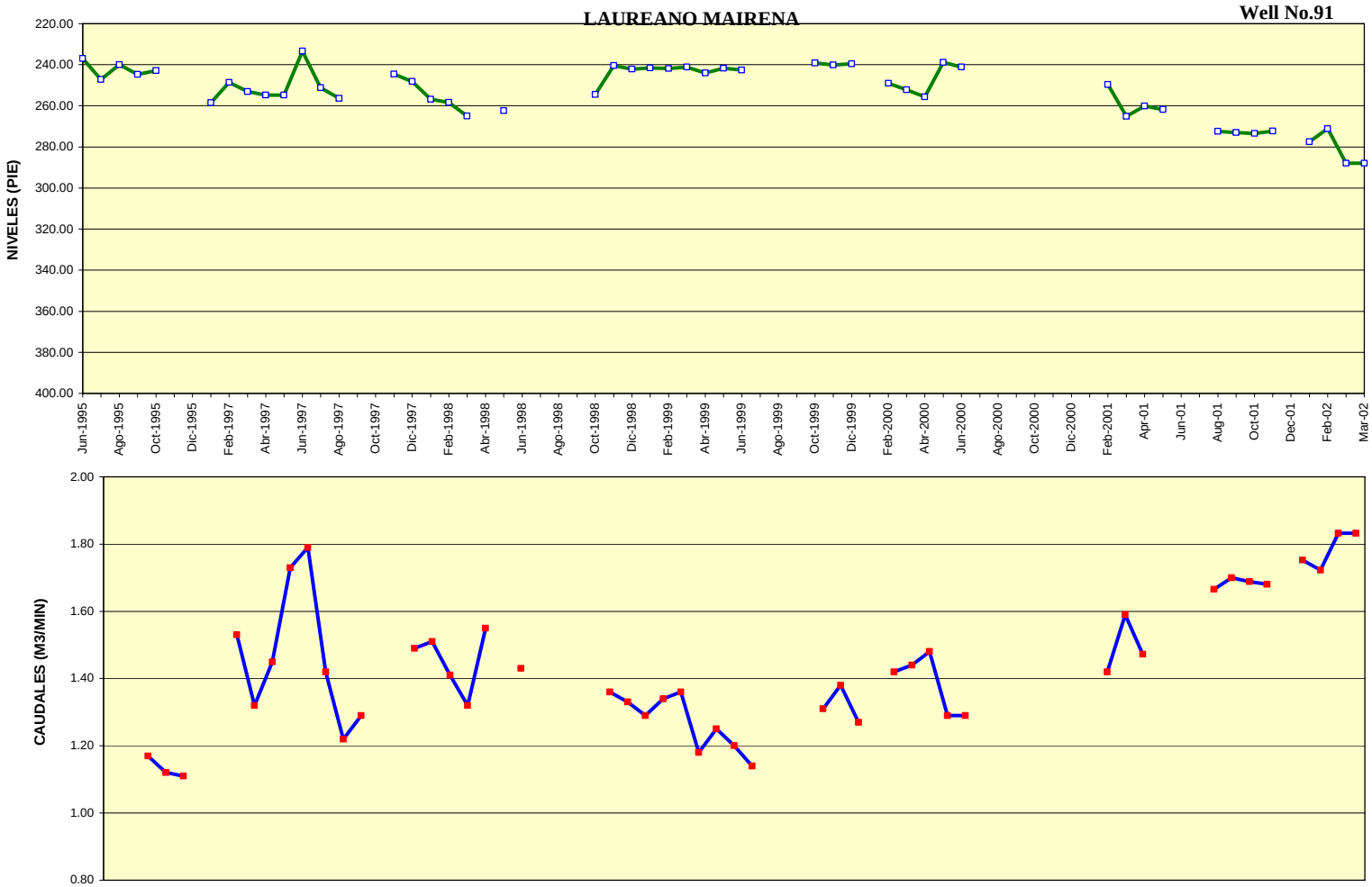
ANNEX 3.C(81) Punping Discharge and Water Level in Wells

ANNEX 3.C(82) Punping Discharge and Water Level in Wells

Ine Central (Well No.89)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	3.07	257.32
May-1995		255.09
Jun-1995	2.97	253.74
Jul-1995	2.91	252.49
Ago-1995	2.46	247.15
Sept-1995	2.79	251.90
Oct-1995	3.63	257.84
Nov-1995	3.50	258.08
Dic-1995		256.25
Ene-1997	3.66	262.33
Feb-1997	3.40	266.45
Mar-1997	3.56	265.92
Abr-1997	4.10	270.79
May-1997	3.72	274.92
Jun-1997	3.41	261.25
Jul-1997	3.85	260.50
Ago-1997	3.27	262.00
Sept-1997		
Oct-1997		
Nov-1997	4.01	263.50
Dic-1997	4.54	264.16
Ene-1998	3.32	258.83
Feb-1998		
Mar-1998	3.72	268.16
Abr-1998		
May-1998	3.50	253.08
Jun-1998	2.94	257.92
Jul-1998	3.03	257.42
Ago-1998	3.07	256.75
Sept-1998	3.36	231.83
Oct-1998	2.94	254.92
Nov-1998	3.19	256.85
Dic-1998		
Ene-1999	2.99	261.59
Feb-1999	2.93	262.09
Mar-1999	2.88	261.66

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.76	262.33
May-1999	2.86	264.50
Jun-1999	2.66	262.83
Jul-1999	3.16	277.41
Ago-1999	2.97	275.85
Sept-1999	3.10	277.00
Oct-1999	2.63	263.50
Nov-1999	2.66	258.00
Dic-1999		
Ene-2000	4.03	276.41
Feb-2000	3.78	282.75
Mar-2000	3.59	290.04
Abr-2000	3.10	284.00
May-2000	2.84	285.30
Jun-2000	2.55	285.42
Jul-2000	2.88	288.59
Ago-2000	3.03	301.10
Sept-2000	2.63	281.96
Oct-2000	2.64	282.04
Nov-2000		
Dic-2000		
Ene-2001	3.31	316.08
Feb-2001	3.07	304.66
Mar-2001	2.81	294.66
Apr-01	2.81	299.67
May-01	2.70	294.70
Jun-01	2.90	298.75
Jul-01		
Aug-01	2.75	OBST
Sep-01	2.73	OBST
Oct-01	2.67	OBST
Nov-01	2.59	OBST
Dec-01	2.38	
Jan-02	2.58	OBST
Feb-02	2.48	OBST
Mar-02	2.58	OBST



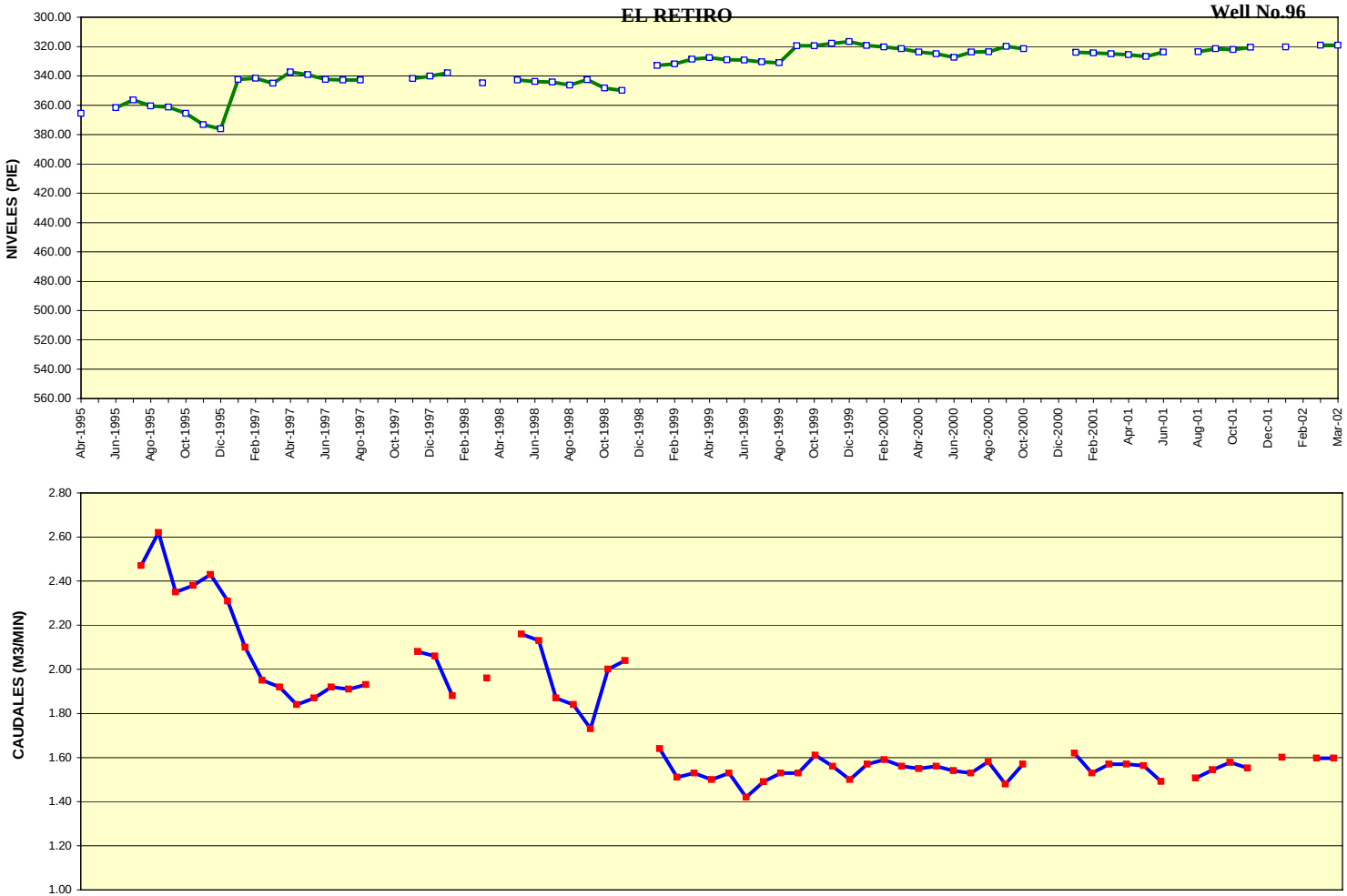
ANNEX 3.C(83) Punping Discharge and Water Level in Wells

ANNEX 3.C(84) Punping Discharge and Water Level in Wells

Laureano Mairena (Well No.91)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Jun-1995		237.01
Jul-1995		247.08
Ago-1995	1.17	239.90
Sept-1995	1.12	244.69
Oct-1995	1.11	242.80
Nov-1995		
Dic-1995		
Ene-1997	1.53	258.50
Feb-1997	1.32	248.58
Mar-1997	1.45	253.00
Abr-1997	1.73	254.83
May-1997	1.79	254.75
Jun-1997	1.42	233.33
Jul-1997	1.22	251.20
Ago-1997	1.29	256.41
Sept-1997		
Oct-1997		
Nov-1997	1.49	244.58
Dic-1997	1.51	248.16
Ene-1998	1.41	256.83
Feb-1998	1.32	258.37
Mar-1998	1.55	264.92
Abr-1998		
May-1998	1.43	262.33
Jun-1998		
Jul-1998		
Ago-1998		
Sept-1998		
Oct-1998	1.36	254.45
Nov-1998	1.33	240.33
Dic-1998	1.29	242.15
Ene-1999	1.34	241.50
Feb-1999	1.36	241.84
Mar-1999	1.18	241.08
Abr-1999	1.25	243.92

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	1.20	241.75
Jun-1999	1.14	242.50
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999	1.31	239.08
Nov-1999	1.38	240.16
Dic-1999	1.27	239.54
Ene-2000		
Feb-2000	1.42	249.00
Mar-2000	1.44	252.25
Abr-2000	1.48	255.62
May-2000	1.29	238.84
Jun-2000	1.29	241.08
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	1.42	249.58
Mar-2001	1.59	265.08
Apr-01	1.47	260.08
May-01		261.83
Jun-01		
Jul-01		
Aug-01	1.67	272.50
Sep-01	1.70	273.08
Oct-01	1.69	273.42
Nov-01	1.68	272.33
Dec-01		
Jan-02	1.75	277.46
Feb-02	1.72	271.12
Mar-02	1.83	288.00



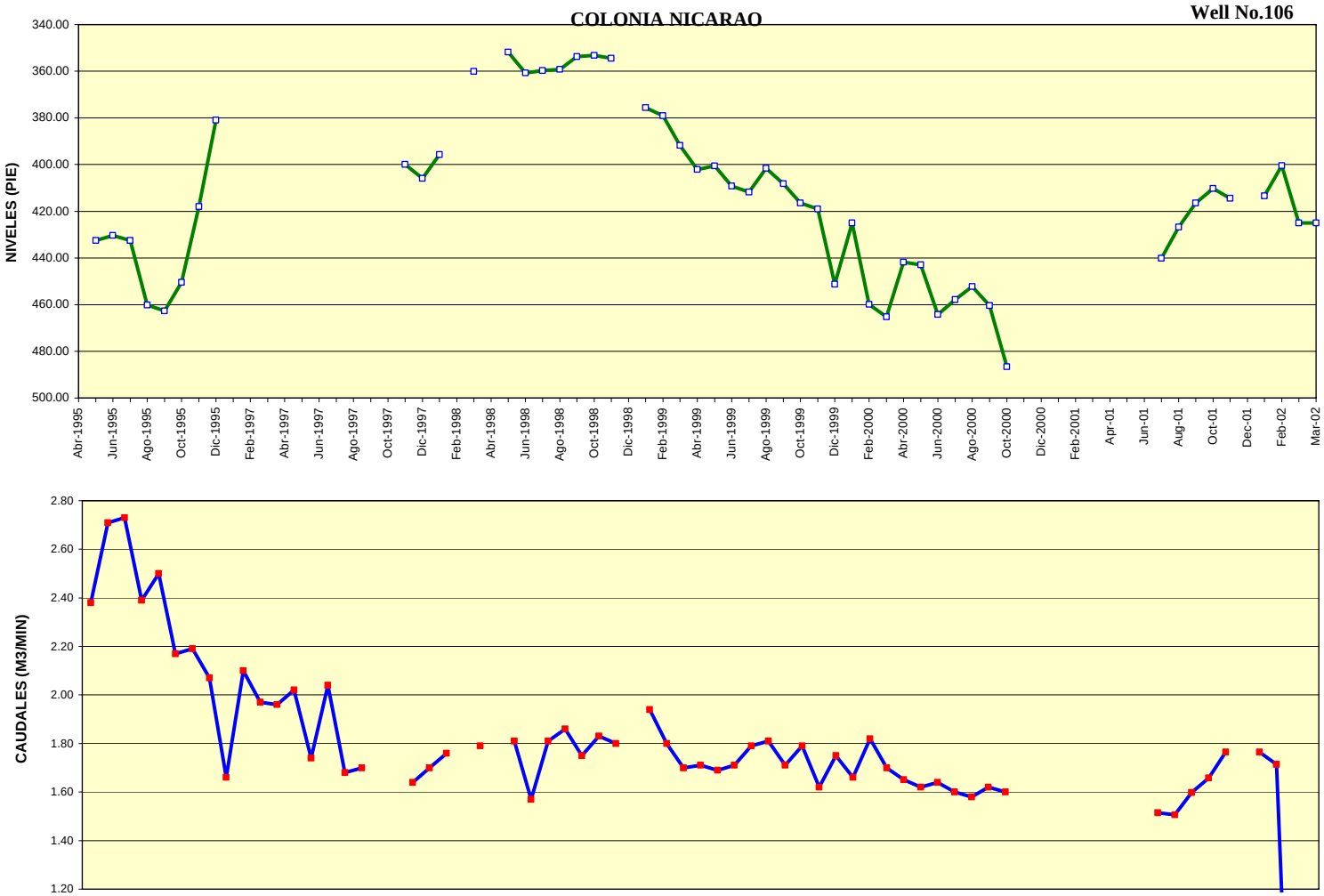
ANNEX 3.C(85) Punping Discharge and Water Level in Wells

ANNEX 3.C(86) Punping Discharge and Water Level in Wells

El Retiro (Well No.96)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		365.59
May-1995		
Jun-1995		361.78
Jul-1995	2.47	356.40
Ago-1995	2.62	360.57
Sept-1995	2.35	361.26
Oct-1995	2.38	365.50
Nov-1995	2.43	373.25
Dic-1995	2.31	376.15
Ene-1997	2.10	342.50
Feb-1997	1.95	341.58
Mar-1997	1.92	345.16
Abr-1997	1.84	337.42
May-1997	1.87	339.25
Jun-1997	1.92	342.41
Jul-1997	1.91	342.80
Ago-1997	1.93	342.92
Sept-1997		
Oct-1997		
Nov-1997	2.08	341.83
Dic-1997	2.06	340.16
Ene-1998	1.88	338.00
Feb-1998		
Mar-1998	1.96	344.83
Abr-1998		
May-1998	2.16	342.92
Jun-1998	2.13	343.92
Jul-1998	1.87	344.33
Ago-1998	1.84	346.37
Sept-1998	1.73	342.58
Oct-1998	2.00	348.25
Nov-1998	2.04	350.00
Dic-1998		
Ene-1999	1.64	332.92
Feb-1999	1.51	331.92
Mar-1999	1.53	328.58

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.50	327.66
May-1999	1.53	329.00
Jun-1999	1.42	329.16
Jul-1999	1.49	330.37
Ago-1999	1.53	331.00
Sept-1999	1.53	319.41
Oct-1999	1.61	319.41
Nov-1999	1.56	317.83
Dic-1999	1.50	316.58
Ene-2000	1.57	319.38
Feb-2000	1.59	320.35
Mar-2000	1.56	321.50
Abr-2000	1.55	323.67
May-2000	1.56	324.92
Jun-2000	1.54	327.33
Jul-2000	1.53	323.83
Ago-2000	1.58	323.46
Sept-2000	1.48	319.88
Oct-2000	1.57	321.42
Nov-2000		
Dic-2000		
Ene-2001	1.62	324.00
Feb-2001	1.53	324.42
Mar-2001	1.57	325.00
Apr-01	1.57	325.50
May-01	1.56	326.87
Jun-01	1.49	323.66
Jul-01		
Aug-01	1.51	323.58
Sep-01	1.54	321.42
Oct-01	1.58	322.16
Nov-01	1.55	320.42
Dec-01		
Jan-02	1.60	320.30
Feb-02		
Mar-02	1.60	319.16



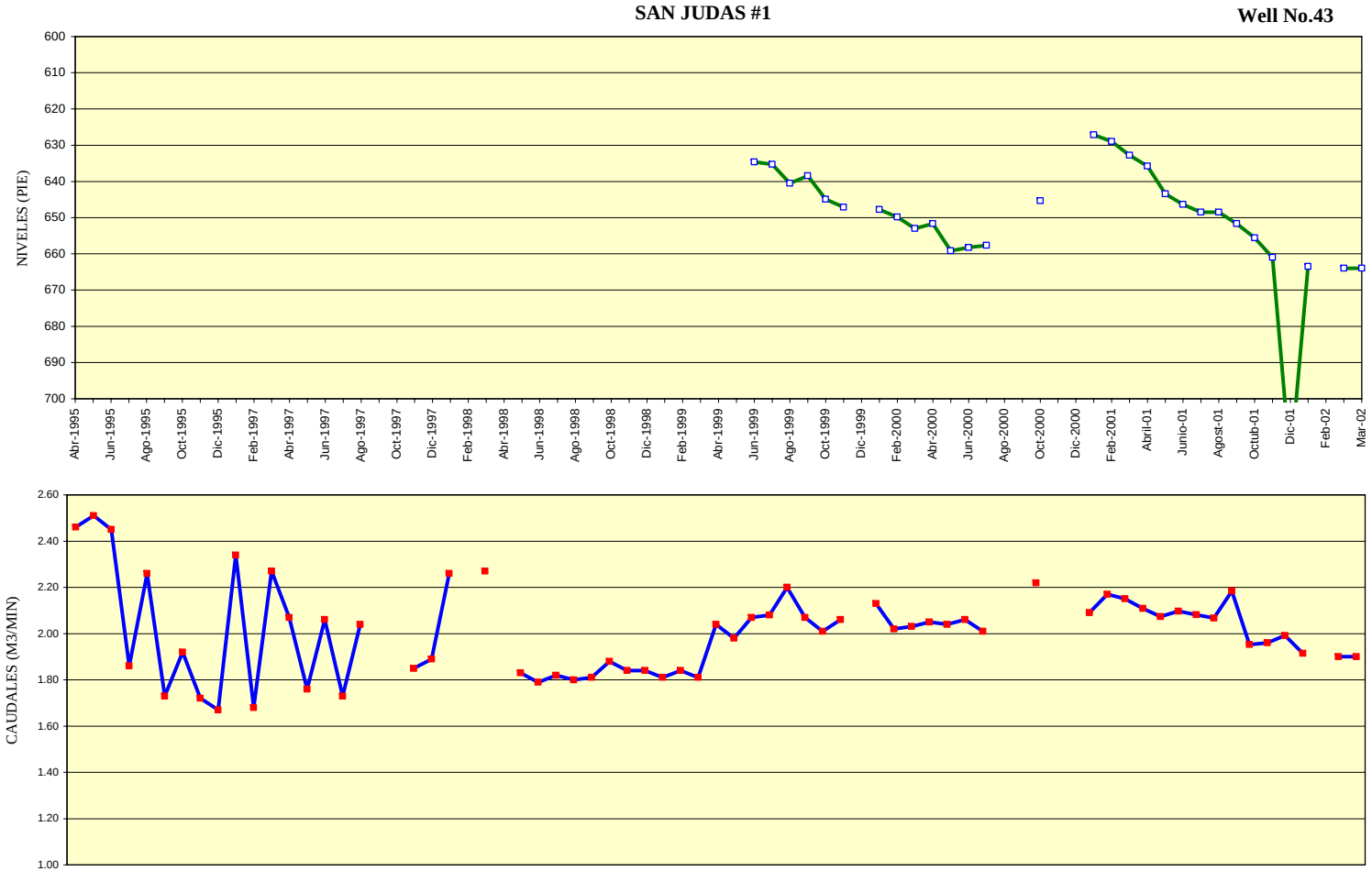
ANNEX 3.C(87) Punping Discharge and Water Level in Wells

ANNEX 3.C(88) Punping Discharge and Water Level in Wells

COLONIA NICARAO (Well No.106)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.38	
May-1995	2.71	432.57
Jun-1995	2.73	430.34
Jul-1995	2.39	432.60
Ago-1995	2.50	460.15
Sept-1995	2.17	462.74
Oct-1995	2.19	450.51
Nov-1995	2.07	418.00
Dic-1995	1.66	381.00
Ene-1997	2.10	
Feb-1997	1.97	
Mar-1997	1.96	
Abr-1997	2.02	
May-1997	1.74	
Jun-1997	2.04	
Jul-1997	1.68	
Ago-1997	1.70	
Sept-1997		
Oct-1997		
Nov-1997	1.64	400.00
Dic-1997	1.70	405.92
Ene-1998	1.76	395.75
Feb-1998		
Mar-1998	1.79	360.08
Abr-1998		
May-1998	1.81	351.83
Jun-1998	1.57	360.70
Jul-1998	1.81	359.75
Ago-1998	1.86	359.25
Sept-1998	1.75	353.75
Oct-1998	1.83	353.25
Nov-1998	1.80	354.50
Dic-1998		
Ene-1999	1.94	375.66
Feb-1999	1.80	379.09
Mar-1999	1.70	391.82

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.71	402.08
May-1999	1.69	400.58
Jun-1999	1.71	409.25
Jul-1999	1.79	411.75
Ago-1999	1.81	401.58
Sept-1999	1.71	408.25
Oct-1999	1.79	416.50
Nov-1999	1.62	419.08
Dic-1999	1.75	451.20
Ene-2000	1.66	425.00
Feb-2000	1.82	459.92
Mar-2000	1.70	465.25
Abr-2000	1.65	441.83
May-2000	1.62	442.92
Jun-2000	1.64	464.25
Jul-2000	1.60	457.92
Ago-2000	1.58	452.33
Sept-2000	1.62	460.42
Oct-2000	1.60	486.66
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001		
Mar-2001		
Apr-01		
May-01		
Jun-01		
Jul-01	1.51	440.16
Aug-01	1.51	426.75
Sep-01	1.60	416.54
Oct-01	1.66	410.25
Nov-01	1.76	414.42
Dec-01		
Jan-02	1.76	413.50
Feb-02	1.71	400.50
Mar-02	NPA	425.00



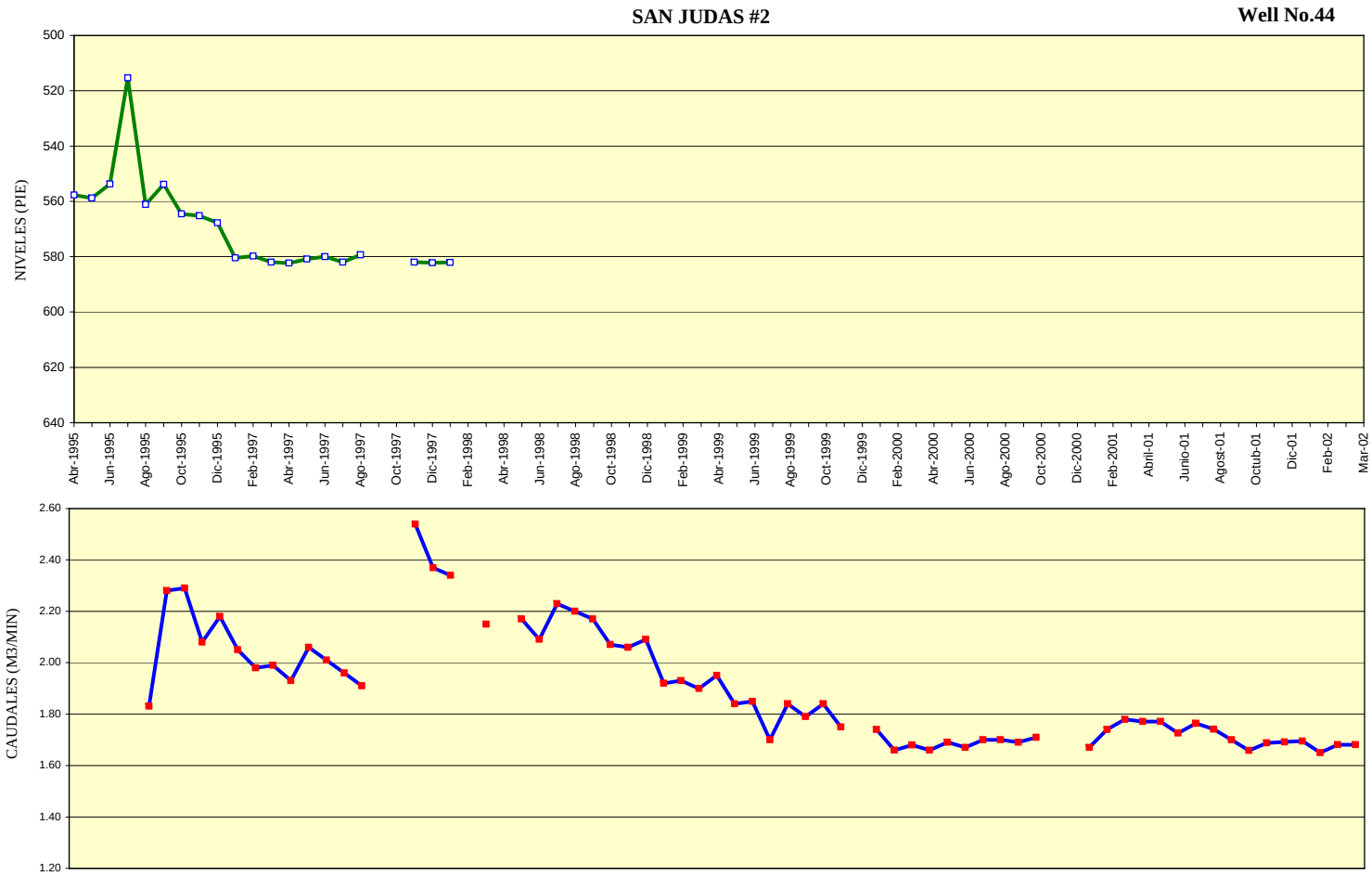
ANNEX 3.C(89) Punping Discharge and Water Level in Wells

ANNEX 3.C(90) Punping Discharge and Water Level in Wells

SAN JUDAS #1 (Well No.43)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.46	
May-1995	2.51	
Jun-1995	2.45	
Jul-1995	1.86	
Ago-1995	2.26	
Sept-1995	1.73	
Oct-1995	1.92	
Nov-1995	1.72	
Dic-1995	1.67	
Ene-1997	2.34	
Feb-1997	1.68	
Mar-1997	2.27	
Abr-1997	2.07	
May-1997	1.76	
Jun-1997	2.06	
Jul-1997	1.73	
Ago-1997	2.04	
Sept-1997		
Oct-1997		
Nov-1997	1.85	
Dic-1997	1.89	
Ene-1998	2.26	
Feb-1998		
Mar-1998	2.27	
Abr-1998		
May-1998	1.83	
Jun-1998	1.79	
Jul-1998	1.82	
Ago-1998	1.80	
Sept-1998	1.81	
Oct-1998	1.88	
Nov-1998	1.84	
Dic-1998	1.84	
Ene-1999	1.81	
Feb-1999	1.84	
Mar-1999	1.81	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.04	
May-1999	1.98	
Jun-1999	2.07	634.58
Jul-1999	2.08	635.25
Ago-1999	2.20	640.50
Sept-1999	2.07	638.41
Oct-1999	2.01	644.92
Nov-1999	2.06	647.08
Dic-1999		
Ene-2000	2.13	647.75
Feb-2000	2.02	649.83
Mar-2000	2.03	652.96
Abr-2000	2.05	651.66
May-2000	2.04	659.16
Jun-2000	2.06	658.25
Jul-2000	2.01	657.63
Ago-2000		
Sept-2000		
Oct-2000	2.22	645.30
Nov-2000		
Dic-2000		
Ene-2001	2.09	627.16
Feb-2001	2.17	628.92
Mar-2001	2.15	632.80
Abril-01	2.11	635.75
Mayo-01	2.07	643.40
Junio-01	2.10	646.30
Julio-01	2.08	648.54
Agost-01	2.07	648.54
Sept-01	2.18	651.66
Octub-01	1.95	655.54
Nov-01	1.96	661.00
Dic-01	1.99	718.33
Enero-02	1.92	663.50
Feb-02		
Mar-02	1.90	664.00



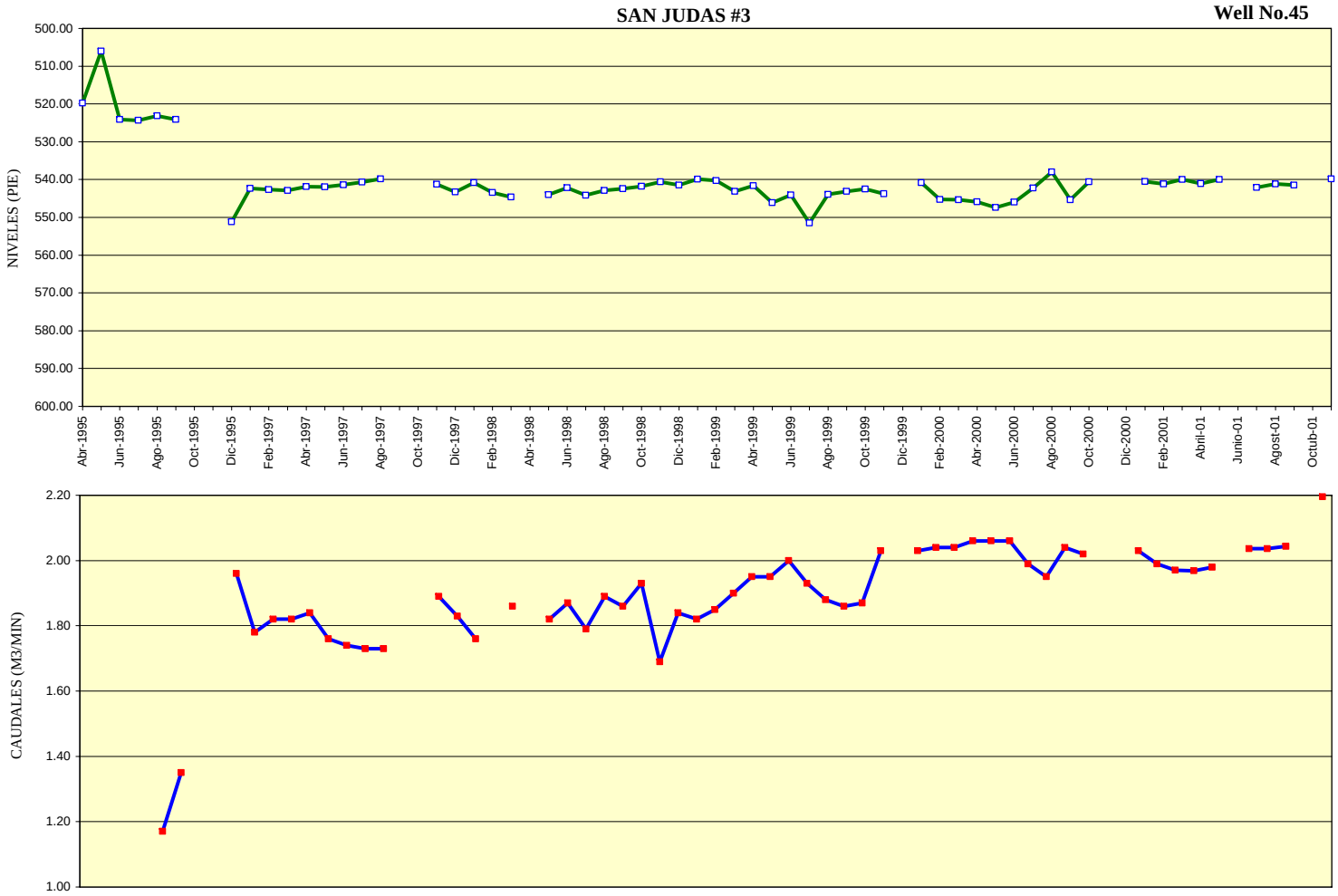
ANNEX 3.C(91) Punping Discharge and Water Level in Wells

ANNEX 3.C(92) Punping Discharge and Water Level in Wells

SAN JUDAS #2 (Well No.44)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		557.67
May-1995		558.81
Jun-1995		553.76
Jul-1995		515.39
Ago-1995	1.83	561.08
Sept-1995	2.28	553.80
Oct-1995	2.29	564.50
Nov-1995	2.08	565.16
Dic-1995	2.18	567.75
Ene-1997	2.05	580.41
Feb-1997	1.98	579.75
Mar-1997	1.99	581.92
Abr-1997	1.93	582.25
May-1997	2.06	580.83
Jun-1997	2.01	580.00
Jul-1997	1.96	581.92
Ago-1997	1.91	579.33
Sept-1997		
Oct-1997		
Nov-1997	2.54	582.00
Dic-1997	2.37	582.16
Ene-1998	2.34	582.08
Feb-1998		
Mar-1998	2.15	
Abr-1998		
May-1998	2.17	
Jun-1998	2.09	
Jul-1998	2.23	
Ago-1998	2.20	
Sept-1998	2.17	
Oct-1998	2.07	
Nov-1998	2.06	
Dic-1998	2.09	
Ene-1999	1.92	
Feb-1999	1.93	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Mar-1999	1.90	
Abr-1999	1.95	
May-1999	1.84	
Jun-1999	1.85	
Jul-1999	1.70	
Ago-1999	1.84	
Sept-1999	1.79	
Nov-99	1.84	
Dec-99		
Ene-2000	1.74	
Feb-2000	1.66	
Mar-2000	1.68	
Abr-2000	1.66	
May-2000	1.69	
Jun-2000	1.67	
Jul-2000	1.70	
Ago-2000	1.70	
Sept-2000	1.69	
Oct-2000	1.71	
Nov-2000		
Dic-2000		
Ene-2001	1.67	
Feb-2001	1.74	
Mar-2001	1.78	
Abril-01	1.77	OBST
Mayo-01	1.77	OBST
Junio-01	1.73	OBST
Julio-01	1.76	OBST
Agost-01	1.74	OBST
Sept-01	1.70	OBST
Octub-01	1.66	OBST
Nov-01	1.69	OBST
Dic-01	1.69	
Enero-02	1.70	OBST
Feb-02	1.65	OBST
Mar-02	1.68	OBST



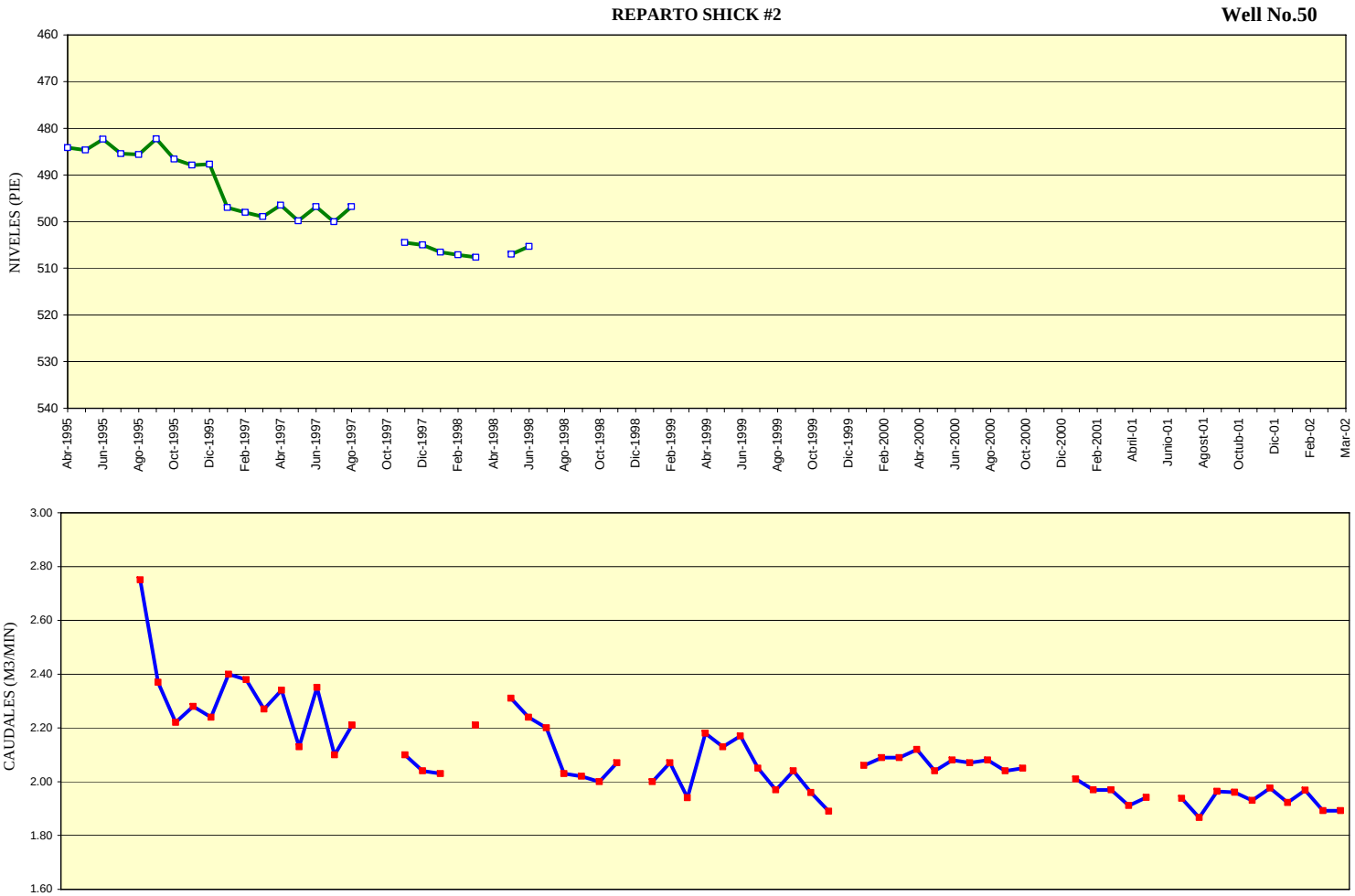
ANNEX 3.C(93) Punping Discharge and Water Level in Wells

ANNEX 3.C(94) Punping Discharge and Water Level in Wells

SAN JUDAS #3 (Well No.45)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		519.75
May-1995		506.01
Jun-1995		524.08
Jul-1995		524.34
Ago-1995	1.17	523.16
Sept-1995	1.35	524.10
Oct-1995		
Nov-1995		
Dic-1995	1.96	551.16
Ene-1997	1.78	542.33
Feb-1997	1.82	542.66
Mar-1997	1.82	542.92
Abr-1997	1.84	541.83
May-1997	1.76	541.92
Jun-1997	1.74	541.42
Jul-1997	1.73	540.70
Ago-1997	1.73	539.80
Sept-1997		
Oct-1997		
Nov-1997	1.89	541.25
Dic-1997	1.83	543.25
Ene-1998	1.76	540.83
Feb-1998		543.41
Mar-1998	1.86	544.66
Abr-1998		
May-1998	1.82	544.00
Jun-1998	1.87	542.16
Jul-1998	1.79	544.16
Ago-1998	1.89	542.92
Sept-1998	1.86	542.42
Oct-1998	1.93	541.75
Nov-1998	1.69	540.58
Dic-1998	1.84	541.50
Ene-1999	1.82	539.92
Feb-1999	1.85	540.25
Mar-1999	1.90	543.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.95	541.66
May-1999	1.95	546.16
Jun-1999	2.00	544.08
Jul-1999	1.93	551.50
Ago-1999	1.88	543.92
Sept-1999	1.86	543.16
Oct-1999	1.87	542.50
Nov-1999	2.03	543.75
Dic-1999		
Ene-2000	2.03	540.80
Feb-2000	2.04	545.29
Mar-2000	2.04	545.33
Abr-2000	2.06	545.92
May-2000	2.06	547.42
Jun-2000	2.06	546.00
Jul-2000	1.99	542.24
Ago-2000	1.95	538.00
Sept-2000	2.04	545.33
Oct-2000	2.02	540.58
Nov-2000		
Dic-2000		
Ene-2001	2.03	540.54
Feb-2001	1.99	541.16
Mar-2001	1.97	540.00
Abril-01	1.97	541.04
Mayo-01	1.98	540.00
Junio-01		
Julio-01	2.04	542.12
Agost-01	2.04	541.12
Sept-01	2.04	541.50
Octub-01		
Nov-01	2.20	539.83
Dic-01		
Enero-02	2.12	544.00
Feb-02		
Mar-02	2.12	545.00



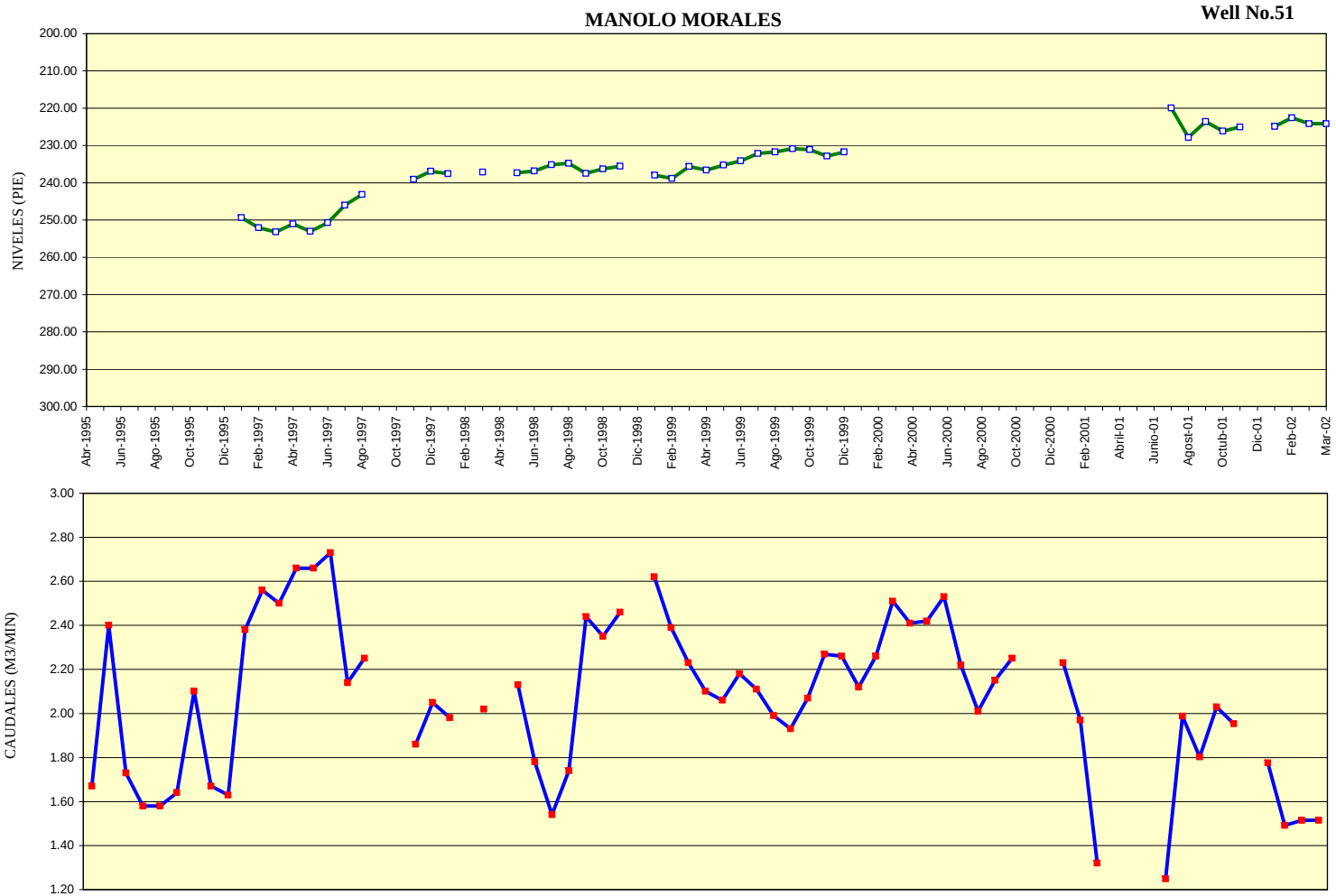
ANNEX 3.C(95) Punping Discharge and Water Level in Wells

ANNEX 3.C(96) Punping Discharge and Water Level in Wells

REPARTO SHICK #2 (Well No.50)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		484.16
May-1995		484.65
Jun-1995		482.32
Jul-1995		485.41
Ago-1995	2.75	485.64
Sept-1995	2.37	482.30
Oct-1995	2.22	486.60
Nov-1995	2.28	487.92
Dic-1995	2.24	487.68
Ene-1997	2.40	497.00
Feb-1997	2.38	498.00
Mar-1997	2.27	498.92
Abr-1997	2.34	496.50
May-1997	2.13	499.83
Jun-1997	2.35	496.83
Jul-1997	2.10	500.04
Ago-1997	2.21	496.80
Sept-1997		
Oct-1997		
Nov-1997	2.10	504.48
Dic-1997	2.04	505.00
Ene-1998	2.03	506.54
Feb-1998		507.16
Mar-1998	2.21	507.67
Abr-1998		
May-1998	2.31	507.00
Jun-1998	2.24	505.33
Jul-1998	2.20	
Ago-1998	2.03	
Sept-1998	2.02	
Oct-1998	2.00	
Nov-1998	2.07	
Dic-1998		
Ene-1999	2.00	
Feb-1999	2.07	
Mar-1999	1.94	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.18	
May-1999	2.13	
Jun-1999	2.17	
Jul-1999	2.05	
Ago-1999	1.97	
Sept-1999	2.04	
Oct-1999	1.96	
Nov-1999	1.89	
Dic-1999		
Ene-2000	2.06	
Feb-2000	2.09	
Mar-2000	2.09	
Abr-2000	2.12	
May-2000	2.04	
Jun-2000	2.08	
Jul-2000	2.07	
Ago-2000	2.08	
Sept-2000	2.04	
Oct-2000	2.05	
Nov-2000		
Dic-2000		
Ene-2001	2.01	OBST
Feb-2001	1.97	OBST
Mar-2001	1.97	OBST
Abril-01	1.91	OBST
Mayo-01	1.94	OBST
Junio-01		OBST
Julio-01	1.94	OBST
Agost-01	1.87	OBST
Sept-01	1.96	OBST
Octub-01	1.96	OBST
Nov-01	1.93	OBST
Dic-01	1.98	
Enero-02	1.92	OBST
Feb-02	1.97	OBST
Mar-02	1.89	OBST



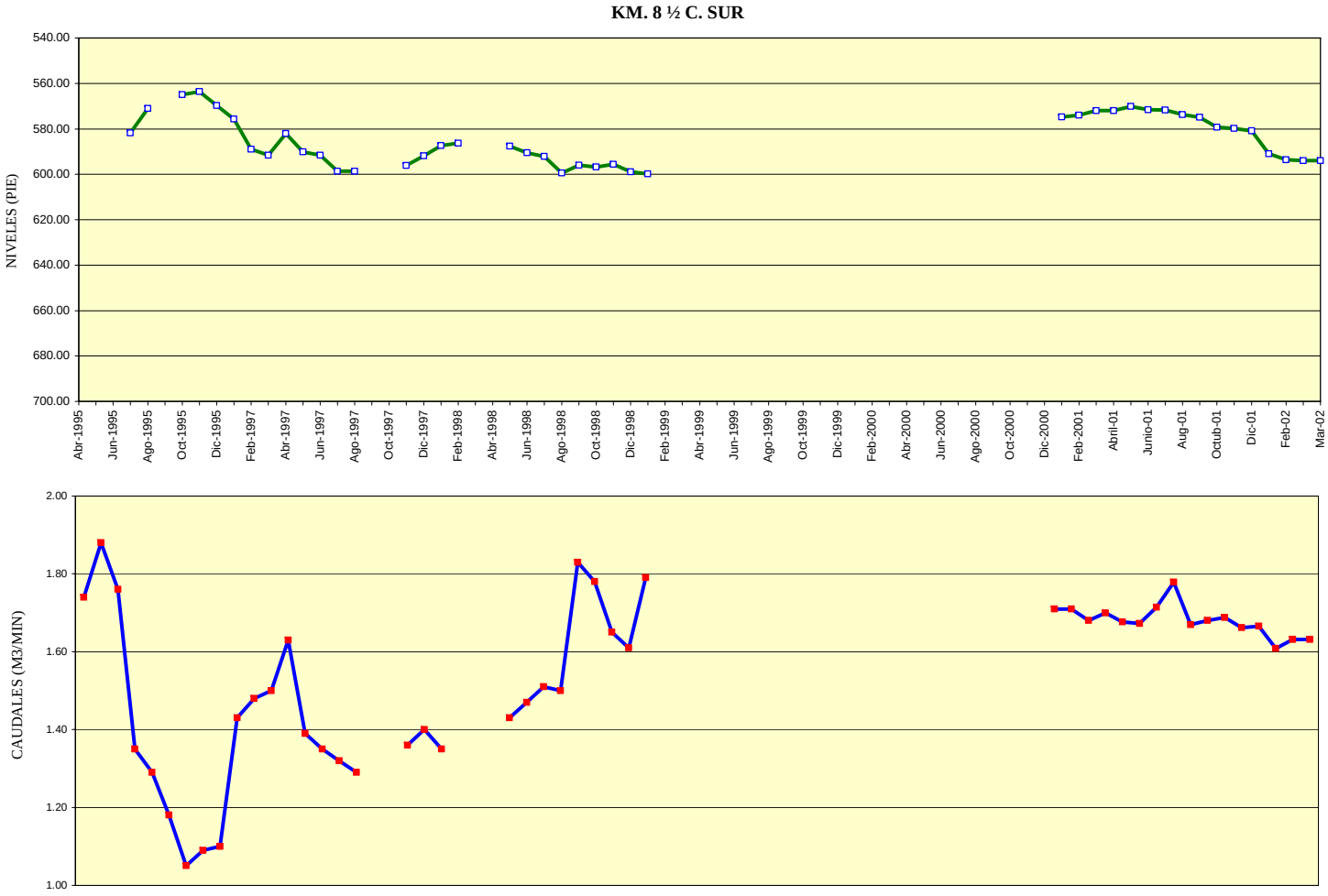
ANNEX 3.C(97) Punping Discharge and Water Level in Wells

ANNEX 3.C(98) Punping Discharge and Water Level in Wells

MANOLO MORALES (Well No.51)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.67	
May-1995	2.40	
Jun-1995	1.73	
Jul-1995	1.58	
Ago-1995	1.58	
Sept-1995	1.64	
Oct-1995	2.10	
Nov-1995	1.67	
Dic-1995	1.63	
Ene-1997	2.38	249.33
Feb-1997	2.56	252.08
Mar-1997	2.50	253.16
Abr-1997	2.66	251.00
May-1997	2.66	253.00
Jun-1997	2.73	250.75
Jul-1997	2.14	246.00
Ago-1997	2.25	243.16
Sept-1997		
Oct-1997		
Nov-1997	1.86	239.08
Dic-1997	2.05	236.96
Ene-1998	1.98	237.58
Feb-1998		
Mar-1998	2.02	237.16
Abr-1998		
May-1998	2.13	237.33
Jun-1998	1.78	236.83
Jul-1998	1.54	235.16
Ago-1998	1.74	234.75
Sept-1998	2.44	237.50
Oct-1998	2.35	236.25
Nov-1998	2.46	235.58
Dic-1998		
Ene-1999	2.62	237.96
Feb-1999	2.39	238.84
Mar-1999	2.23	235.66

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.10	236.58
May-1999	2.06	235.25
Jun-1999	2.18	234.16
Jul-1999	2.11	232.16
Ago-1999	1.99	231.75
Sept-1999	1.93	230.87
Oct-1999	2.07	231.08
Nov-1999	2.27	232.83
Dic-1999	2.26	231.75
Ene-2000	2.12	
Feb-2000	2.26	
Mar-2000	2.51	
Abr-2000	2.41	
May-2000	2.42	
Jun-2000	2.53	
Jul-2000	2.22	
Ago-2000	2.01	
Sept-2000	2.15	
Oct-2000	2.25	
Nov-2000		
Dic-2000		
Ene-2001	2.23	OBST
Feb-2001	1.97	OBST
Mar-2001	1.32	OBST
Abril-01		OBST
Mayo-01		OBST
Junio-01		
Julio-01	1.25	219.92
Agost-01	1.99	227.87
Sept-01	1.80	223.58
Octub-01	2.03	226.16
Nov-01	1.95	225.00
Dic-01		
Enero-02	1.78	224.92
Feb-02	1.49	222.58
Mar-02	1.51	224.16



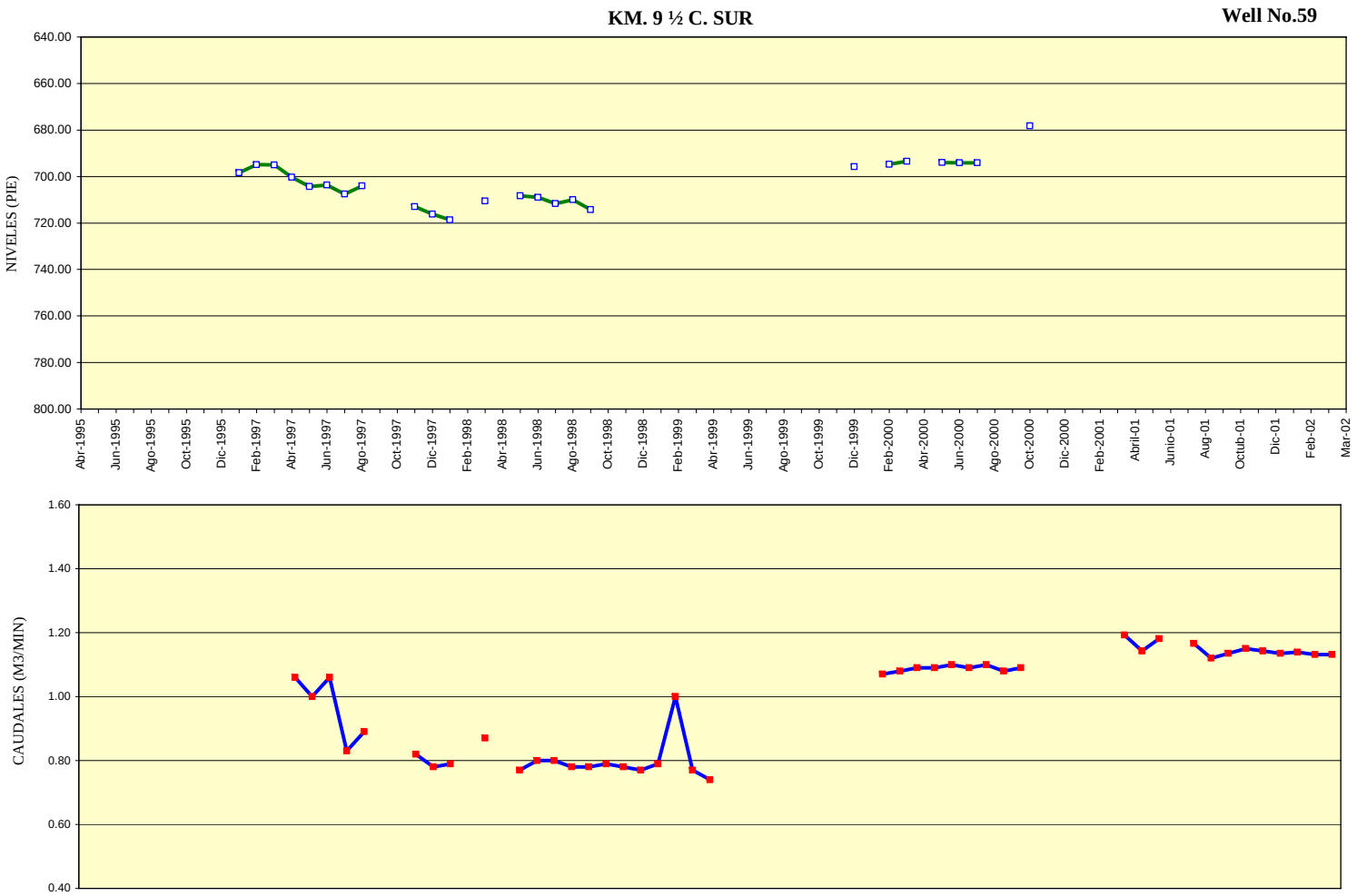
ANNEX 3.C(99) Punping Discharge and Water Level in Wells

ANNEX 3.C(100) Punping Discharge and Water Level in Wells

KM. 8 ½ C. SUR (Well No.58)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.74	
May-1995	1.88	
Jun-1995	1.76	
Jul-1995	1.35	581.84
Ago-1995	1.29	571.11
Sept-1995	1.18	
Oct-1995	1.05	564.90
Nov-1995	1.09	563.57
Dic-1995	1.10	569.75
Ene-1997	1.43	575.66
Feb-1997	1.48	588.92
Mar-1997	1.50	591.66
Abr-1997	1.63	582.08
May-1997	1.39	590.16
Jun-1997	1.35	591.58
Jul-1997	1.32	598.58
Ago-1997	1.29	598.58
Sept-1997		
Oct-1997		
Nov-1997	1.36	596.08
Dic-1997	1.40	591.92
Ene-1998	1.35	587.33
Feb-1998		586.33
Mar-1998		
Abr-1998		
May-1998	1.43	587.58
Jun-1998	1.47	590.50
Jul-1998	1.51	592.08
Ago-1998	1.50	599.50
Sept-1998	1.83	596.00
Oct-1998	1.78	596.75
Nov-1998	1.65	595.58
Dic-1998	1.61	598.92
Ene-1999	1.79	599.84
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001	1.71	574.75
Feb-2001	1.71	574.00
Mar-2001	1.68	571.92
Abril-01	1.70	572.00
Mayo-01	1.68	570.08
Junio-01	1.67	571.54
Julio-01	1.71	571.70
Aug-01	1.78	573.75
Sep-01	1.67	574.92
Octub-01	1.68	579.33
Nov-01	1.69	579.83
Dic-01	1.66	580.92
Enero-02	1.67	590.92
Feb-02	1.61	593.58
Mar-02	1.63	594.00



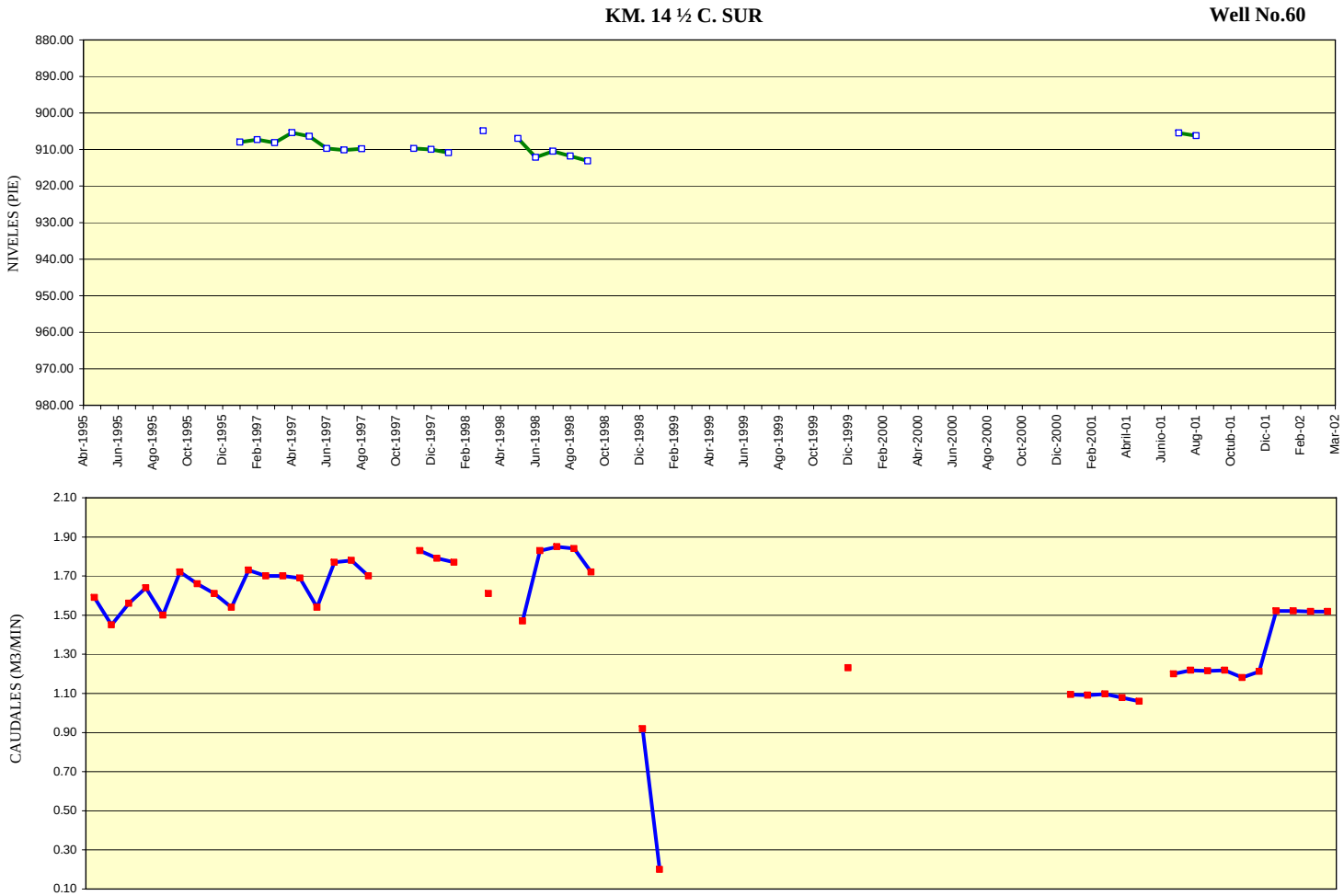
ANNEX 3.C(101) Punping Discharge and Water Level in Wells

ANNEX 3.C(102) Punping Discharge and Water Level in Wells

KM. 9 ½ C. SUR (Well No.59)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		
May-1995		
Jun-1995		
Jul-1995		
Ago-1995		
Sept-1995		
Oct-1995		
Nov-1995		
Dic-1995		
Ene-1997		698.33
Feb-1997		694.83
Mar-1997		694.96
Abr-1997	1.06	700.33
May-1997	1.00	704.25
Jun-1997	1.06	703.66
Jul-1997	0.83	707.58
Ago-1997	0.89	704.00
Sept-1997		
Oct-1997		
Nov-1997	0.82	713.00
Dic-1997	0.78	716.16
Ene-1998	0.79	718.58
Feb-1998		
Mar-1998	0.87	710.50
Abr-1998		
May-1998	0.77	708.32
Jun-1998	0.80	709.00
Jul-1998	0.80	711.62
Ago-1998	0.78	710.00
Sept-1998	0.78	714.25
Oct-1998	0.79	
Nov-1998	0.78	
Dic-1998	0.77	
Ene-1999	0.79	
Feb-1999	1.00	
Mar-1999	0.77	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	0.74	
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		695.75
Ene-2000		
Feb-2000	1.07	694.75
Mar-2000	1.08	693.50
Abr-2000	1.09	
May-2000	1.09	694.00
Jun-2000	1.10	694.16
Jul-2000	1.09	694.16
Ago-2000	1.10	
Sept-2000	1.08	
Oct-2000	1.09	678.25
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001		
Mar-2001		
Abril-01	1.19	
Mayo-01	1.14	
Junio-01	1.18	
Julio-01		
Aug-01	1.17	
Sep-01	1.12	
Octub-01	1.14	
Nov-01	1.15	
Dic-01	1.14	
Enero-02	1.14	OBST
Feb-02	1.14	OBST
Mar-02	1.13	OBST



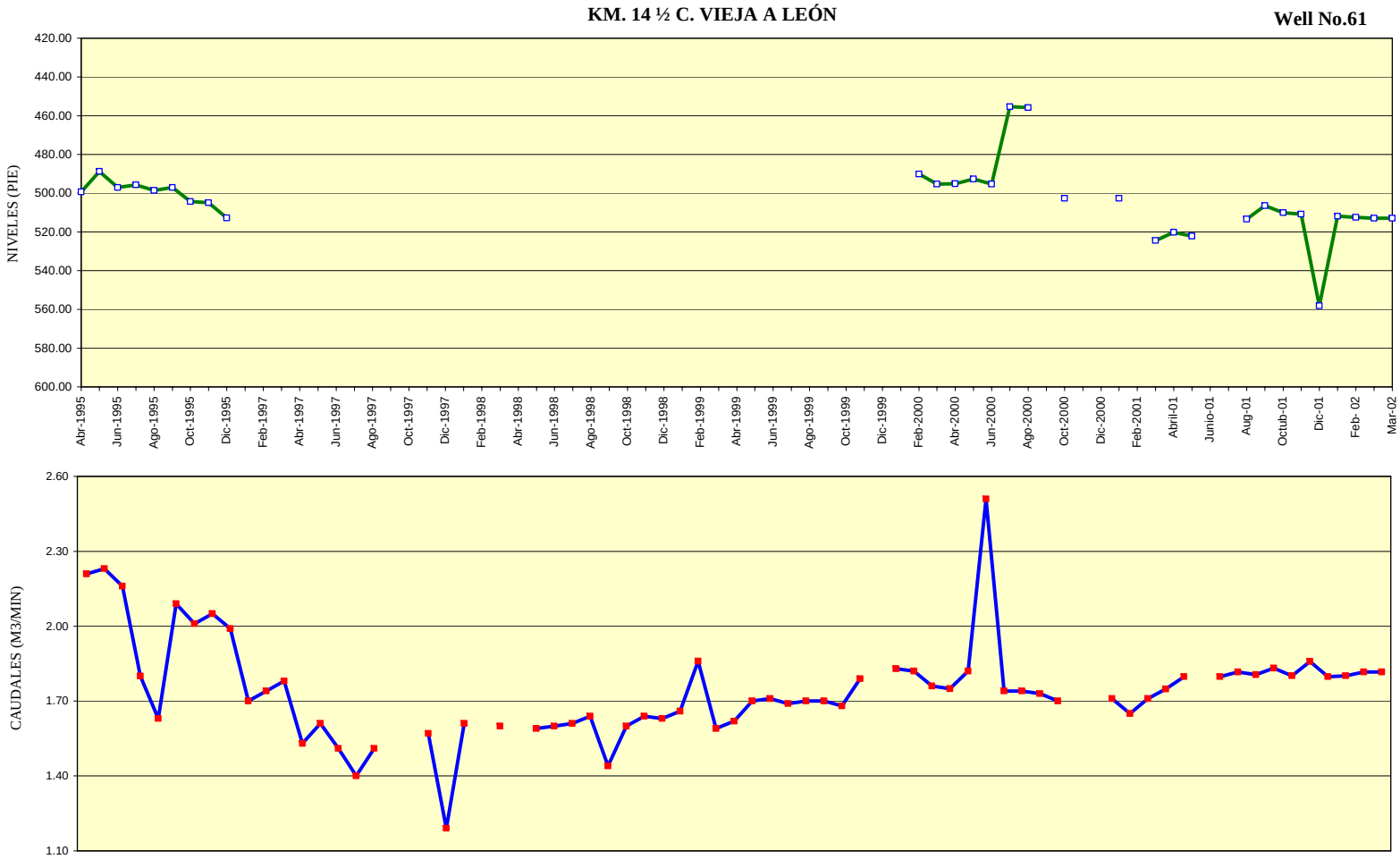
ANNEX 3.C(103) Punping Discharge and Water Level in Wells

ANNEX 3.C(104) Punping Discharge and Water Level in Wells

KM. 14 ½ C. SUR (Well No.60)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.59	
May-1995	1.45	
Jun-1995	1.56	
Jul-1995	1.64	
Ago-1995	1.50	
Sept-1995	1.72	
Oct-1995	1.66	
Nov-1995	1.61	
Dic-1995	1.54	
Ene-1997	1.73	908.00
Feb-1997	1.70	907.33
Mar-1997	1.70	908.16
Abr-1997	1.69	905.41
May-1997	1.54	906.42
Jun-1997	1.77	909.75
Jul-1997	1.78	910.16
Ago-1997	1.70	909.80
Sept-1997		
Oct-1997		
Nov-1997	1.83	909.75
Dic-1997	1.79	910.00
Ene-1998	1.77	910.92
Feb-1998		
Mar-1998	1.61	904.92
Abr-1998		
May-1998	1.47	907.00
Jun-1998	1.83	912.16
Jul-1998	1.85	910.50
Ago-1998	1.84	911.80
Sept-1998	1.72	913.16
Oct-1998		
Nov-1998		
Dic-1998	0.92	
Ene-1999	0.20	
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999	1.23	
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001	1.09	M.E
Feb-2001	1.09	M.E
Mar-2001	1.10	M.E
Abril-01	1.08	M.E
Mayo-01	1.06	M.E
Junio-01		
Julio-01	1.20	905.46
Aug-01	1.22	906.25
Sep-01	1.21	
Octub-01	1.22	
Nov-01	1.18	
Dic-01	1.21	
Enero-02	1.52	OBST
Feb-02	1.52	OBST
Mar-02	1.52	OBST



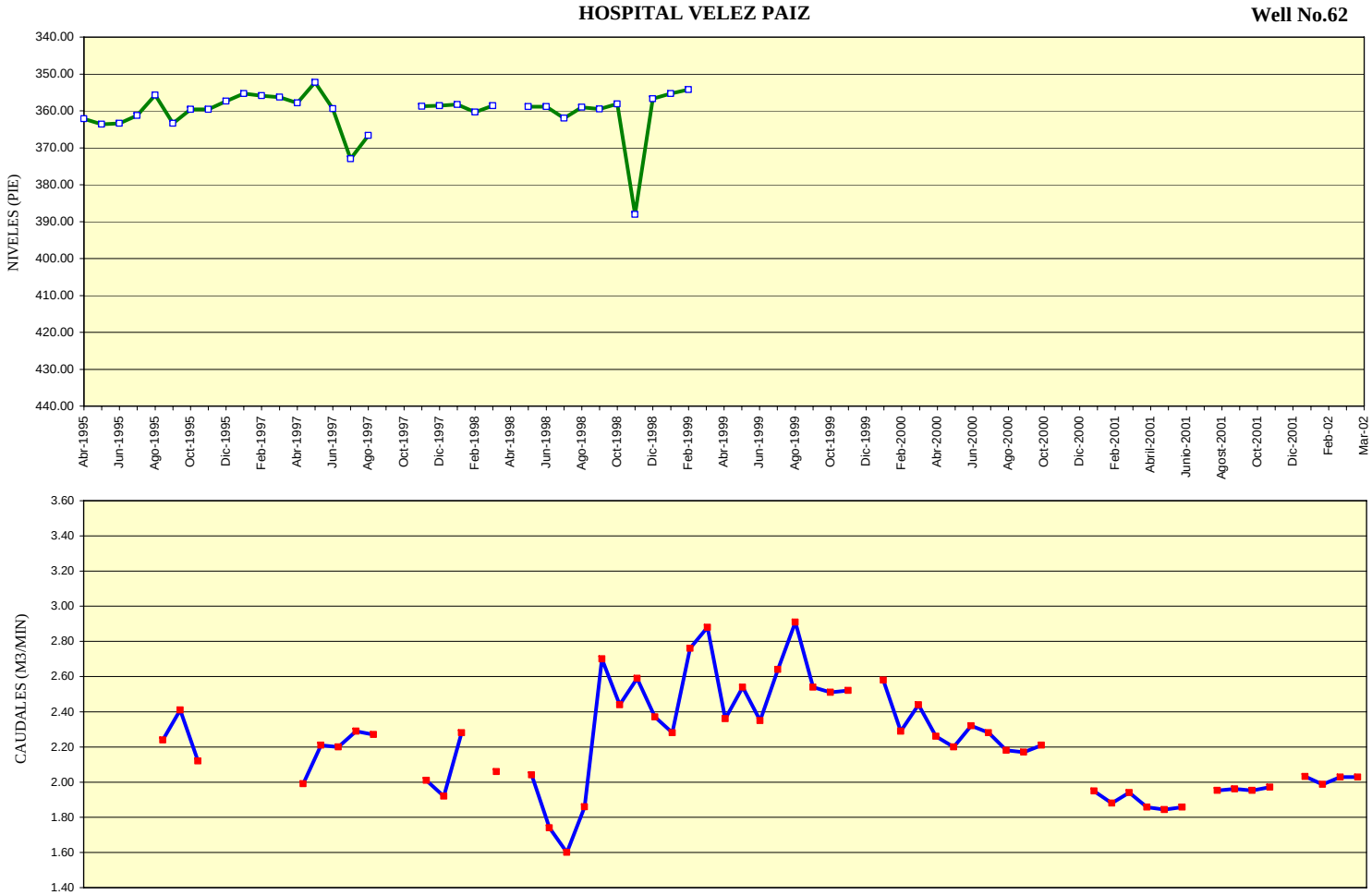
ANNEX 3.C(105) Punping Discharge and Water Level in Wells

ANNEX 3.C(106) Punping Discharge and Water Level in Wells

KM. 14 ½ C. VIEJA A LEÓN (Well No.61)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.21	499.31
May-1995	2.23	488.82
Jun-1995	2.16	497.08
Jul-1995	1.80	495.74
Ago-1995	1.63	498.66
Sept-1995	2.09	497.10
Oct-1995	2.01	504.30
Nov-1995	2.05	505.00
Dic-1995	1.99	512.83
Ene-1997	1.70	
Feb-1997	1.74	
Mar-1997	1.78	
Abr-1997	1.53	
May-1997	1.61	
Jun-1997	1.51	
Jul-1997	1.40	
Ago-1997	1.51	
Sept-1997		
Oct-1997		
Nov-1997	1.57	
Dic-1997	1.19	
Ene-1998	1.61	
Feb-1998		
Mar-1998	1.60	
Abr-1998		
May-1998	1.59	
Jun-1998	1.60	
Jul-1998	1.61	
Ago-1998	1.64	
Sept-1998	1.44	
Oct-1998	1.60	
Nov-1998	1.64	
Dic-1998	1.63	
Ene-1999	1.66	
Feb-1999	1.86	
Mar-1999	1.59	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.62	
May-1999	1.70	
Jun-1999	1.71	
Jul-1999	1.69	
Ago-1999	1.70	
Sept-1999	1.70	
Oct-1999	1.68	
Nov-1999	1.79	
Dic-1999		
Ene-2000	1.83	
Feb-2000	1.82	490.06
Mar-2000	1.76	495.31
Abr-2000	1.75	495.16
May-2000	1.82	492.66
Jun-2000	2.51	495.25
Jul-2000	1.74	455.39
Ago-2000	1.74	455.75
Sept-2000	1.73	
Oct-2000	1.70	502.63
Nov-2000		
Dic-2000		
Ene-2001	1.71	502.63
Feb-2001	1.65	
Mar-2001	1.71	524.50
Abril-01	1.75	520.25
Mayo-01	1.80	522.20
Junio-01		
Julio-01	1.80	
Aug-01	1.82	513.40
Sep-01	1.81	506.42
Octub-01	1.83	510.00
Nov-01	1.80	510.80
Dic-01	1.86	558.16
Enero-01	1.80	511.92
Feb- 02	1.80	512.50
Mar-02	1.82	513.00



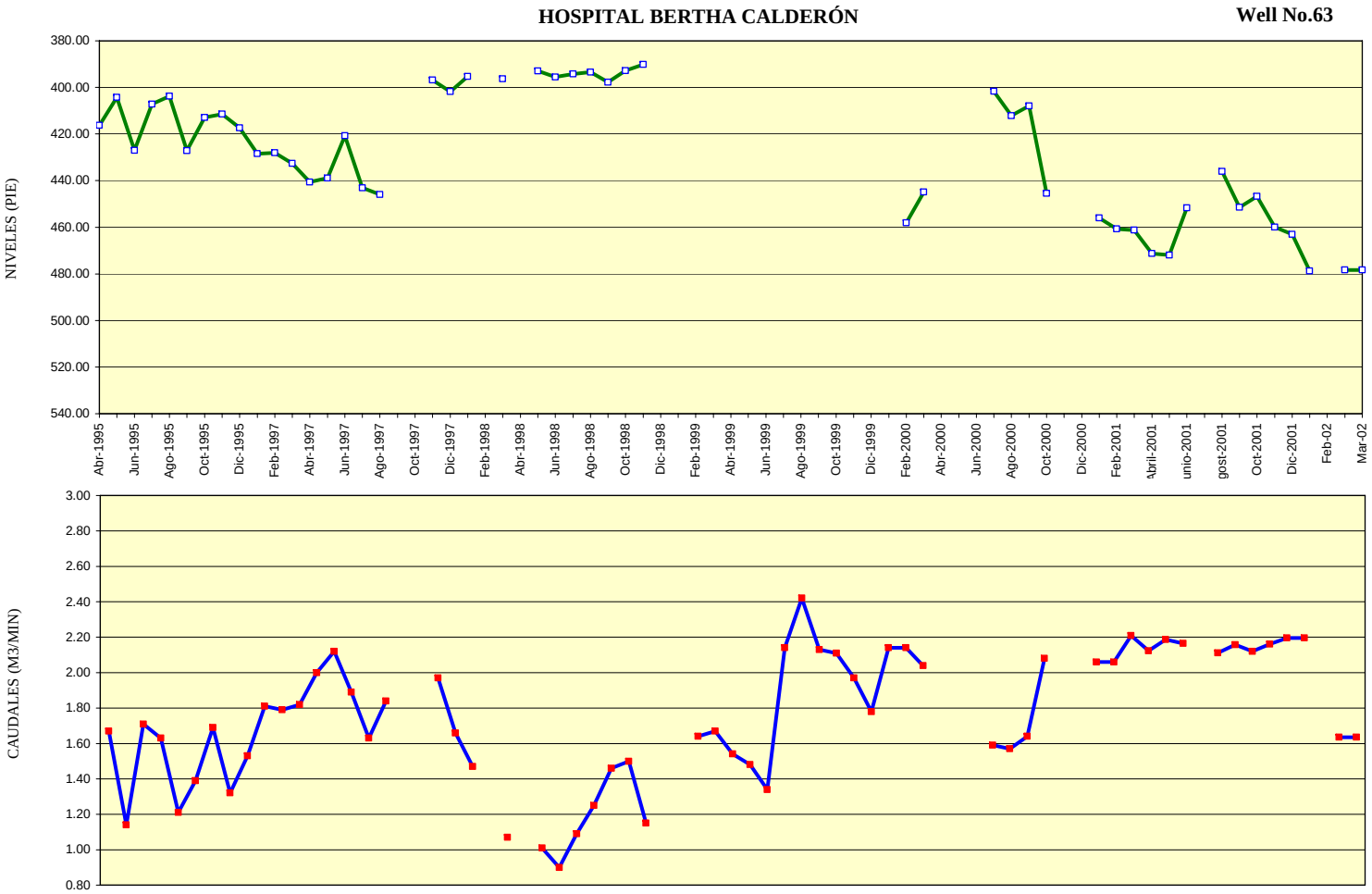
ANNEX 3.C(107) Punping Discharge and Water Level in Wells

ANNEX 3.C(108) Punping Discharge and Water Level in Wells

HOSPITAL VELEZ PAIZ (Well No.62)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		362.14
May-1995		363.65
Jun-1995		363.39
Jul-1995		361.26
Ago-1995	2.24	355.75
Sept-1995	2.41	363.40
Oct-1995	2.12	359.60
Nov-1995		359.58
Dic-1995		357.38
Ene-1997		355.33
Feb-1997		355.92
Mar-1997		356.33
Abr-1997	1.99	357.83
May-1997	2.21	352.25
Jun-1997	2.20	359.42
Jul-1997	2.29	373.00
Ago-1997	2.27	366.66
Sept-1997		
Oct-1997		
Nov-1997	2.01	358.75
Dic-1997	1.92	358.58
Ene-1998	2.28	358.29
Feb-1998		360.33
Mar-1998	2.06	358.58
Abr-1998		
May-1998	2.04	358.83
Jun-1998	1.74	358.83
Jul-1998	1.60	362.00
Ago-1998	1.86	359.00
Sept-1998	2.70	359.50
Oct-1998	2.44	358.08
Nov-1998	2.59	388.09
Dic-1998	2.37	356.67
Ene-1999	2.28	355.30
Feb-1999	2.76	354.25
Mar-1999	2.88	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.36	
May-1999	2.54	
Jun-1999	2.35	
Jul-1999	2.64	
Ago-1999	2.91	
Sept-1999	2.54	
Oct-1999	2.51	
Nov-1999	2.52	
Dic-1999		
Ene-2000	2.58	
Feb-2000	2.29	
Mar-2000	2.44	
Abr-2000	2.26	
May-2000	2.20	
Jun-2000	2.32	
Jul-2000	2.28	
Ago-2000	2.18	
Sept-2000	2.17	
Oct-2000	2.21	
Nov-2000		
Dic-2000		
Ene-2001	1.95	
Feb-2001	1.88	OBST
Mar-2001	1.94	OBST
Abril-2001	1.86	OBST
Mayo-2001	1.84	OBST
Junio-2001	1.86	
Julio-2001		
Agost-2001	1.95	OBST
Sept-2001	1.96	OBST
Oct-2001	1.95	OBST
Nov-2001	1.97	OBST
Dic-2001		
Ener-02	2.03	OBST
Feb-02	1.99	OBST
Mar-02	2.03	OBST



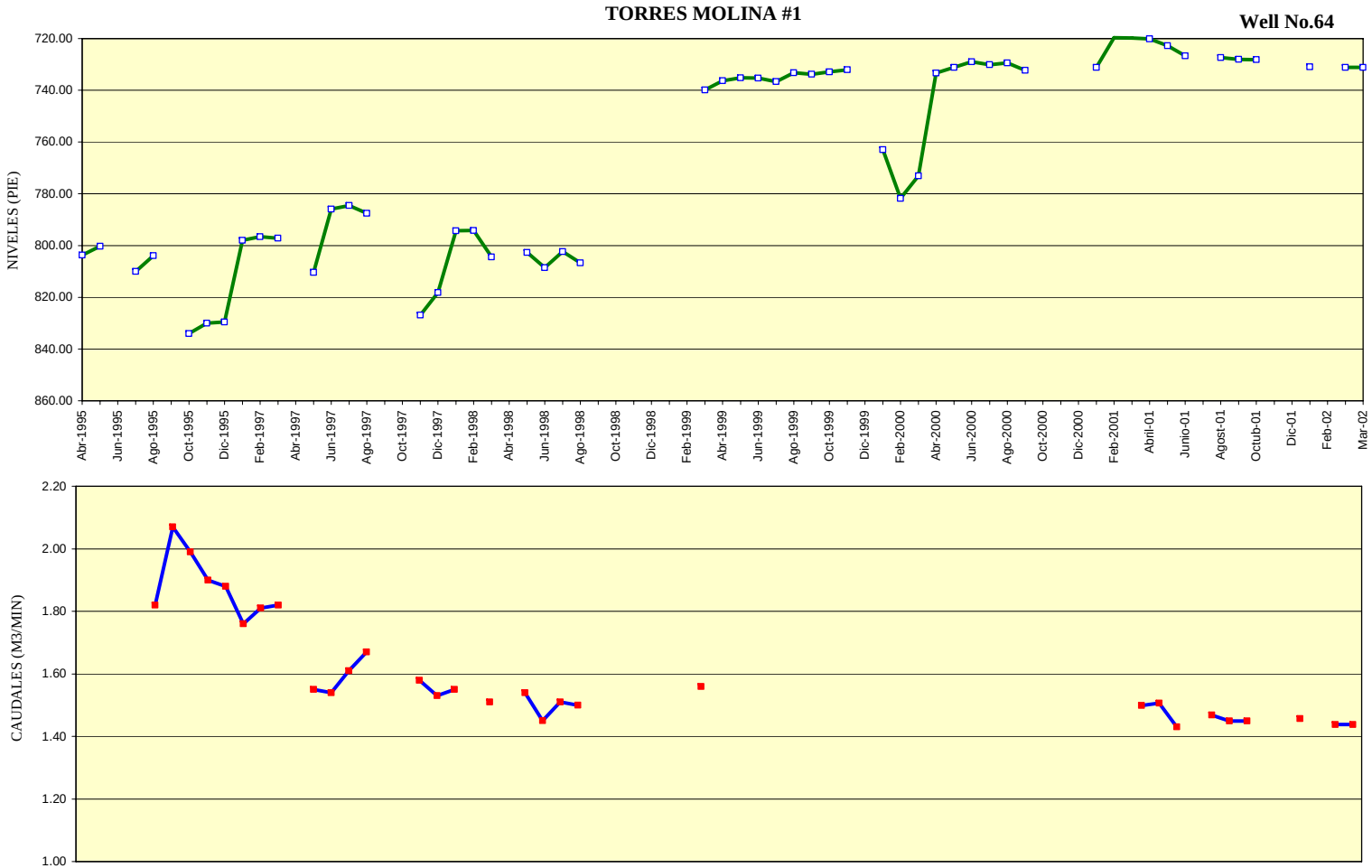
ANNEX 3.C(109) Punping Discharge and Water Level in Wells

ANNEX 3.C(110) Punping Discharge and Water Level in Wells

HOSPITAL BERTHA CALDERÓN (Well No.63)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.67	416.33
May-1995	1.14	404.26
Jun-1995	1.71	427.06
Jul-1995	1.63	407.18
Ago-1995	1.21	403.74
Sept-1995	1.39	427.10
Oct-1995	1.69	412.90
Nov-1995	1.32	411.50
Dic-1995	1.53	417.42
Ene-1997	1.81	428.42
Feb-1997	1.79	428.00
Mar-1997	1.82	432.66
Abr-1997	2.00	440.58
May-1997	2.12	438.92
Jun-1997	1.89	420.75
Jul-1997	1.63	443.08
Ago-1997	1.84	446.00
Sept-1997		
Oct-1997		
Nov-1997	1.97	396.83
Dic-1997	1.66	401.83
Ene-1998	1.47	395.29
Feb-1998		
Mar-1998	1.07	396.37
Abr-1998		
May-1998	1.01	392.92
Jun-1998	0.90	395.58
Jul-1998	1.09	394.25
Ago-1998	1.25	393.41
Sept-1998	1.46	397.75
Oct-1998	1.50	392.75
Nov-1998	1.15	390.25
Dic-1998		
Ene-1999		
Feb-1999	1.64	
Mar-1999	1.67	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.54	
May-1999	1.48	
Jun-1999	1.34	
Jul-1999	2.14	
Ago-1999	2.42	
Sept-1999	2.13	
Oct-1999	2.11	
Nov-1999	1.97	
Dic-1999	1.78	
Ene-2000	2.14	
Feb-2000	2.14	458.16
Mar-2000	2.04	444.87
Abr-2000		
May-2000		
Jun-2000		
Jul-2000	1.59	401.66
Ago-2000	1.57	412.08
Sept-2000	1.64	407.92
Oct-2000	2.08	445.42
Nov-2000		
Dic-2000		
Ene-2001	2.06	456.04
Feb-2001	2.06	460.75
Mar-2001	2.21	461.30
Abril-2001	2.12	471.25
Mayo-2001	2.19	472.00
Junio-2001	2.17	451.70
Julio-2001		
Agost-2001	2.11	436.00
Sept-2001	2.16	451.50
Oct-2001	2.12	446.80
Nov-2001	2.16	459.90
Dic-2001	2.20	463.08
Ener-02	2.20	478.75
Feb-02		
Mar-02	1.64	478.40



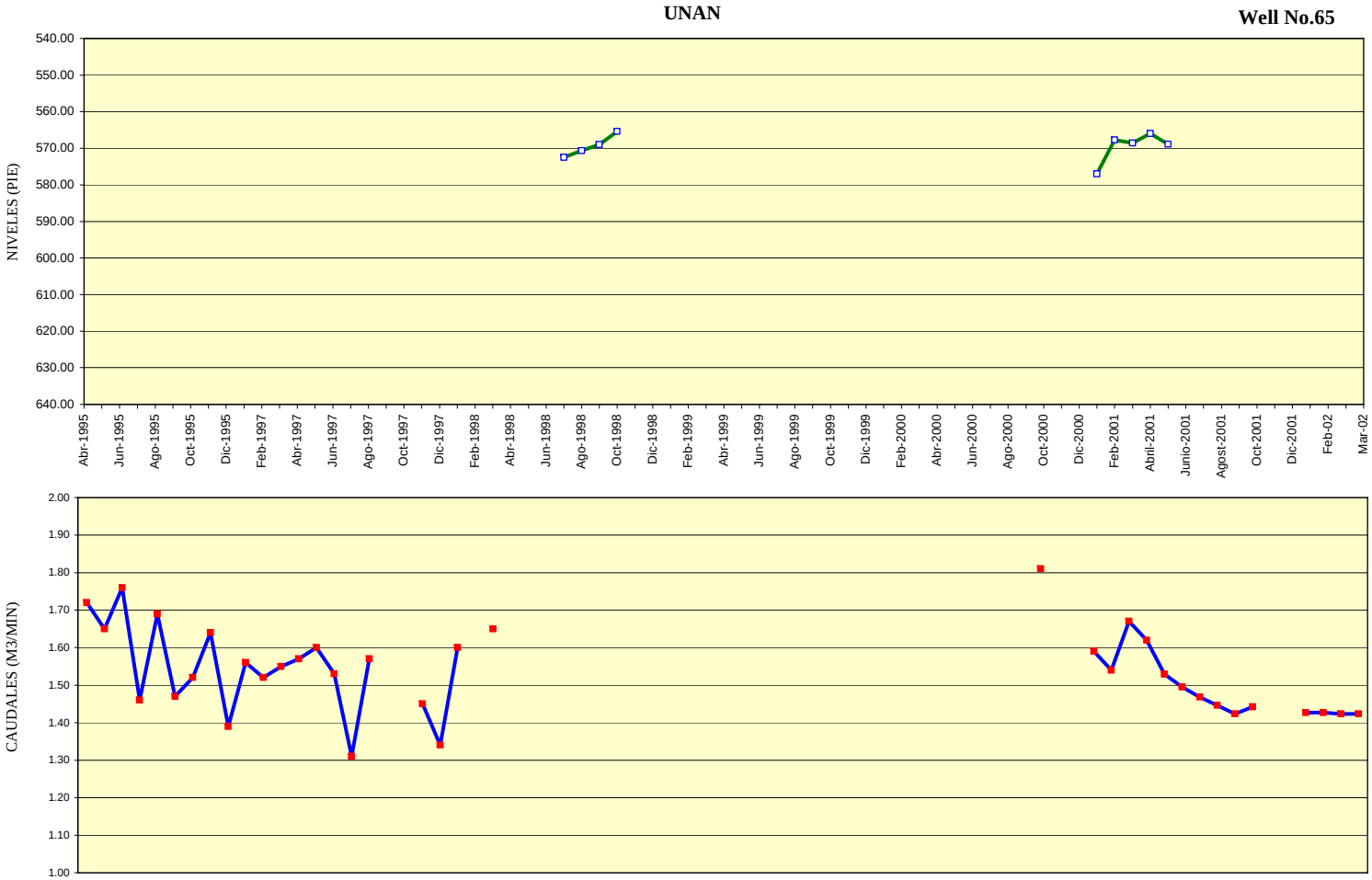
ANNEX 3.C(111) Punping Discharge and Water Level in Wells

ANNEX 3.C(112) Punping Discharge and Water Level in Wells

TORRES MOLINA #1 (Well No.64)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		803.67
May-1995		800.25
Jun-1995		
Jul-1995		810.09
Ago-1995	1.82	803.99
Sept-1995	2.07	
Oct-1995	1.99	834.00
Nov-1995	1.90	830.00
Dic-1995	1.88	829.61
Ene-1997	1.76	798.00
Feb-1997	1.81	796.66
Mar-1997	1.82	797.16
Abr-1997		
May-1997	1.55	810.33
Jun-1997	1.54	785.92
Jul-1997	1.61	784.58
Ago-1997	1.67	787.50
Sept-1997		
Oct-1997		
Nov-1997	1.58	826.96
Dic-1997	1.53	818.25
Ene-1998	1.55	794.25
Feb-1998		794.16
Mar-1998	1.51	804.41
Abr-1998		
May-1998	1.54	802.66
Jun-1998	1.45	808.58
Jul-1998	1.51	802.35
Ago-1998	1.50	806.75
Sept-1998		
Oct-1998		
Nov-1998		
Dic-1998		
Ene-1999		
Feb-1999		
Mar-1999	1.56	739.92

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		736.33
May-1999		735.16
Jun-1999		735.25
Jul-1999		736.66
Ago-1999		733.25
Sept-1999		733.83
Oct-1999		732.83
Nov-1999		732.08
Dic-1999		
Ene-2000		763.00
Feb-2000		781.79
Mar-2000		773.08
Abr-2000		733.33
May-2000		731.16
Jun-2000		729.00
Jul-2000		730.16
Ago-2000		729.41
Sept-2000		732.25
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001		731.16
Feb-2001		719.66
Mar-2001		719.75
Abril-01	1.50	720.08
Mayo-01	1.51	722.75
Junio-01	1.43	726.70
Julio-01		
Agost-01	1.47	727.30
Sept-01	1.45	728.00
Octub-01	1.45	728.16
Nov-01		
Dic-01		
Enero-02	1.46	730.92
Feb-02		
Mar-02	1.44	731.16



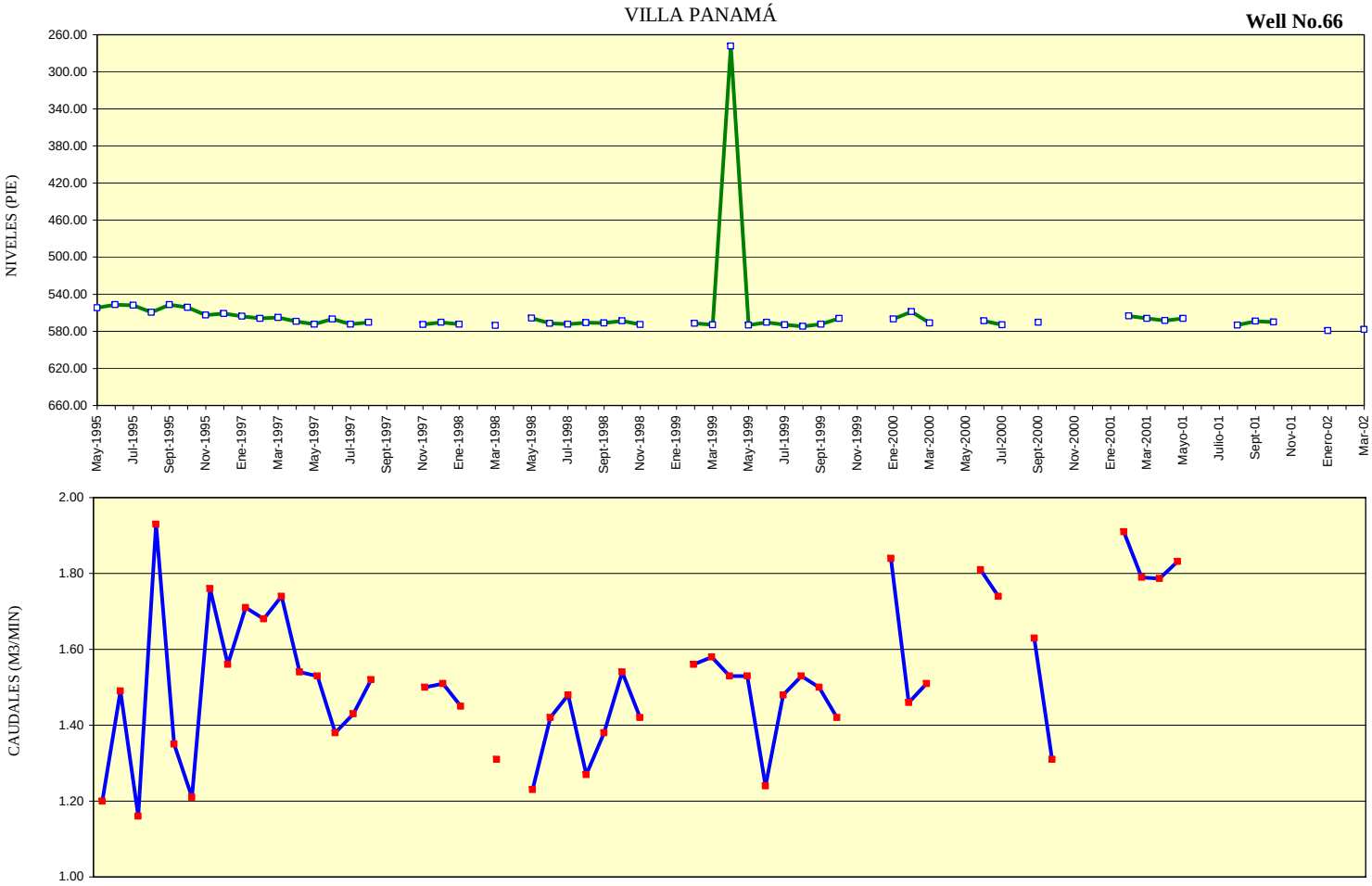
ANNEX 3.C(113) Punping Discharge and Water Level in Wells

ANNEX 3.C(114) Punping Discharge and Water Level in Wells

UNAN (Well No.65)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.72	
May-1995	1.65	
Jun-1995	1.76	
Jul-1995	1.46	
Ago-1995	1.69	
Sept-1995	1.47	
Oct-1995	1.52	
Nov-1995	1.64	
Dic-1995	1.39	
Ene-1997	1.56	
Feb-1997	1.52	
Mar-1997	1.55	
Abr-1997	1.57	
May-1997	1.60	
Jun-1997	1.53	
Jul-1997	1.31	
Ago-1997	1.57	
Sept-1997		
Oct-1997		
Nov-1997	1.45	
Dic-1997	1.34	
Ene-1998	1.60	
Feb-1998		
Mar-1998	1.65	
Abr-1998		
May-1998		
Jun-1998		
Jul-1998		572.50
Ago-1998		570.62
Sept-1998		569.00
Oct-1998		565.41
Nov-1998		
Dic-1998		
Ene-1999		
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000	1.81	
Nov-2000		
Dic-2000		
Ene-2001	1.59	577.05
Feb-2001	1.54	567.75
Mar-2001	1.67	568.58
Abril-2001	1.62	566.00
Mayo-2001	1.53	568.92
Junio-2001	1.50	
Julio-2001	1.47	
Agost-2001	1.45	
Sept-2001	1.42	
Oct-2001	1.44	
Nov-2001		
Dic-2001		
Enero-02	1.43	OBST
Feb-02	1.43	OBST
Mar-02	1.42	OBST



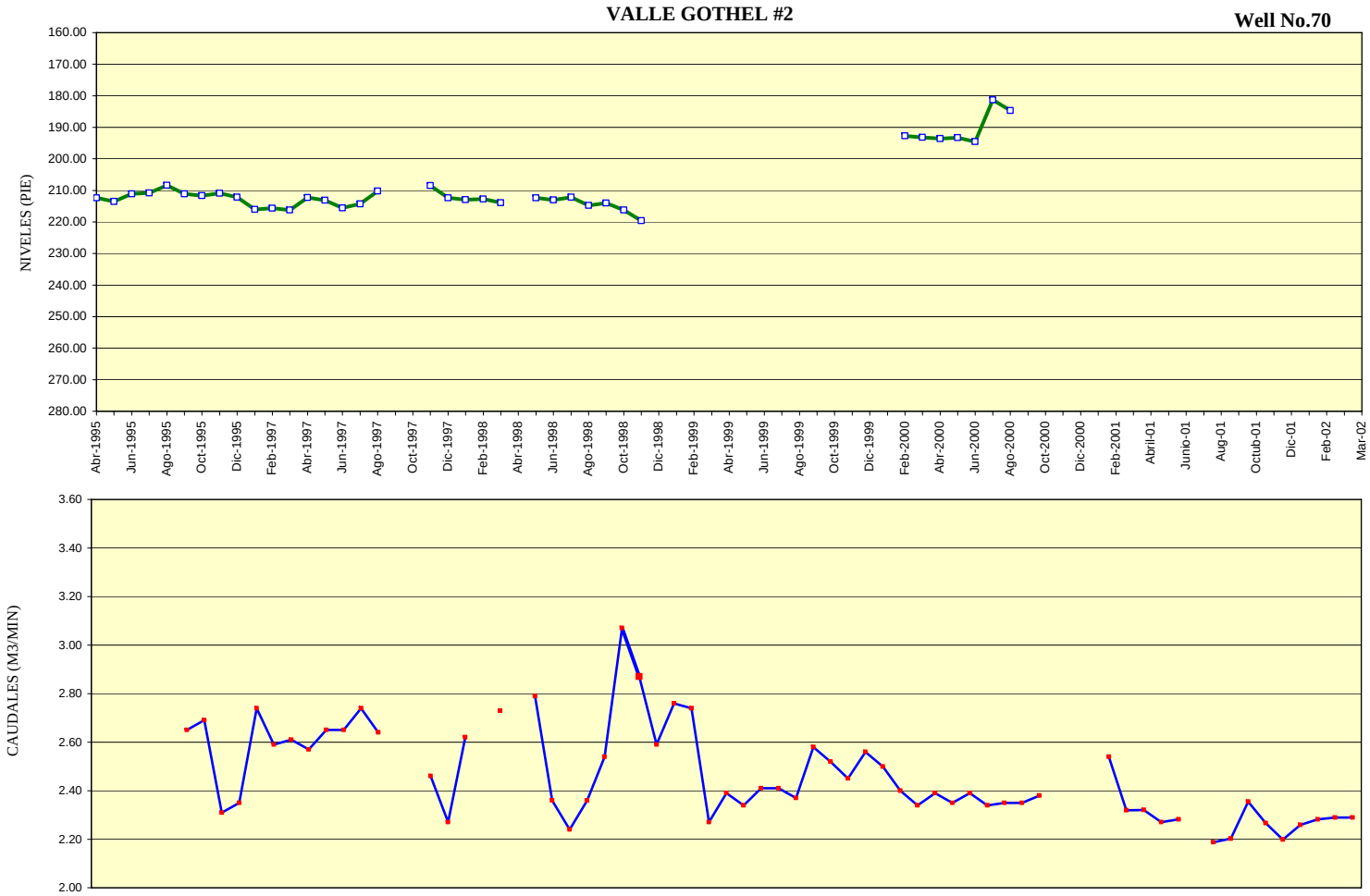
ANNEX 3.C(115) Punping Discharge and Water Level in Wells

ANNEX 3.C(116) Punping Discharge and Water Level in Wells

VILLA PANAMÁ (Well No.66)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995	1.20	554.58
Jun-1995	1.49	551.43
Jul-1995	1.16	551.83
Ago-1995	1.93	559.57
Sept-1995	1.35	551.40
Oct-1995	1.21	554.30
Nov-1995	1.76	562.33
Dic-1995	1.56	560.75
Ene-1997	1.71	563.83
Feb-1997	1.68	566.16
Mar-1997	1.74	565.00
Abr-1997	1.54	569.25
May-1997	1.53	572.42
Jun-1997	1.38	566.79
Jul-1997	1.43	572.33
Ago-1997	1.52	570.25
Sept-1997		
Oct-1997		
Nov-1997	1.50	572.75
Dic-1997	1.51	570.41
Ene-1998	1.45	572.41
Feb-1998		
Mar-1998	1.31	573.75
Abr-1998		
May-1998	1.23	565.62
Jun-1998	1.42	571.33
Jul-1998	1.48	572.50
Ago-1998	1.27	570.62
Sept-1998	1.38	571.00
Oct-1998	1.54	568.87
Nov-1998	1.42	572.75
Dic-1998		
Ene-1999		
Feb-1999	1.56	571.42
Mar-1999	1.58	572.90
Abr-1999	1.53	272.18

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	1.53	573.25
Jun-1999	1.24	570.33
Jul-1999	1.48	573.00
Ago-1999	1.53	574.75
Sept-1999	1.50	572.50
Oct-1999	1.42	566.08
Nov-1999		
Dic-1999		
Ene-2000	1.84	566.66
Feb-2000	1.46	558.88
Mar-2000	1.51	571.08
Abr-2000		
May-2000		
Jun-2000	1.81	568.67
Jul-2000	1.74	572.92
Ago-2000		
Sept-2000	1.63	570.33
Oct-2000	1.31	
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	1.91	563.30
Mar-2001	1.79	566.04
Abril-01	1.79	568.33
Mayo-01	1.83	566.16
Junio-01		
Julio-01		
Agost-01	2.08	573.25
Sept-01	2.05	568.96
Octub-01	2.12	570.16
Nov-01		
Dic-01		
Enero-02	2.26	579.33
Feb-02		
Mar-02	2.28	578.00



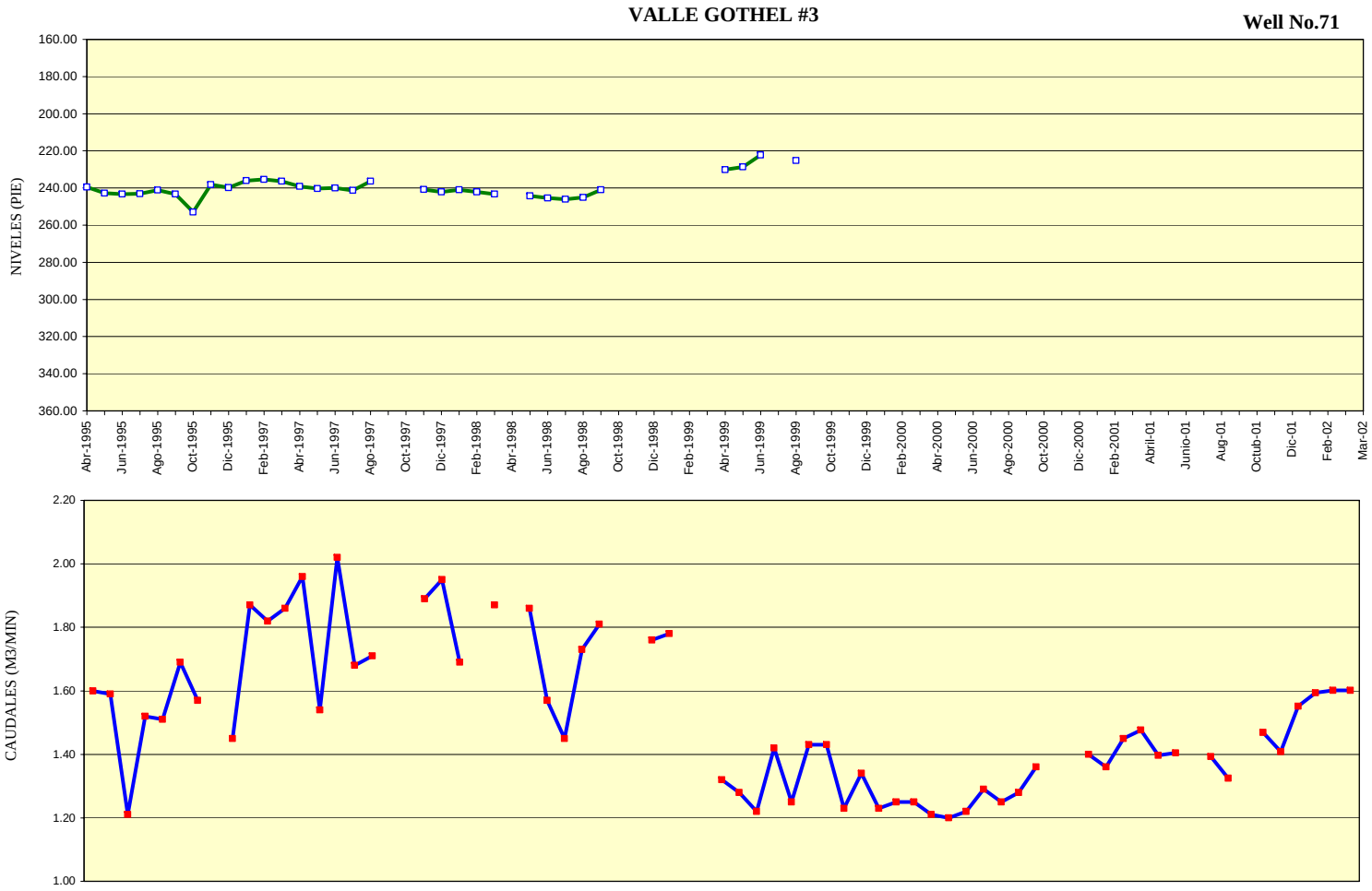
ANNEX 3.C(117) Punping Discharge and Water Level in Wells

ANNEX 3.C(118) Punping Discharge and Water Level in Wells

VALLE GOTHEL #2 (Well No.70)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		212.31
May-1995		213.50
Jun-1995		211.07
Jul-1995		210.77
Ago-1995		208.41
Sept-1995	2.65	211.10
Oct-1995	2.69	211.70
Nov-1995	2.31	210.94
Dic-1995	2.35	212.15
Ene-1997	2.74	216.08
Feb-1997	2.59	215.66
Mar-1997	2.61	216.25
Abr-1997	2.57	212.25
May-1997	2.65	213.16
Jun-1997	2.65	215.50
Jul-1997	2.74	214.25
Ago-1997	2.64	210.25
Sept-1997		
Oct-1997		
Nov-1997	2.46	208.50
Dic-1997	2.27	212.33
Ene-1998	2.62	212.92
Feb-1998		212.75
Mar-1998	2.73	213.87
Abr-1998		
May-1998	2.79	212.33
Jun-1998	2.36	213.00
Jul-1998	2.24	212.16
Ago-1998	2.36	214.75
Sept-1998	2.54	214.00
Oct-1998	3.07	216.25
Nov-1998	2.87	219.58
Dic-1998	2.59	
Ene-1999	2.76	
Feb-1999	2.74	
Mar-1999	2.27	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.39	
May-1999	2.34	
Jun-1999	2.41	
Jul-1999	2.41	
Ago-1999	2.37	
Sept-1999	2.58	
Oct-1999	2.52	
Nov-1999	2.45	
Dic-1999	2.56	
Ene-2000	2.50	
Feb-2000	2.40	192.70
Mar-2000	2.34	193.20
Abr-2000	2.39	193.60
May-2000	2.35	193.33
Jun-2000	2.39	194.50
Jul-2000	2.34	181.25
Ago-2000	2.35	184.66
Sept-2000	2.35	
Oct-2000	2.38	
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	2.54	M/E
Mar-2001	2.32	M/E
Abril-01	2.32	M/E
Mayo-01	2.27	M/E
Junio-01	2.28	
Julio-01		
Aug-01	2.19	
Sep-01	2.20	
Octub-01	2.35	
Nov-01	2.27	
Dic-01	2.20	
Enero-02	2.26	OBST
Feb-02	2.28	OBST
Mar-02	2.29	OBST



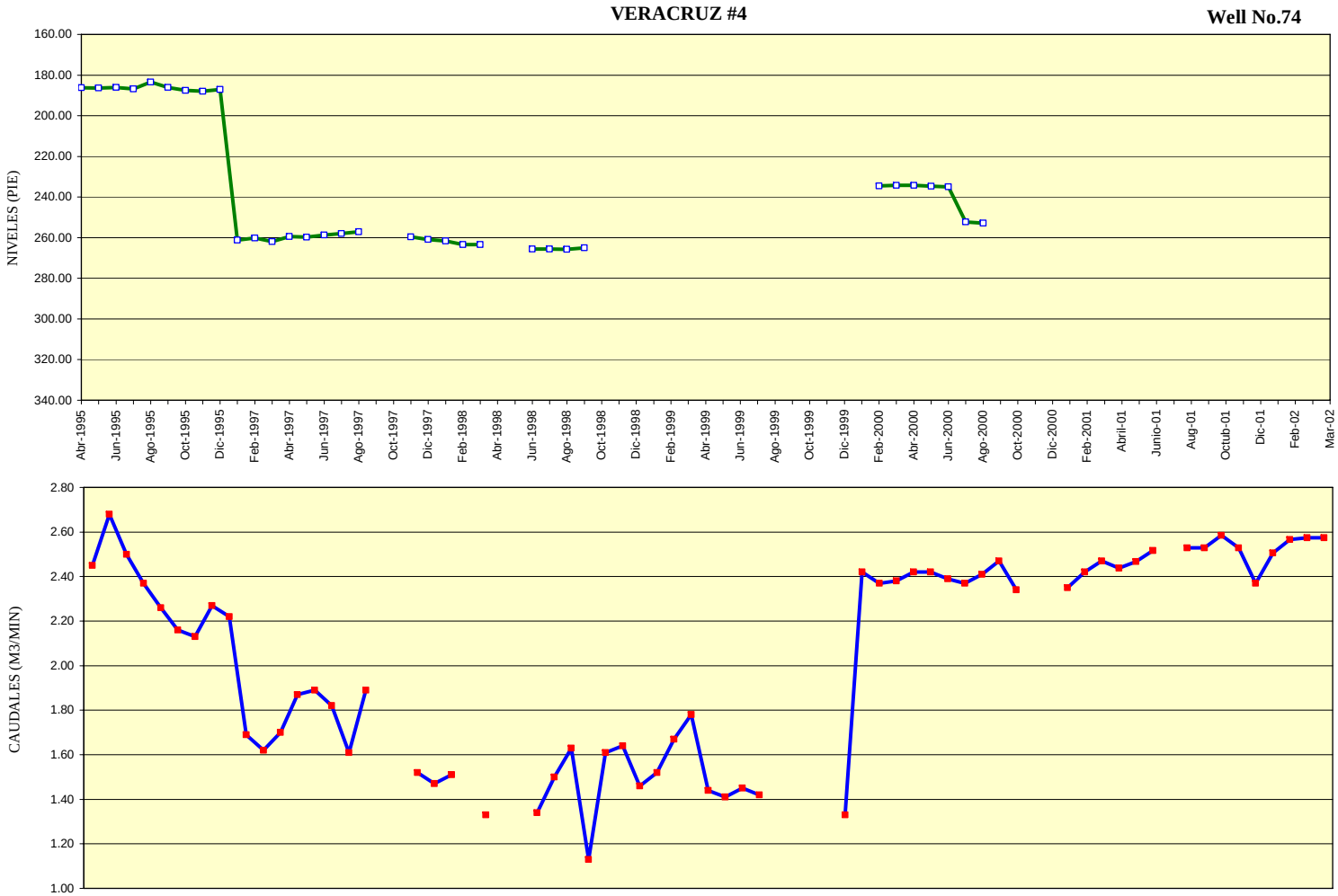
ANNEX 3.C(119) Punping Discharge and Water Level in Wells

ANNEX 3.C(120) Punping Discharge and Water Level in Wells

VALLE GOTHEL #3 (Well No.71)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.60	239.41
May-1995	1.59	242.82
Jun-1995	1.21	243.24
Jul-1995	1.52	243.15
Ago-1995	1.51	241.15
Sept-1995	1.69	243.20
Oct-1995	1.57	253.00
Nov-1995		238.19
Dic-1995	1.45	239.73
Ene-1997	1.87	236.00
Feb-1997	1.82	235.33
Mar-1997	1.86	236.42
Abr-1997	1.96	239.16
May-1997	1.54	240.25
Jun-1997	2.02	240.00
Jul-1997	1.68	241.25
Ago-1997	1.71	236.33
Sept-1997		
Oct-1997		
Nov-1997	1.89	240.75
Dic-1997	1.95	242.16
Ene-1998	1.69	240.92
Feb-1998		242.08
Mar-1998	1.87	243.33
Abr-1998		
May-1998	1.86	244.25
Jun-1998	1.57	245.41
Jul-1998	1.45	246.00
Ago-1998	1.73	245.00
Sept-1998	1.81	241.00
Oct-1998		
Nov-1998		
Dic-1998	1.76	
Ene-1999	1.78	
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.32	230.16
May-1999	1.28	228.66
Jun-1999	1.22	222.20
Jul-1999	1.42	
Ago-1999	1.25	224.16
Sept-1999	1.43	
Oct-1999	1.43	
Nov-1999	1.23	
Dic-1999	1.34	
Ene-2000	1.23	
Feb-2000	1.25	
Mar-2000	1.25	
Abr-2000	1.21	
May-2000	1.20	
Jun-2000	1.22	
Jul-2000	1.29	
Ago-2000	1.25	
Sept-2000	1.28	
Oct-2000	1.36	
Nov-2000		
Dic-2000		
Ene-2001	1.40	
Feb-2001	1.36	M/E
Mar-2001	1.45	M/E
Abril-01	1.48	M/E
Mayo-01	1.40	M/E
Junio-01	1.40	
Julio-01		
Aug-01	1.39	
Sep-01	1.32	
Octub-01		
Nov-01	1.47	
Dic-01	1.41	
Enero-02	1.55	OBST
Feb-02	1.59	OBST
Mar-02	1.60	OBST



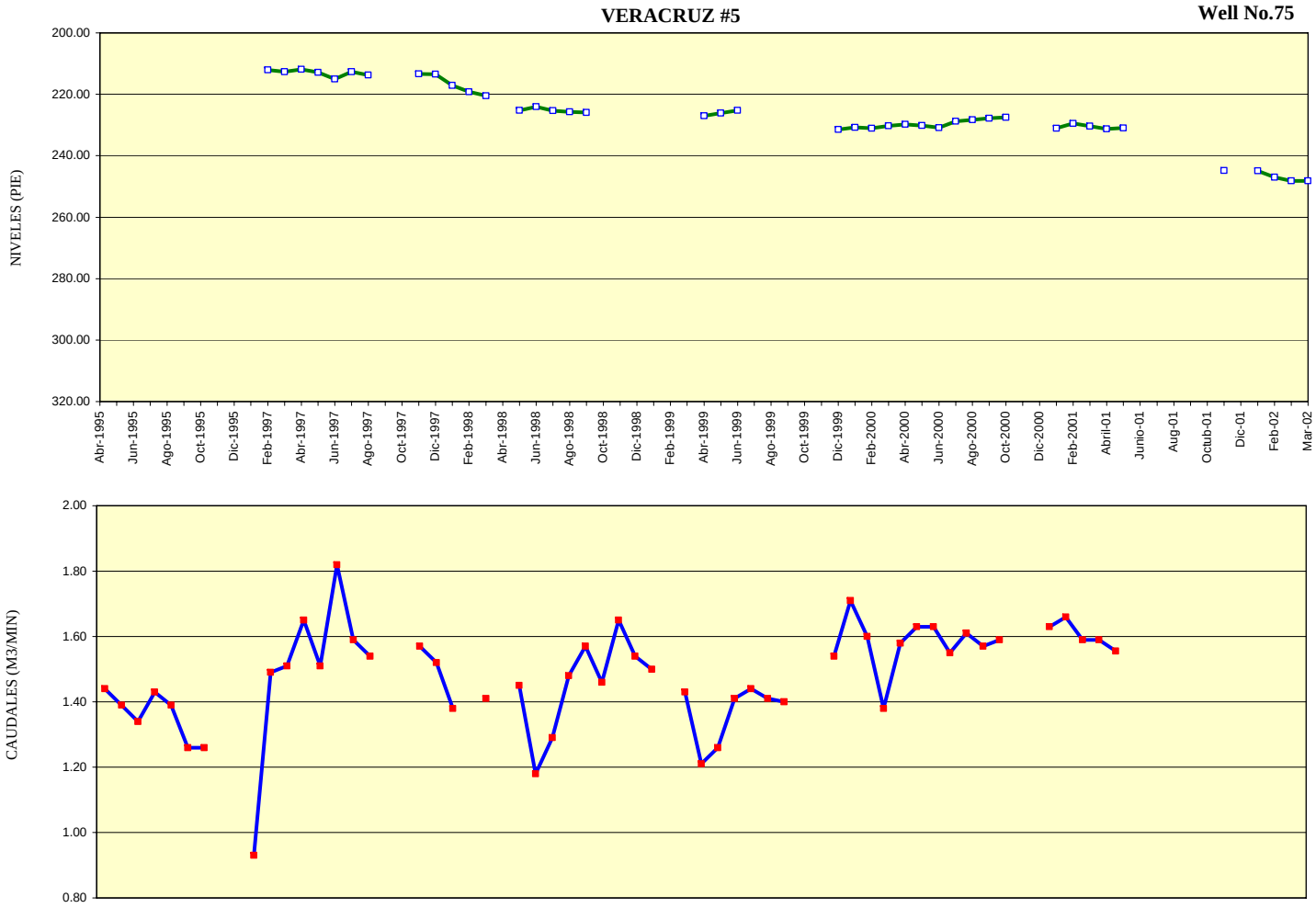
ANNEX 3.C(121) Punping Discharge and Water Level in Wells

ANNEX 3.C(122) Punping Discharge and Water Level in Wells

VERACRUZ #4 (Well No.74)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.45	186.17
May-1995	2.68	186.37
Jun-1995	2.50	186.07
Jul-1995	2.37	186.83
Ago-1995	2.26	183.48
Sept-1995	2.16	186.10
Oct-1995	2.13	187.60
Nov-1995	2.27	187.98
Dic-1995	2.22	187.15
Ene-1997	1.69	261.25
Feb-1997	1.62	260.16
Mar-1997	1.70	261.92
Abr-1997	1.87	259.50
May-1997	1.89	259.75
Jun-1997	1.82	258.66
Jul-1997	1.61	258.00
Ago-1997	1.89	257.16
Sept-1997		
Oct-1997		
Nov-1997	1.52	259.66
Dic-1997	1.47	260.92
Ene-1998	1.51	261.58
Feb-1998		263.37
Mar-1998	1.33	263.33
Abr-1998		
May-1998		
Jun-1998	1.34	265.66
Jul-1998	1.50	265.66
Ago-1998	1.63	265.75
Sept-1998	1.13	265.00
Oct-1998	1.61	
Nov-1998	1.64	
Dic-1998	1.46	
Ene-1999	1.52	
Feb-1999	1.67	
Mar-1999	1.78	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.44	
May-1999	1.41	
Jun-1999	1.45	
Jul-1999	1.42	
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999	1.33	
Ene-2000	2.42	
Feb-2000	2.37	234.58
Mar-2000	2.38	234.25
Abr-2000	2.42	234.25
May-2000	2.42	234.66
Jun-2000	2.39	235.00
Jul-2000	2.37	252.20
Ago-2000	2.41	252.92
Sept-2000	2.47	
Oct-2000	2.34	
Nov-2000		
Dic-2000		
Ene-2001	2.35	
Feb-2001	2.42	M/E
Mar-2001	2.47	M/E
Abril-01	2.44	M/E
Mayo-01	2.47	M/E
Junio-01	2.52	
Julio-01		
Aug-01	2.53	
Sep-01	2.53	
Octub-01	2.59	
Nov-01	2.53	
Dic-01	2.37	
Enero-02	2.51	OBST
Feb-02	2.57	OBST
Mar-02	2.57	OBST



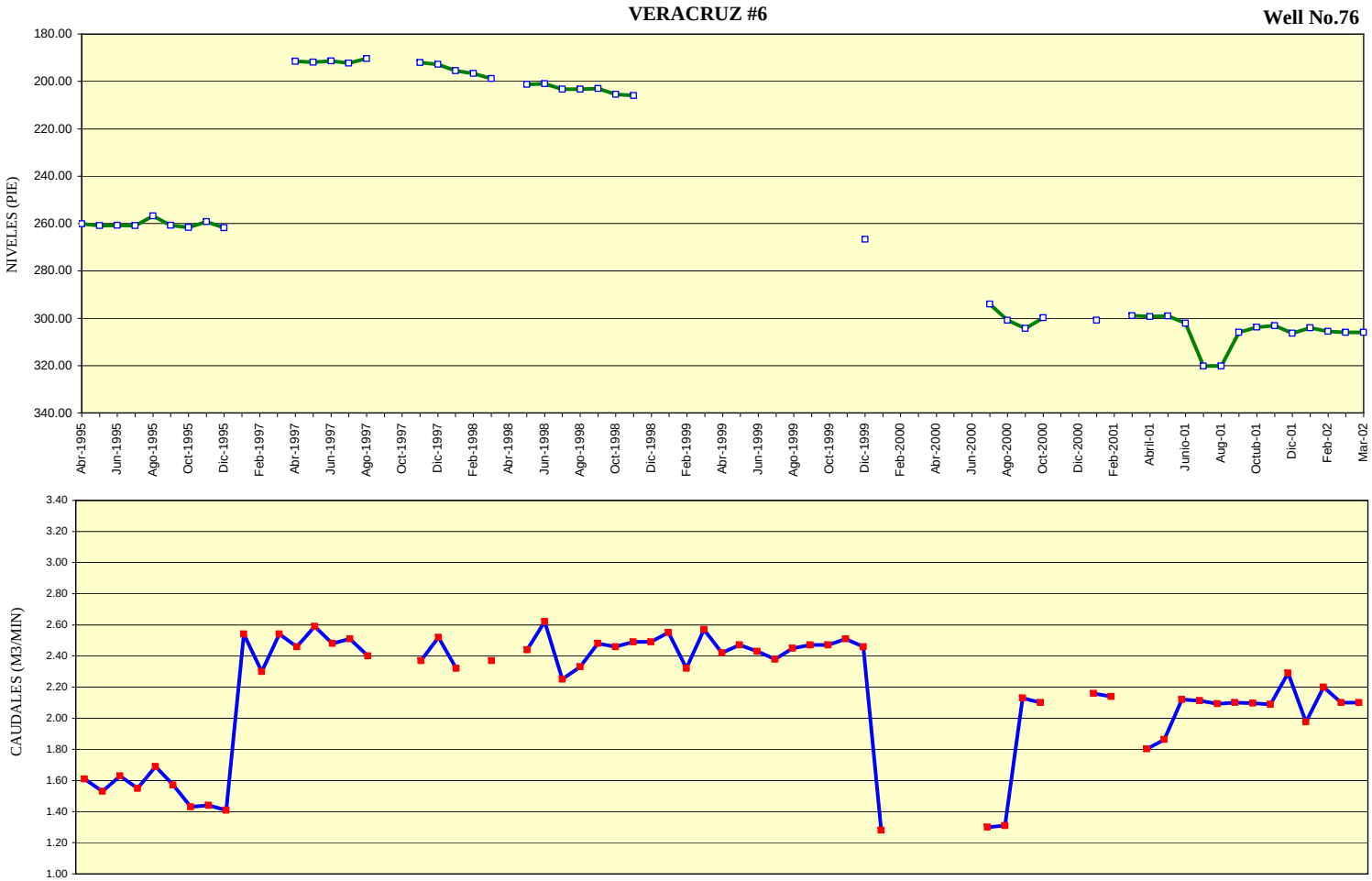
ANNEX 3.C(123) Punping Discharge and Water Level in Wells

ANNEX 3.C(124) Punping Discharge and Water Level in Wells

VERACRUZ #5 (Well No.75)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.44	
May-1995	1.39	
Jun-1995	1.34	
Jul-1995	1.43	
Ago-1995	1.39	
Sept-1995	1.26	
Oct-1995	1.26	
Nov-1995		
Dic-1995		
Ene-1997	0.93	
Feb-1997	1.49	212.08
Mar-1997	1.51	212.66
Abr-1997	1.65	211.83
May-1997	1.51	212.83
Jun-1997	1.82	215.08
Jul-1997	1.59	212.66
Ago-1997	1.54	213.75
Sept-1997		
Oct-1997		
Nov-1997	1.57	213.33
Dic-1997	1.52	213.44
Ene-1998	1.38	217.16
Feb-1998		219.16
Mar-1998	1.41	220.45
Abr-1998		
May-1998	1.45	225.25
Jun-1998	1.18	224.00
Jul-1998	1.29	225.37
Ago-1998	1.48	225.75
Sept-1998	1.57	225.92
Oct-1998	1.46	
Nov-1998	1.65	
Dic-1998	1.54	
Ene-1999	1.50	
Feb-1999		
Mar-1999	1.43	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.21	227.00
May-1999	1.26	226.16
Jun-1999	1.41	225.25
Jul-1999	1.44	
Ago-1999	1.41	
Sept-1999	1.40	
Oct-1999		
Nov-1999		
Dic-1999	1.54	231.42
Ene-2000	1.71	230.75
Feb-2000	1.60	231.04
Mar-2000	1.38	230.30
Abr-2000	1.58	229.75
May-2000	1.63	230.20
Jun-2000	1.63	230.83
Jul-2000	1.55	228.79
Ago-2000	1.61	228.33
Sept-2000	1.57	227.75
Oct-2000	1.59	227.50
Nov-2000		
Dic-2000		
Ene-2001	1.63	231.08
Feb-2001	1.66	229.50
Mar-2001	1.59	230.40
Abril-01	1.59	231.25
Mayo-01	1.56	230.96
Junio-01		
Julio-01		
Aug-01		
Sep-01		
Octub-01		
Nov-01	2.27	244.80
Dic-01		
Enero-02	2.43	244.92
Feb-02	2.43	247.04
Mar-02	2.40	248.20



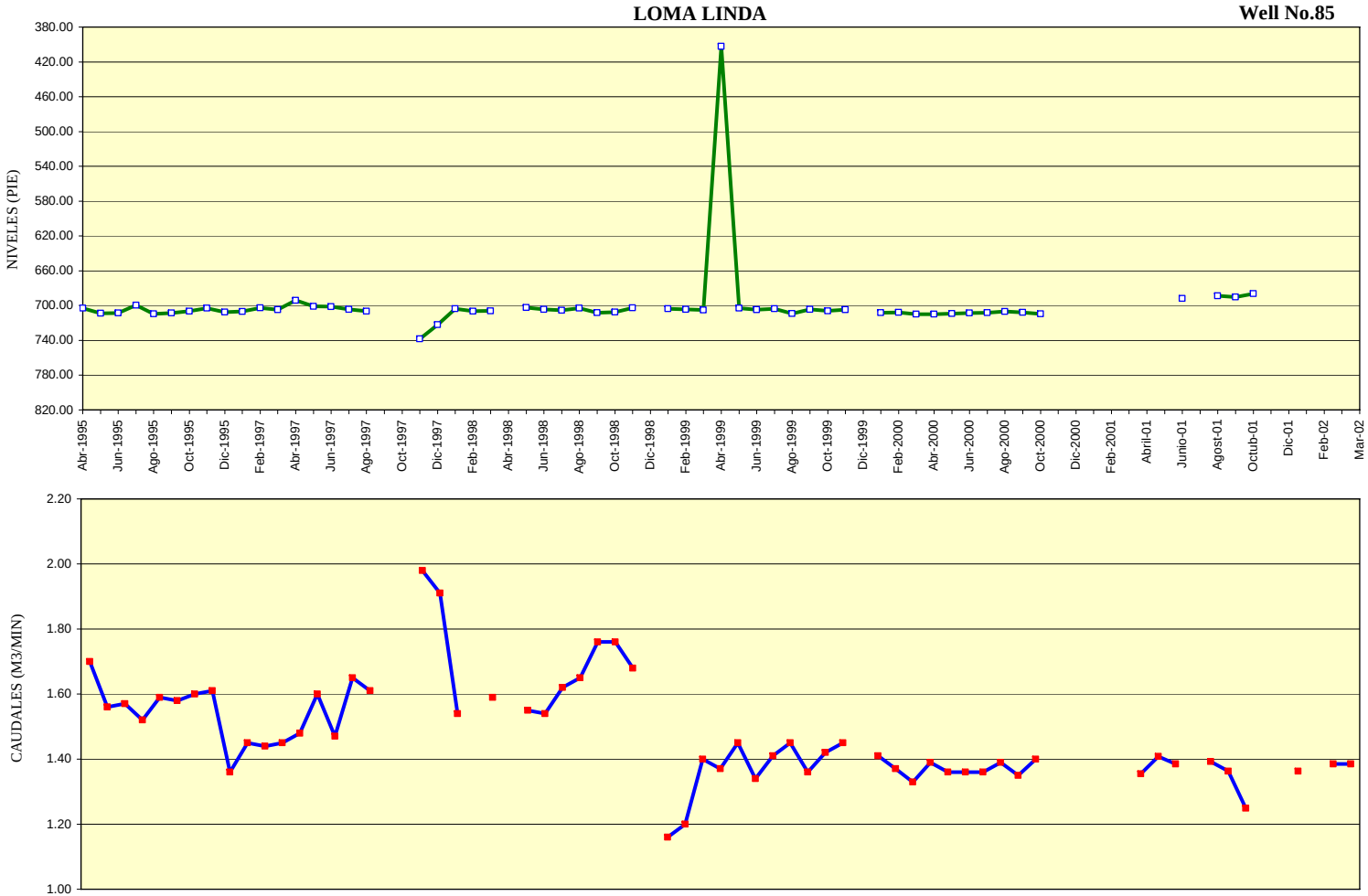
ANNEX 3.C(125) Punping Discharge and Water Level in Wells

ANNEX 3.C(126) Punping Discharge and Water Level in Wells

VERACRUZ #6 (Well No.76)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.61	260.07
May-1995	1.53	260.92
Jun-1995	1.63	260.76
Jul-1995	1.55	260.92
Ago-1995	1.69	256.82
Sept-1995	1.57	260.80
Oct-1995	1.43	261.70
Nov-1995	1.44	259.22
Dic-1995	1.41	261.74
Ene-1997	2.54	
Feb-1997	2.30	
Mar-1997	2.54	
Abr-1997	2.46	191.58
May-1997	2.59	191.92
Jun-1997	2.48	191.33
Jul-1997	2.51	192.32
Ago-1997	2.40	190.42
Sept-1997		
Oct-1997		
Nov-1997	2.37	192.00
Dic-1997	2.52	192.75
Ene-1998	2.32	195.50
Feb-1998		196.66
Mar-1998	2.37	198.83
Abr-1998		
May-1998	2.44	201.25
Jun-1998	2.62	201.00
Jul-1998	2.25	203.33
Ago-1998	2.33	203.33
Sept-1998	2.48	203.08
Oct-1998	2.46	205.50
Nov-1998	2.49	206.00
Dic-1998	2.49	
Ene-1999	2.55	
Feb-1999	2.32	
Mar-1999	2.57	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.42	
May-1999	2.47	
Jun-1999	2.43	
Jul-1999	2.38	
Ago-1999	2.45	
Sept-1999	2.47	
Oct-1999	2.47	
Nov-1999	2.51	
Dic-1999	2.46	266.66
Ene-2000	1.28	
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000	1.30	294.08
Ago-2000	1.31	300.83
Sept-2000	2.13	304.33
Oct-2000	2.10	299.75
Nov-2000		
Dic-2000		
Ene-2001	2.16	300.83
Feb-2001	2.14	
Mar-2001		298.90
Abril-01	1.80	299.33
Mayo-01	1.86	299.10
Junio-01	2.12	302.08
Julio-01	2.11	320.16
Aug-01	2.09	320.16
Sep-01	2.10	305.92
Octub-01	2.10	303.83
Nov-01	2.09	303.20
Dic-01	2.29	306.33
Enero-02	1.98	304.00
Feb-02	2.20	305.60
Mar-02	2.10	306.00



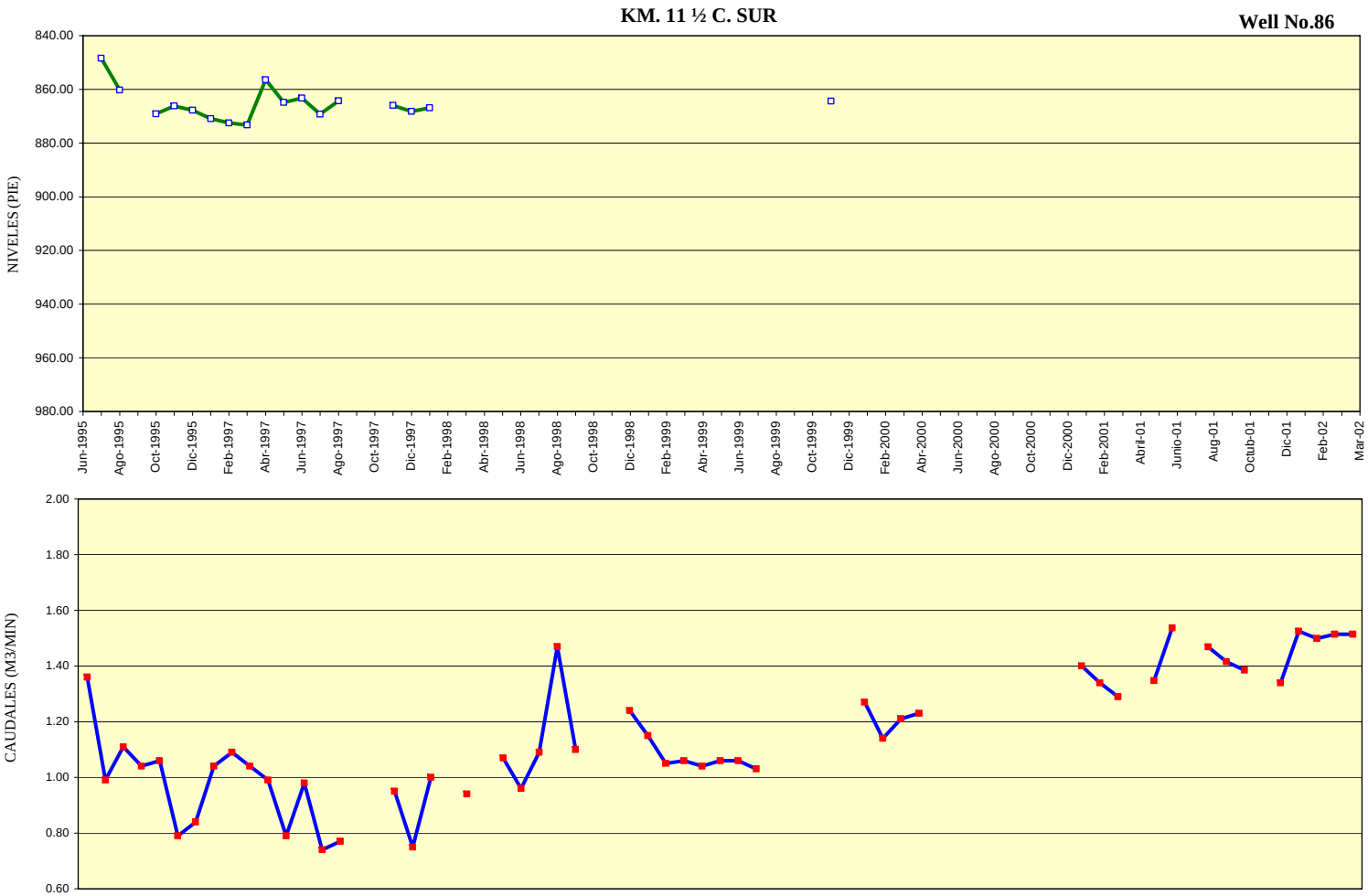
ANNEX 3.C(127) Punping Discharge and Water Level in Wells

ANNEX 3.C(128) Punping Discharge and Water Level in Wells

LOMA LINDA (Well No.85)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.70	702.90
May-1995	1.56	708.91
Jun-1995	1.57	708.41
Jul-1995	1.52	699.49
Ago-1995	1.59	709.56
Sept-1995	1.58	708.40
Oct-1995	1.60	706.40
Nov-1995	1.61	703.00
Dic-1995	1.36	707.50
Ene-1997	1.45	706.83
Feb-1997	1.44	702.75
Mar-1997	1.45	704.66
Abr-1997	1.48	694.00
May-1997	1.60	700.83
Jun-1997	1.47	701.16
Jul-1997	1.65	704.43
Ago-1997	1.61	706.50
Sept-1997		
Oct-1997		
Nov-1997	1.98	738.25
Dic-1997	1.91	722.00
Ene-1998	1.54	703.66
Feb-1998		706.33
Mar-1998	1.59	706.00
Abr-1998		
May-1998	1.55	702.16
Jun-1998	1.54	704.50
Jul-1998	1.62	705.25
Ago-1998	1.65	703.08
Sept-1998	1.76	708.08
Oct-1998	1.76	707.66
Nov-1998	1.68	702.66
Dic-1998		
Ene-1999	1.16	703.59
Feb-1999	1.20	704.25
Mar-1999	1.40	705.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.37	402.00
May-1999	1.45	703.08
Jun-1999	1.34	704.58
Jul-1999	1.41	703.83
Ago-1999	1.45	709.25
Sept-1999	1.36	704.25
Oct-1999	1.42	706.22
Nov-1999	1.45	704.75
Dic-1999		
Ene-2000	1.41	708.16
Feb-2000	1.37	707.75
Mar-2000	1.33	710.00
Abr-2000	1.39	709.83
May-2000	1.36	709.25
Jun-2000	1.36	708.58
Jul-2000	1.36	708.25
Ago-2000	1.39	706.83
Sept-2000	1.35	707.92
Oct-2000	1.40	709.50
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001		
Mar-2001		
Abril-01	1.36	
Mayo-01	1.41	
Junio-01	1.39	691.75
Julio-01		
Agost-01	1.39	688.92
Sept-01	1.36	690.16
Octub-01	1.25	686.25
Nov-01		
Dic-01		
Enero-02	1.36	OBST
Feb-02		OBST
Mar-02	1.39	OBST



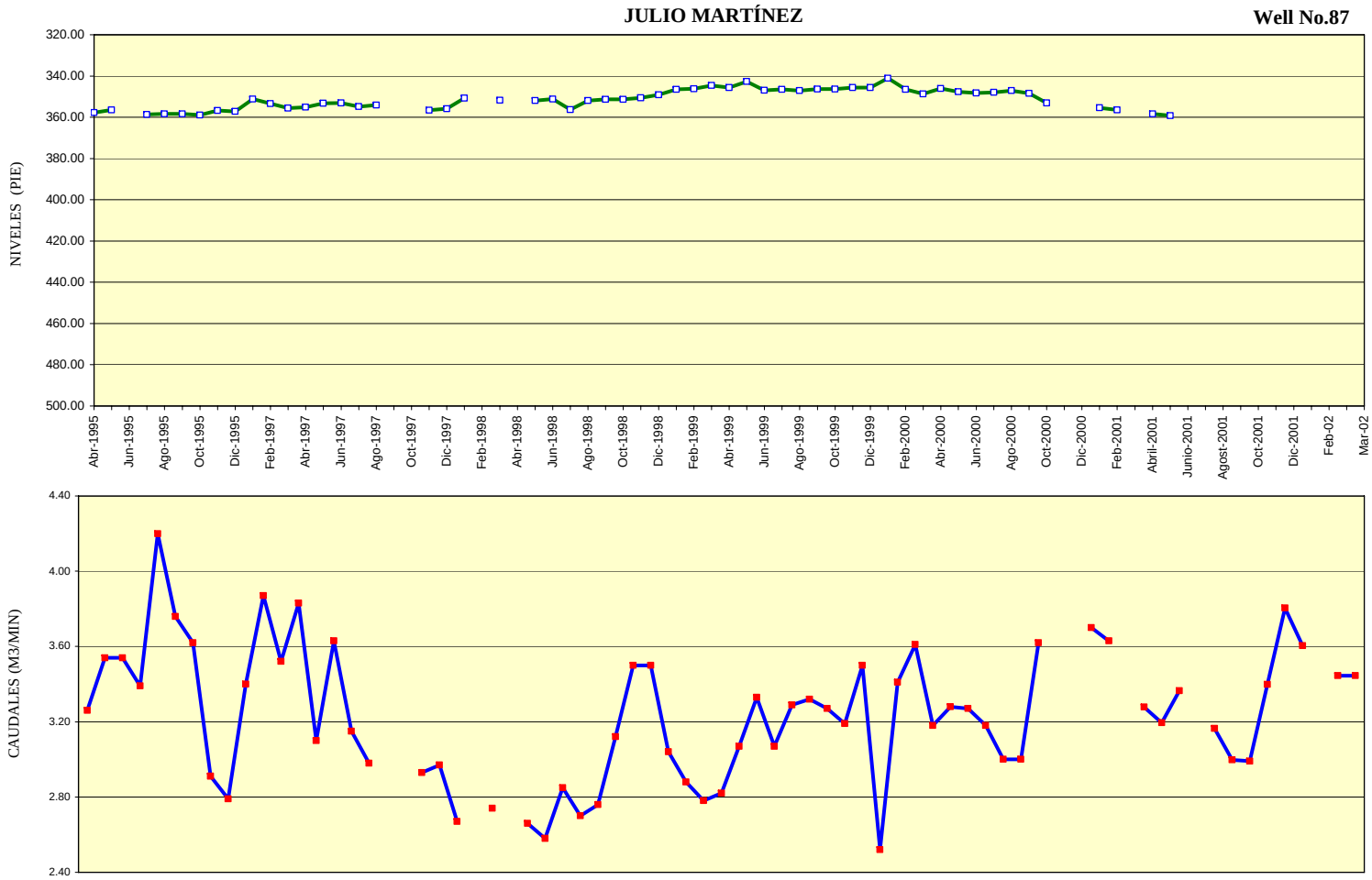
ANNEX 3.C(129) Punping Discharge and Water Level in Wells

ANNEX 3.C(130) Punping Discharge and Water Level in Wells

KM. 11 ½ C. SUR (Well No.86)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Jun-1995	1.36	
Jul-1995	0.99	848.40
Ago-1995	1.11	860.25
Sept-1995	1.04	
Oct-1995	1.06	869.10
Nov-1995	0.79	866.25
Dic-1995	0.84	867.80
Ene-1997	1.04	870.90
Feb-1997	1.09	872.50
Mar-1997	1.04	873.33
Abr-1997	0.99	856.41
May-1997	0.79	864.83
Jun-1997	0.98	863.25
Jul-1997	0.74	869.25
Ago-1997	0.77	864.25
Sept-1997		
Oct-1997		
Nov-1997	0.95	866.00
Dic-1997	0.75	868.25
Ene-1998	1.00	866.92
Feb-1998		
Mar-1998	0.94	
Abr-1998		
May-1998	1.07	
Jun-1998	0.96	
Jul-1998	1.09	
Ago-1998	1.47	
Sept-1998	1.10	
Oct-1998		
Nov-1998		
Dic-1998	1.24	
Ene-1999	1.15	
Feb-1999	1.05	
Mar-1999	1.06	
Abr-1999	1.04	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	1.06	
Jun-1999	1.06	
Jul-1999	1.03	
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		864.42
Dic-1999		
Ene-2000	1.27	
Feb-2000	1.14	
Mar-2000	1.21	
Abr-2000	1.23	
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001	1.40	
Feb-2001	1.34	OBST
Mar-2001	1.29	OBST
Abril-01		OBST
Mayo-01	1.35	OBST
Junio-01	1.54	OBST
Julio-01		OBST
Aug-01	1.47	OBST
Sep-01	1.42	OBST
Octub-01	1.39	OBST
Nov-01		OBST
Dic-01	1.34	OBST
Enero-02	1.53	OBST
Feb-02	1.50	OBST
Mar-02	1.51	OBST



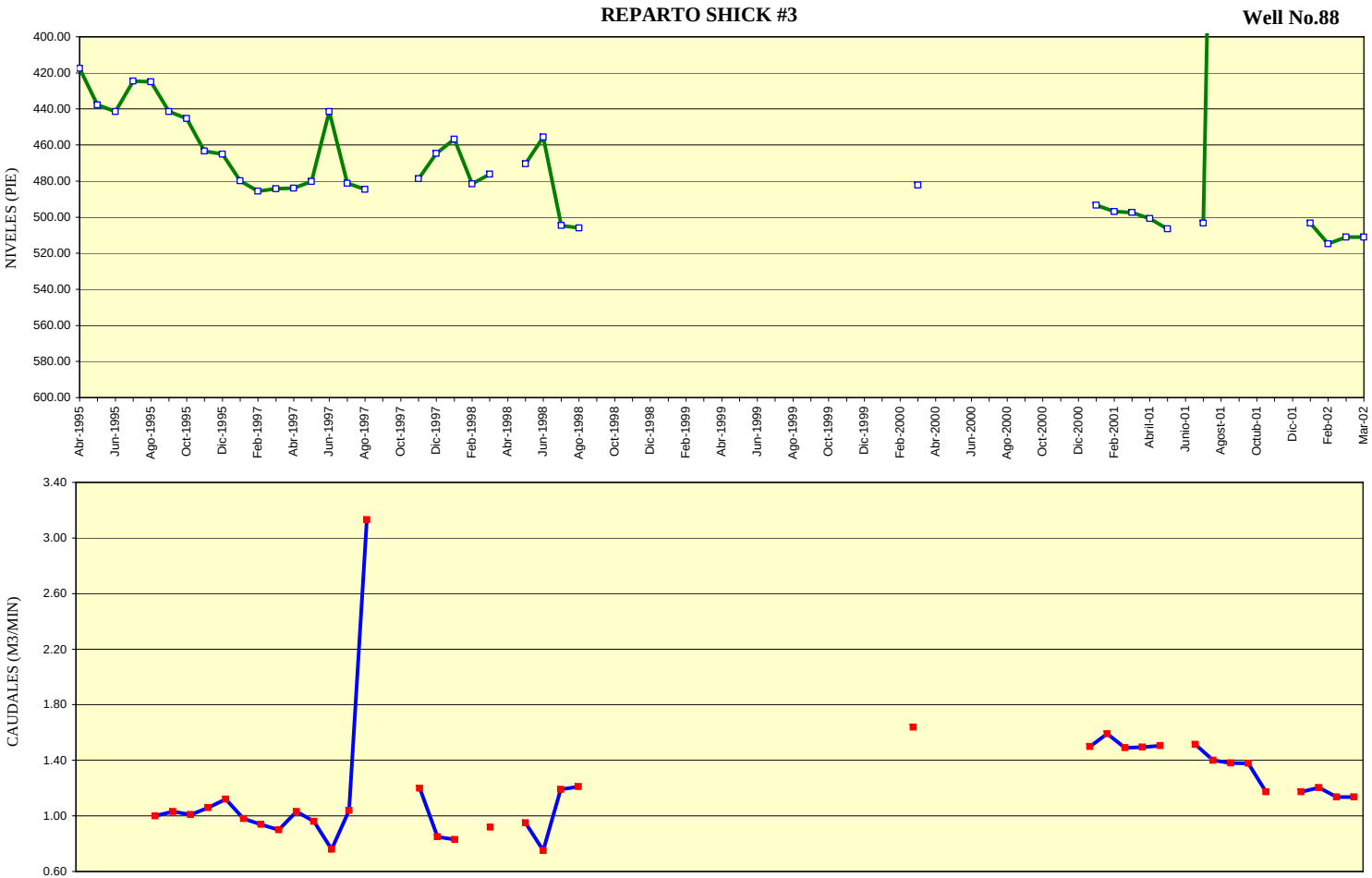
ANNEX 3.C(131) Punping Discharge and Water Level in Wells

ANNEX 3.C(132) Punping Discharge and Water Level in Wells

JULIO MARTÍNEZ (Well No.87)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	3.26	357.75
May-1995	3.54	356.54
Jun-1995	3.54	
Jul-1995	3.39	358.73
Ago-1995	4.20	358.34
Sept-1995	3.76	358.30
Oct-1995	3.62	358.90
Nov-1995	2.91	356.83
Dic-1995	2.79	357.25
Ene-1997	3.40	351.16
Feb-1997	3.87	353.33
Mar-1997	3.52	355.58
Abr-1997	3.83	355.16
May-1997	3.10	353.25
Jun-1997	3.63	353.08
Jul-1997	3.15	354.83
Ago-1997	2.98	354.16
Sept-1997		
Oct-1997		
Nov-1997	2.93	356.58
Dic-1997	2.97	355.92
Ene-1998	2.67	350.75
Feb-1998		
Mar-1998	2.74	351.75
Abr-1998		
May-1998	2.66	351.96
Jun-1998	2.58	351.16
Jul-1998	2.85	356.25
Ago-1998	2.70	351.86
Sept-1998	2.76	351.33
Oct-1998	3.12	351.33
Nov-1998	3.50	350.58
Dic-1998	3.50	349.13
Ene-1999	3.04	346.50
Feb-1999	2.88	346.20
Mar-1999	2.78	344.59

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.82	345.62
May-1999	3.07	342.70
Jun-1999	3.33	347.00
Jul-1999	3.07	346.50
Ago-1999	3.29	347.08
Sept-1999	3.32	346.41
Oct-1999	3.27	346.41
Nov-1999	3.19	345.66
Dic-1999	3.50	345.66
Ene-2000	2.52	341.08
Feb-2000	3.41	346.50
Mar-2000	3.61	348.67
Abr-2000	3.18	346.04
May-2000	3.28	347.75
Jun-2000	3.27	348.34
Jul-2000	3.18	348.00
Ago-2000	3.00	347.16
Sept-2000	3.00	348.42
Oct-2000	3.62	353.08
Nov-2000		
Dic-2000		
Ene-2001	3.70	355.50
Feb-2001	3.63	356.42
Mar-2001		
Abril-2001	3.28	358.33
Mayo-2001	3.19	359.25
Junio-2001	3.36	
Julio-2001		
Agost-2001	3.16	OBST
Sept-2001	3.00	OBST
Oct-2001	2.99	OBST
Nov-2001	3.40	OBST
Dic-2001	3.80	
Enero-02	3.60	OBST
Feb-02		
Mar-02	3.44	OBST



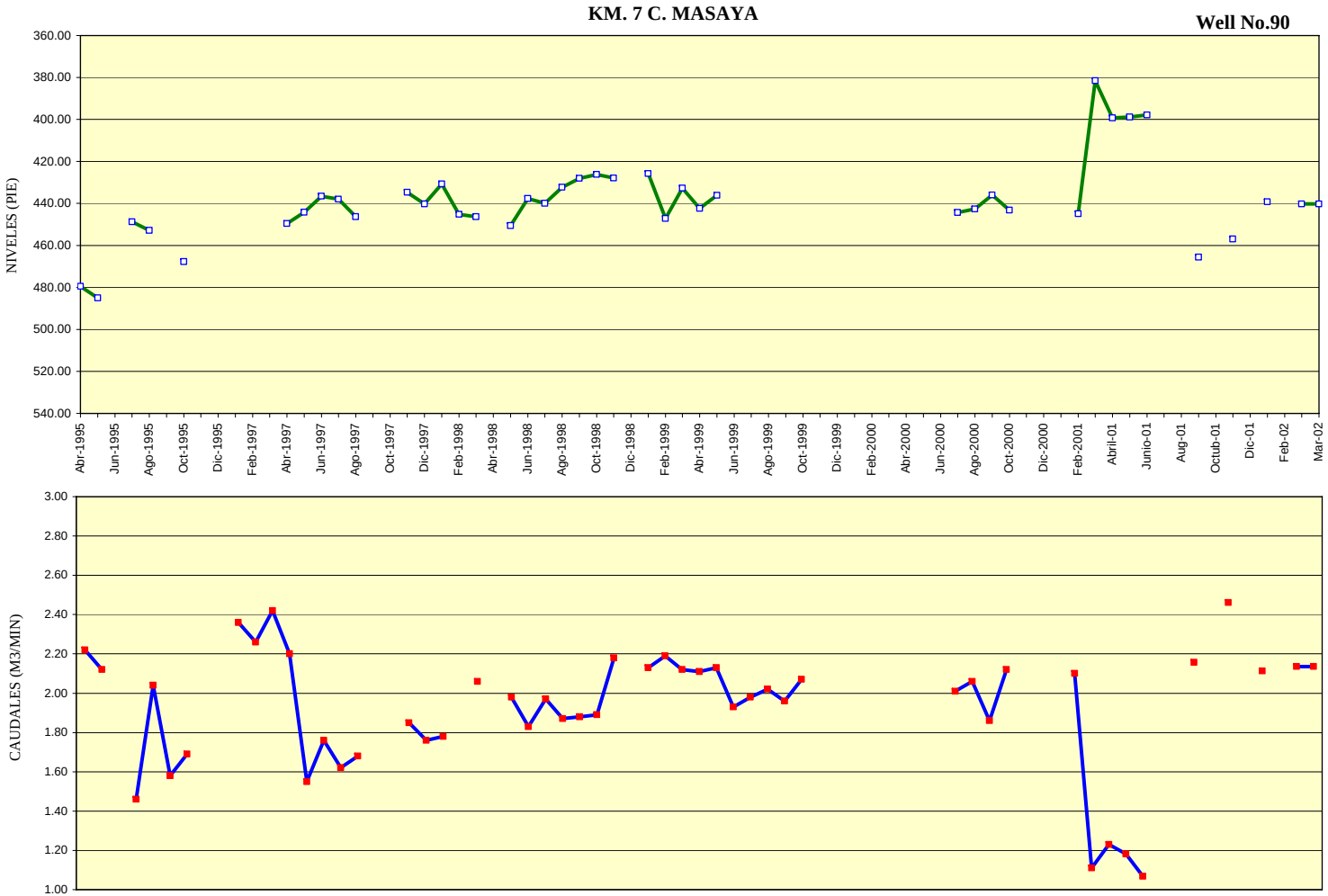
ANNEX 3.C(133) Punping Discharge and Water Level in Wells

ANNEX 3.C(134) Punping Discharge and Water Level in Wells

REPARTO SHICK #3 (Well No.88)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		417.58
May-1995		437.81
Jun-1995		441.49
Jul-1995		424.66
Ago-1995	1.00	424.92
Sept-1995	1.03	441.50
Oct-1995	1.01	445.40
Nov-1995	1.06	463.28
Dic-1995	1.12	465.08
Ene-1997	0.98	479.83
Feb-1997	0.94	485.66
Mar-1997	0.90	484.25
Abr-1997	1.03	483.96
May-1997	0.96	480.16
Jun-1997	0.76	441.42
Jul-1997	1.04	481.25
Ago-1997	3.13	484.50
Sept-1997		
Oct-1997		
Nov-1997	1.20	478.66
Dic-1997	0.85	464.70
Ene-1998	0.83	456.79
Feb-1998		481.50
Mar-1998	0.92	476.08
Abr-1998		
May-1998	0.95	470.42
Jun-1998	0.75	455.58
Jul-1998	1.19	504.58
Ago-1998	1.21	506.00
Sept-1998		
Oct-1998		
Nov-1998		
Dic-1998		
Ene-1999		
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000	1.64	482.16
Abr-2000		
May-2000		
Jun-2000		
Jul-2000		
Ago-2000		
Sept-2000		
Oct-2000		
Nov-2000		
Dic-2000		
Ene-2001	1.50	493.30
Feb-2001	1.59	496.92
Mar-2001	1.49	497.37
Abril-01	1.50	500.83
Mayo-01	1.51	506.42
Junio-01		
Julio-01	1.51	503.33
Agost-01	1.40	OBST
Sept-01	1.38	OBST
Octub-01	1.38	OBST
Nov-01	1.17	OBST
Dic-01		
Enero-02	1.17	503.30
Feb-02	1.20	514.66
Mar-02	1.14	511.08



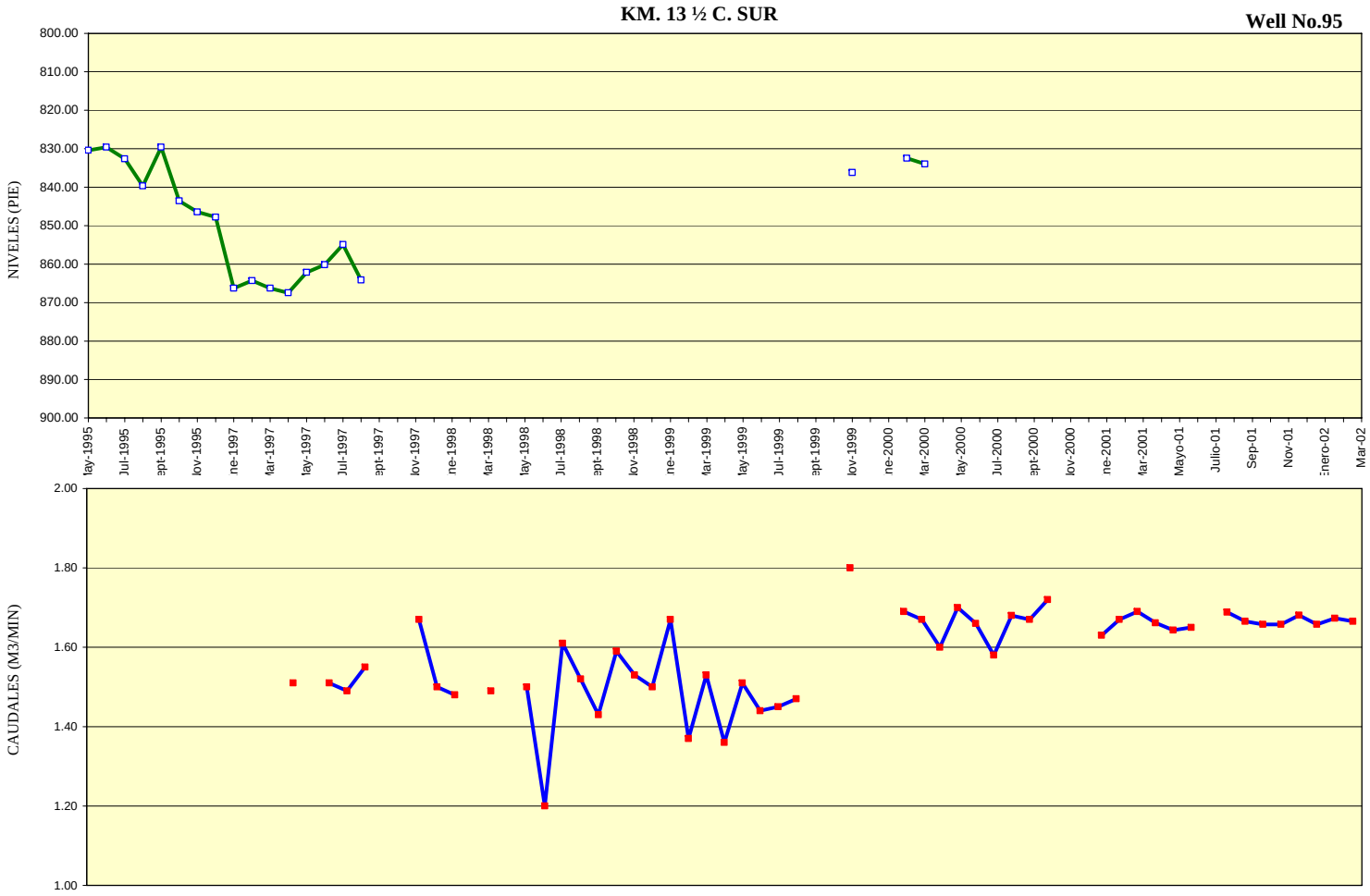
ANNEX 3.C(135) Punping Discharge and Water Level in Wells

ANNEX 3.C(136) Punping Discharge and Water Level in Wells

KM. 7 C. MASAYA (Well No.90)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	2.22	479.50
May-1995	2.12	484.98
Jun-1995		
Jul-1995	1.46	448.74
Ago-1995	2.04	452.80
Sept-1995	1.58	
Oct-1995	1.69	467.70
Nov-1995		
Dic-1995		
Ene-1997	2.36	
Feb-1997	2.26	
Mar-1997	2.42	
Abr-1997	2.20	449.58
May-1997	1.55	444.16
Jun-1997	1.76	436.58
Jul-1997	1.62	438.00
Ago-1997	1.68	446.25
Sept-1997		
Oct-1997		
Nov-1997	1.85	434.75
Dic-1997	1.76	440.16
Ene-1998	1.78	430.75
Feb-1998		445.25
Mar-1998	2.06	446.33
Abr-1998		
May-1998	1.98	450.58
Jun-1998	1.83	437.70
Jul-1998	1.97	439.92
Ago-1998	1.87	432.25
Sept-1998	1.88	428.00
Oct-1998	1.89	426.25
Nov-1998	2.18	427.83
Dic-1998		
Ene-1999	2.13	425.76
Feb-1999	2.19	447.17
Mar-1999	2.12	432.66

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	2.11	442.36
May-1999	2.13	436.16
Jun-1999	1.93	
Jul-1999	1.98	
Ago-1999	2.02	
Sept-1999	1.96	
Oct-1999	2.07	
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000	2.01	444.33
Ago-2000	2.06	442.58
Sept-2000	1.86	436.00
Oct-2000	2.12	443.16
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	2.10	444.83
Mar-2001	1.11	381.58
Abril-01	1.23	399.25
Mayo-01	1.18	398.83
Junio-01	1.07	397.87
Julio-01		
Aug-01		
Sep-01	2.16	465.66
Octub-01		
Nov-01	2.46	457.00
Dic-01		
Enero-02	2.11	439.16
Feb-02		
Mar-02	2.13	440.25



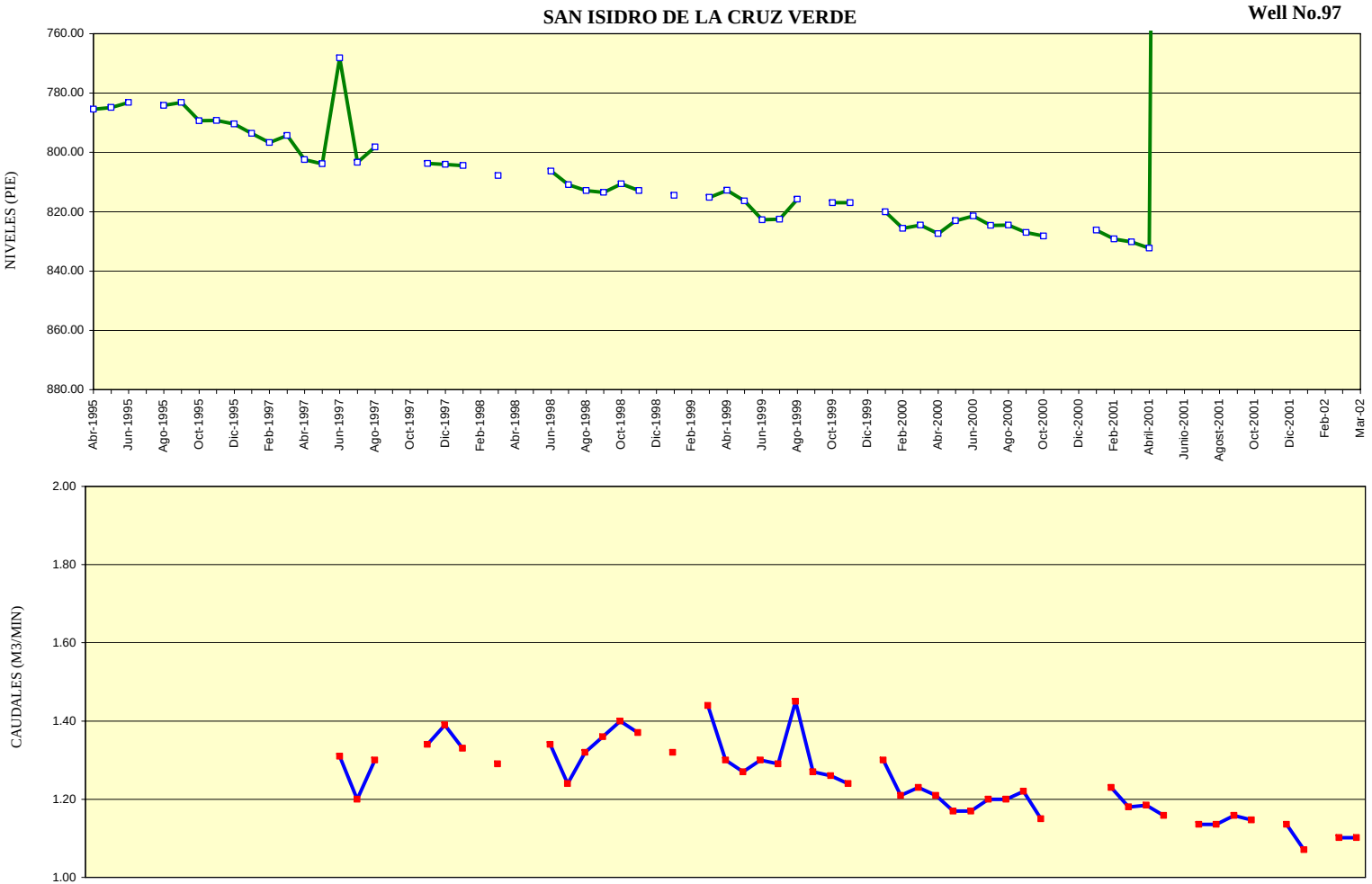
ANNEX 3.C(137) Punping Discharge and Water Level in Wells

ANNEX 3.C(138) Punping Discharge and Water Level in Wells

KM. 13 ½ C. SUR (Well No.95)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1995		830.43
Jun-1995		829.58
Jul-1995		832.60
Ago-1995		839.68
Sept-1995		829.60
Oct-1995		843.60
Nov-1995		846.42
Dic-1995		847.75
Ene-1997		866.25
Feb-1997		864.25
Mar-1997		866.25
Abr-1997	1.51	867.43
May-1997		862.16
Jun-1997	1.51	860.16
Jul-1997	1.49	854.92
Ago-1997	1.55	864.16
Sept-1997		
Oct-1997		
Nov-1997	1.67	
Dic-1997	1.50	
Ene-1998	1.48	
Feb-1998		
Mar-1998	1.49	
Abr-1998		
May-1998	1.50	
Jun-1998	1.20	
Jul-1998	1.61	
Ago-1998	1.52	
Sept-1998	1.43	
Oct-1998	1.59	
Nov-1998	1.53	
Dic-1998	1.50	
Ene-1999	1.67	
Feb-1999	1.37	
Mar-1999	1.53	
Abr-1999	1.36	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
May-1999	1.51	
Jun-1999	1.44	
Jul-1999	1.45	
Ago-1999	1.47	
Sept-1999		
Oct-1999		
Nov-1999	1.80	836.16
Dic-1999		
Ene-2000		
Feb-2000	1.69	832.43
Mar-2000	1.67	833.94
Abr-2000	1.60	
May-2000	1.70	
Jun-2000	1.66	
Jul-2000	1.58	
Ago-2000	1.68	
Sept-2000	1.67	
Oct-2000	1.72	
Nov-2000		
Dic-2000		
Ene-2001	1.63	
Feb-2001	1.67	
Mar-2001	1.69	
Abril-01	1.66	
Mayo-01	1.64	
Junio-01	1.65	
Julio-01		
Aug-01	1.69	
Sep-01	1.67	
Octub-01	1.66	
Nov-01	1.66	
Dic-01	1.68	
Enero-02	1.66	OBST
Feb-02	1.67	OBST
Mar-02	1.67	OBST



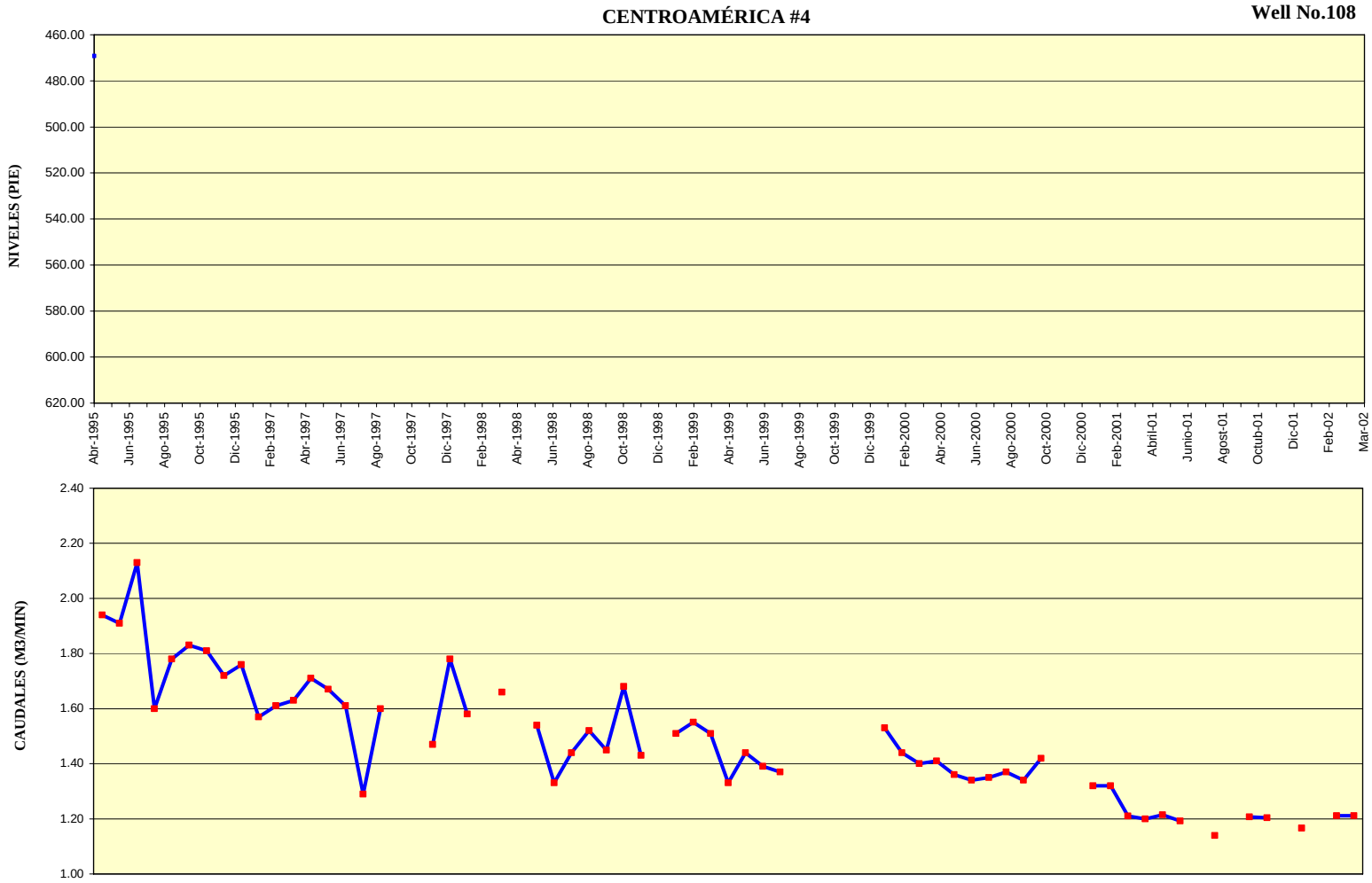
ANNEX 3.C(139) Punping Discharge and Water Level in Wells

ANNEX 3.C(140) Punping Discharge and Water Level in Wells

SAN ISIDRO DE LA CRUZ VERDE (Well No.97)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		785.49
May-1995		784.90
Jun-1995		783.17
Jul-1995		
Ago-1995		784.15
Sept-1995		783.20
Oct-1995		789.30
Nov-1995		789.27
Dic-1995		790.46
Ene-1997		793.58
Feb-1997		796.66
Mar-1997		794.33
Abr-1997		802.42
May-1997		803.82
Jun-1997	1.31	768.16
Jul-1997	1.20	803.33
Ago-1997	1.30	798.16
Sept-1997		
Oct-1997		
Nov-1997	1.34	803.79
Dic-1997	1.39	804.00
Ene-1998	1.33	804.41
Feb-1998		
Mar-1998	1.29	807.83
Abr-1998		
May-1998		
Jun-1998	1.34	806.31
Jul-1998	1.24	810.87
Ago-1998	1.32	812.87
Sept-1998	1.36	813.50
Oct-1998	1.40	810.58
Nov-1998	1.37	812.92
Dic-1998		
Ene-1999	1.32	814.50
Feb-1999		
Mar-1999	1.44	815.20

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.30	812.75
May-1999	1.27	816.42
Jun-1999	1.30	822.75
Jul-1999	1.29	822.50
Ago-1999	1.45	815.75
Sept-1999	1.27	
Oct-1999	1.26	816.92
Nov-1999	1.24	817.00
Dic-1999		
Ene-2000	1.30	820.00
Feb-2000	1.21	825.66
Mar-2000	1.23	824.50
Abr-2000	1.21	827.42
May-2000	1.17	823.00
Jun-2000	1.17	821.41
Jul-2000	1.20	824.66
Ago-2000	1.20	824.50
Sept-2000	1.22	827.00
Oct-2000	1.15	828.16
Nov-2000		
Dic-2000		
Ene-2001		826.25
Feb-2001	1.23	829.16
Mar-2001	1.18	830.16
Abril-2001	1.18	832.25
Mayo-2001	1.16	OBST
Junio-2001		OBST
Julio-2001	1.14	OBST
Agost-2001	1.14	OBST
Sept-2001	1.16	OBST
Oct-2001	1.15	OBST
Nov-2001		OBST
Dic-2001	1.14	
Enero-02	1.07	OBST
Feb-02		OBST
Mar-02	1.10	OBST



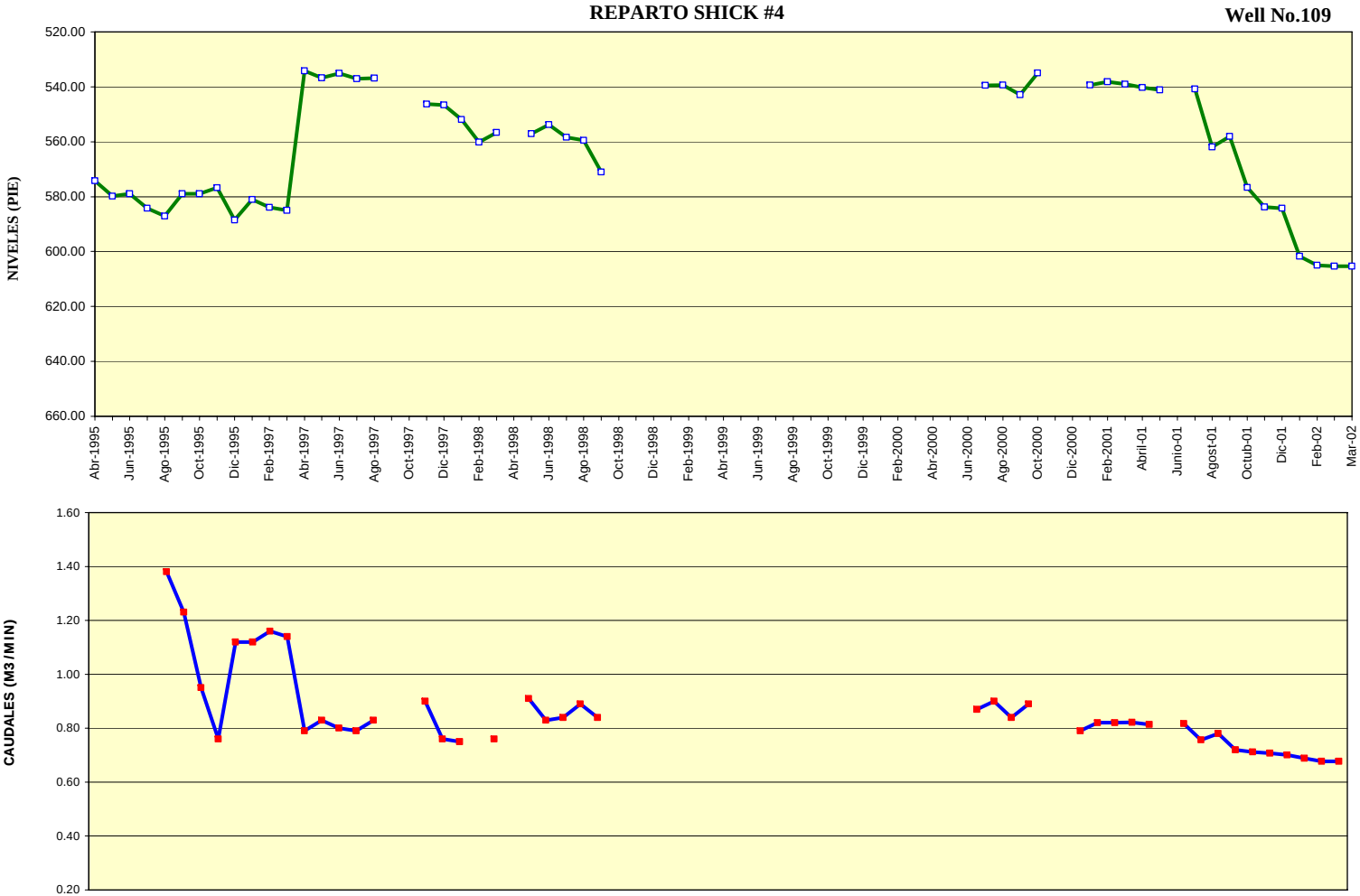
ANNEX 3.C(141) Punping Discharge and Water Level in Wells

ANNEX 3.C(142) Punping Discharge and Water Level in Wells

CENTROAMÉRICA #4 (Well No.108)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995	1.94	469.24
May-1995	1.91	
Jun-1995	2.13	
Jul-1995	1.60	
Ago-1995	1.78	
Sept-1995	1.83	
Oct-1995	1.81	
Nov-1995	1.72	
Dic-1995	1.76	
Ene-1997	1.57	
Feb-1997	1.61	
Mar-1997	1.63	
Abr-1997	1.71	
May-1997	1.67	
Jun-1997	1.61	
Jul-1997	1.29	
Ago-1997	1.60	
Sept-1997		
Oct-1997		
Nov-1997	1.47	
Dic-1997	1.78	
Ene-1998	1.58	
Feb-1998		
Mar-1998	1.66	
Abr-1998		
May-1998	1.54	
Jun-1998	1.33	
Jul-1998	1.44	
Ago-1998	1.52	
Sept-1998	1.45	
Oct-1998	1.68	
Nov-1998	1.43	
Dic-1998		
Ene-1999	1.51	
Feb-1999	1.55	
Mar-1999	1.51	

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	1.33	
May-1999	1.44	
Jun-1999	1.39	
Jul-1999	1.37	
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000	1.53	
Feb-2000	1.44	
Mar-2000	1.40	
Abr-2000	1.41	
May-2000	1.36	
Jun-2000	1.34	
Jul-2000	1.35	
Ago-2000	1.37	
Sept-2000	1.34	
Oct-2000	1.42	
Nov-2000		
Dic-2000		
Ene-2001	1.32	
Feb-2001	1.32	OBST
Mar-2001	1.21	OBST
Abril-01	1.20	OBST
Mayo-01	1.21	OBST
Junio-01	1.19	OBST
Julio-01		OBST
Agost-01	1.14	OBST
Sept-01		OBST
Octub-01	1.21	OBST
Nov-01	1.20	OBST
Dic-01		
Enero-02	1.17	OBST
Feb-02		OBST
Mar-02	1.21	OBST



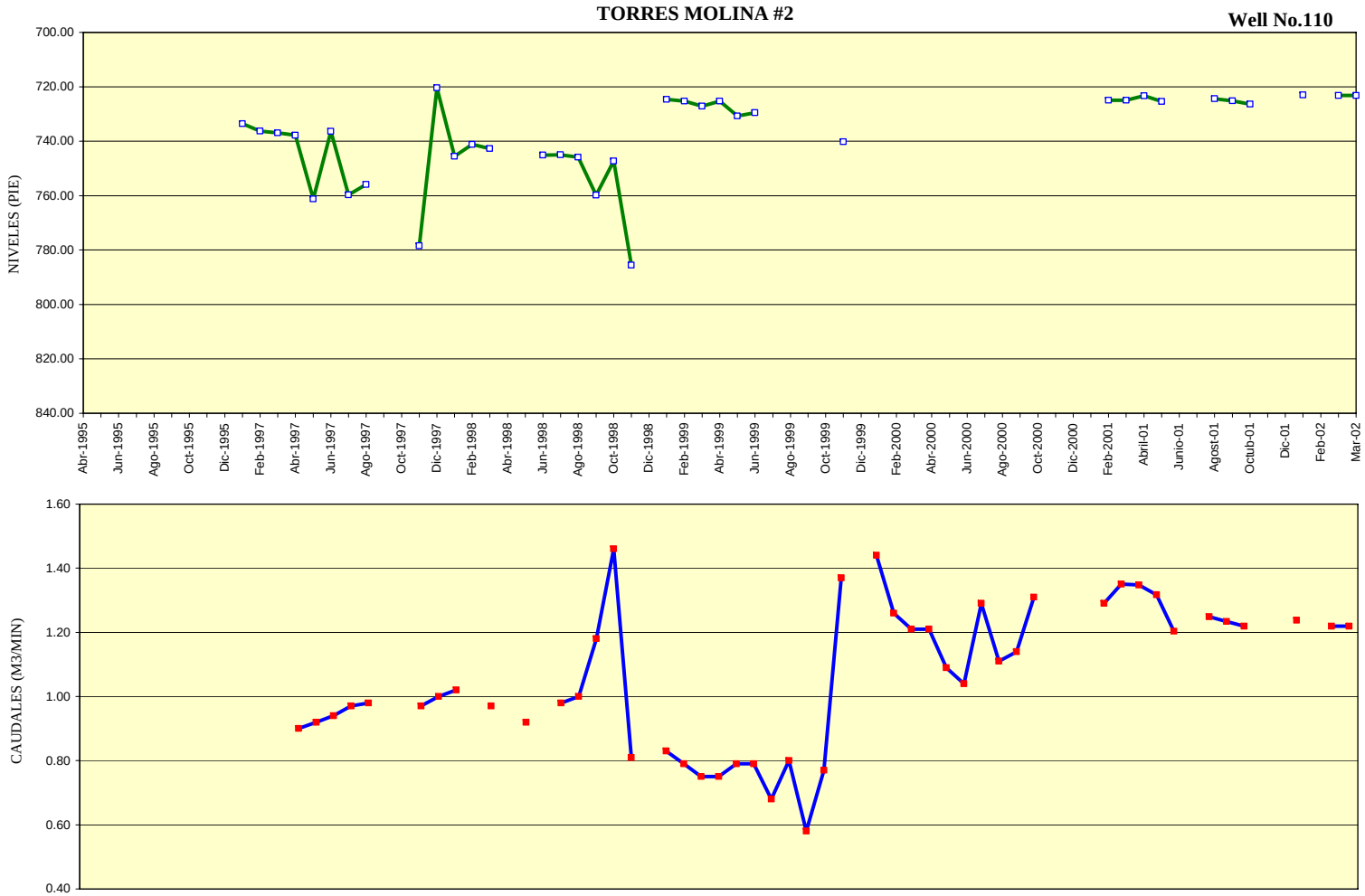
ANNEX 3.C(143) Punping Discharge and Water Level in Wells

ANNEX 3.C(144) Punping Discharge and Water Level in Wells

REPARTO SHICK #4 (Well No.109)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		574.26
May-1995		579.81
Jun-1995		578.99
Jul-1995		584.23
Ago-1995	1.38	587.12
Sept-1995	1.23	579.00
Oct-1995	0.95	578.90
Nov-1995	0.76	576.75
Dic-1995	1.12	588.50
Ene-1997	1.12	581.00
Feb-1997	1.16	583.92
Mar-1997	1.14	585.00
Abr-1997	0.79	534.18
May-1997	0.83	536.75
Jun-1997	0.80	535.08
Jul-1997	0.79	537.00
Ago-1997	0.83	536.80
Sept-1997		
Oct-1997		
Nov-1997	0.90	546.33
Dic-1997	0.76	546.58
Ene-1998	0.75	551.92
Feb-1998		560.16
Mar-1998	0.76	556.58
Abr-1998		
May-1998	0.91	557.08
Jun-1998	0.83	553.79
Jul-1998	0.84	558.41
Ago-1998	0.89	559.50
Sept-1998	0.84	571.00
Oct-1998		
Nov-1998		
Dic-1998		
Ene-1999		
Feb-1999		
Mar-1999		

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999		
May-1999		
Jun-1999		
Jul-1999		
Ago-1999		
Sept-1999		
Oct-1999		
Nov-1999		
Dic-1999		
Ene-2000		
Feb-2000		
Mar-2000		
Abr-2000		
May-2000		
Jun-2000		
Jul-2000	0.87	539.50
Ago-2000	0.90	539.38
Sept-2000	0.84	542.83
Oct-2000	0.89	535.00
Nov-2000		
Dic-2000		
Ene-2001	0.79	539.33
Feb-2001	0.82	538.16
Mar-2001	0.82	539.08
Abril-01	0.82	540.25
Mayo-01	0.81	541.16
Junio-01		
Julio-01	0.82	540.83
Agost-01	0.76	561.92
Sept-01	0.78	558.00
Octub-01	0.72	576.66
Nov-01	0.71	583.83
Dic-01	0.71	584.25
Enero-02	0.70	601.70
Feb-02	0.69	604.96
Mar-02	0.68	605.33



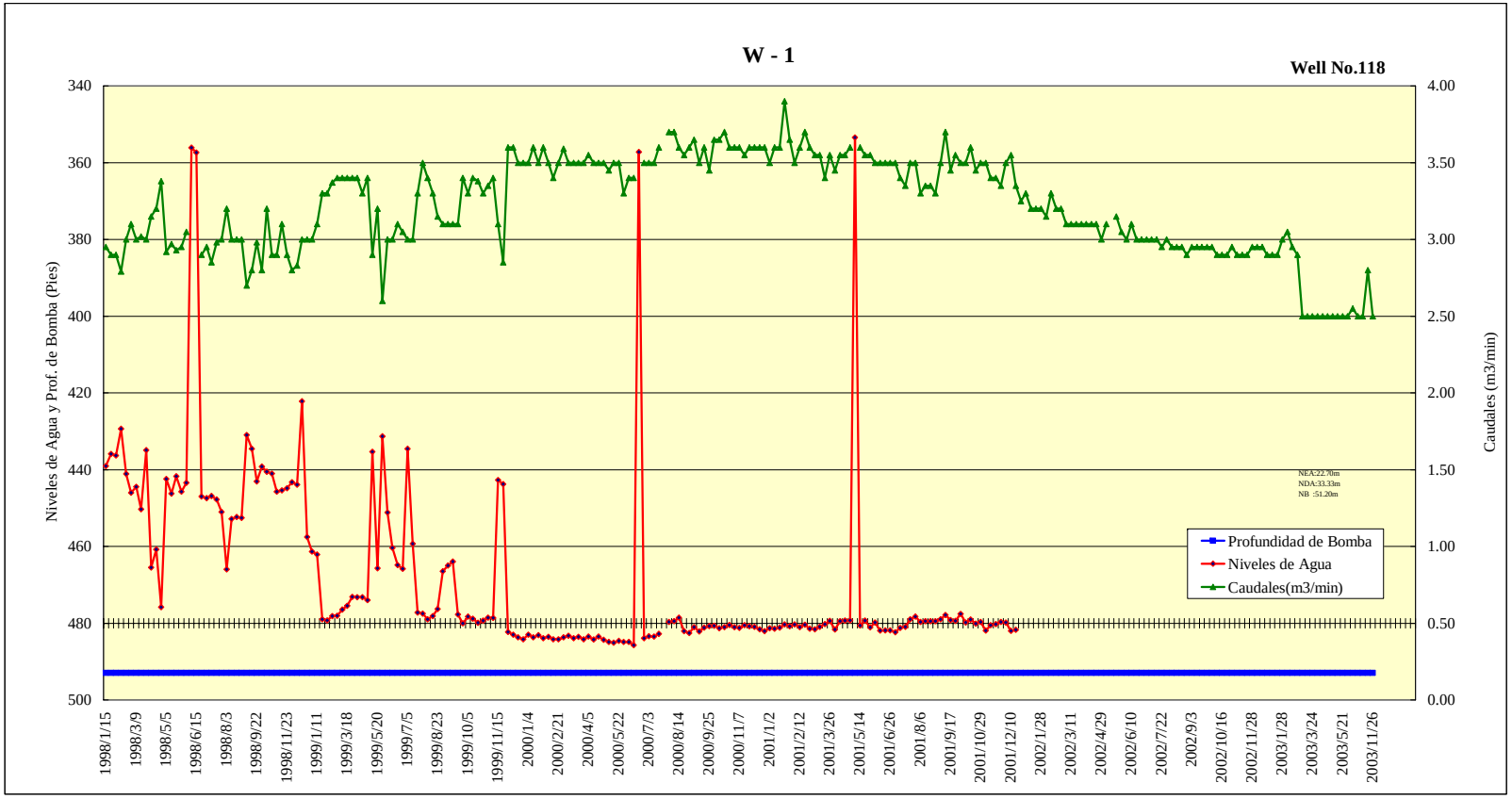
ANNEX 3.C(145) Punping Discharge and Water Level in Wells

ANNEX 3.C(146) Punping Discharge and Water Level in Wells

TORRES MOLINA #2 (Well No.110)

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1995		
May-1995		
Jun-1995		
Jul-1995		
Ago-1995		
Sept-1995		
Oct-1995		
Nov-1995		
Dic-1995		
Ene-1997		733.58
Feb-1997		736.25
Mar-1997		736.92
Abr-1997	0.90	737.83
May-1997	0.92	761.25
Jun-1997	0.94	736.41
Jul-1997	0.97	759.75
Ago-1997	0.98	755.92
Sept-1997		
Oct-1997		
Nov-1997	0.97	778.41
Dic-1997	1.00	720.42
Ene-1998	1.02	745.58
Feb-1998		741.16
Mar-1998	0.97	742.70
Abr-1998		
May-1998	0.92	
Jun-1998		745.08
Jul-1998	0.98	745.00
Ago-1998	1.00	745.92
Sept-1998	1.18	759.83
Oct-1998	1.46	747.33
Nov-1998	0.81	785.50
Dic-1998		
Ene-1999	0.83	724.67
Feb-1999	0.79	725.31
Mar-1999	0.75	727.16

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)
Abr-1999	0.75	725.33
May-1999	0.79	730.75
Jun-1999	0.79	729.50
Jul-1999	0.68	
Ago-1999	0.80	
Sept-1999	0.58	
Oct-1999	0.77	
Nov-1999	1.37	740.25
Dic-1999		
Ene-2000	1.44	
Feb-2000	1.26	
Mar-2000	1.21	
Abr-2000	1.21	
May-2000	1.09	
Jun-2000	1.04	
Jul-2000	1.29	
Ago-2000	1.11	
Sept-2000	1.14	
Oct-2000	1.31	
Nov-2000		
Dic-2000		
Ene-2001		
Feb-2001	1.29	724.92
Mar-2001	1.35	725.00
Abril-01	1.35	723.33
Mayo-01	1.32	725.42
Junio-01	1.20	
Julio-01		
Agost-01	1.25	724.42
Sept-01	1.23	725.16
Octub-01	1.22	726.42
Nov-01		
Dic-01		
Enero-02	1.24	723.04
Feb-02		
Mar-02	1.22	723.16



ANNEX 3.C(147) Punping Discharge and Water Level in Wells

ANNEX 3.C(148) Punping Discharge and Water Level in Wells

POZO W-1
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	2.95	439.04	133.8
1998/1/26	2.90	435.92	132.9
1998/2/9	2.90	436.29	133.0
1998/2/17	2.79	429.33	130.9
1998/2/23	3.00	441.08	134.4
1998/3/3	3.10	446.00	135.9
1998/3/9	3.00	444.46	135.5
1998/3/16	3.02	450.33	137.3
1998/3/24	3.00	434.92	132.6
1998/4/2	3.15	465.50	141.9
1998/4/13	3.20	460.75	140.4
1998/4/21	3.38	475.83	145.0
1998/5/5	2.92	442.41	134.8
1998/5/13	2.97	446.25	136.0
1998/5/18	2.93	441.75	134.6
1998/5/25	2.95	445.70	135.8
1998/6/1	3.05	443.42	135.2
1998/6/9		356.08	108.5
1998/6/15		357.33	108.9
1998/6/22	2.90	447.00	136.2
1998/7/6	2.95	447.41	136.4
1998/7/14	2.85	446.83	136.2
1998/7/21	2.98	447.75	136.5
1998/7/28	3.00	451.00	137.5
1998/8/3	3.20	466.00	142.0
1998/8/11	3.00	452.83	138.0
1998/8/24	3.00	452.33	137.9
1998/8/31	3.00	452.58	137.9
1998/9/7	2.70	431.00	131.4
1998/9/16	2.80	434.58	132.5
1998/9/22	2.98	443.08	135.1
1998/10/9	2.80	439.16	133.9
1998/10/12	3.20	440.50	134.3
1998/11/3	2.90	441.00	134.4
1998/11/9	2.90	445.70	135.8
1998/11/16	3.10	445.36	135.7
1998/11/23	2.90	444.80	135.6
1998/11/30	2.80	443.26	135.1
1998/12/9	2.83	443.88	135.3
1998/12/14	3.00	422.20	128.7
1998/12/21	3.00	457.56	139.5

POZO W-1
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.00	461.34	140.6
1999/1/11	3.10	462.09	140.8
1999/1/18	3.30	479.00	146.0
1999/1/26	3.30	479.25	146.1
1999/2/2	3.37	478.16	145.7
1999/2/16	3.40	478.09	145.7
1999/3/10	3.40	476.45	145.2
1999/3/18	3.40	475.47	144.9
1999/4/5	3.40	473.14	144.2
1999/4/12	3.40	473.20	144.2
1999/4/19	3.30	473.25	144.2
1999/5/5	3.40	474.00	144.5
1999/5/11	2.90	435.29	132.7
1999/5/20	3.20	465.69	141.9
1999/5/27	2.60	431.33	131.5
1999/6/7	3.00	451.16	137.5
1999/6/14	3.00	460.33	140.3
1999/6/23	3.10	464.83	141.7
1999/6/28	3.05	465.83	142.0
1999/7/5	3.00	434.58	132.5
1999/7/13	3.00	459.33	140.0
1999/7/20	3.30	477.25	145.5
1999/8/2	3.50	477.50	145.5
1999/8/9	3.40	479.00	146.0
1999/8/16	3.30	478.16	145.7
1999/8/23	3.15	476.33	145.2
1999/8/30	3.10	466.50	142.2
1999/9/6	3.10	465.00	141.7
1999/9/13	3.10	463.92	141.4
1999/9/20	3.10	477.75	145.6
1999/9/29	3.40	480.00	146.3
1999/10/5	3.30	478.25	145.8
1999/10/11	3.40	478.87	146.0
1999/10/18	3.38	479.92	146.3
1999/10/25	3.30	479.33	146.1
1999/11/1	3.35	478.58	145.9
1999/11/9	3.40	478.66	145.9
1999/11/15	3.10	442.70	134.9
1999/11/22	2.85	443.75	135.3
1999/11/29	3.60	482.25	147.0
1999/12/6	3.60	482.96	147.2
1999/12/13	3.50	483.66	147.4
1999/12/20	3.50	484.16	147.6

POZO W-1
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.50	482.96	147.2
2000/1/10	3.60	483.66	147.4
2000/1/17	3.50	483.16	147.3
2000/1/31	3.60	483.92	147.5
2000/2/7	3.50	483.58	147.4
2000/2/15	3.40	484.20	147.6
2000/2/21	3.50	484.16	147.6
2000/2/28	3.59	483.66	147.4
2000/3/8	3.50	483.30	147.3
2000/3/13	3.50	483.92	147.5
2000/3/20	3.50	483.58	147.4
2000/3/27	3.50	484.16	147.6
2000/4/5	3.55	483.50	147.4
2000/4/10	3.50	484.25	147.6
2000/4/24	3.50	483.50	147.4
2000/5/2	3.50	484.33	147.6
2000/5/8	3.45	484.92	147.8
2000/5/16	3.50	485.08	147.9
2000/5/22	3.50	484.62	147.7
2000/5/29	3.30	484.92	147.8
2000/6/5	3.40	484.87	147.8
2000/6/12	3.40	485.75	148.1
2000/6/20		357.25	108.9
2000/6/27	3.50	483.92	147.5
2000/7/3	3.50	483.41	147.3
2000/7/10	3.50	483.46	147.4
2000/7/17	3.60	482.75	147.1
2000/7/24			0.0
2000/7/31	3.70	479.66	146.2
2000/8/7	3.70	479.50	146.2
2000/8/14	3.60	478.58	145.9
2000/8/21	3.55	482.04	146.9
2000/8/28	3.60	482.54	147.1
2000/9/4	3.65	481.00	146.6
2000/9/11	3.50	482.16	147.0
2000/9/18	3.60	481.16	146.7
2000/9/25	3.45	480.75	146.5
2000/10/3	3.65	480.66	146.5
2000/10/9	3.65	481.33	146.7
2000/10/18	3.70	481.00	146.6
2000/10/23	3.60	480.46	146.4
2000/11/1	3.60	481.00	146.6
2000/11/7	3.60	481.25	146.7
2000/11/14	3.55	480.50	146.5
2000/11/21	3.60	480.83	146.6
2000/12/4	3.60	480.96	146.6
2000/12/11	3.60	481.58	146.8
2000/12/20	3.60	482.04	146.9

ANNEX 3.C(149) Punping Discharge and Water Level in Wells

POZO W-1
AÑO: 2001

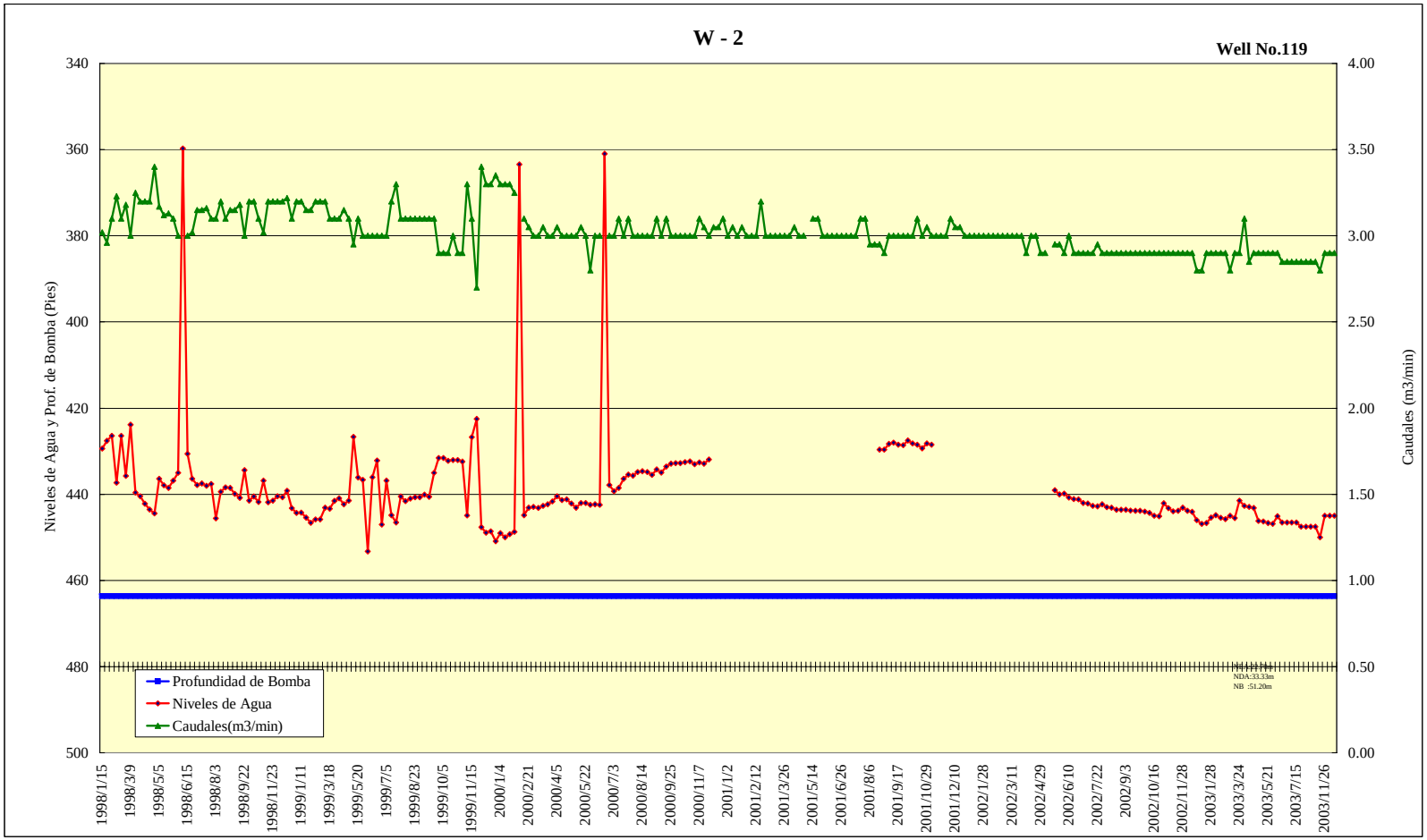
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.50	481.30	146.7
2001/1/8	3.60	481.46	146.7
2001/1/16	3.60	481.16	146.7
2001/1/22	3.90	480.33	146.4
2001/1/31	3.65	480.80	146.5
2001/2/5	3.50	480.33	146.4
2001/2/12	3.60	481.04	146.6
2001/2/20	3.70	480.42	146.4
2001/2/26	3.60	481.42	146.7
2001/3/5	3.55	481.58	146.8
2001/3/12	3.55	480.92	146.6
2001/3/19	3.40	480.25	146.4
2001/3/26	3.55	479.42	146.1
2001/4/2	3.45	481.66	146.8
2001/4/16	3.55	479.50	146.2
2001/4/25	3.55	479.33	146.1
2001/4/30	3.60	479.25	146.1
2001/5/7		353.46	107.7
2001/5/14	3.60	480.58	146.5
2001/5/21	3.55	479.33	146.1
2001/5/28	3.55	481.08	146.6
2001/6/4	3.50	479.83	146.3
2001/6/11	3.50	481.92	146.9
2001/6/18	3.50	481.83	146.9
2001/6/26	3.50	481.87	146.9
2001/7/2	3.50	482.33	147.0
2001/7/10	3.40	481.25	146.7
2001/7/17	3.35	480.92	146.6
2001/7/24	3.50	479.00	146.0
2001/7/30	3.50	478.25	145.8
2001/8/6	3.30	479.66	146.2
2001/8/13	3.35	479.50	146.2
2001/8/20	3.35	479.50	146.2
2001/8/27	3.30	479.50	146.2
2001/9/3	3.50	479.00	146.0
2001/9/10	3.70	477.83	145.6
2001/9/17	3.45	479.20	146.1
2001/9/24	3.55	479.42	146.1
2001/10/1	3.50	477.58	145.6
2001/10/8	3.50	479.83	146.3
2001/10/15	3.60	479.08	146.0
2001/10/22	3.45	480.08	146.3
2001/10/29	3.50	479.66	146.2
2001/11/6	3.50	481.92	146.9
2001/11/12	3.40	480.50	146.5
2001/11/20	3.40	480.25	146.4
2001/11/26	3.35	479.66	146.2
2001/12/3	3.50	479.83	146.3
2001/12/10	3.55	482.00	146.9
2001/12/17	3.35	481.75	146.8

POZO W-1
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.25		
2002/1/7	3.30		
2002/1/14	3.20		
2002/1/21	3.20		
2002/1/28	3.20		
2002/2/4	3.15		
2002/2/12	3.30		
2002/2/19	3.20		
2002/2/25	3.20		
2002/3/4	3.10		
2002/3/11	3.10		
2002/3/19	3.10		
2002/4/3	3.10		
2002/4/8	3.10		
2002/4/15	3.10		
2002/4/22	3.10		
2002/4/29	3.00		
2002/5/6	3.10		
2002/5/13			
2002/5/22	3.15		
2002/5/27	3.05		
2002/6/4	3.00		
2002/6/10	3.10		
2002/6/17	3.00		
2002/6/24	3.00		
2002/7/2	3.00		
2002/7/9	3.00		
2002/7/16	3.00		
2002/7/22	2.95		
2002/7/29	3.00		
2002/8/5	2.95		
2002/8/14	2.95		
2002/8/19	2.95		
2002/8/26	2.90		
2002/9/3	2.95		
2002/9/9	2.95		
2002/9/17	2.95		
2002/9/23	2.95		
2002/9/30	2.95		
2002/10/7	2.90		
2002/10/16	2.90		
2002/10/21	2.90		
2002/10/28	2.95		
2002/11/4	2.90		
2002/11/14	2.90		
2002/11/18	2.90		
2002/11/28	2.95		
2002/12/2	2.95		
2002/12/16	2.95		

POZO W-1
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.90		
2003/1/13	2.90		
2003/1/20	2.90		
2003/1/28	3.00		
2003/2/3	3.05		
2003/2/18	2.95		
2003/2/24	2.90		
2003/3/7	2.50		
2003/3/14	2.50		
2003/3/24	2.50		
2003/4/2	2.50		
2003/4/8	2.50		
2003/4/21	2.50		
2003/5/10	2.50		
2003/5/16	2.50		
2003/5/21	2.50		
2003/6/25	2.50		
2003/7/2	2.55		
2003/7/15	2.50		
2003/8/26	2.50		
2003/10/14	2.80		
2003/11/26	2.50		



ANNEX 3.C(150) Punping Discharge and Water Level in Wells

ANNEX 3.C(151) Punping Discharge and Water Level in Wells

POZO W-2
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.02	429.41	130.9
1998/1/26	2.96	427.58	130.3
1998/2/9	3.10	426.41	130.0
1998/2/17	3.23	437.29	133.3
1998/2/23	3.10	426.41	130.0
1998/3/3	3.18	435.75	132.8
1998/3/9	3.00	423.83	129.2
1998/3/16	3.25	439.58	134.0
1998/3/24	3.20	440.42	134.2
1998/4/2	3.20	442.20	134.8
1998/4/13	3.20	443.50	135.2
1998/4/21	3.40	444.41	135.5
1998/5/5	3.17	436.41	133.0
1998/5/13	3.12	437.92	133.5
1998/5/18	3.13	438.54	133.7
1998/5/25	3.10	436.83	133.1
1998/6/1	3.00	435.00	132.6
1998/6/9		359.75	109.7
1998/6/15	3.00	430.58	131.2
1998/6/22	3.02	436.41	133.0
1998/7/6	3.15	437.83	133.5
1998/7/14	3.15	437.50	133.4
1998/7/21	3.16	438.00	133.5
1998/7/28	3.10	437.58	133.4
1998/8/3	3.10	445.58	135.8
1998/8/11	3.20	439.41	133.9
1998/8/24	3.10	438.37	133.6
1998/8/31	3.15	438.50	133.7
1998/9/7	3.15	439.92	134.1
1998/9/16	3.18	440.83	134.4
1998/9/22	3.00	434.41	132.4
1998/10/9	3.20	441.50	134.6
1998/10/12	3.20	440.50	134.3
1998/11/3	3.10	441.75	134.6
1998/11/9	3.02	436.83	133.1
1998/11/16	3.20	441.82	134.7
1998/11/23	3.20	441.50	134.6
1998/11/30	3.20	440.44	134.2
1998/12/9	3.20	440.67	134.3
1998/12/14	3.22	439.19	133.9
1998/12/21	3.10	443.25	135.1

POZO W-2
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.20	444.34	135.4
1999/1/11	3.20	444.26	135.4
1999/1/18	3.15	445.41	135.8
1999/1/26	3.15	446.58	136.1
1999/2/2	3.20	445.83	135.9
1999/2/16	3.20	445.84	135.9
1999/3/10	3.20	443.12	135.1
1999/3/18	3.10	443.32	135.1
1999/4/5	3.10	441.55	134.6
1999/4/12	3.10	440.93	134.4
1999/4/19	3.15	442.29	134.8
1999/5/5	3.10	441.45	134.6
1999/5/11	2.95	426.7	130.1
1999/5/20	3.10	436.11	132.9
1999/5/27	3.00	436.66	133.1
1999/6/7	3.00	453.25	138.2
1999/6/14	3.00	436.04	132.9
1999/6/23	3.00	432.16	131.7
1999/6/28	3.00	447.04	136.3
1999/7/5	3.00	436.83	133.1
1999/7/13	3.20	444.83	135.6
1999/7/20	3.30	446.54	136.1
1999/8/2	3.10	440.50	134.3
1999/8/9	3.10	441.58	134.6
1999/8/16	3.10	441.00	134.4
1999/8/23	3.10	440.66	134.3
1999/8/30	3.10	440.66	134.3
1999/9/6	3.10	440.08	134.1
1999/9/13	3.10	440.54	134.3
1999/9/20	3.10	435.00	132.6
1999/9/29	2.90	431.58	131.5
1999/10/5	2.90	431.58	131.5
1999/10/11	2.90	432.25	131.7
1999/10/18	3.00	432.08	131.7
1999/10/25	2.90	432.08	131.7
1999/11/1	2.90	432.41	131.8
1999/11/9	3.30	444.92	135.6
1999/11/15	3.10	426.75	130.1
1999/11/22	2.70	422.50	128.8
1999/11/29	3.40	447.66	136.4
1999/12/6	3.30	448.92	136.8
1999/12/13	3.30	448.58	136.7
1999/12/20	3.35	450.92	137.4

POZO W-2
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.30	449.00	136.9
2000/1/10	3.30	450.00	137.2
2000/1/17	3.30	449.25	136.9
2000/1/31	3.25	448.75	136.8
2000/2/7		363.41	110.8
2000/2/15	3.10	444.83	135.6
2000/2/21	3.05	443.08	135.1
2000/2/28	3.00	442.92	135.0
2000/3/8	3.00	443.16	135.1
2000/3/13	3.05	442.66	134.9
2000/3/20	3.00	442.33	134.8
2000/3/27	3.00	441.66	134.6
2000/4/5	3.05	440.45	134.2
2000/4/10	3.00	441.33	134.5
2000/4/24	3.00	441.16	134.5
2000/5/2	3.00	442.16	134.8
2000/5/8	3.00	443.08	135.1
2000/5/16	3.05	442.00	134.7
2000/5/22	3.00	442.00	134.7
2000/5/29	2.80	442.41	134.8
2000/6/5	3.00	442.33	134.8
2000/6/12	3.00	442.46	134.9
2000/6/20		360.96	110.0
2000/6/27	3.00	437.83	133.5
2000/7/3	3.00	439.30	133.9
2000/7/10	3.10	438.50	133.7
2000/7/17	3.00	436.41	133.0
2000/7/24	3.10	435.41	132.7
2000/7/31	3.00	435.66	132.8
2000/8/7	3.00	434.83	132.5
2000/8/14	3.00	434.62	132.5
2000/8/21	3.00	434.80	132.5
2000/8/28	3.00	435.50	132.7
2000/9/4	3.10	434.25	132.4
2000/9/11	3.00	434.92	132.6
2000/9/18	3.10	433.54	132.1
2000/9/25	3.00	432.87	131.9
2000/10/3	3.00	432.75	131.9
2000/10/9	3.00	432.75	131.9
2000/10/18	3.00	432.54	131.8
2000/10/23	3.00	432.33	131.8
2000/11/1	3.00	433.00	132.0
2000/11/7	3.10	432.58	131.9
2000/11/14	3.05	432.87	131.9
2000/11/21	3.00	431.92	131.6
2000/12/4	3.05		0.0
2000/12/11	3.05		0.0
2000/12/20	3.10		0.0

ANNEX 3.C(152) Punping Discharge and Water Level in Wells

POZO W-2
AÑO: 2001

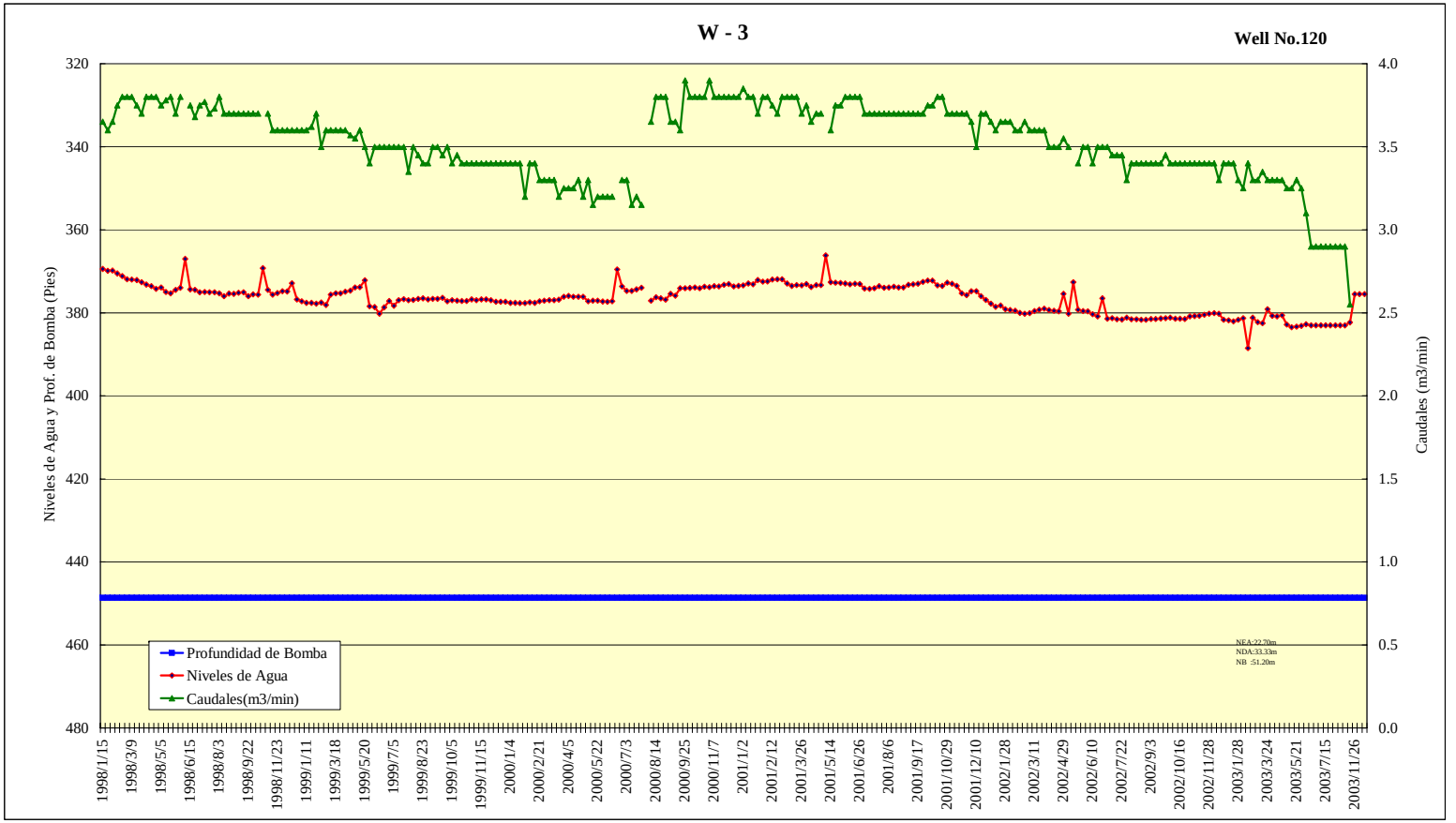
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.00		0.0
2001/1/8	3.05		0.0
2001/1/16	3.00		0.0
2001/1/22	3.05		0.0
2001/1/31	3.00		0.0
2001/2/5	3.00		0.0
2001/2/12	3.00		0.0
2001/2/20	3.20		0.0
2001/2/26	3.00		0.0
2001/3/5	3.00		0.0
2001/3/12	3.00		0.0
2001/3/19	3.00		0.0
2001/3/26	3.00		0.0
2001/4/2	3.00		0.0
2001/4/16	3.05		0.0
2001/4/25	3.00		0.0
2001/4/30	3.00		0.0
2001/5/7			0.0
2001/5/14	3.10		0.0
2001/5/21	3.10		0.0
2001/5/28	3.00		0.0
2001/6/4	3.00		0.0
2001/6/11	3.00		0.0
2001/6/18	3.00		0.0
2001/6/26	3.00		0.0
2001/7/2	3.00		0.0
2001/7/10	3.00		0.0
2001/7/17	3.00		0.0
2001/7/24	3.10		0.0
2001/7/30	3.10		0.0
2001/8/6	2.95		0.0
2001/8/13	2.95		0.0
2001/8/20	2.95	429.66	131.0
2001/8/27	2.90	429.66	131.0
2001/9/3	3.00	428.33	130.6
2001/9/10	3.00	428.00	130.5
2001/9/17	3.00	428.46	130.6
2001/9/24	3.00	428.58	130.6
2001/10/1	3.00	427.50	130.3
2001/10/8	3.00	428.16	130.5
2001/10/15	3.10	428.50	130.6
2001/10/22	3.00	429.33	130.9
2001/10/29	3.05	428.16	130.5
2001/11/6	3.00	428.50	130.6
2001/11/12	3.00	Abejas	
2001/11/20	3.00	Abejas	
2001/11/26	3.00	Abejas	
2001/12/3	3.10	Abejas	
2001/12/10	3.05	Abejas	
2001/12/17	3.05	Abejas	

POZO W-2
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.00	Abejas	
2002/1/7	3.00	Abejas	
2002/1/14	3.00	Abejas	
2002/1/21	3.00	Abejas	
2002/1/28	3.00	Abejas	
2002/2/4	3.00	Abejas	
2002/2/12	3.00	Abejas	
2002/2/19	3.00	Abejas	
2002/2/25	3.00	Abejas	
2002/3/4	3.00	Abejas	
2002/3/11	3.00	Abejas	
2002/3/19	3.00	Abejas	
2002/4/3	3.00	Abejas	
2002/4/8	2.90	Abejas	
2002/4/15	3.00	Abejas	
2002/4/22	3.00	Abejas	
2002/4/29	2.90	Abejas	
2002/5/6	2.90	Abejas	
2002/5/13			0.0
2002/5/22	2.95	439.08	133.8
2002/5/27	2.95	440.00	134.1
2002/6/4	2.90	439.83	134.1
2002/6/10	3.00	440.75	134.3
2002/6/17	2.90	441.12	134.5
2002/6/24	2.90	441.16	134.5
2002/7/2	2.90	442.00	134.7
2002/7/9	2.90	442.12	134.8
2002/7/16	2.90	442.70	134.9
2002/7/22	2.90	442.80	135.0
2002/7/29	2.90	442.33	134.8
2002/8/5	2.90	443.00	135.0
2002/8/14	2.90	443.08	135.1
2002/8/19	2.90	443.58	135.2
2002/8/26	2.90	443.58	135.2
2002/9/3	2.90	443.58	135.2
2002/9/9	2.90	443.75	135.3
2002/9/17	2.90	443.83	135.3
2002/9/23	2.90	443.83	135.3
2002/9/30	2.90	444.00	135.3
2002/10/7	2.90	444.33	135.4
2002/10/16	2.90	445.00	135.6
2002/10/21	2.90	445.08	135.7
2002/10/28	2.90	442.08	134.7
2002/11/4	2.90	443.25	135.1
2002/11/14	2.90	443.92	135.3
2002/11/18	2.90	443.83	135.3
2002/11/28	2.90	443.08	135.1
2002/12/2	2.90	443.83	135.3
2002/12/16	2.90	444.08	135.4

POZO W-2
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.80	446.00	135.9
2003/1/13	2.80	446.83	136.2
2003/1/20	2.90	446.66	136.1
2003/1/28	2.90	445.42	135.8
2003/2/3	2.90	444.83	135.6
2003/2/18	2.90	445.46	135.8
2003/2/24	2.90	445.75	135.9
2003/3/7	2.80	445.00	135.6
2003/3/14	2.90	445.50	135.8
2003/3/24	2.90	441.50	134.6
2003/4/2	3.10	442.66	134.9
2003/4/8	2.85	442.92	135.0
2004/4/21	2.90	443.16	135.1
2003/5/10	2.90	446.16	136.0
2003/5/16	2.90	446.33	136.0
2003/5/21	2.90	446.66	136.1
2003/6/25	2.90	446.83	136.2
2003/7/2	2.90	445.08	135.7
2003/7/15	2.85	446.54	136.1
2003/8/26	2.80	447.50	136.4
2003/10/14	2.80	450.00	137.2
2003/11/26	2.90	445.00	135.6



ANNEX 3.C(153) Punping Discharge and Water Level in Wells

ANNEX 3.C(154) Punping Discharge and Water Level in Wells

POZO W-3
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.65	369.41	112.6
1998/1/26	3.60	369.87	112.7
1998/2/9	3.65	369.83	112.7
1998/2/17	3.75	370.54	112.9
1998/2/23	3.80	371.16	113.1
1998/3/3	3.80	371.92	113.4
1998/3/9	3.80	372.00	113.4
1998/3/16	3.75	372.09	113.4
1998/3/24	3.70	372.66	113.6
1998/4/2	3.80	373.21	113.8
1998/4/13	3.80	373.62	113.9
1998/4/21	3.80	374.20	114.1
1998/5/5	3.75	373.92	114.0
1998/5/13	3.78	375.00	114.3
1998/5/18	3.80	375.33	114.4
1998/5/25	3.70	374.50	114.1
1998/6/1	3.80	374.00	114.0
1998/6/9		367.00	111.9
1998/6/15	3.75	374.33	114.1
1998/6/22	3.68	374.50	114.1
1998/7/6	3.75	375.08	114.3
1998/7/14	3.77	375.00	114.3
1998/7/21	3.70	375.08	114.3
1998/7/28	3.73	375.08	114.3
1998/8/3	3.80	375.33	114.4
1998/8/11	3.70	376.00	114.6
1998/8/24	3.70	375.37	114.4
1998/8/31	3.70	375.41	114.4
1998/9/7	3.70	375.20	114.4
1998/9/16	3.70	375.08	114.3
1998/9/22	3.70	376.00	114.6
1998/10/9	3.70	375.58	114.5
1998/10/12	3.70	375.66	114.5
1998/11/3		369.25	112.5
1998/11/9	3.70	374.50	114.1
1998/11/16	3.60	375.63	114.5
1998/11/23	3.60	375.23	114.4
1998/11/30	3.60	374.83	114.2
1998/12/9	3.60	374.84	114.3
1998/12/14	3.60	372.88	113.7
1998/12/21	3.60	376.76	114.8

POZO W-3
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.60	377.25	115.0
1999/1/11	3.60	377.59	115.1
1999/1/18	3.62	377.59	115.1
1999/1/26	3.70	377.83	115.2
1999/2/2	3.50	377.54	115.1
1999/2/16	3.60	378.09	115.2
1999/3/10	3.60	375.66	114.5
1999/3/18	3.60	375.33	114.4
1999/4/5	3.60	375.33	114.4
1999/4/12	3.60	374.90	114.3
1999/4/19	3.57	374.67	114.2
1999/5/5	3.55	373.92	114.0
1999/5/11	3.60	373.87	114.0
1999/5/20	3.50	372.21	113.4
1999/5/27	3.40	378.42	115.3
1999/6/7	3.50	378.66	115.4
1999/6/14	3.50	380.25	115.9
1999/6/23	3.50	378.67	115.4
1999/6/28	3.50	377.16	115.0
1999/7/5	3.50	378.33	115.3
1999/7/13	3.50	376.96	114.9
1999/7/20	3.50	376.70	114.8
1999/8/2	3.35	377.00	114.9
1999/8/9	3.50	376.92	114.9
1999/8/16	3.45	376.62	114.8
1999/8/23	3.40	376.50	114.8
1999/8/30	3.40	376.75	114.8
1999/9/6	3.50	376.62	114.8
1999/9/13	3.50	376.66	114.8
1999/9/20	3.45	376.41	114.7
1999/9/29	3.50	377.25	115.0
1999/10/5	3.40	377.00	114.9
1999/10/11	3.45	377.08	114.9
1999/10/18	3.40	377.17	115.0
1999/10/25	3.40	377.16	115.0
1999/11/1	3.40	376.75	114.8
1999/11/9	3.40	377.00	114.9
1999/11/15	3.40	376.75	114.8
1999/11/22	3.40	376.75	114.8
1999/11/29	3.40	376.96	114.9
1999/12/6	3.40	377.33	115.0
1999/12/13	3.40	377.33	115.0
1999/12/20	3.40	377.33	115.0

POZO W-3
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.40	377.58	115.1
2000/1/10	3.40	377.63	115.1
2000/1/17	3.40	377.70	115.1
2000/1/31	3.20	377.66	115.1
2000/2/7	3.40	377.50	115.1
2000/2/15	3.40	377.62	115.1
2000/2/21	3.30	377.25	115.0
2000/2/28	3.30	377.08	114.9
2000/3/8	3.30	377.00	114.9
2000/3/13	3.30	377.00	114.9
2000/3/20	3.20	376.83	114.9
2000/3/27	3.25	376.13	114.6
2000/4/5	3.25	375.92	114.6
2000/4/10	3.25	376.16	114.7
2000/4/24	3.30	376.16	114.7
2000/5/2	3.20	376.16	114.7
2000/5/8	3.30	377.20	115.0
2000/5/16	3.15	377.08	114.9
2000/5/22	3.20	377.12	114.9
2000/5/29	3.20	377.30	115.0
2000/6/5	3.20	377.33	115.0
2000/6/12	3.20	377.25	115.0
2000/6/20		369.54	112.6
2000/6/27	3.30	373.66	113.9
2000/7/3	3.30	374.75	114.2
2000/7/10	3.15	374.75	114.2
2000/7/17	3.20	374.33	114.1
2000/7/24	3.15	373.96	114.0
2000/7/31			0.0
2000/8/7	3.65	377.08	114.9
2000/8/14	3.80	376.25	114.7
2000/8/21	3.80	376.54	114.8
2000/8/28	3.80	376.83	114.9
2000/9/4	3.65	375.42	114.4
2000/9/11	3.65	375.87	114.6
2000/9/18	3.60	374.08	114.0
2000/9/25	3.90	374.12	114.0
2000/10/3	3.80	374.04	114.0
2000/10/9	3.80	373.92	114.0
2000/10/18	3.80	374.08	114.0
2000/10/23	3.80	373.70	113.9
2000/11/1	3.90	373.83	113.9
2000/11/7	3.80	373.58	113.9
2000/11/14	3.80	373.66	113.9
2000/11/21	3.80	373.25	113.8
2000/12/4	3.80	373.08	113.7
2000/12/11	3.80	373.66	113.9
2000/12/20	3.80	373.50	113.8

ANNEX 3.C(155) Punping Discharge and Water Level in Wells

POZO W-3
AÑO: 2001

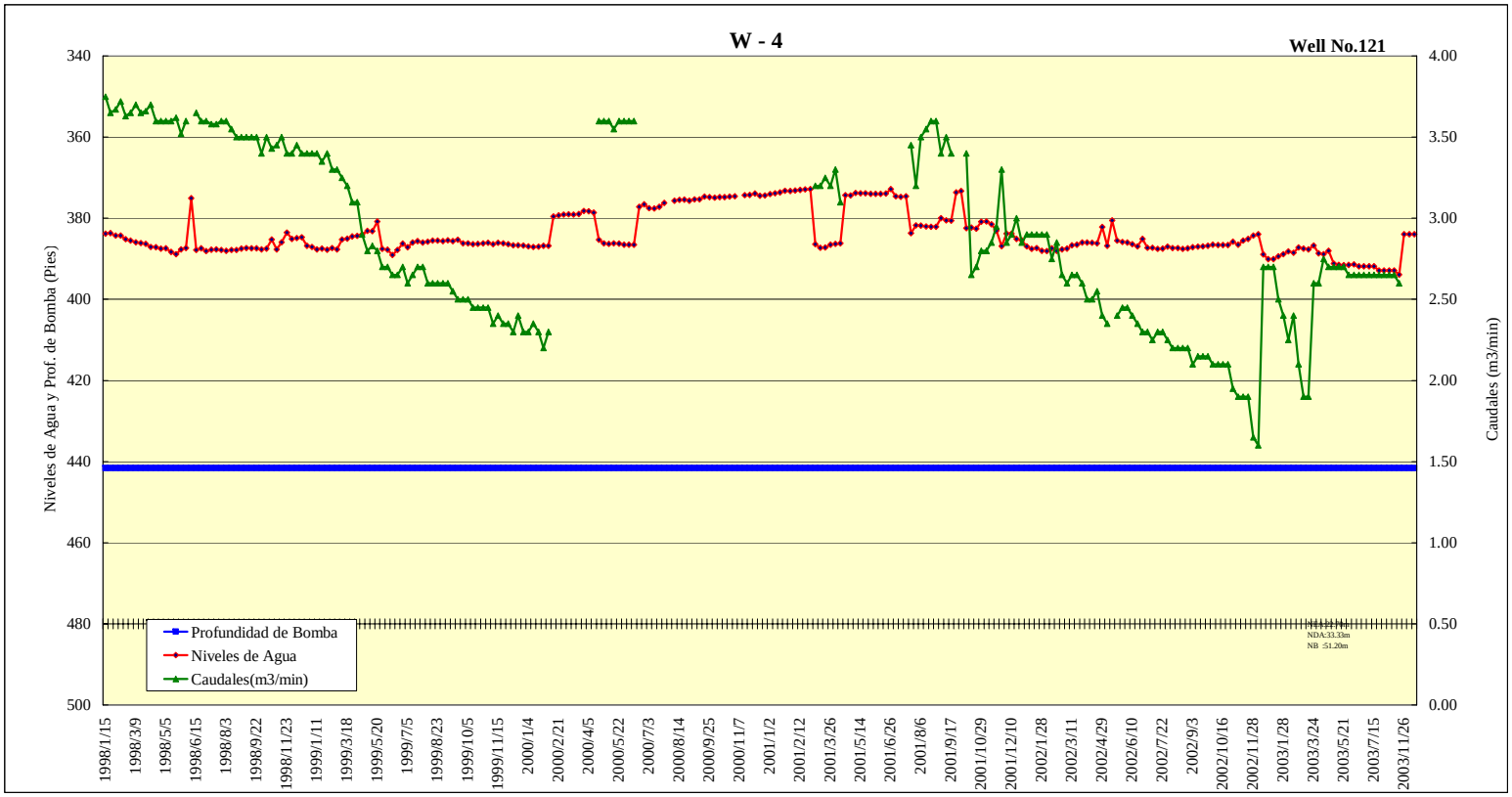
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.85	373.37	113.8
2001/1/8	3.80	372.96	113.7
2001/1/16	3.80	373.16	113.7
2001/1/22	3.70	372.12	113.4
2001/1/31	3.80	372.50	113.5
2001/2/5	3.80	372.42	113.5
2001/2/12	3.75	372.00	113.4
2001/2/20	3.70	371.92	113.4
2001/2/26	3.80	371.92	113.4
2001/3/5	3.80	372.92	113.7
2001/3/12	3.80	373.50	113.8
2001/3/19	3.80	373.33	113.8
2001/3/26	3.70	373.42	113.8
2001/4/2	3.75	373.08	113.7
2001/4/16	3.65	373.75	113.9
2001/4/25	3.70	373.33	113.8
2001/4/30	3.70	373.33	113.8
2001/5/7		366.16	111.6
2001/5/14	3.60	372.66	113.6
2001/5/21	3.75	372.75	113.6
2001/5/28	3.75	372.83	113.6
2001/6/4	3.80	372.92	113.7
2001/6/11	3.80	373.16	113.7
2001/6/18	3.80	373.00	113.7
2001/6/26	3.80	373.10	113.7
2001/7/2	3.70	374.16	114.0
2001/7/10	3.70	374.25	114.1
2001/7/17	3.70	374.08	114.0
2001/7/24	3.70	373.62	113.9
2001/7/30	3.70	374.00	114.0
2001/8/6	3.70	373.92	114.0
2001/8/13	3.70	373.70	113.9
2001/8/20	3.70	373.92	114.0
2001/8/27	3.70	373.92	114.0
2001/9/3	3.70	373.25	113.8
2001/9/10	3.70	373.16	113.7
2001/9/17	3.70	373.04	113.7
2001/9/24	3.70	372.58	113.6
2001/10/1	3.75	372.25	113.5
2001/10/8	3.75	372.25	113.5
2001/10/15	3.80	373.37	113.8
2001/10/22	3.80	373.54	113.9
2001/10/29	3.70	372.75	113.6
2001/11/6	3.70	373.00	113.7
2001/11/12	3.70	373.54	113.9
2001/11/20	3.70	375.30	114.4
2001/11/26	3.70	375.75	114.5
2001/12/3	3.65	374.83	114.2
2001/12/10	3.50	374.83	114.2
2001/12/17	3.70	376.00	114.6

POZO W-3
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.70	376.92	114.9
2002/1/7	3.65	377.83	115.2
2002/1/14	3.60	378.58	115.4
2002/1/21	3.65	378.25	115.3
2002/1/28	3.65	379.12	115.6
2002/2/4	3.65	379.33	115.6
2002/2/12	3.60	379.54	115.7
2002/2/19	3.60	380.04	115.8
2002/2/25	3.65	380.20	115.9
2002/3/4	3.60	380.08	115.8
2002/3/11	3.60	379.58	115.7
2002/3/19	3.60	379.25	115.6
2002/4/3	3.60	379.00	115.5
2002/4/8	3.50	379.33	115.6
2002/4/15	3.50	379.54	115.7
2002/4/22	3.50	379.66	115.7
2002/4/29	3.55	375.42	114.4
2002/5/6	3.50	380.25	115.9
2002/5/13		372.62	113.6
2002/5/22	3.40	379.25	115.6
2002/5/27	3.50	379.58	115.7
2002/6/4	3.50	379.66	115.7
2002/6/10	3.40	380.33	115.9
2002/6/17	3.50	380.87	116.1
2002/6/24	3.50	376.50	114.8
2002/7/2	3.50	381.42	116.3
2002/7/9	3.45	381.30	116.2
2002/7/16	3.45	381.58	116.3
2002/7/22	3.45	381.62	116.3
2002/7/29	3.30	381.16	116.2
2002/8/5	3.40	381.54	116.3
2002/8/14	3.40	381.58	116.3
2002/8/19	3.40	381.66	116.3
2002/8/26	3.40	381.66	116.3
2002/9/3	3.40	381.50	116.3
2002/9/9	3.40	381.50	116.3
2002/9/17	3.40	381.37	116.2
2002/9/23	3.45	381.30	116.2
2002/9/30	3.40	381.16	116.2
2002/10/7	3.40	381.42	116.3
2002/10/16	3.40	381.46	116.3
2002/10/21	3.40	381.50	116.3
2002/10/28	3.40	380.83	116.1
2002/11/4	3.40	380.80	116.1
2002/11/14	3.40	380.75	116.1
2002/11/18	3.40	380.50	116.0
2002/11/28	3.40	380.20	115.9
2002/12/2	3.40	380.08	115.8
2002/12/16	3.30	380.25	115.9

POZO W-3
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.40	381.70	116.3
2003/1/13	3.40	381.83	116.4
2003/1/20	3.40	382.08	116.5
2003/1/28	3.30	381.66	116.3
2003/2/3	3.25	381.33	116.2
2003/2/18	3.40	382.08	116.5
2003/2/24	3.30	381.16	116.2
2003/3/7	3.30	382.25	116.5
2003/3/14	3.35	382.50	116.6
2003/3/24	3.30	379.16	115.6
2003/4/2	3.30	380.75	116.1
2003/4/8	3.30	380.83	116.1
2003/4/21	3.30	380.58	116.0
2003/5/10	3.25	382.83	116.7
2003/5/16	3.25	383.50	116.9
2003/5/21	2.70	383.33	116.8
2003/6/25	3.25	383.16	116.8
2003/7/2	3.10	382.80	116.7
2003/7/15	2.90	383.00	116.7
2003/8/26	2.90	383.00	116.7
2003/10/13	2.55	382.83	116.7
2003/11/26		375.50	114.5



ANNEX 3.C(156) Punping Discharge and Water Level in Wells

ANNEX 3.C(157) Punping Discharge and Water Level in Wells

POZO W-4
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.75	383.79	117.0
1998/1/26	3.65	383.70	117.0
1998/2/9	3.67	384.29	117.1
1998/2/17	3.72	384.25	117.1
1998/2/23	3.63	385.16	117.4
1998/3/3	3.65	385.50	117.5
1998/3/9	3.70	385.92	117.6
1998/3/16	3.65	386.09	117.7
1998/3/24	3.66	386.33	117.8
1998/4/2	3.70	387.08	118.0
1998/4/13	3.60	387.16	118.0
1998/4/21	3.60	387.50	118.1
1998/5/5	3.60	387.41	118.1
1998/5/13	3.60	388.33	118.4
1998/5/18	3.62	388.83	118.5
1998/5/25	3.52	387.66	118.2
1998/6/1	3.60	387.33	118.1
1998/6/9		375.08	114.3
1998/6/15	3.65	387.83	118.2
1998/6/22	3.60	387.41	118.1
1998/7/6	3.60	388.08	118.3
1998/7/14	3.58	387.75	118.2
1998/7/21	3.58	387.70	118.2
1998/7/28	3.60	387.83	118.2
1998/8/3	3.60	388.00	118.3
1998/8/11	3.55	387.83	118.2
1998/8/24	3.50	387.83	118.2
1998/8/31	3.50	387.50	118.1
1998/9/7	3.50	387.33	118.1
1998/9/16	3.50	387.41	118.1
1998/9/22	3.50	387.41	118.1
1998/10/9	3.40	387.66	118.2
1998/10/12	3.50	387.50	118.1
1998/11/3	3.43	385.25	117.4
1998/11/9	3.45	387.66	118.2
1998/11/16	3.50	385.92	117.6
1998/11/23	3.40	383.53	116.9
1998/11/30	3.40	385.13	117.4
1998/12/9	3.45	384.87	117.3
1998/12/14	3.40	384.68	117.3
1998/12/21	3.40	386.84	117.9

POZO W-4
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.40	387.09	118.0
1999/1/11	3.40	387.66	118.2
1999/1/18	3.35	387.50	118.1
1999/1/26	3.40	387.75	118.2
1999/2/2	3.30	387.33	118.1
1999/2/16	3.30	387.67	118.2
1999/3/10	3.25	385.23	117.4
1999/3/18	3.20	385.01	117.4
1999/4/5	3.10	384.51	117.2
1999/4/12	3.10	384.35	117.1
1999/4/19	2.90	384.00	117.0
1999/5/5	2.80	383.14	116.8
1999/5/11	2.83	383.20	116.8
1999/5/20	2.80	380.77	116.1
1999/5/27	2.70	387.58	118.1
1999/6/7	2.70	387.75	118.2
1999/6/14	2.65	389.08	118.6
1999/6/23	2.65	387.83	118.2
1999/6/28	2.70	386.25	117.7
1999/7/5	2.60	387.16	118.0
1999/7/13	2.65	385.96	117.6
1999/7/20	2.70	385.66	117.5
1999/8/2	2.70	386.00	117.7
1999/8/9	2.60	385.75	117.6
1999/8/16	2.60	385.50	117.5
1999/8/23	2.60	385.50	117.5
1999/8/30	2.60	385.66	117.5
1999/9/6	2.60	385.45	117.5
1999/9/13	2.55	385.62	117.5
1999/9/20	2.50	385.33	117.4
1999/9/29	2.50	386.16	117.7
1999/10/5	2.50	386.16	117.7
1999/10/11	2.45	386.41	117.8
1999/10/18	2.45	386.33	117.8
1999/10/25	2.45	386.20	117.7
1999/11/1	2.45	386.08	117.7
1999/11/9	2.35	386.37	117.8
1999/11/15	2.40	386.08	117.7
1999/11/22	2.35	386.16	117.7
1999/11/29	2.35	386.37	117.8
1999/12/6	2.30	386.66	117.9
1999/12/13	2.40	386.66	117.9
1999/12/20	2.30	386.75	117.9

POZO W-4
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	2.30	386.92	117.9
2000/1/10	2.35	387.08	118.0
2000/1/17	2.30	387.04	118.0
2000/1/31	2.20	386.83	117.9
2000/2/7	2.30	386.80	117.9
2000/2/15		379.54	115.7
2000/2/21		379.30	115.6
2000/2/28		379.08	115.5
2000/3/8		379.04	115.5
2000/3/13		379.08	115.5
2000/3/20		378.96	115.5
2000/3/27		378.20	115.3
2000/4/5		378.25	115.3
2000/4/10		378.60	115.4
2000/4/24	3.60	385.33	117.4
2000/5/2	3.60	386.16	117.7
2000/5/8	3.60	386.33	117.8
2000/5/16	3.55	386.16	117.7
2000/5/22	3.60	386.25	117.7
2000/5/29	3.60	386.50	117.8
2000/6/5	3.60	386.50	117.8
2000/6/12	3.60	386.54	117.8
2000/6/20		377.17	115.0
2000/6/27		376.58	114.8
2000/7/3		377.50	115.1
2000/7/10		377.58	115.1
2000/7/17		377.16	115.0
2000/7/24		376.25	114.7
2000/7/31			0.0
2000/8/7		375.66	114.5
2000/8/14		375.50	114.5
2000/8/21		375.41	114.4
2000/8/28		375.66	114.5
2000/9/4		375.33	114.4
2000/9/11		375.33	114.4
2000/9/18		374.66	114.2
2000/9/25		374.83	114.2
2000/10/3		374.92	114.3
2000/10/9		374.80	114.2
2000/10/18		374.83	114.2
2000/10/23		374.66	114.2
2000/11/1		374.58	114.2
2000/11/7			0.0
2000/11/14		374.33	114.1
2000/11/21		374.25	114.1
2000/12/4		373.92	114.0
2000/12/11		374.46	114.1
2000/12/20		374.42	114.1

ANNEX 3.C(158) Punping Discharge and Water Level in Wells

POZO W-4
AÑO: 2001

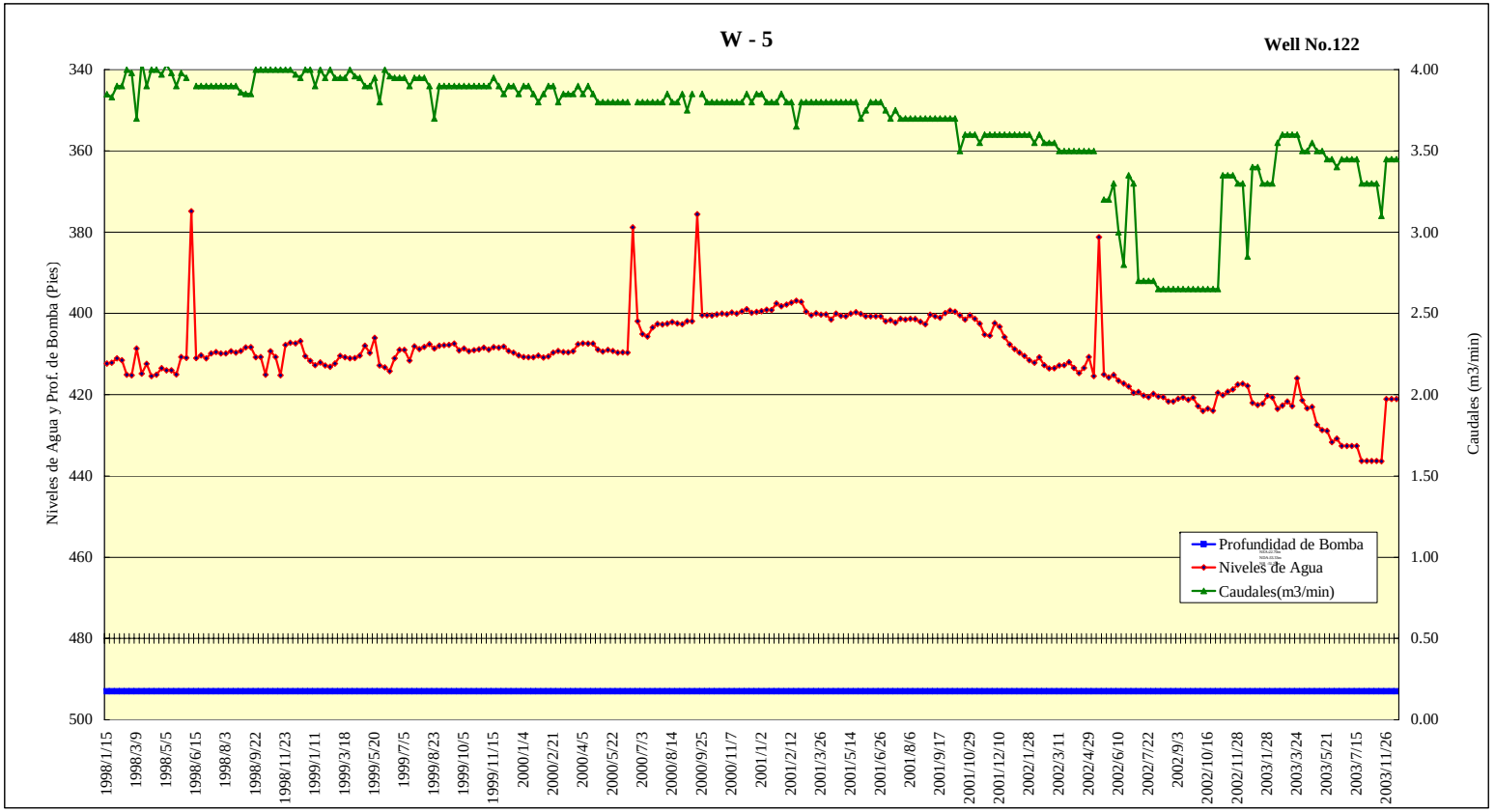
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		374.08	114.0
2001/1/8		373.83	113.9
2001/1/16		373.66	113.9
2001/1/22		373.25	113.8
2001/1/31		373.33	113.8
2001/2/5		373.16	113.7
2001/2/12		373.00	113.7
2001/2/20		372.92	113.7
2001/2/26		372.83	113.6
2001/3/5	3.20	386.42	117.8
2001/3/12	3.20	387.25	118.0
2001/3/19	3.25	387.20	118.0
2001/3/26	3.20	386.50	117.8
2001/4/2	3.30	386.33	117.8
2001/4/16	3.10	386.20	117.7
2001/4/25		374.30	114.1
2001/4/30		374.37	114.1
2001/5/7		373.75	113.9
2001/5/14		373.83	113.9
2001/5/21		373.83	113.9
2001/5/28		373.96	114.0
2001/6/4		374.00	114.0
2001/6/11		374.00	114.0
2001/6/18		373.92	114.0
2001/6/26		372.83	113.6
2001/7/2		374.58	114.2
2001/7/10		374.75	114.2
2001/7/17		374.58	114.2
2001/7/24	3.45	383.70	117.0
2001/7/30	3.20	381.75	116.4
2001/8/6	3.50	381.83	116.4
2001/8/13	3.55	382.00	116.4
2001/8/20	3.60	382.12	116.5
2001/8/27	3.60	382.12	116.5
2001/9/3	3.40	380.00	115.8
2001/9/10	3.50	380.50	116.0
2001/9/17	3.40	380.58	116.0
2001/9/24		373.66	113.9
2001/10/1		373.30	113.8
2001/10/8	3.40	382.42	116.6
2001/10/15	2.65	382.30	116.5
2001/10/22	2.70	382.58	116.6
2001/10/29	2.80	380.87	116.1
2001/11/6	2.80	380.83	116.1
2001/11/12	2.85	381.50	116.3
2001/11/20	2.95	383.08	116.8
2001/11/26	3.30	386.87	117.9
2001/12/3	2.85	383.83	117.0
2001/12/10	2.90	383.80	117.0
2001/12/17	3.00	385.12	117.4

POZO W-4
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	2.85	385.42	117.5
2002/1/7	2.90	386.92	117.9
2002/1/14	2.90	387.58	118.1
2002/1/21	2.90	387.33	118.1
2002/1/28	2.90	388.04	118.3
2002/2/4	2.90	388.12	118.3
2002/2/12	2.75	387.42	118.1
2002/2/19	2.85	388.00	118.3
2002/2/25	2.65	387.66	118.2
2002/3/4	2.60	387.50	118.1
2002/3/11	2.65	386.66	117.9
2002/3/19	2.65	386.50	117.8
2002/4/3	2.60	386.00	117.7
2002/4/8	2.50	386.00	117.7
2002/4/15	2.50	386.08	117.7
2002/4/22	2.55	386.16	117.7
2002/4/29	2.40	382.16	116.5
2002/5/6	2.35	386.83	117.9
2002/5/13		380.50	116.0
2002/5/22	2.40	385.50	117.5
2002/5/27	2.45	385.83	117.6
2002/6/4	2.45	386.00	117.7
2002/6/10	2.40	386.37	117.8
2002/6/17	2.35	386.96	117.9
2002/6/24	2.30	385.08	117.4
2002/7/2	2.30	387.25	118.0
2002/7/9	2.25	387.30	118.0
2002/7/16	2.30	387.58	118.1
2002/7/22	2.30	387.50	118.1
2002/7/29	2.25	387.04	118.0
2002/8/5	2.20	387.37	118.1
2002/8/14	2.20	387.33	118.1
2002/8/19	2.20	387.58	118.1
2002/8/26	2.20	387.42	118.1
2002/9/3	2.10	387.12	118.0
2002/9/9	2.15	387.04	118.0
2002/9/17	2.15	386.92	117.9
2002/9/23	2.15	386.83	117.9
2002/9/30	2.10	386.54	117.8
2002/10/7	2.10	386.62	117.8
2002/10/16	2.10	386.62	117.8
2002/10/21	2.10	386.58	117.8
2002/10/28	1.95	385.75	117.6
2002/11/4	1.90	386.54	117.8
2002/11/14	1.90	385.50	117.5
2002/11/18	1.90	385.08	117.4
2002/11/28	1.65	384.25	117.1
2002/12/2	1.60	383.92	117.0
2002/12/16	2.70	388.92	118.5

POZO W-4
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.70	390.08	118.9
2003/1/13	2.70	390.08	118.9
2003/1/20	2.50	389.42	118.7
2003/1/28	2.40	388.83	118.5
2003/2/3	2.25	388.16	118.3
2003/2/18	2.40	388.54	118.4
2003/2/24	2.10	387.20	118.0
2003/3/7	1.90	387.50	118.1
2003/3/14	1.90	387.66	118.2
2003/3/24	2.60	386.75	117.9
2003/4/2	2.60	388.66	118.5
2003/4/8	2.75	388.83	118.5
2003/4/21	2.70	388.00	118.3
2003/5/10	2.70	391.16	119.2
2003/5/16	2.70	391.50	119.3
2003/5/21	2.70	391.58	119.4
2003/6/25	2.65	391.50	119.3
2003/7/2	2.65	391.37	119.3
2003/7/15	2.65	391.83	119.4
2003/8/26	2.65	392.87	119.7
2003/10/13	2.60	393.92	120.1
2003/11/26		383.92	117.0



ANNEX 3.C(159) Punping Discharge and Water Level in Wells

ANNEX 3.C(160) Punping Discharge and Water Level in Wells

POZO W-5
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.85	412.33	125.7
1998/1/26	3.83	412.16	125.6
1998/2/9	3.90	411.08	125.3
1998/2/17	3.90	411.54	125.4
1998/2/23	4.00	415.08	126.5
1998/3/3	3.98	415.25	126.6
1998/3/9	3.70	408.62	124.5
1998/3/16	4.05	414.83	126.4
1998/3/24	3.90	412.42	125.7
1998/4/2	4.00	415.42	126.6
1998/4/13	4.00	415.08	126.5
1998/4/21	3.97	413.50	126.0
1998/5/5	4.03	414.00	126.2
1998/5/13	3.98	414.00	126.2
1998/5/18	3.90	415.00	126.5
1998/5/25	3.98	410.75	125.2
1998/6/1	3.95	410.92	125.2
1998/6/9		374.83	114.2
1998/6/15	3.90	411.00	125.3
1998/6/22	3.90	410.33	125.1
1998/7/6	3.90	411.08	125.3
1998/7/14	3.90	409.83	124.9
1998/7/21	3.90	409.50	124.8
1998/7/28	3.90	409.83	124.9
1998/8/3	3.90	409.83	124.9
1998/8/11	3.90	409.33	124.8
1998/8/24	3.90	409.66	124.9
1998/8/31	3.86	409.25	124.7
1998/9/7	3.85	408.41	124.5
1998/9/16	3.85	408.33	124.5
1998/9/22	4.00	410.83	125.2
1998/10/9	4.00	410.75	125.2
1998/10/12	4.00	415.13	126.5
1998/11/3	4.00	409.33	124.8
1998/11/9	4.00	410.75	125.2
1998/11/16	4.00	415.25	126.6
1998/11/23	4.00	407.77	124.3
1998/11/30	4.00	407.21	124.1
1998/12/9	3.97	407.38	124.2
1998/12/14	3.95	406.85	124.0
1998/12/21	4.00	410.54	125.1

POZO W-5
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	4.00	411.67	125.5
1999/1/11	3.90	412.76	125.8
1999/1/18	4.00	412.09	125.6
1999/1/26	3.95	412.83	125.8
1999/2/2	4.00	413.13	125.9
1999/2/16	3.95	412.34	125.7
1999/3/10	3.95	410.49	125.1
1999/3/18	3.95	410.79	125.2
1999/4/5	4.00	411.08	125.3
1999/4/12	3.96	410.98	125.3
1999/4/19	3.95	410.41	125.1
1999/5/5	3.90	408.00	124.4
1999/5/11	3.90	409.75	124.9
1999/5/20	3.95	406.00	123.7
1999/5/27	3.80	412.83	125.8
1999/6/7	4.00	413.25	126.0
1999/6/14	3.96	414.25	126.3
1999/6/23	3.95	411.08	125.3
1999/6/28	3.95	409.00	124.7
1999/7/5	3.95	409.00	124.7
1999/7/13	3.90	411.58	125.4
1999/7/20	3.95	408.08	124.4
1999/8/2	3.95	408.80	124.6
1999/8/9	3.95	408.25	124.4
1999/8/16	3.90	407.58	124.2
1999/8/23	3.70	408.66	124.6
1999/8/30	3.90	407.96	124.3
1999/9/6	3.90	407.83	124.3
1999/9/13	3.90	407.75	124.3
1999/9/20	3.90	407.41	124.2
1999/9/29	3.90	409.12	124.7
1999/10/5	3.90	408.66	124.6
1999/10/11	3.90	409.33	124.8
1999/10/18	3.90	409.08	124.7
1999/10/25	3.90	408.83	124.6
1999/11/1	3.90	408.42	124.5
1999/11/9	3.90	408.92	124.6
1999/11/15	3.95	408.33	124.5
1999/11/22	3.90	408.45	124.5
1999/11/29	3.85	408.16	124.4
1999/12/6	3.90	409.25	124.7
1999/12/13	3.90	409.66	124.9
1999/12/20	3.85	410.34	125.1

POZO W-5
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.90	410.75	125.2
2000/1/10	3.90	410.83	125.2
2000/1/17	3.85	410.83	125.2
2000/1/31	3.80	410.41	125.1
2000/2/7	3.85	410.84	125.2
2000/2/15	3.90	410.58	125.1
2000/2/21	3.90	409.66	124.9
2000/2/28	3.80	409.25	124.7
2000/3/8	3.85	409.50	124.8
2000/3/13	3.85	409.58	124.8
2000/3/20	3.85	409.30	124.8
2000/3/27	3.90	407.54	124.2
2000/4/5	3.85	407.38	124.2
2000/4/10	3.90	407.42	124.2
2000/4/24	3.85	407.41	124.2
2000/5/2	3.80	408.92	124.6
2000/5/8	3.80	409.42	124.8
2000/5/16	3.80	409.00	124.7
2000/5/22	3.80	409.25	124.7
2000/5/29	3.80	409.66	124.9
2000/6/5	3.80	409.58	124.8
2000/6/12	3.80	409.66	124.9
2000/6/20		378.80	115.5
2000/6/27	3.80	401.96	122.5
2000/7/3	3.80	405.08	123.5
2000/7/10	3.80	405.70	123.7
2000/7/17	3.80	403.50	123.0
2000/7/24	3.80	402.62	122.7
2000/7/31	3.80	402.75	122.8
2000/8/7	3.85	402.54	122.7
2000/8/14	3.80	402.16	122.6
2000/8/21	3.80	402.50	122.7
2000/8/28	3.85	402.66	122.7
2000/9/4	3.75	401.92	122.5
2000/9/11	3.85	401.92	122.5
2000/9/18		375.58	114.5
2000/9/25	3.85	400.46	122.1
2000/10/3	3.80	400.42	122.0
2000/10/9	3.80	400.50	122.1
2000/10/18	3.80	400.25	122.0
2000/10/23	3.80	400.04	121.9
2000/11/1	3.80	400.20	122.0
2000/11/7	3.80	399.80	121.9
2000/11/14	3.80	400.04	121.9
2000/11/21	3.80	399.54	121.8
2000/12/4	3.85	399.00	121.6
2000/12/11	3.80	399.86	121.9
2000/12/20	3.85	399.62	121.8

ANNEX 3.C(161) Punping Discharge and Water Level in Wells

POZO W-5
AÑO: 2001

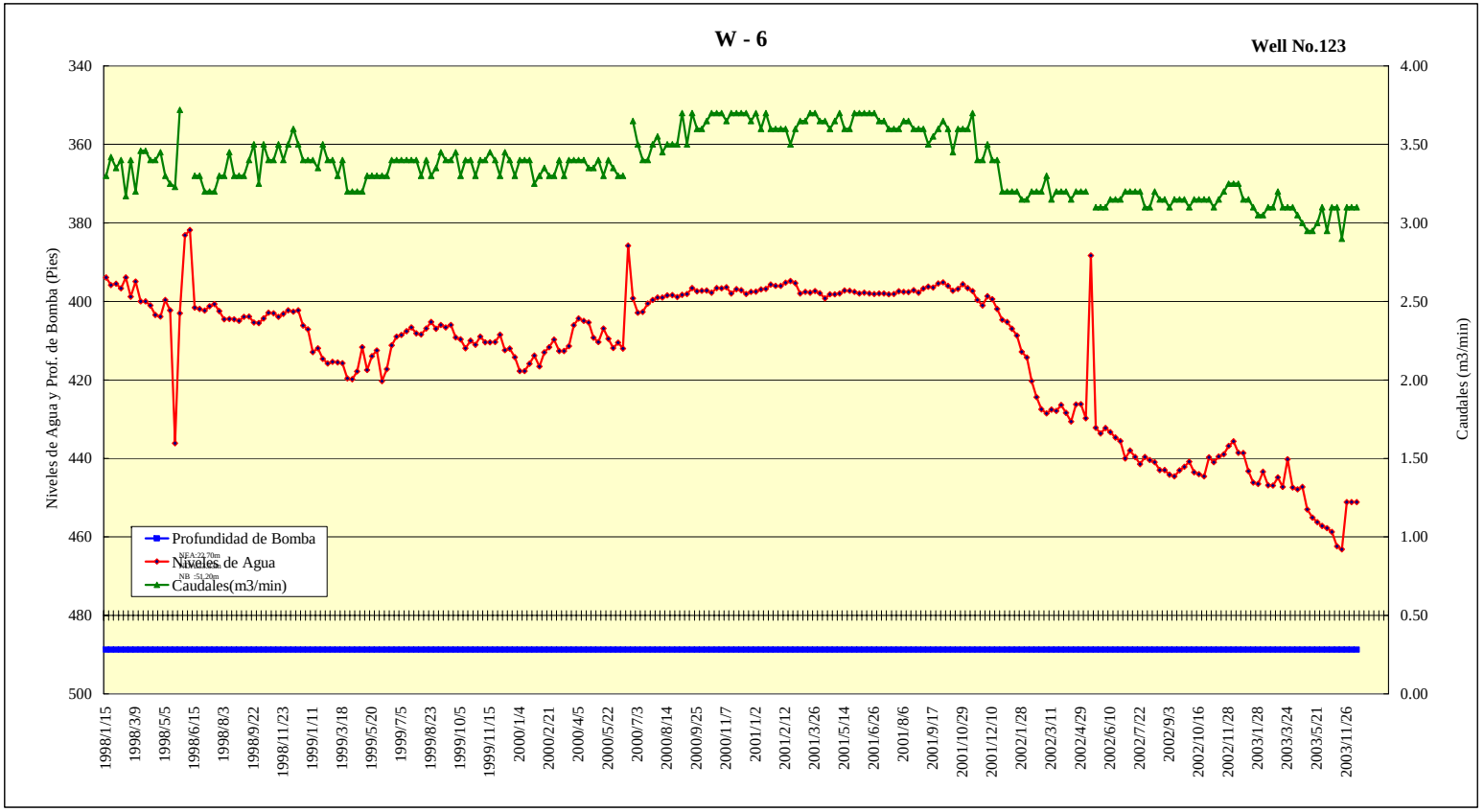
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.85	399.42	121.7
2001/1/8	3.80	399.08	121.6
2001/1/16	3.80	399.16	121.7
2001/1/22	3.80	397.54	121.2
2001/1/31	3.85	398.25	121.4
2001/2/5	3.80	397.84	121.3
2001/2/12	3.80	397.33	121.1
2001/2/20	3.65	396.92	121.0
2001/2/26	3.80	397.16	121.1
2001/3/5	3.80	399.58	121.8
2001/3/12	3.80	400.42	122.0
2001/3/19	3.80	400.00	121.9
2001/3/26	3.80	400.30	122.0
2001/4/2	3.80	400.25	122.0
2001/4/16	3.80	401.50	122.4
2001/4/25	3.80	400.08	121.9
2001/4/30	3.80	400.58	122.1
2001/5/7	3.80	400.70	122.1
2001/5/14	3.80	400.08	121.9
2001/5/21	3.80	399.70	121.8
2001/5/28	3.70	400.12	122.0
2001/6/4	3.75	400.75	122.1
2001/6/11	3.80	400.75	122.1
2001/6/18	3.80	400.70	122.1
2001/6/26	3.80	400.75	122.1
2001/7/2	3.75	401.92	122.5
2001/7/9	3.70	401.66	122.4
2001/7/17	3.75	402.30	122.6
2001/7/24	3.70	401.30	122.3
2001/7/30	3.70	401.50	122.4
2001/8/6	3.70	401.33	122.3
2001/8/13	3.70	401.42	122.4
2001/8/20	3.70	402.08	122.6
2001/8/27	3.70	402.68	122.7
2001/9/3	3.70	400.33	122.0
2001/9/10	3.70	400.75	122.1
2001/9/17	3.70	401.08	122.2
2001/9/24	3.70	399.92	121.9
2001/10/1	3.70	399.33	121.7
2001/10/8	3.70	399.58	121.8
2001/10/15	3.50	400.46	122.1
2001/10/22	3.60	401.50	122.4
2001/10/29	3.60	400.46	122.1
2001/11/6	3.60	401.33	122.3
2001/11/12	3.55	402.54	122.7
2001/11/20	3.60	405.20	123.5
2001/11/26	3.60	405.46	123.6
2001/12/3	3.60	402.42	122.7
2001/12/10	3.60	403.25	122.9
2001/12/17	3.60	405.83	123.7

POZO W-5
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.60	407.62	124.2
2002/1/7	3.60	408.75	124.6
2002/1/14	3.60	409.66	124.9
2002/1/21	3.60	410.46	125.1
2002/1/28	3.60	411.54	125.4
2002/2/4	3.55	412.16	125.6
2002/2/11	3.60	410.82	125.2
2002/2/19	3.55	412.75	125.8
2002/2/25	3.55	413.58	126.1
2002/3/4	3.55	413.50	126.0
2002/3/11	3.50	412.83	125.8
2002/3/19	3.50	412.75	125.8
2002/4/3	3.50	412.00	125.6
2002/4/8	3.50	413.42	126.0
2002/4/15	3.50	414.66	126.4
2002/4/22	3.50	413.42	126.0
2002/4/29	3.50	410.75	125.2
2002/5/6	3.50	415.42	126.6
2002/5/13		381.25	116.2
2002/5/22	3.20	415.00	126.5
2002/5/27	3.20	415.75	126.7
2002/6/4	3.30	415.16	126.5
2002/6/10	3.00	416.58	127.0
2002/6/17	2.80	417.25	127.2
2002/6/24	3.35	418.00	127.4
2002/7/2	3.30	419.50	127.9
2002/7/9	2.70	419.33	127.8
2002/7/16	2.70	420.20	128.1
2002/7/22	2.70	420.58	128.2
2002/7/29	2.70	419.83	128.0
2002/8/5	2.65	420.50	128.2
2002/8/14	2.65	420.58	128.2
2002/8/19	2.65	421.66	128.5
2002/8/26	2.65	421.66	128.5
2002/9/3	2.65	421.00	128.3
2002/9/9	2.65	420.66	128.2
2002/9/17	2.65	421.25	128.4
2002/9/23	2.65	420.75	128.2
2002/9/30	2.65	422.83	128.9
2002/10/7	2.65	424.00	129.2
2002/10/16	2.65	423.42	129.1
2002/10/21	2.65	423.96	129.2
2002/10/28	2.65	419.54	127.9
2002/11/4	3.35	420.16	128.1
2002/11/14	3.35	419.25	127.8
2002/11/18	3.35	418.75	127.6
2002/11/28	3.30	417.50	127.3
2002/12/2	3.30	417.33	127.2
2002/12/16	2.85	417.83	127.4

POZO W-5
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.40	422.04	128.6
2003/1/13	3.40	422.58	128.8
2003/1/20	3.30	422.25	128.7
2003/1/28	3.30	420.25	128.1
2003/2/3	3.30	420.70	128.2
2003/2/18	3.55	423.50	129.1
2003/2/24	3.60	422.70	128.8
2003/3/7	3.60	421.66	128.5
2003/3/14	3.60	422.83	128.9
2003/3/24	3.60	416.00	126.8
2003/4/2	3.50	421.42	128.4
2003/4/8	3.50	423.33	129.0
2003/4/21	3.55	423.00	128.9
2003/5/10	3.50	427.42	130.3
2003/5/16	3.50	428.75	130.7
2003/5/21	3.45	428.92	130.7
2003/6/25	3.45	431.66	131.6
2003/7/2	3.40	430.83	131.3
2003/7/15	3.45	432.62	131.9
2003/8/26	3.30	436.33	133.0
2003/10/13	3.10	436.42	133.0
2003/11/26	3.45	421.08	128.3



ANNEX 3.C(162) Punping Discharge and Water Level in Wells

ANNEX 3.C(163) Punping Discharge and Water Level in Wells

POZO W-6
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.30	393.92	120.1
1998/1/26	3.42	395.83	120.6
1998/2/9	3.35	395.50	120.5
1998/2/17	3.40	396.66	120.9
1998/2/23	3.17	393.92	120.1
1998/3/3	3.40	398.83	121.6
1998/3/9	3.20	394.92	120.4
1998/3/16	3.46	399.96	121.9
1998/3/24	3.46	400.00	121.9
1998/4/2	3.40	401.00	122.2
1998/4/13	3.40	403.42	123.0
1998/4/21	3.45	403.83	123.1
1998/5/5	3.30	399.66	121.8
1998/5/13	3.25	402.25	122.6
1998/5/18	3.23	436.16	132.9
1998/5/25	3.72	403.00	122.8
1998/6/1		383.16	116.8
1998/6/9		381.83	116.4
1998/6/15	3.30	401.58	122.4
1998/6/22	3.30	401.92	122.5
1998/7/6	3.20	402.33	122.6
1998/7/14	3.20	401.25	122.3
1998/7/21	3.20	400.66	122.1
1998/7/28	3.30	402.50	122.7
1998/8/3	3.30	404.58	123.3
1998/8/11	3.45	404.50	123.3
1998/8/24	3.30	404.54	123.3
1998/8/31	3.30	405.00	123.4
1998/9/7	3.30	403.92	123.1
1998/9/16	3.40	403.83	123.1
1998/9/22	3.50	405.41	123.6
1998/10/9	3.25	405.50	123.6
1998/10/12	3.50	404.33	123.2
1998/11/3	3.40	402.92	122.8
1998/11/9	3.40	403.00	122.8
1998/11/16	3.50	403.93	123.1
1998/11/23	3.40	403.18	122.9
1998/11/30	3.50	402.26	122.6
1998/12/9	3.60	402.65	122.7
1998/12/14	3.50	402.29	122.6
1998/12/21	3.40	406.17	123.8

POZO W-6
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.40	407.09	124.1
1999/1/11	3.40	412.90	125.9
1999/1/18	3.35	411.92	125.6
1999/1/26	3.50	414.66	126.4
1999/2/2	3.40	415.83	126.7
1999/2/16	3.40	415.42	126.6
1999/3/10	3.30	415.58	126.7
1999/3/18	3.40	415.74	126.7
1999/4/5	3.20	419.61	127.9
1999/4/12	3.20	419.81	128.0
1999/4/19	3.20	417.81	127.3
1999/5/5	3.20	411.70	125.5
1999/5/11	3.30	417.45	127.2
1999/5/20	3.30	413.97	126.2
1999/5/27	3.30	412.50	125.7
1999/6/7	3.30	420.33	128.1
1999/6/14	3.30	417.25	127.2
1999/6/23	3.40	411.16	125.3
1999/6/28	3.40	408.96	124.7
1999/7/5	3.40	408.58	124.5
1999/7/13	3.40	407.58	124.2
1999/7/20	3.40	406.66	123.9
1999/8/2	3.40	408.16	124.4
1999/8/9	3.30	408.41	124.5
1999/8/16	3.40	406.92	124.0
1999/8/23	3.30	405.25	123.5
1999/8/30	3.35	407.00	124.1
1999/9/6	3.45	406.00	123.7
1999/9/13	3.40	406.62	123.9
1999/9/20	3.40	406.00	123.7
1999/9/29	3.45	409.16	124.7
1999/10/5	3.30	409.70	124.9
1999/10/11	3.40	411.92	125.6
1999/10/18	3.40	410.00	125.0
1999/10/25	3.30	411.08	125.3
1999/11/1	3.40	409.00	124.7
1999/11/9	3.40	410.41	125.1
1999/11/15	3.45	410.41	125.1
1999/11/22	3.40	410.33	125.1
1999/11/29	3.30	408.50	124.5
1999/12/6	3.45	412.41	125.7
1999/12/13	3.40	412.00	125.6
1999/12/20	3.30	414.25	126.3

POZO W-6
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.40	417.75	127.3
2000/1/10	3.40	417.75	127.3
2000/1/17	3.40	415.87	126.8
2000/1/31	3.25	413.83	126.1
2000/2/7	3.30	416.58	127.0
2000/2/15	3.35	413.00	125.9
2000/2/21	3.30	411.66	125.5
2000/2/28	3.30	409.75	124.9
2000/3/8	3.40	412.66	125.8
2000/3/13	3.30	412.67	125.8
2000/3/20	3.40	411.42	125.4
2000/3/27	3.40	406.08	123.8
2000/4/5	3.40	404.33	123.2
2000/4/10	3.40	405.00	123.4
2000/4/24	3.35	405.41	123.6
2000/5/2	3.35	409.25	124.7
2000/5/8	3.40	410.33	125.1
2000/5/16	3.30	406.87	124.0
2000/5/22	3.40	409.50	124.8
2000/5/29	3.35	411.87	125.5
2000/6/5	3.30	410.50	125.1
2000/6/12	3.30	412.00	125.6
2000/6/20		385.84	117.6
2000/6/27	3.65	399.23	121.7
2000/7/3	3.50	402.92	122.8
2000/7/10	3.40	402.66	122.7
2000/7/17	3.40	400.54	122.1
2000/7/24	3.50	399.67	121.8
2000/7/31	3.55	399.04	121.6
2000/8/7	3.45	399.00	121.6
2000/8/14	3.50	398.50	121.5
2000/8/21	3.50	398.38	121.4
2000/8/28	3.50	398.88	121.6
2000/9/4	3.70	398.34	121.4
2000/9/11	3.50	398.12	121.3
2000/9/18	3.70	396.62	120.9
2000/9/25	3.60	397.42	121.1
2000/10/3	3.60	397.33	121.1
2000/10/9	3.65	397.25	121.1
2000/10/18	3.70	397.75	121.2
2000/10/23	3.70	396.62	120.9
2000/11/1	3.70	396.70	120.9
2000/11/7	3.65	396.42	120.8
2000/11/14	3.70	398.00	121.3
2000/11/21	3.70	396.87	121.0
2000/12/4	3.70	397.16	121.1
2000/12/11	3.70	398.12	121.3
2000/12/20	3.65	397.58	121.2

ANNEX 3.C(164) Punping Discharge and Water Level in Wells

POZO W-6
AÑO: 2001

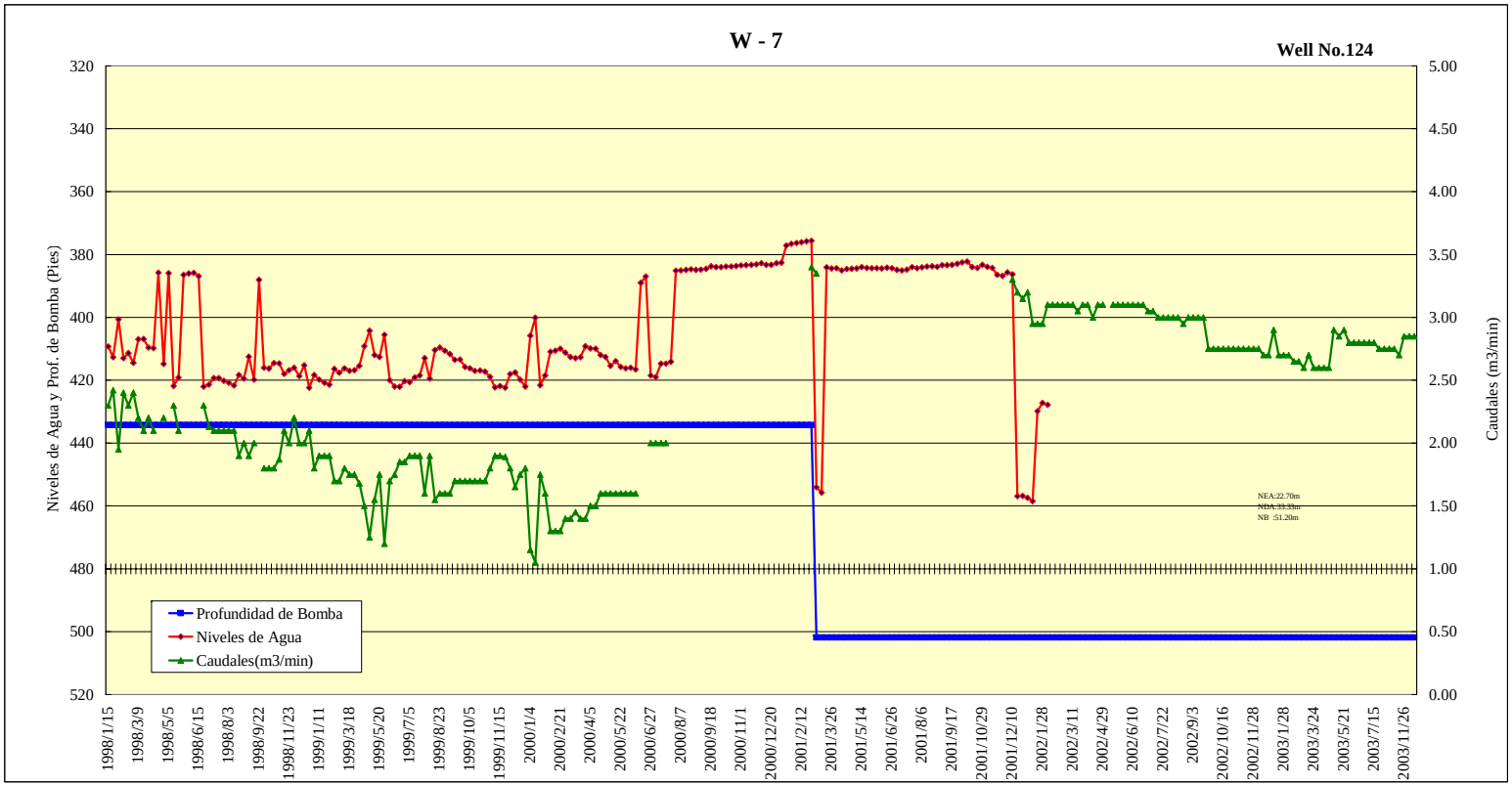
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.70	397.50	121.2
2001/1/8	3.60	396.92	121.0
2001/1/16	3.70	396.83	121.0
2001/1/22	3.60	395.70	120.6
2001/1/31	3.60	396.08	120.7
2001/2/5	3.60	396.08	120.7
2001/2/12	3.60	395.20	120.5
2001/2/20	3.50	394.83	120.3
2001/2/26	3.60	395.33	120.5
2001/3/5	3.65	398.00	121.3
2001/3/12	3.65	397.54	121.2
2001/3/19	3.70	397.75	121.2
2001/3/26	3.70	397.37	121.1
2001/4/2	3.65	397.92	121.3
2001/4/16	3.65	399.25	121.7
2001/4/25	3.60	398.16	121.4
2001/4/30	3.65	398.20	121.4
2001/5/7	3.70	398.00	121.3
2001/5/14	3.60	397.20	121.1
2001/5/21	3.60	397.33	121.1
2001/5/28	3.70	397.54	121.2
2001/6/4	3.70	398.00	121.3
2001/6/11	3.70	397.75	121.2
2001/6/18	3.70	397.96	121.3
26/0601	3.70	398.12	121.3
2001/7/2	3.65	398.00	121.3
2001/7/9	3.65	398.00	121.3
2001/7/17	3.60	398.16	121.4
2001/7/24	3.60	398.12	121.3
2001/7/30	3.60	397.42	121.1
2001/8/6	3.65	397.58	121.2
2001/8/13	3.65	397.66	121.2
2001/8/20	3.60	397.16	121.1
2001/8/27	3.60	397.76	121.2
2001/9/3	3.60	396.75	120.9
2001/9/10	3.50	396.25	120.8
2001/9/17	3.55	396.46	120.8
2001/9/24	3.60	395.42	120.5
2001/10/1	3.65	395.16	120.4
2001/10/8	3.60	396.08	120.7
2001/10/15	3.45	397.30	121.1
2001/10/22	3.60	396.80	120.9
2001/10/29	3.60	395.66	120.6
2001/11/6	3.60	396.58	120.9
2001/11/12	3.70	397.37	121.1
2001/11/20	3.40	399.66	121.8
2001/11/26	3.40	401.00	122.2
2001/12/3	3.50	398.66	121.5
2001/12/10	3.40	399.42	121.7
2001/12/17	3.40	401.96	122.5

POZO W-6
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.20	404.70	123.4
2002/1/7	3.20	405.25	123.5
2002/1/14	3.20	407.00	124.1
2002/1/21	3.20	408.70	124.6
2002/1/28	3.15	412.83	125.8
2002/2/4	3.15	414.30	126.3
2002/2/11	3.20	420.33	128.1
2002/2/19	3.20	424.42	129.4
2002/2/25	3.20	427.50	130.3
2002/3/4	3.30	428.54	130.6
2002/3/11	3.15	427.54	130.3
2002/3/19	3.20	427.92	130.4
2002/4/3	3.20	426.42	130.0
2002/4/8	3.20	428.42	130.6
2002/4/15	3.15	430.58	131.2
2002/4/22	3.20	426.25	129.9
2002/4/29	3.20	426.16	129.9
2002/5/6	3.20	429.75	131.0
2002/5/13		388.33	118.4
2002/5/22	3.10	432.20	131.7
2002/5/27	3.10	433.62	132.2
2002/6/4	3.10	432.30	131.8
2002/6/10	3.15	433.30	132.1
2002/6/17	3.15	434.66	132.5
2002/6/24	3.15	435.58	132.8
2002/7/2	3.20	440.04	134.1
2002/7/9	3.20	438.00	133.5
2002/7/16	3.20	439.66	134.0
2002/7/22	3.20	441.46	134.6
2002/7/29	3.10	439.66	134.0
2002/8/5	3.10	440.42	134.2
2002/8/14	3.20	441.00	134.4
2002/8/19	3.15	443.00	135.0
2002/8/26	3.15	443.16	135.1
2002/9/3	3.10	444.16	135.4
2002/9/9	3.15	444.54	135.5
2002/9/17	3.15	443.08	135.1
2002/9/23	3.15	442.16	134.8
2002/9/30	3.10	440.83	134.4
2002/10/7	3.15	443.54	135.2
2002/10/16	3.15	444.00	135.3
2002/10/21	3.15	444.58	135.5
2002/10/28	3.15	439.75	134.0
2002/11/4	3.10	440.96	134.4
2002/11/14	3.15	439.50	134.0
2002/11/18	3.20	439.00	133.8
2002/11/28	3.25	436.83	133.1
2002/12/2	3.25	435.62	132.8
2002/12/16	3.25	438.58	133.7

POZO W-6
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.15	438.62	133.7
2003/1/13	3.15	443.25	135.1
2003/1/20	3.10	446.16	136.0
2003/1/28	3.05	446.50	136.1
2003/2/3	3.05	443.37	135.1
2003/2/18	3.10	446.87	136.2
2003/2/24	3.10	446.92	136.2
2003/3/7	3.20	444.83	135.6
2003/3/14	3.10	447.25	136.3
2003/3/24	3.10	440.25	134.2
2003/4/2	3.10	447.42	136.4
2003/4/8	3.05	447.92	136.5
2003/4/21	3.00	447.25	136.3
2003/5/10	2.95	453.00	138.1
2003/5/16	2.95	455.08	138.7
2003/5/21	3.00	456.25	139.1
2003/6/25	3.10	457.25	139.4
2003/7/2	2.95	457.80	139.5
2003/7/15	3.10	458.75	139.8
2003/8/26	3.10	462.42	140.9
2003/10/26	3.10	462.42	140.9
2003/10/13	2.90	463.16	141.2
2003/11/26	3.10	451.16	137.5



ANNEX 3.C(165) Punping Discharge and Water Level in Wells

ANNEX 3.C(166) Punping Discharge and Water Level in Wells

POZO W-7
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	2.30	409.29	124.8
1998/1/26	2.42	412.66	125.8
1998/2/9	1.95	400.62	122.1
1998/2/17	2.40	413.00	125.9
1998/2/23	2.30	411.33	125.4
1998/3/3	2.40	414.49	126.3
1998/3/9	2.20	407.00	124.1
1998/3/16	2.10	406.92	124.0
1998/3/24	2.20	409.58	124.8
1998/4/2	2.10	409.83	124.9
1998/4/13		385.75	117.6
1998/4/21	2.20	414.83	126.4
1998/5/5		385.92	117.6
1998/5/13	2.30	421.83	128.6
1998/5/18	2.10	419.08	127.7
1998/5/25		386.50	117.8
1998/6/1		386.00	117.7
1998/6/9		385.83	117.6
1998/6/15		386.92	117.9
1998/6/22	2.30	422.00	128.6
1998/7/6	2.13	421.45	128.5
1998/7/14	2.10	419.33	127.8
1998/7/21	2.10	419.33	127.8
1998/7/28	2.10	420.16	128.1
1998/8/3	2.10	420.75	128.2
1998/8/11	2.10	421.66	128.5
1998/8/24	1.90	418.37	127.5
1998/8/31	2.00	419.50	127.9
1998/9/7	1.90	412.50	125.7
1998/9/16	2.00	419.83	128.0
1998/9/22		388.08	118.3
1998/10/9	1.80	416.08	126.8
1998/10/12	1.80	416.33	126.9
1998/11/3	1.80	414.58	126.4
1998/11/9	1.87	414.62	126.4
1998/11/16	2.10	418.00	127.4
1998/11/23	2.00	416.79	127.0
1998/11/30	2.20	416.00	126.8
1998/12/9	2.00	418.65	127.6
1998/12/14	2.00	415.25	126.6
1998/12/21	2.10	422.42	128.8

POZO W-7
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	1.80	418.34	127.5
1999/1/11	1.90	419.84	128.0
1999/1/18	1.90	420.83	128.3
1999/1/26	1.90	421.37	128.4
1999/2/2	1.70	416.41	126.9
1999/2/16	1.70	417.59	127.3
1999/3/10	1.80	416.23	126.9
1999/3/18	1.75	417.05	127.1
1999/4/5	1.75	416.82	127.0
1999/4/12	1.68	415.41	126.6
1999/4/19	1.50	409.20	124.7
1999/5/5	1.25	404.25	123.2
1999/5/11	1.55	412.00	125.6
1999/5/20	1.75	412.62	125.8
1999/5/27	1.20	405.58	123.6
1999/6/7	1.70	420.00	128.0
1999/6/14	1.75	422.00	128.6
1999/6/23	1.85	422.08	128.6
1999/6/28	1.85	420.29	128.1
1999/7/5	1.90	420.66	128.2
1999/7/13	1.90	419.08	127.7
1999/7/20	1.90	418.50	127.6
1999/8/2	1.60	413.00	125.9
1999/8/9	1.90	419.50	127.9
1999/8/16	1.55	410.41	125.1
1999/8/23	1.60	409.58	124.8
1999/8/30	1.60	410.54	125.1
1999/9/6	1.60	411.62	125.5
1999/9/13	1.70	413.46	126.0
1999/9/20	1.70	413.41	126.0
1999/9/29	1.70	415.75	126.7
1999/10/5	1.70	416.20	126.9
1999/10/11	1.70	417.00	127.1
1999/10/18	1.70	416.92	127.1
1999/10/25	1.70	417.30	127.2
1999/11/1	1.80	418.92	127.7
1999/11/9	1.90	422.25	128.7
1999/11/15	1.90	421.83	128.6
1999/11/22	1.90	422.37	128.7
1999/11/29	1.80	418.08	127.4
1999/12/6	1.65	417.50	127.3
1999/12/13	1.75	419.83	128.0
1999/12/20	1.80	422.00	128.6

POZO W-7
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	1.15	405.83	123.7
2000/1/10	1.05	400.08	121.9
2000/1/17	1.75	421.58	128.5
2000/1/31	1.60	418.50	127.6
2000/2/7	1.30	410.92	125.2
2000/2/15	1.30	410.58	125.1
2000/2/21	1.30	410.00	125.0
2000/2/28	1.40	411.16	125.3
2000/3/8	1.40	412.58	125.8
2000/3/13	1.45	412.92	125.9
2000/3/20	1.40	412.67	125.8
2000/3/27	1.40	409.16	124.7
2000/4/5	1.50	409.84	124.9
2000/4/10	1.50	410.00	125.0
2000/4/24	1.60	412.00	125.6
2000/5/2	1.60	412.58	125.8
2000/5/8	1.60	415.42	126.6
2000/5/16	1.60	413.96	126.2
2000/5/22	1.60	415.75	126.7
2000/5/29	1.60	416.20	126.9
2000/6/5	1.60	416.08	126.8
2000/6/12	1.60	416.58	127.0
2000/6/20		389.00	118.6
2000/6/27		387.00	118.0
2000/7/3	2.00	418.50	127.6
2000/7/10	2.00	419.00	127.7
2000/7/17	2.00	414.70	126.4
2000/7/24	2.00	414.08	126.2
2000/7/31		385.16	117.4
2000/8/7		385.04	117.4
2000/8/14		384.87	117.3
2000/8/21		384.70	117.3
2000/8/28		384.92	117.3
2000/9/4		384.75	117.3
2000/9/11		384.50	117.2
2000/9/18		383.75	117.0
2000/9/25		384.00	117.0
2000/10/3		383.96	117.0
2000/10/9		383.80	117.0
2000/10/18		383.80	117.0
2000/10/23		383.66	116.9
2000/11/1		383.50	116.9
2000/11/7		383.42	116.9
2000/11/14		383.25	116.8
2000/11/21		383.08	116.8
2000/12/4		382.75	116.7
2000/12/11		383.30	116.8
2000/12/20		383.25	116.8

ANNEX 3.C(167) Punping Discharge and Water Level in Wells

POZO W-7
AÑO: 2001

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		382.75	116.7
2001/1/8		382.62	116.6
2001/1/16		382.60	116.6
2001/1/22		377.16	115.0
2001/1/31		376.62	114.8
2001/2/5		376.33	114.7
2001/2/12		376.08	114.6
2001/2/20		375.83	114.6
2001/2/26		375.66	114.5
2001/3/5	3.40	454.08	138.4
2001/3/12	3.35	455.75	138.9
2001/3/19		384.08	117.1
2001/3/26		384.42	117.2
2001/4/2		384.37	117.2
2001/4/16		385.08	117.4
2001/4/25		384.62	117.2
2001/4/30		384.50	117.2
2001/5/7		384.42	117.2
2001/5/14		384.00	117.0
2001/5/21		384.25	117.1
2001/5/28		384.33	117.1
2001/6/4		384.33	117.1
2001/6/11		384.46	117.2
2001/6/18		384.16	117.1
2001/6/26		384.33	117.1
2001/7/2		384.92	117.3
2001/7/9		385.08	117.4
2001/7/17		384.83	117.3
2001/7/24		384.00	117.0
2001/7/30		384.33	117.1
2001/8/6		384.08	117.1
2001/8/13		383.83	117.0
2001/8/20		383.75	117.0
2001/8/27		383.95	117.0
2001/9/3		383.42	116.9
2001/9/10		383.42	116.9
2001/9/17		383.33	116.8
2001/9/24		382.92	116.7
2001/10/1		382.50	116.6
2001/10/8		382.25	116.5
2001/10/15		384.00	117.0
2001/10/22		384.25	117.1
2001/10/29		383.30	116.8
2001/11/6		383.92	117.0
2001/11/12		384.30	117.1
2001/11/20		386.42	117.8
2001/11/26		386.83	117.9
2001/12/3		385.70	117.6
2001/12/10		386.25	117.7
2001/12/17	3.30	456.92	139.3

POZO W-7
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.20	456.83	139.2
2002/1/7	3.15	457.42	139.4
2002/1/14	3.20	458.50	139.8
2002/1/21	2.95	429.87	131.0
2002/1/28	2.95	427.20	130.2
2002/2/4	2.95	427.83	130.4
2002/2/11	3.10	Obstruido	
2002/2/19	3.10	Obstruido	
2002/2/25	3.10	Obstruido	
2002/3/4	3.10	Obstruido	
2002/3/11	3.10	Obstruido	
2002/3/19	3.10	Obstruido	
2002/4/3	3.05	Obstruido	
2002/4/8	3.10	Obstruido	
2002/4/15	3.10	Obstruido	
2002/4/22	3.00	Obstruido	
2002/4/29	3.10	Obstruido	
2002/5/6	3.10	Obstruido	
2002/5/13		Obstruido	
2002/5/22	3.10	Obstruido	
2002/5/27	3.10	Obstruido	
2002/6/4	3.10	Obstruido	
2002/6/10	3.10	Obstruido	
2002/6/17	3.10	Obstruido	
2002/6/24	3.10	Obstruido	
2002/7/2	3.10	Obstruido	
2002/7/9	3.05	Obstruido	
2002/7/16	3.05	Obstruido	
2002/7/22	3.00	Obstruido	
2002/7/29	3.00	Obstruido	
2002/8/5	3.00	Obstruido	
2002/8/14	3.00	Obstruido	
2002/8/19	3.00	Obstruido	
2002/8/26	2.95	Obstruido	
2002/9/3	3.00	Obstruido	
2002/9/9	3.00	Obstruido	
2002/9/17	3.00	Obstruido	
2002/9/23	3.00	Obstruido	
2002/9/30	2.75	Obstruido	
2002/10/7	2.75	Obstruido	
2002/10/16	2.75	Obstruido	
2002/10/21	2.75	Obstruido	
2002/10/28	2.75	Obstruido	
2002/11/4	2.75	Obstruido	
2002/11/14	2.75	Obstruido	
2002/11/18	2.75	Obstruido	
2002/11/28	2.75	Obstruido	
2002/12/2	2.75	Obstruido	
2002/12/16	2.75	Obstruido	#VALUE!

POZO W-7
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.70	Obstruido	
2003/1/13	2.70	Obstruido	
2003/1/20	2.90	Obstruido	
2003/1/28	2.70	Obstruido	
2003/2/3	2.70	Obstruido	
2003/2/18	2.65	Obstruido	
2003/2/24	2.65	Obstruido	
2003/3/7	2.60	Obstruido	
2003/3/14	2.70	Obstruido	
2003/3/24	2.60	Obstruido	
2003/4/2	2.60	Obstruido	
2003/4/8	2.60	Obstruido	
2003/4/21	2.60	Obstruido	
2003/5/10	2.90	Obstruido	
2003/5/16	2.85	Obstruido	
2003/5/21	2.90	Obstruido	
2003/6/25	2.80	Obstruido	
2003/7/2	2.80	Obstruido	
2003/7/15	2.80	Obstruido	
2003/8/26	2.75	Obstruido	
2003/10/13	2.70	Obstruido	
2003/11/26	2.85	Obstruido	
2003/11/26	3.10	451.16	137.5

ANNEX 3.C(168) Punping Discharge and Water Level in Wells

ANNEX 3.C(169) Punping Discharge and Water Level in Wells

POZO W-8
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	2.60	428.58	130.6
1998/1/26	2.35	421.41	128.4
1998/2/9	2.00	413.00	125.9
1998/2/17	2.10	415.00	126.5
1998/2/23	2.10	417.50	127.3
1998/3/3	2.20	423.83	129.2
1998/3/9	2.20	422.50	128.8
1998/3/16	2.15	421.04	128.3
1998/3/24	2.10	417.00	127.1
1998/4/2	2.20	426.16	129.9
1998/4/13			0.0
1998/4/21		386.00	117.7
1998/5/5		386.25	117.7
1998/5/13	2.00	431.75	131.6
1998/5/18	2.00	431.08	131.4
1998/5/25		386.54	117.8
1998/6/1		386.33	117.8
1998/6/9		385.87	117.6
1998/6/15		386.41	117.8
1998/6/22		386.41	117.8
1998/7/6	1.98	430.41	131.2
1998/7/14	2.00	429.25	130.8
1998/7/21	2.00	429.50	130.9
1998/7/28	1.98	429.75	131.0
1998/8/3	2.00	430.58	131.2
1998/8/11	1.90	428.41	130.6
1998/8/24	1.85	426.66	130.0
1998/8/31	1.85	426.58	130.0
1998/9/7	1.80	425.75	129.8
1998/9/16	1.80	426.50	130.0
1998/9/22	1.80	426.75	130.1
1998/10/9	1.80	427.92	130.4
1998/10/12	1.90	428.42	130.6
1998/11/3	1.90	428.08	130.5
1998/11/9		386.54	117.8
1998/11/16	2.00	429.50	130.9
1998/11/23	2.00	429.70	131.0
1998/11/30	2.20	429.84	131.0
1998/12/9	1.80	423.18	129.0
1998/12/14	1.90	425.81	129.8
1998/12/21	1.90	431.76	131.6

POZO W-8
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	1.80	429.50	130.9
1999/1/11	1.80	430.67	131.3
1999/1/18	1.76	430.16	131.1
1999/1/26	1.60	429.50	130.9
1999/2/2	1.60	424.16	129.3
1999/2/16	1.70	426.17	129.9
1999/3/10	1.65	422.89	128.9
1999/3/18	1.65	423.58	129.1
1999/4/5	1.70	424.33	129.3
1999/4/12	1.70	424.04	129.2
1999/4/19	1.60	422.33	128.7
1999/5/5	1.60	420.37	128.1
1999/5/11	1.60	422.07	128.6
1999/5/20	1.70	421.87	128.6
1999/5/27	1.70	429.00	130.8
1999/6/7	1.75	429.83	131.0
1999/6/14	1.70	433.25	132.1
1999/6/23	1.65	427.42	130.3
1999/6/28	1.70	427.04	130.2
1999/7/5	1.70	428.00	130.5
1999/7/13	1.80	430.96	131.4
1999/7/20	1.80	431.00	131.4
1999/8/2	1.55	419.33	127.8
1999/8/9	1.70	426.83	130.1
1999/8/16	1.80	428.79	130.7
1999/8/23	1.75	429.62	130.9
1999/8/30	1.60	419.92	128.0
1999/9/6	1.80	429.75	131.0
1999/9/13	1.75	427.62	130.3
1999/9/20	1.70	427.41	130.3
1999/9/29	1.70	428.70	130.7
1999/10/5	1.70	429.33	130.9
1999/10/11	1.80	430.00	131.1
1999/10/18	1.75	430.50	131.2
1999/10/25	1.80	429.75	131.0
1999/11/1	1.80	429.92	131.0
1999/11/9	1.80	430.66	131.3
1999/11/15	1.70	429.50	130.9
1999/11/22	1.70	429.50	130.9
1999/11/29	1.20	410.70	125.2
1999/12/6	1.70	429.58	130.9
1999/12/13	1.70	431.00	131.4
1999/12/20	1.50	422.41	128.8

POZO W-8
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	1.40	421.92	128.6
2000/1/10	1.50	422.75	128.9
2000/1/17	1.50	421.00	128.3
2000/1/31	1.65	428.00	130.5
2000/2/7	1.55	424.00	129.2
2000/2/15	1.55	424.25	129.3
2000/2/21	1.55	424.33	129.3
2000/2/28	1.60	425.58	129.7
2000/3/8	1.60	426.83	130.1
2000/3/13	1.65	427.33	130.3
2000/3/20	1.70	428.41	130.6
2000/3/27	1.70	425.66	129.7
2000/4/5	1.70	425.83	129.8
2000/4/10	1.70	425.92	129.8
2000/4/24	1.70	426.92	130.1
2000/5/2	1.75	429.08	130.8
2000/5/8	1.70	429.54	130.9
2000/5/16	1.70	428.59	130.6
2000/5/22	1.75	430.83	131.3
2000/5/29	1.55	423.54	129.1
2000/6/5	1.60	425.00	129.5
2000/6/12	1.60	426.41	130.0
2000/6/20		388.67	118.5
2000/6/27		387.08	118.0
2000/7/3	2.10	437.37	133.3
2000/7/10		387.16	118.0
2000/7/17		386.80	117.9
2000/7/24		386.46	117.8
2000/7/31		385.66	117.5
2000/8/7		385.50	117.5
2000/8/14		385.54	117.5
2000/8/21		385.37	117.5
2000/8/28		385.58	117.5
2000/9/4		385.50	117.5
2000/9/11		385.42	117.5
2000/9/18		384.83	117.3
2000/9/25		385.04	117.4
2000/10/3		385.08	117.4
2000/10/9		384.92	117.3
2000/10/18		385.00	117.3
2000/10/23		384.87	117.3
2000/11/1		384.75	117.3
2000/11/7		384.66	117.2
2000/11/14		384.58	117.2
2000/11/21		384.42	117.2
2000/12/4		384.12	117.1
2000/12/11		384.75	117.3
2000/12/20		384.62	117.2

ANNEX 3.C(170) Punping Discharge and Water Level in Wells

POZO W-8
AÑO: 2001

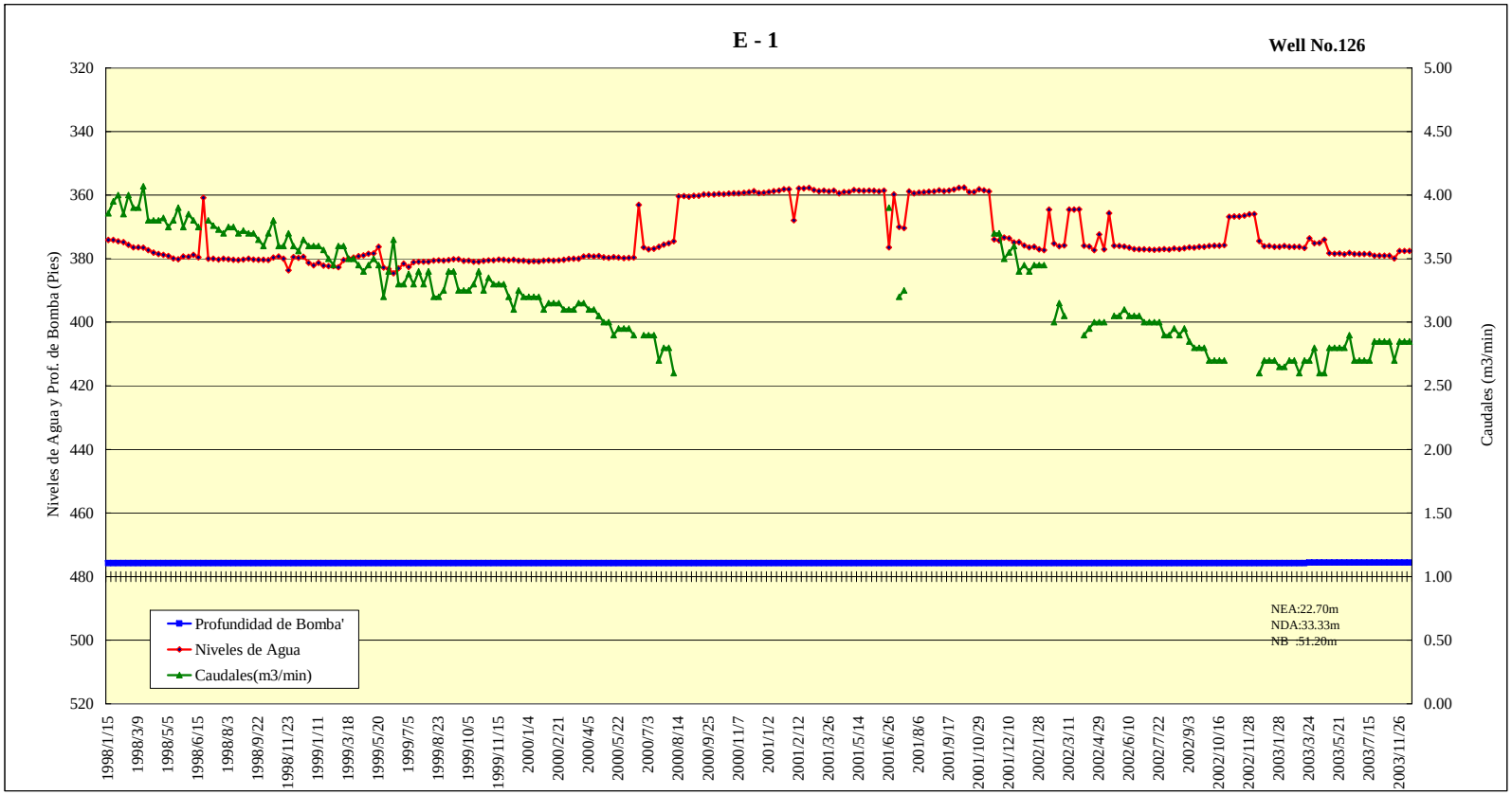
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		384.37	117.2
2001/1/8		384.16	117.1
2001/1/16		384.08	117.1
2001/1/22		378.37	115.3
2001/1/31		377.33	115.0
2001/2/5		377.16	115.0
2001/2/12		376.92	114.9
2001/2/20		376.83	114.9
2001/2/26		376.75	114.8
2001/3/5	3.25		0.0
2001/3/12	3.05		0.0
2001/3/19	3.00	460.92	140.5
2001/3/26	3.00	460.92	140.5
2001/4/2	3.00	461.83	140.8
2001/4/16	3.00	464.42	141.6
2001/4/25	2.90	454.33	138.5
2001/4/30	2.85	454.16	138.4
2001/5/7	2.95	454.50	138.5
2001/5/14	2.90	452.50	137.9
2001/5/21	2.90	454.42	138.5
2001/5/28	2.85	455.00	138.7
2001/6/4	2.85	455.66	138.9
2001/6/11	2.95	456.08	139.0
2001/6/18	2.85	455.50	138.8
2001/6/26	2.80	454.42	138.5
2001/7/2	2.80	455.50	138.8
2001/7/9	2.80	446.50	136.1
2001/7/17	2.80	457.96	139.6
2001/7/24	2.85	455.12	138.7
2001/7/30	2.80	455.92	139.0
2001/8/6	2.65	455.25	138.8
2001/8/13	2.65	455.66	138.9
2001/8/20		384.42	117.2
2001/8/27		384.72	117.3
2001/9/3		383.92	117.0
2001/9/10		384.08	117.1
2001/9/17		384.08	117.1
2001/9/24		383.66	116.9
2001/10/1		383.33	116.8
2001/10/8		383.00	116.7
2001/10/15		385.00	117.3
2001/10/22		384.92	117.3
2001/10/29		384.12	117.1
2001/11/6	2.80	447.25	136.3
2001/11/12	2.40	448.37	136.7
2001/11/20	2.75	452.16	137.8
2001/11/26	2.75	454.75	138.6
2001/12/3	2.75	449.75	137.1
2001/12/10	2.70	450.58	137.3
2001/12/17	2.60	454.00	138.4

POZO W-8
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	2.60	455.66	138.9
2002/1/7	2.55	455.92	139.0
2002/1/14	2.60	457.16	139.3
2002/1/21	2.50	456.75	139.2
2002/1/28	2.45	458.00	139.6
2002/2/4	2.40	458.62	139.8
2002/2/12	2.50	457.83	139.5
2002/2/19	2.50	459.33	140.0
2002/2/25	2.45	458.92	139.9
2002/3/4	2.50	458.66	139.8
2002/3/11	2.45	458.16	139.6
2002/3/19	2.45	456.37	139.1
2002/4/3	2.50	454.25	138.5
2002/4/8	2.40	453.25	138.2
2002/4/15	2.35	453.00	138.1
2002/4/22	2.30	450.66	137.4
2002/4/29	2.30	445.66	135.8
2002/5/6	2.30	450.00	137.2
2002/5/13		389.50	118.7
2002/5/22	2.20	448.37	136.7
2002/5/27	2.20	447.92	136.5
2002/6/4	2.10	446.16	136.0
2002/6/10	2.10	446.54	136.1
2002/6/17	2.10	445.96	135.9
2002/6/24	2.10	445.08	135.7
2002/7/2	2.00	443.42	135.2
2002/7/9	1.90	442.46	134.9
2002/7/16	1.90	440.66	134.3
2002/7/22	1.80	440.83	134.4
2002/7/29	1.85	439.83	134.1
2002/8/5	1.85	439.42	133.9
2002/8/14	1.75	437.17	133.2
2002/8/19	1.70	436.34	133.0
2002/8/26	1.65	434.92	132.6
2002/9/3		389.75	118.8
2002/9/9		389.83	118.8
2002/9/17		389.33	118.7
2002/9/23		389.33	118.7
2002/9/30		389.25	118.6
2002/10/7		389.33	118.7
2002/10/16		389.30	118.7
2002/10/21		389.30	118.7
2002/10/28		389.12	118.6
2002/11/4		389.25	118.6
2002/11/14		389.20	118.6
2002/11/18		389.16	118.6
2002/11/28		389.08	118.6
2002/12/2		389.04	118.6
2002/12/16		389.00	118.6

POZO W-8
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8		389.75	118.8
2003/1/13		389.75	118.8
2003/1/20		390.00	118.9
2003/1/28		389.92	118.8
2003/2/3		389.75	118.8
2003/2/18		389.92	118.8
2003/2/24		389.50	118.7
2003/3/7		389.66	118.8
2003/3/14		390.12	118.9
2003/3/24		447.42	136.4
2003/4/2		448.25	136.6
2003/4/8		389.66	118.8
2003/4/21	2.30	447.25	136.3
2003/5/10	2.00	452.46	137.9
2003/5/16	2.10	453.00	138.1
2003/5/21	2.10	452.62	138.0
2003/6/25	2.10	452.62	138.0
2003/7/2	2.00	451.66	137.7
2003/7/15	2.05	452.62	138.0
2003/8/26	2.05	455.08	138.7
2003/10/13	2.10	456.50	139.1
2003/11/26		394.83	120.3
2003/11/26	3.10	451.16	137.5



ANNEX 3.C(171) Punping Discharge and Water Level in Wells

ANNEX 3.C(172) Punping Discharge and Water Level in Wells

POZO E-1
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	4.00	403.87	123.1
1998/1/26	3.90	401.25	122.3
1998/2/9	4.00	402.58	122.7
1998/2/17	3.90	402.66	122.7
1998/2/23	4.00	403.75	123.1
1998/3/3	4.00	404.00	123.1
1998/3/9	4.00	404.08	123.2
1998/3/16	4.00	404.16	123.2
1998/3/24	4.00	404.75	123.4
1998/4/2	4.00	405.83	123.7
1998/4/13	4.00	405.87	123.7
1998/4/21	3.98	405.75	123.7
1998/5/5	3.98	405.50	123.6
1998/5/13	4.06	406.75	124.0
1998/5/18	4.10	407.75	124.3
1998/5/25	3.98	405.00	123.4
1998/6/1	4.00	405.58	123.6
1998/6/9	4.03	404.58	123.3
1998/6/15	4.00	405.58	123.6
1998/6/22		366.75	111.8
1998/7/6	3.96	405.16	123.5
1998/7/14	3.90	404.66	123.3
1998/7/21	3.87	404.75	123.4
1998/7/28	3.80	404.50	123.3
1998/8/3	3.80	404.58	123.3
1998/8/11	3.75	404.58	123.3
1998/8/24	3.76	404.16	123.2
1998/8/31	3.75	403.92	123.1
1998/9/7	3.76	403.33	122.9
1998/9/16	3.80	403.41	123.0
1998/9/22	3.80	403.41	123.0
1998/10/9	3.80	403.00	122.8
1998/10/12	4.00	403.16	122.9
1998/11/3	4.10	402.25	122.6
1998/11/9	4.05	405.00	123.4
1998/11/16	4.10	402.62	122.7
1998/11/23	4.00	402.88	122.8
1998/11/30	4.00	401.54	122.4
1998/12/9	3.95	401.41	122.3
1998/12/14	3.90	401.04	122.2
1998/12/21	3.95	403.67	123.0

POZO E-1
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.60	382.09	116.5
1999/1/11	3.60	381.34	116.2
1999/1/18	3.57	382.16	116.5
1999/1/26	3.50	382.33	116.5
1999/2/2	3.45	382.38	116.5
1999/2/16	3.60	382.67	116.6
1999/3/10	3.60	380.48	116.0
1999/3/18	3.50	379.99	115.8
1999/4/5	3.50	379.63	115.7
1999/4/12	3.45	379.27	115.6
1999/4/19	3.40	379.00	115.5
1999/5/5	3.45	378.45	115.4
1999/5/11	3.50	378.41	115.3
1999/5/20	3.45	376.25	114.7
1999/5/27	3.20	382.75	116.7
1999/6/7	3.40	383.25	116.8
1999/6/14	3.65	384.58	117.2
1999/6/23	3.30	383.08	116.8
1999/6/28	3.30	381.58	116.3
1999/7/5	3.38	382.66	116.6
1999/7/13	3.30	381.16	116.2
1999/7/20	3.40	381.00	116.1
1999/8/2	3.30	381.00	116.1
1999/8/9	3.40	381.00	116.1
1999/8/16	3.20	380.66	116.0
1999/8/23	3.20	380.58	116.0
1999/8/30	3.25	380.66	116.0
1999/9/6	3.40	380.41	115.9
1999/9/13	3.40	380.20	115.9
1999/9/20	3.25	380.16	115.9
1999/9/29	3.25	380.75	116.1
1999/10/5	3.25	380.66	116.0
1999/10/11	3.30	380.96	116.1
1999/10/18	3.40	381.00	116.1
1999/10/25	3.25	380.70	116.0
1999/11/1	3.35	380.50	116.0
1999/11/9	3.30	380.58	116.0
1999/11/15	3.30	380.29	115.9
1999/11/22	3.30	380.33	115.9
1999/11/29	3.20	380.50	116.0
1999/12/6	3.10	380.33	115.9
1999/12/13	3.25	380.66	116.0
1999/12/20	3.20	380.66	116.0

POZO E-1
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.20	380.87	116.1
2000/1/10	3.20	380.83	116.1
2000/1/17	3.20	380.87	116.1
2000/1/31	3.10	380.66	116.0
2000/2/7	3.15	380.58	116.0
2000/2/15	3.15	380.66	116.0
2000/2/21	3.15	380.50	116.0
2000/2/28	3.10	380.33	115.9
2000/3/8	3.10	380.08	115.8
2000/3/13	3.10	380.00	115.8
2000/3/20	3.15	380.00	115.8
2000/3/27	3.15	379.33	115.6
2000/4/5	3.10	379.16	115.6
2000/4/10	3.10	379.34	115.6
2000/4/24	3.05	379.16	115.6
2000/5/2	3.00	379.59	115.7
2000/5/8	3.00	379.75	115.7
2000/5/16	2.90	379.50	115.7
2000/5/22	2.95	379.66	115.7
2000/5/29	2.95	379.83	115.8
2000/6/5	2.95	379.75	115.7
2000/6/12	2.90	379.70	115.7
2000/6/20		363.08	110.7
2000/6/27	2.90	376.50	114.8
2000/7/3	2.90	377.08	114.9
2000/7/10	2.90	376.87	114.9
2000/7/17	2.70	376.25	114.7
2000/7/24	2.80	375.62	114.5
2000/7/31	2.80	375.16	114.3
2000/8/7	2.60	374.54	114.2
2000/8/14		360.42	109.9
2000/8/21		360.30	109.8
2000/8/28		360.50	109.9
2000/9/4		360.25	109.8
2000/9/11		360.20	109.8
2000/9/18		359.83	109.7
2000/9/25		359.80	109.7
2000/10/3		359.80	109.7
2000/10/9		359.66	109.6
2000/10/18		359.75	109.7
2000/10/23		359.54	109.6
2000/11/1		359.46	109.6
2000/11/7		359.42	109.6
2000/11/14		359.25	109.5
2000/11/21		359.12	109.5
2000/12/4		358.80	109.4
2000/12/11		359.38	109.5
2000/12/20		359.33	109.5

ANNEX 3.C(173) Punping Discharge and Water Level in Wells

POZO E-1
AÑO: 2001

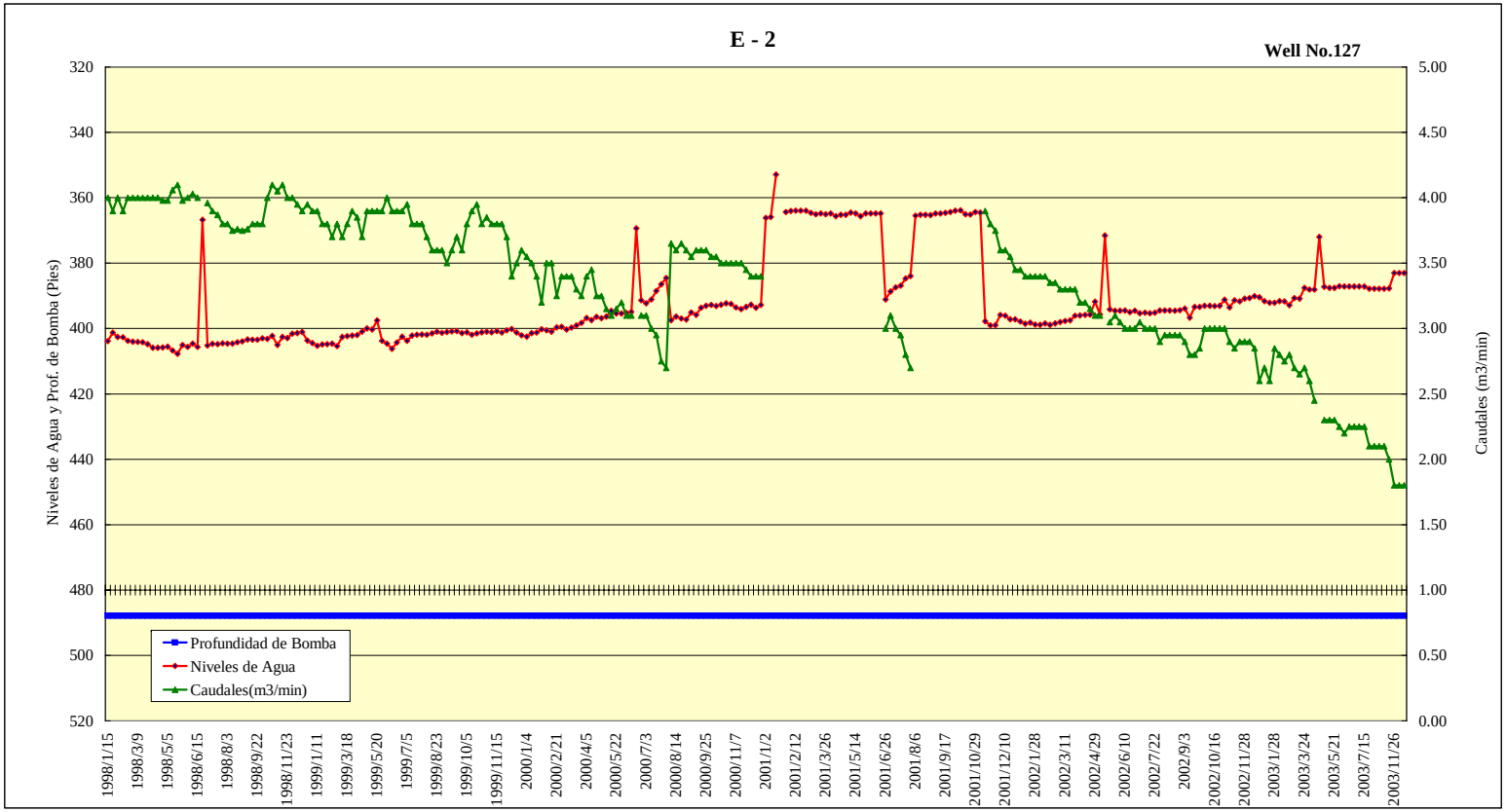
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		359.00	109.4
2001/1/8		358.75	109.3
2001/1/16		358.63	109.3
2001/1/22		358.12	109.2
2001/1/31		358.20	109.2
2001/2/5		368.00	112.2
2001/2/12		357.92	109.1
2001/2/20		357.92	109.1
2001/2/26		357.75	109.0
2001/3/5		358.46	109.3
2001/3/12		358.80	109.4
2001/3/19		358.62	109.3
2001/3/26		358.87	109.4
2001/4/2		358.58	109.3
2001/4/16		359.50	109.6
2001/4/25		359.00	109.4
2001/4/30		359.04	109.4
2001/5/7		358.46	109.3
2001/5/14		358.58	109.3
2001/5/21		358.66	109.3
2001/5/28		358.58	109.3
2001/6/4		358.66	109.3
2001/6/11		358.83	109.4
2001/6/18		358.58	109.3
2001/6/26	3.90	376.50	114.8
2001/7/2		359.83	109.7
2001/7/10	3.20	370.00	112.8
2001/7/17	3.25	370.42	112.9
2001/7/24		358.83	109.4
2001/7/30		359.42	109.6
2001/8/6		359.20	109.5
2001/8/13		359.08	109.4
2001/8/20		358.92	109.4
2001/8/27		358.82	109.4
2001/9/3		358.54	109.3
2001/9/10		358.75	109.3
2001/9/17		358.58	109.3
2001/9/24		358.25	109.2
2001/10/1		357.75	109.0
2001/10/8		357.62	109.0
2001/10/15		359.00	109.4
2001/10/22		359.00	109.4
2001/10/29		358.16	109.2
2001/11/6		358.50	109.3
2001/11/12		358.83	109.4
2001/11/20	3.70	373.92	114.0
2001/11/26	3.70	374.25	114.1
2001/12/3	3.50	373.33	113.8
2001/12/10	3.55	373.58	113.9
2001/12/17	3.60	374.87	114.3

POZO E-1
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.40	374.80	114.2
2002/1/7	3.45	375.83	114.6
2002/1/14	3.40	376.50	114.8
2002/1/21	3.45	376.33	114.7
2002/1/28	3.45	377.08	114.9
2002/2/4	3.45	377.30	115.0
2002/2/12		364.58	111.1
2002/2/19	3.00	375.25	114.4
2002/2/25	3.15	376.08	114.6
2002/3/4	3.05	375.87	114.6
2002/3/11		364.58	111.1
2002/3/19		364.58	111.1
2002/4/3		364.50	111.1
2002/4/8	2.90	375.92	114.6
2002/4/15	2.95	376.16	114.7
2002/4/22	3.00	377.33	115.0
2002/4/29	3.00	372.42	113.5
2002/5/6	3.00	377.08	114.9
2002/5/13		365.75	111.5
2002/5/22	3.05	375.92	114.6
2002/5/27	3.05	376.04	114.6
2002/6/4	3.10	376.20	114.7
2002/6/10	3.05	376.58	114.8
2002/6/17	3.05	377.00	114.9
2002/6/24	3.05	377.08	114.9
2002/7/2	3.00	377.08	114.9
2002/7/9	3.00	377.16	115.0
2002/7/16	3.00	377.20	115.0
2002/7/22	3.00	377.16	115.0
2002/7/29	2.90	377.00	114.9
2002/8/5	2.90	377.16	115.0
2002/8/14	2.95	376.83	114.9
2002/8/19	2.90	377.00	114.9
2002/8/26	2.95	376.75	114.8
2002/9/3	2.85	376.42	114.7
2002/9/9	2.80	376.58	114.8
2002/9/17	2.80	376.33	114.7
2002/9/23	2.80	376.33	114.7
2002/9/30	2.70	376.04	114.6
2002/10/7	2.70	375.96	114.6
2002/10/16	2.70	375.92	114.6
2002/10/21	2.70	375.80	114.5
2002/10/28		366.80	111.8
2002/11/4		366.75	111.8
2002/11/14		366.75	111.8
2002/11/18		366.50	111.7
2002/11/28		366.08	111.6
2002/12/2		366.00	111.6
2002/12/16	2.60	374.50	114.1

POZO E-1
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.70	376.08	114.6
2003/1/13	2.70	376.00	114.6
2003/1/20	2.70	376.33	114.7
2003/1/28	2.65	376.25	114.7
2003/2/3	2.65	376.00	114.6
2003/2/18	2.70	376.30	114.7
2003/2/24	2.70	376.25	114.7
2003/3/7	2.60	376.30	114.7
2003/3/14	2.70	376.66	114.8
2003/3/24	2.70	373.58	113.9
2003/4/2	2.80	375.16	114.3
2003/4/8	2.60	375.08	114.3
2003/4/21	2.60	374.00	114.0
2003/5/10	2.80	378.25	115.3
2003/5/16	2.80	378.42	115.3
2003/5/21	2.80	378.33	115.3
2003/6/25	2.80	378.62	115.4
2003/7/2	2.90	378.20	115.3
2003/7/15	2.70	378.54	115.4
2003/10/26	2.85	379.08	115.5
2003/10/14	2.70	379.92	115.8
2003/11/26	2.85	377.58	115.1
2003/11/26	3.10	451.16	137.5



ANNEX 3.C(174) Punping Discharge and Water Level in Wells

ANNEX 3.C(175) Punping Discharge and Water Level in Wells

POZO E-2
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.85	374.08	114.0
1998/1/26	3.95	374.16	114.0
1998/2/9	4.00	374.58	114.2
1998/2/17	3.85	374.83	114.2
1998/2/23	4.00	375.66	114.5
1998/3/3	3.90	376.42	114.7
1998/3/9	3.90	376.50	114.8
1998/3/16	4.07	376.54	114.8
1998/3/24	3.80	377.33	115.0
1998/4/2	3.80	378.08	115.2
1998/4/13	3.80	378.58	115.4
1998/4/21	3.82	378.83	115.5
1998/5/5	3.75	379.16	115.6
1998/5/13	3.80	379.92	115.8
1998/5/18	3.90	380.16	115.9
1998/5/25	3.75	379.33	115.6
1998/6/1	3.85	379.42	115.6
1998/6/9	3.80	378.83	115.5
1998/6/15	3.75	379.58	115.7
1998/6/22		360.83	110.0
1998/7/6	3.80	380.00	115.8
1998/7/14	3.76	380.00	115.8
1998/7/21	3.73	380.25	115.9
1998/7/28	3.70	380.00	115.8
1998/8/3	3.75	380.16	115.9
1998/8/11	3.75	380.33	115.9
1998/8/24	3.70	380.41	115.9
1998/8/31	3.72	380.25	115.9
1998/9/7	3.70	380.00	115.8
1998/9/16	3.70	380.25	115.9
1998/9/22	3.65	380.33	115.9
1998/10/9	3.60	380.33	115.9
1998/10/12	3.70	380.42	116.0
1998/11/3	3.80	379.66	115.7
1998/11/9	3.60	379.33	115.6
1998/11/16	3.60	380.00	115.8
1998/11/23	3.70	383.70	117.0
1998/11/30	3.60	379.53	115.7
1998/12/9	3.56	379.72	115.7
1998/12/14	3.65	379.40	115.6
1998/12/21	3.60	381.33	116.2

POZO E-2
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.90	404.42	123.3
1999/1/11	3.90	405.26	123.5
1999/1/18	3.80	404.84	123.4
1999/1/26	3.80	404.75	123.4
1999/2/2	3.70	404.62	123.3
1999/2/16	3.80	405.34	123.5
1999/3/10	3.70	402.62	122.7
1999/3/18	3.80	402.32	122.6
1999/4/5	3.90	402.16	122.6
1999/4/12	3.85	401.96	122.5
1999/4/19	3.70	400.95	122.2
1999/5/5	3.90	399.96	121.9
1999/5/11	3.90	400.29	122.0
1999/5/20	3.90	397.54	121.2
1999/5/27	3.90	403.75	123.1
1999/6/7	4.00	404.58	123.3
1999/6/14	3.90	406.25	123.8
1999/6/23	3.90	404.25	123.2
1999/6/28	3.90	402.50	122.7
1999/7/5	3.95	403.75	123.1
1999/7/13	3.80	402.16	122.6
1999/7/20	3.80	401.92	122.5
1999/8/2	3.80	401.83	122.5
1999/8/9	3.70	401.92	122.5
1999/8/16	3.60	401.50	122.4
1999/8/23	3.60	400.96	122.2
1999/8/30	3.60	401.33	122.3
1999/9/6	3.50	401.08	122.2
1999/9/13	3.60	400.87	122.2
1999/9/20	3.70	400.79	122.2
1999/9/29	3.60	401.37	122.3
1999/10/5	3.80	401.16	122.3
1999/10/11	3.90	401.92	122.5
1999/10/18	3.95	401.50	122.4
1999/10/25	3.80	401.16	122.3
1999/11/1	3.85	401.00	122.2
1999/11/9	3.80	401.16	122.3
1999/11/15	3.80	400.83	122.2
1999/11/22	3.80	401.25	122.3
1999/11/29	3.70	400.54	122.1
1999/12/6	3.40	400.16	122.0
1999/12/13	3.50	401.20	122.3
1999/12/20	3.60	402.08	122.6

POZO E-2
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.55	402.50	122.7
2000/1/10	3.50	401.41	122.3
2000/1/17	3.40	401.25	122.3
2000/1/31	3.20	400.25	122.0
2000/2/7	3.50	400.58	122.1
2000/2/15	3.50	401.00	122.2
2000/2/21	3.25	399.66	121.8
2000/2/28	3.40	399.50	121.8
2000/3/8	3.40	400.33	122.0
2000/3/13	3.40	399.75	121.8
2000/3/20	3.30	399.00	121.6
2000/3/27	3.25	398.25	121.4
2000/4/5	3.40	396.75	120.9
2000/4/10	3.45	397.42	121.1
2000/4/24	3.25	396.41	120.8
2000/5/2	3.25	396.83	121.0
2000/5/8	3.15	396.30	120.8
2000/5/16	3.10	394.58	120.3
2000/5/22	3.15	395.41	120.5
2000/5/29	3.20	395.41	120.5
2000/6/5	3.10	395.25	120.5
2000/6/12	3.10	394.87	120.4
2000/6/20		369.33	112.6
2000/6/27	3.10	391.33	119.3
2000/7/3	3.10	392.29	119.6
2000/7/10	3.00	391.08	119.2
2000/7/17	2.95	388.50	118.4
2000/7/24	2.75	386.50	117.8
2000/7/31	2.70	384.50	117.2
2000/8/7	3.65	397.42	121.1
2000/8/14	3.60	396.37	120.8
2000/8/21	3.65	396.92	121.0
2000/8/28	3.60	397.25	121.1
2000/9/4	3.55	395.08	120.4
2000/9/11	3.60	395.83	120.6
2000/9/18	3.60	393.66	120.0
2000/9/25	3.60	393.04	119.8
2000/10/3	3.55	392.83	119.7
2000/10/9	3.55	393.16	119.8
2000/10/18	3.50	392.70	119.7
2000/10/23	3.50	392.33	119.6
2000/11/1	3.50	392.50	119.6
2000/11/7	3.50	393.58	120.0
2000/11/14	3.50	394.04	120.1
2000/11/21	3.45	393.42	119.9
2000/12/4	3.40	392.70	119.7
2000/12/11	3.40	393.66	120.0
2000/12/20	3.40	392.83	119.7

ANNEX 3.C(176) Punping Discharge and Water Level in Wells

POZO E-2
AÑO: 2001

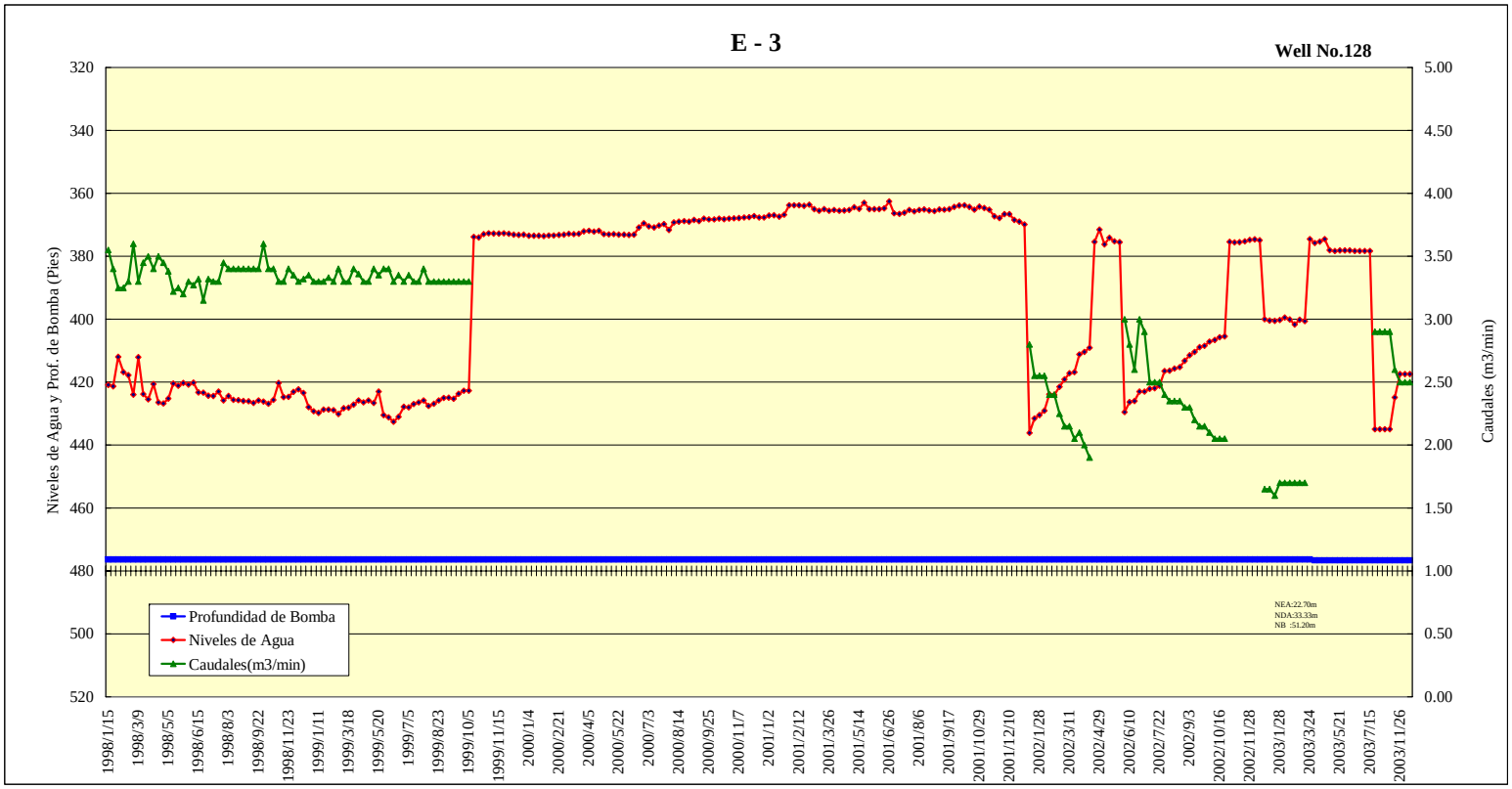
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		366.16	111.6
2001/1/8		365.87	111.5
2001/1/16		352.89	107.6
2001/1/22			0.0
2001/1/31		364.33	111.0
2001/2/5		364.00	110.9
2001/2/12		363.92	110.9
2001/2/20		363.92	110.9
2001/2/26		363.92	110.9
2001/3/5		364.66	111.1
2001/3/12		365.08	111.3
2001/3/19		364.83	111.2
2001/3/26		365.08	111.3
2001/4/2		364.83	111.2
2001/4/16		365.66	111.5
2001/4/25		365.20	111.3
2001/4/30		365.25	111.3
2001/5/7		364.58	111.1
2001/5/14		364.75	111.2
2001/5/21		365.66	111.5
2001/5/28		364.75	111.2
2001/6/4		364.83	111.2
2001/6/11		364.83	111.2
2001/6/12		364.75	111.2
2001/6/18		364.75	111.2
2001/6/26	3.00	391.10	119.2
2001/7/2	3.10	388.66	118.5
2001/7/10	3.00	387.42	118.1
2001/7/17	2.95	386.87	117.9
2001/7/24	2.80	384.66	117.2
2001/7/30	2.70	383.92	117.0
2001/8/6		365.46	111.4
2001/8/13		365.25	111.3
2001/8/20		365.20	111.3
2001/8/27		365.30	111.3
2001/9/3		364.80	111.2
2001/9/10		364.83	111.2
2001/9/17		364.66	111.1
2001/9/24		364.37	111.1
2001/10/1		363.92	110.9
2001/10/8		363.83	110.9
2001/10/15		365.08	111.3
2001/10/22		365.16	111.3
2001/10/29		364.33	111.0
2001/11/6		364.58	111.1
2001/11/12	3.90	397.80	121.2
2001/11/20	3.80	399.00	121.6
2001/11/26	3.75	398.92	121.6
2001/12/3	3.60	395.80	120.6
2001/12/10	3.60	396.08	120.7
2001/12/17	3.55	397.20	121.1

POZO E-2
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.55	397.20	121.1
2002/1/7	3.45	397.87	121.3
2002/1/14	3.40	398.50	121.5
2002/1/21	3.40	398.16	121.4
2002/1/28	3.40	398.80	121.6
2002/2/4	3.40	398.83	121.6
2002/2/12	3.40	398.42	121.4
2002/2/19	3.35	398.83	121.6
2002/2/25	3.35	398.42	121.4
2002/3/4	3.30	398.00	121.3
2002/3/11	3.30	397.66	121.2
2002/3/19	3.30	397.54	121.2
2002/4/3	3.30	396.08	120.7
2002/4/8	3.20	396.00	120.7
2002/4/15	3.20	395.83	120.6
2002/4/22	3.15	395.75	120.6
2002/4/29	3.10	391.75	119.4
2002/5/6	3.10	395.66	120.6
2002/5/13		371.54	113.2
2002/5/22	3.05	394.16	120.1
2002/5/27	3.10	394.58	120.3
2002/6/4	3.05	394.58	120.3
2002/6/10	3.00	394.50	120.2
2002/6/17	3.00	395.00	120.4
2002/6/24	3.00	394.58	120.3
2002/7/2	3.05	395.33	120.5
2002/7/9	3.00	395.20	120.5
2002/7/16	3.00	395.33	120.5
2002/7/22	3.00	395.16	120.4
2002/7/29	2.90	394.46	120.2
2002/8/5	2.95	394.50	120.2
2002/8/14	2.95	394.50	120.2
2002/8/19	2.95	394.58	120.3
2002/8/26	2.95	394.42	120.2
2002/9/3	2.90	393.92	120.1
2002/9/9	2.80	396.70	120.9
2002/9/17	2.80	393.37	119.9
2002/9/23	2.85	393.37	119.9
2002/9/30	3.00	393.08	119.8
2002/10/7	3.00	393.08	119.8
2002/10/16	3.00	393.12	119.8
2002/10/21	3.00	393.04	119.8
2002/10/28	3.00	391.16	119.2
2002/11/4	2.90	393.58	120.0
2002/11/14	2.85	391.33	119.3
2002/11/18	2.90	391.66	119.4
2002/11/28	2.90	390.83	119.1
2002/12/2	2.90	390.66	119.1
2002/12/16	2.85	390.12	118.9

POZO E-2
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.60	390.42	119.0
2003/1/13	2.70	391.62	119.4
2003/1/20	2.60	392.16	119.5
2003/1/28	2.85	392.08	119.5
2003/2/3	2.80	391.58	119.4
2003/2/18	2.75	391.66	119.4
2003/2/24	2.80	392.92	119.8
2003/3/7	2.70	390.66	119.1
2003/3/14	2.65	390.83	119.1
2003/3/24	2.70	387.58	118.1
2003/4/2	2.60	388.08	118.3
2003/4/8	2.45	388.08	118.3
2003/4/21		372.00	113.4
2003/5/10	2.30	387.25	118.0
2003/5/16	2.30	387.58	118.1
2003/5/21	2.30	387.58	118.1
2003/6/25	2.25	387.08	118.0
2003/7/2	2.20	387.16	118.0
2003/7/15	2.25	387.12	118.0
2003/8/26	2.10	387.83	118.2
2003/10/14	2.00	387.75	118.2
2003/11/26	1.80	383.00	116.7



ANNEX 3.C(177) Punping Discharge and Water Level in Wells

ANNEX 3.C(178) Punping Discharge and Water Level in Wells

POZO E-3
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.55	420.87	128.3
1998/1/26	3.40	421.33	128.4
1998/2/9	3.25	411.96	125.6
1998/2/17	3.25	416.79	127.0
1998/2/23	3.30	417.83	127.4
1998/3/3	3.60	424.00	129.2
1998/3/9	3.30	412.08	125.6
1998/3/16	3.45	423.83	129.2
1998/3/24	3.50	425.50	129.7
1998/4/2	3.40	420.66	128.2
1998/4/13	3.50	426.46	130.0
1998/4/21	3.45	426.75	130.1
1998/5/5	3.38	425.16	129.6
1998/5/13	3.22	420.41	128.1
1998/5/18	3.25	421.16	128.4
1998/5/25	3.20	420.25	128.1
1998/6/1	3.30	420.83	128.3
1998/6/9	3.27	420.16	128.1
1998/6/15	3.32	423.25	129.0
1998/6/22	3.15	423.33	129.0
1998/7/6	3.32	424.29	129.3
1998/7/14	3.30	424.41	129.4
1998/7/21	3.30	423.00	128.9
1998/7/28	3.45	425.83	129.8
1998/8/3	3.40	424.42	129.4
1998/8/11	3.40	425.66	129.7
1998/8/24	3.40	425.75	129.8
1998/8/31	3.40	426.00	129.8
1998/9/7	3.40	426.08	129.9
1998/9/16	3.40	426.58	130.0
1998/9/22	3.40	425.83	129.8
1998/10/9	3.60	426.16	129.9
1998/10/12	3.40	426.83	130.1
1998/11/3	3.40	425.66	129.7
1998/11/9	3.30	420.25	128.1
1998/11/16	3.30	424.75	129.5
1998/11/23	3.40	424.66	129.4
1998/11/30	3.35	423.05	128.9
1998/12/9	3.30	422.30	128.7
1998/12/14	3.32	423.45	129.1
1998/12/21	3.35	427.92	130.4

POZO E-3
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.30	429.25	130.8
1999/1/11	3.30	429.76	131.0
1999/1/18	3.30	428.75	130.7
1999/1/26	3.33	428.75	130.7
1999/2/2	3.30	428.92	130.7
1999/2/16	3.40	430.09	131.1
1999/3/10	3.30	428.27	130.5
1999/3/18	3.30	428.14	130.5
1999/4/5	3.40	427.15	130.2
1999/4/12	3.36	425.83	129.8
1999/4/19	3.30	426.41	130.0
1999/5/5	3.30	425.81	129.8
1999/5/11	3.40	426.58	130.0
1999/5/20	3.35	422.96	128.9
1999/5/27	3.40	430.50	131.2
1999/6/7	3.40	431.23	131.4
1999/6/14	3.30	432.62	131.9
1999/6/23	3.35	431.00	131.4
1999/6/28	3.30	427.83	130.4
1999/7/5	3.35	428.00	130.5
1999/7/13	3.30	427.00	130.1
1999/7/20	3.30	426.41	130.0
1999/8/2	3.40	425.83	129.8
1999/8/9	3.30	427.54	130.3
1999/8/16	3.30	426.83	130.1
1999/8/23	3.30	425.83	129.8
1999/8/30	3.30	425.00	129.5
1999/9/6	3.30	424.92	129.5
1999/9/13	3.30	425.33	129.6
1999/9/20	3.30	423.66	129.1
1999/9/29	3.30	422.75	128.9
1999/10/5	3.30	422.75	128.9
1999/10/11		373.87	114.0
1999/10/18		374.00	114.0
1999/10/25		372.92	113.7
1999/11/1		372.66	113.6
1999/11/9		372.80	113.6
1999/11/15		372.75	113.6
1999/11/22		372.66	113.6
1999/11/29		372.87	113.7
1999/12/6		373.16	113.7
1999/12/13		373.25	113.8
1999/12/20		373.16	113.7

POZO E-3
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4		373.50	113.8
2000/1/10		373.50	113.8
2000/1/17		373.50	113.8
2000/1/31		373.58	113.9
2000/2/7		373.37	113.8
2000/2/15		373.41	113.8
2000/2/21		373.25	113.8
2000/2/28		373.16	113.7
2000/3/8		372.83	113.6
2000/3/13		372.92	113.7
2000/3/20		372.83	113.6
2000/3/27		372.08	113.4
2000/4/5		371.92	113.4
2000/4/10		372.16	113.4
2000/4/24		371.92	113.4
2000/5/2		372.92	113.7
2000/5/8		373.08	113.7
2000/5/16		372.93	113.7
2000/5/22		373.12	113.7
2000/5/29		373.16	113.7
2000/6/5		373.20	113.8
2000/6/12		373.16	113.7
2000/6/20		370.80	113.0
2000/6/27		369.54	112.6
2000/7/3		370.50	112.9
2000/7/10		370.83	113.0
2000/7/17		370.25	112.9
2000/7/24		369.75	112.7
2000/7/31		371.66	113.3
2000/8/7		369.25	112.5
2000/8/14		368.96	112.5
2000/8/21		368.84	112.4
2000/8/28		369.00	112.5
2000/9/4		368.50	112.3
2000/9/11		368.80	112.4
2000/9/18		368.00	112.2
2000/9/25		368.25	112.2
2000/10/3		368.25	112.2
2000/10/9		368.04	112.2
2000/10/18		368.16	112.2
2000/10/23		368.00	112.2
2000/11/1		367.92	112.1
2000/11/7		367.83	112.1
2000/11/14		367.70	112.1
2000/11/21		367.54	112.0
2000/12/4		367.20	111.9
2000/12/11		367.66	112.1
2000/12/20		367.66	112.1

ANNEX 3.C(179) Punping Discharge and Water Level in Wells

POZO E-3
AÑO: 2001

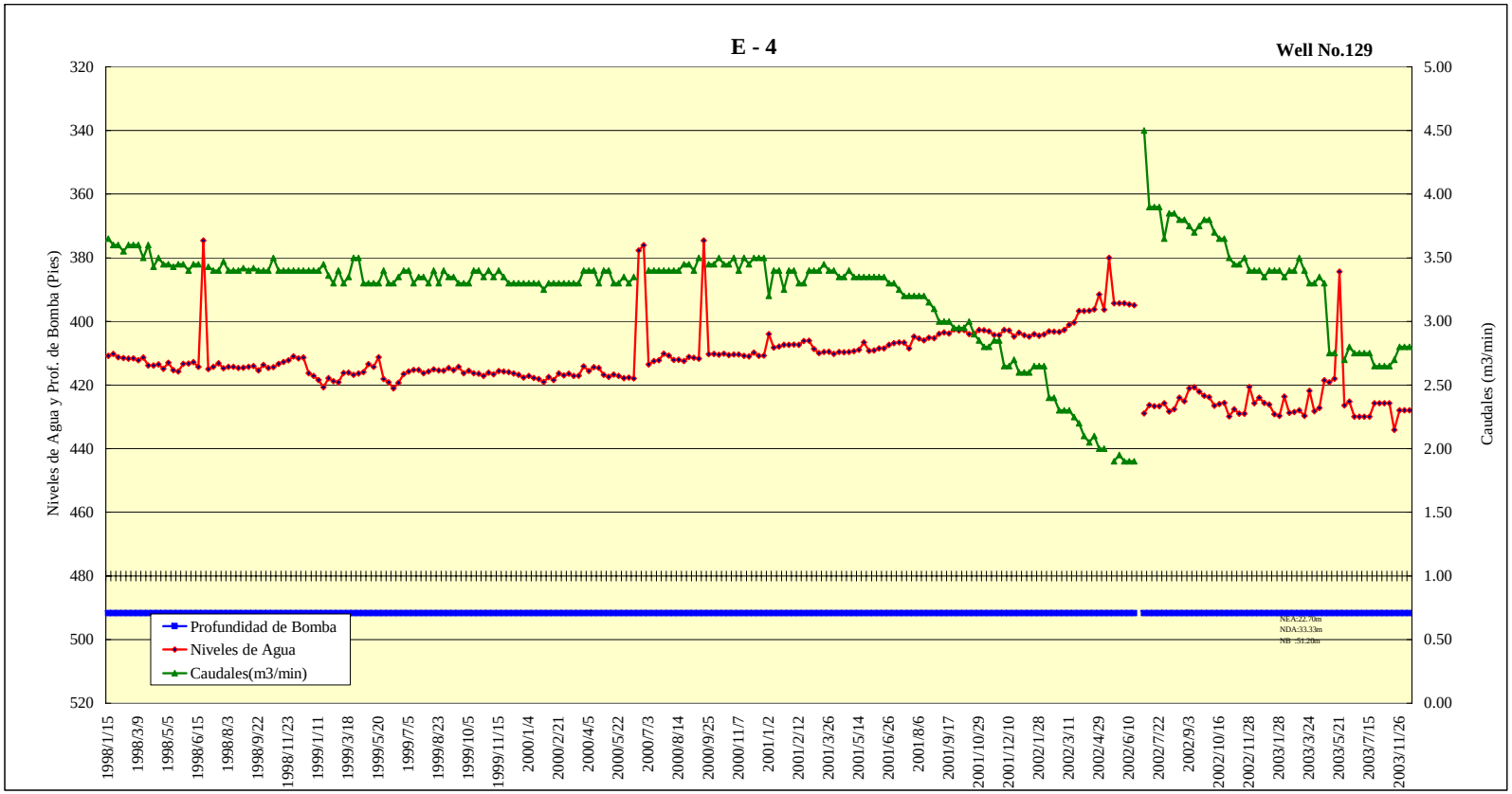
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		367.08	111.9
2001/1/8		366.96	111.8
2001/1/16		367.36	112.0
2001/1/22		366.75	111.8
2001/1/31		363.80	110.9
2001/2/5		363.75	110.9
2001/2/12		363.80	110.9
2001/2/20		364.00	110.9
2001/2/26		363.58	110.8
2001/3/5		365.04	111.3
2001/3/12		365.54	111.4
2001/3/19		365.04	111.3
2001/3/26		365.58	111.4
2001/4/2		365.25	111.3
2001/4/16		365.58	111.4
2001/4/25		365.42	111.4
2001/4/30		365.25	111.3
2001/5/7		364.37	111.1
2001/5/14		364.92	111.2
2001/5/21		363.00	110.6
2001/5/28		365.04	111.3
2001/6/4		365.00	111.3
2001/6/11		365.04	111.3
2001/6/18		364.75	111.2
2001/6/26		362.54	110.5
2001/7/2		366.33	111.7
2001/7/10		366.54	111.7
2001/7/17		366.20	111.6
2001/7/24		365.25	111.3
2001/7/30		365.75	111.5
2001/8/6		365.33	111.4
2001/8/13		365.12	111.3
2001/8/20		365.50	111.4
2001/8/27		365.60	111.4
2001/9/3		365.12	111.3
2001/9/10		365.16	111.3
2001/9/17		365.00	111.3
2001/9/24		364.33	111.0
2001/10/1		363.92	110.9
2001/10/8		363.83	110.9
2001/10/15		364.33	111.0
2001/10/22		365.16	111.3
2001/10/29		364.25	111.0
2001/11/6		364.66	111.1
2001/11/12		365.20	111.3
2001/11/20		367.33	112.0
2001/11/26		367.80	112.1
2001/12/3		366.58	111.7
2001/12/10		366.62	111.7
2001/12/17		368.42	112.3

POZO E-3
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2		369.00	112.5
2002/1/7		369.87	112.7
2002/1/14	2.80	436.08	132.9
2002/1/21	2.55	431.50	131.5
2002/1/28	2.55	430.46	131.2
2002/2/4	2.55	429.04	130.8
2002/2/12	2.40	423.92	129.2
2002/2/19	2.40	424.08	129.3
2002/2/25	2.25	421.54	128.5
2002/3/4	2.15	419.16	127.8
2002/3/11	2.15	417.16	127.2
2002/3/19	2.05	416.83	127.0
2002/4/3	2.10	411.16	125.3
2002/4/8	2.00	410.42	125.1
2002/4/15	1.90	409.08	124.7
2002/4/22		375.46	114.4
2002/4/29		371.58	113.3
2002/5/6		376.25	114.7
2002/5/13		374.08	114.0
2002/5/22		375.20	114.4
2002/5/27		375.50	114.5
2002/6/4	3.00	429.50	130.9
2002/6/10	2.80	426.33	129.9
2002/6/17	2.60	426.00	129.8
2002/6/24	3.00	423.00	128.9
2002/7/2	2.90	423.00	128.9
2002/7/9	2.50	422.08	128.6
2002/7/16	2.50	421.96	128.6
2002/7/22	2.50	421.16	128.4
2002/7/29	2.40	416.50	126.9
2002/8/5	2.35	416.42	126.9
2002/8/14	2.35	415.68	126.7
2002/8/19	2.35	415.25	126.6
2002/8/26	2.30	413.25	126.0
2002/9/3	2.30	411.42	125.4
2002/9/9	2.20	410.42	125.1
2002/9/17	2.15	408.92	124.6
2002/9/23	2.15	408.50	124.5
2002/9/30	2.10	407.12	124.1
2002/10/7	2.05	406.62	123.9
2002/10/16	2.05	405.75	123.7
2002/10/21	2.05	405.42	123.6
2002/10/28		375.46	114.4
2002/11/4		375.58	114.5
2002/11/14		375.50	114.5
2002/11/18		375.25	114.4
2002/11/28		374.83	114.2
2002/12/2		374.66	114.2
2002/12/16		374.92	114.3

POZO E-3
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	1.65	400.00	121.9
2003/1/13	1.65	400.42	122.0
2003/1/20	1.60	400.50	122.1
2003/1/28	1.70	400.30	122.0
2003/2/3	1.70	399.50	121.8
2003/2/18	1.70	400.08	121.9
2003/2/24	1.70	401.66	122.4
2003/3/7	1.70	400.16	122.0
2003/3/14	1.70	400.66	122.1
2003/3/24		374.58	114.2
2003/4/2		375.75	114.5
2003/4/8		375.33	114.4
2003/4/21		374.58	114.2
2003/5/10		378.08	115.2
2003/5/16		378.33	115.3
2003/5/21		378.12	115.3
2003/6/25		378.16	115.3
2003/7/2		378.33	115.3
2003/7/15		378.33	115.3
2003/8/26	2.90	435.00	132.6
2003/10/13	2.60	424.83	129.5
2003/11/26	2.5	417.42	127.2



ANNEX 3.C(180) Punping Discharge and Water Level in Wells

ANNEX 3.C(181) Punping Discharge and Water Level in Wells

POZO E-4
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.65	410.87	125.2
1998/1/26	3.60	410.25	125.0
1998/2/9	3.60	411.25	125.3
1998/2/17	3.55	411.54	125.4
1998/2/23	3.60	411.70	125.5
1998/3/3	3.60	411.58	125.4
1998/3/9	3.60	412.25	125.7
1998/3/16	3.50	411.33	125.4
1998/3/24	3.60	413.83	126.1
1998/4/2	3.43	413.88	126.2
1998/4/13	3.50	413.50	126.0
1998/4/21	3.45	414.92	126.5
1998/5/5	3.45	413.00	125.9
1998/5/13	3.43	415.33	126.6
1998/5/18	3.45	415.75	126.7
1998/5/25	3.45	413.37	126.0
1998/6/1	3.40	413.25	126.0
1998/6/9	3.45	412.83	125.8
1998/6/15	3.45	414.33	126.3
1998/6/22		374.58	114.2
1998/7/6	3.43	415.00	126.5
1998/7/14	3.40	414.25	126.3
1998/7/21	3.40	413.16	125.9
1998/7/28	3.47	414.75	126.4
1998/8/3	3.40	414.33	126.3
1998/8/11	3.40	414.33	126.3
1998/8/24	3.40	414.66	126.4
1998/8/31	3.42	414.58	126.4
1998/9/7	3.40	414.33	126.3
1998/9/16	3.42	414.00	126.2
1998/9/22	3.40	415.41	126.6
1998/10/9	3.40	413.66	126.1
1998/10/12	3.40	414.66	126.4
1998/11/3	3.50	414.42	126.3
1998/11/9	3.40	413.37	126.0
1998/11/16	3.40	412.75	125.8
1998/11/23	3.40	412.23	125.6
1998/11/30	3.40	411.00	125.3
1998/12/9	3.40	411.64	125.5
1998/12/14	3.40	411.31	125.4
1998/12/21	3.40	416.26	126.9

POZO E-4
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.40	417.17	127.2
1999/1/11	3.40	418.42	127.5
1999/1/18	3.45	420.66	128.2
1999/1/26	3.36	417.83	127.4
1999/2/2	3.30	418.83	127.7
1999/2/16	3.40	419.17	127.8
1999/3/10	3.30	416.23	126.9
1999/3/18	3.35	416.10	126.8
1999/4/5	3.50	416.76	127.0
1999/4/12	3.50	416.40	126.9
1999/4/19	3.30	415.90	126.8
1999/5/5	3.30	413.45	126.0
1999/5/11	3.30	414.29	126.3
1999/5/20	3.30	411.28	125.4
1999/5/27	3.40	418.08	127.4
1999/6/7	3.30	419.16	127.8
1999/6/14	3.30	421.00	128.3
1999/6/23	3.35	419.34	127.8
1999/6/28	3.40	416.50	126.9
1999/7/5	3.40	415.75	126.7
1999/7/13	3.30	415.25	126.6
1999/7/20	3.35	415.25	126.6
1999/8/2	3.35	416.25	126.9
1999/8/9	3.30	415.75	126.7
1999/8/16	3.40	415.04	126.5
1999/8/23	3.30	415.41	126.6
1999/8/30	3.40	415.50	126.6
1999/9/6	3.35	414.66	126.4
1999/9/13	3.35	415.29	126.6
1999/9/20	3.30	414.33	126.3
1999/9/29	3.30	416.25	126.9
1999/10/5	3.30	415.50	126.6
1999/10/11	3.40	416.25	126.9
1999/10/18	3.40	416.42	126.9
1999/10/25	3.35	417.16	127.2
1999/11/1	3.40	416.08	126.8
1999/11/9	3.35	416.62	127.0
1999/11/15	3.40	415.58	126.7
1999/11/22	3.35	415.75	126.7
1999/11/29	3.30	415.92	126.8
1999/12/6	3.30	416.41	126.9
1999/12/13	3.30	416.80	127.0
1999/12/20	3.30	417.66	

POZO E-4
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.30	417.17	127.2
2000/1/10	3.30	417.75	127.3
2000/1/17	3.30	418.08	127.4
2000/1/31	3.25	419.08	127.7
2000/2/7	3.30	417.46	127.2
2000/2/15	3.30	418.41	127.5
2000/2/21	3.30	416.41	126.9
2000/2/28	3.30	417.00	127.1
2000/3/8	3.30	416.42	126.9
2000/3/13	3.30	417.13	127.1
2000/3/20	3.30	417.08	127.1
2000/3/27	3.40	414.08	126.2
2000/4/5	3.40	415.58	126.7
2000/4/10	3.40	414.41	126.3
2000/4/24	3.30	414.66	126.4
2000/5/2	3.40	416.83	127.0
2000/5/8	3.40	417.42	127.2
2000/5/16	3.30	416.75	127.0
2000/5/22	3.30	417.16	127.2
2000/5/29	3.35	417.83	127.4
2000/6/6	3.30	417.70	127.3
2000/6/12	3.35	417.92	127.4
2000/6/20		377.67	115.1
2000/6/27		376.04	114.6
2000/7/3	3.40	413.50	126.0
2000/7/10	3.40	412.46	125.7
2000/7/17	3.40	412.25	125.7
2000/7/24	3.40	410.16	125.0
2000/7/31	3.40	410.75	125.2
2000/8/7	3.40	412.16	125.6
2000/8/14	3.40	412.04	125.6
2000/8/21	3.45	412.46	125.7
2000/8/28	3.45	411.16	125.3
2000/9/4	3.40	411.46	125.4
2000/9/11	3.50	411.66	125.5
2000/9/18		374.62	114.2
2000/9/25	3.45	410.33	125.1
2000/10/3	3.45	410.25	125.0
2000/10/9	3.50	410.46	125.1
2000/10/18	3.45	410.16	125.0
2000/10/23	3.45	410.58	125.1
2000/11/1	3.50	410.42	125.1
2000/11/7	3.40	410.37	125.1
2000/11/14	3.50	410.87	125.2
2000/11/21	3.45	411.00	125.3
2000/12/4	3.50	409.75	124.9
2000/12/11	3.50	410.83	125.2
2000/12/20	3.50	410.75	125.2

ANNEX 3.C(182) Punping Discharge and Water Level in Wells

POZO E-4
AÑO: 2001

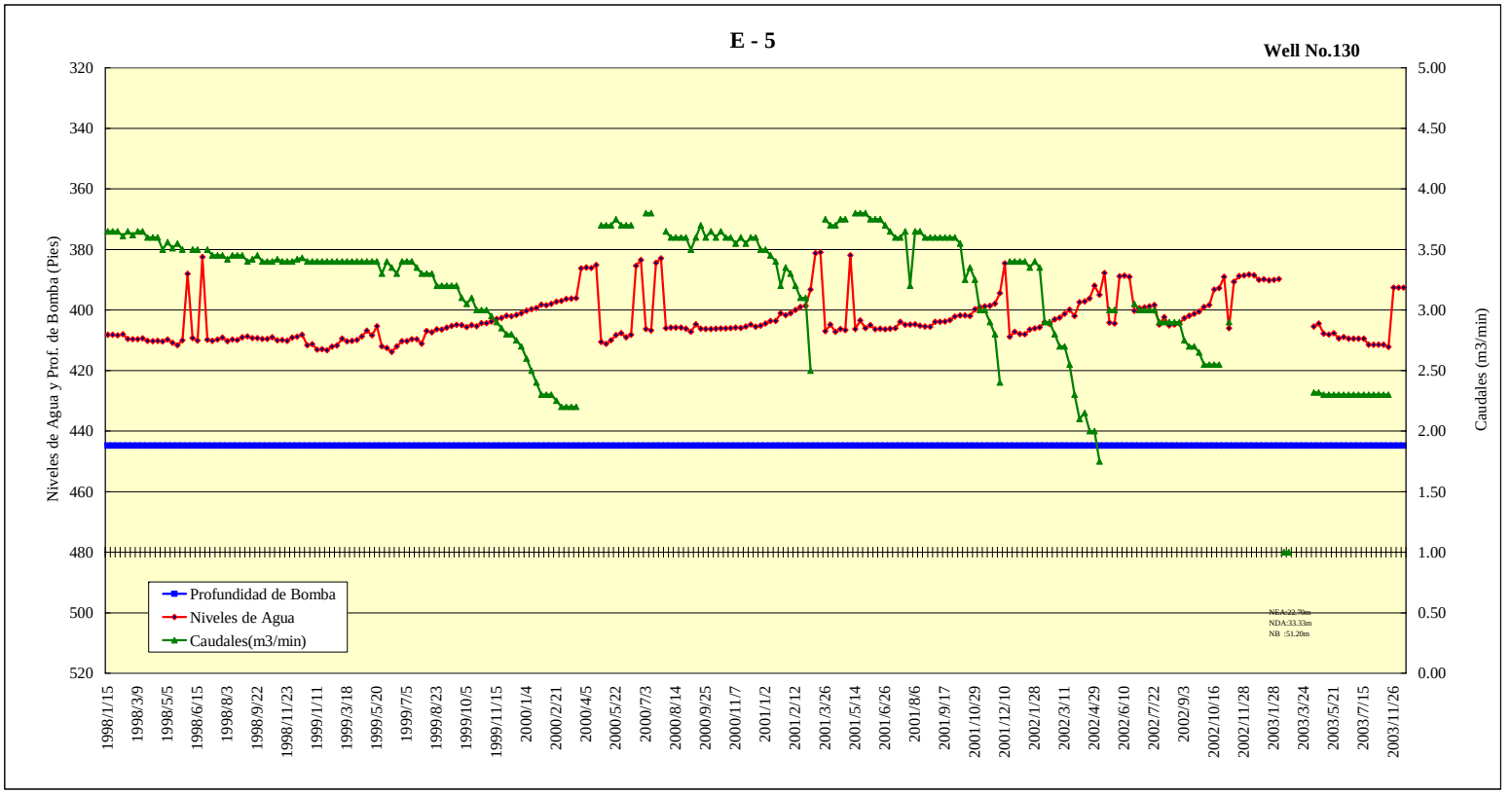
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.20	403.96	123.1
2001/1/8	3.40	408.20	124.4
2001/1/16	3.40	407.92	124.3
2001/1/22	3.25	407.37	124.2
2001/1/31	3.40	407.33	124.2
2001/2/5	3.40	407.25	124.1
2001/2/12	3.30	407.33	124.2
2001/2/20	3.30	406.17	123.8
2001/2/26	3.40	406.08	123.8
2001/3/5	3.40	408.66	124.6
2001/3/12	3.40	410.00	125.0
2001/3/19	3.45	409.58	124.8
2001/3/26	3.40	409.50	124.8
2001/4/2	3.40	410.25	125.0
2001/4/16	3.35	409.62	124.9
2001/4/25	3.35	409.70	124.9
2001/4/30	3.40	409.58	124.8
2001/5/7	3.35	409.33	124.8
2001/5/14	3.35	408.92	124.6
2001/5/21	3.35	406.58	123.9
2001/5/28	3.35	409.25	124.7
2001/6/4	3.35	409.08	124.7
2001/6/11	3.35	408.50	124.5
2001/6/18	3.35	408.50	124.5
2001/6/25	3.30	407.33	124.2
2001/7/2	3.30	406.83	124.0
2001/7/10	3.25	406.58	123.9
2001/7/17	3.20	406.70	124.0
2001/7/24	3.20	408.50	124.5
2001/7/30	3.20	404.75	123.4
2001/8/6	3.20	405.37	123.6
2001/8/13	3.20	405.96	123.7
2001/8/20	3.15	405.16	123.5
2001/8/27	3.10	405.26	123.5
2001/9/3	3.00	403.92	123.1
2001/9/10	3.00	403.50	123.0
2001/9/17	3.00	403.80	123.1
2001/9/24	2.95	402.50	122.7
2001/10/1	2.95	402.83	122.8
2001/10/8	2.95	402.66	122.7
2001/10/15	3.00	404.00	123.1
2001/10/22	2.90	403.80	123.1
2001/10/29	2.85	402.66	122.7
2001/11/6	2.80	402.75	122.8
2001/11/12	2.80	403.16	122.9
2001/11/20	2.85	404.25	123.2
2001/11/26	2.85	404.30	123.2
2001/12/3	2.65	402.70	122.7
2001/12/10	2.65	402.83	122.8
2001/12/17	2.70	404.75	123.4

POZO E-4
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	2.60	403.58	123.0
2002/1/7	2.60	404.37	123.3
2002/1/14	2.60	404.75	123.4
2002/1/21	2.65	403.96	123.1
2002/1/28	2.65	404.50	123.3
2002/2/4	2.65	404.08	123.2
2002/2/12	2.40	403.16	122.9
2002/2/19	2.40	403.25	122.9
2002/2/25	2.30	403.30	122.9
2002/3/4	2.30	402.66	122.7
2002/3/11	2.30	401.08	122.2
2002/3/19	2.25	400.33	122.0
2002/4/3	2.20	396.75	120.9
2002/4/8	2.10	396.75	120.9
2002/4/15	2.05	396.66	120.9
2002/4/22	2.10	396.25	120.8
2002/4/29	2.00	391.58	119.4
2002/5/6	2.00	396.33	120.8
2002/5/13		380.00	115.8
2002/5/22	1.90	394.33	120.2
2002/5/27	1.95	394.33	120.2
2002/6/4	1.90	394.30	120.2
2002/6/10	1.90	394.62	120.3
2002/6/17	1.90	394.92	120.4
2002/6/24			0.0
2002/7/2	4.50	428.92	130.7
2002/7/9	3.90	426.33	129.9
2002/7/16	3.90	426.66	130.0
2002/7/22	3.90	426.70	130.1
2002/7/29	3.65	425.75	129.8
2002/8/5	3.85	428.33	130.6
2002/8/14	3.85	427.58	130.3
2002/8/19	3.80	424.00	129.2
2002/8/26	3.80	425.08	129.6
2002/9/3	3.75	421.08	128.3
2002/9/9	3.70	420.66	128.2
2002/9/17	3.75	422.08	128.6
2002/9/23	3.80	423.37	129.0
2002/9/30	3.80	423.80	129.2
2002/10/7	3.70	426.50	130.0
2002/10/16	3.65	425.96	129.8
2002/10/21	3.65	425.66	129.7
2002/10/28	3.50	429.83	131.0
2002/11/4	3.45	427.62	130.3
2002/11/14	3.45	429.00	130.8
2002/11/18	3.50	429.00	130.8
2002/11/28	3.40	420.62	128.2
2002/12/2	3.40	425.75	129.8
2002/12/16	3.40	424.00	129.2

POZO E-4
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.35	425.66	129.7
2003/1/13	3.40	426.16	129.9
2003/1/20	3.40	429.16	130.8
2003/1/28	3.40	429.66	131.0
2003/2/3	3.35	423.62	129.1
2003/2/18	3.40	428.75	130.7
2003/2/24	3.40	428.50	130.6
2003/3/7	3.50	427.96	130.4
2003/3/14	3.40	429.66	131.0
2003/3/24	3.30	421.83	128.6
2003/4/2	3.30	428.25	130.5
2003/4/8	3.35	427.16	130.2
2003/4/21	3.30	418.50	127.6
2003/5/10	2.75	419.16	127.8
2003/5/16	2.75	418.00	127.4
2003/5/21		384.33	117.1
2003/6/25	2.70	426.42	130.0
2003/7/2	2.80	425.16	129.6
2003/7/15	2.75	429.92	131.0
2003/8/26	2.65	425.75	129.8
2003/10/13	2.70	434.08	132.3
2003/11/26	2.80	427.92	130.4



ANNEX 3.C(183) Punping Discharge and Water Level in Wells

ANNEX 3.C(184) Punping Discharge and Water Level in Wells

POZO E-5
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.65	408.20	124.4
1998/1/26	3.65	408.16	124.4
1998/2/9	3.65	408.41	124.5
1998/2/17	3.61	408.00	124.4
1998/2/23	3.65	409.54	124.8
1998/3/3	3.62	409.66	124.9
1998/3/9	3.65	409.66	124.9
1998/3/16	3.65	409.41	124.8
1998/3/24	3.60	410.16	125.0
1998/4/2	3.60	410.33	125.1
1998/4/13	3.60	410.25	125.0
1998/4/21	3.50	410.41	125.1
1998/5/5	3.56	409.75	124.9
1998/5/13	3.51	410.83	125.2
1998/5/18	3.55	411.62	125.5
1998/5/25	3.50	410.00	125.0
1998/6/1		388.08	118.3
1998/6/9	3.50	409.25	124.7
1998/6/15	3.50	410.08	125.0
1998/6/22		382.54	116.6
1998/7/6	3.50	409.83	124.9
1998/7/14	3.45	410.16	125.0
1998/7/21	3.45	409.75	124.9
1998/7/28	3.45	409.08	124.7
1998/8/3	3.42	410.33	125.1
1998/8/11	3.45	409.75	124.9
1998/8/24	3.45	409.92	124.9
1998/8/31	3.45	409.00	124.7
1998/9/7	3.40	408.75	124.6
1998/9/16	3.42	409.33	124.8
1998/9/22	3.45	409.33	124.8
1998/10/9	3.40	409.58	124.8
1998/10/12	3.40	409.56	124.8
1998/11/3	3.40	409.00	124.7
1998/11/9	3.42	410.00	125.0
1998/11/16	3.40	409.93	124.9
1998/11/23	3.40	410.20	125.0
1998/11/30	3.40	409.12	124.7
1998/12/9	3.42	408.88	124.6
1998/12/14	3.43	408.16	124.4
1998/12/21	3.40	411.67	125.5

POZO E-5
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.40	411.26	125.4
1999/1/11	3.40	413.09	125.9
1999/1/18	3.40	412.92	125.9
1999/1/26	3.40	413.30	126.0
1999/2/2	3.40	412.16	125.6
1999/2/16	3.40	411.76	125.5
1999/3/10	3.40	409.45	124.8
1999/3/18	3.40	410.43	125.1
1999/4/5	3.40	410.19	125.0
1999/4/12	3.40	409.93	124.9
1999/4/19	3.40	408.79	124.6
1999/5/5	3.40	406.87	124.0
1999/5/11	3.40	408.37	124.5
1999/5/20	3.40	405.37	123.6
1999/5/27	3.30	412.00	125.6
1999/6/7	3.40	412.58	125.8
1999/6/14	3.35	413.84	126.1
1999/6/23	3.30	412.00	125.6
1999/6/28	3.40	410.33	125.1
1999/7/5	3.40	410.33	125.1
1999/7/13	3.40	409.70	124.9
1999/7/20	3.35	409.66	124.9
1999/8/2	3.30	411.16	125.3
1999/8/9	3.30	406.96	124.0
1999/8/16	3.30	407.41	124.2
1999/8/23	3.20	406.37	123.9
1999/8/30	3.20	406.50	123.9
1999/9/6	3.20	405.87	123.7
1999/9/13	3.20	405.25	123.5
1999/9/20	3.20	404.92	123.4
1999/9/29	3.10	405.00	123.4
1999/10/5	3.05	405.66	123.6
1999/10/11	3.10	405.00	123.4
1999/10/18	3.00	405.42	123.6
1999/10/25	3.00	404.41	123.3
1999/11/1	3.00	404.33	123.2
1999/11/9	2.95	403.83	123.1
1999/11/15	2.90	403.04	122.8
1999/11/22	2.85	402.66	122.7
1999/11/29	2.80	401.92	122.5
1999/12/6	2.80	402.08	122.6
1999/12/13	2.75	401.66	122.4
1999/12/20	2.70	401.08	122.2

POZO E-5
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	2.60	400.25	122.0
2000/1/10	2.50	399.75	121.8
2000/1/17	2.40	399.34	121.7
2000/1/31	2.30	398.25	121.4
2000/2/7	2.30	398.42	121.4
2000/2/15	2.30	398.00	121.3
2000/2/21	2.25	397.25	121.1
2000/2/28	2.20	397.00	121.0
2000/3/8	2.20	396.33	120.8
2000/3/13	2.20	396.30	120.8
2000/3/20	2.20	396.04	120.7
2000/3/27		386.25	117.7
2000/4/5		386.00	117.7
2000/4/10		386.16	117.7
2000/4/24		385.16	117.4
2000/5/2	3.70	410.54	125.1
2000/5/8	3.70	411.25	125.3
2000/5/16	3.70	410.00	125.0
2000/5/22	3.75	408.30	124.4
2000/5/29	3.70	407.67	124.3
2000/6/6	3.70	409.00	124.7
2000/6/12	3.70	408.20	124.4
2000/6/20		385.41	117.5
2000/6/27		383.54	116.9
2000/7/3	3.80	406.33	123.8
2000/7/10	3.80	406.75	124.0
2000/7/17		384.41	117.2
2000/7/24		383.00	116.7
2000/7/31	3.65	406.00	123.7
2000/8/7	3.60	405.83	123.7
2000/8/14	3.60	405.80	123.7
2000/8/21	3.60	405.83	123.7
2000/8/28	3.60	406.16	123.8
2000/9/4	3.50	407.16	124.1
2000/9/11	3.60	404.75	123.4
2000/9/18	3.70	406.16	123.8
2000/9/25	3.60	406.33	123.8
2000/10/3	3.65	406.30	123.8
2010/10/9	3.60	406.16	123.8
2000/10/18	3.65	406.12	123.8
2000/10/23	3.60	406.08	123.8
2000/11/1	3.60	406.04	123.8
2000/11/7	3.55	405.87	123.7
2000/11/14	3.60	405.96	123.7
2000/11/21	3.55	405.46	123.6
2000/12/4	3.60	404.87	123.4
2000/12/11	3.60	405.58	123.6
2000/12/20	3.50	405.16	123.5

ANNEX 3.C(185) Punping Discharge and Water Level in Wells

POZO E-5
AÑO: 2001

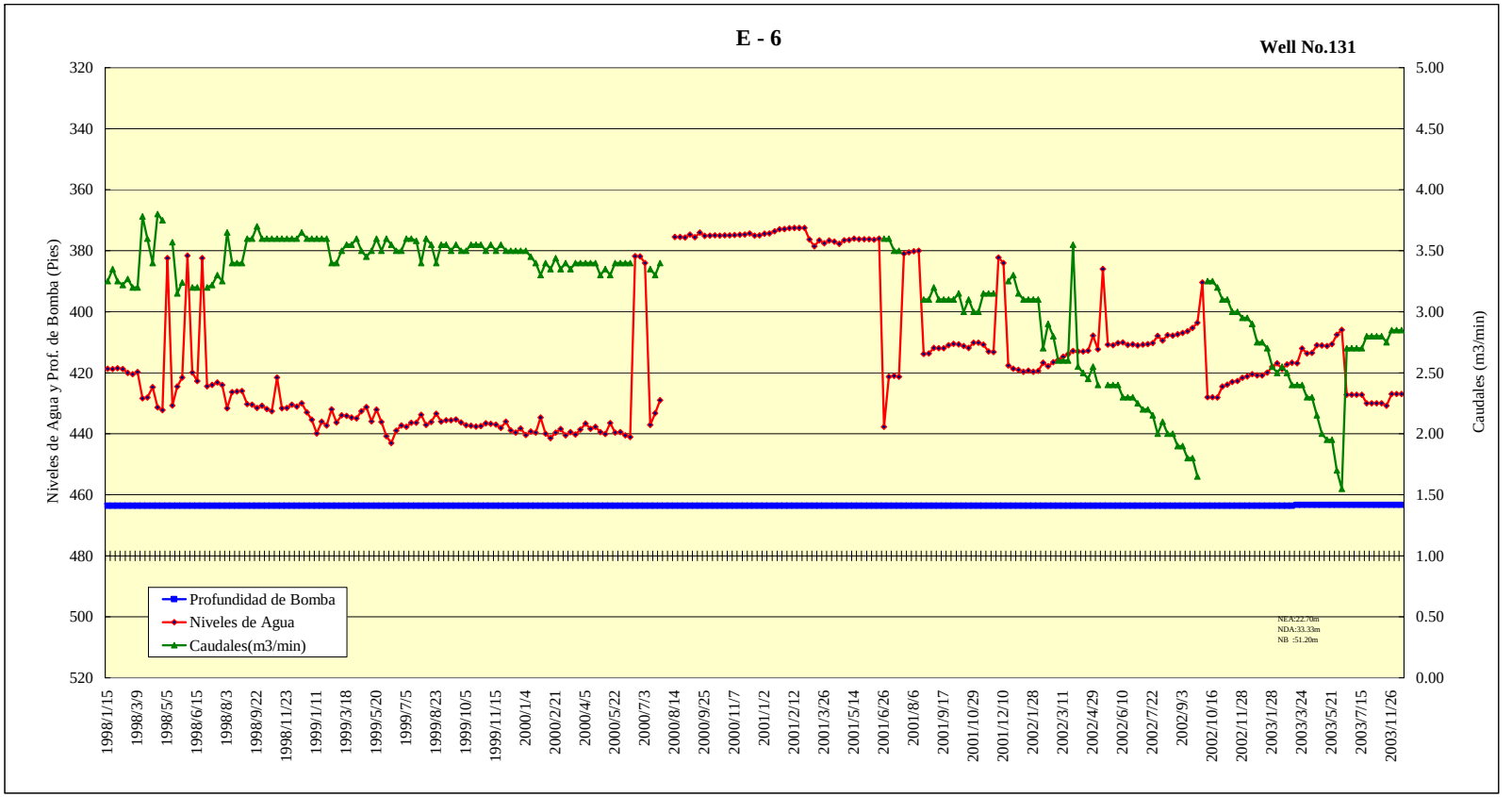
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2	3.50	404.46	123.3
2001/1/8	3.45	403.66	123.0
2001/1/16	3.40	403.66	123.0
2001/1/22	3.20	401.08	122.2
2001/1/31	3.35	401.75	122.5
2001/2/5	3.30	401.08	122.2
2001/2/12	3.20	400.00	121.9
2001/2/20	3.10	399.00	121.6
2001/2/26	3.10	398.67	121.5
2001/3/5	2.50	393.25	119.9
2001/3/12		381.25	116.2
2001/3/19		380.92	116.1
2001/3/26	3.75	407.00	124.1
2001/4/2	3.70	404.83	123.4
2001/4/16	3.70	407.20	124.1
2001/4/25	3.75	406.29	123.8
2001/4/30	3.75	406.62	123.9
2001/5/7		381.92	116.4
2001/5/14	3.80	406.25	123.8
2001/5/21	3.80	403.50	123.0
2001/5/28	3.80	406.00	123.7
2001/6/4	3.75	405.00	123.4
2001/6/11	3.75	406.42	123.9
2001/6/18	3.75	406.16	123.8
2001/6/26	3.70	406.40	123.9
2001/7/2	3.65	406.16	123.8
2001/7/10	3.60	406.00	123.7
2001/7/17	3.60	403.96	123.1
2001/7/24	3.65	404.96	123.4
2001/7/30	3.60	404.83	123.4
2001/8/6	3.65	404.75	123.4
2001/8/13	3.65	405.16	123.5
2001/8/20	3.60	405.50	123.6
2001/8/27	3.60	405.60	123.6
2001/9/3	3.60	403.92	123.1
2001/9/10	3.60	403.92	123.1
2001/9/17	3.60	403.83	123.1
2001/9/24	3.60	403.33	122.9
2001/10/1	3.60	402.16	122.6
2001/10/8	3.55	401.83	122.5
2001/10/15	3.25	401.83	122.5
2001/10/22	3.35	402.00	122.5
2001/10/29	3.25	399.83	121.9
2001/11/6	3.00	399.08	121.6
2001/11/12	3.00	398.83	121.6
2001/11/20	2.90	398.66	121.5
2001/11/26	2.80	397.92	121.3
2001/12/3	2.40	394.42	120.2
2001/12/10		384.62	117.2
2001/12/17	3.40	408.83	124.6

POZO E-5
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.40	407.16	124.1
2002/1/7	3.40	407.92	124.3
2002/1/14	3.40	408.00	124.4
2002/1/21	3.35	406.46	123.9
2002/1/28	3.40	406.08	123.8
2002/2/4	3.35	405.75	123.7
2002/2/12	2.90	404.00	123.1
2002/2/19	2.90	404.58	123.3
2002/2/25	2.80	403.08	122.9
2002/3/4	2.70	402.58	122.7
2002/3/11	2.70	401.30	122.3
2002/3/19	2.55	399.92	121.9
2002/4/3	2.30	402.00	122.5
2002/4/8	2.10	397.42	121.1
2002/4/15	2.15	397.16	121.1
2002/4/22	2.00	396.13	120.7
2002/4/29	2.00	392.00	119.5
2002/5/6	1.75	395.00	120.4
2002/5/13		387.83	118.2
2002/5/22	3.00	404.16	123.2
2002/5/27	3.00	404.46	123.3
2002/6/4		388.92	118.5
2002/6/10		388.66	118.5
2002/6/17		389.04	118.6
2002/6/24	3.05	400.25	122.0
2002/7/2	3.00	399.42	121.7
2002/7/9	3.00	399.16	121.7
2002/7/16	3.00	398.83	121.6
2002/7/22	3.00	398.33	121.4
2002/7/29	2.90	404.83	123.4
2002/8/5	2.90	402.33	122.6
2002/8/14	2.90	405.06	123.5
2002/8/19	2.90	404.83	123.4
2002/8/26	2.90	404.42	123.3
2002/9/3	2.75	402.70	122.7
2002/9/9	2.70	401.92	122.5
2002/9/17	2.70	401.30	122.3
2002/9/23	2.65	400.58	122.1
2002/9/30	2.55	399.00	121.6
2002/10/7	2.55	398.33	121.4
2002/10/16	2.55	393.25	119.9
2002/10/21	2.55	392.83	119.7
2002/10/28		389.08	118.6
2002/11/4	2.90	406.00	123.7
2002/11/14		390.70	119.1
2002/11/18		388.83	118.5
2002/11/28		388.58	118.4
2002/12/2		388.37	118.4
2002/12/16		388.54	118.4

POZO E-5
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8		390.08	118.9
2003/1/13		389.92	118.8
2003/1/20		390.25	118.9
2003/1/28		390.08	118.9
2003/2/3		389.75	118.8
2003/2/18	1.00	Obstruido	#VALUE!
2003/2/24	1.00		0.0
2003/3/7			0.0
2003/3/14			0.0
2003/3/24			0.0
2003/4/2			0.0
2003/4/8	2.32	405.50	123.6
2003/4/21	2.32	404.50	123.3
2003/5/10	2.30	407.83	124.3
2003/5/16	2.30	408.12	124.4
2003/5/21	2.30	407.66	124.3
2003/6/25	2.30	409.37	124.8
2003/7/2	2.30	408.92	124.6
2003/7/15	2.30	409.50	124.8
2000/8/26	2.30	411.50	125.4
2003/10/13	2.30	412.20	125.6
2003/11/26		392.58	119.7



ANNEX 3.C(186) Punping Discharge and Water Level in Wells

ANNEX 3.C(187) Punping Discharge and Water Level in Wells

POZO E-6
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	3.25	418.66	127.6
1998/1/26	3.35	418.83	127.7
1998/2/9	3.25	418.50	127.6
1998/2/17	3.22	418.75	127.6
1998/2/23	3.27	420.08	128.0
1998/3/3	3.20	420.50	128.2
1998/3/9	3.20	419.75	127.9
1998/3/16	3.78	428.37	130.6
1998/3/24	3.60	428.16	130.5
1998/4/2	3.40	424.75	129.5
1998/4/13	3.80	431.33	131.5
1998/4/21	3.75	432.29	131.8
1998/5/5		382.45	116.6
1998/5/13	3.57	430.75	131.3
1998/5/18	3.15	424.58	129.4
1998/5/25	3.24	421.58	128.5
1998/6/1		381.58	116.3
1998/6/9	3.20	419.92	128.0
1998/6/15	3.20	422.75	128.9
1998/6/22		382.41	116.6
1998/7/6	3.20	424.41	129.4
1998/7/14	3.22	424.00	129.2
1998/7/21	3.30	423.16	129.0
1998/7/28	3.25	424.00	129.2
1998/8/3	3.65	431.66	131.6
1998/8/11	3.40	426.33	129.9
1998/8/24	3.40	426.16	129.9
1998/8/31	3.40	426.00	129.8
1998/9/7	3.60	430.29	131.2
1998/9/16	3.60	430.50	131.2
1998/9/22	3.70	431.58	131.5
1998/10/9	3.60	430.83	131.3
1998/10/12	3.60	431.92	131.6
1998/11/3	3.60	432.66	131.9
1998/11/9	3.60	421.58	128.5
1998/11/16	3.60	431.60	131.6
1998/11/23	3.60	431.55	131.5
1998/11/30	3.60	430.47	131.2
1998/12/9	3.60	431.06	131.4
1998/12/14	3.65	430.00	131.1
1998/12/21	3.60	433.00	132.0

POZO E-6
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	3.60	435.42	132.7
1999/1/11	3.60	439.92	134.1
1999/1/18	3.60	436.00	132.9
1999/1/26	3.60	437.25	133.3
1999/2/2	3.40	432.00	131.7
1999/2/16	3.40	436.34	133.0
1999/3/10	3.50	433.98	132.3
1999/3/18	3.55	434.17	132.3
1999/4/5	3.55	434.70	132.5
1999/4/12	3.60	434.93	132.6
1999/4/19	3.50	432.63	131.9
1999/5/5	3.45	431.29	131.5
1999/5/11	3.50	435.92	132.9
1999/5/20	3.60	432.12	131.7
1999/5/27	3.50	436.08	132.9
1999/6/7	3.60	440.83	134.4
1999/6/14	3.55	443.00	135.0
1999/6/23	3.50	439.00	133.8
1999/6/28	3.50	437.25	133.3
1999/7/5	3.60	437.75	133.4
1999/7/13	3.60	436.41	133.0
1999/7/20	3.58	436.41	133.0
1999/8/2	3.40	433.75	132.2
1999/8/9	3.60	437.08	133.2
1999/8/16	3.55	436.08	132.9
1999/8/23	3.40	433.46	132.1
1999/8/30	3.55	436.00	132.9
1999/9/6	3.55	435.62	132.8
1999/9/13	3.50	435.58	132.8
1999/9/20	3.55	435.33	132.7
1999/9/29	3.50	436.33	133.0
1999/10/5	3.50	437.16	133.2
1999/10/11	3.55	437.41	133.3
1999/10/18	3.55	437.66	133.4
1999/10/25	3.55	437.50	133.4
1999/11/1	3.50	436.58	133.1
1999/11/9	3.55	436.75	133.1
1999/11/15	3.50	437.00	133.2
1999/11/22	3.55	438.12	133.5
1999/11/29	3.50	436.00	132.9
1999/12/6	3.50	438.92	133.8
1999/12/13	3.50	439.66	134.0
1999/12/20	3.50	438.25	133.6

POZO E-6
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	3.50	440.46	134.3
2000/1/10	3.45	439.30	133.9
2000/1/17	3.40	439.66	134.0
2000/1/31	3.30	434.66	132.5
2000/2/7	3.40	440.00	134.1
2000/2/15	3.35	441.41	134.5
2000/2/21	3.44	439.58	134.0
2000/2/28	3.35	438.42	133.6
2000/3/8	3.40	440.54	134.3
2000/3/13	3.35	439.41	133.9
2000/3/20	3.40	440.25	134.2
2000/3/27	3.40	438.63	133.7
2000/4/5	3.40	436.66	133.1
2000/4/10	3.40	438.34	133.6
2000/4/24	3.40	437.75	133.4
2000/5/2	3.30	439.42	133.9
2000/5/8	3.35	440.08	134.1
2000/5/16	3.30	436.46	133.0
2000/5/22	3.40	439.66	134.0
2000/5/29	3.40	439.46	133.9
2000/6/6	3.40	440.50	134.3
2000/6/12	3.40	441.08	134.4
2000/6/20		381.75	116.4
2000/6/27		381.87	116.4
2000/7/3		384.04	117.1
2000/7/10	3.35	437.08	133.2
2000/7/17	3.30	433.25	132.1
2000/7/24	3.40	429.00	130.8
2000/7/31			0.0
2000/8/7			0.0
2000/8/14		375.54	114.5
2000/8/21		375.50	114.5
2000/8/28		375.70	114.5
2000/9/4		374.66	114.2
2000/9/11		375.58	114.5
2000/9/18		374.08	114.0
2000/9/25		375.16	114.3
2000/10/3		375.08	114.3
2000/10/9		375.00	114.3
2000/10/18		375.08	114.3
2000/10/23		375.00	114.3
2000/11/1		374.92	114.3
2000/11/7		374.83	114.2
2000/11/14		374.80	114.2
2000/11/21		374.70	114.2
2000/12/4		374.33	114.1
2000/12/11		375.04	114.3
2000/12/20		374.92	114.3

ANNEX 3.C(188) Punping Discharge and Water Level in Wells

POZO E-6
AÑO: 2001

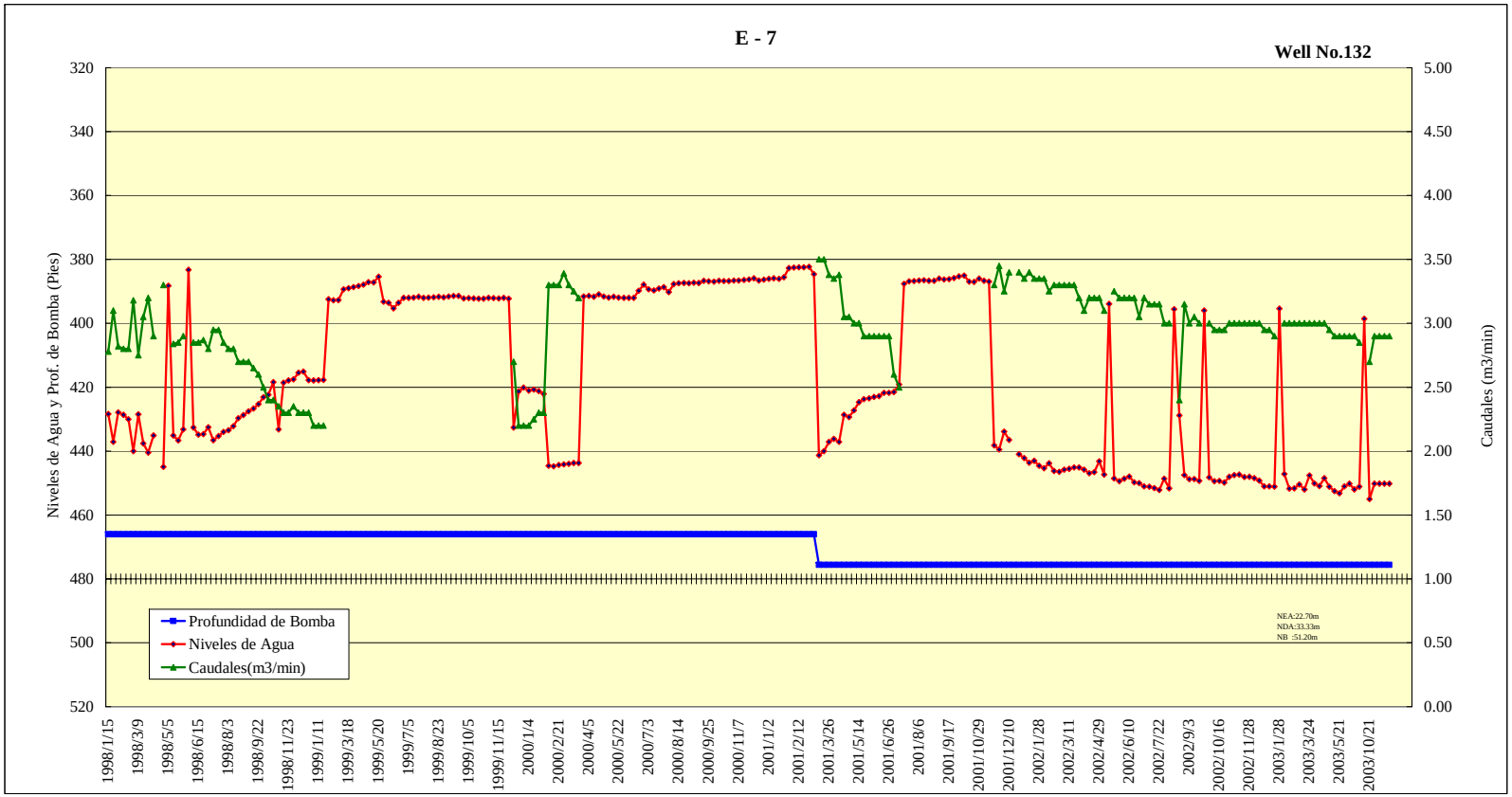
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		374.42	114.1
2001/1/8		374.30	114.1
2001/1/16		373.62	113.9
2001/1/22		373.00	113.7
2001/1/31		372.92	113.7
2001/2/5		372.66	113.6
2001/2/12		372.58	113.6
2001/2/20		372.58	113.6
2001/2/26		372.58	113.6
2001/3/5		376.33	114.7
2001/3/12		378.58	115.4
2001/3/19		376.62	114.8
2001/3/26		377.54	115.1
2001/4/2		376.66	114.8
2001/4/16		377.00	114.9
2001/4/25		377.75	115.1
2001/4/30		376.54	114.8
2001/5/7		376.50	114.8
2001/5/14		376.00	114.6
2001/5/21		376.25	114.7
2001/5/28		376.25	114.7
2001/6/4		376.25	114.7
2001/6/11		376.42	114.7
2001/6/18		376.08	114.6
2001/6/26	3.60	437.75	133.4
2001/7/2	3.60	421.33	128.4
2001/7/9	3.50	421.00	128.3
2001/7/17	3.50	421.33	128.4
2001/7/24		381.00	116.1
2001/7/30		380.50	116.0
2001/8/6		380.16	115.9
2001/8/13		380.00	115.8
2001/8/20		413.83	126.1
2001/8/27	3.10	413.63	126.1
2001/9/3	3.20	411.87	125.5
2001/9/10	3.10	411.92	125.6
2001/9/17	3.10	411.92	125.6
2001/9/24	3.10	411.00	125.3
2001/10/1	3.10	410.50	125.1
2001/10/8	3.15	410.70	125.2
2001/10/15	3.00	411.25	125.3
2001/10/22	3.10	411.87	125.5
2001/10/29	3.00	410.16	125.0
2001/11/6	3.00	410.16	125.0
2001/11/12	3.15	410.83	125.2
2001/11/20	3.15	413.08	125.9
2001/11/26	3.15	413.25	126.0
2001/12/3		382.25	116.5
2001/12/10		384.00	117.0
2001/12/17	3.25	417.62	127.3

POZO E-6
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.30	418.70	127.6
2002/1/7	3.15	419.04	127.7
2002/1/14	3.10	419.66	127.9
2002/1/21	3.10	419.30	127.8
2002/1/28	3.10	419.66	127.9
2002/2/4	3.10	419.46	127.9
2002/2/12	2.70	416.75	127.0
2002/2/19	2.90	417.87	127.4
2002/2/25	2.80	416.50	126.9
2002/3/4	2.60	415.80	126.7
2002/3/11	2.60	414.75	126.4
2002/3/19	2.60	413.92	126.2
2002/4/3	3.55	412.83	125.8
2002/4/8	2.55	413.00	125.9
2002/4/15	2.50	413.04	125.9
2002/4/22	2.45	412.75	125.8
2002/4/29	2.55	407.83	124.3
2002/5/6	2.40	412.33	125.7
2002/5/13		386.00	117.7
2002/5/22	2.40	410.83	125.2
2002/5/27	2.40	411.00	125.3
2002/6/4	2.40	410.25	125.0
2002/6/10	2.30	410.08	125.0
2002/6/17	2.30	410.87	125.2
2002/6/24	2.30	410.70	125.2
2002/7/2	2.25	411.08	125.3
2002/7/9	2.20	410.80	125.2
2002/7/16	2.20	410.58	125.1
2002/7/22	2.15	410.25	125.0
2002/7/29	2.00	407.92	124.3
2002/8/5	2.10	409.42	124.8
2002/8/14	2.00	407.66	124.3
2002/8/19	2.00	407.83	124.3
2002/8/26	1.90	407.42	124.2
2002/9/3	1.90	406.92	124.0
2002/9/9	1.80	406.42	123.9
2002/9/17	1.80	405.33	123.5
2002/9/23	1.65	403.58	123.0
2002/9/30		390.42	119.0
2002/10/7	3.25	428.04	130.5
2002/10/16	3.25	428.08	130.5
2002/10/21	3.20	428.16	130.5
2002/10/28	3.10	424.50	129.4
2002/11/4	3.10	423.87	129.2
2002/11/14	3.00	423.00	128.9
2002/11/18	3.00	422.75	128.9
2002/11/28	2.95	421.66	128.5
2002/12/2	2.95	421.20	128.4
2002/12/16	2.90	420.50	128.2

POZO E-6
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.75	420.83	128.3
2003/1/13	2.75	420.83	128.3
2003/1/20	2.70	419.92	128.0
2003/1/28	2.55	418.04	127.4
2003/2/3	2.50	416.92	127.1
2003/2/18	2.55	418.83	127.7
2003/2/24	2.50	417.25	127.2
2003/3/7	2.40	416.70	127.0
2003/3/14	2.40	416.92	127.1
2003/3/24	2.40	412.08	125.6
2003/4/2	2.30	413.66	126.1
2003/4/8	2.30	413.46	126.0
2003/4/21	2.15	411.00	125.3
2003/5/10	2.00	411.08	125.3
2003/5/16	1.95	411.25	125.3
2003/5/21	1.95	410.58	125.1
2003/6/25	1.70	407.58	124.2
2003/7/2	1.55	405.92	123.7
2003/7/15	2.70	427.25	130.2
2003/8/26	2.80	430.00	131.1
2003/10/13	2.75	430.83	131.3
2003/11/26	2.85	427.00	130.1



ANNEX 3.C(189) Punping Discharge and Water Level in Wells

ANNEX 3.C(190) Punping Discharge and Water Level in Wells

POZO E-7
AÑO: 1998

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1998/1/15	2.78	428.37	130.6
1998/1/26	3.10	437.08	133.2
1998/2/9	2.82	427.92	130.4
1998/2/17	2.80	428.66	130.7
1998/2/23	2.80	430.05	131.1
1998/3/3	3.18	440.00	134.1
1998/3/9	2.75	428.50	130.6
1998/3/16	3.05	437.58	133.4
1998/3/24	3.20	440.50	134.3
1998/4/2	2.90	435.16	132.6
1998/4/13			0.0
1998/4/21	3.30	444.96	135.6
1998/5/5		388.25	118.3
1998/5/13	2.84	435.16	132.6
1998/5/18	2.85	436.66	133.1
1998/5/25	2.90	433.25	132.1
1998/6/1		383.25	116.8
1998/6/9	2.85	432.66	131.9
1998/6/15	2.85	434.83	132.5
1998/6/22	2.87	434.66	132.5
1998/7/6	2.80	432.50	131.8
1998/7/14	2.95	436.58	133.1
1998/7/21	2.95	435.33	132.7
1998/7/28	2.85	434.00	132.3
1998/8/3	2.80	433.50	132.1
1998/8/11	2.80	432.16	131.7
1998/8/24	2.70	429.70	131.0
1998/8/31	2.70	428.75	130.7
1998/9/7	2.70	427.58	130.3
1998/9/16	2.65	426.66	130.0
1998/9/22	2.60	425.33	129.6
1998/10/9	2.50	423.16	129.0
1998/10/12	2.40	422.33	128.7
1998/11/3	2.40	418.42	127.5
1998/11/9	2.35	433.25	132.1
1998/11/16	2.30	418.59	127.6
1998/11/23	2.30	417.90	127.4
1998/11/30	2.35	417.51	127.3
1998/12/9	2.30	415.44	126.6
1998/12/14	2.30	415.12	126.5
1998/12/21	2.30	417.76	127.3

POZO E-7
AÑO: 1999

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
1999/1/4	2.20	417.92	127.4
1999/1/11	2.20	417.84	127.4
1999/1/18	2.20	417.75	127.3
1999/1/26		392.50	119.6
1999/2/2		392.80	119.7
1999/2/16		392.76	119.7
1999/3/10		389.34	118.7
1999/3/18		389.01	118.6
1999/4/5		388.71	118.5
1999/4/12		388.29	118.4
1999/4/19		387.89	118.2
1999/5/5		387.16	118.0
1999/5/11		387.20	118.0
1999/5/20		385.37	117.5
1999/5/27		393.25	119.9
1999/6/7		393.58	120.0
1999/6/14		395.34	120.5
1999/6/23		393.58	120.0
1999/6/28		392.04	119.5
1999/7/5		392.08	119.5
1999/7/13		391.92	119.5
1999/7/20		391.70	119.4
1999/8/2		392.00	119.5
1999/8/9		391.96	119.5
1999/8/16		391.83	119.4
1999/8/23		391.70	119.4
1999/8/30		391.83	119.4
1999/9/6		391.58	119.4
1999/9/13		391.46	119.3
1999/9/20		391.41	119.3
1999/9/29		392.25	119.6
1999/10/5		392.16	119.5
1999/10/11		392.20	119.5
1999/10/18		392.33	119.6
1999/10/25		392.33	119.6
1999/11/1		392.08	119.5
1999/11/9		392.16	119.5
1999/11/15		392.25	119.6
1999/11/22		392.00	119.5
1999/11/29		392.33	119.6
1999/12/6	2.70	432.62	131.9
1999/12/13	2.20	421.33	128.4
1999/12/20	2.20	420.16	128.1

POZO E-7
AÑO: 2000

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2000/1/4	2.20	421.04	128.3
2000/1/10	2.25	420.70	128.2
2000/1/17	2.30	421.25	128.4
2000/1/31	2.30	422.08	128.6
2000/2/7	3.30	444.62	135.5
2000/2/15	3.30	444.75	135.6
2000/2/21	3.30	444.33	135.4
2000/2/28	3.39	444.16	135.4
2000/3/8	3.30	444.04	135.3
2000/3/13	3.25	443.75	135.3
2000/3/20	3.20	443.70	135.2
2000/3/27		391.62	119.4
2000/4/5		391.45	119.3
2000/4/10		391.70	119.4
2000/4/24		390.96	119.2
2000/5/2		391.62	119.4
2000/5/8		391.96	119.5
2000/5/16		391.66	119.4
2000/5/22		391.96	119.5
2000/5/29		392.04	119.5
2000/6/6		392.08	119.5
2000/6/12		392.04	119.5
2000/6/20		389.84	118.8
2000/6/27		387.92	118.2
2000/7/3		389.34	118.7
2000/7/10		389.70	118.8
2000/7/17		389.08	118.6
2000/7/24		388.66	118.5
2000/7/31		390.25	118.9
2000/8/7		387.70	118.2
2000/8/14		387.50	118.1
2000/8/21		387.37	118.1
2000/8/28		387.50	118.1
2000/9/4		387.30	118.0
2000/9/11		387.42	118.1
2000/9/18		386.66	117.9
2000/9/25		386.87	117.9
2000/10/3		386.96	117.9
2000/10/9		386.70	117.9
2000/10/18		386.80	117.9
2000/10/23		386.75	117.9
2000/11/1		386.58	117.8
07/11//00		386.58	117.8
2000/11/14		386.42	117.8
2000/11/21		386.30	117.7
2000/12/4		385.92	117.6
2000/12/11		386.62	117.8
2000/12/20		386.37	117.8

ANNEX 3.C(191) Punping Discharge and Water Level in Wells

POZO E-7
AÑO: 2001

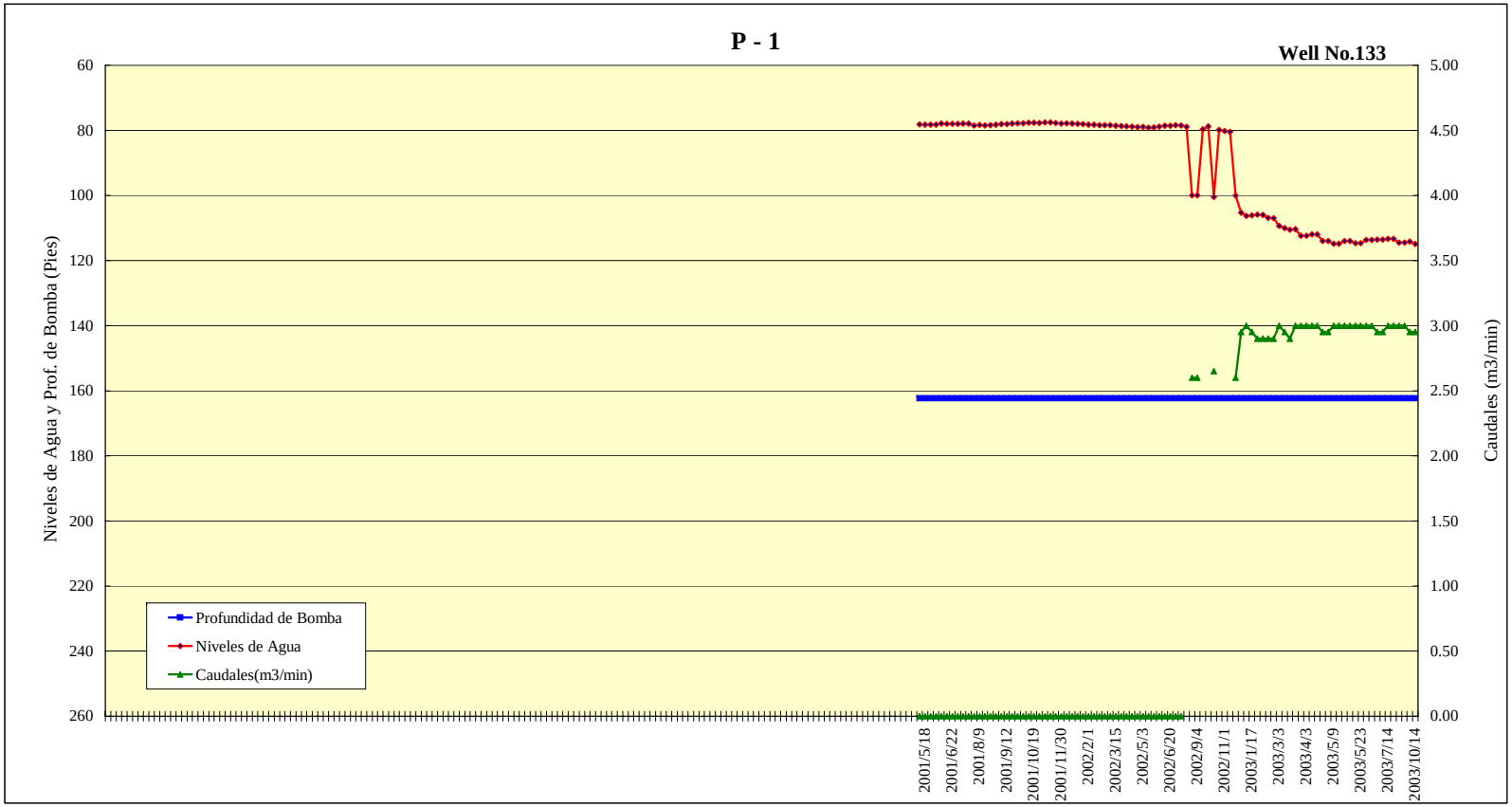
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/1/2		386.12	117.7
2001/1/8		385.96	117.6
2001/1/16		386.08	117.7
2001/1/22		385.54	117.5
2001/1/31		382.75	116.7
2001/2/5		382.58	116.6
2001/2/12		382.50	116.6
2001/2/20		382.50	116.6
2001/2/26		382.33	116.5
2001/3/5		384.62	117.2
2001/3/12	3.50	441.33	134.5
2001/3/19	3.50	440.00	134.1
2001/3/26	3.38	437.12	133.2
2001/4/2	3.35	436.12	132.9
2001/4/16	3.20	434.08	132.3
2001/4/25	3.05	428.62	130.6
2001/4/30	3.05	429.37	130.9
2001/5/7	3.00	427.30	130.2
2001/5/14	3.00	424.66	129.4
2001/5/21	2.90	423.75	129.2
2001/5/28	2.90	423.46	129.1
2001/6/4	2.90	423.08	129.0
2001/6/11	2.90	422.83	128.9
2001/6/18	2.90	421.80	128.6
2001/4/26	2.90	421.75	128.5
2001/7/2	2.60	421.50	128.5
2001/7/10	2.50	419.16	127.8
2001/7/17		387.62	118.1
2001/7/24		386.83	117.9
2001/7/30		386.75	117.9
2001/8/6		386.58	117.8
2001/8/13		386.54	117.8
2001/8/20		386.70	117.9
2001/8/27		386.70	117.9
2001/9/3		386.04	117.7
2001/9/10		386.25	117.7
2001/9/17		386.16	117.7
2001/9/24		385.83	117.6
2001/10/1		385.33	117.4
2001/10/8		385.08	117.4
2001/10/15		386.92	117.9
2001/10/22		387.00	118.0
2001/10/29		386.04	117.7
2001/11/6		386.66	117.9
2001/11/12		386.96	117.9
2001/11/20	3.30	438.25	133.6
2001/11/26	3.45	439.50	134.0
2001/12/3	3.25	433.92	132.3
2001/12/10	3.40	436.46	133.0
2001/12/17			0.0

POZO E-7
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/2	3.40	440.96	134.4
2002/1/7	3.35	442.20	134.8
2002/1/14	3.40	443.66	135.2
2002/1/21	3.35	443.08	135.1
2002/1/28	3.35	444.58	135.5
2002/2/4	3.35	445.42	135.8
2002/2/12	3.25	443.80	135.3
2002/2/19	3.30	446.25	136.0
2002/2/25	3.30	446.46	136.1
2002/3/4	3.30	445.83	135.9
2002/3/11	3.30	445.54	135.8
2002/3/19	3.30	445.16	135.7
2002/4/3	3.20	445.16	135.7
2002/4/8	3.10	445.83	135.9
2002/4/15	3.20	446.96	136.2
2002/4/22	3.20	446.58	136.1
2002/4/29	3.20	443.25	135.1
2002/5/6	3.10	447.33	136.3
2002/5/13		393.92	120.1
2002/5/22	3.25	448.58	136.7
2002/5/27	3.20	449.42	137.0
2002/6/4	3.20	448.62	136.7
2002/6/10	3.20	448.00	136.6
2002/6/17	3.20	449.80	137.1
2002/6/24	3.05	450.00	137.2
2002/7/2	3.20	451.08	137.5
2002/7/9	3.15	451.16	137.5
2002/7/16	3.15	451.58	137.6
2002/7/22	3.15	452.20	137.8
2002/7/29	3.00	448.66	136.8
2002/8/5	3.00	451.66	137.7
2002/8/14		395.58	120.6
2002/8/19	2.40	428.83	130.7
2002/8/26	3.15	447.50	136.4
2002/9/3	3.00	448.83	136.8
2002/9/9	3.05	448.75	136.8
2002/9/17	3.00	449.33	137.0
2002/9/23		396.00	120.7
2002/9/30	3.00	448.25	136.6
2002/10/7	2.95	449.42	137.0
2002/10/16	2.95	449.33	137.0
2002/10/28	3.00	448.08	136.6
2002/11/4	3.00	447.50	136.4
2002/11/14	3.00	447.37	136.4
2002/11/18	3.00	448.12	136.6
2002/11/28	3.00	448.04	136.6
2002/12/2	3.00	448.50	136.7
2002/12/16	3.00	449.25	136.9
			0.0
			0.0
2002/12/16		388.54	118.4

POZO E-7
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.95	451.04	137.5
2003/1/13	2.95	451.08	137.5
2003/1/20	2.90	451.16	137.5
2013/1/28		395.42	120.5
2003/2/3	3.00	447.20	136.3
2003/2/18	3.00	451.75	137.7
2003/2/24	3.00	451.66	137.7
2003/3/7	3.00	450.50	137.3
2003/3/14	3.00	452.00	137.8
2003/3/24	3.00	447.58	136.4
2003/4/2	3.00	450.08	137.2
2003/4/8	3.00	451.00	137.5
2003/4/21	3.00	448.50	136.7
2003/5/10	2.95	451.16	137.5
2003/5/16	2.90	452.92	138.1
2003/5/21	2.90	453.25	138.2
2003/6/25	2.90	451.08	137.5
2003/7/2	2.90	450.16	137.2
2003/7/15	2.90	452.00	137.8
2003/8/26	2.85	451.16	137.5
2003/10/13		398.58	121.5
2003/10/21	2.70	455.00	138.7
2003/11/26	2.90	450.16	137.2



ANNEX 3.C(192) Punping Discharge and Water Level in Wells

ANNEX 3.C(193) Punping Discharge and Water Level in Wells

POZO P-1
AÑO: 2001

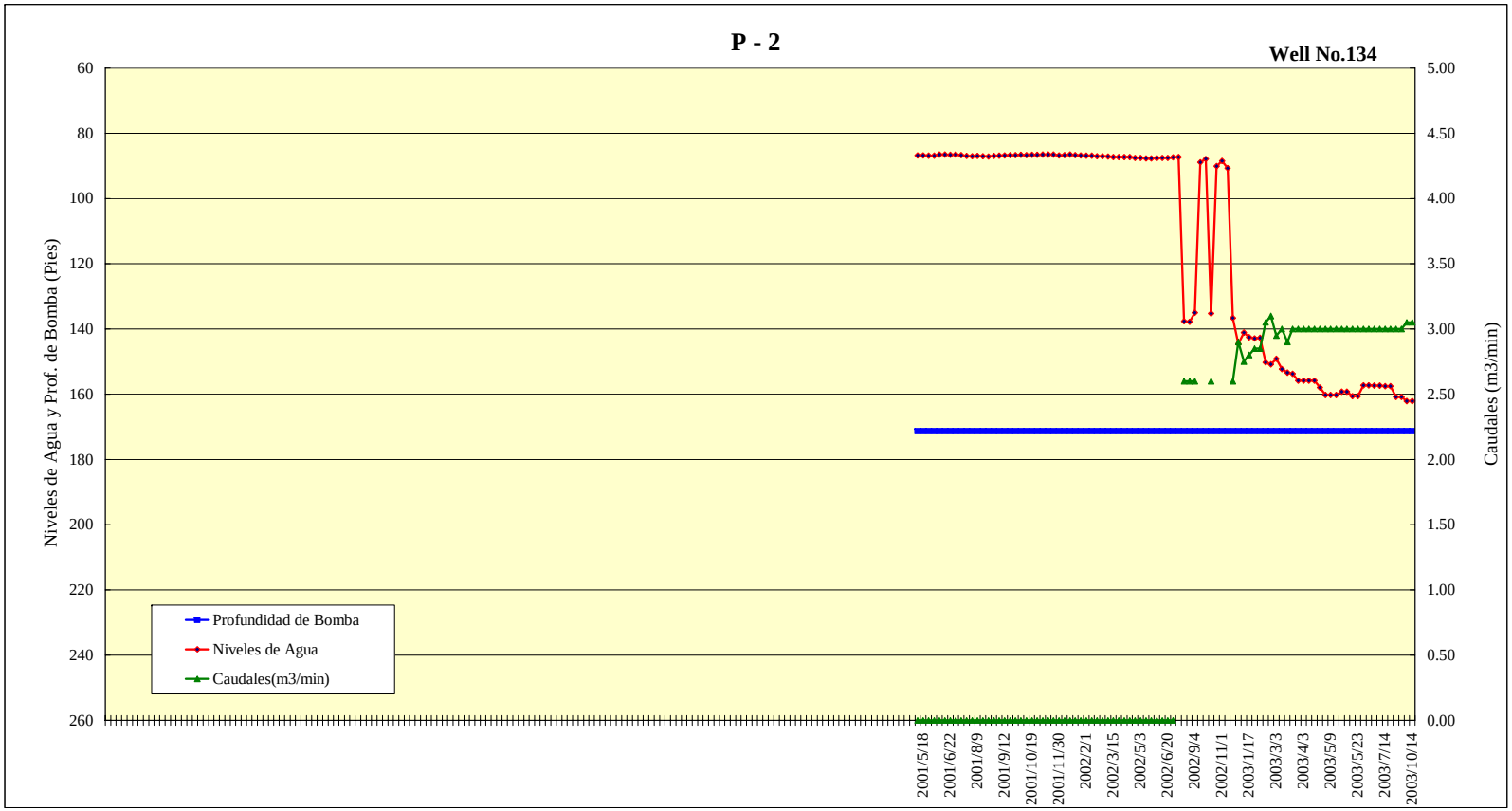
TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	78.16	23.8
2001/5/18	0.00	78.25	23.9
2001/5/25	0.00	78.25	23.9
2001/6/1	0.00	78.25	23.9
2001/6/8	0.00	77.92	23.8
2001/6/15	0.00	78.00	23.8
2001/6/22	0.00	78.00	23.8
2001/6/29	0.00	78.00	23.8
2001/7/16	0.00	77.92	23.8
2001/7/27	0.00	77.92	23.8
2001/8/3	0.00	78.50	23.9
2001/8/9	0.00	78.37	23.9
2001/8/17	0.00	78.50	23.9
2001/8/24	0.00	78.42	23.9
2001/8/31	0.00	78.25	23.9
2001/9/7	0.00	78.12	23.8
2001/9/12	0.00	78.08	23.8
2001/9/21	0.00	77.92	23.8
2001/9/28	0.00	77.87	23.7
2001/10/5	0.00	77.83	23.7
2001/10/12	0.00	77.66	23.7
2001/10/19	0.00	77.70	23.7
2001/10/26	0.00	77.75	23.7
2001/11/1	0.00	77.58	23.6
2001/11/9	0.00	77.54	23.6
2001/11/23	0.00	77.75	23.7
2001/11/30	0.00	77.92	23.8
2001/12/14	0.00	77.87	23.7
2001/12/20	0.00	77.92	23.8

POZO P-1
AÑO:-2002

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	77.96	23.8
2002/1/25	0.00	78.04	23.8
2002/2/1	0.00	78.25	23.9
2002/2/5	0.00	78.25	23.9
2002/2/15	0.00	78.46	23.9
2002/2/22	0.00	78.46	23.9
2002/3/1	0.00	78.42	23.9
2002/3/15	0.00	78.58	24.0
2002/4/5	0.00	78.66	24.0
2002/4/9	0.00	78.75	24.0
2002/4/19	0.00	78.83	24.0
2002/4/26	0.00	79.00	24.1
2002/5/3	0.00	78.96	24.1
2002/5/8	0.00	79.16	24.1
2002/5/20	0.00	79.08	24.1
2002/5/31	0.00	78.83	24.0
2002/6/12	0.00	78.58	24.0
2002/6/20	0.00	78.62	24.0
2002/7/18	0.00	78.46	23.9
2002/8/2	0.00	78.50	23.9
2002/8/13		78.96	24.1
2002/8/23	2.60	100.00	30.5
2002/9/4	2.60	100.00	30.5
2002/9/12		79.70	24.3
2002/9/26		78.75	24.0
2002/10/10	2.65	100.50	30.6
2002/10/23		79.83	24.3
2002/11/1		80.16	24.4
2002/11/11		80.46	24.5
2002/11/26	2.60	100.08	30.5
2002/12/20	2.95	105.33	32.1

POZO P-1
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/9	3.00	106.33	32.4
2003/1/17	2.95	106.16	32.4
2003/1/24	2.90	105.92	32.3
2003/1/29	2.90	106.00	32.3
2003/2/7	2.90	106.87	32.6
2003/2/14	2.90	107.00	32.6
2003/3/3	3.00	109.33	33.3
2003/3/10	2.95	110.00	33.5
2003/3/17	2.90	110.50	33.7
2003/3/27	3.00	110.37	33.6
2003/4/3	3.00	112.42	34.3
2003/4/3	3.00	112.42	34.3
2003/4/11	3.00	112.00	34.1
2003/4/11	3.00	112.00	34.1
2003/4/30	2.95	114.00	34.7
2003/4/30	2.95	114.00	34.7
2003/5/9	3.00	114.83	35.0
2003/5/9	3.00	114.83	35.0
2003/5/15	3.00	114.00	34.7
2003/5/15	3.00	114.00	34.7
2003/5/23	3.00	114.66	34.9
2003/5/23	3.00	114.66	34.9
2003/6/10	3.00	113.66	34.6
2003/6/10	3.00	113.66	34.6
2003/6/27	2.95	113.58	34.6
2003/6/27	2.95	113.58	34.6
2003/7/14	3.00	113.33	34.5
2003/7/14	3.00	113.33	34.5
2003/8/21	3.00	114.50	34.9
2003/8/21	3.00	114.50	34.9
2003/10/14	2.95	114.20	34.8
2003/10/14	2.95	114.92	35.0



ANNEX 3.C(194) Punping Discharge and Water Level in Wells

ANNEX 3.C(195) Punping Discharge and Water Level in Wells

POZO P-2
AÑO: 2001

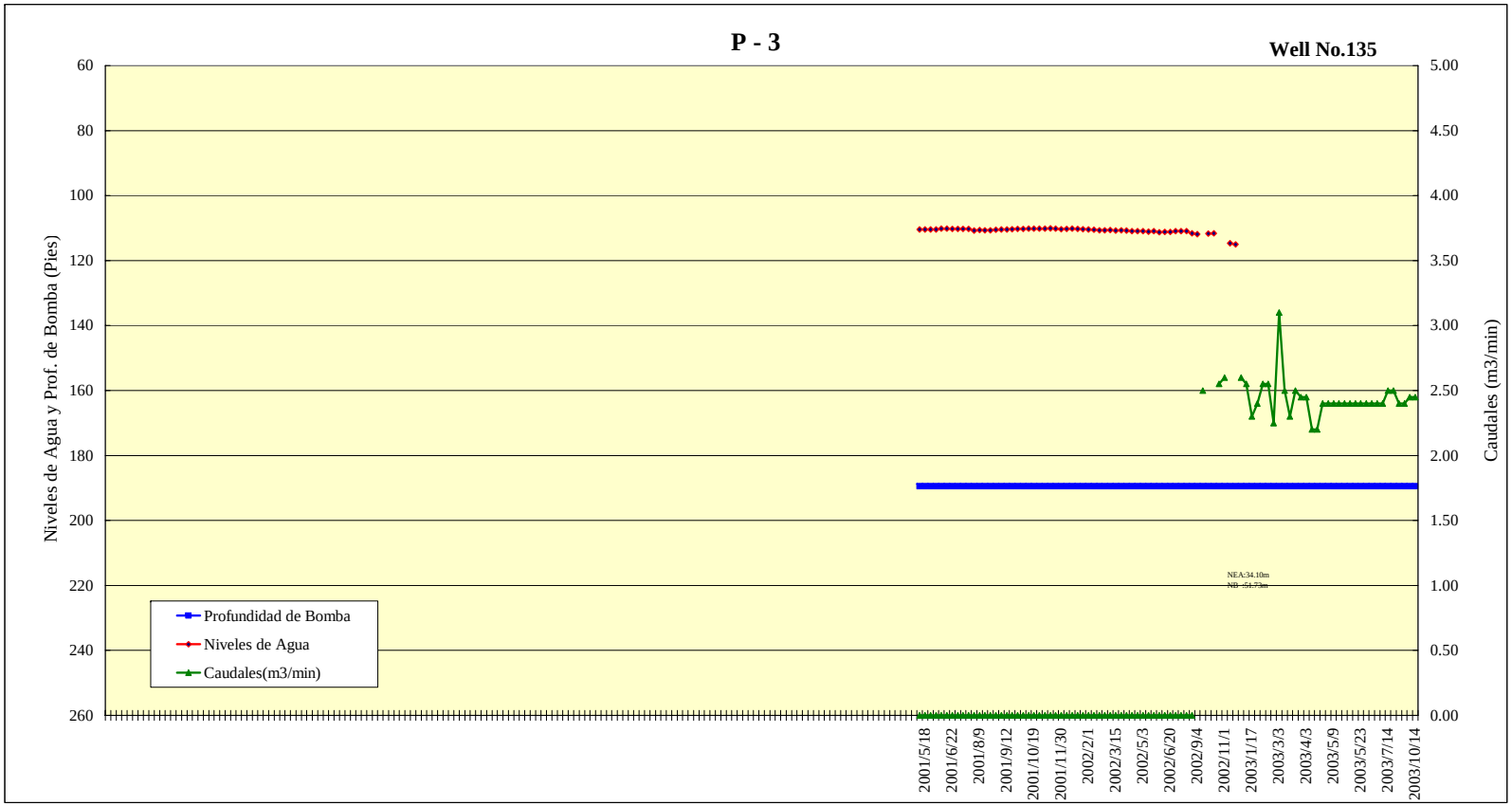
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	86.80	26.5
2001/5/18	0.00	86.80	26.5
2001/5/25	0.00	86.83	26.5
2001/6/1	0.00	86.83	26.5
2001/6/8	0.00	86.50	26.4
2001/6/15	0.00	86.54	26.4
2001/6/22	0.00	86.58	26.4
2001/7/29	0.00	86.50	26.4
2001/7/16	0.00	86.66	26.4
2001/7/27	0.00	86.92	26.5
2001/8/3	0.00	87.00	26.5
2001/8/9	0.00	86.92	26.5
2001/8/17	0.00	87.00	26.5
2001/8/24	0.00	87.08	26.5
2001/8/31	0.00	86.92	26.5
2001/9/7	0.00	86.83	26.5
2001/9/12	0.00	86.75	26.4
2001/9/21	0.00	86.70	26.4
2001/9/28	0.00	86.66	26.4
2001/10/5	0.00	86.58	26.4
2001/10/12	0.00	86.66	26.4
2001/10/19	0.00	86.58	26.4
2001/10/26	0.00	86.62	26.4
2001/11/1	0.00	86.54	26.4
2001/11/9	0.00	86.50	26.4
2001/11/23	0.00	86.54	26.4
2001/11/30	0.00	86.75	26.4
2001/12/14	0.00	86.66	26.4
2001/12/20	0.00	86.50	26.4

POZO P-2
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	86.66	26.4
2002/1/25	0.00	86.80	26.5
2002/2/1	0.00	86.87	26.5
2002/2/5	0.00	86.87	26.5
2002/2/15	0.00	87.00	26.5
2002/2/22	0.00	87.12	26.6
2002/3/1	0.00	87.08	26.5
2002/3/15	0.00	87.33	26.6
2002/4/5	0.00	87.30	26.6
2002/4/9	0.00	87.25	26.6
2002/4/19	0.00	87.25	26.6
2002/4/26	0.00	87.54	26.7
2002/5/3	0.00	87.54	26.7
2002/5/8	0.00	87.75	26.7
2002/5/20	0.00	87.75	26.7
2002/5/31	0.00	87.66	26.7
2002/6/12	0.00	87.58	26.7
2002/6/20	0.00	87.58	26.7
2002/7/18	0.00	87.37	26.6
2002/8/2	0.00	87.33	26.6
2002/8/13	0.00	137.66	42.0
2002/8/23	2.60	137.83	42.0
2002/9/4	2.60	135.04	41.2
2002/9/12	0.00	88.92	27.1
2002/9/26	0.00	87.92	26.8
2002/10/10	2.60	135.25	41.2
2002/10/23	0.00	90.12	27.5
2002/11/1	0.00	88.50	27.0
2002/11/11	0.00	90.70	27.6
2002/11/26	2.60	136.58	41.6
2002/12/20	2.90	144.58	44.1

POZO P-2
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/9	2.75	141.08	43.0
2003/1/17	2.80	142.58	43.5
2003/1/24	2.85	142.92	43.6
2003/1/29	2.85	142.75	43.5
2003/2/7	3.05	150.25	45.8
2003/2/14	3.10	150.83	46.0
2003/3/3	2.95	149.16	45.5
2003/3/10	3.00	152.25	46.4
2003/3/17	2.90	153.42	46.8
2003/3/27	3.00	153.75	46.9
2003/4/3	3.00	155.83	47.5
2003/4/3	3.00	155.83	47.5
2003/4/11	3.00	155.83	47.5
2003/4/11	3.00	155.83	47.5
2003/4/30	3.00	158.00	48.2
2003/4/30	3.00	160.25	48.8
2003/5/9	3.00	160.25	48.8
2003/5/9	3.00	160.25	48.8
2003/5/15	3.00	159.25	48.5
2003/5/15	3.00	159.25	48.5
2003/5/23	3.00	160.58	48.9
2003/5/23	3.00	160.58	48.9
2003/6/10	3.00	157.25	47.9
2003/6/10	3.00	157.25	47.9
2003/6/30	3.00	157.41	48.0
2003/6/30	3.00	157.41	48.0
2003/7/14	3.00	157.50	48.0
2003/7/14	3.00	157.50	48.0
2003/8/21	3.00	160.83	49.0
2003/8/21	3.00	160.83	49.0
2003/10/14	3.05	162.08	49.4
2003/10/14	3.05	162.08	49.4



ANNEX 3.C(196) Punping Discharge and Water Level in Wells

ANNEX 3.C(197) Punping Discharge and Water Level in Wells

POZO P-3
AÑO: 2001

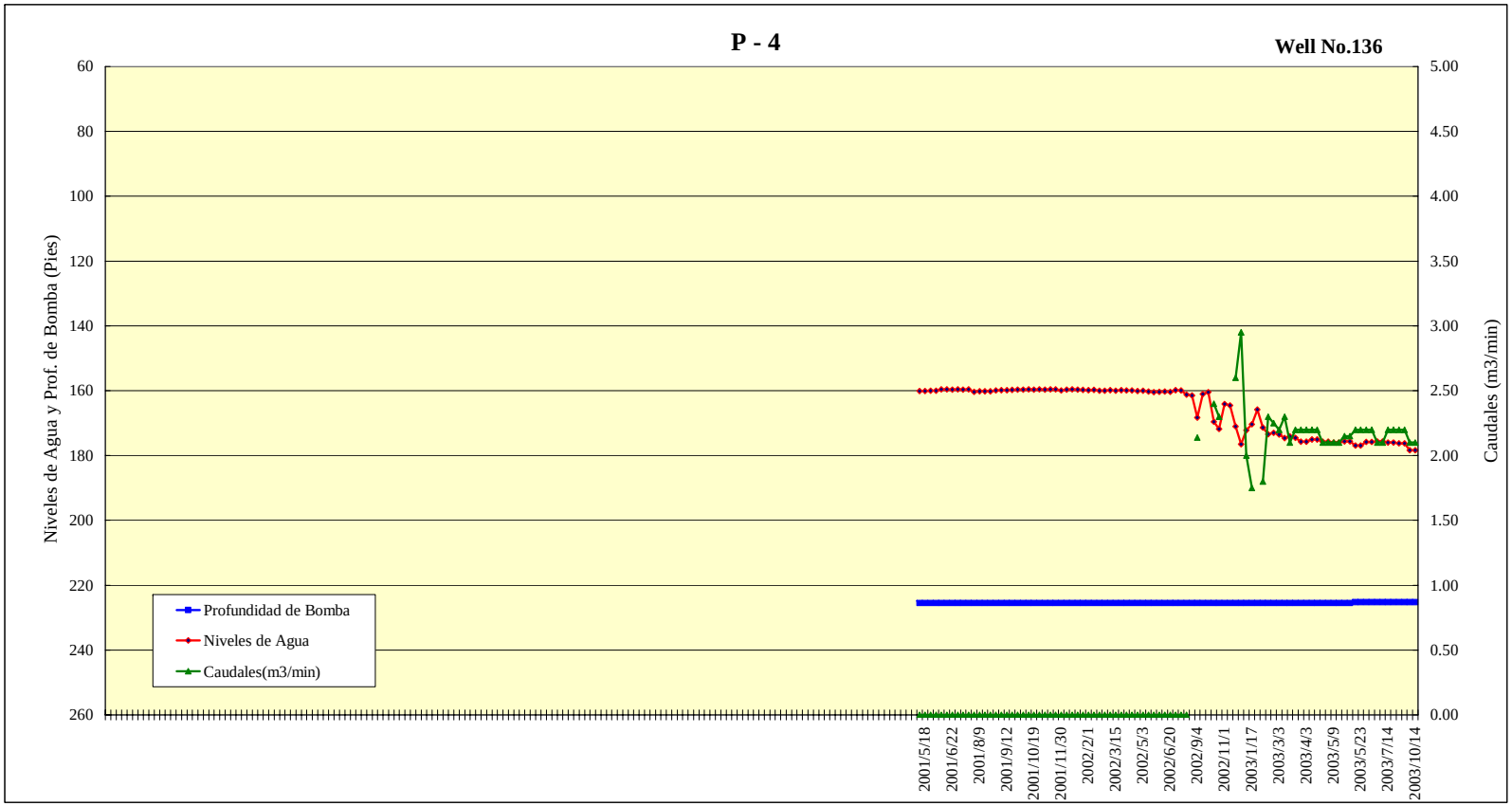
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	110.46	33.7
2001/5/18	0.00	110.46	33.7
2001/5/25	0.00	110.46	33.7
2001/6/1	0.00	110.46	33.7
2001/6/8	0.00	110.16	33.6
2001/6/15	0.00	110.16	33.6
2001/6/22	0.00	110.25	33.6
2001/6/29	0.00	110.25	33.6
2001/7/16	0.00	110.25	33.6
2001/7/27	0.00	110.25	33.6
2001/8/3	0.00	110.75	33.8
2001/8/9	0.00	110.58	33.7
2001/8/17	0.00	110.70	33.7
2001/8/24	0.00	110.66	33.7
2001/8/31	0.00	110.54	33.7
2001/9/7	0.00	110.46	33.7
2001/9/12	0.00	110.42	33.7
2001/9/21	0.00	110.33	33.6
2001/9/28	0.00	110.29	33.6
2001/10/5	0.00	110.25	33.6
2001/10/12	0.00	110.16	33.6
2001/10/19	0.00	110.16	33.6
2001/10/26	0.00	110.20	33.6
2001/11/1	0.00	110.16	33.6

POZO P-3
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	110.25	33.6
2002/1/25	0.00	110.33	33.6
2002/2/1	0.00	110.42	33.7
2002/2/5	0.00	110.50	33.7
2002/2/15	0.00	110.66	33.7
2002/2/22	0.00	110.66	33.7
2002/3/1	0.00	110.58	33.7
2002/3/15	0.00	110.75	33.8
2002/4/5	0.00	110.66	33.7
2002/4/9	0.00	110.75	33.8
2002/4/19	0.00	110.92	33.8
2002/4/26	0.00	110.96	33.8
2002/5/3	0.00	110.92	33.8
2002/5/8	0.00	111.08	33.9
2002/5/20	0.00	110.92	33.8
2002/5/31	0.00	111.25	33.9
2002/6/12	0.00	111.16	33.9
2002/6/20	0.00	111.20	33.9
2002/7/18	0.00	110.92	33.8
2002/8/2	0.00	110.96	33.8
2002/8/13	0.00	111.58	34.0
2002/8/23	0.00	111.88	34.1
2002/9/5	2.50	Obstruido	
2002/9/12	0.00	111.66	34.0
2002/9/26	0.00	111.58	34.0
2002/10/10	2.55	Obstruido	
2002/10/23	2.60	Obstruido	
2002/11/1	0.00	114.66	34.9
2002/11/11	0.00	115.00	35.1
2002/11/26	2.60	Obstruido	
2002/12/20	2.55	Obstruido	

POZO P-3
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/9	2.30	Obstruido	
2003/1/17	2.40	Obstruido	
2003/1/24	2.55	Obstruido	
2003/1/29	2.55	Obstruido	
2003/2/7	2.25	Obstruido	
2003/2/14	3.10	Obstruido	
2003/3/3	2.45	Obstruido	
2003/3/10	2.50	Obstruido	
2003/3/17	2.30	Obstruido	
2003/3/27	2.50	Obstruido	
2003/4/3	2.45	Obstruido	
2003/4/11	2.45	Obstruido	
2003/4/30	2.40	Obstruido	
2003/5/9	2.40	Obstruido	
2003/5/15	2.40	Obstruido	
2003/5/23	2.40	Obstruido	
2003/6/10	2.40	Obstruido	
2003/6/30	2.40	Obstruido	
2003/7/14	2.50	Obstruido	
2003/8/21	2.40	Obstruido	
2003/10/14	2.45	Obstruido	



ANNEX 3.C(198) Punping Discharge and Water Level in Wells

ANNEX 3.C(199) Punping Discharge and Water Level in Wells

POZO P-5
AÑO: 2001

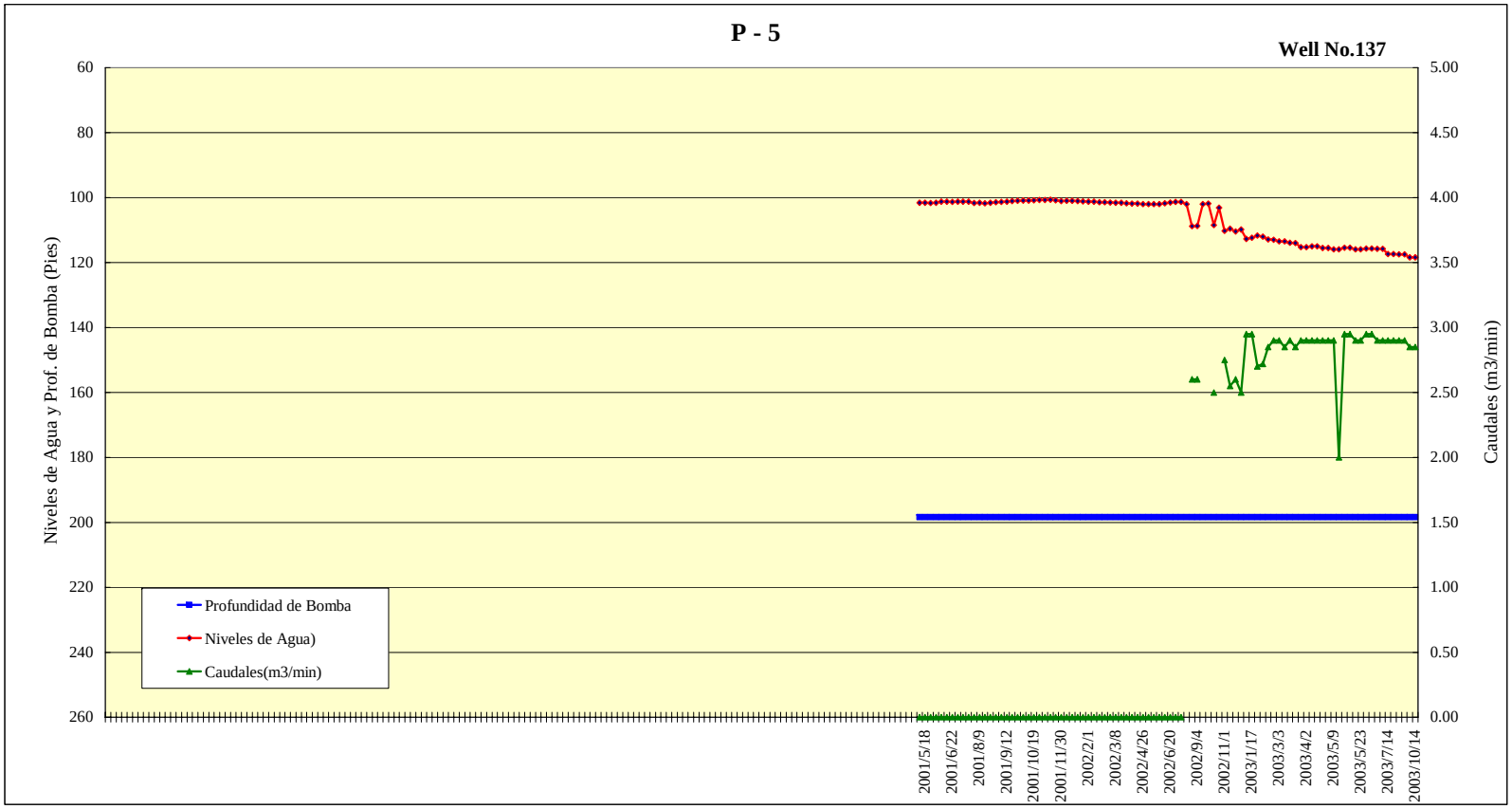
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	160.08	48.8
2001/5/18	0.00	160.08	48.8
2001/5/25	0.00	160.04	48.8
2001/6/1	0.00	160.00	48.8
2001/6/8	0.00	159.58	48.6
2001/6/15	0.00	159.54	48.6
2001/6/22	0.00	159.70	48.7
2001/6/29	0.00	159.58	48.6
2001/7/16	0.00	159.66	48.7
2001/7/27	0.00	159.58	48.6
2001/8/3	0.00	160.33	48.9
2001/8/9	0.00	160.16	48.8
2001/8/17	0.00	160.20	48.8
2001/8/24	0.00	160.16	48.8
2001/8/31	0.00	159.92	48.7
2001/9/7	0.00	159.83	48.7
2001/9/12	0.00	159.80	48.7
2001/9/21	0.00	159.75	48.7
2001/9/28	0.00	159.70	48.7
2001/10/5	0.00	159.66	48.7
2001/10/12	0.00	159.58	48.6
2001/10/19	0.00	159.62	48.7
2001/10/26	0.00	159.58	48.6
2001/11/1	0.00	159.62	48.7
2001/11/9	0.00	159.54	48.6
2001/11/23	0.00	159.58	48.6
2001/11/30	0.00	159.92	48.7
2001/12/14	0.00	159.66	48.7
2001/12/20	0.00	159.58	48.6

POZO P-5
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	159.66	48.7
2002/1/25	0.00	159.75	48.7
2002/2/1	0.00	159.83	48.7
2002/2/5	0.00	159.75	48.7
2002/2/15	0.00	160.00	48.8
2002/2/22	0.00	160.00	48.8
2002/3/1	0.00	159.83	48.7
2002/3/15	0.00	160.00	48.8
2002/4/5	0.00	159.87	48.7
2002/4/9	0.00	159.92	48.7
2002/4/19	0.00	159.92	48.7
2002/4/26	0.00	160.08	48.8
2002/5/3	0.00	160.04	48.8
2002/5/8	0.00	160.25	48.8
2002/5/20	0.00	160.42	48.9
2002/5/31	0.00	160.37	48.9
2002/6/12	0.00	160.25	48.8
2002/6/20	0.00	160.30	48.9
2002/7/18	0.00	159.83	48.7
2002/8/2	0.00	159.88	48.7
2002/8/13	0.00	161.16	49.1
2002/8/23	0.00	161.42	49.2
2002/9/4	2.15	168.25	51.3
2002/9/12	0.00	161.00	49.1
2002/9/26	0.00	160.42	48.9
2002/10/10	2.40	169.58	51.7
2002/10/23	2.30	171.75	52.3
2002/11/1	0.00	164.08	50.0
2002/11/11	0.00	164.50	50.1
2002/11/26	2.60	171.00	52.1
2002/12/20	2.95	176.50	53.8

POZO P-5
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/9	2.00	172.25	52.5
2003/1/17	1.75	170.30	51.9
2003/1/24	0.00	165.83	50.5
2003/1/29	1.80	171.33	52.2
2003/2/7	2.30	173.42	52.9
2003/2/14	2.25	173.00	52.7
2003/3/3	2.20	173.50	52.9
2003/3/10	2.30	174.58	53.2
2003/3/17	2.10	174.08	53.1
2003/3/27	2.20	174.50	53.2
2003/4/3	2.20	175.75	53.6
2003/4/11	2.20	175.00	53.3
2003/4/30	2.10	175.75	53.6
2003/5/9	2.10	176.00	53.6
2003/5/15	2.15	175.66	53.5
2003/5/23	2.20	176.92	53.9
2003/7/10	2.20	175.83	53.6
2003/7/30	2.10	175.66	53.5
2003/7/14	2.20	176.00	53.6
2003/8/21	2.20	176.25	53.7
2003/10/14	2.10	178.33	54.4



ANNEX 3.C(200) Punping Discharge and Water Level in Wells

ANNEX 3.C(201) Punping Discharge and Water Level in Wells

POZO P-5
AÑO: 2001

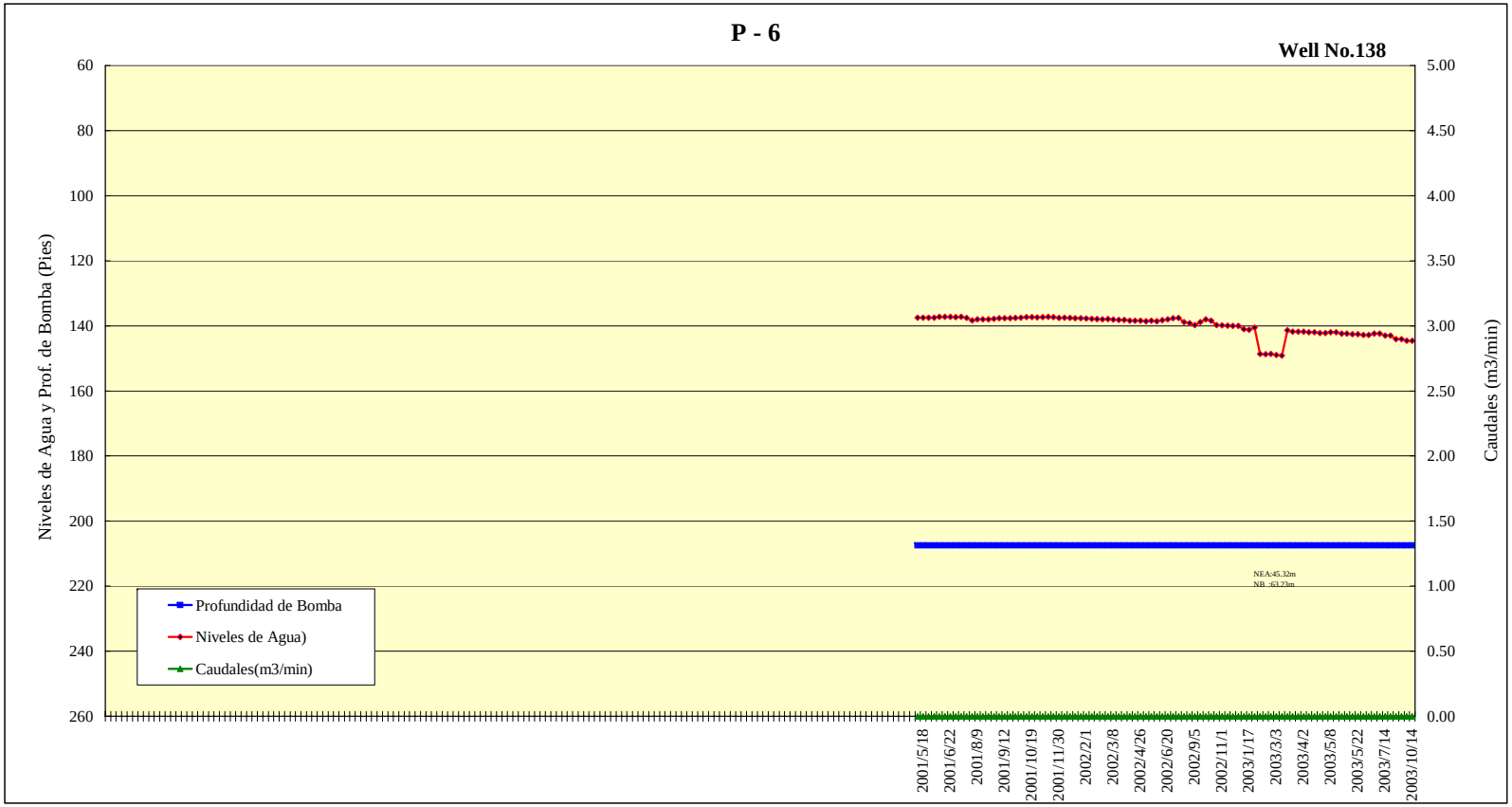
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	101.58	31.0
2001/5/18	0.00	101.58	31.0
2001/5/25	0.00	101.66	31.0
2001/6/1	0.00	101.58	31.0
2001/6/8	0.00	101.25	30.9
2001/6/15	0.00	101.25	30.9
2001/6/22	0.00	101.33	30.9
2001/6/29	0.00	101.30	30.9
2001/7/16	0.00	101.25	30.9
2001/7/27	0.00	101.30	30.9
2001/8/3	0.00	101.66	31.0
2001/8/9	0.00	101.58	31.0
2001/8/17	0.00	101.79	31.0
2001/8/24	0.00	101.58	31.0
2001/8/31	0.00	101.42	30.9
2001/9/7	0.00	101.33	30.9
2001/9/12	0.00	101.30	30.9
2001/9/21	0.00	101.08	30.8
2001/9/28	0.00	101.00	30.8
2001/10/5	0.00	100.96	30.8
2001/10/12	0.00	100.92	30.8
2001/10/19	0.00	100.87	30.7
2001/10/26	0.00	100.80	30.7
2001/11/1	0.00	100.75	30.7
2001/11/9	0.00	100.66	30.7
2001/11/23	0.00	100.83	30.7
2001/11/30	0.00	101.08	30.8
2001/12/14	0.00	101.04	30.8
2001/12/19	0.00	101.00	30.8

POZO P-5
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	101.08	30.8
2002/1/25	0.00	101.16	30.8
2002/2/1	0.00	101.25	30.9
2002/2/5	0.00	101.25	30.9
2002/2/15	0.00	101.42	30.9
2002/2/22	0.00	101.46	30.9
2002/3/1	0.00	101.50	30.9
2002/3/8	0.00	101.58	31.0
2002/3/15	0.00	101.62	31.0
2002/4/5	0.00	101.75	31.0
2002/4/10	0.00	101.83	31.0
2002/4/19	0.00	101.83	31.0
2002/4/26	0.00	102.00	31.1
2002/5/3	0.00	102.00	31.1
2002/5/8	0.00	102.00	31.1
2002/5/20	0.00	102.08	31.1
2002/5/31	0.00	101.80	31.0
2002/6/20	0.00	101.50	30.9
2002/7/18	0.00	101.33	30.9
2002/8/2	0.00	101.33	30.9
2002/8/13	0.00	102.00	31.1
2002/8/23	2.60	108.83	33.2
2002/9/5	2.60	108.75	33.1
2002/9/12	0.00	102.08	31.1
2002/9/26	0.00	101.83	31.0
2002/10/10	2.50	108.50	33.1
2002/10/23	0.00	103.12	31.4
2002/11/1	2.75	110.25	33.6
2002/11/11	2.55	109.62	33.4
2002/11/26	2.60	110.42	33.7
2002/12/20	2.50	109.83	33.5

POZO P-5
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.95	112.75	34.4
2003/1/17	2.95	112.42	34.3
2003/1/24	2.70	111.75	34.1
2003/1/29	2.72	112.08	34.2
2003/2/7	2.85	112.87	34.4
2003/2/17	2.90	113.00	34.4
2003/3/3	2.90	113.50	34.6
2003/3/10	2.85	113.54	34.6
2003/3/17	2.90	113.92	34.7
2003/3/27	2.85	114.00	34.7
2003/4/2	2.90	115.25	35.1
2003/4/11	2.90	115.00	35.1
2003/4/30	2.90	115.50	35.2
2003/5/9	2.90	116.00	35.4
2003/5/15	2.95	115.42	35.2
2003/5/23	2.90	116.00	35.4
2003/6/10	2.95	115.75	35.3
2003/6/30	2.90	115.83	35.3
2003/7/14	2.90	117.42	35.8
2003/8/21	2.90	117.50	35.8
2003/10/14	2.85	118.42	36.1



ANNEX 3.C(202) Punping Discharge and Water Level in Wells

ANNEX 3.C(203) Punping Discharge and Water Level in Wells

POZO P-6
AÑO: 2001

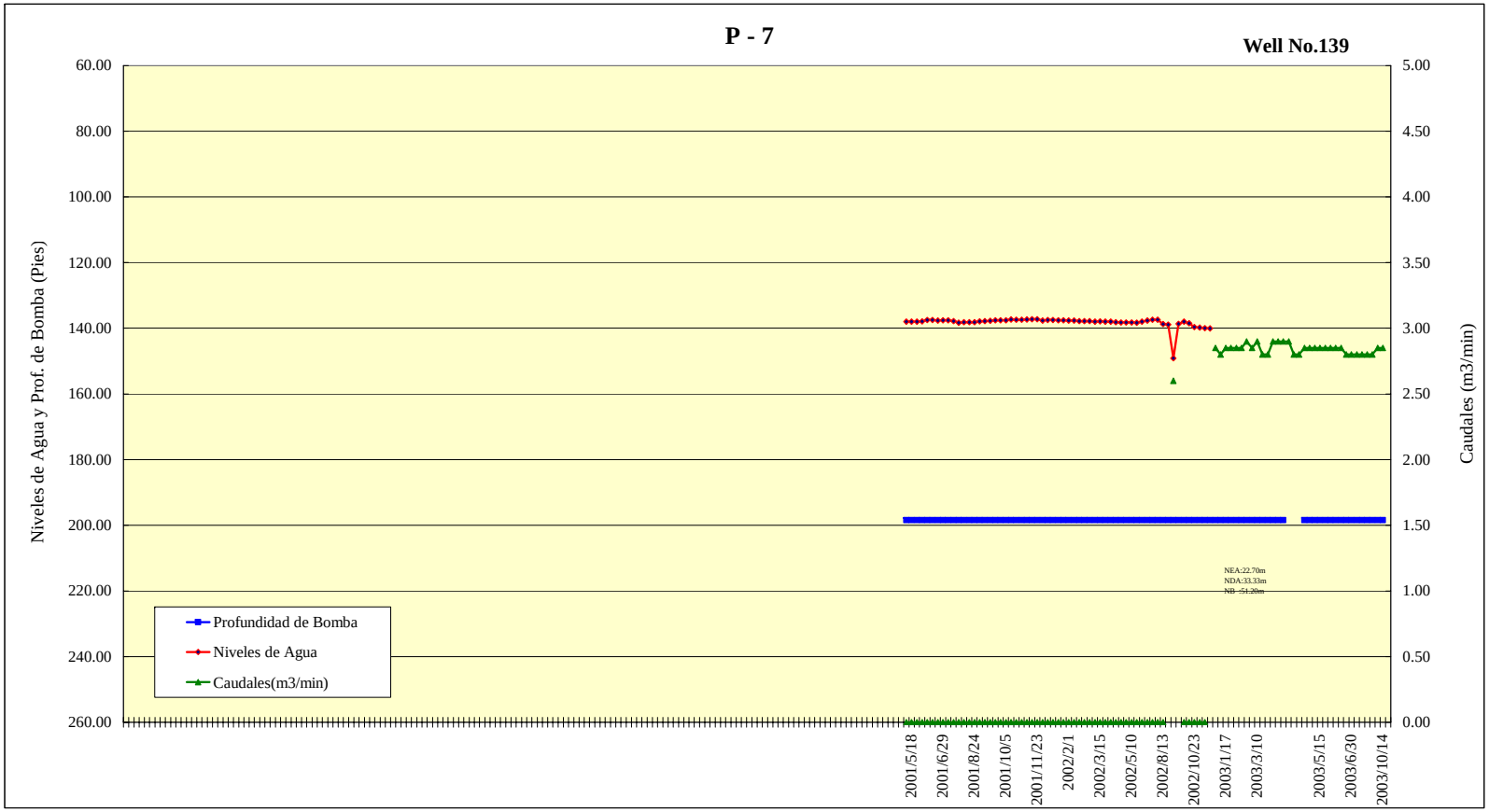
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	137.46	41.9
2001/5/18	0.00	137.50	41.9
2001/5/25	0.00	137.50	41.9
2001/6/1	0.00	137.50	41.9
2001/6/8	0.00	137.25	41.8
2001/6/15	0.00	137.25	41.8
2001/6/22	0.00	137.25	41.8
2001/6/29	0.00	137.33	41.9
2001/7/16	0.00	137.25	41.8
2001/7/27	0.00	137.58	41.9
2001/8/3	0.00	138.33	42.2
2001/8/9	0.00	138.00	42.1
2001/8/17	0.00	138.00	42.1
2001/8/24	0.00	138.00	42.1
2001/8/31	0.00	137.83	42.0
2001/9/7	0.00	137.70	42.0
2001/9/12	0.00	137.66	42.0
2001/9/21	0.00	137.66	42.0
2001/9/28	0.00	137.58	41.9
2001/10/5	0.00	137.50	41.9
2001/10/12	0.00	137.33	41.9
2001/10/19	0.00	137.37	41.9
2001/10/26	0.00	137.42	41.9
2001/11/1	0.00	137.33	41.9
2001/11/9	0.00	137.25	41.8
2001/11/23	0.00	137.30	41.8
2001/11/30	0.00	137.58	41.9
2001/12/14	0.00	137.54	41.9
2001/12/20	0.00	137.58	41.9

POZO P-6
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/9	0.00	137.66	42.0
2002/1/25	0.00	137.70	42.0
2002/2/1	0.00	137.75	42.0
2002/2/5	0.00	137.83	42.0
2002/2/15	0.00	137.92	42.0
2002/2/22	0.00	138.00	42.1
2002/3/1	0.00	137.96	42.1
2002/3/8	0.00	138.08	42.1
2002/3/15	0.00	138.16	42.1
2002/4/5	0.00	138.16	42.1
2002/4/9	0.00	138.42	42.2
2002/4/19	0.00	138.42	42.2
2002/4/26	0.00	138.46	42.2
2002/5/3	0.00	138.58	42.2
2002/5/10	0.00	138.42	42.2
2002/5/20	0.00	138.58	42.2
2002/5/31	0.00	138.25	42.1
2002/6/20	0.00	138.00	42.1
2002/7/18	0.00	137.66	42.0
2002/8/2	0.00	137.58	41.9
2002/8/9	0.00	138.83	42.3
2002/8/23	0.00	139.16	42.4
2002/9/5	0.00	139.80	42.6
2002/9/12	0.00	138.83	42.3
2002/9/26	0.00	138.00	42.1
2002/10/10	0.00	138.42	42.2
2002/10/23	0.00	139.75	42.6
2002/11/1	0.00	139.83	42.6
2002/11/11	0.00	139.92	42.6
2002/11/26	0.00	140.00	42.7
2002/12/20	0.00	140.00	42.7

POZO P-6
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	0.00	141.08	43.0
2003/1/17	0.00	141.25	43.1
2003/1/24	0.00	140.58	42.8
2003/1/29	0.00	148.66	45.3
2003/2/7	0.00	148.75	45.3
2003/2/14	0.00	148.66	45.3
2003/3/3	0.00	149.00	45.4
2003/3/10	0.00	149.16	45.5
2003/3/20	0.00	141.42	43.1
2003/3/27	0.00	141.83	43.2
2003/4/2	0.00	141.66	43.2
2003/4/11	0.00	142.00	43.3
2003/4/30	0.00	142.25	43.4
2003/5/8	0.00	142.00	43.3
2003/5/15	0.00	142.42	43.4
2003/5/22	0.00	142.58	43.5
2003/6/10	0.00	142.83	43.5
2003/6/30	0.00	142.42	43.4
2003/7/14	0.00	143.00	43.6
2003/8/21	0.00	144.08	43.9
2003/10/14	0.00	144.62	44.1



ANNEX 3.C(204) Punping Discharge and Water Level in Wells

ANNEX 3.C(205) Punping Discharge and Water Level in Wells

POZO P-7
AÑO: 2001

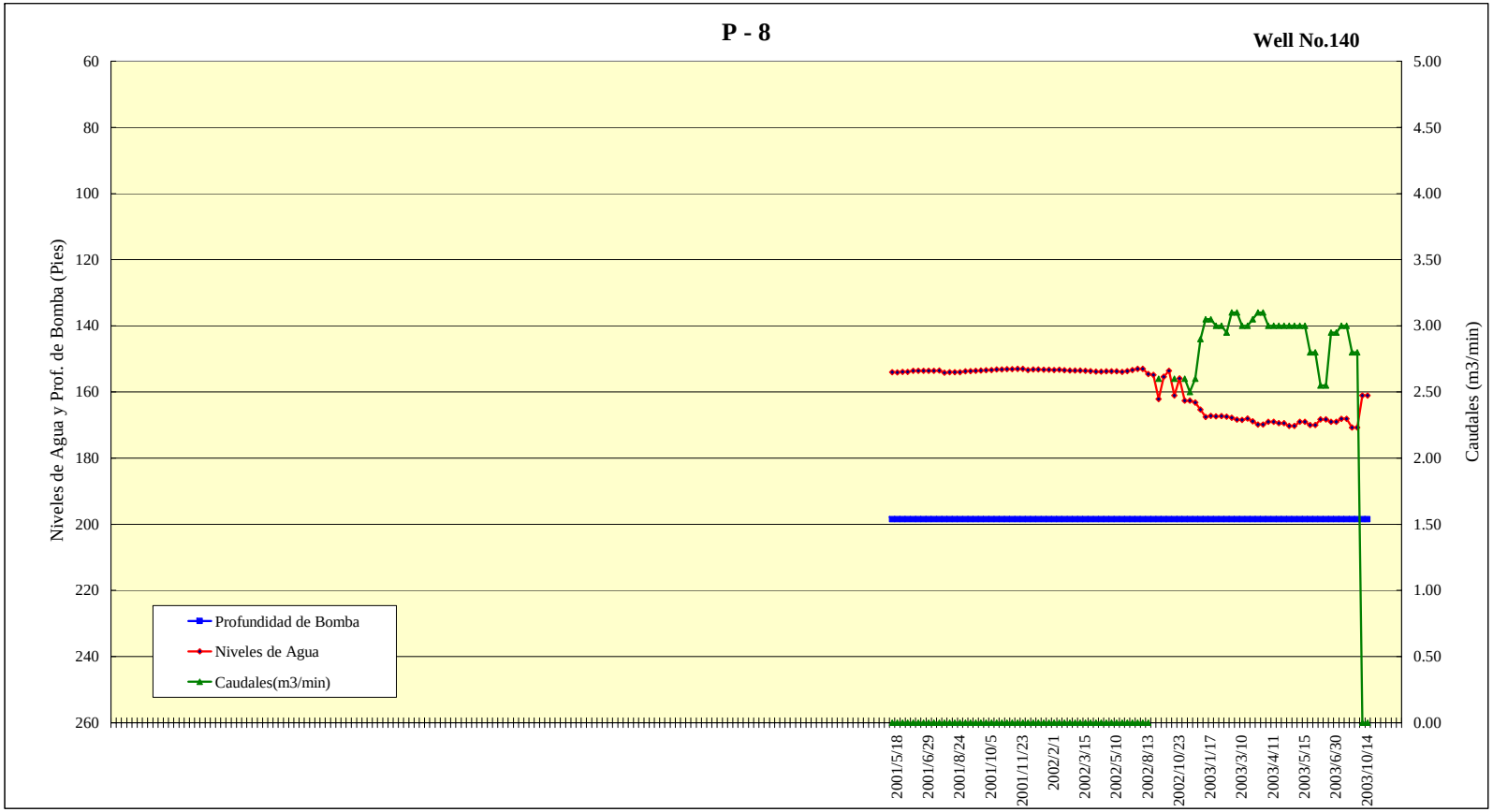
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	137.96	42.1
2001/5/18	0.00	137.96	42.1
2001/5/25	0.00	137.96	42.1
2001/6/1	0.00	137.92	42.0
2001/6/8	0.00	137.50	41.9
2001/6/15	0.00	137.50	41.9
2001/6/22	0.00	137.62	41.9
2001/6/29	0.00	137.58	41.9
2001/7/16	0.00	137.58	41.9
2001/7/27	0.00	137.83	42.0
2001/8/3	0.00	138.33	42.2
2001/8/9	0.00	138.16	42.1
2001/8/17	0.00	138.16	42.1
2001/8/24	0.00	138.16	42.1
2001/8/31	0.00	137.92	42.0
2001/9/7	0.00	137.80	42.0
2001/9/12	0.00	137.75	42.0
2001/9/21	0.00	137.60	41.9
2001/9/28	0.00	137.54	41.9
2001/10/5	0.00	137.54	41.9
2001/10/12	0.00	137.33	41.9
2001/10/19	0.00	137.37	41.9
2001/10/26	0.00	137.37	41.9
2001/11/1	0.00	137.33	41.9
2001/11/9	0.00	137.25	41.8
2001/11/23	0.00	137.25	41.8
2001/11/30	0.00	137.62	41.9
2001/12/14	0.00	137.50	41.9
2001/12/19	0.00	137.50	41.9

POZO P-7
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	137.54	41.9
2002/1/25	0.00	137.58	41.9
2002/2/1	0.00	137.62	41.9
2002/2/5	0.00	137.66	42.0
2002/2/15	0.00	137.83	42.0
2002/2/22	0.00	137.83	42.0
2002/3/1	0.00	137.83	42.0
2002/3/8	0.00	138.00	42.1
2002/3/15	0.00	137.92	42.0
2002/4/5	0.00	138.00	42.1
2002/4/9	0.00	138.00	42.1
2002/4/19	0.00	138.12	42.1
2002/4/26	0.00	138.25	42.1
2002/5/3	0.00	138.25	42.1
2002/5/10	0.00	138.25	42.1
2002/5/20	0.00	138.33	42.2
2002/5/31	0.00	138.00	42.1
2002/6/20	0.00	137.66	42.0
2002/7/18	0.00	137.37	41.9
2002/8/2	0.00	137.37	41.9
2002/8/13	0.00	138.75	42.3
2002/8/23	0.00	138.88	42.3
2002/9/5	2.60	149.12	45.5
2002/9/12	0.00	138.66	42.3
2002/9/26	0.00	138.00	42.1
2002/10/10	0.00	138.46	42.2
2002/10/23	0.00	139.66	42.6
2002/11/1	0.00	139.83	42.6
2002/11/11	0.00	140.00	42.7
2002/11/26	0.00	140.08	42.7
2002/12/20	2.85	Obstuido	

POZO P-7
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.80	Obstruido	
2003/1/17	2.85	Obstruido	
2003/1/24	2.85	Obstruido	
2003/1/29	2.85	Obstruido	
2003/2/7	2.85	Obstruido	
2003/2/14	2.90	Obstruido	
2003/3/3	2.85	Obstruido	
2003/3/10	2.90	Obstruido	
2003/7/17	2.80	obstruido	
2003/3/27	2.80	Obstruido	
2003/4/2	2.90	Obstruido	
2003/4/11	2.90	Obstruido	
2003/4/30	2.80	Obstruido	
2003/5/8	2.85	Obstruido	
2003/5/15	2.85	Obstruido	
2003/5/22	2.85	Obstruido	
2003/6/10	2.85	Obstruido	
2003/6/30	2.80	Obstruido	
2003/7/14	2.80	Obstruido	
2003/8/21	2.80	Obstruido	
2003/10/14	2.85	Obstruido	



ANNEX 3.C(206) Punping Discharge and Water Level in Wells

ANNEX 3.C(207) Punping Discharge and Water Level in Wells

POZO P-8
AÑO: 2001

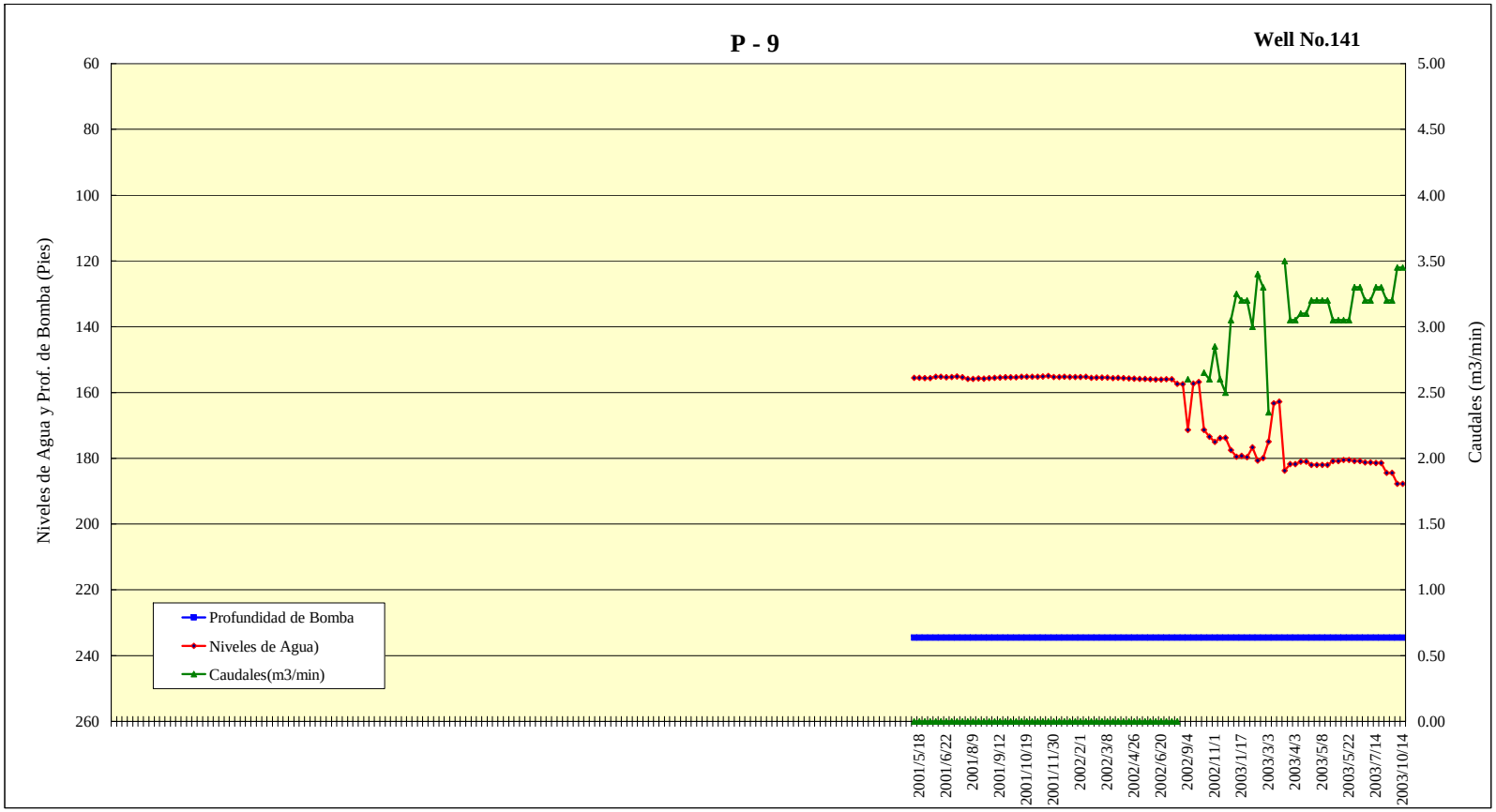
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	154.00	46.9
2001/5/18	0.00	154.08	47.0
2001/5/25	0.00	153.96	46.9
2001/6/1	0.00	153.92	46.9
2001/6/8	0.00	153.58	46.8
2001/6/15	0.00	153.62	46.8
2001/6/22	0.00	153.62	46.8
2001/6/29	0.00	153.58	46.8
2001/7/16	0.00	153.62	46.8
2001/7/27	0.00	153.54	46.8
2001/8/3	0.00	154.16	47.0
2001/8/9	0.00	154.00	46.9
2001/8/17	0.00	154.00	46.9
2001/8/24	0.00	154.00	46.9
2001/8/31	0.00	153.80	46.9
2001/9/7	0.00	153.70	46.8
2001/9/12	0.00	153.62	46.8
2001/9/21	0.00	153.50	46.8
2001/9/28	0.00	153.42	46.8
2001/10/5	0.00	153.33	46.7
2001/10/12	0.00	153.16	46.7
2001/10/19	0.00	153.16	46.7
2001/10/26	0.00	153.12	46.7
2001/11/1	0.00	153.08	46.7
2001/11/9	0.00	153.00	46.6
2001/11/23	0.00	153.00	46.6
2001/11/30	0.00	153.33	46.7
2001/12/14	0.00	153.20	46.7
2001/12/19	0.00	153.16	46.7

POZO P-8
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	153.25	46.7
2002/1/25	0.00	153.30	46.7
2002/2/1	0.00	153.33	46.7
2002/2/5	0.00	153.25	46.7
2002/2/15	0.00	153.42	46.8
2002/2/22	0.00	153.50	46.8
2002/3/1	0.00	153.50	46.8
2002/3/8	0.00	153.50	46.8
2002/3/15	0.00	153.58	46.8
2002/4/5	0.00	153.66	46.8
2002/4/9	0.00	153.83	46.9
2002/4/19	0.00	153.83	46.9
2002/4/26	0.00	153.75	46.9
2002/5/3	0.00	153.80	46.9
2002/5/10	0.00	153.75	46.9
2002/5/20	0.00	153.92	46.9
2002/5/31	0.00	153.70	46.8
2002/6/20	0.00	153.33	46.7
2002/7/18	0.00	153.00	46.6
2002/8/2	0.00	153.00	46.6
2002/8/13	0.00	154.58	47.1
2002/8/23	0.00	154.83	47.2
2002/9/5	2.60	162.16	49.4
2002/9/12	0.00	155.42	47.4
2002/9/26	0.00	153.62	46.8
2002/10/10	2.60	161.04	49.1
2002/10/23	0.00	155.87	47.5
2002/11/1	2.60	162.66	49.6
2002/11/11	2.50	162.62	49.6
2002/11/26	2.60	163.16	49.7
2002/12/20	2.90	165.33	50.4

POZO P-8
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.05	167.54	51.1
2003/1/17	3.05	167.25	51.0
2003/1/24	3.00	167.42	51.0
2003/1/29	3.00	167.33	51.0
2003/2/7	2.95	167.46	51.0
2003/2/14	3.10	167.83	51.2
2003/3/3	3.00	168.37	51.3
2003/3/10	3.00	168.42	51.3
2003/3/17	3.00	168.00	51.2
2003/3/27	3.05	168.87	51.5
2003/4/2	3.10	169.83	51.8
2003/4/11	3.00	169.00	51.5
2003/4/30	3.00	169.42	51.6
2003/5/8	3.00	170.25	51.9
2003/5/15	3.00	169.00	51.5
2003/5/22	2.80	170.00	51.8
2003/6/10	2.55	168.25	51.3
2003/6/30	2.95	169.00	51.5
2003/7/14	3.00	168.16	51.3
2003/8/21	2.80	170.75	52.0
2003/10/14	0.00	161.08	49.1



ANNEX 3.C(208) Punping Discharge and Water Level in Wells

ANNEX 3.C(209) Punping Discharge and Water Level in Wells

POZO P-9
AÑO: 2001

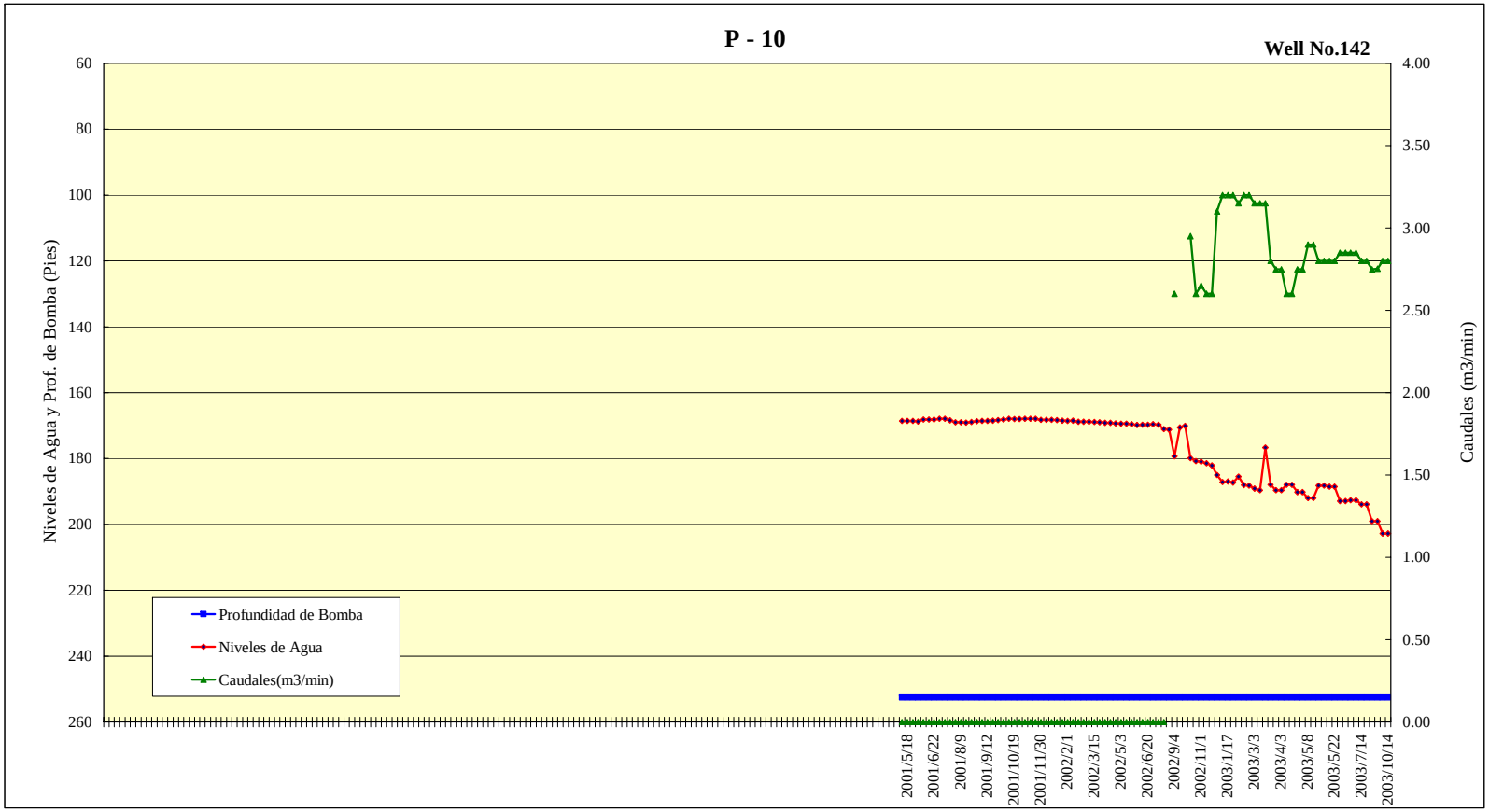
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	155.58	47.4
2001/5/18	0.00	155.54	47.4
2001/5/25	0.00	155.66	47.4
2001/6/1	0.00	155.66	47.4
2001/6/8	0.00	155.25	47.3
2001/6/15	0.00	155.25	47.3
2001/6/22	0.00	155.37	47.4
2001/6/29	0.00	155.30	47.3
2001/7/16	0.00	155.16	47.3
2001/7/27	0.00	155.42	47.4
2001/8/3	0.00	155.92	47.5
2001/8/9	0.00	155.87	47.5
2001/8/17	0.00	155.75	47.5
2001/8/24	0.00	155.83	47.5
2001/8/31	0.00	155.62	47.4
2001/9/7	0.00	155.54	47.4
2001/9/12	0.00	155.46	47.4
2001/9/21	0.00	155.42	47.4
2001/9/28	0.00	155.37	47.4
2001/10/5	0.00	155.37	47.4
2001/10/12	0.00	155.25	47.3
2001/10/19	0.00	155.25	47.3
2001/10/26	0.00	155.25	47.3
2001/11/1	0.00	155.20	47.3
2001/11/9	0.00	155.16	47.3
2001/11/23	0.00	155.00	47.2
2001/11/30	0.00	155.33	47.3
2001/12/14	0.00	155.30	47.3
2001/12/20	0.00	155.25	47.3

POZO P-9
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/9	0.00	155.33	47.3
2002/1/25	0.00	155.30	47.3
2002/2/1	0.00	155.33	47.3
2002/2/5	0.00	155.25	47.3
2002/2/15	0.00	155.58	47.4
2002/2/22	0.00	155.50	47.4
2002/3/1	0.00	155.50	47.4
2002/3/8	0.00	155.50	47.4
2002/3/15	0.00	155.62	47.4
2002/4/5	0.00	155.54	47.4
2002/4/9	0.00	155.66	47.4
2002/4/19	0.00	155.75	47.5
2002/4/26	0.00	155.80	47.5
2002/5/3	0.00	155.87	47.5
2002/5/10	0.00	155.92	47.5
2002/5/20	0.00	156.00	47.5
2002/5/31	0.00	156.08	47.6
2002/6/20	0.00	156.08	47.6
2002/7/18	0.00	156.00	47.5
2002/8/2	0.00	156.00	47.5
2002/8/9	0.00	157.37	48.0
2002/8/23	0.00	157.50	48.0
2002/9/5	2.60	171.33	52.2
2002/9/12	0.00	157.30	47.9
2002/9/26	0.00	156.83	47.8
2002/10/10	2.65	171.33	52.2
2002/10/23	2.60	173.42	52.9
2002/11/1	2.85	175.00	53.3
2002/11/11	2.60	173.83	53.0
2002/11/26	2.50	173.75	53.0
2002/12/20	3.05	177.50	54.1

POZO P-9
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.25	179.50	54.7
2003/1/17	3.20	179.30	54.7
2003/1/24	3.20	179.66	54.8
2003/1/29	3.00	176.66	53.8
2003/2/7	3.40	180.66	55.1
2003/2/14	3.30	179.92	54.8
2003/3/3	2.35	174.92	53.3
2003/3/10	0.00	163.25	49.8
2003/3/20	0.00	162.75	49.6
2003/3/27	3.50	183.80	56.0
2003/4/3	3.05	181.80	55.4
2003/4/11	3.10	181.00	55.2
2003/4/30	3.20	182.00	55.5
2003/5/8	3.20	182.00	55.5
2003/5/15	3.05	180.83	55.1
2003/5/22	3.05	180.50	55.0
2003/6/10	3.30	180.83	55.1
2003/6/30	3.20	181.25	55.2
2003/7/14	3.30	181.42	55.3
2003/8/21	3.20	184.42	56.2
2003/10/14	3.45	187.75	57.2



ANNEX 3.C(210) Punping Discharge and Water Level in Wells

ANNEX 3.C(211) Punping Discharge and Water Level in Wells

POZO P-10
AÑO: 2001

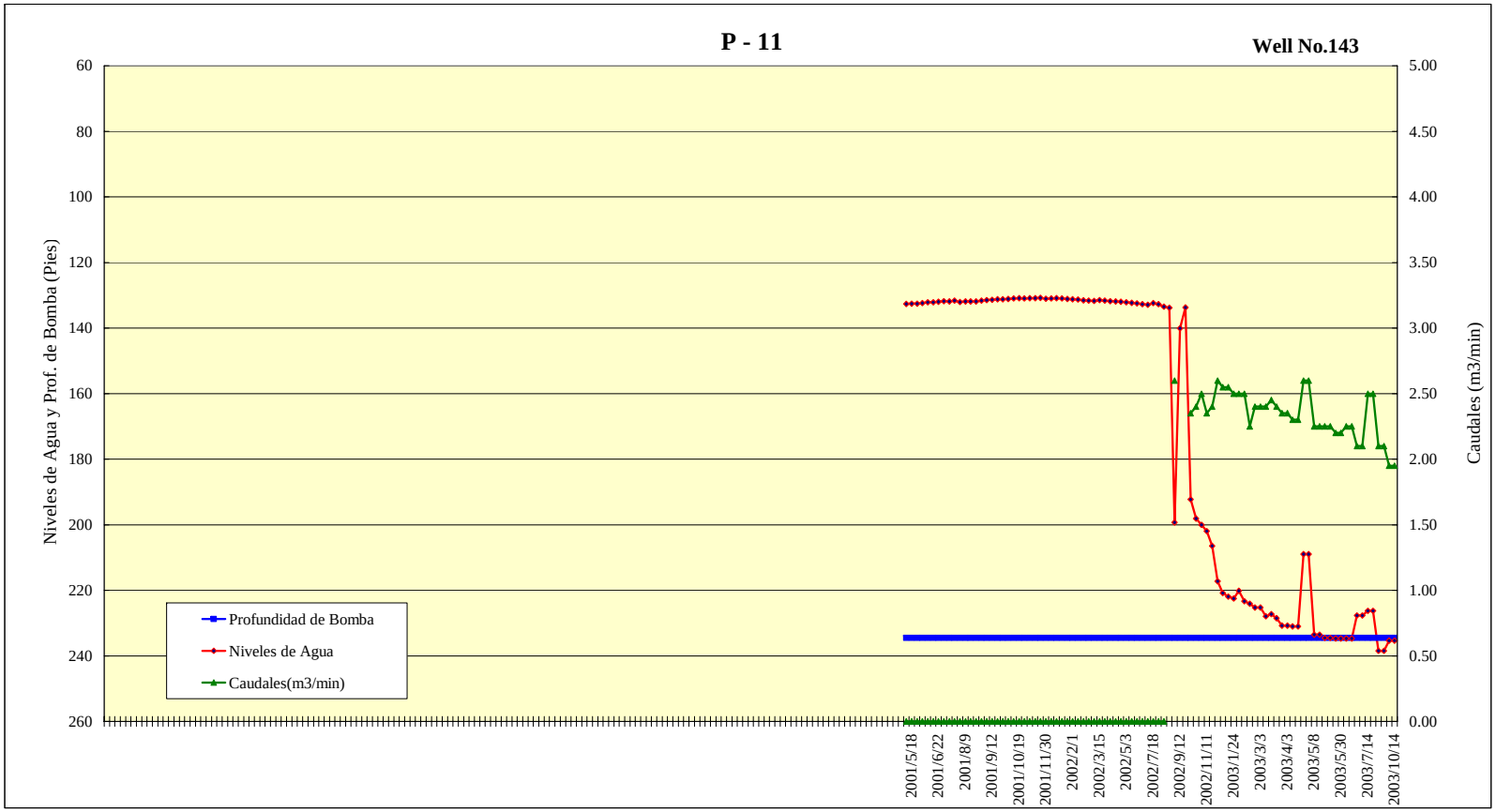
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	168.62	51.4
2001/5/18	0.00	168.58	51.4
2001/5/25	0.00	168.58	51.4
2001/6/1	0.00	168.75	51.4
2001/6/8	0.00	168.16	51.3
2001/6/15	0.00	168.20	51.3
2001/6/22	0.00	168.16	51.3
2001/6/29	0.00	167.96	51.2
2001/7/16	0.00	167.92	51.2
2001/7/27	0.00	168.42	51.3
2001/8/3	0.00	169.00	51.5
2001/8/9	0.00	169.00	51.5
2001/8/17	0.00	169.08	51.5
2001/8/24	0.00	168.92	51.5
2001/8/31	0.00	168.70	51.4
2001/9/7	0.00	168.62	51.4
2001/9/12	0.00	168.58	51.4
2001/9/21	0.00	168.48	51.4
2001/9/28	0.00	168.33	51.3
2001/10/5	0.00	168.20	51.3
2001/10/12	0.00	167.96	51.2
2001/10/19	0.00	168.00	51.2
2001/10/26	0.00	168.00	51.2
2001/11/1	0.00	167.96	51.2
2001/11/9	0.00	167.96	51.2
2001/11/23	0.00	167.92	51.2
2001/11/30	0.00	168.25	51.3
2001/12/14	0.00	168.25	51.3
2001/12/20	0.00	168.25	51.3

POZO P-10
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	168.33	51.3
2002/1/25	0.00	168.46	51.3
2002/2/1	0.00	168.54	51.4
2002/2/5	0.00	168.50	51.4
2002/2/15	0.00	168.83	51.5
2002/2/22	0.00	168.83	51.5
2002/3/1	0.00	168.83	51.5
2002/3/15	0.00	168.92	51.5
2002/4/5	0.00	168.96	51.5
2002/4/10	0.00	169.16	51.6
2002/4/19	0.00	169.16	51.6
2002/4/24	0.00	169.33	51.6
2002/5/3	0.00	169.42	51.6
2002/5/10	0.00	169.42	51.6
2002/5/20	0.00	169.58	51.7
2002/5/31	0.00	169.80	51.8
2002/6/10	0.00	169.70	51.7
2002/6/20	0.00	169.70	51.7
2002/7/18	0.00	169.58	51.7
2002/8/2	0.00	169.75	51.7
2002/8/9	0.00	171.08	52.1
2002/8/23	0.00	171.25	52.2
2002/9/5	2.60	179.33	54.7
2002/9/12	0.00	170.58	52.0
2002/9/26	0.00	170.08	51.8
2002/10/10	2.95	179.92	54.8
2002/10/23	2.60	180.80	55.1
2002/11/1	2.65	180.96	55.2
2002/11/11	2.60	181.46	55.3
2002/11/26	2.60	182.08	55.5
2002/12/20	3.10	185.00	56.4

POZO P-10
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.20	187.12	57.0
2003/1/17	3.20	187.00	57.0
2003/1/24	3.20	187.33	57.1
2003/1/29	3.15	185.50	56.5
2003/2/7	3.20	188.08	57.3
2003/2/14	3.20	188.25	57.4
2003/3/3	3.15	189.16	57.7
2003/3/10	3.15	189.66	57.8
2003/3/20	0.00	176.66	53.8
2003/3/27	2.80	188.00	57.3
2003/4/3	2.75	189.62	57.8
2003/4/11	2.60	188.00	57.3
2003/4/30	2.75	190.16	58.0
2003/5/8	2.90	192.00	58.5
2003/5/15	2.80	188.25	57.4
2003/5/22	2.80	188.58	57.5
2003/6/10	2.85	192.92	58.8
2003/6/30	2.85	192.66	58.7
2003/7/14	2.80	193.92	59.1
2003/8/21	2.75	199.04	60.7
2003/10/14	2.80	202.70	61.8



ANNEX 3.C(212) Punping Discharge and Water Level in Wells

ANNEX 3.C(213) Punping Discharge and Water Level in Wells

POZO P-11
AÑO: 2001

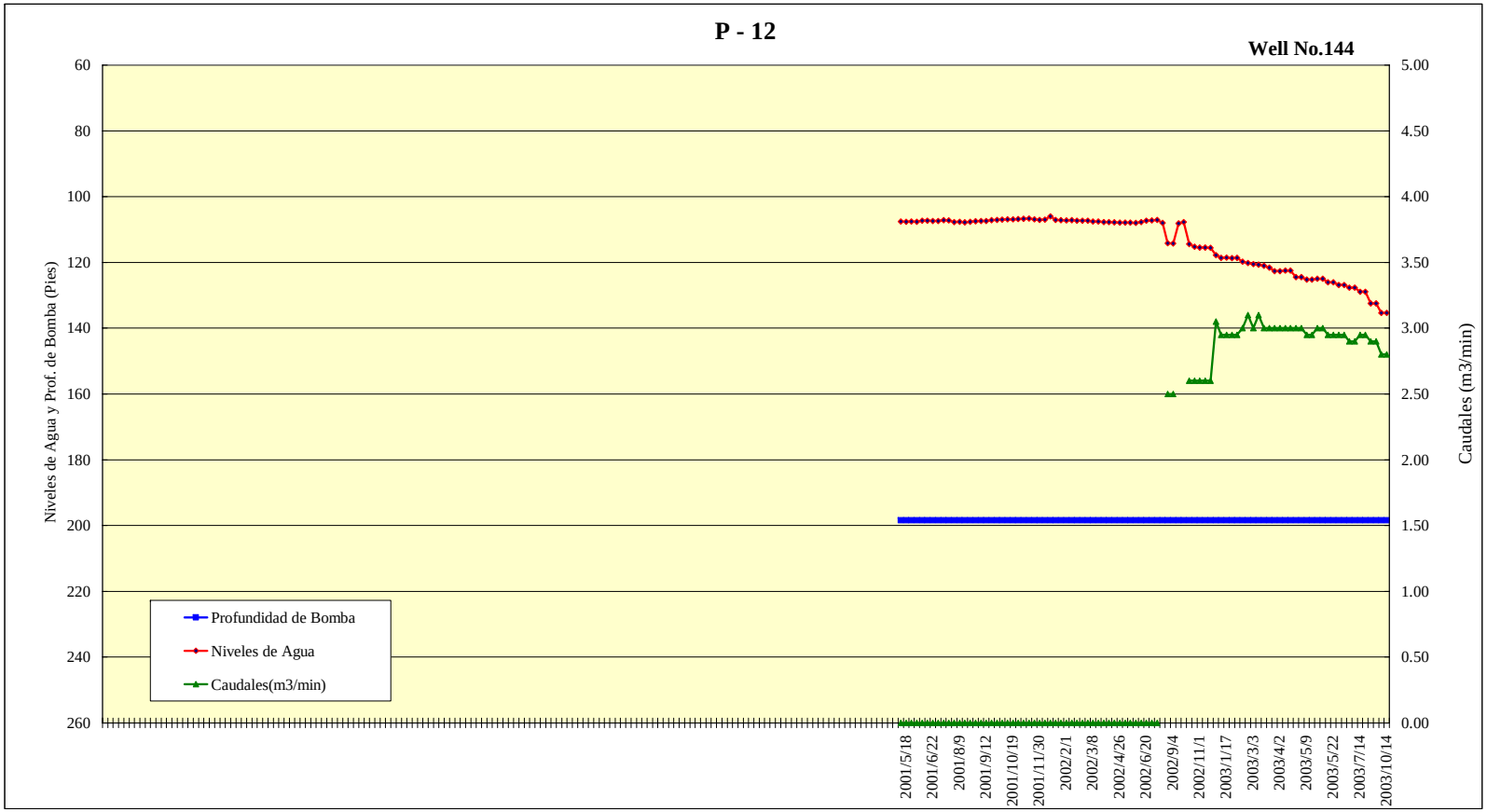
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	132.66	40.4
2001/5/18	0.00	132.58	40.4
2001/5/25	0.00	132.58	40.4
2001/6/1	0.00	132.42	40.4
2001/6/8	0.00	132.16	40.3
2001/6/15	0.00	132.12	40.3
2001/6/22	0.00	132.00	40.2
2001/6/29	0.00	131.83	40.2
2001/7/16	0.00	131.92	40.2
2001/7/27	0.00	131.66	40.1
2001/8/3	0.00	132.08	40.3
2001/8/9	0.00	131.92	40.2
2001/8/17	0.00	131.92	40.2
2001/8/24	0.00	131.92	40.2
2001/8/31	0.00	131.62	40.1
2001/9/7	0.00	131.50	40.1
2001/9/12	0.00	131.42	40.1
2001/9/21	0.00	131.25	40.0
2001/9/28	0.00	131.20	40.0
2001/10/5	0.00	131.16	40.0
2001/10/12	0.00	130.96	39.9
2001/10/19	0.00	130.92	39.9
2001/10/26	0.00	131.00	39.9
2001/11/1	0.00	130.92	39.9
2001/11/9	0.00	130.87	39.9
2001/11/23	0.00	130.83	39.9
2001/11/30	0.00	131.04	39.9
2001/12/14	0.00	130.96	39.9
2001/12/20	0.00	130.92	39.9

POZO P-11
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	131.00	39.9
2002/1/25	0.00	131.12	40.0
2002/2/1	0.00	131.20	40.0
2002/2/5	0.00	131.33	40.0
2002/2/15	0.00	131.58	40.1
2002/2/22	0.00	131.66	40.1
2002/3/1	0.00	131.75	40.2
2002/3/15	0.00	131.50	40.1
2002/4/5	0.00	131.66	40.1
2002/4/9	0.00	131.83	40.2
2002/4/19	0.00	114.92	35.0
2002/4/26	0.00	132.00	40.2
2002/5/3	0.00	132.16	40.3
2002/5/10	0.00	132.33	40.3
2002/5/20	0.00	132.50	40.4
2002/5/31	0.00	132.75	40.5
2002/6/20	0.00	132.92	40.5
2002/7/18	0.00	132.42	40.4
2002/8/2	0.00	132.75	40.5
2002/8/9	0.00	133.50	40.7
2002/8/23	0.00	133.83	40.8
2002/9/5	2.55	199.33	60.8
2002/9/12	0.00	140.08	42.7
2002/9/26	0.00	133.75	40.8
2002/10/10	2.35	192.25	58.6
2002/10/23	2.40	198.08	60.4
2002/11/1	2.50	200.00	61.0
2002/11/11	2.35	202.00	61.6
2002/11/26	2.40	206.50	62.9
2002/12/20	2.60	217.25	66.2

POZO P-11
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.55	220.80	67.3
2003/1/17	2.55	221.92	67.6
2003/1/24	2.50	222.50	67.8
2003/1/29	2.50	220.16	67.1
2003/2/7	2.50	223.33	68.1
2003/2/14	2.25	224.08	68.3
2003/3/3	2.40	225.25	68.7
2003/3/10	2.40	227.90	69.5
2003/3/20	2.45	227.25	69.3
2003/3/27	2.40	228.50	69.6
2003/4/3	2.35	230.80	70.3
2003/4/11	2.30	231.00	70.4
2003/4/30	2.60	209.00	63.7
2003/5/8	2.25	233.50	71.2
2003/5/15	2.25	234.50	71.5
2003/5/22	2.20	234.66	71.5
2003/6/10	2.25	234.66	71.5
2003/6/30	2.10	227.66	69.4
2003/7/14	2.50	226.25	69.0
2003/8/21	2.10	238.42	72.7
2003/10/14	1.95	235.37	71.7



ANNEX 3.C(214) Punping Discharge and Water Level in Wells

ANNEX 3.C(215) Punping Discharge and Water Level in Wells

POZO P-12
AÑO: 2001

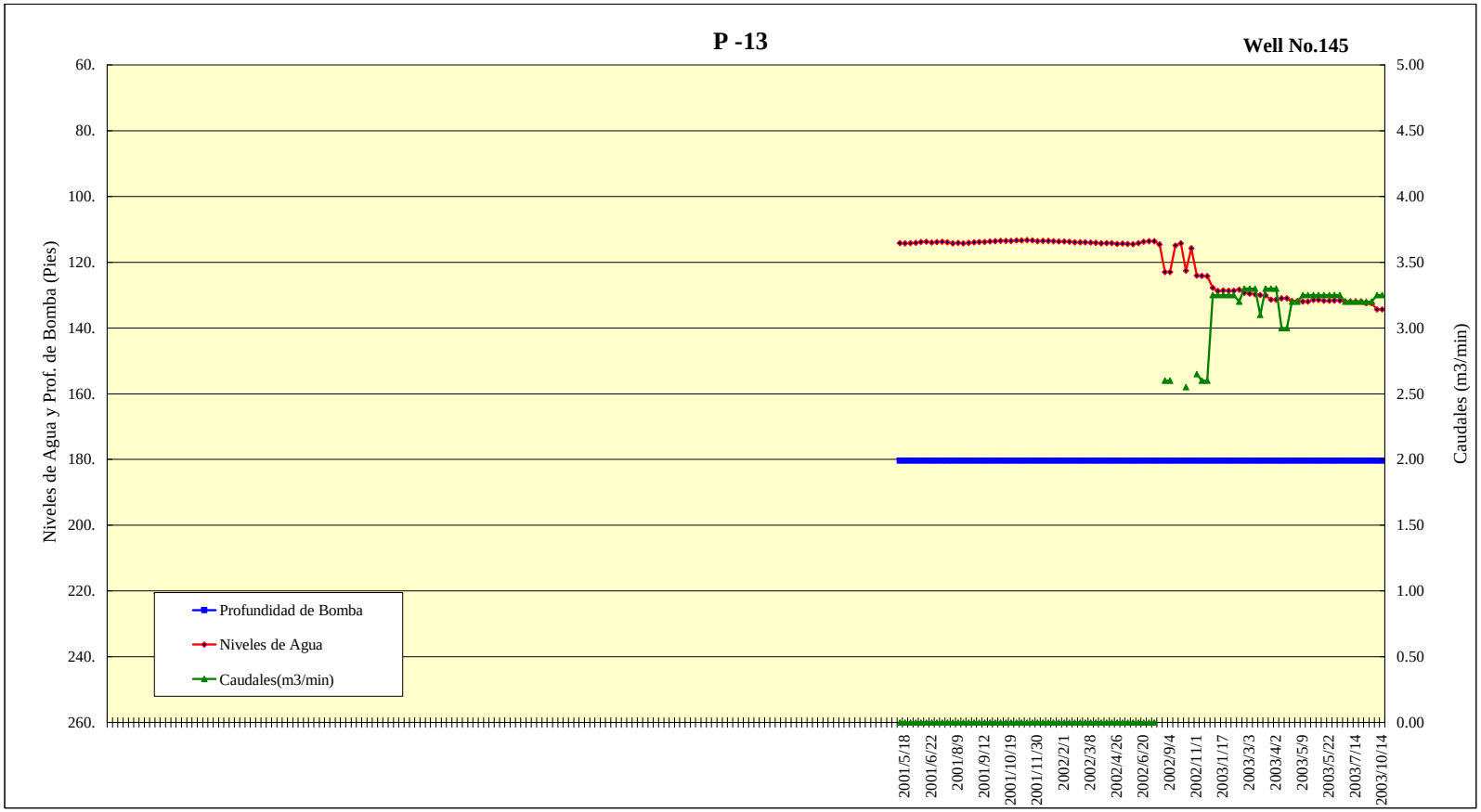
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	107.58	32.8
2001/5/18	0.00	107.66	32.8
2001/5/25	0.00	107.58	32.8
2001/6/1	0.00	107.66	32.8
2001/6/8	0.00	107.33	32.7
2001/6/15	0.00	107.33	32.7
2001/6/22	0.00	107.37	32.7
2001/6/29	0.00	107.42	32.7
2001/7/16	0.00	107.16	32.7
2001/7/27	0.00	107.25	32.7
2001/8/3	0.00	107.75	32.8
2001/8/9	0.00	107.66	32.8
2001/8/17	0.00	107.80	32.9
2001/8/24	0.00	107.66	32.8
2001/8/31	0.00	107.46	32.8
2001/9/7	0.00	107.37	32.7
2001/9/12	0.00	107.37	32.7
2001/9/21	0.00	107.16	32.7
2001/9/28	0.00	107.08	32.6
2001/10/5	0.00	107.00	32.6
2001/10/12	0.00	106.87	32.6
2001/10/19	0.00	106.92	32.6
2001/10/26	0.00	106.80	32.6
2001/11/1	0.00	106.75	32.5
2001/11/9	0.00	106.70	32.5
2001/11/23	0.00	106.87	32.6
2001/11/30	0.00	107.04	32.6
2001/12/14	0.00	107.00	32.6
2001/12/20	0.00	106.00	32.3

POZO P-12
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	107.04	32.6
2002/1/25	0.00	107.16	32.7
2002/2/1	0.00	107.20	32.7
2002/2/5	0.00	107.16	32.7
2002/2/15	0.00	107.33	32.7
2002/2/22	0.00	107.33	32.7
2002/3/1	0.00	107.33	32.7
2002/3/8	0.00	107.58	32.8
2002/3/15	0.00	107.58	32.8
2002/4/5	0.00	107.75	32.8
2002/4/10	0.00	107.70	32.8
2002/4/19	0.00	107.83	32.9
2002/4/26	0.00	107.87	32.9
2002/5/3	0.00	107.87	32.9
2002/5/8	0.00	107.92	32.9
2002/5/20	0.00	108.00	32.9
2002/5/31	0.00	107.75	32.8
2002/6/20	0.00	107.30	32.7
2002/7/18	0.00	107.20	32.7
2002/8/2	0.00	107.08	32.6
2002/8/13	0.00	108.00	32.9
2002/8/23	2.50	114.16	34.8
2002/9/5	2.50	114.25	34.8
2002/9/12	0.00	108.12	33.0
2002/9/26	0.00	107.75	32.8
2002/10/10	2.60	114.42	34.9
2002/10/23	2.60	115.25	35.1
2002/11/1	2.60	115.50	35.2
2002/11/11	2.60	115.50	35.2
2002/11/26	2.60	115.58	35.2
2002/12/20	3.05	117.75	35.9

POZO P-12
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.95	118.62	36.2
2003/1/17	2.95	118.50	36.1
2003/1/24	2.95	118.66	36.2
2003/1/29	2.95	118.58	36.1
2003/2/7	3.00	119.75	36.5
2003/2/17	3.10	120.16	36.6
2003/3/3	3.00	120.54	36.7
2003/3/10	3.10	120.70	36.8
2003/3/17	3.00	121.00	36.9
2003/3/27	3.00	121.58	37.1
2003/4/2	3.00	122.66	37.4
2003/4/11	3.00	122.50	37.3
2003/4/30	3.00	124.50	37.9
2003/5/9	2.95	126.00	38.4
2003/5/15	3.00	125.00	38.1
2003/5/22	2.95	126.00	38.4
2003/6/10	2.95	126.83	38.7
2003/6/30	2.90	127.66	38.9
2003/7/14	2.95	128.92	39.3
2003/8/21	2.90	132.50	40.4
2003/10/14	2.80	135.33	41.2



ANNEX 3.C(216) Punping Discharge and Water Level in Wells

ANNEX 3.C(217) Punping Discharge and Water Level in Wells

POZO P-13
AÑO: 2001

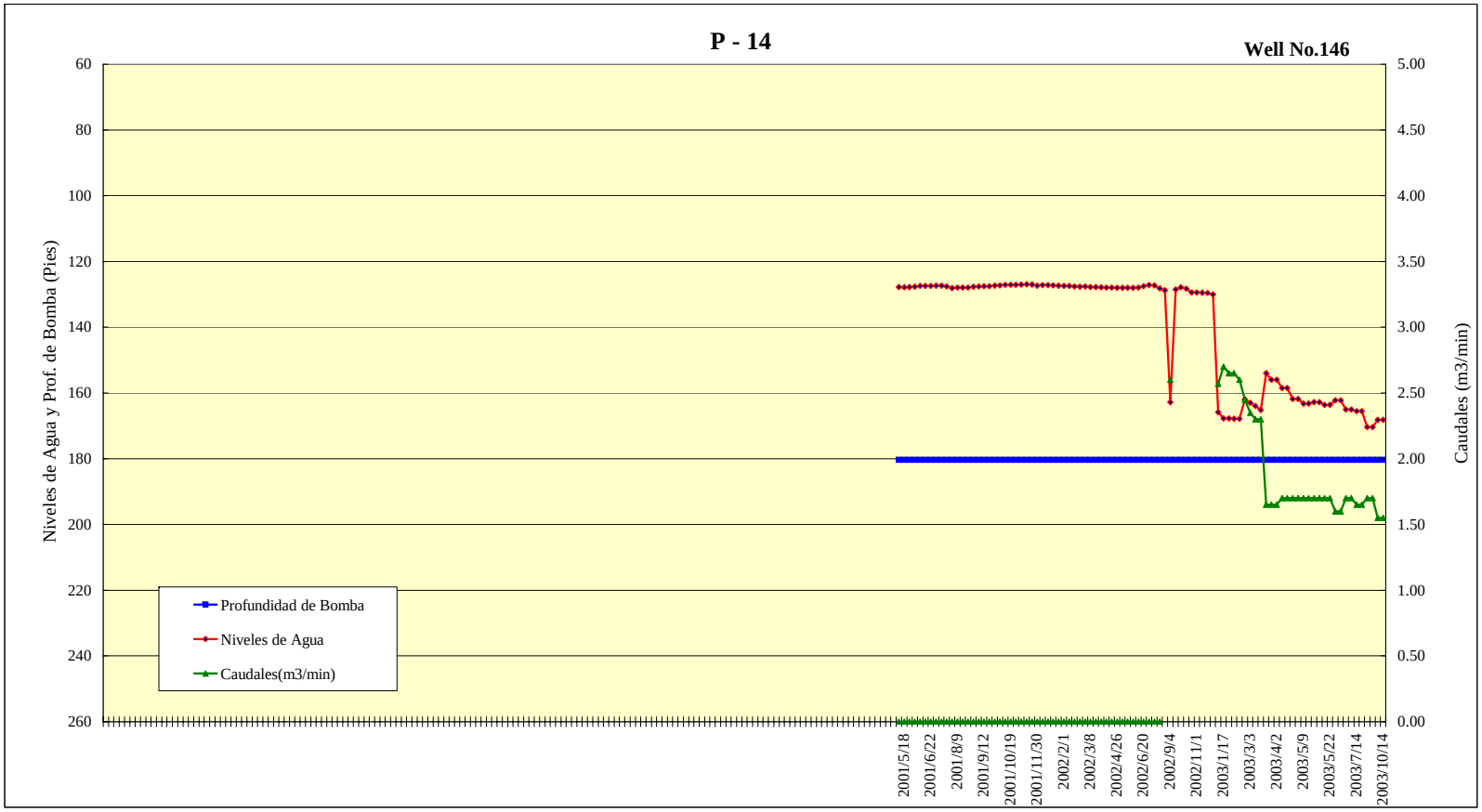
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	114.16	34.8
2001/5/18	0.00	114.25	34.8
2001/5/25	0.00	114.16	34.8
2001/6/1	0.00	114.08	34.8
2001/6/8	0.00	113.83	34.7
2001/6/15	0.00	113.80	34.7
2001/6/22	0.00	114.00	34.7
2001/6/29	0.00	113.83	34.7
2001/7/16	0.00	113.75	34.7
2001/7/27	0.00	113.92	34.7
2001/8/3	0.00	114.25	34.8
2001/8/9	0.00	114.12	34.8
2001/8/17	0.00	114.25	34.8
2001/8/24	0.00	114.08	34.8
2001/8/31	0.00	113.92	34.7
2001/9/7	0.00	113.87	34.7
2001/9/12	0.00	113.83	34.7
2001/9/21	0.00	113.66	34.6
2001/9/28	0.00	113.58	34.6
2001/10/5	0.00	113.50	34.6
2001/10/12	0.00	113.50	34.6
2001/10/19	0.00	113.50	34.6
2001/10/26	0.00	113.37	34.6
2001/11/1	0.00	113.33	34.5
2001/11/9	0.00	113.30	34.5
2001/11/23	0.00	113.37	34.6
2001/11/30	0.00	113.58	34.6
2001/12/14	0.00	113.50	34.6
2001/12/20	0.00	113.50	34.6

POZO P-13
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	113.58	34.6
2002/1/25	0.00	113.66	34.6
2002/2/1	0.00	113.70	34.7
2002/2/5	0.00	113.75	34.7
2002/2/15	0.00	113.92	34.7
2002/2/22	0.00	113.96	34.7
2002/3/1	0.00	113.92	34.7
2002/3/8	0.00	114.00	34.7
2002/3/15	0.00	114.08	34.8
2002/4/5	0.00	114.25	34.8
2002/4/9	0.00	114.16	34.8
2002/4/19	0.00	114.20	34.8
2002/4/26	0.00	114.42	34.9
2002/5/3	0.00	114.37	34.9
2002/5/10	0.00	114.46	34.9
2002/5/20	0.00	114.50	34.9
2002/5/31	0.00	114.16	34.8
2002/6/20	0.00	113.75	34.7
2002/7/18	0.00	113.58	34.6
2002/8/2	0.00	113.58	34.6
2002/8/13	0.00	114.58	34.9
2002/8/23	2.60	123.00	37.5
2002/9/5	2.55	123.00	37.5
2002/9/12	0.00	114.92	35.0
2002/9/26	0.00	114.25	34.8
2002/10/10	2.55	122.58	37.4
2002/10/23	0.00	115.75	35.3
2002/11/1	2.65	124.08	37.8
2002/11/11	2.60	124.16	37.8
2002/11/26	2.60	124.25	37.9
2002/12/20	3.25	127.75	38.9

POZO P-13
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	3.25	128.75	39.2
2003/1/17	3.25	128.58	39.2
2003/1/24	3.25	128.66	39.2
2003/1/29	3.25	128.66	39.2
2003/2/7	3.20	128.33	39.1
2003/2/17	3.30	129.33	39.4
2003/3/3	3.30	129.58	39.5
2003/3/10	3.30	129.75	39.5
2003/3/17	3.10	130.00	39.6
2003/3/27	3.30	130.08	39.6
2003/4/2	3.30	131.42	40.1
2003/4/11	3.20	131.00	39.9
2003/4/30	3.20	131.83	40.2
2003/5/9	3.25	132.00	40.2
2003/5/15	3.25	131.50	40.1
2003/5/22	3.25	131.75	40.2
2003/6/10	3.25	131.66	40.1
2003/6/30	3.20	132.00	40.2
2003/7/14	3.20	132.00	40.2
2003/8/21	3.20	133.42	40.7
2003/10/14	3.25	134.16	40.9



ANNEX 3.C(218) Punping Discharge and Water Level in Wells

ANNEX 3.C(219) Punping Discharge and Water Level in Wells

POZO P-14
AÑO: 2001

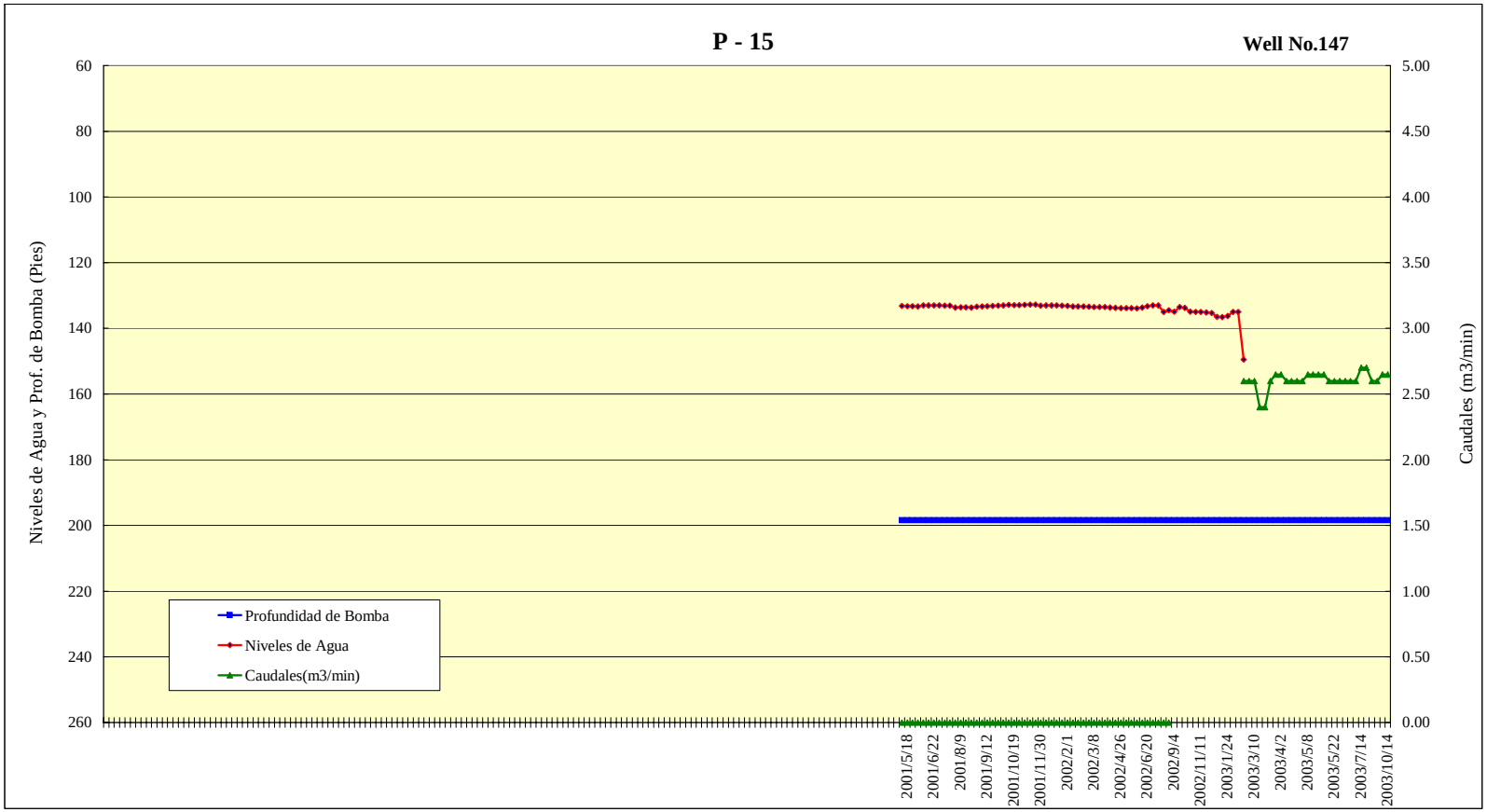
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	127.75	38.9
2001/5/18	0.00	127.83	39.0
2001/5/25	0.00	127.75	38.9
2001/6/1	0.00	127.66	38.9
2001/6/8	0.00	127.42	38.8
2001/6/15	0.00	127.42	38.8
2001/6/22	0.00	127.42	38.8
2001/6/29	0.00	127.37	38.8
2001/7/16	0.00	127.33	38.8
2001/7/27	0.00	127.58	38.9
2001/8/3	0.00	128.08	39.0
2001/8/9	0.00	127.96	39.0
2001/8/17	0.00	127.96	39.0
2001/8/24	0.00	127.92	39.0
2001/8/31	0.00	127.66	38.9
2001/9/7	0.00	127.58	38.9
2001/9/12	0.00	127.54	38.9
2001/9/21	0.00	127.48	38.9
2001/9/28	0.00	127.37	38.8
2001/10/5	0.00	127.30	38.8
2001/10/12	0.00	127.12	38.7
2001/10/19	0.00	127.12	38.7
2001/10/26	0.00	127.08	38.7
2001/11/1	0.00	127.04	38.7
2001/11/9	0.00	126.96	38.7
2001/11/23	0.00	127.00	38.7
2001/11/30	0.00	127.33	38.8
2001/12/14	0.00	127.20	38.8
2001/12/20	0.00	127.16	38.8

POZO P-14
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	127.25	38.8
2002/1/25	0.00	127.33	38.8
2002/2/1	0.00	127.42	38.8
2002/2/5	0.00	127.42	38.8
2002/2/15	0.00	127.58	38.9
2002/2/22	0.00	127.66	38.9
2002/3/1	0.00	127.58	38.9
2002/3/8	0.00	127.75	38.9
2002/3/15	0.00	127.75	38.9
2002/4/5	0.00	127.83	39.0
2002/4/9	0.00	127.92	39.0
2002/4/19	0.00	127.92	39.0
2002/4/26	0.00	128.00	39.0
2002/5/3	0.00	128.00	39.0
2002/5/10	0.00	128.00	39.0
2002/5/20	0.00	128.00	39.0
2002/5/31	0.00	127.92	39.0
2002/6/20	0.00	127.50	38.9
2002/7/18	0.00	127.16	38.8
2002/8/2	0.00	127.25	38.8
2002/8/13	0.00	128.20	39.1
2002/8/23	0.00	128.75	39.2
2002/9/5	2.60	162.83	49.6
2002/9/12	0.00	128.50	39.2
2002/9/26	0.00	127.83	39.0
2002/10/10	0.00	128.25	39.1
2002/10/23	0.00	129.42	39.4
2002/11/1	0.00	129.42	39.4
2002/11/11	0.00	129.50	39.5
2002/11/26	0.00	129.58	39.5
2002/12/20	0.00	130.00	39.6

POZO P-14
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	2.57	165.83	50.5
2003/1/17	2.70	167.75	51.1
2003/1/24	2.65	167.75	51.1
2003/1/29	2.65	167.80	51.1
2003/2/7	2.60	167.80	51.1
2003/2/17	2.45	161.83	49.3
2003/3/3	2.35	163.00	49.7
2003/3/10	2.30	163.92	50.0
2003/3/17	2.30	165.16	50.3
2003/3/27	1.65	154.00	46.9
2003/4/2	1.65	156.00	47.5
2003/4/11	1.70	158.50	48.3
2003/4/30	1.70	161.83	49.3
2003/5/9	1.70	163.20	49.7
2003/5/15	1.70	162.83	49.6
2003/5/22	1.70	163.66	49.9
2003/5/10	1.60	162.25	49.5
2003/6/30	1.70	165.00	50.3
2003/7/14	1.65	165.50	50.4
2003/8/21	170.00	170.42	51.9
2003/10/14	1.55	168.16	51.3



ANNEX 3.C(220) Punping Discharge and Water Level in Wells

ANNEX 3.C(221) Punping Discharge and Water Level in Wells

POZO P-15
AÑO: 2001

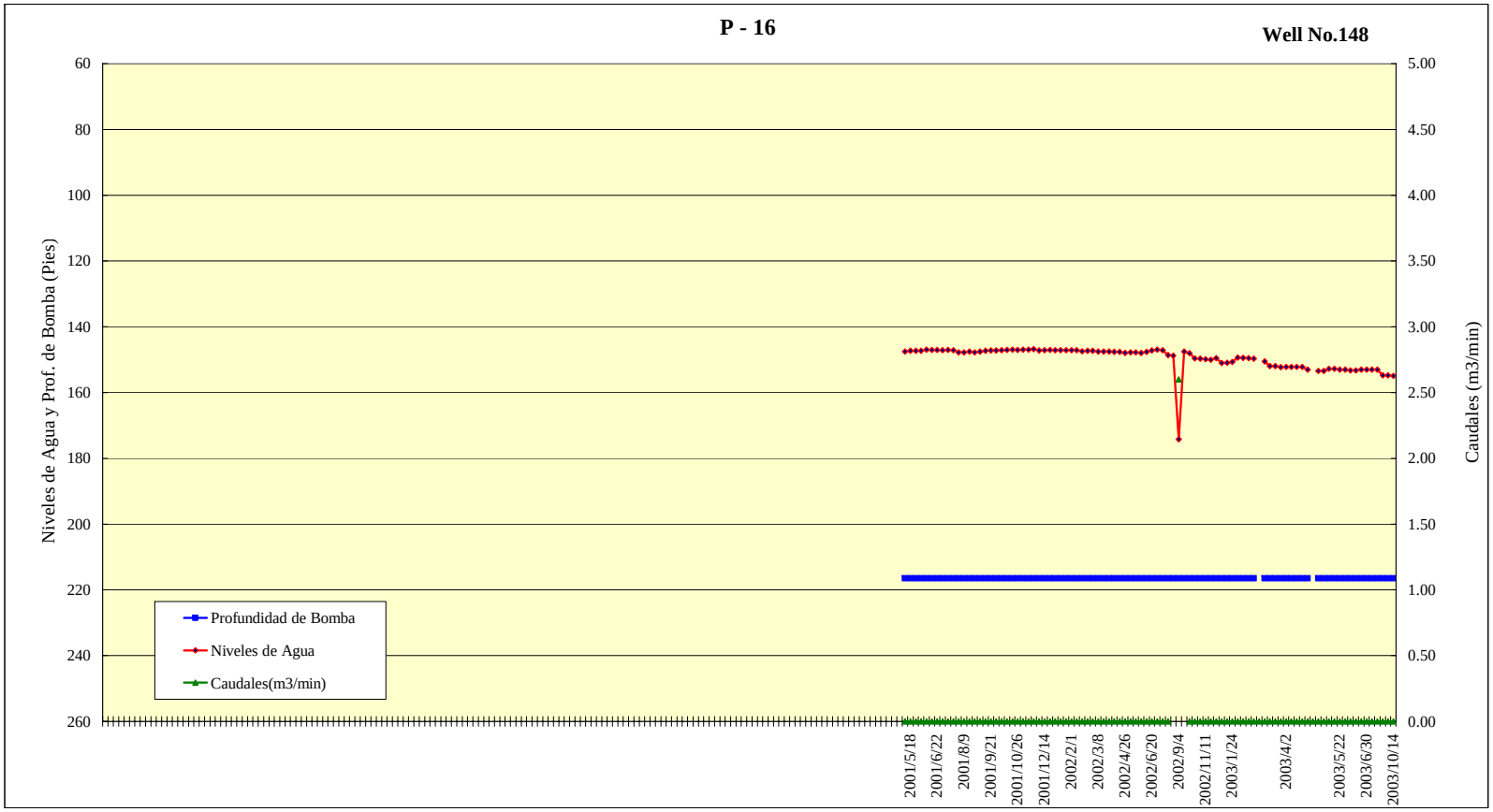
TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	133.16	40.6
2001/5/18	0.00	133.25	40.6
2001/5/25	0.00	133.25	40.6
2001/6/1	0.00	133.33	40.6
2001/6/8	0.00	133.00	40.5
2001/6/15	0.00	133.00	40.5
2001/6/22	0.00	133.00	40.5
2001/6/29	0.00	133.00	40.5
2001/7/16	0.00	133.08	40.6
2001/7/27	0.00	133.12	40.6
2001/8/3	0.00	133.66	40.7
2001/8/9	0.00	133.58	40.7
2001/8/17	0.00	133.58	40.7
2001/8/24	0.00	133.66	40.7
2001/8/31	0.00	133.46	40.7
2001/9/7	0.00	133.33	40.6
2001/9/12	0.00	133.25	40.6
2001/9/21	0.00	133.16	40.6
2001/9/28	0.00	133.08	40.6
2001/10/5	0.00	133.04	40.6
2001/10/12	0.00	132.87	40.5
2001/10/19	0.00	132.92	40.5
2001/10/26	0.00	132.92	40.5
2001/11/1	0.00	132.83	40.5
2001/11/9	0.00	132.80	40.5
2001/11/23	0.00	132.80	40.5
2001/11/30	0.00	133.08	40.6
2001/12/14	0.00	133.00	40.5
2001/12/20	0.00	133.00	40.5

POZO P-15
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	133.04	40.6
2002/1/25	0.00	133.12	40.6
2002/2/1	0.00	133.16	40.6
2002/2/5	0.00	133.33	40.6
2002/2/15	0.00	133.33	40.6
2002/2/22	0.00	133.33	40.6
2002/3/1	0.00	133.42	40.7
2002/3/8	0.00	133.50	40.7
2002/3/15	0.00	133.50	40.7
2002/4/5	0.00	133.50	40.7
2002/4/9	0.00	133.66	40.7
2002/4/19	0.00	133.75	40.8
2002/4/26	0.00	133.83	40.8
2002/5/3	0.00	133.83	40.8
2002/5/10	0.00	133.83	40.8
2002/5/20	0.00	133.92	40.8
2002/5/31	0.00	133.66	40.7
2002/6/20	0.00	133.30	40.6
2002/7/18	0.00	133.00	40.5
2002/8/2	0.00	133.00	40.5
2002/8/9	0.00	135.00	41.1
2002/8/23	0.00	134.50	41.0
2002/9/4	0.00	134.92	41.1
2002/9/26	0.00	133.50	40.7
2002/10/10	0.00	133.75	40.8
2002/10/23	0.00	134.92	41.1
2002/11/1	0.00	135.00	41.1
2002/11/11	0.00	135.00	41.1
2002/11/26	0.00	135.16	41.2
2002/12/20	0.00	135.33	41.2

POZO P-15
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	0.00	136.50	41.6
2003/1/17	0.00	136.58	41.6
2003/1/24	0.00	136.25	41.5
2003/1/29	0.00	135.00	41.1
2003/2/7	0.00	135.00	41.1
2003/2/17	2.60	149.50	45.6
2003/3/3	2.60	Obstruido	
2003/3/10	2.60	Obstruido	
2003/3/17	2.40	Obstruido	
2003/3/27	2.60	Obstruido	
2003/4/2	2.65	Obstruido	
2003/4/11	2.60	Obstruido	
2003/4/30	2.60	Obstruido	
2003/5/8	2.65	Obstruido	
2003/5/15	2.65	Obstruido	
2003/5/22	2.60	Obstruido	
2003/6/10	2.60	Obstruido	
2003/6/30	2.60	Obstruido	
2003/7/14	2.70	Obstruido	
2003/8/21	2.60	Obstruido	
2003/10/14	2.65	Obstruido	



ANNEX 3.C(222) Punping Discharge and Water Level in Wells

ANNEX 3.C(223) Punping Discharge and Water Level in Wells

POZO P-16
AÑO: 2001

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2001/5/11	0.00	147.50	45.0
2001/5/18	0.00	147.33	44.9
2001/5/25	0.00	147.33	44.9
2001/6/1	0.00	147.33	44.9
2001/6/8	0.00	147.00	44.8
2001/6/15	0.00	147.04	44.8
2001/6/22	0.00	147.08	44.8
2001/6/29	0.00	147.16	44.9
2001/7/16	0.00	147.08	44.8
2001/7/27	0.00	147.16	44.9
2001/8/3	0.00	147.75	45.0
2001/8/9	0.00	147.80	45.0
2001/8/17	0.00	147.58	45.0
2001/8/24	0.00	147.75	45.0
2001/8/31	0.00	147.50	45.0
2001/9/7	0.00	147.33	44.9
2001/9/12	0.00	147.25	44.9
2001/9/21	0.00	147.20	44.9
2001/9/28	0.00	147.16	44.9
2001/10/5	0.00	147.04	44.8
2001/10/12	0.00	147.00	44.8
2001/10/19	0.00	147.08	44.8
2001/10/26	0.00	147.00	44.8
2001/11/1	0.00	146.92	44.8
2001/11/9	0.00	146.83	44.8
2001/11/23	0.00	147.20	44.9
2001/11/30	0.00	147.12	44.8
2001/12/14	0.00	147.08	44.8
2001/12/20	0.00	147.16	44.9

POZO P-16
AÑO:-2002

TIEMPO	CAUDAL (M3/MIN)	NIVELES DE AGUA (PIE)	NIVELES DINAMICOS (m)
2002/1/11	0.00	147.16	44.9
2002/1/25	0.00	147.16	44.9
2002/2/1	0.00	147.16	44.9
2002/2/5	0.00	147.16	44.9
2002/2/15	0.00	147.42	44.9
2002/2/22	0.00	147.33	44.9
2002/3/1	0.00	147.33	44.9
2002/3/8	0.00	147.50	45.0
2002/3/15	0.00	147.50	45.0
2002/4/5	0.00	147.58	45.0
2002/4/9	0.00	147.66	45.0
2002/4/19	0.00	147.66	45.0
2002/4/26	0.00	147.92	45.1
2002/5/3	0.00	147.80	45.0
2002/5/10	0.00	147.80	45.0
2002/5/20	0.00	147.92	45.1
2002/5/31	0.00	147.66	45.0
2002/6/20	0.00	147.25	44.9
2002/7/18	0.00	147.00	44.8
2002/8/2	0.00	147.12	44.8
2002/8/9	0.00	148.66	45.3
2002/8/23	0.00	148.78	45.3
2002/9/5	2.60	174.20	53.1
2002/9/26	0.00	147.58	45.0
2002/10/10	0.00	148.08	45.1
2002/10/23	0.00	149.58	45.6
2002/11/1	0.00	149.66	45.6
2002/11/11	0.00	149.87	45.7
2002/11/26	0.00	150.00	45.7
2002/12/18	0.00	149.54	45.6

POZO P-16
AÑO: 2003

TIEMPO	CAUDALES (M3/MIN)	NIVELES DINAMICOS (PIE)	NIVELES DINAMICOS (m)
2003/1/8	0.00	151.00	46.0
2003/1/17	0.00	150.96	46.0
2003/1/24	0.00	150.66	45.9
2003/1/29	0.00	149.33	45.5
2003/2/7	0.00	149.42	45.5
2003/2/14	0.00	149.50	45.6
2003/3/3	0.00	149.66	45.6
2003/3/10	0.00	150.50	45.9
2003/3/20	0.00	151.92	46.3
2003/3/27	0.00	152.25	46.4
2003/4/2	0.00	152.16	46.4
2003/4/11	0.00	152.16	46.4
2003/4/30	0.00	153.00	46.6
2003/5/8	0.00	153.42	46.8
2003/5/15	0.00	152.80	46.6
2003/5/22	0.00	153.00	46.6
2003/6/10	0.00	153.25	46.7
2003/6/30	0.00	153.00	46.6
2003/7/14	0.00	153.00	46.6
2003/8/21	0.00	154.75	47.2
2003/10/14	0.00	154.91	47.2