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CAMP DRESSER & McKEE INC.

Final Report

Mine Hydrology Test Data Analysis

Crandon Project

May 27, 1982

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I. EXECUTIVE SUMMARY

Two pump tests were conducted by CDM for Exxon Minerals Company in the Crandon ore body and an additional pump test was performed in the overlying glacial materials during the Spring and Summer of 1981. Subsequent to completion of these field testing programs, hydrologic analysis of the field data and interpretive modelling of proposed mining activities calibrated against aquifer behavior during the pump tests was conducted to:

1. determine an estimate of projected mine inflow versus time, and
2. estimate the probable effect of proposed mine dewatering on the glacial aquifer and local surface water systems.

Observations made during the pump tests and analysis of the pump test data support the following findings:

1. there is evidence for hydrologic connection between permeable zones in the ore body and overlying glacial materials
   - time/drawdown relationships in observation wells placed in the ore body indicate that recharge to the ore body is occurring.
   - many observation wells in the overlying glacial materials recorded continuous water level declines when the ore body was pumped,
2. the area of drawdown impact during conduct of the pumping tests had an oblong shape along strike of the ore body,
3. a basal clay rich zone in till (encountered in construction of observation wells) separates in some locations, more permeable glacial materials from the underlying ore body subcrop,
4. pump test results indicate the presence of a resistive (to flow) layer in the subsurface at the ore body and the glacial materials contact, and
5. whereas the ore body appears to be more permeable in the east than in the western position, the glacial/ore body behavior showed less resistance to flow in the west (vicinity borings 211 and 216) than in the east (vicinity boring 213).

Predictive modelling of a proposed mine plan sequence calibrated against hydrologic behavior recorded during the pump tests has resulted in findings (T.A. Prickett report February 24, 1982 - Appendix G to this report) as follows:

1. maximum inflow to the mine will probably coincide with the 36 month period of the currently proposed mining plan in response to increasing subsurface exposure of permeable rock zones,
2. inflow at this time (under conditions where no controls to flow would be applied) is likely to be on the order of 5.3 million gallons per day (mgd),
3. steady state inflow to the mine would occur sometime subsequent to about month 48 of the proposed mining plan, and would, under the same conditions of no flow control, likely be on the order of 4.8 mgd.,
4. At steady state, when water levels in the glacial deposits would no longer be declining and maximum impacts are established, drawdown impacts in the glacial deposits due to mine dewatering (assuming the Dec. 9, 1981 Golder Associates glacial model and again no control of mine inflow) will occur in the Swamp Creek area to the north of the ore body and major effects (i.e., 1 ft of drawdown) will extend to the west, east and south at approximate distances of 1.4, 1.6 and 1.6 miles, respectively from the center of the ore body, and
5. that induced permeability reductions in the subsurface ore body area could reduce mine inflow, but may require extensive and effective grouting.

II. INTRODUCTION AND BACKGROUND

This report presents a summary discussion of the methods used in and the data collected from pump tests at two locations (borings 211 and 213) in the Crandon ore body and also at one location (well WW4) in the glacial materials overlying the ore body. The pump test data after reduction and computer processing is presented in report Appendices A, B, and C.

The data was used in predictive modelling of a proposed mining plan sequence calibrated against pump test observations to estimate mine inflow and the probable effect of mine dewatering on the glacial aquifer and nearby surface water systems. Findings of this predictive modelling activity (T.A. Prickett Final Report, in preparation) are referenced in the Executive Summary and Results sections and are included in their entirety in Appendix H of this report.

Four technical meetings between representatives of Exxon Minerals Company, Camp Dresser & McKee Inc. and T.A. Prickett & Associates dealing with the analysis of the field data and initial predictive modelling work were held between late June 1981 and the time of this report. Summaries of these meetings are presented in Appendix E.

The field data collection and hydrologic analysis program, incuding initial predictive modelling work, was performed for Exxon Minerals Company, Crandon Project, in order to:

1. project mine inflow/dewatering volumes, and
2. estimate probable related impacts on the glacial aquifer which overlies the Crandon ore body.

This work followed CDM's review of the existing hydrologic data base for the Crandon Project and joint critique and design of a pump testing program with Exxon Minerals personnel (CDM, March 1981).

Previous to this effort the existing hydrologic data base (related to hydrologic properties of the ore body and possible projected inflow volumes) was well summarized in an internal Exxon Minerals Company memorandum report, "Results of the Crandon Phase I - Mine Hydrology Tests," Landers, 1981. This study presented evidence of previously unrecognized

highly permeable conditions in the ore body in zones along boring 213 and also indicated that significant flow is possible within the ore body in the vicinity of boring 217. The study recommended that a Phase II hydrology test be performed. CDM's review of the Landers report and other data including:

1. weathering and leaching plan profiles of the ore body,
2. strongly leached rock core material, and
3. drillers observations as to flow quantities encountered in the ore body

confirmed in our opinion the need for subsequent (Phase II) tests. This report summarizes those tests, presents the data obtained from those tests, and also presents results of analysis and predictive mine plan modelling using the pump test data.

III. PURPOSE OF THE INVESTIGATION

The objectives of the pump testing program, subsequent data analysis, and predictive modelling were to estimate the following:

1. Mine dewatering volume versus time (life of the mine) for pumping from the 350 meter level. Possible effect on this quantity of pumpage versus time if some level of dewatering could initially be accomplished at the 140 meter level in the subsurface excavations planned for that level.
2. Mine dewatering volume versus time for additional pumping from the 840 meter level to coincide with development of the mine between the 350 and 710 meter levels. Pumping would continue at the 350 meter level.
3. The probable effect on the glacial aquifer and local surface water systems of proposed dewatering operations as above during the life of the mine.
4. Additionally, the likely effect on pumpage volumes at the 350 and 840 meter levels (as above) if the overlying saturated glacial materials could be cut off as a source of recharge to the permeable ore body zones by 1) operating a shallow dewatering system in the glacial materials or 2) reducing the permeability of the contact between the overburden and ore body subcrop by cementing or grouting.

These objectives were determined in discussions with Exxon Minerals Company personnel shortly after hydrologic analysis began in July, 1982 (Appendix E, Summaries of Technical Meetings - item 2).

The pump test data base which has been developed to fulfill these objectives and the results of modelling and analyses are presented herein.

IV. DESIGN OF THE PUMP TEST PROGRAM

With reference to "Crandon Mine Hydrology - Design of Phase II Tests," Landers, 1981 b, CDM made several recommendations (CDM, March 1981) for conduct of the subject tests. These recommendations included:

1. Type, number and sequencing of pumping tests to be conducted,
2. Collection of soil samples at the bedrock and glacial overburden contact from appropriate observation wells which would be installed,
3. Water quality sampling before, during and after each pumping test,
4. Pump installation procedures, and
5. Operation of pumping.

IV.A. Type, Number and Sequencing of Tests

CDM recommended an additional pump test on the overlying glacial materials in order to adequately evaluate this aquifer on a separate basis from the permeable ore body zones. Horizontal as well as vertical permeabilities in the saturated glacial materials are important factors in subsequent analysis of test results and application to evaluating mine dewatering schemes.

This recommendation was implemented by Exxon Minerals Company with the construction and use of Water Well 4 as a glacial test well.

Sequencing of the pumping tests was to be as follows:

Well #WW4,
Well #211,
Well #213, and optionally
Well #216.

Pumping tests were not conducted on Well 216 because sufficient information regarding ore body response to pumping was obtained in tests conducted on Wells 211 and 213. Tests on this well were originally proposed as optional depending on initial results of tests conducted on the

other wells. The decision to terminate the field pump testing program after conduct of the test on Well 213 is documented in a June 22, 1981 meeting summary memorandum previously sent to Exxon.

IV.B. Collection of Additional Soil Samples

Because of the importance of stratigraphic information at the bedrock and glacial overburden contact, CDM recommended that core or splitspoon sampling of the contact be undertaken at selected observation wells which would be installed prior to the pump test program. This is particularly important in documenting the presence of and subsequently testing the nature of impermeable clay materials at the contact. We recommended such sampling at observation wells:

#213-1
#213-3
#216-1
#211-2
#211-3, and
#WW4.

This recommendation was implemented with some modification by Exxon Minerals Company. CDM performed grain size analyses on samples from these wells and submitted them to Exxon in a report "Sieve Analysis Curves, Exxon Minerals Crandon Project," August 1981. This information was used by Crandon Project personnel in constructing geologic cross-sections which were and will again be used in continued interpretive modelling.

IV.C. Water Quality Sampling

Samples for water quality determinations were taken by CDM from production wells at the start, middle and end of each test. The samples were analyzed by Aqualab Inc. Analysis results are presented in Appendix F.

IV.D. Pump Installation and Operation of Pump Tests

Concerns about installation of the pump monitoring devices in an angled hole became apparent prior to start-up. A satisfactory methodology to minimize these concerns was implemented and is summarized below:

- The monitoring transducer and cable were protected to prevent damage during installation.
- The pump was located in the hanging wall or on one of the more competent weathered zones to prevent the movement of the weathered material into the pump bowls during pumping.
- The pump and discharge pipe were supported to prevent kinking.

During operation of the pump test several separate types of data were collected. These included: the water levels (PSI) in various wells, discharge rate, and barometric pressure. A field pump test diary was kept which contained a record of weather conditions, equipment malfunctions, pumping rate adjustment, and any other significant events which occurred during the test. Water levels in observation wells near the pumping well and the pumping well water level were checked on the following schedule:

LENGTH OF PUMPING TIME	MEASURING INTERVAL
1 - 10 minutes	1 minute or less
10 - 30 minutes	2 minutes
30 - 60 minutes	5 minutes
60 - 120 minutes	10 minutes
120 - 240 minutes	20 minutes
240 - 720 minutes	60 minutes
720 - 1440 minutes	120 minutes
1440 - 1440 minutes	240 minutes
2880 - end minutes	480 minutes

Additional details regarding development of the pump tests is presented in the CDM report, "Review of Existing Data Base, Critique of Proposed Pump Testing, Crandon Project," March 1981; and is discussed in the following sections of this report, General Pump Test Procedures, Equipment, and Summary of the Pump Tests.

V. GENERAL PUMP TEST PROCEDURES

In general, the pump tests can be divided into four parts: set up, the preliminary test, the pumping test, and recovery.

The setting up portion of the test consisted of installing the pump, flow metering device, and water level measuring instrumentation. Also, unless it was initiated sooner, this is when the recording of background data was initiated.

The installation of the pumps, flowmeters, holding tanks, and discharge lines was completed by or under the supervision of Exxon personnel.

Installation of the transducer system, the continuous recorders, electric sounders, and other miscellaneous equipment was completed by or under supervision of CDM personnel.

Background measurements were initiated by Exxon prior to the start of the tests. These background measurements were continued throughout the testing program in coordination with measurements taken from the particular pump tests.

V.A. The Preliminary Test

The purpose of this preliminary test was twofold. The primary purpose was to set the pumping rate and insure that the maximum stress was placed on the aquifer without prematurely breaking suction on the pump.

The second reason for the preliminary test was to check all the equipment to insure that it was functioning properly.

The duration of the preliminary pumping test was set to be long enough to obtain a good picture of the time-drawdown relationship, but short enough to minimize the length of time needed for the water levels to stabilize after the test was terminated. Preliminary tests of two to four hours were usually satisfactory.

IV.B. The Pumping Test

After allowing sufficient time for water levels to stabilize following the preliminary test, the actual pump test itself was run. It

was at this time that full attention was turned toward the collection of the data from which subsequent hydrogeologic calculations and conclusions would be made.

V.C. The Recovery Period

Data collected after the pump was shut off is as important as the data which was collected while the pump was running. The recovery of the water levels should mirror the drop in water levels. For this reason, the same care which was used for the data collection during the pumping portion of the test was used for the recovery portion of the test.

VI. EQUIPMENT

VI.A. Pumps

The large pumping heads and relatively small hole diameters placed some severe restraints on the pumping system which could be used for the inclined wells (211 and 213). It was anticipated that pumping lifts in the range of 300 feet would be encountered in the wells with another 60 - 80 psi needed to discharge the water through the sprinkler system. Since the boreholes were only eight inches in diameter, the pump size was limited to about six inches O.D. Therefore, it was impossible to utilize one pump or pumping system to lift the water out of the bore hole and discharge it through the irrigation system.

To overcome this problem, a dual pumping system was used. In this system, one set of pumps discharged from the well to a holding tank. The second set of pumps discharged this water from the holding tank through the sprinkler systems.

For the WW4 test, the pumping system consisted of a single submersible pump discharging water from the well to a holding tank and a centrifugal pump discharging water to the irrigation system. The submersible pump was powered by a diesel generator, and the centrifugal pump was powered by either a propane engine or diesel engine. The test was started with the propane powered pump. However, this broke down and the discharge was switched to the diesel powered pump.

For the 211 and 213 tests, a set of three submersible pumps were installed in the production well. these pumps were hooked in parallel and individually wired. This was done so that any or all the pumps could be operated independently. Typically, two of the pumps were operated and the third used as a backup. Also for these tests, the water was pumped from the holding tanks by a bank of up to six submersible pumps operating in parallel. All the submersible pumps were powered by the same diesel generator.

VI.B. Flow Measuring Equipment

During the WW4 test, the discharge rate was monitored with a 6 inch McCrometer propeller meter. During the 211 and 213 tests, this same meter was used and a circular orifice weir was also installed in the discharge line. The flow was regulated with a gate valve which was installed downstream of the propeller meter.

VI.C. Water Level Measuring Equipment

A variety of methods were used to measure the water levels and changes in water level. This included pressure transducers, continuous recorders and manual methods.

The pressure transducer system used was the Slope Indicator Model 56400 system. This system included 9-100 PSI range transducers, 1-250 psi range transducer, a 10 channel switchable terminal, an indicator unit (both LCD and LED type displays were used) and the necessary cables and accessories.

The most serious problem with the transducer system related to the "warm up" period. According to the instructions, a 15 minute warm up period was required whenever the display unit was turned on. However, it was noticed that when this procedure was followed inconsistencies occurred in the readings. Upon further examination, it was determined that the warmup period could take as long as an hour before consistent readings would result. This problem was complicated by the fact that the unit is not designed to run off an external power source; and therefore the display had to be turned off regularly to allow the internal battery to recharge.

During the tests, it was noticed that the drawdown calculated from the transducers did not agree with the corresponding drawdowns calculated from measurements taken in the same wells utilizing other methods. Therefore, after the tests were completed, the transducers were calibrated by lowering them into a well and comparing the pressure changes on the transducer to the measured depth below the water surface. However, after this correction was applied, large discrepancies still occurred between the transducer data and the other data.

Also during the 211 test, a transducer became lodged in a well and was lost and during the 213 test a second transducer failed.

Because of the problems which occurred with the transducer system, it was decided that the transducer data would be used on a limited basis only.

A continuous recorder system was also in use during the tests. The continuous recorders consisted of Stevens type F recorders coupled to Johnson-Keck Model SD62B water level sensors. The recorders were equipped with a variety of clock and gage gears. These allowed the recording of time intervals from four hours to eight days and water level changes of one chart revolution equaling one foot to one revolution equaling 10 feet. The water level sensors consisted of a battery powered motor drive which raises or lowers a sensing probe. The sensing probe and control wire replaced the float, cable, and counterweight assembly normally used with the Stevens recorder. The SD62B allows the use of Stevens recorders in smaller diameter wells and for measuring greater water level changes than could be measured using the float assembly. The continuous recorders were more reliable than the transducer system, but required periodic monitoring and maintenance.

Additionally, there were two types of manual measurements taken. All calibration measurements, measurements taken in wells with shallow water levels, and measurements taken in wells not equipped with other instrumentation were taken with a chalked steel tape. Other manual measurements were taken with electric water level sounders. These were either lowered into wells and read using the markers on the wire, or steel tapes were attached to the sounders and they were suspended in a well for the duration of the particular pump test.

VI.D. Water Quality Sampling Equipment

During each pump test, three water samples were taken for a complete chemical analysis. One sample was taken at the start of the test, the second was taken in the middle of the pumping period, and the third was taken at the end of the pumping period. The samples were filtered where

required immediately after collection. They were then placed in containers supplied by the analytical laboratory and treated with preservatives also supplied by the analytical laboratory.

Also, these samples were measured in the field for pH, conductivity, alkalinity and temperature. The pH was measured with an Orion Research 601A pH meter, the conductivity was measured with a Chemtrix Type 70 conductivity meter, the temperature was measured with a mercury thermometer, and the alkalinity was measured using the standard sulfuric acid titration.

Additional field information recorded was the barometric pressure, rainfall, and a field log of the pump tests (Pump test log).

VII. SUMMARY OF PUMP TESTS

VII.A. WW4 Test

The first pump test was run on well WW4. This well was screened in the glacial overburden above the ore body. The primary purpose of this test was to determine the hydrologic properties of the glacial materials. Also information on the degree of connection between the glacial materials was sought. Table 1 lists the primary wells monitored for this test and the instrumentation used. Figure 1 shows the location of the primary monitoring wells.

The preliminary test was run on April 24, 1981. At this time the pumping rate was set at 200 gpm. The results of the preliminary test indicated that the well could be pumped at a rate higher than the flowmeter could register (250+ gpm). Therefore it was decided to change to a larger flowmeter (1000 gpm capacity) and reset the pumping rate.

On April 28, 1981 a second short test was run to reset the pumping rate. The rate was reset at 280 gpm which was near the limit of the pump capacity.

The actual pump test was started at 13:00 hours on April 29, 1981. The initial start up rate was 290 gpm. However, this rate could not be maintained and therefore the rate was reduced to 260 gpm. The problem with maintaining the higher rate was apparently due to the presence of excess gas in the water. This gas dropped out of solution as the water passed through the pump and this in turn lowered the efficiency of the pumps. Gas bubbles could be seen in the discharge water and the water had a definite hydrogen sulfide odor. This situation continued throughout the test and at 19:00 on April 30, 1981 the rate was lowered again to 225 gpm. This rate was maintained throughout the remainder of the test.

It was during this test that the problem and inconsistencies with the transducer system first became apparent (Please refer to discussion in section entitled, Equipment).

Although problems were encountered with the pumps and piping system used to discharge the water through the sprinkler system (these included 2 pump failures and a split in the discharge line), emergency repairs were

Table 1. Primary wells monitored for the WW4 test.

Well	Instrumentation
WW4	Manual Transducer
213-1	Transducer/Recorder (NOTE 1)
213-2	Transducer/Manual
213-3 upper	Recorder
213-3 lower	Manual
195 West	Transducer
DMI-1	Recorder (NOTE 1)
216-2	Transducer
213	Transducer
217	Transducer
223	Transducer
224	Transducer

NOTE 1: A recorder was installed on DMI-1. However, since the response at this well was negligible, the recorder was moved to well 213-1.

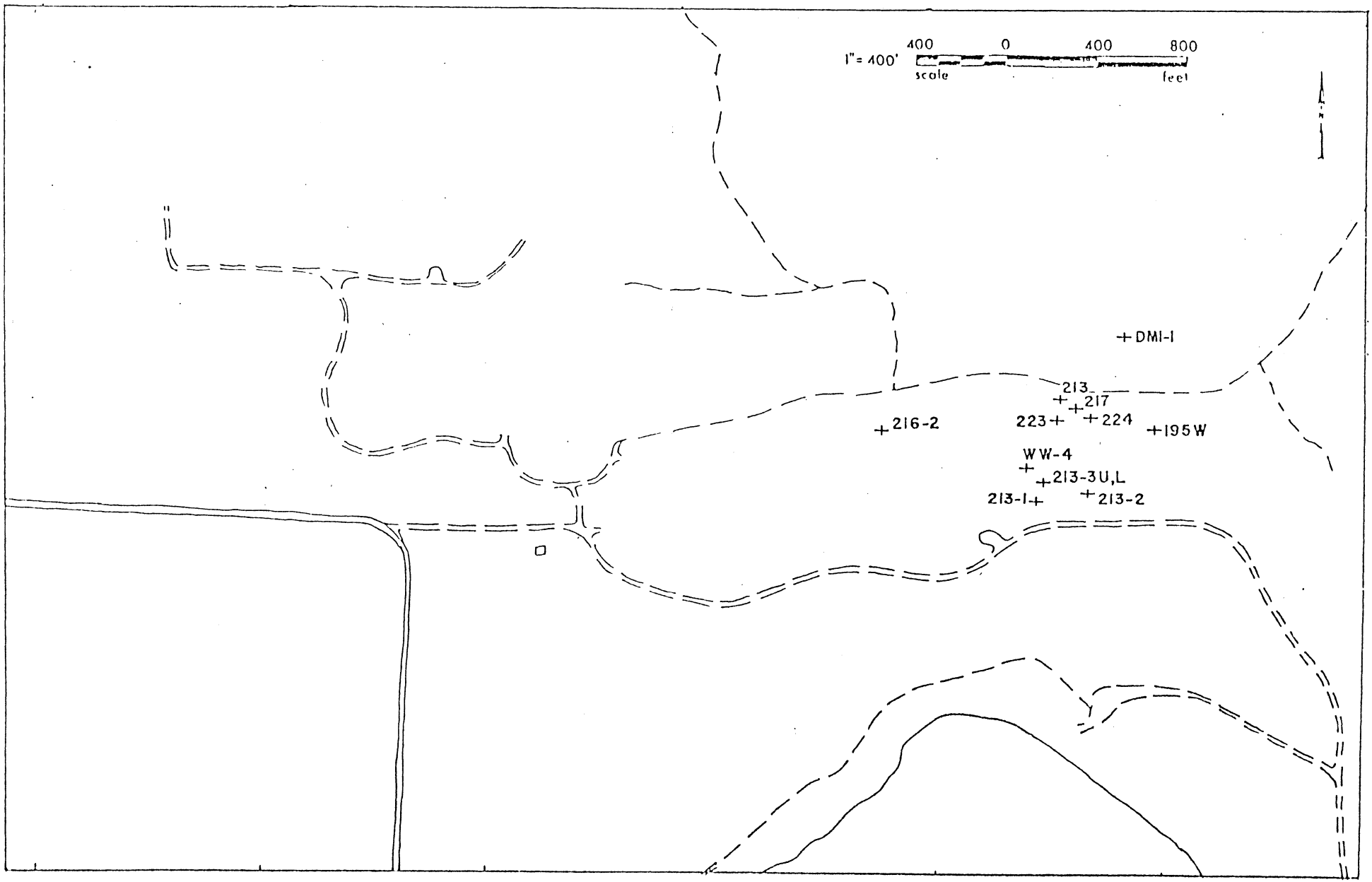


Figure 1. Primary Monitoring Locations for the WW4 Test.

completed with no disruption of pumping from the well. Only once was there an interruption in pumping from the well. At the 9:40 on April 30 the circuit breaker on the generator tripped cutting power to the production well pump for approximately 5 minutes. This interruption caused no serious loss of data.

The pumping portion of the test was terminated at 11:00 hours on May 2, 1981. The total length of pumping time was 70 hours.

VII.B. 211 Test

The second test was run on well 211. this was an incline well opened to the ore body. This was the first test run to determine the hydrologeologic properties of the ore body. Table 2 lists the primary wells monitored for this test and the instrumentation used. Figure 2 shows the locations of the primary monitoring wells.

The preliminary test was run on May 12, 1981. At this time the pumping rate was set at 230 gpm. The preliminary test was run for only three hours and it took almost three days for the water levels to recover to their static levels.

The pump test was initially started at 12:30 on May 18, 1981. However, a split developed in the 6 inch plastic discharge hose and during the replacement of this hose the production well was inadvertently shutdown by a power surge in the generator. The test was, therefore, killed at 12:51 the same day and scheduled to restart at a later date.

The pump test was restarted at 12:00 on May 20, 1981. The pumping rate was 225 gpm. No serious problems were encountered in maintaining this rate throughout the length of the test.

During the test, the production well continually produced a large amount of gas. The discharge water was milky white in color and many small bubbles could be seen coming from the top of the discharge orifice. This gas, unlike the gas encountered during the MW4 test, did not have any distinctive odor. Although it was assumed that this gas was being released from the formation water because of the large pressure drop (drawdown) in the well, the exact nature or origin of the gas could not be determined from the test.

Table 2. Primary wells monitored for the 211 test.

Well	Instrumentation
211	Manual
219	Manual/Transducer
220	Manual/Transducer
230	Manual/Transducer
231	Manual/Transducer
218	Recorder/Transducer/Manual (NOTE 1)
211-1	Recorder/Transducer
211-2U	Manual
211-2L	Manual
211-3U	Manual
211-3L	Recorder/Manual (NOTE 2)
WW-2	Recorder/Transducer
228	Recorder
216-2	Recorder
213-3U	Recorder
210	Recorder (NOTE 1)
TW-1	Recorder
221	Recorder
232	Recorder

NOTE 1: The water level in well 218 dropped too low to use the recorder, therefore, it was moved temporarily to well 210.

NOTE 2: The water level in well dropped too low to use the recorder, therefore, it was moved temporarily to well 232.

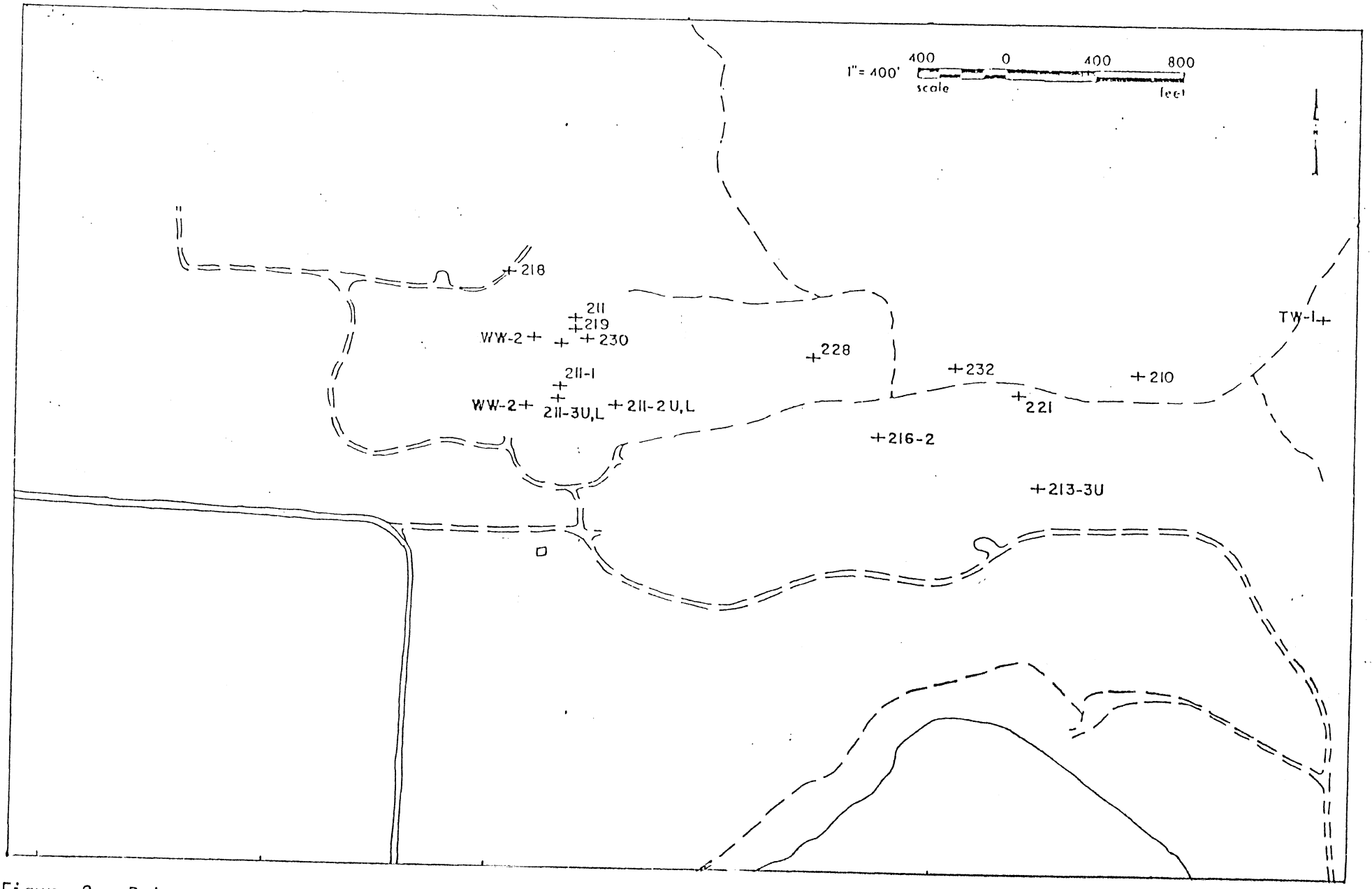


Figure 2. Primary Monitoring Locations for the 211 Test.

Because of earlier experience with the transducer system, it was decided that for this test and future tests that the transducers would be used as a secondary data collection system only, with the primary data collection being by manual methods or continuous recorders. During the test no significant problems occurred with data collection. However, the water level in well 231 dropped below the transducer probe setting rendering it useless for the remainder of the pumping portion of the test. Also, the large drawdowns which occurred caused the recorders on wells 218 and 211-3 (lower) to stop working, and obtaining the manual measurements became increasingly more difficult and time consuming. Therefore, some data, especially from the recorders, was lost.

The pumping system ran well during the test. Two very short interruptions (a few seconds each) occurred on May 21 and May 24 as the generators were switched but these caused no disruptions in the test.

The pumping portion of the test was terminated at 14:00 on May 27, 1981. The length of the pumping period was 170 hours.

VII.C. 213 Test

The third and final test run was on well 213. This well was also open to the ore body but in a zone of significantly higher permeability than in the area of well 211. Table 3 lists the primary wells monitored for this test and the instrumentation used to measure them. Figure 3 shows the location of the primary monitoring wells for this test.

The preliminary test was run on June 8, 1981. At this time the pumping rate was set at 600 gpm. The recovery after the preliminary test also appeared to be retarded although not to the extent of the 211 recovery.

The pump test was started at 12:30 on June 11, 1981. The pumping rate was 560 gpm. The pump was shut off at 14:30 on June 18, 1981. The length of the pumping period was 170 hours. No problems were encountered in maintaining the pumping rate throughout the test.

Table 3. Primary wells monitored for the 213 test.

Well	Instrumentation
213	Manual
217	Manual/Transducer
222	Manual/Transducer
223	Manual/Transducer
224	Manual/Transducer
209	Manual
210	Manual/Transducer
214	Recorder
227	Manual
228	Manual
155	Recorder
195 East	Manual/Transducer
195 West	Recorder
WW4	Manual/Transducer
213-3 upper	Recorder
213-3 lower	Manual
TW-1	Recorder
216-2	Recorder
STSB-1	Recorder
DMI-2 lower	Recorder
DMI-1	Recorder
DMP-1	Manual/Transducer (NOTE 1)
232	Manual

NOTE 1: This transducer malfunctioned during this test.

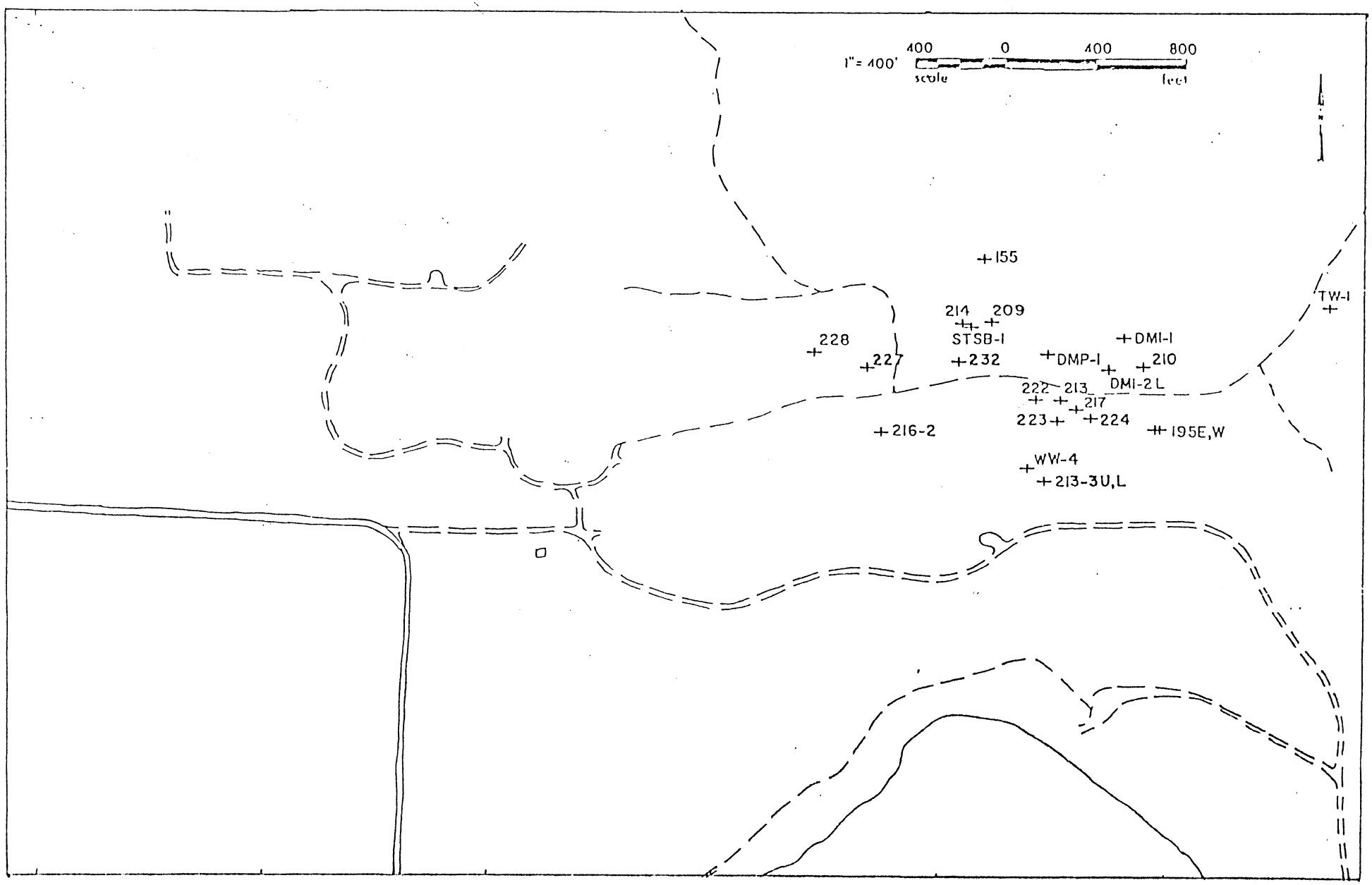


Figure 3. Primary Monitoring Locations for the 213 Test.

Poor weather occurred during this test. The first four days of the test were wet and rainy with very heavy rains occurring on June 14. The result was that even though the recorders were covered, moisture still collected in the electronic circuit causing several failures. Also rainwater running down the observation wells wet the sides of the pipe which caused the sensing wire to stick. When the malfunctions did occur, the wet weather often prevented remedial action from being taken immediately. Therefore, some loss of data did occur.

Also during this test, the transducer probe in well DMP-1 malfunctioned. The nature of the problem could not be determined. However, as manual readings were also being taken in this well, no serious loss of data occurred.

VIII. DATA REDUCTION

VIII.A. Data Processing Prior to Computer Entry

The processing of the data before it was entered into the computer was done to convert the data collected during the pump tests to a basic time/water level unit. Regular data and clock times (in hours, minutes and seconds) were used as these would be the most versatile in keeping track of the data as to which test it pertained to and for generating both time/drawdown data and long term hydrograph data. The water level data was entered as the water level below the measuring point (usually the top of the piezometer casing) for the manual measurements and Stevens recorder data, or the height of water above the transducer probe for the pressure transducer data.

The data processing completed on the manual measurements consisted only of sorting the data and calculating the water levels from the "holds" and "cuts" on the data sheets.

For the pressure transducers, the data processing consisted of determining the actual pressure heads (psi) from the percent of full scale readings obtained from the transducer display and then converting this to a hydrostatic pressure head (ft. of water).

Since the Stevens recorder data consisted of a pen trace on a paper chart, more had to be done to get this data ready for computer entry.

The first step in processing the Stevens charts was to determine the specific water level points desired. This was done by dividing the chart trace into water level change intervals of from 0.1 feet to 1 foot. The larger spacings were used on the charts which had the larger total change in water level. In addition, on those charts which showed cyclic type water level changes, the "peaks" and "valleys" of these changes were also selected.

The second step involved the determination of the time-length equivalent on the time axis of the chart. This was completed by calculating the number of minutes between the time the chart was started, and the time that the chart was stopped, and dividing this by the distance, as measured with an engineer scale, between these two points.

The third step was to determine the time, in minutes, from the start of the chart to each selected water level point. This value was then added to the starting time from the chart and converted to give the actual clock time and day.

VIII.B. Processing by the Computer

The computer used was the DEC 20 located in CDM's headquarters in Boston, Massachusetts.

VIII.B.1. Data Input

The data input included elements for describing the particular well and water level measurement method, elements needed to apply the various correction factors needed, and the actual time/water level data for each well. The various elements input into the computer are as follows:

- Name: Well designation.
- Location: Survey coordinates as supplied by Exxon.
- Type: Glacial, Hanging wall, Incline, etc.
- Measurement Type: Manual, Stevens recorder, transducer.
- M.P. Elevation (feet): The elevation above mean sea level of the point on the well casing from which all depths to water are measured.
- Date (MM/DD/YY): The month, day, and year when the water level measurement was taken.
- Time (HH:MM.MM): The hour (24 hour clock) and decimal minutes when the water level measurement was taken.
- Uncorrected reading (feet): The depth to water (manual or Stevens) or height of water above the pressure transducer.
- The downhole depths and true vertical depths from the bore hole surveys of the inclined holes (not shown on printouts).
- The serial number of the transducer placed in the observation well (not shown on printouts).

VIII.B.2. Processing

After the raw data was input, it was processed by the computer in preparation for running the data printouts and plots.

The major correction applied to the data was the determination of the true vertical depths to water from the depths to water as measured down the inclined wells. This was completed by interpolating between the survey points obtained from the borehole surveys.

After the incline corrections were made, the depths to water (manual and recorder data only) were subtracted from the elevations of the measuring points to obtain the elevations of the water level.

For the time/drawdown and time/recovery plots used in the pump test analysis, the computer converted the clock time/water level data to time (in minutes)/drawdown or time/recovery data. This data was then used to generate the semi log and the log-log plots needed for the analysis.

In addition options were placed in the processing programs for barometric, tidal, and the transducer error corrections. However during the data review, it was determined that the background data prior to the tests was not sufficient to determine the barometric and tidal efficiencies. Also it was found that even after applying the transducer corrections obtained from the transducer calibrations, large discrepancies in the transducer data made its use questionable. Therefore these three corrections were not made to the raw data.

VIII.B.3. Output from the Computer

The data output from the computer was in two basic forms. The first form is a computer printout which tabulates the date, time, raw water level, incline correction, and corrected elevation for the manual observation and Steven's recorder data obtained by well. This data is compiled in Appendix A.

Appendix B contains the raw data obtained from the transducers. Because of the problems which were encountered with the transducers, this data was not used in the analysis. Therefore, the data is included for reference only.

The second form of the data output was the various time/drawdown plots used in the pumping test analysis. Examples of these plots are enclosed in Appendix C.

IX. DATA INTERPRETATION AND ANALYSIS AND MODEL DEVELOPMENT AND CALIBRATION

The initial analyses of the data obtained from the three pump tests were completed utilizing standard "type curve" methods (Lohman, 1972 and Reed, 1980). This analysis was completed to obtain the initial values for the aquifer transmissivity, storage coefficient and boundary correlation and to obtain a qualitative feeling for how the aquifer system as a whole responds to pumping.

IX.A. Analysis of the WW4 Test

The WW4 test was the first pumping test performed. It was during this test that many of the equipmemnt problems were discovered. The most significant of these was the unreliability of the pressure transducer system. A direct result of the failure of the transducer system to give dependable results was the loss of data from several wells during the pumping portion of the test.

The results of the analysis are shown in Table 4. The time-drawdown analyses display a relatively large range of transmissivity and storage coefficient values (42428-67655 gpd/ft and 3.1×10^{-2} - 1.6×10^{-1}, respectively). The mean transmissivity is 50244 gpd/ft and the mean storage coefficient is 8.0×10^{-2}. These are significantly different than the respective values obtained from the distance-drawdown ($T = 21483$ gpd/ft, $S = 2.0 \times 10^{-1}$). The exact reason for this difference could not be determined from the available data. However, reasons for these differences include: variations in the permeability of the tills, partial penetration effects from variations in the screen elevations, delayed yield effects, and influx of water (leakage) from the bedrock.

The transducer problem also limited the data collected on the bedrock observation wells. However, based on the manual recovery readings, the water level in the bedrock beneath WW4 was lowered approximately 0.8 feet. This decline probably represents both a removal of water from the bedrock and an unloading effect (pressure adjustment) caused by removing water from the overburden.

Table 4. Results of analysis for the WW4 test.

Well	Transmissivity (gpd/ft)	Storage Coefficient	Screen Elevation
213-1 Pumping	-	-	1557-1532
213-1 Recovery	53719	9.8×10^{-2}	1557-1532
213-2 Pumping	-	-	1554-1529
213-2 Recovery	67655	1.6×10^{-1}	1554-1529
213-3U Pumping	42975	3.7×10^{-2}	1566-1546
213-3U Recovery	46882	6.2×10^{-2}	1566-1546
213-3L Pumping	42975	9.2×10^{-2}	1522-1512
213-3L Recovery	62890	3.1×10^{-2}	1522-1512
WW4 Pumping	42428	-	1578-1563
WW4 Recovery	42428	-	
Distance-Drawdown	21483	2.0×10^{-1}	

The drawdown distribution for WW4 at the end of pumping is shown in Figure 4. As indicated, the radius of influence for this test was not very far reaching (approximately 600 feet).

IX.B. Analysis of the 211 Test

The analysis of the two ore body pump tests is complicated by the nonuniform nature of the ore body, the variability of the "resistive" layer above the ore body, and the angle at which the production and observation wells penetrate the ore body. The net result of these factors is that the calculated hydrogeologic parameters are averages for the ore body as a whole and do not necessarily reflect the properties of any particular zone in the ore body. Representative transmissivity and storage coefficient values are listed in Table 5. The transmissivity values listed range from 322 gpd/ft to 2579/gpd/ft excluding wells 213 and WW2. The significantly higher transmissivities in these two wells indicate that the drawdown effects are being subdued in the directions of these wells.

In the case of well 213, the subdued effects are caused by a combination of the increased permeability in the vicinity of well 213 and the downward movement of water from the glacial overburden.

In the case of well WW2, the subdued effects are caused by the substantially higher permeability of the overburden and the separation of the overburden from the ore body by the "resistive" layer.

The drawdown distribution around well 211 at the end of the pumping period is shown in Figures 5 and 6. As indicated, the pumping effects were transmitted throughout the orebody and also into the glacial overburden. Two areas of special significance stand out in the these figures.

The first area is in the vicinity of well 211-3 (Figure 6). Well 211-3L, which is screened in the bedrock, had a final drawdown of 144 ft whereas the maximum drawdown in any of the overburden wells above it was 15 ft (211-1). This change in drawdown over such a short distance indicates that the flow is being impeded in this area by the resistive layer.

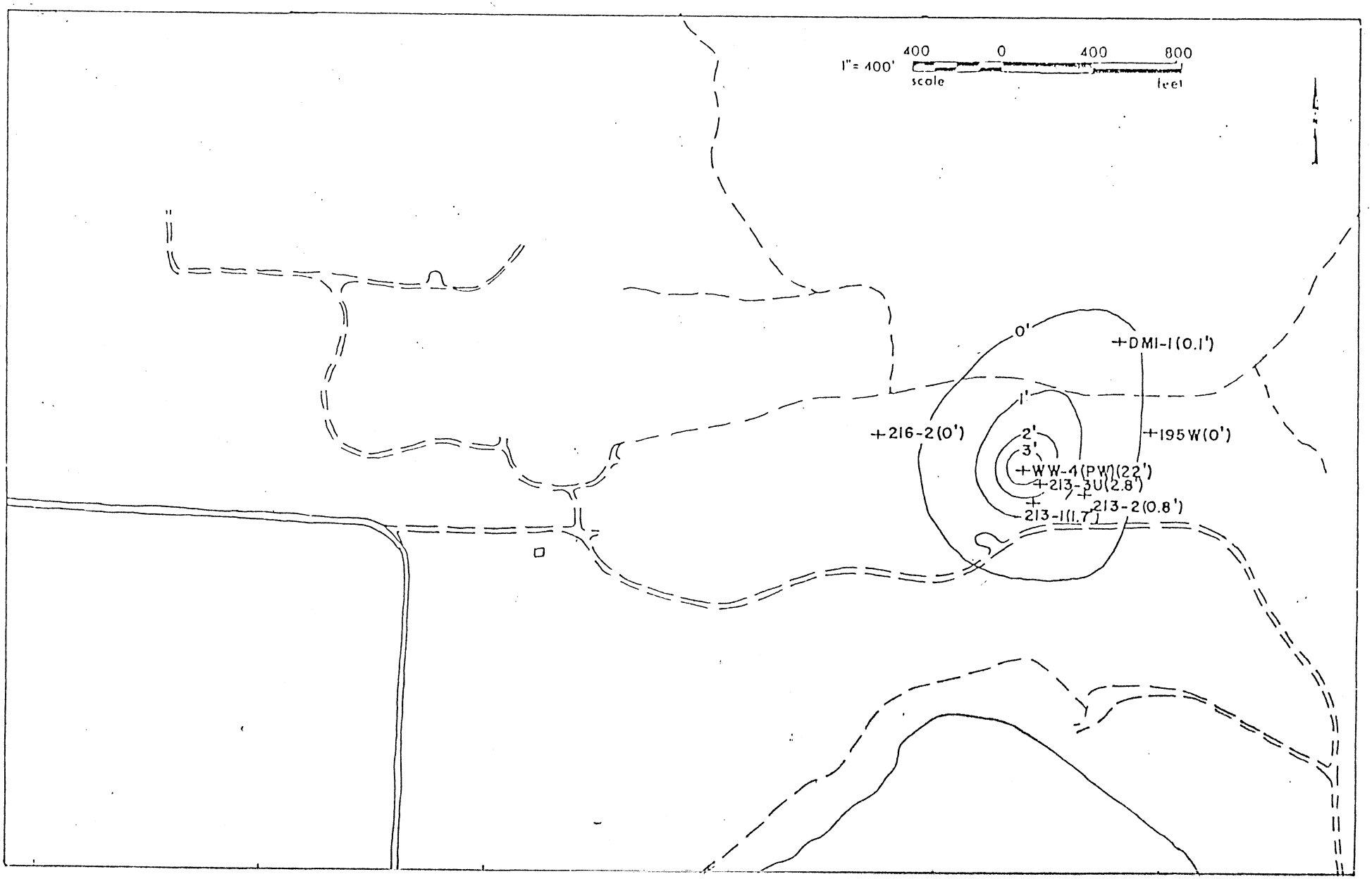


Figure 4. Cone of Depression Caused by Pumping Well WW4 (plan view).

Table 5. Results of analysis for the 211 test (representative wells only).

Well	Transmissivity (gpd/ft)	Storage Coefficient
219 Pumping	516	1.3×10^{-4}
219 Recovery	645	1.9×10^{-4}
220 Pumping	758	9.0×10^{-5}
220 Recovery	1322	1.5×10^{-4}
230 Pumping	322	2.2×10^{-4}
230 Recovery	457	4.6×10^{-4}
213 Pumping	184179	1.7×10^{-3}
213 Recovery	-	-
218 Pumping	781	2.4×10^{-4}
218 Recovery	1031	3.9×10^{-4}
211-3L Pumping	860	1.8×10^{-3}
211-3L Recovery	115	1.0×10^{-3}
WW2 Pumping	8595	3.2×10^{-9}
WW2 Recovery	18918	7.7×10^{-3}
228 Pumping	2579	6.0×10^{-4}
228 Recovery	3223	1.5×10^{-3}
211 Pumping	742	-
211 Recovery	990	-
Distance-Drawdown	452	8.0×10^{-4}

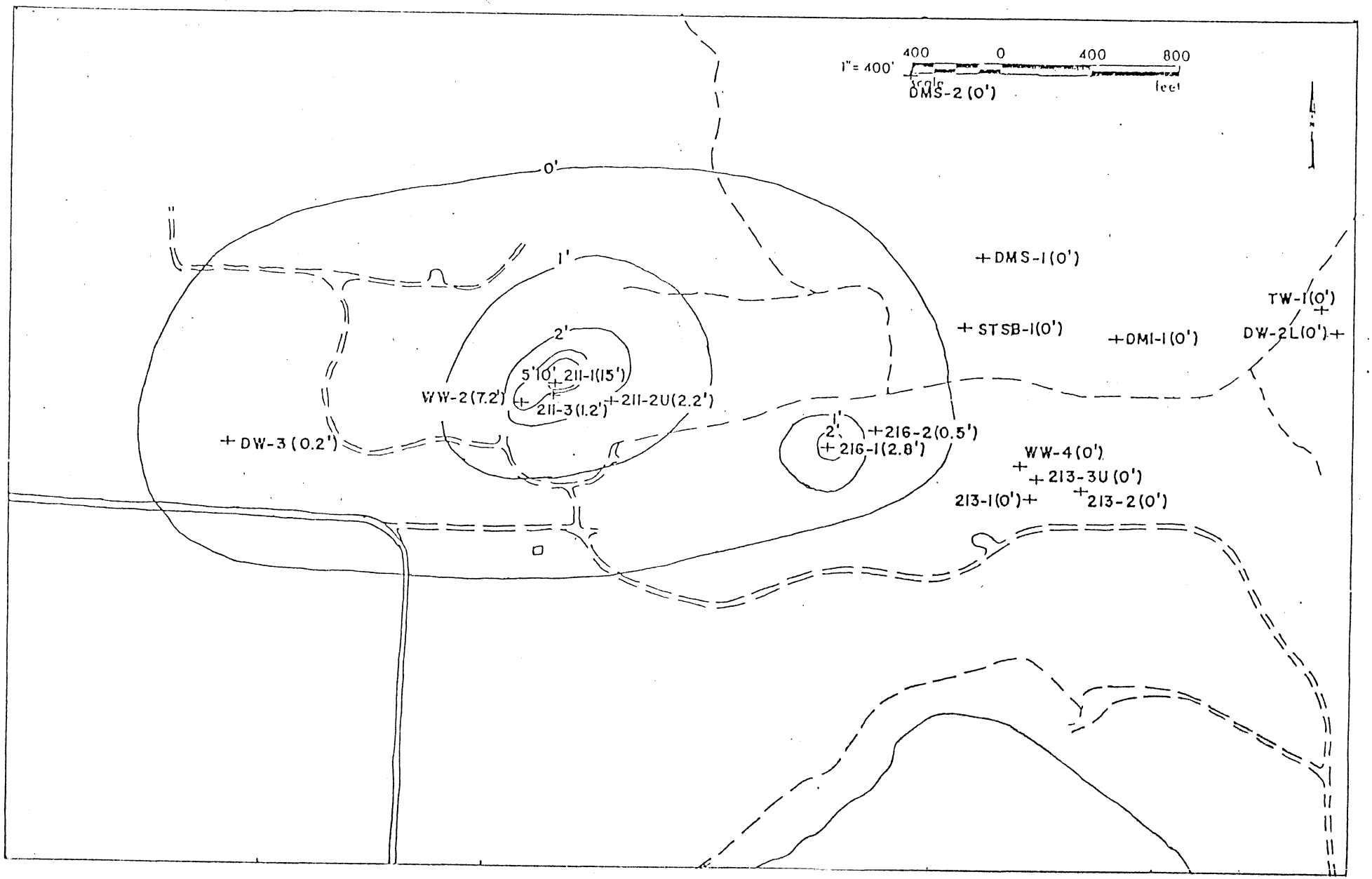


Figure 5. Cone of Depression Caused by Pumping Well 211 (plan view).

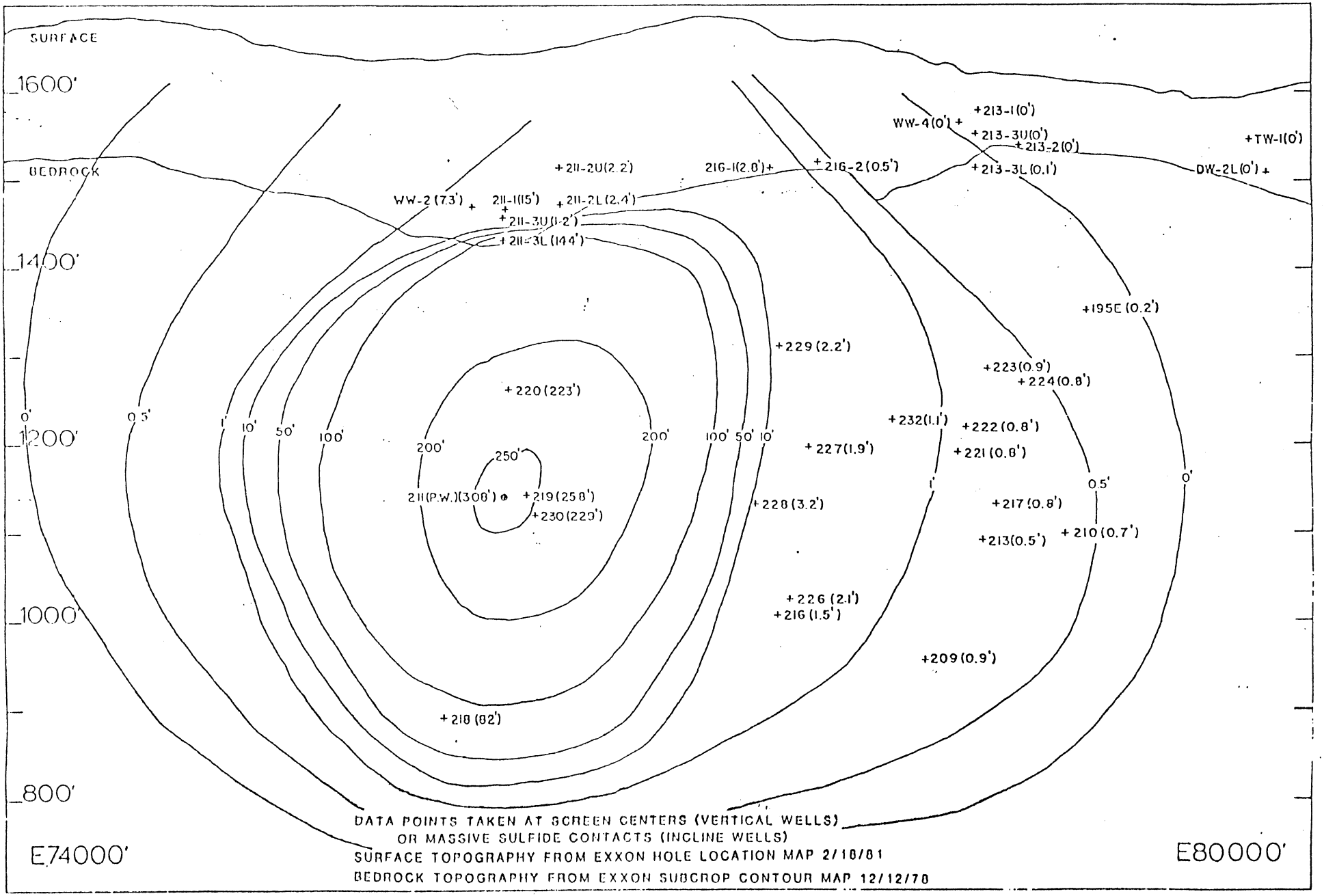


Figure 6. Cone of depression caused by pumping well 211 (cross section).

The second area of significance is in the vicinity of Well 216-1. In this area the drawdown in the overburden is higher than the drawdown in the deeper bedrock wells below. The indication here is that the resistive layer is not as impermeable in this area and therefore the effects of pumping can be more easily transmitted into the overburden.

IX.C. Analysis of the 213

The results of the 213 test, in general, look very similar to those of the 211 test. There is evidence of a recharge boundary (the glacial overburden) and the wells which are on the opposite side of the ore body or near the overburden-bedrock contact show a subdued response.

The most obvious factor shown by the 213 test is the higher permeability of the ore body in this area. This was shown by both the higher specific capacity of Well 213 (2.53 gpm/ft vs. 0.73 gpm/gt for Well 211) and the calculated transmissivity values which ran from 1945 to 3605 gpd/ft (Table 6). These values are approximately six to eight times higher than the transmissivity values in the vicinity of Well 211.

The variable nature of the resistive layer was also shown by this test. At the end of pumping, the drawdown in Wells 216-1 and 216-2 were 49 feet and 14 feet, respectively, and the drawdown in Wells 213-1, 213-2, 213-3U and WW4 were 3.1 to 3.9 feet (Figures 7 & 8). If the resistive layer was relatively uniform, the greatest drawdown would have occurred in the wells directly above 213 (i.e. 213-1, 213-2) not at a greater distance away (i.e., 216-1). Therefore it appears that a "hole" in the resistive layer occurs in the vicinity of 216-1.

The pumping of 213 also caused significant responses in the two shaft exploration holes (155 and 214) which are drilled into the hanging wall. The first implication of this response is that there is a good hydraulic connection between the hanging wall and the ore body. However, there are many factors which make the exact determination of why these drawdowns occurred difficult. These factors include: the low permeabilities and storage coefficients of the hanging wall rocks, the long lengths of open hole in these two boreholes, and the fractures which intersect these boreholes.

Table 6. Results of analysis for the 213 test.

Well	Transmissivity (gpd/ft)	Storage Coefficient
232 Pumping	2985	5.9×10^{-5}
232 Recovery	2377	6.6×10^{-5}
228 Pumping	1945	4.3×10^{-5}
228 Recovery	2139	4.2×10^{-5}
224 Pumping	2731	1.6×10^{-4}
224 Recovery	2468	1.5×10^{-4}
223 Pumping	2917	2.4×10^{-4}
223 Recovery	2468	2.5×10^{-4}
222 Pumping	2567	4.6×10^{-4}
222 Recovery	2468	4.3×10^{-4}
220 Pumping	20055	6.8×10^{-4}
220 Recovery	22518	6.9×10^{-4}
817 Pumping	2674	7.7×10^{-4}
217 Recovery	2674	6.5×10^{-4}
216-2 Pumping	16044	6.0×10^{-4}
216-2 Recovery	9168	5.5×10^{-4}
216 Pumping	3605	1.1×10^{-4}
216 Recovery	6415	1.5×10^{-4}
213-3L Pumping	27903	3.0×10^{-3}
213-3L Recovery	14585	5.4×10^{-3}
210 Pumping	2213	9.3×10^{-6}
210 Recovery	2674	2.1×10^{-5}

Table 6
(continued)

Well	Transmissivity (gpd/ft)	Storage Coefficient
195E Pumping	4754	3.7×10^{-1}
195E Recovery	3667	5.0×10^{-6}
213 Pumping	2688	-
213 Recovery	2957	-
Distance-Drawdown	1834	2×10^{-3}

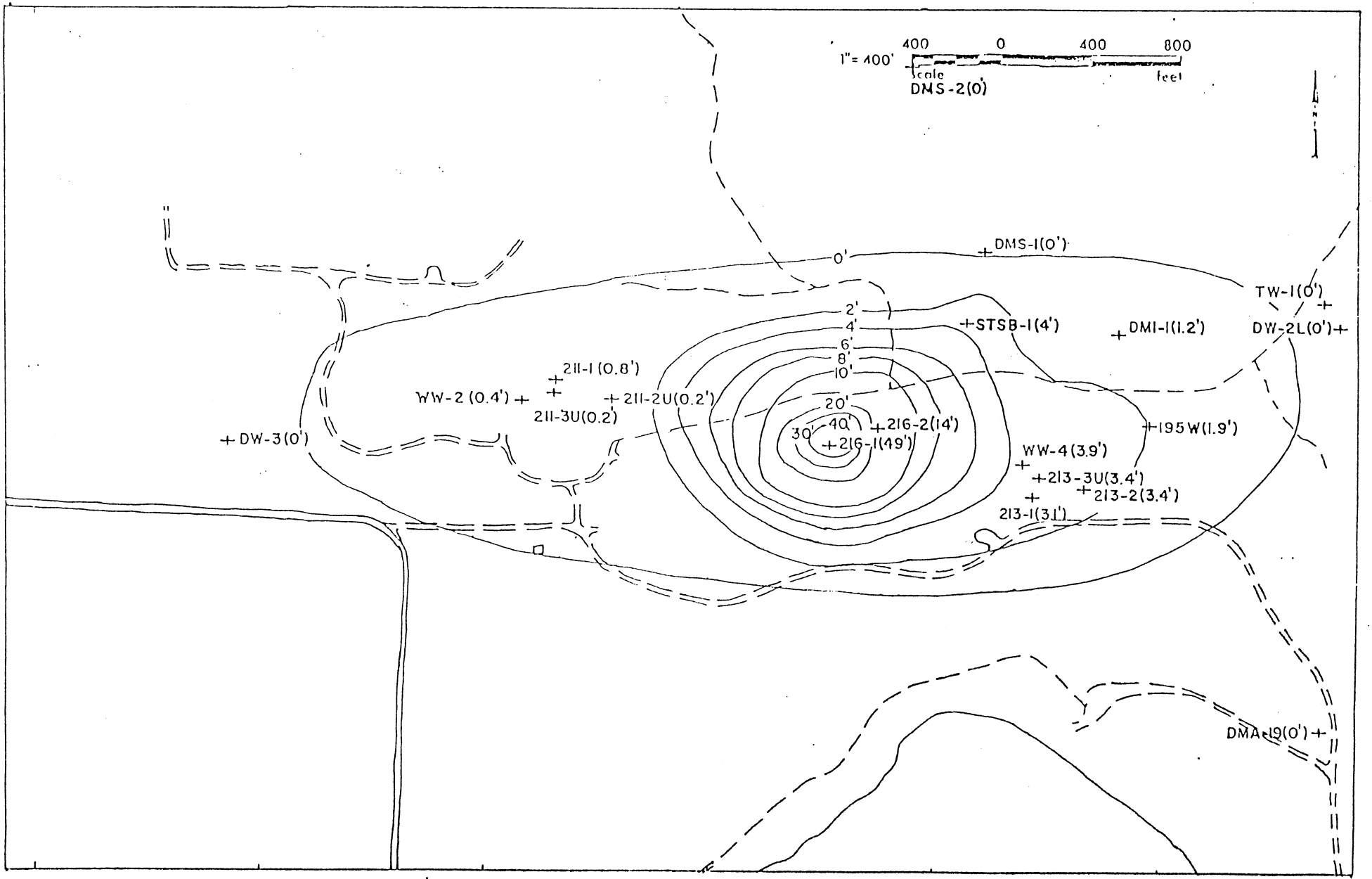


Figure 7. Cone of Depression Caused by Pumping Well 213 (plan view).

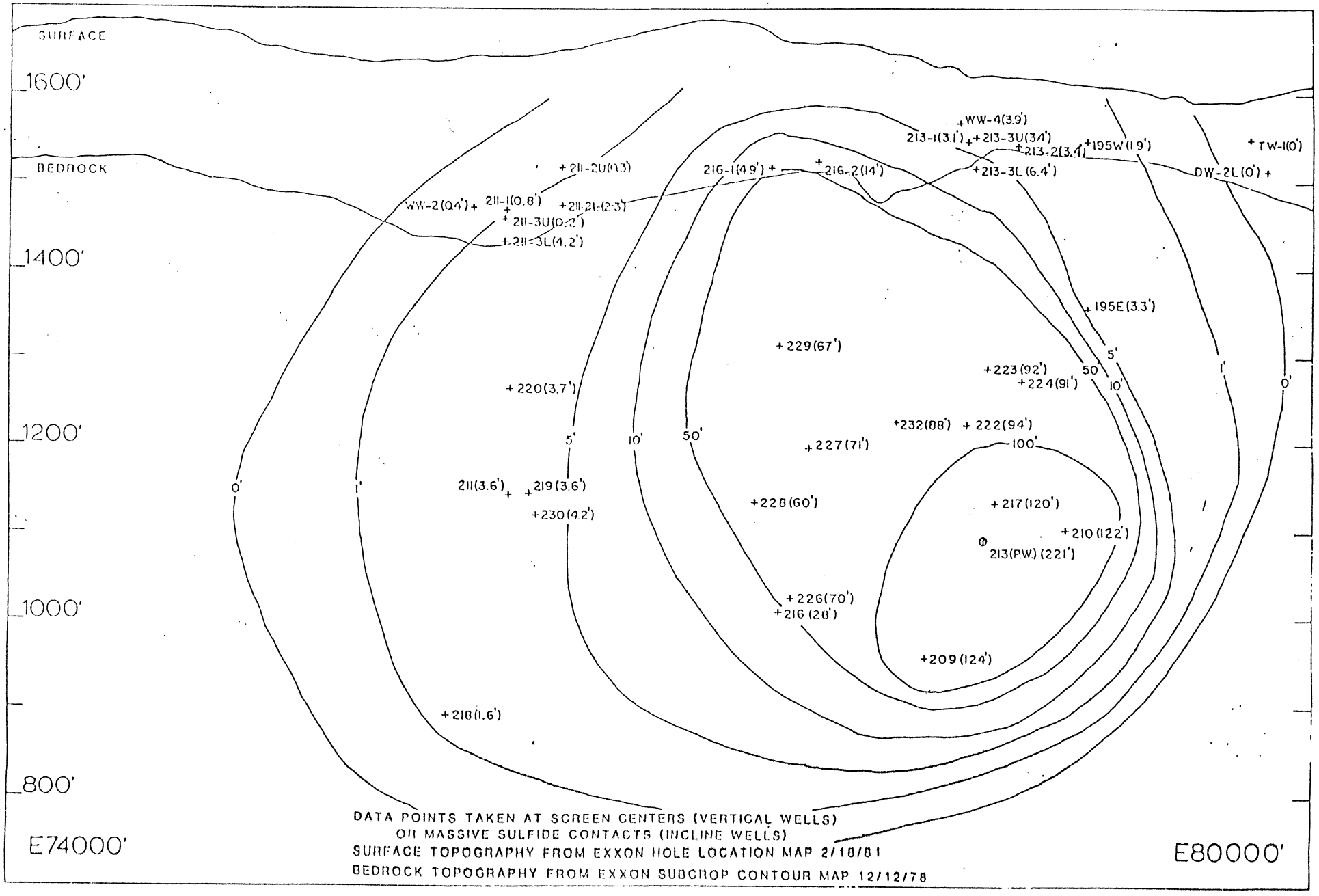


Figure 8. Cone of depression caused by pumping well 213 (cross section).

The pumping effects in the overburden were very widespread (Figure 7). As mentioned previously, the greatest effects were in the vicinity of 216-1. The effects in the vicinity of 211-1 were 0.2 - 0.8 feet of drawdown. The cone of depression caused by pumping 213 roughly parallels the ore body. This is to be expected since the ore body is much more permeable than either the foot wall or the hanging wall and, therefore, is going to act as a conduit to transmit the pumping stress to the glacial overburden.

X. RESULTS OF ANALYSIS AND PREDICTIVE MODELLING

Please refer to the discussion in the Executive Summary and Appendix G for a summary of quantified initial findings which will not be repeated here. These findings indicate that:

1. There is a hydraulic connection between the overlying glacial materials and permeable zones in the ore body,
2. a resistive layer does impede this connection,
3. maximum inflow to the mine with no flow control (retarding recharge to the mined areas) will be on the order of approximately 5.3 million gallons per day (mgd) at about the time frame of the 36 month period of the currently proposed mine plan,
4. steady state inflow to the mine would occur subsequent to this time frame and would be on the order of 4.8 mgd, and
5. dewatering of this volume would have some impacts on the glacial aquifer in the area of Swamp Creek and effects (i.e., 1 foot of drawdown) in an approximate one and a half mile radius from the center of the Crandon ore body.

XI. RECOMMENDATIONS

Discussions at the Ground-water Concepts Meeting (Appendix E, item 4) included recommendations for additional efforts related to mine hydrology analysis. CDM had then and still has two major recommendations:

1. that additional calibration of the interpretive model assessing mine inflow and related glacial aquifer impacts be done to maximize the fit between mine plan modelling results and the hydrologic behavior recorded in the pump test results, and
2. that this additional calibration and subsequent model production runs have the benefit of prior input of additions to the data base particularly with respect to better definition of:
   - glacial aquifer boundary conditions,
   - the connective layer between the glacial materials and the ore body subcrop,
   - drainage characteristics of the variously weathered and leached zones in the ore body, and
   - the nature of the hydraulic connection between the glacial aquifer in the vicinity of the ore body and surface water particularly at Swamp Creek and Little Sand Lake.

It is our understanding that these recommendations have already been implemented by Exxon Minerals Company.

XII. REFERENCES

Camp Dresser & McKee, Inc., March 1981, Review of Existing Data Base, Critique of Proposed Pump Testing, Crandon Project.

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Lohman, S.W., 1972, Ground-Water Hydraulics, USGS Professional Paper 708.

Reed, J.E., 1980, Type Curves for Selected Problems of Flow to Wells in Confined Aquifers, Techniques of Water Resources Investigations of the USGS, Book 3, Chapter B3.

Appendix A

APPENDIX A

Time Versus Corrected Water Level Elevations for Manual Measurements and Stevens Recorder Data

Data presented in order by well number and alphabetical suborder.

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:10 PAGE 1

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:47.00	75.50	0.00	1588.00
5/16/81	19:36.00	75.87	0.00	1587.63
5/17/81	10:43.00	75.18	0.00	1588.32
5/18/81	10:44.00	75.14	0.00	1588.36
5/19/81	11:10.00	75.04	0.00	1588.46
5/20/81	10:31.00	74.87	0.00	1588.63
5/21/81	14:47.00	74.94	0.00	1588.56
5/22/81	15: 9.00	74.82	0.00	1588.68
5/23/81	13: 8.00	75.97	0.00	1587.53
5/24/81	14:24.00	74.47	0.00	1589.03
5/25/81	14:10.00	74.36	0.00	1589.14
5/26/81	17: 0.00	74.58	0.00	1588.92
5/28/81	13:32.00	74.42	0.00	1589.08
5/30/81	1:47.00	74.48	0.00	1589.02
5/30/81	21: 4.00	74.94	0.00	1588.66
5/31/81	10:16.00	75.39	0.00	1589.11
6/ 1/81	13:20.00	75.28	0.00	1588.22
6/ 2/81	16:45.00	75.30	0.00	1588.20
6/ 3/81	9:44.00	74.80	0.00	1588.70
6/ 4/81	10: 8.00	74.94	0.00	1588.56
6/ 5/81	11:56.00	74.96	0.00	1588.54
6/ 6/81	9:16.00	74.65	0.00	1588.85
6/ 7/81	6:24.00	74.68	0.00	1588.82
6/ 9/81	24: 0.00	74.82	0.00	1588.68

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:16 PAGE

NAME.....195 EAST
LOCATION.....16342.0,78974.1
TYPE.....VERTICAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:16.00	27.24	0.00	1588.21
5/17/81	11:11.00	27.28	0.00	1588.17
5/18/81	10:56.00	27.22	0.00	1588.23
5/19/81	11:33.00	27.17	0.00	1588.28
5/20/81	10:56.00	27.12	0.00	1588.33
5/21/81	15:37.00	27.22	0.00	1588.23
5/22/81	15:36.00	27.27	0.00	1588.18
5/23/81	14:12.00	27.30	0.00	1588.15
5/24/81	14:57.00	27.34	0.00	1588.11
5/25/81	14:38.00	27.32	0.00	1588.13
5/26/81	17:37.00	27.32	0.00	1588.13
5/28/81	13:55.00	27.15	0.00	1588.30
5/29/81	15:43.00	26.94	0.00	1588.51
5/31/81	10:47.00	27.03	0.00	1588.42
6/ 1/81	15:26.00	27.04	0.00	1588.41
6/ 2/81	19:20.00	27.04	0.00	1588.41
6/ 3/81	10: 9.00	26.03	0.00	1589.42
6/ 4/81	10:35.00	26.81	0.00	1588.64
6/ 5/81	12:40.00	26.86	0.00	1588.59
6/ 6/81	9:41.00	26.82	0.00	1588.63
6/ 6/81	16:11.00	26.86	0.00	1588.59
6/ 6/81	20: 6.00	26.99	0.00	1588.46
6/ 7/81	0:56.00	26.91	0.00	1588.54
6/ 7/81	4:12.00	26.97	0.00	1588.48
6/ 7/81	8: 7.00	26.83	0.00	1588.62
6/ 7/81	15:11.00	27.18	0.00	1588.27
6/ 7/81	20:40.00	26.98	0.00	1588.47
6/ 9/81	24: 0.00	27.35	0.00	1588.10
6/11/81	11:44.00	26.98	0.00	1588.47
6/11/81	13: 3.82	30.07	0.00	1585.38
6/11/81	14:50.00	39.81	0.00	1575.64
6/11/81	16:38.00	45.96	0.00	1569.49
6/11/81	20:45.00	49.60	0.00	1565.85
6/11/81	23:34.00	55.58	0.00	1559.87
6/12/81	7:10.00	58.06	0.00	1557.39
6/12/81	9:30.00	58.43	0.00	1557.02
6/12/81	15: 3.00	58.93	0.00	1556.52
6/12/81	20:12.00	59.29	0.00	1556.16
6/13/81	1: 5.00	59.52	0.00	1555.93
6/13/81	5:40.00	59.73	0.00	1555.72

NAME.....195 EAST
LOCATION.....16342.0,78974.1
TYPE.....VERTICAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/13/81	9:43.00	59.82	0.00	1555.63
6/13/81	15:35.00	59.73	0.00	1555.72
6/13/81	19:52.00	60.80	0.00	1554.65
6/14/81	6:10.00	59.85	0.00	1555.60
6/14/81	13:35.00	59.64	0.00	1555.81
6/14/81	19:30.00	59.77	0.00	1555.68
6/15/81	1: 0.00	59.84	0.00	1555.61
6/15/81	6:50.00	60.03	0.00	1555.42
6/15/81	15:57.00	60.02	0.00	1555.43
6/15/81	19:44.00	60.09	0.00	1555.36
6/16/81	0:15.00	60.13	0.00	1555.32
6/16/81	6:10.00	60.12	0.00	1555.33
6/16/81	13:35.00	60.24	0.00	1555.21
6/16/81	18:38.00	60.18	0.00	1555.27
6/17/81	0:30.00	60.31	0.00	1555.14
6/17/81	5: 5.00	60.29	0.00	1555.16
6/17/81	13: 9.00	60.36	0.00	1555.09
6/17/81	18:55.00	60.20	0.00	1555.25
6/18/81	0: 5.00	60.32	0.00	1555.13
6/18/81	5:20.00	60.30	0.00	1555.15
6/18/81	11:51.00	60.48	0.00	1554.97
6/18/81	15: 4.00	60.27	0.00	1555.18
6/18/81	16: 5.75	53.70	0.00	1561.75
6/18/81	17: 1.00	49.26	0.00	1566.19
6/18/81	17:49.00	45.95	0.00	1569.50
6/18/81	19:49.00	39.60	0.00	1575.85
6/18/81	22:15.00	34.99	0.00	1580.46
6/19/81	0:25.00	32.63	0.00	1582.82
6/19/81	1:45.00	30.42	0.00	1585.03
6/19/81	3:50.00	31.22	0.00	1584.23
6/19/81	6: 0.00	30.58	0.00	1584.87
6/19/81	7:52.00	30.33	0.00	1585.12
6/19/81	11:45.00	29.97	0.00	1585.48
6/19/81	16:56.00	29.50	0.00	1585.95
6/19/81	23:54.00	29.29	0.00	1586.16
6/20/81	6: 5.00	29.09	0.00	1586.36
6/20/81	14: 3.00	28.98	0.00	1586.47
6/20/81	17:45.00	28.85	0.00	1586.60
6/21/81	9:16.00	28.63	0.00	1586.77
6/21/81	17:24.00	28.56	0.00	1586.89

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:16 PAGE

NAME.....195 EAST
LOCATION.....16342.0,78974.1
TYPE.....VERTICAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/22/81	10: 0.00	28.45	0.00	1587.00
6/22/81	17:35.00	28.44	0.00	1587.01
6/23/81	10:28.00	28.37	0.00	1587.08
6/23/81	17:34.00	28.23	0.00	1587.22
6/24/81	15:36.00	28.11	0.00	1587.34

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:29 PAGE 1

NAME.....195 WEST
LOCATION.....16342.0,78954.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1615.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12: 6.00	28.55	0.00	1586.80
5/ 1/81	19:20.00	28.58	0.00	1586.77
5/ 2/81	3:35.00	28.64	0.00	1586.71
5/ 2/81	9:15.00	28.65	0.00	1586.70
5/ 2/81	12: 0.00	28.65	0.00	1586.70
5/ 2/81	15:15.00	28.65	0.00	1586.70
5/ 2/81	18:15.00	28.67	0.00	1586.68
5/ 2/81	22:45.00	28.70	0.00	1586.65
5/ 3/81	4:20.00	28.69	0.00	1586.66
5/ 3/81	9:20.00	28.70	0.00	1586.65
5/ 3/81	17:30.00	28.70	0.00	1586.65
5/ 4/81	12: 0.00	28.68	0.00	1586.67
5/ 5/81	6:28.00	28.64	0.00	1586.71
5/ 6/81	6: 0.00	28.56	0.00	1586.79
5/ 7/81	5:50.00	28.47	0.00	1586.88
5/15/81	19:15.00	28.05	0.00	1587.30
5/17/81	11: 9.00	27.98	0.00	1587.37
5/18/81	10:56.00	27.92	0.00	1587.43
5/19/81	11:32.00	27.90	0.00	1587.45
5/20/81	10:55.00	27.87	0.00	1587.48
5/21/81	15:34.00	27.83	0.00	1587.52
5/22/81	15:35.00	27.96	0.00	1587.39
5/23/81	14:12.00	27.76	0.00	1587.59
5/24/81	14:56.00	27.73	0.00	1587.62
5/25/81	14:35.00	27.75	0.00	1587.60
5/26/81	17:36.00	27.69	0.00	1587.66
5/28/81	13:54.00	27.66	0.00	1587.69
5/29/81	15:41.00	27.62	0.00	1587.73
5/30/81	10:14.00	27.65	0.00	1587.70
5/31/81	10:46.00	27.64	0.00	1587.71
6/ 1/81	15:26.00	27.66	0.00	1587.69
6/ 2/81	18:12.00	27.63	0.00	1587.72
6/ 3/81	10: 8.00	27.59	0.00	1587.76
6/ 4/81	10:35.00	27.57	0.00	1587.78
6/ 5/81	12:40.00	27.55	0.00	1587.80
6/ 6/81	9:40.00	27.53	0.00	1587.82
6/ 6/81	16:11.00	27.17	0.00	1588.18
6/ 6/81	20: 8.00	27.19	0.00	1588.16
6/ 7/81	0:58.00	27.19	0.00	1588.16
6/ 7/81	4:15.00	27.20	0.00	1588.15

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:29 PAGE

NAME.....195 WEST
LOCATION.....16342.0,78954.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1615.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	8: 8.00	27.53	0.00	1587.82
6/ 7/81	15:12.00	27.53	0.00	1587.82
6/ 7/81	20:43.00	27.54	0.00	1587.81

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:38 PAGE 1

NAME.....196
LOCATION.....16743.9 74372.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1685.11

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	17:24.00	109.68	0.00	1575.43
5/16/81	17:29.00	109.95	0.00	1575.16
5/17/81	9: 1.00	110.18	0.00	1574.93
5/18/81	9:23.00	110.13	0.00	1574.98
5/19/81	8:58.00	109.94	0.00	1575.17
5/20/81	9:31.00	109.87	0.00	1575.24
5/21/81	13:25.00	109.86	0.00	1575.25
5/22/81	14: 7.00	109.82	0.00	1575.29
5/23/81	12: 7.00	109.87	0.00	1575.24
5/24/81	13:27.00	109.81	0.00	1575.30
5/25/81	12:59.00	109.93	0.00	1575.18
5/26/81	14:24.00	110.17	0.00	1574.94
5/28/81	13: 0.00	110.12	0.00	1574.99
5/29/81	9: 5.00	109.85	0.00	1575.26
5/30/81	8:55.00	110.19	0.00	1574.92
5/31/81	6:30.00	110.25	0.00	1574.86
5/31/81	6:35.00	110.25	0.00	1574.86
6/ 1/81	7:27.00	110.07	0.00	1575.04
6/ 2/81	6:48.00	109.98	0.00	1575.13
6/ 4/81	6:30.00	110.21	0.00	1574.90
6/ 5/81	6:48.00	109.99	0.00	1575.12
6/ 6/81	8:50.00	110.03	0.00	1575.08
6/ 7/81	9:31.00	110.12	0.00	1574.99
6/ 8/81	7:25.00	110.13	0.00	1574.98
6/ 9/81	12: 0.00	110.05	0.00	1575.06
6/ 9/81	17:54.00	110.04	0.00	1575.07
6/10/81	6:48.00	110.01	0.00	1575.10
6/10/81	17: 7.00	110.23	0.00	1574.88
6/11/81	6:20.00	110.15	0.00	1574.96
6/11/81	19:47.00	110.29	0.00	1574.82
6/12/81	1:55.00	110.24	0.00	1574.87
6/12/81	7:15.00	110.26	0.00	1574.85
6/12/81	17:21.00	110.25	0.00	1574.86
6/13/81	6:30.00	110.27	0.00	1574.84
6/13/81	16:50.00	109.91	0.00	1575.20
6/14/81	9: 0.00	110.00	0.00	1575.11
6/14/81	17:20.00	109.97	0.00	1575.14
6/15/81	10:38.00	110.06	0.00	1575.05
6/15/81	16:37.00	110.03	0.00	1575.08
6/16/81	7:13.00	110.05	0.00	1575.06

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:18:38 PAGE

NAME.....196
LOCATION.....16743.9 74372.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1685.11

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	16:47.00	110.15	0.00	1574.96
6/17/81	7:29.00	110.35	0.00	1574.76
6/17/81	16:29.00	110.11	0.00	1575.00
6/18/81	7:21.00	109.99	0.00	1575.12
6/19/81	6: 4.00	110.22	0.00	1574.89
6/19/81	15:46.00	110.20	0.00	1574.91
6/20/81	7: 8.00	110.16	0.00	1574.95
6/20/81	16: 2.00	110.15	0.00	1574.96
6/21/81	10: 0.00	110.13	0.00	1574.98
6/21/81	16:33.00	110.01	0.00	1575.10
6/23/81	8:55.00	110.20	0.00	1574.91
6/23/81	16: 1.00	110.25	0.00	1574.86
6/24/81	8:35.00	110.29	0.00	1574.82

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19: 7 PAGE 1

NAME.....209
LOCATION.....16814.7,78231.4
TYPE.....INCLINED
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1656.15

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	15:45.00	79.34	-8.97	1585.78
5/ 1/81	19:48.00	79.55	-8.99	1585.59
5/ 2/81	4:35.00	79.59	-8.99	1585.55
5/ 2/81	9:31.00	79.74	-9.01	1585.42
5/ 2/81	12:38.00	79.69	-9.00	1585.46
5/ 2/81	15:35.00	79.51	-8.98	1585.62
5/ 2/81	18:33.00	79.48	-8.98	1585.65
5/ 2/81	23:20.00	79.54	-8.99	1585.60
5/ 3/81	4:45.00	79.41	-8.97	1585.71
5/ 3/81	9:35.00	79.46	-8.98	1585.67
5/ 3/81	17:15.00	79.24	-8.95	1585.86
5/ 4/81	12:36.00	79.25	-8.96	1585.86
5/ 5/81	7:10.00	79.07	-8.93	1586.01
5/ 6/81	6:40.00	79.02	-8.93	1586.06
5/ 7/81	5:35.00	78.82	-8.91	1586.24
5/15/81	18: 0.00	78.17	-8.83	1586.81
5/16/81	19: 0.00	78.16	-8.83	1586.82
5/17/81	10: 0.00	78.20	-8.84	1586.79
5/18/81	10: 0.00	78.13	-8.83	1586.85
5/19/81	10: 0.00	78.08	-8.82	1586.89
5/20/81	10: 0.00	78.00	-8.81	1586.96
5/21/81	14: 0.00	78.52	-8.87	1586.50
5/22/81	14: 0.00	78.72	-8.90	1586.33
5/23/81	12: 0.00	78.80	-8.90	1586.25
5/24/81	14: 0.00	78.75	-8.90	1586.30
5/25/81	13: 0.00	78.87	-8.91	1586.19
5/26/81	16: 0.00	78.94	-8.92	1586.13
5/28/81	13: 0.00	78.54	-8.88	1586.49
5/30/81	1: 0.00	78.56	-8.88	1586.47
5/30/81	20: 0.00	77.98	-8.81	1586.98
5/31/81	10:11.00	77.98	-8.81	1586.98
5/31/81	10: 0.00	77.98	-8.81	1586.98
6/ 1/81	13: 5.00	77.89	-8.80	1587.06
6/ 2/81	15:10.00	77.77	-8.79	1587.17
6/ 3/81	9:33.00	77.78	-8.79	1587.16
6/ 4/81	9:50.00	77.80	-8.79	1587.14
6/ 5/81	11:52.00	77.74	-8.78	1587.19
6/ 6/81	9:10.00	77.68	-8.78	1587.25
6/ 7/81	6: 1.00	77.70	-8.78	1587.23
6/ 8/81	5:56.00	77.70	-8.78	1587.23

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19: 7 PAGE

NAME.....209
LOCATION.....16814.7,78231.4
TYPE.....INCLINED
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1656.15

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	12: 0.00	78.27	-8.84	1586.72
6/ 9/81	18:43.00	77.98	-8.81	1586.98
6/10/81	9:16.00	77.91	-8.80	1587.04
6/10/81	19:16.00	78.00	-8.81	1586.96
6/11/81	7:22.00	77.95	-8.81	1587.01
6/11/81	11:17.00	77.80	-8.79	1587.14
6/11/81	11:17.00	78.95	-8.92	1586.12
6/11/81	11:19.00	77.79	-8.79	1587.15
6/11/81	12:33.00	85.20	-9.63	1580.58
6/11/81	13: 3.00	111.87	-12.64	1556.92
6/11/81	13:36.00	143.65	-16.23	1528.72
6/11/81	14:21.00	159.14	-17.90	1515.91
6/11/81	16:58.00	183.70	-20.89	1493.34
6/11/81	18:29.00	191.79	-21.84	1486.20
6/12/81	0:15.00	204.75	-23.38	1474.78
6/12/81	5:15.00	208.66	-23.85	1471.34
6/12/81	10:33.00	210.54	-24.08	1469.69
6/12/81	10:33.00	209.20	-23.92	1470.87
6/12/81	15:31.00	212.17	-24.28	1468.26
6/12/81	20:40.00	212.90	-24.36	1467.61
6/13/81	0:12.00	213.79	-24.47	1466.83
6/13/81	4:55.00	214.50	-24.56	1466.21
6/13/81	10:33.00	214.37	-24.54	1466.32
6/13/81	10:42.00	215.12	-24.63	1465.66
6/13/81	15:53.00	214.17	-24.52	1466.50
6/13/81	20: 6.00	214.50	-24.56	1466.21
6/14/81	1:35.00	215.00	-24.62	1465.77
6/14/81	5:10.00	215.29	-24.65	1465.51
6/14/81	14:16.00	214.31	-24.59	1465.93
6/14/81	14:18.00	213.53	-24.44	1467.06
6/14/81	19:59.00	214.04	-24.50	1466.61
6/14/81	23:40.00	215.67	-24.70	1465.18
6/15/81	5:55.00	216.16	-24.76	1464.75
6/15/81	16:24.00	216.65	-24.82	1464.32
6/15/81	20: 4.00	216.62	-24.81	1464.34
6/16/81	1: 0.00	216.95	-24.85	1464.05
6/16/81	5:15.00	217.45	-24.91	1463.61
6/16/81	13:52.00	217.26	-24.89	1463.78
6/16/81	13:55.00	216.17	-24.76	1464.74
6/16/81	18:54.00	217.35	-24.90	1463.70

NAME.....209
LOCATION.....16814.7,78231.4
TYPE.....INCLINED
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1656.15

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	23:40.00	217.87	-24.97	1463.25
6/17/81	6:10.00	218.08	-24.99	1463.06
6/17/81	13:28.00	217.95	-24.98	1463.18
6/17/81	13:28.00	216.94	-24.85	1464.06
6/17/81	19:11.00	217.97	-24.98	1463.16
6/17/81	23:35.00	218.62	-25.06	1462.59
6/18/81	6:15.00	219.04	-25.11	1462.22
6/18/81	12:12.00	219.25	-25.13	1462.03
6/18/81	12:14.00	218.17	-25.00	1462.98
6/18/81	14:32.00	212.81	-24.35	1467.69
6/18/81	14:47.00	173.51	-19.70	1502.34
6/18/81	15: 0.00	164.30	-18.62	1510.47
6/18/81	15:11.00	157.84	-17.87	1516.18
6/18/81	15:25.00	153.46	-17.35	1520.04
6/18/81	15:50.00	140.97	-15.93	1531.11
6/18/81	16: 8.00	135.64	-15.33	1535.84
6/18/81	16:27.00	128.50	-14.52	1542.17
6/18/81	17:37.00	112.86	-12.75	1556.04
6/18/81	18:32.00	106.08	-11.99	1562.06
6/18/81	19:35.00	101.30	-11.45	1566.30
6/18/81	23: 0.00	87.79	-9.92	1578.28
6/19/81	0:45.00	85.62	-9.68	1580.21
6/19/81	2:40.00	85.53	-9.67	1580.24
6/19/81	4:50.00	84.83	-9.59	1580.91
6/19/81	6:25.00	84.50	-9.55	1581.20
6/19/81	8: 7.00	84.15	-9.51	1581.50
6/19/81	12: 0.00	83.37	-9.42	1582.20
6/19/81	12: 0.00	83.22	-9.40	1582.33
6/19/81	17:12.00	81.86	-9.25	1583.54
6/20/81	6:37.00	79.93	-9.02	1585.34
6/20/81	14:20.00	79.80	-9.02	1585.37
6/20/81	18: 5.00	79.33	-8.96	1585.78
6/21/81	9:35.00	75.79	-8.56	1588.92
6/21/81	18:27.00	75.95	-8.58	1588.78
6/22/81	18: 7.00	78.79	-8.90	1586.26
6/23/81	10:43.00	75.91	-8.58	1588.82
6/23/81	17:48.00	75.72	-8.56	1588.99

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:15 PAGE

NAME.....210
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.33

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	15:34.00	47.28	-7.19	1585.24
5/ 1/81	19:28.00	47.39	-7.20	1585.14
5/ 2/81	3:30.00	47.44	-7.21	1585.10
5/ 2/81	9:17.00	47.60	-7.24	1584.97
5/ 2/81	12: 6.00	47.57	-7.23	1584.99
5/ 2/81	15:18.00	47.36	-7.20	1585.17
5/ 2/81	18:18.00	47.32	-7.19	1585.20
5/ 2/81	22:50.00	47.40	-7.20	1585.13
5/ 3/81	4:30.00	47.20	-7.17	1585.30
5/ 3/81	9:25.00	47.28	-7.19	1585.24
5/ 3/81	9:25.00	47.28	-7.19	1585.24
5/ 4/81	12: 0.00	47.13	-7.16	1585.36
5/ 5/81	6:40.00	46.89	-7.13	1585.57
5/ 6/81	6: 5.00	46.76	-7.11	1585.68
5/ 7/81	5:55.00	46.63	-7.09	1585.79
5/15/81	19:19.00	45.20	-6.87	1587.00
5/17/81	11:15.00	45.20	-6.87	1587.00
5/18/81	11: 1.00	45.13	-6.86	1587.06
5/19/81	11:36.00	45.06	-6.85	1587.12
5/20/81	10:57.00	45.00	-6.84	1587.17
5/21/81	15:40.00	45.49	-6.91	1586.75
5/22/81	15:39.00	45.66	-6.94	1586.61
5/23/81	14:10.00	46.55	-7.08	1585.86
5/24/81	14:53.00	45.76	-6.96	1586.53
5/25/81	14:40.00	45.81	-6.96	1586.48
5/26/81	17:42.00	45.85	-6.97	1586.45
5/28/81	14: 0.00	45.48	-6.91	1586.76
5/29/81	15:45.00	45.05	-6.85	1587.13
5/30/81	10:19.00	45.12	-6.86	1587.07
5/31/81	10:50.00	44.95	-6.83	1587.21
6/ 1/81	10:58.00	44.91	-6.83	1587.25
6/ 2/81	18:25.00	44.97	-6.84	1587.20
6/ 3/81	10:10.00	44.79	-6.81	1587.35
6/ 4/81	10:32.00	44.80	-6.81	1587.34
6/ 5/81	12:43.00	44.80	-6.81	1587.34
6/ 6/81	9:43.00	44.66	-6.79	1587.46
6/ 6/81	16:13.00	44.68	-6.79	1587.44
6/ 6/81	20:21.00	44.72	-6.80	1587.41
6/ 7/81	0: 2.00	44.70	-6.79	1587.42
6/ 7/81	4:18.00	44.75	-6.80	1587.37

NAME.....210
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.33

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	8:16.00	44.67	-6.79	1587.45
6/ 7/81	15:16.00	45.90	-6.98	1586.41
6/ 7/81	20:38.00	44.66	-6.79	1587.46
6/ 9/81	24: 0.00	45.20	-6.87	1587.00
6/11/81	11:47.00	44.74	-6.80	1587.39
6/11/81	13:11.00	96.20	-14.62	1543.75
6/11/81	14:55.00	133.00	-20.22	1512.55
6/11/81	16:43.00	149.86	-22.78	1498.25
6/11/81	21:25.00	169.75	-26.13	1481.71
6/11/81	23:40.00	173.65	-26.78	1478.46
6/12/81	6:45.00	179.55	-27.78	1473.56
6/12/81	9:33.00	180.48	-27.93	1472.78
6/12/81	15: 7.00	182.54	-28.28	1471.07
6/12/81	20:16.00	183.31	-28.41	1470.43
6/13/81	1: 0.00	184.16	-28.55	1469.72
6/13/81	5:40.00	184.80	-28.66	1469.19
6/13/81	9:47.00	184.99	-28.69	1469.03
6/13/81	15:40.00	184.75	-28.66	1469.23
6/13/81	19:56.00	184.96	-28.69	1469.06
6/14/81	6:15.00	185.75	-28.82	1468.40
6/14/81	13:39.00	185.20	-28.73	1468.86
6/14/81	19:35.00	184.29	-28.58	1469.62
6/15/81	1:15.00	186.19	-28.90	1468.04
6/15/81	6:55.00	186.56	-28.96	1467.73
6/15/81	16: 1.00	187.04	-29.04	1467.33
6/15/81	19:47.00	187.25	-29.08	1467.16
6/16/81	0:10.00	187.35	-29.09	1467.07
6/16/81	6:15.00	187.63	-29.14	1466.84
6/16/81	13:40.00	188.75	-29.33	1465.91
6/16/81	18:41.00	188.00	-29.20	1466.53
6/17/81	0:25.00	189.20	-29.40	1465.53
6/17/81	5: 0.00	188.46	-29.28	1466.15
6/17/81	13:13.00	188.72	-29.32	1465.93
6/17/81	18:59.00	188.60	-29.30	1466.03
6/18/81	0:10.00	189.11	-29.39	1465.61
6/18/81	5:15.00	189.42	-29.44	1465.35
6/18/81	11:57.00	189.93	-29.53	1464.93
6/18/81	15: 6.00	133.87	-20.35	1511.81
6/18/81	16:10.00	104.30	-15.85	1536.88
6/18/81	17: 4.00	89.39	-13.59	1549.53

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:15 PAGE

NAME.....210
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.33

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	17:52.00	80.23	-12.19	1557.29
6/18/81	19:52.00	65.44	-9.95	1569.84
6/18/81	22:10.00	57.24	-8.70	1576.79
6/19/81	0:15.00	53.61	-8.15	1579.87
6/19/81	1:35.00	52.56	-7.99	1580.76
6/19/81	3:55.00	51.42	-7.82	1581.73
6/19/81	6: 5.00	50.73	-7.71	1582.31
6/19/81	7:55.00	50.36	-7.65	1582.62
6/19/81	11:48.00	49.77	-7.57	1583.13
6/19/81	16:59.00	49.15	-7.47	1583.65
6/19/81	23:58.00	48.81	-7.42	1583.94
6/20/81	6: 8.00	48.50	-7.37	1584.20
6/20/81	14: 7.00	48.12	-7.31	1584.52
6/20/81	17:47.00	48.10	-7.31	1584.54
6/21/81	9:20.00	47.87	-7.28	1584.74
6/21/81	17:55.00	47.77	-7.26	1584.82
6/22/81	10: 2.00	47.46	-7.21	1585.08
6/22/81	17:39.00	47.39	-7.20	1585.14
6/23/81	10:33.00	47.28	-7.19	1585.24
6/23/81	17:40.00	47.20	-7.17	1585.30
6/24/81	15:39.00	46.89	-7.13	1585.57

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE 1

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	14: 3.00	169.81	-23.13	1506.46
5/12/81	14: 3.92	174.81	-23.81	1502.14
5/12/81	14: 4.42	177.81	-24.22	1499.55
5/12/81	14: 5.00	180.81	-24.63	1496.96
5/12/81	14: 5.50	182.81	-24.90	1495.23
5/12/81	14: 6.00	184.81	-25.17	1493.50
5/12/81	14: 6.62	186.81	-25.45	1491.78
5/12/81	14: 7.22	188.81	-25.72	1490.05
5/12/81	14: 7.83	190.81	-25.99	1488.32
5/12/81	14: 8.62	192.81	-26.26	1486.59
5/12/81	14: 9.35	194.81	-26.54	1484.87
5/12/81	14:10.32	196.81	-26.81	1483.14
5/12/81	14:11.12	198.81	-27.08	1481.41
5/12/81	14:12.08	200.81	-27.35	1479.68
5/12/81	14:13.13	202.81	-27.63	1477.96
5/12/81	14:14.08	204.81	-27.90	1476.23
5/12/81	14:15.12	206.81	-28.17	1474.50
5/12/81	14:16.53	208.81	-28.44	1472.77
5/12/81	14:17.90	210.81	-28.72	1471.05
5/12/81	14:19.50	212.81	-28.99	1469.32
5/12/81	14:20.75	214.81	-29.26	1467.59
5/12/81	14:22.42	216.81	-29.53	1465.86
5/12/81	14:24.25	218.81	-29.81	1464.14
5/12/81	14:25.88	220.81	-30.08	1462.41
5/12/81	14:27.72	222.81	-30.35	1460.68
5/12/81	14:29.88	224.81	-30.62	1458.95
5/12/81	14:32.07	226.81	-30.90	1457.23
5/12/81	14:34.23	228.81	-31.17	1455.50
5/12/81	14:36.68	230.81	-31.44	1453.77
5/12/81	14:39.00	232.81	-31.72	1452.05
5/12/81	14:41.83	234.81	-32.00	1450.33
5/12/81	14:44.67	236.81	-32.27	1448.60
5/12/81	14:47.33	238.81	-32.55	1446.88
5/12/81	14:50.58	240.81	-32.83	1445.16
5/12/81	14:54.40	242.81	-33.10	1443.43
5/12/81	14:56.95	244.81	-33.38	1441.71
5/12/81	15: 1.08	246.81	-33.66	1439.99
5/12/81	15: 2.00	248.81	-33.93	1438.26
5/12/81	15: 3.72	250.81	-34.21	1436.54
5/12/81	15: 5.12	252.81	-34.49	1434.82

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	15: 7.42	254.81	-34.76	1433.09
5/12/81	15:10.60	256.81	-35.04	1431.37
5/12/81	15:13.90	258.81	-35.32	1429.65
5/12/81	15:18.00	260.81	-35.59	1427.92
5/12/81	15:27.08	262.81	-35.87	1426.20
5/12/81	15:57.83	278.31	-38.09	1412.42
5/12/81	16:21.42	286.61	-39.17	1405.70
5/12/81	16:58.83	293.06	-40.06	1400.14
5/12/81	17: 1.35	233.81	-31.86	1451.19
5/12/81	17: 1.63	282.81	-38.64	1408.97
5/12/81	17: 1.87	223.81	-30.49	1459.82
5/12/81	17: 2.25	219.81	-29.94	1463.27
5/12/81	17: 2.52	216.81	-29.53	1465.86
5/12/81	17: 3.00	212.81	-28.99	1469.32
5/12/81	17: 3.40	209.81	-28.58	1471.91
5/12/81	17: 4.12	205.81	-28.03	1475.36
5/12/81	17: 4.60	203.81	-27.76	1477.09
5/12/81	17: 5.08	201.81	-27.49	1478.82
5/12/81	17: 5.67	198.81	-27.08	1481.41
5/12/81	17: 6.27	197.81	-26.95	1482.28
5/12/81	17: 7.33	194.81	-26.54	1484.87
5/12/81	17: 8.13	192.81	-26.26	1486.59
5/12/81	17: 9.00	190.81	-25.99	1488.32
5/12/81	17: 9.92	188.81	-25.72	1490.05
5/12/81	17:11.00	186.81	-25.45	1491.78
5/12/81	17:11.90	184.81	-25.17	1493.50
5/12/81	17:13.17	182.81	-24.90	1495.23
5/12/81	17:16.55	177.81	-24.22	1499.55
5/12/81	17:18.88	174.81	-23.81	1502.14
5/12/81	17:20.40	172.81	-23.54	1503.87
5/12/81	17:22.12	170.81	-23.27	1505.60
5/12/81	17:23.95	168.81	-22.99	1507.32
5/12/81	17:26.00	166.81	-22.72	1509.05
5/12/81	17:28.10	164.81	-22.45	1510.78
5/12/81	17:30.42	162.81	-22.18	1512.51
5/12/81	17:32.83	160.81	-21.91	1514.24
5/12/81	17:35.50	158.81	-21.63	1515.96
5/12/81	17:38.47	156.81	-21.36	1517.69
5/12/81	17:41.83	154.81	-21.09	1519.42
5/12/81	17:44.62	152.81	-20.82	1521.15

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	17:48.00	150.81	-20.54	1522.87
5/12/81	17:57.00	145.69	-19.85	1527.30
5/12/81	18:23.00	135.91	-18.51	1535.74
5/12/81	18:51.00	128.70	-17.53	1541.97
5/12/81	19:20.00	123.15	-16.78	1546.76
5/12/81	19:54.33	118.73	-16.17	1550.58
5/12/81	22:43.00	106.26	-14.47	1561.35
5/12/81	23:37.00	103.91	-14.15	1563.38
5/13/81	0:39.00	101.71	-13.85	1565.28
5/13/81	2:30.00	97.72	-13.31	1568.73
5/13/81	4:55.00	95.44	-13.00	1570.70
5/13/81	6:47.00	93.95	-12.80	1571.99
5/13/81	6:49.00	93.98	-12.80	1571.96
5/13/81	8:44.00	92.70	-12.63	1573.07
5/13/81	8:50.00	92.66	-12.62	1573.10
5/13/81	10: 4.00	91.92	-12.52	1573.74
5/15/81	17:50.00	85.91	-11.70	1578.93
5/16/81	18:36.00	86.00	-11.71	1578.85
5/17/81	9:44.00	86.14	-11.73	1578.73
5/18/81	8:37.00	85.99	-11.71	1578.86
5/18/81	9: 4.00	85.98	-11.71	1578.87
5/18/81	9:10.00	85.92	-11.70	1578.92
5/18/81	12: 4.00	88.42	-12.04	1576.76
5/18/81	12: 6.00	87.67	-11.94	1577.41
5/18/81	12: 7.00	87.42	-11.91	1577.63
5/18/81	12: 8.00	87.09	-11.86	1577.91
5/18/81	12:10.00	87.00	-11.85	1577.99
5/18/81	12:12.00	86.67	-11.81	1578.28
5/18/81	12:14.00	87.92	-11.98	1577.20
5/18/81	12:29.00	86.34	-11.76	1578.56
5/18/81	12:37.00	186.84	-25.45	1491.75
5/18/81	12:39.00	191.71	-26.11	1487.54
5/18/81	12:41.00	194.39	-26.48	1485.23
5/18/81	12:43.00	196.73	-26.80	1483.21
5/18/81	12:44.00	198.60	-27.05	1481.59
5/18/81	12:45.00	199.36	-27.16	1480.94
5/18/81	12:46.00	201.64	-27.47	1478.97
5/18/81	12:47.00	202.73	-27.62	1478.03
5/18/81	12:48.00	203.51	-27.72	1477.35
5/18/81	12:49.00	204.95	-27.92	1476.11

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/18/81	12:50.00	206.39	-28.11	1474.86
5/18/81	13:10.00	107.90	-14.70	1559.94
5/18/81	13:18.00	104.31	-14.21	1563.04
5/18/81	13:30.00	101.08	-13.77	1565.83
5/19/81	9:35.00	86.30	-11.76	1578.60
5/20/81	8:54.00	85.78	-11.68	1579.04
5/20/81	12: 5.42	177.51	-24.18	1499.81
5/20/81	12: 6.08	180.00	-24.52	1497.66
5/20/81	12: 7.08	184.00	-25.06	1494.20
5/20/81	12: 7.75	186.00	-25.34	1492.48
5/20/81	12: 8.15	188.00	-25.61	1490.75
5/20/81	12: 8.75	190.00	-25.88	1489.02
5/20/81	12: 9.92	193.00	-26.29	1486.43
5/20/81	12:10.83	196.00	-26.70	1483.84
5/20/81	12:11.45	198.00	-26.97	1482.11
5/20/81	12:12.25	199.00	-27.11	1481.25
5/20/81	12:12.75	200.00	-27.24	1480.38
5/20/81	12:13.42	201.00	-27.38	1479.52
5/20/81	12:13.75	201.50	-27.45	1479.09
5/20/81	12:14.22	202.50	-27.58	1478.22
5/20/81	12:15.25	204.00	-27.79	1476.93
5/20/81	12:16.31	205.50	-27.99	1475.63
5/20/81	12:16.33	206.00	-28.06	1475.20
5/20/81	12:17.22	207.00	-28.20	1474.34
5/20/81	12:17.50	207.50	-28.27	1473.91
5/20/81	12:17.80	208.00	-28.33	1473.47
5/20/81	12:18.12	208.50	-28.40	1473.04
5/20/81	12:18.63	210.00	-28.61	1471.75
5/20/81	12:19.25	211.00	-28.74	1470.88
5/20/81	12:19.50	211.50	-28.81	1470.45
5/20/81	12:19.75	212.00	-28.88	1470.02
5/20/81	12:21.00	213.50	-29.08	1468.72
5/20/81	12:26.00	221.26	-30.14	1462.02
5/20/81	12:32.00	226.28	-30.82	1457.68
5/20/81	12:35.50	227.20	-30.95	1456.89
5/20/81	12:37.08	228.22	-31.09	1456.01
5/20/81	12:38.25	228.76	-31.16	1455.54
5/20/81	12:39.25	229.45	-31.26	1454.95
5/20/81	12:40.50	230.29	-31.37	1454.22
5/20/81	12:41.33	234.60	-31.97	1450.51

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	12:42.33	235.82	-32.14	1449.46
5/20/81	12:43.33	237.19	-32.33	1448.28
5/20/81	12:44.33	238.34	-32.48	1447.28
5/20/81	12:45.25	239.19	-32.60	1446.55
5/20/81	12:46.25	240.13	-32.73	1445.74
5/20/81	12:47.25	240.73	-32.82	1445.23
5/20/81	12:48.25	241.51	-32.92	1444.55
5/20/81	12:49.25	242.60	-33.07	1443.61
5/20/81	12:51.25	243.15	-33.15	1443.14
5/20/81	12:52.33	243.87	-33.25	1442.52
5/20/81	12:53.25	244.51	-33.34	1441.97
5/20/81	12:54.25	244.86	-33.39	1441.67
5/20/81	12:55.25	245.35	-33.45	1441.24
5/20/81	12:56.25	245.84	-33.52	1440.82
5/20/81	12:57.25	246.42	-33.60	1440.32
5/20/81	12:58.25	247.24	-33.72	1439.62
5/20/81	13: 0.25	248.19	-33.85	1438.80
5/20/81	13: 1.33	248.85	-33.94	1438.23
5/20/81	13: 2.25	249.90	-34.08	1437.32
5/20/81	13: 4.42	254.75	-34.76	1433.15
5/20/81	13: 5.42	255.32	-34.83	1432.65
5/20/81	13: 6.25	255.62	-34.88	1432.40
5/20/81	13: 7.25	256.21	-34.96	1431.89
5/20/81	13: 9.25	256.78	-35.04	1431.40
5/20/81	13:10.25	257.60	-35.15	1430.69
5/20/81	13:11.25	257.87	-35.19	1430.46
5/20/81	13:12.25	258.18	-35.23	1430.19
5/20/81	13:18.00	259.59	-35.43	1428.98
5/20/81	13:20.00	260.40	-35.54	1428.28
5/20/81	13:25.00	262.00	-35.76	1426.90
5/20/81	13:30.00	263.74	-36.00	1425.40
5/20/81	13:40.00	272.41	-37.20	1417.93
5/20/81	13:50.00	275.15	-37.58	1415.57
5/20/81	14: 0.00	278.09	-37.99	1413.04
5/20/81	14:15.00	281.71	-38.49	1409.92
5/20/81	14:31.00	283.72	-38.77	1408.19
5/20/81	14:46.00	286.72	-39.18	1405.60
5/20/81	15: 4.00	293.84	-40.17	1399.47
5/20/81	15:22.00	297.28	-40.64	1396.50
5/20/81	15:45.00	302.10	-41.31	1392.35

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	16:56.00	314.04	-42.96	1382.06
5/20/81	18: 0.00	320.22	-43.82	1376.74
5/20/81	20:13.00	334.75	-45.83	1364.22
5/20/81	21:54.00	355.32	-48.68	1346.50
5/20/81	23:55.00	356.07	-48.78	1345.85
5/21/81	2: 0.00	363.11	-49.75	1339.78
5/21/81	3:56.00	373.41	-51.18	1330.91
5/21/81	5:59.00	375.50	-51.47	1329.11
5/21/81	8: 4.00	383.16	-52.53	1322.51
5/21/81	10: 6.00	374.60	-51.34	1329.88
5/21/81	12: 0.00	389.43	-53.40	1317.11
5/21/81	14: 2.00	388.18	-53.22	1318.18
5/21/81	16:15.00	385.30	-52.83	1320.67
5/21/81	17:59.00	391.57	-53.69	1315.26
5/21/81	19:56.00	394.70	-54.13	1312.57
5/21/81	22: 2.00	397.68	-54.54	1310.00
5/22/81	0: 0.00	399.76	-54.83	1308.21
5/22/81	2: 2.00	400.87	-54.98	1307.25
5/22/81	4: 7.00	401.89	-55.11	1306.36
5/22/81	6: 0.00	402.15	-55.15	1306.14
5/22/81	8: 0.00	402.47	-55.19	1305.86
5/22/81	10: 8.00	406.48	-55.73	1302.39
5/22/81	12:11.00	409.61	-56.15	1299.68
5/22/81	14: 5.00	410.12	-56.22	1299.24
5/22/81	16: 1.00	411.63	-56.42	1297.93
5/22/81	18: 1.00	412.40	-56.52	1297.26
5/22/81	20: 1.00	412.91	-56.59	1296.82
5/23/81	0: 1.00	414.03	-56.74	1295.85
5/23/81	2: 4.00	413.65	-56.69	1296.18
5/23/81	4: 2.00	414.83	-56.85	1295.16
5/23/81	6: 5.00	414.34	-56.78	1295.58
5/23/81	7:59.00	414.30	-56.78	1295.62
5/23/81	10: 5.00	417.48	-57.20	1292.86
5/23/81	12: 5.00	418.20	-57.30	1292.24
5/23/81	14: 1.00	418.03	-57.28	1292.39
5/23/81	16: 7.00	419.34	-57.45	1291.25
5/23/81	20: 2.00	422.83	-57.92	1288.23
5/24/81	0: 3.00	428.97	-58.74	1282.91
5/24/81	5: 2.00	424.33	-58.12	1286.93
5/24/81	7:56.00	425.20	-58.24	1286.18

CRANDON MINE WELL DATA LISTING · DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/24/81	12: 0.00	426.05	-58.35	1285.44
5/24/81	16:10.00	431.77	-59.12	1280.49
5/24/81	20: 5.00	431.45	-59.07	1280.76
5/24/81	23:58.00	432.03	-59.15	1280.26
5/25/81	3:59.00	433.03	-59.29	1279.40
5/25/81	8: 0.00	434.67	-59.51	1277.98
5/25/81	12:10.00	434.62	-59.50	1278.02
5/25/81	15:59.00	434.73	-59.51	1277.92
5/25/81	20: 0.00	434.96	-59.54	1277.72
5/26/81	0: 8.00	435.88	-59.67	1276.93
5/26/81	4: 5.00	435.09	-59.70	1276.75
5/26/81	7:55.00	437.49	-59.88	1275.53
5/26/81	13:14.00	439.13	-60.10	1274.11
5/26/81	16:19.00	438.99	-60.08	1274.23
5/26/81	20: 0.00	439.72	-60.18	1273.60
5/26/81	23:50.00	439.70	-60.18	1273.62
5/27/81	3:50.00	438.90	-60.07	1274.31
5/27/81	8:10.00	442.28	-60.53	1271.39
5/27/81	11:58.00	442.40	-60.54	1271.28
5/27/81	13:33.00	442.79	-60.59	1270.94
5/27/81	14: 5.59	341.00	-46.69	1358.83
5/27/81	14: 6.29	339.00	-46.42	1360.56
5/27/81	14: 7.13	337.00	-46.14	1362.28
5/27/81	14: 8.20	334.00	-45.72	1364.86
5/27/81	14: 9.22	332.00	-45.45	1366.59
5/27/81	14:10.28	330.00	-45.17	1368.31
5/27/81	14:11.38	328.00	-44.89	1370.03
5/27/81	14:12.57	326.00	-44.62	1371.76
5/27/81	14:14.25	324.00	-44.34	1373.48
5/27/81	14:16.04	322.00	-44.06	1375.20
5/27/81	14:17.50	320.00	-43.79	1376.93
5/27/81	14:19.44	318.00	-43.51	1378.65
5/27/81	14:26.05	312.00	-42.68	1383.82
5/27/81	14:28.33	310.00	-42.40	1385.54
5/27/81	14:31.14	308.00	-42.13	1387.27
5/27/81	14:34.12	306.00	-41.85	1388.99
5/27/81	14:37.15	304.00	-41.57	1390.71
5/27/81	14:40.41	302.00	-41.30	1392.44
5/27/81	14:44.24	300.00	-41.02	1394.16
5/27/81	14:48.16	298.00	-40.74	1395.88

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/27/81	14:52.37	296.00	-40.47	1397.61
5/27/81	15: 3.42	291.40	-39.83	1401.57
5/27/81	15:10.00	289.00	-39.50	1403.64
5/27/81	15:22.00	285.10	-38.96	1407.00
5/27/81	15:25.00	284.09	-38.82	1407.87
5/27/81	15:30.00	282.75	-38.63	1409.02
5/27/81	15:57.00	276.09	-37.71	1414.76
5/27/81	16:10.00	273.18	-37.31	1417.27
5/27/81	16:30.00	269.12	-36.74	1420.76
5/27/81	16:50.00	265.67	-36.27	1423.74
5/27/81	17:24.00	260.15	-35.50	1428.49
5/27/81	17:40.00	257.79	-35.18	1430.53
5/27/81	17:55.00	255.80	-34.90	1432.24
5/27/81	18:58.00	247.11	-33.70	1439.73
5/27/81	20: 0.00	239.51	-32.65	1446.28
5/27/81	21:12.00	231.80	-31.58	1452.92
5/27/81	22:18.00	225.45	-30.71	1458.40
5/28/81	0: 3.00	217.20	-29.59	1465.53
5/28/81	1:16.00	211.99	-28.88	1470.03
5/28/81	2: 0.00	209.04	-28.47	1472.57
5/28/81	4:30.00	198.90	-27.09	1481.33
5/28/81	6: 0.00	194.03	-26.43	1485.54
5/28/81	7:50.00	188.20	-25.64	1490.58
5/28/81	10:20.00	180.46	-24.58	1497.26
5/28/81	12: 5.00	175.59	-23.92	1501.47
5/28/81	14: 2.00	170.19	-23.18	1506.13
5/28/81	16: 1.00	165.02	-22.48	1510.60
5/28/81	18: 6.00	159.77	-21.76	1515.13
5/28/81	20: 0.00	155.06	-21.12	1519.20
5/28/81	21:52.00	150.52	-20.50	1523.12
5/29/81	0:10.00	145.24	-19.78	1527.68
5/29/81	2: 0.00	140.86	-19.19	1531.47
5/29/81	4: 5.00	136.52	-18.60	1535.22
5/29/81	6: 8.00	132.45	-18.04	1538.73
5/29/81	8: 0.00	128.95	-17.57	1541.76
5/29/81	12:20.00	121.00	-16.48	1548.62
5/29/81	16:25.00	114.69	-15.62	1554.07
5/29/81	21: 0.00	108.64	-14.80	1559.30
5/30/81	0: 0.00	108.60	-14.79	1559.33
5/30/81	6: 0.00	102.80	-14.00	1564.34

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/30/81	8:12.00	97.90	-13.34	1568.58
5/30/81	12: 6.00	95.48	-13.01	1570.67
5/30/81	16: 0.00	93.39	-12.72	1572.47
5/30/81	19:50.00	91.88	-12.52	1573.78
5/31/81	0: 4.00	90.75	-12.36	1574.75
5/31/81	4:23.00	89.42	-12.18	1575.90
5/31/81	6:51.00	89.42	-12.18	1575.90
5/31/81	7:52.00	89.03	-12.13	1576.19
5/31/81	11:54.00	88.56	-12.06	1576.64
5/31/81	16:30.00	88.08	-12.00	1577.06
5/31/81	20:10.00	87.56	-11.93	1577.51
6/ 1/81	0:16.00	87.36	-11.90	1577.68
6/ 1/81	4: 7.00	87.10	-11.86	1577.90
6/ 1/81	8:29.00	87.04	-11.86	1577.96
6/ 1/81	16:20.00	86.68	-11.81	1578.27
6/ 1/81	20:39.00	86.68	-11.81	1578.27
6/ 2/81	0: 7.00	86.57	-11.79	1578.36
6/ 2/81	4:20.00	86.55	-11.79	1578.38
6/ 2/81	6:55.00	86.55	-11.79	1578.38
6/ 2/81	8:37.00	86.56	-11.79	1578.37
6/ 2/81	11:59.00	86.62	-11.80	1578.32
6/ 2/81	16: 7.00	86.64	-11.80	1578.30
6/ 2/81	20:21.00	86.31	-11.76	1578.59
6/ 3/81	0: 7.00	86.27	-11.75	1578.62
6/ 3/81	4: 5.00	86.23	-11.75	1578.66
6/ 3/81	6:46.00	86.23	-11.75	1578.66
6/ 3/81	8:39.00	86.23	-11.75	1578.66
6/ 3/81	12:19.00	86.33	-11.76	1578.57
6/ 3/81	15:57.00	86.29	-11.75	1578.60
6/ 3/81	20:55.00	86.24	-11.75	1578.65
6/ 4/81	0:16.00	86.29	-11.75	1578.60
6/ 4/81	5:37.00	86.30	-11.76	1578.60
6/ 4/81	6:50.00	86.30	-11.76	1578.60
6/ 4/81	8:32.00	86.46	-11.78	1578.46
6/ 4/81	12:26.00	86.39	-11.77	1578.52
6/ 4/81	20:37.00	86.24	-11.75	1578.65
6/ 5/81	0:10.00	85.98	-11.71	1578.87
6/ 5/81	4:28.00	85.85	-11.69	1578.98
6/ 5/81	8:32.00	85.81	-11.69	1579.02
6/ 5/81	13:50.00	85.83	-11.69	1579.00

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE 1

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 5/81	17:18.00	85.74	-11.68	1579.08
6/ 5/81	20:56.00	85.54	-11.65	1579.25
6/ 6/81	0: 5.00	85.50	-11.65	1579.29
6/ 6/81	4: 7.00	85.38	-11.63	1579.39
6/ 6/81	6:50.00	85.85	-11.69	1578.98
6/ 6/81	8:15.00	85.66	-11.67	1579.15
6/ 6/81	11:49.00	85.68	-11.67	1579.13
6/ 7/81	6:38.00	85.72	-11.68	1579.10
6/ 8/81	7:10.00	85.73	-11.68	1579.09
6/ 9/81	12: 0.00	85.94	-11.71	1578.91
6/ 9/81	19:20.00	85.70	-11.67	1579.11
6/10/81	6:52.00	85.76	-11.68	1579.06
6/10/81	17:11.00	85.71	-11.68	1579.11
6/11/81	6:26.00	85.80	-11.69	1579.03
6/11/81	15:34.00	85.80	-11.69	1579.03
6/11/81	19:17.00	86.40	-11.77	1578.51
6/12/81	1:14.00	87.48	-11.92	1577.58
6/12/81	7:24.00	88.16	-12.01	1576.99
6/12/81	12: 0.00	88.56	-12.06	1576.64
6/12/81	17:29.00	88.93	-12.11	1576.32
6/12/81	23:47.00	89.09	-12.14	1576.19
6/13/81	6:40.00	89.69	-12.22	1575.67
6/13/81	12: 3.00	89.36	-12.17	1575.95
6/13/81	16:56.00	89.24	-12.16	1576.06
6/13/81	23:12.00	89.33	-12.17	1575.98
6/14/81	6:21.00	89.35	-12.17	1575.96
6/14/81	12:30.00	89.38	-12.18	1575.94
6/14/81	17:27.00	89.48	-12.19	1575.85
6/14/81	23:32.00	89.53	-12.20	1575.81
6/15/81	7:16.00	89.62	-12.21	1575.73
6/15/81	11:50.00	89.91	-12.25	1575.48
6/15/81	16:45.00	89.64	-12.21	1575.71
6/15/81	23:54.00	89.74	-12.22	1575.62
6/16/81	5:46.00	89.72	-12.22	1575.64
6/16/81	11:50.00	89.86	-12.24	1575.52
6/16/81	16:55.00	89.84	-12.24	1575.54
6/16/81	23:48.00	90.00	-12.26	1575.40
6/17/81	6:17.00	90.03	-12.26	1575.37
6/17/81	12:18.00	90.12	-12.28	1575.30
6/17/81	16:34.00	89.95	-12.25	1575.44

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:36 PAGE 1

NAME.....211
LOCATION.....16837.1,76372.8
TYPE.....PRODUCTION WELL - INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.14

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/17/81	23:40.00	89.88	-12.24	1575.50
6/18/81	6:35.00	89.81	-12.23	1575.56
6/18/81	12: 9.00	89.95	-12.25	1575.44
6/18/81	18:33.00	89.91	-12.25	1575.48
6/18/81	23:37.00	88.43	-12.05	1576.76
6/19/81	6:10.00	88.87	-12.11	1576.38
6/19/81	12:36.00	88.32	-12.03	1576.85
6/19/81	15:47.00	87.04	-11.86	1577.96
6/20/81	7:13.00	86.24	-11.75	1578.65
6/20/81	16: 8.00	86.09	-11.73	1578.78
6/21/81	10: 6.00	85.98	-11.71	1578.87
6/21/81	16:40.00	85.87	-11.70	1578.97
6/22/81	9: 7.00	85.73	-11.68	1579.09
6/22/81	16:27.00	85.91	-11.70	1578.93
6/23/81	9: 2.00	86.08	-11.73	1578.79
6/23/81	16: 7.00	85.98	-11.71	1578.87
6/24/91	9:40.00	85.69	-11.67	1579.12

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:53 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	17:29.00	70.11	0.00	1579.50
5/16/81	17:37.00	70.13	0.00	1579.48
5/17/81	9:11.00	70.12	0.00	1579.49
5/18/81	9:97.00	70.12	0.00	1579.49
5/19/81	9:20.00	70.19	0.00	1579.42
5/20/81	9:13.00	69.96	0.00	1579.65
5/23/81	11:44.00	80.68	0.00	1568.93
5/24/81	13: 8.00	80.96	0.00	1568.65
5/25/81	12:43.00	81.96	0.00	1567.65
5/26/81	14:36.00	87.35	0.00	1562.26
5/29/81	9:12.00	73.96	0.00	1575.65
5/30/81	9:12.00	71.50	0.00	1578.11
5/31/81	7: 6.00	70.60	0.00	1579.01
5/31/81	7: 6.00	70.60	0.00	1579.01
6/ 1/81	9: 9.00	70.48	0.00	1579.13
6/ 2/81	7: 2.00	70.20	0.00	1579.41
6/ 3/81	6:57.00	69.80	0.00	1579.81
6/ 4/81	7: 1.00	70.17	0.00	1579.44
6/ 5/81	9: 0.00	70.13	0.00	1579.48
6/ 6/81	8:55.00	70.19	0.00	1579.42
6/ 7/81	7: 5.00	70.19	0.00	1579.42
6/ 8/81	7: 8.00	70.20	0.00	1579.41
6/ 9/81	12: 0.00	70.16	0.00	1579.45
6/ 9/81	19:13.00	70.15	0.00	1579.46
6/10/81	7: 3.00	70.17	0.00	1579.44
6/10/81	17:24.00	70.20	0.00	1579.41
6/11/81	6:42.00	70.20	0.00	1579.41
6/11/81	15:26.00	70.22	0.00	1579.39
6/11/81	19:27.00	70.34	0.00	1579.27
6/12/81	1:44.00	70.48	0.00	1579.13
6/12/81	7:47.00	70.46	0.00	1579.15
6/12/81	11:46.00	70.78	0.00	1578.83
6/12/81	17:44.00	70.80	0.00	1578.81
6/12/81	23:42.00	70.86	0.00	1578.75
6/13/81	6:55.00	70.85	0.00	1578.76
6/13/81	12:13.00	70.86	0.00	1578.75
6/13/81	17:10.00	70.80	0.00	1578.81
6/13/81	23: 9.00	70.81	0.00	1578.80
6/14/81	7: 1.00	70.85	0.00	1578.76
6/14/81	12:12.00	70.83	0.00	1578.78

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/14/81	17:47.00	70.76	0.00	1578.85
6/14/81	23:28.00	70.81	0.00	1578.80
6/15/81	7:31.00	70.96	0.00	1578.65
6/15/81	12: 2.00	70.97	0.00	1578.64
6/15/81	17: 7.00	70.97	0.00	1578.64
6/15/81	23:50.00	71.00	0.00	1578.61
6/16/81	6: 5.00	71.00	0.00	1578.61
6/16/81	12: 3.00	71.05	0.00	1578.56
6/16/81	17:14.00	71.09	0.00	1578.52
6/16/81	23:45.00	71.18	0.00	1578.43
6/17/81	6:47.00	71.24	0.00	1578.37
6/17/81	12:15.00	71.22	0.00	1578.39
6/17/81	16:50.00	71.23	0.00	1578.38
6/17/81	23:34.00	71.17	0.00	1578.44
6/18/81	6:52.00	71.04	0.00	1578.57
6/18/81	12: 6.00	71.02	0.00	1578.59
6/18/81	23:30.00	70.99	0.00	1578.62
6/19/81	6:40.00	70.80	0.00	1578.81
6/19/81	12:53.00	70.71	0.00	1578.90
6/19/81	15:57.00	70.65	0.00	1578.96
6/20/81	7:30.00	70.44	0.00	1579.17
6/20/81	16:27.00	70.70	0.00	1578.91
6/21/81	10:22.00	70.39	0.00	1579.22
6/21/81	16:58.00	70.41	0.00	1579.20
6/22/81	9:22.00	70.21	0.00	1579.40
6/22/81	16:41.00	70.36	0.00	1579.25
6/23/81	9:19.00	70.18	0.00	1579.43
6/23/81	16:21.00	70.21	0.00	1579.40
6/24/81	14:45.00	70.09	0.00	1579.52

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:19:59 PAGE

NAME.....211-2 LOWER
LOCATION.....16451.7,76560.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1662.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/13/81	7:42.00	82.12	0.00	1580.52
5/13/81	7:48.00	82.15	0.00	1580.49
5/13/81	17:42.00	81.99	0.00	1580.65
5/14/81	9:22.00	81.95	0.00	1580.69
5/15/81	20: 3.00	81.91	0.00	1580.73
5/17/81	12:30.00	82.10	0.00	1580.54
5/18/81	9:42.00	82.04	0.00	1580.60
5/19/81	12:33.00	81.92	0.00	1580.72
5/20/81	9:20.00	81.89	0.00	1580.75
5/21/81	13:46.00	82.98	0.00	1579.66
5/22/81	13:54.00	83.62	0.00	1579.02
5/23/81	11:45.00	83.86	0.00	1578.78
5/24/81	13:12.00	83.90	0.00	1578.74
5/25/81	12:45.00	84.08	0.00	1578.56
5/26/81	15:17.00	84.25	0.00	1578.39
5/29/81	1:42.00	83.10	0.00	1579.54
5/29/81	17:21.00	82.65	0.00	1579.99
5/30/81	9:19.00	82.68	0.00	1579.96
5/31/81	7:45.00	82.46	0.00	1580.18
6/ 1/81	9:13.00	82.27	0.00	1580.37
6/ 2/81	7:14.00	81.75	0.00	1580.89
6/ 3/81	7:10.00	81.65	0.00	1580.99
6/ 4/81	9: 7.00	81.83	0.00	1580.81
6/ 5/81	7:14.00	81.63	0.00	1581.01
6/ 6/81	5:34.00	81.93	0.00	1580.71
6/ 7/81	7:18.00	81.96	0.00	1580.68
6/ 8/81	6:54.00	81.94	0.00	1580.70
6/ 9/81	12: 0.00	81.59	0.00	1581.05
6/ 9/81	19: 6.00	81.92	0.00	1580.72
6/10/81	7:12.00	81.91	0.00	1580.73
6/10/81	19:25.00	81.70	0.00	1580.94
6/11/81	6:52.00	81.73	0.00	1580.91
6/12/81	2:50.00	79.81	0.00	1582.83
6/12/81	7:52.00	81.86	0.00	1580.78
6/12/81	17:47.00	81.90	0.00	1580.74
6/13/81	7: 2.00	81.85	0.00	1580.79
6/13/81	17:16.00	81.78	0.00	1580.86
6/14/81	7:20.00	81.90	0.00	1580.74
6/14/81	17:52.00	81.82	0.00	1580.82
6/15/81	7:33.00	81.90	0.00	1580.74

NAME.....211-2 LOWER
LOCATION.....16451.7,76560.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1662.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	17:12.00	81.98	0.00	1580.66
6/16/81	6:10.00	82.01	0.00	1580.63
6/16/81	17:19.00	82.11	0.00	1580.53
6/17/81	6:49.00	82.27	0.00	1580.37
6/17/81	17: 5.00	82.10	0.00	1580.54
6/18/81	6:56.00	82.07	0.00	1580.57
6/18/81	18:51.00	82.09	0.00	1580.55
6/19/81	6:59.00	82.01	0.00	1580.63
6/19/81	16: 0.00	81.99	0.00	1580.65
6/20/81	7:35.00	82.10	0.00	1580.54
6/20/81	16:31.00	81.98	0.00	1580.66
6/21/81	10:25.00	81.93	0.00	1580.71
6/21/81	17: 1.00	81.93	0.00	1580.71
6/22/81	9:24.00	81.90	0.00	1580.74
6/22/81	16:45.00	82.05	0.00	1580.59
6/23/81	9:24.00	82.04	0.00	1580.60
6/23/81	16:28.00	81.98	0.00	1580.66
6/24/81	14:50.00	81.77	0.00	1580.87

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NAME.....211-2 UPPER
LOCATION.....16451.7,76560.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1662.72

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/13/81	7:40.00	81.76	0.00	1580.96
5/13/81	7:46.00	81.74	0.00	1580.98
5/13/81	17:40.00	81.58	0.00	1581.14
5/14/81	9:20.00	81.54	0.00	1581.18
5/15/81	20: 2.00	81.49	0.00	1581.23
5/17/81	12:33.00	81.71	0.00	1581.01
5/18/81	9:44.00	81.64	0.00	1581.08
5/19/81	12:34.00	81.50	0.00	1581.22
5/20/81	9:20.00	81.48	0.00	1581.24
5/21/81	13:45.00	81.98	0.00	1580.74
5/22/81	13:50.00	83.62	0.00	1579.10
5/23/81	11:46.00	83.16	0.00	1579.56
5/24/81	13:14.00	83.26	0.00	1579.46
5/25/81	12:49.00	83.45	0.00	1579.27
5/26/81	15:20.00	83.67	0.00	1579.05
5/29/81	2:43.00	82.79	0.00	1579.93
5/29/81	17:24.00	82.27	0.00	1580.45
5/30/81	9:21.00	82.32	0.00	1580.40
5/31/81	7:17.00	82.11	0.00	1580.61
6/ 1/81	9:11.00	82.07	0.00	1580.65
6/ 2/81	7:11.00	82.09	0.00	1580.63
6/ 3/81	7: 7.00	81.97	0.00	1580.75
6/ 4/81	9: 5.00	82.16	0.00	1580.56
6/ 5/81	7:16.00	81.95	0.00	1580.77
6/ 6/81	5:27.00	81.96	0.00	1580.76
6/ 7/81	7:15.00	81.68	0.00	1581.04
6/ 8/81	6:50.00	81.70	0.00	1581.02
6/ 9/81	12: 0.00	81.93	0.00	1580.79
6/ 9/81	19: 4.00	82.59	0.00	1580.13
6/10/81	7:10.00	81.62	0.00	1581.10
6/10/81	19:25.00	82.02	0.00	1580.70
6/11/81	6:50.00	82.04	0.00	1580.68
6/12/81	2:47.00	81.10	0.00	1581.62
6/12/81	7:50.00	82.17	0.00	1580.55
6/12/81	17:46.00	82.20	0.00	1580.52
6/13/81	7: 0.00	82.17	0.00	1580.55
6/13/81	17:15.00	82.09	0.00	1580.63
6/14/81	7:17.00	82.22	0.00	1580.50
6/14/81	17:51.00	82.20	0.00	1580.52
6/15/81	7:31.00	82.30	0.00	1580.42

NAME.....211-2 UPPER
LOCATION.....16451.7,76560.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1662.72

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	17:11.00	82.28	0.00	1580.44
6/16/81	6:10.00	82.32	0.00	1580.40
6/16/81	17:47.00	82.41	0.00	1580.31
6/17/81	6:49.00	82.54	0.00	1580.18
6/17/81	17: 4.00	82.39	0.00	1580.33
6/18/81	6:55.00	82.33	0.00	1580.39
6/18/81	18:48.00	82.37	0.00	1580.35
6/19/81	6:47.00	82.32	0.00	1580.40
6/20/81	7:35.00	81.85	0.00	1580.87
6/20/81	16:29.00	81.77	0.00	1580.95
6/21/81	10:26.00	81.68	0.00	1581.04
6/21/81	17: 4.00	81.71	0.00	1581.01
6/22/81	9:25.00	81.70	0.00	1581.02
6/22/81	16:45.00	81.84	0.00	1580.88
6/23/81	9:26.00	81.79	0.00	1580.93
6/23/81	16:31.00	81.77	0.00	1580.95
6/24/81	14:50.00	81.55	0.00	1581.16

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:28 PAGE

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	13:52.00	71.71	0.00	1578.88
5/ 9/81	19:48.00	71.89	0.00	1578.70
5/10/81	7:25.00	71.62	0.00	1578.97
5/10/81	21: 5.00	75.78	0.00	1574.81
5/11/81	7:18.00	72.68	0.00	1577.91
5/11/81	19:20.00	65.93	0.00	1584.66
5/15/81	17:35.00	71.37	0.00	1579.22
5/16/81	18:10.00	71.54	0.00	1579.05
5/17/81	9:17.00	71.57	0.00	1579.02
5/18/81	9:12.00	71.45	0.00	1579.14
5/19/81	9:17.00	71.85	0.00	1578.74
5/20/81	9:16.00	71.25	0.00	1579.34
5/20/81	21:26.00	109.82	0.00	1540.77
5/20/81	21:21.00	110.71	0.00	1539.88
5/21/81	0:23.00	108.47	0.00	1542.12
5/21/81	2:28.00	107.00	0.00	1543.59
5/21/81	4:45.00	108.80	0.00	1541.79
5/21/81	6:25.00	110.09	0.00	1540.50
5/21/81	8:30.00	108.80	0.00	1541.79
5/21/81	10:39.00	109.33	0.00	1541.26
5/21/81	12:20.00	118.46	0.00	1532.13
5/21/81	13:42.00	121.17	0.00	1529.42
5/21/81	18:37.00	120.74	0.00	1529.85
5/21/81	20: 7.00	128.69	0.00	1521.90
5/21/81	22:32.00	138.99	0.00	1511.60
5/22/81	0:25.00	145.22	0.00	1505.37
5/22/81	2:28.00	150.42	0.00	1500.17
5/22/81	4:30.00	153.14	0.00	1497.45
5/22/81	6:36.00	156.06	0.00	1494.53
5/22/81	8:23.00	156.31	0.00	1494.28
5/22/81	10:30.00	165.26	0.00	1485.33
5/22/81	13: 2.00	165.31	0.00	1485.28
5/22/81	18:55.00	170.08	0.00	1480.51
5/22/81	20:15.00	171.69	0.00	1478.90
5/23/81	0:25.00	176.70	0.00	1473.89
5/23/81	2:40.00	178.91	0.00	1471.68
5/23/81	4:27.00	180.18	0.00	1470.41
5/23/81	6:25.00	181.42	0.00	1469.17
5/23/81	8:19.00	182.45	0.00	1468.14
5/23/81	10:31.00	181.49	0.00	1469.10

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	16:51.00	173.51	0.00	1477.08
5/23/81	20:40.00	174.75	0.00	1475.84
5/24/81	0:31.00	177.44	0.00	1473.15
5/24/81	5:25.00	181.26	0.00	1469.33
5/24/81	8:14.00	185.06	0.00	1465.53
5/24/81	12:37.00	195.48	0.00	1455.11
5/24/81	16:38.00	195.20	0.00	1455.39
5/24/81	20:30.00	197.87	0.00	1452.72
5/25/81	0:16.00	199.16	0.00	1451.43
5/25/81	4:23.00	201.58	0.00	1449.01
5/25/81	8:18.00	201.64	0.00	1448.95
5/25/81	12: 5.00	203.06	0.00	1447.53
5/25/81	16:36.00	204.68	0.00	1445.91
5/25/81	20:26.00	207.05	0.00	1443.54
5/26/81	0:40.00	213.10	0.00	1437.49
5/26/81	4:45.00	212.58	0.00	1438.01
5/26/81	8:15.00	213.58	0.00	1437.01
5/26/81	12:15.00	213.84	0.00	1436.75
5/26/81	15: 5.00	213.09	0.00	1437.50
5/26/81	16: 4.00	213.66	0.00	1436.93
5/26/81	20:13.00	214.89	0.00	1435.70
5/27/81	0:25.00	214.77	0.00	1435.82
5/27/81	4:20.00	215.62	0.00	1434.97
5/27/81	8:35.00	215.07	0.00	1435.52
5/27/81	12: 9.00	215.25	0.00	1435.34
5/27/81	13:48.50	215.54	0.00	1435.05
5/27/81	14: 7.67	213.31	0.00	1437.28
5/27/81	14:37.00	215.46	0.00	1435.13
5/27/81	15: 7.00	213.34	0.00	1437.25
5/27/81	15:35.00	214.96	0.00	1435.63
5/27/81	16: 8.00	214.96	0.00	1435.63
5/27/81	17: 7.00	214.66	0.00	1435.93
5/27/81	19:19.00	214.63	0.00	1435.96
5/27/81	20:20.00	213.93	0.00	1436.66
5/27/81	20:55.00	213.79	0.00	1436.80
5/27/81	22:50.00	213.10	0.00	1437.49
5/28/81	1:45.00	211.40	0.00	1439.19
5/28/81	2:40.00	210.45	0.00	1440.14
5/28/81	5:10.00	199.17	0.00	1451.42
5/28/81	6:29.00	197.80	0.00	1452.79

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NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	8:25.00	195.85	0.00	1454.74
5/28/81	10:37.00	196.23	0.00	1454.36
5/28/81	12:15.00	191.70	0.00	1458.89
5/28/81	14:36.00	185.42	0.00	1465.17
5/28/81	16:20.00	180.60	0.00	1469.99
5/28/81	18:25.00	174.77	0.00	1475.82
5/28/81	20:19.00	169.37	0.00	1481.22
5/29/81	0: 0.00	158.65	0.00	1491.94
5/29/81	2:30.00	151.00	0.00	1499.59
5/29/81	4:40.00	149.80	0.00	1500.79
5/29/81	6:30.00	139.25	0.00	1511.34
5/29/81	8:22.00	133.95	0.00	1516.64
5/29/81	12:50.00	121.84	0.00	1528.75
5/29/81	16:53.00	111.89	0.00	1538.70
5/29/81	21: 7.00	111.65	0.00	1538.94
5/30/81	0:15.00	111.67	0.00	1538.92
5/30/81	3:32.00	87.28	0.00	1563.31
5/30/81	5:42.00	97.67	0.00	1552.92
5/30/81	8:32.00	87.82	0.00	1562.77
5/30/81	12:21.00	83.97	0.00	1566.62
5/30/81	16:15.00	81.06	0.00	1569.53
5/30/81	20: 9.00	78.89	0.00	1571.70
5/30/81	23:45.00	77.61	0.00	1572.98
5/31/81	4:13.00	75.79	0.00	1574.80
5/31/81	6:59.00	75.79	0.00	1574.80
5/31/81	8: 7.00	75.07	0.00	1575.52
5/31/81	12: 9.00	74.35	0.00	1576.23
5/31/81	12:31.00	71.84	0.00	1578.75
5/31/81	16:45.00	73.69	0.00	1576.90
5/31/81	20: 0.00	73.30	0.00	1577.29
6/ 1/81	0: 3.00	72.98	0.00	1577.61
6/ 1/81	4: 1.00	72.73	0.00	1577.86
6/ 1/81	8:34.00	72.47	0.00	1578.12
6/ 1/81	12:15.00	72.39	0.00	1578.20
6/ 1/81	16: 0.00	72.42	0.00	1578.17
6/ 1/81	20:32.00	72.30	0.00	1578.29
6/ 2/81	0: 1.00	72.18	0.00	1578.41
6/ 2/81	4:15.00	72.18	0.00	1578.41
6/ 2/81	6:55.00	72.18	0.00	1578.41
6/ 2/81	8:55.00	72.17	0.00	1578.42

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 2/81	12:20.00	72.15	0.00	1578.44
6/ 2/81	16:35.00	72.17	0.00	1578.42
6/ 2/81	20:15.00	71.98	0.00	1578.61
6/ 2/81	23:59.00	71.90	0.00	1578.69
6/ 3/81	4: 0.00	71.86	0.00	1578.73
6/ 3/81	6:50.00	71.86	0.00	1578.73
6/ 3/81	8:35.00	71.80	0.00	1578.79
6/ 3/81	12:31.00	71.84	0.00	1578.75
6/ 3/81	16:15.00	71.80	0.00	1578.79
6/ 3/81	20:49.00	71.81	0.00	1578.78
6/ 4/81	0:10.00	71.82	0.00	1578.77
6/ 4/81	5:30.00	71.83	0.00	1578.76
6/ 4/81	6:50.00	71.68	0.00	1578.91
6/ 4/81	8:45.00	71.82	0.00	1578.77
6/ 4/81	12: 8.00	71.82	0.00	1578.77
6/ 4/81	16:18.00	72.00	0.00	1578.59
6/ 4/81	20:30.00	72.02	0.00	1578.57
6/ 5/81	0: 1.00	71.82	0.00	1578.77
6/ 5/81	4:20.00	71.68	0.00	1578.91
6/ 5/81	6:50.00	71.68	0.00	1578.91
6/ 5/81	8:55.00	71.51	0.00	1579.08
6/ 5/81	14:13.00	71.45	0.00	1579.14
6/ 5/81	20:22.00	71.35	0.00	1579.24
6/ 6/81	0: 9.00	71.32	0.00	1579.27
6/ 6/81	4:13.00	71.23	0.00	1579.36
6/ 6/81	8:26.00	71.32	0.00	1579.27
6/ 6/81	12: 8.00	71.20	0.00	1579.39
6/ 7/81	7:10.00	71.32	0.00	1579.27
6/ 8/81	7: 5.00	71.37	0.00	1579.22
6/ 9/81	12: 0.00	71.52	0.00	1579.07
6/ 9/81	19:11.00	71.32	0.00	1579.27
6/10/81	7: 7.00	71.45	0.00	1579.14
6/10/81	17:23.00	71.28	0.00	1579.31
6/11/81	6:45.00	71.31	0.00	1579.28
6/11/81	15:25.00	71.33	0.00	1579.26
6/11/81	19:33.00	71.83	0.00	1578.76
6/12/81	1:40.00	72.78	0.00	1577.81
6/12/81	7:46.00	72.69	0.00	1577.90
6/12/81	11:54.00	73.97	0.00	1576.62
6/12/81	17:41.00	74.33	0.00	1576.26

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:28 PAGE

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	23:39.00	74.61	0.00	1575.98
6/13/81	6:58.00	73.76	0.00	1576.83
6/13/81	12:12.00	74.87	0.00	1575.72
6/13/81	17: 7.00	74.90	0.00	1575.69
6/13/81	21: 7.00	74.92	0.00	1575.67
6/14/81	7: 2.00	75.04	0.00	1575.55
6/14/81	12: 9.00	75.03	0.00	1575.56
6/14/81	17:44.00	75.06	0.00	1575.53
6/14/81	23:25.00	75.06	0.00	1575.53
6/15/81	7:29.00	75.23	0.00	1575.36
6/15/81	12: 0.00	75.28	0.00	1575.31
6/15/81	17: 3.00	75.28	0.00	1575.31
6/15/81	23:50.00	75.34	0.00	1575.25
6/16/81	6: 5.00	75.34	0.00	1575.25
6/16/81	12: 1.00	75.45	0.00	1575.14
6/16/81	17:11.00	75.50	0.00	1575.09
6/16/81	23:45.00	75.60	0.00	1574.99
6/17/81	6:47.00	75.65	0.00	1574.94
6/17/81	12:14.00	75.66	0.00	1574.93
6/17/81	16:48.00	75.65	0.00	1574.94
6/17/81	23:34.00	75.67	0.00	1574.92
6/18/81	6:52.00	75.65	0.00	1574.94
6/18/81	12: 3.00	75.52	0.00	1575.07
6/18/81	18:41.00	75.54	0.00	1575.05
6/18/81	23:30.00	74.78	0.00	1575.81
6/19/81	6:35.00	73.63	0.00	1576.96
6/19/81	12:45.00	73.00	0.00	1577.59
6/19/81	15:53.00	72.71	0.00	1577.88
6/20/81	7:30.00	71.88	0.00	1578.71
6/20/81	16:24.00	71.66	0.00	1578.93
6/21/81	10:22.00	71.58	0.00	1579.01
6/21/81	16:58.00	71.41	0.00	1579.18
6/22/81	9:22.00	71.33	0.00	1579.26
6/22/81	16:41.00	71.50	0.00	1579.09
6/23/81	9:15.00	71.59	0.00	1579.00
6/23/81	15:18.00	71.57	0.00	1579.02
6/24/81	14:45.00	71.28	0.00	1579.31

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:44 PAGE 1

NAME.....211-3 UPPER
LOCATION.....16476.1,76300.6
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	18:18.00	66.50	0.00	1584.09
5/17/81	9:14.00	68.20	0.00	1582.39
5/18/81	9: 9.00	69.42	0.00	1581.17
5/19/81	9:15.00	69.96	0.00	1580.63
5/20/81	9:15.00	70.17	0.00	1580.42
5/21/81	13:40.00	70.63	0.00	1579.96
5/22/81	13:37.00	70.80	0.00	1579.79
5/23/81	14: 0.00	70.77	0.00	1579.82
5/24/81	13: 7.00	70.95	0.00	1579.64
5/25/81	12:40.00	70.92	0.00	1579.67
5/26/81	14:39.00	71.41	0.00	1579.18
5/30/81	9:15.00	70.64	0.00	1579.95
6/ 1/81	9: 9.00	70.27	0.00	1580.32
6/ 3/81	7: 3.00	70.01	0.00	1580.58
6/ 5/81	7: 5.00	69.96	0.00	1580.63
6/ 6/81	8:56.00	69.97	0.00	1580.62
6/ 7/81	12: 0.00	70.00	0.00	1580.59
6/ 8/81	7: 3.00	70.02	0.00	1580.57
6/ 9/81	19:12.00	69.98	0.00	1580.61
6/10/81	7: 5.00	69.90	0.00	1580.69
6/10/81	17:21.00	69.99	0.00	1580.60
6/11/81	6:44.00	69.92	0.00	1580.67
6/11/81	15:23.00	69.98	0.00	1580.61
6/11/81	19:29.00	70.02	0.00	1580.57
6/12/81	1:39.00	70.00	0.00	1580.59
6/12/81	7:45.00	70.05	0.00	1580.54
6/12/81	17:40.00	70.06	0.00	1580.53
6/13/81	6:53.00	70.04	0.00	1580.55
6/13/81	17: 8.00	69.90	0.00	1580.69
6/14/81	6:56.00	69.99	0.00	1580.60
6/14/81	17:41.00	69.96	0.00	1580.63
6/15/81	7:29.00	70.04	0.00	1580.55
6/15/81	17: 3.00	70.15	0.00	1580.44
6/16/81	6: 4.00	70.10	0.00	1580.49
6/16/81	17:12.00	70.20	0.00	1580.39
6/17/81	6:47.00	70.36	0.00	1580.23
6/17/81	16:40.00	70.19	0.00	1580.40
6/18/81	6:52.00	70.12	0.00	1580.47
6/18/81	18:43.00	70.14	0.00	1580.45
6/19/81	6:36.00	70.28	0.00	1580.31

NAME.....211-3 UPPER
LOCATION.....16476.1,76300.6
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	15:54.00	70.24	0.00	1580.35
6/20/81	7:30.00	70.10	0.00	1580.49
6/20/81	16:25.00	70.00	0.00	1580.59
6/21/81	10:22.00	69.94	0.00	1580.65
6/21/81	16:58.00	69.98	0.00	1580.61
6/22/81	9:22.00	69.89	0.00	1580.70
6/22/81	16:41.00	70.12	0.00	1580.47
6/23/81	9:17.00	70.25	0.00	1580.34
6/23/81	16:19.00	70.27	0.00	1580.32
6/24/81	14:45.00	69.94	0.00	1580.65

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:58 PAGE

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12:15.00	54.89	-2.12	1585.63
5/ 1/81	19:39.00	54.95	-2.12	1585.57
5/ 2/81	3:55.00	55.00	-2.13	1585.53
5/ 2/81	9:27.00	55.11	-2.13	1585.42
5/ 2/81	12:39.00	55.10	-2.13	1585.43
5/ 2/81	12:31.00	54.99	-2.13	1585.54
5/ 2/81	18:29.00	54.95	-2.12	1585.57
5/ 2/81	22:30.00	54.98	-2.13	1585.55
5/ 3/81	3:50.00	54.86	-2.12	1585.66
5/ 3/81	9: 0.00	54.87	-2.12	1585.65
5/ 4/81	12: 5.00	54.67	-2.11	1585.84
5/ 5/81	7: 5.00	54.52	-2.11	1585.99
5/ 6/81	6:35.00	54.40	-2.10	1586.10
5/ 7/81	6:15.00	54.27	-2.10	1586.23
5/15/81	19:29.00	53.69	-2.08	1586.79
5/17/81	11:30.00	53.64	-2.07	1586.83
5/20/81	11:33.00	53.47	-2.07	1587.00
5/21/81	15:58.00	53.75	-2.08	1586.73
5/22/81	15:52.00	53.84	-2.08	1586.64
5/23/81	14:28.00	53.89	-2.08	1586.59
5/24/81	15: 7.00	53.90	-2.08	1586.58
5/25/81	15: 0.00	53.92	-2.08	1586.56
5/26/81	17:56.00	53.95	-2.09	1586.54
5/28/81	21:20.00	53.66	-2.07	1586.81
5/29/81	15:56.00	53.44	-2.07	1587.03
5/30/81	10:34.00	53.46	-2.07	1587.01
5/31/81	11: 4.00	53.57	-2.07	1586.90
6/ 1/81	9:35.00	53.28	-2.06	1587.18
6/ 2/81	18:58.00	53.30	-2.06	1587.16
6/ 3/81	10:21.00	53.25	-2.06	1587.21
6/ 4/81	11: 0.00	53.25	-2.06	1587.21
6/ 5/81	12:57.00	53.21	-2.06	1587.25
6/ 6/81	6: 7.00	53.20	-2.06	1587.26
6/ 6/81	13:10.00	53.82	-2.08	1586.66
6/ 6/81	13:47.70	150.00	-5.80	1494.20
6/ 6/81	13:49.27	155.00	-6.01	1489.41
6/ 6/81	13:51.33	160.00	-6.21	1484.61
6/ 6/81	13:54.08	165.00	-6.42	1479.82
6/ 6/81	13:57.82	170.00	-6.62	1475.02
6/ 6/81	14: 2.63	175.00	-6.83	1470.23

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:58 PAGE

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 6/81	14:13.87	185.00	-7.24	1460.64
6/ 6/81	14:17.95	190.00	-7.45	1455.85
6/ 6/81	14:26.60	200.00	-7.86	1446.26
6/ 6/81	14:34.43	205.00	-8.09	1441.49
6/ 6/81	14:59.23	210.00	-8.32	1436.72
6/ 6/81	15: 0.00	213.75	-8.50	1433.15
6/ 6/81	15:15.00	218.15	-8.70	1428.95
6/ 6/81	15:48.00	230.15	-9.26	1417.51
6/ 6/81	16: 0.00	230.80	-9.29	1416.89
6/ 6/81	16:33.00	233.70	-9.42	1414.12
6/ 6/81	16:52.00	240.35	-9.73	1407.78
6/ 6/81	16:57.00	279.62	-11.55	1370.33
6/ 6/81	17:15.00	256.48	-10.48	1392.40
6/ 6/81	17:15.17	255.00	-10.41	1393.81
6/ 6/81	17:22.87	113.00	-4.37	1529.77
6/ 6/81	17:24.00	111.00	-4.29	1531.69
6/ 6/81	17:25.32	109.00	-4.21	1533.61
6/ 6/81	17:26.75	107.00	-4.14	1535.54
6/ 6/81	17:28.38	105.00	-4.06	1537.46
6/ 6/81	17:33.95	100.00	-3.87	1542.27
6/ 6/81	17:40.90	95.00	-3.67	1547.07
6/ 6/81	17:53.15	90.00	-3.48	1551.88
6/ 6/81	18: 7.58	85.00	-3.29	1556.69
6/ 6/81	18:25.87	80.00	-3.09	1561.49
6/ 6/81	18:45.00	75.57	-2.92	1565.75
6/ 6/81	19:16.00	70.81	-2.74	1570.33
6/ 6/81	19:57.00	67.13	-2.60	1573.87
6/ 6/81	21:58.00	59.22	-2.29	1581.47
6/ 6/81	23:48.00	56.74	-2.19	1583.85
6/ 9/81	2:10.00	55.62	-2.15	1584.93
6/ 9/81	3:56.00	54.74	-2.12	1585.78
6/ 9/81	5:58.00	54.50	-2.11	1586.01
6/ 9/81	11:45.00	54.18	-2.09	1586.31
6/ 9/81	15:10.00	54.10	-2.09	1586.39
6/10/81	0: 1.00	54.01	-2.09	1586.48
6/10/81	6:14.00	54.02	-2.09	1586.47
6/10/81	11:56.00	53.98	-2.09	1586.51
6/10/81	19: 0.00	53.98	-2.09	1586.51
6/10/81	23:59.00	53.97	-2.09	1586.52
6/11/81	5:50.00	53.96	-2.09	1586.53

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:20:58 PAGE

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/11/81	11:58.00	53.90	-2.08	1586.58
6/11/81	12: 0.00	53.95	-2.09	1586.54
6/11/81	12: 5.33	170.00	-6.62	1475.02
6/11/81	12: 8.70	175.00	-6.83	1470.23
6/11/81	12:10.48	177.00	-6.91	1468.31
6/11/81	12:11.72	179.00	-6.99	1466.39
6/11/81	12:13.55	181.00	-7.08	1464.48
6/11/81	12:16.05	183.00	-7.16	1462.56
6/11/81	12:18.97	185.00	-7.24	1460.64
6/11/81	12:21.88	187.00	-7.32	1458.72
6/11/81	12:23.88	189.00	-7.41	1456.81
6/11/81	12:28.27	191.00	-7.49	1454.89
6/11/81	12:31.90	196.00	-7.70	1450.10
6/11/81	12:33.10	197.00	-7.74	1449.14
6/11/81	12:35.17	198.00	-7.78	1448.18
6/11/81	12:36.62	199.00	-7.82	1447.22
6/11/81	12:45.05	203.00	-8.00	1443.40
6/11/81	12:53.93	205.00	-8.09	1441.49
6/11/81	12:58.87	209.00	-8.28	1437.68
6/11/81	13: 1.43	210.00	-8.32	1436.72
6/11/81	13:11.37	212.00	-8.42	1434.82
6/11/81	13:21.08	215.00	-8.55	1431.95
6/11/81	13:25.78	217.00	-8.65	1430.05
6/11/81	13:38.08	219.83	-8.78	1427.35
6/11/81	13:50.58	232.41	-9.36	1415.35
6/11/81	14: 1.33	227.08	-9.11	1420.43
6/11/81	14:41.00	232.16	-9.35	1415.59
6/11/81	14:58.00	233.91	-9.43	1413.92
6/11/81	15:14.00	233.91	-9.43	1413.92
6/11/81	15:34.00	237.77	-9.61	1410.24
6/11/81	15:55.00	239.91	-9.71	1408.20
6/11/81	16: 7.00	242.14	-9.81	1406.07
6/11/81	16:37.00	245.33	-9.96	1403.03
6/11/81	17:36.00	251.20	-10.23	1397.43
6/11/81	18:34.00	256.20	-10.46	1392.66
6/11/81	19:32.00	258.78	-10.58	1390.20
6/11/81	20:30.00	263.33	-10.79	1385.86
6/11/81	21:30.00	265.66	-10.90	1383.64
6/11/81	22:37.00	266.64	-10.95	1382.71
6/11/81	23:35.00	267.25	-10.97	1382.12

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	0:35.00	269.27	-11.07	1380.20
6/12/81	1:30.00	269.91	-11.10	1379.59
6/12/81	2:37.00	270.70	-11.13	1378.83
6/12/81	3:42.00	271.45	-11.17	1378.12
6/12/81	4:38.00	272.08	-11.20	1377.52
6/12/81	5:30.00	272.37	-11.21	1377.24
6/12/81	6:50.00	272.75	-11.23	1376.88
6/12/81	7:30.00	273.37	-11.26	1376.29
6/12/81	8:36.00	272.84	-11.23	1376.79
6/12/81	12:33.00	275.46	-11.35	1374.29
6/12/81	14:39.00	276.10	-11.38	1373.68
6/12/81	16:36.00	275.37	-11.35	1374.38
6/12/81	18:28.00	274.76	-11.32	1374.96
6/12/81	20:30.00	276.46	-11.40	1373.34
6/12/81	22:38.00	276.77	-11.41	1373.04
6/13/81	0:32.00	278.04	-11.47	1371.83
6/13/81	4:35.00	278.70	-11.50	1371.20
6/13/81	8:25.00	278.62	-11.50	1371.28
6/13/81	12:28.00	278.33	-11.49	1371.56
6/13/81	16:30.00	278.34	-11.49	1371.55
6/13/81	16:33.00	278.60	-11.50	1371.30
6/13/81	20:25.00	277.86	-11.46	1372.00
6/14/81	1:20.00	279.25	-11.53	1370.68
6/14/81	4:47.00	279.45	-11.54	1370.49
6/14/81	8:25.00	279.83	-11.56	1370.13
6/14/81	12:30.00	278.39	-11.49	1371.50
6/14/81	16:27.00	277.98	-11.47	1371.89
6/14/81	16:34.00	278.05	-11.47	1371.82
6/14/81	20:47.00	277.68	-11.46	1372.18
6/15/81	0:30.00	279.08	-11.52	1370.84
6/15/81	4:40.00	279.79	-11.55	1370.16
6/15/81	8:45.00	279.79	-11.55	1370.16
6/15/81	12:37.00	280.20	-11.57	1369.77
6/15/81	16:35.00	280.56	-11.59	1369.43
6/15/81	20:28.00	280.47	-11.59	1369.52
6/15/81	20:31.00	280.19	-11.57	1369.78
6/16/81	0:35.00	280.75	-11.60	1369.25
6/16/81	4:45.00	281.58	-11.64	1368.46
6/16/81	12:26.00	281.70	-11.64	1368.34
6/16/81	15:34.00	281.63	-11.64	1368.41

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1639.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	15:38.00	281.95	-11.65	1368.10
6/16/81	20:28.00	281.94	-11.65	1368.11
6/17/81	0:45.00	282.66	-11.69	1367.43
6/17/81	4:55.00	282.58	-11.68	1367.50
6/17/81	8:32.00	282.50	-11.68	1367.58
6/17/81	12:32.00	282.75	-11.69	1367.34
6/17/81	12:36.00	282.96	-11.70	1367.14
6/17/81	16:30.00	282.62	-11.69	1367.47
6/17/81	20:31.00	283.00	-11.70	1367.10
6/18/81	0:40.00	283.87	-11.74	1366.27
6/18/81	4:45.00	284.33	-11.76	1365.83
6/18/81	8:15.00	284.72	-11.78	1365.46
6/18/81	12:36.00	284.87	-11.79	1365.32
6/18/81	12:40.00	285.08	-11.80	1365.12
6/18/81	14: 5.00	285.11	-11.80	1365.09
6/18/81	14:30.63	252.25	-10.28	1396.43
6/18/81	14:34.08	157.00	-6.09	1487.49
6/18/81	14:35.58	155.00	-6.01	1489.41
6/18/81	14:36.38	153.00	-5.92	1491.32
6/18/81	14:36.22	151.00	-5.84	1493.24
6/18/81	14:37.12	149.00	-5.76	1495.16
6/18/81	14:39.38	145.00	-5.61	1499.01
6/18/81	14:40.58	143.00	-5.53	1500.93
6/18/81	14:42.00	140.00	-5.41	1503.81
6/18/81	14:44.55	138.00	-5.34	1505.74
6/18/81	14:46.52	136.00	-5.26	1507.66
6/18/81	14:48.57	134.00	-5.18	1509.58
6/18/81	14:51.02	132.00	-5.10	1511.50
6/18/81	14:53.60	130.00	-5.03	1513.43
6/18/81	14:56.53	128.00	-4.95	1515.35
6/18/81	14:59.83	126.00	-4.87	1517.27
6/18/91	15: 3.27	124.00	-4.79	1519.19
6/18/81	15: 7.05	122.00	-4.72	1521.12
6/18/81	15:11.07	120.00	-4.64	1523.04
6/18/81	15:15.28	118.00	-4.56	1524.96
6/18/81	15:20.83	116.00	-4.49	1526.89
6/18/81	15:24.83	114.00	-4.41	1528.81
6/18/81	15:30.28	112.00	-4.33	1530.73
6/18/81	15:36.40	110.00	-4.25	1532.65
6/18/81	15:41.88	108.00	-4.18	1534.58

NAME.....213
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.4

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	15:46.75	106.00	-4.10	1536.50
6/18/81	15:53.27	104.00	-4.02	1538.42
6/18/81	15:59.55	102.00	-3.94	1540.34
6/18/81	16:16.58	94.33	-3.65	1547.72
6/18/81	16:31.00	94.16	-3.64	1547.88
6/18/81	16:40.00	94.25	-3.64	1547.79
6/18/81	16:50.00	90.00	-3.48	1551.88
6/18/81	17: 0.00	89.29	-3.41	1553.52
6/18/81	17:10.00	86.75	-3.35	1555.00
6/18/81	17:20.00	85.00	-3.29	1556.69
6/18/81	17:31.00	83.38	-3.22	1558.24
6/18/81	17:59.00	79.67	-3.08	1561.91
6/18/81	18:46.00	74.70	-2.89	1566.59
6/18/81	19:30.00	70.86	-2.74	1570.28
6/18/81	20:30.00	66.80	-2.58	1574.18
6/18/81	21:30.00	64.08	-2.48	1576.80
6/18/81	22:35.00	62.62	-2.42	1578.20
6/18/81	23:40.00	61.50	-2.38	1579.28
6/19/81	0:30.00	60.79	-2.35	1579.96
6/19/81	2:30.00	59.70	-2.31	1581.01
6/19/81	4:30.00	59.08	-2.28	1581.60
6/19/81	6:30.00	58.70	-2.27	1581.97
6/19/81	8:30.00	58.41	-2.26	1582.25
6/19/81	12: 0.00	57.99	-2.24	1582.55
6/19/81	12: 7.00	58.00	-2.24	1582.64
6/19/81	12: 9.00	57.99	-2.24	1582.65
6/19/81	16:41.00	57.58	-2.23	1583.05
6/19/81	23:32.00	57.33	-2.22	1583.29
6/20/81	5:46.00	57.09	-2.21	1583.52
6/20/81	13:47.00	56.91	-2.20	1583.69
6/20/81	17:30.00	56.80	-2.20	1583.80
6/21/81	9: 0.00	56.54	-2.19	1584.05
6/21/81	18:10.00	56.36	-2.18	1584.22
6/22/81	10:13.00	56.18	-2.17	1584.39
6/22/81	17:56.00	56.13	-2.17	1584.44
6/23/81	10:14.00	55.92	-2.16	1584.64
6/23/81	17:25.00	55.87	-2.16	1584.69
6/24/81	15:51.00	55.67	-2.15	1584.88

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NAME.....213-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:36.00	35.99	0.00	1585.67
5/17/81	11:44.00	35.93	0.00	1585.73
5/18/81	11:21.00	35.87	0.00	1585.79
5/19/81	12: 7.00	35.81	0.00	1585.85
5/20/81	11:17.00	35.81	0.00	1585.85
5/21/81	16: 8.00	35.75	0.00	1585.91
5/22/81	16: 3.00	35.70	0.00	1585.96
5/23/81	14:40.00	35.71	0.00	1585.95
5/24/81	15:16.00	35.71	0.00	1585.95
5/25/81	15: 8.00	35.70	0.00	1585.96
5/26/81	18:18.00	35.72	0.00	1585.94
5/28/81	22:47.00	35.66	0.00	1586.00
5/29/81	16: 5.00	35.67	0.00	1585.99
5/30/81	10:45.00	35.70	0.00	1585.96
5/31/81	11:14.00	35.64	0.00	1586.02
6/ 1/81	11:24.00	35.60	0.00	1586.06
6/ 3/81	10:29.00	35.61	0.00	1586.05
6/ 4/81	11:14.00	35.60	0.00	1586.06
6/ 5/81	13: 5.00	35.57	0.00	1586.09
6/ 6/81	6:44.00	35.55	0.00	1586.11
6/ 6/81	16:25.00	35.57	0.00	1586.09
6/ 6/81	20:43.00	35.55	0.00	1586.11
6/ 7/81	1:28.00	35.57	0.00	1586.09
6/ 7/81	4:47.00	35.57	0.00	1586.09
6/ 7/81	8:40.00	35.57	0.00	1586.09
6/ 7/81	15:48.00	35.55	0.00	1586.11
6/ 7/81	21: 3.00	35.56	0.00	1586.10
6/ 9/81	12: 0.00	35.68	0.00	1585.98
6/ 9/81	18: 5.00	35.70	0.00	1585.96
6/10/81	10:19.00	35.65	0.00	1586.01
6/10/81	17:41.00	35.66	0.00	1586.00
6/11/81	8:33.00	35.64	0.00	1586.02
6/11/81	12:34.00	35.60	0.00	1586.06
6/11/81	18:58.00	35.90	0.00	1585.76
6/12/81	4:10.00	36.49	0.00	1585.17
6/12/81	18: 5.00	36.65	0.00	1585.01
6/13/81	17:27.00	37.11	0.00	1584.55
6/14/81	18: 7.00	37.59	0.00	1584.07
6/15/81	10:57.00	37.87	0.00	1583.79
6/15/81	17:25.00	37.90	0.00	1583.76

NAME.....213-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	6:20.00	38.12	0.00	1583.54
6/16/81	17:38.00	38.29	0.00	1583.37
6/17/81	7: 0.00	38.47	0.00	1583.19
6/17/81	17:24.00	38.59	0.00	1583.07
6/18/81	6:11.00	38.75	0.00	1582.91
6/18/81	18:54.00	38.79	0.00	1582.87
6/19/81	7:27.00	38.51	0.00	1583.15
6/19/81	16:20.00	38.37	0.00	1583.29
6/20/81	8: 1.00	38.18	0.00	1583.48
6/20/81	16:52.00	38.09	0.00	1583.57
6/21/81	10:44.00	37.78	0.00	1583.88
6/21/81	17:28.00	37.80	0.00	1583.86
6/22/81	9:38.00	37.66	0.00	1584.00
6/22/81	17: 9.00	37.61	0.00	1584.05
6/23/81	9:47.00	37.65	0.00	1584.01
6/23/81	16:43.00	37.56	0.00	1584.10
6/24/81	15:14.00	37.29	0.00	1584.37

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NAME.....213-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12: 1.00	34.14	0.00	1585.21
5/ 1/81	19:23.00	34.22	0.00	1585.13
5/ 2/81	4:15.00	34.30	0.00	1585.05
5/ 2/81	9:12.00	34.36	0.00	1584.99
5/ 2/81	9:56.00	34.36	0.00	1584.99
5/ 2/81	11: 1.00	34.35	0.00	1585.00
5/ 2/81	11: 2.00	34.35	0.00	1585.00
5/ 2/81	11: 4.00	34.34	0.00	1585.01
5/ 2/81	11: 6.00	34.34	0.00	1585.01
5/ 2/81	11: 8.00	34.34	0.00	1585.01
5/ 2/81	11:10.00	34.34	0.00	1585.01
5/ 2/81	11:11.00	34.34	0.00	1585.01
5/ 2/81	11:12.00	34.34	0.00	1585.01
5/ 2/81	11:14.00	34.34	0.00	1585.01
5/ 2/81	11:16.00	34.34	0.00	1585.01
5/ 2/81	11:17.00	34.34	0.00	1585.01
5/ 2/81	11:20.00	34.33	0.00	1585.02
5/ 2/81	11:22.00	34.33	0.00	1585.02
5/ 2/81	11:24.00	34.33	0.00	1585.02
5/ 2/81	11:29.00	34.33	0.00	1585.02
5/ 2/81	11:34.00	34.33	0.00	1585.02
5/ 2/81	11:39.00	34.32	0.00	1585.03
5/ 2/81	11:44.00	34.32	0.00	1585.03
5/ 2/81	11:49.00	34.32	0.00	1585.03
5/ 2/81	11:54.00	34.32	0.00	1585.03
5/ 2/81	11:59.00	34.34	0.00	1585.01
5/ 2/81	12: 9.00	34.32	0.00	1585.03
5/ 2/81	12:27.00	34.33	0.00	1585.02
5/ 2/81	12:50.00	34.32	0.00	1585.03
5/ 2/81	13:26.00	34.30	0.00	1585.05
5/ 2/81	14:24.00	34.29	0.00	1585.06
5/ 2/81	15:12.00	34.29	0.00	1585.06
5/ 2/81	16:12.00	34.27	0.00	1585.08
5/ 2/81	18:12.00	34.22	0.00	1585.13
5/ 2/81	19: 9.00	34.24	0.00	1585.11
5/ 2/81	20:11.00	34.24	0.00	1585.11
5/ 2/81	21:30.00	34.22	0.00	1585.13
5/ 2/81	22:10.00	34.23	0.00	1585.12
5/ 2/81	23:15.00	34.24	0.00	1585.11
5/ 3/81	1: 0.00	34.18	0.00	1585.17

NAME.....213-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 3/81	3:30.00	34.40	0.00	1584.95
5/ 3/81	5:25.00	34.17	0.00	1585.18
5/ 3/81	7:20.00	34.10	0.00	1585.25
5/ 3/81	9: 0.00	34.10	0.00	1585.25
5/ 3/81	11:15.00	34.09	0.00	1585.26
5/ 4/81	12:23.00	33.85	0.00	1585.50
5/ 5/81	6:17.00	33.82	0.00	1585.53
5/ 6/81	6:40.00	33.68	0.00	1585.67
5/ 7/81	5:45.00	33.56	0.00	1585.79
5/15/81	19:38.00	32.99	0.00	1586.36
5/17/81	11:53.00	31.97	0.00	1587.38
5/18/81	11:23.00	32.85	0.00	1586.50
5/19/81	12:11.00	32.82	0.00	1586.53
5/20/81	11:17.00	32.78	0.00	1586.57
5/21/81	16:10.00	32.77	0.00	1586.58
5/22/81	16: 1.00	32.70	0.00	1586.65
5/23/81	14:58.00	32.71	0.00	1586.64
5/24/81	15:14.00	32.68	0.00	1586.67
5/25/81	15:20.00	32.69	0.00	1586.66
5/26/81	18:25.00	32.68	0.00	1586.67
5/28/81	22:56.00	31.40	0.00	1587.95
5/29/81	16: 7.00	32.63	0.00	1586.72
5/30/81	10:47.00	32.66	0.00	1586.69
5/31/81	11:17.00	32.31	0.00	1587.04
6/ 1/81	10: 3.00	32.15	0.00	1587.20
6/ 3/81	10:30.00	32.58	0.00	1586.77
6/ 4/81	11:15.00	32.48	0.00	1586.87
6/ 5/81	13: 8.00	32.55	0.00	1586.80
6/ 6/81	6:34.00	32.53	0.00	1586.82
6/ 6/81	16:26.00	32.52	0.00	1586.83
6/ 7/81	8:42.00	32.53	0.00	1586.82
6/ 7/81	15:52.00	32.50	0.00	1586.85
6/ 9/81	12: 0.00	32.64	0.00	1586.71
6/ 9/81	24: 0.00	32.67	0.00	1586.68
6/10/81	10:22.00	32.62	0.00	1586.73
6/10/81	17:40.00	32.65	0.00	1586.70
6/11/81	8:30.00	32.52	0.00	1586.73
6/11/81	12:39.00	32.54	0.00	1586.81
6/11/81	19: 9.00	33.20	0.00	1586.15
6/12/81	4:20.00	33.59	0.00	1585.76

NAME.....213-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	18:11.00	33.98	0.00	1585.37
6/13/81	7:58.00	34.24	0.00	1585.11
6/13/81	17:35.00	34.46	0.00	1584.89
6/14/81	18:13.00	33.51	0.00	1585.84
6/15/81	11: 3.00	35.18	0.00	1584.17
6/15/81	17:36.00	35.28	0.00	1584.07
6/16/81	6:17.00	35.25	0.00	1584.10
6/16/81	17:42.00	35.59	0.00	1583.76
6/17/81	6:57.00	35.66	0.00	1583.69
6/17/81	17: 0.00	35.85	0.00	1583.50
6/18/81	6:10.00	36.03	0.00	1583.32
6/18/81	18:52.00	35.74	0.00	1583.61
6/19/81	7:25.00	35.32	0.00	1584.03
6/20/81	7:59.00	35.01	0.00	1584.34
6/20/81	16:59.00	34.97	0.00	1584.38
6/21/81	10:48.00	34.90	0.00	1584.45
6/21/81	17:25.00	34.65	0.00	1584.70
6/22/81	9:43.00	34.56	0.00	1584.79
6/22/81	17: 6.00	34.49	0.00	1584.86
6/23/81	9:47.00	34.47	0.00	1584.88
6/23/81	16:47.00	34.22	0.00	1585.13
6/24/81	15:11.00	34.18	0.00	1585.17

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NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/26/18	22: 7.00	39.42	0.00	1586.21
4/29/81	12:38.00	39.86	0.00	1585.77
4/29/81	12:45.00	40.18	0.00	1585.45
4/29/81	12:54.00	40.31	0.00	1585.32
4/29/81	13:42.00	40.44	0.00	1585.19
4/29/81	13:54.00	40.56	0.00	1585.07
4/29/81	14:26.00	40.68	0.00	1584.95
4/29/81	14:53.00	40.75	0.00	1584.88
4/29/81	15:42.00	40.86	0.00	1584.77
4/29/81	16:54.00	40.97	0.00	1584.66
4/29/81	18: 5.00	41.06	0.00	1584.57
4/29/81	19: 2.00	41.15	0.00	1584.48
4/29/81	19:44.00	41.20	0.00	1584.43
4/29/81	21: 0.00	41.28	0.00	1584.35
4/29/81	22: 0.00	41.32	0.00	1584.31
4/29/81	23: 0.00	41.42	0.00	1584.21
4/29/81	24: 0.00	41.49	0.00	1584.14
4/30/81	1: 0.00	41.59	0.00	1584.04
4/30/81	2: 0.00	41.64	0.00	1583.99
4/30/81	3: 0.00	41.69	0.00	1583.94
4/30/81	4: 0.00	41.73	0.00	1583.90
4/30/81	5: 0.00	41.75	0.00	1583.88
4/30/81	6: 0.00	41.82	0.00	1583.81
4/30/81	7: 0.00	41.84	0.00	1583.79
4/30/81	8: 0.00	41.86	0.00	1583.77
4/30/81	9:31.00	41.90	0.00	1583.73
4/30/81	11:18.00	41.98	0.00	1583.65
4/30/81	13: 9.00	42.00	0.00	1583.63
4/30/81	15:17.00	42.03	0.00	1583.60
4/30/81	18: 1.00	42.09	0.00	1583.54
4/30/81	18:51.00	42.10	0.00	1583.53
4/30/81	19:59.00	42.12	0.00	1583.51
4/30/81	21:13.00	42.14	0.00	1583.49
4/30/81	23: 0.00	42.18	0.00	1583.45
5/ 1/81	1: 0.00	42.22	0.00	1583.41
5/ 1/81	3: 0.00	42.24	0.00	1583.39
5/ 1/81	5: 0.00	42.25	0.00	1583.38
5/ 1/81	7: 0.00	42.28	0.00	1583.35
5/ 1/81	9: 0.00	42.33	0.00	1583.30
5/ 1/81	11:12.00	42.39	0.00	1583.24

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:21:42 PAGE 2

NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	13: 7.00	42.35	0.00	1583.28
5/ 1/81	15: 7.00	42.38	0.00	1583.25
5/ 1/81	17: 9.00	42.41	0.00	1583.22
5/ 1/81	19:15.00	42.45	0.00	1583.18
5/ 1/81	21: 0.00	42.49	0.00	1583.14
5/ 1/81	23:30.00	42.52	0.00	1583.11
5/ 2/81	1:25.00	42.54	0.00	1583.09
5/ 2/81	3:15.00	42.56	0.00	1583.07
5/ 2/81	5:15.00	42.58	0.00	1583.05
5/ 2/81	7:15.00	42.60	0.00	1583.03
5/ 2/81	9: 8.00	42.63	0.00	1583.00
5/ 2/81	9: 8.00	42.63	0.00	1583.00
5/ 2/81	11: 0.25	42.42	0.00	1583.21
5/ 2/81	11: 1.67	42.53	0.00	1583.10
5/ 2/81	11: 2.17	42.44	0.00	1583.19
5/ 2/81	11: 3.25	42.44	0.00	1583.19
5/ 2/81	11: 4.33	42.45	0.00	1583.18
5/ 2/81	11: 6.50	42.43	0.00	1583.20
5/ 2/81	11: 7.42	42.42	0.00	1583.21
5/ 2/81	11: 8.50	42.40	0.00	1583.23
5/ 2/81	11: 9.50	42.38	0.00	1583.25
5/ 2/81	11:10.25	42.38	0.00	1583.26
5/ 2/81	11:11.25	42.36	0.00	1583.27
5/ 2/81	11:12.08	42.34	0.00	1583.29
5/ 2/81	11:13.08	42.33	0.00	1583.30
5/ 2/81	11:14.17	42.33	0.00	1583.30
5/ 2/81	11:15.08	42.30	0.00	1583.33
5/ 2/81	11:16.17	42.29	0.00	1583.34
5/ 2/81	11:17.58	42.26	0.00	1583.37
5/ 2/81	11:18.50	42.24	0.00	1583.39
5/ 2/81	11:19.50	42.23	0.00	1583.40
5/ 2/81	11:20.33	42.24	0.00	1583.39
5/ 2/81	11:21.42	42.23	0.00	1583.40
5/ 2/81	11:23.50	42.22	0.00	1583.41
5/ 2/81	11:25.50	42.20	0.00	1583.43
5/ 2/81	11:27.50	42.19	0.00	1583.44
5/ 2/81	11:32.50	42.15	0.00	1583.48
5/ 2/81	11:37.50	42.11	0.00	1583.52
5/ 2/81	11:42.00	42.09	0.00	1583.54
5/ 2/81	11:47.00	42.07	0.00	1583.56

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:21:42 PAGE

NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 2/81	11:57.00	42.02	0.00	1583.61
5/ 2/81	12: 7.00	41.70	0.00	1583.93
5/ 2/81	12:22.00	41.91	0.00	1583.72
5/ 2/81	12:49.00	41.85	0.00	1583.78
5/ 2/81	13:24.00	41.75	0.00	1583.88
5/ 2/81	14:17.00	41.66	0.00	1583.97
5/ 2/81	15: 8.00	41.58	0.00	1584.05
5/ 2/81	16:10.00	41.51	0.00	1584.12
5/ 2/81	18: 9.00	41.40	0.00	1584.23
5/ 2/81	19: 7.00	41.36	0.00	1584.27
5/ 2/81	20: 5.00	41.35	0.00	1584.28
5/ 2/81	21:20.00	41.30	0.00	1584.33
5/ 2/81	22: 0.00	41.28	0.00	1584.35
5/ 2/81	23:10.00	41.29	0.00	1584.34
5/ 3/81	0: 0.00	41.20	0.00	1584.43
5/ 3/81	3:25.00	41.11	0.00	1584.52
5/ 3/81	5:15.00	41.05	0.00	1584.58
5/ 3/81	7:15.00	41.00	0.00	1584.63
5/ 3/81	9: 0.00	41.00	0.00	1584.63
5/ 3/81	11:11.00	41.00	0.00	1584.63
5/ 4/81	12:15.00	40.67	0.00	1584.96
5/ 5/81	6: 5.00	40.44	0.00	1585.19
5/ 6/81	5:35.00	40.54	0.00	1585.09
5/ 7/81	5:40.00	40.27	0.00	1585.36
5/15/81	19:43.00	39.65	0.00	1585.98
5/17/81	11:50.00	39.61	0.00	1586.02
5/18/81	11:18.00	39.55	0.00	1586.08
5/19/81	12: 4.00	39.49	0.00	1586.14
5/20/81	11:15.00	39.47	0.00	1586.16
5/21/81	16: 2.00	39.50	0.00	1586.13
5/22/81	15:58.00	39.50	0.00	1586.13
5/23/81	14:38.00	39.51	0.00	1586.12
5/24/81	15:12.00	39.50	0.00	1586.13
5/25/81	15:10.00	39.49	0.00	1586.14
5/26/81	13:22.00	39.48	0.00	1586.15
5/29/81	16: 4.00	39.37	0.00	1586.26
5/30/81	10:42.00	39.39	0.00	1586.24
5/31/81	11:12.00	39.34	0.00	1586.29
6/ 1/81	9:45.00	39.28	0.00	1586.35
6/ 2/81	19:20.00	39.30	0.00	1586.33

NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 3/81	10:27.00	39.25	0.00	1586.38
6/ 4/81	11:11.00	39.27	0.00	1586.36
6/ 5/81	13: 3.00	39.23	0.00	1586.40
6/ 6/81	6:47.00	39.24	0.00	1586.39
6/ 6/81	16:24.00	39.21	0.00	1586.42
6/ 6/81	20:42.00	39.21	0.00	1586.42
6/ 7/81	1:28.00	39.19	0.00	1586.44
6/ 7/81	4:43.00	39.20	0.00	1586.43
6/ 7/81	8:38.00	39.20	0.00	1586.43
6/ 7/81	15:45.00	39.29	0.00	1586.34
6/ 7/81	20:58.00	39.27	0.00	1586.36
6/ 9/81	12: 0.00	39.42	0.00	1586.21
6/ 9/81	18: 4.00	39.47	0.00	1586.16
6/10/81	10:20.00	39.31	0.00	1586.32
6/10/81	17:44.00	39.30	0.00	1586.33
6/11/81	8:44.00	39.43	0.00	1586.20
6/11/81	9: 9.00	39.40	0.00	1586.23
6/11/81	12:31.00	39.20	0.00	1586.43
6/11/81	12:52.75	39.43	0.00	1586.20
6/11/81	13:54.00	40.20	0.00	1585.43
6/11/81	16:21.00	41.58	0.00	1584.05
6/11/81	19: 1.00	41.90	0.00	1583.73
6/11/81	20:35.00	42.27	0.00	1583.36
6/11/81	23:10.00	42.17	0.00	1583.46
6/12/81	6: 0.00	42.72	0.00	1582.91
6/12/81	9:12.00	42.60	0.00	1583.03
6/12/81	14:51.00	42.72	0.00	1582.91
6/12/81	18: 0.00	42.68	0.00	1582.95
6/12/81	20: 3.00	42.83	0.00	1582.80
6/13/81	0:50.00	42.87	0.00	1582.76
6/13/81	5:25.00	43.14	0.00	1582.49
6/13/81	9:10.00	43.32	0.00	1582.31
6/13/81	15:24.00	43.70	0.00	1581.93
6/13/81	17:31.00	43.56	0.00	1582.07
6/13/81	19:41.00	43.82	0.00	1581.81
6/13/81	23:45.00	43.94	0.00	1581.69
6/14/81	7:15.00	44.10	0.00	1581.53
6/14/81	13:15.00	44.45	0.00	1581.18
6/14/81	18:10.00	44.38	0.00	1581.25
6/14/81	19:17.00	44.54	0.00	1581.09

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NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	0:50.00	44.58	0.00	1581.05
6/15/81	6:25.00	44.81	0.00	1580.82
6/15/81	10:59.00	44.69	0.00	1580.94
6/15/81	15:43.00	44.99	0.00	1580.64
6/15/81	17:28.00	44.95	0.00	1580.68
6/15/81	19:33.00	45.12	0.00	1580.51
6/16/81	0:30.00	45.26	0.00	1580.37
6/16/81	5:55.00	45.26	0.00	1580.37
6/16/81	13:15.00	45.26	0.00	1580.37
6/16/81	17:36.00	45.17	0.00	1580.46
6/16/81	18:25.00	45.37	0.00	1580.26
6/17/81	0:15.00	45.46	0.00	1580.17
6/17/81	5:35.00	45.58	0.00	1580.05
6/17/81	7: 4.00	45.35	0.00	1580.28
6/17/81	12:58.00	45.63	0.00	1580.00
6/17/81	17:30.00	45.59	0.00	1580.04
6/17/81	18:45.00	45.73	0.00	1579.90
6/18/81	0:25.00	44.82	0.00	1580.81
6/18/81	5:50.00	45.94	0.00	1579.69
6/18/81	6:13.00	45.80	0.00	1579.83
6/18/81	11:40.00	45.94	0.00	1579.69
6/18/81	14:45.75	46.04	0.00	1579.59
6/18/81	15:51.50	45.85	0.00	1579.78
6/18/81	16:50.00	45.37	0.00	1580.26
6/18/81	17:40.00	44.92	0.00	1580.71
6/18/81	19:28.00	43.92	0.00	1581.71
6/18/81	19:40.00	43.98	0.00	1581.65
6/18/81	21:55.00	43.39	0.00	1582.24
6/18/81	23:55.00	43.15	0.00	1582.48
6/19/81	2:15.00	42.95	0.00	1582.68
6/19/81	3:35.00	42.87	0.00	1582.76
6/19/81	5:45.00	42.75	0.00	1582.88
6/19/81	7:30.00	42.55	0.00	1583.08
6/19/81	7:40.00	42.66	0.00	1582.97
6/19/81	16:23.00	42.32	0.00	1583.31
6/19/81	16:47.00	42.46	0.00	1583.17
6/19/81	22:35.00	42.60	0.00	1583.03
6/19/81	23:41.00	42.17	0.00	1583.46
6/20/81	5:55.00	42.05	0.00	1583.58
6/20/81	8: 0.00	42.05	0.00	1583.58

NAME.....213-3 LOWER
LOCATION.....16112.3,78467.4
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.63

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/20/81	13:54.00	42.06	0.00	1583.57
6/20/81	16:56.00	41.90	0.00	1583.73
6/20/81	17:35.00	42.02	0.00	1583.61
6/21/81	9: 6.00	41.59	0.00	1584.04
6/21/81	10:46.00	41.59	0.00	1584.04
6/21/81	17:30.00	41.61	0.00	1584.02
6/21/81	18: 6.00	41.51	0.00	1584.12
6/22/81	9:40.00	41.40	0.00	1584.23
6/22/81	10: 8.00	41.40	0.00	1584.23
6/22/81	17:12.00	41.32	0.00	1584.31
6/22/81	17:48.00	41.32	0.00	1584.31
6/23/81	10:21.00	41.34	0.00	1584.29
6/23/81	17:32.00	41.29	0.00	1584.34
6/24/81	15:18.00	40.99	0.00	1584.64
6/24/81	15:48.00	40.99	0.00	1584.64

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NAME.....213-3 UPPER
LOCATION.....16112.3,78467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:40.00	39.80	0.00	1585.98
5/17/81	11:47.00	39.72	0.00	1586.06
5/18/81	11:17.00	39.69	0.00	1586.09
5/19/81	12: 2.00	39.64	0.00	1586.14
5/20/81	11:13.00	39.60	0.00	1586.18
5/21/81	16: 2.00	39.56	0.00	1586.22
5/22/81	15:59.00	39.53	0.00	1586.25
5/23/81	14:36.00	39.51	0.00	1586.27
5/24/81	15:13.00	39.48	0.00	1586.30
5/26/81	15: 9.00	39.49	0.00	1586.29
5/26/81	18:20.00	39.50	0.00	1586.28
5/28/81	22: 5.00	39.33	0.00	1586.45
5/29/81	26: 3.00	39.46	0.00	1586.32
5/30/81	10:40.00	39.48	0.00	1586.30
5/31/81	11:11.00	39.47	0.00	1586.31
6/ 1/81	11:28.00	39.48	0.00	1586.30
6/ 2/81	19:14.00	39.46	0.00	1586.32
6/ 3/81	10:26.00	39.40	0.00	1586.38
6/ 4/81	11:10.00	39.38	0.00	1586.40
6/ 5/81	13: 2.00	39.35	0.00	1586.43
6/ 6/81	7:12.00	39.36	0.00	1586.42
6/ 6/81	16:24.00	39.33	0.00	1586.45
6/ 6/81	20:40.00	39.34	0.00	1586.44
6/ 7/81	1:25.00	39.34	0.00	1586.44
6/ 7/81	4:40.00	39.34	0.00	1586.44
6/ 7/81	8:35.00	39.34	0.00	1586.44
6/ 7/81	15:44.00	39.33	0.00	1586.45
6/ 7/81	20:56.00	39.32	0.00	1586.46
6/ 9/81	24: 0.00	39.39	0.00	1586.39

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NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1653.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:31.00	69.35	0.00	1584.29
5/16/81	19:16.00	69.39	0.00	1584.25
5/17/81	10:33.00	69.58	0.00	1584.06
5/19/81	11: 5.00	69.40	0.00	1584.24
5/20/81	10:21.00	69.33	0.00	1584.31
5/21/81	14:42.00	69.45	0.00	1584.19
5/22/81	15: 3.00	69.37	0.00	1584.27
5/23/81	13: 0.00	69.37	0.00	1584.27
5/24/81	14:20.00	69.33	0.00	1584.31
5/25/81	13:59.00	69.31	0.00	1584.33
5/26/81	16:46.00	70.90	0.00	1582.74
5/28/81	13:17.00	69.19	0.00	1584.45
5/30/81	1:37.00	69.37	0.00	1584.27
5/30/81	21: 0.00	69.12	0.00	1584.52
5/31/81	10: 5.00	69.30	0.00	1584.34
5/31/81	10: 5.00	69.30	0.00	1584.34
6/ 1/81	13:13.00	69.18	0.00	1584.46
6/ 2/81	17:44.00	69.20	0.00	1584.44
6/ 3/81	9:36.00	69.08	0.00	1584.56
6/ 4/81	9:57.00	69.13	0.00	1584.51
6/ 5/81	11:45.00	70.03	0.00	1583.61
6/ 6/81	9: 5.00	68.94	0.00	1584.70
6/ 7/81	6: 9.00	68.93	0.00	1584.71
6/ 8/81	5:45.00	68.87	0.00	1584.77
6/ 9/81	24: 0.00	70.06	0.00	1583.58
6/22/81	18:25.00	71.03	0.00	1582.61
5/18/91	10:38.00	69.48	0.00	1584.16

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:22: 7 PAGE 1

NAME.....216
LOCATION.....16609.8,77553.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1677.38

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:19.00	94.29	-2.23	1585.32
5/16/81	19: 6.00	94.32	-2.24	1585.30
5/17/81	10:14.00	94.39	-2.24	1585.23
5/18/81	10:21.00	94.34	-2.24	1585.28
5/19/81	10:30.00	94.53	-2.24	1585.09
5/20/81	10:10.00	94.20	-2.23	1585.41
5/21/81	14:16.00	95.08	-2.25	1584.55
5/22/81	14:40.00	95.36	-2.26	1584.28
5/23/81	12:35.00	95.50	-2.26	1584.14
5/24/81	13:49.00	96.15	-2.28	1583.51
5/25/81	13:25.00	95.87	-2.27	1583.78
5/26/81	16:28.00	95.74	-2.27	1583.91
5/28/81	13:17.00	95.27	-2.26	1584.37
5/29/81	21:31.00	95.16	-2.26	1584.48
5/30/81	21:16.00	94.42	-2.24	1585.20
5/31/81	7:44.00	94.37	-2.24	1585.25
5/31/81	7:44.00	94.37	-2.24	1585.25
6/ 1/81	9:17.00	94.27	-2.23	1585.34
6/ 2/81	7:22.00	94.12	-2.23	1585.49
6/ 3/81	7:17.00	94.03	-2.23	1585.58
6/ 4/81	9:12.00	94.14	-2.23	1585.47
6/ 5/81	7:16.00	94.08	-2.23	1585.53
6/ 6/81	5:44.00	94.00	-2.23	1585.61
6/ 7/81	6:32.00	94.02	-2.23	1585.59
6/ 8/81	6:32.00	93.09	-2.21	1586.50
6/ 9/81	12: 0.00	94.71	-2.24	1584.91
6/ 9/81	18:52.00	94.26	-2.23	1585.35
6/10/81	7:18.00	94.80	-2.25	1584.83
6/10/81	17:29.00	94.15	-2.23	1585.46
6/11/81	6:58.00	94.17	-2.23	1585.44
6/11/81	18:28.00	111.34	-2.64	1568.68
6/12/81	3:35.00	118.74	-2.81	1561.45
6/12/81	8: 0.00	119.79	-2.84	1560.43
6/12/81	17:56.00	120.65	-2.86	1559.59
6/13/81	7: 9.00	121.29	-2.87	1558.96
6/13/81	17:21.00	121.26	-2.87	1558.99
6/14/81	9:20.00	121.79	-2.89	1558.48
6/14/81	17:59.00	121.65	-2.88	1558.61
6/15/81	10:47.00	122.23	-2.90	1558.05
6/15/81	17:17.00	122.16	-2.90	1558.12

NAME.....216
LOCATION.....16609.8,77553.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1677.38

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	7:22.00	122.48	-2.90	1557.80
6/16/81	17:25.00	122.59	-2.91	1557.70
6/17/81	7:36.00	122.87	-2.91	1557.42
6/17/81	17:12.00	122.80	-2.91	1557.49
6/18/81	7:34.00	123.10	-2.92	1557.20
6/18/81	13: 1.00	123.29	-2.92	1557.01
6/18/81	17:51.00	113.19	-2.68	1566.87
6/19/81	7: 6.00	98.90	-2.34	1580.82
6/19/81	16: 8.00	98.05	-2.32	1581.65
6/20/81	7:40.00	97.38	-2.31	1582.31
6/20/81	16:36.00	97.15	-2.30	1582.53
6/21/81	10:31.00	96.69	-2.29	1582.98
6/21/81	17:10.00	96.75	-2.29	1582.92
6/22/81	9:30.00	96.55	-2.29	1583.12
6/22/81	16:50.00	96.58	-2.29	1583.09
6/23/81	9:32.00	96.40	-2.28	1583.26
6/23/81	16:33.00	96.42	-2.29	1583.25
6/24/81	14:57.00	97.04	-2.30	1582.64

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NAME.....216-1
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12:20.00	74.65	0.00	1584.55
5/ 1/81	19:48.00	74.68	0.00	1584.52
5/ 2/81	4:25.00	74.77	0.00	1584.43
5/ 2/81	9:35.00	74.81	0.00	1584.39
5/ 2/81	12:45.00	74.81	0.00	1584.39
5/ 2/81	15:43.00	75.28	0.00	1583.92
5/ 2/81	18:39.00	75.00	0.00	1584.20
5/ 2/81	23:25.00	74.80	0.00	1584.40
5/ 3/81	4:50.00	74.60	0.00	1584.60
5/ 3/81	9:45.00	74.60	0.00	1584.60
5/17/81	12:22.00	73.75	0.00	1585.45
5/18/81	10:27.00	73.72	0.00	1585.48
5/20/81	10:15.00	73.58	0.00	1585.62
5/21/81	15: 7.00	73.55	0.00	1585.65
5/22/81	14:51.00	76.06	0.00	1583.14
5/23/81	12:42.00	76.09	0.00	1583.11
5/24/81	14: 0.00	76.19	0.00	1583.01
5/25/81	15:33.00	76.22	0.00	1582.98
5/26/81	16:33.00	76.42	0.00	1582.78
5/29/81	24:51.00	76.38	0.00	1582.82
5/30/81	9:27.00	74.05	0.00	1585.15
5/31/81	9:51.00	73.73	0.00	1585.47
6/ 1/81	9:33.00	73.64	0.00	1585.56
6/ 2/81	15: 4.00	73.55	0.00	1585.65
6/ 3/81	9: 7.00	73.51	0.00	1585.69
6/ 4/81	9:25.00	73.50	0.00	1585.70
6/ 5/81	9: 8.00	73.39	0.00	1585.81
6/ 6/81	6:18.00	73.40	0.00	1585.80
6/ 7/81	9:38.00	73.36	0.00	1585.84
6/ 8/81	6:43.00	73.38	0.00	1585.82
6/ 9/81	12: 0.00	73.96	0.00	1585.24
6/ 9/81	19: 0.00	73.68	0.00	1585.52
6/10/81	7:30.00	73.64	0.00	1585.56
6/10/81	17:36.00	73.57	0.00	1585.63
6/11/81	7:12.00	73.60	0.00	1585.60
6/11/81	15: 1.00	97.54	0.00	1561.66
6/11/81	18:45.00	112.08	0.00	1547.12
6/12/81	19: 3.00	113.90	0.00	1545.30
6/13/81	7:18.00	115.98	0.00	1543.22
6/14/81	18:30.00	122.09	0.00	1537.11

NAME.....216-1
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	11: 6.00	122.04	0.00	1537.16
6/15/81	17:43.00	121.70	0.00	1537.50
6/16/81	7:31.00	121.95	0.00	1537.25
6/16/81	17:34.00	121.87	0.00	1537.33
6/17/81	7:45.00	122.32	0.00	1536.88
6/17/81	17:21.00	122.37	0.00	1536.83
6/18/81	7:41.00	122.44	0.00	1536.76
6/18/81	13: 7.00	122.56	0.00	1536.64
6/18/81	18:13.00	96.62	0.00	1562.58
6/19/81	7:36.00	77.30	0.00	1581.90
6/19/81	16:16.00	77.38	0.00	1581.82
6/20/81	7:56.00	76.72	0.00	1582.48
6/20/81	16:50.00	76.42	0.00	1582.78
6/21/81	10:41.00	76.39	0.00	1582.81
6/21/81	17:20.00	76.03	0.00	1583.17
6/22/81	9:36.00	75.92	0.00	1583.28
6/22/81	17: 2.00	75.88	0.00	1583.32
6/23/81	9:43.00	75.66	0.00	1583.54
6/23/81	16:39.00	75.60	0.00	1583.60
6/24/81	15: 7.00	75.37	0.00	1583.83

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NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
R.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:57.00	70.29	0.00	1586.32
5/17/81	12:24.00	70.32	0.00	1586.29
5/18/81	10:29.00	70.30	0.00	1586.31
5/19/81	10:46.00	70.33	0.00	1586.28
5/20/81	10:16.00	70.23	0.00	1586.38
5/21/81	15: 4.00	70.25	0.00	1586.36
5/22/81	14:47.00	70.27	0.00	1586.34
5/23/81	12:40.00	70.44	0.00	1586.17
5/24/81	13:59.00	70.47	0.00	1586.14
5/25/81	13:35.00	70.59	0.00	1586.02
5/26/81	16:37.00	70.74	0.00	1585.87
5/28/81	23:45.00	70.94	0.00	1585.67
5/30/81	1: 5.00	70.98	0.00	1585.63
5/30/81	9:57.00	70.82	0.00	1585.79
5/31/81	9:57.00	70.76	0.00	1585.85
5/31/81	9:57.00	70.76	0.00	1585.85
6/ 1/81	9:30.00	70.70	0.00	1585.91
6/ 2/81	15: 0.00	70.70	0.00	1585.91
6/ 3/81	9:24.00	70.72	0.00	1585.89
6/ 4/81	9:21.00	70.80	0.00	1585.81
6/ 5/81	9:15.00	70.73	0.00	1585.88
6/ 6/81	6:12.00	70.82	0.00	1585.79
6/ 7/81	9:43.00	70.72	0.00	1585.89
6/ 8/81	6:47.00	70.59	0.00	1586.02
6/ 9/81	7:50.00	71.10	0.00	1585.51
6/10/81	7:34.00	71.16	0.00	1585.45
6/11/81	7:15.00	71.09	0.00	1585.52

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:22:42 PAGE 1

NAME.....217
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12:12.00	50.46	-1.78	1585.14
5/ 1/81	22:22.00	50.49	-1.78	1585.11
5/ 2/81	3:50.00	50.52	-1.78	1585.08
5/ 2/81	9:24.00	50.68	-1.78	1584.92
5/ 2/81	12:21.00	50.64	-1.78	1584.96
5/ 2/81	15:26.00	50.48	-1.78	1585.12
5/ 2/81	16:20.00	50.44	-1.78	1585.16
5/ 2/81	22:35.00	50.50	-1.78	1585.10
5/ 3/81	3:55.00	50.37	-1.77	1585.22
5/ 3/81	9:15.00	50.40	-1.77	1585.19
5/ 4/81	12: 0.00	50.24	-1.77	1585.35
5/ 5/81	6:55.00	50.07	-1.76	1585.51
5/ 6/81	6:17.00	49.94	-1.76	1585.64
5/ 7/81	6:10.00	49.81	-1.75	1585.76
5/15/81	19:26.00	49.25	-1.73	1586.30
5/17/81	11:27.00	49.23	-1.73	1586.32
5/18/81	11: 9.00	49.10	-1.73	1586.45
5/19/81	11:54.00	49.10	-1.73	1586.45
5/20/81	11: 7.00	49.00	-1.72	1586.54
5/21/81	15:56.00	49.50	-1.74	1586.06
5/22/81	15:49.00	49.62	-1.75	1585.95
5/23/81	14:25.00	49.62	-1.75	1585.95
5/24/81	15: 3.00	49.74	-1.75	1585.83
5/25/81	14:58.00	49.77	-1.75	1585.80
5/26/81	17:54.00	49.80	-1.75	1585.77
5/28/81	21:15.00	48.74	-1.72	1586.80
5/29/81	15:53.00	49.11	-1.73	1586.44
5/30/81	10:30.00	49.12	-1.73	1586.43
5/31/81	11: 2.00	49.01	-1.73	1586.54
6/ 1/81	11:17.00	48.99	-1.72	1586.55
6/ 2/81	18:51.00	48.97	-1.72	1586.57
6/ 3/81	10:19.00	48.89	-1.72	1586.65
6/ 4/81	10:53.00	48.89	-1.72	1586.65
6/ 5/81	12:50.00	48.85	-1.72	1586.69
6/ 6/81	6:54.00	48.32	-1.70	1587.20
6/ 6/81	16:20.00	46.49	-1.64	1588.97
6/ 6/81	20:31.00	46.47	-1.64	1588.99
6/ 7/81	1:12.00	46.50	-1.64	1588.96
6/ 7/81	4:30.00	46.50	-1.64	1588.96
6/ 7/81	8:25.00	48.79	-1.72	1586.75

NAME.....217
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	15:25.00	49.62	-1.75	1585.95
6/ 7/81	20:28.00	48.26	-1.70	1587.26
6/ 9/81	24: 0.00	49.26	-1.73	1586.29
6/11/81	11:39.00	48.87	-1.72	1586.67
6/11/81	12:57.17	87.90	-3.09	1549.01
6/11/81	13:59.00	113.75	-4.12	1524.19
6/11/81	16:28.00	138.98	-5.22	1500.06
6/11/81	20:38.00	155.67	-5.95	1484.10
6/11/81	23:15.00	160.13	-6.15	1479.84
6/12/81	6:29.00	165.49	-6.38	1474.71
6/12/81	8:15.00	166.16	-6.41	1474.07
6/12/81	14:56.00	167.95	-6.49	1472.36
6/12/81	20: 6.00	168.68	-6.52	1471.66
6/13/81	0:52.00	169.30	-6.55	1471.07
6/13/81	5:30.00	169.85	-6.57	1470.54
6/13/81	9:15.00	169.95	-6.58	1470.45
6/13/81	15:28.00	169.79	-6.57	1470.60
6/13/81	19:45.00	169.83	-6.57	1470.56
6/14/81	6: 0.00	170.56	-6.60	1469.86
6/14/81	13:19.00	170.13	-6.58	1470.27
6/14/81	19:22.00	169.36	-6.55	1471.01
6/15/81	0:55.00	171.06	-6.63	1469.39
6/15/81	6:17.00	171.43	-6.64	1469.03
6/15/81	15:49.00	171.83	-6.66	1468.65
6/15/81	19:36.00	171.94	-6.66	1468.54
6/16/81	0:20.00	172.02	-6.67	1468.47
6/16/81	5:50.00	172.28	-6.68	1468.22
6/16/81	13:29.00	172.60	-6.69	1467.91
6/16/81	18:29.00	172.68	-6.70	1467.84
6/17/81	0:20.00	173.00	-6.71	1467.53
6/17/81	5:20.00	173.10	-6.71	1467.43
6/17/81	13: 2.00	173.26	-6.72	1467.28
6/17/81	18:48.00	173.13	-6.72	1467.41
6/18/81	0:15.00	173.59	-6.74	1466.97
6/18/81	5:35.00	173.82	-6.75	1466.75
6/18/81	11:44.00	174.26	-6.77	1466.33
6/18/81	14:50.50	134.65	-5.03	1504.20
6/18/81	15:55.25	113.67	-4.12	1524.27
6/18/81	16:53.00	89.09	-3.14	1547.87
6/18/81	17:43.00	80.12	-2.82	1556.52

NAME.....217
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	19:43.00	67.08	-2.36	1569.10
6/18/81	22: 0.00	59.87	-2.11	1576.06
6/19/81	0: 5.00	56.63	-1.99	1579.18
6/19/81	2: 0.00	55.45	-1.95	1580.32
6/19/81	3:40.00	54.70	-1.93	1581.05
6/19/81	5:50.00	53.96	-1.90	1581.76
6/19/81	7:45.00	53.66	-1.89	1582.05
6/19/81	11:40.00	53.21	-1.87	1582.48
6/19/81	16:49.00	52.73	-1.86	1582.95
6/19/81	23:45.00	52.45	-1.85	1583.22
6/20/81	5:59.00	52.15	-1.84	1583.51
6/20/81	13:58.00	51.97	-1.83	1583.68
6/20/81	17:38.00	51.86	-1.83	1583.79
6/21/81	9:10.00	51.59	-1.82	1584.05
6/21/81	18: 0.00	51.42	-1.81	1584.21
6/22/81	10: 6.00	51.25	-1.80	1584.37
6/22/81	17:47.00	51.20	-1.80	1584.42
6/23/81	10:24.00	50.96	-1.79	1584.65
6/23/81	17:34.00	50.94	-1.79	1584.67
6/24/81	15:44.00	50.74	-1.79	1584.87

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NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	17:46.00	81.32	-7.62	1578.88
5/16/81	18:26.00	81.43	-7.63	1578.78
5/17/81	9:40.00	82.36	-7.72	1577.94
5/18/81	9:54.00	81.64	-7.65	1578.59
5/19/81	9:31.00	81.91	-7.67	1578.34
5/21/81	2:18.00	127.97	-11.99	1536.60
5/21/81	4:29.00	138.82	-13.01	1526.77
5/21/81	6:12.00	142.35	-13.34	1523.57
5/21/81	8:14.00	144.00	-13.49	1522.07
5/21/81	10:20.00	146.13	-13.69	1520.14
5/21/81	12:46.00	148.34	-13.90	1518.14
5/21/81	13:27.00	149.02	-13.96	1517.52
5/21/81	18:18.00	151.87	-14.23	1514.94
5/21/81	20:15.00	153.96	-14.43	1513.05
5/21/81	22:20.00	154.02	-14.43	1512.99
5/22/81	0:14.00	155.10	-14.53	1512.01
5/22/81	2:17.00	156.10	-14.63	1511.11
5/22/81	4:19.00	156.85	-14.70	1510.43
5/22/81	6:21.00	157.55	-14.76	1509.79
5/22/81	8:13.00	158.15	-14.82	1509.25
5/22/81	10:56.00	159.09	-14.91	1508.40
5/22/81	12:47.00	159.77	-14.97	1507.78
5/22/81	18:20.00	161.70	-15.15	1506.03
5/22/81	20:24.00	161.48	-15.13	1506.23
5/23/81	0:15.00	162.33	-15.21	1505.46
5/23/81	2:30.00	162.65	-15.24	1505.17
5/23/81	4:17.00	162.97	-15.27	1504.88
5/23/81	6:15.00	163.27	-15.30	1504.61
5/23/81	8:10.00	163.55	-15.32	1504.35
5/23/81	10:21.00	163.90	-15.36	1504.04
5/23/81	16:40.00	164.98	-15.46	1503.06
5/23/81	20:22.00	165.35	-15.49	1502.72
5/24/81	0:20.00	165.92	-15.55	1502.21
5/24/81	5:19.00	166.40	-15.59	1501.77
5/24/81	8: 6.00	166.77	-15.63	1501.44
5/24/81	12:11.00	168.55	-15.79	1499.82
5/24/81	16:23.00	167.77	-15.72	1500.53
5/24/81	20:15.00	168.07	-15.75	1500.25
5/25/81	0: 8.00	168.46	-15.78	1499.90
5/25/81	4:12.00	168.83	-15.82	1499.52

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	8:12.00	169.20	-15.85	1499.23
5/25/81	11:57.00	169.55	-15.89	1498.92
5/25/81	13: 5.00	161.97	-15.18	1505.79
5/25/81	16:15.00	169.98	-15.93	1498.53
5/25/81	20: 7.00	170.13	-15.95	1498.35
5/26/81	0:20.00	170.29	-15.96	1498.25
5/26/81	4:30.00	170.58	-15.98	1497.98
5/26/81	8: 5.00	170.90	-16.01	1497.69
5/26/81	12:23.00	171.18	-16.04	1497.44
5/26/81	15:37.00	171.49	-16.07	1497.16
5/26/81	16:11.00	171.50	-16.07	1497.15
5/26/81	20:23.00	171.65	-16.08	1497.01
5/27/81	0:10.00	171.68	-16.09	1496.99
5/27/81	4:10.00	171.87	-16.10	1496.81
5/27/81	8:43.00	172.20	-16.14	1496.52
5/27/81	12:15.00	172.33	-16.15	1496.40
5/27/81	13:29.42	172.35	-16.15	1496.37
5/27/81	14:26.17	172.50	-16.16	1496.24
5/27/81	14:58.25	171.64	-16.08	1497.02
5/27/81	15:25.83	170.33	-15.96	1498.21
5/27/81	16: 0.00	168.26	-15.77	1500.09
5/27/81	16:22.00	166.86	-15.63	1501.35
5/27/81	16:54.00	164.90	-15.45	1503.13
5/27/81	17:37.00	162.27	-15.20	1505.51
5/27/81	18:31.00	159.22	-14.92	1508.28
5/27/81	19: 0.00	157.65	-14.77	1509.70
5/27/81	20:30.00	153.02	-14.34	1513.90
5/27/81	21: 7.00	151.34	-14.18	1515.42
5/27/81	22:32.00	147.65	-13.83	1518.76
5/28/81	0:31.00	143.09	-13.41	1522.90
5/29/81	17:15.00	99.00	-9.28	1562.86
5/30/81	9: 0.00	90.13	-8.45	1570.90
5/31/81	6:40.00	84.74	-7.94	1575.78
6/ 1/81	7:32.00	82.74	-7.75	1577.59
6/ 2/81	6:52.00	82.11	-7.69	1578.16
6/ 3/81	6: 0.00	81.77	-7.66	1578.47
6/ 7/81	0:27.00	81.51	-7.64	1578.71
6/ 7/81	4:27.00	81.47	-7.63	1578.74
6/ 7/81	6:54.00	81.64	-7.65	1578.59
6/ 7/81	8:21.00	81.58	-7.64	1578.64

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:22:51 PAGE

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	12: 1.00	81.68	-7.65	1578.55
6/ 8/81	7:23.00	81.64	-7.65	1578.59
6/ 9/81	12: 0.00	81.67	-7.65	1578.56
6/ 9/81	19:16.00	81.67	-7.65	1578.56
6/10/81	6:50.00	81.66	-7.65	1578.57
6/10/81	17: 9.00	81.65	-7.65	1578.58
6/11/81	6:23.00	81.64	-7.65	1578.59
6/11/81	15:44.00	81.57	-7.64	1578.65
6/11/81	19:50.00	81.75	-7.66	1578.49
6/12/81	1:50.00	81.95	-7.68	1578.31
6/12/81	7:19.00	81.97	-7.68	1578.29
6/12/81	17:25.00	82.71	-7.75	1577.62
6/13/81	6:35.00	83.08	-7.78	1577.28
6/13/81	16:53.00	82.96	-7.77	1577.39
6/14/81	6:17.00	83.06	-7.78	1577.30
6/14/81	17:24.00	83.03	-7.78	1577.33
6/15/81	7: 8.00	83.02	-7.78	1577.34
6/15/81	16:42.00	83.26	-7.80	1577.12
6/16/81	5:35.00	83.36	-7.81	1577.03
6/16/81	16:50.00	83.54	-7.83	1576.87
6/17/81	6:11.00	83.64	-7.84	1576.78
6/17/81	16:31.00	83.60	-7.83	1576.81
6/18/81	6:35.00	83.43	-7.82	1576.97
6/18/81	13: 3.00	83.76	-7.85	1576.67
6/18/81	18:21.00	83.48	-7.82	1576.92
6/19/81	6: 7.00	83.04	-7.78	1577.32
6/19/81	15:16.00	82.76	-7.75	1577.57
6/20/81	7:11.00	81.93	-7.68	1578.28
6/20/81	16: 6.00	82.00	-7.68	1578.26
6/21/81	10: 3.00	81.76	-7.66	1578.48
6/21/81	16:37.00	81.76	-7.66	1578.48
6/22/81	9: 5.00	81.65	-7.65	1578.58
6/22/81	16:24.00	81.76	-7.66	1578.48
6/23/81	8:58.00	81.77	-7.66	1578.47
6/23/81	16: 4.00	81.85	-7.67	1578.40
6/24/81	8:38.00	81.84	-7.67	1578.41

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23: 2 PAGE 1

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/18	12: 0.00	81.76	-8.27	1579.46
6/ 9/18	19:24.00	81.55	-8.25	1579.65
5/ 9/81	13:17.00	81.98	-8.30	1579.27
5/ 9/81	19:22.00	81.74	-8.27	1579.48
5/10/81	7:40.00	81.55	-8.25	1579.65
5/11/81	7:40.00	82.52	-8.35	1578.78
5/12/81	13:14.00	81.74	-8.27	1579.48
5/13/81	6:59.00	89.47	-9.05	1572.53
5/13/81	7: 2.00	89.47	-9.05	1572.53
5/13/81	17:30.00	89.50	-9.06	1572.51
5/14/81	9: 0.00	82.35	-8.33	1578.92
5/15/81	17:55.00	81.47	-8.24	1579.72
5/16/81	18:45.00	81.55	-8.25	1579.64
5/17/81	9:51.00	81.70	-8.27	1579.52
5/18/81	8:49.00	81.54	-8.25	1579.66
5/18/81	9:23.00	81.54	-8.25	1579.66
5/18/81	9:30.00	81.54	-8.25	1579.66
5/18/81	12:45.50	115.09	-11.65	1549.51
5/19/81	9:42.00	81.84	-8.28	1579.39
5/20/81	8:59.00	81.34	-8.23	1579.84
5/20/81	11:48.00	81.37	-8.23	1579.81
5/20/81	11:54.00	81.28	-8.22	1579.89
5/20/81	12: 1.50	83.33	-8.44	1578.01
5/20/81	12:12.17	109.00	-11.03	1554.98
5/20/81	12:27.52	145.60	-14.73	1522.08
5/20/81	12:52.42	171.36	-17.34	1498.93
5/20/81	13: 5.58	182.60	-18.48	1488.83
5/20/81	13:32.00	199.10	-20.15	1474.00
5/20/81	13:35.00	200.44	-20.28	1472.79
5/20/81	15: 8.00	231.33	-23.41	1445.03
5/20/81	15:48.00	240.13	-24.30	1437.12
5/20/81	16: 3.00	250.80	-25.38	1427.53
5/20/81	17: 3.00	259.80	-26.29	1419.44
5/20/81	19:10.00	266.96	-26.97	1412.96
5/20/81	20:17.00	273.57	-27.61	1406.99
5/20/81	22: 7.00	287.69	-28.95	1394.21
5/21/81	0:12.00	292.22	-29.39	1390.12
5/21/81	2: 8.00	299.33	-30.11	1383.23
5/21/81	4:19.00	307.10	-30.81	1376.66
5/21/81	6: 5.00	316.35	-31.69	1368.28

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	8: 9.00	314.45	-31.51	1370.01
5/21/81	10:10.00	310.37	-31.12	1373.70
5/21/81	12:12.00	320.26	-32.06	1364.75
5/21/81	14: 7.00	322.20	-32.25	1363.00
5/21/81	16:22.00	320.98	-32.13	1364.10
5/21/81	18:12.00	324.59	-32.48	1360.84
5/21/81	20: 0.00	326.67	-32.58	1358.96
5/21/81	22: 8.00	330.46	-33.04	1355.53
5/22/81	0: 6.00	332.40	-33.22	1353.77
5/22/81	2: 8.00	332.67	-33.25	1353.53
5/22/81	4:12.00	335.86	-33.55	1350.64
5/22/81	6: 8.00	335.89	-33.56	1350.62
5/22/81	8: 6.00	336.28	-33.59	1350.26
5/22/81	10:13.00	337.61	-33.72	1349.06
5/22/81	12:38.00	339.53	-33.91	1347.28
5/22/81	14: 7.00	340.05	-33.95	1346.85
5/22/81	16: 5.00	341.55	-34.10	1345.50
5/22/81	18: 6.00	342.66	-34.20	1344.49
5/22/81	20: 5.00	343.24	-34.26	1343.97
5/23/81	0: 7.00	345.60	-34.48	1341.83
5/23/81	2:15.00	344.57	-34.39	1342.77
5/23/81	4: 6.00	344.55	-34.38	1342.78
5/23/81	6: 9.00	345.67	-34.49	1341.77
5/23/81	8: 3.00	345.90	-34.51	1341.56
5/23/81	10:13.00	347.51	-34.67	1340.11
5/23/81	12:11.00	348.50	-34.77	1339.12
5/23/81	14:11.00	348.77	-34.79	1338.97
5/23/81	15:57.00	349.60	-34.87	1338.22
5/23/81	20: 9.00	352.08	-35.10	1335.97
5/24/81	0:12.00	354.13	-35.30	1334.07
5/24/81	5: 8.00	359.80	-35.84	1328.99
5/24/81	7:59.00	354.50	-35.33	1333.78
5/24/81	12: 4.00	355.70	-35.45	1332.70
5/24/81	16:15.00	357.16	-35.59	1331.38
5/24/81	19:55.00	358.53	-35.72	1330.14
5/25/81	0: 2.00	358.53	-35.72	1330.14
5/25/81	4: 6.00	360.23	-35.88	1328.60
5/25/81	8: 5.00	361.00	-35.95	1327.90
5/25/81	12:16.00	361.92	-36.03	1327.06
5/25/81	16: 5.00	361.95	-36.03	1327.03

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	20: 3.00	362.40	-36.07	1326.62
5/26/81	0: 2.00	363.05	-36.12	1326.02
5/26/81	4:16.00	363.47	-36.16	1325.64
5/26/81	7:52.00	364.78	-36.27	1324.44
5/26/81	12: 8.00	365.47	-36.33	1323.81
5/26/81	16:16.00	365.67	-36.35	1323.63
5/26/81	20: 7.00	365.57	-36.34	1323.72
5/26/81	23:45.00	366.77	-36.45	1322.63
5/27/81	3:40.00	366.25	-36.40	1323.10
5/27/81	8:15.00	368.00	-36.55	1321.50
5/27/81	12: 2.00	369.38	-36.67	1320.24
5/27/81	13:26.00	368.56	-36.60	1320.99
5/27/81	14: 3.58	366.40	-36.41	1322.96
5/27/81	14: 8.67	357.40	-35.61	1331.16
5/27/81	14:13.92	347.35	-34.65	1340.25
5/27/81	14:17.67	340.72	-34.02	1346.25
5/27/81	14:23.00	332.13	-33.20	1354.02
5/27/81	14:25.33	328.88	-32.89	1356.96
5/27/81	14:32.58	319.25	-31.97	1365.67
5/27/81	14:37.75	313.44	-31.41	1370.92
5/27/81	14:42.50	308.75	-30.97	1375.17
5/27/81	14:47.33	304.54	-30.56	1378.97
5/27/81	15: 5.33	292.41	-29.41	1389.95
5/27/81	15:30.08	281.13	-28.33	1400.15
5/27/81	15:43.08	276.53	-27.89	1404.31
5/27/81	15:58.67	271.79	-27.44	1408.60
5/27/81	16:21.83	265.74	-26.86	1414.07
5/27/81	16:52.00	259.21	-26.23	1419.97
5/27/81	17:12.00	254.90	-25.79	1423.84
5/27/81	17:34.00	249.70	-25.27	1428.52
5/27/81	17:43.00	246.20	-24.91	1431.66
5/27/81	18: 3.00	245.50	-24.84	1432.29
5/27/81	19:23.00	236.82	-23.96	1440.09
5/27/81	20: 8.00	230.50	-23.32	1445.77
5/27/81	20:12.00	230.34	-23.31	1445.92
5/27/81	21:14.00	224.15	-22.68	1451.48
5/27/81	22:21.00	217.42	-22.00	1457.53
5/28/81	0: 6.00	210.32	-21.28	1463.91
5/28/81	1:17.00	203.26	-20.57	1470.26
5/28/81	2: 2.00	202.37	-20.48	1471.06

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	4:40.00	191.11	-19.34	1481.18
5/28/81	6: 2.00	187.60	-18.98	1484.33
5/28/81	7:56.00	182.20	-18.44	1489.19
5/28/81	10:28.00	174.61	-17.67	1496.01
5/28/81	12: 9.00	168.90	-17.09	1501.14
5/28/81	14: 5.00	163.77	-16.57	1505.75
5/28/81	16: 4.00	158.75	-16.06	1510.26
5/28/81	16: 6.00	158.62	-16.05	1510.38
5/28/81	18:10.00	154.59	-15.64	1514.00
5/28/81	20: 1.00	149.18	-15.10	1518.87
5/28/81	22: 0.00	145.56	-14.73	1522.12
5/29/81	0:20.00	140.60	-14.23	1526.58
5/29/81	2:10.00	135.53	-13.71	1531.13
5/29/81	4:10.00	131.22	-13.28	1535.01
5/29/81	6:15.00	127.15	-12.87	1538.67
5/29/81	8: 7.00	123.82	-12.53	1541.66
5/29/81	12:31.00	117.13	-11.85	1547.67
5/29/81	12:36.00	115.90	-11.73	1548.78
5/29/81	16:38.00	109.53	-11.08	1554.50
5/29/81	20:52.00	103.80	-10.50	1559.65
5/30/81	0: 6.00	103.78	-10.50	1559.67
5/30/81	5:20.00	100.78	-10.20	1562.37
5/30/81	8:21.00	93.31	-9.44	1569.08
5/30/81	12:12.00	90.96	-9.20	1571.19
5/30/81	16: 6.00	88.91	-9.00	1573.04
5/30/81	19:57.00	87.42	-8.85	1574.38
5/30/81	23:56.00	86.00	-8.70	1575.65
5/31/81	7:54.00	84.63	-8.56	1576.88
5/31/81	11:59.00	84.13	-8.51	1577.33
5/31/81	16:36.00	83.47	-8.45	1577.93
5/31/81	20:14.00	83.14	-8.41	1578.22
6/ 1/81	6:57.00	84.98	-8.60	1576.57
6/ 1/81	8:16.00	82.68	-8.37	1578.64
6/ 1/81	12: 6.00	82.64	-8.36	1578.67
6/ 1/81	16:15.00	82.57	-8.36	1578.74
6/ 1/81	20:41.00	82.18	-8.32	1579.09
6/ 2/81	4:24.00	82.07	-8.30	1579.18
6/ 2/81	6:55.00	82.07	-8.30	1579.18
6/ 2/81	8:39.00	82.11	-8.31	1579.15
6/ 2/81	12: 5.00	82.15	-8.31	1579.11

NAME.....219
LOCATION.....16737.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 2/81	16:15.00	82.13	-8.31	1579.13
6/ 2/81	20:32.00	81.88	-8.29	1579.36
6/ 3/81	0:12.00	81.82	-8.28	1579.41
6/ 3/81	4: 9.00	81.79	-8.28	1579.44
6/ 3/81	6:50.00	81.79	-8.28	1579.44
6/ 4/81	6:50.00	82.89	-8.39	1578.45
6/ 4/81	8:37.00	81.80	-8.28	1579.43
6/ 4/81	12:23.00	81.93	-8.29	1579.31
6/ 4/81	16: 4.00	82.47	-8.35	1578.83
6/ 4/81	20:40.00	82.05	-8.30	1579.20
6/ 5/81	6:55.00	81.68	-8.27	1579.54
6/ 5/81	8:41.00	81.63	-8.26	1579.58
6/ 5/81	13:59.00	81.63	-8.26	1579.58
6/ 5/81	17:24.00	81.57	-8.25	1579.63
6/ 5/81	20:41.00	81.46	-8.24	1579.73
6/ 6/81	0:47.00	81.44	-8.24	1579.75
6/ 6/81	4:43.00	81.41	-8.24	1579.78
6/ 6/81	8:16.00	81.49	-8.25	1579.71
6/ 6/81	11:53.00	81.53	-8.25	1579.67
6/ 7/81	6:46.00	81.56	-8.25	1579.64
6/ 8/81	7:15.00	81.58	-8.26	1579.63
6/10/81	6:53.00	81.52	-8.25	1579.68
6/10/81	17:14.00	81.54	-8.25	1579.66
6/11/81	6:31.00	81.54	-8.25	1579.66
6/11/81	15:39.00	81.62	-8.26	1579.59
6/11/81	19:22.00	82.18	-8.32	1579.09
6/12/81	2:40.00	82.85	-8.38	1578.48
6/12/81	7:26.00	83.93	-8.49	1577.51
6/12/81	17:31.00	85.59	-8.66	1576.02
6/13/81	6:47.00	85.01	-8.60	1576.54
6/13/81	17: 0.00	85.01	-8.60	1576.54
6/14/81	6:36.00	86.08	-8.71	1575.58
6/14/81	17: 1.00	86.18	-8.72	1575.49
6/15/81	7:13.00	86.23	-8.73	1575.45
6/15/81	16:51.00	86.39	-8.74	1575.30
6/16/81	5:42.00	85.49	-8.65	1576.11
6/16/81	16:58.00	85.60	-8.66	1576.01
6/17/81	6:22.00	85.80	-8.68	1575.83
6/17/81	16:38.00	85.71	-8.67	1575.91
6/18/81	6:40.00	85.60	-8.66	1576.01

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23: 2 PAGE

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.95

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	13: 9.00	85.74	-8.68	1575.89
6/18/81	18:27.00	85.55	-8.66	1576.06
6/19/81	6:17.00	83.69	-8.47	1577.73
6/19/81	15:49.00	82.88	-8.39	1578.46
6/20/81	7:17.00	82.09	-8.31	1579.17
6/20/81	16:12.00	81.94	-8.29	1579.30
6/21/81	10:50.00	81.72	-8.27	1579.50
6/21/81	16:45.00	81.70	-8.27	1579.52
6/22/81	9:11.00	81.56	-8.25	1579.64
6/22/81	16:30.00	81.77	-8.27	1579.45
6/23/81	9: 7.00	81.85	-8.28	1579.38
6/23/81	16:10.00	81.83	-8.28	1579.40
6/24/81	8:44.00	81.52	-8.25	1579.68

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	13:24.00	78.99	-6.83	1578.93
5/ 9/81	19:31.00	78.78	-6.81	1579.12
5/10/81	7:50.00	78.60	-6.80	1579.29
5/11/81	7:45.00	79.52	-6.88	1578.45
5/11/81	19:10.00	78.33	-6.78	1579.54
5/12/81	13:15.00	78.80	-6.82	1579.11
5/13/81	7: 5.00	86.25	-7.46	1572.30
5/13/81	7: 8.00	86.30	-7.46	1572.25
5/13/81	17:32.00	81.46	-7.05	1576.68
5/14/81	9: 2.00	79.40	-6.87	1578.56
5/15/81	17:57.00	78.55	-6.79	1579.33
5/16/81	18:49.00	78.63	-6.80	1579.26
5/17/81	9:55.00	78.74	-6.81	1579.16
5/18/81	9:50.00	78.59	-6.80	1579.30
5/18/81	11:51.00	78.60	-6.80	1579.29
5/18/81	11:55.00	78.60	-6.80	1579.29
5/18/81	12:45.83	123.08	-10.65	1538.66
5/18/81	12:50.92	119.65	-10.35	1541.79
5/19/81	9:52.00	78.89	-6.82	1579.02
5/20/81	9: 0.00	78.41	-6.78	1579.46
5/20/81	11:39.00	78.40	-6.78	1579.47
5/20/81	11:40.00	78.43	-6.78	1579.44
5/20/81	12: 3.10	95.00	-8.22	1564.31
5/20/81	12:14.33	118.20	-10.22	1543.11
5/20/81	12:28.40	148.92	-12.88	1515.05
5/20/81	13: 1.92	156.63	-13.55	1508.01
5/20/81	13: 6.83	159.93	-13.83	1504.99
5/20/81	13:43.00	174.40	-15.09	1491.78
5/20/81	13:52.00	179.60	-15.54	1487.03
5/20/81	15:14.00	198.33	-17.16	1469.92
5/20/81	15:55.00	205.08	-17.74	1463.75
5/20/81	16: 5.00	214.42	-18.55	1455.22
5/20/81	17: 7.00	221.50	-19.16	1448.75
5/20/81	19:16.00	227.75	-19.70	1443.04
5/20/81	20:19.00	232.75	-20.13	1438.47
5/20/81	22: 9.00	244.73	-21.17	1427.53
5/21/81	0:14.00	249.54	-21.59	1423.14
5/21/81	2:10.00	255.71	-22.12	1417.50
5/21/81	4:20.00	261.90	-22.65	1411.84
5/21/81	6: 7.00	265.50	-22.97	1408.56

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23:18 PAGE

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	8:11.00	269.38	-23.30	1405.01
5/21/81	10: 9.00	267.74	-23.16	1406.51
5/21/81	12:15.00	274.95	-23.78	1399.92
5/21/81	12:18.00	274.92	-23.78	1399.95
5/21/81	14: 9.00	276.91	-23.95	1398.13
5/21/81	16:21.00	277.34	-23.99	1397.74
5/21/81	18: 9.00	279.81	-24.20	1395.48
5/21/81	20: 1.00	282.11	-24.40	1393.38
5/21/81	22: 8.00	284.33	-24.59	1391.35
5/22/81	0: 8.00	286.10	-24.75	1389.74
5/22/81	2: 9.00	287.66	-24.88	1388.31
5/22/81	4:14.00	288.88	-24.99	1387.20
5/22/81	6: 9.00	290.04	-25.09	1386.14
5/22/81	8: 9.00	290.80	-25.15	1385.44
5/22/81	10:15.00	292.70	-25.32	1383.71
5/22/81	10:21.00	292.14	-25.27	1384.22
5/22/81	12:40.00	294.34	-25.46	1382.21
5/22/81	14: 9.00	295.10	-25.53	1381.52
5/22/81	16: 8.00	296.33	-25.63	1380.39
5/22/81	18:15.00	297.46	-25.73	1379.36
5/22/81	20: 7.00	298.00	-25.78	1378.87
5/23/81	0: 9.00	299.77	-25.93	1377.25
5/23/81	2:17.00	301.00	-26.03	1376.12
5/23/81	4: 7.00	300.79	-26.01	1376.31
5/23/81	6:12.00	301.33	-26.06	1375.82
5/23/81	8: 4.00	301.07	-26.04	1376.06
5/23/81	10:12.00	302.86	-26.18	1374.41
5/23/81	12: 9.00	303.79	-26.25	1373.55
5/23/81	14: 7.00	304.21	-26.28	1373.16
5/23/81	16: 0.00	304.83	-26.33	1372.59
5/23/81	20: 4.00	306.53	-26.48	1370.94
5/24/81	0:14.00	307.92	-26.58	1369.75
5/24/81	5: 9.00	308.96	-26.66	1368.79
5/24/81	8: 0.00	309.63	-26.72	1368.18
5/24/81	12: 2.00	310.71	-26.80	1367.18
5/24/81	16:13.00	312.08	-26.91	1365.92
5/24/81	19:52.00	313.31	-27.01	1364.79
5/25/81	0: 3.00	314.10	-27.07	1364.06
5/25/81	4: 7.00	315.00	-27.14	1363.23
5/25/81	8: 6.00	315.75	-27.20	1362.54

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	12:15.00	316.44	-27.26	1361.91
5/25/81	16: 4.00	316.99	-27.30	1361.40
5/25/81	20: 2.00	317.48	-27.34	1360.95
5/25/81	23:59.00	318.08	-27.39	1360.40
5/26/81	4:12.00	318.54	-27.42	1359.97
5/26/81	7:50.00	319.54	-27.50	1359.05
5/26/81	12: 9.00	320.20	-27.56	1358.45
5/26/81	16:15.00	320.53	-27.58	1358.14
5/26/81	20:10.00	320.83	-27.61	1357.87
5/26/81	23:40.00	321.50	-27.66	1357.25
5/27/81	3:37.00	321.52	-27.66	1357.23
5/27/81	8:12.00	322.71	-27.76	1356.14
5/27/81	12: 5.00	322.98	-27.78	1355.89
5/27/81	13:30.00	323.21	-27.80	1355.68
5/27/81	14: 5.50	314.35	-27.09	1363.83
5/27/81	14:11.50	306.81	-26.49	1370.77
5/27/81	14:12.75	300.31	-25.97	1376.75
5/27/81	14:18.58	300.48	-25.99	1376.60
5/27/81	14:28.67	293.38	-25.38	1383.09
5/27/81	14:34.92	289.95	-25.08	1386.22
5/27/81	14:39.47	287.76	-24.89	1388.22
5/27/81	14:44.75	285.30	-24.68	1390.47
5/27/81	14:48.58	283.65	-24.54	1391.98
5/27/81	15: 6.42	277.35	-23.99	1397.73
5/27/81	15:31.75	270.33	-23.38	1404.14
5/27/81	15:44.58	267.34	-23.12	1406.87
5/27/81	15:59.75	264.22	-22.86	1409.73
5/27/81	16:24.33	259.49	-22.45	1414.05
5/27/81	16:53.33	254.58	-22.02	1418.53
5/27/81	17:14.50	251.00	-21.71	1421.80
5/27/81	17:35.50	247.58	-21.42	1424.93
5/27/81	17:44.33	246.00	-21.28	1426.37
5/27/81	18: 5.00	243.50	-21.06	1428.65
5/27/81	19:26.00	234.03	-20.24	1437.30
5/27/81	20:13.00	223.29	-19.75	1442.55
5/27/81	20:15.00	228.22	-19.74	1442.61
5/27/81	21:14.00	222.65	-19.26	1447.70
5/27/81	22:25.00	216.04	-18.69	1453.74
5/28/81	0:23.00	207.64	-17.96	1461.41
5/28/81	1:22.00	202.92	-17.55	1465.72

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23:18 PAGE

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	2:15.00	199.29	-17.24	1469.04
5/28/81	4:50.00	189.96	-16.43	1477.56
5/28/81	6: 9.00	185.42	-16.04	1481.71
5/28/81	7:58.00	179.67	-15.54	1486.96
5/28/81	10:31.00	173.63	-15.02	1492.48
5/28/81	12:10.00	167.24	-14.47	1498.32
5/28/81	14: 6.00	162.02	-14.01	1503.08
5/28/81	16:14.00	156.52	-13.54	1508.11
5/28/81	16:16.00	156.47	-13.53	1508.15
5/28/81	18: 7.00	151.75	-13.13	1512.47
5/28/81	20: 4.00	146.96	-12.71	1516.84
5/28/81	21:55.00	142.63	-12.34	1520.80
5/29/81	0:15.00	137.33	-11.88	1525.64
5/29/81	2: 7.00	133.21	-11.52	1529.40
5/29/81	4:15.00	128.58	-11.12	1533.63
5/29/81	6:11.00	124.79	-10.79	1537.09
5/29/81	8:10.00	121.08	-10.47	1540.48
5/29/81	12:38.00	112.98	-9.77	1547.88
5/29/81	12:39.00	112.96	-9.77	1547.90
5/29/81	16:35.00	106.70	-9.23	1553.62
5/29/81	21: 1.00	106.59	-9.22	1553.72
5/30/81	0:10.00	106.60	-9.22	1553.71
5/30/81	5:30.00	101.27	-8.76	1558.58
5/30/81	8:25.00	90.20	-7.80	1568.69
5/30/81	12:14.00	87.88	-7.60	1570.81
5/30/81	16: 8.00	85.86	-7.43	1572.66
5/30/81	20: 0.00	84.35	-7.30	1574.04
5/31/81	12: 1.00	81.10	-7.02	1577.01
5/31/81	16:39.00	80.48	-6.96	1577.57
5/31/81	20:15.00	80.16	-6.93	1577.86
6/ 1/81	0:18.00	79.82	-6.90	1578.17
6/ 1/81	4:14.00	79.68	-6.89	1578.30
6/ 1/81	8:16.00	79.54	-6.88	1578.43
6/ 1/81	12:14.00	79.46	-6.87	1578.50
6/ 1/81	16:12.00	79.37	-6.87	1578.59
6/ 1/81	20:45.00	79.24	-6.85	1578.70
6/ 2/81	0:15.00	79.19	-6.85	1578.75
6/ 2/81	4:26.00	79.13	-6.84	1578.80
6/ 2/81	8:45.00	79.15	-6.85	1578.79
6/ 2/81	12: 7.00	79.05	-6.84	1578.88

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 2/81	16:17.00	79.07	-6.84	1578.86
6/ 2/81	20:35.00	78.88	-6.82	1579.03
6/ 3/81	0:15.00	78.85	-6.82	1579.06
6/ 3/81	4:13.00	78.85	-6.82	1579.06
6/ 3/81	6:50.00	78.85	-6.82	1579.06
6/ 3/81	8:45.00	78.85	-6.82	1579.06
6/ 3/81	12:25.00	78.93	-6.83	1578.99
6/ 3/81	16:10.00	78.89	-6.82	1579.02
6/ 3/81	21: 2.00	78.87	-6.82	1579.04
6/ 4/81	0:25.00	78.90	-6.82	1579.01
6/ 4/81	6:47.00	78.92	-6.83	1579.00
6/ 4/81	6:50.00	77.92	-6.74	1579.91
6/ 4/81	8:40.00	78.84	-6.82	1579.07
6/ 4/81	12:21.00	78.88	-6.82	1579.03
6/ 4/81	16:10.00	80.44	-6.96	1577.61
6/ 4/81	20:45.00	79.09	-6.84	1578.84
6/ 5/81	0:45.00	78.85	-6.82	1579.06
6/ 5/81	4:25.00	78.72	-6.81	1579.18
6/ 5/81	6:50.00	78.72	-6.81	1579.18
6/ 5/81	8:44.00	78.68	-6.81	1579.22
6/ 5/81	14: 0.00	78.69	-6.81	1579.21
6/ 5/81	17:27.00	78.59	-6.80	1579.30
6/ 5/81	20:47.00	78.53	-6.79	1579.35
6/ 6/81	0:58.00	78.53	-6.79	1579.35
6/ 6/81	4:52.00	78.48	-6.79	1579.40
6/ 6/81	8:18.00	78.54	-6.79	1579.34
6/ 6/81	11:55.00	78.57	-6.80	1579.32
6/ 7/81	6:49.00	78.58	-6.80	1579.31
6/ 8/81	7:18.00	78.60	-6.80	1579.29
6/ 9/81	12: 0.00	78.79	-6.82	1579.12
6/ 9/81	19:25.00	78.59	-6.80	1579.30
6/10/81	6:55.00	78.59	-6.80	1579.30
6/10/81	17:15.00	78.58	-6.80	1579.31
6/11/81	6:34.00	78.59	-6.80	1579.30
6/11/81	15:41.00	78.71	-6.81	1579.19
6/11/81	19:23.00	79.33	-6.86	1578.62
6/12/81	2:42.00	80.44	-6.96	1577.61
6/12/81	7:32.00	81.06	-7.01	1577.04
6/12/81	11:49.00	81.40	-7.04	1576.73
6/12/81	17:33.00	81.67	-7.06	1576.48

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23:18 PAGE

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1651.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	23:52.00	81.93	-7.09	1576.25
6/13/81	6:43.00	82.06	-7.10	1576.13
6/13/81	12: 5.00	82.20	-7.11	1576.00
6/13/81	17: 1.00	82.02	-7.09	1576.16
6/13/81	23:16.00	82.21	-7.11	1575.99
6/14/81	6:24.00	82.26	-7.12	1575.95
6/14/81	12:23.00	82.30	-7.12	1575.91
6/14/81	17:33.00	82.28	-7.12	1575.93
6/14/81	23:36.00	82.38	-7.13	1575.84
6/15/81	7:18.00	82.46	-7.13	1575.76
6/15/81	11:55.00	82.56	-7.14	1575.67
6/15/81	16:53.00	82.49	-7.14	1575.74
6/15/81	23:58.00	82.58	-7.14	1575.65
6/16/81	5:50.00	82.56	-7.14	1575.67
6/16/81	11:55.00	82.72	-7.16	1575.53
6/16/81	17: 2.00	82.70	-7.15	1575.54
6/16/81	23:51.00	82.88	-7.17	1575.38
6/17/81	6:14.00	82.91	-7.17	1575.35
6/17/81	12:21.00	82.95	-7.18	1575.32
6/17/81	16:39.00	82.96	-7.18	1575.31
6/17/81	23:44.00	82.73	-7.16	1575.52
6/18/81	6:37.00	82.68	-7.15	1575.56
6/18/81	12: 0.00	82.00	-7.09	1576.18
6/18/81	18:30.00	82.55	-7.14	1575.68
6/18/81	23:41.00	81.73	-7.07	1576.43
6/19/81	6:12.00	80.66	-6.98	1577.41
6/19/81	12:39.00	80.17	-6.93	1577.85
6/19/81	15:50.00	80.89	-7.00	1577.20
6/20/81	7:19.00	79.13	-6.84	1578.80
6/20/81	16:15.00	78.99	-6.83	1578.93
6/21/81	10:12.00	78.77	-6.81	1579.13
6/21/81	16:47.00	78.76	-6.81	1579.14
6/22/81	9:13.00	78.62	-6.80	1579.27
6/22/81	16:32.00	78.80	-6.82	1579.11
6/23/81	9: 9.00	78.90	-6.82	1579.01
6/23/81	16:12.00	78.92	-6.83	1579.00
6/24/81	8:46.00	79.59	-6.80	1579.30

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:23:24 PAGE 1

NAME.....221
LOCATION.....16521.9,78373.8
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.71

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:48.00	73.34	-7.42	1586.79
5/17/81	12: 2.00	73.30	-7.42	1586.83
5/18/81	11:30.00	73.26	-7.42	1586.87
5/19/81	12:21.00	73.20	-7.41	1586.92
5/20/81	11:24.00	73.15	-7.40	1586.96
5/21/81	16:18.00	73.75	-7.47	1586.43
5/23/81	15: 2.00	74.01	-7.49	1586.19
5/24/81	15:25.00	74.04	-7.49	1586.16
5/25/81	15:28.00	74.08	-7.50	1586.13
5/26/81	18:11.00	74.07	-7.50	1586.14
5/29/81	1:15.00	73.53	-7.44	1586.62
5/30/81	2: 0.00	73.61	-7.45	1586.55
5/30/81	10:56.00	73.24	-7.41	1586.88
5/31/81	11:24.00	73.11	-7.40	1587.00
6/ 1/81	11:42.00	73.08	-7.40	1587.03
6/ 3/81	10:45.00	72.98	-7.39	1587.12
6/ 4/81	11:25.00	72.91	-7.38	1587.18
6/ 5/81	13:12.00	72.92	-7.38	1587.17
6/ 6/81	10: 0.00	72.87	-7.38	1587.22
6/ 6/81	16:31.00	72.84	-7.37	1587.24
6/ 6/81	20:51.00	72.82	-7.37	1587.26
6/ 7/81	1:37.00	72.85	-7.37	1587.23
6/ 7/81	4: 1.00	72.99	-7.39	1587.11
6/ 7/81	8:51.00	72.82	-7.37	1587.26
6/ 7/81	16: 3.00	73.55	-7.45	1586.61
6/ 7/81	20: 7.00	73.84	-7.47	1586.34
6/ 9/81	10: 0.00	73.32	-7.42	1586.81
6/ 9/81	18:37.00	73.13	-7.40	1586.98
6/10/81	10:26.00	73.03	-7.39	1587.07
6/10/81	19:15.00	73.02	-7.39	1587.08
6/11/81	8:28.00	73.04	-7.39	1587.06
6/11/81	18:21.00	153.44	-15.53	1514.80
6/12/81	3:15.00	168.48	-17.05	1501.28
6/12/81	18:19.00	172.85	-17.50	1497.36
6/13/81	7:30.00	174.80	-17.69	1495.60
6/18/81	18:20.00	101.49	-10.27	1561.49
6/19/81	8: 5.00	87.03	-8.81	1574.49
6/20/81	8:25.00	76.40	-7.73	1584.04
6/20/81	18: 0.00	76.12	-7.71	1584.30
6/21/81	11:11.00	75.89	-7.68	1584.50

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NAME.....221
LOCATION.....16521.9,78373.8
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1652.71

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/21/81	18:20.00	75.63	-7.66	1584.74
6/22/81	9:59.00	75.58	-7.65	1584.78
6/22/81	18: 2.00	75.42	-7.63	1584.92
6/23/81	10: 4.00	75.40	-7.63	1584.94
6/23/81	17:23.00	75.37	-7.63	1584.97
6/24/81	15:59.00	74.90	-7.58	1585.39

NAME.....222
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.65

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:50.00	70.47	-6.10	1586.28
5/17/81	12: 0.00	70.46	-6.09	1586.28
5/18/81	11:28.00	70.39	-6.09	1586.35
5/19/81	12:18.00	70.30	-6.08	1586.43
5/20/81	11:22.00	70.30	-6.08	1586.43
5/21/81	16:15.00	70.82	-6.13	1585.96
5/22/81	16: 8.00	70.98	-6.14	1585.81
5/23/81	14:50.00	71.08	-6.15	1585.72
5/24/81	15:33.00	71.10	-6.15	1585.70
5/25/81	15:23.00	71.08	-6.15	1585.72
5/26/81	18: 5.00	71.22	-6.16	1585.59
5/28/81	1:20.00	71.19	-6.16	1585.62
5/30/81	1:56.00	71.09	-6.15	1585.71
5/30/81	10:53.00	70.37	-6.09	1586.37
5/31/81	11:22.00	70.23	-6.07	1586.49
6/ 1/81	11:34.00	70.20	-6.07	1586.52
6/ 3/81	10:37.00	70.09	-6.06	1586.62
6/ 4/81	11:23.00	70.54	-6.10	1586.21
6/ 5/81	13:10.00	70.40	-6.09	1586.34
6/ 6/81	9:58.00	69.99	-6.05	1586.71
6/ 6/81	16:30.00	70.00	-6.05	1586.70
6/ 6/81	20:54.00	69.98	-6.05	1586.72
6/ 7/81	1:34.00	70.00	-6.05	1586.70
6/ 7/81	4: 7.00	70.00	-6.05	1586.70
6/ 7/81	8:49.00	69.95	-6.05	1586.75
6/ 7/81	15:58.00	70.69	-6.11	1586.07
6/ 7/81	20:15.00	69.94	-6.05	1586.76
6/11/81	11:51.00	70.05	-6.06	1586.66
6/11/81	13:18.00	100.02	-8.65	1559.28
6/11/81	15:21.00	130.58	-11.29	1531.36
6/11/81	16:51.00	142.19	-12.30	1520.76
6/11/81	21:45.00	157.25	-13.60	1507.00
6/11/81	23:55.00	160.27	-13.86	1504.24
6/12/81	7: 0.00	166.09	-14.37	1498.93
6/12/81	9:41.00	165.84	-14.34	1499.15
6/12/81	15:17.00	167.22	-14.46	1497.89
6/12/81	20:21.00	167.86	-14.52	1497.31
6/13/81	1:15.00	168.53	-14.58	1496.70
6/13/81	5:45.00	169.07	-14.62	1496.20
6/13/81	9:52.00	169.20	-14.64	1496.09

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NAME.....222
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.65

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/13/81	15:47.00	169.15	-14.63	1496.13
6/13/81	20: 1.00	169.32	-14.65	1495.98
6/14/81	7:30.00	169.96	-14.70	1495.39
6/14/81	14: 7.00	169.96	-14.70	1495.39
6/14/81	19:43.00	169.17	-14.63	1496.11
6/15/81	1:45.00	169.25	-14.64	1496.04
6/15/81	6:25.00	169.22	-14.64	1496.07
6/15/81	16: 7.00	170.07	-14.71	1495.29
6/15/81	19:58.00	171.07	-14.80	1494.38
6/16/81	0:45.00	171.15	-14.80	1494.30
6/16/81	6:20.00	171.41	-14.83	1494.07
6/16/81	13:46.00	171.62	-14.84	1493.87
6/16/81	18:49.00	171.67	-14.85	1493.83
6/17/81	0:32.00	171.97	-14.87	1493.55
6/17/81	5:40.00	172.05	-14.88	1493.48
6/17/81	13:20.00	172.17	-14.89	1493.37
6/17/81	19: 6.00	172.08	-14.88	1493.45
6/18/81	0:30.00	172.46	-14.92	1493.11
6/18/81	6: 0.00	172.72	-14.94	1492.87
6/18/81	12: 6.00	173.05	-14.97	1492.57
6/18/81	15:14.25	144.34	-12.48	1518.79
6/18/81	16:18.00	121.20	-10.48	1539.93
6/18/81	17:11.00	108.75	-9.41	1551.31
6/18/81	19:56.00	88.33	-7.64	1569.96
6/18/81	22:20.00	80.94	-7.00	1576.71
6/19/81	0:30.00	77.89	-6.74	1579.50
6/19/81	2:20.00	76.88	-6.65	1580.42
6/19/81	4: 0.00	76.06	-6.58	1581.17
6/19/81	6:10.00	75.44	-6.52	1581.73
6/19/81	7:59.00	75.56	-6.54	1581.63
6/19/81	7:59.00	75.56	-6.54	1581.63
6/19/81	11:52.00	74.67	-6.46	1582.44
6/19/81	17: 5.00	74.14	-6.41	1582.92
6/20/81	0: 1.00	73.54	-6.36	1583.47
6/20/81	6:11.00	73.54	-6.36	1583.47
6/20/81	14:12.00	73.35	-6.34	1583.64
6/20/81	17:22.00	73.23	-6.33	1583.75
6/21/81	9:26.00	72.95	-6.31	1584.01
6/21/81	16:14.00	72.77	-6.29	1584.17
6/22/81	10:15.00	72.59	-6.28	1584.34

NAME.....222
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.65

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/22/81	14: 1.00	72.55	-6.28	1584.38
6/23/81	10:36.00	72.51	-6.27	1584.41
6/23/81	17:41.00	72.07	-6.23	1584.81
6/24/81	15:53.00	72.04	-6.23	1584.84

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NAME.....223
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/18	21:24.00	58.35	-5.05	1585.63
4/29/81	12: 0.00	58.23	-5.04	1585.74
5/ 1/81	12:14.00	59.33	-5.13	1584.73
5/ 1/81	19:37.00	59.37	-5.14	1584.70
5/ 2/81	4: 5.00	59.42	-5.14	1584.65
5/ 2/81	9:25.00	59.56	-5.15	1584.52
5/ 2/81	12:26.00	59.50	-5.15	1584.58
5/ 2/81	15:29.00	59.31	-5.13	1584.75
5/ 2/81	18:27.00	59.27	-5.13	1584.79
5/ 2/81	22:25.00	59.35	-5.13	1584.71
5/ 3/81	3:45.00	59.22	-5.12	1584.83
5/ 3/81	9: 0.00	59.21	-5.12	1584.84
5/ 4/81	12: 7.00	59.06	-5.11	1584.98
5/ 5/81	7: 0.00	58.86	-5.09	1585.16
5/ 6/81	6:20.00	58.75	-5.08	1585.26
5/ 7/81	6:13.00	58.62	-5.07	1585.38
5/15/81	19:32.00	57.99	-5.02	1585.96
5/17/81	11:35.00	58.02	-5.02	1585.93
5/18/81	11:14.00	57.95	-5.01	1585.99
5/19/81	11:58.00	57.90	-5.01	1586.04
5/20/81	11:10.00	57.84	-5.00	1586.09
5/21/81	16: 2.00	58.42	-5.05	1585.56
5/22/81	15:54.00	58.57	-5.07	1585.43
5/23/81	14:31.00	58.70	-5.08	1585.31
5/24/81	15: 7.00	58.71	-5.08	1585.30
5/25/81	15: 3.00	58.80	-5.09	1585.22
5/26/81	17:59.00	58.79	-5.09	1585.23
5/29/81	15:57.00	57.96	-5.01	1585.98
5/30/81	10:36.00	57.93	-5.01	1586.01
5/31/81	11: 6.00	57.80	-5.00	1586.13
6/ 1/81	11:32.00	57.73	-4.99	1586.19
6/ 2/81	19: 4.00	57.68	-4.99	1586.24
6/ 3/81	10:22.00	57.68	-4.99	1586.24
6/ 4/81	11: 3.00	57.69	-4.99	1586.23
6/ 5/81	12:59.00	57.61	-4.98	1586.30
6/ 6/81	12:59.00	57.73	-4.99	1586.19
6/ 6/81	16:21.00	57.56	-4.98	1586.35
6/ 6/81	20:34.00	57.52	-4.98	1586.39
6/ 7/81	1:16.00	57.54	-4.98	1586.37
6/ 7/81	4:34.00	57.55	-4.98	1586.36

NAME.....223
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	8:30.00	57.55	-4.98	1586.36
6/ 7/81	15:36.00	58.16	-5.03	1585.80
6/ 7/81	20:23.00	57.55	-4.98	1586.36
6/11/81	11:35.00	57.51	-4.97	1586.39
6/11/81	12:47.83	71.96	-6.22	1573.19
6/11/81	13:46.00	96.69	-8.35	1550.60
6/11/81	16:16.00	123.22	-10.66	1526.37
6/11/81	20:30.00	140.09	-12.12	1510.96
6/11/81	23: 0.00	144.74	-12.53	1506.72
6/12/81	5:35.00	151.26	-13.10	1500.77
6/12/81	9: 7.00	151.30	-13.11	1500.74
6/12/81	14:46.00	152.62	-13.22	1499.53
6/12/81	19:59.00	153.38	-13.29	1498.84
6/13/81	0:40.00	153.99	-13.34	1498.28
6/13/81	5:20.00	154.47	-13.39	1497.85
6/13/81	9: 5.00	154.74	-13.41	1497.60
6/13/81	15:19.00	154.68	-13.40	1497.65
6/13/81	19:35.00	154.85	-13.42	1497.50
6/13/81	23:38.00	154.86	-13.42	1497.49
6/14/81	5:50.00	155.20	-13.45	1497.18
6/14/81	13: 9.00	155.09	-13.44	1497.28
6/14/81	19:11.00	154.50	-13.39	1497.82
6/15/81	0:40.00	155.62	-13.49	1496.80
6/15/81	15:38.00	156.38	-13.55	1496.10
6/15/81	16:15.00	156.05	-13.53	1496.41
6/15/81	19:28.00	156.60	-13.57	1495.90
6/16/81	0: 5.00	156.63	-13.58	1495.88
6/16/81	5:45.00	156.86	-13.60	1495.67
6/16/81	13: 9.00	157.13	-13.62	1495.42
6/16/81	18:20.00	157.15	-13.62	1495.40
6/17/81	0: 5.00	157.41	-13.64	1495.16
6/17/81	5:25.00	157.54	-13.66	1495.05
6/17/81	12:45.00	157.60	-13.66	1494.99
6/17/81	18:40.00	157.55	-13.66	1495.04
6/17/81	23:55.00	157.93	-13.69	1494.69
6/18/81	5:40.00	158.18	-13.71	1494.46
6/18/81	11:35.00	158.80	-13.77	1493.90
6/18/81	14:41.00	151.55	-13.13	1500.51
6/18/81	15:46.00	119.25	-10.32	1530.00
6/18/81	16:45.00	102.03	-8.83	1545.73

NAME.....223
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	17:37.00	91.90	-7.95	1554.98
6/18/81	19:36.00	77.62	-6.71	1568.02
6/18/81	21:45.00	69.89	-6.05	1575.09
6/18/81	23:45.00	66.55	-5.76	1578.14
6/19/81	2: 5.00	64.68	-5.59	1579.84
6/19/81	3:25.00	63.98	-5.53	1580.48
6/19/81	5:35.00	63.17	-5.46	1581.22
6/19/81	7:30.00	62.79	-5.43	1581.57
6/19/81	11:32.00	62.32	-5.39	1582.00
6/19/81	16:43.00	61.76	-5.34	1582.51
6/19/81	23:36.00	61.46	-5.32	1582.79
6/20/81	5:50.00	61.15	-5.29	1583.07
6/20/81	13:50.00	60.98	-5.27	1583.22
6/21/81	9: 1.00	60.55	-5.24	1583.62
6/21/81	14: 4.00	60.36	-5.22	1583.79
6/22/81	10:12.00	60.17	-5.20	1583.96
6/22/81	17:55.00	60.13	-5.20	1584.00
6/23/81	10:16.00	59.90	-5.18	1584.21
6/23/81	17:27.00	59.83	-5.18	1584.28
6/24/81	15:45.00	59.77	-5.17	1584.33

NAME.....224
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	12:10.00	55.84	-5.33	1585.36
5/ 1/81	19:30.00	55.87	-5.34	1585.34
5/ 2/81	3:45.00	55.93	-5.34	1585.28
5/ 2/81	9:22.00	56.06	-5.35	1585.16
5/ 2/81	12:16.00	56.03	-5.35	1585.19
5/ 2/81	15:24.00	55.83	-5.33	1585.37
5/ 2/81	18:24.00	55.78	-5.33	1585.42
5/ 2/81	22:40.00	55.85	-5.33	1585.35
5/ 3/81	4: 5.00	55.80	-5.33	1585.40
5/ 3/81	9:20.00	55.75	-5.32	1585.44
5/ 4/81	12: 0.00	55.57	-5.31	1585.61
5/ 5/81	6:50.00	55.22	-5.27	1585.92
5/ 6/81	6:15.00	55.27	-5.28	1585.88
5/ 7/81	6: 5.00	55.15	-5.27	1585.99
5/15/81	19:25.00	54.55	-5.21	1586.53
5/17/81	11:25.00	54.54	-5.21	1586.54
5/18/81	11: 7.00	54.49	-5.20	1586.58
5/19/81	11:50.00	54.43	-5.20	1586.64
5/20/81	11: 5.00	54.43	-5.20	1586.64
5/22/81	15:45.00	55.10	-5.26	1586.03
5/23/81	14:20.00	55.19	-5.27	1585.95
5/24/81	15: 0.00	55.20	-5.27	1585.94
5/25/81	14:55.00	55.27	-5.28	1585.88
5/26/81	17:51.00	55.27	-5.28	1585.88
5/28/81	21:40.00	54.37	-5.19	1586.69
5/29/81	15:42.00	54.48	-5.20	1586.59
5/30/81	10:28.00	54.45	-5.20	1586.62
5/31/81	10:59.00	54.32	-5.19	1586.74
6/ 1/81	11: 3.00	54.22	-5.18	1586.83
6/ 2/81	18:43.00	54.28	-5.18	1586.77
6/ 3/81	10:18.00	54.17	-5.17	1586.87
6/ 4/81	10:49.00	54.18	-5.17	1586.86
6/ 5/81	12:49.00	54.12	-5.17	1586.92
6/ 6/81	9:50.00	54.07	-5.16	1586.96
6/ 6/81	16:16.00	54.10	-5.17	1586.94
6/ 6/81	20:27.00	54.10	-5.17	1586.94
6/ 7/81	1: 9.00	54.08	-5.16	1586.95
6/ 7/81	4:27.00	54.09	-5.17	1586.95
6/ 7/81	8:23.00	54.06	-5.16	1586.97
6/ 7/81	15:23.00	54.91	-5.24	1586.20

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NAME.....224
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	20:31.00	54.06	-5.16	1586.97
6/11/81	11:41.00	54.15	-5.17	1586.89
6/11/81	13: 0.00	74.80	-7.14	1568.21
6/11/81	14:45.00	106.49	-10.17	1539.55
6/11/81	16:32.00	121.25	-11.58	1526.19
6/11/81	20:41.00	137.18	-13.10	1511.79
6/11/81	23:25.00	141.70	-13.53	1507.70
6/12/81	6:38.00	146.90	-14.03	1503.00
6/12/81	9:18.00	147.72	-14.11	1502.26
6/12/81	14:59.00	149.15	-14.24	1500.96
6/12/81	20: 9.00	150.83	-14.40	1499.44
6/13/81	0:55.00	150.48	-14.37	1499.76
6/13/81	5:35.00	151.00	-14.42	1499.29
6/13/81	9:20.00	151.19	-14.44	1499.12
6/13/81	15:31.00	151.18	-14.44	1499.13
6/13/81	19:48.00	151.30	-14.45	1499.02
6/14/81	6: 5.00	151.78	-14.49	1498.58
6/14/81	13:22.00	151.53	-14.47	1498.81
6/14/81	19:25.00	151.08	-14.43	1499.22
6/15/81	0:57.00	152.15	-14.53	1498.25
6/15/81	6: 5.00	153.34	-14.64	1497.17
6/15/81	13:31.00	153.58	-14.67	1496.96
6/15/81	18:32.00	153.61	-14.67	1496.93
6/17/81	0:20.00	153.91	-14.70	1496.66
6/17/81	5:15.00	154.00	-14.71	1496.58
6/17/81	13: 5.00	154.12	-14.72	1496.47
6/17/81	18:51.00	154.02	-14.71	1496.56
6/18/81	0:10.00	154.39	-14.74	1496.22
6/18/81	5:30.00	154.64	-14.77	1496.00
6/18/81	11:47.00	154.98	-14.80	1495.69
6/18/81	14:50.75	137.85	-13.16	1511.18
6/18/81	15:59.25	111.50	-10.65	1535.02
6/18/81	16:57.00	96.18	-9.19	1548.88
6/18/81	17:46.00	87.14	-8.32	1557.05
6/18/81	19:45.00	73.43	-7.01	1569.45
6/18/81	22: 5.00	65.72	-6.28	1576.43
6/19/81	0:10.00	62.40	-5.96	1579.43
6/19/81	1:55.00	61.24	-5.85	1580.48
6/19/81	3:45.00	60.38	-5.77	1581.26
6/19/81	5:55.00	59.60	-5.69	1581.96

NAME.....224
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	7:50.00	59.27	-5.66	1582.26
6/19/81	11:42.00	58.78	-5.61	1582.70
6/19/81	16:57.00	58.24	-5.56	1583.19
6/19/81	23:49.00	57.93	-5.53	1583.47
6/20/81	6: 1.00	57.65	-5.51	1583.73
6/20/81	14: 0.00	57.46	-5.49	1583.90
6/20/81	17:44.00	57.32	-5.47	1584.02
6/21/81	9:12.00	57.13	-5.46	1584.20
6/21/81	17:59.00	56.87	-5.43	1584.43
6/22/81	10: 4.00	56.70	-5.41	1584.58
6/22/81	17:15.00	56.62	-5.41	1584.66
6/23/81	10:27.00	56.52	-5.40	1584.75
6/23/81	17:36.00	56.30	-5.38	1584.95
6/24/81	15:41.00	56.12	-5.36	1585.11

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NAME.....226
LOCATION.....16703.5,77613.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1677.97

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18: 9.00	100.70	-8.71	1585.98
5/16/81	18:54.00	99.86	-8.64	1586.75
5/17/81	10: 5.00	100.86	-8.72	1585.83
5/18/81	10:13.00	100.83	-8.72	1585.86
5/19/81	10:35.00	101.11	-8.75	1585.61
5/20/81	10: 1.00	100.70	-8.71	1585.98
5/22/81	14:35.00	102.45	-8.86	1584.38
5/23/81	12:15.00	102.67	-8.88	1584.18
5/24/81	13:41.00	102.70	-8.88	1584.15
5/25/81	13:23.00	102.84	-8.90	1584.03
5/26/81	15:50.00	102.97	-8.91	1583.91
5/28/81	13: 9.00	102.24	-8.84	1584.57
5/29/81	21:41.00	102.22	-8.84	1584.59
5/30/81	21:21.00	100.87	-8.73	1585.83
5/31/81	7:33.00	100.81	-8.72	1585.88
5/31/81	7:33.00	100.81	-8.72	1585.88
6/ 1/81	9:23.00	100.69	-8.71	1585.99
6/ 2/81	14:30.00	100.54	-8.70	1586.13
6/ 3/81	7:27.00	100.47	-8.69	1586.19
6/ 4/81	9:16.00	100.57	-8.70	1586.10
6/ 5/81	7:23.00	100.42	-8.69	1586.24
6/ 6/81	5:51.00	100.49	-8.69	1586.17
6/ 7/81	6:26.00	100.42	-8.69	1586.24
6/ 8/81	6:35.00	100.44	-8.69	1586.22
6/ 9/81	7: 1.00	100.96	-8.73	1585.74
6/ 9/81	18:55.00	100.78	-8.72	1585.91
6/10/81	7:21.00	100.78	-8.72	1585.91
6/10/81	17:32.00	100.60	-8.70	1586.07
6/11/81	7: 1.00	100.63	-8.70	1586.04
6/11/81	18:42.00	153.69	-13.29	1537.57
6/12/81	3:50.00	168.30	-14.56	1524.23
6/12/81	8: 4.00	170.37	-14.74	1522.34
6/12/81	17:59.00	171.92	-14.87	1520.92
6/13/81	7:13.00	174.96	-15.13	1518.14
6/13/81	17:24.00	174.12	-15.06	1518.91
6/13/81	18: 2.00	174.66	-15.11	1518.42
6/15/81	10:51.00	175.79	-15.21	1517.39
6/15/81	17:15.00	175.81	-15.21	1517.37
6/16/81	7:26.00	176.32	-15.25	1516.90
6/16/81	17:27.00	176.51	-15.27	1516.73

NAME.....226
LOCATION.....16703.5,77613.4
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1677.97

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/17/81	7:35.00	176.89	-15.30	1516.38
6/17/81	17:15.00	176.93	-15.30	1516.34
6/18/81	7:30.00	177.54	-15.36	1515.79
6/18/81	13: 5.00	177.95	-15.39	1515.41
6/18/81	17:47.00	137.82	-11.92	1552.07
6/19/81	7:20.00	106.35	-9.20	1580.82
6/19/81	16:13.00	104.97	-9.08	1582.08
6/20/81	7:54.00	104.14	-9.01	1582.84
6/20/81	16:46.00	103.90	-8.99	1583.06
6/21/81	10:38.00	103.38	-8.94	1583.53
6/21/81	17:15.00	103.39	-8.94	1583.52
6/22/81	9:34.00	103.16	-8.92	1583.73
6/22/81	16:39.00	103.19	-8.93	1583.71
6/23/81	9:36.00	102.88	-8.90	1583.99
6/23/81	16:37.00	102.90	-8.90	1583.97
6/24/81	15: 3.00	102.56	-8.87	1584.28

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NAME.....227
LOCATION.....16614.5,77681.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1672.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:13.00	95.29	-8.24	1585.82
5/16/81	18:59.00	95.29	-8.24	1585.82
5/17/81	10: 9.00	95.35	-8.25	1585.77
5/18/81	10:16.00	95.30	-8.24	1585.81
5/19/81	10:38.00	95.25	-8.24	1585.86
5/20/81	10: 5.00	95.16	-8.23	1585.94
5/21/81	14:25.00	96.51	-8.35	1584.71
5/22/81	14:37.00	96.82	-8.37	1584.42
5/23/81	12:16.00	97.07	-8.40	1584.20
5/24/81	13:43.00	97.10	-8.40	1584.17
5/25/81	13:20.00	97.22	-8.41	1584.06
5/26/81	15:55.00	97.29	-8.42	1584.00
5/28/81	13:13.00	96.63	-8.36	1584.60
5/29/81	21:45.00	96.59	-8.36	1584.64
5/30/81	21:19.00	95.30	-8.24	1585.81
5/31/81	7:36.00	95.24	-8.24	1585.87
5/31/81	7:36.00	95.24	-8.24	1585.87
6/ 1/81	9:26.00	95.17	-8.23	1585.93
6/ 2/81	7:25.00	95.01	-8.22	1586.08
6/ 2/81	14:47.00	94.90	-8.21	1586.18
6/ 3/81	7:30.00	94.94	-8.21	1586.14
6/ 4/81	9:20.00	95.04	-8.22	1586.05
6/ 5/81	7:26.00	94.91	-8.21	1586.17
6/ 6/81	6: 5.00	94.95	-8.21	1586.13
6/ 7/81	6:34.00	94.93	-8.21	1586.15
6/ 8/81	6:42.00	94.97	-8.21	1586.11
6/ 9/81	12: 0.00	95.69	-8.28	1585.46
6/ 9/81	18:56.00	95.20	-8.23	1585.90
6/10/81	7:27.00	95.25	-8.24	1585.86
6/10/81	17:34.00	95.05	-8.22	1586.04
6/11/81	7: 7.00	95.05	-8.22	1586.04
6/11/81	11:24.00	94.97	-8.21	1586.11
6/11/81	12:46.00	99.66	-8.62	1581.83
6/11/81	13:10.00	108.25	-9.36	1573.98
6/11/81	13:40.00	116.08	-10.04	1566.83
6/11/81	14:28.00	126.12	-10.91	1557.66
6/11/81	17: 8.00	145.87	-12.62	1539.62
6/11/81	18:35.00	151.69	-13.12	1534.30
6/12/81	0:20.00	162.37	-14.05	1524.54
6/12/81	4:57.00	165.41	-14.31	1521.77

NAME.....227
LOCATION.....16614.5,77681.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1672.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	9:57.00	167.25	-14.47	1520.09
6/12/81	9:59.00	166.94	-14.44	1520.37
6/12/81	15:41.00	168.06	-14.54	1519.35
6/12/81	20:44.00	168.66	-14.59	1518.80
6/13/81	0:15.00	169.18	-14.63	1518.32
6/13/81	5: 5.00	169.70	-14.68	1517.85
6/13/81	10:16.00	169.96	-14.70	1517.61
6/13/81	10:18.00	169.92	-14.70	1517.65
6/13/81	16: 6.00	169.95	-14.70	1517.62
6/13/81	20:11.00	170.13	-14.72	1517.46
6/14/81	1:40.00	170.33	-14.73	1517.27
6/14/81	5:15.00	170.29	-14.73	1517.31
6/14/81	14:36.00	170.45	-14.74	1517.16
6/14/81	14:38.00	171.10	-14.80	1516.57
6/14/81	20: 3.00	170.20	-14.72	1517.39
6/14/81	23:55.00	170.79	-14.77	1516.85
6/15/81	6: 0.00	171.20	-14.81	1516.48
6/15/81	16:30.00	171.54	-14.84	1516.17
6/15/81	20:15.00	171.72	-14.85	1516.00
6/16/81	1: 5.00	171.89	-14.87	1515.85
6/16/81	5:20.00	172.04	-14.88	1515.71
6/16/81	14:12.00	172.25	-14.90	1515.52
6/16/81	14:15.00	172.23	-14.90	1515.49
6/16/81	19: 7.00	172.27	-14.90	1515.50
6/16/81	23:45.00	172.00	-14.88	1515.75
6/17/81	6: 0.00	172.79	-14.95	1515.03
6/17/81	13:41.00	172.75	-14.94	1515.06
6/17/81	13:44.00	172.79	-14.95	1515.03
6/17/81	19:20.00	172.70	-14.94	1515.11
6/17/81	23:40.00	173.08	-14.97	1514.76
6/18/81	6:20.00	173.41	-15.00	1514.46
6/18/81	12:23.00	173.51	-15.01	1514.37
6/18/81	12:25.00	173.58	-15.01	1514.30
6/18/81	14:35.00	173.34	-14.99	1514.52
6/18/81	14:51.00	168.92	-14.53	1519.38
6/18/81	15:15.00	160.53	-13.89	1526.23
6/18/81	15: 2.00	164.28	-14.21	1522.80
6/18/81	15:28.00	156.72	-13.56	1529.71
6/18/81	15:55.00	149.20	-12.91	1536.58
6/18/81	16:10.00	145.09	-12.55	1540.34

NAME.....227
LOCATION.....16614.5,77681.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1672.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	16:30.00	140.86	-12.18	1544.19
6/18/81	17:42.00	127.86	-11.06	1556.07
6/18/81	18:38.00	120.75	-10.44	1562.56
6/18/81	19:40.00	115.00	-9.95	1567.82
6/18/81	22:55.00	105.91	-9.16	1576.12
6/19/81	0:50.00	103.08	-8.92	1578.71
6/19/81	2:35.00	102.04	-8.83	1579.66
6/19/81	4:45.00	101.16	-8.75	1580.46
6/19/81	6:30.00	100.54	-8.70	1581.03
6/19/81	8:10.00	100.29	-8.68	1581.26
6/19/81	12:15.00	99.58	-8.61	1581.90
6/19/81	12: 5.00	100.00	-8.65	1581.52
6/19/81	17:15.00	99.22	-8.58	1582.23
6/20/81	0:23.00	98.97	-8.56	1582.46
6/20/81	6:10.00	98.66	-8.53	1582.74
6/20/81	14:23.00	98.40	-8.51	1582.98
6/20/81	18:10.00	98.25	-8.50	1583.12
6/21/81	9:40.00	98.12	-8.49	1583.24
6/21/81	18:25.00	97.81	-8.46	1583.52
6/22/81	10:26.00	97.56	-8.44	1583.75
6/22/81	18:31.00	97.52	-8.44	1583.79
6/23/81	10:45.00	97.30	-8.42	1583.99
6/23/81	17:53.00	97.12	-8.40	1584.15

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NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18: 4.00	114.75	-9.93	1585.03
5/16/81	17:15.00	114.76	-9.93	1585.02
5/17/81	10:24.00	114.92	-9.94	1584.87
5/18/81	10:10.00	114.82	-9.93	1584.96
5/19/81	8:53.00	114.81	-9.93	1584.97
5/20/81	9: 6.00	114.71	-9.92	1585.06
5/22/81	14:30.00	117.53	-10.17	1582.49
5/23/81	12:13.00	117.78	-10.19	1582.26
5/24/81	13:37.00	118.02	-10.21	1582.04
5/25/81	13:10.00	118.13	-10.22	1581.94
5/26/81	15:45.00	118.27	-10.23	1581.81
5/28/81	13: 6.00	117.23	-10.14	1582.76
5/29/81	21:58.00	117.17	-10.14	1582.82
5/30/81	21:24.00	115.07	-9.95	1584.73
5/31/81	7:30.00	114.95	-9.94	1584.84
5/31/81	7:30.00	114.95	-9.94	1584.84
6/ 1/81	9:21.00	114.85	-9.93	1584.93
6/ 2/81	14:42.00	114.75	-9.93	1585.03
6/ 3/81	7:23.00	114.60	-9.91	1585.16
6/ 4/81	9:15.00	114.66	-9.92	1585.11
6/ 5/81	7:20.00	114.52	-9.91	1585.24
6/ 6/81	5:56.00	114.58	-9.91	1585.18
6/ 7/81	6: 0.00	114.58	-9.91	1585.18
6/ 8/81	6:38.00	114.56	-9.91	1585.20
6/ 9/81	18:53.00	114.86	-9.94	1584.93
6/10/81	7:24.00	114.83	-9.93	1584.95
6/10/81	17:30.00	114.65	-9.92	1585.12
6/11/81	7: 4.00	114.62	-9.91	1585.14
6/11/81	11:40.00	114.60	-9.91	1585.16
6/11/81	12:48.00	115.37	-9.98	1584.46
6/11/81	13:21.00	119.79	-10.36	1580.42
6/11/81	13:42.00	123.12	-10.65	1577.38
6/11/81	14:24.00	129.98	-11.24	1571.11
6/11/81	17: 5.00	149.58	-12.94	1553.21
6/11/81	19:33.00	155.90	-13.49	1547.44
6/12/81	0:22.00	168.18	-14.55	1536.22
6/12/81	5: 5.00	171.87	-14.87	1532.85
6/12/81	10: 5.00	173.85	-15.04	1531.04
6/12/81	15:43.00	174.93	-15.13	1530.05
6/12/81	20:46.00	175.62	-15.19	1529.42

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/13/81	0:20.00	176.12	-15.23	1528.96
6/13/81	5:10.00	176.62	-15.28	1528.51
6/13/81	10:21.00	176.94	-15.31	1528.22
6/13/81	10:23.00	176.80	-15.29	1528.34
6/13/81	16: 4.00	176.91	-15.30	1528.24
6/13/81	20:13.00	172.20	-14.90	1532.55
6/14/81	1:45.00	177.25	-15.33	1527.93
6/14/81	5:20.00	177.58	-15.36	1527.63
6/14/81	14:43.00	177.55	-15.36	1527.66
6/14/81	14:45.00	177.35	-15.34	1527.84
6/14/81	20: 5.00	177.56	-15.36	1527.65
6/15/81	0:10.00	177.95	-15.39	1527.29
6/15/81	6: 2.00	178.33	-15.43	1526.95
6/15/81	16:32.00	178.56	-15.45	1526.74
6/15/81	20:18.00	178.75	-15.46	1526.56
6/16/81	1:10.00	178.95	-15.48	1526.38
6/16/81	5:22.00	179.04	-15.49	1526.30
6/16/81	14:15.00	179.33	-15.51	1526.03
6/16/81	14:16.00	179.15	-15.50	1526.20
6/16/81	19:10.00	179.37	-15.52	1526.00
6/16/81	23:50.00	179.66	-15.54	1525.73
6/17/81	6: 5.00	179.83	-15.56	1525.58
6/17/81	13:46.00	179.87	-15.56	1525.54
6/17/81	13:48.00	179.68	-15.54	1525.71
6/17/81	19:23.00	179.68	-15.54	1525.71
6/17/81	23:45.00	180.08	-15.58	1525.35
6/18/81	6:25.00	180.29	-15.60	1525.16
6/18/81	12:27.00	180.59	-15.62	1524.88
6/18/81	12:29.00	180.40	-15.60	1525.05
6/18/81	14:37.00	180.32	-15.64	1524.67
6/18/81	14:54.00	181.91	-15.74	1523.68
6/18/81	15: 6.00	178.79	-15.47	1526.53
6/18/81	15:18.00	176.98	-15.31	1528.18
6/18/81	18: 7.00	149.28	-12.91	1553.48
6/18/81	23:52.00	126.21	-10.92	1574.56
6/19/81	7:13.00	120.72	-10.44	1579.57
6/19/81	12:33.00	119.80	-10.36	1580.41
6/19/81	16:11.00	119.22	-10.31	1580.94
6/20/81	7:50.00	118.20	-10.22	1581.87
6/20/81	16:41.00	117.99	-10.21	1582.07

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/21/81	10:34.00	117.78	-10.19	1582.26
6/21/81	17:13.00	117.42	-10.16	1582.59
6/22/81	9:32.00	117.19	-10.14	1582.80
6/22/81	16:56.00	117.21	-10.14	1582.78
6/23/81	9:35.00	116.96	-10.12	1583.01
6/23/81	16:35.00	116.98	-10.12	1582.99
6/24/81	15: 0.00	116.60	-10.09	1583.34

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NAME.....229
LOCATION.....16543.9,77554.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1675.24

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:16.00	96.55	-6.11	1584.80
5/16/81	18: 3.00	96.55	-6.11	1584.80
5/17/81	10:12.00	96.60	-6.11	1584.75
5/18/81	10:19.00	96.55	-6.11	1584.80
5/19/81	10:19.00	96.45	-6.11	1584.90
5/20/81	10: 9.00	96.43	-6.10	1584.91
5/21/81	14:18.00	97.68	-6.18	1583.74
5/22/81	14:43.00	98.28	-6.22	1583.18
5/23/81	12:20.00	98.50	-6.24	1582.98
5/24/81	13:51.00	98.51	-6.24	1582.97
5/25/81	13:20.00	98.67	-6.25	1582.82
5/26/81	16:25.00	98.76	-6.25	1582.73
5/28/81	15:15.00	98.01	-6.20	1583.43
5/29/81	21:26.00	97.97	-6.20	1583.47
5/30/81	21:14.00	96.58	-6.11	1584.77
5/31/81	7:40.00	96.52	-6.11	1584.83
6/ 1/81	9:15.00	96.00	-6.08	1585.32
6/ 2/81	7:19.00	96.27	-6.09	1585.06
6/ 3/81	7:15.00	96.24	-6.09	1585.09
6/ 4/81	9:10.00	96.29	-6.10	1585.05
6/ 5/81	7:15.00	96.18	-6.09	1585.15
6/ 6/81	5:39.00	96.22	-6.09	1585.11
6/ 7/81	6:30.00	96.17	-6.09	1585.16
6/ 8/81	6:30.00	99.18	-6.21	1583.27
6/ 9/81	12: 0.00	96.97	-6.14	1584.41
6/ 9/81	18:48.00	96.45	-6.11	1584.90
6/10/81	7:16.00	96.51	-6.11	1584.84
6/10/81	17:27.00	96.32	-6.10	1585.02
6/11/81	6:56.00	96.35	-6.10	1584.99
6/11/81	18:26.00	147.27	-9.32	1537.29
6/12/81	3:25.00	160.09	-10.13	1525.28
6/12/81	7:57.00	161.95	-10.25	1523.53
6/12/81	17:52.00	163.65	-10.36	1521.95
6/13/81	7: 6.00	165.05	-10.45	1520.64
6/13/81	17:14.00	165.16	-10.45	1520.53
6/14/81	9:16.00	165.70	-10.49	1520.03
6/14/81	17:56.00	165.50	-10.48	1520.22
6/15/81	10:45.00	166.42	-10.53	1519.35
6/15/81	17:15.00	166.49	-10.54	1519.29
6/16/81	7:19.00	166.92	-10.57	1518.89

NAME.....229
LOCATION.....16543.9,77554.6
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1675.24

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	17:22.00	167.09	-10.58	1518.73
6/17/81	7:40.00	167.50	-10.60	1518.34
6/17/81	17:10.00	167.50	-10.60	1518.34
6/18/81	7:37.00	168.03	-10.64	1517.85
6/18/81	13: 0.00	168.30	-10.65	1517.59
6/18/81	17:56.00	126.58	-8.01	1556.67
6/19/81	7: 2.00	98.41	-6.23	1583.06
6/19/81	16: 6.00	100.96	-6.39	1580.67
6/20/81	7:43.00	99.85	-6.32	1581.71
6/20/81	16:35.00	99.60	-6.30	1581.94
6/21/81	10:29.00	99.38	-6.29	1582.15
6/21/81	17: 7.00	99.09	-6.27	1582.42
6/22/81	9:28.00	98.86	-6.26	1582.64
6/22/81	16:47.00	98.85	-6.26	1582.65
6/23/81	9:30.00	98.64	-6.24	1582.84
6/23/81	16:32.00	98.66	-6.25	1582.83
6/24/81	14:55.00	98.29	-6.22	1583.17

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:34 PAGE

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	13:21.00	83.10	-6.19	1578.10
5/ 9/81	19:37.00	82.68	-6.16	1578.49
5/10/81	7:35.00	82.54	-6.15	1578.62
5/11/81	7:37.00	83.59	-6.23	1577.65
5/11/81	19:14.00	83.00	-6.18	1578.19
5/12/81	13:12.00	82.77	-6.17	1578.41
5/13/81	6:53.00	91.01	-6.78	1570.78
5/13/81	6:56.00	90.98	-6.78	1570.81
5/13/81	17:28.00	85.68	-6.38	1575.71
5/14/81	8:58.00	83.43	-6.22	1577.80
5/14/81	17:52.00	82.41	-6.14	1578.74
5/16/81	18:42.00	82.50	-6.15	1578.66
5/17/81	9:48.00	82.68	-6.16	1578.49
5/18/81	8:41.00	82.52	-6.15	1578.64
5/18/81	9:32.00	82.58	-6.15	1578.58
5/18/81	9:39.00	82.55	-6.15	1578.61
5/18/81	12:39.00	85.09	-6.34	1576.26
5/19/81	9:46.00	82.86	-6.17	1578.32
5/20/81	8:58.00	82.32	-6.13	1578.82
5/20/81	11:35.00	82.36	-6.14	1578.79
5/20/81	11:36.00	82.38	-6.14	1578.77
5/20/81	12: 0.50	82.41	-6.14	1578.74
5/20/81	12: 8.25	82.41	-6.14	1578.74
5/20/81	12:18.00	97.00	-7.23	1565.24
5/20/81	12:44.92	110.25	-8.21	1552.97
5/20/81	13: 3.25	126.95	-9.46	1537.51
5/20/81	13:26.00	143.19	-10.67	1522.49
5/20/81	13:30.00	145.37	-10.83	1520.47
5/20/81	15: 5.00	194.00	-14.45	1475.46
5/20/81	15:52.00	203.00	-15.12	1467.13
5/20/81	16: 0.00	216.02	-16.09	1455.08
5/20/81	17: 0.00	225.25	-16.73	1446.49
5/20/81	19: 3.00	232.73	-17.22	1439.50
5/20/81	20:15.00	239.17	-17.63	1433.47
5/20/81	22:12.00	252.65	-18.51	1420.87
5/21/81	0:12.00	258.54	-18.89	1415.36
5/21/81	2: 6.00	265.46	-19.34	1408.89
5/21/81	4: 7.00	272.71	-19.81	1402.11
5/21/81	6: 3.00	276.92	-20.08	1398.17
5/21/81	8: 7.00	280.77	-20.33	1394.57

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
A.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	10:12.00	279.43	-20.25	1395.83
5/21/81	12: 4.00	285.35	-20.63	1390.29
5/21/81	12: 9.00	285.22	-20.62	1390.41
5/21/81	14: 6.00	289.27	-20.89	1386.63
5/21/81	16:23.00	288.85	-20.86	1387.02
5/21/81	18:13.00	290.75	-20.98	1385.24
5/21/81	19:59.00	292.77	-21.11	1383.35
5/21/81	22: 6.00	295.21	-21.27	1381.07
5/22/81	0: 4.00	296.95	-21.38	1379.44
5/22/81	2: 6.00	298.29	-21.47	1378.19
5/22/81	4:10.00	299.46	-21.55	1377.10
5/22/81	6: 6.00	303.90	-21.84	1372.95
5/22/81	8: 4.00	301.09	-21.65	1375.57
5/22/81	10:11.00	302.80	-21.76	1373.97
5/22/81	12:41.00	304.65	-21.88	1372.24
5/22/81	14: 8.00	305.14	-21.92	1371.79
5/22/81	16: 6.00	306.54	-22.01	1370.48
5/22/81	18:10.00	307.40	-22.06	1369.67
5/22/81	20: 6.00	307.86	-22.09	1369.24
5/23/81	0: 4.00	309.30	-22.19	1367.90
5/23/81	2: 6.00	309.38	-22.19	1367.82
5/23/81	4: 4.00	309.79	-22.22	1367.44
5/23/81	6: 8.00	310.25	-22.25	1367.01
5/23/81	8: 2.00	310.33	-22.25	1366.93
5/23/81	10:15.00	311.35	-22.32	1365.98
5/23/81	12:13.00	312.44	-22.39	1364.96
5/23/81	14:12.00	312.98	-22.42	1364.45
5/23/81	15:58.00	313.38	-22.45	1364.08
5/23/81	20:13.00	315.48	-22.59	1362.12
5/24/81	0:10.00	316.31	-22.64	1361.34
5/24/81	5: 7.00	316.90	-22.68	1360.79
5/24/81	7:57.00	317.50	-22.72	1360.23
5/24/81	12: 6.00	318.60	-22.79	1359.20
5/24/81	16:17.00	319.40	-22.84	1358.45
5/24/81	19:56.00	320.96	-22.94	1356.99
5/25/81	0: 0.00	321.67	-22.98	1356.32
5/25/81	4: 5.00	322.35	-23.01	1355.67
5/25/81	8: 4.00	323.04	-23.05	1355.02
5/25/81	12:18.00	323.63	-23.09	1354.47
5/25/81	16: 6.00	323.96	-23.11	1354.16

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:34 PAGE

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	20: 4.00	324.33	-23.13	1353.81
5/26/81	0: 5.00	324.75	-23.15	1353.41
5/26/81	4:20.00	325.02	-23.17	1353.16
5/26/81	7:55.00	326.08	-23.23	1352.16
5/26/81	12: 7.00	326.69	-23.26	1351.58
5/26/81	16:17.00	326.96	-23.28	1351.33
5/26/81	20: 8.00	326.94	-23.28	1351.35
5/26/81	23:46.00	327.67	-23.32	1350.66
5/27/81	3:45.00	327.71	-23.32	1350.62
5/27/81	8:17.00	328.71	-23.38	1349.68
5/27/81	12: 3.00	329.14	-23.40	1349.27
5/27/81	13:26.00	329.35	-23.42	1349.08
5/27/81	14: 1.00	329.43	-23.42	1349.00
5/27/81	14: 7.25	328.77	-23.38	1349.62
5/27/81	14:12.75	326.75	-23.27	1351.53
5/27/81	14:16.58	324.75	-23.15	1353.41
5/27/81	14:21.33	321.90	-22.99	1356.10
5/27/81	14:30.43	315.76	-22.60	1361.85
5/27/81	14:36.47	311.52	-22.33	1365.82
5/27/81	14:40.83	308.47	-22.13	1368.67
5/27/81	14:46.17	304.79	-21.89	1372.11
5/27/81	14:52.33	304.67	-21.89	1372.23
5/27/81	14:58.87	296.07	-21.33	1380.27
5/27/81	15: 6.17	290.71	-20.98	1385.28
5/27/81	15:28.70	279.19	-20.23	1396.05
5/27/81	15:41.83	272.90	-19.82	1401.93
5/27/81	15:57.50	266.25	-19.39	1408.15
5/27/81	16:20.58	258.08	-18.86	1415.79
5/27/81	16:51.00	249.49	-18.30	1423.82
5/27/81	17:10.50	244.54	-17.98	1428.45
5/27/81	17:32.00	240.29	-17.90	1429.62
5/27/81	17:42.00	237.71	-17.54	1431.84
5/27/81	18: 0.00	235.42	-17.39	1436.98
5/27/81	19:18.00	225.00	-16.71	1446.72
5/27/81	20: 2.00	219.42	-16.35	1451.94
5/27/81	20: 7.00	219.60	-16.36	1451.77
5/27/81	21:14.00	213.33	-15.89	1457.57
5/27/81	22:24.00	206.44	-15.38	1463.95
5/28/81	0: 8.00	198.00	-14.75	1471.76
5/28/81	1:20.00	194.52	-14.49	1474.98

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	2: 5.00	191.50	-14.27	1477.78
5/28/81	4:45.00	182.63	-13.61	1485.99
5/28/81	6: 7.00	178.67	-13.31	1489.65
5/28/81	7:52.00	173.71	-12.94	1494.24
5/28/81	10:22.00	167.81	-12.50	1499.70
5/28/81	12: 7.00	162.71	-12.12	1504.42
5/28/81	14: 3.00	158.11	-11.78	1508.68
5/28/81	16: 3.00	153.48	-11.43	1512.96
5/28/81	16: 9.00	153.41	-11.43	1513.03
5/28/81	18:11.00	148.82	-11.09	1517.28
5/28/81	20: 2.00	144.90	-10.80	1520.91
5/28/81	22: 5.00	140.92	-10.50	1524.59
5/29/81	0:12.00	132.69	-9.89	1532.21
5/29/81	0:22.00	136.29	-10.15	1528.87
5/29/81	4:12.00	128.96	-9.61	1535.66
5/29/81	6:17.00	125.21	-9.33	1539.13
5/29/81	8: 5.00	122.33	-9.11	1541.79
5/29/81	12:23.00	115.45	-8.60	1548.16
5/29/81	12:24.00	115.48	-8.60	1548.13
5/29/81	16:30.00	109.50	-8.16	1553.67
5/29/81	20:47.00	104.70	-7.80	1558.11
5/30/81	0: 2.00	104.70	-7.80	1558.11
5/30/81	5:15.00	95.70	-7.13	1566.44
5/30/81	8:19.00	94.19	-7.02	1567.84
5/30/81	12: 9.00	91.94	-6.85	1569.92
5/30/81	16: 3.00	89.90	-6.70	1571.81
5/30/81	19:55.00	88.44	-6.59	1573.16
5/30/81	23:59.00	87.39	-6.51	1574.13
5/31/81	4:72.00	85.87	-6.40	1575.54
5/31/81	5:57.00	85.66	-6.38	1575.73
5/31/81	8:52.00	85.69	-6.38	1575.70
5/31/81	11:57.00	85.19	-6.35	1576.17
5/31/81	16:33.00	84.47	-6.29	1576.83
5/31/81	20:12.00	84.12	-6.27	1577.16
6/ 1/81	8:12.00	83.58	-6.23	1577.66
6/ 1/81	12: 1.00	83.59	-6.23	1577.65
6/ 1/81	16:17.00	83.50	-6.22	1577.73
6/ 1/81	20:43.00	83.12	-6.19	1578.08
6/ 1/81	24: 0.00	83.08	-6.19	1578.12
6/ 2/81	4:22.00	83.03	-6.19	1578.17

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NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 2/81	6:55.00	83.03	-6.19	1578.17
6/ 2/81	8:42.00	83.06	-6.19	1578.14
6/ 2/81	12: 1.00	83.10	-6.19	1578.10
6/ 2/81	16:12.00	83.08	-6.19	1578.12
6/ 2/81	20:28.00	82.79	-6.17	1578.39
6/ 3/81	0:10.00	82.72	-6.16	1578.45
6/ 3/81	4: 7.00	82.70	-6.16	1578.47
6/ 3/81	6:50.00	82.70	-6.16	1578.47
6/ 4/81	6:50.00	82.79	-6.17	1578.39
6/ 4/81	8:35.00	82.84	-6.17	1578.34
6/ 4/81	12:15.00	82.94	-6.18	1578.25
6/ 4/81	16: 7.00	83.55	-6.22	1577.68
6/ 4/81	20:40.00	83.01	-6.18	1578.18
6/ 5/81	6:50.00	82.65	-6.16	1578.52
6/ 5/81	8:37.00	82.51	-6.15	1578.65
6/ 5/81	13:53.00	82.70	-6.16	1578.47
6/ 5/81	17:21.00	82.55	-6.15	1578.61
6/ 5/81	20:32.00	82.48	-6.14	1578.67
6/ 6/81	0:35.00	82.52	-6.15	1578.64
6/ 6/81	4:32.00	82.43	-6.14	1578.72
6/ 6/81	8:15.00	82.44	-6.14	1578.71
6/ 6/81	11:50.00	82.50	-6.15	1578.66
6/ 7/81	6:41.00	81.72	-6.09	1579.38
6/ 8/81	7:12.00	81.77	-6.09	1579.33
6/ 9/81	12: 0.00	82.88	-6.17	1578.30
6/ 9/81	19:22.00	82.57	-6.15	1578.59
6/10/81	6:52.00	82.64	-6.16	1578.53
6/10/81	17:12.00	82.50	-6.15	1578.66
6/11/81	6:29.00	82.58	-6.15	1578.58
6/11/81	15:35.00	82.49	-6.15	1578.67
6/11/81	19:20.00	83.01	-6.18	1578.18
6/12/81	2:35.00	84.38	-6.29	1576.92
6/12/81	7:26.00	85.15	-6.34	1576.19
6/12/81	17:30.00	85.96	-6.40	1575.45
6/13/81	6:45.00	86.48	-6.44	1574.97
6/13/81	16:58.00	86.49	-6.44	1574.96
6/14/81	6:34.00	86.58	-6.45	1574.88
6/14/81	17:29.00	86.74	-6.46	1574.73
6/15/81	7:10.00	86.71	-6.46	1574.76
6/15/81	16:48.00	86.77	-6.46	1574.70

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:34 PAGE

NAME.....230
LOCATION.....16745.5, 76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.01

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	5:40.00	87.02	-6.48	1574.47
6/16/81	16:53.00	87.13	-6.49	1574.37
6/17/81	6:20.00	87.14	-6.49	1574.36
6/17/81	16:37.00	87.27	-6.50	1574.24
6/18/81	6:40.00	87.14	-6.49	1574.36
6/18/81	13: 6.00	87.31	-6.50	1574.20
6/18/81	18:24.00	87.20	-6.50	1574.31
6/19/81	6:14.00	85.01	-6.33	1576.33
6/19/81	15:48.00	84.08	-6.26	1577.19
6/20/81	7:15.00	83.15	-6.19	1578.05
6/20/81	16:10.00	83.00	-6.18	1578.19
6/21/81	10: 8.00	82.73	-6.16	1578.44
6/21/81	16:42.00	82.76	-6.17	1578.42
6/22/81	9: 9.00	82.56	-6.15	1578.60
6/22/81	16:29.00	82.79	-6.17	1578.39
6/23/81	16: 9.00	82.90	-6.18	1578.29
6/24/81	8:42.00	82.56	-6.15	1578.60

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:44 PAGE

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.12

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 6/71	0:17.00	76.26	-13.79	1586.65
6/ 6/71	4:20.00	76.11	-13.76	1586.77
6/ 6/71	8:23.00	76.30	-13.80	1586.62
6/ 6/71	12: 5.00	76.32	-13.80	1586.60
5/ 9/81	13:28.00	76.92	-13.91	1586.11
5/ 9/81	19:19.00	76.72	-13.87	1586.27
5/10/81	20:27.00	80.42	-14.54	1583.24
5/11/81	7:32.00	77.46	-14.01	1585.67
5/11/81	19: 7.00	70.23	-12.70	1591.59
5/12/81	13:17.00	76.74	-13.88	1586.26
5/13/81	7:18.00	83.71	-15.14	1580.55
5/13/81	7:20.00	83.69	-15.14	1580.57
5/13/81	17:36.00	79.23	-14.33	1584.22
5/14/81	9:14.00	77.25	-13.97	1585.84
5/15/81	17:41.00	76.00	-13.74	1586.86
5/16/81	18:24.00	76.55	-13.84	1586.41
5/17/81	9:36.00	76.64	-13.86	1586.34
5/18/81	9:31.00	76.54	-13.84	1586.42
5/18/81	12: 0.00	76.81	-13.89	1586.20
5/18/81	12:22.00	77.44	-14.01	1585.69
5/18/81	12:27.00	77.19	-13.96	1585.89
5/19/81	9:26.00	77.01	-13.93	1586.04
5/20/81	8:48.00	76.35	-13.81	1586.58
5/20/81	11:41.00	76.25	-13.79	1586.66
5/20/81	11:43.00	76.36	-13.81	1586.57
5/20/81	12: 5.17	86.45	-15.63	1578.30
5/20/81	12:17.58	86.60	-15.66	1578.18
5/20/81	12:30.00	97.25	-17.59	1569.46
5/20/81	12:58.33	110.78	-20.03	1558.37
5/20/81	13: 7.75	111.43	-20.15	1557.84
5/20/81	14:15.00	153.58	-27.77	1523.31
5/20/81	14:42.00	185.12	-33.48	1497.48
5/20/81	14:51.00	187.19	-33.85	1495.78
5/20/81	15:17.00	193.71	-35.03	1490.44
5/20/81	15:50.00	199.20	-36.03	1485.95
5/20/81	16: 7.00	208.42	-37.69	1478.39
5/20/81	18:41.00	218.33	-39.48	1470.27
5/20/81	19:19.00	221.06	-39.98	1468.04
5/20/81	20:22.00	225.90	-40.85	1464.07
5/20/81	22:17.00	237.17	-42.89	1454.84

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.12

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	0:19.00	242.08	-43.78	1450.82
5/21/81	4:37.00	253.17	-45.79	1441.74
5/21/81	6:19.00	256.83	-46.45	1438.74
5/21/81	8:19.00	260.48	-47.11	1435.75
5/21/81	10:23.00	258.90	-46.82	1437.04
5/21/81	12:42.00	266.86	-48.26	1430.52
5/21/81	13:38.00	208.43	-37.69	1478.38
5/21/81	14:12.00	267.25	-48.33	1430.20
5/21/81	16:28.00	267.44	-48.37	1430.05
5/21/81	18:20.00	270.07	-48.84	1427.89
5/21/81	20:12.00	272.08	-49.21	1426.25
5/21/81	22:26.00	274.50	-49.64	1424.26
5/22/81	0:20.00	276.04	-49.92	1423.00
5/22/81	2:23.00	277.56	-50.20	1421.76
5/22/81	4:27.00	277.79	-50.24	1421.57
5/22/81	6:26.00	279.96	-50.63	1419.79
5/22/81	8:14.00	280.42	-50.71	1419.41
5/22/81	12:57.00	283.90	-51.34	1416.56
5/22/81	14:11.00	284.59	-51.47	1416.00
5/22/81	16:10.00	285.79	-51.69	1415.02
5/22/81	18:35.00	286.96	-51.90	1414.06
5/22/81	20:19.00	287.52	-52.00	1413.60
5/23/81	0:20.00	289.10	-52.28	1412.30
5/23/81	2:35.00	289.54	-52.36	1411.94
5/23/81	4:23.00	290.04	-52.45	1411.53
5/23/81	6:20.00	290.50	-52.54	1411.16
5/23/81	8:15.00	290.90	-52.61	1410.83
5/23/81	10:23.00	291.99	-52.81	1409.94
5/23/81	12:17.00	292.92	-52.97	1409.17
5/23/81	14:16.00	293.29	-53.04	1408.87
5/23/81	16: 3.00	293.92	-53.16	1408.36
5/23/81	20:33.00	295.83	-53.50	1406.79
5/24/81	0:25.00	296.83	-53.68	1405.97
5/24/81	5:12.00	297.67	-53.83	1405.28
5/24/81	8:10.00	298.42	-53.97	1404.67
5/24/81	12:14.00	299.50	-54.16	1403.78
5/24/81	16:26.00	300.67	-54.38	1402.83
5/24/81	20:18.00	301.96	-54.61	1401.77
5/25/81	0:12.00	302.75	-54.75	1401.12
5/25/81	4:18.00	303.42	-54.87	1400.57

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:44 PAGE

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.12

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	8:15.00	304.25	-55.02	1399.89
5/25/81	11:59.00	304.84	-55.13	1399.41
5/25/81	16:17.00	305.47	-55.24	1398.89
5/25/81	20: 9.00	305.89	-55.32	1398.55
5/26/81	0:25.00	306.46	-55.42	1398.08
5/26/81	4:35.00	306.96	-55.51	1397.67
5/26/81	8:10.00	307.75	-55.66	1397.03
5/26/81	12:19.00	308.54	-55.80	1396.38
5/26/81	16: 7.00	308.63	-55.82	1396.31
5/27/81	17: 1.00	242.82	-43.91	1450.21
5/27/81	17:46.00	236.45	-42.76	1455.43
5/27/81	18:26.00	232.15	-41.98	1458.95
5/27/81	19: 5.00	226.26	-40.92	1463.78
5/27/81	20:26.00	215.08	-38.90	1472.94
5/27/81	21: 2.00	213.60	-38.63	1474.15
5/27/81	22:39.00	205.11	-37.09	1481.10
5/28/81	1: 9.00	195.10	-35.28	1489.30
5/28/81	1:35.00	194.71	-35.21	1489.62
5/28/81	2:25.00	188.70	-34.13	1494.55
5/28/81	5: 7.00	181.00	-32.73	1500.85
5/28/81	6:15.00	177.10	-32.03	1504.05
5/28/81	8:15.00	171.50	-31.02	1508.64
5/28/81	10:43.00	164.43	-29.74	1514.43
5/28/81	12:26.00	159.85	-28.91	1518.18
5/28/81	14:19.00	155.03	-28.04	1522.13
5/28/81	16:25.00	149.95	-27.12	1526.29
5/28/81	18:19.00	145.50	-26.31	1529.93
5/28/81	20:15.00	139.64	-25.25	1534.73
5/28/81	23:40.00	133.64	-24.17	1539.65
5/29/81	2:25.00	127.90	-23.13	1544.35
5/29/81	4:20.00	123.95	-22.42	1547.59
5/29/81	6:25.00	120.06	-21.71	1550.77
5/29/81	8:15.00	116.77	-21.12	1553.47
5/29/81	12:55.00	108.78	-19.67	1560.01
5/29/81	16:43.00	103.22	-18.67	1564.57
5/29/81	20:45.00	99.10	-17.92	1567.94
5/30/81	0:25.00	99.10	-17.92	1567.94
5/30/81	5:50.00	92.03	-16.64	1573.73
5/30/81	6:42.00	103.22	-18.67	1564.57
5/30/81	8:37.00	87.42	-15.81	1577.51

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.12

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/30/81	12:18.00	85.28	-15.42	1579.26
5/30/81	16:11.00	83.33	-15.07	1580.86
5/30/81	20: 5.00	81.89	-14.81	1582.04
5/30/81	23: 0.00	80.08	-14.48	1583.52
5/31/81	4: 0.00	79.69	-14.41	1583.84
5/31/81	6:59.00	79.69	-14.41	1583.84
5/31/81	8: 0.00	79.27	-14.34	1584.19
5/31/81	12: 5.00	78.78	-14.25	1584.59
5/31/81	16:41.00	78.15	-14.13	1585.10
5/31/81	20: 6.00	78.20	-14.14	1585.06
6/ 1/81	0: 7.00	77.80	-14.07	1585.39
6/ 1/81	1: 6.00	77.42	-14.00	1585.70
6/ 1/81	8: 9.00	77.37	-13.99	1585.74
6/ 1/81	12:20.00	77.40	-14.00	1585.72
6/ 1/81	16:10.00	77.33	-13.99	1585.78
6/ 1/81	20:35.00	76.98	-13.92	1586.06
6/ 2/81	6:55.00	76.91	-13.91	1586.12
6/ 2/81	8:51.00	77.97	-14.10	1585.25
6/ 2/81	12:15.00	77.90	-14.09	1585.31
6/ 2/81	16:30.00	76.91	-13.91	1586.12
6/ 2/81	20:17.00	76.61	-13.85	1586.36
6/ 3/81	0: 4.00	76.59	-13.85	1586.38
6/ 3/81	4: 3.00	76.58	-13.85	1586.39
6/ 3/81	6:57.00	76.62	-13.86	1586.36
6/ 3/81	6:50.00	76.58	-13.85	1586.39
6/ 3/81	12:29.00	76.62	-13.86	1586.36
6/ 3/81	16:14.00	76.54	-13.86	1586.34
6/ 3/81	20:51.00	76.58	-13.85	1586.39
6/ 4/81	1:12.00	76.64	-13.86	1586.34
6/ 4/81	5:35.00	76.66	-13.86	1586.32
6/ 4/81	6:50.00	76.66	-13.86	1586.32
6/ 4/81	8:41.00	76.68	-13.87	1586.31
6/ 4/81	12:12.00	76.73	-13.88	1586.27
6/ 4/81	16:15.00	79.47	-14.19	1584.84
6/ 4/81	20:34.00	76.82	-13.89	1586.19
6/ 5/81	0: 4.00	76.59	-13.87	1586.30
6/ 5/81	4:22.00	76.48	-13.83	1586.47
6/ 5/81	6:50.00	76.48	-13.83	1586.47
6/ 5/81	8:51.00	76.42	-13.82	1586.52
6/ 5/81	14:11.00	76.45	-13.83	1586.50

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:44 PAGE

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.12

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 5/81	17:35.00	76.34	-13.81	1586.59
6/ 5/81	20:29.00	76.28	-13.80	1586.64
6/ 7/81	6:52.00	76.33	-13.80	1586.59
6/ 8/81	7:20.00	76.34	-13.81	1586.59
6/ 9/81	12: 0.00	78.56	-14.21	1584.77
6/ 9/81	19:15.00	76.34	-13.81	1586.59
6/10/81	6:59.00	76.48	-13.83	1586.47
6/10/81	17:17.00	76.34	-13.81	1586.59
6/11/81	6:38.00	76.42	-13.82	1586.52
6/11/81	15:30.00	76.43	-13.82	1586.51
6/11/81	19:25.00	76.99	-13.92	1585.05
6/12/81	7:10.00	75.07	-13.58	1587.63
6/12/81	7:39.00	78.63	-14.22	1584.71
6/12/81	17:36.00	79.23	-14.33	1584.22
6/13/81	6:50.00	79.60	-14.40	1583.92
6/13/81	17: 3.00	83.60	-15.12	1580.64
6/14/81	6:50.00	83.63	-15.12	1580.61
6/14/81	17:36.00	79.73	-14.42	1583.81
6/15/81	7:23.00	80.25	-14.51	1583.38
6/15/81	16:56.00	81.09	-14.67	1582.70
6/16/81	5:55.00	80.05	-14.48	1583.55
6/16/81	16: 4.00	80.20	-14.50	1583.42
6/17/81	6:40.00	80.38	-14.54	1583.28
6/17/81	13: 0.00	80.29	-14.52	1583.35
6/17/81	18:35.00	80.27	-14.52	1583.37
6/19/81	6:20.00	78.32	-14.16	1584.96
6/19/81	15:51.00	77.57	-14.03	1585.58
6/20/81	7:21.00	76.84	-13.90	1586.18
6/20/81	16:17.00	76.69	-13.87	1586.30
6/21/81	10:15.00	76.51	-13.84	1586.45
6/21/81	16:50.00	76.48	-13.83	1586.47
6/22/81	9:15.00	76.41	-13.82	1586.53
6/22/81	16:34.00	76.56	-13.85	1586.41
6/23/81	9:11.00	76.58	-13.85	1586.39
6/23/81	16:14.00	76.59	-13.85	1586.38
6/24/81	8:49.00	76.33	-13.80	1586.59

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:52 PAGE 1

NAME.....232
LOCATION.....16641.9,78087.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.13

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:53.00	88.92	-18.37	1584.58
5/17/81	12: 6.00	88.90	-18.37	1584.60
5/18/81	11:33.00	88.92	-18.37	1584.58
5/19/81	12:25.00	88.58	-18.30	1584.85
5/20/81	10:27.00	88.70	-18.33	1584.76
5/21/81	16:23.00	88.79	-18.34	1584.68
5/22/81	15: 5.00	88.70	-18.33	1584.76
5/23/81	13: 5.00	89.93	-18.58	1583.78
5/24/81	14:13.00	90.22	-18.64	1583.55
5/25/81	13:47.00	89.89	-18.57	1583.81
5/26/81	16:50.00	90.05	-18.60	1583.68
5/28/81	13:25.00	89.53	-18.50	1584.10
5/30/81	2:10.00	89.77	-18.55	1583.91
5/30/81	9:42.00	88.87	-18.36	1584.62
5/31/81	10: 8.00	88.69	-18.32	1584.76
5/31/81	10: 8.00	88.69	-18.32	1584.76
6/ 1/81	11:51.00	88.58	-18.30	1584.85
6/ 3/81	9:38.00	88.46	-18.28	1584.95
6/ 4/81	10: 0.00	88.48	-18.28	1584.93
6/ 5/81	11:50.00	88.41	-18.27	1584.99
6/ 6/81	9: 7.00	88.37	-18.26	1585.02
6/ 7/81	5:48.00	88.40	-18.26	1584.99
6/ 8/81	6:20.00	88.15	-18.21	1585.19
6/ 9/81	12: 0.00	89.02	-18.39	1584.50
6/ 9/81	18:39.00	88.70	-18.33	1584.76
6/10/81	9:18.00	88.62	-18.31	1584.82
6/10/81	19:18.00	88.59	-18.30	1584.84
6/11/81	7:18.00	88.36	-18.26	1585.03
6/11/81	11:11.00	88.25	-18.23	1585.11
6/11/81	12:53.00	106.29	-21.96	1570.80
6/11/81	13:18.00	119.66	-24.72	1560.19
6/11/81	13:47.00	130.12	-26.88	1551.89
6/11/81	14:30.00	141.77	-29.29	1542.65
6/11/81	17:14.00	166.35	-34.37	1523.15
6/11/81	18:38.00	173.23	-35.79	1517.69
6/12/81	0:30.00	186.58	-38.55	1507.10
6/12/81	4:55.00	190.16	-39.29	1504.26
6/12/81	9:50.00	191.23	-39.51	1503.41
6/12/81	9:53.00	191.00	-39.46	1503.59
6/12/81	15:36.00	193.63	-40.00	1501.50

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:24:52 PAGE

NAME.....232
LOCATION.....16641.9,78087.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.13

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	20:41.00	194.37	-40.16	1500.92
6/13/81	0: 7.00	194.85	-40.26	1500.54
6/13/81	5: 0.00	195.54	-40.40	1499.99
6/13/81	10: 9.00	195.74	-40.44	1499.83
6/13/81	16:11.00	195.89	-40.47	1499.71
6/13/81	20: 8.00	195.86	-40.46	1499.73
6/14/81	1:30.00	196.08	-40.51	1499.56
6/14/81	5:25.00	196.33	-40.56	1499.36
6/14/81	14:26.00	196.26	-40.55	1499.42
6/14/81	20: 0.00	195.95	-40.48	1499.66
6/14/81	23:35.00	196.79	-40.66	1499.00
6/15/81	5:50.00	197.33	-40.77	1498.57
6/15/81	16:27.00	197.78	-40.86	1498.21
6/15/81	20:10.00	197.87	-40.88	1498.14
6/16/81	0:55.00	198.04	-40.92	1498.01
6/16/81	5:30.00	198.29	-40.97	1497.81
6/16/81	13:59.00	198.47	-41.00	1497.66
6/16/81	14: 5.00	198.56	-41.02	1497.59
6/16/81	19: 3.00	198.56	-41.02	1497.59
6/16/81	23:35.00	198.87	-41.09	1497.35
6/17/81	5:50.00	199.08	-41.13	1497.18
6/17/81	13:34.00	199.10	-41.13	1497.16
6/17/81	13:37.00	199.18	-41.15	1497.10
6/17/81	19:17.00	199.04	-41.12	1497.21
6/17/81	23:50.00	199.45	-41.21	1496.89
6/18/81	6:10.00	199.83	-41.28	1496.58
6/18/81	12:17.00	200.12	-41.35	1496.36
6/18/81	14:30.00	200.25	-41.38	1496.26
6/18/81	14:40.00	184.53	-38.12	1508.72
6/18/81	14:57.00	181.58	-37.51	1511.06
6/18/81	15:21.00	169.19	-34.95	1520.89
6/18/81	15:45.00	158.15	-32.67	1529.65
6/18/81	15: 7.00	175.50	-36.26	1515.89
6/18/81	16:25.00	145.27	-30.01	1539.87
6/18/81	16: 5.00	151.54	-31.31	1534.90
6/18/81	17:24.00	128.16	-26.48	1553.45
6/18/81	18:28.00	119.65	-24.72	1560.20
6/18/81	19:35.00	117.25	-24.22	1562.10
6/18/81	22:40.00	100.54	-20.77	1575.36
6/19/81	0:55.00	97.20	-20.08	1578.01

NAME.....232
LOCATION.....16641.9,78087.9
TYPE.....INCLINE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1655.13

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	2:30.00	96.12	-19.86	1578.87
6/19/81	4:40.00	95.25	-19.68	1579.56
6/19/81	6:20.00	94.70	-19.57	1580.00
6/19/81	8: 5.00	94.29	-19.48	1580.32
6/19/81	11:58.00	93.75	-19.37	1580.75
6/19/81	11:58.00	93.75	-19.37	1580.75
6/19/81	17:10.00	93.01	-19.22	1581.34
6/20/81	0:10.00	92.83	-19.18	1581.48
6/20/81	14:12.00	92.12	-19.03	1582.04
6/20/81	18: 1.00	91.95	-19.00	1582.18
6/21/81	9:30.00	91.75	-18.96	1582.34
6/21/81	18:22.00	91.50	-18.90	1582.53
6/22/81	10:19.00	91.35	-18.87	1582.65
6/22/81	18: 9.00	91.20	-18.84	1582.77
6/23/81	10:41.00	91.06	-18.81	1582.88
6/23/81	17:45.00	90.75	-18.75	1583.13

NAME.....DMA-19
LOCATION.....15003.8,79719.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1598.30

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	16:16.00	8.16	0.00	1590.14
5/17/81	8:44.00	8.20	0.00	1590.10
5/20/81	9:56.00	8.08	0.00	1590.22
5/21/81	17:47.00	8.00	0.00	1590.30
5/22/81	16:18.00	8.00	0.00	1590.30
5/23/81	16:10.00	8.02	0.00	1590.28
5/24/81	15:30.00	7.97	0.00	1590.33
5/25/81	15:33.00	8.02	0.00	1590.28
5/26/81	14: 7.00	8.06	0.00	1590.24
5/28/81	7:25.00	7.76	0.00	1590.54
5/29/81	17:29.00	8.79	0.00	1589.51
5/30/81	8: 5.00	8.07	0.00	1590.23
5/31/81	8: 5.00	8.07	0.00	1590.23
6/ 1/81	6:56.00	7.97	0.00	1590.33
6/ 2/81	6:31.00	8.00	0.00	1590.30
6/ 3/81	6: 0.00	7.95	0.00	1590.35
6/ 4/81	6:16.00	8.05	0.00	1590.25
6/ 5/81	5:22.00	7.94	0.00	1590.36
6/ 6/81	8:39.00	7.99	0.00	1590.31
6/ 7/81	9:18.00	7.96	0.00	1590.34
6/ 9/81	12: 0.00	8.00	0.00	1590.30
6/ 9/81	17:45.00	7.99	0.00	1590.31
6/10/81	6:29.00	7.97	0.00	1590.33
6/10/81	16:56.00	8.05	0.00	1590.25
6/11/81	5:55.00	8.08	0.00	1590.22
6/11/81	16: 3.00	8.04	0.00	1590.26
6/11/81	19:53.00	8.08	0.00	1590.22
6/12/81	6:11.00	8.09	0.00	1590.21
6/12/81	17:14.00	8.11	0.00	1590.19
6/13/81	6:20.00	8.09	0.00	1590.21
6/13/81	16:40.00	8.05	0.00	1590.25
6/14/81	6: 6.00	8.08	0.00	1590.22
6/14/81	17: 8.00	8.03	0.00	1590.27
6/15/81	6:57.00	8.03	0.00	1590.27
6/15/81	16:27.00	7.91	0.00	1590.39
6/16/81	5:18.00	7.96	0.00	1590.34
6/16/81	16:37.00	8.03	0.00	1590.27
6/17/81	5:59.00	8.02	0.00	1590.28
6/17/81	16:20.00	8.04	0.00	1590.26
6/18/81	6:27.00	8.03	0.00	1590.27

NAME.....DMA-19
LOCATION.....15003.8,79719.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1598.30

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	18: 5.00	7.97	0.00	1590.33
6/19/81	5:55.00	7.93	0.00	1590.37
6/19/81	15:34.00	8.08	0.00	1590.22
6/20/81	7: 0.00	7.87	0.00	1590.43
6/20/81	15:55.00	7.90	0.00	1590.40
6/21/81	9:52.00	7.77	0.00	1590.53
6/21/81	16:16.00	7.78	0.00	1590.52
6/22/81	8:53.00	7.79	0.00	1590.51
6/22/81	16: 9.00	7.84	0.00	1590.46
6/23/81	8:45.00	7.86	0.00	1590.44
6/23/81	15:54.00	7.83	0.00	1590.47
6/24/81	8:27.00	7.81	0.00	1590.49

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:17 PAGE

NAME.....DMI-1
LOCATION.....16746.7 78815.3
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1638.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	15:37.00	48.78	0.00	1589.31
5/ 1/81	19:30.00	48.80	0.00	1589.29
5/ 2/81	3:40.00	48.81	0.00	1589.28
5/ 2/81	9:19.00	48.84	0.00	1589.25
5/ 2/81	12:10.00	48.85	0.00	1589.24
5/ 2/81	15:21.00	48.79	0.00	1589.30
5/ 2/81	18:21.00	48.79	0.00	1589.30
5/ 2/81	22:55.00	48.86	0.00	1589.23
5/ 3/81	4:35.00	48.85	0.00	1589.24
5/ 3/81	9:30.00	48.87	0.00	1589.22
5/ 4/81	12: 0.00	48.89	0.00	1589.20
5/ 5/81	6:45.00	48.82	0.00	1589.27
5/ 6/81	6:10.00	48.79	0.00	1589.30
5/ 7/81	6: 0.00	48.74	0.00	1589.35
5/15/81	19: 1.00	48.14	0.00	1589.95
5/17/81	11:17.00	48.11	0.00	1589.98
5/18/81	11: 2.00	48.07	0.00	1590.02
5/19/81	11:40.00	48.00	0.00	1590.09
5/20/81	11: 0.00	47.98	0.00	1590.11
5/21/81	15:42.00	47.92	0.00	1590.17
5/22/81	15:41.00	47.89	0.00	1590.20
5/23/81	14: 8.00	47.88	0.00	1590.21
5/24/81	14:50.00	47.86	0.00	1590.23
5/25/81	14:42.00	47.85	0.00	1590.24
5/26/81	17:45.00	47.82	0.00	1590.27
5/28/81	14: 3.00	47.76	0.00	1590.33
5/29/81	15:42.00	47.74	0.00	1590.35
5/30/81	10:22.00	47.80	0.00	1590.29
5/31/81	10:53.00	47.79	0.00	1590.30
6/ 1/81	11:12.00	47.73	0.00	1590.36

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:21 PAGE 1

NAME.....DMI-2 LOWER
LOCATION.....16608.9,78750.1
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1630.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19: 3.00	41.76	0.00	1588.91
5/17/81	11:21.00	41.80	0.00	1588.87
5/18/81	11: 6.00	41.74	0.00	1588.93
5/19/81	11:47.00	41.68	0.00	1588.99
5/20/81	11: 3.00	41.64	0.00	1589.03
5/21/81	15:50.00	41.62	0.00	1589.05
5/22/81	15:45.00	41.60	0.00	1589.07
5/23/81	14: 8.00	41.61	0.00	1589.06
5/24/81	14:48.00	41.58	0.00	1589.09
5/25/81	14:51.00	41.57	0.00	1589.10
5/26/81	17:49.00	41.55	0.00	1589.12
5/28/81	21:20.00	41.47	0.00	1589.20
5/29/81	15:52.00	41.36	0.00	1589.31
5/30/81	10:25.00	41.49	0.00	1589.18
5/31/81	10:55.00	41.47	0.00	1589.20
6/ 1/81	11: 6.00	41.37	0.00	1589.30
6/ 2/81	18:40.00	41.36	0.00	1589.31
6/ 3/81	10:16.00	41.40	0.00	1589.27
6/ 4/81	10:45.00	41.38	0.00	1589.29
6/ 5/81	12:47.00	41.36	0.00	1589.31
6/ 6/81	9:43.00	41.28	0.00	1589.39
6/ 6/81	16:15.00	41.33	0.00	1589.34
6/ 6/81	20:25.00	41.32	0.00	1589.35
6/ 7/81	1: 7.00	41.32	0.00	1589.35
6/ 7/81	4:23.00	41.32	0.00	1589.35
6/ 7/81	8:19.00	41.30	0.00	1589.37
6/ 7/81	15:18.00	41.27	0.00	1589.40
6/ 7/81	20:35.00	41.22	0.00	1589.45

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:26 PAGE

NAME.....DMP-1
LOCATION.....16675.0,78480.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.27

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/11/81	8:59.00	60.37	0.00	1588.90
6/11/81	11:54.00	60.41	0.00	1588.86
6/11/81	13:23.00	60.44	0.00	1588.83
6/11/81	15:25.00	60.45	0.00	1588.82
6/11/81	16:54.00	60.46	0.00	1588.81
6/11/81	21:30.00	59.56	0.00	1589.71
6/11/81	24: 0.00	60.65	0.00	1588.62
6/12/81	7:15.00	60.53	0.00	1588.74
6/12/81	9:45.00	60.47	0.00	1588.80
6/12/81	15:20.00	60.52	0.00	1588.75
6/12/81	20:26.00	60.49	0.00	1588.78
6/13/81	1:20.00	60.57	0.00	1588.70
6/13/81	5:47.00	60.54	0.00	1588.73
6/13/81	9:55.00	60.58	0.00	1588.69
6/13/81	15:51.00	60.60	0.00	1588.67
6/13/81	20: 4.00	60.59	0.00	1588.68
6/14/81	8: 5.00	60.64	0.00	1588.63
6/14/81	14:11.00	60.27	0.00	1589.00
6/14/81	19:55.00	60.65	0.00	1588.62
6/15/81	1:50.00	60.63	0.00	1588.64
6/15/81	6:35.00	60.70	0.00	1588.57
6/15/81	16:10.00	60.80	0.00	1588.47
6/15/81	20: 1.00	60.75	0.00	1588.52
6/16/81	0:50.00	60.76	0.00	1588.51
6/16/81	6:25.00	60.70	0.00	1588.57
6/16/81	13:49.00	60.79	0.00	1588.48
6/16/81	18:51.00	60.79	0.00	1588.48
6/17/81	0:35.00	60.80	0.00	1588.47
6/17/81	5:45.00	60.79	0.00	1588.48
6/17/81	13:23.00	60.80	0.00	1588.47
6/17/81	19: 9.00	60.84	0.00	1588.43
6/18/81	0:35.00	60.93	0.00	1588.34
6/18/81	6: 5.00	60.84	0.00	1588.43
6/18/81	12: 9.00	60.96	0.00	1588.31
6/18/81	15:17.50	60.87	0.00	1588.40
6/18/81	16:21.00	60.88	0.00	1588.39
6/18/81	17:44.00	60.88	0.00	1588.39
6/18/81	17:55.00	60.86	0.00	1588.41
6/18/81	19:59.00	60.85	0.00	1588.42
6/18/81	22:25.00	60.85	0.00	1588.42

NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1646.17

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	4:17.00	72.00	0.00	1574.17
5/28/81	5:59.00	71.80	0.00	1574.37
5/28/81	7:44.00	71.60	0.00	1574.57
5/28/81	9:29.00	71.40	0.00	1574.77
5/28/81	11:19.00	71.20	0.00	1574.97
5/28/81	13: 4.00	71.00	0.00	1575.17
5/28/81	14:24.00	70.86	0.00	1575.31
5/28/81	15: 3.00	70.80	0.00	1575.37
5/28/81	16:60.00	70.60	0.00	1575.57
5/28/81	18:60.00	70.40	0.00	1575.77
5/28/81	21: 8.00	70.20	0.00	1575.97
5/28/81	22:48.00	70.00	0.00	1576.17
5/29/81	0:56.00	69.80	0.00	1576.37
5/29/81	3:17.00	69.60	0.00	1576.57
5/29/81	5:35.00	69.40	0.00	1576.77
5/29/81	8:20.00	69.20	0.00	1576.97
5/29/81	10:53.00	69.00	0.00	1577.17
5/29/81	11:26.00	68.93	0.00	1577.24
5/29/81	13: 1.00	68.80	0.00	1577.37
5/29/81	15:49.00	68.60	0.00	1577.57
5/29/81	18:12.00	68.40	0.00	1577.77
5/30/81	0:10.00	68.20	0.00	1577.97
5/30/81	6:33.00	68.00	0.00	1578.17
5/30/81	11:43.00	67.80	0.00	1578.37
5/30/81	16: 6.00	67.60	0.00	1578.57
5/31/81	3:39.00	67.40	0.00	1578.77
5/31/81	15:12.00	67.20	0.00	1578.97
6/ 1/81	11:55.00	67.00	0.00	1579.17
6/ 1/81	20:41.00	66.88	0.00	1579.29
6/ 2/81	1:28.00	66.90	0.00	1579.27
6/ 2/81	7: 2.00	66.88	0.00	1579.29
6/ 2/81	11:49.00	66.89	0.00	1579.28
6/ 2/81	20:35.00	66.78	0.00	1579.39
6/ 3/81	0:10.00	66.79	0.00	1579.38
6/ 3/81	3:45.00	66.77	0.00	1579.40
6/ 3/81	16:30.00	66.83	0.00	1579.34

NAME.....WW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1646.17

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	11:31.00	71.60	0.00	1574.57
5/21/81	14:35.00	71.80	0.00	1574.37
5/21/81	18:24.00	72.03	0.00	1574.14
5/21/81	21:57.00	72.20	0.00	1573.97
5/22/81	2: 6.00	72.40	0.00	1573.77
5/22/81	7:55.00	72.60	0.00	1573.57
5/22/81	16:52.00	72.80	0.00	1573.37
5/22/81	18:46.00	72.83	0.00	1573.34
5/23/81	2:55.00	73.00	0.00	1573.17
5/23/81	18:17.00	73.20	0.00	1572.97
5/23/81	23:43.00	73.27	0.00	1572.90
5/24/81	2:50.00	73.27	0.00	1572.90
5/24/81	3:32.00	73.30	0.00	1572.87
5/24/81	5: 0.00	73.30	0.00	1572.87
5/24/81	8:16.00	73.35	0.00	1572.82
5/24/81	9:59.00	73.35	0.00	1572.82
5/24/81	11:26.00	73.38	0.00	1572.79
5/24/81	18: 2.00	73.40	0.00	1572.77
5/24/81	19:10.00	73.44	0.00	1572.73
5/24/81	23:25.00	73.52	0.00	1572.65
5/25/81	5:47.00	73.60	0.00	1572.57
5/25/81	14:54.00	73.70	0.00	1572.47
5/25/81	18:11.00	73.73	0.00	1572.44
5/26/81	1:32.00	73.80	0.00	1572.37
5/26/81	11:19.00	73.90	0.00	1572.27
5/26/81	18:56.00	73.95	0.00	1572.22
5/27/81	3:33.00	73.98	0.00	1572.19
5/27/81	9: 8.00	74.03	0.00	1572.14
5/27/81	13:14.00	74.00	0.00	1572.17
5/27/81	14: 0.00	73.99	0.00	1572.18
5/27/81	14:23.00	74.01	0.00	1572.16
5/27/81	15:56.00	73.80	0.00	1572.37
5/27/81	17:10.00	73.59	0.00	1572.58
5/27/81	18:16.00	73.40	0.00	1572.77
5/27/81	19:36.00	73.20	0.00	1572.97
5/27/81	20:39.00	73.03	0.00	1573.14
5/27/81	22:15.00	72.80	0.00	1573.37
5/27/81	23:14.00	72.60	0.00	1573.57
5/28/81	1: 6.00	72.40	0.00	1573.77
5/28/81	2:42.00	72.20	0.00	1573.97

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29:20 PAGE 1

NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1646.17

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	13: 8.00	66.80	0.00	1579.37
5/12/81	13:59.00	66.94	0.00	1579.23
5/12/81	14:40.00	66.95	0.00	1579.22
5/12/81	19:26.00	66.80	0.00	1579.37
5/19/81	0:51.00	66.80	0.00	1579.37
5/19/81	5:13.00	66.75	0.00	1579.42
5/19/81	10:50.00	66.74	0.00	1579.43
5/19/81	15:44.00	66.65	0.00	1579.52
5/19/81	19:47.00	66.61	0.00	1579.56
5/20/81	0:14.00	66.65	0.00	1579.52
5/20/81	11: 4.00	66.68	0.00	1579.49
5/20/81	12: 0.00	66.68	0.00	1579.49
5/20/81	12:21.00	66.62	0.00	1579.55
5/20/81	13: 4.00	66.80	0.00	1579.37
5/20/81	13:34.00	67.00	0.00	1579.17
5/20/81	14: 1.00	67.20	0.00	1578.97
5/20/81	14:28.00	67.40	0.00	1578.77
5/20/81	14:56.00	67.60	0.00	1578.57
5/20/81	15: 7.00	67.69	0.00	1578.48
5/20/81	15:24.00	67.80	0.00	1578.37
5/20/81	15:54.00	68.00	0.00	1578.17
5/20/81	16:26.00	68.20	0.00	1577.97
5/20/81	16:59.00	68.40	0.00	1577.77
5/20/81	17:35.00	68.60	0.00	1577.57
5/20/81	18: 3.00	68.80	0.00	1577.37
5/20/81	18:33.00	69.00	0.00	1577.17
5/20/81	19:19.00	69.12	0.00	1577.05
5/20/81	19:37.00	69.20	0.00	1576.97
5/20/81	20:22.00	69.40	0.00	1576.77
5/20/81	21:13.00	69.60	0.00	1576.57
5/20/81	22: 1.00	69.80	0.00	1576.37
5/20/81	22:52.00	70.00	0.00	1576.17
5/20/81	23:52.00	70.20	0.00	1575.97
5/21/81	1: 1.00	70.40	0.00	1575.77
5/21/81	2:16.00	70.60	0.00	1575.57
5/21/81	3:40.00	70.80	0.00	1575.37
5/21/81	5: 7.00	71.00	0.00	1575.17
5/21/81	6:49.00	71.20	0.00	1574.97
5/21/81	8:46.00	71.40	0.00	1574.77
5/21/81	8:43.00	71.40	0.00	1574.77

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29:16 PAGE

NAME.....TW-1
LOCATION.....16893.9,79723.3
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1602.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 5/81	4: 0.00	12.05	0.00	1590.45
6/ 9/81	8:23.00	12.05	0.00	1590.45
6/10/81	2: 7.00	12.05	0.00	1590.45
6/10/81	15:37.00	12.04	0.00	1590.46
6/11/81	1:13.00	12.03	0.00	1590.47
6/11/81	10:43.00	12.04	0.00	1590.46
6/11/81	23:45.00	12.05	0.00	1590.45
6/12/81	7:12.00	12.07	0.00	1590.43
6/12/81	12: 9.00	12.10	0.00	1590.40
6/12/81	18:47.00	12.10	0.00	1590.40
6/13/81	11:14.00	12.11	0.00	1590.39
6/13/81	17:25.00	12.10	0.00	1590.40
6/13/81	20:56.00	12.11	0.00	1590.39
6/13/81	23:24.00	12.12	0.00	1590.38
6/14/81	0:15.00	12.15	0.00	1590.35
6/14/81	1:35.00	12.12	0.00	1590.38
6/14/81	3: 1.00	12.12	0.00	1590.38
6/14/81	3:10.00	12.15	0.00	1590.35
6/14/81	3:54.00	12.13	0.00	1590.37
6/14/81	5:14.00	12.13	0.00	1590.37
6/14/81	6:32.00	12.15	0.00	1590.35
6/14/81	9:42.00	12.13	0.00	1590.37
6/14/81	10:12.00	12.14	0.00	1590.36
6/15/81	0:19.00	12.10	0.00	1590.40
6/15/81	11:33.00	12.05	0.00	1590.45
6/16/81	1:15.00	12.00	0.00	1590.50
6/16/81	11:16.00	11.57	0.00	1590.93
6/17/81	11:48.00	11.95	0.00	1590.55
6/19/81	11:17.00	11.92	0.00	1590.58
6/19/81	15:58.00	11.90	0.00	1590.60
6/19/81	23:46.00	11.90	0.00	1590.60
6/20/81	4:11.00	11.88	0.00	1590.62
6/20/81	10:34.00	11.88	0.00	1590.62
6/20/81	10:47.00	11.85	0.00	1590.65
6/21/81	9:47.00	11.85	0.00	1590.65

NAME.....TW-1
LOCATION.....16683.9,79723.3
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1602.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	11:33.00	12.30	0.00	1590.20
5/16/81	19:29.00	12.30	0.00	1590.20
5/17/81	3:25.00	12.30	0.00	1590.20
5/17/81	9:31.00	12.30	0.00	1590.20
5/17/81	12:16.00	12.28	0.00	1590.22
5/17/81	18:13.00	12.27	0.00	1590.23
5/18/81	10: 0.00	12.28	0.00	1590.22
5/18/81	10: 2.00	12.28	0.00	1590.22
5/18/81	16:44.00	12.25	0.00	1590.25
5/19/81	2:51.00	12.25	0.00	1590.25
5/19/81	9: 9.00	12.25	0.00	1590.25
5/19/81	18:22.00	12.23	0.00	1590.27
5/20/81	9:47.00	12.19	0.00	1590.31
5/20/81	22:22.00	12.19	0.00	1590.31
5/21/81	11:19.00	12.19	0.00	1590.31
5/21/81	15:43.12	0.18	0.00	1602.32
5/22/81	3:22.00	12.18	0.00	1590.32
5/22/81	11:19.00	12.18	0.00	1590.32
5/22/81	20: 2.00	12.17	0.00	1590.33
5/23/81	8:25.00	12.16	0.00	1590.34
5/23/81	10:48.00	12.15	0.00	1590.35
5/24/81	6:27.00	12.14	0.00	1590.36
5/24/81	10:43.00	12.13	0.00	1590.37
5/24/81	18:52.00	12.13	0.00	1590.37
5/25/81	3: 1.00	12.13	0.00	1590.37
5/25/81	10:36.00	12.13	0.00	1590.37
5/25/81	14:52.00	12.12	0.00	1590.38
5/26/81	3:34.00	12.12	0.00	1590.38
5/26/81	10:59.00	12.11	0.00	1590.39
5/26/81	21:49.00	12.10	0.00	1590.40
5/27/81	9:56.00	12.10	0.00	1590.40
5/27/81	17:58.00	12.10	0.00	1590.40
5/28/81	4:18.00	12.10	0.00	1590.40
5/28/81	10: 3.00	12.08	0.00	1590.42
5/28/81	22:41.00	12.07	0.00	1590.43
5/29/81	9:54.00	12.06	0.00	1590.44
5/30/81	10:23.00	12.05	0.00	1590.45
6/ 3/81	17:44.00	12.07	0.00	1590.43
6/ 3/81	17:55.00	12.07	0.00	1590.43
6/ 4/81	9:55.00	12.04	0.00	1590.46

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29: 7 PAGE

NAME.....STS B-1
LOCATION.....16792.1,78140.8
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
R.P. ELEVATION (FEET)...1657.30

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/20/81	0:51.00	70.40	0.00	1586.90
6/20/81	17:42.00	70.20	0.00	1587.10
6/21/81	22: 9.00	70.00	0.00	1587.30
6/23/81	7: 1.00	69.98	0.00	1587.32
6/23/81	8:38.00	69.90	0.00	1587.40
6/23/81	20:39.00	69.80	0.00	1587.50
6/24/81	17: 6.00	69.67	0.00	1587.63

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29: 7 PAGE 1

NAME.....STS B-1
LOCATION.....16792.1,78140.8
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1657.30

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	10:21.00	68.28	0.00	1589.02
6/10/81	16:58.00	68.24	0.00	1589.06
6/11/81	1:12.00	68.24	0.00	1589.06
6/11/81	8:52.00	68.24	0.00	1589.06
6/11/81	12:49.00	68.20	0.00	1589.10
6/11/81	14: 5.00	68.40	0.00	1588.90
6/11/81	15:10.00	68.60	0.00	1588.70
6/11/81	16:40.00	68.80	0.00	1588.50
6/11/81	18: 7.00	69.00	0.00	1588.30
6/11/81	20: 2.00	69.20	0.00	1588.10
6/11/81	22:15.00	69.40	0.00	1587.90
6/12/81	1:19.00	69.60	0.00	1587.70
6/12/81	5:36.00	69.80	0.00	1587.50
6/12/81	10:28.00	70.00	0.00	1587.30
6/12/81	10:30.00	70.06	0.00	1587.24
6/12/81	16: 8.00	70.20	0.00	1587.10
6/12/81	23:12.00	70.40	0.00	1586.90
6/13/81	10:47.00	70.55	0.00	1586.75
6/13/81	14: 9.00	70.60	0.00	1586.70
6/14/81	0:11.00	70.80	0.00	1586.50
6/14/81	9:25.00	70.95	0.00	1586.35
6/14/81	14:40.00	71.00	0.00	1586.30
6/15/81	3:25.00	71.20	0.00	1586.10
6/15/81	10:34.00	71.35	0.00	1585.95
6/15/81	16:20.00	71.40	0.00	1585.90
6/16/81	3:52.00	71.60	0.00	1585.70
6/16/81	16:36.00	71.80	0.00	1585.50
6/17/81	9:50.00	72.04	0.00	1585.26
6/18/81	6:55.00	72.20	0.00	1585.10
6/18/81	9:26.00	72.21	0.00	1585.09
6/18/81	14:50.00	72.24	0.00	1585.06
6/18/81	16:45.00	72.00	0.00	1585.30
6/18/81	17:51.00	71.80	0.00	1585.50
6/18/81	19: 3.00	71.60	0.00	1585.70
6/18/81	20:21.00	71.40	0.00	1585.90
6/18/81	22: 9.00	71.20	0.00	1586.10
6/19/81	0:46.00	71.00	0.00	1586.30
6/19/81	3:46.00	70.80	0.00	1586.50
6/19/81	10:26.00	70.67	0.00	1586.63
6/19/81	12: 2.00	70.60	0.00	1586.70

NAME.....DMI-2 LOWER
LOCATION.....16608.9,7875C.1
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1630.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/14/81	17: 4.00	49.78	0.00	1580.89
6/14/81	17:10.00	49.89	0.00	1580.78
6/15/81	12:20.00	50.12	0.00	1580.55
6/15/81	14:52.00	50.07	0.00	1580.60
6/15/81	18:13.00	50.10	0.00	1580.57
6/15/81	22:41.00	50.23	0.00	1580.44
6/16/81	4:50.00	50.22	0.00	1580.45
6/16/81	8: 8.00	50.30	0.00	1580.37
6/16/81	10:48.00	50.34	0.00	1580.33
6/16/81	14:37.00	50.35	0.00	1580.32
6/16/81	14:52.00	50.33	0.00	1580.34
6/16/81	18:45.00	50.33	0.00	1580.34
6/17/81	0: 6.00	50.46	0.00	1580.21
6/17/81	6:28.00	50.46	0.00	1580.21
6/17/81	10:14.00	50.53	0.00	1580.14
6/17/81	20:23.00	50.55	0.00	1580.12
6/18/81	0: 6.00	50.65	0.00	1580.02
6/18/81	5:45.00	50.65	0.00	1580.02
6/18/81	10: 9.00	50.66	0.00	1580.01
6/18/81	14:18.00	50.69	0.00	1579.98
6/18/81	14:48.00	50.50	0.00	1580.17
6/18/81	15:34.00	50.00	0.00	1580.67
6/18/81	15:49.00	49.50	0.00	1581.17
6/18/81	16:32.00	49.00	0.00	1581.67
6/18/81	17: 3.00	48.50	0.00	1582.17
6/18/81	17:43.00	48.00	0.00	1582.67
6/18/81	18:38.00	47.00	0.00	1583.67
6/18/81	19:27.00	47.50	0.00	1583.17
6/18/81	20:22.00	46.00	0.00	1584.67
6/18/81	21:29.00	46.50	0.00	1584.17
6/18/81	22:55.00	45.00	0.00	1585.67
6/19/81	1: 1.00	45.50	0.00	1585.17
6/19/81	4: 5.00	44.00	0.00	1586.67
6/19/81	11: 8.00	43.59	0.00	1587.08
6/19/81	14:21.00	43.40	0.00	1587.27
6/19/81	21:11.00	43.20	0.00	1587.47
6/24/81	14:15.00	42.35	0.00	1588.32

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29: 3 PAGE 1

NAME.....DMI-2 LOWER
LOCATION.....16608.9,78750.1
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1630.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	8:53.00	41.58	0.00	1589.09
6/ 9/81	11:30.00	41.50	0.00	1589.17
6/ 9/81	23: 1.00	41.40	0.00	1589.27
6/10/81	2: 2.00	41.37	0.00	1589.30
6/10/81	8:30.00	41.43	0.00	1589.24
6/10/81	14:46.00	41.37	0.00	1589.30
6/10/81	16:27.00	41.37	0.00	1589.30
6/10/81	18:15.00	41.40	0.00	1589.27
6/10/81	20: 9.00	41.40	0.00	1589.27
6/10/81	23: 0.00	41.39	0.00	1589.28
6/11/81	0:21.00	41.36	0.00	1589.31
6/11/81	3:27.00	41.36	0.00	1589.31
6/11/81	6:15.00	41.40	0.00	1589.27
6/11/81	9:22.00	41.40	0.00	1589.27
6/11/81	12:27.00	41.35	0.00	1589.32
6/11/81	12:36.00	41.50	0.00	1589.17
6/11/81	12:58.00	42.00	0.00	1588.67
6/11/81	13:19.00	42.50	0.00	1588.17
6/11/81	13:46.00	43.00	0.00	1587.67
6/11/81	14:13.00	43.50	0.00	1587.17
6/11/81	14:50.00	44.00	0.00	1586.67
6/11/81	15:29.00	44.50	0.00	1586.17
6/11/81	16:17.00	45.00	0.00	1585.67
6/11/81	17: 9.00	45.50	0.00	1585.17
6/11/81	18:16.00	46.00	0.00	1584.67
6/11/81	19:34.00	46.50	0.00	1584.17
6/11/81	21: 8.00	47.00	0.00	1583.67
6/11/81	23:19.00	47.50	0.00	1583.17
6/12/81	16:25.00	48.97	0.00	1581.70
6/12/81	16:58.00	49.00	0.00	1581.67
6/12/81	21:56.00	49.20	0.00	1581.47
6/13/81	6:54.00	49.40	0.00	1581.27
6/13/81	11:42.00	49.50	0.00	1581.17
6/13/81	19:21.00	49.60	0.00	1581.07
6/14/81	0: 8.00	49.70	0.00	1580.97
6/14/81	2:31.00	49.70	0.00	1580.97
6/14/81	2:34.00	49.65	0.00	1581.02
6/14/81	4:41.00	49.66	0.00	1581.01
6/14/81	10:50.00	49.81	0.00	1580.86
6/14/81	14: 7.00	49.80	0.00	1580.87

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:29: 0 PAGE

NAME.....DMI-1
LOCATION.....16746.7 78815.3
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1638.09

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
4/29/81	12:20.00	48.75	0.00	1589.34
4/29/81	13:23.00	48.75	0.00	1589.34
4/29/81	14:39.00	48.74	0.00	1589.35
4/29/81	15:26.00	48.74	0.00	1589.35
4/29/81	17:32.00	48.75	0.00	1589.34
4/29/81	19:26.00	48.77	0.00	1589.32
4/30/81	1:33.00	48.76	0.00	1589.33
4/30/81	7:15.00	48.78	0.00	1589.31
4/30/81	10:36.00	48.78	0.00	1589.31
4/30/81	12:51.00	48.75	0.00	1589.34
4/30/81	15:30.00	48.75	0.00	1589.34
4/30/81	18:37.00	48.76	0.00	1589.33
4/30/81	21:35.00	48.78	0.00	1589.31
5/ 1/81	0:37.00	48.78	0.00	1589.31
5/ 1/81	3:35.00	48.77	0.00	1589.32
5/ 1/81	5: 5.00	48.78	0.00	1589.31
5/ 1/81	5:45.00	48.79	0.00	1589.30
5/ 1/81	6:22.00	48.80	0.00	1589.29
5/ 1/81	10:29.00	48.82	0.00	1589.27

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:57 PAGE 1

NAME.....232
LOCATION.....16641.9,78087.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1655.13

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	14: 3.00	89.80	-18.55	1583.88
5/23/81	20:19.00	89.80	-18.55	1583.88
5/24/81	2:51.00	89.80	-18.55	1583.88
5/24/81	10:10.00	89.80	-18.55	1583.88
5/24/81	14:12.00	89.84	-18.56	1583.85
5/24/81	17:45.00	89.80	-18.55	1583.88
5/25/81	2:12.00	89.84	-18.56	1583.85
5/25/81	6:12.00	89.86	-18.57	1583.84
5/25/81	10:18.00	89.85	-18.56	1583.84
5/25/81	13:18.00	89.90	-18.57	1583.80
5/25/81	17: 8.00	89.95	-18.58	1583.76
5/25/81	23:59.00	89.88	-18.57	1583.82
5/26/81	7:14.00	89.96	-18.59	1583.76
5/26/81	10:36.00	89.94	-18.58	1583.77
5/26/81	18:59.00	89.93	-18.59	1583.74
5/26/81	21:56.00	89.98	-18.59	1583.74
5/27/81	1:47.00	89.92	-18.58	1583.79
5/27/81	6:23.00	90.00	-18.59	1583.72
5/27/81	9:34.00	89.99	-18.59	1583.73
5/27/81	11:57.00	89.92	-18.58	1583.79
5/27/81	15:25.00	89.99	-18.59	1583.73

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 3/81	4:59.00	114.57	-9.91	1585.19
6/ 3/81	11:23.00	114.79	-9.93	1585.00
6/ 3/81	11:23.00	114.78	-9.93	1585.00
6/ 3/81	13:20.00	114.75	-9.93	1585.03
6/ 3/81	13:20.00	114.75	-9.93	1585.03
6/ 3/81	14:11.00	114.57	-9.91	1585.19
6/ 3/81	14:11.00	114.57	-9.91	1585.19
6/ 3/81	18:27.00	114.44	-9.90	1585.31
6/ 3/81	18:27.00	114.44	-9.90	1585.31
6/ 8/81	12:17.00	114.48	-9.90	1585.27
6/ 8/81	12:17.00	114.48	-9.90	1585.27

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	10:15.00	117.50	-10.16	1582.51
5/28/81	10:18.00	116.80	-10.10	1583.15
5/28/81	11:15.00	117.40	-10.16	1582.61
5/28/81	12:12.00	117.30	-10.15	1582.70
5/28/81	13:19.00	117.20	-10.14	1582.79
5/28/81	14:52.00	117.10	-10.13	1582.88
5/28/81	17: 5.00	117.00	-10.12	1582.97
5/28/81	19:33.00	116.90	-10.11	1583.06
5/28/81	21:28.00	116.80	-10.10	1583.15
5/28/81	22:22.00	116.70	-10.09	1583.24
5/28/81	23:19.00	116.60	-10.09	1583.34
5/29/81	0:35.00	116.50	-10.08	1583.43
5/29/81	2: 2.00	116.40	-10.07	1583.52
5/29/81	4:21.00	116.30	-10.06	1583.61
5/29/81	8:38.00	116.22	-10.05	1583.68
5/29/81	10:59.00	116.09	-10.04	1583.80
5/29/81	17:47.00	115.65	-10.00	1584.20
5/29/81	20:59.00	115.70	-10.01	1584.16
5/30/81	4:59.00	115.40	-9.98	1584.43
5/30/81	8:10.00	115.45	-9.99	1584.39
5/30/81	16:59.00	114.97	-9.94	1584.82
5/30/81	22:11.00	115.10	-9.96	1584.71
5/30/81	22:11.00	115.10	-9.96	1584.71
6/ 1/81	4:59.00	114.87	-9.94	1584.92
6/ 1/81	4:59.00	114.87	-9.94	1584.92
6/ 1/81	9:23.00	115.02	-9.95	1584.78
6/ 1/81	9:23.00	115.02	-9.95	1584.78
6/ 1/81	16:59.00	114.62	-9.91	1585.14
6/ 1/81	16:59.00	114.62	-9.91	1585.14
6/ 1/81	22:34.00	114.81	-9.93	1584.97
6/ 1/81	22:35.00	114.81	-9.93	1584.97
6/ 2/81	3:47.00	114.64	-9.92	1585.13
6/ 2/81	3:47.00	114.64	-9.92	1585.13
6/ 2/81	10:11.00	114.84	-9.93	1584.94
6/ 2/81	10:11.00	114.84	-9.93	1584.94
6/ 2/81	17:23.00	114.47	-9.90	1585.28
6/ 2/81	17:23.00	114.47	-9.90	1585.28
6/ 2/81	23:47.00	114.71	-9.92	1585.06
6/ 2/81	23:47.00	114.71	-9.92	1585.06
6/ 3/81	4:59.00	114.57	-9.91	1585.19

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	0:32.00	117.65	-10.18	1582.38
5/23/81	4:26.00	117.73	-10.18	1582.30
5/23/81	8:54.00	117.73	-10.18	1582.30
5/23/81	10:42.00	117.79	-10.19	1582.25
5/23/81	12:55.00	117.90	-10.20	1582.15
5/23/81	15:32.00	117.90	-10.20	1582.15
5/23/81	16:44.00	117.85	-10.19	1582.19
5/23/81	20:19.00	117.78	-10.19	1582.26
5/23/81	23:53.00	117.85	-10.19	1582.19
5/24/81	3:31.00	117.93	-10.20	1582.12
5/24/81	4:37.00	117.90	-10.20	1582.15
5/24/81	10:53.00	117.99	-10.21	1582.07
5/24/81	14:10.00	118.07	-10.21	1581.99
5/24/81	21: 8.00	117.99	-10.21	1582.07
5/25/81	4: 9.00	118.12	-10.22	1581.95
5/25/81	10:47.00	118.07	-10.21	1581.99
5/25/81	13:44.00	118.15	-10.22	1581.92
5/25/81	17: 0.00	118.20	-10.22	1581.87
5/25/81	20: 7.00	118.15	-10.22	1581.92
5/25/81	23:35.00	118.11	-10.22	1581.96
5/26/81	1:41.00	118.15	-10.22	1581.92
5/26/81	6:52.00	118.25	-10.23	1581.83
5/26/81	11: 6.00	118.25	-10.23	1581.83
5/26/81	14:20.00	118.30	-10.23	1581.78
5/26/81	16:54.00	118.34	-10.24	1581.75
5/26/81	21:39.00	118.30	-10.23	1581.78
5/27/81	1:17.00	118.23	-10.23	1581.85
5/27/81	3:54.00	118.30	-10.23	1581.78
5/27/81	7:26.00	118.39	-10.24	1581.70
5/27/81	10: 5.00	118.30	-10.23	1581.78
5/27/81	13:36.00	118.24	-10.23	1581.84
5/27/81	16:52.00	118.31	-10.23	1581.77
5/27/81	20:36.00	118.25	-10.23	1581.83
5/27/81	21:36.00	118.20	-10.22	1581.87
5/27/81	23: 6.00	118.10	-10.22	1581.97
5/28/81	0:22.00	118.00	-10.21	1582.06
5/28/81	1:52.00	117.90	-10.20	1582.15
5/28/81	5:54.00	117.57	-10.17	1582.45
5/28/81	7:43.00	117.50	-10.16	1582.51
5/28/81	9:10.00	117.40	-10.16	1582.61

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/19/81	17:16.00	114.57	-9.91	1585.19
5/19/81	21:52.00	114.70	-9.92	1585.07
5/20/81	0:19.00	114.77	-9.93	1585.01
5/20/81	9: 1.00	114.77	-9.93	1585.01
5/20/81	9:15.00	114.71	-9.92	1585.06
5/20/81	11:39.00	114.74	-9.93	1585.04
5/20/81	13:27.00	114.69	-9.92	1585.08
5/20/81	16:14.00	114.80	-9.93	1584.98
5/20/81	17:23.00	114.90	-9.94	1584.89
5/20/81	18:20.00	115.00	-9.95	1584.80
5/20/81	19:17.00	115.10	-9.96	1584.71
5/20/81	19:56.00	115.20	-9.96	1584.61
5/20/81	20:23.00	115.20	-9.96	1584.61
5/20/81	21: 5.00	115.40	-9.98	1584.43
5/20/81	21:44.00	115.50	-9.99	1584.34
5/20/81	22:23.00	115.60	-10.00	1584.25
5/20/81	23: 5.00	115.70	-10.01	1584.16
5/20/81	23:53.00	115.80	-10.02	1584.07
5/21/81	0:41.00	115.90	-10.03	1583.98
5/21/81	1:38.00	116.00	-10.03	1583.88
5/21/81	3: 2.00	116.10	-10.04	1583.79
5/21/81	4:35.00	116.20	-10.05	1583.70
5/21/81	6: 2.00	116.30	-10.06	1583.61
5/21/81	7:22.00	116.40	-10.07	1583.52
5/21/81	8:35.00	116.50	-10.08	1583.43
5/21/81	11:30.00	116.70	-10.10	1583.16
5/21/81	13:57.00	116.90	-10.11	1583.06
5/21/81	19:19.00	116.90	-10.11	1583.06
5/21/81	21:26.00	117.00	-10.12	1582.97
5/21/81	22:53.00	117.10	-10.13	1582.88
5/22/81	0:45.00	117.20	-10.14	1582.79
5/22/81	3: 9.00	117.28	-10.14	1582.71
5/22/81	5:55.00	117.30	-10.15	1582.70
5/22/81	8:20.00	117.35	-10.15	1582.65
5/22/81	9:44.00	117.40	-10.16	1582.61
5/22/81	11: 9.00	117.55	-10.17	1582.47
5/22/81	12:55.00	117.61	-10.17	1582.41
5/22/81	17: 2.00	117.55	-10.17	1582.47
5/22/81	19:37.00	117.50	-10.16	1582.51
5/22/81	21:48.00	117.55	-10.17	1582.47

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:47 PAGE 1

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	15: 2.00	114.80	-9.93	1584.98
5/15/81	18: 8.00	114.75	-9.93	1585.03
5/15/81	21:38.00	114.85	-9.93	1584.93
5/15/81	23:12.00	114.91	-9.94	1584.88
5/16/81	1: 0.00	114.85	-9.93	1584.93
5/16/81	4:12.00	114.78	-9.93	1585.00
5/16/81	6:42.00	114.85	-9.93	1584.93
5/16/81	9:40.00	114.93	-9.94	1584.86
5/16/81	13:23.00	114.87	-9.94	1584.92
5/16/81	14:30.00	114.80	-9.93	1584.98
5/16/81	17:29.00	114.65	-9.92	1585.12
5/16/81	20:27.00	114.75	-9.93	1585.03
5/16/81	23:21.00	114.83	-9.93	1584.95
5/17/81	1:46.00	114.75	-9.93	1585.03
5/17/81	4:52.00	114.68	-9.92	1585.09
5/17/81	6:55.00	114.75	-9.93	1585.03
5/17/81	10: 0.00	114.95	-9.94	1584.84
5/17/81	11:35.00	114.90	-9.94	1584.89
5/17/81	13:24.00	114.80	-9.93	1584.98
5/17/81	15:19.00	114.70	-9.92	1585.07
5/17/81	17:43.00	114.63	-9.92	1585.14
5/17/81	19:44.00	114.70	-9.92	1585.07
5/17/81	21:45.00	114.80	-9.93	1584.98
5/17/81	23:37.00	114.83	-9.93	1584.95
5/18/81	2:13.00	114.75	-9.93	1585.03
5/18/81	5: 4.00	114.68	-9.92	1585.09
5/18/81	8:18.00	114.80	-9.93	1584.98
5/18/81	12: 2.00	114.85	-9.93	1584.93
5/18/81	14:23.00	114.75	-9.93	1585.03
5/18/81	18:16.00	114.62	-9.91	1585.14
5/18/81	21:12.00	114.75	-9.93	1585.03
5/19/81	0: 1.00	114.84	-9.93	1584.94
5/19/81	2:50.00	114.75	-9.93	1585.03
5/19/81	5:28.00	114.69	-9.92	1585.08
5/19/81	7:36.00	114.41	-9.90	1585.34
5/19/81	9: 1.00	114.81	-9.93	1584.97
5/19/81	11:12.00	114.84	-9.93	1584.94
5/19/81	13: 1.00	114.80	-9.93	1584.98
5/19/81	14:37.00	114.70	-9.92	1585.07
5/19/81	16:40.00	114.60	-9.91	1585.16

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:47 PAGE 1

NAME.....228
LOCATION.....16679.0,77445.9
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1689.85

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	9:15.00	115.30	-9.97	1584.52
5/ 9/81	16: 3.00	115.43	-9.98	1584.40
5/10/81	1:25.00	115.27	-9.97	1584.55
5/10/81	7:23.00	115.32	-9.98	1584.51
5/10/81	13:46.00	115.22	-9.97	1584.60
5/10/81	20:35.00	115.35	-9.98	1584.48
5/11/81	1: 7.00	115.35	-9.98	1584.48
5/11/81	5: 6.00	115.20	-9.96	1584.61
5/11/81	9:60.00	115.27	-9.97	1584.55
5/11/81	14:53.00	115.28	-9.97	1584.54
5/11/81	17: 1.00	115.15	-9.96	1584.66
5/12/81	2:49.00	115.14	-9.96	1584.67
5/12/81	7:55.00	115.25	-9.97	1584.57
5/12/81	13:53.00	115.07	-9.95	1584.73
5/12/81	16:31.00	115.00	-9.95	1584.80
5/12/81	17:19.00	115.10	-9.96	1584.71
5/12/81	17:55.00	115.20	-9.96	1584.61
5/12/81	18:40.00	115.30	-9.97	1584.52
5/12/81	22:19.00	115.54	-9.99	1584.30
5/12/81	23:49.00	115.50	-9.99	1584.34
5/13/81	1:46.00	115.50	-9.99	1584.34
5/13/81	1:46.00	115.40	-9.98	1584.43
5/13/81	9:14.00	115.35	-9.98	1584.47
5/13/81	12:21.00	115.20	-9.96	1584.61
5/13/81	16:35.00	115.06	-9.95	1584.74
5/13/81	21:38.00	115.16	-9.96	1584.65
5/14/81	1:14.00	115.05	-9.95	1584.75
5/14/81	4:34.00	114.94	-9.94	1584.85
5/14/81	6:21.00	115.00	-9.95	1584.80
5/14/81	10:27.00	115.04	-9.95	1584.76
5/14/81	15:38.00	114.86	-9.94	1584.93
5/14/81	19: 9.00	114.95	-9.94	1584.84
5/14/81	21:49.00	115.03	-9.95	1584.77
5/15/81	0:39.00	114.95	-9.94	1584.84
5/15/81	3:55.00	114.87	-9.94	1584.92
5/15/81	6:11.00	114.93	-9.94	1584.86
5/15/81	8: 6.00	115.00	-9.95	1584.80
5/15/81	9:11.00	115.02	-9.95	1584.78
5/15/81	11:22.00	114.95	-9.94	1584.84
5/15/81	12:11.00	114.90	-9.94	1584.89

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:41 PAGE 3

NAME.....221
LOCATION.....16521.9,78373.8
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.71

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/30/81	16:12.00	73.05	-7.39	1587.05
5/30/81	22:36.00	73.14	-7.40	1586.97
6/ 1/81	4:36.00	73.06	-7.40	1587.05
6/ 1/81	8:12.00	73.12	-7.40	1586.99
6/ 1/81	16:12.00	72.94	-7.38	1587.15
6/ 1/81	22:36.00	73.03	-7.39	1587.07
6/ 2/81	4:36.00	72.95	-7.38	1587.14
6/ 2/81	10:12.00	73.03	-7.39	1587.07
6/ 2/81	17:48.00	72.86	-7.38	1587.23
6/ 3/81	0:12.00	72.98	-7.39	1587.12
6/ 3/81	5: 0.00	72.91	-7.38	1587.18
6/ 3/81	11:24.00	73.00	-7.39	1587.10
6/ 3/81	18:36.00	72.82	-7.37	1587.26
6/ 4/81	3:58.00	72.93	-7.38	1587.16
6/ 4/81	11:33.00	72.94	-7.38	1587.15
6/ 4/81	19: 9.00	72.90	-7.37	1587.28
6/ 5/81	1:33.00	72.85	-7.37	1587.23
6/ 5/81	10:21.00	72.85	-7.37	1587.23
6/ 5/81	11:57.00	72.87	-7.38	1587.22
6/ 5/81	19: 9.00	72.77	-7.37	1587.31
6/ 5/81	22:45.00	72.84	-7.37	1587.24
6/ 6/81	7:33.00	72.84	-7.37	1587.24

NAME.....221
LOCATION.....16521.9,78373.8
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.71

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/22/81	15:40.00	73.90	-7.48	1586.29
5/22/81	18:39.00	73.85	-7.48	1586.34
5/23/81	3:28.00	73.95	-7.49	1586.25
5/23/81	7:33.00	73.92	-7.48	1586.27
5/23/81	11:12.00	73.98	-7.49	1586.22
5/23/81	20:33.00	73.92	-7.48	1586.27
5/24/81	1:16.00	73.96	-7.49	1586.24
5/24/81	3:32.00	73.99	-7.49	1586.21
5/24/81	4:51.00	73.99	-7.49	1586.21
5/24/81	10:20.00	73.97	-7.49	1586.23
5/24/81	14:33.00	74.00	-7.49	1586.20
5/24/81	21: 9.00	73.96	-7.49	1586.24
5/25/81	2:47.00	74.00	-7.49	1586.20
5/25/81	6:36.00	74.02	-7.49	1586.18
5/25/81	10:23.00	73.99	-7.49	1586.21
5/25/81	17:21.00	74.06	-7.50	1586.15
5/26/81	0:25.00	74.00	-7.49	1586.20
5/26/81	6:58.00	74.07	-7.50	1586.14
5/26/81	10:41.00	74.09	-7.50	1586.12
5/26/81	18:43.00	74.12	-7.50	1586.09
5/27/81	1:26.00	74.06	-7.50	1586.15
5/27/81	7:18.00	74.14	-7.50	1586.07
5/27/81	9:38.00	74.09	-7.50	1586.12
5/27/81	14: 5.00	74.04	-7.49	1586.16
5/27/81	19:41.00	74.09	-7.50	1586.12
5/28/81	1:50.00	73.95	-7.49	1586.25
5/28/81	6:53.00	73.93	-7.48	1586.26
5/28/81	9:38.00	73.86	-7.48	1586.33
5/28/81	11:24.00	73.80	-7.47	1586.38
5/28/81	15:17.00	73.70	-7.46	1586.47
5/28/81	22:21.00	73.60	-7.45	1586.56
5/29/81	1:31.00	73.50	-7.44	1586.65
5/29/81	3:29.00	73.46	-7.44	1586.69
5/29/81	5:57.00	73.46	-7.44	1586.69
5/29/81	7: 4.00	73.49	-7.44	1586.66
5/29/81	10:36.00	73.12	-7.43	1586.72
5/29/81	17:48.00	73.25	-7.41	1586.87
5/29/81	21:48.00	73.32	-7.42	1586.81
5/30/81	3:48.00	73.22	-7.41	1586.90
5/30/81	8:12.00	73.26	-7.42	1586.87

NAME.....221
LOCATION.....16521.9,78373.8
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.71

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/14/81	16: 5.00	73.32	-7.42	1586.81
5/14/81	17:37.00	73.35	-7.42	1586.78
5/14/81	20:32.00	73.40	-7.43	1586.74
5/15/81	1:58.00	73.42	-7.43	1586.72
5/15/81	9:49.00	73.37	-7.43	1586.77
5/15/81	12:29.00	73.34	-7.42	1586.79
5/15/81	14:10.00	73.30	-7.42	1586.83
5/15/81	18:19.00	73.31	-7.42	1586.82
5/15/81	22:42.00	73.39	-7.43	1586.75
5/16/81	3:52.00	73.32	-7.42	1586.81
5/16/81	11: 3.00	73.38	-7.43	1586.76
5/16/81	16:18.00	73.26	-7.42	1586.87
5/16/81	23:22.00	73.36	-7.43	1586.78
5/17/81	4:51.00	73.30	-7.42	1586.83
5/17/81	9:49.00	73.34	-7.42	1586.79
5/17/81	17:52.00	73.20	-7.41	1586.92
5/18/81	0:10.00	73.30	-7.42	1586.83
5/18/81	6:18.00	73.25	-7.41	1586.87
5/18/81	10:14.00	73.28	-7.42	1586.85
5/19/81	17:56.00	73.13	-7.40	1586.98
5/18/81	23:41.00	73.24	-7.41	1586.88
5/19/81	5:20.00	73.17	-7.41	1586.95
5/19/81	9:47.00	74.23	-7.51	1585.99
5/19/81	18:27.00	73.10	-7.40	1587.01
5/20/81	1:50.00	73.19	-7.41	1586.93
5/20/81	9:34.00	73.14	-7.40	1586.97
5/20/81	19:20.00	73.20	-7.41	1586.92
5/20/81	19:41.00	73.14	-7.40	1586.97
5/20/81	20:59.00	73.30	-7.42	1586.83
5/20/81	22:29.00	73.40	-7.43	1586.74
5/21/81	1:31.00	73.50	-7.44	1586.65
5/21/81	7:24.00	73.60	-7.45	1586.56
5/21/81	11:40.00	73.70	-7.46	1586.47
5/21/81	11: 6.00	73.69	-7.46	1586.48
5/21/81	13:36.00	73.72	-7.46	1586.45
5/21/81	18:36.00	73.67	-7.46	1586.50
5/21/81	20:48.00	73.70	-7.46	1586.47
5/22/81	0:25.00	73.80	-7.47	1586.38
5/22/81	4:19.00	73.83	-7.47	1586.35
5/22/81	11:39.00	73.92	-7.48	1586.27

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/29/81	18:24.00	97.00	-9.09	1564.67
5/29/81	20:12.00	96.50	-9.04	1565.12

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	23:52.00	112.50	-10.54	1550.62
5/29/81	0:22.00	112.00	-10.49	1551.07
5/29/81	0:53.00	111.50	-10.45	1551.53
5/29/81	0:53.00	111.50	-10.45	1551.53
5/29/81	1:23.00	111.00	-10.40	1551.98
5/29/81	1:53.00	110.50	-10.35	1552.43
5/29/81	2:26.00	110.00	-10.31	1552.89
5/29/81	2:56.00	109.50	-10.26	1553.34
5/29/81	2:56.00	109.50	-10.26	1553.34
5/29/81	3:32.00	109.00	-10.21	1553.79
5/29/81	3:32.00	109.00	-10.21	1553.79
5/29/81	4: 3.00	108.50	-10.17	1554.25
5/29/81	4:42.00	108.00	-10.12	1554.70
5/29/81	5:18.00	107.50	-10.07	1555.15
5/29/81	5:18.00	107.50	-10.07	1555.15
5/29/81	5:54.00	107.00	-10.03	1555.61
5/29/81	5:54.00	107.00	-10.03	1555.61
5/29/81	6:34.00	106.50	-9.98	1556.06
5/29/81	7:13.00	106.00	-9.93	1556.51
5/29/81	7:49.00	105.50	-9.89	1556.97
5/29/81	7:49.00	105.50	-9.89	1556.97
5/29/81	8:25.00	105.00	-9.84	1557.42
5/29/81	8:25.00	105.00	-9.84	1557.42
5/29/81	9: 4.00	104.50	-9.79	1557.87
5/29/81	9:43.00	104.00	-9.74	1558.32
5/29/81	10:19.00	103.50	-9.70	1558.78
5/29/81	10:20.00	103.50	-9.70	1558.78
5/29/81	10:53.00	103.00	-9.65	1559.23
5/29/81	10:53.00	103.00	-9.65	1559.23
5/29/81	11:12.00	102.81	-9.63	1559.40
5/29/81	11:36.00	102.00	-9.56	1560.14
5/29/81	12:12.00	101.50	-9.51	1560.59
5/29/81	12:48.00	101.00	-9.46	1561.04
5/29/81	13:24.00	100.50	-9.42	1561.50
5/29/81	14: 0.00	100.00	-9.37	1561.95
5/29/81	14:36.00	100.50	-9.42	1561.50
5/29/81	15:12.00	99.00	-9.28	1562.86
5/29/81	15:36.00	98.50	-9.23	1563.31
5/29/81	16:12.00	98.50	-9.23	1563.31
5/29/81	17: 0.00	98.00	-9.18	1563.76

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	11:56.00	125.50	-11.76	1538.84
5/28/81	12:20.00	125.00	-11.71	1539.29
5/28/81	12:20.00	125.00	-11.71	1539.29
5/28/81	12:44.00	124.50	-11.67	1539.75
5/28/81	13: 8.00	124.00	-11.62	1540.20
5/28/81	13:29.00	123.50	-11.57	1540.65
5/28/81	13:29.00	123.50	-11.57	1540.65
5/28/81	13:56.00	123.00	-11.53	1541.11
5/28/81	13:56.00	123.00	-11.53	1541.11
5/28/81	14:24.00	122.50	-11.48	1541.56
5/28/81	14:48.00	122.00	-11.43	1542.01
5/28/81	15:18.00	121.50	-11.38	1542.46
5/28/81	15:18.00	121.50	-11.38	1542.46
5/28/81	15:45.00	121.00	-11.34	1542.92
5/28/81	15:45.00	121.00	-11.34	1542.92
5/28/81	16:12.00	120.50	-11.29	1543.37
5/28/81	16:39.00	120.00	-11.24	1543.82
5/28/81	17: 9.00	119.50	-11.20	1544.28
5/28/81	17: 9.00	119.50	-11.20	1544.28
5/28/81	17:36.00	119.00	-11.15	1544.73
5/28/81	17:36.00	119.00	-11.15	1544.73
5/28/81	18: 7.00	118.50	-11.10	1545.18
5/28/81	18:39.00	117.77	-11.04	1545.85
5/28/81	18:39.00	117.77	-11.04	1545.85
5/28/81	18:57.00	117.50	-11.01	1546.09
5/28/81	18:57.00	117.50	-11.01	1546.09
5/28/81	19:24.00	117.00	-10.96	1546.54
5/28/81	19:54.00	116.50	-10.92	1547.00
5/28/81	19:54.00	116.50	-10.92	1547.00
5/28/81	20:24.00	116.00	-10.87	1547.45
5/28/81	20:54.00	115.50	-10.82	1547.90
5/28/81	20:54.00	115.50	-10.82	1547.90
5/28/81	21:25.00	115.00	-10.78	1548.36
5/28/81	21:55.00	114.50	-10.73	1548.81
5/28/81	21:55.00	114.50	-10.73	1548.81
5/28/81	22:25.00	114.00	-10.68	1549.26
5/28/81	22:52.00	113.50	-10.63	1549.71
5/28/81	22:52.00	113.50	-10.63	1549.71
5/28/81	23:22.00	113.00	-10.59	1550.17
5/28/81	23:52.00	112.50	-10.54	1550.62

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:33 PAGE

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	1:23.00	141.50	-13.26	1524.34
5/28/81	1:35.00	141.00	-13.21	1524.79
5/28/81	1:47.00	140.50	-13.16	1525.24
5/28/81	2: 5.00	140.00	-13.12	1525.70
5/28/81	2:23.00	116.00	-10.87	1547.45
5/28/81	2:23.00	139.50	-13.07	1526.15
5/28/81	2:38.00	139.00	-13.02	1526.60
5/28/81	2:56.00	138.50	-12.98	1527.06
5/28/81	3:11.00	138.00	-12.93	1527.51
5/28/81	3:32.00	137.50	-12.88	1527.96
5/28/81	3:33.00	137.50	-12.88	1527.96
5/28/81	3:32.00	137.50	-12.88	1527.96
5/28/81	3:48.00	137.00	-12.84	1528.42
5/28/81	4: 6.00	136.50	-12.79	1528.87
5/28/81	4: 3.00	135.00	-12.65	1530.23
5/28/81	4:27.00	136.00	-12.74	1529.32
5/28/81	4:48.00	135.00	-12.65	1530.23
5/28/81	4:48.00	135.50	-12.70	1529.78
5/28/81	4:48.00	135.50	-12.70	1529.78
5/28/81	5:24.00	134.50	-12.60	1530.68
5/28/81	5:42.00	134.00	-12.56	1531.14
5/28/81	7:22.00	131.50	-12.32	1533.40
5/28/81	7:22.00	131.50	-12.32	1533.40
5/28/81	7:22.00	131.50	-12.32	1533.40
5/28/81	7:43.00	131.00	-12.27	1533.85
5/28/81	8:10.00	130.50	-12.23	1534.31
5/28/81	8:31.00	130.00	-12.18	1534.76
5/28/81	8:58.00	129.50	-12.13	1535.21
5/28/81	8:58.00	129.50	-12.13	1535.21
5/28/81	8:58.00	129.50	-12.13	1535.21
5/28/81	9:16.00	129.00	-12.09	1535.67
5/28/81	9:37.00	128.50	-12.04	1536.12
5/28/81	9:58.00	128.00	-11.99	1536.57
5/28/81	10:25.00	127.50	-11.95	1537.03
5/28/81	10:25.00	127.50	-11.95	1537.03
5/28/81	10:25.00	127.50	-11.95	1537.03
5/28/81	10:43.00	127.00	-11.90	1537.48
5/28/81	11: 7.00	126.50	-11.85	1537.93
5/28/81	11:32.00	126.00	-11.81	1538.39
5/28/81	11:56.00	125.50	-11.76	1538.84

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	15:23.00	97.50	-9.14	1564.22
5/20/81	15:28.00	98.00	-9.18	1563.76
5/20/81	15:33.00	98.50	-9.23	1563.31
5/20/81	15:38.00	99.00	-9.28	1562.86
5/20/81	15:43.00	99.50	-9.32	1562.40
5/20/81	15:49.00	100.00	-9.37	1561.95
5/20/81	15:54.00	100.50	-9.42	1561.50
5/20/81	16: 0.00	101.00	-9.46	1561.04
5/20/81	16: 5.00	101.50	-9.51	1560.59
5/20/81	19: 8.00	115.45	-10.82	1547.95
5/20/81	19:17.00	116.00	-10.87	1547.45
5/20/81	19:25.00	116.50	-10.92	1547.00
5/20/81	19:33.00	117.00	-10.96	1546.54
5/20/81	19:41.00	117.50	-11.01	1546.09
5/20/81	19:58.00	118.50	-11.10	1545.18
5/20/81	19:50.00	118.00	-11.06	1545.64
5/20/81	20: 8.00	119.00	-11.15	1544.73
5/20/81	20:16.00	119.50	-11.20	1544.28
5/20/81	20:26.00	120.00	-11.24	1543.82
5/20/81	20:35.00	120.50	-11.29	1543.37
5/20/81	20:45.00	121.00	-11.34	1542.92
5/20/81	20:55.00	121.50	-11.38	1542.46
5/20/81	21: 8.00	122.17	-11.45	1541.86
5/20/81	21:15.00	122.50	-11.48	1541.56
5/20/81	21:25.00	123.00	-11.53	1541.11
5/20/81	21:32.00	123.50	-11.57	1540.65
5/20/81	21:45.00	124.00	-11.62	1540.20
5/20/81	21:54.00	124.50	-11.67	1539.75
5/20/81	22: 5.00	125.00	-11.71	1539.29
5/20/81	22:15.00	125.50	-11.76	1538.84
5/20/81	22:25.00	126.00	-11.81	1538.39
5/20/81	22:36.00	126.50	-11.85	1537.93
5/20/81	22:47.00	127.00	-11.90	1537.48
5/20/81	22:57.00	127.50	-11.95	1537.03
5/20/81	23:10.00	128.00	-11.99	1536.57
5/20/81	23:16.00	128.50	-12.04	1536.12
5/28/81	0:35.00	143.09	-13.41	1522.90
5/28/81	0:39.00	143.00	-13.40	1522.98
5/28/81	0:51.00	142.50	-13.35	1523.43
5/28/81	1: 5.00	142.00	-13.31	1523.89

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	6:36.00	81.26	-7.61	1578.93
5/20/81	10:52.00	81.49	-7.64	1578.73
5/20/81	12: 0.00	81.52	-7.64	1578.70
5/20/81	12: 4.00	81.40	-7.63	1578.81
5/20/81	12: 8.00	81.30	-7.62	1578.90
5/20/81	12:17.00	81.20	-7.61	1578.99
5/20/81	12:25.00	81.30	-7.62	1578.90
5/20/81	12:29.00	81.40	-7.63	1578.81
5/20/81	12:32.00	81.50	-7.64	1578.72
5/20/81	12:42.00	82.00	-7.68	1578.26
5/20/81	12:50.00	82.50	-7.73	1577.81
5/20/81	12:57.00	83.00	-7.78	1577.36
5/20/81	13: 3.00	83.50	-7.82	1576.90
5/20/81	13: 9.00	84.00	-7.87	1576.45
5/20/81	13:15.00	84.50	-7.92	1576.00
5/20/81	13:25.00	85.50	-8.01	1575.09
5/20/81	13:20.00	85.00	-7.96	1575.54
5/20/81	13:31.00	86.00	-8.06	1574.64
5/20/81	13:36.00	86.50	-8.11	1574.19
5/20/81	13:45.00	87.50	-8.20	1573.28
5/20/81	13:41.00	87.00	-8.15	1573.73
5/20/81	13:50.00	88.00	-8.25	1572.83
5/20/81	13:55.00	88.50	-8.29	1572.37
5/20/81	13:60.00	89.00	-8.34	1571.92
5/20/81	14: 4.00	89.50	-8.39	1571.47
5/20/81	14: 9.00	90.00	-8.43	1571.01
5/20/81	14:13.00	90.50	-8.48	1570.56
5/20/81	14:18.00	91.00	-8.53	1570.11
5/20/81	14:23.00	91.50	-8.57	1569.65
5/20/81	14:28.00	92.00	-8.62	1569.20
5/20/81	14:33.00	92.50	-8.67	1568.75
5/20/81	14:37.00	93.00	-8.71	1568.29
5/20/81	14:42.00	93.50	-8.76	1567.84
5/20/81	14:47.00	94.00	-8.81	1567.39
5/20/81	14:52.00	94.50	-8.85	1566.93
5/20/81	15: 0.00	95.18	-8.92	1566.32
5/20/81	15: 3.00	95.50	-8.95	1566.03
5/20/81	15: 8.00	96.00	-9.00	1565.58
5/20/81	15:13.00	96.50	-9.04	1565.12
5/20/81	15:18.00	97.00	-9.09	1564.67

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/14/81	18:47.00	81.73	-7.66	1578.51
5/14/81	21:54.00	81.80	-7.66	1578.44
5/15/81	2:45.00	81.70	-7.66	1578.54
5/15/81	13:48.00	81.50	-7.64	1578.72
5/15/81	17:45.00	81.32	-7.62	1578.88
5/15/81	21:12.00	81.50	-7.64	1578.72
5/15/81	22:48.00	81.58	-7.64	1578.64
5/16/81	7:42.00	81.58	-7.64	1578.64
5/16/81	10:30.00	81.77	-7.66	1578.47
5/16/81	14:31.00	81.60	-7.65	1578.63
5/16/81	17:32.00	81.45	-7.63	1578.76
5/16/81	21:20.00	81.60	-7.65	1578.63
5/17/81	0:11.00	81.70	-7.66	1578.54
5/17/81	3: 1.00	81.60	-7.65	1578.63
5/17/81	5: 9.00	81.56	-7.64	1578.66
5/17/81	6:14.00	81.60	-7.65	1578.63
5/17/81	8: 5.00	81.70	-7.66	1578.54
5/17/81	10: 7.00	81.80	-7.66	1578.44
5/17/81	11:13.00	81.85	-7.67	1578.40
5/17/81	14: 4.00	81.70	-7.66	1578.54
5/17/81	16:22.00	81.50	-7.64	1578.72
5/17/81	18:46.00	81.40	-7.63	1578.81
5/18/81	8:41.00	81.60	-7.65	1578.63
5/18/81	9:53.00	81.67	-7.65	1578.56
5/18/81	13:49.00	83.60	-7.83	1576.81
5/18/81	14: 4.00	83.80	-7.85	1576.63
5/18/81	14:48.00	83.90	-7.86	1576.54
5/18/81	15:51.00	83.80	-7.85	1576.63
5/18/81	16:32.00	83.60	-7.83	1576.81
5/18/81	17:50.00	83.20	-7.80	1577.18
5/18/81	19:43.00	81.80	-7.66	1578.44
5/18/81	22:27.00	81.60	-7.65	1578.63
5/19/81	2:57.00	81.40	-7.63	1578.81
5/19/81	10:12.00	81.83	-7.67	1578.37
5/19/81	11:14.00	81.90	-7.67	1578.35
5/19/81	15:21.00	81.60	-7.65	1578.63
5/19/81	20: 3.00	81.24	-7.61	1578.95
5/19/81	21:41.00	81.30	-7.62	1578.90
5/20/81	0:55.00	81.40	-7.63	1578.81
5/20/81	4: 2.00	81.30	-7.62	1578.90

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:33 PAGE

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	20:17.00	98.50	-9.23	1563.31
5/12/81	20:10.00	95.61	-8.96	1565.93
5/12/81	20:36.00	98.00	-9.18	1563.76
5/12/81	22:26.00	95.00	-8.90	1566.48
5/12/81	22:47.00	94.50	-8.85	1566.93
5/12/81	23:10.00	94.00	-8.81	1567.39
5/12/81	23:34.00	93.50	-8.76	1567.84
5/12/81	23:58.00	93.00	-8.71	1568.29
5/13/81	0:22.00	92.50	-8.67	1568.75
5/13/81	0:46.00	92.00	-8.62	1569.20
5/13/81	1:18.00	91.50	-8.57	1569.65
5/13/81	1:46.00	91.00	-8.53	1570.11
5/13/81	2:21.00	90.50	-8.48	1570.56
5/13/81	2:57.00	90.00	-8.43	1571.01
5/13/81	3:35.00	89.50	-8.39	1571.47
5/13/81	4:20.00	89.00	-8.34	1571.92
5/13/81	5: 8.00	88.50	-8.29	1572.37
5/13/81	6:10.00	88.00	-8.25	1572.83
5/13/81	7: 5.00	87.50	-8.20	1573.28
5/13/81	8:17.00	87.00	-8.15	1573.73
5/13/81	9:24.00	86.56	-8.11	1574.13
5/13/81	9:30.00	86.50	-8.11	1574.19
5/13/81	10:48.00	86.00	-8.06	1574.64
5/13/81	12: 9.00	85.50	-8.01	1575.09
5/13/81	13:37.00	85.50	-8.01	1575.09
5/13/81	17:43.00	84.00	-7.87	1576.45
5/13/81	22:11.00	83.50	-7.82	1576.90
5/13/81	23:10.00	83.41	-7.82	1576.99
5/14/81	0:16.00	83.41	-7.82	1576.99
5/14/81	2:10.00	83.16	-7.79	1577.21
5/14/81	2:39.00	83.16	-7.79	1577.21
5/14/81	4: 9.00	83.05	-7.78	1577.31
5/14/81	6:32.00	83.04	-7.78	1577.32
5/14/81	7:32.00	82.77	-7.76	1577.57
5/14/81	7:59.00	82.75	-7.75	1577.58
5/14/81	8:39.00	82.50	-7.73	1577.81
5/14/81	10:37.00	82.32	-7.71	1577.97
5/14/81	12: 2.00	82.20	-7.70	1578.08
5/14/81	13:47.00	82.00	-7.68	1578.26
5/14/81	15:52.00	81.80	-7.66	1578.44

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	15: 2.00	83.50	-7.82	1576.90
5/12/81	15: 8.00	84.00	-7.87	1576.45
5/12/81	15:19.00	84.50	-7.92	1576.00
5/12/81	15:25.00	85.50	-8.01	1575.09
5/12/81	15:20.00	85.00	-7.96	1575.54
5/12/81	15:35.00	86.50	-8.11	1574.19
5/12/81	15:30.00	86.00	-8.06	1574.64
5/12/81	15:45.00	87.50	-8.20	1573.28
5/12/81	15:40.00	87.00	-8.15	1573.73
5/12/81	15:54.00	88.50	-8.29	1572.37
5/12/81	15:50.00	88.00	-8.25	1572.83
5/12/81	15:59.00	89.00	-8.34	1571.92
5/12/81	16: 4.00	89.50	-8.39	1571.47
5/12/81	16: 9.00	90.00	-8.43	1571.01
5/12/81	16:13.00	90.50	-8.48	1570.56
5/12/81	16:23.00	91.50	-8.57	1569.65
5/12/81	16:27.00	92.00	-8.62	1569.20
5/12/81	16:32.00	92.50	-8.67	1568.75
5/12/81	16:42.00	93.50	-8.76	1567.84
5/12/81	16:46.00	93.90	-8.80	1567.48
5/12/81	16:46.00	94.00	-8.81	1567.39
5/12/81	16:56.00	95.00	-8.90	1566.48
5/12/81	16:51.00	94.55	-8.86	1566.89
5/12/81	17: 5.00	96.00	-9.00	1565.58
5/12/81	17: 1.00	95.50	-8.95	1566.03
5/12/81	17: 9.00	96.50	-9.04	1565.12
5/12/81	17:13.00	97.00	-9.09	1564.67
5/12/81	17:17.00	97.50	-9.14	1564.22
5/12/81	17:22.00	98.00	-9.18	1563.76
5/12/81	17:28.00	98.56	-9.24	1563.26
5/12/81	17:37.00	93.00	-8.71	1568.29
5/12/81	17:34.00	99.00	-9.28	1562.86
5/12/81	17:43.00	99.50	-9.32	1562.40
5/12/81	17:54.00	100.00	-9.37	1561.95
5/12/81	18:17.00	100.50	-9.42	1561.50
5/12/81	18:34.00	100.55	-9.42	1561.45
5/12/81	18:40.00	100.50	-9.42	1561.50
5/12/81	19:15.00	100.00	-9.37	1561.95
5/12/81	19:38.00	99.50	-9.32	1562.40
5/12/81	19:58.00	99.00	-9.28	1562.86

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:33 PAGE

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1652.58

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
**/81/ 0	1:53.00	110.50	-10.35	1552.43
**/81/ 0	4: 3.00	108.50	-10.17	1554.25
**/81/ 0	6:33.00	106.50	-9.98	1556.06
**/81/ 0	9: 4.00	104.50	-9.79	1557.87
**/81/ 0	19:24.00	117.00	-10.96	1546.54
**/81/ 0	21:25.00	115.00	-10.78	1548.36
**/81/ 0	23:22.00	113.00	-10.59	1550.17
5/ 9/81	10:28.00	81.43	-7.63	1578.78
5/ 9/81	10:52.00	81.50	-7.64	1578.72
5/ 9/81	16:16.00	81.66	-7.65	1578.57
5/ 9/81	20:33.00	81.55	-7.64	1578.67
5/10/81	2:12.00	81.37	-7.62	1578.83
5/10/81	7: 3.00	81.44	-7.63	1578.77
5/11/81	16:13.00	81.88	-7.67	1578.37
5/11/81	16:27.00	81.88	-7.67	1578.37
5/11/81	16:39.00	81.61	-7.65	1578.62
5/11/81	16:45.00	81.75	-7.66	1578.49
5/11/81	16:54.00	82.00	-7.68	1578.26
5/11/81	17: 2.00	82.25	-7.71	1578.04
5/11/81	17:11.00	82.50	-7.73	1577.81
5/11/81	17:24.00	82.75	-7.75	1577.58
5/11/81	17:43.00	83.00	-7.78	1577.36
5/11/81	18:22.00	83.16	-7.79	1577.21
5/11/81	19: 5.00	83.21	-7.80	1577.17
5/11/81	20:22.00	83.10	-7.79	1577.27
5/11/81	21:10.00	83.00	-7.78	1577.36
5/12/81	9:10.00	81.96	-7.68	1578.30
5/12/81	10: 4.00	81.90	-7.67	1578.35
5/12/81	11:34.00	81.80	-7.66	1578.44
5/12/81	12:48.00	81.74	-7.66	1578.50
5/12/81	13: 9.00	91.00	-8.53	1570.11
5/12/81	13:17.00	81.70	-7.66	1578.54
5/12/81	13:60.00	81.65	-7.65	1578.58
5/12/81	14: 1.00	81.60	-7.65	1578.63
5/12/81	14: 4.00	81.50	-7.64	1578.72
5/12/81	14:29.00	81.50	-7.64	1578.72
5/12/81	14:33.00	81.60	-7.65	1578.63
5/12/81	14:49.00	82.50	-7.73	1577.81
5/12/81	14:41.00	82.00	-7.68	1578.26
5/12/81	14:56.00	83.00	-7.78	1577.36

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	16:33.00	83.00	0.00	1573.61
6/18/81	16: 9.00	83.50	0.00	1573.11
6/18/81	17:39.00	82.00	0.00	1574.61
6/18/81	17: 3.00	82.50	0.00	1574.11
6/18/81	18:16.00	81.50	0.00	1575.11
6/18/81	18:58.00	81.00	0.00	1575.61
6/18/81	19:52.00	80.50	0.00	1576.11
6/18/81	21: 2.00	80.00	0.00	1576.61
6/18/81	22:20.00	79.50	0.00	1577.11
6/19/81	2:37.00	78.50	0.00	1578.11
6/19/81	9:51.00	77.60	0.00	1579.01
6/19/81	17:32.00	77.00	0.00	1579.61
6/20/81	4:26.00	76.50	0.00	1580.11
6/20/81	18:11.00	76.00	0.00	1580.61
6/21/81	12:21.00	75.50	0.00	1581.11
6/24/81	13:52.00	74.05	0.00	1582.56

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:23 PAGE

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/13/81	20:12.00	81.00	0.00	1575.61
6/13/81	23:43.00	81.20	0.00	1575.41
6/14/81	3: 5.00	81.40	0.00	1575.21
6/14/81	6:24.00	81.60	0.00	1575.01
6/14/81	9: 6.00	81.72	0.00	1574.89
6/14/81	12:15.00	81.80	0.00	1574.81
6/14/81	15:58.00	82.00	0.00	1574.61
6/14/81	19:59.00	82.20	0.00	1574.41
6/15/81	0:28.00	82.40	0.00	1574.21
6/15/81	2:33.00	82.46	0.00	1574.15
6/15/81	2:49.00	82.40	0.00	1574.21
6/15/81	3:19.00	82.20	0.00	1574.41
6/15/81	3:34.00	82.00	0.00	1574.61
6/15/81	3:47.00	81.80	0.00	1574.81
6/15/81	3:56.00	81.67	0.00	1574.94
6/15/81	6:10.00	81.80	0.00	1574.81
6/15/81	10: 7.00	81.98	0.00	1574.63
6/15/81	16:21.00	82.20	0.00	1574.41
6/15/81	16:55.00	82.03	0.00	1574.58
6/15/81	17:25.00	82.03	0.00	1574.58
6/15/81	18:50.00	82.20	0.00	1574.41
6/15/81	21:27.00	82.40	0.00	1574.21
6/16/81	3:39.00	82.60	0.00	1574.01
6/16/81	8:47.00	82.80	0.00	1573.81
6/16/81	9:36.00	82.75	0.00	1573.86
6/16/81	12:33.00	83.00	0.00	1573.61
6/16/81	17:37.00	83.20	0.00	1573.41
6/16/81	22:14.00	83.40	0.00	1573.21
6/17/81	4:15.00	83.60	0.00	1573.01
6/17/81	9:27.00	83.77	0.00	1572.84
6/17/81	10:40.00	83.80	0.00	1572.81
6/17/81	19: 1.00	84.00	0.00	1572.61
6/17/81	23:16.00	84.20	0.00	1572.41
6/18/81	5:34.00	84.40	0.00	1572.21
6/18/81	9: 9.00	84.55	0.00	1572.06
6/18/81	10:36.00	84.60	0.00	1572.01
6/18/81	10:39.00	79.00	0.00	1577.61
6/18/81	14:41.00	84.79	0.00	1571.82
6/18/81	15:17.00	84.50	0.00	1572.11
6/18/81	15:44.00	84.00	0.00	1572.61

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 8/81	19:49.00	74.78	0.00	1581.83
6/ 8/81	20:37.00	73.00	0.00	1583.61
6/ 8/81	21:48.00	72.50	0.00	1584.11
6/ 8/81	23:47.00	72.00	0.00	1584.61
6/ 9/81	10: 7.00	71.50	0.00	1585.11
6/ 9/81	17:16.00	71.40	0.00	1585.21
6/10/81	0:25.00	71.34	0.00	1585.27
6/10/81	7:10.00	71.40	0.00	1585.21
6/10/81	16:48.00	70.82	0.00	1585.79
6/10/81	18:25.00	70.86	0.00	1585.75
6/10/81	20:22.00	70.81	0.00	1585.80
6/10/81	20:59.00	70.84	0.00	1585.77
6/10/81	21:50.00	70.81	0.00	1585.80
6/10/81	22:41.00	70.85	0.00	1585.76
6/11/81	1:19.00	70.79	0.00	1585.82
6/11/81	3:13.00	70.81	0.00	1585.80
6/11/81	8:59.00	70.81	0.00	1585.80
6/11/81	12:29.00	70.78	0.00	1585.83
6/11/81	13:39.00	71.50	0.00	1585.11
6/11/81	13: 8.00	71.00	0.00	1585.61
6/11/81	14: 2.00	72.00	0.00	1584.61
6/11/81	14:32.00	72.50	0.00	1584.11
6/11/81	14:59.00	73.00	0.00	1583.61
6/11/81	15:32.00	73.50	0.00	1583.11
6/11/81	16: 5.00	73.99	0.00	1582.62
6/11/81	17:48.00	75.00	0.00	1581.61
6/11/81	18:53.00	75.50	0.00	1581.11
6/11/81	20:14.00	76.00	0.00	1580.61
6/11/81	21:53.00	76.50	0.00	1580.11
6/12/81	0:26.00	77.00	0.00	1579.61
6/12/81	10:43.00	78.35	0.00	1578.26
6/12/81	12:12.00	78.50	0.00	1578.11
6/12/81	15:14.00	78.80	0.00	1577.81
6/12/81	16:59.00	79.00	0.00	1577.61
6/12/81	22:34.00	79.50	0.00	1577.11
6/13/81	2:15.00	79.80	0.00	1576.81
6/13/81	4:56.00	80.00	0.00	1576.61
6/13/81	10:54.00	80.45	0.00	1576.16
6/13/81	11:45.00	80.50	0.00	1576.11
6/13/81	17:23.00	80.80	0.00	1575.81

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:23 PAGE

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 1/81	21:15.00	70.75	0.00	1585.86
6/ 2/81	4:26.00	70.71	0.00	1585.90
6/ 2/81	9:13.00	70.74	0.00	1585.87
6/ 2/81	13:49.00	70.70	0.00	1585.91
6/ 2/81	15: 0.00	70.74	0.00	1585.87
6/ 2/81	18:48.00	70.70	0.00	1585.91
6/ 2/81	21:59.00	70.73	0.00	1585.88
6/ 3/81	1:11.00	70.69	0.00	1585.92
6/ 3/81	15:45.00	70.77	0.00	1585.84
6/ 3/81	15:55.00	71.27	0.00	1585.34
6/ 3/81	23:27.00	71.31	0.00	1585.30
6/ 4/81	2:38.00	71.27	0.00	1585.34
6/ 4/81	7: 0.00	71.30	0.00	1585.31
6/ 4/81	18:31.00	71.24	0.00	1585.37
6/ 4/81	22:29.00	71.26	0.00	1585.35
6/ 5/81	5:14.00	71.23	0.00	1585.38
6/ 5/81	18:21.00	71.21	0.00	1585.40
6/ 5/81	22:43.00	71.30	0.00	1585.31
6/ 6/81	1:53.00	71.24	0.00	1585.37
6/ 6/81	6:39.00	71.27	0.00	1585.34
6/ 6/81	16:59.00	71.23	0.00	1585.38
6/ 6/81	21:21.00	71.30	0.00	1585.31
6/ 7/81	0:55.00	71.26	0.00	1585.35
6/ 7/81	7:17.00	71.25	0.00	1585.36
6/ 7/81	8:52.00	71.21	0.00	1585.40
6/ 7/81	12:50.00	71.21	0.00	1585.40
6/ 7/81	14:49.00	71.26	0.00	1585.35
6/ 7/81	21:11.00	71.17	0.00	1585.44
6/ 8/81	6:19.00	71.22	0.00	1585.39
6/ 8/81	13: 4.00	71.23	0.00	1585.38
6/ 8/81	13:51.00	71.50	0.00	1585.11
6/ 8/81	14:15.00	72.00	0.00	1584.61
6/ 8/81	14:39.00	72.50	0.00	1584.11
6/ 8/81	15:27.00	73.50	0.00	1583.11
6/ 8/81	15:27.00	73.00	0.00	1583.61
6/ 8/81	16:14.00	74.00	0.00	1582.61
6/ 8/81	17: 2.00	74.50	0.00	1582.11
6/ 8/81	18:14.00	74.50	0.00	1582.11
6/ 8/81	19: 1.00	74.00	0.00	1582.61
6/ 8/81	19:49.00	73.50	0.00	1583.11

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/24/81	3:40.00	70.53	0.00	1586.08
5/24/81	4:43.00	70.47	0.00	1586.14
5/24/81	5: 1.00	70.50	0.00	1586.11
5/24/81	6:16.00	70.50	0.00	1586.11
5/24/81	7:31.00	70.54	0.00	1586.07
5/24/81	9:23.00	70.49	0.00	1586.12
5/24/81	9:59.00	70.47	0.00	1586.14
5/24/81	11:29.00	70.51	0.00	1586.10
5/24/81	11:59.00	70.48	0.00	1586.13
5/24/81	17:15.00	70.48	0.00	1586.13
5/24/81	18:20.00	70.50	0.00	1586.11
5/24/81	21:46.00	70.56	0.00	1586.05
5/25/81	2:32.00	70.56	0.00	1586.05
5/25/81	5:50.00	70.59	0.00	1586.02
5/25/81	10: 8.00	70.60	0.00	1586.01
5/25/81	13:44.00	70.65	0.00	1585.96
5/25/81	21: 0.00	70.70	0.00	1585.91
5/26/81	10:24.00	70.70	0.00	1585.91
5/26/81	19:36.00	70.75	0.00	1585.86
5/26/81	22:51.00	70.77	0.00	1585.84
5/27/81	0:45.00	70.75	0.00	1585.86
5/27/81	3: 6.00	70.75	0.00	1585.86
5/27/81	9:25.00	70.80	0.00	1585.81
5/27/81	15:57.00	70.78	0.00	1585.83
5/27/81	18:56.00	70.80	0.00	1585.81
5/27/81	20:36.00	70.82	0.00	1585.79
5/27/81	23:19.00	70.84	0.00	1585.77
5/28/81	0:34.00	70.82	0.00	1585.79
5/28/81	9:32.00	70.83	0.00	1585.78
5/29/81	17:39.00	70.70	0.00	1585.91
5/29/81	23:26.00	70.82	0.00	1585.79
5/30/81	3: 1.00	70.78	0.00	1585.83
5/30/81	6:25.00	70.82	0.00	1585.79
5/30/81	16:11.00	70.73	0.00	1585.88
5/30/81	20:59.00	70.79	0.00	1585.82
5/31/81	16:56.00	70.71	0.00	1585.90
5/31/81	22:19.00	70.75	0.00	1585.86
6/ 1/81	5:18.00	70.71	0.00	1585.90
6/ 1/81	8:53.00	70.74	0.00	1585.87
6/ 1/81	17: 4.00	70.69	0.00	1585.92

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NAME.....216-2
LOCATION.....16327.3,77714.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	12:57.00	70.24	0.00	1586.37
5/20/81	20:45.00	70.28	0.00	1586.33
5/20/81	22: 0.00	70.31	0.00	1586.30
5/20/81	23:21.00	70.29	0.00	1586.32
5/21/81	4:19.00	70.28	0.00	1586.33
5/21/81	6:55.00	70.30	0.00	1586.31
5/21/81	9: 7.00	70.30	0.00	1586.31
5/21/81	10:59.00	70.28	0.00	1586.33
5/21/81	14:59.00	70.27	0.00	1586.34
5/21/81	19:34.00	70.27	0.00	1586.34
5/21/81	23:20.00	70.33	0.00	1586.28
5/22/81	7:45.00	70.37	0.00	1586.24
5/22/81	11:19.00	70.33	0.00	1586.28
5/22/81	11:51.00	70.38	0.00	1586.23
5/22/81	13:44.00	70.35	0.00	1586.26
5/22/81	17:56.00	70.37	0.00	1586.24
5/22/81	19:29.00	70.40	0.00	1586.21
5/22/81	22:29.00	70.44	0.00	1586.17
5/23/81	0:49.00	70.41	0.00	1586.20
5/23/81	2: 1.00	70.40	0.00	1586.21
5/23/81	3:34.00	70.44	0.00	1586.17
5/23/81	4:49.00	70.42	0.00	1586.19
5/23/81	7: 2.00	70.45	0.00	1586.16
5/23/81	9: 0.00	70.41	0.00	1586.20
5/23/81	10:20.00	70.41	0.00	1586.20
5/23/81	11: 7.00	70.47	0.00	1586.14
5/23/81	11:49.00	70.50	0.00	1586.11
5/23/81	12:40.00	70.47	0.00	1586.14
5/23/81	14:54.00	70.47	0.00	1586.14
5/23/81	17:35.00	70.47	0.00	1586.14
5/23/81	18: 2.00	70.50	0.00	1586.11
5/23/81	18:41.00	70.47	0.00	1586.14
5/23/81	20: 1.00	70.47	0.00	1586.14
5/23/81	20:47.00	70.50	0.00	1586.11
5/23/81	21:24.00	70.52	0.00	1586.09
5/23/81	22:39.00	70.49	0.00	1586.12
5/24/81	0:15.00	70.49	0.00	1586.12
5/24/81	2: 5.00	70.47	0.00	1586.14
5/24/81	3: 0.00	70.47	0.00	1586.14
5/24/81	3: 9.00	70.50	0.00	1586.11

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28:23 PAGE 1

NAME.....216-2
LOCATION.....16327.3,77744.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1656.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/14/81	13:20.00	67.13	0.00	1589.48
5/14/81	13:26.00	67.50	0.00	1589.11
5/14/81	13:38.00	68.00	0.00	1588.61
5/14/81	13:48.00	68.50	0.00	1588.11
5/14/81	14: 9.00	69.00	0.00	1587.61
5/14/81	16:23.00	69.50	0.00	1587.11
5/15/81	0: 6.00	70.00	0.00	1586.61
5/15/81	12:40.00	70.23	0.00	1586.38
5/15/81	19:57.00	70.29	0.00	1586.32
5/16/81	2:12.00	70.33	0.00	1586.28
5/16/81	12: 1.00	70.35	0.00	1586.26
5/16/81	17:18.00	70.36	0.00	1586.25
5/16/81	18:24.00	70.40	0.00	1586.21
5/16/81	20:10.00	70.38	0.00	1586.23
5/16/81	23:31.00	70.41	0.00	1586.20
5/17/81	1:45.00	70.40	0.00	1586.21
5/17/81	3:34.00	70.38	0.00	1586.23
5/17/81	4:52.00	70.40	0.00	1586.21
5/17/81	6:27.00	70.41	0.00	1586.20
5/17/81	9:56.00	70.34	0.00	1586.27
5/17/81	16:14.00	70.29	0.00	1586.32
5/17/81	22:35.00	70.34	0.00	1586.27
5/18/81	1:57.00	70.30	0.00	1586.31
5/18/81	10:20.00	70.30	0.00	1586.31
5/18/81	16:49.00	70.27	0.00	1586.34
5/18/81	19:27.00	70.26	0.00	1586.35
5/18/81	22: 3.00	70.31	0.00	1586.30
5/19/81	0:11.00	70.31	0.00	1586.30
5/19/81	3:14.00	70.25	0.00	1586.36
5/19/81	4:54.00	70.25	0.00	1586.36
5/19/81	6:43.00	70.29	0.00	1586.32
5/19/81	9:57.00	70.24	0.00	1586.37
5/19/81	13:40.00	70.19	0.00	1586.42
5/19/81	17:52.00	70.19	0.00	1586.42
5/19/81	19:32.00	70.20	0.00	1586.41
5/19/81	22:55.00	70.24	0.00	1586.37
5/20/81	1:48.00	70.21	0.00	1586.40
5/20/81	6: 7.00	70.23	0.00	1586.38
5/20/81	9:27.00	70.21	0.00	1586.40
5/20/81	10:33.00	70.25	0.00	1586.36

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NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1653.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	22:36.00	81.00	0.00	1572.64
6/18/81	22: 6.00	81.50	0.00	1572.14
6/18/81	23:38.00	80.00	0.00	1573.64
6/18/81	23: 6.00	80.50	0.00	1573.14
6/19/81	0:11.00	79.50	0.00	1574.14
6/19/81	0:47.00	79.00	0.00	1574.64
6/19/81	1:32.00	78.50	0.00	1575.14
6/19/81	2:14.00	78.00	0.00	1575.64
6/19/81	3: 5.00	77.50	0.00	1576.14
6/19/81	4: 1.00	77.00	0.00	1576.64
6/19/81	5: 4.00	76.50	0.00	1577.14
6/19/81	6:19.00	76.00	0.00	1577.64
6/19/81	7:49.00	75.50	0.00	1578.14
6/19/81	10:14.00	74.85	0.00	1578.79

NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1653.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/16/81	21:50.00	91.80	0.00	1561.84
6/16/81	23:35.00	91.90	0.00	1561.74
6/17/81	2: 7.00	91.96	0.00	1561.68
6/17/81	5:11.00	91.95	0.00	1561.69
6/17/81	7:31.00	92.00	0.00	1561.64
6/17/81	9:45.00	92.10	0.00	1561.54
6/17/81	12:35.00	92.20	0.00	1561.44
6/17/81	14:59.00	92.10	0.00	1561.54
6/17/81	16:16.00	92.00	0.00	1561.64
6/17/81	19: 7.00	91.85	0.00	1561.79
6/17/81	20:35.00	91.85	0.00	1561.79
6/17/81	23:50.00	92.00	0.00	1561.64
6/18/81	1:38.00	92.05	0.00	1561.59
6/18/81	3:47.00	92.05	0.00	1561.59
6/18/81	4:47.00	92.03	0.00	1561.61
6/18/81	6:17.00	92.03	0.00	1561.61
6/18/81	9:20.00	92.22	0.00	1561.42
6/18/81	12:17.00	92.40	0.00	1561.24
6/18/81	13:13.00	91.00	0.00	1562.64
6/18/81	14:31.00	92.44	0.00	1561.20
6/18/81	15:28.00	92.00	0.00	1561.64
6/18/81	15:55.00	91.50	0.00	1562.14
6/18/81	16:31.00	90.50	0.00	1563.14
6/18/81	16:46.00	90.00	0.00	1563.64
6/18/81	17:22.00	89.00	0.00	1564.64
6/18/81	17:37.00	88.50	0.00	1565.14
6/18/81	17:52.00	88.00	0.00	1565.64
6/18/81	17: 7.00	89.50	0.00	1564.14
6/18/81	18:10.00	87.50	0.00	1566.14
6/18/81	18:25.00	87.00	0.00	1566.64
6/18/81	18:39.00	86.50	0.00	1567.14
6/18/81	18:57.00	86.00	0.00	1567.64
6/18/81	19:15.00	85.50	0.00	1568.14
6/18/81	19:33.00	85.00	0.00	1568.64
6/18/81	19:54.00	84.50	0.00	1569.14
6/18/81	20:12.00	84.00	0.00	1569.64
6/18/81	20:33.00	83.50	0.00	1570.14
6/18/81	20:54.00	83.00	0.00	1570.64
6/18/81	21:18.00	82.50	0.00	1571.14
6/18/81	21:42.00	82.00	0.00	1571.64

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NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1653.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	20: 3.00	88.40	0.00	1565.24
6/12/81	21:23.00	88.60	0.00	1565.04
6/12/81	22:56.00	88.80	0.00	1564.84
6/13/81	1:37.00	89.00	0.00	1564.64
6/13/81	4:12.00	89.20	0.00	1564.44
6/13/81	6:17.00	89.40	0.00	1564.24
6/13/81	8: 4.00	89.60	0.00	1564.04
6/13/81	10:45.00	89.20	0.00	1564.44
6/13/81	13:14.00	89.24	0.00	1564.40
6/13/81	15:28.00	89.20	0.00	1564.44
6/13/81	20: 6.00	90.00	0.00	1563.64
6/13/81	23:57.00	90.20	0.00	1563.44
6/14/81	0:50.00	90.24	0.00	1563.40
6/14/81	4:11.00	90.25	0.00	1563.39
6/14/81	6:40.00	90.40	0.00	1563.24
6/14/81	9:20.00	90.60	0.00	1563.04
6/14/81	10:48.00	90.65	0.00	1562.99
6/14/81	11:51.00	90.60	0.00	1563.04
6/14/81	16:26.00	90.49	0.00	1563.15
6/14/81	19:50.00	90.60	0.00	1563.04
6/15/81	0: 5.00	90.80	0.00	1562.84
6/15/81	4:50.00	90.90	0.00	1562.74
6/15/81	6:29.00	91.00	0.00	1562.64
6/15/81	9: 0.00	91.20	0.00	1562.44
6/15/81	10:39.00	91.32	0.00	1562.32
6/15/81	12:29.00	91.35	0.00	1562.29
6/15/81	14:32.00	91.30	0.00	1562.34
6/15/81	16:23.00	91.21	0.00	1562.43
6/15/81	17:47.00	91.20	0.00	1562.44
6/15/81	19: 8.00	91.21	0.00	1562.43
6/15/81	20:56.00	91.30	0.00	1562.34
6/15/81	22:28.00	91.40	0.00	1562.24
6/16/81	0:10.00	91.45	0.00	1562.19
6/16/81	4:54.00	91.47	0.00	1562.17
6/16/81	7:52.00	91.60	0.00	1562.04
6/16/81	9:56.00	91.74	0.00	1561.90
6/16/81	10:52.00	91.80	0.00	1561.84
6/16/81	13: 0.00	91.85	0.00	1561.79
6/16/81	15: 2.00	91.90	0.00	1561.84
6/16/81	18:40.00	91.69	0.00	1561.95

NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1653.54

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/11/81	14:22.00	70.50	0.00	1583.14
6/11/81	14:46.00	71.00	0.00	1582.64
6/11/81	15:11.00	71.50	0.00	1582.14
6/11/81	15:11.00	77.00	0.00	1576.64
6/11/81	15:32.00	72.00	0.00	1581.64
6/11/81	15:54.00	72.50	0.00	1581.14
6/11/81	16:15.00	73.00	0.00	1580.64
6/11/81	16:37.00	73.50	0.00	1580.14
6/11/81	17: 1.00	74.00	0.00	1579.64
6/11/81	17:23.00	74.50	0.00	1579.14
6/11/81	17:47.00	75.00	0.00	1578.64
6/11/81	18: 9.00	75.50	0.00	1578.14
6/11/81	18:30.00	76.00	0.00	1577.64
6/11/81	18:51.00	76.50	0.00	1577.14
6/11/81	19:37.00	77.50	0.00	1576.14
6/11/81	20: 2.00	78.00	0.00	1575.64
6/11/81	20:26.00	78.50	0.00	1575.14
6/11/81	20:54.00	79.00	0.00	1574.64
6/11/81	21:21.00	79.50	0.00	1574.14
6/11/81	21:55.00	80.00	0.00	1573.64
6/11/81	22:26.00	80.50	0.00	1573.14
6/11/81	22:56.00	81.00	0.00	1572.64
6/11/81	23:39.00	81.50	0.00	1572.14
6/12/81	0:19.00	82.00	0.00	1571.64
6/12/81	1: 5.00	82.50	0.00	1571.14
6/12/81	1:57.00	83.00	0.00	1570.64
6/12/81	2:52.00	83.50	0.00	1570.14
6/12/81	3:50.00	84.00	0.00	1569.64
6/12/81	4:55.00	84.50	0.00	1569.14
6/12/81	6: 5.00	85.00	0.00	1568.64
6/12/81	7:19.00	85.50	0.00	1568.14
6/12/81	8:35.00	86.00	0.00	1567.64
6/12/81	10:21.00	86.83	0.00	1566.81
6/12/81	11: 6.00	87.00	0.00	1566.64
6/12/81	12: 6.00	87.20	0.00	1566.44
6/12/81	13:17.00	87.40	0.00	1566.24
6/12/81	13:39.00	88.20	0.00	1565.44
6/12/81	14:44.00	87.60	0.00	1566.04
6/12/81	15:55.00	87.80	0.00	1565.84
6/12/81	17:19.00	88.00	0.00	1565.64

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NAME.....214
LOCATION.....16807.6,78100.2
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1653.64

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 3/81	18:20.00	69.04	0.00	1584.60
6/ 3/81	20:31.00	68.97	0.00	1584.67
6/ 4/81	3: 4.00	69.11	0.00	1584.53
6/ 4/81	7: 2.00	69.08	0.00	1584.56
6/ 4/81	13:23.00	69.25	0.00	1584.39
6/ 4/81	18:57.00	69.00	0.00	1584.64
6/ 4/81	21:43.00	69.92	0.00	1583.72
6/ 5/81	2:53.00	68.98	0.00	1584.66
6/ 5/81	7:15.00	68.93	0.00	1584.71
6/ 5/81	14:24.00	69.11	0.00	1584.53
6/ 5/81	21:56.00	68.87	0.00	1584.77
6/ 6/81	5:29.00	68.97	0.00	1584.67
6/ 6/81	9: 3.00	68.95	0.00	1584.69
6/ 6/81	15:25.00	69.08	0.00	1584.56
6/ 6/81	23:21.00	68.94	0.00	1584.70
6/ 7/81	4:55.00	69.00	0.00	1584.64
6/ 7/81	10:28.00	68.95	0.00	1584.69
6/ 7/81	12: 3.00	69.04	0.00	1584.60
6/ 7/81	19:36.00	69.90	0.00	1583.74
6/ 7/81	23:58.00	68.77	0.00	1584.87
6/ 8/81	7:54.00	66.88	0.00	1586.76
6/ 8/81	13:28.00	69.00	0.00	1584.64
6/ 8/81	18:14.00	74.00	0.00	1579.64
6/ 8/81	18:49.00	74.08	0.00	1579.56
6/ 8/81	19: 1.00	74.00	0.00	1579.64
6/ 9/81	8:55.00	70.00	0.00	1583.64
6/ 9/81	11:18.00	69.80	0.00	1583.84
6/ 9/81	16: 4.00	69.60	0.00	1584.04
6/ 9/81	22:25.00	69.40	0.00	1584.24
6/10/81	3:11.00	69.27	0.00	1584.37
6/10/81	7:33.00	69.37	0.00	1584.27
6/10/81	17:10.00	69.23	0.00	1584.41
6/10/81	20: 7.00	69.27	0.00	1584.37
6/10/81	22:22.00	69.25	0.00	1584.39
6/11/81	1:52.00	69.17	0.00	1584.47
6/11/81	4: 4.00	69.17	0.00	1584.47
6/11/81	8:45.00	69.29	0.00	1584.35
6/11/81	12:28.00	69.20	0.00	1584.44
6/11/81	13:20.00	69.50	0.00	1584.14
6/11/81	13:57.00	70.00	0.00	1583.64

NAME.....213-3 UPPER
LOCATION.....16112.,378467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	9: 0.00	39.50	0.00	1586.28
6/ 9/81	16: 8.00	39.48	0.00	1586.30
6/ 9/81	19:50.00	39.47	0.00	1586.31
6/ 9/81	20: 5.00	39.44	0.00	1586.34
6/ 9/81	20:27.00	39.49	0.00	1586.29
6/ 9/81	20:49.00	39.47	0.00	1586.31
6/10/81	2:29.00	39.47	0.00	1586.31
6/10/81	14:18.00	39.46	0.00	1586.32
6/10/81	16:57.00	39.42	0.00	1586.36
6/10/81	18: 2.00	39.45	0.00	1586.33
6/11/81	1:36.00	39.45	0.00	1586.33
6/11/81	9:11.00	39.40	0.00	1586.38
6/11/81	12:53.00	39.39	0.00	1586.39
6/11/81	16: 2.00	39.50	0.00	1586.18
6/11/81	20:11.00	39.80	0.00	1585.98
6/11/81	23:50.00	39.95	0.00	1585.83
6/12/81	6:15.00	40.13	0.00	1585.65
6/12/81	8:46.00	40.20	0.00	1585.58
6/12/81	11:48.00	40.27	0.00	1585.51
6/12/81	15:50.00	40.40	0.00	1585.38
6/12/81	23:46.00	40.60	0.00	1585.18
6/13/81	7:21.00	40.80	0.00	1584.98
6/13/81	11: 3.00	40.92	0.00	1584.86
6/13/81	14:37.00	41.00	0.00	1584.78
6/13/81	22:37.00	41.20	0.00	1584.58
6/14/81	12:51.00	41.40	0.00	1584.38
6/14/81	23:51.00	41.60	0.00	1584.18
6/15/81	12: 9.00	41.80	0.00	1583.98
6/16/81	0: 7.00	42.00	0.00	1583.78
6/16/81	10:26.00	42.26	0.00	1583.52
6/16/81	19:37.00	42.40	0.00	1583.38
6/17/81	9:56.00	42.58	0.00	1583.20
6/18/81	9:47.00	42.78	0.00	1583.00
6/19/81	15: 0.00	42.85	0.00	1582.93
6/19/81	11:35.00	42.46	0.00	1583.32
6/19/81	14: 6.00	42.40	0.00	1583.38
6/20/81	12: 0.00	42.15	0.00	1583.63
6/24/81	14: 6.00	41.12	0.00	1584.66

NAME.....213-3 UPPER
LOCATION.....16112.,378467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	11:21.00	39.54	0.00	1586.24
5/23/81	20:33.00	39.53	0.00	1586.25
5/24/81	0:27.00	39.52	0.00	1586.26
5/24/81	2:57.00	39.52	0.00	1586.26
5/24/81	3: 3.00	39.54	0.00	1586.24
5/24/81	3:33.00	39.54	0.00	1586.24
5/24/81	3:57.00	39.51	0.00	1586.27
5/24/81	4:48.00	39.52	0.00	1586.26
5/24/81	6:25.00	39.53	0.00	1586.25
5/24/81	7:13.00	39.53	0.00	1586.25
5/24/81	8:34.00	39.52	0.00	1586.26
5/24/81	8:43.00	39.51	0.00	1586.27
5/24/81	10:27.00	39.52	0.00	1586.26
5/24/81	15:14.00	39.51	0.00	1586.27
5/24/81	17: 8.00	39.53	0.00	1586.25
5/25/81	3: 3.00	39.52	0.00	1586.26
5/25/81	10:30.00	39.49	0.00	1586.29
5/25/81	15:14.00	39.49	0.00	1586.29
5/25/81	22:33.00	39.49	0.00	1586.29
5/26/81	10:45.00	39.50	0.00	1586.28
5/26/81	18: 1.00	39.50	0.00	1586.28
5/27/81	2:41.00	39.50	0.00	1586.28
5/27/81	19:32.00	39.50	0.00	1586.28
5/28/81	2:36.00	39.50	0.00	1586.28
5/28/81	9:49.00	39.50	0.00	1586.28
5/28/81	17:49.00	39.49	0.00	1586.29
5/28/81	22:15.00	39.48	0.00	1586.30
5/29/81	10:22.00	39.47	0.00	1586.31
5/29/81	20: 4.00	39.49	0.00	1586.29
5/30/81	10:58.00	39.48	0.00	1586.30
5/30/81	12:46.00	39.47	0.00	1586.31
6/ 3/81	17:25.00	39.37	0.00	1586.41
6/ 4/81	11:25.00	39.35	0.00	1586.42
6/ 5/81	11:37.00	39.35	0.00	1586.43
6/ 5/81	13:55.00	39.34	0.00	1586.44
6/ 6/81	12:47.00	39.30	0.00	1586.48
6/ 8/81	15:59.00	39.40	0.00	1586.38
6/ 8/81	17:41.00	39.50	0.00	1586.28
6/ 8/81	18:47.00	39.55	0.00	1586.23
6/ 9/81	5:59.00	39.50	0.00	1586.28

NAME.....213-3 UPPER
LOCATION.....16112.,378467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 2/81	21:58.00	41.06	0.00	1584.72
5/ 3/81	0:30.00	41.50	0.00	1584.28
5/ 3/81	2:30.00	41.40	0.00	1584.38
5/ 3/81	6:19.00	41.30	0.00	1584.48
5/ 3/81	10:32.00	41.20	0.00	1584.58
5/ 3/81	15:47.00	41.10	0.00	1584.68
5/ 3/81	23:47.00	41.00	0.00	1584.78
5/ 4/81	8:11.00	40.90	0.00	1584.88
5/ 4/81	18:11.00	40.80	0.00	1584.98
5/ 5/81	4:11.00	40.70	0.00	1585.08
5/ 5/81	23:12.00	40.60	0.00	1585.18
5/ 6/81	16:36.00	40.50	0.00	1585.28
5/ 7/81	10:12.00	40.40	0.00	1585.38
5/ 8/81	10:37.00	40.31	0.00	1585.47
5/14/81	16:16.00	39.84	0.00	1585.94
5/15/81	2: 5.00	39.82	0.00	1585.96
5/15/81	8: 1.00	39.82	0.00	1585.96
5/15/81	12:20.00	39.80	0.00	1585.98
5/15/81	21:32.00	39.80	0.00	1585.98
5/16/81	4: 7.00	39.79	0.00	1585.99
5/16/81	11:16.00	39.78	0.00	1586.00
5/16/81	22:28.00	39.77	0.00	1586.01
5/17/81	5:44.00	39.76	0.00	1586.02
5/17/81	9:45.00	39.74	0.00	1586.04
5/17/81	17: 9.00	39.73	0.00	1586.05
5/18/81	0:27.00	39.73	0.00	1586.05
5/18/81	10:10.00	39.69	0.00	1586.09
5/18/81	12: 8.00	39.67	0.00	1586.11
5/18/81	14:36.00	39.66	0.00	1586.12
5/19/81	2:21.00	39.66	0.00	1586.12
5/19/81	9:25.00	39.65	0.00	1586.13
5/20/81	9:41.00	39.60	0.00	1586.18
5/21/81	11:11.00	39.57	0.00	1586.21
5/21/81	11:12.00	39.57	0.00	1586.21
5/21/81	19:43.00	39.57	0.00	1586.21
5/22/81	4:30.00	39.57	0.00	1586.21
5/22/81	11:33.00	39.56	0.00	1586.22
5/22/81	16: 0.00	39.55	0.00	1586.23
5/22/81	23:23.00	39.54	0.00	1586.24
5/23/81	5:14.00	39.53	0.00	1586.25

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:28: 3 PAGE

NAME.....213-3 UPPER
LOCATION.....16112.,378467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
4/29/81	13:29.00	40.70	0.00	1585.08
4/29/81	13:56.00	40.80	0.00	1584.98
4/29/81	14:33.00	40.90	0.00	1584.88
4/29/81	15:18.00	41.00	0.00	1584.78
4/29/81	15:39.00	41.06	0.00	1584.72
4/29/81	16: 1.00	41.10	0.00	1584.68
4/29/81	16:58.00	41.20	0.00	1584.58
4/29/81	17:60.00	41.30	0.00	1584.48
4/29/81	18:42.00	41.43	0.00	1584.35
4/29/81	19:12.00	41.40	0.00	1584.38
4/29/81	19:52.00	41.50	0.00	1584.28
4/29/81	21:36.00	41.60	0.00	1584.18
4/29/81	23:31.00	41.70	0.00	1584.08
4/30/81	1:43.00	41.80	0.00	1583.98
4/30/81	4:11.00	41.90	0.00	1583.88
4/30/81	7:35.00	42.00	0.00	1583.78
4/30/81	10:36.00	42.10	0.00	1583.68
4/30/81	14:28.00	42.20	0.00	1583.58
4/30/81	18:25.00	42.30	0.00	1583.48
5/ 1/81	0:24.00	42.40	0.00	1583.38
5/ 1/81	6: 5.00	42.50	0.00	1583.28
5/ 1/81	12:36.00	42.60	0.00	1583.18
5/ 1/81	16:36.00	42.65	0.00	1583.13
5/ 1/81	20:32.00	42.70	0.00	1583.08
5/ 2/81	3: 6.00	42.75	0.00	1583.03
5/ 2/81	7:58.00	42.80	0.00	1582.98
5/ 2/81	10:12.00	42.85	0.00	1582.93
5/ 2/81	11: 0.34	42.86	0.00	1582.92
5/ 2/81	11: 0.10	42.80	0.00	1582.98
5/ 2/81	11: 0.87	42.70	0.00	1583.08
5/ 2/81	11: 3.00	42.60	0.00	1583.18
5/ 2/81	11:15.00	42.50	0.00	1583.28
5/ 2/81	11:41.00	42.40	0.00	1583.38
5/ 2/81	12:15.00	42.30	0.00	1583.48
5/ 2/81	12:58.00	42.20	0.00	1583.58
5/ 2/81	13:54.00	42.10	0.00	1583.68
5/ 2/81	14:49.00	42.00	0.00	1583.78
5/ 2/81	16: 9.00	41.90	0.00	1583.88
5/ 2/81	17:36.00	41.80	0.00	1583.98
5/ 2/81	20: 7.00	41.07	0.00	1584.71

NAME.....213-3 UPPER
LOCATION.....16112.,378467.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.78

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
4/22/81	14:45.00	40.11	0.00	1585.67
4/23/81	5:16.00	40.08	0.00	1585.70
4/23/81	12:25.00	40.08	0.00	1585.70
4/23/81	12:29.00	40.08	0.00	1585.70
4/23/81	21: 6.00	40.09	0.00	1585.69
4/24/81	9: 4.00	40.09	0.00	1585.69
4/24/81	11: 1.00	40.09	0.00	1585.69
4/24/81	11:50.00	40.09	0.00	1585.69
4/24/81	11:52.00	40.20	0.00	1585.58
4/24/81	11:60.00	40.30	0.00	1585.48
4/24/81	12:30.00	40.40	0.00	1585.38
4/24/81	12:33.00	40.50	0.00	1585.28
4/24/81	13: 4.00	40.60	0.00	1585.18
4/24/81	13:49.00	40.70	0.00	1585.08
4/24/81	14:46.00	40.80	0.00	1584.98
4/24/81	15: 2.00	40.82	0.00	1584.96
4/24/81	15: 3.00	40.85	0.00	1584.93
4/24/81	15: 4.00	40.88	0.00	1584.90
4/24/81	15:11.00	40.90	0.00	1584.88
4/24/81	15:18.00	40.91	0.00	1584.87
4/24/81	15:19.00	40.80	0.00	1584.98
4/24/81	15:19.20	40.70	0.00	1585.08
4/24/81	15:23.00	40.60	0.00	1585.18
4/24/81	15:34.00	40.55	0.00	1585.23
4/24/81	16: 7.00	40.48	0.00	1585.30
4/25/81	12:10.00	40.15	0.00	1585.63
4/26/81	2:25.00	40.10	0.00	1585.68
4/27/81	10:55.00	40.05	0.00	1585.73
4/28/81	8:59.00	40.09	0.00	1585.69
4/28/81	19:13.00	40.18	0.00	1585.60
4/28/81	21:*****	0.00	0.00	1625.78
4/28/81	21:21.00	40.15	0.00	1585.63
4/29/81	9:45.00	40.05	0.00	1585.73
4/29/81	12:36.00	40.02	0.00	1585.76
4/29/81	12:59.00	40.02	0.00	1585.76
4/29/81	12:60.00	40.10	0.00	1585.68
4/29/81	13: 0.10	40.20	0.00	1585.58
4/29/81	13: 0.23	40.30	0.00	1585.48
4/29/81	13: 0.75	40.40	0.00	1585.38
4/29/81	13: 1.00	40.50	0.00	1585.28

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:54 PAGE

NAME.....213-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 4/81	18:24.00	36.95	0.00	1584.71
5/ 5/81	3:40.00	36.90	0.00	1584.76
5/ 5/81	11: 8.00	36.85	0.00	1584.81
5/ 5/81	22:25.00	36.80	0.00	1584.86
5/ 6/81	7:41.00	36.75	0.00	1584.91
5/ 6/81	12:31.00	36.70	0.00	1584.96
5/ 7/81	5:27.00	36.60	0.00	1585.06
5/ 8/81	8:40.00	36.50	0.00	1585.16

NAME.....213-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	10:50.00	37.89	0.00	1583.77
5/ 1/81	11:48.00	37.90	0.00	1583.76
5/ 1/81	12:29.00	37.90	0.00	1583.76
5/ 1/81	14:42.00	37.92	0.00	1583.74
5/ 1/81	16:17.00	37.93	0.00	1583.73
5/ 1/81	19:17.00	37.98	0.00	1583.68
5/ 1/81	22:52.00	38.03	0.00	1583.63
5/ 2/81	3: 0.00	38.08	0.00	1583.58
5/ 2/81	5:23.00	38.10	0.00	1583.56
5/ 2/81	8: 1.00	38.12	0.00	1583.54
5/ 2/81	10:23.00	38.15	0.00	1583.51
5/ 2/81	11: 5.00	38.10	0.00	1583.56
5/ 2/81	11:20.00	38.05	0.00	1583.61
5/ 2/81	11:22.00	38.02	0.00	1583.64
5/ 2/81	11:38.00	38.00	0.00	1583.66
5/ 2/81	12:20.00	37.95	0.00	1583.71
5/ 2/81	12:25.00	37.93	0.00	1583.73
5/ 2/81	12:44.00	37.90	0.00	1583.76
5/ 2/81	13:23.00	37.80	0.00	1583.86
5/ 2/81	14:34.00	37.80	0.00	1583.86
5/ 2/81	15:36.00	37.75	0.00	1583.91
5/ 2/81	16:43.00	37.70	0.00	1583.96
5/ 2/81	18:15.00	37.65	0.00	1584.01
5/ 2/81	19:42.00	37.60	0.00	1584.06
5/ 2/81	21:55.00	37.50	0.00	1584.16
5/ 2/81	23:34.00	37.50	0.00	1584.16
5/ 3/81	1:30.00	37.45	0.00	1584.21
5/ 3/81	3: 5.00	37.40	0.00	1584.26
5/ 3/81	6: 6.00	37.35	0.00	1584.31
5/ 3/81	8:55.00	37.30	0.00	1584.36
5/ 3/81	10:46.00	37.25	0.00	1584.41
5/ 3/81	10:53.00	37.24	0.00	1584.42
5/ 3/81	11: 7.00	37.31	0.00	1584.35
5/ 3/81	11:34.00	37.28	0.00	1584.38
5/ 3/81	14:11.00	37.25	0.00	1584.41
5/ 3/81	18: 1.00	37.20	0.00	1584.46
5/ 3/81	22: 2.00	37.15	0.00	1584.51
5/ 4/81	2:29.00	37.10	0.00	1584.56
5/ 4/81	7:31.00	37.05	0.00	1584.61
5/ 4/81	13: 9.00	37.00	0.00	1584.66

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:51 PAGE

NAME.....211-3 UPPER
LOCATION.....16476.1,76300.6
TYPE.....STEVENS
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	12:33.00	49.05	0.00	1601.54
5/12/81	14: 9.00	49.50	0.00	1601.09
5/12/81	15:50.00	50.00	0.00	1600.59
5/12/81	17: 5.00	50.50	0.00	1600.09
5/12/81	18:25.00	51.00	0.00	1599.59
5/12/81	19:42.00	51.50	0.00	1599.09
5/12/81	21: 6.00	52.00	0.00	1598.59
5/12/81	22:26.00	52.50	0.00	1598.09
5/12/81	23:23.00	53.00	0.00	1597.59
5/13/81	1:49.00	53.50	0.00	1597.09
5/13/81	3:45.00	54.00	0.00	1596.59
5/13/81	5:38.00	54.50	0.00	1596.09
5/13/81	7:46.00	55.00	0.00	1595.59
5/13/81	9:42.00	55.47	0.00	1595.12
5/13/81	9:50.00	55.50	0.00	1595.09
5/13/81	12:39.00	********	0.00	********
5/13/81	15:32.00	56.50	0.00	1594.09
5/13/81	18:17.00	57.00	0.00	1593.59
5/13/81	21:16.00	57.50	0.00	1593.09
5/13/81	56:*****	0.00	0.00	1650.59
5/14/81	0:27.00	58.00	0.00	1592.59
5/14/81	4:18.00	58.50	0.00	1592.09
5/14/81	7:35.00	59.00	0.00	1591.59

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:43 PAGE

NAME.....211-3 LOWER
LOCATION.....16475.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	14: 8.00	94.50	0.00	1556.09
5/20/81	14: 0.00	93.00	0.00	1557.59
5/20/81	14: 6.00	94.00	0.00	1556.59
5/20/81	14: 4.00	89.50	0.00	1561.09
5/20/81	14:14.00	95.50	0.00	1555.09
5/20/81	14:11.00	95.00	0.00	1555.59
5/20/81	14:17.00	96.00	0.00	1554.59
5/20/81	14:20.00	96.50	0.00	1554.09
5/20/81	14:25.00	97.50	0.00	1553.09
5/20/81	14:23.00	97.00	0.00	1553.59
5/20/81	14:29.00	98.00	0.00	1552.59
5/20/81	14:23.00	91.50	0.00	1559.09
5/20/81	14:31.00	98.50	0.00	1552.09
5/20/81	14:37.00	99.50	0.00	1551.09
5/20/81	14:34.00	99.00	0.00	1551.59
5/20/81	14:44.00	100.50	0.00	1550.09
5/20/81	14:49.00	101.50	0.00	1549.09
5/20/81	14:40.00	100.00	0.00	1550.59
5/20/81	14:46.00	101.00	0.00	1549.59
5/20/81	14:42.00	93.50	0.00	1557.09
5/20/81	14:56.00	102.50	0.00	1548.09
5/20/81	14:53.00	102.00	0.00	1548.59
5/20/81	14:59.00	103.00	0.00	1547.59
5/20/81	15: 3.00	103.50	0.00	1547.09
5/20/81	15: 9.00	104.50	0.00	1546.09
5/20/81	15: 6.00	104.00	0.00	1546.59

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:43 PAGE

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HR:MN.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	12:44.00	72.50	0.00	1578.09
5/20/81	12:52.00	74.50	0.00	1576.09
5/20/81	12:52.00	79.50	0.00	1571.09
5/20/81	12:57.00	80.50	0.00	1570.09
5/20/81	12:54.00	80.00	0.00	1570.59
5/20/81	12:59.00	81.00	0.00	1569.59
5/20/81	12:57.00	74.00	0.00	1576.59
5/20/81	12:53.00	73.50	0.00	1577.09
5/20/81	13: 1.00	81.50	0.00	1569.09
5/20/81	13: 7.00	82.50	0.00	1568.09
5/20/81	13: 5.00	82.00	0.00	1568.59
5/20/81	13: 9.00	83.00	0.00	1567.59
5/20/81	13: 3.00	83.50	0.00	1567.09
5/20/81	13: 9.00	84.00	0.00	1566.59
5/20/81	13: 7.00	75.00	0.00	1575.59
5/20/81	13: 1.00	74.50	0.00	1575.09
5/20/81	13:17.00	84.50	0.00	1566.09
5/20/81	13:14.00	84.00	0.00	1566.59
5/20/81	13:19.00	85.00	0.00	1565.59
5/20/81	13:13.00	75.50	0.00	1575.09
5/20/81	13:21.00	85.50	0.00	1565.09
5/20/81	13:26.00	86.50	0.00	1564.09
5/20/81	13:24.00	86.00	0.00	1564.59
5/20/81	13:29.00	87.00	0.00	1563.59
5/20/81	13:25.00	85.50	0.00	1565.09
5/20/81	13:26.00	76.00	0.00	1574.59
5/20/81	13:31.00	87.50	0.00	1563.09
5/20/81	13:36.00	88.50	0.00	1562.09
5/20/81	13:34.00	88.00	0.00	1562.59
5/20/81	13:41.00	89.50	0.00	1561.09
5/20/81	13:47.00	80.50	0.00	1570.09
5/20/81	13:40.00	89.00	0.00	1561.59
5/20/81	13:44.00	90.00	0.00	1560.59
5/20/81	13:45.00	87.50	0.00	1563.09
5/20/81	13:47.00	76.50	0.00	1574.09
5/20/81	13:52.00	91.50	0.00	1559.09
5/20/81	13:58.00	92.50	0.00	1558.09
5/20/81	13:50.00	91.00	0.00	1559.59
5/20/81	13:55.00	92.00	0.00	1558.59
5/20/81	14: 3.00	93.50	0.00	1557.09

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/18/81	22:56.00	73.00	0.00	1577.59
5/19/81	2:57.00	81.40	0.00	1569.19
5/19/81	10:12.00	81.88	0.00	1568.71
5/19/81	10:42.00	71.78	0.00	1578.81
5/19/81	11:14.00	81.90	0.00	1568.69
5/19/81	14:16.00	71.60	0.00	1578.99
5/19/81	15:21.00	81.60	0.00	1568.99
5/19/81	18:35.00	71.40	0.00	1579.19
5/19/81	20: 3.00	81.24	0.00	1569.35
5/19/81	20:18.00	71.36	0.00	1579.23
5/19/81	21:41.00	81.30	0.00	1569.29
5/20/81	0:55.00	81.40	0.00	1569.19
5/20/81	4: 2.00	81.30	0.00	1569.29
5/20/81	6:36.00	81.26	0.00	1569.33
5/20/81	7:57.00	71.26	0.00	1579.33
5/20/81	10:52.00	81.49	0.00	1569.10
5/20/81	11:11.00	71.73	0.00	1578.86
5/20/81	11:12.00	83.50	0.00	1567.09
5/20/81	11:59.00	71.71	0.00	1578.88
5/20/81	12: 6.00	72.00	0.00	1578.59
5/20/81	12: 0.00	81.52	0.00	1569.07
5/20/81	12: 4.00	81.40	0.00	1569.19
5/20/81	12:11.00	72.50	0.00	1578.09
5/20/81	12:19.00	73.50	0.00	1577.09
5/20/81	12:15.00	73.00	0.00	1577.59
5/20/81	12:17.00	81.20	0.00	1569.39
5/20/81	12:22.00	74.00	0.00	1576.59
5/20/81	12:28.00	75.00	0.00	1575.59
5/20/81	12:25.00	81.30	0.00	1569.29
5/20/81	12:29.00	81.40	0.00	1569.19
5/20/81	12:31.00	75.50	0.00	1575.09
5/20/81	12:36.00	76.50	0.00	1574.09
5/20/81	12:34.00	76.00	0.00	1574.59
5/20/81	12:39.00	77.00	0.00	1573.59
5/20/81	12:32.00	81.50	0.00	1569.09
5/20/81	12:41.00	77.50	0.00	1573.09
5/20/81	12:47.00	78.50	0.00	1572.09
5/20/81	12:44.00	78.00	0.00	1572.59
5/20/81	12:49.00	79.00	0.00	1571.59
5/20/81	12:42.00	82.00	0.00	1568.59

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:43 PAGE

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/13/81	0: 4.00	91.00	0.00	1559.59
5/13/81	0:20.00	90.50	0.00	1560.09
5/13/81	0:35.00	90.00	0.00	1560.59
5/13/81	0:49.00	89.50	0.00	1561.09
5/13/81	1: 6.00	89.00	0.00	1561.59
5/13/81	1:21.00	88.50	0.00	1562.09
5/13/81	1:40.00	88.00	0.00	1562.59
5/13/81	1:55.00	87.50	0.00	1563.09
5/13/81	2:16.00	87.00	0.00	1563.59
5/13/81	2:31.00	86.50	0.00	1564.09
5/13/81	2:56.00	86.00	0.00	1564.59
5/13/81	3:14.00	85.50	0.00	1565.09
5/13/81	3:36.00	85.00	0.00	1565.59
5/13/81	3:54.00	84.50	0.00	1566.09
5/13/81	4:21.00	84.00	0.00	1566.59
5/13/81	4:43.00	83.50	0.00	1567.09
5/13/81	5:10.00	83.00	0.00	1567.59
5/13/81	5:38.00	82.50	0.00	1568.09
5/13/81	6: 8.00	82.00	0.00	1568.59
5/13/81	6:36.00	81.50	0.00	1569.09
5/13/81	7:10.00	81.00	0.00	1569.59
5/13/81	7:43.00	80.50	0.00	1570.09
5/13/81	8:57.00	79.50	0.00	1571.09
5/18/81	9:53.00	81.67	0.00	1568.92
5/18/81	13:49.00	83.60	0.00	1566.99
5/18/81	14: 4.00	83.80	0.00	1566.79
5/18/81	14: 6.00	76.61	0.00	1573.98
5/18/81	14:32.00	76.50	0.00	1574.09
5/18/81	14:48.00	83.90	0.00	1566.69
5/18/81	15:25.00	76.00	0.00	1574.59
5/18/81	15:51.00	83.80	0.00	1566.79
5/18/81	16:12.00	75.50	0.00	1575.09
5/18/81	16:32.00	83.60	0.00	1566.99
5/18/81	17: 2.00	75.00	0.00	1575.59
5/18/81	17:50.00	83.20	0.00	1567.39
5/18/81	17:59.00	74.50	0.00	1576.09
5/18/81	19:12.00	74.00	0.00	1576.59
5/18/81	19:43.00	81.80	0.00	1568.79
5/18/81	20:44.00	73.50	0.00	1577.09
5/18/81	22:26.00	81.60	0.00	1568.99

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:43 PAGE 1

NAME.....211-3 LOWER
LOCATION.....16476.1,76300.6
TYPE.....HANGING WALL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1650.59

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	15:16.00	105.12	0.00	1545.47
5/12/81	15:18.00	105.50	0.00	1545.09
5/12/81	15:21.00	106.00	0.00	1544.59
5/12/81	15:28.00	107.00	0.00	1543.59
5/12/81	15:25.00	106.50	0.00	1544.09
5/12/81	15:35.00	108.00	0.00	1542.59
5/12/81	15:32.00	107.50	0.00	1543.09
5/12/81	15:39.00	108.50	0.00	1542.09
5/12/81	15:43.00	109.00	0.00	1541.59
5/12/81	15:49.00	110.00	0.00	1540.59
5/12/81	15:46.00	109.50	0.00	1541.09
5/12/81	15:57.00	111.00	0.00	1539.59
5/12/81	15:53.00	110.50	0.00	1540.09
5/12/81	16: 4.00	112.00	0.00	1538.59
5/12/81	16: 7.00	113.00	0.00	1537.59
5/12/81	16: 1.00	111.50	0.00	1539.09
5/12/81	16: 8.00	112.50	0.00	1538.09
5/12/81	16:19.00	114.00	0.00	1536.59
5/12/81	16:16.00	113.50	0.00	1537.09
5/12/81	16:28.00	115.00	0.00	1535.59
5/12/81	16:24.00	114.50	0.00	1536.09
5/12/81	16:36.00	116.00	0.00	1534.59
5/12/81	16:33.00	115.50	0.00	1535.09
5/12/81	16:45.00	117.00	0.00	1533.59
5/12/81	16:40.00	116.50	0.00	1534.09
5/12/81	16:49.00	117.50	0.00	1533.09
5/12/81	16:53.00	118.00	0.00	1532.59
5/12/81	16:57.00	118.50	0.00	1532.09
5/12/81	17: 2.00	119.00	0.00	1531.59
5/12/81	17: 6.00	119.50	0.00	1531.09
5/12/81	17:10.00	120.00	0.00	1530.59
5/12/81	17:15.00	120.50	0.00	1530.09
5/12/81	17:20.00	121.00	0.00	1529.59
5/12/81	22:32.00	94.74	0.00	1555.85
5/12/81	22:48.00	94.00	0.00	1556.59
5/12/81	22:59.00	93.50	0.00	1557.09
5/12/81	22:57.00	93.00	0.00	1557.59
5/12/81	23:25.00	92.50	0.00	1558.09
5/12/81	23:49.00	91.50	0.00	1559.09
5/12/81	23:57.00	92.00	0.00	1558.59

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/28/81	11: 5.00	78.50	0.00	1571.11
5/28/81	12:13.00	77.83	0.00	1571.78
5/28/81	14:23.00	78.50	0.00	1571.11
5/28/81	14:30.00	78.48	0.00	1571.13
5/28/81	16:57.00	78.00	0.00	1571.61
5/28/81	19:33.00	77.50	0.00	1572.11
5/28/81	22: 9.00	77.00	0.00	1572.61
5/28/81	23:51.00	76.50	0.00	1573.11
5/29/81	0:51.00	76.00	0.00	1573.61
5/29/81	4:45.00	74.50	0.00	1575.11
5/29/81	6:42.00	75.00	0.00	1574.61
5/29/81	8:36.00	73.50	0.00	1576.11
5/29/81	9: 0.00	74.00	0.00	1575.61
5/29/81	11:39.00	73.83	0.00	1575.78
5/29/81	12:51.00	73.50	0.00	1576.11
5/29/81	15:39.00	73.00	0.00	1576.61
5/29/81	23:15.00	72.50	0.00	1577.11
5/30/81	4:51.00	72.00	0.00	1577.61
5/30/81	9:39.00	71.50	0.00	1578.11
6/ 3/81	15:29.00	70.00	0.00	1579.61
6/ 4/81	9:48.00	70.26	0.00	1579.35
6/ 4/81	19:58.00	70.20	0.00	1579.41
6/ 5/81	17:31.00	70.10	0.00	1579.51
6/ 6/81	6:32.00	70.18	0.00	1579.43
6/ 6/81	15:51.00	70.12	0.00	1579.49
6/ 7/81	4: 6.00	70.20	0.00	1579.41
6/ 8/81	3:17.00	69.98	0.00	1579.63
6/ 8/81	9:47.00	70.19	0.00	1579.42
6/ 8/81	17:31.00	70.10	0.00	1579.51

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/26/81	23: 3.00	83.76	0.00	1565.85
5/27/81	1:22.00	83.27	0.00	1566.34
5/27/81	2:35.00	83.55	0.00	1566.06
5/27/81	3:11.00	83.62	0.00	1565.99
5/27/81	3:35.00	83.49	0.00	1566.12
5/27/81	4: 9.00	83.69	0.00	1565.92
5/27/81	5:30.00	83.50	0.00	1566.11
5/27/81	6: 0.00	84.50	0.00	1565.11
5/27/81	7:28.00	85.77	0.00	1563.84
5/27/81	9:50.00	84.90	0.00	1564.71
5/27/81	10:35.00	85.07	0.00	1564.54
5/27/81	10:59.00	85.07	0.00	1564.54
5/27/81	11:21.00	85.11	0.00	1564.50
5/27/81	12:33.00	84.95	0.00	1564.66
5/27/81	13:21.00	84.90	0.00	1564.71
5/27/81	13:34.00	84.90	0.00	1564.71
5/27/81	14: 0.00	85.05	0.00	1564.56
5/27/81	14:46.00	85.00	0.00	1564.61
5/27/81	15:11.00	85.05	0.00	1564.56
5/27/81	15:31.00	85.04	0.00	1564.57
5/27/81	16:33.00	84.90	0.00	1564.71
5/27/81	17:14.00	84.80	0.00	1564.81
5/27/81	18: 5.00	84.60	0.00	1565.01
5/27/81	18:58.00	84.40	0.00	1565.21
5/27/81	20: 5.00	84.20	0.00	1565.41
5/27/81	20:37.00	84.00	0.00	1565.61
5/27/81	20:50.00	83.88	0.00	1565.73
5/27/81	21: 2.00	83.80	0.00	1565.81
5/27/81	21:54.00	83.50	0.00	1566.11
5/28/81	0: 2.00	82.80	0.00	1566.81
5/28/81	0:54.00	82.50	0.00	1567.11
5/28/81	1:40.00	81.80	0.00	1567.81
5/28/81	1:49.00	81.50	0.00	1568.11
5/28/81	2:22.00	80.80	0.00	1568.81
5/28/81	2:56.00	80.50	0.00	1569.11
5/28/81	5:38.00	79.80	0.00	1569.81
5/28/81	7: 0.00	79.50	0.00	1570.11
5/28/81	9:12.00	78.80	0.00	1570.81
5/28/81	9:48.00	78.50	0.00	1571.11
5/28/81	10:28.00	78.24	0.00	1571.37

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:29 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/25/81	17:20.00	89.29	0.00	1560.32
5/25/81	17:26.00	89.19	0.00	1560.42
5/25/81	18:17.00	89.35	0.00	1560.26
5/25/81	19:50.00	88.79	0.00	1560.82
5/25/81	20:12.00	88.86	0.00	1560.75
5/25/81	20:39.00	88.70	0.00	1560.91
5/25/81	21:40.00	88.63	0.00	1560.98
5/25/81	22:10.00	88.67	0.00	1560.94
5/25/81	23:20.00	88.63	0.00	1560.98
5/26/81	0: 8.00	88.67	0.00	1560.94
5/26/81	0:56.00	88.00	0.00	1561.61
5/26/81	2:15.00	87.84	0.00	1561.77
5/26/81	3:52.00	86.73	0.00	1562.88
5/26/81	4:13.00	86.66	0.00	1562.95
5/26/81	4:53.00	87.21	0.00	1562.40
5/26/81	7:12.00	87.41	0.00	1562.20
5/26/81	7:39.00	87.41	0.00	1562.20
5/26/81	7:49.00	87.53	0.00	1562.08
5/26/81	8:31.00	86.50	0.00	1563.11
5/26/81	10:11.00	86.02	0.00	1563.59
5/26/81	10:29.00	86.10	0.00	1563.51
5/26/81	11: 6.00	87.00	0.00	1562.61
5/26/81	11:27.00	87.52	0.00	1562.09
5/26/81	11:57.00	87.33	0.00	1562.28
5/26/81	12:12.00	87.39	0.00	1562.22
5/26/81	12:33.00	87.35	0.00	1562.26
5/26/81	12:42.00	87.22	0.00	1562.39
5/26/81	13: 7.00	87.36	0.00	1562.25
5/26/81	14: 4.00	87.39	0.00	1562.22
5/26/81	15:44.00	87.27	0.00	1562.34
5/26/81	16:27.00	87.47	0.00	1562.14
5/26/81	17:36.00	87.00	0.00	1562.61
5/26/81	18: 7.00	86.00	0.00	1563.61
5/26/81	18:37.00	85.00	0.00	1564.61
5/26/81	18:56.00	84.34	0.00	1565.27
5/26/81	19:44.00	83.95	0.00	1565.66
5/26/81	20:26.00	84.01	0.00	1565.60
5/26/81	22: 0.00	83.63	0.00	1565.98
5/26/81	22:27.00	83.75	0.00	1565.86
5/26/81	22:39.00	83.73	0.00	1565.88

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	21:41.00	87.46	0.00	1562.15
5/24/81	2:23.00	87.83	0.00	1561.78
5/24/81	2:45.00	87.78	0.00	1561.83
5/24/81	3: 9.00	87.77	0.00	1561.84
5/24/81	3:36.00	87.84	0.00	1561.77
5/24/81	5:10.00	87.11	0.00	1562.50
5/24/81	5:28.00	86.98	0.00	1562.63
5/24/81	7:48.00	87.60	0.00	1562.01
5/24/81	9:49.00	88.00	0.00	1561.61
5/24/81	13: 7.00	88.79	0.00	1560.82
5/24/81	13:37.00	89.00	0.00	1560.61
5/24/81	14:38.00	84.04	0.00	1565.57
5/24/81	15:14.00	88.69	0.00	1560.92
5/24/81	15:45.00	88.90	0.00	1560.71
5/24/81	17:19.00	89.10	0.00	1560.51
5/24/81	18:19.00	88.97	0.00	1560.64
5/24/81	18:44.00	88.97	0.00	1560.64
5/24/81	19:14.00	89.08	0.00	1560.53
5/24/81	20: 9.00	89.00	0.00	1560.61
5/24/81	20:39.00	89.00	0.00	1560.61
5/24/81	21:31.00	89.08	0.00	1560.53
5/24/81	22:10.00	89.08	0.00	1560.53
5/24/81	23: 2.00	88.00	0.00	1561.61
5/25/81	0:42.00	86.98	0.00	1562.63
5/25/81	1:25.00	88.00	0.00	1561.61
5/25/81	2:52.00	88.72	0.00	1560.89
5/25/81	3:23.00	88.72	0.00	1560.89
5/25/81	3:26.00	88.65	0.00	1560.96
5/25/81	5:36.00	89.10	0.00	1560.51
5/25/81	7:22.00	89.39	0.00	1561.22
5/25/81	10:30.00	89.23	0.00	1560.38
5/25/81	10:55.00	89.09	0.00	1560.52
5/25/81	11:25.00	89.09	0.00	1560.52
5/25/81	11:34.00	89.10	0.00	1560.51
5/25/81	12: 1.00	89.12	0.00	1560.49
5/25/81	13:39.00	88.40	0.00	1561.21
5/25/81	14:42.00	88.80	0.00	1560.81
5/25/81	15: 3.00	88.67	0.00	1560.94
5/25/81	15:10.00	89.25	0.00	1560.36
5/25/81	16:44.00	89.06	0.00	1560.55

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:29 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/22/81	15:23.00	92.00	0.00	1557.61
5/22/81	18:25.00	92.50	0.00	1557.11
5/22/81	18:56.00	92.71	0.00	1556.90
5/22/81	21:58.00	93.21	0.00	1556.40
5/22/81	22:31.00	93.10	0.00	1556.51
5/22/81	23:17.00	93.00	0.00	1556.61
5/22/81	23:35.00	92.86	0.00	1556.75
5/22/81	23:53.00	92.87	0.00	1556.74
5/23/81	1: 0.00	92.30	0.00	1557.31
5/23/81	1:15.00	92.00	0.00	1557.61
5/23/81	1:36.00	91.00	0.00	1558.61
5/23/81	2:16.00	90.00	0.00	1559.61
5/23/81	3:20.00	89.94	0.00	1559.67
5/23/81	5:21.00	89.49	0.00	1560.12
5/23/81	5:27.00	89.00	0.00	1560.61
5/23/81	5:39.00	88.49	0.00	1561.12
5/23/81	6:19.00	89.00	0.00	1560.61
5/23/81	7:38.00	90.00	0.00	1559.61
5/23/81	9: 6.00	90.73	0.00	1558.88
5/23/81	9:48.00	90.00	0.00	1559.61
5/23/81	10:40.00	89.24	0.00	1560.37
5/23/81	10:52.00	89.47	0.00	1560.14
5/23/81	10:55.00	89.38	0.00	1560.23
5/23/81	11:20.00	89.50	0.00	1560.11
5/23/81	11:32.00	89.45	0.00	1560.16
5/23/81	11:50.00	89.45	0.00	1560.16
5/23/81	12:26.00	89.55	0.00	1560.06
5/23/81	12:48.00	89.00	0.00	1560.61
5/23/81	14:16.00	87.94	0.00	1561.67
5/23/81	14:55.00	87.94	0.00	1561.67
5/23/81	15:22.00	87.84	0.00	1561.77
5/23/81	15:41.00	87.90	0.00	1561.71
5/23/81	15:53.00	87.86	0.00	1561.75
5/23/81	16: 2.00	87.88	0.00	1561.73
5/23/81	17:12.00	87.27	0.00	1562.34
5/23/81	18: 9.00	87.29	0.00	1562.32
5/23/81	19:55.00	87.76	0.00	1561.85
5/23/81	20:37.00	87.71	0.00	1561.90
5/23/81	20:54.00	87.71	0.00	1561.90
5/23/81	21: 5.00	87.74	0.00	1561.87

NAME.....211-1
LOCATION.....16533.5,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/20/81	18:35.00	74.20	0.00	1575.41
5/20/81	18:44.00	74.40	0.00	1575.21
5/20/81	18:54.00	74.60	0.00	1575.01
5/20/81	19: 3.00	74.80	0.00	1574.81
5/20/81	19:11.00	75.00	0.00	1574.61
5/20/81	19:20.00	75.20	0.00	1574.41
5/20/81	19:36.00	75.50	0.00	1574.11
5/20/81	20: 4.00	76.00	0.00	1573.61
5/20/81	20:31.00	76.50	0.00	1573.11
5/20/81	21: 4.00	77.00	0.00	1572.61
5/20/81	21:34.00	77.50	0.00	1572.11
5/20/81	22:10.00	78.00	0.00	1571.61
5/20/81	22:44.00	78.50	0.00	1571.11
5/20/81	23:20.00	79.00	0.00	1570.61
5/20/81	23:59.00	79.50	0.00	1570.11
5/21/81	0:38.00	80.00	0.00	1569.61
5/21/81	1:24.00	80.50	0.00	1569.11
5/21/81	2:15.00	81.00	0.00	1568.61
5/21/81	3: 3.00	81.50	0.00	1568.11
5/21/81	3:54.00	82.00	0.00	1567.61
5/21/81	4:49.00	82.50	0.00	1567.11
5/21/81	5:49.00	83.00	0.00	1566.61
5/21/81	6:58.00	83.50	0.00	1566.11
5/21/81	7:50.00	84.00	0.00	1565.61
5/21/81	8:47.00	84.50	0.00	1565.11
5/21/81	10: 6.00	85.00	0.00	1564.61
5/21/81	11:12.00	85.50	0.00	1564.11
5/21/81	11:18.00	86.00	0.00	1563.61
5/21/81	13:37.00	86.50	0.00	1563.11
5/21/81	15: 7.00	87.00	0.00	1562.61
5/21/81	16:53.00	87.50	0.00	1562.11
5/21/81	19:33.00	87.89	0.00	1561.72
5/21/81	19: 1.00	88.00	0.00	1561.61
5/21/81	21: 8.00	88.50	0.00	1561.11
5/21/81	23:31.00	89.00	0.00	1560.61
5/22/81	1:53.00	89.50	0.00	1560.11
5/22/81	4:49.00	90.00	0.00	1559.61
5/22/81	7:12.00	90.50	0.00	1559.11
5/22/81	9:44.00	91.00	0.00	1558.61
5/22/81	12: 9.00	91.50	0.00	1558.11

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:29 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/18/81	13:21.00	70.12	0.00	1579.49
5/18/81	14:10.00	70.14	0.00	1579.47
5/18/81	14:53.00	70.20	0.00	1579.41
5/18/81	16:32.00	70.30	0.00	1579.31
5/18/81	19:20.00	70.40	0.00	1579.21
5/18/81	21: 3.00	70.42	0.00	1579.19
5/18/81	22:57.00	70.40	0.00	1579.21
5/19/81	3:33.00	70.30	0.00	1579.31
5/19/81	8: 7.00	70.20	0.00	1579.41
5/19/81	10:25.00	70.17	0.00	1579.44
5/19/81	14:30.00	70.10	0.00	1579.51
5/19/81	20:43.00	70.00	0.00	1579.61
5/20/81	1:58.00	69.97	0.00	1579.64
5/20/81	11:21.00	69.96	0.00	1579.65
5/20/81	12: 4.00	69.96	0.00	1579.65
5/20/81	12:56.00	69.93	0.00	1579.68
5/20/81	13:48.00	70.00	0.00	1579.61
5/20/81	14:15.00	70.10	0.00	1579.51
5/20/81	14:33.00	70.20	0.00	1579.41
5/20/81	14:48.00	70.30	0.00	1579.31
5/20/81	15: 0.00	70.40	0.00	1579.21
5/20/81	15:11.00	70.50	0.00	1579.11
5/20/81	15:22.00	70.67	0.00	1578.94
5/20/81	15:33.00	70.80	0.00	1578.81
5/20/81	15:49.00	71.00	0.00	1578.61
5/20/81	16: 4.00	71.20	0.00	1578.41
5/20/81	16:17.00	71.40	0.00	1578.21
5/20/81	16:30.00	71.60	0.00	1578.01
5/20/81	16:43.00	71.80	0.00	1577.81
5/20/81	16:53.00	72.00	0.00	1577.61
5/20/81	17: 3.00	72.20	0.00	1577.41
5/20/81	17:13.00	72.40	0.00	1577.21
5/20/81	17:22.00	72.60	0.00	1577.01
5/20/81	17:31.00	72.80	0.00	1576.81
5/20/81	17:40.00	73.00	0.00	1576.61
5/20/81	17:49.00	73.20	0.00	1576.41
5/20/81	17:59.00	73.40	0.00	1576.21
5/20/81	18: 8.00	73.60	0.00	1576.01
5/20/81	18:17.00	73.80	0.00	1575.81
5/20/81	18:26.00	74.00	0.00	1575.61

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/12/81	23:19.00	74.20	0.00	1575.41
5/13/81	0:17.00	74.00	0.00	1575.61
5/13/81	1: 5.00	73.80	0.00	1575.81
5/13/81	1:53.00	73.60	0.00	1576.01
5/13/81	2:38.00	73.40	0.00	1576.21
5/13/81	3:29.00	73.20	0.00	1576.41
5/13/81	4:17.00	73.00	0.00	1576.61
5/13/81	5:12.00	72.80	0.00	1576.81
5/13/81	6: 3.00	72.60	0.00	1577.01
5/13/81	7: 3.00	72.40	0.00	1577.21
5/13/81	8: 6.00	72.20	0.00	1577.41
5/13/81	9:36.00	71.95	0.00	1577.66
5/13/81	10:25.00	71.80	0.00	1577.81
5/13/81	11:41.00	71.60	0.00	1578.01
5/13/81	13: 3.00	71.40	0.00	1578.21
5/13/81	14:35.00	71.20	0.00	1578.41
5/13/81	16:21.00	71.00	0.00	1578.61
5/13/81	18:23.00	70.80	0.00	1578.81
5/13/81	21: 7.00	70.60	0.00	1579.01
5/14/81	0:55.00	70.40	0.00	1579.21
5/14/81	9:47.00	70.11	0.00	1579.50
5/14/81	13:24.00	70.00	0.00	1579.61
5/14/81	17:29.00	69.90	0.00	1579.71
5/14/81	20:50.00	69.86	0.00	1579.75
5/15/81	3:52.00	69.84	0.00	1579.77
5/15/81	11: 8.00	69.94	0.00	1579.67
5/15/81	15: 7.00	69.94	0.00	1579.67
5/15/81	17:25.00	70.11	0.00	1579.50
5/15/81	21:52.00	70.08	0.00	1579.53
5/16/81	4: 9.00	70.09	0.00	1579.52
5/16/81	10:48.00	70.13	0.00	1579.48
5/16/81	19:32.00	70.15	0.00	1579.46
5/16/81	23: 3.00	70.17	0.00	1579.44
5/17/81	5:19.00	70.20	0.00	1579.41
5/17/81	10:16.00	70.20	0.00	1579.41
5/17/81	16:34.00	70.19	0.00	1579.42
5/18/81	2:55.00	70.16	0.00	1579.45
5/18/81	10:52.00	70.14	0.00	1579.47
5/18/81	12:18.00	70.13	0.00	1579.48
5/18/81	12:50.00	70.12	0.00	1579.49

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:29 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1649.61

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	13:43.00	68.50	0.00	1581.11
5/ 9/81	14: 6.00	69.00	0.00	1580.61
5/ 9/81	15:41.00	69.50	0.00	1580.11
5/ 9/81	18: 3.00	70.00	0.00	1579.61
5/10/81	2:45.00	70.18	0.00	1579.43
5/10/81	10:16.00	70.15	0.00	1579.46
5/10/81	16:36.00	70.50	0.00	1579.11
5/10/81	21:44.00	71.01	0.00	1578.60
5/11/81	6: 2.00	70.50	0.00	1579.11
5/11/81	13:56.00	70.21	0.00	1579.40
5/11/81	15: 8.00	70.24	0.00	1579.37
5/11/81	17:30.00	70.22	0.00	1579.39
5/12/81	0:13.00	70.38	0.00	1579.23
5/12/81	9:42.00	70.23	0.00	1579.38
5/12/81	10:16.00	70.85	0.00	1578.76
5/12/81	10:56.00	70.60	0.00	1579.01
5/12/81	12: 2.00	70.40	0.00	1579.21
5/12/81	14:57.00	70.13	0.00	1579.48
5/12/81	15:36.00	70.20	0.00	1579.41
5/12/81	16:33.00	70.60	0.00	1579.01
5/12/81	16:51.00	70.80	0.00	1578.81
5/12/81	16: 9.00	70.40	0.00	1579.21
5/12/81	17:21.00	71.20	0.00	1578.41
5/12/81	17:30.00	71.40	0.00	1578.21
5/12/81	17:42.00	71.60	0.00	1578.01
5/12/81	17:48.00	71.80	0.00	1577.81
5/12/81	17: 9.00	71.00	0.00	1578.61
5/12/81	18: 0.00	72.00	0.00	1577.61
5/12/81	18:18.00	72.40	0.00	1577.21
5/12/81	18:30.00	72.60	0.00	1577.01
5/12/81	18:36.00	72.80	0.00	1576.81
5/12/81	18:48.00	73.00	0.00	1576.61
5/12/81	18:57.00	73.20	0.00	1576.41
5/12/81	18: 9.00	72.20	0.00	1577.41
5/12/81	19:12.00	73.40	0.00	1576.21
5/12/81	19:24.00	73.60	0.00	1576.01
5/12/81	19:43.00	73.80	0.00	1575.81
5/12/81	19:58.00	74.00	0.00	1575.61
5/12/81	20:22.00	74.20	0.00	1575.41
5/12/81	21:43.00	74.38	0.00	1575.23

NAME.....210
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1625.33

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/31/81	18:12.00	44.76	-6.80	1587.37
6/ 1/81	4:12.00	44.84	-6.82	1587.31
6/ 1/81	14:36.00	44.75	-6.80	1587.38
6/ 1/81	18:24.00	44.66	-6.79	1587.46
6/ 2/81	0: 0.00	44.79	-6.81	1587.35
6/ 3/81	17:30.00	44.74	-6.80	1587.39
6/ 4/81	7:18.00	44.85	-6.82	1587.30
6/ 4/81	21:30.00	44.75	-6.80	1587.38
6/ 5/81	5:30.00	44.77	-6.81	1587.37
6/ 5/81	13:18.00	44.80	-6.81	1587.34
6/ 5/81	20:18.00	44.71	-6.80	1587.42
6/ 6/81	4:30.00	44.76	-6.80	1587.37
6/ 6/81	14: 6.00	44.78	-6.81	1587.36
6/ 8/81	12:36.00	44.64	-6.79	1587.48

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:27:18 PAGE 1

NAME.....210
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1625.33

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/23/81	14:42.00	45.75	-6.95	1586.53
5/23/81	18:41.00	45.70	-6.95	1586.58
5/23/81	23:11.00	45.69	-6.94	1586.58
5/24/81	2:53.00	45.73	-6.95	1586.55
5/24/81	3:30.00	45.75	-6.95	1586.53
5/24/81	10:36.00	45.73	-6.95	1586.55
5/24/81	14: 4.00	45.75	-6.95	1586.53
5/24/81	17:45.00	45.72	-6.95	1586.56
5/24/81	23:32.00	45.72	-6.95	1586.56
5/25/81	6: 1.00	45.79	-6.96	1586.50
5/25/81	11:42.00	45.78	-6.96	1586.51
5/25/81	16:25.00	45.84	-6.97	1586.46
5/25/81	23:47.00	45.78	-6.96	1586.51
5/26/81	6:38.00	45.85	-6.97	1586.45
5/26/81	10:52.00	45.82	-6.96	1586.47
5/26/81	17:13.00	45.86	-6.97	1586.44
5/26/81	21:11.00	45.85	-6.97	1586.45
5/27/81	1:29.00	45.79	-6.96	1586.50
5/27/81	7:15.00	45.88	-6.97	1586.42
5/27/81	9:49.00	45.84	-6.97	1586.46
5/27/81	14: 4.00	45.79	-6.96	1586.50
5/27/81	19:27.00	45.85	-6.97	1586.45
5/28/81	1:34.00	45.72	-6.95	1586.56
5/28/81	7:15.00	45.72	-6.95	1586.56
5/28/81	9:56.00	45.62	-6.93	1586.64
5/28/81	13:24.00	45.50	-6.92	1586.75
5/28/81	19:51.00	45.45	-6.91	1586.79
5/28/81	22:15.00	45.40	-6.90	1586.83
5/29/81	0:39.00	45.30	-6.89	1586.92
5/29/81	3:30.00	45.25	-6.88	1586.96
5/29/81	6: 0.00	45.25	-6.88	1586.96
5/29/81	7:36.00	45.28	-6.88	1586.93
5/29/81	10:12.00	45.22	-6.87	1586.98
5/29/81	13:12.00	45.10	-6.86	1587.09
5/29/81	16:24.00	45.03	-6.84	1587.14
5/30/81	3: 0.00	45.13	-6.86	1587.06
5/30/81	11:48.00	45.00	-6.84	1587.17
5/30/81	16:36.00	44.95	-6.82	1587.30
5/31/81	3:12.00	44.94	-6.83	1587.22
5/31/81	13:12.00	44.95	-6.82	1587.30

NAME.....195W
LOCATION.....16342.0,78954.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVENS
M.P. ELEVATION (FEET)...1615.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	1:32.00	28.80	0.00	1586.55
6/15/81	11:17.00	28.92	0.00	1586.43
6/15/81	15:43.00	29.20	0.00	1586.15
6/15/81	19:11.00	29.00	0.00	1586.35
6/17/81	10: 7.00	29.33	0.00	1586.02
6/17/81	20:26.00	29.40	0.00	1585.95
6/18/81	9:58.00	29.49	0.00	1585.86
6/18/81	14:54.00	29.53	0.00	1585.82
6/19/81	3:25.00	29.40	0.00	1585.95
6/19/81	11:24.00	29.35	0.00	1586.00
6/20/81	8:36.00	29.20	0.00	1586.15
6/21/81	22:12.00	29.00	0.00	1586.35
6/23/81	13:12.00	28.82	0.00	1586.53
6/24/81	14:43.00	28.60	0.00	1586.75

NAME.....1954
LOCATION.....16342.0,78954.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1615.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	9:27.00	27.64	0.00	1587.71
6/ 9/81	17:41.00	27.62	0.00	1587.73
6/ 9/81	17:50.00	27.58	0.00	1587.77
6/ 9/81	18:17.00	27.64	0.00	1587.71
6/ 9/81	19: 2.00	27.62	0.00	1587.73
6/ 9/81	21:25.00	27.63	0.00	1587.72
6/10/81	0:55.00	27.62	0.00	1587.73
6/10/81	6:49.00	27.62	0.00	1587.73
6/10/81	15:15.00	27.59	0.00	1587.76
6/10/81	17:31.00	27.59	0.00	1587.76
6/10/81	18:13.00	27.62	0.00	1587.73
6/10/81	19:25.00	27.60	0.00	1587.75
6/10/81	20:50.00	27.60	0.00	1587.75
6/10/81	20:59.00	27.62	0.00	1587.73
6/10/81	21:23.00	27.60	0.00	1587.75
6/10/81	22:26.00	27.60	0.00	1587.75
6/10/81	22:38.00	27.62	0.00	1587.73
6/10/81	23: 2.00	27.60	0.00	1587.75
6/11/81	7:34.00	27.60	0.00	1587.75
6/11/81	9:39.00	27.57	0.00	1587.78
6/11/81	13:12.00	27.56	0.00	1587.79
6/11/81	13:60.00	27.63	0.00	1587.72
6/11/81	14:30.00	27.63	0.00	1587.72
6/11/81	14:45.00	27.61	0.00	1587.74
6/11/81	20:24.00	27.80	0.00	1587.55
6/12/81	5:39.00	28.00	0.00	1587.35
6/12/81	12: 0.00	28.08	0.00	1587.27
6/12/81	20: 8.00	28.00	0.00	1587.35
6/13/81	11: 2.00	28.40	0.00	1586.95
6/13/81	11:21.00	28.38	0.00	1586.97
6/13/81	20:43.00	28.50	0.00	1586.85
6/14/81	0:41.00	28.59	0.00	1586.76
6/14/81	4:57.00	28.70	0.00	1586.65
6/14/81	13:33.00	28.70	0.00	1586.65
6/14/81	19:58.00	28.80	0.00	1586.55
6/14/81	20:19.00	28.84	0.00	1586.51
6/14/81	20:49.00	28.75	0.00	1586.59
6/14/81	21:34.00	28.81	0.00	1586.51
6/14/81	22: 1.00	28.80	0.00	1586.55
6/15/81	0:44.00	28.83	0.00	1586.52

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/21/81	9:42.00	76.80	0.00	1586.70
6/21/81	10:54.00	77.00	0.00	1586.50
6/21/81	13:18.00	77.20	0.00	1586.30
6/21/81	14: 6.00	77.25	0.00	1586.25
6/21/81	15:42.00	77.20	0.00	1586.30
6/21/81	17:42.00	77.00	0.00	1586.50
6/21/81	18:54.00	76.80	0.00	1586.70
6/21/81	20:54.00	76.60	0.00	1586.90
6/21/81	22:30.00	76.50	0.00	1587.00
6/22/81	1:42.00	76.60	0.00	1586.90
6/22/81	4: 6.00	76.66	0.00	1586.84
6/22/81	5:18.00	76.60	0.00	1586.90
6/22/81	8:54.00	76.45	0.00	1587.05
6/22/81	11:18.00	76.60	0.00	1586.90
6/22/81	12:55.00	76.80	0.00	1586.70
6/22/81	16: 7.00	76.99	0.00	1586.51
6/22/81	18:55.00	76.80	0.00	1586.70
6/22/81	20:55.00	76.60	0.00	1586.90
6/23/81	2:55.00	76.60	0.00	1586.90
6/23/81	4:55.00	76.67	0.00	1586.83
6/23/81	7:19.00	76.60	0.00	1586.90
6/23/81	10: 7.00	76.47	0.00	1587.03
6/23/81	10:31.00	76.45	0.00	1587.05
6/23/81	12:55.00	76.60	0.00	1586.90
6/23/81	16: 7.00	76.79	0.00	1586.71
6/23/81	19:19.00	76.60	0.00	1586.90
6/23/81	21:19.00	76.40	0.00	1587.10
6/23/81	23:43.00	76.20	0.00	1587.30
6/24/81	0:55.00	76.19	0.00	1587.31
6/24/81	2: 7.00	76.20	0.00	1587.30
6/24/81	6: 7.00	76.36	0.00	1587.14
6/24/81	9:44.00	76.20	0.00	1587.30
6/24/81	12: 8.00	76.13	0.00	1587.37
6/24/81	14: 8.00	76.20	0.00	1587.30
6/24/81	18: 8.00	76.18	0.00	1587.02

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:55 PAGE

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	12:21.00	78.20	0.00	1585.30
6/18/81	13:57.00	78.28	0.00	1585.22
6/18/81	16:10.00	78.20	0.00	1585.30
6/18/81	17:40.00	78.00	0.00	1585.50
6/18/81	19:28.00	77.80	0.00	1585.70
6/18/81	20:47.00	77.75	0.00	1585.75
6/18/81	22: 5.00	77.80	0.00	1585.70
6/19/81	1:30.00	77.96	0.00	1585.54
6/19/81	4:12.00	77.80	0.00	1585.70
6/19/81	5:18.00	77.62	0.00	1585.88
6/19/81	9:50.00	77.80	0.00	1585.70
6/19/81	10: 5.00	77.84	0.00	1585.66
6/19/81	10:41.00	78.00	0.00	1585.50
6/19/81	12: 5.00	78.20	0.00	1585.30
6/19/81	13:17.00	78.24	0.00	1585.26
6/19/81	14:17.00	78.20	0.00	1585.30
6/19/81	15:41.00	78.00	0.00	1585.50
6/19/81	16:53.00	77.80	0.00	1585.70
6/19/81	18:29.00	77.60	0.00	1585.90
6/19/81	20:29.00	77.40	0.00	1586.10
6/19/81	22:29.00	77.40	0.00	1586.10
6/19/81	23:41.00	77.37	0.00	1586.13
6/20/81	2: 5.00	77.51	0.00	1585.99
6/20/81	4: 5.00	77.40	0.00	1586.10
6/20/81	6: 1.00	77.16	0.00	1586.34
6/20/81	6:29.00	77.20	0.00	1586.30
6/20/81	9:17.00	77.20	0.00	1586.30
6/20/81	10:53.00	77.40	0.00	1586.10
6/20/81	12:29.00	77.60	0.00	1585.90
6/20/81	14:29.00	77.67	0.00	1585.83
6/20/81	16: 5.00	77.60	0.00	1585.90
6/20/81	17:17.00	77.40	0.00	1586.10
6/20/81	18:54.00	77.20	0.00	1586.30
6/20/81	20: 6.00	77.00	0.00	1586.50
6/20/81	22: 6.00	76.89	0.00	1586.61
6/21/81	0:54.00	77.00	0.00	1586.50
6/21/81	3:42.00	77.06	0.00	1586.44
6/21/81	4:30.00	77.00	0.00	1586.50
6/21/81	6:54.00	76.80	0.00	1586.70
6/21/81	8: 6.00	76.73	0.00	1586.77

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 1[illegible]:55 PAGE

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	9: 1.00	76.60	0.00	1586.90
6/15/81	10:21.00	76.78	0.00	1586.72
6/15/81	12: 9.00	76.90	0.00	1586.60
6/15/81	13:52.00	76.80	0.00	1586.70
6/15/81	15:10.00	76.60	0.00	1586.90
6/15/81	16:46.00	76.40	0.00	1587.10
6/15/81	18:41.00	76.31	0.00	1587.19
6/15/81	20:23.00	76.40	0.00	1587.10
6/15/81	22: 5.00	76.60	0.00	1586.90
6/16/81	0:36.00	76.74	0.00	1586.76
6/16/81	3:30.00	76.60	0.00	1586.90
6/16/81	5: 1.00	76.55	0.00	1586.95
6/16/81	6:13.00	76.60	0.00	1586.90
6/16/81	7:55.00	76.80	0.00	1586.70
6/16/81	9: 2.00	77.00	0.00	1586.50
6/16/81	10:14.00	77.20	0.00	1586.30
6/16/81	12:38.00	77.43	0.00	1586.07
6/16/81	15:27.00	77.20	0.00	1586.30
6/16/81	16:51.00	77.00	0.00	1586.50
6/16/81	19:10.00	76.86	0.00	1586.64
6/16/81	21:28.00	77.00	0.00	1586.50
6/16/81	23: 5.00	77.20	0.00	1586.30
6/17/81	1:29.00	77.32	0.00	1586.18
6/17/81	3:60.00	77.20	0.00	1586.30
6/17/81	5:36.00	77.15	0.00	1586.35
6/17/81	6:54.00	77.20	0.00	1586.30
6/17/81	8:25.00	77.40	0.00	1586.10
6/17/81	9:39.00	77.60	0.00	1585.90
6/17/81	10:33.00	77.80	0.00	1585.70
6/17/81	12:45.00	78.00	0.00	1585.50
6/17/81	15:10.00	77.80	0.00	1585.70
6/17/81	16:28.00	77.60	0.00	1585.90
6/17/81	17:35.00	77.40	0.00	1586.10
6/17/81	19:59.00	77.24	0.00	1586.26
6/17/81	22:24.00	77.40	0.00	1586.10
6/18/81	1:42.00	77.60	0.00	1585.90
6/18/81	6: 1.00	77.40	0.00	1586.10
6/18/81	8:28.00	77.50	0.00	1585.90
6/18/81	9:50.00	77.80	0.00	1585.70
6/18/81	11: 2.00	78.00	0.00	1585.50

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:55 PAGE 2

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/12/81	10:44.00	75.43	0.00	1588.07
6/12/81	11:47.00	75.43	0.00	1588.07
6/12/81	14:24.00	75.20	0.00	1588.30
6/12/81	16:32.00	75.11	0.00	1588.39
6/12/81	18:36.00	75.20	0.00	1588.30
6/12/81	20:58.00	75.40	0.00	1588.10
6/12/81	23: 5.00	75.50	0.00	1588.00
6/13/81	1:30.00	74.40	0.00	1589.10
6/13/81	3:58.00	74.32	0.00	1589.18
6/13/81	5:32.00	75.40	0.00	1588.10
6/13/81	7: 8.00	75.60	0.00	1587.90
6/13/81	8:33.00	75.80	0.00	1587.70
6/13/81	10:29.00	76.00	0.00	1587.50
6/13/81	11:20.00	76.02	0.00	1587.48
6/13/81	12: 2.00	76.00	0.00	1587.50
6/13/81	14:12.00	75.80	0.00	1587.70
6/13/81	16: 3.00	75.60	0.00	1587.90
6/13/81	17:37.00	75.53	0.00	1587.97
6/13/81	19: 4.00	75.60	0.00	1587.90
6/13/81	21:10.00	75.80	0.00	1587.70
6/14/81	0:11.00	75.95	0.00	1587.55
6/14/81	2:18.00	75.80	0.00	1587.70
6/14/81	4:36.00	75.69	0.00	1587.81
6/14/81	6:16.00	75.80	0.00	1587.70
6/14/81	7:37.00	76.00	0.00	1587.50
6/14/81	8:56.00	76.20	0.00	1587.30
6/14/81	9:16.00	76.23	0.00	1587.27
6/14/81	9:55.00	76.30	0.00	1587.20
6/14/81	11: 1.00	76.38	0.00	1587.12
6/14/81	13: 4.00	76.30	0.00	1587.20
6/14/81	14: 4.00	76.20	0.00	1587.30
6/14/81	15:34.00	76.00	0.00	1587.50
6/14/81	17:55.00	75.84	0.00	1587.66
6/14/81	20:13.00	76.00	0.00	1587.50
6/14/81	22:37.00	76.20	0.00	1587.30
6/15/81	0:10.00	76.23	0.00	1587.27
6/15/81	1:19.00	76.20	0.00	1587.30
6/15/81	4:31.00	76.05	0.00	1587.45
6/15/81	6:31.00	76.20	0.00	1587.30
6/15/81	7:55.00	76.40	0.00	1587.10

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:55 PAGE 1

NAME.....155
LOCATION.....17093.8,78198.1
TYPE.....SHAFT
MEASUREMENT TYPE.....STEVEN'S
M.P. ELEVATION (FEET)...1663.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 9/81	10:52.00	74.83	0.00	1588.67
6/ 9/81	11:52.00	74.80	0.00	1588.70
6/ 9/81	13:22.00	74.77	0.00	1588.73
6/ 9/81	14:55.00	74.80	0.00	1588.70
6/ 9/81	17: 7.00	74.90	0.00	1588.60
6/ 9/81	18:37.00	74.57	0.00	1588.93
6/ 9/81	18:37.00	74.57	0.00	1588.93
6/ 9/81	20:10.00	74.57	0.00	1588.93
6/ 9/81	21:52.00	74.90	0.00	1588.60
6/ 9/81	23: 7.00	74.80	0.00	1588.70
6/10/81	0:22.00	74.70	0.00	1588.80
6/10/81	2:40.00	74.63	0.00	1588.87
6/10/81	4:22.00	74.79	0.00	1588.80
6/10/81	5:34.00	74.80	0.00	1588.70
6/10/81	6:49.00	74.90	0.00	1588.60
6/10/81	9:16.00	74.90	0.00	1588.60
6/10/81	9:16.00	74.00	0.00	1589.50
6/10/81	16:50.00	74.80	0.00	1588.70
6/11/81	8:40.00	75.11	0.00	1588.39
6/11/81	9:55.00	75.13	0.00	1588.37
6/11/81	11: 1.00	75.10	0.00	1588.40
6/11/81	12:25.00	75.00	0.00	1588.50
6/11/81	13:10.00	74.90	0.00	1588.60
6/11/81	14: 7.00	74.80	0.00	1588.70
6/11/81	15:13.00	74.70	0.00	1588.80
6/11/81	16:40.00	74.66	0.00	1588.84
6/11/81	17:40.00	74.70	0.00	1588.80
6/11/81	19:19.00	74.80	0.00	1588.70
6/11/81	21: 1.00	74.90	0.00	1588.60
6/11/81	22:10.00	74.93	0.00	1588.57
6/11/81	23:31.00	71.90	0.00	1588.60
6/12/81	1:25.00	74.80	0.00	1588.70
6/12/81	3: 1.00	74.76	0.00	1588.74
6/12/81	4:10.00	74.80	0.00	1588.70
6/12/81	5:25.00	74.90	0.00	1588.60
6/12/81	6:10.00	75.00	0.00	1588.50
6/12/81	6:55.00	75.10	0.00	1588.40
6/12/81	7:43.00	75.20	0.00	1588.30
6/12/81	8:28.00	75.30	0.00	1588.20
6/12/81	10:14.00	75.43	0.00	1588.07

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:44 PAGE

NAME.....NW4
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.26

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	15:49.50	42.98	0.00	1582.28
6/18/81	16:48.00	42.97	0.00	1582.29
6/18/81	17:39.00	42.95	0.00	1582.31
6/18/81	19:38.00	41.86	0.00	1583.40
6/18/81	21:50.00	42.74	0.00	1582.52
6/18/81	23:50.00	42.69	0.00	1582.57
6/19/81	2:10.00	42.60	0.00	1582.66
6/19/81	3:30.00	42.58	0.00	1582.68
6/19/81	5:40.00	42.49	0.00	1582.77
6/19/81	7:35.00	42.46	0.00	1582.80
6/19/81	11:35.00	42.36	0.00	1582.90
6/19/81	16:45.00	42.30	0.00	1582.96
6/19/81	23:39.00	42.15	0.00	1583.11
6/20/81	5:52.00	42.02	0.00	1583.24
6/20/81	13:52.00	41.86	0.00	1583.40
6/20/81	17:34.00	41.83	0.00	1583.43
6/21/81	9: 3.00	41.54	0.00	1583.72
6/21/81	18: 6.00	41.41	0.00	1583.85
6/22/81	10:10.00	41.01	0.00	1584.25
6/22/81	17:52.00	40.94	0.00	1584.32
6/23/81	10:19.00	40.99	0.00	1584.27
6/23/81	17:30.00	40.92	0.00	1584.34
6/24/81	15:47.00	40.76	0.00	1584.50

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:44 PAGE 4

NAME.....MW4
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.26

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 7/81	4:37.00	38.92	0.00	1586.34
6/ 7/81	8:33.00	38.89	0.00	1586.37
6/ 7/81	15:40.00	38.95	0.00	1586.31
6/ 7/81	20:52.00	38.97	0.00	1586.29
6/ 9/81	12: 0.00	38.66	0.00	1586.60
6/11/81	11:36.00	38.98	0.00	1586.28
6/11/81	12:51.00	39.00	0.00	1586.26
6/11/81	13:51.00	39.04	0.00	1586.22
6/11/81	16:18.00	39.19	0.00	1586.07
6/11/81	20:32.00	39.40	0.00	1585.86
6/11/81	23: 7.00	39.55	0.00	1585.71
6/12/81	5:50.00	39.79	0.00	1585.47
6/12/81	9:10.00	39.92	0.00	1585.34
6/12/81	14:49.00	40.10	0.00	1585.16
6/12/81	20: 1.00	40.28	0.00	1584.98
6/13/81	0:45.00	40.42	0.00	1584.84
6/13/81	5:25.00	40.55	0.00	1584.71
6/13/81	9: 6.00	40.66	0.00	1584.60
6/13/81	15:21.00	40.83	0.00	1584.43
6/13/81	19:38.00	40.93	0.00	1584.33
6/13/81	23:40.00	41.08	0.00	1584.18
6/14/81	5:55.00	41.20	0.00	1584.06
6/14/81	13:12.00	41.37	0.00	1583.89
6/14/81	19:15.00	41.49	0.00	1583.77
6/15/81	0:45.00	41.57	0.00	1583.69
6/15/81	6:20.00	41.73	0.00	1583.53
6/15/81	15:41.00	41.90	0.00	1583.36
6/15/81	19:30.00	41.95	0.00	1583.31
6/16/81	0:25.00	42.03	0.00	1583.23
6/16/81	6: 0.00	42.81	0.00	1582.45
6/16/81	13:12.00	42.27	0.00	1582.99
6/16/81	18:24.00	42.33	0.00	1582.93
6/17/81	0:10.00	42.43	0.00	1582.83
6/17/81	5:30.00	42.50	0.00	1582.76
6/17/81	12:48.00	42.62	0.00	1582.64
6/17/81	18:42.00	42.69	0.00	1582.57
6/18/81	0:20.00	42.77	0.00	1582.49
6/18/81	5:45.00	42.85	0.00	1582.41
6/18/81	11:38.00	42.93	0.00	1582.33
6/19/81	14:43.50	42.98	0.00	1582.28

CRANDCA MINE WELL DATA LISTING DATE 11/24/81 TIME 17:26:44 PAGE

NAME.....MW4
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.25

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 2/81	18: 7.00	41.69	0.00	1583.57
5/ 2/81	19: 5.00	41.60	0.00	1583.66
5/ 2/81	20: 6.00	41.56	0.00	1583.70
5/ 2/81	21:10.00	41.48	0.00	1583.78
5/ 2/81	22: 0.00	41.43	0.00	1583.83
5/ 2/81	23: 0.00	41.37	0.00	1583.89
5/ 3/81	1: 0.00	41.28	0.00	1583.98
5/ 3/81	3:20.00	41.17	0.00	1584.09
5/ 3/81	5:15.00	41.10	0.00	1584.16
5/ 3/81	7:15.00	41.04	0.00	1584.22
5/ 3/81	9: 0.00	41.01	0.00	1584.25
5/ 3/81	11: 9.00	40.98	0.00	1584.28
5/ 4/81	12:15.00	40.52	0.00	1584.74
5/ 5/81	5:56.00	40.33	0.00	1584.93
5/ 6/81	5:22.00	39.55	0.00	1585.71
5/ 7/81	5:30.00	40.04	0.00	1585.22
5/15/81	19:34.00	39.40	0.00	1585.86
5/17/81	11:40.00	39.33	0.00	1585.93
5/18/81	11:15.00	39.29	0.00	1585.97
5/19/81	2: 0.00	39.20	0.00	1586.06
5/20/81	11:11.00	39.19	0.00	1586.07
5/21/81	16: 5.00	39.14	0.00	1586.12
5/22/81	15:57.00	39.20	0.00	1586.06
5/23/81	14:35.00	39.13	0.00	1586.13
5/24/81	15:10.00	39.15	0.00	1586.11
5/25/81	15: 6.00	39.12	0.00	1586.14
5/26/81	18: 1.00	39.12	0.00	1586.14
5/28/81	21:31.00	39.05	0.00	1586.21
5/29/81	16: 1.00	39.07	0.00	1586.19
5/30/81	10:38.00	39.10	0.00	1586.16
5/31/81	11: 8.00	39.05	0.00	1586.21
6/ 1/81	9:51.00	38.97	0.00	1586.29
6/ 2/81	19: 9.00	39.09	0.00	1586.17
6/ 3/81	10:24.00	38.90	0.00	1586.36
6/ 4/81	11: 9.00	38.97	0.00	1586.29
6/ 5/81	13: 0.00	38.99	0.00	1586.27
6/ 6/81	6:47.00	38.96	0.00	1586.30
6/ 6/81	16:22.00	38.94	0.00	1586.32
6/ 6/81	20:36.00	38.94	0.00	1586.32
6/ 7/81	1:18.00	38.90	0.00	1586.36

NAME.....MW4
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.26

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 1/81	11: 8.00	59.94	0.00	1565.32
5/ 1/81	13: 5.00	60.16	0.00	1565.10
5/ 1/81	15: 5.00	60.35	0.00	1564.91
5/ 1/81	17: 6.00	60.56	0.00	1564.70
5/ 1/81	19:12.00	60.64	0.00	1564.62
5/ 1/81	21: 0.00	60.93	0.00	1564.33
5/ 1/81	23:30.00	61.01	0.00	1564.25
5/ 2/81	1:20.00	61.08	0.00	1564.18
5/ 2/81	3:15.00	61.20	0.00	1564.06
5/ 2/81	5:15.00	61.42	0.00	1563.84
5/ 2/81	7:15.00	61.50	0.00	1563.76
5/ 2/81	9: 6.00	61.61	0.00	1563.65
5/ 2/81	10:57.00	61.61	0.00	1563.65
5/ 2/81	11: 1.25	45.11	0.00	1580.15
5/ 2/81	11: 2.00	44.77	0.00	1580.49
5/ 2/81	11: 3.00	44.25	0.00	1581.01
5/ 2/81	11: 5.50	43.57	0.00	1581.69
5/ 2/81	11: 6.50	43.55	0.00	1581.71
5/ 2/81	11: 7.50	43.17	0.00	1582.09
5/ 2/81	11:11.00	43.40	0.00	1581.86
5/ 2/81	11:12.00	43.41	0.00	1581.85
5/ 2/81	11:13.00	43.37	0.00	1581.89
5/ 2/81	11:14.00	43.36	0.00	1581.90
5/ 2/81	11:15.00	43.33	0.00	1581.93
5/ 2/81	11:17.00	43.29	0.00	1581.97
5/ 2/81	11:19.00	43.28	0.00	1581.98
5/ 2/81	11:25.00	43.17	0.00	1582.09
5/ 2/81	11:30.00	43.10	0.00	1582.16
5/ 2/81	11:35.00	43.06	0.00	1582.20
5/ 2/81	11:40.00	43.00	0.00	1582.26
5/ 2/81	11:50.00	42.91	0.00	1582.35
5/ 2/81	12: 0.00	42.83	0.00	1582.43
5/ 2/81	12:11.00	42.75	0.00	1582.51
5/ 2/81	12:20.00	42.70	0.00	1582.56
5/ 2/81	12:31.00	42.64	0.00	1582.62
5/ 2/81	12:40.00	42.58	0.00	1582.66
5/ 2/81	13:23.00	42.37	0.00	1582.89
5/ 2/81	14:14.00	42.19	0.00	1583.07
5/ 2/81	15: 6.00	42.06	0.00	1583.20
5/ 2/81	16: 4.00	41.90	0.00	1583.36

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NAME.....WW4
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.26

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
4/29/81	12:43.00	39.59	0.00	1585.67
4/29/81	13: 5.00	55.74	0.00	1569.52
4/29/81	13:10.00	55.78	0.00	1569.48
4/29/81	13:15.00	55.87	0.00	1569.39
4/29/81	13:33.00	55.99	0.00	1569.27
4/29/81	14: 6.00	56.06	0.00	1569.20
4/29/81	14:21.00	56.14	0.00	1569.12
4/29/81	14:51.00	56.19	0.00	1569.07
4/29/81	15:44.00	56.26	0.00	1569.00
4/29/81	16:47.00	56.34	0.00	1568.92
4/29/81	18: 3.00	56.37	0.00	1568.89
4/29/81	19: 0.00	56.39	0.00	1568.87
4/29/81	19:45.00	56.43	0.00	1568.83
4/29/81	21: 0.00	56.52	0.00	1568.74
4/29/81	22: 0.00	56.55	0.00	1568.71
4/29/81	23: 0.00	56.58	0.00	1568.68
4/29/81	24: 0.00	56.61	0.00	1568.65
4/30/81	1: 0.00	56.67	0.00	1568.59
4/30/81	2: 0.00	56.72	0.00	1568.54
4/30/81	3: 0.00	56.76	0.00	1568.50
4/30/81	4: 0.00	56.78	0.00	1568.48
4/30/81	5: 0.00	56.83	0.00	1568.43
4/30/81	6: 0.00	56.87	0.00	1568.39
4/30/81	7: 0.00	56.89	0.00	1568.37
4/30/81	8: 0.00	56.94	0.00	1568.32
4/30/81	9:28.00	56.97	0.00	1568.29
4/30/81	11:32.00	56.66	0.00	1568.60
4/30/81	13: 2.00	56.67	0.00	1568.59
4/30/81	15:24.00	57.19	0.00	1568.07
4/30/81	17:56.00	58.35	0.00	1566.91
4/30/81	18:53.00	58.50	0.00	1566.76
4/30/81	19: 9.00	58.22	0.00	1567.04
4/30/81	20: 5.00	58.25	0.00	1567.01
4/30/81	20:58.00	58.40	0.00	1566.86
4/30/81	23: 0.00	58.51	0.00	1566.75
5/ 1/81	1: 0.00	58.68	0.00	1566.58
5/ 1/81	3: 0.00	58.87	0.00	1566.39
5/ 1/81	5: 0.00	59.17	0.00	1566.09
5/ 1/81	7: 0.00	59.33	0.00	1565.93
5/ 1/81	9: 0.00	59.55	0.00	1565.71

NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1646.17

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/13/81	17: 4.00	67.15	0.00	1579.02
6/13/81	23: 2.00	67.17	0.00	1579.00
6/14/81	6:53.00	67.09	0.00	1579.08
6/14/81	12: 6.00	67.18	0.00	1578.99
6/14/81	17:42.00	67.20	0.00	1578.97
6/14/81	23:20.00	67.17	0.00	1579.00
6/15/81	7:26.00	67.26	0.00	1578.91
6/15/81	11:58.00	67.30	0.00	1578.87
6/15/81	17: 0.00	67.30	0.00	1578.87
6/15/81	23:45.00	67.32	0.00	1578.85
6/16/81	5:58.00	67.30	0.00	1578.87
6/16/81	11:58.00	67.36	0.00	1578.81
6/16/81	17: 8.00	67.40	0.00	1578.77
6/16/81	23:37.00	67.50	0.00	1578.67
6/17/81	6:42.00	67.53	0.00	1578.64
6/17/81	12: 7.00	67.52	0.00	1578.65
6/17/81	16:45.00	67.50	0.00	1578.67
6/17/81	23:26.00	67.33	0.00	1578.84
6/18/81	6:45.00	67.33	0.00	1578.84
6/18/81	12: 0.00	67.36	0.00	1578.81
6/18/81	18:39.00	67.34	0.00	1578.83
6/18/81	23:25.00	67.33	0.00	1578.84
6/19/81	6:22.00	67.23	0.00	1578.94
6/19/81	12:42.00	67.18	0.00	1578.99
6/19/81	15:52.00	67.12	0.00	1579.05
6/20/81	7:25.00	66.91	0.00	1579.23
6/20/81	16:21.00	66.88	0.00	1579.29
6/21/81	10:17.00	66.88	0.00	1579.29
6/21/81	16:52.00	66.83	0.00	1579.34
6/22/81	9:17.00	66.80	0.00	1579.37
6/22/81	16:36.00	66.94	0.00	1579.23
6/23/81	9:13.00	67.05	0.00	1579.12
6/23/81	16:16.00	67.07	0.00	1579.10
6/24/81	14:40.00	66.80	0.00	1579.37

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NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1646.17

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/ 9/81	13:30.00	66.89	0.00	1579.28
5/ 9/81	17:45.00	66.89	0.00	1579.28
5/10/81	7:20.00	66.84	0.00	1579.33
5/11/81	7:10.00	66.82	0.00	1579.35
5/12/81	7: 0.00	66.80	0.00	1579.37
5/15/81	17:38.00	66.83	0.00	1579.34
5/16/81	18:21.00	66.81	0.00	1579.36
5/17/81	9:24.00	66.89	0.00	1579.28
5/18/81	9: 5.00	66.80	0.00	1579.37
5/19/81	9:11.00	66.72	0.00	1579.45
5/20/81	9:10.00	66.68	0.00	1579.49
5/24/81	13: 0.00	75.80	0.00	1570.37
5/25/81	12:35.00	73.80	0.00	1572.37
5/26/81	15: 9.00	73.90	0.00	1572.27
5/29/81	8:55.00	78.66	0.00	1567.51
5/30/81	9: 8.00	69.90	0.00	1576.27
5/31/81	5: 1.00	67.31	0.00	1578.86
5/31/81	7: 1.00	67.31	0.00	1578.86
6/ 1/81	9: 3.00	67.53	0.00	1578.64
6/ 2/81	6:58.00	66.95	0.00	1579.22
6/ 3/81	6:54.00	66.74	0.00	1579.43
6/ 4/81	6:59.00	66.98	0.00	1579.19
6/ 5/81	6:56.00	66.80	0.00	1579.37
6/ 6/81	8:53.00	66.81	0.00	1579.36
6/ 7/81	7: 0.00	66.86	0.00	1579.31
6/ 9/81	2:59.00	66.83	0.00	1579.34
6/ 9/81	12: 0.00	66.80	0.00	1579.37
6/ 9/81	19: 9.00	66.80	0.00	1579.37
6/10/81	7: 4.00	66.79	0.00	1579.38
6/10/81	17:19.00	66.88	0.00	1579.29
6/11/81	6:40.00	66.92	0.00	1579.25
6/11/81	15:21.00	66.87	0.00	1579.30
6/11/81	19:41.00	66.98	0.00	1579.19
6/12/81	1:33.00	67.53	0.00	1578.64
6/12/81	7:41.00	67.49	0.00	1578.68
6/12/81	11:48.00	67.22	0.00	1578.95
6/12/81	17:37.00	67.20	0.00	1578.97
6/12/81	23:35.00	67.24	0.00	1578.93
6/13/81	6:52.00	67.22	0.00	1578.95
6/13/81	12:10.00	67.22	0.00	1578.95

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NAME.....TW-1
LOCATION.....16883.9,79723.3
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1602.50

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19:10.00	12.31	0.00	1590.19
5/16/81	16:32.00	12.31	0.00	1590.19
5/17/81	11: 2.00	12.31	0.00	1590.19
5/18/81	10:49.00	12.25	0.00	1590.25
5/19/81	11:24.00	12.22	0.00	1590.28
5/20/81	10:44.00	12.19	0.00	1590.31
5/21/81	15:25.00	12.17	0.00	1590.33
5/22/81	15:30.00	12.15	0.00	1590.35
5/23/81	14: 5.00	12.12	0.00	1590.38
5/24/81	14:43.00	12.15	0.00	1590.35
5/25/81	14:33.00	12.11	0.00	1590.39
5/26/81	17:25.00	12.11	0.00	1590.39
5/28/81	13:48.00	12.08	0.00	1590.42
5/29/81	15:36.00	12.05	0.00	1590.45
5/30/81	10: 8.00	12.07	0.00	1590.43
5/31/81	10:37.00	12.09	0.00	1590.41
6/ 1/81	13:22.00	12.12	0.00	1590.38
6/ 2/81	17: 3.00	12.10	0.00	1590.40
6/ 3/81	10: 0.00	12.04	0.00	1590.46
6/ 4/81	10:30.00	12.06	0.00	1590.44
6/ 5/81	12:35.00	12.05	0.00	1590.45
6/ 6/81	9:33.00	12.03	0.00	1590.47
6/ 7/81	10: 7.00	12.04	0.00	1590.46
6/ 9/81	12: 0.00	12.02	0.00	1590.48
6/ 9/81	18:22.00	12.06	0.00	1590.44
6/10/81	10:10.00	12.06	0.00	1590.44
6/10/81	18:14.00	12.62	0.00	1589.88
6/11/81	7:49.00	12.39	0.00	1590.11
6/12/81	18:37.00	12.12	0.00	1590.38
6/13/81	7:46.00	12.14	0.00	1590.36

NAME.....STS 8-1
LOCATION.....16792.1, 78140.8
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1657.30

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	19: 9.00	68.74	0.00	1588.56
5/17/81	10:30.00	68.72	0.00	1588.58
5/18/81	10:35.00	68.66	0.00	1588.64
5/19/81	11: 1.00	68.62	0.00	1588.68
5/20/81	10:20.00	68.56	0.00	1588.74
5/21/81	14:32.00	68.62	0.00	1588.68
5/22/81	15: 1.00	68.48	0.00	1588.82
5/23/81	12:58.00	68.50	0.00	1588.80
5/24/81	14:16.00	68.44	0.00	1588.86
5/25/81	13:52.00	67.98	0.00	1589.32
5/26/81	16:44.00	68.48	0.00	1588.82
5/28/81	13:21.00	68.42	0.00	1588.88
5/29/81	1:20.00	69.02	0.00	1588.28
5/30/81	20:55.00	68.40	0.00	1588.90
5/31/81	10: 2.00	68.40	0.00	1588.90
5/31/81	10: 2.00	68.40	0.00	1588.90
6/ 1/81	13:10.00	68.29	0.00	1589.01
6/ 3/81	9:38.00	68.33	0.00	1588.97
6/ 4/81	9:52.00	68.36	0.00	1588.94
6/ 5/81	9:19.00	68.25	0.00	1589.05
6/ 6/81	9: 4.00	68.26	0.00	1589.04
6/ 7/81	6:14.00	68.23	0.00	1589.07
6/ 8/81	5:48.00	68.25	0.00	1589.05
6/ 9/81	8:30.00	68.28	0.00	1589.02

NAME.....SKUNK LANE
LOCATION.....
TYPE.....LAKE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...0.00

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/21/81	17:46.00	2.52	0.00	2.52
6/22/81	9:53.00	2.44	0.00	2.44
6/22/81	17:28.00	2.46	0.00	2.46
6/23/81	9:59.00	2.43	0.00	2.43
6/23/81	16:59.00	2.44	0.00	2.44

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NAME.....SKUNK LANE
LOCATION.....
TYPE.....LAKE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...0.00

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/21/81	15:19.00	3.42	0.00	3.42
5/22/81	15:20.00	3.30	0.00	3.30
5/23/81	14: 0.00	3.30	0.00	3.30
5/24/81	14:37.00	3.33	0.00	3.33
5/25/81	14:26.00	3.29	0.00	3.29
5/26/81	17:14.00	3.30	0.00	3.30
5/28/81	13:44.00	3.30	0.00	3.30
5/29/81	15:32.00	3.27	0.00	3.27
5/30/81	9:55.00	3.28	0.00	3.28
5/31/81	10:32.00	3.29	0.00	3.29
6/ 1/81	13:32.00	3.30	0.00	3.30
6/ 2/81	16:58.00	3.26	0.00	3.26
6/ 3/81	9:56.00	3.32	0.00	3.32
6/ 4/81	10:20.00	3.32	0.00	3.32
6/ 5/81	12:31.00	3.35	0.00	3.35
6/ 6/81	9:27.00	3.39	0.00	3.39
6/ 7/81	10: 2.00	3.40	0.00	3.40
6/ 9/81	9: 5.00	3.43	0.00	3.43
6/ 9/81	18:19.00	3.46	0.00	3.46
6/10/81	10: 7.00	3.47	0.00	3.47
6/10/81	18: 5.00	3.47	0.00	3.47
6/11/81	7:44.00	3.47	0.00	3.47
6/11/81	14:13.00	3.49	0.00	3.49
6/11/81	18: 5.00	3.49	0.00	3.49
6/12/81	18:33.00	3.48	0.00	3.48
6/13/81	7:40.00	3.49	0.00	3.49
6/13/81	18: 4.00	3.50	0.00	3.50
6/14/81	7:46.00	3.49	0.00	3.49
6/14/81	18:40.00	2.63	0.00	2.63
6/15/81	17:57.00	2.28	0.00	2.28
6/16/81	6:53.00	2.48	0.00	2.48
6/16/81	17:59.00	2.47	0.00	2.47
6/17/81	7:16.00	2.47	0.00	2.47
6/18/81	7:10.00	2.47	0.00	2.47
6/18/81	19:23.00	2.48	0.00	2.48
6/19/81	7:50.00	2.49	0.00	2.49
6/19/81	16:36.00	2.47	0.00	2.47
6/20/81	8:15.00	2.47	0.00	2.47
6/20/81	17:13.00	2.46	0.00	2.46
6/21/81	11: 1.00	2.48	0.00	2.48

NAME.....SAND LAKE
LOCATION.....
TYPE.....LAKE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	15:29.00	4.15	0.00	4.15
6/20/81	6:55.00	4.16	0.00	4.16
6/20/81	15:50.00	4.19	0.00	4.19
6/21/81	9:47.00	4.10	0.00	4.10
6/21/81	16:11.00	4.07	0.00	4.07
6/22/81	8:48.00	4.10	0.00	4.10
6/22/81	16: 3.00	4.10	0.00	4.10
6/23/81	8:39.00	4.11	0.00	4.11
6/23/81	15:50.00	4.13	0.00	4.13
6/24/81	8:23.00	4.14	0.00	4.14

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NAME.....SAND LAKE
LOCATION.....
TYPE.....LAKE
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	16: 5.00	4.44	0.00	4.44
5/17/81	8:34.00	4.44	0.00	4.44
5/18/81	9:51.00	4.45	0.00	4.45
5/20/81	9:45.00	4.50	0.00	4.50
5/21/81	17:51.00	4.26	0.00	4.26
5/23/81	16: 2.00	4.54	0.00	4.54
5/24/81	15:40.00	4.55	0.00	4.55
5/25/81	15:38.00	4.53	0.00	4.53
5/26/81	14: 2.00	4.53	0.00	4.53
5/28/81	7:31.00	3.97	0.00	3.97
5/29/81	17:37.00	4.53	0.00	4.53
5/30/81	17:53.00	4.57	0.00	4.57
6/ 1/81	6:56.00	4.56	0.00	4.56
6/ 2/81	6:23.00	4.62	0.00	4.62
6/ 3/81	12: 0.00	4.60	0.00	4.60
6/ 4/81	5:56.00	4.60	0.00	4.60
6/ 5/81	5:22.00	4.62	0.00	4.62
6/ 6/81	8:33.00	4.67	0.00	4.67
6/ 7/81	9:12.00	4.48	0.00	4.48
6/ 9/81	12: 0.00	4.69	0.00	4.69
6/ 9/81	17:40.00	4.73	0.00	4.73
6/10/81	6:22.00	4.73	0.00	4.73
6/10/81	16:53.00	4.77	0.00	4.77
6/11/81	5:48.00	4.72	0.00	4.72
6/11/81	15:48.00	4.71	0.00	4.71
6/11/81	19:59.00	4.72	0.00	4.72
6/12/81	6: 3.00	4.73	0.00	4.73
6/12/81	17:12.00	4.71	0.00	4.71
6/13/81	6:16.00	4.72	0.00	4.72
6/13/81	16:32.00	4.72	0.00	4.72
6/14/81	6: 1.00	4.48	0.00	4.48
6/14/81	17: 4.00	4.45	0.00	4.45
6/15/81	6:52.00	4.27	0.00	4.27
6/15/81	16:24.00	4.24	0.00	4.24
6/16/81	5:19.00	4.21	0.00	4.21
6/16/81	16:33.00	4.18	0.00	4.18
6/17/81	5:55.00	4.15	0.00	4.15
6/18/81	6:24.00	4.17	0.00	4.17
6/18/81	18:13.00	4.16	0.00	4.16
6/19/81	5:50.00	4.16	0.00	4.16

NAME.....DH-3 WHITE
LOCATION.....16254.6 74848.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1658.94

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	16:34.00	82.52	0.00	1576.42
6/16/81	5:30.00	82.53	0.00	1576.41
6/16/81	16:43.00	82.57	0.00	1576.37
6/17/81	6: 6.00	82.64	0.00	1576.30
6/17/81	16:27.00	82.65	0.00	1576.29
6/18/81	6:33.00	82.64	0.00	1576.30
6/18/81	18:19.00	82.64	0.00	1576.30
6/19/81	6: 1.00	82.65	0.00	1576.29
6/19/81	15:43.00	82.64	0.00	1576.30
6/20/81	7: 6.00	82.63	0.00	1576.31
6/20/81	15:59.00	82.51	0.00	1576.43
6/21/81	9:57.00	82.50	0.00	1576.44
6/21/81	16:27.00	82.46	0.00	1576.48
6/22/81	8:58.00	82.43	0.00	1576.51
6/22/81	16:16.00	82.49	0.00	1576.45
6/23/81	8:52.00	82.72	0.00	1576.22
6/23/81	15:56.00	82.75	0.00	1576.19
6/24/81	8:32.00	82.80	0.00	1576.14

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NAME.....DH-3 WHITE
LOCATION.....16254.6 74848.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1658.94

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/31/80	6:24.00	82.75	0.00	1576.19
5/15/81	17:18.00	80.44	0.00	1578.50
5/16/81	17:23.00	82.49	0.00	1576.45
5/17/81	8:54.00	82.63	0.00	1576.31
5/18/81	9:18.00	82.61	0.00	1576.33
5/19/81	9: 8.00	82.40	0.00	1576.54
5/20/81	9:27.00	82.30	0.00	1576.64
5/21/81	13:19.00	82.57	0.00	1576.37
5/22/81	14: 3.00	82.67	0.00	1576.27
5/23/81	11:52.00	82.57	0.00	1576.37
5/24/81	13:22.00	82.75	0.00	1576.19
5/25/81	12:58.00	82.85	0.00	1576.09
5/26/81	14:19.00	83.08	0.00	1575.86
5/28/81	12:55.00	82.90	0.00	1576.04
5/29/81	7:48.00	82.76	0.00	1576.18
5/30/81	8:51.00	82.66	0.00	1576.28
5/31/81	6:24.00	82.75	0.00	1576.19
6/ 1/81	7:22.00	82.65	0.00	1576.29
6/ 2/81	6:43.00	82.53	0.00	1576.41
6/ 3/81	6:32.00	82.40	0.00	1576.54
6/ 4/81	6:23.00	82.46	0.00	1576.48
6/ 5/81	6:40.00	82.59	0.00	1576.35
6/ 6/81	8:46.00	82.52	0.00	1576.42
6/ 7/81	9:27.00	82.63	0.00	1576.31
6/ 8/81	7:37.00	82.64	0.00	1576.30
6/ 9/81	12: 0.00	82.44	0.00	1576.50
6/ 9/81	17:51.00	82.56	0.00	1576.38
6/10/81	6:44.00	82.53	0.00	1576.41
6/10/81	17: 3.00	82.65	0.00	1576.29
6/11/81	6:15.00	82.73	0.00	1576.16
6/11/81	15:46.00	82.76	0.00	1576.18
6/11/81	19:45.00	82.77	0.00	1576.17
6/12/81	2: 2.00	82.68	0.00	1576.26
6/12/81	7:12.00	82.74	0.00	1576.20
6/12/81	17:18.00	82.70	0.00	1576.24
6/13/81	6:27.00	82.69	0.00	1576.25
6/13/81	16:47.00	82.47	0.00	1576.47
6/14/81	6:13.00	82.46	0.00	1576.48
6/14/81	17:17.00	82.49	0.00	1576.45
6/15/81	7: 6.00	82.49	0.00	1576.45

NAME.....DW-3 BLACK
LOCATION.....16254.5 74848.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1659.05

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/15/81	15:33.00	82.60	0.00	1576.45
6/16/81	5:30.00	82.60	0.00	1576.45
6/16/81	16:42.00	82.69	0.00	1576.36
6/17/81	6: 6.00	82.87	0.00	1576.18
6/17/81	16:25.00	82.67	0.00	1576.38
6/18/81	6:32.00	82.68	0.00	1576.37
6/18/81	18:17.00	82.70	0.00	1576.35
6/19/81	5:59.00	82.68	0.00	1576.37
6/19/81	15:41.00	82.67	0.00	1576.38
6/20/81	7: 6.00	82.65	0.00	1576.40
6/20/81	15:58.00	82.51	0.00	1576.54
6/21/81	9:57.00	82.52	0.00	1576.53
6/21/81	16:25.00	82.51	0.00	1576.54
6/22/81	8:58.00	82.52	0.00	1576.53
6/22/81	16:16.00	82.69	0.00	1576.36
6/23/81	8:51.00	82.70	0.00	1576.35
6/23/81	15:55.00	82.61	0.00	1576.44
6/24/81	8:31.00	82.58	0.00	1576.47

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NAME.....DW-3 BLACK
LOCATION.....16254.6 74848.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1659.05

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	17:16.00	82.43	0.00	1576.62
5/16/81	17:19.00	82.66	0.00	1576.39
5/17/81	8:51.00	82.78	0.00	1576.27
5/18/81	9:17.00	82.70	0.00	1576.35
5/19/81	9: 4.00	82.49	0.00	1576.56
5/20/81	9:25.00	82.43	0.00	1576.62
5/21/81	13:13.00	82.42	0.00	1576.63
5/22/81	14: 1.00	82.38	0.00	1576.67
5/23/81	11:52.00	82.43	0.00	1576.62
5/24/81	13:20.00	82.39	0.00	1576.66
5/25/81	12:54.00	82.51	0.00	1576.54
5/26/81	14:14.00	82.75	0.00	1576.30
5/27/81	12:54.00	82.60	0.00	1576.45
5/29/81	7:45.00	82.48	0.00	1576.57
5/30/81	8:48.00	82.81	0.00	1576.24
5/31/81	6:22.00	82.85	0.00	1576.20
5/31/81	6:22.00	82.85	0.00	1576.20
6/ 1/81	7:20.00	82.68	0.00	1576.37
6/ 2/81	6:41.00	82.58	0.00	1576.47
6/ 3/81	6:30.00	82.47	0.00	1576.58
6/ 4/81	6:21.00	82.93	0.00	1576.12
6/ 5/81	6:43.00	82.58	0.00	1576.47
6/ 6/81	8:45.00	82.74	0.00	1576.31
6/ 7/81	9:25.00	82.70	0.00	1576.35
6/ 8/81	7:28.00	82.68	0.00	1576.37
6/ 9/81	12: 0.00	82.60	0.00	1576.45
6/ 9/81	17:50.00	82.60	0.00	1576.45
6/10/81	6:43.00	82.63	0.00	1576.42
6/10/81	17: 0.00	82.80	0.00	1576.25
6/11/81	6:14.00	82.80	0.00	1576.25
6/11/81	15:46.00	82.80	0.00	1576.25
6/11/81	19:43.00	82.80	0.00	1576.25
6/12/81	1:59.00	82.77	0.00	1576.28
6/12/81	7:10.00	82.79	0.00	1576.26
6/12/81	17:17.00	82.75	0.00	1576.30
6/13/81	6:25.00	82.76	0.00	1576.29
6/13/81	16:45.00	82.46	0.00	1576.59
6/14/81	6:10.00	82.54	0.00	1576.51
6/14/81	17:15.00	82.53	0.00	1576.52
6/15/81	7: 6.00	82.60	0.00	1576.45

NAME.....DW-2 SMALL
LOCATION.....16776.3,79794.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1601.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/ 2/81	18: 7.00	10.10	0.00	1591.57
6/ 3/81	10: 3.00	10.03	0.00	1591.64
6/ 6/81	9:36.00	9.98	0.00	1591.69
6/ 7/81	10: 9.00	9.99	0.00	1591.68
6/ 9/81	12: 0.00	9.95	0.00	1591.72
6/ 9/81	18:25.00	9.96	0.00	1591.71
6/10/81	10:10.00	9.96	0.00	1591.71

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:51 PAGE

NAME.....DH-2 LARGE PIPE
LOCATION.....16776.8, 79794.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1601.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	16:38.00	9.20	0.00	1592.47
6/20/81	8:18.00	9.19	0.00	1592.48
6/20/81	17:18.00	9.19	0.00	1592.48
6/21/81	11: 4.00	9.15	0.00	1592.52
6/21/81	17:50.00	9.12	0.00	1592.55
6/22/81	9:56.00	9.07	0.00	1592.60
6/22/81	17:32.00	9.09	0.00	1592.58
6/23/81	17: 3.00	9.08	0.00	1592.59
6/24/81	15:32.00	9.04	0.00	1592.63

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:51 PAGE

NAME.....DW-2 LARGE PIPE
LOCATION.....16776.8,79794.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1601.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/17/81	12:44.00	9.60	0.00	1592.07
5/18/81	10:51.00	9.60	0.00	1592.07
5/19/81	11:27.00	9.55	0.00	1592.12
5/20/81	10:50.00	9.53	0.00	1592.14
5/21/81	15:27.00	9.50	0.00	1592.17
5/22/81	15:31.00	9.47	0.00	1592.20
5/23/81	14: 6.00	9.47	0.00	1592.20
5/24/81	14:45.00	9.46	0.00	1592.21
5/25/81	14:35.00	9.46	0.00	1592.21
5/26/81	17:29.00	9.46	0.00	1592.21
5/28/81	13:51.00	9.46	0.00	1592.21
5/29/81	15:37.00	9.39	0.00	1592.28
5/30/81	10:10.00	9.44	0.00	1592.23
5/31/81	10:39.00	9.43	0.00	1592.24
6/ 1/81	13:20.00	9.45	0.00	1592.22
6/ 2/81	18: 7.00	9.42	0.00	1592.25
6/ 3/81	10: 3.00	9.37	0.00	1592.30
6/ 4/81	10:32.00	9.40	0.00	1592.27
6/ 5/81	12:36.00	9.36	0.00	1592.31
6/ 6/81	9:36.00	9.37	0.00	1592.30
6/ 7/81	10: 9.00	9.38	0.00	1592.29
6/ 9/81	12: 0.00	9.40	0.00	1592.27
6/ 9/81	18:24.00	9.39	0.00	1592.28
6/10/81	10:13.00	9.40	0.00	1592.27
6/10/81	16:18.00	9.42	0.00	1592.25
6/11/81	8:48.00	9.44	0.00	1592.23
6/11/81	14: 9.00	9.44	0.00	1592.23
6/11/81	18: 1.00	9.45	0.00	1592.22
6/12/81	18:39.00	9.50	0.00	1592.17
6/13/81	7:48.00	9.51	0.00	1592.16
6/13/81	18:15.00	9.52	0.00	1592.15
6/14/81	7:52.00	9.52	0.00	1592.15
6/14/81	18:45.00	9.48	0.00	1592.19
6/15/81	18: 2.00	9.29	0.00	1592.38
6/16/81	18: 7.00	9.24	0.00	1592.43
6/17/81	7:20.00	9.25	0.00	1592.42
6/17/81	12:50.00	9.24	0.00	1592.43
6/18/81	7:15.00	9.18	0.00	1592.49
6/18/81	19:13.00	9.22	0.00	1592.45
6/19/81	7:58.00	9.18	0.00	1592.49

NAME.....DMS-2
LOCATION.....17926.7,77889.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1643.40

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	19:18.00	54.72	0.00	1588.68
6/19/81	7:46.00	55.02	0.00	1588.38
6/19/81	16:33.00	54.99	0.00	1588.41
6/20/81	8:12.00	54.87	0.00	1588.53
6/20/81	17:11.00	54.80	0.00	1588.60
6/21/81	10:56.00	54.78	0.00	1588.62
6/21/81	17:40.00	54.78	0.00	1588.62
6/22/81	9:50.00	54.79	0.00	1588.61
6/22/81	17:21.00	54.90	0.00	1588.50
6/23/81	9:56.00	54.92	0.00	1588.48
6/23/81	16:57.00	54.87	0.00	1588.53
6/24/81	15:29.00	54.73	0.00	1588.67

NAME.....DMS-2
LOCATION.....17926.7,77889.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1643.40

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/16/81	16:25.00	55.16	0.00	1588.24
5/17/81	10:52.00	55.19	0.00	1588.21
5/18/81	10: 1.00	55.16	0.00	1588.24
5/19/81	11:20.00	55.03	0.00	1588.37
5/20/81	10:45.00	55.05	0.00	1588.35
5/21/81	15:20.00	55.01	0.00	1588.39
5/22/81	15:15.00	54.98	0.00	1588.42
5/23/81	13:51.00	55.01	0.00	1588.39
5/24/81	14:30.00	54.98	0.00	1588.42
5/25/81	14:20.00	55.02	0.00	1588.38
5/26/81	17: 8.00	55.34	0.00	1588.06
5/28/81	13:39.00	55.07	0.00	1588.33
5/29/81	15:27.00	54.97	0.00	1588.43
5/30/81	9:47.00	55.23	0.00	1588.17
5/31/81	10:25.00	55.21	0.00	1588.19
6/ 1/81	10:48.00	55.07	0.00	1588.33
6/ 2/81	16:58.00	55.10	0.00	1588.30
6/ 3/81	9:50.00	55.00	0.00	1588.40
6/ 4/81	10:14.00	55.19	0.00	1588.21
6/ 5/81	12:28.00	54.99	0.00	1588.41
6/ 6/81	9:23.00	55.07	0.00	1588.33
6/ 7/81	9:56.00	55.08	0.00	1588.32
6/ 9/81	9: 0.00	55.02	0.00	1588.38
6/ 9/81	18:12.00	55.00	0.00	1588.40
6/10/81	10: 1.00	55.00	0.00	1588.40
6/10/81	18: 2.00	45.55	0.00	1597.85
6/11/81	7:36.00	55.13	0.00	1588.27
6/11/81	14:17.00	55.13	0.00	1588.27
6/11/81	18: 8.00	55.10	0.00	1588.30
6/12/81	18:30.00	55.07	0.00	1588.33
6/13/81	7:35.00	54.95	0.00	1588.45
6/13/81	18: 0.00	54.87	0.00	1588.53
6/14/81	7:42.00	54.74	0.00	1588.66
6/14/81	18:34.00	54.72	0.00	1588.68
6/15/81	17:53.00	54.93	0.00	1588.47
6/16/81	6:46.00	54.94	0.00	1588.46
6/16/81	17:56.00	55.00	0.00	1588.40
6/17/81	7:10.00	55.10	0.00	1588.30
6/17/81	17:40.00	54.93	0.00	1588.47
6/18/81	7: 5.00	54.84	0.00	1588.56

NAME.....DMS-1
LOCATION.....17104.1,78219.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1663.55

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	19: 8.00	69.85	0.00	1593.70
6/19/81	7:40.00	69.84	0.00	1593.71
6/19/81	16:28.00	69.83	0.00	1593.72
6/20/81	8:10.00	69.79	0.00	1593.76
6/20/81	17: 5.00	69.80	0.00	1593.75
6/21/81	10:51.00	69.78	0.00	1593.77
6/21/81	17:35.00	69.66	0.00	1593.89
6/22/81	9:47.00	69.64	0.00	1593.91
6/22/81	17:17.00	69.68	0.00	1593.87
6/23/81	9:53.00	69.66	0.00	1593.89
6/23/81	16:53.00	69.51	0.00	1593.94
6/24/81	15:25.00	69.51	0.00	1594.04

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NAME.....DMS-1
LOCATION.....17104.1,78219.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1663.55

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	18:44.00	65.15	0.00	1598.40
5/16/81	19:29.00	71.15	0.00	1592.40
5/17/81	10:40.00	71.45	0.00	1592.10
5/18/81	10:41.00	71.58	0.00	1591.97
5/19/81	11: 7.00	71.55	0.00	1592.00
5/20/81	10:30.00	71.48	0.00	1592.07
5/21/81	14:45.00	71.40	0.00	1592.15
5/22/81	15: 9.00	71.36	0.00	1592.19
5/23/81	13: 6.00	71.31	0.00	1592.24
5/24/81	14:22.00	71.25	0.00	1592.30
5/26/81	16:57.00	71.20	0.00	1592.35
5/28/81	13:31.00	71.08	0.00	1592.47
5/30/81	1:50.00	70.98	0.00	1592.57
5/30/81	21: 7.00	71.01	0.00	1592.54
5/31/81	10:14.00	70.98	0.00	1592.57
6/ 1/81	10:51.00	70.88	0.00	1592.67
6/ 2/81	16:40.00	70.80	0.00	1592.75
6/ 3/81	9:42.00	70.75	0.00	1592.80
6/ 4/81	10: 3.00	70.75	0.00	1592.80
6/ 5/81	11:55.00	70.59	0.00	1592.96
6/ 6/81	9:14.00	70.58	0.00	1592.97
6/ 7/81	9: 0.00	70.55	0.00	1593.00
6/ 9/81	12: 0.00	70.37	0.00	1593.18
6/ 9/81	18:45.00	70.34	0.00	1593.21
6/10/81	9:54.00	70.33	0.00	1593.22
6/10/81	19:18.00	70.35	0.00	1593.20
6/11/81	7:27.00	70.31	0.00	1593.24
6/11/81	14:42.00	70.26	0.00	1593.29
6/11/81	19:14.00	70.25	0.00	1593.29
6/12/81	18:15.00	70.20	0.00	1593.35
6/13/81	7:22.00	70.14	0.00	1593.41
6/13/81	17:43.00	70.08	0.00	1593.47
6/14/81	7:31.00	70.08	0.00	1593.47
6/14/81	18:29.00	70.00	0.00	1593.55
6/15/81	17:45.00	70.00	0.00	1593.55
6/16/81	6:39.00	69.98	0.00	1593.57
6/16/81	17:49.00	69.99	0.00	1593.56
6/17/81	5:45.00	70.01	0.00	1593.54
6/17/81	17:33.00	70.02	0.00	1593.53
6/18/81	6: 0.00	69.85	0.00	1593.70

NAME.....DMP-3
LOCATION.....13665.0,75625.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.45

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/18/81	18:11.00	47.32	0.00	1578.13
6/19/81	5:46.00	47.39	0.00	1578.06
6/19/81	15:25.00	47.37	0.00	1578.08
6/20/81	6:53.00	47.38	0.00	1578.07
6/20/81	15:47.00	47.35	0.00	1578.10
6/21/81	9:45.00	47.35	0.00	1578.10
6/21/81	16: 7.00	47.33	0.00	1578.12
6/22/81	8:45.00	47.34	0.00	1578.11
6/22/81	16: 0.00	47.36	0.00	1578.09
6/23/81	8:36.00	47.39	0.00	1578.06
6/23/81	15:47.00	47.38	0.00	1578.07
6/24/81	8:20.00	47.37	0.00	1578.08

NAME.....DMP-3
LOCATION.....13665.0,75625.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1625.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	20:17.00	47.14	0.00	1578.31
5/16/81	16: 1.00	47.50	0.00	1577.95
5/17/81	8:30.00	47.50	0.00	1577.95
5/18/81	9:49.00	47.50	0.00	1577.95
5/20/81	9:38.00	47.44	0.00	1578.01
5/21/81	17:50.00	47.40	0.00	1578.05
5/23/81	16: 0.00	47.42	0.00	1578.03
5/24/81	15: 0.00	47.38	0.00	1578.07
5/25/81	15:37.00	47.40	0.00	1578.05
5/26/81	13:57.00	47.49	0.00	1577.96
5/29/81	7:41.00	47.40	0.00	1578.05
5/30/81	7:50.00	47.50	0.00	1577.95
5/31/81	6: 6.00	47.50	0.00	1577.95
6/ 1/81	6:45.00	47.45	0.00	1578.00
6/ 2/81	6:20.00	47.43	0.00	1578.02
6/ 3/81	6:12.00	47.42	0.00	1578.03
6/ 4/81	5:54.00	47.48	0.00	1577.97
6/ 5/81	6:19.00	47.38	0.00	1578.07
6/ 6/81	8:31.00	47.45	0.00	1578.00
6/ 7/81	9: 3.00	47.46	0.00	1577.99
6/ 9/81	6: 0.00	47.52	0.00	1577.93
6/ 9/81	17:37.00	47.52	0.00	1577.93
6/10/81	6: 4.00	47.44	0.00	1578.01
6/10/81	16:51.00	47.46	0.00	1577.99
6/11/81	5:45.00	47.45	0.00	1578.00
6/11/81	15:53.00	47.43	0.00	1578.02
6/11/81	19:57.00	47.49	0.00	1577.96
6/12/81	6: 0.00	47.45	0.00	1578.00
6/12/81	17: 8.00	47.45	0.00	1578.00
6/13/81	6:13.00	47.44	0.00	1578.01
6/13/81	11:35.00	47.39	0.00	1578.06
6/14/81	5:56.00	47.40	0.00	1578.05
6/14/81	16:59.00	46.35	0.00	1579.10
6/15/81	6:50.00	47.39	0.00	1578.06
6/15/81	16:19.00	47.38	0.00	1578.07
6/16/81	5:15.00	47.36	0.00	1578.09
6/16/81	16:30.00	47.33	0.00	1578.07
6/17/81	5:52.00	47.40	0.00	1578.05
6/17/81	16: 2.00	47.37	0.00	1578.08
6/18/81	6:21.00	47.34	0.00	1578.11

NAME.....DMP-1
LOCATION.....16675.0,78480.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.27

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/19/81	0:35.00	60.85	0.00	1588.42
6/19/81	2:25.00	60.86	0.00	1588.41
6/19/81	4: 5.00	60.86	0.00	1588.41
6/19/81	6:15.00	60.86	0.00	1588.41
6/19/81	8: 1.00	60.87	0.00	1588.40
6/19/81	11:55.00	60.87	0.00	1588.40
6/19/81	17: 7.00	60.89	0.00	1588.38
6/20/81	2: 6.00	60.86	0.00	1588.41
6/20/81	6:14.00	60.90	0.00	1588.37
6/20/81	14:16.00	60.87	0.00	1588.40
6/20/81	17:56.00	60.90	0.00	1588.37
6/21/81	9:30.00	60.88	0.00	1588.39
6/21/81	18:16.00	60.87	0.00	1588.40
6/22/81	10:17.00	60.88	0.00	1588.39
6/22/81	18: 6.00	60.86	0.00	1588.41
6/23/81	10:41.00	60.83	0.00	1588.44
6/23/81	17:43.00	60.85	0.00	1588.42
6/24/81	15:56.00	60.82	0.00	1588.45

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NAME.....DMI-2 LOWER
LOCATION.....16608.9,78750.1
TYPE.....HANGING WALL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1630.67

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
5/15/81	19: 3.00	41.76	0.00	1588.91
5/17/81	11:21.00	41.80	0.00	1588.87
5/18/81	11: 6.00	41.74	0.00	1588.93
5/19/81	11:47.00	41.68	0.00	1588.99
5/20/81	11: 3.00	41.64	0.00	1589.03
5/21/81	15:50.00	41.62	0.00	1589.05
5/22/81	15:45.00	41.60	0.00	1589.07
5/23/81	14: 8.00	41.61	0.00	1589.06
5/24/81	14:48.00	41.58	0.00	1589.09
5/25/81	14:51.00	41.57	0.00	1589.10
5/26/81	17:49.00	41.55	0.00	1589.12
5/28/81	21:20.00	41.47	0.00	1589.20
5/29/81	15:52.00	41.36	0.00	1589.31
5/30/81	10:25.00	41.49	0.00	1589.18
5/31/81	10:55.00	41.47	0.00	1589.20
6/ 1/81	11: 6.00	41.37	0.00	1589.30
6/ 2/81	18:40.00	41.36	0.00	1589.31
6/ 3/81	10:16.00	41.40	0.00	1589.27
6/ 4/81	10:45.00	41.38	0.00	1589.29
6/ 5/81	12:47.00	41.36	0.00	1589.31
6/ 6/81	9:43.00	41.28	0.00	1589.39
6/ 6/81	16:15.00	41.33	0.00	1589.34
6/ 6/81	20:25.00	41.32	0.00	1589.35
6/ 7/81	1: 7.00	41.32	0.00	1589.35
6/ 7/81	4:23.00	41.32	0.00	1589.35
6/ 7/81	8:19.00	41.30	0.00	1589.37
6/ 7/81	15:18.00	41.27	0.00	1589.40
6/ 7/81	20:35.00	41.22	0.00	1589.45

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 17:25:26 PAGE

NAME.....DMP-1
LOCATION.....16675.0,78480.0
TYPE.....GLACIAL
MEASUREMENT TYPE.....MANUAL
M.P. ELEVATION (FEET)...1649.27

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)	INCLINE CORRECTION (FEET)	CORRECTED ELEVATION (FEET)
6/11/81	8:59.00	60.37	0.00	1588.90
6/11/81	11:54.00	60.41	0.00	1588.86
6/11/81	13:23.00	60.44	0.00	1588.83
6/11/81	15:25.00	60.45	0.00	1588.82
6/11/81	16:54.00	60.46	0.00	1588.81
6/11/81	21:30.00	59.56	0.00	1589.71
6/11/81	24: 0.00	60.65	0.00	1588.62
6/12/81	7:15.00	60.53	0.00	1588.74
6/12/81	9:45.00	60.47	0.00	1588.80
6/12/81	15:20.00	60.52	0.00	1588.75
6/12/81	20:26.00	60.49	0.00	1588.78
6/13/81	1:20.00	60.57	0.00	1588.70
6/13/81	5:47.00	60.54	0.00	1588.73
6/13/81	9:55.00	60.58	0.00	1588.69
6/13/81	15:51.00	60.60	0.00	1588.67
6/13/81	20: 4.00	60.59	0.00	1588.68
6/14/81	8: 5.00	60.64	0.00	1588.63
6/14/81	14:11.00	60.27	0.00	1589.00
6/14/81	19:55.00	60.65	0.00	1588.62
6/15/81	1:50.00	60.63	0.00	1588.64
6/15/81	6:35.00	60.70	0.00	1588.57
6/15/81	16:10.00	60.80	0.00	1588.47
6/15/81	20: 1.00	60.75	0.00	1588.52
6/16/81	0:50.00	60.76	0.00	1588.51
6/16/81	6:25.00	60.70	0.00	1588.57
6/16/81	13:49.00	60.79	0.00	1588.48
6/16/81	18:51.00	60.79	0.00	1588.48
6/17/81	0:35.00	60.80	0.00	1588.47
6/17/81	5:45.00	60.79	0.00	1588.48
6/17/81	13:23.00	60.80	0.00	1588.47
6/17/81	19: 9.00	60.84	0.00	1588.43
6/18/81	0:35.00	60.93	0.00	1588.34
6/18/81	6: 5.00	60.84	0.00	1588.43
6/18/81	12: 9.00	60.96	0.00	1588.31
6/18/81	15:17.50	60.87	0.00	1588.40
6/18/81	16:21.00	60.88	0.00	1588.39
6/18/81	17:44.00	60.88	0.00	1588.39
6/18/81	17:55.00	60.86	0.00	1588.41
6/18/81	19:59.00	60.85	0.00	1588.42
6/18/81	22:25.00	60.85	0.00	1588.42

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	13:48.55	289.22
6/ 8/81	13:49.92	284.20
6/ 8/81	13:51.70	282.91
6/ 8/81	13:53.15	281.89
6/ 8/81	13:54.83	280.99
6/ 8/81	13:55.93	280.27
6/ 8/81	13:57.43	279.09
6/ 8/81	13:58.93	278.22
6/ 8/81	14: 0.58	277.27
6/ 8/81	14: 2.38	276.37
6/ 8/81	14: 4.05	275.44
6/ 8/81	14: 5.78	274.54
6/ 8/81	14: 9.68	273.60
6/ 8/81	14: 9.67	272.65
6/ 8/81	14:11.98	271.61
6/ 8/81	14:13.30	270.99
6/ 8/81	14:14.68	270.39
6/ 8/81	14:18.17	268.95
6/ 8/81	14:22.43	267.13
6/ 8/81	14:30.50	263.94
6/ 8/81	14:42.40	259.94
6/ 8/81	14:50.22	257.59
6/ 8/81	14:56.47	255.81
6/ 8/81	15: 6.25	253.27
6/ 8/81	15:13.58	251.54
6/ 8/81	15:22.13	249.55
6/ 8/81	15:28.67	248.21
6/ 8/81	15:42.00	245.60
6/ 8/81	15:59.00	242.46
6/ 8/81	16:14.00	240.63
6/ 8/81	16:28.00	238.58
6/ 8/81	16:46.00	235.90
6/ 8/81	16:55.00	234.33
6/ 8/81	16:58.00	233.91
6/ 8/81	17:15.00	230.98
6/ 8/81	17:25.00	230.21
6/ 8/81	17:25.33	230.01
6/ 8/81	17:28.33	231.62
6/ 8/81	17:29.65	232.89
6/ 8/81	17:31.75	234.21

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:13:10 PAGE

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:35.25	236.52
6/ 8/81	17:37.52	237.91
6/ 8/81	17:30.97	258.49
6/ 8/81	17:41.13	240.01
6/ 8/81	17:50.33	244.77
6/ 8/81	17:54.50	246.66
6/ 8/81	18: 6.40	249.94
6/ 8/81	18:11.00	252.85
6/ 8/81	19: 8.00	266.00
6/ 8/81	19:43.00	271.15
6/ 8/81	22: 3.00	280.39
6/ 8/81	23:48.00	282.70
6/ 9/81	2:10.00	283.81
6/ 9/81	3:58.00	284.50
6/ 9/81	6: 0.00	284.13
6/ 9/81	12: 5.00	287.16
6/ 9/81	15:15.00	287.11
6/ 9/81	18:31.00	286.58
6/ 9/81	23:52.00	285.10
6/10/81	6:14.00	284.38
6/10/81	12: 0.00	288.93
6/10/81	19: 0.00	286.51
6/10/81	23:52.00	284.25
6/11/81	5:51.00	284.41
6/11/81	10:16.00	240.24
6/11/81	10:30.00	241.12
6/11/81	11:35.00	242.04
6/11/81	12:31.08	242.16
6/11/81	12:34.33	239.41
6/11/81	12:36.42	236.24
6/11/81	12:37.92	237.84
6/11/81	12:39.92	233.68
6/11/81	12:42.33	234.00
6/11/81	12:43.75	233.86
6/11/81	12:45.25	232.52
6/11/81	12:46.67	232.99
6/11/81	12:47.33	232.25
6/11/81	12:50.17	231.18
6/11/81	12:51.67	229.87
6/11/81	12:53.17	229.11

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:54.67	228.02
6/11/81	12:56.50	228.16
6/11/81	13: 0.33	226.84
6/11/81	13: 2.17	226.73
6/11/81	13: 4.75	225.46
6/11/81	13: 9.50	222.64
6/11/81	13:14.33	221.76
6/11/81	13:19.50	220.72
6/11/81	13:24.67	219.45
6/11/81	13:30.75	217.83
6/11/81	13:40.33	215.71
6/11/81	13:50.00	213.35
6/11/81	14: 0.00	211.32
6/11/81	14:10.00	206.65
6/11/81	14:20.00	205.61
6/11/81	14:31.00	206.17
6/11/81	14:50.00	203.16
6/11/81	15:10.00	200.55
6/11/81	15:30.00	198.36
6/11/81	15:54.00	196.72
6/11/81	16:12.00	195.20
6/11/81	16:31.00	193.79
6/11/81	17:31.00	189.72
6/11/81	18:30.00	186.42
6/11/81	19:30.00	183.95
6/11/81	20:25.00	182.33
6/11/81	21:30.00	180.20
6/11/81	22:30.00	178.85
6/11/81	23:30.00	178.10
6/12/81	0:30.00	177.11
6/12/81	2:30.00	175.03
6/12/81	4:30.00	173.92
6/12/81	6:30.00	173.60
6/12/81	8:30.00	172.72
6/12/81	12:50.00	174.24
6/12/81	15:22.00	173.94
6/12/81	17: 5.00	173.48
6/12/81	18:35.00	173.25
6/12/81	20:31.00	171.49
6/12/81	22:30.00	171.08

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:13:10 PAGE

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/13/81	0:30.00	171.24
6/13/81	4:30.00	170.50
6/13/81	8:30.00	170.48
6/13/81	12:36.00	171.15
6/13/81	17:25.00	171.70
6/13/81	20:25.00	172.07
6/14/81	0:30.00	171.01
6/14/81	4:30.00	170.59
6/14/81	8:30.00	170.36
6/14/81	12:24.00	171.54
6/14/81	16:35.00	171.73
6/14/81	20:29.00	171.91
6/15/81	0:30.00	170.64
6/15/81	4:30.00	170.62
6/15/81	8:40.00	170.36
6/15/81	12:40.00	168.84
6/15/81	16:36.00	170.04
6/15/81	20:33.00	169.55
6/16/81	0:30.00	169.14
6/16/81	4:45.00	168.63
6/16/81	8:35.00	168.40
6/16/81	12:27.00	169.16
6/16/81	16:31.00	169.35
6/16/81	20:28.00	169.35
6/17/81	0:30.00	168.38
6/17/81	4:45.00	168.03
6/17/81	8:30.00	168.72
6/17/81	12:38.00	170.32
6/17/81	16:31.00	169.97
6/17/81	20:47.00	168.33
6/18/81	0:30.00	168.81
6/18/81	14:22.00	169.53
6/18/81	14:30.37	169.53
6/18/81	14:32.00	170.59
6/18/81	14:33.28	171.31
6/18/81	14:34.58	172.05
6/18/81	14:35.83	172.72
6/18/81	14:36.95	172.90
6/19/81	14:38.17	173.43
6/19/81	14:39.45	174.29

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:40.95	175.21
6/18/81	14:42.38	175.84
6/18/81	14:43.87	175.40
6/18/81	14:45.22	176.95
6/18/81	14:46.58	177.43
6/18/81	14:47.78	178.01
6/18/81	14:49.07	178.79
6/18/81	14:51.00	179.74
6/18/81	14:53.47	178.82
6/18/81	14:56.40	180.06
6/18/81	14:58.17	182.91
6/18/81	15: 6.00	185.84
6/18/81	15:11.00	187.09
6/18/81	15:15.00	188.84
6/18/81	15:20.00	189.70
6/18/81	15:27.00	190.60
6/18/81	15:33.00	193.69
6/18/81	15:42.00	196.56
6/18/81	15:52.00	196.70
6/18/81	16: 2.00	201.09
6/18/81	16:12.00	203.51
6/18/81	16:22.00	205.68
6/18/81	16:32.00	207.76
6/18/81	16:43.00	209.45
6/18/81	17: 6.00	212.45
6/18/81	17:32.00	216.24
6/18/81	18: 0.00	219.54
6/18/81	18:47.00	223.61
6/18/81	19:32.00	226.58
6/18/81	20:32.00	229.50
6/18/81	21:30.00	230.98
6/18/81	22:30.00	232.52
6/18/81	23:30.00	232.99
6/19/81	0:35.00	233.84
6/19/81	2:45.00	232.11
6/19/81	4:30.00	233.08
6/19/81	6:30.00	233.95
6/19/81	8:30.00	235.20
6/19/81	11:59.00	237.42

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NAME.....223 AIR A-8
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	12:55.00	-0.14
6/ 8/81	13:45.00	-0.12
6/ 8/81	13:46.80	-0.09
6/ 8/81	13:48.37	-0.09
6/ 8/81	13:49.75	-0.07
6/ 8/81	13:51.47	-0.07
6/ 8/81	13:52.78	-0.07
6/ 8/81	13:54.23	-0.07
6/ 8/81	13:55.65	-0.07
6/ 8/81	13:57.17	-0.07
6/ 8/81	13:58.73	-0.07
6/ 8/81	14: 0.08	-0.07
6/ 8/81	14: 1.93	-0.07
6/ 8/81	14: 3.53	-0.07
6/ 8/81	14: 5.58	-0.07
6/ 8/81	14: 7.25	-0.07
6/ 8/81	14: 8.92	-0.07
6/ 8/81	14:11.38	-0.07
6/ 8/81	14:13.03	-0.07
6/ 8/81	14:14.47	-0.07
6/ 8/81	14:16.10	-0.07
6/ 8/81	14:19.38	-0.07
6/ 8/81	14:23.48	-0.07
6/ 8/81	14:31.60	-0.05
6/ 8/81	14:43.87	-0.05
6/ 8/81	14:51.30	-0.05
6/ 8/81	14:57.80	-0.05
6/ 8/81	15: 7.80	-0.05
6/ 8/81	15:15.68	-0.05
6/ 8/81	15:25.28	-0.05
6/ 8/81	15:29.95	-0.05
6/ 8/81	15:42.00	-0.05
6/ 8/81	15:59.00	-0.09
6/ 8/81	16:15.00	-0.07
6/ 8/81	16:30.00	-0.05
6/ 8/81	16:47.00	-0.05
6/ 8/81	16:55.00	-0.05
6/ 8/81	16:58.00	-0.05
6/ 8/81	17:15.00	-0.05
6/ 8/81	17:25.00	-0.05

NAME.....223 AIR A-8
LOCATION.....16373.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:27.67	-0.05
6/ 8/81	17:29.33	-0.05
6/ 8/81	17:31.20	-0.05
6/ 8/81	17:34.17	-0.05
6/ 8/81	17:36.77	-0.05
6/ 8/81	17:38.73	-0.05
6/ 8/81	17:42.20	-0.05
6/ 8/81	17:51.50	-0.05
6/ 8/81	17:55.97	-0.05
6/ 8/81	18: 4.17	-0.05
6/ 8/81	18:12.35	-0.05
6/ 8/81	18:32.52	-0.07
6/ 8/81	19:10.12	-0.07
6/ 8/81	19:55.00	-0.09
6/ 8/81	22: 3.00	-0.12
6/ 8/81	23:46.00	-0.21
6/ 9/81	2:10.00	-0.18
6/ 9/81	3:58.00	-0.07
6/ 9/81	6: 0.00	-0.14
6/ 9/81	12: 5.00	0.18
6/ 9/81	15:15.00	0.35
6/ 9/81	18:36.00	0.28
6/ 9/81	23:52.00	0.00
6/10/81	6:14.00	0.02
6/10/81	12: 2.00	0.21
6/10/81	19: 4.00	0.16
6/10/81	23:52.00	0.30
6/11/81	5:51.00	0.16
6/11/81	10:23.00	-0.09
6/11/81	10:33.00	-0.07
6/11/81	11:52.00	-0.02
6/11/81	12:33.42	0.00
6/11/81	12:35.58	-0.02
6/11/81	12:37.58	-0.02
6/11/81	12:39.58	0.00
6/11/81	12:41.92	-0.02
6/11/81	12:43.92	0.00
6/11/81	12:44.92	-0.02
6/11/81	12:46.33	-0.02
6/11/81	12:48.00	-0.02

NAME.....223 AIR A-8
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:49.50	-0.02
6/11/81	12:51.17	-0.02
6/11/81	12:52.83	0.02
6/11/81	12:55.83	0.01
6/11/81	12:58.67	0.05
6/11/81	13: 1.67	0.05
6/11/81	13: 3.33	0.05
6/11/81	13: 7.00	0.05
6/11/81	13:12.50	0.05
6/11/81	13:17.00	0.07
6/11/81	13:22.67	0.07
6/11/81	13:26.83	0.07
6/11/81	13:32.75	0.07
6/11/81	13:43.50	0.07
6/11/81	13:52.00	0.05
6/11/81	14: 1.00	0.05
6/11/81	14:10.00	0.02
6/11/81	14:21.00	0.05
6/11/81	14:32.00	0.02
6/11/81	14:51.00	0.00
6/11/81	15:12.00	0.00
6/11/81	15:32.00	0.00
6/11/81	15:56.00	0.00
6/11/81	16:14.00	0.00
6/11/81	16:33.00	-0.02
6/11/81	17:33.00	-0.02
6/11/81	18:31.00	-0.02
6/11/81	19:31.00	-0.05
6/11/81	20:27.00	-0.07
6/11/81	20:35.00	-0.09
6/11/81	22:30.00	-0.18
6/11/81	23:33.00	-0.14
6/12/81	0:30.00	-0.21
6/12/81	2:30.00	0.07
6/12/81	4:30.00	0.09
6/12/81	6:30.00	0.09
6/12/81	8:32.00	0.16
6/12/81	12:50.00	0.16
6/12/81	15:22.00	0.18
6/12/81	17: 5.00	0.21

NAME.....223 AIR A-8
LOCATION.....16379.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/12/81	18:35.00	0.18
6/12/81	20:31.00	0.02
6/12/81	22:30.00	0.05
6/13/81	0:30.00	0.12
6/13/81	4:30.00	0.09
6/13/81	8:30.00	0.16
6/13/81	12:36.00	0.14
6/13/81	17:26.00	0.12
6/13/81	20:25.00	0.02
6/14/81	0:30.00	-0.07
6/14/81	4:30.00	0.02
6/14/81	8:30.00	0.02
6/14/81	12:24.00	0.07
6/14/81	16:34.00	0.16
6/14/81	20:29.00	0.05
6/15/81	0:30.00	0.02
6/15/81	4:30.00	0.05
6/15/81	8:40.00	0.07
6/15/81	12:40.00	0.07
6/15/81	16:38.00	0.05
6/15/81	20:33.00	0.00
6/16/81	0:30.00	-0.09
6/16/81	4:45.00	-0.02
6/16/81	8:35.00	-0.02
6/16/81	12:27.00	0.02
6/16/81	16:31.00	0.02
6/16/81	20:28.00	-0.02
6/17/81	0:30.00	-0.16
6/17/81	4:45.00	-0.09
6/17/81	8:30.00	0.02
6/17/81	12:38.00	0.16
6/17/81	16:31.00	0.09
6/17/81	20:47.00	0.12
6/18/81	0:30.00	-0.05
6/18/81	14:22.00	0.14
6/18/81	14:31.55	0.14
6/18/81	14:33.00	0.14
6/18/81	14:34.27	0.14
6/18/81	14:35.58	0.14
6/18/81	14:36.72	0.12

NAME.....223 AIR A-8
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:37.85	0.12
6/18/81	14:39.20	0.12
6/18/81	14:40.65	0.12
6/18/81	14:42.13	0.12
6/18/81	14:43.42	0.12
6/18/81	14:44.90	0.09
6/18/81	14:46.17	0.09
6/18/81	14:47.45	0.12
6/18/81	14:48.83	0.12
6/18/81	14:50.00	0.09
6/18/81	14:51.93	0.09
6/18/81	14:54.55	0.12
6/18/81	14:57.38	0.07
6/18/81	14:59.47	0.09
6/18/81	15: 7.40	0.05
6/18/81	15:12.00	0.07
6/18/81	15:16.00	0.07
6/18/81	15:22.00	0.07
6/18/81	15:28.00	0.05
6/18/81	15:34.00	0.09
6/18/81	15:43.00	0.07
6/18/81	15:53.00	0.05
6/18/81	16: 3.00	0.05
6/18/81	16:14.00	0.05
6/18/81	16:23.00	0.05
6/18/81	16:33.00	0.02
6/18/81	16:44.00	0.02
6/18/81	17: 8.00	-0.02
6/18/81	17:32.00	0.00
6/18/81	18: 0.00	-0.02
6/18/81	18:47.00	-0.02
6/18/81	19:32.00	-0.05
6/18/81	20:32.00	-0.12
6/18/81	21:30.00	-0.16
6/18/81	22:30.00	-0.16
6/18/81	23:30.00	-0.35
6/19/81	0:35.00	-0.30
6/19/81	2:45.00	-0.09
6/19/81	4:30.00	-0.05
6/19/81	6:30.00	-0.02

NAME.....223 AIR A-8
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/19/81	8:30.00	0.05
6/19/81	11:59.00	0.00

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NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	66.37
4/29/81	13: 5.37	66.11
4/29/81	13: 6.95	66.11
4/29/81	13: 8.40	65.90
4/29/81	13: 9.80	66.11
4/29/81	13:11.03	66.09
4/29/81	13:12.57	66.09
4/29/81	13:13.95	65.86
4/29/81	13:15.63	66.02
4/29/81	13:19.33	66.02
4/29/81	13:21.48	66.00
4/29/81	13:23.20	65.97
4/29/81	13:25.02	65.90
4/29/81	13:27.35	65.90
4/29/81	13:31.00	65.79
4/29/81	13:36.20	65.81
4/29/81	13:41.15	65.53
4/29/81	13:46.17	65.56
4/29/81	13:51.47	65.49
4/29/81	13:56.22	65.47
4/29/81	14: 1.50	65.65
4/29/81	14:11.47	65.51
4/29/81	14:20.00	65.26
4/29/81	14:30.00	65.21
4/29/81	14:40.00	65.23
4/29/81	14:50.00	65.14
4/29/81	15: 0.00	65.07
4/29/81	15:20.00	64.82
4/29/81	15:40.00	64.47
4/29/81	16: 0.00	64.22
4/29/81	16:20.00	64.03
4/29/81	16:40.00	62.49
4/29/81	17: 0.00	61.75
4/29/81	18: 0.00	61.79
4/29/81	19: 0.00	60.69
4/29/81	20: 0.00	59.83
4/29/81	21: 0.00	56.78
4/29/81	22: 0.00	52.78
4/29/81	23:15.00	60.04
4/29/81	24: 0.00	61.28

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/30/81	1: 0.00	61.63
4/30/81	3: 0.00	61.42
4/30/81	5: 0.00	61.19
4/30/81	7: 0.00	61.01
4/30/81	9: 0.00	61.03
4/30/81	10:27.00	59.76
4/30/81	11:13.00	61.45
4/30/81	12:57.00	61.38
4/30/81	15: 0.00	61.89
4/30/81	17: 6.00	62.14
4/30/81	18:54.00	62.30
4/30/81	19:10.00	62.39
4/30/81	20: 1.00	61.98
4/30/81	21: 0.00	62.25
4/30/81	23: 0.00	61.52
5/ 1/81	1: 0.00	61.45
5/ 1/81	3: 0.00	61.05
5/ 1/81	5: 0.00	61.38
5/ 1/81	7: 0.00	60.94
5/ 1/81	9: 0.00	60.87
5/ 1/81	11: 0.00	62.55
5/ 1/81	13: 0.00	62.12
5/ 1/81	15: 0.00	61.63
5/ 1/81	17: 0.00	61.93
5/ 1/81	19: 0.00	51.74
5/ 1/81	21:45.00	51.63
5/ 1/81	23:10.00	51.42
5/ 2/81	1:15.00	51.05
5/ 2/81	3: 0.00	50.89
5/ 2/81	5:15.00	50.75
5/ 2/81	7: 0.00	51.35
5/ 2/81	9: 0.00	51.61
5/ 2/81	10:54.00	52.81
5/ 2/81	11: 4.53	52.81
5/ 2/81	11: 6.88	52.90
5/ 2/81	11: 8.72	52.90
5/ 2/81	11:10.75	52.92
5/ 2/81	11:13.08	52.92
5/ 2/81	11:14.58	52.90
5/ 2/81	11:16.08	52.92

NAME.....224 A-9.
LOCATION.....13691.6 78571.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:17.58	52.92
5/ 2/81	11:19.75	52.90
5/ 2/81	11:21.75	52.90
5/ 2/81	11:23.42	52.90
5/ 2/81	11:27.92	52.92
5/ 2/81	11:32.90	52.92
5/ 2/81	11:41.42	52.90
5/ 2/81	12: 0.42	52.97
5/ 2/81	12:11.42	52.99
5/ 2/81	12:30.00	53.01
5/ 2/81	13: 0.00	53.08
5/ 2/81	14:10.00	53.05
5/ 2/81	15: 0.00	52.97
5/ 2/81	16: 6.00	52.97
5/ 2/81	18: 2.00	52.92
5/ 2/81	19: 0.00	52.88
5/ 2/81	20: 2.00	52.32
5/ 2/81	21:11.00	52.41
5/ 2/81	23:15.00	51.31
5/ 3/81	1: 0.00	51.14
5/ 3/81	3:10.00	51.35
5/ 3/81	5:20.00	51.12
5/ 3/81	7:20.00	51.33
5/ 3/81	9: 0.00	51.51
5/ 3/81	11: 1.00	52.00
5/ 3/81	18: 0.00	51.12
5/ 4/81	0:31.00	52.09
5/ 4/81	6: 0.00	51.65
5/ 4/81	11:45.00	51.91
5/ 4/81	18: 0.00	52.44
5/ 5/81	0:33.00	52.60
5/ 5/81	5:52.00	53.07
5/ 5/81	18:30.00	53.20
5/ 6/81	0: 3.00	52.54
5/ 6/81	6:34.00	52.44
5/ 6/81	12:30.00	53.15
6/ 8/81	12:53.00	232.39
6/ 8/81	13:44.00	232.22
6/ 8/81	13:45.58	232.04
6/ 8/81	13:47.24	230.98

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASURMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	13:48.72	229.94
6/ 8/81	13:50.07	229.01
6/ 8/81	13:51.85	227.84
6/ 8/81	13:53.30	226.87
6/ 8/81	13:54.65	226.03
6/ 8/81	13:56.12	225.11
6/ 8/81	13:57.62	224.28
6/ 8/81	13:59.12	223.40
6/ 8/81	14: 0.83	222.50
6/ 8/81	14: 2.53	221.64
6/ 8/81	14: 4.20	220.77
6/ 8/81	14: 5.92	219.94
6/ 8/81	14: 7.82	219.06
6/ 8/81	14:10.00	218.11
6/ 8/81	14:12.08	217.19
6/ 8/81	14:13.50	216.56
6/ 8/81	14:14.92	215.99
6/ 8/81	14:18.32	214.65
6/ 8/81	14:22.58	212.94
6/ 8/81	14:30.67	209.93
6/ 8/81	14:42.60	206.19
6/ 8/81	14:50.37	204.02
6/ 8/81	14:56.63	202.38
6/ 8/81	15: 6.47	200.00
6/ 8/81	15:13.75	198.31
6/ 8/81	15:22.37	196.47
6/ 8/81	15:28.92	195.20
6/ 8/81	15:42.00	192.75
6/ 8/81	15:59.00	189.79
6/ 8/81	16:14.00	188.13
6/ 8/81	16:28.00	186.19
6/ 8/81	16:46.00	183.62
6/ 8/81	16:55.00	182.24
6/ 8/81	16:58.00	181.82
6/ 8/81	17:15.00	179.98
6/ 8/81	17:25.00	178.29
6/ 8/81	17:25.55	178.19
6/ 8/81	17:28.25	179.51
6/ 8/81	17:30.17	180.67
6/ 8/81	17:31.97	181.84

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14: 6 PAGE

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:35.62	184.06
6/ 8/81	17:37.68	185.15
6/ 8/81	17:41.27	187.13
6/ 8/81	17:50.65	191.59
6/ 8/81	17:54.70	193.39
6/ 8/81	18: 1.97	196.56
6/ 8/81	18:11.20	199.28
6/ 8/81	18:31.43	204.74
6/ 8/81	19: 8.25	211.69
6/ 8/81	19:43.00	216.47
6/ 8/81	22: 3.00	225.53
6/ 8/81	23:48.00	227.74
6/ 9/81	2:10.00	228.51
6/ 9/81	3:58.00	229.54
6/ 9/81	6: 0.00	229.31
6/ 9/81	12: 5.00	231.37
6/ 9/81	15:15.00	231.35
6/ 9/81	18:33.00	231.21
6/ 9/81	23:52.00	230.03
6/10/81	6:14.00	229.50
6/10/81	12: 0.00	232.78
6/10/81	19: 1.00	231.28
6/10/81	23:52.00	229.45
6/11/81	5:51.00	229.73
6/11/81	10:18.00	190.46
6/11/81	10:31.00	190.94
6/11/81	11:41.00	191.48
6/11/81	12:32.52	191.61
6/11/81	12:34.50	189.33
6/11/81	12:36.63	186.23
6/11/81	12:38.25	187.71
6/11/81	12:40.08	185.49
6/11/81	12:42.50	184.38
6/11/81	12:43.92	184.36
6/11/81	12:45.42	183.25
6/11/81	12:47.00	183.53
6/11/81	12:48.50	182.86
6/11/81	12:50.33	181.91
6/11/81	12:51.67	180.57
6/11/81	12:53.33	180.18

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:54.83	179.16
6/11/81	12:56.80	179.16
6/11/81	13: 0.50	177.96
6/11/81	13: 1.33	177.73
6/11/81	13: 5.00	176.51
6/11/81	13: 9.83	172.81
6/11/81	13:14.67	173.13
6/11/81	13:19.75	172.21
6/11/81	13:24.92	171.15
6/11/81	13:31.00	169.69
6/11/81	13:41.00	167.64
6/11/81	13:50.00	165.63
6/11/81	14: 0.00	163.87
6/11/81	14:10.00	160.20
6/11/81	14:20.00	158.44
6/11/81	14:31.00	158.27
6/11/81	14:50.00	156.41
6/11/81	15:10.00	153.96
6/11/81	15:31.00	152.02
6/11/81	15:55.00	150.38
6/11/81	16:12.00	149.00
6/11/81	16:31.00	147.70
6/11/81	17:31.00	144.05
6/11/81	18:30.00	141.12
6/11/81	19:30.00	138.90
6/11/81	20:25.00	137.42
6/11/81	20:30.00	135.53
6/11/81	22:30.00	134.30
6/11/81	23:31.00	133.59
6/12/81	0:30.00	132.71
6/12/81	2:30.00	130.98
6/12/81	4:30.00	129.96
6/12/81	6:30.00	129.61
6/12/81	8:30.00	128.71
6/12/81	12:50.00	129.52
6/12/81	15:22.00	129.31
6/12/81	17: 5.00	129.06
6/12/81	18:35.00	128.94
6/12/81	20:31.00	127.56
6/12/81	22:30.00	127.28

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14: 6 PAGE

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/13/81	0:30.00	127.37
6/13/81	4:30.00	126.80
6/13/81	8:30.00	126.56
6/13/81	12:36.00	127.12
6/13/81	17:26.00	127.51
6/13/81	20:25.00	127.84
6/14/81	0:30.00	127.14
6/14/81	4:30.00	126.73
6/14/81	8:30.00	126.56
6/14/81	12:24.00	127.21
6/14/81	16:34.00	127.30
6/14/81	20:29.00	127.74
6/15/81	0:30.00	126.68
6/15/81	4:30.00	126.61
6/15/81	8:40.00	126.38
6/15/81	12:40.00	125.04
6/15/81	16:38.00	126.16
6/15/81	20:33.00	125.76
6/16/81	0:30.00	125.50
6/16/81	4:45.00	125.20
6/16/81	8:35.00	124.83
6/16/81	12:27.00	125.46
6/16/81	16:31.00	125.53
6/16/81	20:28.00	125.69
6/17/81	0:30.00	124.97
6/17/81	4:45.00	124.76
6/17/81	8:30.00	125.04
6/17/81	12:38.00	126.03
6/17/81	16:31.00	125.85
6/17/81	20:47.00	124.67
6/18/81	0:30.00	125.09
6/18/81	4:22.00	125.34
6/18/81	14:30.55	125.39
6/18/81	14:32.20	126.17
6/18/81	14:33.42	126.75
6/18/81	14:34.75	127.40
6/18/81	14:35.95	127.93
6/18/81	14:37.06	128.04
6/18/81	14:38.29	128.69
6/18/81	14:39.42	129.45

NAME.....224 A-9
LOCATION.....13691.6 78671.8
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1635.87

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:41.08	130.10
6/18/81	14:42.52	130.70
6/18/81	14:44.05	130.86
6/18/81	14:45.33	131.42
6/18/81	14:47.98	132.92
6/18/81	14:49.20	132.89
6/18/81	14:51.07	133.77
6/18/81	14:53.60	133.98
6/18/81	14:56.58	136.47
6/18/81	14:58.43	137.35
6/18/81	15: 6.38	140.08
6/18/81	15:11.00	141.30
6/18/81	15:15.00	141.88
6/18/81	15:20.00	142.60
6/18/81	15:27.00	145.99
6/18/81	15:33.00	146.73
6/18/81	15:42.00	150.01
6/18/81	15:52.00	150.29
6/18/81	16: 2.00	152.69
6/18/81	16:12.00	155.48
6/18/81	16:22.00	158.42
6/18/81	16:32.00	160.34
6/18/81	16:43.00	161.93
6/18/81	17: 7.00	163.96
6/18/81	17:32.00	168.28
6/18/81	18: 0.00	171.31
6/18/81	18:47.00	175.12
6/18/81	19:32.00	177.99
6/18/81	20:32.00	180.67
6/18/81	21:30.00	182.14
6/18/81	22:30.00	184.27
6/19/81	0:35.00	184.98
6/19/81	2:45.00	183.95
6/19/81	4:30.00	184.68
6/19/81	6:30.00	185.33
6/19/81	8:30.00	186.05
6/19/81	11:59.00	187.60

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NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:51.00	223.08
5/18/81	12: 0.17	224.53
5/18/81	12:12.10	224.39
5/18/81	12:30.15	224.44
5/18/81	12:32.23	224.44
5/18/81	12:33.72	224.32
5/18/81	12:35.15	224.07
5/18/81	12:36.65	223.72
5/18/81	12:38.12	223.24
5/18/81	12:39.53	222.73
5/18/81	12:40.75	222.25
5/18/81	12:42.45	221.44
5/18/81	12:44.30	220.51
5/18/81	12:46.15	219.57
5/18/81	12:47.80	218.66
5/18/81	12:49.83	217.46
5/20/81	11:56.00	226.01
5/20/81	12: 0.67	226.10
5/20/81	12: 2.33	226.10
5/20/81	12: 3.90	225.90
5/20/81	12: 5.23	225.80
5/20/81	12: 6.73	225.46
5/20/81	12: 8.02	225.06
5/20/81	12: 9.53	224.51
5/20/81	12:10.87	223.98
5/20/81	12:12.05	223.45
5/20/81	12:13.33	222.87
5/20/81	12:14.70	222.15
5/20/81	12:16.77	221.02
5/20/81	12:18.45	220.05
5/20/81	12:21.23	218.34
5/20/81	12:30.50	213.37
5/20/81	12:35.97	208.32
5/20/81	12:42.17	204.13
5/20/81	12:50.00	198.45
5/20/81	12:58.00	192.84
5/20/81	13: 3.00	189.97
5/20/81	13: 7.00	187.39
5/20/81	13:13.00	183.37
5/20/81	13:18.00	180.23

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:23.00	177.59
5/20/81	13:28.00	174.61
5/20/81	13:33.00	171.73
5/20/81	13:39.00	168.51
5/20/81	13:49.00	163.71
5/20/81	14: 5.00	157.10
5/20/81	14:36.00	144.88
5/20/81	14:55.00	139.20
5/20/81	15:20.00	132.94
5/20/81	15:40.00	128.18
5/20/81	16: 0.00	124.44
5/20/81	16:57.00	114.92
5/20/81	18: 1.00	106.86
5/20/81	20: 1.00	95.93
5/20/81	21:58.00	84.29
5/21/81	1: 1.00	75.47
5/21/81	3: 2.00	68.38
5/21/81	8: 4.00	63.78
5/23/81	11:59.00	32.50
5/23/81	14:58.00	32.18
5/23/81	16:21.00	31.88
5/23/81	19:57.00	29.89
5/24/81	0: 5.00	29.01
5/24/81	3:57.00	28.90
5/24/81	12:55.00	27.07
5/24/81	16: 5.00	26.57
5/24/81	20: 5.00	24.86
5/25/81	0:20.00	24.26
5/25/81	4: 8.00	23.61
5/25/81	8: 1.00	22.92
5/25/81	12:23.00	22.38
5/25/81	16: 0.00	22.01
5/25/81	20:45.00	21.62
5/25/81	23:52.00	21.30
5/26/81	3:56.00	21.04
5/26/81	7:56.00	20.30
5/26/81	12: 3.00	19.77
5/26/81	16:20.00	20.14
5/26/81	20: 2.00	19.56
5/26/81	23:54.00	18.83

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14:19 PAGE

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	3:58.00	18.99
5/27/81	8: 5.00	18.11
5/27/81	11:34.00	18.04
5/27/81	11:59.00	17.93
5/27/81	14: 0.00	18.23
5/27/81	14: 1.85	18.23
5/27/81	14: 4.33	18.34
5/27/81	14: 5.25	18.62
5/27/81	14: 8.42	19.10
5/27/81	14:10.42	19.73
5/27/81	14:12.58	20.49
5/27/81	14:15.17	21.58
5/27/81	14:17.58	22.75
5/27/81	14:19.75	23.89
5/27/81	14:22.17	25.25
5/27/81	14:24.17	26.38
5/27/81	14:26.17	27.49
5/27/81	14:28.50	28.85
5/27/81	14:30.58	30.05
5/27/81	14:32.75	31.53
5/27/81	14:35.00	32.69
5/27/81	14:37.58	34.23
5/27/81	14:40.25	35.87
5/27/81	14:42.58	37.21
5/27/81	14:45.17	38.76
5/27/81	14:48.33	40.54
5/27/81	14:52.17	42.74
5/27/81	14:55.25	44.49
5/27/81	15: 0.33	27.12
5/27/81	15: 5.17	49.85
5/27/81	15:12.75	53.66
5/27/81	15:17.17	55.76
5/27/81	15:22.17	58.12
5/27/81	15:32.17	62.51
5/27/81	15:42.17	66.50
5/27/81	15:52.17	70.20
5/27/81	16: 0.00	73.09
5/27/81	16:20.00	78.82
5/27/81	16:40.00	83.75
5/27/81	17: 0.00	88.08

NAME.....230
LOCATION.....16745.5,76427.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17:25.00	92.54
5/27/81	17:40.00	95.03
5/27/81	18: 0.00	97.78
5/27/81	18:56.00	104.60
5/27/81	19:57.00	110.56
5/27/81	21:10.00	116.52
5/27/81	22: 0.00	119.94
5/27/81	23: 0.00	124.12
5/27/81	23:50.00	126.68
5/28/81	1:10.00	130.84
5/28/81	2: 0.00	133.19
5/28/81	4:10.00	139.41
5/28/81	6:25.00	145.00
5/28/81	8: 0.00	149.04
5/28/81	12: 2.00	158.10
5/28/81	14: 0.00	162.19
5/28/81	15:59.00	165.88
5/28/81	18: 3.00	169.60
5/28/81	19:58.00	172.60
5/28/81	22: 3.00	175.95
5/28/81	24: 0.00	179.19
5/29/81	1:55.00	182.03
5/29/81	6: 0.00	188.40
5/29/81	7:55.00	191.06
5/29/81	33:55.00	185.24

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14:36 PAGE 1

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)---

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:53.00	108.92
5/18/81	12: 0.73	109.08
5/18/81	12:12.83	109.01
5/18/81	12:31.10	105.87
5/18/81	12:32.65	101.15
5/18/81	12:33.98	97.71
5/18/81	12:35.45	94.39
5/18/81	12:36.90	91.59
5/18/81	12:38.32	89.03
5/18/81	12:39.73	86.81
5/18/81	12:40.95	85.01
5/18/81	12:42.93	78.49
5/18/81	12:44.88	80.36
5/18/81	12:46.37	78.31
5/18/81	12:47.98	76.60
5/18/81	12:50.28	74.27
5/20/81	11:57.00	110.65
5/20/81	12: 1.07	107.58
5/20/81	12: 2.78	102.26
5/20/81	12: 4.25	98.43
5/20/81	12: 5.55	95.63
5/20/81	12: 7.07	92.63
5/20/81	12: 8.53	90.02
5/20/81	12: 9.87	87.80
5/20/81	12:11.20	85.75
5/20/81	12:12.35	84.04
5/20/81	12:13.65	82.26
5/20/81	12:15.08	80.36
5/20/81	12:17.10	78.03
5/20/81	12:18.83	76.11
5/20/81	12:21.75	73.16
5/20/81	12:27.50	66.25
5/20/81	12:36.58	61.45
5/20/81	12:42.83	57.77
5/20/81	12:51.00	52.48
5/20/81	12:59.00	48.93
5/20/81	13: 3.00	47.03
5/20/81	13: 7.00	45.09
5/20/81	13:14.00	42.46
5/20/81	13:19.00	40.63

NAME.....231
LOCATION.....16748.3 76188.9
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:23.00	39.09
5/20/81	13:28.00	37.45
5/20/81	13:34.00	35.74
5/20/81	13:40.00	33.59
5/20/81	13:49.00	30.75
5/20/81	14: 4.00	27.03
5/20/81	14:15.00	24.60
5/20/81	14:37.00	20.72
5/20/81	14:56.00	17.44
5/20/81	15:20.00	13.35
5/20/81	15:40.00	10.30
5/20/81	16: 0.00	7.85
5/20/81	16:57.00	1.41
5/27/81	22: 0.00	0.28
5/27/81	23: 0.00	4.09
5/27/81	23:50.00	6.77
5/28/81	1:10.00	11.20
5/28/81	2: 0.00	13.65
5/28/81	4:10.00	20.21
5/28/81	6:25.00	26.24
5/28/81	8: 0.00	30.15
5/28/81	12: 2.00	39.52
5/28/81	14: 0.00	43.84
5/28/81	15:59.00	47.98
5/28/81	18: 3.00	51.93
5/28/81	19:57.00	55.42
5/28/81	22: 3.00	59.21
5/28/81	24: 0.00	62.74
5/29/81	1:55.00	65.88
5/29/81	3:55.00	69.32
5/29/81	6: 0.00	72.65
5/29/81	7:55.00	75.54

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NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:55.00	23.65
5/18/81	12: 3.23	24.09
5/18/81	12:13.72	24.14
5/18/81	12:31.70	24.21
5/18/81	12:33.13	24.23
5/18/81	12:34.42	24.26
5/18/81	12:35.82	24.26
5/18/81	12:37.23	24.26
5/18/81	12:38.68	24.26
5/18/81	12:39.98	24.28
5/18/81	12:41.35	24.28
5/18/81	12:43.53	24.30
5/18/81	12:44.92	24.30
5/18/81	12:46.70	24.32
5/18/81	12:48.35	24.32
5/18/81	12:51.12	24.35
5/20/81	11:58.00	24.44
5/20/81	12: 1.60	24.46
5/20/81	12: 3.38	24.51
5/20/81	12: 4.77	24.49
5/20/81	12: 6.08	24.51
5/20/81	12: 7.58	24.51
5/20/81	12: 8.98	24.53
5/20/81	12:10.43	24.56
5/20/81	12:11.65	24.53
5/20/81	12:12.83	24.56
5/20/81	12:14.12	24.56
5/20/81	12:15.90	24.58
5/20/81	12:17.60	24.58
5/20/81	12:19.35	24.60
5/20/81	12:22.18	24.60
5/20/81	12:39.00	24.65
5/20/81	12:37.43	24.67
5/20/81	12:43.50	24.67
5/20/81	12:52.00	24.67
5/20/81	13: 0.00	24.65
5/20/81	13: 4.00	24.65
5/20/81	13: 8.00	24.62
5/20/81	13:14.00	24.60
5/20/81	13:19.00	24.58

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14:51 PAGE

NAME.....WW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:24.00	24.58
5/20/81	13:29.00	24.56
5/20/81	13:34.00	24.55
5/20/81	13:40.00	24.53
5/20/81	13:50.00	24.51
5/20/81	14: 5.00	24.46
5/20/81	14:16.00	24.37
5/20/81	14:37.00	24.26
5/20/81	14:57.00	24.16
5/20/81	15:20.00	24.02
5/20/81	15:40.00	23.93
5/20/81	16: 0.00	23.86
5/20/81	16:57.00	23.59
5/20/81	18: 1.00	23.24
5/20/81	20: 1.00	22.61
5/20/81	22: 0.00	21.88
5/21/81	1: 3.00	21.09
5/21/81	3: 3.00	20.81
5/21/81	5: 6.00	20.63
5/23/81	12: 2.00	18.97
5/23/81	14:59.00	19.22
5/23/81	16:23.00	19.22
5/23/81	19:57.00	18.92
5/24/81	0: 7.00	18.78
5/24/81	3:58.00	18.80
5/24/81	12:55.00	18.50
5/24/81	16: 6.00	18.62
5/24/81	20: 5.00	18.46
5/25/81	0:21.00	18.36
5/25/81	4: 9.00	18.25
5/25/81	12:23.00	18.04
5/25/81	16: 0.00	17.97
5/25/81	20:45.00	17.95
5/25/81	23:52.00	17.79
5/26/81	3:56.00	17.74
5/26/81	7:56.00	17.86
5/26/81	12: 3.00	17.86
5/26/81	16:20.00	18.36
5/26/81	20: 2.00	17.95
5/26/81	23:54.00	17.67

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14:51 PAGE

NAME.....WW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	3:58.00	17.72
5/27/81	8: 5.00	17.72
5/27/81	11:59.00	17.93
5/27/81	13:35.00	18.32
5/27/81	14: 1.17	18.39
5/27/81	14: 3.50	18.39
5/27/81	14: 5.58	18.41
5/27/81	14: 7.58	18.41
5/27/81	14: 9.75	18.41
5/27/81	14:11.75	18.41
5/27/81	14:14.00	18.41
5/27/81	14:16.92	18.41
5/27/81	14:18.92	18.41
5/27/81	14:21.42	18.43
5/27/81	14:23.33	18.43
5/27/81	14:25.42	18.43
5/27/81	14:27.67	18.43
5/27/81	14:29.75	18.46
5/27/81	14:31.83	18.46
5/27/81	14:34.17	18.46
5/27/81	14:36.42	18.46
5/27/81	14:38.83	18.46
5/27/81	14:41.67	18.48
5/27/81	14:44.00	18.48
5/27/81	14:47.08	18.50
5/27/81	14:49.42	18.50
5/27/81	14:53.25	18.53
5/27/81	14:56.75	18.55
5/27/81	15: 2.00	18.55
5/27/81	15: 6.50	18.57
5/27/81	15:14.00	18.60
5/27/81	15:18.33	18.62
5/27/81	15:23.67	18.64
5/27/81	15:33.42	18.66
5/27/81	15:43.67	18.71
5/27/81	15:53.75	18.71
5/27/81	16: 2.00	18.78
5/27/81	16:20.00	18.87
5/27/81	16:40.00	18.92
5/27/81	17: 0.00	18.97

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:14:51 PAGE 4

NAME.....MW2
LOCATION.....16442.0,76157.4
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17:25.00	19.03
5/27/81	17:40.00	19.06
5/27/81	18: 0.00	19.13
5/27/81	18:56.00	19.27
5/27/81	19:57.00	19.31
5/27/81	21:10.00	19.31
5/27/81	22: 0.00	19.31
5/27/81	23: 0.00	19.33
5/27/81	23:50.00	19.38
5/28/81	1:10.00	19.38
5/28/81	2: 0.00	19.47
5/28/81	4:10.00	19.70
5/28/81	6:25.00	19.84
5/28/81	8: 0.00	20.14
5/28/81	12: 2.00	20.56
5/28/81	14: 0.00	20.84
5/28/81	15:59.00	21.00
5/28/81	18: 3.00	21.13
5/28/81	19:57.00	21.18
5/28/81	22: 3.00	21.28
5/28/81	24: 0.00	21.39
5/29/81	1:55.00	21.48
5/29/81	3:55.00	21.64
5/29/81	6: 0.00	21.81
5/29/81	7:55.00	21.88

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:15:31 PAGE

NAME.....WW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	21.41
4/29/81	13: 0.40	12.66
4/29/81	13: 0.72	8.55
4/29/81	13: 1.28	7.16
4/29/81	13: 1.63	6.70
4/29/81	13: 2.00	6.42
4/29/81	13: 2.57	6.28
4/29/81	13: 3.05	6.25
4/29/81	13: 3.43	6.24
4/29/81	13: 3.93	6.24
4/29/81	13: 4.67	6.21
4/29/81	13: 6.28	6.19
4/29/81	13: 7.87	6.19
4/29/81	13: 9.30	6.14
4/29/81	13:10.47	6.12
4/29/81	13:11.00	6.10
4/29/81	13:13.37	6.10
4/29/81	13:15.12	6.05
4/29/81	13:18.70	5.96
4/29/81	13:20.93	6.01
4/29/81	13:22.65	5.98
4/29/81	13:24.53	5.89
4/29/81	13:26.85	5.91
4/29/81	13:30.53	5.89
4/29/81	13:35.65	5.84
4/29/81	13:40.68	5.78
4/29/81	13:45.60	5.78
4/29/81	13:50.85	5.73
4/29/81	13:55.67	5.73
4/29/81	14: 0.73	5.66
4/29/81	14:10.93	5.59
4/29/81	14:20.00	5.57
4/29/81	14:30.00	5.50
4/29/81	14:40.00	5.50
4/29/81	14:50.00	5.45
4/29/81	15: 0.00	5.41
4/29/81	15:20.00	5.34
4/29/81	15:40.00	5.27
4/29/81	16: 0.00	5.15
4/29/81	16:20.00	5.11

NAME.....WW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	16:40.00	4.83
4/29/81	17: 0.00	4.71
4/29/81	18: 0.00	4.76
4/29/81	19: 0.00	4.50
4/29/81	20: 0.00	4.44
4/29/81	21: 0.00	4.04
4/29/81	22: 0.00	3.51
4/29/81	24: 0.00	4.83
4/30/81	1: 0.00	5.06
4/30/81	3: 0.00	4.80
4/30/81	5: 0.00	4.64
4/30/81	7: 0.00	4.50
4/30/81	9: 0.00	4.39
4/30/81	10:44.00	4.37
4/30/81	11:12.00	5.15
4/30/81	12:57.00	4.99
4/30/81	15: 0.00	4.74
4/30/81	17: 6.00	4.71
4/30/81	18:54.00	4.50
4/30/81	19:10.00	4.74
4/30/81	20: 1.00	4.55
4/30/81	21: 0.00	4.64
4/30/81	23: 0.00	4.13
5/ 1/81	1: 0.00	4.07
5/ 1/81	3: 0.00	3.70
5/ 1/81	5: 0.00	3.72
5/ 1/81	7: 0.00	3.40
5/ 1/81	9: 0.00	3.25
5/ 1/81	11: 0.00	4.02
5/ 1/81	13: 0.00	3.56
5/ 1/81	15: 0.00	3.23
5/ 1/81	17: 0.00	3.12
5/ 1/81	19: 0.00	1.96
5/ 1/81	21:45.00	1.92
5/ 1/81	23: 8.00	1.73
5/ 2/81	1:15.00	1.34
5/ 2/81	3: 0.00	1.16
5/ 2/81	5:15.00	1.04
5/ 2/81	7: 0.00	1.36
5/ 2/81	9: 0.00	1.55

NAME.....KW-4 A-5
LOCATION.....16170.0, 78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	10:53.00	2.10
5/ 2/81	11: 0.53	14.00
5/ 2/81	11: 1.03	14.69
5/ 2/81	11: 1.53	14.74
5/ 2/81	11: 2.03	14.81
5/ 2/81	11: 2.78	14.83
5/ 2/81	11: 3.87	14.85
5/ 2/81	11: 5.98	14.88
5/ 2/81	11: 7.97	14.88
5/ 2/81	11: 9.70	14.88
5/ 2/81	11:11.77	14.90
5/ 2/81	11:13.87	14.90
5/ 2/81	11:15.42	14.92
5/ 2/81	11:16.92	14.92
5/ 2/81	11:19.08	14.95
5/ 2/81	11:21.08	14.97
5/ 2/81	11:22.58	14.97
5/ 2/81	11:25.67	15.02
5/ 2/81	11:27.25	15.04
5/ 2/81	11:32.08	15.06
5/ 2/81	11:40.67	15.08
5/ 2/81	11:59.75	15.25
5/ 2/81	12:11.75	15.38
5/ 2/81	12:30.00	15.52
5/ 2/81	13: 0.00	15.68
5/ 2/81	13:20.00	15.75
5/ 2/81	14:10.00	15.82
5/ 2/81	15: 0.00	15.87
5/ 2/81	16: 6.00	16.01
5/ 2/81	18: 2.00	16.05
5/ 2/81	19: 0.00	16.08
5/ 2/81	20: 2.00	15.75
5/ 2/81	23:15.00	15.22
5/ 3/81	1: 0.00	15.15
5/ 3/81	3:10.00	15.36
5/ 3/81	5:20.00	15.22
5/ 3/81	7:20.00	15.41
5/ 3/81	11: 1.00	15.99
5/ 3/81	18: 0.00	15.38
5/ 4/81	0:30.00	16.15

NAME.....WW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
5/ 4/81	6: 0.00	15.82
5/ 4/81	11:45.00	16.17
5/ 4/81	18: 0.00	16.47
5/ 5/81	0:32.00	16.61
5/ 5/81	5:50.00	16.84
5/ 5/81	18:30.00	17.26
5/ 6/81	0: 2.00	16.82
5/ 6/81	6:23.00	16.63
5/ 6/81	12:30.00	17.33
6/ 8/81	12:54.00	19.50
6/ 8/81	13:44.00	19.47
6/ 8/81	13:46.13	19.47
6/ 8/81	13:47.82	19.47
6/ 8/81	13:49.30	19.47
6/ 8/81	13:50.57	19.47
6/ 8/81	13:52.32	19.47
6/ 8/81	13:53.72	19.47
6/ 8/81	13:55.17	19.47
6/ 8/81	13:56.65	19.47
6/ 8/81	13:58.13	19.47
6/ 8/81	13:59.63	19.47
6/ 8/81	14: 1.45	19.47
6/ 8/81	14: 3.08	19.47
6/ 8/81	14: 5.07	19.47
6/ 8/81	14: 6.50	19.45
6/ 8/81	14: 8.70	19.45
6/ 8/81	14:10.65	19.45
6/ 8/81	14:12.57	19.45
6/ 8/81	14:13.95	19.45
6/ 8/81	14:15.33	19.45
6/ 8/81	14:18.90	19.45
6/ 8/81	14:23.03	19.45
6/ 8/81	14:31.17	19.45
6/ 8/81	14:43.43	19.43
6/ 8/81	14:50.90	19.43
6/ 8/81	14:57.30	19.43
6/ 8/81	15: 7.27	19.43
6/ 8/81	15:14.58	19.43
6/ 8/81	15:23.30	19.43
6/ 8/81	15:29.37	19.43

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:15:31 PAGE

NAME.....WW-4 A-5
LOCATION.....16170.0, 78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	15:42.00	19.38
6/ 8/81	15:59.00	19.36
6/ 8/81	16:15.00	19.31
6/ 8/81	16:29.00	19.31
6/ 8/81	16:47.00	19.29
6/ 8/81	16:55.00	19.29
6/ 8/81	16:58.00	19.29
6/ 8/81	17:15.00	19.27
6/ 8/81	17:25.00	19.27
6/ 8/81	17:26.82	19.27
6/ 8/81	17:28.80	19.27
6/ 8/81	17:30.58	19.27
6/ 8/81	17:33.58	19.27
6/ 8/81	17:36.13	19.27
6/ 8/81	17:38.25	19.27
6/ 8/81	17:41.75	19.24
6/ 8/81	17:50.98	19.24
6/ 8/81	17:55.23	19.24
6/ 8/81	18: 3.58	19.22
6/ 8/81	18:11.68	19.22
6/ 8/81	18:31.97	19.20
6/ 8/81	19: 9.42	19.20
6/ 8/81	19:55.00	19.17
6/ 8/81	22: 3.00	19.08
6/ 8/81	23: 9.00	19.03
6/ 9/81	2:10.00	19.01
6/ 9/81	3:58.00	19.08
6/ 9/81	6: 0.00	19.01
6/ 9/81	12: 5.00	19.38
6/ 9/81	15:15.00	19.40
6/ 9/81	18:34.00	19.33
6/ 9/81	23:52.00	19.10
6/10/81	6:14.00	19.10
6/10/81	12: 1.00	19.80
6/10/81	19: 3.00	19.59
6/10/81	23:52.00	19.27
6/11/81	5:51.00	19.40
6/11/81	10:21.00	16.59
6/11/81	10:32.00	16.63
6/11/81	11:37.00	16.75

NAME.....MW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:32.28	16.84
6/11/81	12:35.08	16.84
6/11/81	12:37.08	16.84
6/11/81	12:39.08	16.82
6/11/81	12:40.75	16.82
6/11/81	12:42.92	16.79
6/11/81	12:44.33	16.79
6/11/81	12:45.83	16.77
6/11/81	12:47.50	16.84
6/11/81	12:49.00	16.84
6/11/81	12:50.50	16.82
6/11/81	12:52.33	16.72
6/11/81	12:53.83	16.72
6/11/81	12:55.33	16.75
6/11/81	12:56.17	16.82
6/11/81	13: 0.83	16.79
6/11/81	13: 2.83	16.82
6/11/81	13: 6.17	16.82
6/11/81	13:10.75	16.79
6/11/81	13:15.50	16.77
6/11/81	13:21.83	16.79
6/11/81	13:25.67	16.79
6/11/81	13:31.92	16.77
6/11/81	13:42.17	16.77
6/11/81	13:51.00	16.77
6/11/81	14: 0.00	16.72
6/11/81	14:10.00	16.61
6/11/81	14:20.00	16.56
6/11/81	14:32.00	16.68
6/11/81	14:50.00	16.61
6/11/81	15:10.00	16.54
6/11/81	15:31.00	16.52
6/11/81	15:55.00	16.54
6/11/81	16:13.00	16.52
6/11/81	16:32.00	16.52
6/11/81	17:32.00	16.42
6/11/81	18:30.00	16.35
6/11/81	19:30.00	16.29
6/11/81	20:26.00	16.22
6/11/81	20:30.00	16.12

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:15:31 PAGE

NAME.....WW-4 A-5
LOCATION.....16170.0, 78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	22:30.00	16.01
6/11/81	23:30.00	16.03
6/12/81	0:30.00	15.94
6/12/81	2:30.00	15.87
6/12/81	4:30.00	15.78
6/12/81	6:30.00	15.75
6/12/81	8:30.00	15.71
6/12/81	12:50.00	16.01
6/12/81	15:22.00	15.87
6/12/81	17: 5.00	15.75
6/12/81	18:35.00	15.68
6/12/81	20:31.00	15.27
6/12/81	22:30.00	15.29
6/13/81	0:30.00	15.29
6/13/81	4:30.00	15.13
6/13/81	8:30.00	15.04
6/13/81	12:36.00	15.04
6/13/81	17:26.00	14.95
6/13/81	20:25.00	14.92
6/14/81	0:30.00	14.74
6/14/81	4:30.00	14.71
6/14/81	8:30.00	14.65
6/14/81	12:24.00	11.97
6/14/81	16:34.00	12.22
6/14/81	20:29.00	9.86
6/15/81	0:30.00	18.04
6/15/81	4:30.00	17.79
6/15/81	8:40.00	17.63
6/15/81	12:40.00	17.35
6/15/81	16:38.00	17.35
6/15/81	20:33.00	17.12
6/16/81	0:30.00	16.96
6/16/81	4:45.00	16.91
6/16/81	8:35.00	16.84
6/16/81	12:27.00	16.91
6/16/81	16:31.00	16.89
6/16/81	20:28.00	16.84
6/17/81	0:30.00	16.63
6/17/81	4:45.00	16.63
6/17/81	8:30.00	16.77

NAME.....WW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/17/81	12:38.00	16.96
6/17/81	16:31.00	16.72
6/17/81	20:47.00	16.29
6/18/81	0:30.00	16.33
6/18/81	14:22.00	16.45
6/18/81	14:31.07	16.42
6/18/81	14:32.62	16.45
6/18/81	14:33.82	16.42
6/18/81	14:35.20	16.45
6/18/81	14:36.35	16.38
6/18/81	14:37.47	16.38
6/18/81	14:38.65	16.29
6/18/81	14:40.02	16.24
6/18/81	14:41.78	16.38
6/18/81	14:42.97	16.26
6/18/81	14:44.47	16.24
6/18/81	14:45.77	16.26
6/18/81	14:47.07	16.29
6/18/81	14:48.40	16.35
6/18/81	14:49.60	16.19
6/18/81	14:51.45	16.40
6/18/81	14:54.02	16.19
6/18/81	14:58.98	16.40
6/18/81	15: 6.93	16.26
6/18/81	15:11.00	16.29
6/18/81	15:16.00	16.15
6/18/81	15:21.00	16.40
6/18/81	15:27.00	16.24
6/18/81	15:33.00	16.40
6/18/81	15:43.00	16.42
6/18/81	15:53.00	16.42
6/18/81	16: 3.00	16.42
6/18/81	16:13.00	16.40
6/18/81	16:22.00	16.40
6/18/81	16:33.00	16.42
6/18/81	16:43.00	16.40
6/18/81	17: 7.00	16.26
6/18/81	17:32.00	16.42
6/18/81	18: 0.00	16.42
6/18/81	18:47.00	16.40

NAME.....WW-4 A-5
LOCATION.....16170.0,78391.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	19:32.00	16.42
6/18/81	20:32.00	16.40
6/18/81	21:30.00	16.38
6/18/81	22:30.00	16.40
6/18/81	23:30.00	16.24
6/19/81	0:35.00	16.38
6/19/81	2:45.00	16.12
6/19/81	4:30.00	16.31
6/19/81	6:30.00	16.35
6/19/81	8:30.00	16.52
6/19/81	11:59.00	16.93

Appendix B

APPENDIX B

Raw Data from the Pressure Transducer Monitoring System

Data presented in order by well number and alphabetical suborder.

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	17.21
4/29/81	13: 4.98	17.12
4/29/81	13: 6.55	17.09
4/29/81	13: 8.27	17.02
4/29/81	13: 9.53	17.09
4/29/81	13:10.73	17.07
4/29/81	13:12.28	17.09
4/29/81	13:13.70	17.02
4/29/81	13:15.38	17.09
4/29/81	13:19.03	17.09
4/29/81	13:21.25	17.07
4/29/81	13:22.88	17.07
4/29/81	13:24.77	17.05
4/29/81	13:27.12	17.00
4/29/81	13:30.73	17.00
4/29/81	13:35.88	16.98
4/29/81	13:40.92	16.86
4/29/81	13:45.97	16.96
4/29/81	13:51.18	16.86
4/29/81	13:55.90	16.86
4/29/81	14: 1.15	16.91
4/29/81	14:11.20	16.89
4/29/81	14:20.00	16.77
4/29/81	14:30.00	16.72
4/29/81	14:40.00	16.77
4/29/81	14:50.00	16.72
4/29/81	15: 0.00	16.70
4/29/81	15:20.00	16.63
4/29/81	15:40.00	16.49
4/29/81	16: 0.00	16.40
4/29/81	16:20.00	16.33
4/29/81	16:40.00	15.78
4/29/81	17: 0.00	15.52
4/29/81	18: 0.00	15.45
4/29/81	19: 0.00	15.15
4/29/81	20: 0.00	14.90
4/29/81	21: 0.00	14.02
4/29/81	22: 0.00	12.71
4/29/81	23:15.00	14.95
4/29/81	24: 0.00	15.85

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HR:MN.MM)	UNCORRECTED READING (FEET)
4/30/81	1: 0.00	16.12
4/30/81	3: 0.00	15.96
4/30/81	5: 0.00	15.82
4/30/81	7: 0.00	15.75
4/30/81	9: 0.00	15.78
4/30/81	10:27.00	15.13
4/30/81	11:12.00	16.35
4/30/81	12:57.00	16.29
4/30/81	15: 0.00	16.42
4/30/81	17: 8.00	16.61
4/30/81	18:54.00	16.68
4/30/81	19:19.00	16.72
4/30/81	20: 1.00	16.49
4/30/81	21: 0.00	16.66
4/30/81	23: 0.00	16.15
5/ 1/81	1: 0.00	16.12
5/ 1/81	3: 0.00	15.87
5/ 1/81	5: 0.00	16.05
5/ 1/81	7: 0.00	15.82
5/ 1/81	9: 0.00	15.82
5/ 1/81	11: 0.00	17.05
5/ 1/81	13: 0.00	16.72
5/ 1/81	15: 0.00	16.31
5/ 1/81	17: 0.00	16.52
5/ 1/81	19: 0.00	12.96
5/ 1/81	21:45.00	13.01
5/ 1/81	23: 8.00	12.87
5/ 2/81	1:15.00	12.59
5/ 2/81	3: 0.00	12.43
5/ 2/81	5:15.00	12.34
5/ 2/81	7: 0.00	12.80
5/ 2/81	9: 0.00	13.01
5/ 2/81	10:54.00	13.84
5/ 2/81	11: 4.20	13.86
5/ 2/81	11: 6.53	13.88
5/ 2/81	11: 8.33	13.88
5/ 2/81	11:10.43	13.91
5/ 2/81	11:12.75	13.88
5/ 2/81	11:14.25	13.88
5/ 2/81	11:15.75	13.91

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:17.25	13.91
5/ 2/81	11:19.42	13.88
5/ 2/81	11:21.42	13.88
5/ 2/81	11:22.92	13.88
5/ 2/81	11:26.08	13.88
5/ 2/81	11:27.58	13.88
5/ 2/81	11:32.42	13.91
5/ 2/81	11:41.08	13.91
5/ 2/81	12: 0.08	13.91
5/ 2/81	12:11.08	13.93
5/ 2/81	12:30.00	13.95
5/ 2/81	13: 0.00	13.98
5/ 2/81	13:20.00	13.95
5/ 2/81	14:10.00	13.88
5/ 2/81	15: 0.00	13.81
5/ 2/81	16: 6.00	13.77
5/ 2/81	18: 2.00	13.72
5/ 2/81	19: 0.00	13.70
5/ 2/81	20: 2.00	13.31
5/ 2/81	21:11.00	13.26
5/ 2/81	23:15.00	12.59
5/ 3/81	1: 0.00	12.45
5/ 3/81	3:10.00	12.61
5/ 3/81	5:20.00	12.40
5/ 3/81	7:20.00	12.54
5/ 3/81	9: 0.00	12.71
5/ 3/81	11: 1.00	13.03
5/ 3/81	18: 0.00	12.31
5/ 4/81	0:31.00	13.03
5/ 4/81	6: 0.00	12.66
5/ 4/81	11:45.00	12.94
5/ 4/81	18: 0.00	13.21
5/ 5/81	0:33.00	13.35
5/ 5/81	5:51.00	13.65
5/ 5/81	18:30.00	13.86
5/ 6/81	0: 2.00	13.51
5/ 6/81	6:34.00	13.33
5/ 6/81	12:30.00	13.79
6/ 8/81	12:55.00	135.00
6/ 8/81	13:44.00	135.34

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	13:46.30	135.37
6/ 8/81	13:48.02	135.41
6/ 8/81	13:49.47	135.34
6/ 8/81	13:51.08	135.27
6/ 8/81	13:52.47	135.18
6/ 8/81	13:53.90	135.09
6/ 8/81	13:55.33	134.93
6/ 8/81	13:56.83	134.77
6/ 8/81	13:58.33	134.63
6/ 8/81	13:59.85	134.42
6/ 8/81	14: 1.63	134.21
6/ 8/81	14: 3.25	134.00
6/ 8/81	14: 5.22	133.82
6/ 8/81	14: 6.68	133.66
6/ 8/81	14: 8.60	133.40
6/ 8/81	14:11.00	133.15
6/ 8/81	14:12.72	132.94
6/ 8/81	14:14.13	132.80
6/ 8/81	14:15.48	132.62
6/ 8/81	14:19.08	132.22
6/ 8/81	14:23.18	131.81
6/ 8/81	14:31.30	130.98
6/ 8/81	14:43.55	129.85
6/ 8/81	14:51.03	129.22
6/ 8/81	14:57.50	128.67
6/ 8/81	15: 7.45	127.86
6/ 8/81	15:15.17	127.28
6/ 8/81	15:24.85	126.50
6/ 8/81	15:29.60	126.17
6/ 8/81	15:42.00	125.23
6/ 8/81	15:59.00	124.12
6/ 8/81	16:15.00	123.24
6/ 8/81	16:29.00	122.41
6/ 8/81	16:47.00	121.34
6/ 8/81	16:55.00	121.00
6/ 8/81	16:58.00	120.91
6/ 8/81	17:15.00	120.03
6/ 8/81	17:25.00	119.75
6/ 8/81	17:21.97	119.66
6/ 8/81	17:28.97	119.54

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:19 PAGE

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:30.73	119.47
6/ 8/81	17:33.80	119.43
6/ 8/81	17:36.42	119.45
6/ 8/81	17:38.48	119.45
6/ 8/81	17:41.98	119.54
6/ 8/81	17:51.17	119.94
6/ 8/81	17:55.58	120.19
6/ 8/81	18: 3.77	120.67
6/ 8/81	18:12.00	121.14
6/ 8/81	18:32.12	122.27
6/ 8/81	19: 9.62	124.32
6/ 8/81	19:55.00	126.56
6/ 8/81	22: 3.00	130.56
6/ 8/81	22:44.00	131.49
6/ 9/81	2:10.00	133.77
6/ 9/81	3:58.00	133.47
6/ 9/81	6: 0.00	133.56
6/ 9/81	12: 5.00	134.63
6/ 9/81	15:15.00	134.72
6/ 9/81	18:35.00	134.79
6/ 9/81	23:52.00	134.14
6/10/81	6:14.00	133.73
6/10/81	12: 2.00	135.60
6/10/81	19: 3.00	134.90
6/10/81	23:52.00	133.75
6/11/81	5:51.00	134.03
6/11/81	10:22.00	109.59
6/11/81	10:33.00	109.79
6/11/81	11:44.00	109.96
6/11/81	12:32.17	110.23
6/11/81	12:35.25	110.07
6/11/81	12:37.25	110.12
6/11/81	12:39.25	109.63
6/11/81	12:40.92	109.84
6/11/81	12:43.13	109.56
6/11/81	12:44.50	109.29
6/11/81	12:46.00	109.10
6/11/81	12:47.67	109.61
6/11/81	12:49.17	109.45
6/11/81	12:51.00	109.12

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:52.50	108.57
6/11/81	12:54.00	108.39
6/11/81	12:55.50	112.73
6/11/81	12:58.33	108.98
6/11/81	13: 1.17	108.22
6/11/81	13: 3.00	108.22
6/11/81	13: 6.42	106.98
6/11/81	13:11.00	105.94
6/11/81	13:16.25	106.61
6/11/81	13:22.00	106.68
6/11/81	13:25.92	106.44
6/11/81	13:32.00	106.10
6/11/81	13:42.50	105.38
6/11/81	13:52.00	104.78
6/11/81	14: 0.00	104.09
6/11/81	14:10.00	102.66
6/11/81	14:20.00	102.96
6/11/81	14:32.00	102.33
6/11/81	14:51.00	100.95
6/11/81	15:11.00	99.84
6/11/81	15:31.00	98.94
6/11/81	15:56.00	98.29
6/11/81	16:14.00	97.64
6/11/81	16:32.00	97.07
6/11/81	17:33.00	95.31
6/11/81	18:31.00	93.83
6/11/81	19:30.00	92.68
6/11/81	20:26.00	91.89
6/11/81	20:35.00	90.90
6/11/81	22:30.00	90.25
6/11/81	23:30.00	89.91
6/12/81	0:30.00	89.51
6/12/81	2:30.00	88.47
6/12/81	4:30.00	87.94
6/12/81	6:30.00	87.76
6/12/81	8:30.00	87.23
6/12/81	12:50.00	87.92
6/12/81	15:22.00	87.73
6/12/81	17: 5.00	87.60
6/12/81	18:35.00	87.00

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:19 PAGE

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/12/81	20:31.00	86.42
6/12/81	22:30.00	86.63
6/13/81	0:30.00	86.69
6/13/81	4:30.00	86.42
6/13/81	8:30.00	86.23
6/13/81	12:36.00	86.60
6/13/81	17:26.00	86.83
6/13/81	20:25.00	87.09
6/14/81	0:30.00	86.65
6/14/81	4:30.00	86.56
6/14/81	8:30.00	86.39
6/14/81	12:24.00	86.56
6/14/81	16:34.00	86.15
6/14/81	20:29.00	87.09
6/15/81	0:30.00	86.53
6/15/81	4:30.00	86.51
6/15/81	8:40.00	86.42
6/15/81	12:40.00	85.77
6/15/81	16:38.00	86.39
6/15/81	20:33.00	86.21
6/16/81	0:30.00	86.07
6/16/81	4:45.00	86.00
6/16/81	8:35.00	85.65
6/16/81	12:27.00	86.32
6/16/81	16:31.00	86.28
6/16/81	20:28.00	86.49
6/17/81	0:30.00	86.05
6/17/81	4:45.00	86.02
6/17/81	8:30.00	86.21
6/17/81	12:38.00	86.74
6/17/81	16:31.00	86.72
6/17/81	20:47.00	85.93
6/18/81	0:30.00	86.26
6/18/81	14:22.00	86.51
6/18/81	14:31.23	86.49
6/18/81	14:32.75	86.53
6/18/81	14:33.97	86.53
6/18/81	14:35.32	86.49
6/18/81	14:36.47	86.26
6/18/81	14:37.57	86.21

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:19 PAGE

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:38.83	85.98
6/18/81	14:40.25	85.65
6/18/81	14:41.90	86.32
6/18/81	14:43.13	85.29
6/18/81	14:44.60	85.79
6/18/81	14:45.92	85.63
6/18/81	14:47.18	86.21
6/18/81	14:48.53	86.44
6/18/81	14:49.73	86.00
6/18/81	14:51.58	86.05
6/18/81	14:54.17	86.83
6/18/81	14:57.17	87.18
6/18/81	14:59.17	87.11
6/18/81	15: 7.08	86.99
6/18/81	15:12.00	86.97
6/18/81	15:16.00	86.51
6/18/81	15:21.00	87.18
6/18/81	15:27.00	88.75
6/18/81	15:34.00	88.57
6/18/81	15:43.00	89.86
6/18/81	15:53.00	90.55
6/18/81	16: 3.00	91.08
6/18/81	16:13.00	91.57
6/18/81	16:22.00	92.19
6/18/81	16:33.00	92.91
6/18/81	16:44.00	93.42
6/18/81	17: 7.00	93.65
6/18/81	17:32.00	95.89
6/18/81	18: 0.00	97.23
6/18/81	18:47.00	98.94
6/18/81	19:32.00	100.53
6/18/81	20:32.00	102.08
6/18/81	21:30.00	103.07
6/18/81	22:30.00	104.18
6/18/81	23:30.00	104.74
6/19/81	0:35.00	105.31
6/19/81	2:45.00	105.61
6/19/81	4:30.00	105.82
6/19/81	6:30.00	106.08
6/19/81	8:30.00	106.38

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:19 PAGE

NAME.....195 A-7 WEST
LOCATION.....16342.0,78974.1
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1615.45

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/19/81	11:59.00	107.30

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	12:55.00	267.27
6/ 8/81	13:48.00	267.09
6/ 8/81	13:46.47	264.90
6/ 8/81	13:48.18	261.67
6/ 8/81	13:49.95	259.30
6/ 8/81	13:51.32	256.53
6/ 8/81	13:52.60	254.68
6/ 8/81	13:54.10	252.66
6/ 8/81	13:55.63	250.75
6/ 8/81	13:57.12	248.96
6/ 8/81	13:58.58	247.23
6/ 8/81	13:59.98	243.99
6/ 8/81	14: 1.82	243.99
6/ 8/81	14: 3.37	242.61
6/ 8/81	14: 5.45	240.82
6/ 8/81	14: 6.83	239.49
6/ 8/81	14: 8.73	238.28
6/ 8/81	14:11.20	236.54
6/ 8/81	14:12.88	235.45
6/ 8/81	14:14.30	234.58
6/ 8/81	14:15.90	233.54
6/ 8/81	14:19.23	231.64
6/ 8/81	14:23.33	229.04
6/ 8/81	14:31.40	224.71
6/ 8/81	14:43.72	219.39
6/ 8/81	14:51.17	216.79
6/ 8/81	14:57.63	214.48
6/ 8/81	15: 2.63	211.42
6/ 8/81	15:15.37	209.29
6/ 8/81	15:25.08	206.63
6/ 8/81	15:29.46	205.59
6/ 8/81	15:42.00	202.64
6/ 8/81	15:59.00	198.89
6/ 8/81	16:15.00	197.74
6/ 8/81	16:29.00	195.02
6/ 8/81	16:47.00	191.79
6/ 8/81	16:55.00	188.78
6/ 8/81	16:58.00	187.80
6/ 8/81	17:15.00	184.34
6/ 8/81	17:25.00	183.76

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:31 PAGE

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:27.42	188.50
6/ 8/81	17:29.18	192.94
6/ 8/81	17:30.98	197.10
6/ 8/81	17:33.97	202.78
6/ 8/81	17:36.58	206.98
6/ 8/81	17:38.57	209.63
6/ 8/81	17:42.07	213.73
6/ 8/81	17:51.30	221.36
6/ 8/81	17:55.78	224.07
6/ 8/81	18: 3.95	228.11
6/ 8/81	18:12.17	231.40
6/ 8/81	18:32.37	237.58
6/ 8/81	18:55.00	251.67
6/ 8/81	19: 9.87	245.32
6/ 8/81	22: 3.00	259.76
6/ 8/81	23:47.00	261.84
6/ 9/81	2:10.00	263.46
6/ 9/81	3:59.00	263.92
6/ 9/81	6: 0.00	263.51
6/ 9/81	12: 5.00	266.46
6/ 9/81	15:15.00	266.52
6/ 9/81	18:35.00	266.05
6/ 9/81	23:52.00	264.38
6/10/81	6:14.00	263.63
6/10/81	12: 2.00	268.25
6/10/81	19: 3.00	265.77
6/10/81	23:52.00	263.57
6/11/81	5:51.00	263.69
6/11/81	10:23.00	223.02
6/11/81	10:33.00	223.67
6/11/81	11:48.00	223.95
6/11/81	12:32.98	220.49
6/11/81	12:35.42	216.68
6/11/81	12:37.42	214.37
6/11/81	12:39.42	211.48
6/11/81	12:41.83	208.82
6/11/81	12:43.25	207.67
6/11/81	12:44.67	205.94
6/11/81	12:46.17	203.57
6/11/81	12:47.83	204.38

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:31 PAGE

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:49.33	203.16
6/11/81	12:51.17	200.85
6/11/81	12:52.67	199.87
6/11/81	12:54.17	198.83
6/11/81	12:55.67	197.68
6/11/81	12:58.50	197.10
6/11/81	13: 1.50	195.54
6/11/81	13: 3.17	194.96
6/11/81	13: 6.75	192.02
6/11/81	13:11.50	188.73
6/11/81	13:16.58	188.32
6/11/81	13:22.33	186.94
6/11/81	13:26.25	185.67
6/11/81	13:32.50	183.82
6/11/81	13:42.83	180.99
6/11/81	13:52.00	178.74
6/11/81	14: 1.00	176.74
6/11/81	14:10.00	172.73
6/11/81	14:21.00	172.44
6/11/81	14:32.00	170.42
6/11/81	14:51.00	167.13
6/11/81	15:11.00	164.24
6/11/81	15:32.00	161.76
6/11/81	15:56.00	159.85
6/11/81	16:14.00	158.12
6/11/81	16:32.00	156.62
6/11/81	17:33.00	152.17
6/11/81	18:31.00	148.65
6/11/81	19:31.00	145.99
6/11/81	20:26.00	143.86
6/11/81	20:35.00	141.78
6/11/81	22:30.00	140.56
6/11/81	23:31.00	139.64
6/12/81	0:30.00	138.48
6/12/81	2:30.00	138.14
6/12/81	4:30.00	136.98
6/12/81	6:30.00	136.52
6/12/81	8:30.00	136.00
6/12/81	12:50.00	137.21
6/12/81	15:22.00	136.52

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:31 PAGE

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/12/81	17: 5.00	136.29
6/12/81	18:35.00	136.17
6/12/81	20:31.00	133.92
6/12/81	22:30.00	133.69
6/13/81	0:30.00	133.81
6/13/81	4:30.00	133.06
6/13/81	8:30.00	133.11
6/13/81	12:36.00	133.75
6/13/81	17:26.00	134.27
6/13/81	20:25.00	134.56
6/14/81	0:30.00	133.40
6/14/81	4:30.00	133.11
6/14/81	8:30.00	133.11
6/14/81	12:24.00	134.10
6/14/81	16:34.00	133.69
6/14/81	20:29.00	134.44
6/15/81	0:30.00	133.06
6/15/81	4:30.00	133.00
6/15/81	8:40.00	132.88
6/15/81	12:40.00	131.72
6/15/81	16:38.00	132.59
6/15/81	20:33.00	132.02
6/16/81	0:30.00	131.61
6/16/81	4:45.00	131.27
6/16/81	8:35.00	130.86
6/16/81	12:27.00	131.79
6/16/81	16:31.00	131.79
6/16/81	20:28.00	131.73
6/17/81	0:30.00	130.63
6/17/81	4:45.00	130.52
6/17/81	8:30.00	131.32
6/17/81	12:38.00	132.71
6/17/81	16:31.00	132.36
6/17/81	20:47.00	130.69
6/18/81	0:30.00	128.55
6/18/81	14:22.00	131.55
6/18/81	14:31.42	133.40
6/18/81	14:32.92	136.09
6/18/81	14:34.13	139.24
6/18/81	14:35.45	141.72

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:31 PAGE

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:36.58	143.22
6/18/81	14:37.70	145.01
6/18/81	14:39.03	146.63
6/18/81	14:40.50	148.19
6/18/81	14:42.02	151.02
6/18/81	14:43.27	151.59
6/18/81	14:44.77	153.21
6/18/81	14:46.05	153.33
6/18/81	14:47.30	156.33
6/18/81	14:48.72	157.54
6/18/81	14:49.85	158.06
6/18/81	14:51.82	158.61
6/18/81	14:54.30	161.93
6/18/81	14:57.27	164.01
6/18/81	14:59.28	164.88
6/18/81	15: 7.23	166.44
6/18/81	15:12.00	169.44
6/18/81	15:16.00	170.42
6/18/81	15:22.00	172.10
6/18/81	15:27.00	176.02
6/18/81	15:34.00	176.77
6/18/81	15:43.00	180.70
6/18/81	15:53.00	183.41
6/18/81	16: 3.00	185.61
6/18/81	16:13.00	187.75
6/18/81	16:23.00	189.71
6/18/81	16:33.00	191.79
6/18/81	16:44.00	193.46
6/18/81	17: 8.00	193.52
6/18/81	17:32.00	200.22
6/18/81	18: 0.00	203.45
6/18/81	18:47.00	207.15
6/18/81	19:32.00	210.44
6/18/81	20:32.00	213.27
6/18/81	21:30.00	214.60
6/18/81	22:30.00	216.39
6/18/81	23:30.00	216.97
6/19/81	0:35.00	217.60
6/19/81	2:45.00	216.10
6/19/81	4:30.00	217.60

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:31 PAGE

NAME.....210 A-7
LOCATION.....16621.2,78902.6
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
R.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/19/81	6:30.00	218.06
6/19/81	8:30.00	217.08
6/19/81	11:59.00	218.87

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:53.00	45.14
5/18/81	12: 1.58	45.67
5/18/81	12:13.08	45.76
5/18/81	12:31.37	45.85
5/18/81	12:32.80	45.88
5/18/81	12:34.15	45.88
5/18/81	12:35.58	45.90
5/18/81	12:36.98	45.90
5/18/81	12:38.43	45.90
5/18/81	12:39.82	45.92
5/18/81	12:40.07	45.95
5/18/81	12:43.13	45.95
5/18/81	12:44.67	45.95
5/18/81	12:46.48	45.97
5/18/81	12:48.10	45.97
5/18/81	12:50.55	45.97
5/20/81	11:57.00	46.29
5/20/81	12: 1.27	46.34
5/20/81	12: 2.95	46.36
5/20/81	12: 4.43	46.36
5/20/81	12: 5.73	46.38
5/20/81	12: 7.25	46.41
5/20/81	12: 8.67	46.41
5/20/81	12: 9.02	46.41
5/20/81	12:11.33	46.41
5/20/81	12:12.53	46.43
5/20/81	12:13.82	46.43
5/20/81	12:15.32	46.45
5/20/81	12:17.28	46.48
5/20/81	12:19.00	46.48
5/20/81	12:21.88	46.50
5/20/81	12:27.75	46.55
5/20/81	12:36.78	46.52
5/20/81	12:43.00	46.59
5/20/81	12:51.00	46.66
5/20/81	12:59.00	46.71
5/20/81	13: 3.00	46.71
5/20/81	13: 8.00	46.73
5/20/81	13:14.00	46.75
5/20/81	13:19.00	46.78

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:46 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:23.00	46.80
5/20/81	13:28.00	46.78
5/20/81	13:34.00	46.78
5/20/81	13:40.00	46.78
5/20/81	13:50.00	46.78
5/20/81	14: 4.00	46.73
5/20/81	14:15.00	46.78
5/20/81	14:56.00	46.55
5/20/81	15:20.00	46.41
5/20/81	15:40.00	46.27
5/20/81	16: 0.00	46.06
5/20/81	16:57.00	45.14
5/20/81	18: 1.00	43.84
5/20/81	20: 1.00	41.21
5/20/81	22: 0.00	39.06
5/21/81	1: 2.00	36.47
5/21/81	3: 3.00	35.41
5/21/81	5: 5.00	34.37
5/23/81	12: 1.00	28.48
5/23/81	14:58.00	30.17
5/23/81	16:22.00	30.61
5/23/81	19:57.00	30.35
5/24/81	0: 7.00	30.31
5/24/81	3:57.00	30.42
5/24/81	12:55.00	29.22
5/24/81	16: 5.00	29.27
5/24/81	20: 5.00	28.97
5/25/81	0:21.00	30.70
5/25/81	4: 9.00	29.04
5/25/81	8: 1.00	29.20
5/25/81	12:23.00	28.74
5/25/81	16: 0.00	28.41
5/25/81	20:45.00	28.92
5/25/81	23:52.00	28.76
5/26/81	3:56.00	30.47
5/26/81	7:56.00	30.12
5/26/81	12: 3.00	30.15
5/26/81	16:20.00	30.75
5/26/81	20: 2.00	33.36
5/26/81	23:54.00	33.47

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:46 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	3:58.00	33.40
5/27/81	8: 5.00	31.79
5/27/81	11:59.00	32.55
5/27/81	13:34.00	33.10
5/27/81	14: 0.83	33.06
5/27/81	14: 2.92	33.06
5/27/81	14: 5.08	33.06
5/27/81	14: 9.25	33.08
5/27/81	14:11.25	33.08
5/27/81	14:13.50	33.10
5/27/81	14:15.42	33.10
5/27/81	14:18.33	33.13
5/27/81	14:20.58	33.13
5/27/81	14:22.83	33.08
5/27/81	14:24.92	33.13
5/27/81	14:27.08	33.13
5/27/81	14:29.25	33.15
5/27/81	14:31.33	33.17
5/27/81	14:33.67	33.17
5/27/81	14:35.92	33.17
5/27/81	14:38.33	33.19
5/27/81	14:41.00	33.19
5/27/81	14:43.42	33.19
5/27/81	14:45.33	33.19
5/27/81	14:49.00	33.22
5/27/81	14:52.83	33.22
5/27/81	14:56.17	33.22
5/27/81	15: 1.33	33.22
5/27/81	15: 5.92	33.22
5/27/81	15:13.50	33.24
5/27/81	15:17.75	33.24
5/27/81	15:23.00	33.26
5/27/81	15:32.92	33.26
5/27/81	15:42.75	33.31
5/27/81	15:52.83	33.36
5/27/81	16: 1.00	33.40
5/27/81	16:20.00	33.47
5/27/81	16:40.00	33.50
5/27/81	17: 0.00	33.65
5/27/81	17:25.00	33.61

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15: 9:46 PAGE

NAME.....211-1
LOCATION.....16533.6,76308.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17:40.00	33.66
5/27/81	18: 0.00	33.75
5/27/81	18:56.00	33.93
5/27/81	19:57.00	33.98
5/27/81	21:10.00	34.14
5/27/81	22: 0.00	34.28
5/27/81	23: 0.00	34.60
5/27/81	23:50.00	34.63
5/28/81	1:10.00	34.86
5/28/81	2: 0.00	35.92
5/28/81	4:10.00	36.96
5/28/81	6:25.00	37.28
5/28/81	8: 0.00	37.86
5/28/81	12: 2.00	38.39
5/28/81	14: 0.00	38.72
5/28/81	15:58.00	39.02
5/28/81	16: 3.00	39.34
5/28/81	19:57.00	39.50
5/28/81	22: 3.00	39.78
5/28/81	24: 0.00	40.24
5/29/81	1:55.00	40.56
5/29/81	3:55.00	40.91
5/29/81	6: 0.00	41.28
5/29/81	7:55.00	41.72

NAME.....213 A-4
LOCATION.....16471.3, 78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	56.29
4/29/81	13: 4.40	56.11
4/29/81	13: 6.12	56.09
4/29/81	13: 7.63	56.09
4/29/81	13: 9.20	56.06
4/29/81	13:10.35	56.06
4/29/81	13:11.88	56.04
4/29/81	13:13.18	56.02
4/29/81	13:14.95	55.95
4/29/81	13:18.70	55.83
4/29/81	13:20.80	55.97
4/29/81	13:22.52	55.95
4/29/81	13:24.40	55.97
4/29/81	13:26.55	55.97
4/29/81	13:30.40	55.93
4/29/81	13:35.65	55.93
4/29/81	13:40.55	55.72
4/29/81	13:45.43	55.86
4/29/81	13:50.65	55.83
4/29/81	13:55.50	55.76
4/29/81	14: 0.47	55.51
4/29/81	14:10.78	55.56
4/29/81	14:20.00	55.42
4/29/81	14:30.00	55.32
4/29/81	14:40.00	55.37
4/29/81	14:50.00	55.30
4/29/81	15: 0.00	55.26
4/29/81	15:20.00	55.07
4/29/81	15:40.00	54.56
4/29/81	16: 0.00	54.49
4/29/81	16:20.00	54.31
4/29/81	16:40.00	52.99
4/29/81	17: 0.00	52.37
4/29/81	18: 0.00	52.46
4/29/81	19: 0.00	51.42
4/29/81	20: 0.00	50.78
4/29/81	21: 0.00	48.42
4/29/81	22: 0.00	44.98
4/29/81	23: 0.00	49.39
4/29/81	24: 0.00	51.21

NAME.....213-1 A-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 4/81	18: 0.00	37.79
5/ 5/81	0:30.00	37.93
5/ 5/81	5:47.00	38.32
5/ 5/81	18:30.00	38.55
5/ 6/81	0: 1.00	38.05
5/ 6/81	2:30.00	38.62
5/ 6/81	6:32.00	37.81

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NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	10:52.00	31.67
5/ 2/81	11: 0.35	31.72
5/ 2/81	11: 1.37	31.74
5/ 2/81	11: 1.87	31.74
5/ 2/81	11: 2.42	31.74
5/ 2/81	11: 3.35	31.74
5/ 2/81	11: 4.92	31.76
5/ 2/81	11: 7.33	31.76
5/ 2/81	11: 9.20	31.76
5/ 2/81	11:11.25	31.79
5/ 2/81	11:13.42	31.79
5/ 2/81	11:14.92	31.79
5/ 2/81	11:16.42	31.79
5/ 2/81	11:18.58	31.79
5/ 2/81	11:20.08	31.81
5/ 2/81	11:22.08	31.81
5/ 2/81	11:25.25	31.79
5/ 2/81	11:26.75	31.79
5/ 2/81	11:31.43	31.81
5/ 2/81	11:40.08	31.81
5/ 2/81	11:59.25	31.81
5/ 2/81	12:11.25	31.83
5/ 2/81	12:30.00	31.85
5/ 2/81	13: 0.00	31.90
5/ 2/81	13:20.00	31.88
5/ 2/81	14:10.00	31.83
5/ 2/81	15: 0.00	31.72
5/ 2/81	16: 6.00	31.74
5/ 2/81	18: 2.00	31.67
5/ 2/81	19: 0.00	31.62
5/ 2/81	20: 1.00	31.14
5/ 2/81	21:11.00	31.07
5/ 2/81	23:15.00	30.24
5/ 3/81	1: 0.00	30.08
5/ 3/81	3:10.00	30.31
5/ 3/81	5:20.00	29.98
5/ 3/81	7:20.00	30.17
5/ 3/81	9: 0.00	30.47
5/ 3/81	11: 1.00	30.91
5/ 3/81	18: 0.00	30.08

NAME.....216-1 A-6
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
4/30/81	1: 0.00	3.06
4/30/81	3: 0.00	2.66
4/30/81	5: 0.00	2.43
4/30/81	7: 0.00	2.19
4/30/81	9: 0.00	2.31
4/30/81	10:27.00	9.88
4/30/81	11:12.00	12.47
4/30/81	12:57.00	12.47
4/30/81	15: 0.00	3.64
4/30/81	17: 6.00	4.04
4/30/81	18:54.00	4.16
4/30/81	19:10.00	4.33
4/30/81	20: 1.00	3.87
4/30/81	21: 0.00	4.22
4/30/81	23: 0.00	2.48
5/ 1/81	1: 0.00	2.43
5/ 1/81	3: 0.00	1.85
5/ 1/81	5: 0.00	2.25
5/ 1/81	7: 0.00	1.79
5/ 1/81	9: 0.00	1.79
5/ 1/81	11: 0.00	3.93
5/ 1/81	13: 0.00	3.29
5/ 1/81	15: 0.00	2.89
5/ 1/81	17: 0.00	3.18
5/ 1/81	19: 0.00	2.43
5/ 1/81	21:45.00	2.54
5/ 1/81	23: 8.00	2.31
5/ 2/81	1:15.00	1.79
5/ 2/81	3: 0.00	1.56
5/ 2/81	5:15.00	1.33
5/ 2/81	7: 0.00	2.25
5/ 2/81	9: 0.00	2.83
5/ 2/81	10:53.00	4.56
5/ 2/81	11: 4.03	4.62
5/ 2/81	11: 6.28	4.68
5/ 2/81	11: 8.17	4.68
5/ 2/81	11: 9.87	4.68
5/ 2/81	11:14.08	4.68
5/ 2/81	11:15.58	4.68
5/ 2/81	11:17.08	4.68

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NAME.....216-1 A-6
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:19.25	4.68
5/ 2/81	11:21.25	4.74
5/ 2/81	11:22.75	4.68
5/ 2/81	11:25.92	4.68
5/ 2/81	11:27.42	4.68
5/ 2/81	11:32.25	4.68
5/ 2/81	11:40.92	4.74
5/ 2/81	11:59.92	4.79
5/ 2/81	12:30.00	4.85
5/ 2/81	13: 0.00	4.97
5/ 2/81	13:20.00	4.91

NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 4/81	0:29.00	30.98
5/ 4/81	6: 0.00	30.49
5/ 4/81	11:45.00	30.95
5/ 4/81	18: 0.00	31.32
5/ 5/81	0:30.00	31.46
5/ 5/81	5:48.00	31.83
5/ 5/81	18:30.00	32.06
5/ 6/81	0: 1.00	31.58
5/ 6/81	6:33.00	31.37
5/ 6/81	12:30.00	32.13

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11: 1 PAGE

NAME.....216-1 A-6
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	11.43
4/29/81	12: 0.00	11.26
4/29/81	13: 6.42	11.32
4/29/81	13: 7.97	11.32
4/29/81	13: 9.42	11.32
4/29/81	13:10.50	11.32
4/29/81	13:12.10	11.32
4/29/81	13:13.52	11.26
4/29/81	13:15.27	11.38
4/29/81	13:18.93	11.32
4/29/81	13:21.08	11.32
4/29/81	13:22.88	11.32
4/29/81	13:24.17	11.32
4/29/81	13:26.98	11.26
4/29/81	13:30.63	11.26
4/29/81	13:35.88	11.32
4/29/81	13:45.72	11.32
4/29/81	13:50.97	11.26
4/29/81	13:55.90	11.20
4/29/81	14: 0.93	11.20
4/29/81	14: 0.93	11.20
4/29/81	14:11.07	11.20
4/29/81	14:20.00	11.15
4/29/81	14:30.00	11.15
4/29/81	14:40.00	11.15
4/29/81	14:50.00	11.15
4/29/81	15: 0.00	11.15
4/29/81	15:20.00	11.09
4/29/81	15:40.00	10.97
4/29/81	16: 0.00	10.92
4/29/81	16:20.00	10.86
4/29/81	16:40.00	10.45
4/29/81	17: 0.00	10.34
4/29/81	18: 0.00	10.16
4/29/81	19: 0.00	9.93
4/29/81	20: 0.00	9.82
4/29/81	21: 0.00	9.24
4/29/81	22: 0.00	8.37
4/29/81	23:15.00	0.69
4/29/81	24: 0.00	2.37

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:10:51 PAGE

NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	10:52.00	31.67
5/ 2/81	11: 0.35	31.72
5/ 2/81	11: 1.37	31.74
5/ 2/81	11: 1.87	31.74
5/ 2/81	11: 2.42	31.74
5/ 2/81	11: 3.35	31.74
5/ 2/81	11: 4.92	31.76
5/ 2/81	11: 7.33	31.76
5/ 2/81	11: 9.20	31.76
5/ 2/81	11:11.25	31.79
5/ 2/81	11:13.42	31.79
5/ 2/81	11:14.92	31.79
5/ 2/81	11:16.42	31.79
5/ 2/81	11:18.58	31.79
5/ 2/81	11:20.08	31.81
5/ 2/81	11:22.08	31.81
5/ 2/81	11:25.25	31.79
5/ 2/81	11:26.75	31.79
5/ 2/81	11:31.43	31.81
5/ 2/81	11:40.08	31.81
5/ 2/81	11:59.25	31.81
5/ 2/81	12:11.25	31.83
5/ 2/81	12:30.00	31.85
5/ 2/81	13: 0.00	31.90
5/ 2/81	13:20.00	31.88
5/ 2/81	14:10.00	31.83
5/ 2/81	15: 0.00	31.72
5/ 2/81	16: 6.00	31.74
5/ 2/81	18: 2.00	31.67
5/ 2/81	19: 0.00	31.62
5/ 2/81	20: 1.00	31.14
5/ 2/81	21:11.00	31.07
5/ 2/81	23:15.00	30.24
5/ 3/81	1: 0.00	30.08
5/ 3/81	3:10.00	30.31
5/ 3/81	5:20.00	29.98
5/ 3/81	7:20.00	30.17
5/ 3/81	9: 0.00	30.47
5/ 3/81	11: 1.00	30.91
5/ 3/81	18: 0.00	30.08

NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	17: 0.00	36.82
4/29/81	18: 0.00	36.89
4/29/81	19: 0.00	36.15
4/29/81	20: 0.00	35.64
4/29/81	21: 0.00	34.14
4/29/81	22: 0.00	31.76
4/29/81	23:15.00	34.21
4/29/81	24: 0.00	36.01
4/30/81	1: 0.00	36.52
4/30/81	3: 0.00	35.99
4/30/81	5: 0.00	35.90
4/30/81	7: 0.00	35.76
4/30/81	9: 0.00	35.39
4/30/81	10:27.00	34.67
4/30/81	11:11.00	36.52
4/30/81	12:57.00	36.45
4/30/81	15: 0.00	36.57
4/30/81	17: 6.00	36.80
4/30/81	18:54.00	36.89
4/30/81	19:10.00	36.98
4/30/81	20: 1.00	36.61
4/30/81	21: 0.00	36.80
4/30/81	23: 0.00	36.17
5/ 1/81	1: 0.00	36.04
5/ 1/81	3: 0.00	35.69
5/ 1/81	5: 0.00	35.94
5/ 1/81	7: 0.00	35.67
5/ 1/81	9: 0.00	35.67
5/ 1/81	11: 0.00	37.26
5/ 1/81	13: 0.00	36.78
5/ 1/81	15: 0.00	36.36
5/ 1/81	17: 0.00	36.59
5/ 1/81	19: 0.00	30.47
5/ 1/81	21:45.00	30.58
5/ 1/81	23: 8.00	30.38
5/ 2/81	1:15.00	29.96
5/ 2/81	3: 0.00	29.78
5/ 2/81	5:15.00	29.64
5/ 2/81	7: 0.00	30.21
5/ 2/81	9: 0.00	30.61

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NAME.....217 A-8
LOCATION.....16430.0, 78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	102.98
4/29/81	13: 5.15	102.56
4/29/81	13: 6.78	102.63
4/29/81	13: 8.27	102.29
4/29/81	13: 9.58	102.10
4/29/81	13:10.92	102.59
4/29/81	13:12.42	102.52
4/29/81	13:13.82	102.22
4/29/81	13:15.50	102.47
4/29/81	13:19.35	102.43
4/29/81	13:21.37	102.38
4/29/81	13:23.20	102.38
4/29/81	13:24.88	102.36
4/29/81	13:27.22	102.38
4/29/81	13:30.87	102.33
4/29/81	13:36.05	102.29
4/29/81	13:41.00	101.94
4/29/81	13:45.97	102.17
4/29/81	13:51.32	101.78
4/29/81	13:56.07	101.69
4/29/81	14: 1.27	101.92
4/29/81	14:11.33	101.69
4/29/81	14:20.00	101.43
4/29/81	14:30.00	101.29
4/29/81	14:40.00	101.36
4/29/81	14:50.00	101.25
4/29/81	15: 0.00	101.13
4/29/81	15:20.00	100.83
4/29/81	15:40.00	100.16
4/29/81	16: 0.00	99.84
4/29/81	16:20.00	99.49
4/29/81	16:40.00	97.11
4/29/81	17: 0.00	96.03
4/29/81	18: 0.00	96.17
4/29/81	19: 0.00	94.22
4/29/81	20: 0.00	92.86
4/29/81	21: 0.00	88.20
4/29/81	23:15.00	92.12
4/29/81	24: 0.00	93.88
4/30/81	1: 0.00	94.32

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NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	39.73
4/29/81	13: 0.20	39.64
4/29/81	13: 0.68	39.64
4/29/81	13: 1.00	39.50
4/29/81	13: 1.55	39.50
4/29/81	13: 1.88	39.50
4/29/81	13: 2.38	39.64
4/29/81	13: 2.90	39.62
4/29/81	13: 3.33	39.62
4/29/81	13: 4.25	39.59
4/29/81	13: 5.78	39.57
4/29/81	13: 7.35	39.59
4/29/81	13: 8.87	39.59
4/29/81	13:10.05	39.57
4/29/81	13:11.53	39.55
4/29/81	13:12.98	39.52
4/29/81	13:14.70	39.50
4/29/81	13:18.27	39.36
4/29/81	13:20.22	39.48
4/29/81	13:22.25	39.48
4/29/81	13:24.15	39.29
4/29/81	13:26.47	39.45
4/29/81	13:30.15	39.43
4/29/81	13:35.18	39.27
4/29/81	13:40.22	39.27
4/29/81	13:45.18	39.36
4/29/81	13:50.35	39.32
4/29/81	13:55.13	39.27
4/29/81	14: 0.17	39.25
4/29/81	14:10.50	39.11
4/29/81	14:20.00	39.06
4/29/81	14:30.00	38.99
4/29/81	14:40.00	38.99
4/29/81	14:50.00	38.95
4/29/81	15: 0.00	38.90
4/29/81	15:20.00	38.78
4/29/81	15:40.00	38.51
4/29/81	16: 0.00	38.35
4/29/81	16:20.00	38.21
4/29/81	16:40.00	37.28

NAME.....213-1 A-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	17: 0.00	44.44
4/29/81	18: 0.00	44.51
4/29/81	19: 0.00	43.59
4/29/81	20: 0.00	42.97
4/29/81	21: 0.00	41.23
4/29/81	22: 0.00	38.53
4/29/81	23:15.00	41.16
4/30/81	1: 0.00	43.80
4/30/81	3: 0.00	43.15
4/30/81	5: 0.00	43.08
4/30/81	7: 0.00	42.90
4/30/81	9: 0.00	42.46
4/30/81	10:27.00	41.56
4/30/81	11:10.00	43.64
4/30/81	12:57.00	43.54
4/30/81	15: 0.00	43.73
4/30/81	17: 6.00	43.98
4/30/81	18:54.00	44.10
4/30/81	19:10.00	44.17
4/30/81	20: 1.00	43.77
4/30/81	21: 0.00	43.98
4/30/81	23: 0.00	43.24
5/ 1/81	1: 0.00	43.13
5/ 1/81	3: 0.00	42.76
5/ 1/81	5: 0.00	42.85
5/ 1/81	7: 0.00	42.71
5/ 1/81	9: 0.00	42.71
5/ 1/81	11: 0.00	44.44
5/ 1/81	13: 0.00	43.89
5/ 1/81	15: 0.00	43.45
5/ 1/81	17: 0.00	43.71
5/ 1/81	19: 0.00	36.57
5/ 1/81	21:45.00	36.57
5/ 1/81	23: 8.00	36.34
5/ 2/81	1:15.00	35.78
5/ 2/81	3: 0.00	35.64
5/ 2/81	5:15.00	35.50
5/ 2/81	7: 0.00	36.06
5/ 2/81	9: 0.00	36.57
5/ 2/81	10:52.00	37.70

NAME.....213-1 A-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11: 0.17	37.77
5/ 2/81	11: 1.20	37.81
5/ 2/81	11: 1.70	37.81
5/ 2/81	11: 3.15	37.84
5/ 2/81	11: 4.75	37.86
5/ 2/81	11: 8.93	37.86
5/ 2/81	11:11.12	37.88
5/ 2/81	11:13.25	37.88
5/ 2/81	11:14.75	37.88
5/ 2/81	11:16.25	37.88
5/ 2/81	11:18.42	37.91
5/ 2/81	11:21.92	37.91
5/ 2/81	11:25.08	37.91
5/ 2/81	11:26.58	37.91
5/ 2/81	11:31.20	37.93
5/ 2/81	11:40.08	37.95
5/ 2/81	11:59.08	37.95
5/ 2/81	12:11.08	38.00
5/ 2/81	12:30.00	38.05
5/ 2/81	13: 0.00	38.12
5/ 2/81	13:20.00	38.09
5/ 2/81	14:10.00	38.05
5/ 2/81	15: 0.00	37.77
5/ 2/81	16: 6.00	38.00
5/ 2/81	18: 2.00	37.98
5/ 2/81	19: 0.00	37.93
5/ 2/81	20: 1.00	37.42
5/ 2/81	20:11.00	37.38
5/ 2/81	21:10.00	37.45
5/ 2/81	23:15.00	36.52
5/ 3/81	1: 0.00	36.34
5/ 3/81	3:10.00	36.64
5/ 3/81	5:20.00	36.29
5/ 3/81	7:20.00	36.50
5/ 3/81	9: 0.00	36.80
5/ 3/81	11: 1.00	37.31
5/ 3/81	18: 0.00	36.43
5/ 4/81	0:17.00	36.91
5/ 4/81	6: 0.00	36.87
5/ 4/81	11:45.00	37.38

NAME.....213 A-4
LOCATION.....16471.3,78537.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
F.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:16.75	44.72
5/ 2/81	11:18.92	44.72
5/ 2/81	11:20.87	44.74
5/ 2/81	11:22.42	44.72
5/ 2/81	11:25.58	44.72
5/ 2/81	11:31.92	44.74
5/ 2/81	11:40.58	44.72
5/ 2/81	11:59.58	44.72
5/ 2/81	12:11.92	44.74
5/ 2/81	12:30.00	44.79
5/ 2/81	13: 0.00	44.86
5/ 2/81	13:20.00	44.84
5/ 2/81	14:10.00	44.79
5/ 2/81	15: 0.00	44.68
5/ 2/81	16: 6.00	44.70
5/ 2/81	18: 2.00	44.63
5/ 2/81	19: 0.00	44.56
5/ 2/81	20: 2.00	44.01
5/ 2/81	21:11.00	43.89
5/ 2/81	23:15.00	42.97
5/ 3/81	1: 0.00	42.80
5/ 3/81	3:10.00	43.04
5/ 3/81	5:20.00	42.69
5/ 3/81	7:20.00	42.92
5/ 3/81	9: 0.00	43.20
5/ 3/81	11: 1.00	43.68
5/ 3/81	18: 0.00	42.80
5/ 4/81	0:30.00	43.75
5/ 4/81	6: 0.00	43.24
5/ 4/81	11:45.00	43.68
5/ 4/81	18: 0.00	44.17
5/ 5/81	0:31.00	44.25
5/ 5/81	5:49.00	44.65
5/ 5/81	18:30.00	44.91
5/ 6/81	0: 2.00	44.31
5/ 6/81	6:33.00	44.07
5/ 6/81	12:30.00	44.95

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NAME.....213-1 A-1
LOCATION.....16025.4,78436.7
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1621.66

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	48.21
4/29/81	13: 0.08	48.07
4/29/81	13: 0.52	48.05
4/29/81	13: 0.98	47.86
4/29/81	13: 1.53	47.84
4/29/81	13: 1.77	47.82
4/29/81	13: 2.38	47.96
4/29/81	13: 2.78	47.93
4/29/81	13: 3.20	47.93
4/29/81	13: 3.77	47.93
4/29/81	13: 4.12	47.93
4/29/81	13: 5.97	47.91
4/29/81	13: 7.22	47.86
4/29/81	13: 8.73	47.84
4/29/81	13: 9.97	47.86
4/29/81	13:11.38	47.84
4/29/81	13:12.85	47.79
4/29/81	13:18.08	47.61
4/29/81	13:20.43	47.70
4/29/81	13:22.12	47.68
4/29/81	13:24.00	47.54
4/29/81	13:26.00	47.70
4/29/81	13:30.00	47.66
4/29/81	13:35.00	47.47
4/29/81	13:40.00	47.59
4/29/81	13:45.00	47.54
4/29/81	13:50.17	47.49
4/29/81	13:55.00	47.45
4/29/81	14: 0.00	47.38
4/29/81	14:10.38	47.26
4/29/81	14:20.00	47.12
4/29/81	14:30.00	47.03
4/29/81	14:40.00	47.08
4/29/81	14:50.00	46.98
4/29/81	15: 0.00	46.92
4/29/81	15:20.00	46.73
4/29/81	15:40.00	46.48
4/29/81	16: 0.00	46.25
4/29/81	16:20.00	46.08
4/29/81	16:40.00	45.00

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NAME.....213-2 A-2
LOCATION.....16064.0,78664.5
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1619.35

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	12:20.00	39.73
4/29/81	13: 0.20	39.64
4/29/81	13: 0.68	39.64
4/29/81	13: 1.00	39.50
4/29/81	13: 1.55	39.50
4/29/81	13: 1.88	39.50
4/29/81	13: 2.38	39.64
4/29/81	13: 2.90	39.62
4/29/81	13: 3.33	39.62
4/29/81	13: 4.25	39.59
4/29/81	13: 5.78	39.57
4/29/81	13: 7.35	39.59
4/29/81	13: 8.87	39.59
4/29/81	13:10.05	39.57
4/29/81	13:11.53	39.55
4/29/81	13:12.98	39.52
4/29/81	13:14.70	39.50
4/29/81	13:18.27	39.36
4/29/81	13:20.22	39.48
4/29/81	13:22.25	39.48
4/29/81	13:24.15	39.29
4/29/81	13:26.47	39.45
4/29/81	13:30.15	39.43
4/29/81	13:35.18	39.27
4/29/81	13:40.22	39.27
4/29/81	13:45.18	39.36
4/29/81	13:50.35	39.32
4/29/81	13:55.13	39.27
4/29/81	14: 0.17	39.25
4/29/81	14:10.50	39.11
4/29/81	14:20.00	39.06
4/29/81	14:30.00	38.99
4/29/81	14:40.00	38.99
4/29/81	14:50.00	38.95
4/29/81	15: 0.00	38.90
4/29/81	15:20.00	38.78
4/29/81	15:40.00	38.51
4/29/81	16: 0.00	38.35
4/29/81	16:20.00	38.21
4/29/81	16:40.00	37.28

NAME.....216-1 A-6
LOCATION.....16252.8,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
4/30/81	1: 0.00	3.06
4/30/81	3: 0.00	2.66
4/30/81	5: 0.00	2.43
4/30/81	7: 0.00	2.19
4/30/81	9: 0.00	2.31
4/30/81	10:27.00	9.88
4/30/81	11:12.00	12.47
4/30/81	12:57.00	12.47
4/30/81	15: 0.00	3.64
4/30/81	17: 6.00	4.04
4/30/81	18:54.00	4.16
4/30/81	19:10.00	4.33
4/30/81	20: 1.00	3.87
4/30/81	21: 0.00	4.22
4/30/81	23: 0.00	2.48
5/ 1/81	1: 0.00	2.43
5/ 1/81	3: 0.00	1.85
5/ 1/81	5: 0.00	2.25
5/ 1/81	7: 0.00	1.79
5/ 1/81	9: 0.00	1.79
5/ 1/81	11: 0.00	3.93
5/ 1/81	13: 0.00	3.29
5/ 1/81	15: 0.00	2.89
5/ 1/81	17: 0.00	3.18
5/ 1/81	19: 0.00	2.43
5/ 1/81	21:45.00	2.54
5/ 1/81	23: 8.00	2.31
5/ 2/81	1:15.00	1.79
5/ 2/81	3: 0.00	1.56
5/ 2/81	5:15.00	1.33
5/ 2/81	7: 0.00	2.25
5/ 2/81	9: 0.00	2.83
5/ 2/81	10:53.00	4.56
5/ 2/81	11: 4.03	4.62
5/ 2/81	11: 6.28	4.68
5/ 2/81	11: 8.17	4.68
5/ 2/81	11: 9.87	4.68
5/ 2/81	11:14.08	4.68
5/ 2/81	11:15.58	4.68
5/ 2/81	11:17.08	4.68

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NAME.....216-1 A-6
LOCATION.....16252.9,77530.9
TYPE.....GLACIAL
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1659.20

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:19.25	4.68
5/ 2/81	11:21.25	4.74
5/ 2/81	11:22.75	4.68
5/ 2/81	11:25.92	4.68
5/ 2/81	11:27.42	4.68
5/ 2/81	11:32.25	4.68
5/ 2/81	11:40.92	4.74
5/ 2/81	11:59.92	4.79
5/ 2/81	12:30.00	4.85
5/ 2/81	13: 0.00	4.97
5/ 2/81	13:20.00	4.91

NAME.....217 A-8
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HR:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:19.58	81.31
5/ 2/81	11:21.58	81.31
5/ 2/81	11:23.25	81.29
5/ 2/81	11:26.25	81.29
5/ 2/81	11:27.75	81.29
5/ 2/81	11:32.58	81.29
5/ 2/81	11:41.25	81.29
5/ 2/81	12: 0.25	81.29
5/ 2/81	12:11.25	81.34
5/ 2/81	12:30.00	81.38
5/ 2/81	13: 0.00	81.47
5/ 2/81	13:20.00	81.45
5/ 2/81	14:10.00	81.38
5/ 2/81	15: 0.00	81.24
5/ 2/81	16: 6.00	81.27
5/ 2/81	18: 2.00	81.20
5/ 2/81	19: 0.00	81.09
5/ 2/81	20: 2.00	80.34
5/ 2/81	21:11.00	80.18
5/ 2/81	23:15.00	78.98
5/ 3/81	1: 0.00	78.77
5/ 3/81	3:10.00	79.05
5/ 3/81	5:20.00	78.68
5/ 3/81	7:20.00	78.96
5/ 3/81	9: 0.00	79.26
5/ 3/81	11: 1.00	79.88
5/ 3/81	18: 0.00	78.75
5/ 4/81	0:31.00	80.00
5/ 4/81	6: 0.00	79.35
5/ 4/81	11:45.00	79.83
5/ 4/81	18: 0.00	80.46
5/ 5/81	0:33.00	80.57
5/ 5/81	5:51.00	81.03
5/ 5/81	18:30.00	81.31
5/ 6/81	0: 3.00	80.46
5/ 6/81	6:34.00	80.13
5/ 6/81	12:30.00	81.36
6/ 8/81	12:53.00	224.23
6/ 8/81	13:44.00	224.00
6/ 8/81	13:45.80	220.40

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:20 PAGE

NAME.....217 A-8
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	13:47.37	215.27
6/ 8/81	13:48.88	212.34
6/ 8/81	13:50.25	210.21
6/ 8/81	13:51.98	207.76
6/ 8/81	13:53.42	206.10
6/ 8/81	13:54.83	204.55
6/ 8/81	13:56.27	202.98
6/ 8/81	13:57.77	200.97
6/ 8/81	13:59.28	199.58
6/ 8/81	14: 0.98	198.13
6/ 8/81	14: 2.70	196.81
6/ 8/81	14: 4.48	195.50
6/ 8/81	14: 5.98	194.34
6/ 8/81	14: 7.97	193.07
6/ 8/81	14:10.17	191.59
6/ 8/81	14:12.25	190.34
6/ 8/81	14:13.67	189.54
6/ 8/81	14:15.05	188.73
6/ 8/81	14:18.47	186.99
6/ 8/81	14:22.72	184.38
6/ 8/81	14:30.83	180.53
6/ 8/81	14:47.75	175.68
6/ 8/81	14:50.65	173.11
6/ 8/81	14:56.83	170.82
6/ 8/81	15: 6.73	167.00
6/ 8/81	15:13.95	165.83
6/ 8/81	15:22.53	163.76
6/ 8/81	15:29.09	162.14
6/ 8/81	15:42.00	159.21
6/ 8/81	15:59.00	155.51
6/ 8/81	16:14.00	154.40
6/ 8/81	16:28.00	152.16
6/ 8/81	16:46.00	148.53
6/ 8/81	16:55.00	144.51
6/ 8/81	16:58.00	143.66
6/ 8/81	17:15.00	141.65
6/ 8/81	17:25.00	141.07
6/ 8/81	17:25.47	144.93
6/ 8/81	17:28.40	154.17
6/ 8/81	17:30.27	158.33

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NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:54.00	189.82
5/18/81	12: 2.90	186.93
5/18/81	12:13.25	187.04
5/18/81	12:31.55	187.27
5/18/81	12:32.93	187.32
5/18/81	12:34.28	187.36
5/18/81	12:35.72	187.36
5/18/81	12:37.10	187.41
5/18/81	12:38.57	187.46
5/18/81	12:39.92	187.46
5/18/81	12:41.25	187.55
5/18/81	12:43.35	187.50
5/18/81	12:44.78	187.60
5/18/81	12:46.58	187.60
5/18/81	12:48.25	187.60
5/18/81	12:50.83	187.66
5/20/81	11:57.00	187.92
5/20/81	12: 1.45	187.96
5/20/81	12: 2.98	188.01
5/20/81	12: 4.60	188.08
5/20/81	12: 5.90	188.08
5/20/81	12: 7.42	188.10
5/20/81	12: 8.82	188.17
5/20/81	12:10.23	188.24
5/20/81	12:11.50	188.24
5/20/81	12:12.67	188.31
5/20/81	12:13.97	188.31
5/20/81	12:15.58	188.33
5/20/81	12:17.47	188.40
5/20/81	12:19.20	188.40
5/20/81	12:22.05	188.40
5/20/81	12:28.00	188.43
5/20/81	12:36.98	188.38
5/20/81	12:43.25	188.15
5/20/81	12:52.00	187.80
5/20/81	12:59.00	187.41
5/20/81	13: 4.00	187.16
5/20/81	13: 8.00	186.95
5/20/81	13:14.00	186.56
5/20/81	13:19.00	186.23

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NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:24.00	185.96
5/20/81	13:29.00	185.61
5/20/81	13:34.00	185.17
5/20/81	13:40.00	184.89
5/20/81	13:50.00	184.15
5/20/81	14: 5.00	183.18
5/20/81	14:15.00	182.21
5/20/81	14:37.00	180.60
5/20/81	14:57.00	179.14
5/20/81	15:20.00	177.29
5/20/81	15:40.00	175.88
5/20/81	16: 0.00	174.64
5/20/81	16:57.00	170.78
5/20/81	18: 1.00	167.08
5/20/81	20: 1.00	160.96
5/20/81	22: 0.00	155.62
5/21/81	1: 3.00	149.09
5/21/81	3: 3.00	146.36
5/21/81	5: 6.00	143.82
5/23/81	12: 1.00	125.76
5/23/81	14:59.00	125.90
5/23/81	16:23.00	125.90
5/23/81	19:57.00	124.97
5/24/81	0: 7.00	124.42
5/24/81	3:58.00	124.21
5/24/81	12:55.00	123.01
5/24/81	16: 5.00	123.08
5/24/81	20: 5.00	122.50
5/25/81	0:21.00	122.18
5/25/81	4: 9.00	121.64
5/25/81	8: 2.00	121.16
5/25/81	12:23.00	120.74
5/25/81	16: 0.00	120.35
5/25/81	20:45.00	120.28
5/25/81	23:52.00	119.80
5/26/81	3:56.00	119.59
5/26/81	7:56.00	119.57
5/26/81	12: 3.00	119.40
5/26/81	16:20.00	120.30
5/26/81	20: 2.00	119.27

NAME.....217 A-8
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:32.67	162.23
6/ 8/81	17:35.83	167.13
6/ 8/81	17:37.97	169.55
6/ 8/81	17:41.38	173.02
6/ 8/81	17:50.70	179.65
6/ 8/81	17:54.92	181.94
6/ 8/81	18: 3.22	185.70
6/ 8/81	18:11.70	188.84
6/ 8/81	18:31.62	194.85
6/ 8/81	19: 8.93	202.47
6/ 8/81	19:55.00	208.85
6/ 8/81	22: 3.00	217.02
6/ 8/81	23: 8.00	219.31
6/ 9/81	2:10.00	219.54
6/ 9/81	3:58.00	221.27
6/ 9/81	6: 0.00	221.02
6/ 9/81	12: 5.00	223.42
6/ 9/81	15:15.00	223.45
6/ 9/81	18:34.00	223.08
6/ 9/81	23:52.00	221.88
6/10/81	6:14.00	221.32
6/10/81	12: 1.00	224.95
6/10/81	19: 1.00	223.05
6/10/81	23:52.00	221.34
6/11/81	5:51.00	221.48
6/11/81	10:18.00	187.25
6/11/81	10:32.00	187.76
6/11/81	11:39.00	186.69
6/11/81	12:32.75	181.96
6/11/81	12:34.75	176.53
6/11/81	12:36.75	173.11
6/11/81	12:38.58	169.72
6/11/81	12:40.25	169.14
6/11/81	12:42.75	167.06
6/11/81	12:44.08	166.62
6/11/81	12:45.58	165.17
6/11/81	12:47.17	164.91
6/11/81	12:48.67	163.83
6/11/81	12:50.50	162.32
6/11/81	12:51.83	161.08

CRANICN MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:20 PAGE

NAME.....217 A-8
LCCATICN.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:53.50	160.22
6/11/81	12:55.00	159.09
6/11/81	12:57.83	158.28
6/11/81	13: 0.67	156.94
6/11/81	13: 2.50	156.25
6/11/81	13: 5.58	154.68
6/11/81	13:10.17	151.79
6/11/81	13:15.00	150.66
6/11/81	13:21.25	148.79
6/11/81	13:25.08	147.66
6/11/81	13:31.33	145.65
6/11/81	13:41.42	143.13
6/11/81	13:51.00	140.75
6/11/81	14: 0.00	138.67
6/11/81	14:10.00	136.01
6/11/81	14:20.00	134.37
6/11/81	14:31.00	132.85
6/11/81	14:50.00	129.68
6/11/81	15:10.00	126.87
6/11/81	15:31.00	124.49
6/11/81	15:55.00	122.52
6/11/81	16:12.00	120.86
6/11/81	16:31.00	119.31
6/11/81	17:31.00	114.97
6/11/81	18:30.00	111.50
6/11/81	19:30.00	109.01
6/11/81	20:26.00	107.09
6/11/81	20:30.00	104.97
6/11/81	22:30.00	103.77
6/11/81	23:30.00	102.84
6/12/81	0:30.00	102.84
6/12/81	2:30.00	100.12
6/12/81	4:30.00	99.01
6/12/81	6:30.00	98.54
6/12/81	8:30.00	97.74
6/12/81	12:50.00	98.22
6/12/81	15:22.00	97.78
6/12/81	17: 5.00	97.71
6/12/81	18:35.00	97.74
6/12/81	20:31.00	96.14

NAME.....217 A-B
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/12/81	22:30.00	93.81
6/13/81	0:30.00	95.73
6/13/81	4:30.00	95.13
6/13/81	8:30.00	95.08
6/13/81	12:36.00	95.47
6/13/81	17:26.00	95.84
6/13/81	20:25.00	96.05
6/14/81	0:30.00	95.31
6/14/81	4:30.00	94.96
6/14/81	8:30.00	95.01
6/14/81	12:24.00	95.84
6/14/81	16:34.00	95.77
6/14/81	20:29.00	95.77
6/15/81	0:30.00	94.64
6/15/81	4:30.00	94.55
6/15/81	8:40.00	94.35
6/15/81	12:40.00	93.28
6/15/81	16:38.00	94.02
6/15/81	20:33.00	93.65
6/16/81	0:30.00	93.42
6/16/81	4:45.00	93.09
6/16/81	8:35.00	92.89
6/16/81	12:27.00	93.25
6/16/81	16:31.00	93.37
6/16/81	20:28.00	93.35
6/17/81	0:30.00	92.68
6/17/81	4:45.00	92.47
6/17/81	8:30.00	92.95
6/17/81	12:38.00	93.79
6/17/81	16:31.00	93.60
6/17/81	20:47.00	92.49
6/18/81	0:30.00	92.63
6/18/81	14:22.00	92.79
6/18/81	14:30.72	95.77
6/18/81	14:32.35	102.29
6/18/81	14:33.55	105.27
6/18/81	14:34.85	107.85
6/18/81	14:36.08	109.73
6/18/81	14:37.22	110.58
6/18/81	14:38.40	112.52

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:20 PAGE

NAME.....217 A-8
LOCATION.....16430.0,78606.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1633.82

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:39.73	113.47
6/18/81	14:41.22	114.76
6/18/81	14:42.65	117.28
6/18/81	14:44.18	117.93
6/18/81	14:45.50	119.24
6/18/81	14:46.83	120.70
6/18/81	14:48.17	121.58
6/18/81	14:49.35	121.92
6/18/81	14:51.20	123.89
6/18/81	14:55.73	123.12
6/18/81	14:56.73	126.13
6/18/81	14:58.60	128.02
6/18/81	15: 6.60	131.60
6/18/81	15:11.00	133.17
6/18/81	15:15.00	133.77
6/18/81	15:21.00	135.69
6/18/81	15:27.00	137.93
6/18/81	15:33.00	140.24
6/18/81	15:42.00	143.24
6/18/81	15:53.00	144.38
6/18/81	16: 2.00	147.82
6/18/81	16:13.00	150.22
6/18/81	16:22.00	152.18
6/18/81	16:33.00	154.26
6/18/81	16:43.00	155.97
6/18/81	17: 7.00	159.30
6/18/81	17:32.00	162.79
6/18/81	18: 0.00	166.02
6/18/81	18:47.00	170.15
6/18/81	19:32.00	173.25
6/18/81	20:32.00	176.18
6/18/81	21:30.00	177.80
6/18/81	23:30.00	180.02
6/19/81	0:35.00	180.00
6/19/81	2:45.00	179.88
6/19/81	4:30.00	180.69
6/19/81	6:30.00	181.38
6/19/81	8:30.00	182.26
6/19/81	11:59.00	184.15

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:56 PAGE 1

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:50.00	461.36
5/18/81	12: 0.00	464.48
5/18/81	12:11.85	463.56
5/18/81	12:30.00	464.77
5/18/81	12:32.08	463.10
5/18/81	12:33.60	460.85
5/18/81	12:35.00	458.19
5/18/81	12:36.53	455.36
5/18/81	12:38.00	452.53
5/18/81	12:39.43	449.70
5/18/81	12:40.63	447.39
5/18/81	12:42.15	444.33
5/18/81	12:44.17	440.57
5/18/81	12:46.00	437.23
5/18/81	12:47.70	434.40
5/18/81	12:49.52	431.62
5/20/81	11:50.00	467.78
5/20/81	12: 0.00	467.89
5/20/81	12: 2.00	466.56
5/20/81	12: 3.70	464.08
5/20/81	12: 5.10	461.60
5/20/81	12: 6.55	458.82
5/20/81	12: 7.85	456.28
5/20/81	12: 9.38	453.16
5/20/81	12:10.73	450.51
5/20/81	12:11.92	448.14
5/20/81	12:13.25	445.60
5/20/81	12:14.55	442.94
5/20/81	12:16.65	439.07
5/20/81	12:18.33	436.13
5/20/81	12:21.05	431.33
5/20/81	12:26.00	420.48
5/20/81	12:35.77	411.24
5/20/81	12:42.00	405.52
5/20/81	12:50.00	398.36
5/20/81	12:57.00	392.82
5/20/81	13: 2.00	389.52
5/20/81	13: 7.00	387.04
5/20/81	13:13.00	383.34
5/20/81	13:18.00	380.75

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:56 PAGE 1

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:23.00	378.67
5/20/81	13:28.00	376.41
5/20/81	13:33.00	374.39
5/20/81	13:39.00	371.79
5/20/81	13:49.00	368.16
5/20/81	14: 3.00	363.42
5/20/81	14:15.00	360.71
5/20/81	14:36.00	356.20
5/20/81	14:55.00	352.56
5/20/81	15:20.00	347.89
5/20/81	15:40.00	344.54
5/20/81	16: 0.00	341.88
5/20/81	16:57.00	334.78
5/20/81	18: 1.00	327.56
5/20/81	21:57.00	301.97
5/21/81	1: 1.00	295.10
5/21/81	3: 2.00	286.38
5/21/81	5: 4.00	282.98
5/23/81	11:59.00	252.54
5/23/81	14:58.00	253.52
5/23/81	16:20.00	253.23
5/23/81	19:57.00	249.65
5/24/81	0: 5.00	248.38
5/24/81	3:57.00	248.27
5/24/81	12:55.00	246.53
5/24/81	16: 3.00	246.30
5/24/81	20: 5.00	243.36
5/25/81	0:20.00	242.32
5/25/81	4: 8.00	241.22
5/25/81	8: 1.00	240.30
5/25/81	12:23.00	239.49
5/25/81	16: 0.00	238.97
5/25/81	20:45.00	238.33
5/25/81	23:52.00	237.35
5/26/81	3:56.00	236.78
5/26/81	7:56.00	236.54
5/26/81	12: 3.00	236.14
5/26/81	16:21.00	239.74
5/26/81	20: 2.00	236.20
5/26/81	23:54.00	234.06

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	3:58.00	234.75
5/27/81	8: 5.00	233.31
5/27/81	11:59.00	234.58
5/27/81	13:34.00	236.43
5/27/81	14: 0.00	236.72
5/27/81	14: 1.67	237.18
5/27/81	14: 4.00	239.37
5/27/81	14: 6.00	242.20
5/27/81	14: 8.17	245.44
5/27/81	14:10.17	248.56
5/27/81	14:12.42	251.96
5/27/81	14:15.00	255.77
5/27/81	14:17.42	259.41
5/27/81	14:19.33	262.01
5/27/81	14:22.00	265.65
5/27/81	14:24.00	268.08
5/27/81	14:26.00	270.44
5/27/81	14:28.08	272.98
5/27/81	14:30.33	275.18
5/27/81	14:32.42	277.72
5/27/81	14:34.75	279.39
5/27/81	14:37.33	281.76
5/27/81	14:40.00	283.96
5/27/81	14:42.33	285.75
5/27/81	14:45.00	287.65
5/27/81	14:48.08	289.85
5/27/81	14:52.00	292.27
5/27/81	14:55.00	294.06
5/27/81	15: 0.00	296.60
5/27/81	15: 5.00	299.09
5/27/81	15:12.42	302.44
5/27/81	15:17.00	304.17
5/27/81	15:22.00	305.96
5/27/81	15:32.00	309.25
5/27/81	15:42.00	312.20
5/27/81	15:52.00	314.80
5/27/81	16: 0.00	316.76
5/27/81	16:20.00	320.97
5/27/81	16:40.00	324.67
5/27/81	17: 0.00	327.90

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:11:56 PAGE

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17:25.00	331.43
5/27/81	17:40.00	333.39
5/27/81	18: 0.00	335.76
5/27/81	18:56.00	342.11
5/27/81	19:57.00	347.66
5/27/81	21:10.00	352.91
5/27/81	22: 0.00	355.91
5/27/81	23: 0.00	359.61
5/27/81	23:50.00	362.03
5/28/81	1:10.00	365.85
5/28/81	2: 0.00	368.27
5/28/81	4:10.00	374.80
5/28/81	6:25.00	380.57
5/28/81	8: 0.00	385.83
5/28/81	12: 2.00	396.28
5/29/81	14: 0.00	396.28
5/28/81	15:59.00	404.71
5/28/81	18: 3.00	408.71
5/28/81	19:58.00	411.47
5/28/81	22: 3.00	414.70
5/28/81	24: 0.00	418.05
5/29/81	1:55.00	420.94
5/29/81	3:55.00	424.46
5/29/81	6: 0.00	427.99
5/29/81	7:55.00	430.70

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:12:12 PAGE 1

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:56.00	1.22
5/18/81	12: 3.72	1.50
5/18/81	12:14.03	1.52
5/18/81	12:31.88	1.57
5/18/81	12:33.32	1.57
5/18/81	12:34.60	1.57
5/18/81	12:35.93	1.57
5/18/81	12:37.35	1.57
5/18/81	12:38.80	1.57
5/18/81	12:40.10	1.57
5/18/81	12:41.48	1.57
5/18/81	12:43.65	1.59
5/18/81	12:44.98	1.59
5/18/81	12:46.82	1.59
5/18/81	12:48.43	1.62
5/18/81	12:51.32	1.62
5/20/81	11:58.00	1.57
5/20/81	12: 1.77	1.57
5/20/81	12: 3.53	1.57
5/20/81	12: 4.93	1.57
5/20/81	12: 6.20	1.57
5/20/81	12: 7.72	1.57
5/20/81	12: 9.13	1.59
5/20/81	12:10.60	1.57
5/20/81	12:11.78	1.57
5/20/81	12:13.00	1.59
5/20/81	12:14.23	1.59
5/20/81	12:15.10	1.59
5/20/81	12:17.77	1.59
5/20/81	12:19.67	1.62
5/20/81	12:22.28	1.59
5/20/81	12:28.33	1.64
5/20/81	12:37.67	1.66
5/20/81	12:43.67	1.62
5/20/81	12:52.00	1.71
5/20/81	13: 0.00	1.73
5/20/81	13: 4.00	1.73
5/20/81	13: 8.00	1.76
5/20/81	13:14.00	1.73
5/20/81	13:19.00	1.76

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:12:12 PAGE

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:24.00	1.76
5/20/81	13:29.00	1.78
5/20/81	13:34.00	1.80
5/20/81	13:41.00	1.82
5/20/81	13:50.00	1.85
5/20/81	14: 5.00	1.89
5/20/81	14:15.00	1.89
5/20/81	14:37.00	1.92
5/20/81	14:57.00	1.92
5/20/81	15:21.00	1.99
5/20/81	15:40.00	2.06
5/20/81	16: 0.00	2.08
5/20/81	16:57.00	2.10
5/20/81	18: 1.00	2.10
5/20/81	20: 1.00	1.99
5/20/81	22: 1.00	1.76
5/21/81	1: 3.00	1.50
5/21/81	3: 4.00	1.55
5/21/81	5: 6.00	1.52
5/23/81	12: 2.00	1.39
5/23/81	14:59.00	1.57
5/23/81	16:24.00	1.59
5/23/81	19:57.00	1.36
5/24/81	0: 7.00	1.34
5/24/81	3:50.00	1.36
5/24/81	12:55.00	1.32
5/24/81	16: 6.00	1.43
5/24/81	20: 5.00	1.27
5/25/81	0:21.00	1.18
5/25/81	4:10.00	1.09
5/25/81	8: 2.00	1.09
5/25/81	12:23.00	0.99
5/25/81	16: 0.00	1.02
5/25/81	20:45.00	0.99
5/25/81	23:52.00	0.90
5/26/81	3:56.00	0.88
5/26/81	7:56.00	1.02
5/26/81	12: 3.00	1.09
5/26/81	16:20.00	1.43
5/26/81	20: 2.00	1.09

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/26/81	23:54.00	0.88
5/27/81	3:58.00	0.92
5/27/81	8: 5.00	0.92
5/27/81	11:59.00	1.13
5/27/81	13:35.00	1.34
5/27/81	14: 1.50	1.36
5/27/81	14: 3.67	1.39
5/27/81	14: 5.75	1.39
5/27/81	14: 7.75	1.39
5/27/81	14:10.00	1.39
5/27/81	14:11.92	1.39
5/27/81	14:14.17	1.39
5/27/81	14:17.08	1.41
5/27/81	14:19.00	1.41
5/27/81	14:21.67	1.41
5/27/81	14:23.50	1.41
5/27/81	14:25.67	1.41
5/27/81	14:27.83	1.41
5/27/81	14:30.00	1.41
5/27/81	14:32.00	1.41
5/27/81	14:34.42	1.41
5/27/81	14:36.67	1.41
5/27/81	14:39.00	1.43
5/27/81	14:41.83	1.43
5/27/81	14:44.17	1.41
5/27/81	14:47.25	1.43
5/27/81	14:49.50	1.43
5/27/81	14:53.50	1.46
5/27/81	14:57.00	1.46
5/27/81	15: 2.17	1.46
5/27/81	15: 6.75	1.46
5/27/81	15:14.25	1.46
5/27/81	15:18.50	1.46
5/27/81	15:23.83	1.46
5/27/81	15:33.75	1.48
5/27/81	15:43.92	1.48
5/27/81	15:54.00	1.50
5/27/81	16: 2.00	1.50
5/27/81	16:20.00	1.52
5/27/81	16:40.00	1.52

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:12:12 PAGE 1

NAME.....219
LOCATION.....16787.3,76373.5
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17: 0.00	1.50
5/27/81	17:25.00	1.50
5/27/81	17:40.00	1.50
5/27/81	18: 0.00	1.50
5/27/81	18:56.00	1.52
5/27/81	19:57.00	1.48
5/27/81	21:10.00	1.32
5/27/81	22: 0.00	1.25
5/27/81	23: 0.00	1.18
5/27/81	23:50.00	1.11
5/28/81	1:10.00	0.97
5/28/81	2: 0.00	1.02
5/28/81	4:10.00	1.02
5/28/81	6:25.00	0.99
5/28/81	8: 0.00	1.13
5/28/81	12: 2.00	1.13
5/28/81	14: 0.00	1.20
5/28/81	15:59.00	1.16
5/28/81	18: 3.00	1.06
5/28/81	19:57.00	0.97
5/28/81	22: 3.00	1.04
5/28/81	24: 0.00	0.88
5/29/81	1:55.00	0.95
5/29/81	3:55.00	0.97
5/29/81	6: 0.00	0.97
5/29/81	7:55.00	0.97

NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/26/81	23:54.00	118.66
5/27/81	3:58.00	118.64
5/27/81	8: 5.00	118.48
5/27/81	11:59.00	118.71
5/27/81	13:35.00	119.54
5/27/81	14: 1.00	119.70
5/27/81	14: 3.00	119.70
5/27/81	14: 5.33	119.70
5/27/81	14: 7.17	119.70
5/27/81	14: 9.42	119.68
5/27/81	14:11.58	119.63
5/27/81	14:13.83	119.63
5/27/81	14:16.67	119.68
5/27/81	14:18.58	119.70
5/27/81	14:20.92	119.70
5/27/81	14:23.00	119.70
5/27/81	14:25.17	119.77
5/27/81	14:27.50	119.77
5/27/81	14:29.50	119.84
5/27/81	14:31.58	119.84
5/27/81	14:33.83	119.84
5/27/81	14:36.17	119.94
5/27/81	14:38.67	120.03
5/27/81	14:41.42	120.03
5/27/81	14:43.67	120.10
5/27/81	14:45.83	120.28
5/27/81	14:49.17	120.28
5/27/81	14:53.00	120.40
5/27/81	14:56.42	120.51
5/27/81	15: 1.58	120.74
5/27/81	15: 6.00	120.91
5/27/81	15:13.83	121.25
5/27/81	15:18.00	121.39
5/27/81	15:23.25	121.64
5/27/81	15:33.17	122.11
5/27/81	15:43.08	122.57
5/27/81	15:53.00	123.03
5/27/81	16: 1.00	123.03
5/27/81	16:20.00	124.42
5/27/81	16:40.00	125.39

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NAME.....218
LOCATION.....17043.6 76071.2
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	17: 0.00	126.33
5/27/81	17:25.00	127.49
5/27/81	17:40.00	128.16
5/27/81	18: 0.00	129.06
5/27/81	18:56.00	131.49
5/27/81	19:57.00	133.59
5/27/81	21:10.00	135.92
5/27/81	22: 0.00	137.42
5/27/81	23: 0.00	139.04
5/27/81	23:50.00	140.24
5/28/81	1:10.00	142.16
5/28/81	2: 0.00	143.31
5/28/81	4:10.00	146.27
5/28/81	6:25.00	148.65
5/28/81	8: 0.00	150.57
5/28/81	12: 2.00	154.72
5/28/81	14: 0.00	156.83
5/28/81	15:59.00	158.49
5/28/81	18: 3.00	160.13
5/28/81	19:57.00	161.26
5/28/81	22: 3.00	162.62
5/28/81	24: 0.00	164.06
5/29/81	1:55.00	165.37
5/29/81	3:55.00	166.74
5/29/81	6: 0.00	168.14
5/29/81	7:55.00	169.14

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:12:24 PAGE 1

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/18/81	10:52.00	185.68
5/18/81	12: 0.22	186.14
5/18/81	12:12.45	186.26
5/18/81	12:30.37	183.95
5/18/81	12:32.48	176.00
5/18/81	12:33.85	172.19
5/18/81	12:35.32	168.77
5/18/81	12:36.78	165.95
5/18/81	12:38.23	163.43
5/18/81	12:39.63	161.21
5/18/81	12:40.83	159.48
5/18/81	12:42.65	157.01
5/18/81	12:44.43	154.89
5/18/81	12:46.27	152.90
5/18/81	12:47.90	151.24
5/18/81	12:50.00	149.24
5/20/81	11:56.00	188.20
5/20/81	12: 0.85	183.95
5/20/81	12: 2.60	177.57
5/20/81	12: 4.10	173.32
5/20/81	12: 5.38	170.41
5/20/81	12: 6.92	167.36
5/20/81	12: 8.20	164.96
5/20/81	12: 9.68	162.53
5/20/81	12:10.98	160.43
5/20/81	12:12.20	158.77
5/20/81	12:13.50	157.08
5/20/81	12:14.87	155.23
5/20/81	12:16.93	152.95
5/20/81	12:18.60	151.12
5/20/81	12:21.60	148.12
5/20/81	12:27.00	173.23
5/20/81	12:36.17	136.66
5/20/81	12:42.58	133.03
5/20/81	12:50.00	128.23
5/20/81	12:59.00	124.30
5/20/81	13: 3.00	122.34
5/20/81	13: 7.00	120.40
5/20/81	13:13.00	117.79
5/20/81	13:18.00	115.99

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:12:24 PAGE

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/20/81	13:23.00	114.44
5/20/81	13:28.00	112.77
5/20/81	13:34.00	111.09
5/20/81	13:40.00	108.82
5/20/81	13:49.00	106.01
5/20/81	14: 4.00	102.29
5/20/81	14:15.00	99.86
5/20/81	14:37.00	96.03
5/20/81	14:55.00	92.58
5/20/81	15:20.00	88.43
5/20/81	15:40.00	85.33
5/20/81	16: 0.00	82.84
5/20/81	16:57.00	76.18
5/20/81	18: 1.00	70.18
5/20/81	20: 1.00	61.61
5/20/81	21:58.00	50.40
5/21/81	1: 2.00	44.28
5/21/81	3: 2.00	37.70
5/21/81	5: 5.00	34.10
5/23/81	12: 0.00	0.95
5/23/81	14:58.00	0.39
5/23/81	16:21.00	0.14
5/23/81	19:57.00	-0.25
5/24/81	0: 6.00	-0.30
5/24/81	3:57.00	-0.30
5/27/81	14: 0.33	-0.09
5/27/81	14: 2.33	0.09
5/27/81	14: 4.58	0.09
5/27/81	14: 6.50	0.09
5/27/81	14: 8.67	0.09
5/27/81	14:10.67	0.09
5/27/81	14:12.92	0.09
5/27/81	14:15.83	2.06
5/27/81	14:17.92	4.90
5/27/81	14:22.33	6.38
5/27/81	14:24.42	7.53
5/27/81	14:26.58	8.59
5/27/81	14:28.67	9.79
5/27/81	14:30.83	10.76
5/27/81	14:33.17	11.97

NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/27/81	14:35.25	12.84
5/27/81	14:37.83	13.91
5/27/81	14:40.50	14.97
5/27/81	14:42.83	15.87
5/27/81	14:45.92	16.98
5/27/81	14:48.50	17.88
5/27/81	14:52.33	19.08
5/27/81	14:55.50	20.07
5/27/81	15: 0.67	21.58
5/27/81	15: 5.50	22.89
5/27/81	15:13.00	24.81
5/27/81	15:17.33	25.85
5/27/81	15:22.42	27.00
5/27/81	15:32.50	29.11
5/27/81	15:42.33	31.05
5/27/81	15:52.50	32.85
5/27/81	16: 1.00	34.35
5/27/81	16:20.00	37.42
5/27/81	16:40.00	40.26
5/27/81	17: 0.00	42.97
5/27/81	17:25.00	46.02
5/27/81	17:40.00	47.84
5/27/81	18: 0.00	49.94
5/27/81	18:56.00	56.13
5/27/81	19:57.00	62.16
5/27/81	21:10.00	68.15
5/27/81	22: 0.00	71.52
5/27/81	23: 0.00	75.81
5/27/81	23:50.00	78.56
5/28/81	1:10.00	83.11
5/28/81	2: 0.00	85.68
5/28/81	4:10.00	92.58
5/28/81	6:25.00	98.89
5/28/81	8: 0.00	103.21
5/28/81	12: 2.00	113.31
5/28/81	14: 0.00	117.86
5/28/81	15:59.00	122.06
5/28/81	18: 3.00	126.36
5/28/81	19:57.00	129.96
5/28/81	22: 3.00	133.86

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NAME.....220
LOCATION.....16722.9,76311.4
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/29/81	0: 0.00	137.58
5/29/81	1:55.00	140.82
5/29/81	3:55.00	144.47
5/29/81	6: 0.00	148.02
5/29/81	7:55.00	151.03

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NAME.....222 A-4
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	12:54.00	279.35
6/ 8/81	13:44.00	279.09
6/ 8/81	13:45.93	277.92
6/ 8/81	13:47.55	276.30
6/ 8/81	13:49.12	274.91
6/ 8/81	13:50.40	273.90
6/ 8/81	13:52.18	272.51
6/ 8/81	13:53.57	271.52
6/ 8/81	13:55.03	270.48
6/ 8/81	13:56.40	269.46
6/ 8/81	13:57.97	268.58
6/ 8/81	13:59.33	267.66
6/ 8/81	14: 1.25	266.64
6/ 8/81	14: 2.87	265.74
6/ 8/81	14: 4.65	264.66
6/ 8/81	14: 6.28	263.89
6/ 8/81	14: 8.27	262.90
6/ 8/81	14:10.43	261.86
6/ 8/81	14:12.40	260.94
6/ 8/81	14:13.80	260.31
6/ 8/81	14:15.17	259.71
6/ 8/81	14:18.70	258.23
6/ 8/81	14:22.87	256.41
6/ 8/81	14:31.03	253.18
6/ 8/81	14:43.18	248.99
6/ 8/81	14:50.75	246.75
6/ 8/81	14:57.13	244.91
6/ 8/81	15: 6.00	242.34
6/ 8/81	15:14.37	240.54
6/ 8/81	15:22.75	238.60
6/ 8/81	15:29.20	237.24
6/ 8/81	15:42.00	234.65
6/ 8/81	15:59.00	231.42
6/ 8/81	16:14.00	229.54
6/ 8/81	16:24.00	227.58
6/ 8/81	16:47.00	224.83
6/ 8/81	16:55.00	222.96
6/ 8/81	16:58.00	222.45
6/ 8/81	17:15.00	221.09
6/ 8/81	17:25.00	218.96

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NAME.....222 A-4
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/ 8/81	17:26.50	220.17
6/ 8/81	17:28.67	222.15
6/ 8/81	17:30.42	223.68
6/ 8/81	17:32.80	225.43
6/ 8/81	17:35.97	227.67
6/ 8/81	17:38.13	229.01
6/ 8/81	17:41.58	231.16
6/ 8/81	17:50.83	235.99
6/ 8/81	17:55.08	237.93
6/ 8/81	18: 3.40	241.21
6/ 8/81	18:11.68	244.12
6/ 8/81	18:31.78	249.80
6/ 8/81	19: 9.17	257.31
6/ 8/81	19:55.00	263.64
6/ 8/81	22: 3.00	271.75
6/ 8/81	23:48.00	274.06
6/ 9/81	2:10.00	275.10
6/ 9/81	3:58.00	275.98
6/ 9/81	6: 0.00	275.58
6/ 9/81	12: 5.00	278.49
6/ 9/81	15:15.00	278.49
6/ 9/81	18:34.00	278.03
6/ 9/81	23:52.00	276.51
6/10/81	6:14.00	275.84
6/10/81	12: 1.00	280.30
6/10/81	19: 2.00	277.92
6/10/81	23:52.00	275.77
6/11/81	5:51.00	275.91
6/11/81	10:21.00	233.31
6/11/81	10:32.00	233.96
6/11/81	11:51.00	234.56
6/11/81	12:32.08	233.30
6/11/81	12:34.92	230.84
6/11/81	12:36.92	229.54
6/11/81	12:38.75	225.89
6/11/81	12:40.50	226.45
6/11/81	12:42.83	225.71
6/11/81	12:44.25	225.13
6/11/81	12:45.67	223.79
6/11/81	12:47.33	224.21

NAME.....222 A-4
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
R.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/11/81	12:48.83	223.45
6/11/81	12:50.67	220.19
6/11/81	12:53.67	220.26
6/11/81	12:55.17	219.33
6/11/81	12:58.00	219.10
6/11/81	13: 0.83	217.97
6/11/81	13: 2.67	217.69
6/11/81	13: 5.83	216.33
6/11/81	13:10.50	213.51
6/11/81	13:15.25	212.80
6/11/81	13:21.50	211.37
6/11/81	13:25.33	210.49
6/11/81	13:31.67	208.82
6/11/81	13:42.00	206.51
6/11/81	13:51.00	204.37
6/11/81	14: 0.00	202.36
6/11/81	14:10.00	199.49
6/11/81	14:20.00	195.93
6/11/81	14:31.00	197.14
6/11/81	14:50.00	194.13
6/11/81	15:10.00	191.43
6/11/81	15:31.00	189.26
6/11/81	15:55.00	187.60
6/11/81	16:13.00	184.50
6/11/81	18:30.00	177.22
6/11/81	19:30.00	174.74
6/11/81	20:26.00	173.09
6/11/81	20:30.00	170.96
6/11/81	22:30.00	169.52
6/11/81	23:30.00	168.88
6/12/81	0:30.00	167.84
6/12/81	2:30.00	165.86
6/12/81	4:30.00	164.75
6/12/81	6:30.00	164.40
6/12/81	8:30.00	163.52
6/12/81	12:50.00	164.91
6/12/81	15:22.00	164.63
6/12/81	17: 5.00	164.22
6/12/81	18:35.00	164.01
6/12/81	20:32.00	162.14

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NAME.....222 A-4
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/12/81	22:30.00	157.24
6/13/81	0:30.00	161.98
6/13/81	4:30.00	161.28
6/13/81	8:30.00	161.26
6/13/81	12:36.00	161.88
6/13/81	17:36.00	162.42
6/13/81	20:25.00	162.69
6/14/81	0:30.00	161.79
6/14/81	4:30.00	161.52
6/14/81	8:30.00	161.26
6/14/81	12:24.00	159.44
6/14/81	16:34.00	159.53
6/14/81	20:29.00	160.04
6/15/81	0:30.00	158.28
6/15/81	4:30.00	158.30
6/15/81	8:40.00	158.19
6/15/81	12:40.00	156.66
6/15/81	16:38.00	157.91
6/15/81	20:33.00	157.43
6/16/81	0:30.00	157.03
6/16/81	4:45.00	156.73
6/16/81	8:35.00	156.41
6/16/81	12:27.00	157.17
6/16/81	16:31.00	157.38
6/16/81	20:28.00	157.38
6/17/81	0:30.00	156.48
6/17/81	4:45.00	156.16
6/17/81	8:30.00	157.03
6/17/81	12:38.00	158.33
6/17/81	16:31.00	158.00
6/17/81	20:47.00	155.09
6/18/81	0:30.00	156.90
6/18/81	14:22.00	157.52
6/18/81	14:30.88	158.19
6/18/81	14:32.47	159.52
6/18/81	14:33.72	160.57
6/18/81	14:35.07	161.40
6/18/81	14:36.20	161.93
6/18/81	14:37.35	161.95
6/18/81	14:38.53	161.98

NAME.....222 A-4
LOCATION.....16475.6,78427.1
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
6/18/81	14:41.35	162.25
6/18/81	14:42.82	165.33
6/18/81	14:44.32	164.98
6/18/81	14:45.63	166.00
6/18/81	14:46.57	167.52
6/18/81	14:48.28	167.98
6/18/81	14:49.47	167.87
6/18/81	14:51.32	169.79
6/18/81	14:53.88	168.88
6/18/81	14:56.88	170.13
6/18/81	14:58.73	172.95
6/18/81	15: 6.78	175.98
6/18/81	15:11.00	177.22
6/18/81	15:16.00	177.34
6/18/81	15:21.00	180.73
6/18/81	15:27.00	182.24
6/18/81	15:33.00	183.11
6/18/81	15:43.00	186.99
6/18/81	15:53.00	187.32
6/18/81	16: 2.00	191.31
6/18/81	16:13.00	193.86
6/18/81	16: 2.00	195.80
6/18/81	16:33.00	197.87
6/18/81	16:43.00	199.56
6/18/81	17: 7.00	201.41
6/18/81	17:32.00	206.35
6/18/81	18: 0.00	209.61
6/18/81	18:47.00	213.63
6/18/81	19:32.00	216.79
6/18/81	20:32.00	219.66
6/18/81	21:30.00	221.09
6/18/81	22:30.00	222.71
6/18/81	23:30.00	223.38
6/19/81	0:35.00	224.05
6/19/81	2:45.00	222.75
6/19/81	4:30.00	223.95
6/19/81	6:30.00	224.37
6/19/81	8:30.00	225.39
6/19/81	11:59.00	227.67

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:13:10 PAGE

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
F.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/29/81	13: 4.40	63.13
4/29/81	13: 5.97	63.11
4/29/81	13: 7.48	63.09
4/29/81	13: 9.03	63.13
4/29/81	13:10.22	63.11
4/29/81	13:11.65	63.06
4/29/81	13:13.07	63.04
4/29/81	13:14.83	63.04
4/29/81	13:18.38	62.83
4/29/81	13:20.67	62.97
4/29/81	13:22.38	62.99
4/29/81	13:24.28	62.76
4/29/81	13:26.60	62.95
4/29/81	13:30.28	62.92
4/29/81	13:35.53	62.90
4/29/81	13:40.40	62.72
4/29/81	13:45.30	62.83
4/29/81	13:50.48	62.74
4/29/81	13:55.32	62.81
4/29/81	14: 0.35	62.69
4/29/81	14:10.62	62.53
4/29/81	14:20.00	62.37
4/29/81	14:30.00	62.28
4/29/81	14:40.00	62.30
4/29/81	14:50.00	62.23
4/29/81	15: 0.00	62.14
4/29/81	15:20.00	61.98
4/29/81	15:40.00	61.38
4/29/81	16: 0.00	61.35
4/29/81	16:20.00	61.10
4/29/81	16:40.00	59.64
4/29/81	17: 0.00	58.93
4/29/81	18: 0.00	59.04
4/29/81	19: 0.00	57.84
4/29/81	20: 0.00	57.06
4/29/81	21: 0.00	54.56
4/29/81	22: 0.00	50.82
4/29/81	23:15.00	55.44
4/29/81	24: 0.00	57.54
4/30/81	1: 0.00	58.12

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
4/30/81	3: 0.00	57.59
4/30/81	5: 0.00	57.40
4/30/81	7: 0.00	57.22
4/30/81	10:27.00	55.76
4/30/81	11:11.00	57.93
4/30/81	12:57.00	57.84
4/30/81	15: 0.00	58.24
4/30/81	17: 0.00	58.54
4/30/81	18:54.00	58.65
4/30/81	19:10.00	58.74
4/30/81	20: 1.00	58.30
4/30/81	21: 0.00	58.51
4/30/81	23: 0.00	57.75
5/ 1/81	1: 0.00	57.66
5/ 1/81	3: 0.00	57.22
5/ 1/81	5: 0.00	57.50
5/ 1/81	7: 0.00	57.10
5/ 1/81	9: 0.00	57.10
5/ 1/81	11: 0.00	56.71
5/ 1/81	13: 0.00	58.49
5/ 1/81	15: 0.00	58.03
5/ 1/81	17: 0.00	58.33
5/ 1/81	19: 0.00	48.79
5/ 1/81	21:45.00	48.76
5/ 1/81	23: 8.00	48.51
5/ 2/81	1:15.00	48.07
5/ 2/81	3: 0.00	47.86
5/ 2/81	5:15.00	47.59
5/ 2/81	7: 0.00	48.26
5/ 2/81	9: 0.00	48.83
5/ 2/81	10:53.00	50.10
5/ 2/81	11: 3.53	50.20
5/ 2/81	11: 5.12	50.22
5/ 2/81	11: 7.60	50.22
5/ 2/81	11: 9.37	50.22
5/ 2/81	11:11.43	50.22
5/ 2/81	11:13.53	50.22
5/ 2/81	11:15.08	50.22
5/ 2/81	11:16.58	50.24
5/ 2/81	11:18.75	50.24

CRANDON MINE WELL DATA LISTING DATE 11/24/81 TIME 15:13:10 PAGE

NAME.....223 A-3
LOCATION.....16378.2,78524.7
TYPE.....INCLINE
MEASUREMENT TYPE.....TRANSDUCER
M.P. ELEVATION (FEET)...1638.93

DATE (MM/DD/YY)	TIME (HH:MM.MM)	UNCORRECTED READING (FEET)
5/ 2/81	11:20.25	50.27
5/ 2/81	11:22.25	50.27
5/ 2/81	11:25.42	50.24
5/ 2/81	11:26.92	50.24
5/ 2/81	11:31.75	50.27
5/ 2/81	11:40.42	50.27
5/ 2/81	11:59.42	50.27
5/ 2/81	12:11.42	50.29
5/ 2/81	12:30.00	50.36
5/ 2/81	13: 0.00	50.43
5/ 2/81	13:20.00	50.40
5/ 2/81	14:10.00	50.38
5/ 2/81	15: 0.00	50.27
5/ 2/81	16: 6.00	50.29
5/ 2/81	18: 2.00	50.22
5/ 2/81	19: 0.00	50.15
5/ 2/81	20: 2.00	49.55
5/ 2/81	21:11.00	49.43
5/ 2/81	23:15.00	48.42
5/ 3/81	1: 0.00	48.23
5/ 3/81	3:10.00	48.53
5/ 3/81	5:20.00	48.16
5/ 3/81	7:20.00	48.37
5/ 3/81	9: 0.00	48.67
5/ 3/81	11: 1.00	49.04
5/ 3/81	18: 0.00	48.14
5/ 4/81	0:30.00	49.13
5/ 4/81	6: 0.00	48.58
5/ 4/81	11:45.00	49.02
5/ 4/81	18: 0.00	49.00
5/ 5/81	0:31.00	49.62
5/ 5/81	5:48.00	50.06
5/ 5/81	18:30.00	50.33
5/ 6/81	0: 1.00	49.67
5/ 6/81	6:33.00	49.43
5/ 6/81	12:30.00	50.33
6/ 8/81	12:53.00	288.13
6/ 8/81	13:43.00	287.89
6/ 8/81	13:45.25	287.69
6/ 8/81	13:47.00	286.37

Appendix C

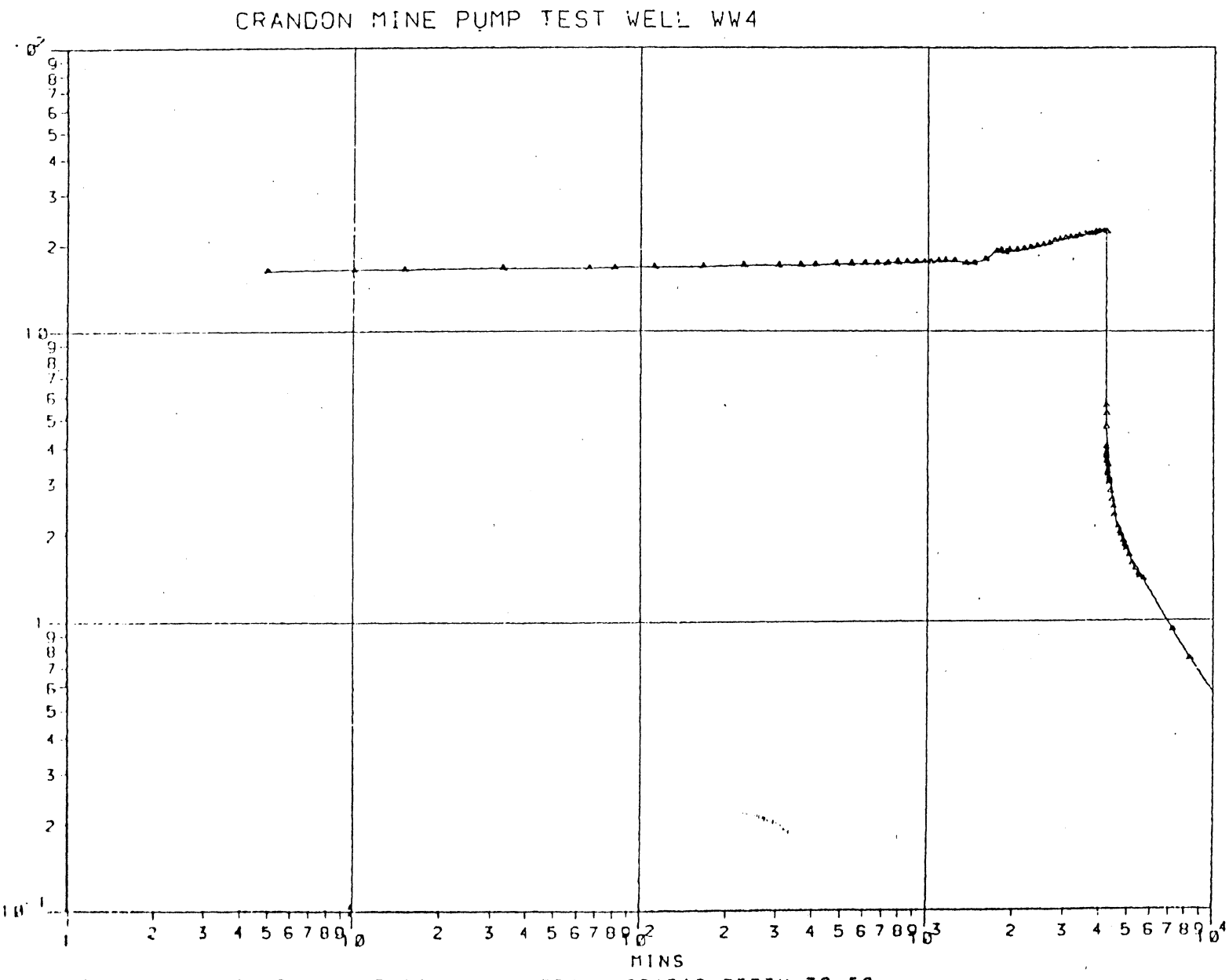
APPENDIX C

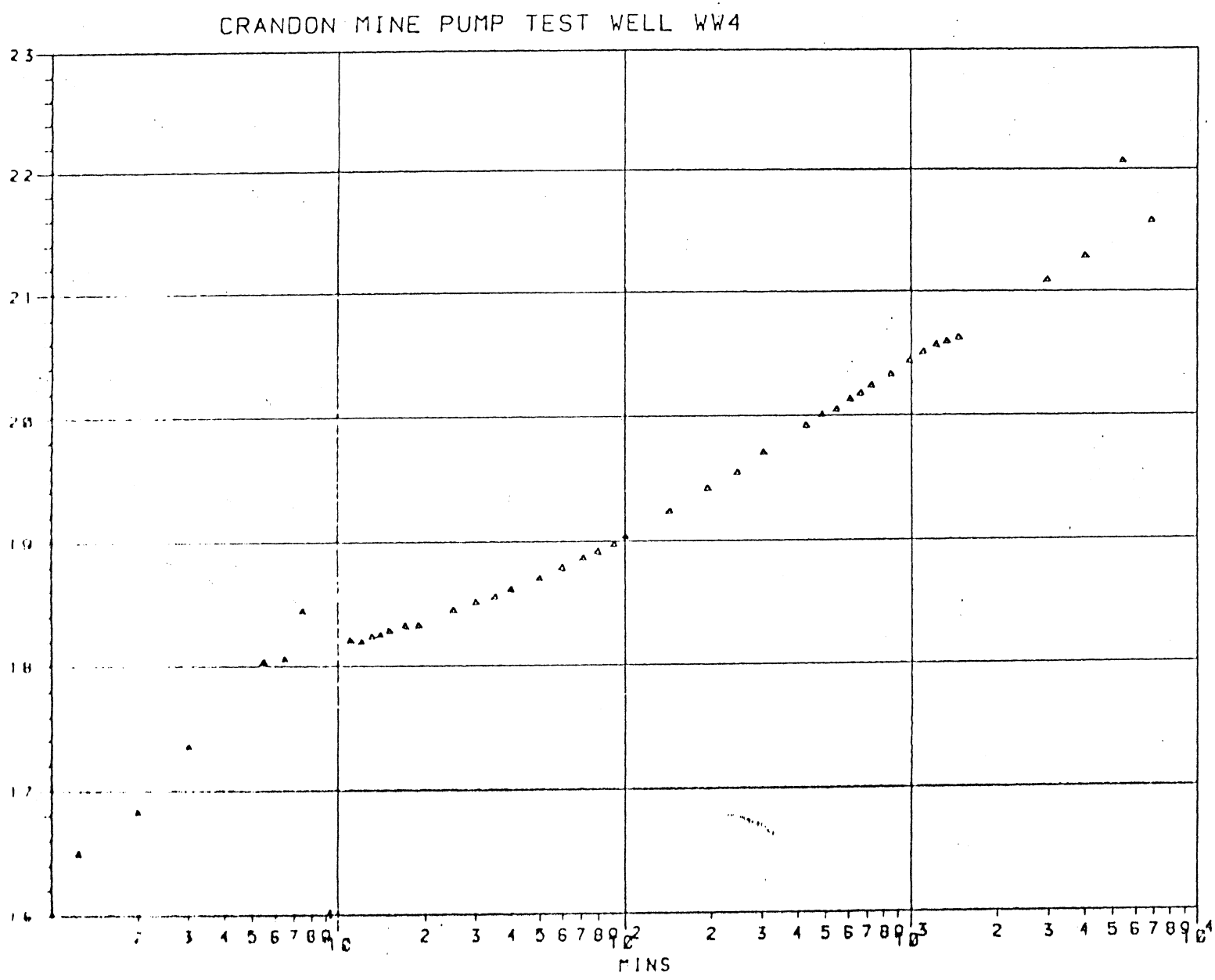
Time Versus Drawdown and
Time Water Level Plots

	Item
WW4 Test.....	1
211 Test.....	2
213 Test.....	3

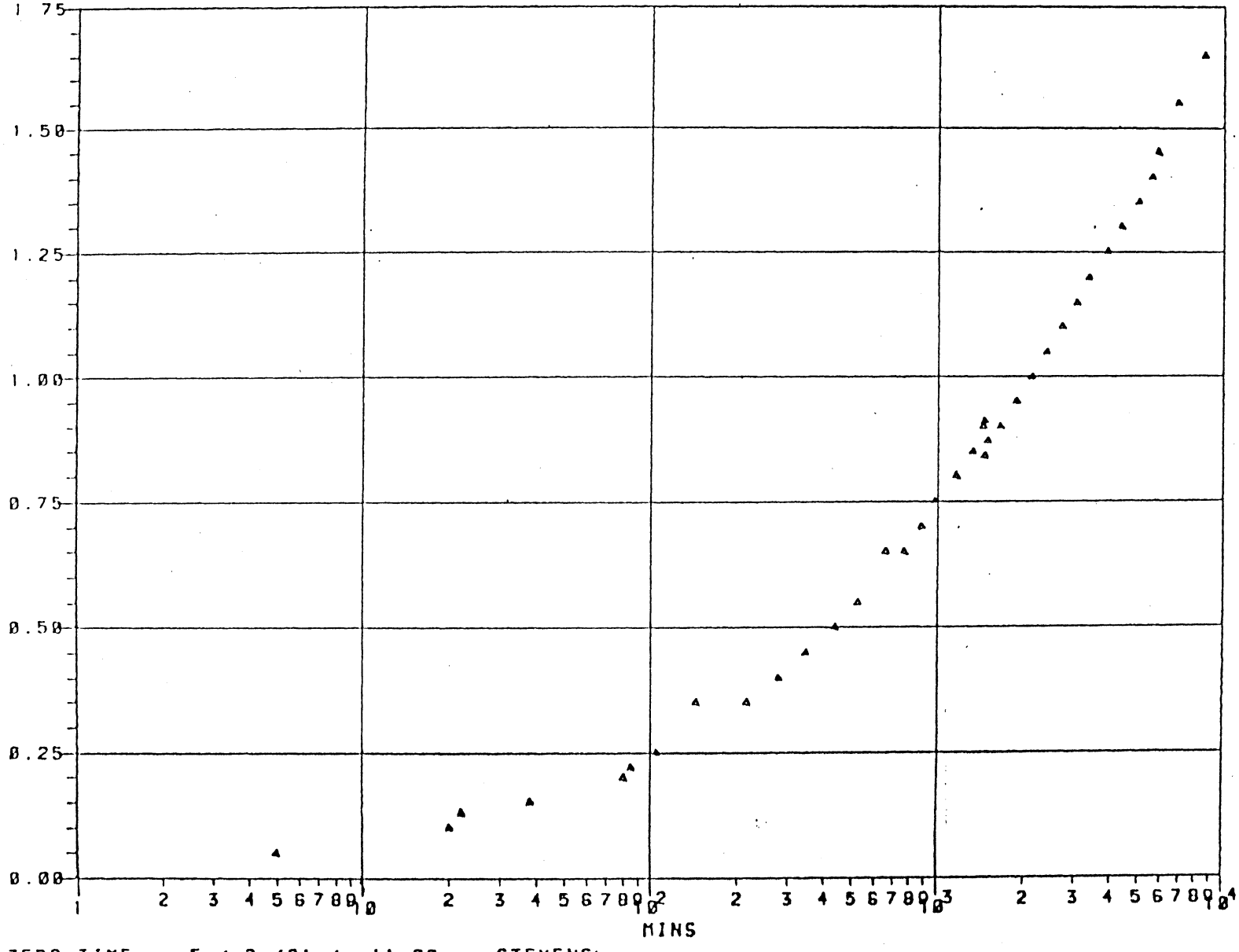
CAMP DRESSER & McKEE INC.
Environmental Planning and Sciences Division

ITEM 1

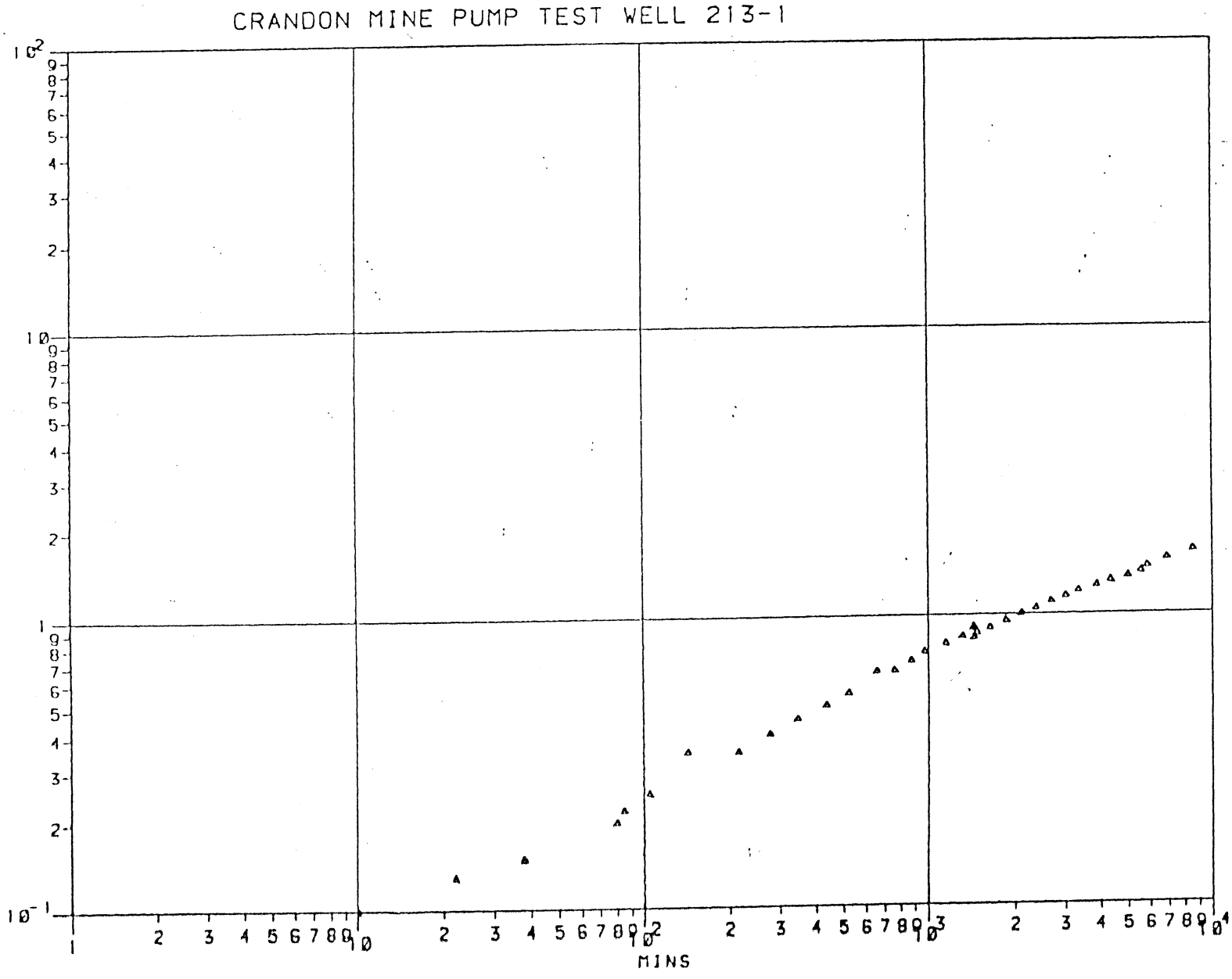

CRANDON MINE PUMP TEST WELL WW4
MINS
RECORD ZERO TIME 4 /20 /81 / 13 00 WW4 DD1 STATIC DEPTH 38.50


CRANDON MINE PUMP TEST WELL WW4
23
22
21
20
19
18
17
16
MINS

CRANDON MINE PUMP TEST WELL 213-1

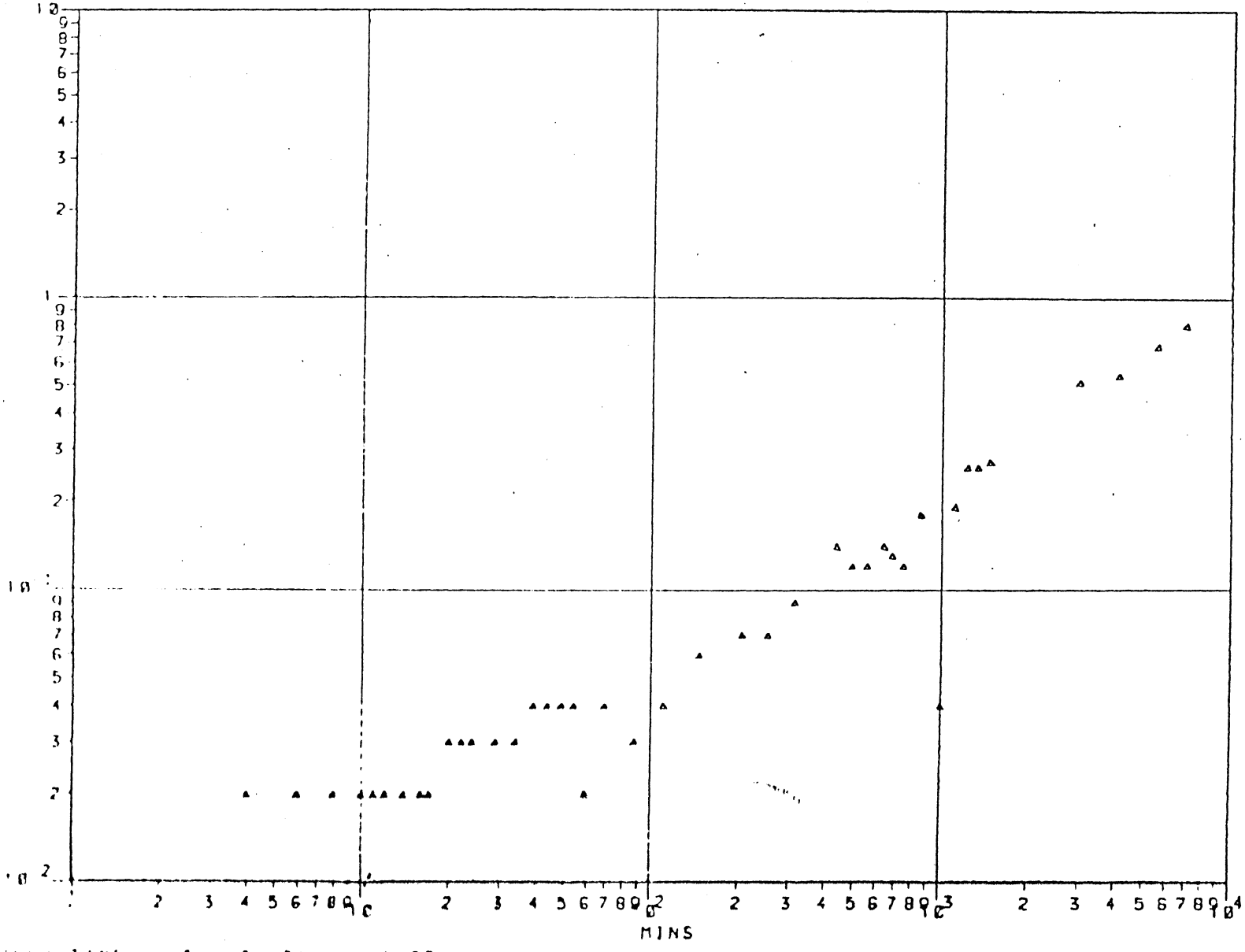


RECORD ZERO TIME : 5./ 2./81./ 11.00 STEVENS:

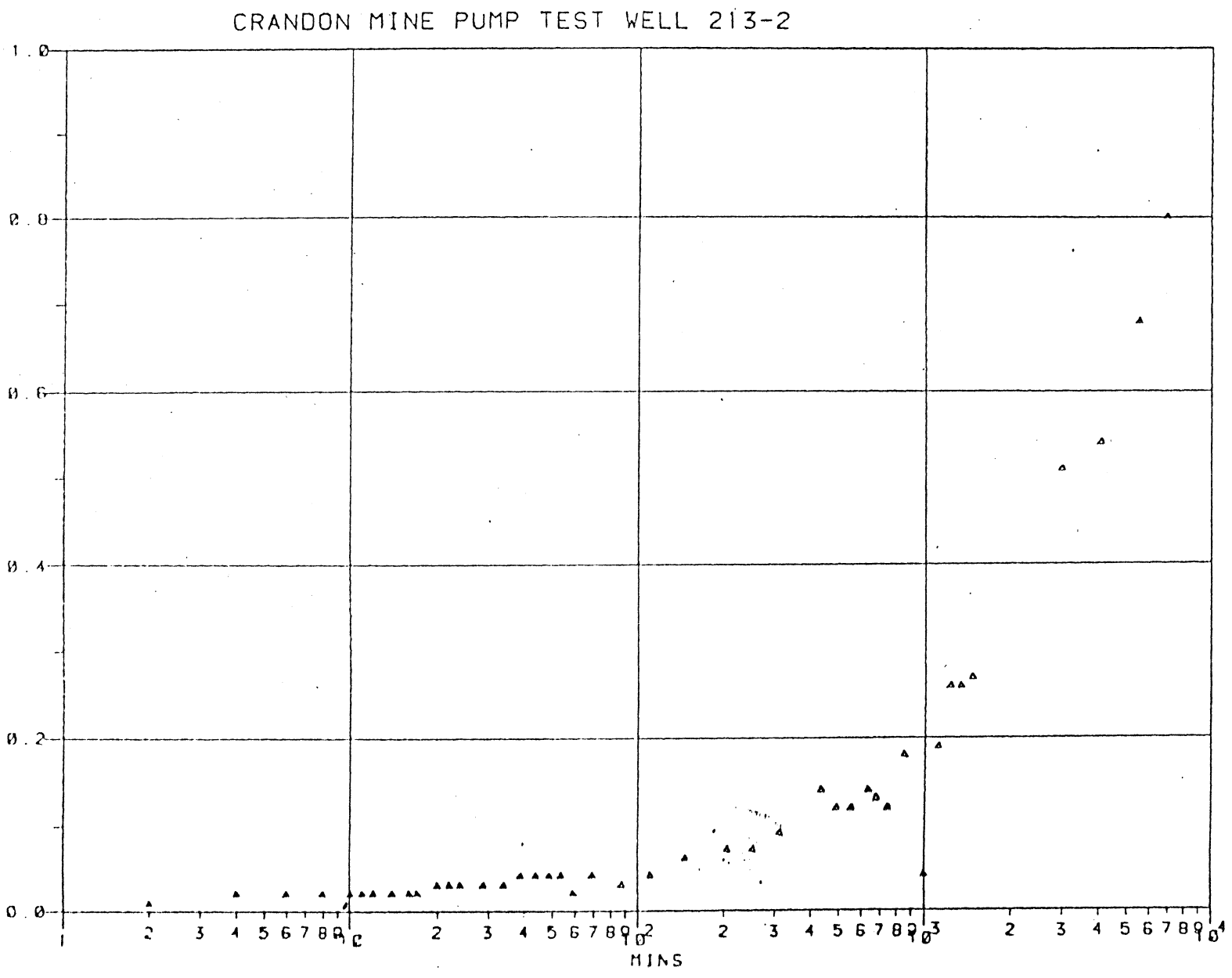


RECORD ZERO TIME : 5./ 2./81./ 11.00 STEVENS

CRANDON MINE PUMP TEST WELL 213-2

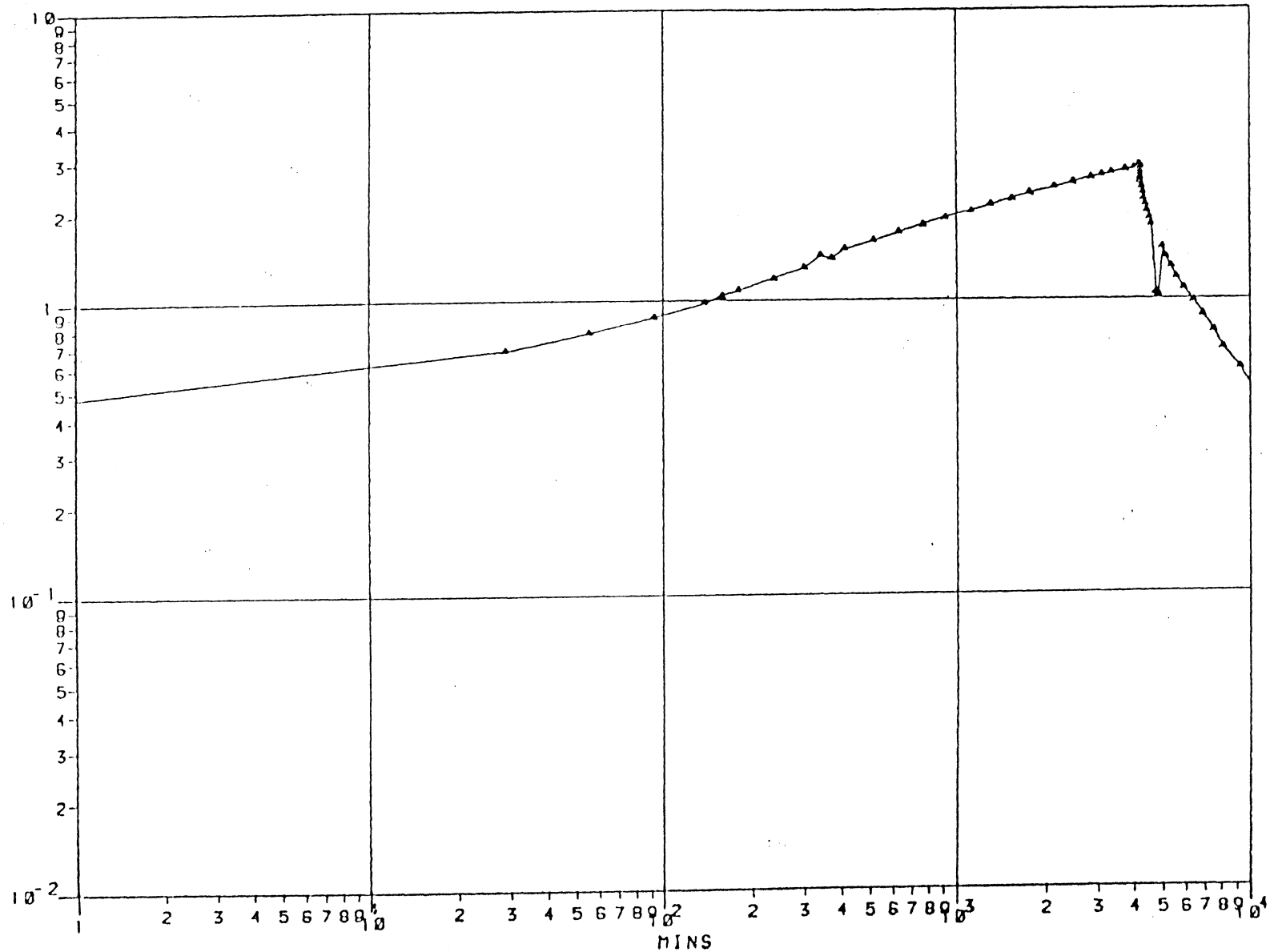


[illegible] TIME [illegible]

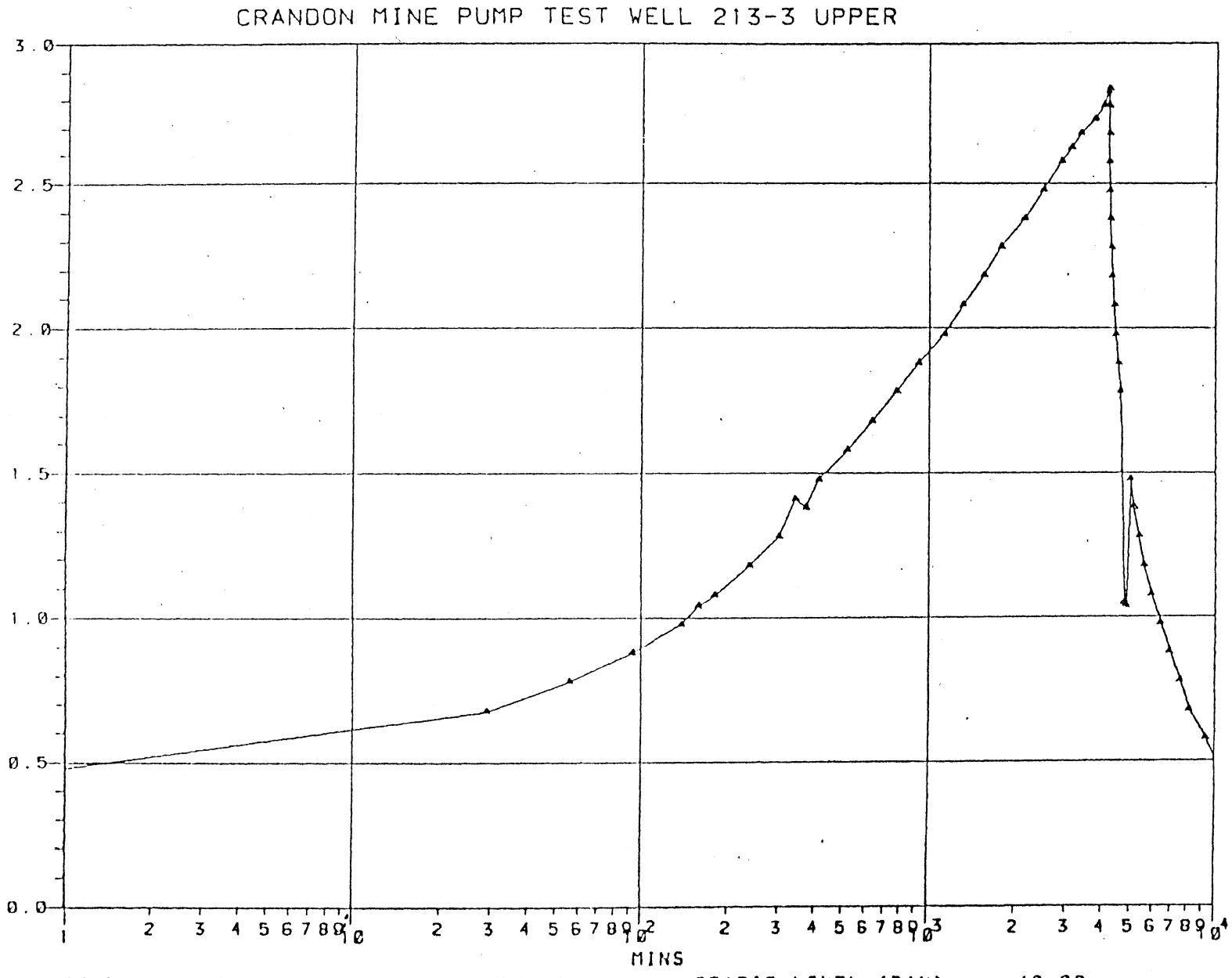


RECORD ZERO TIME 5 / 2 /81 / 11.00

CRANDON MINE PUMP TEST WELL 213-3 UPPER

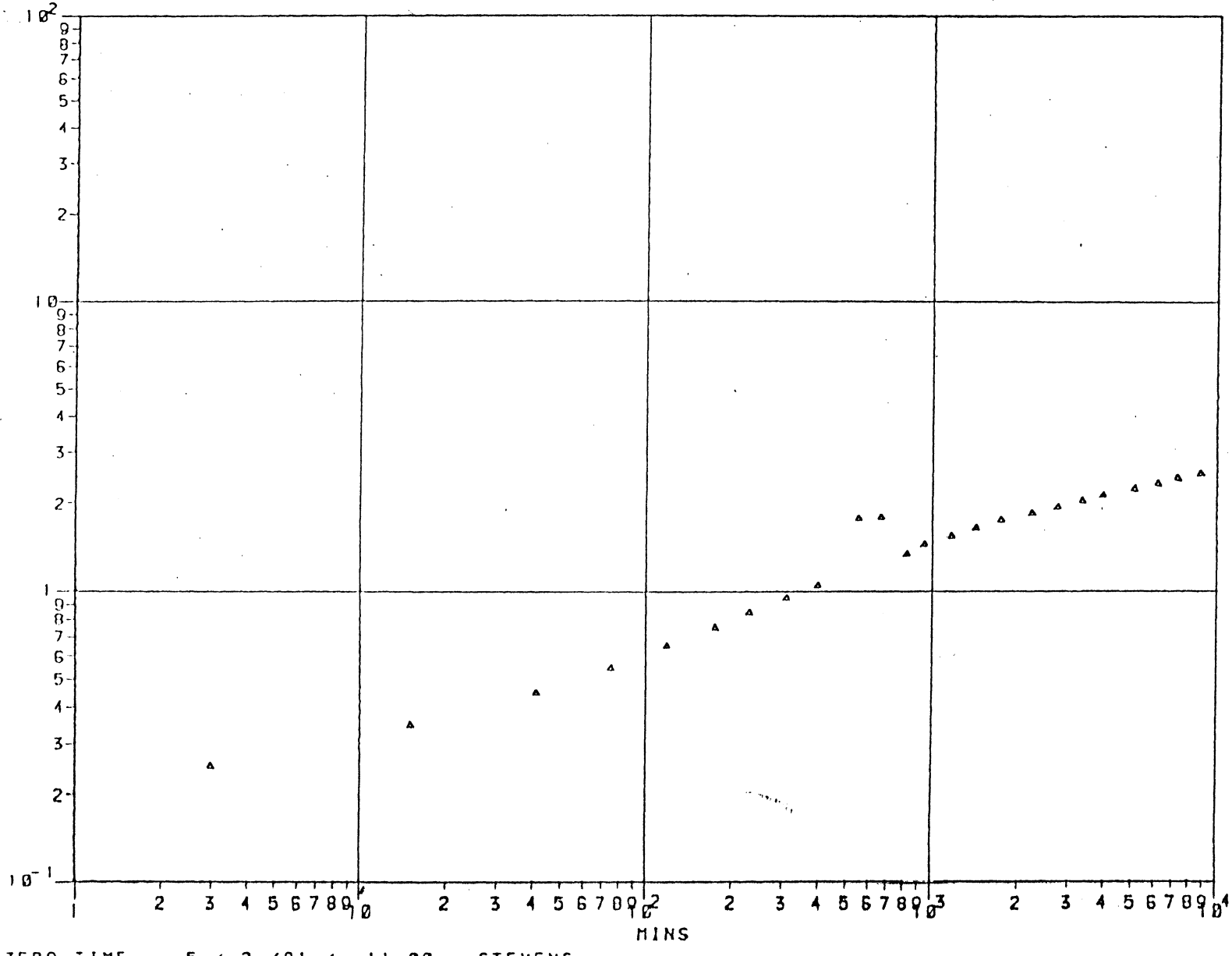


RECORD ZERO TIME : 4./29./81./ 13.00 W2133U.STN STATIC LEVEL (RAW): 40.02.

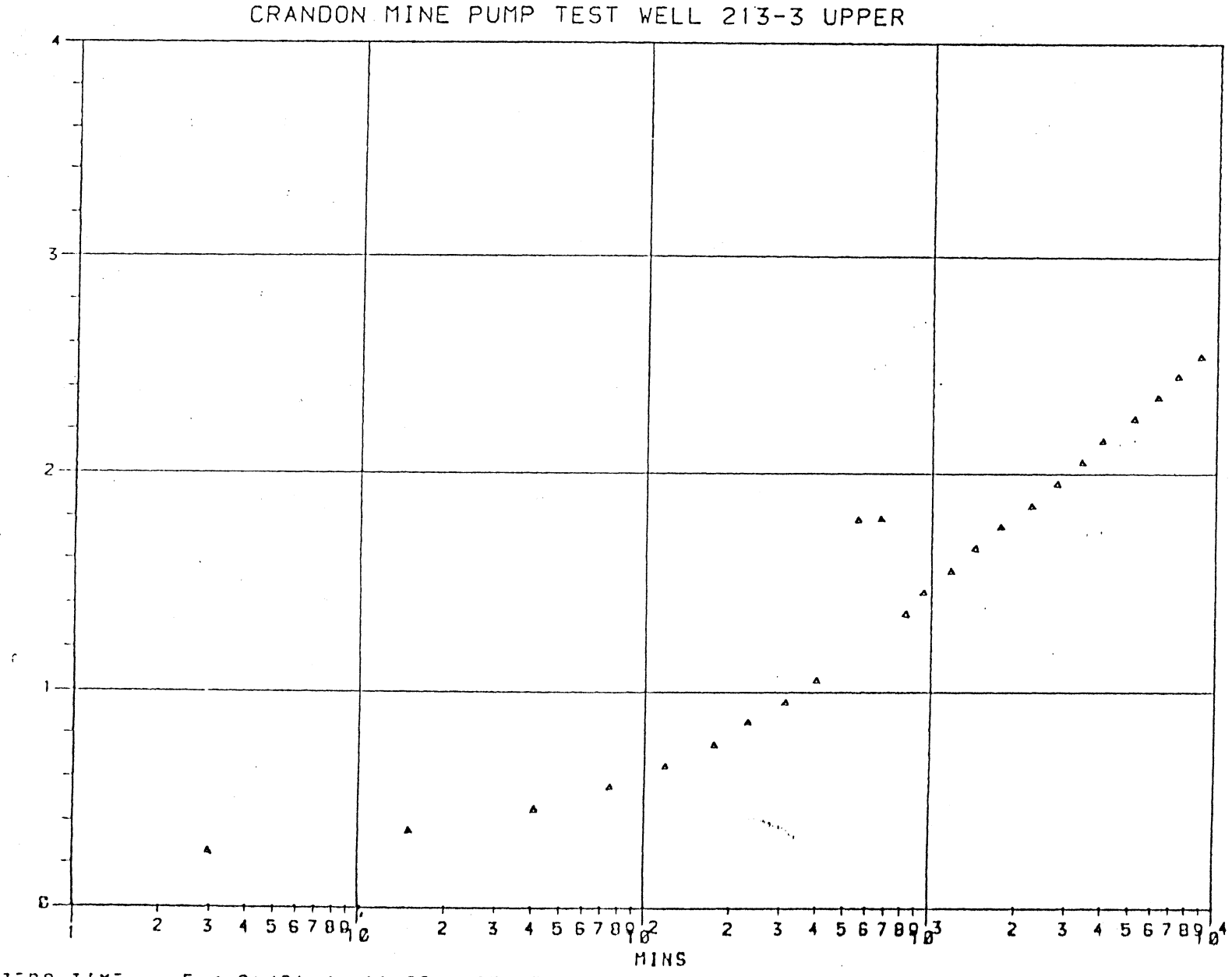


RECORD ZERO TIME : 4./20./81./ 13.00 W2133U.STN STATIC LEVEL (RAW): 40.02

CRANDON MINE PUMP TEST WELL 213-3 UPPER

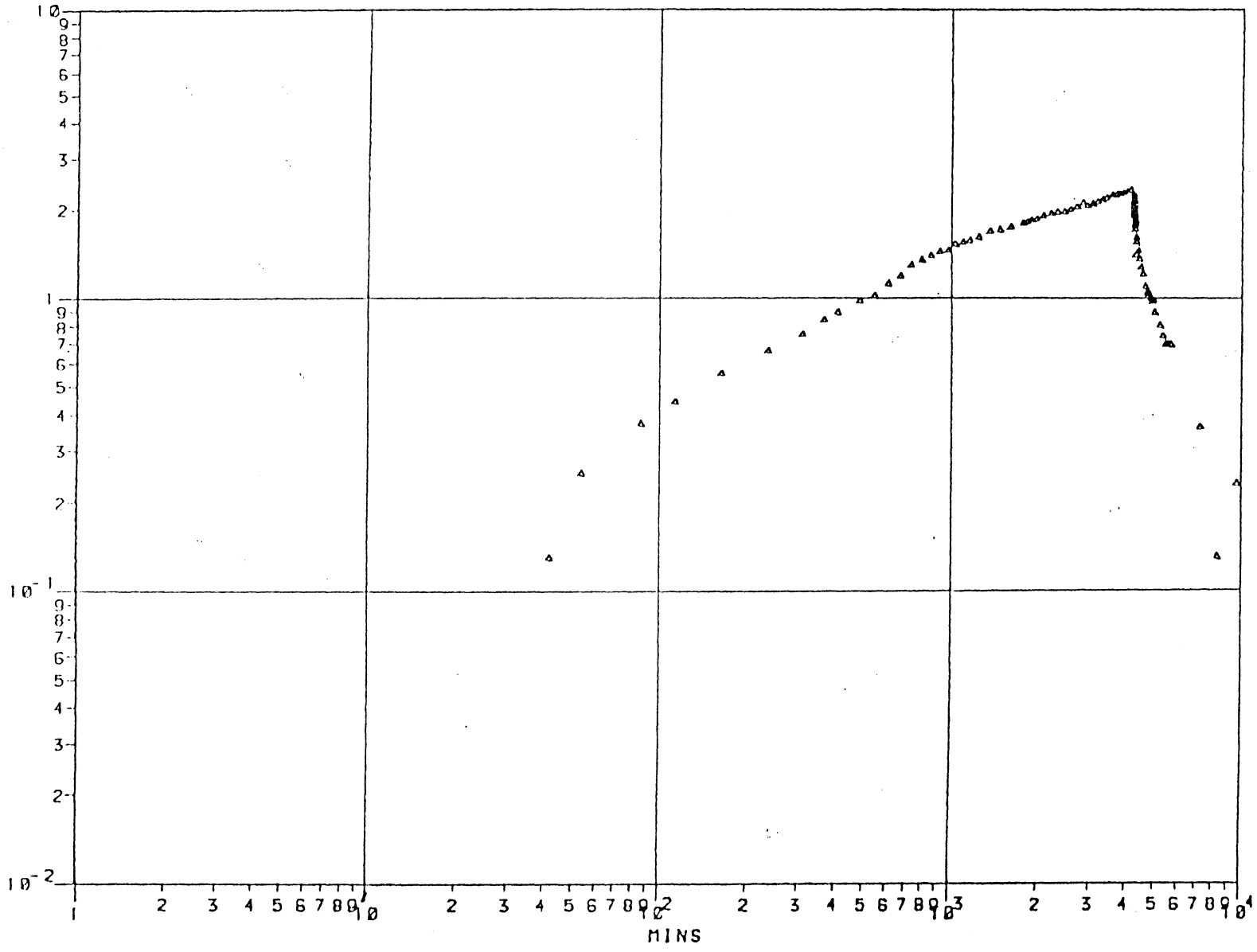


RECORD ZERO TIME : 5./ 2./81./ 11.00 STEVENS

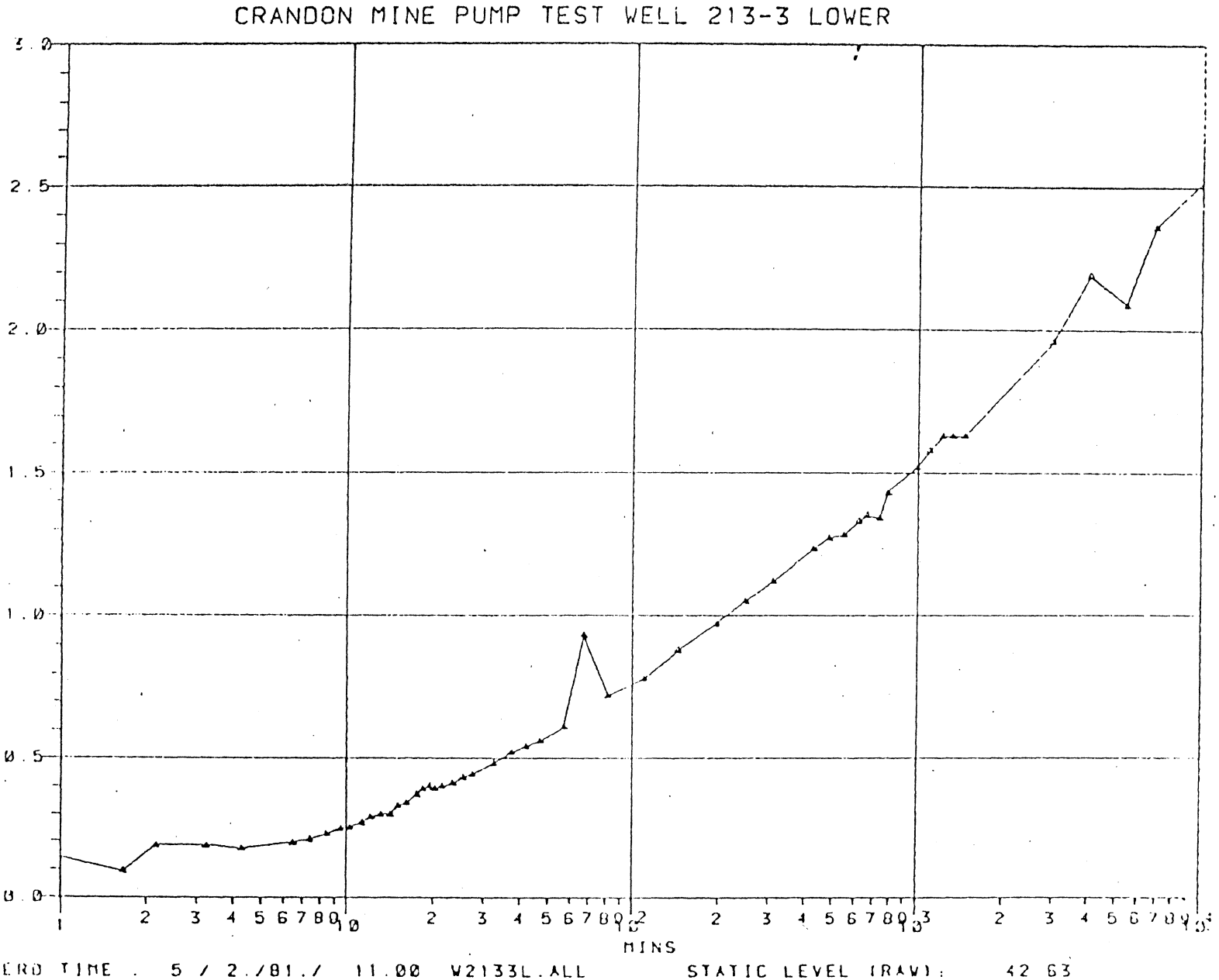


RECORD ZERO TIME : 5./ 2./81 / 11.00 STEVENS

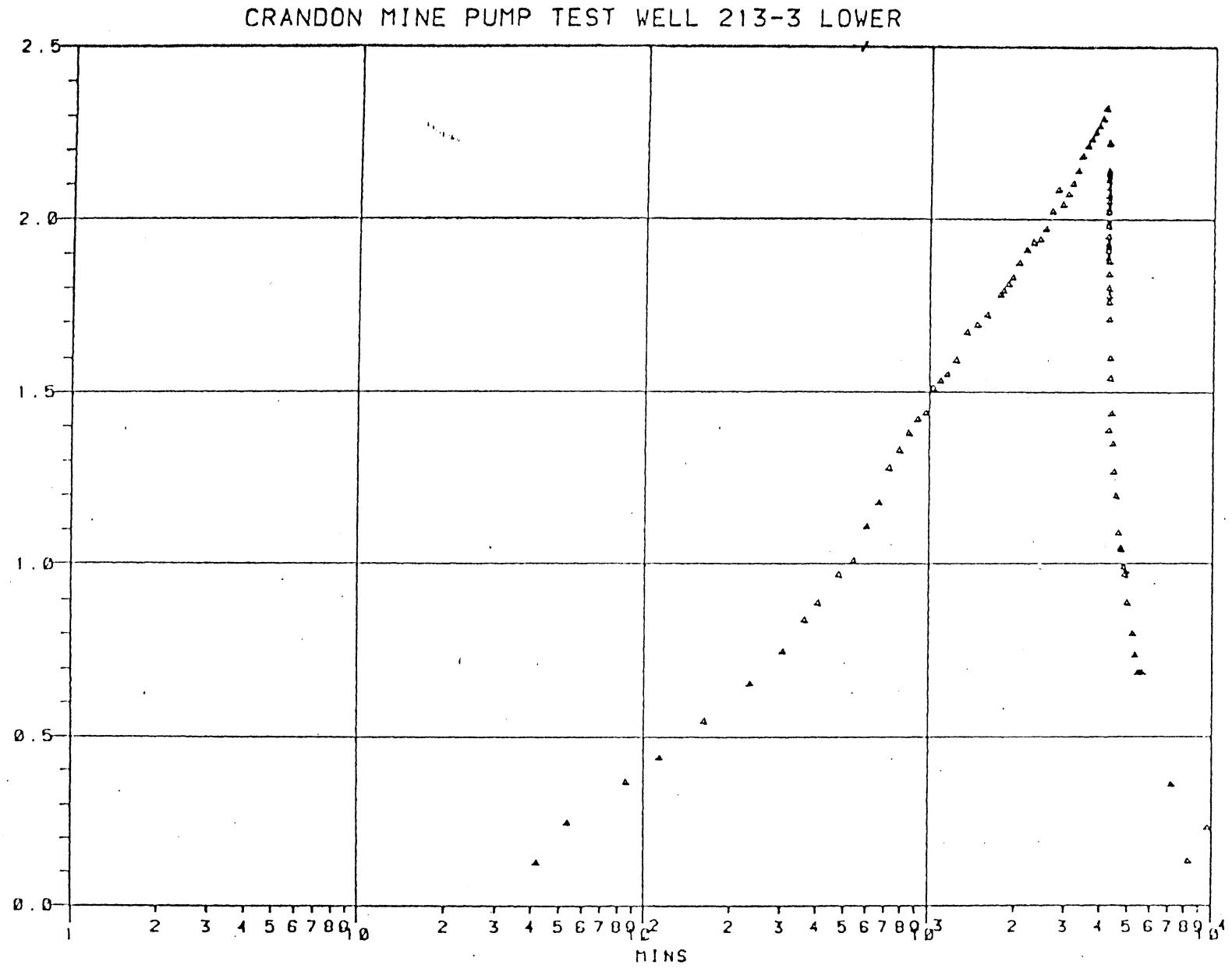
CRANDON MINE PUMP TEST WELL 213-3 LOWER



RECORD ZERO TIME : 4./20./81./ 13.00 MANUAL

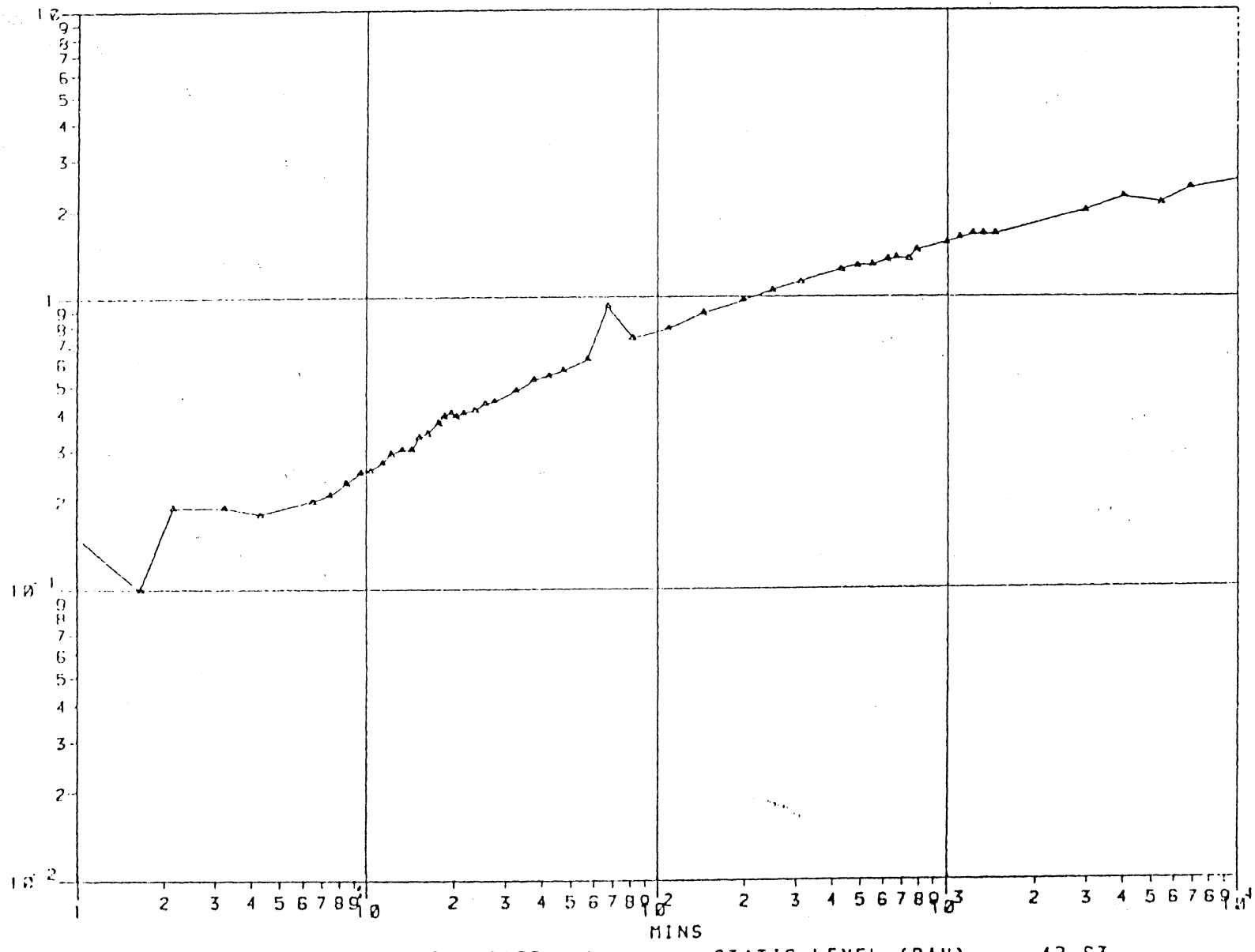


RECORD ZERO TIME . 5 / 2./81./ 11.00 W2133L.ALL STATIC LEVEL (RAW): 42.63



RECORD ZERO TIME : 4./20./81./ 13.00 MANUAL

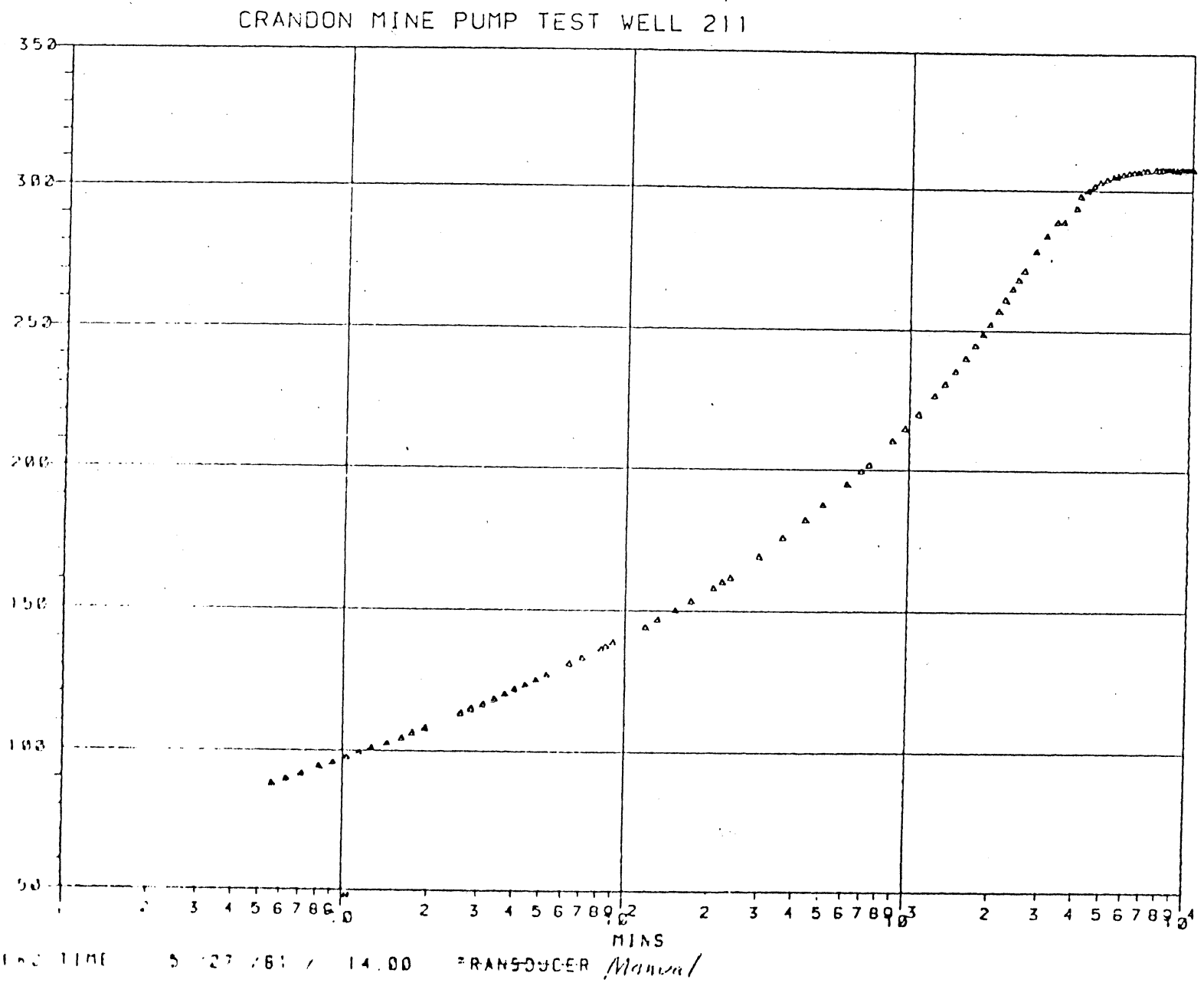
CRANDON MINE PUMP TEST WELL 213-3 LOWER



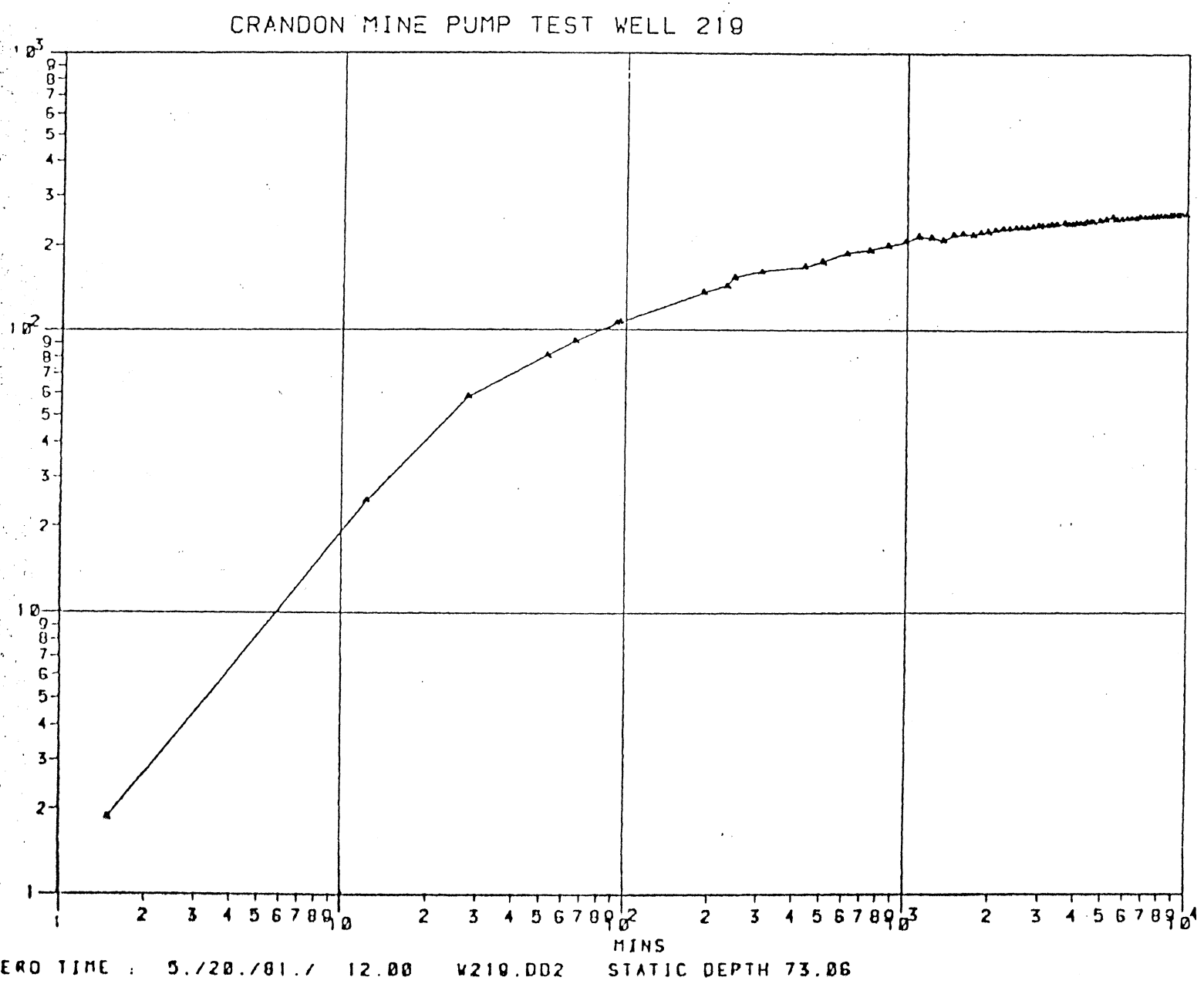
[illegible] ZERO TIME : 5./ 2./81./ 11.00 W2133L.ALL STATIC LEVEL (RAW): 42.63

CAMP DRESSER & McKEE INC.
Environmental Planning and Sciences Division

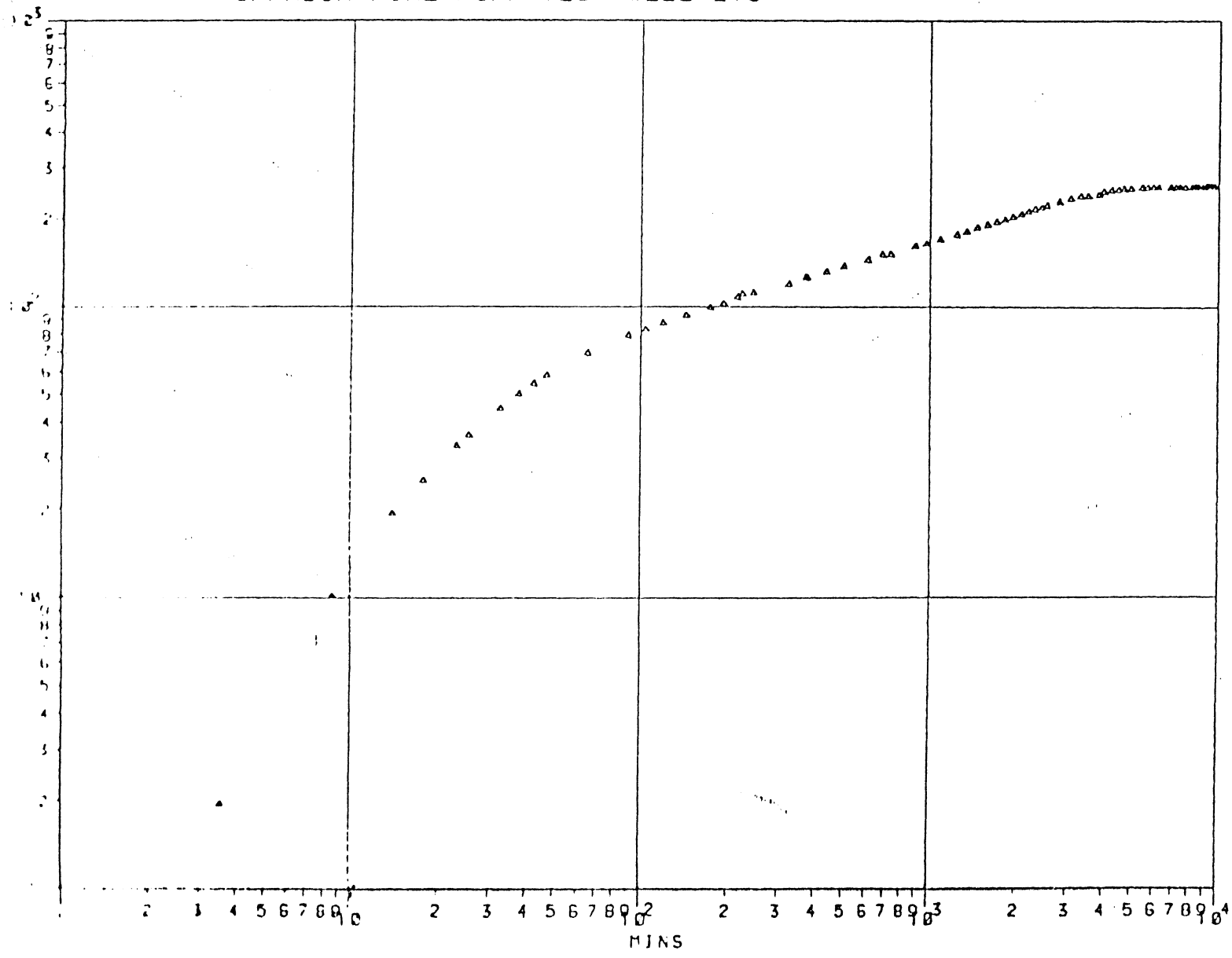
ITEM 2



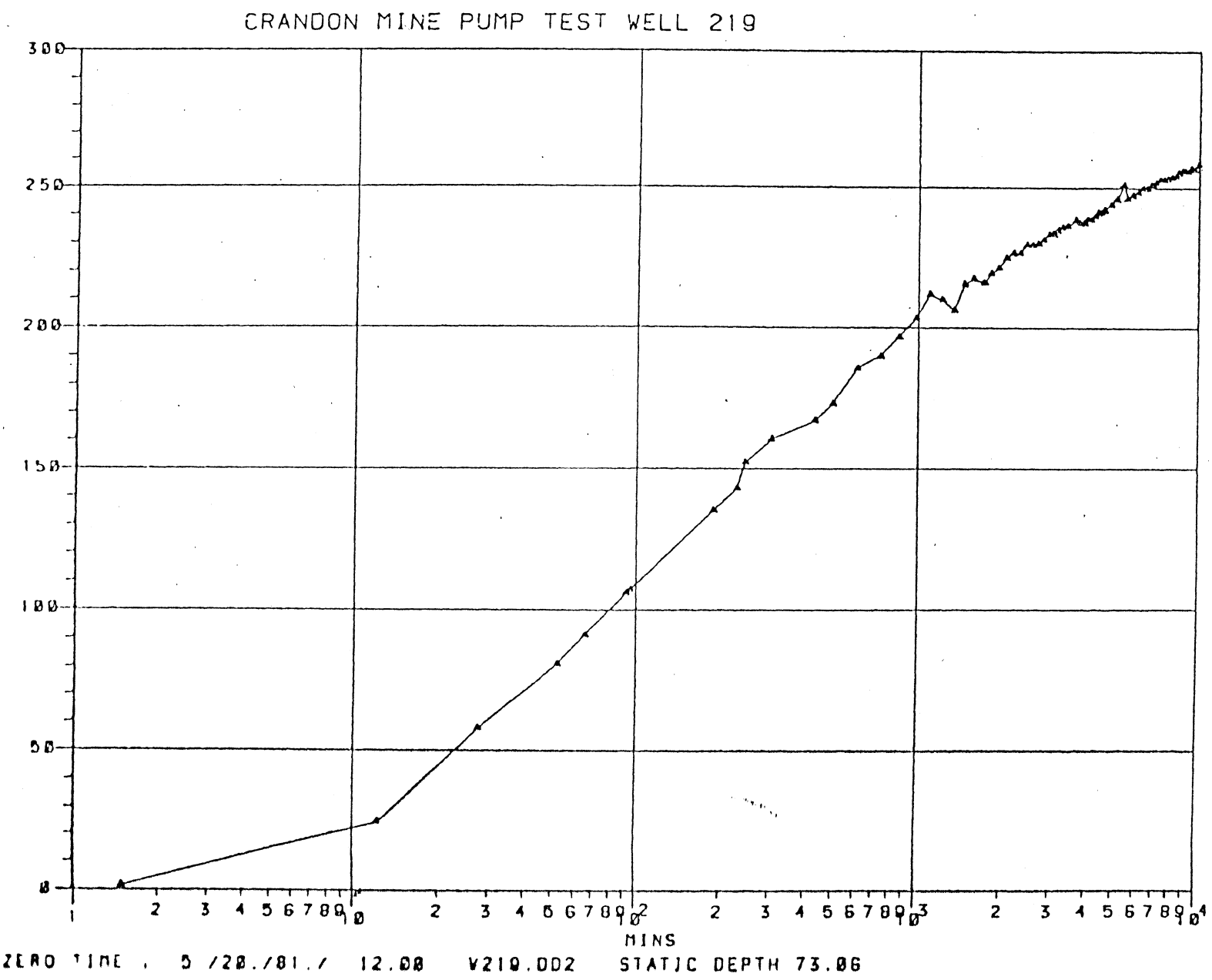
RECORD START TIME 5 27 /81 / 14.00 TRANSDUCER Manual


CRANDON MINE PUMP TEST WELL 219
MINS
RECORD ZERO TIME : 5./20./81./ 12.00 W219.DD2 STATIC DEPTH 73.86

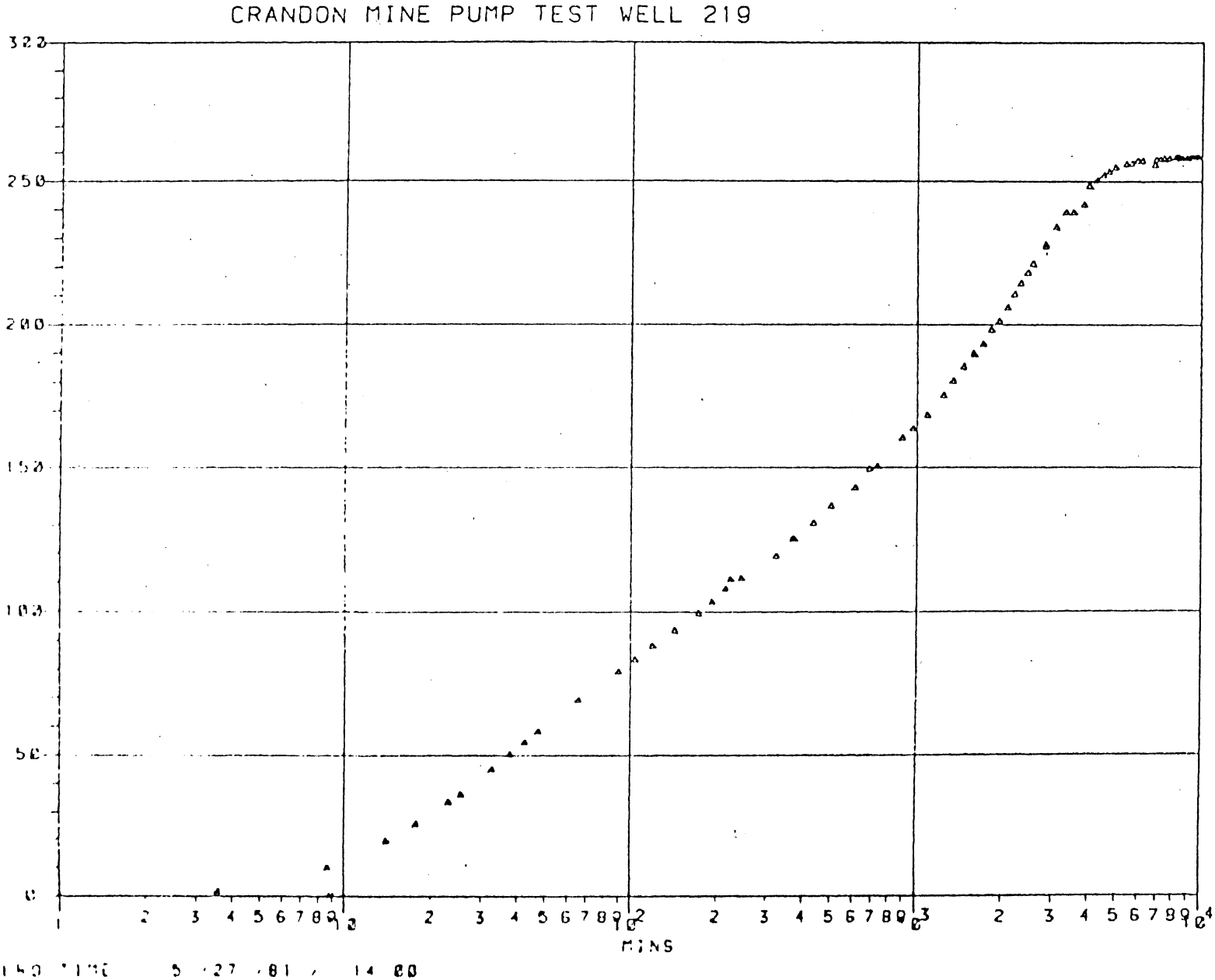
CRANDON MINE PUMP TEST WELL 219



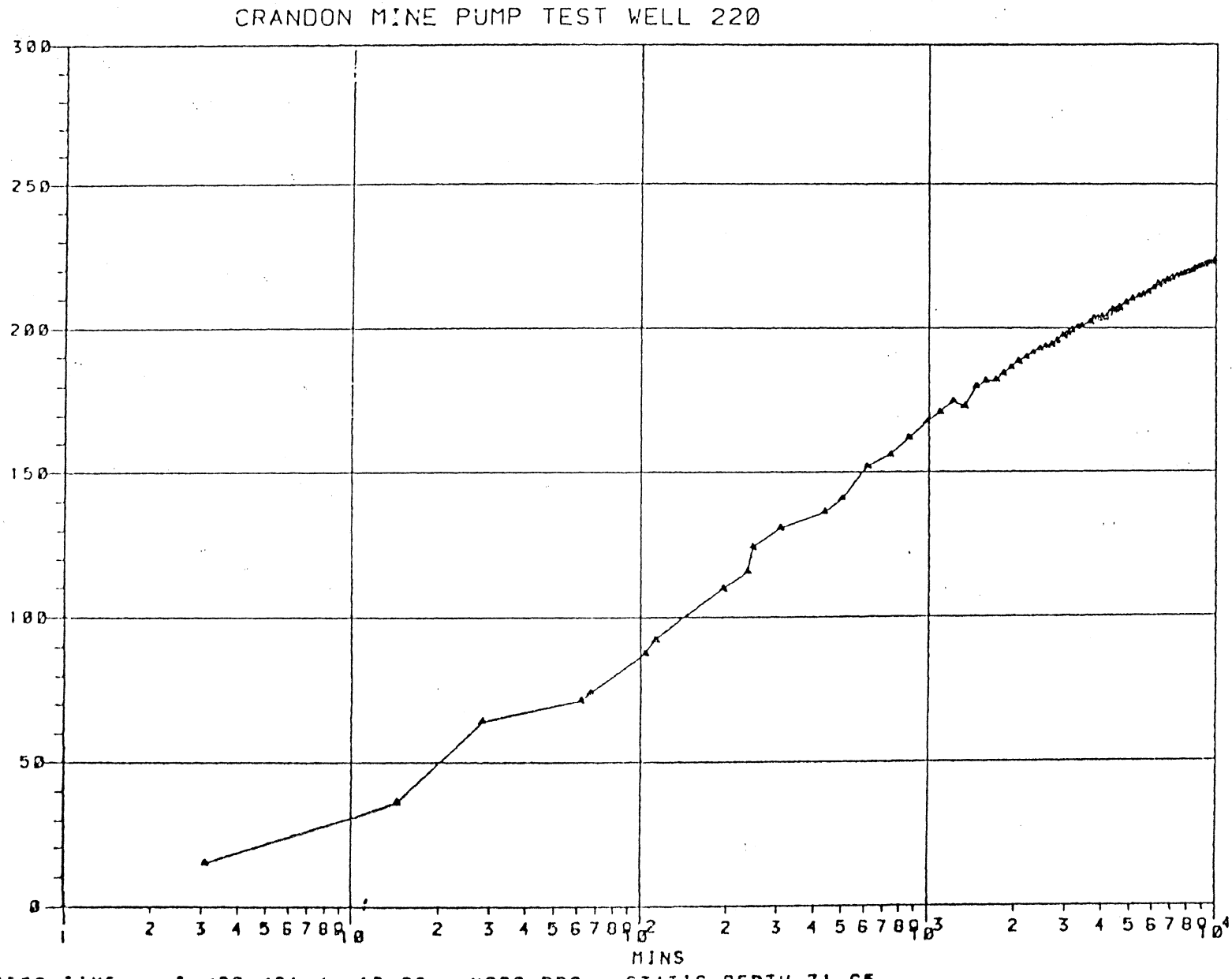
27/81 / 14.00



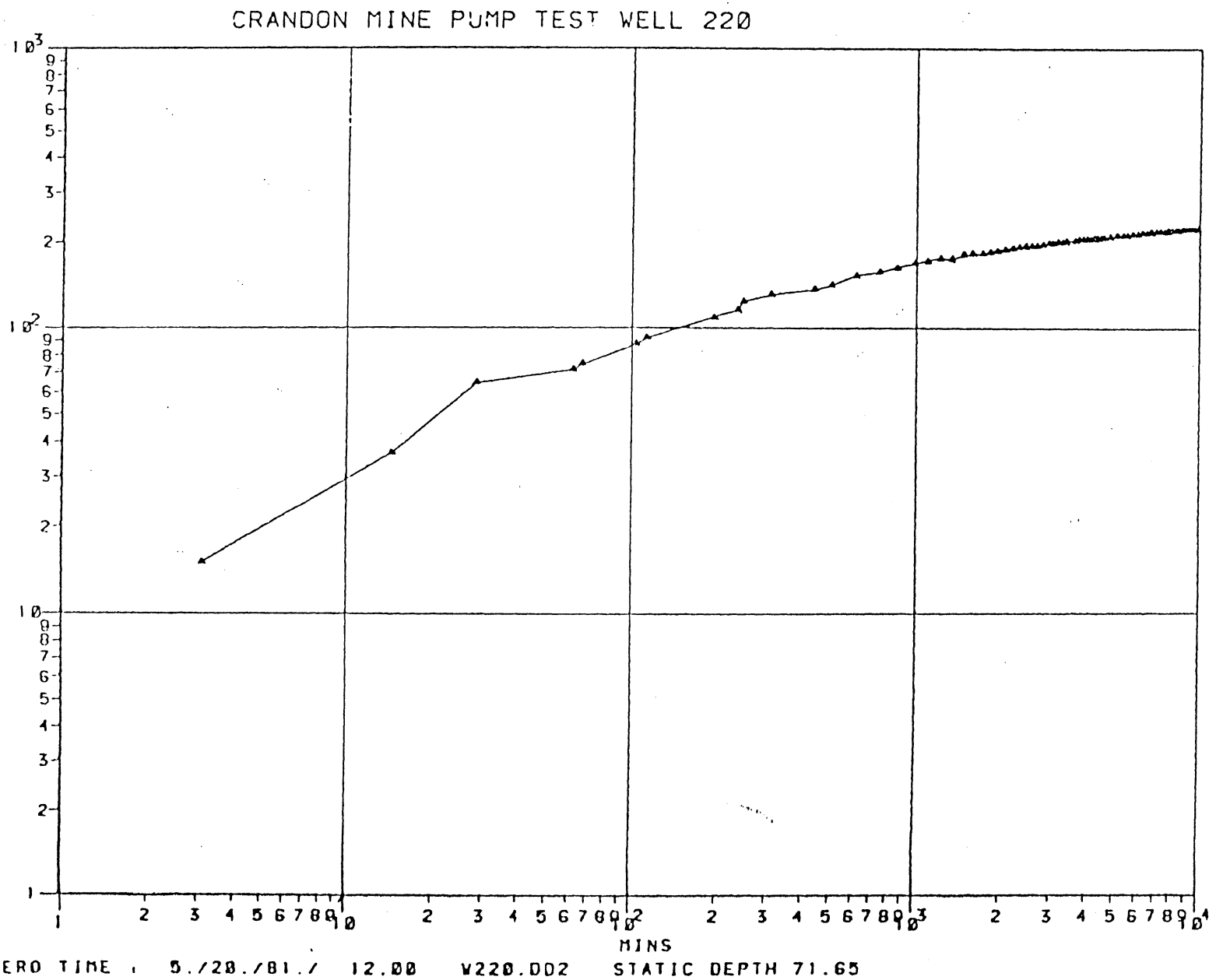
RECORD ZERO TIME , 5 /20./81./ 12.00 V219.DD2 STATIC DEPTH 73.06

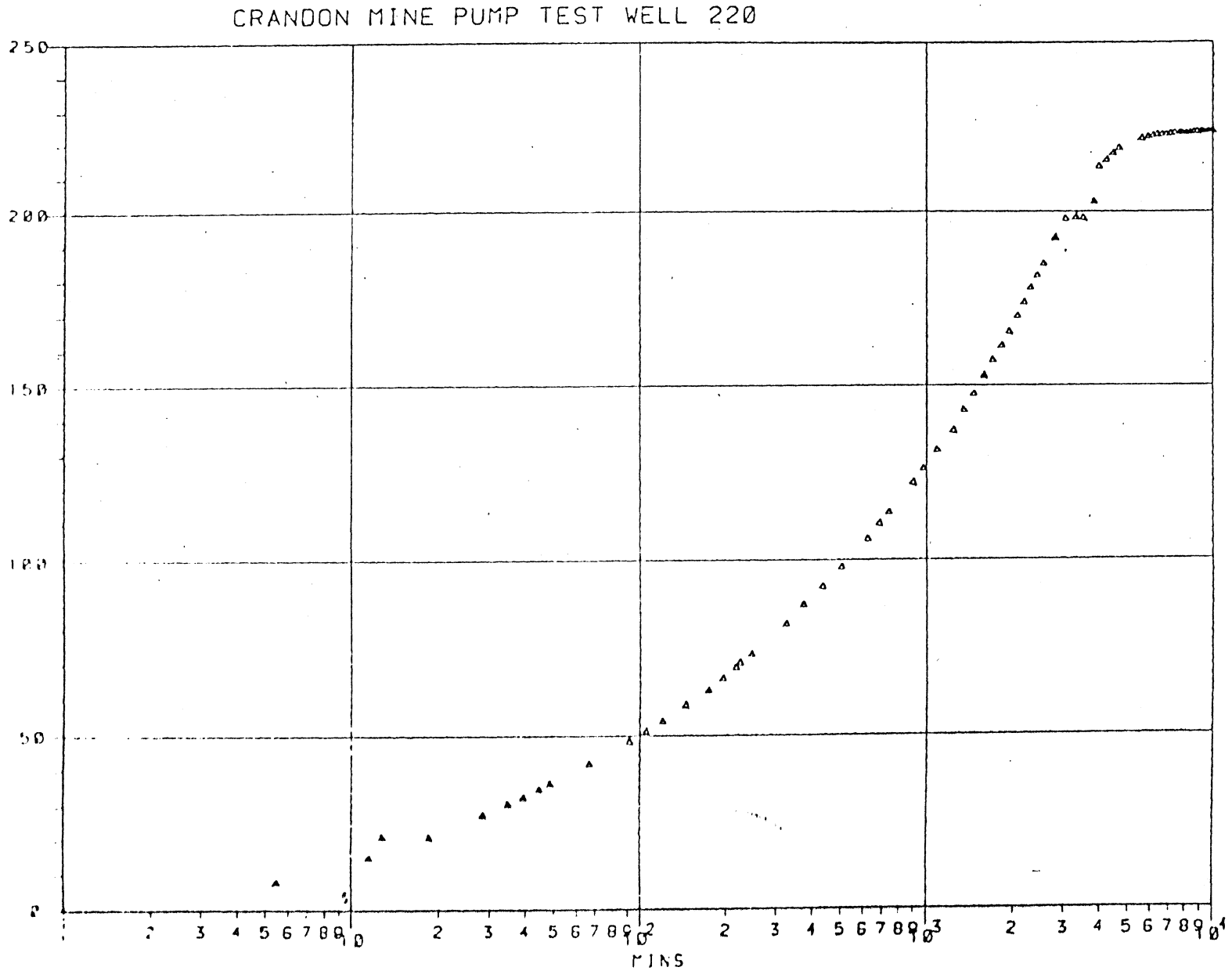


RECORD TIME 5 27 81 / 14 00

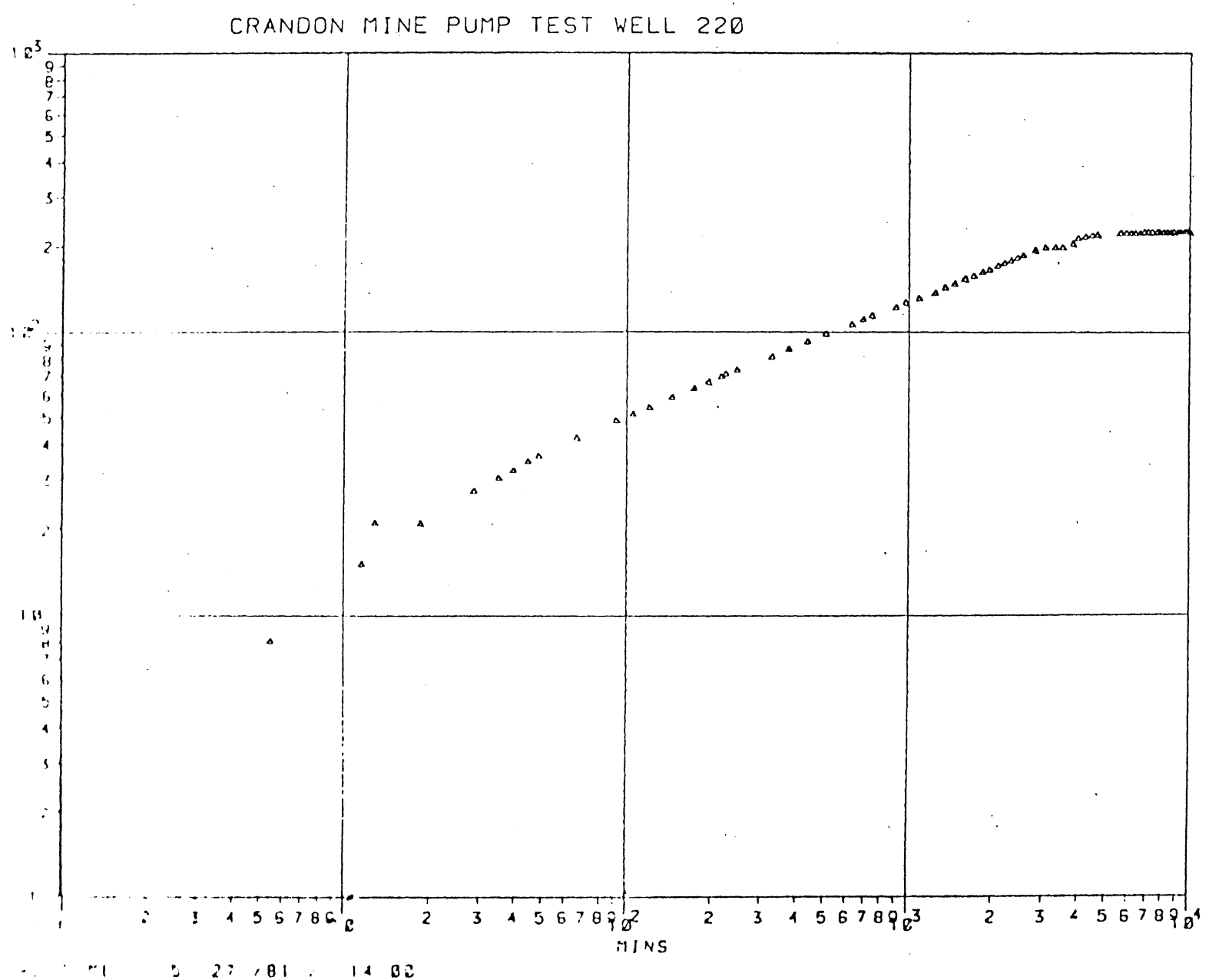


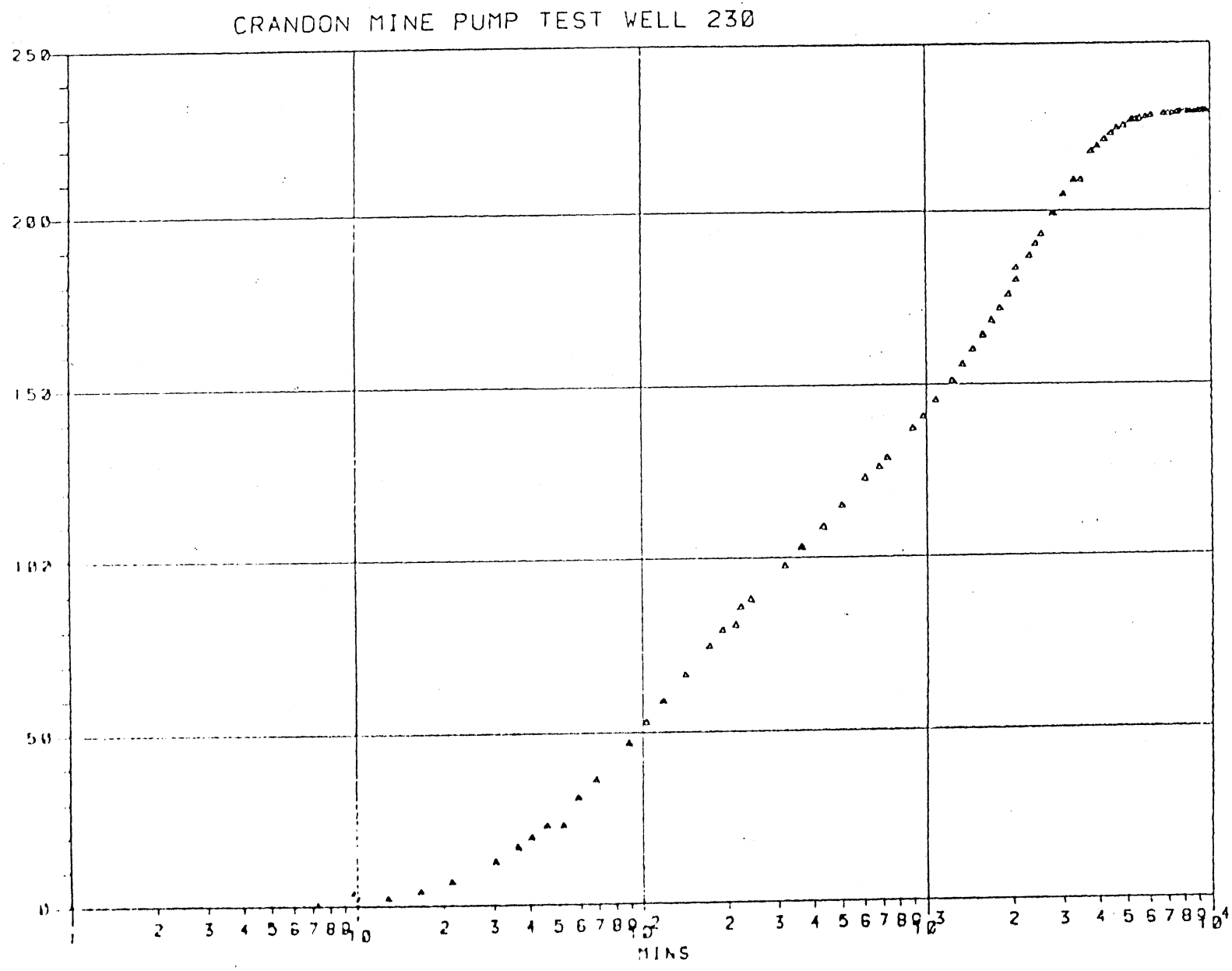
RECORD ZERO TIME 5./20./81./ 12.00 W220.DD2 STATIC DEPTH 71.65


CRANDON MINE PUMP TEST WELL 220
MINS
RECORD ZERO TIME : 5./28./81./ 12.00 W220.DD2 STATIC DEPTH 71.65

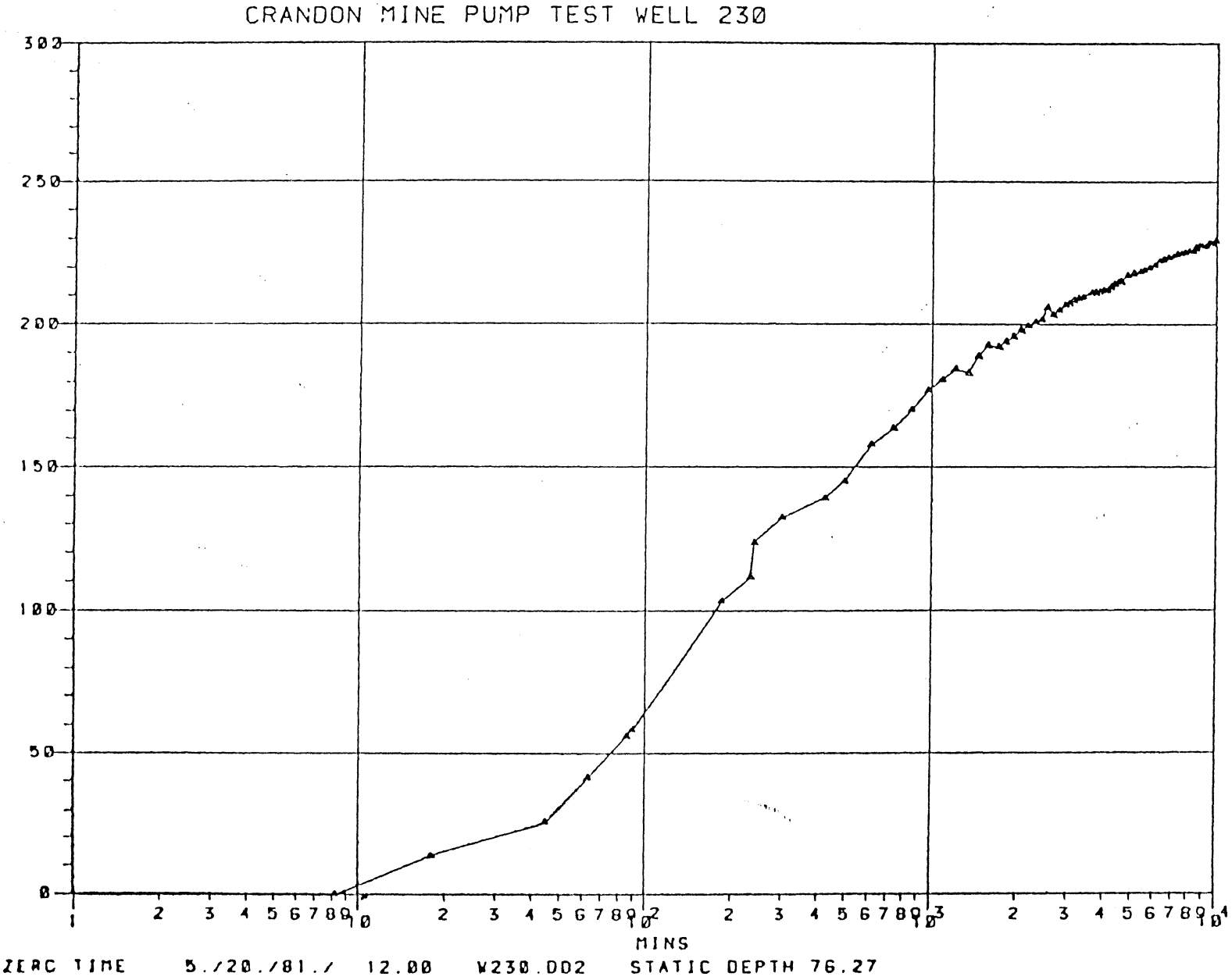


Time 5/27/81/ 14.00

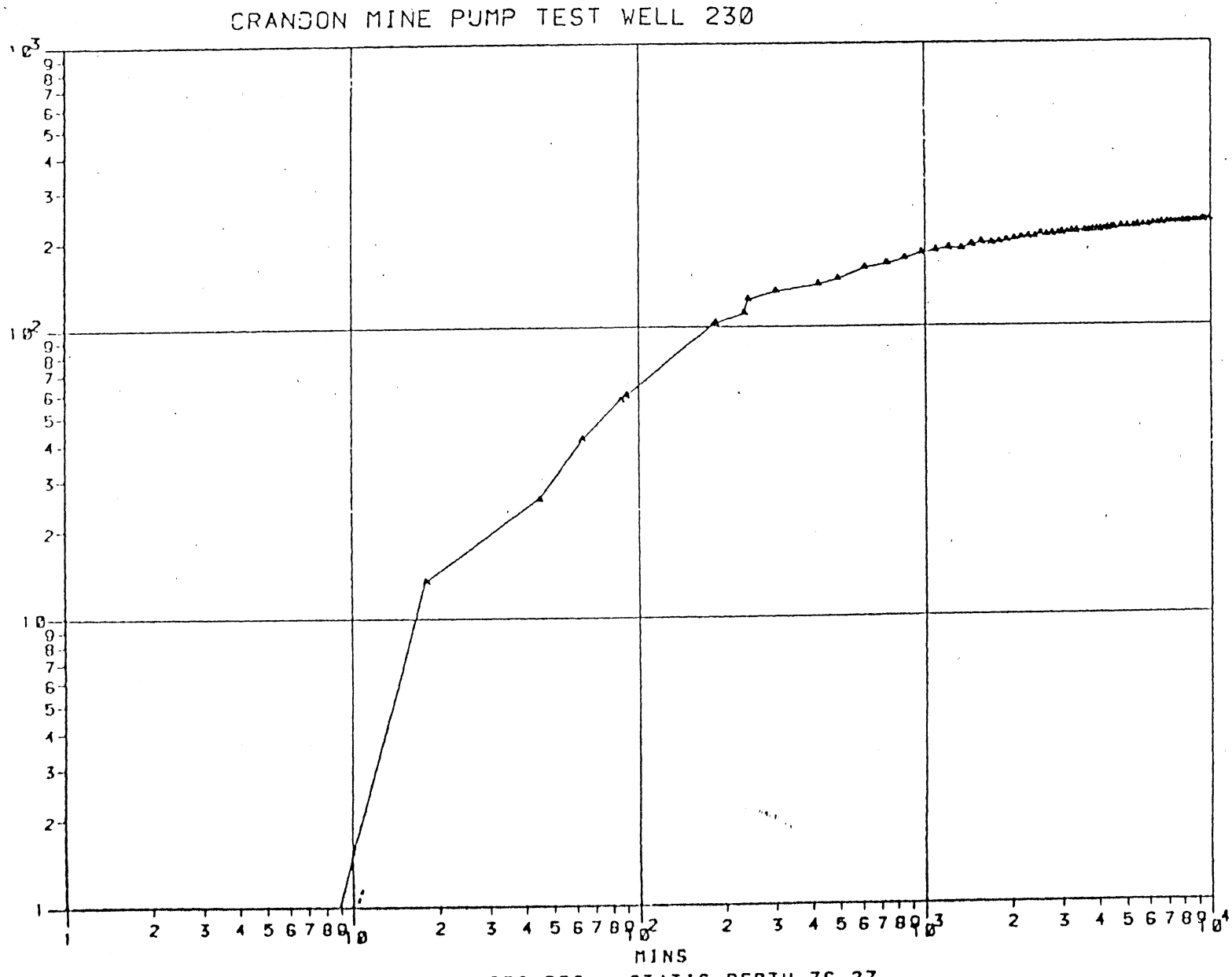

CRANDON MINE PUMP TEST WELL 220
MINS



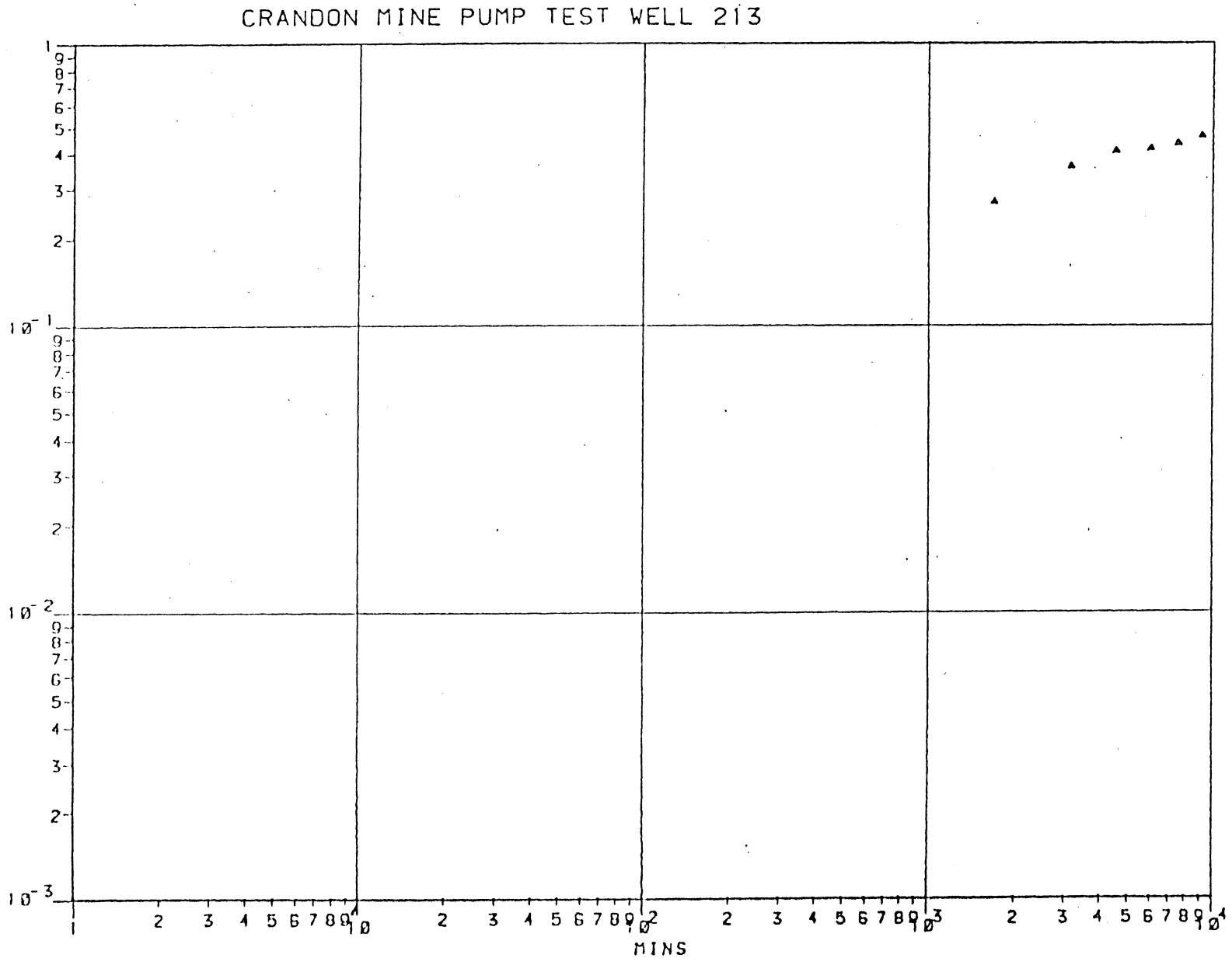
[illegible] TIME 5 /27 /8[illegible] / 14 00



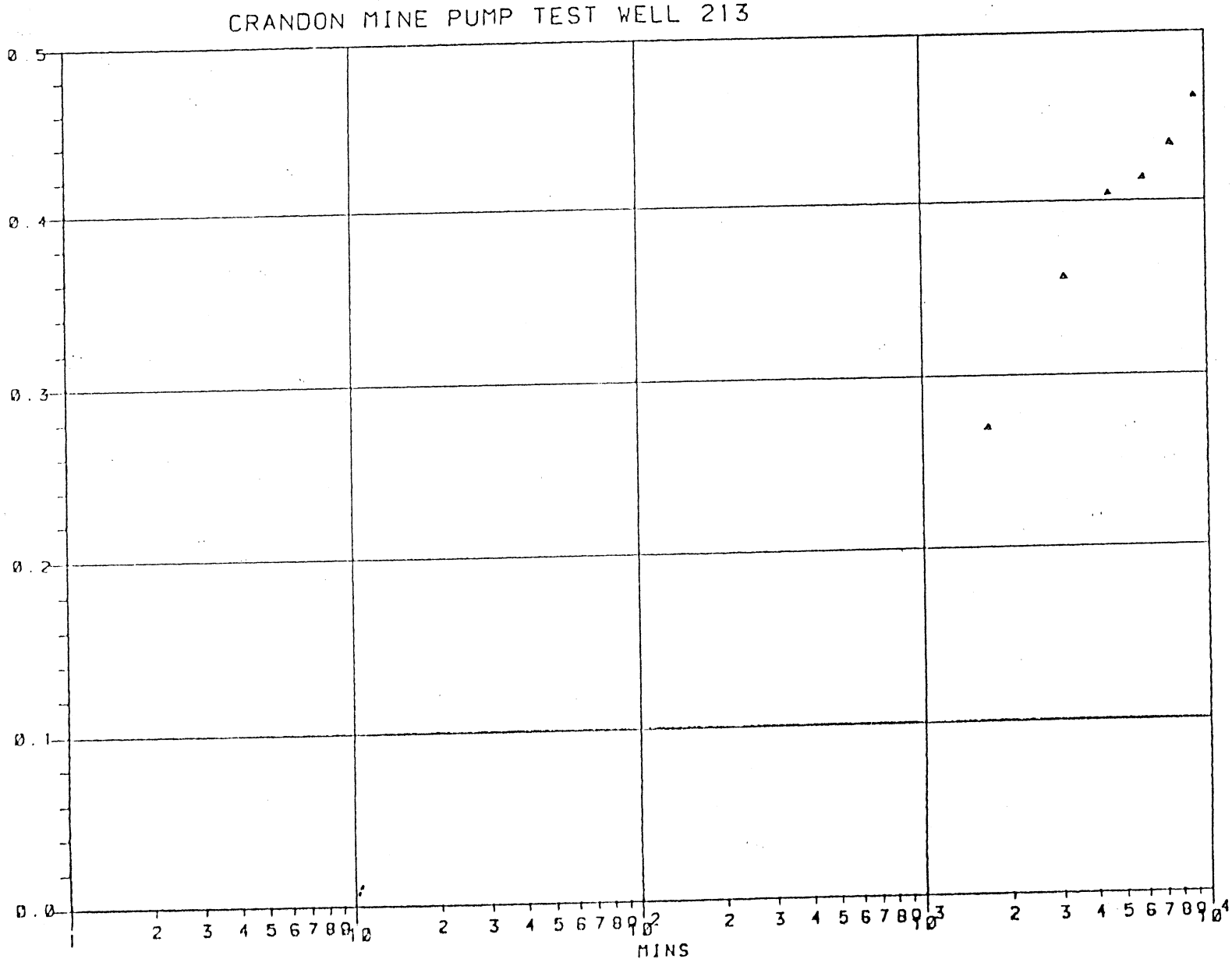
. RECORD ZERO TIME 5./20./81./ 12.00 W230.DD2 STATIC DEPTH 76.27



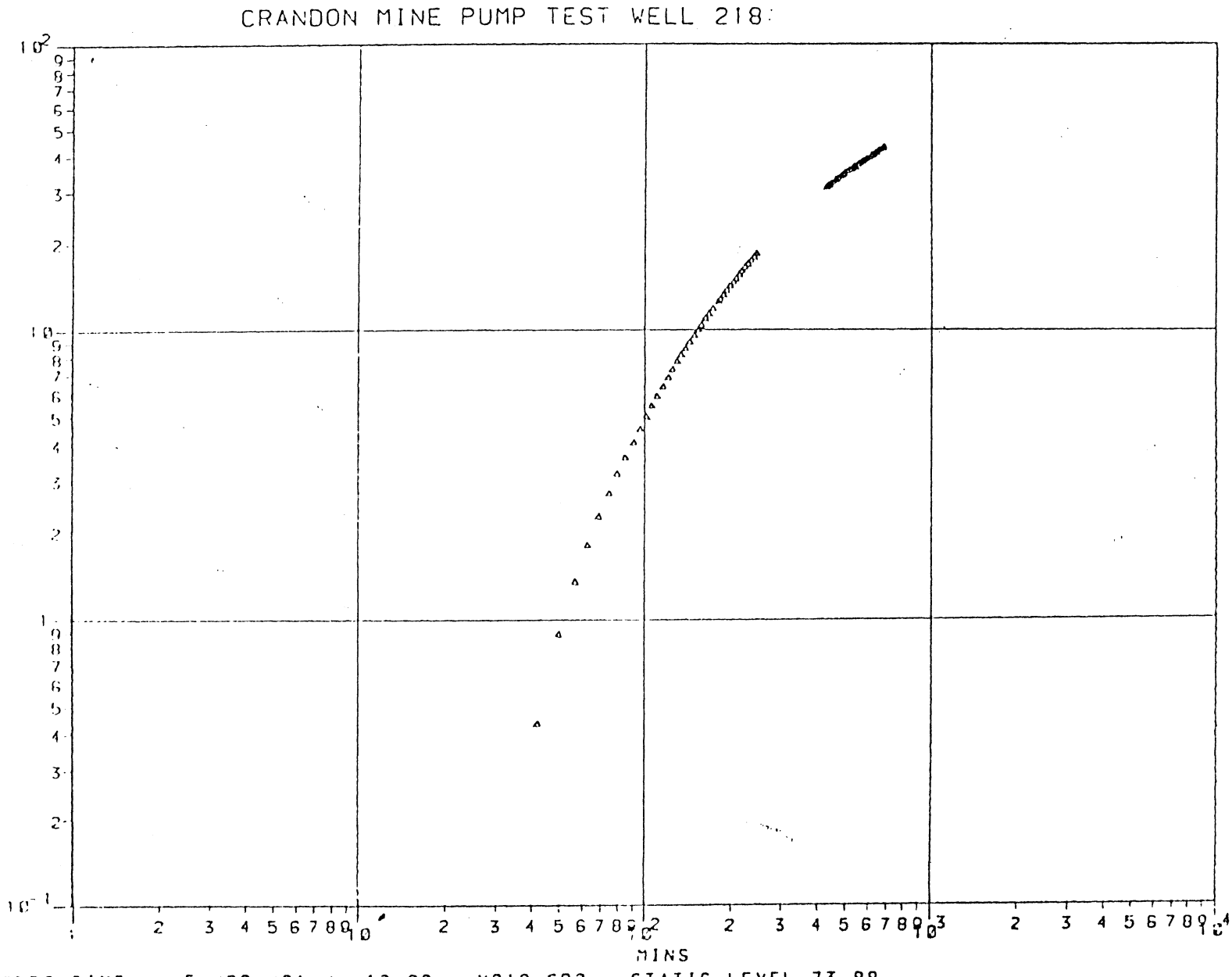
RECORD ZERO TIME 5./20./81./ 12.00 W230.002 STATIC DEPTH 76.27



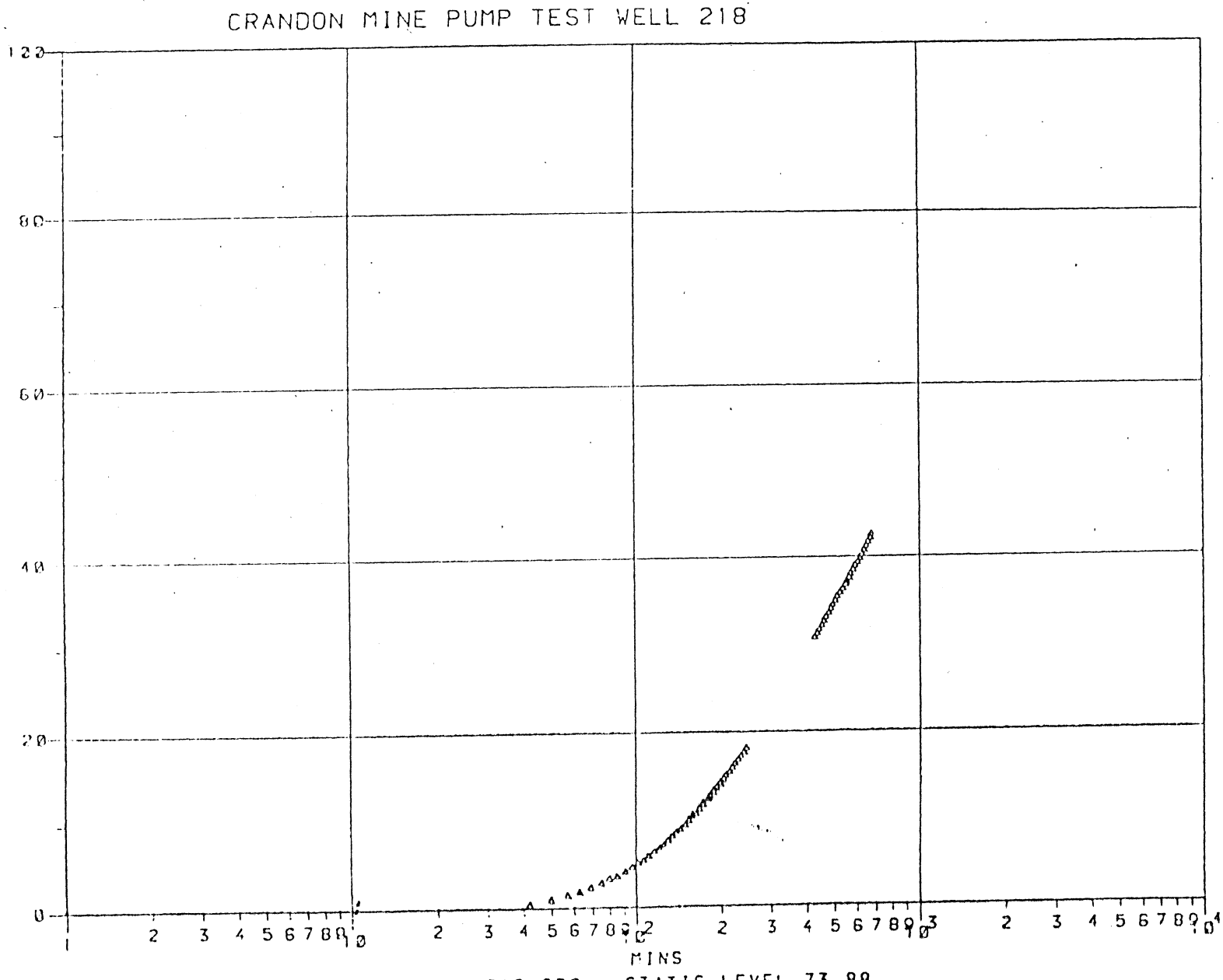
RECORD ZERO TIME · 5 /20./81./ 12.00 MANUAL

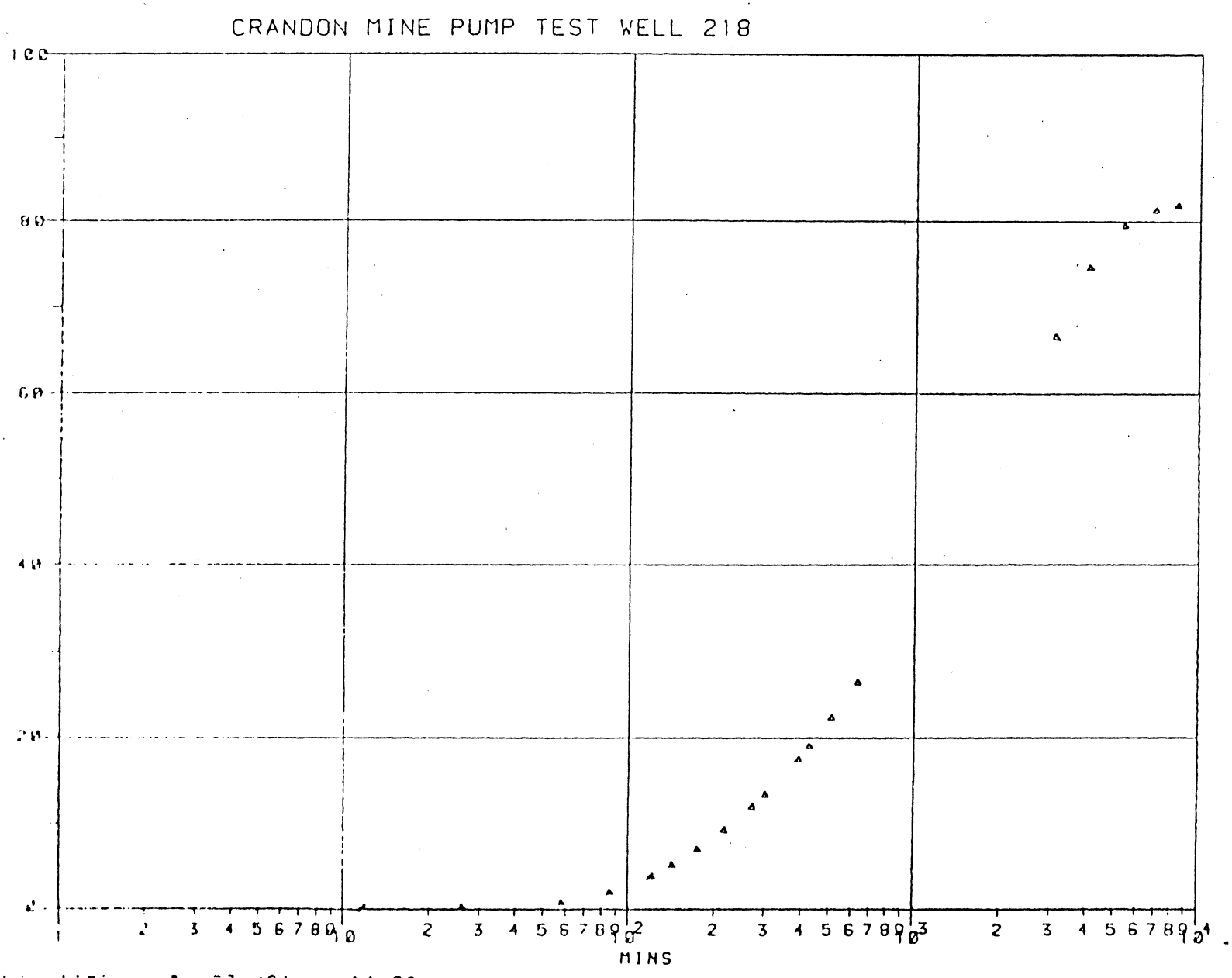


RECORC ZERC TIME : 5./20./81./ 12.00 MANUAL

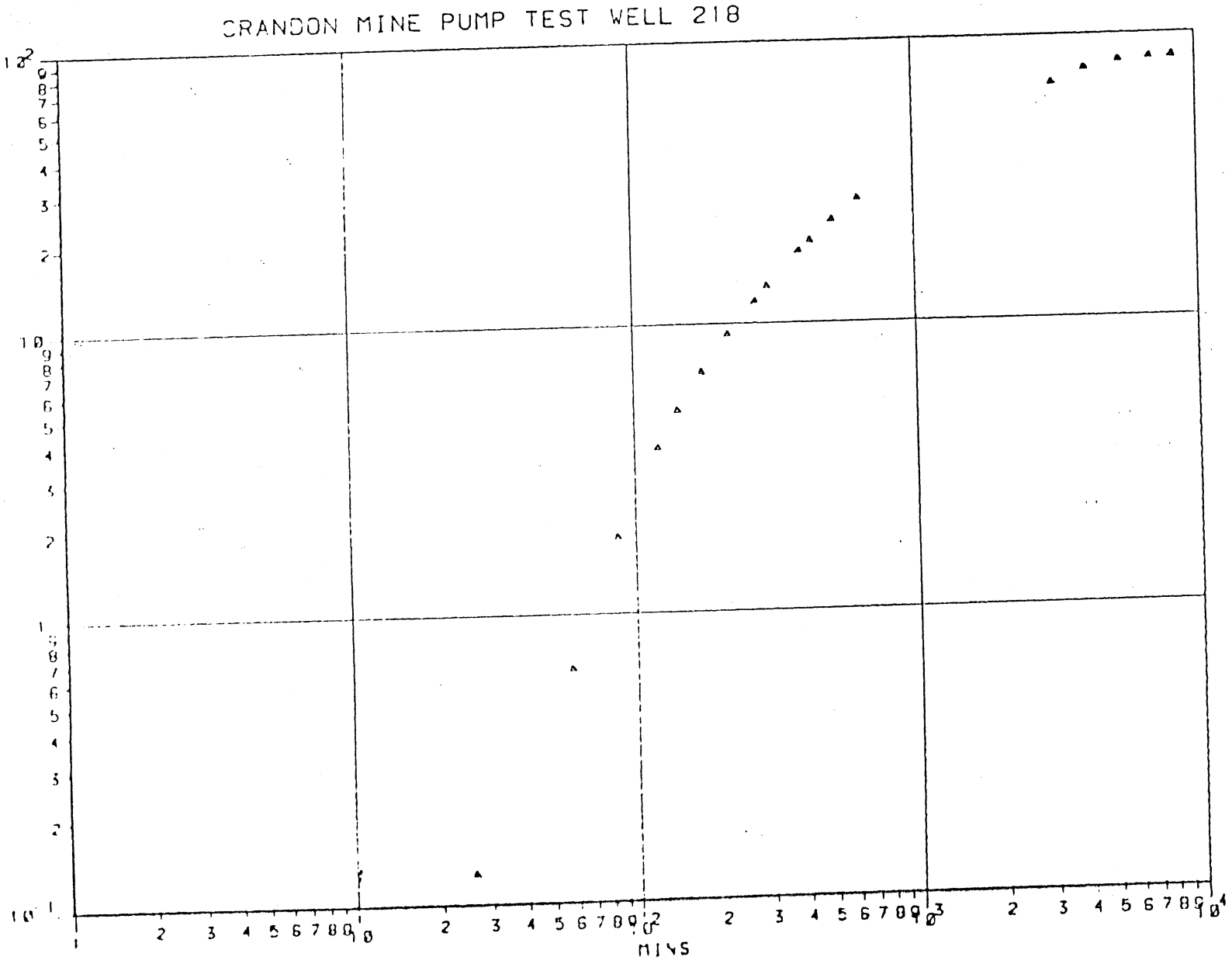


RECORD ZERO TIME : 5./20./81./ 12.00 W218.SD2 STATIC LEVEL 73.88

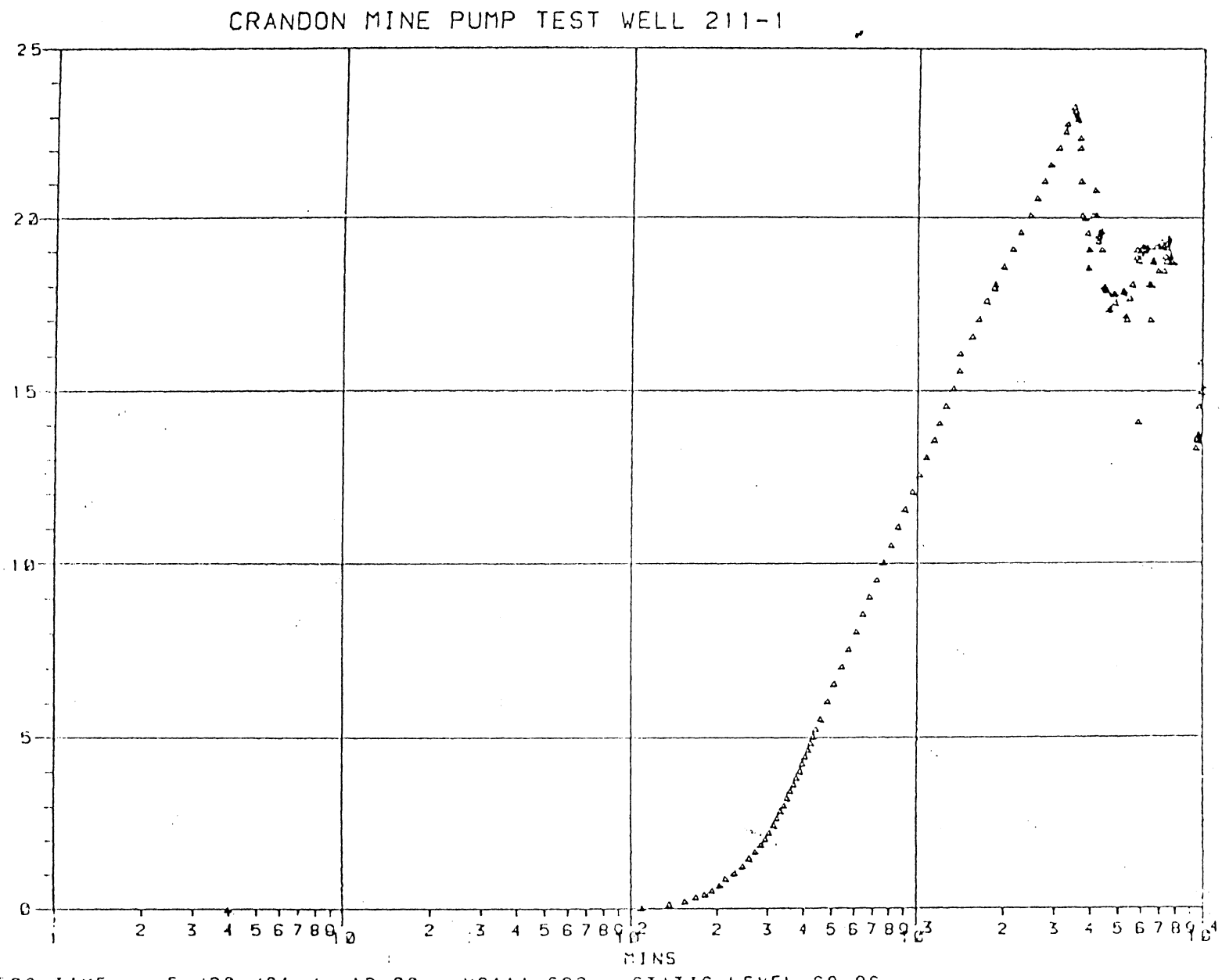

CRANDON MINE PUMP TEST WELL 218
100
80
60
40
20
0
2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10
2 3 4 5 6 7 8 9 10
MINS
RECORD ZERO TIME : 5 /20./81./ 12.00 W218.SD2 STATIC LEVEL 73.88

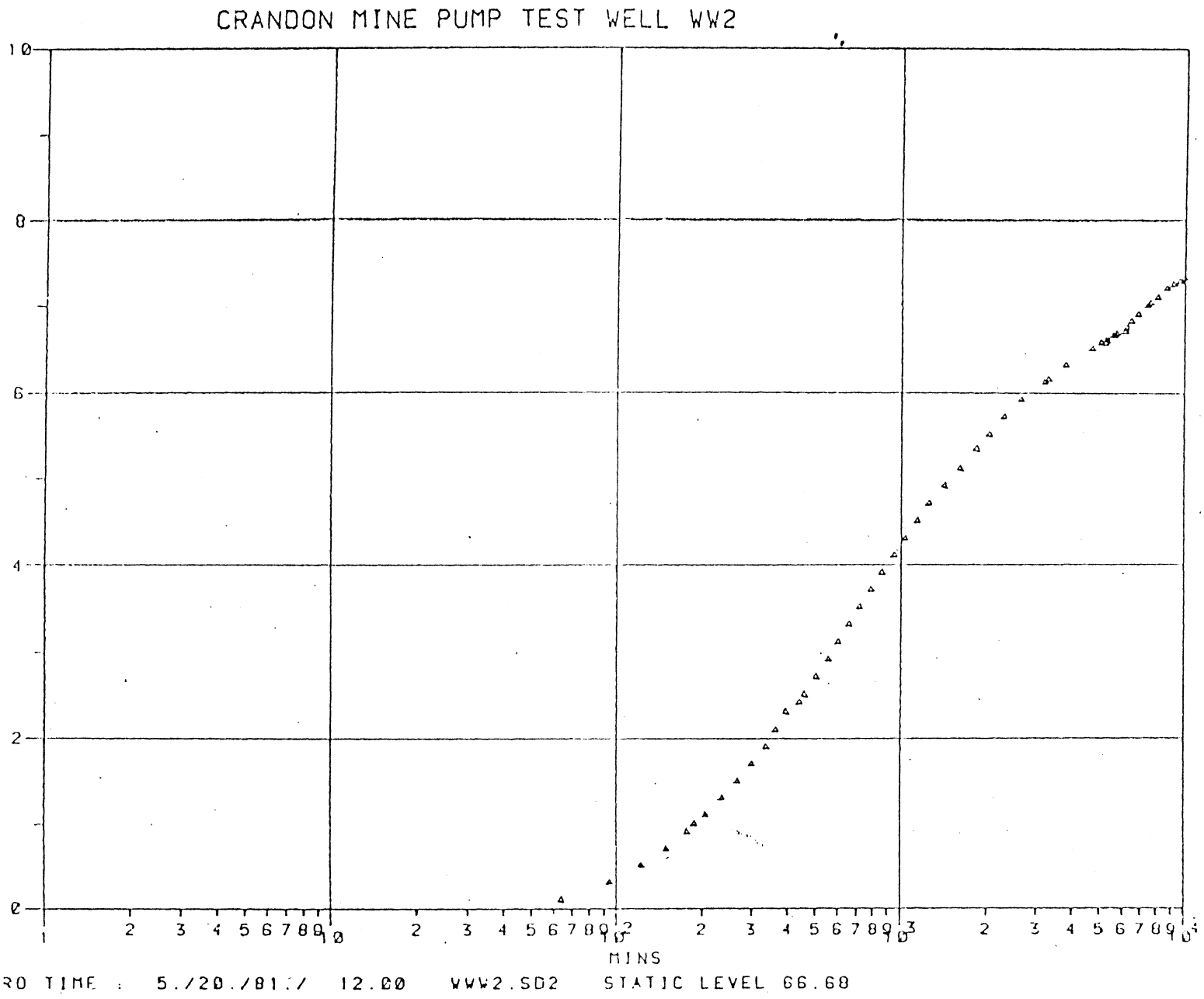


RECORD [illegible] TIME 5 /27 /81 / 14 30

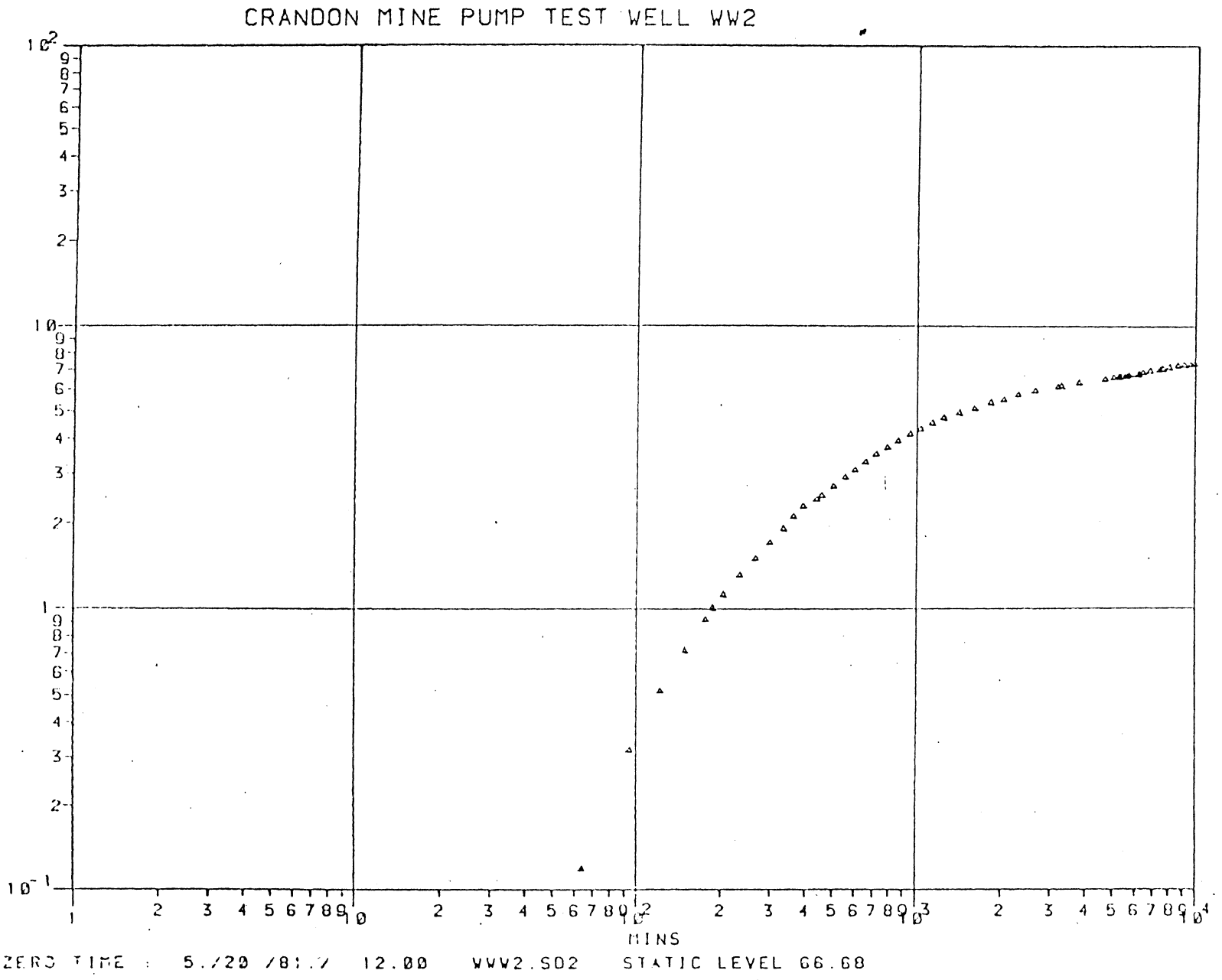


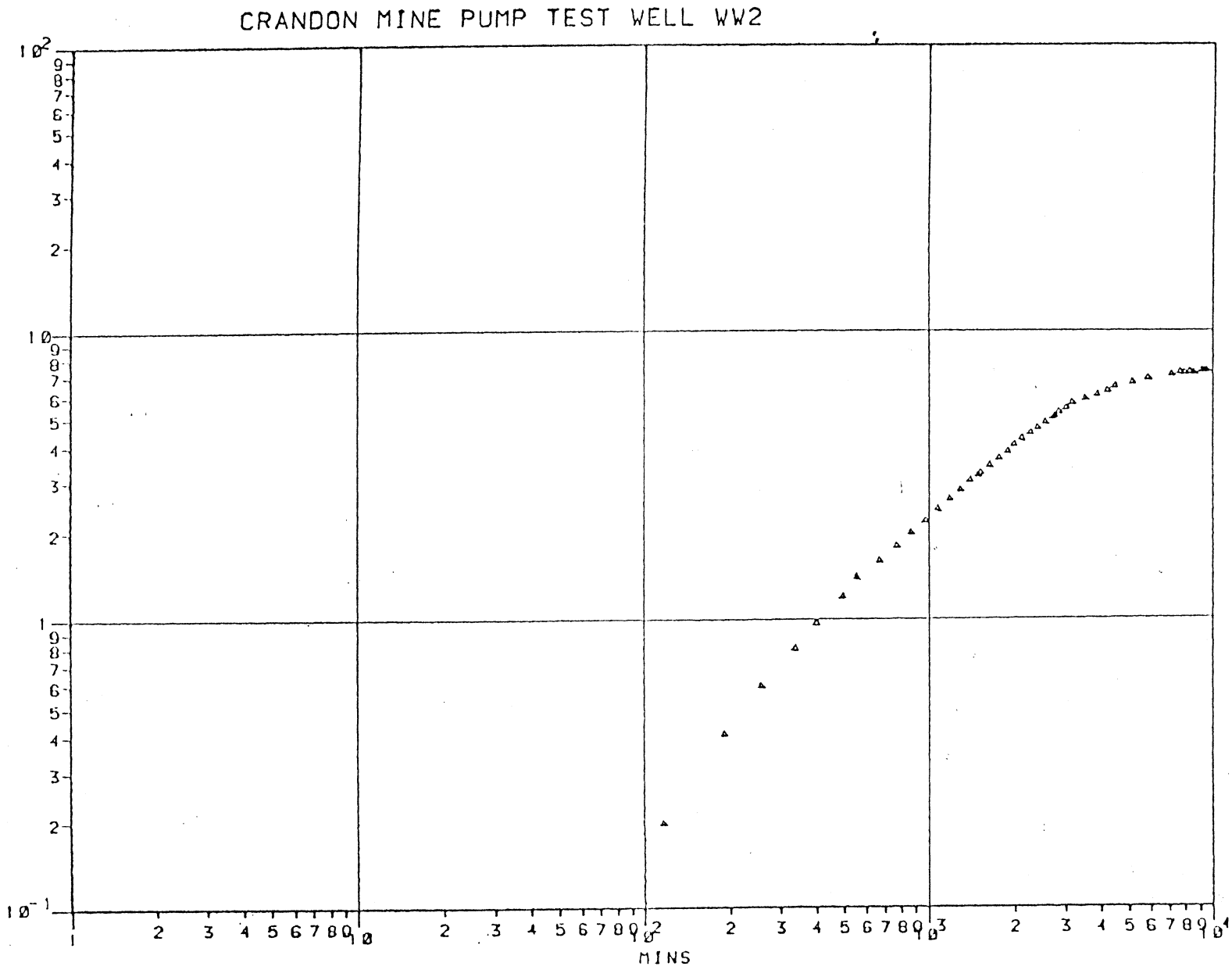
5/27/81 14.00


CRANDON MINE PUMP TEST WELL 211-1
25
20
15
10
5
0
1
2 3 4 5 6 7 8 9
10
2 3 4 5 6 7 8 9
10^2
2 3 4 5 6 7 8 9
10^3
2 3 4 5 6 7 8 9
10^4
MINS
RECORD ZERO TIME - 5./20./8:./ 12.00 W2111.SD2 STATIC LEVEL 60.96

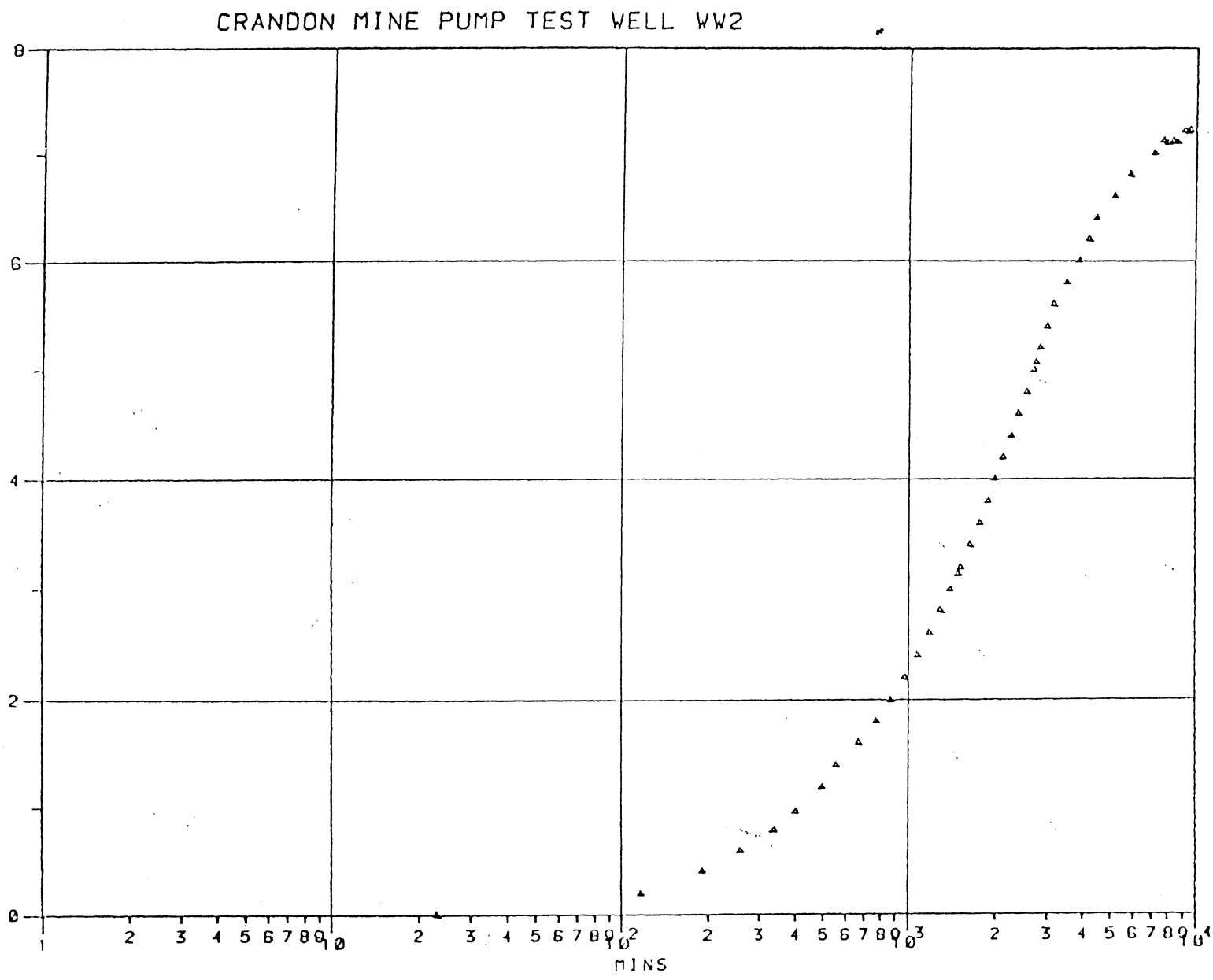


RECORD ZERO TIME : 5./20./81./ 12.00 WWW2.SD2 STATIC LEVEL 66.68

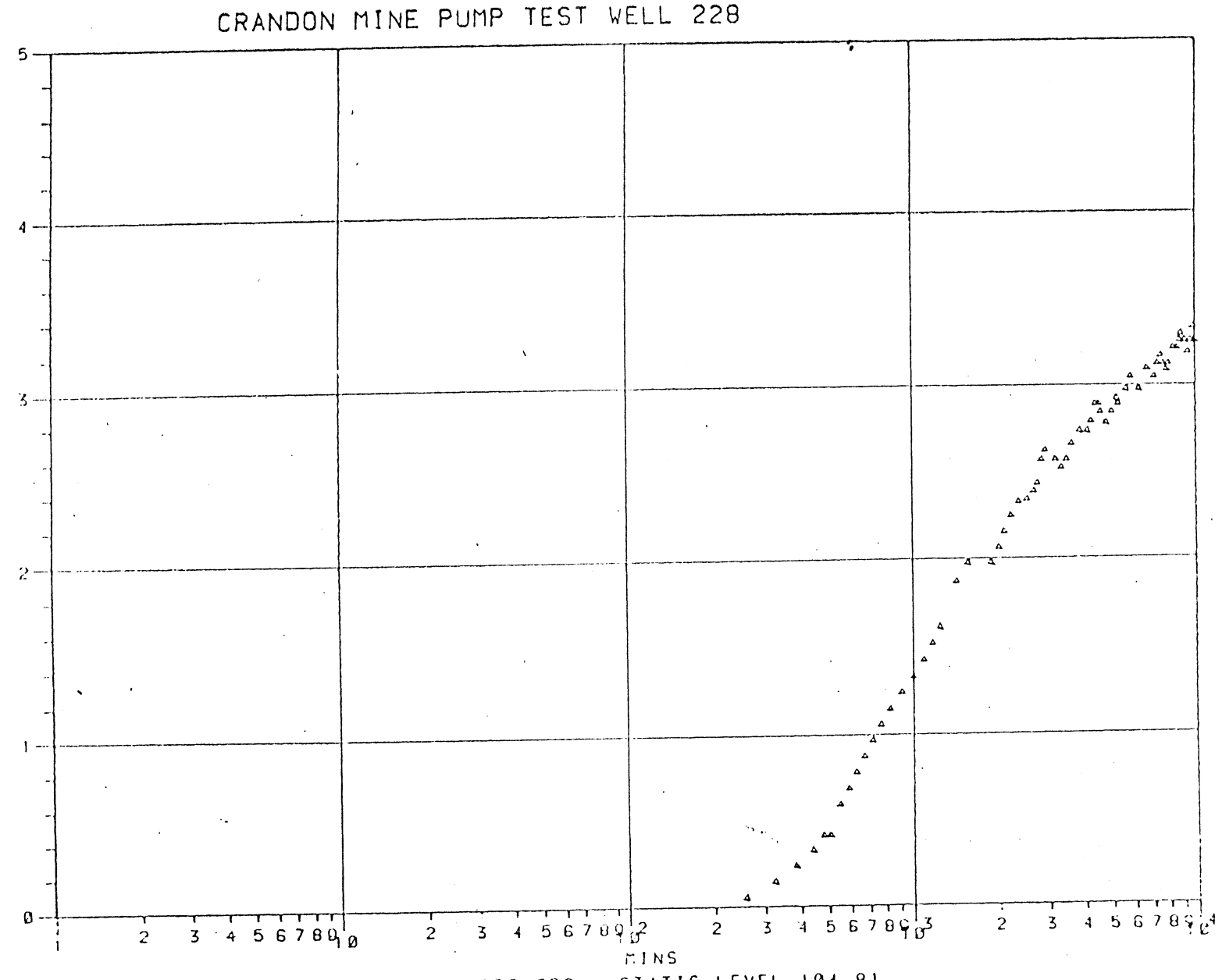

CRANDON MINE PUMP TEST WELL WW2
MINS
RECORD ZERO TIME : 5./20 /81:./ 12.00 WWW2.SD2 STATIC LEVEL 66.68



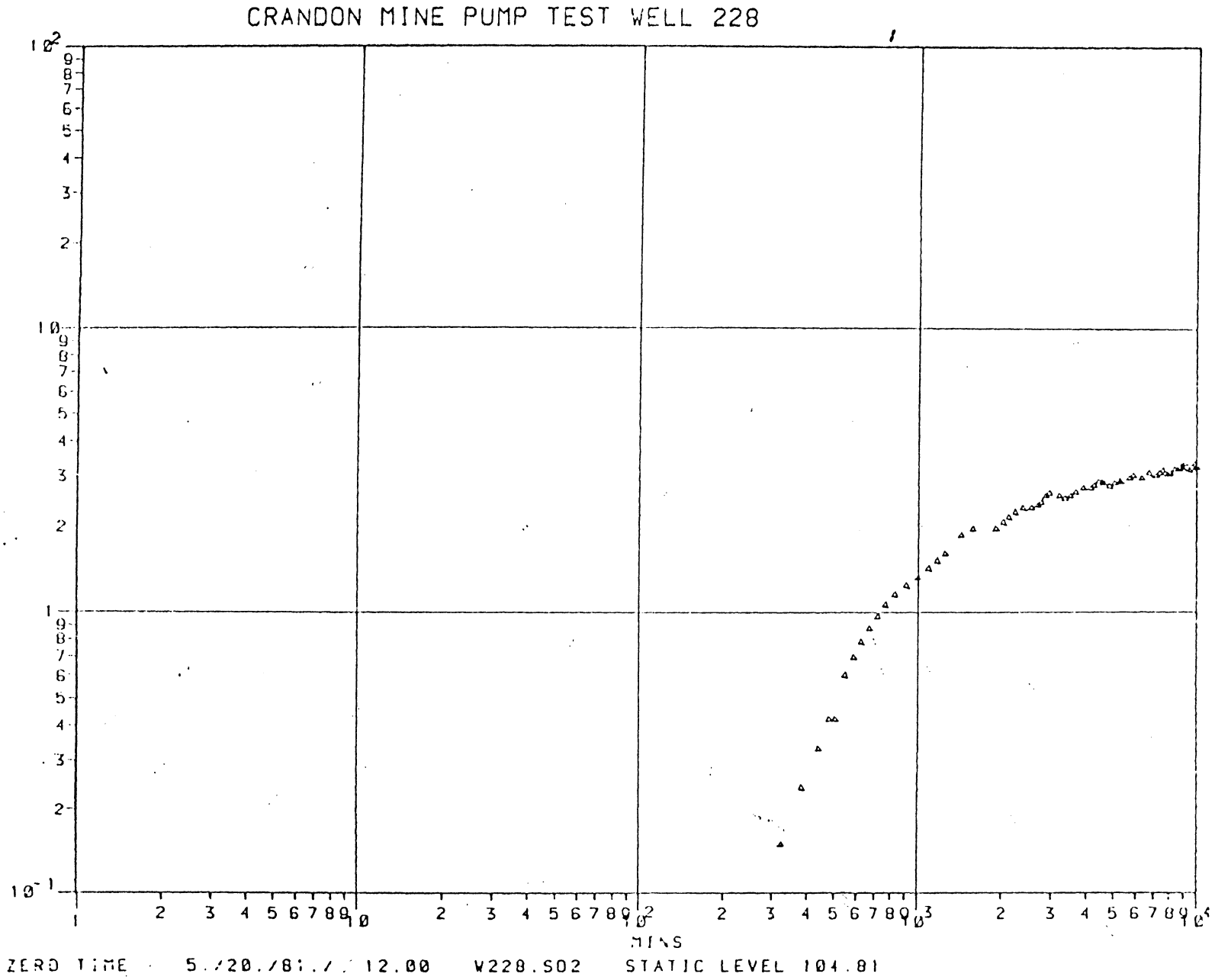
RECORD ZERO TIME : 5./27./81./ 14.00 STEVENS



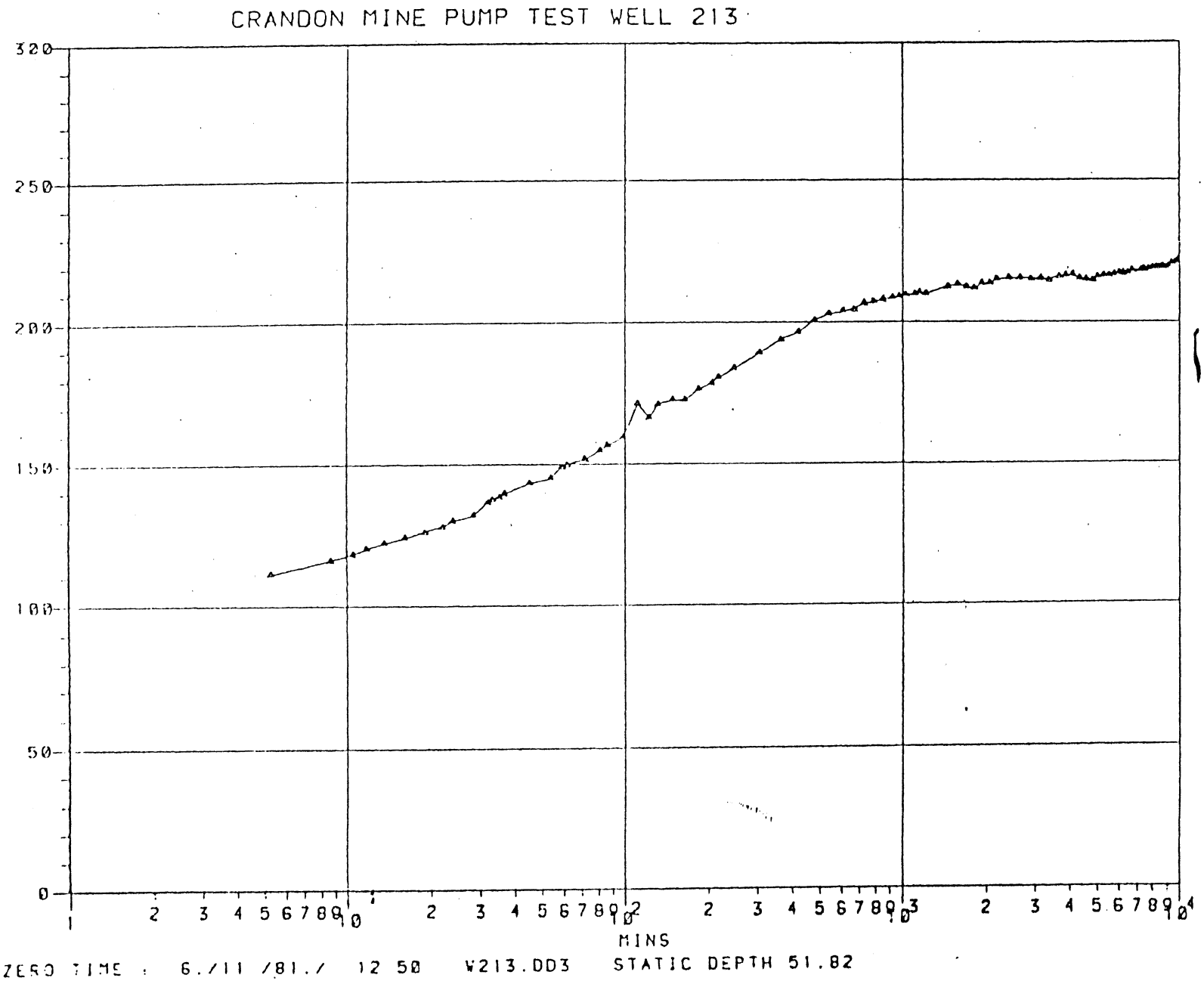
RECORD ZERO TIME : 5./27./81./ 14.00 STEVENS



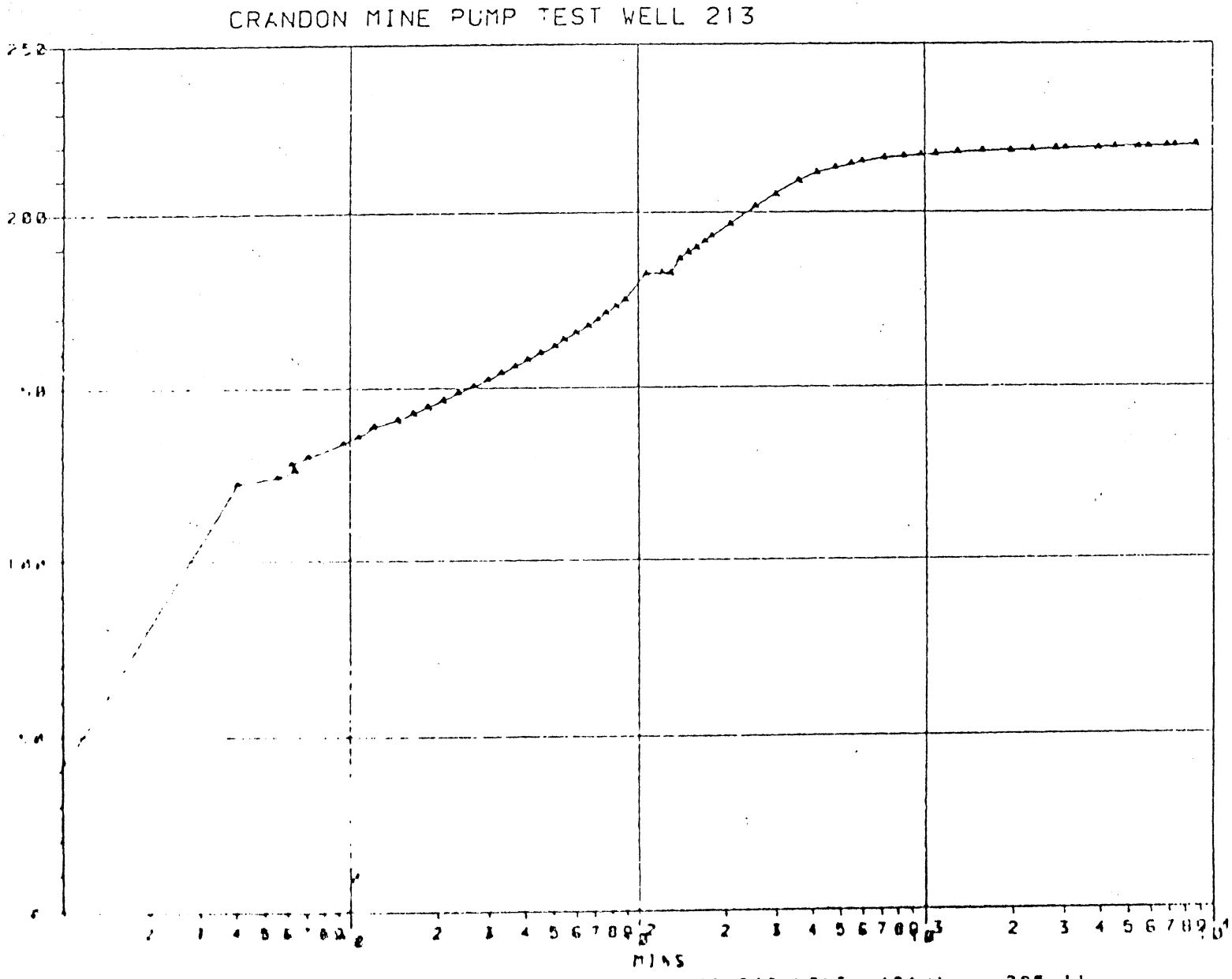
RECORD ZERO TIME - 5./20 /81./ 12.00 W228.SD2 STATIC LEVEL 104.81

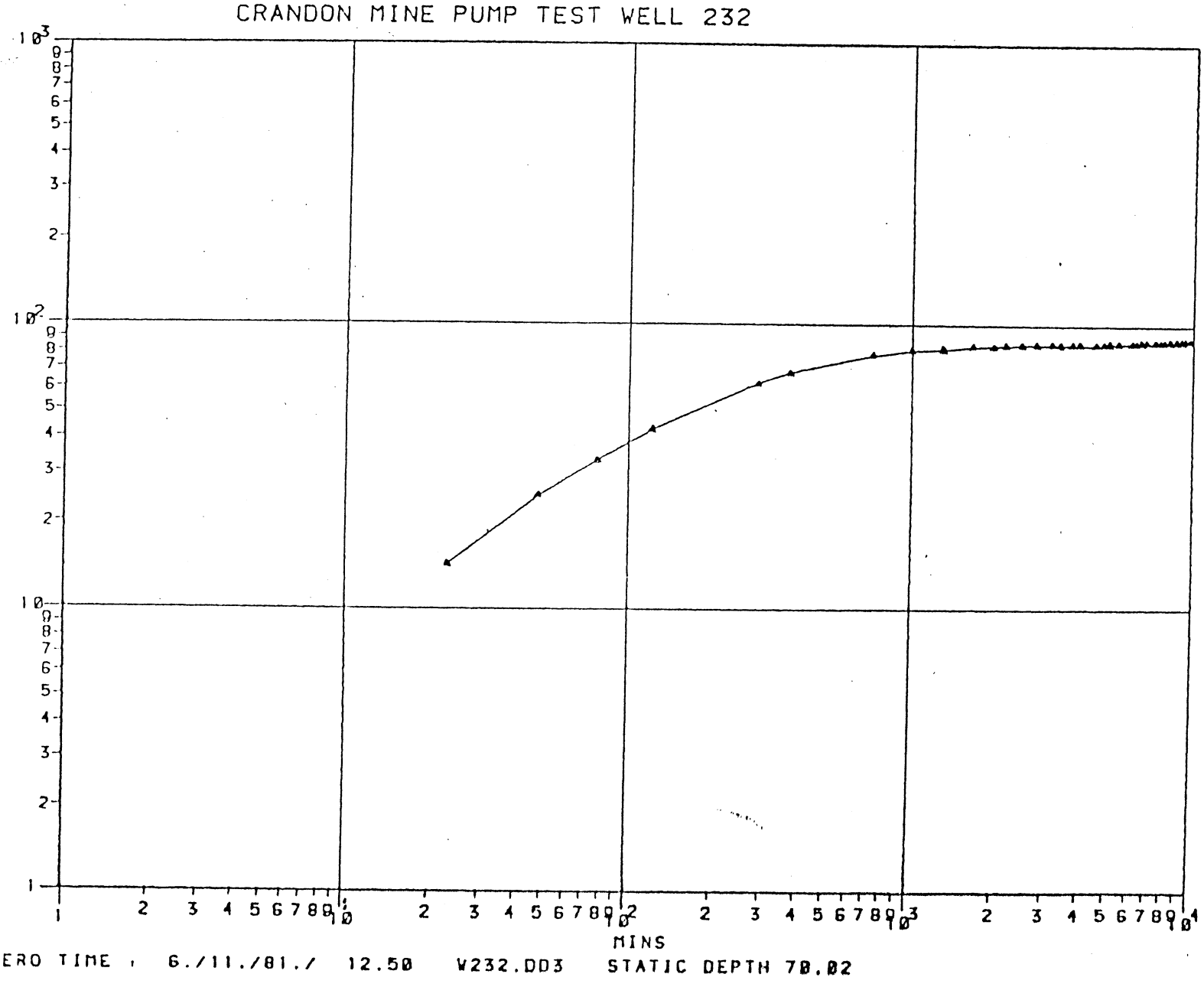

CRANDON MINE PUMP TEST WELL 228
MINS
RECORD ZERO TIME 5./20./81./ 12.00 W228.S02 STATIC LEVEL 104.81

ITEM 3

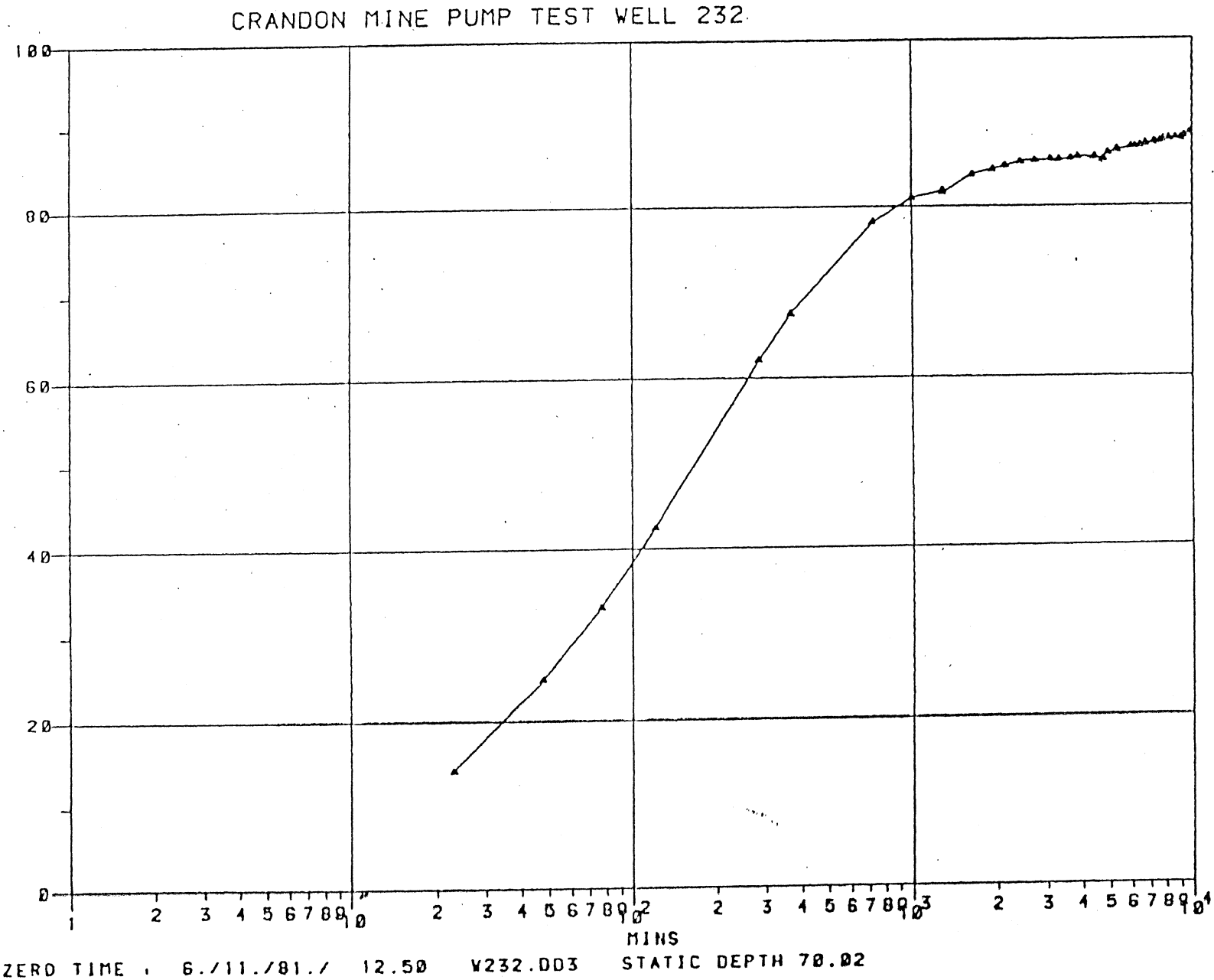


RECORD ZERO TIME : 6./11 /81./ 12 50 W213.DD3 STATIC DEPTH 51.82

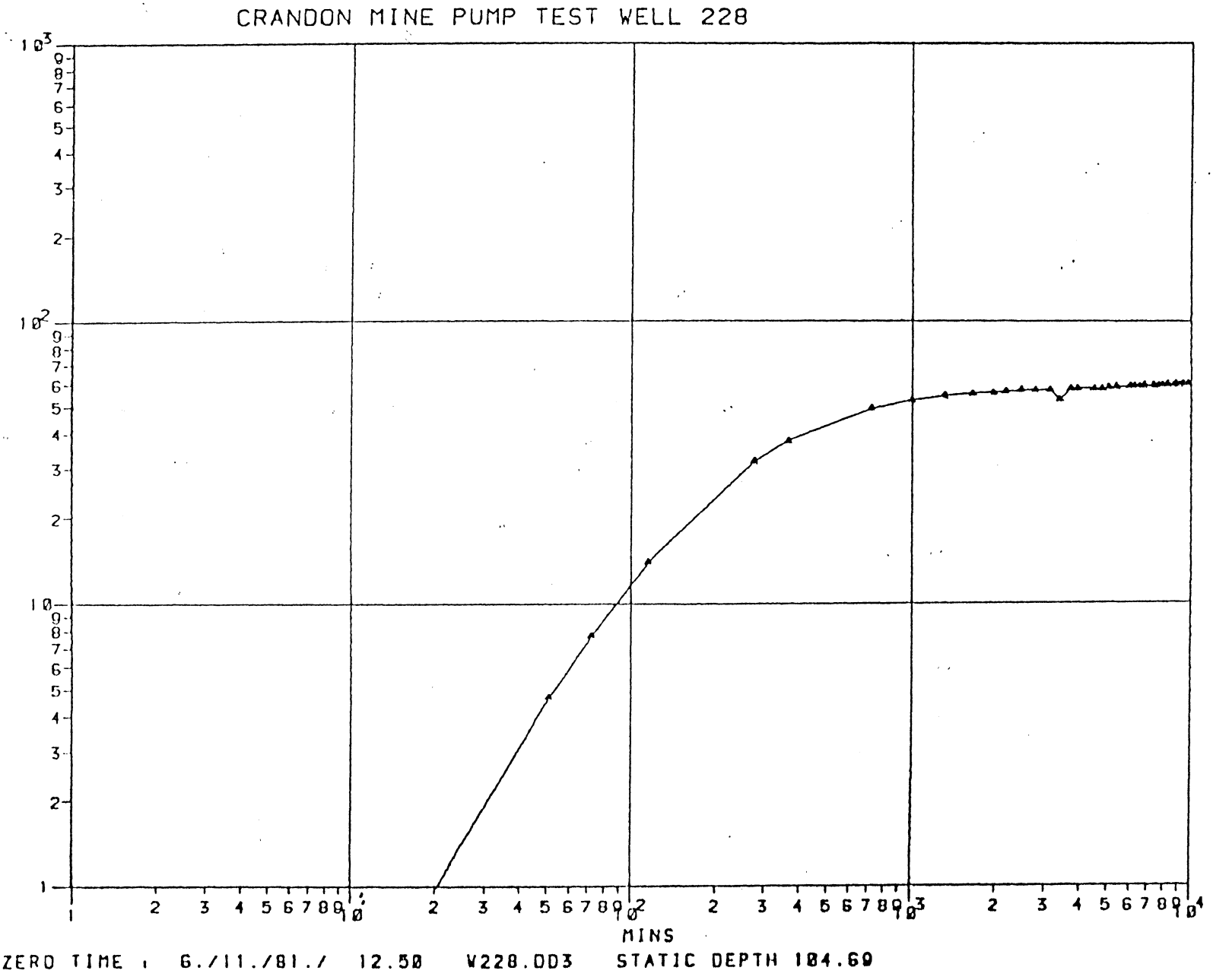

CRANDON MINE PUMP TEST WELL 213
200
MINS
STATIC LEVEL (RAW): 285 11



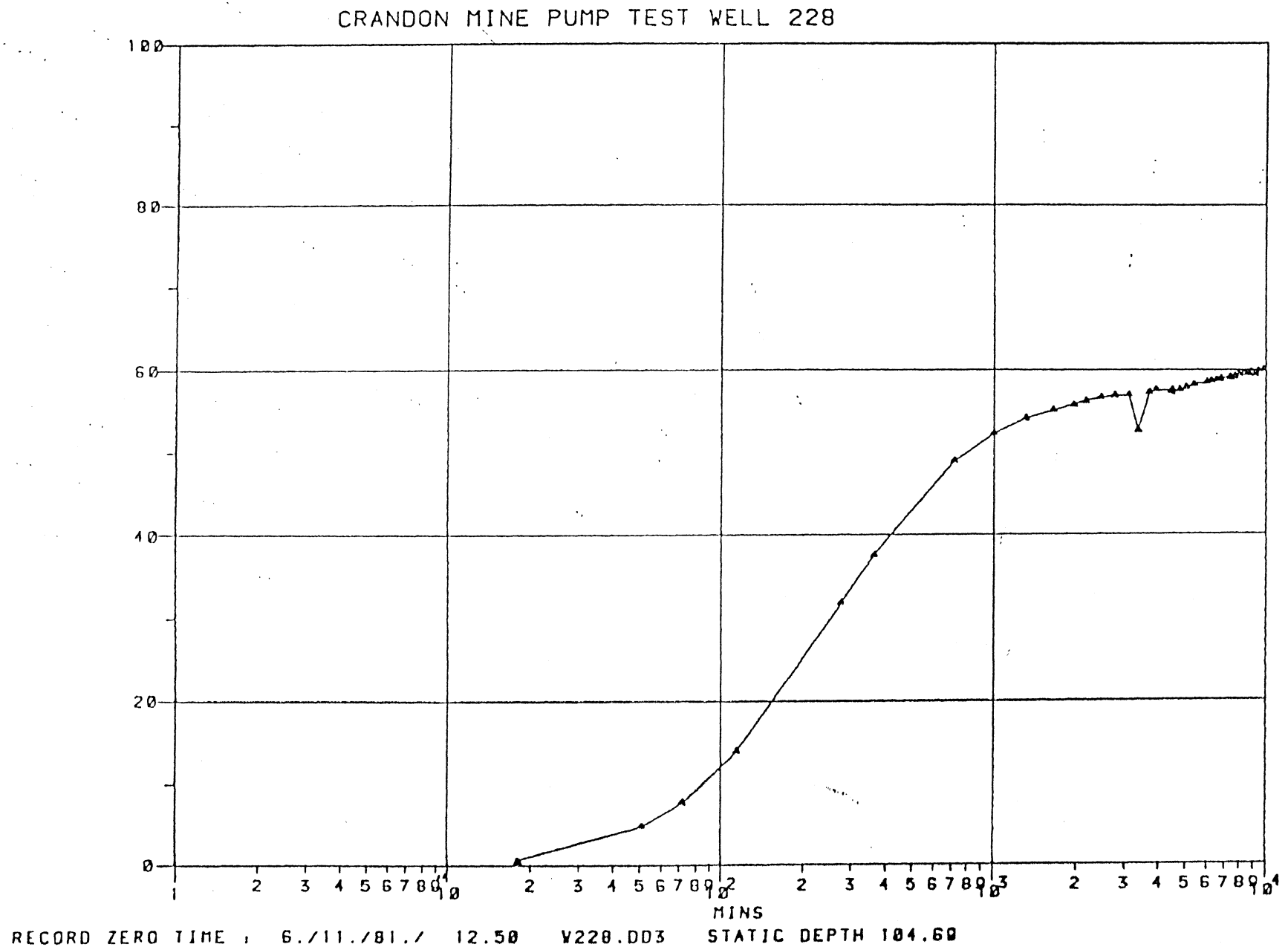
RECORD ZERO TIME : 6./11./81./ 12.50 W232.DD3 STATIC DEPTH 78.02



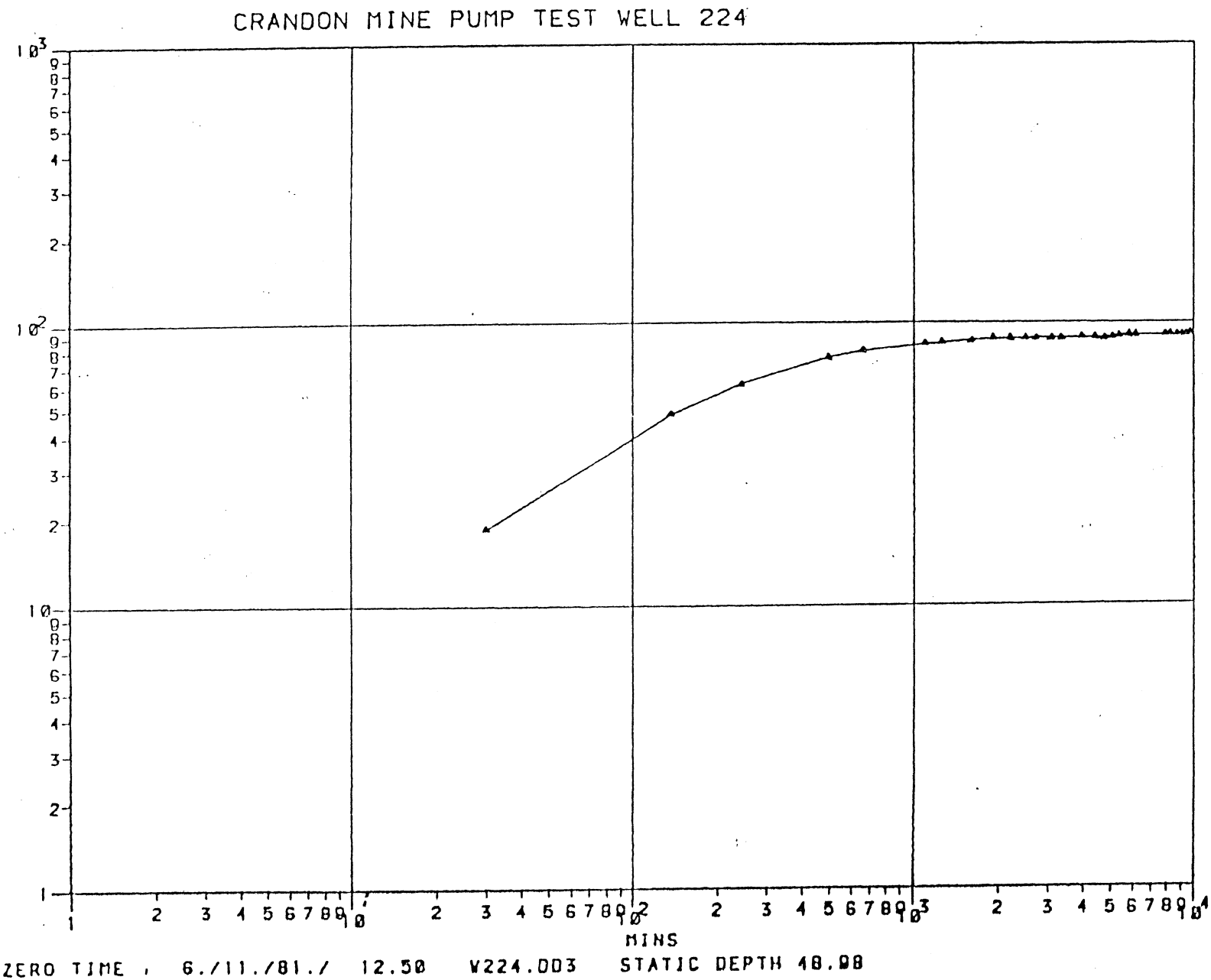
RECORD ZERO TIME : 6./11./81./ 12.50 W232.DD3 STATIC DEPTH 70.02

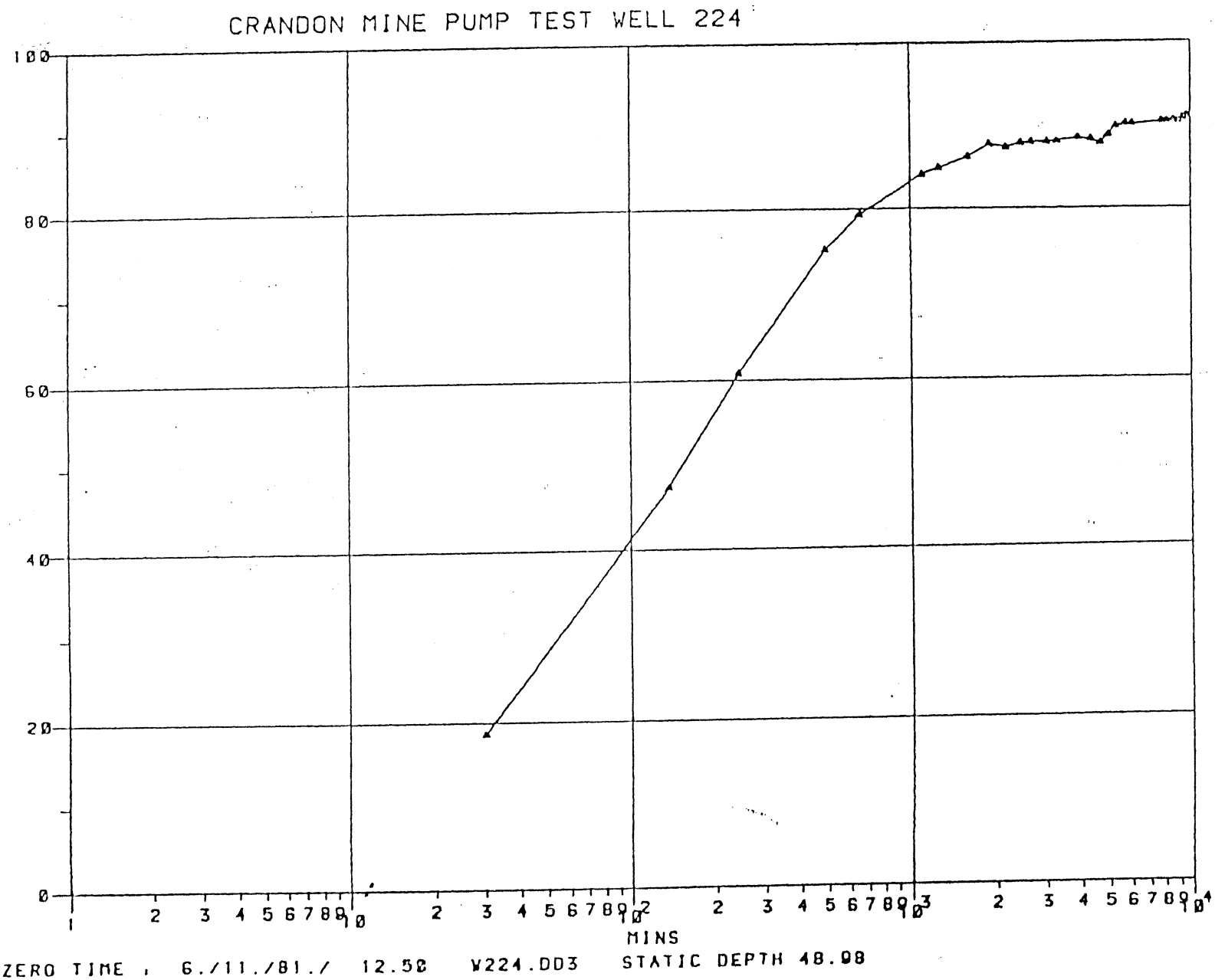


RECORD ZERO TIME : 6./11./81./ 12.50 W228.DD3 STATIC DEPTH 184.60

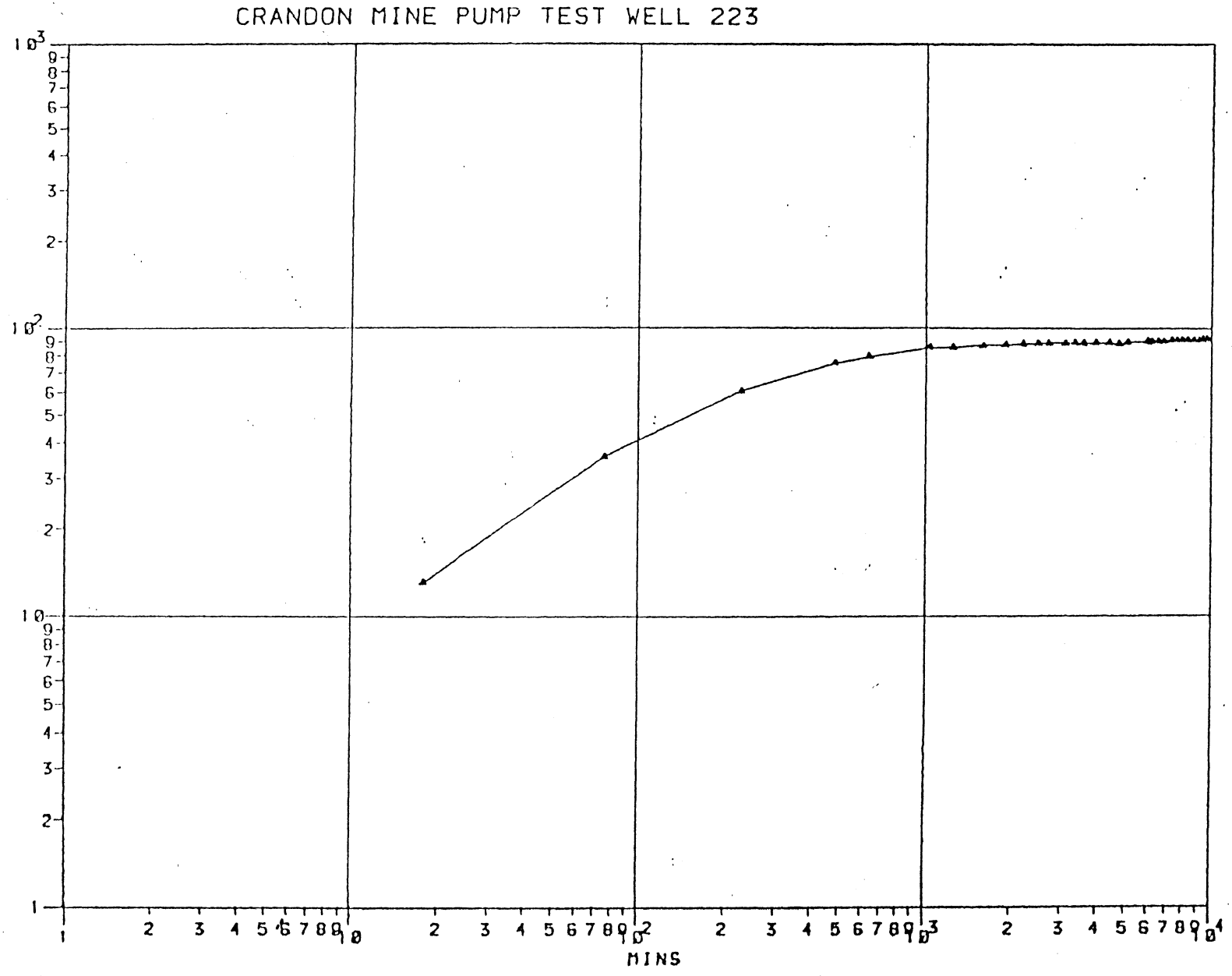


RECORD ZERO TIME : 6./11./81./ 12.50 V228.DD3 STATIC DEPTH 104.60

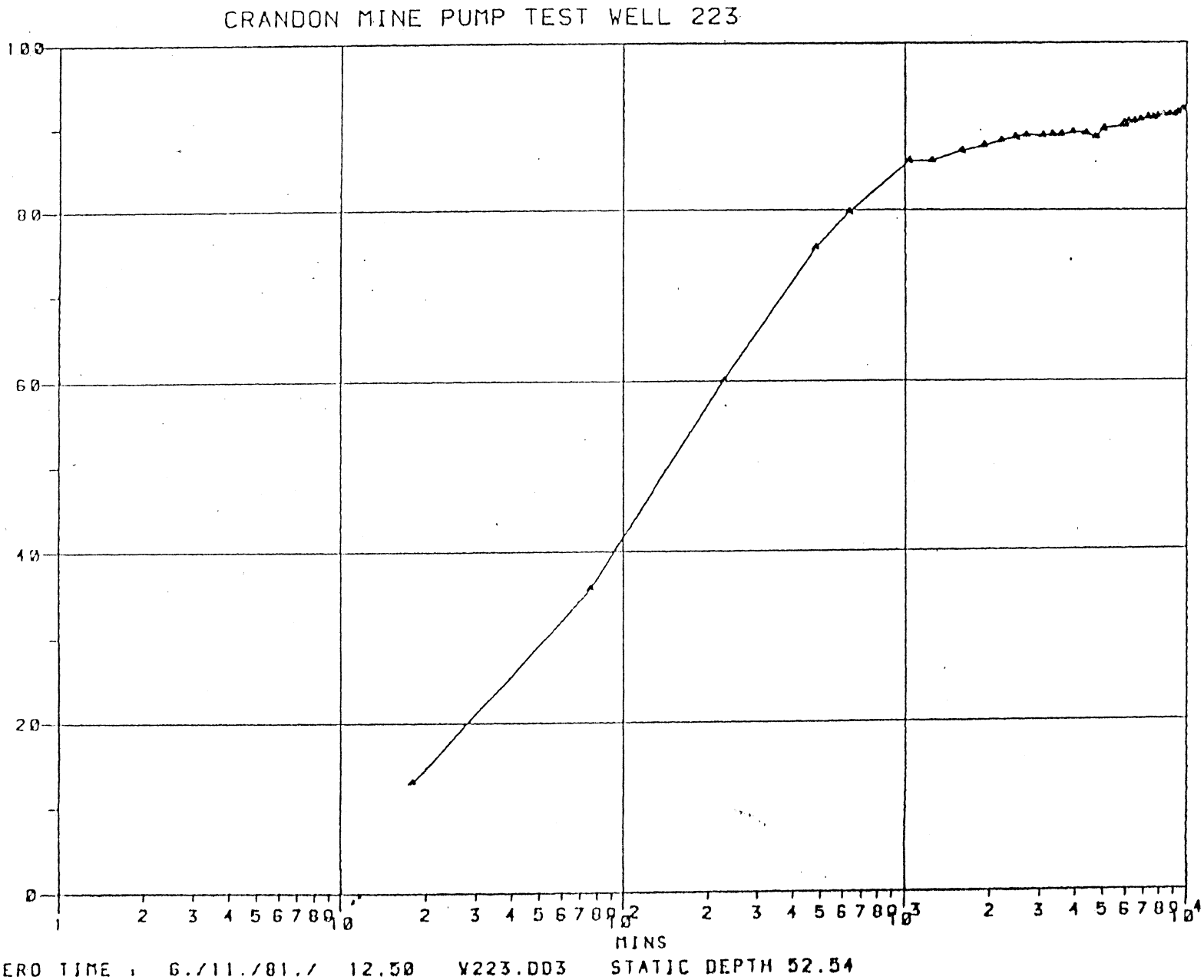

CRANDON MINE PUMP TEST WELL 224
MINS
RECORD ZERO TIME : 6./11./81./ 12.50 V224.003 STATIC DEPTH 48.88



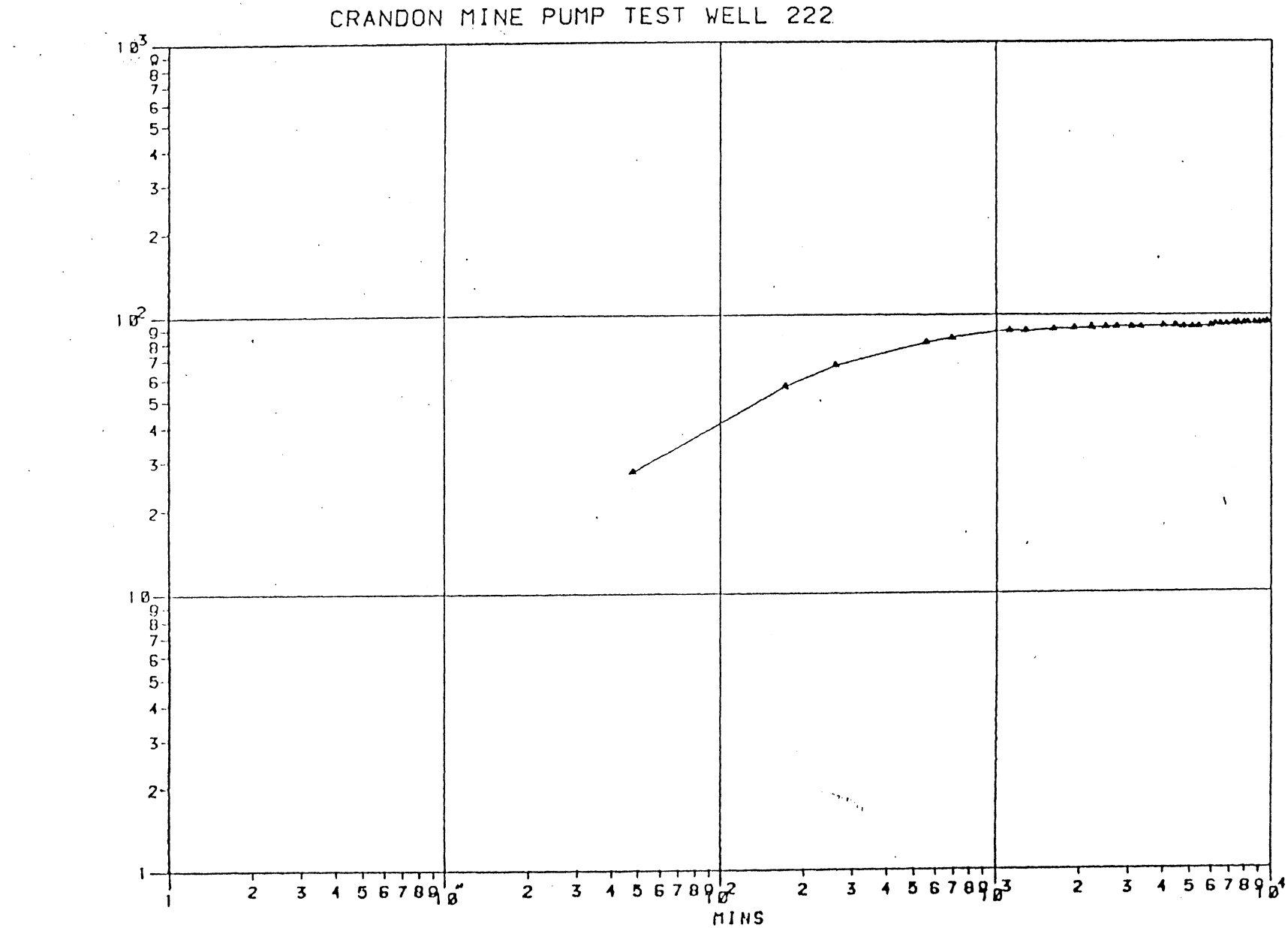
RECORD ZERO TIME : 6./11./81./ 12.50 W224.DD3 STATIC DEPTH 48.98



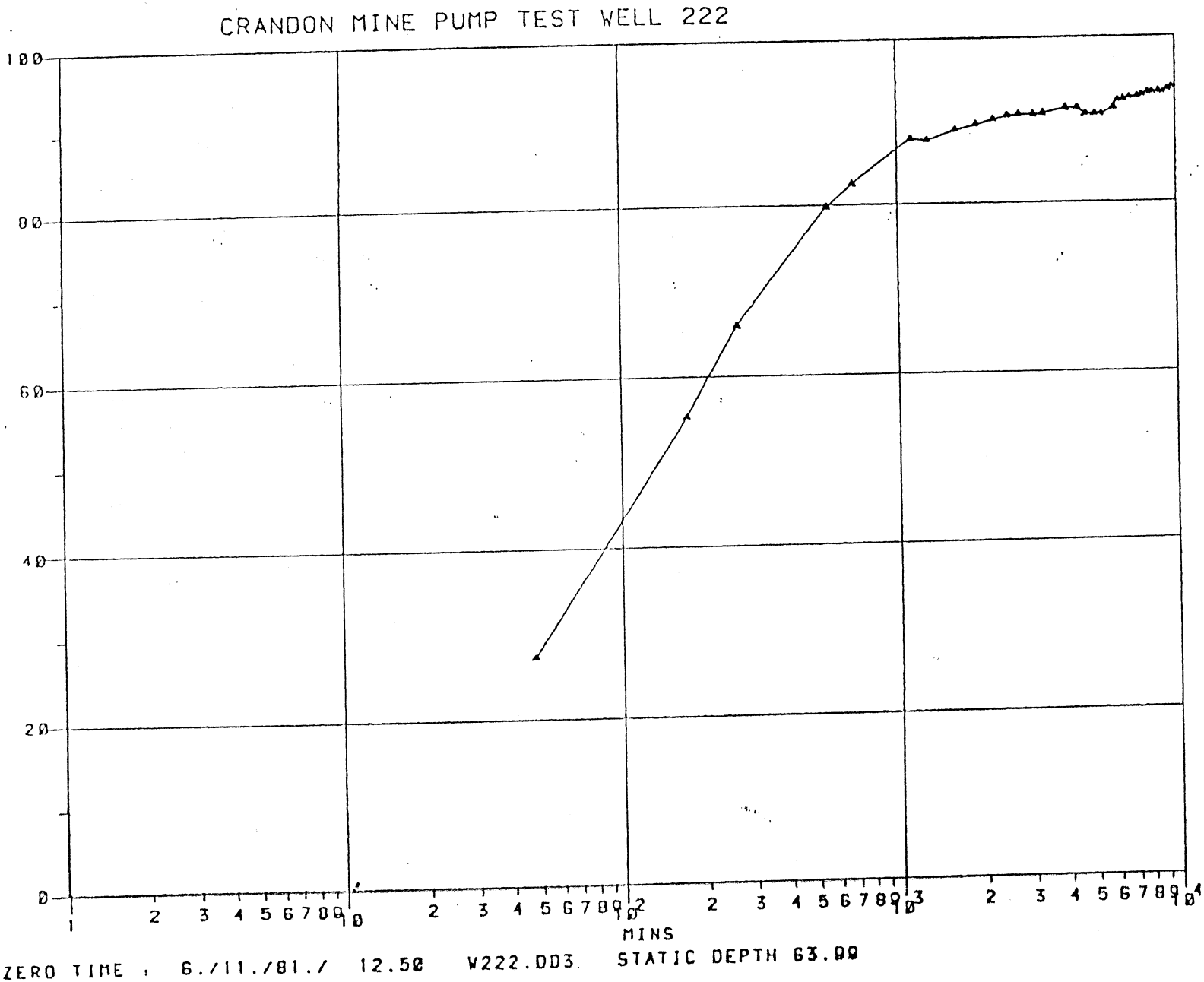
RECORD ZERO TIME : 6./11./81./ 12.50 W223.DD3 STATIC DEPTH 52.54



RECORD ZERO TIME : 6./11./81./ 12.50 V223.DD3 STATIC DEPTH 52.54

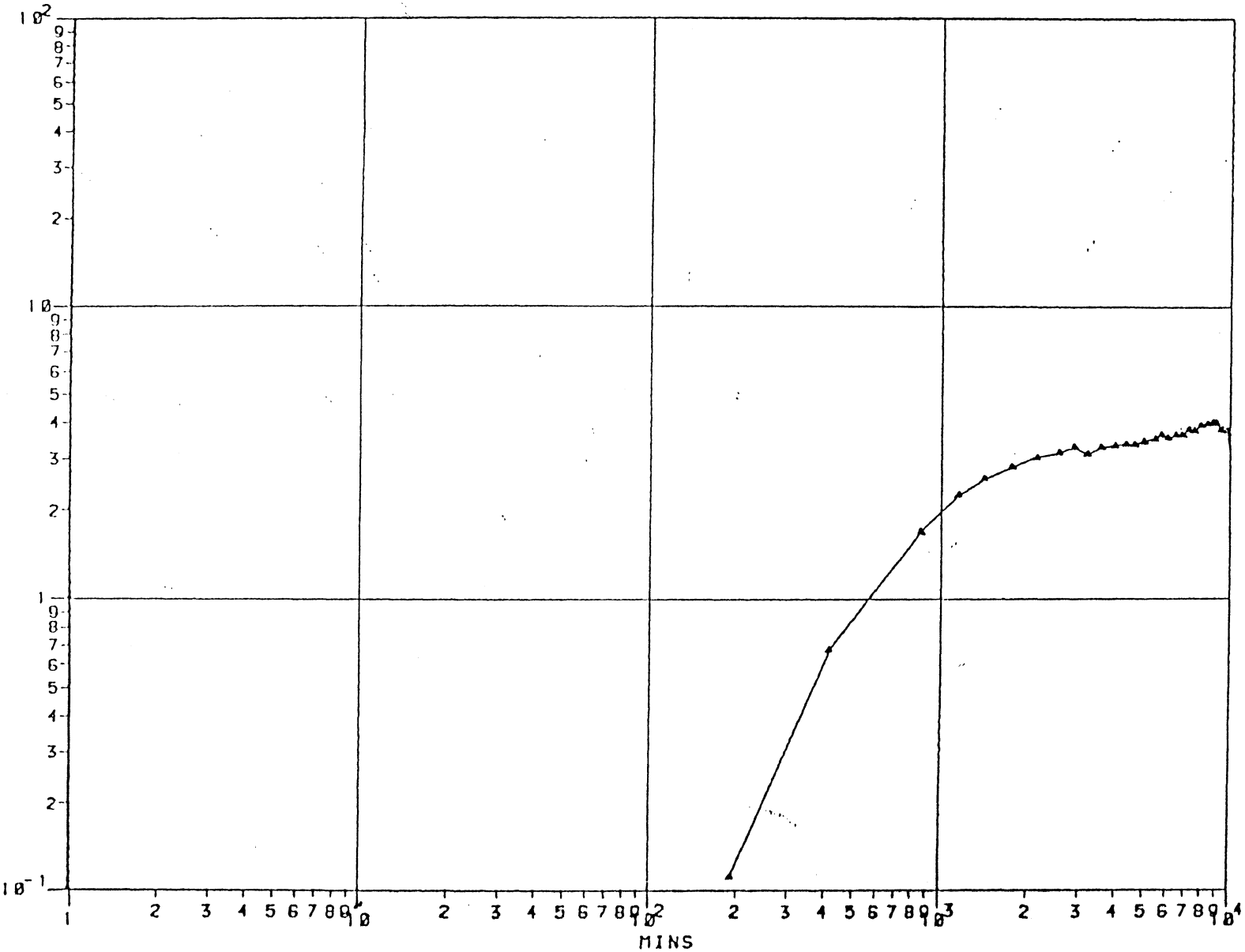


RECORD ZERO TIME : 6./11./81./ 12.50 W222.DD3 STATIC DEPTH 63.00

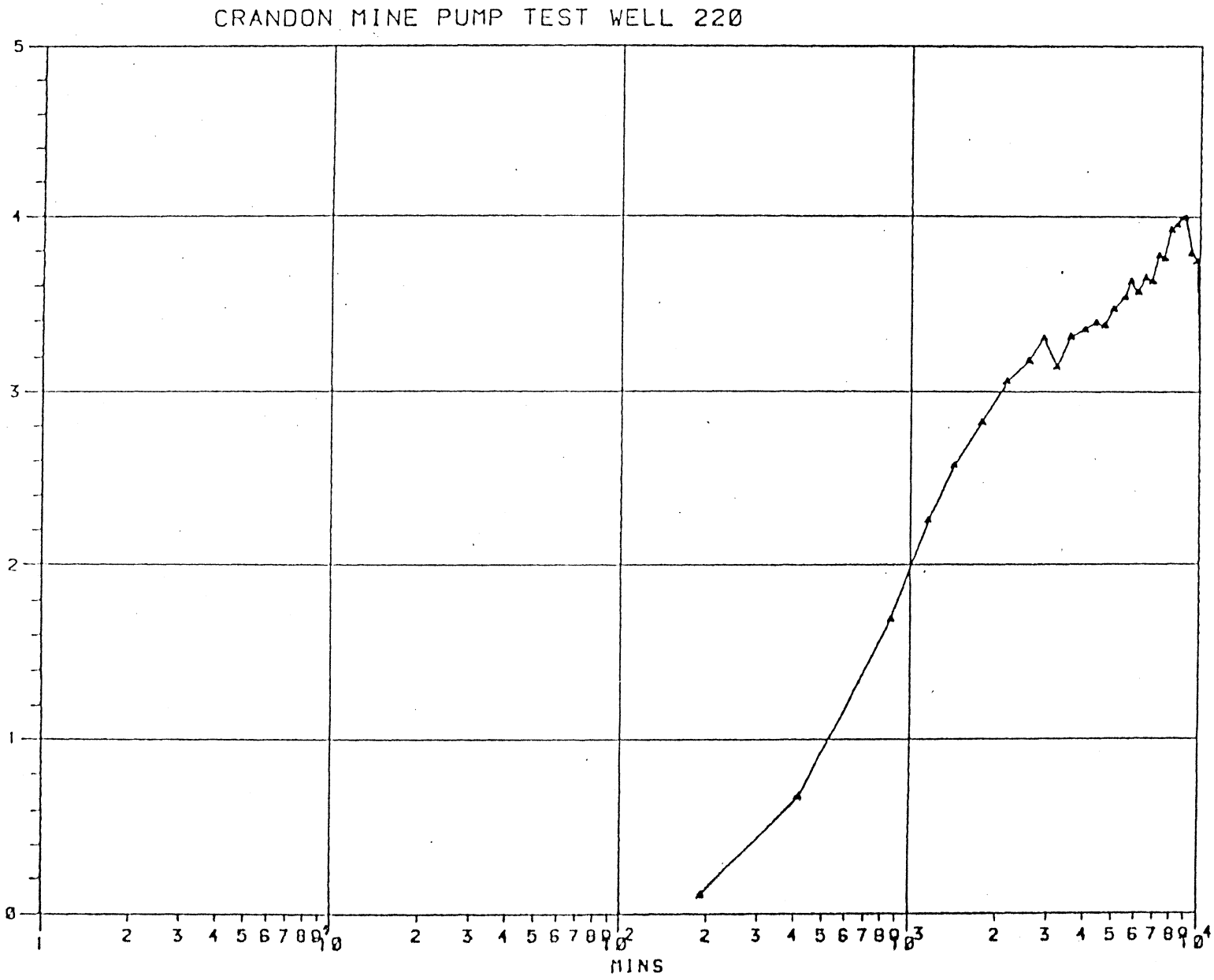


RECORD ZERO TIME : 6./11./81./ 12.50 W222.DD3. STATIC DEPTH 63.00

CRANDON MINE PUMP TEST WELL 220

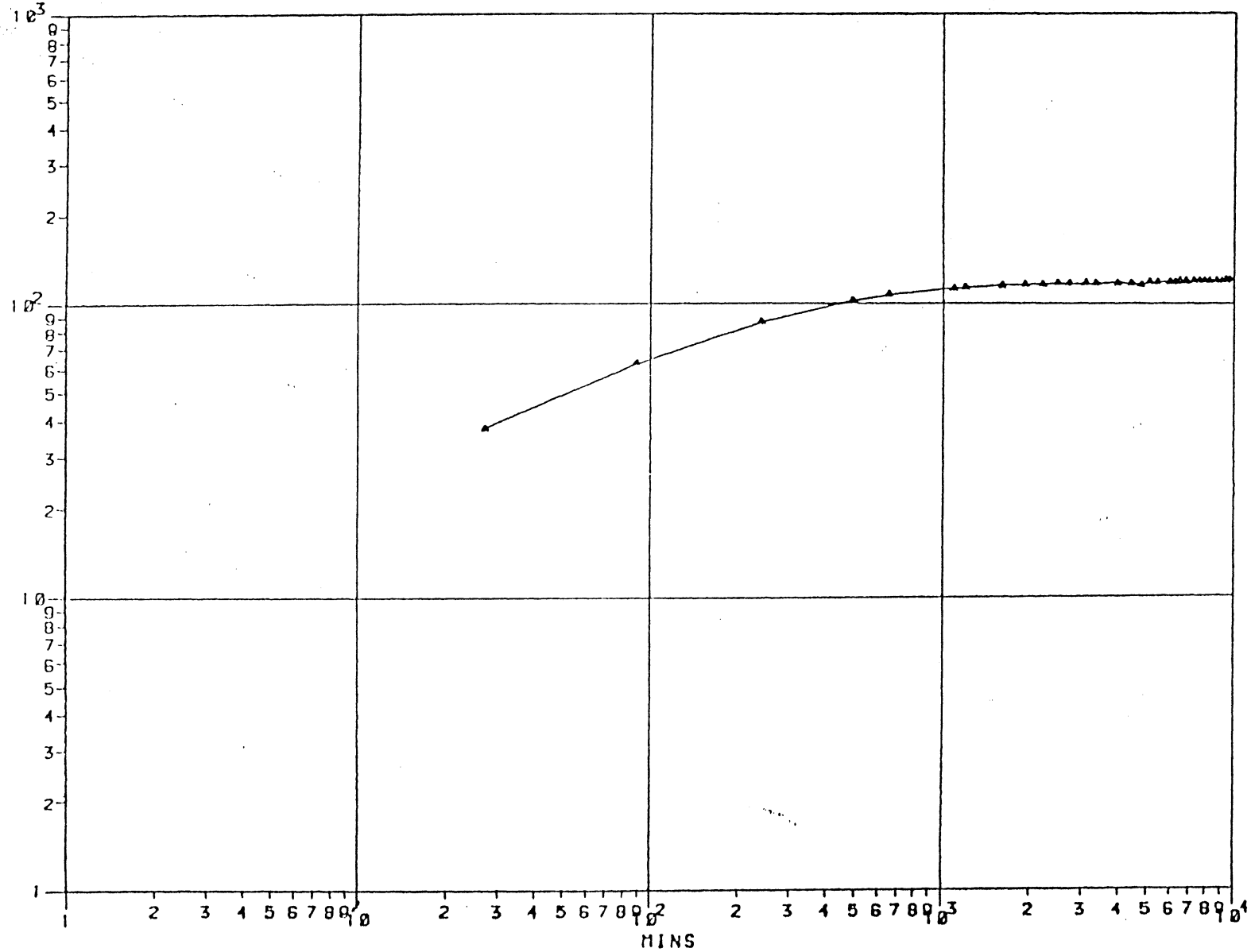


RECORD ZERO TIME : 6./11./81./ 12.50 W220.D03 STATIC DEPTH 71.79

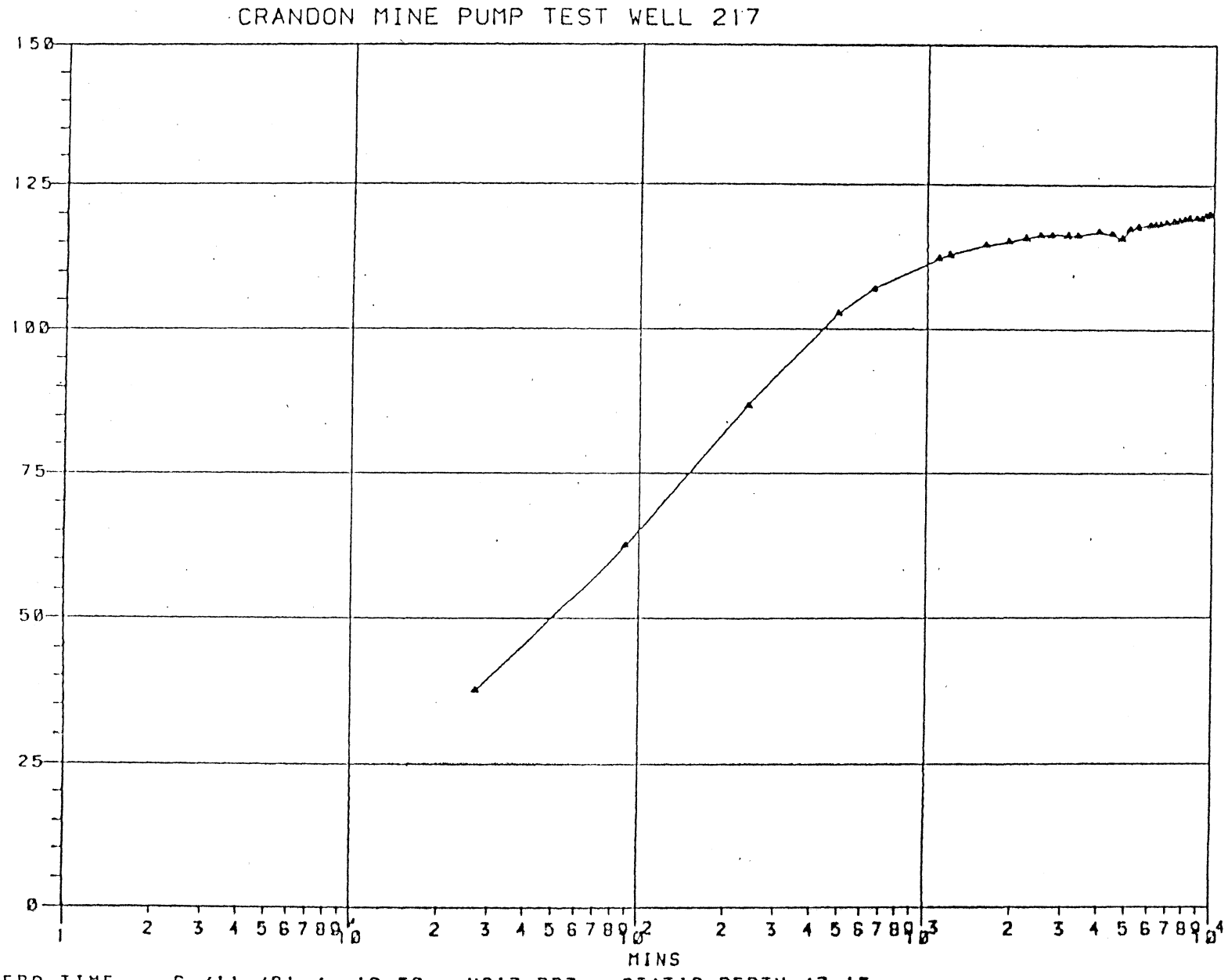


RECORD ZERO TIME : 6./11./81./ 12.50 W220.DD3 STATIC DEPTH 71.79

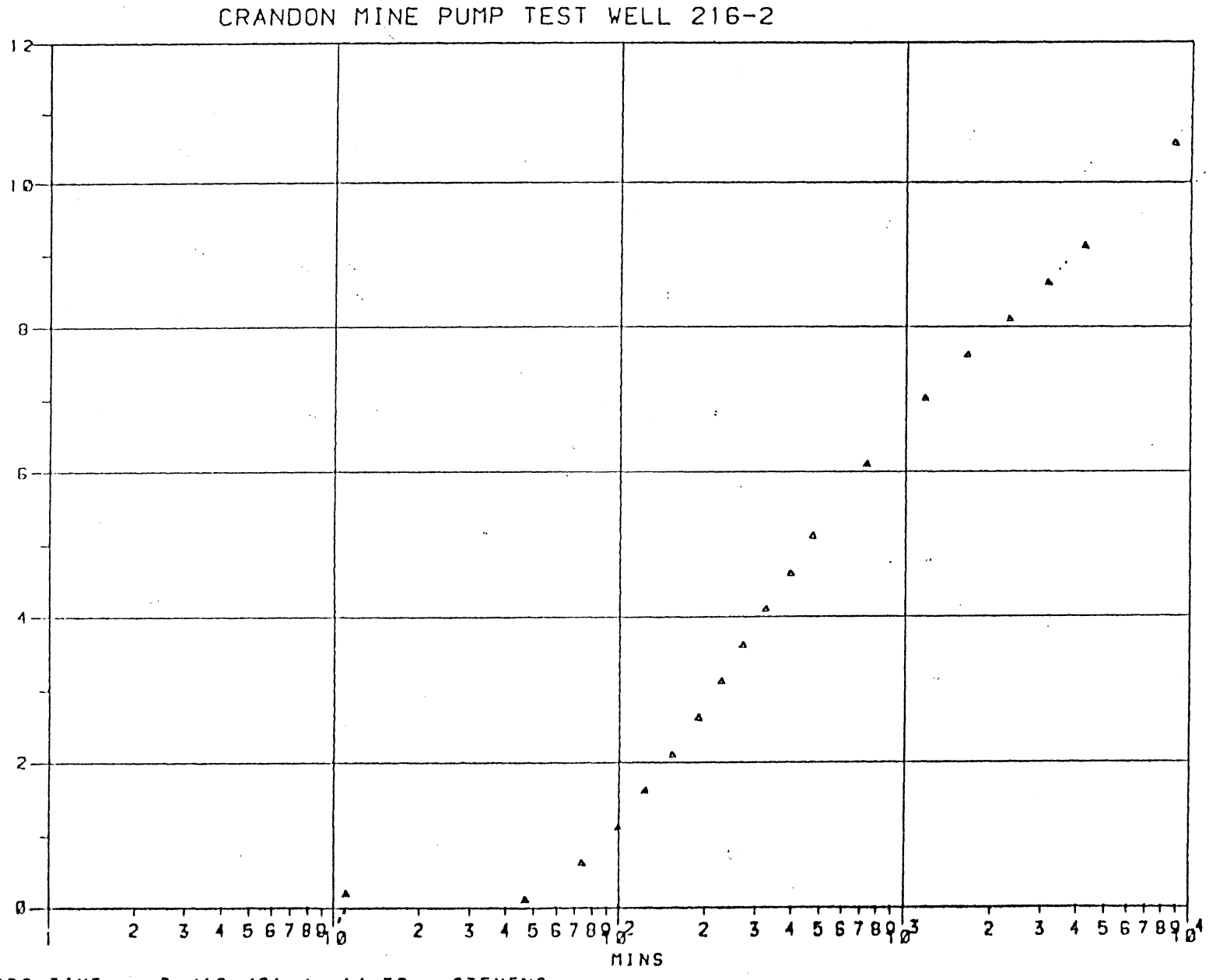
CRANDON MINE PUMP TEST WELL 217



RECORD ZERO TIME : 6./11./81./ 12.58 W217.DD3 STATIC DEPTH 47.15

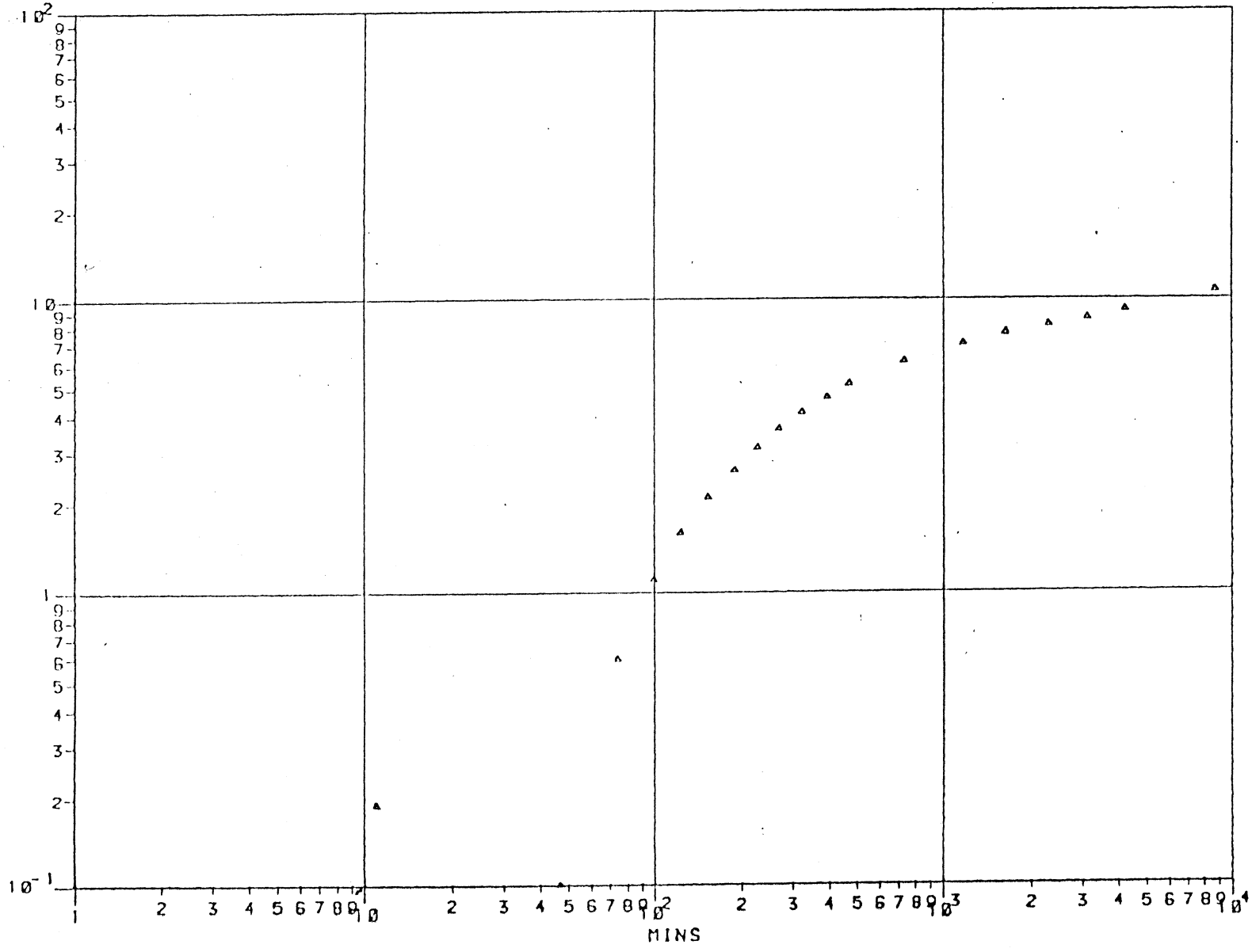


RECORD ZERO TIME : 6./11./81./ 12.50 W217.DD3 STATIC DEPTH 47.15

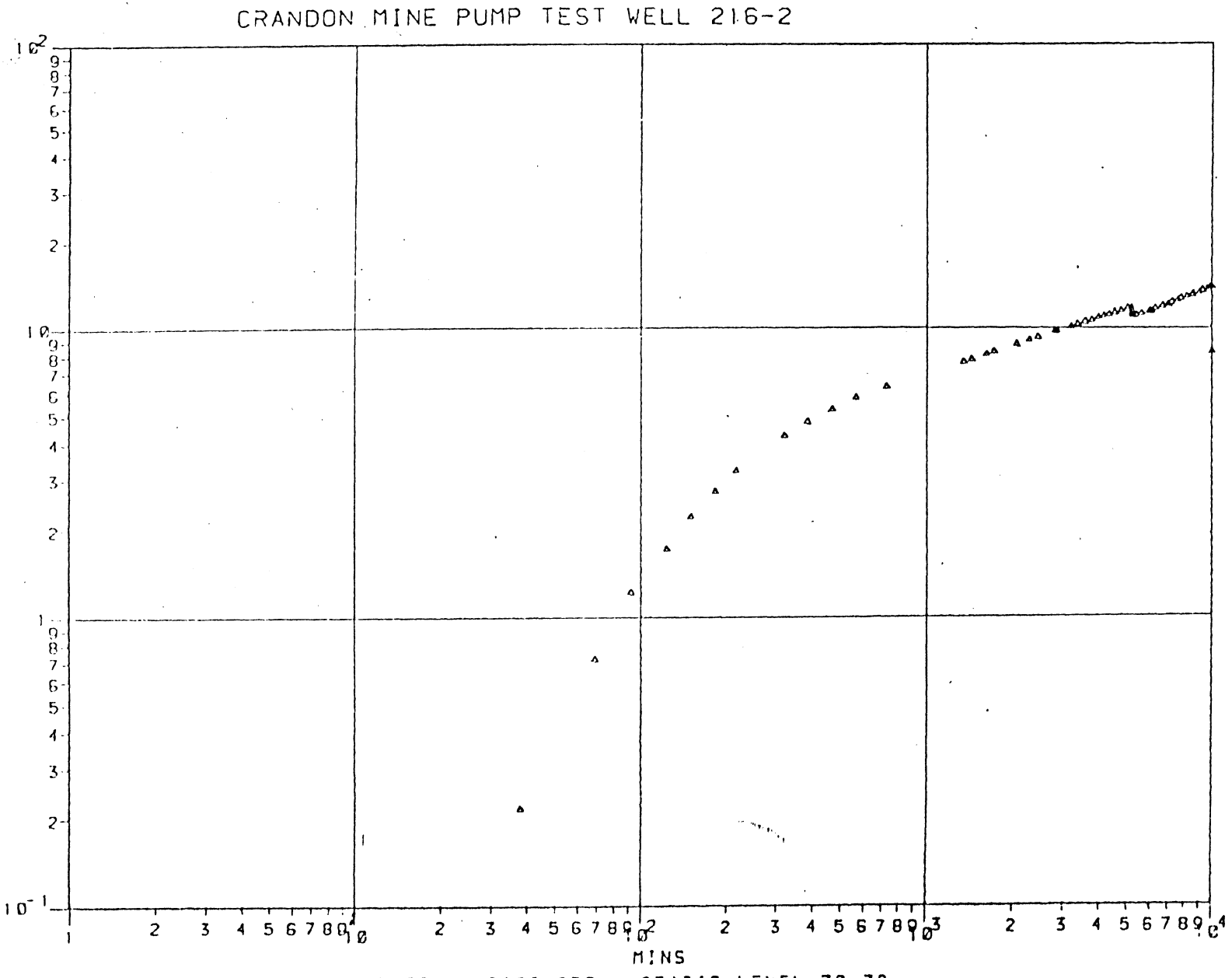


RECORD ZERO TIME : 6./18./81./ 14.50 STEVENS

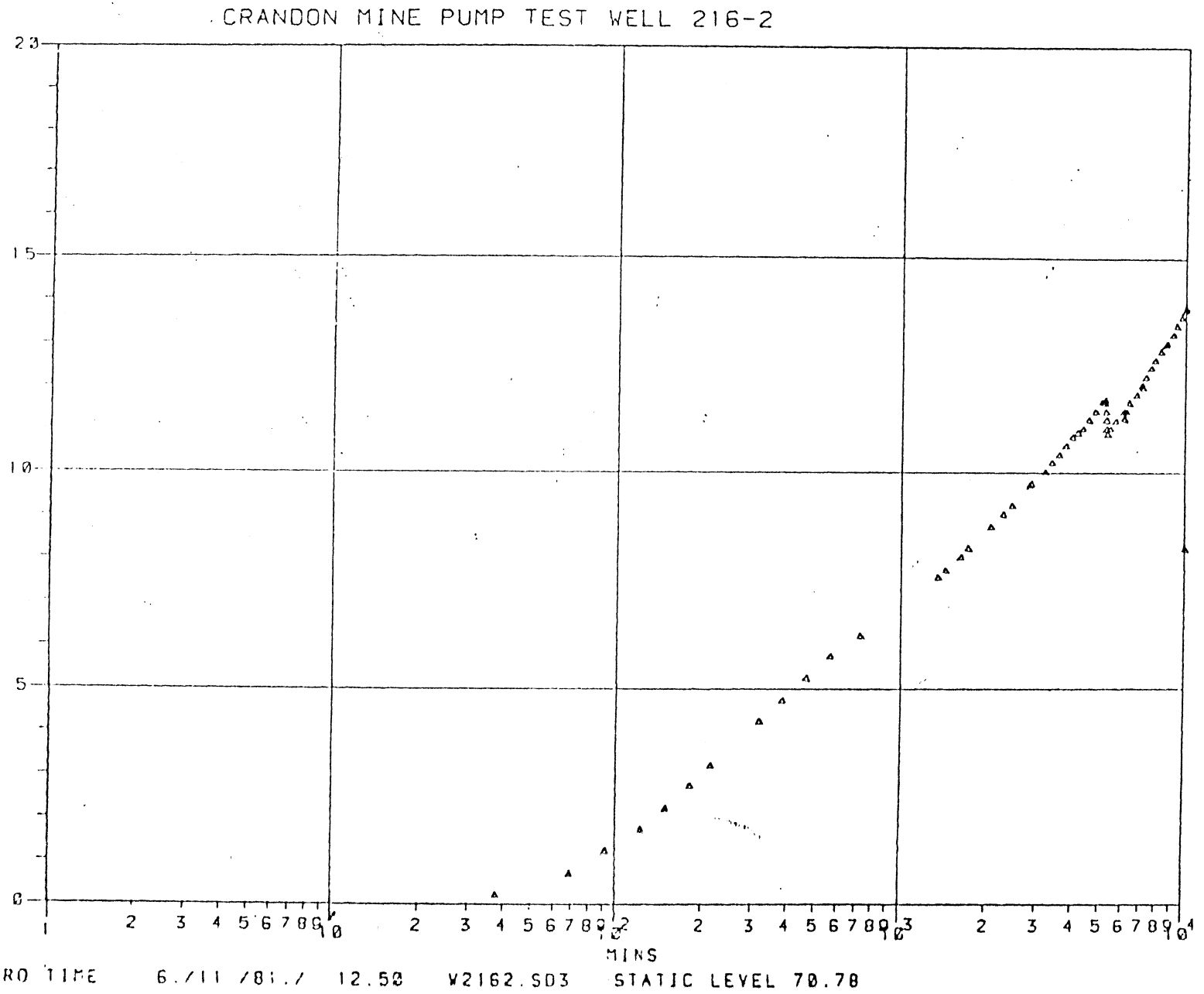
CRANDON MINE PUMP TEST WELL 216-2

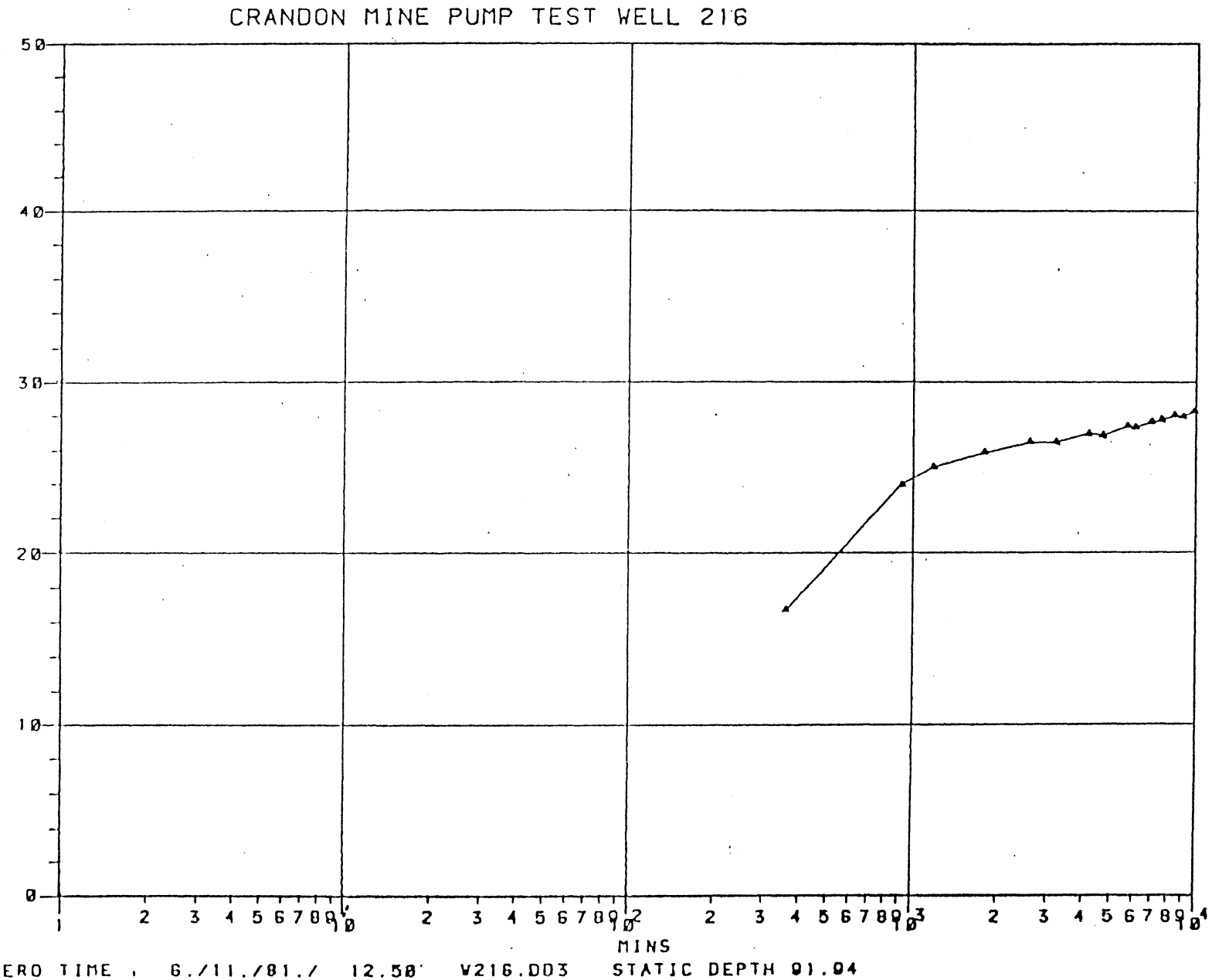


RECORD ZERO TIME : 6./18./81./ 14.50 STEVENS



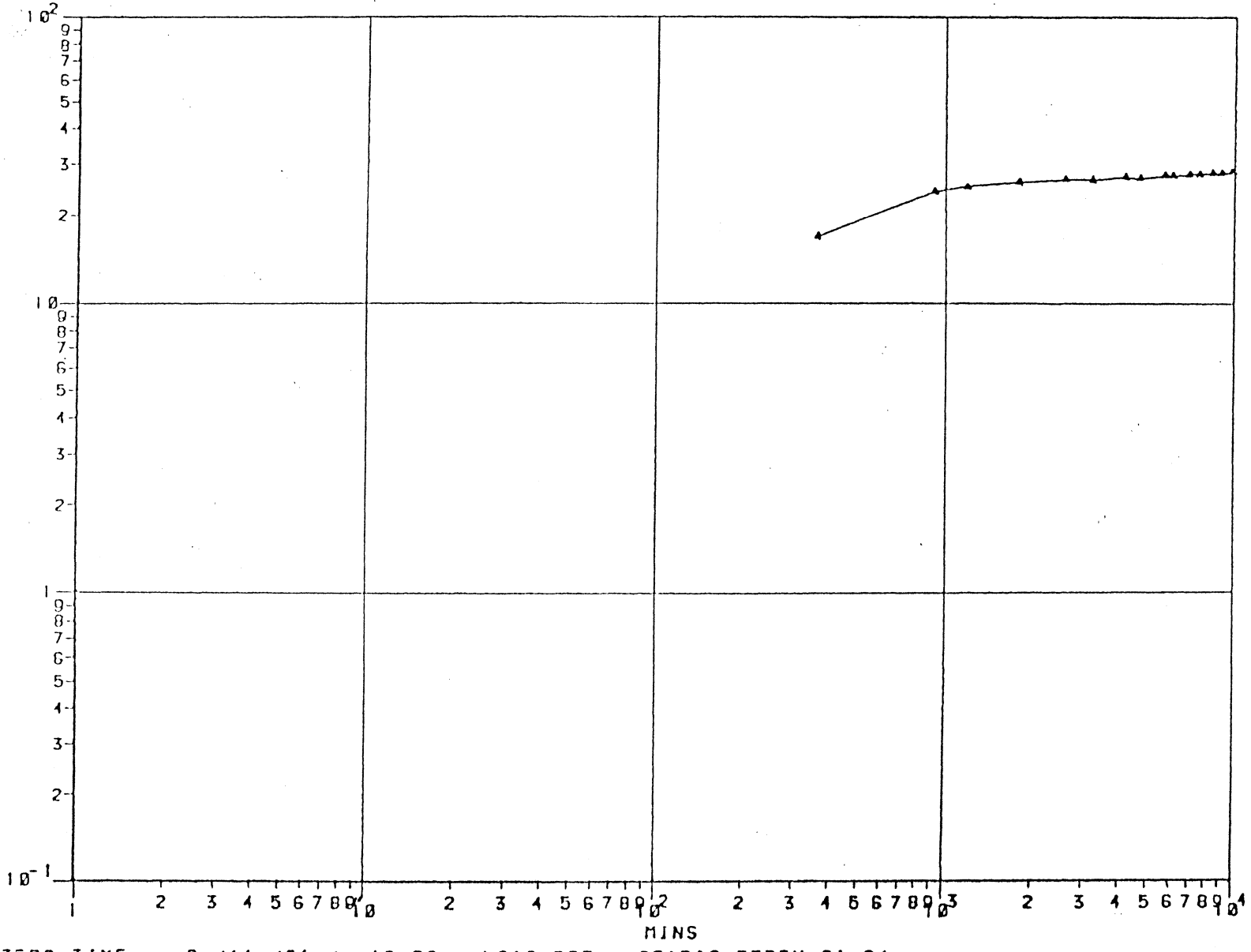
RECORD ZERO TIME : 6./11./81./ 12.50 W2162.SD3 STATIC LEVEL 70 78


CRANDON MINE PUMP TEST WELL 216-2
20
15
10
5
0
1
2
3
4
5
6
7
8
9
10
2
3
4
5
6
7
8
9
10
2
2
3
4
5
6
7
8
9
10
3
2
3
4
5
6
7
8
9
10
4
MINS
RECORD ZERO TIME 6./11 /81./ 12.50 W2162.SD3 STATIC LEVEL 70.78



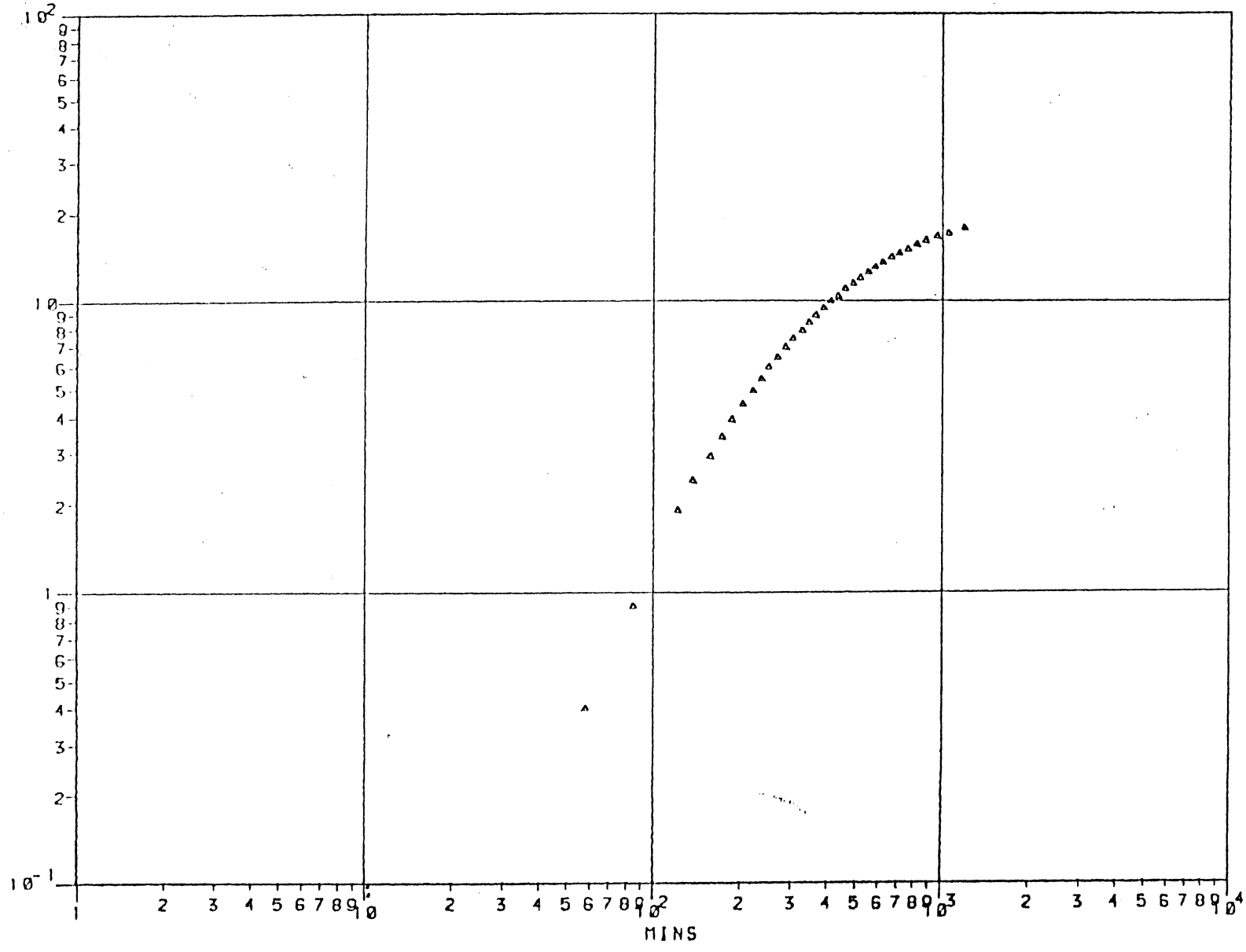
RECORD ZERO TIME , 6./11./81./ 12.58' V216.DD3 STATIC DEPTH 91.04

CRANDON MINE PUMP TEST WELL 216

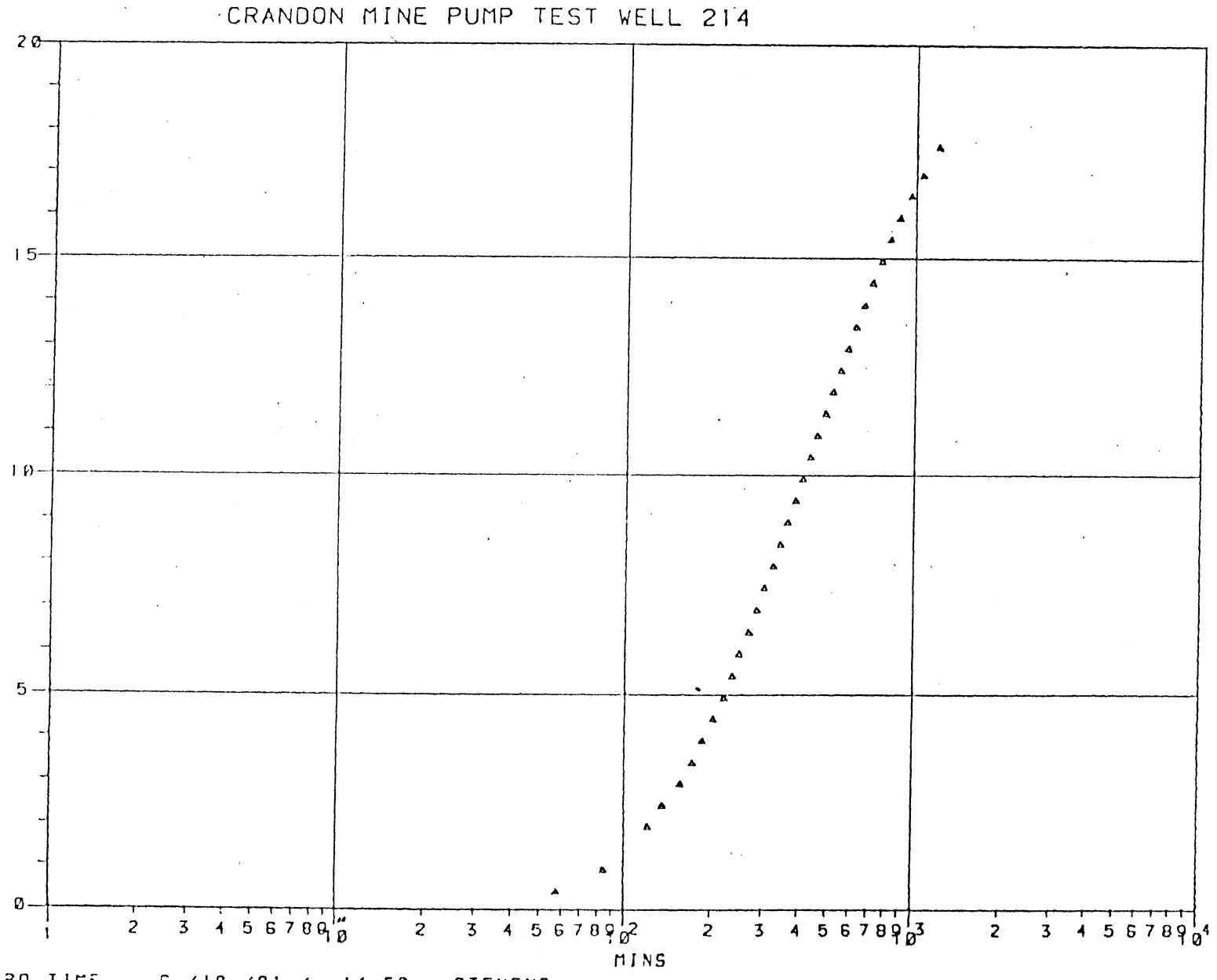


RECORD ZERO TIME : 6./11./81./ 12.50 W216.DD3 STATIC DEPTH 81.04

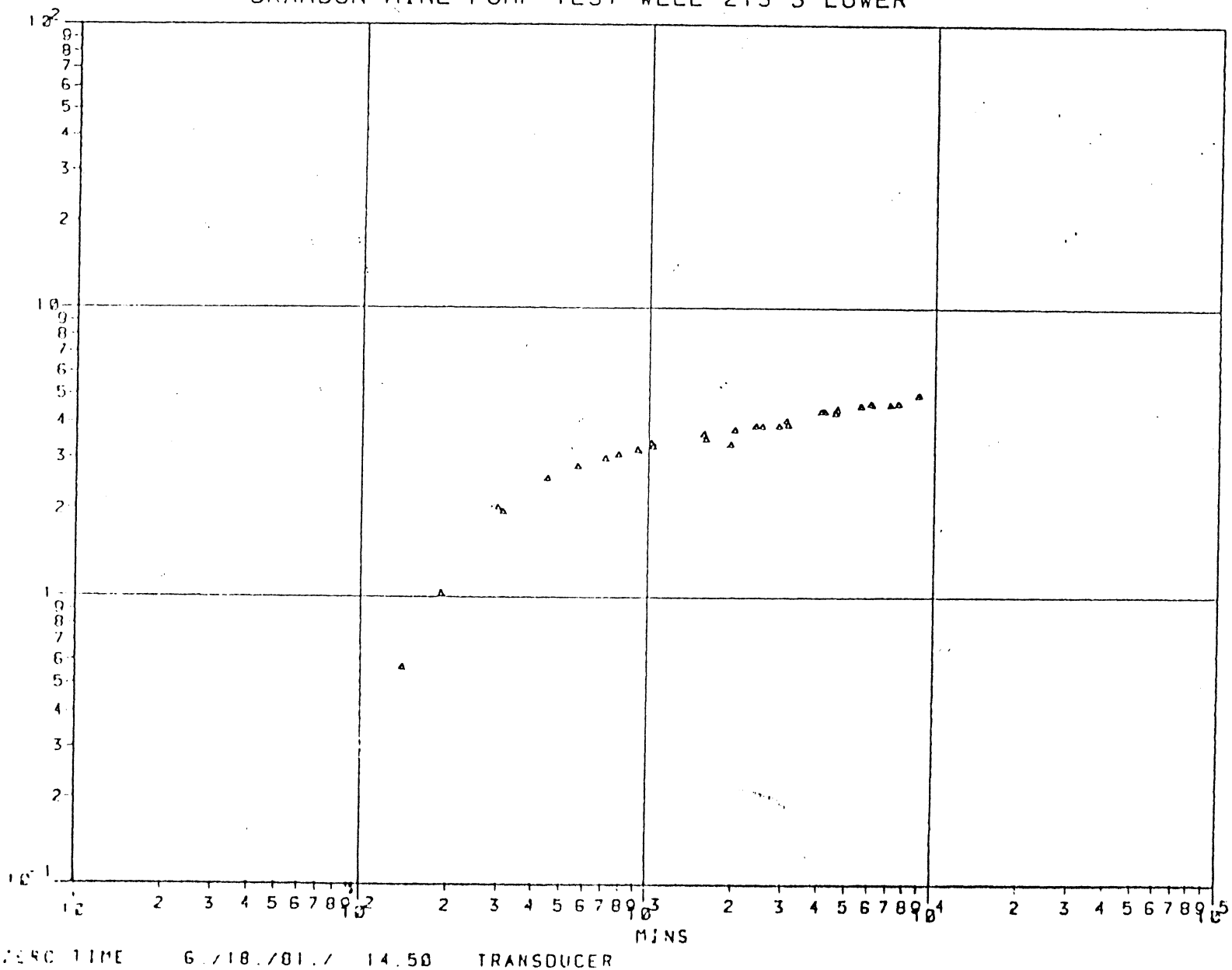
CRANDON MINE PUMP TEST WELL 214

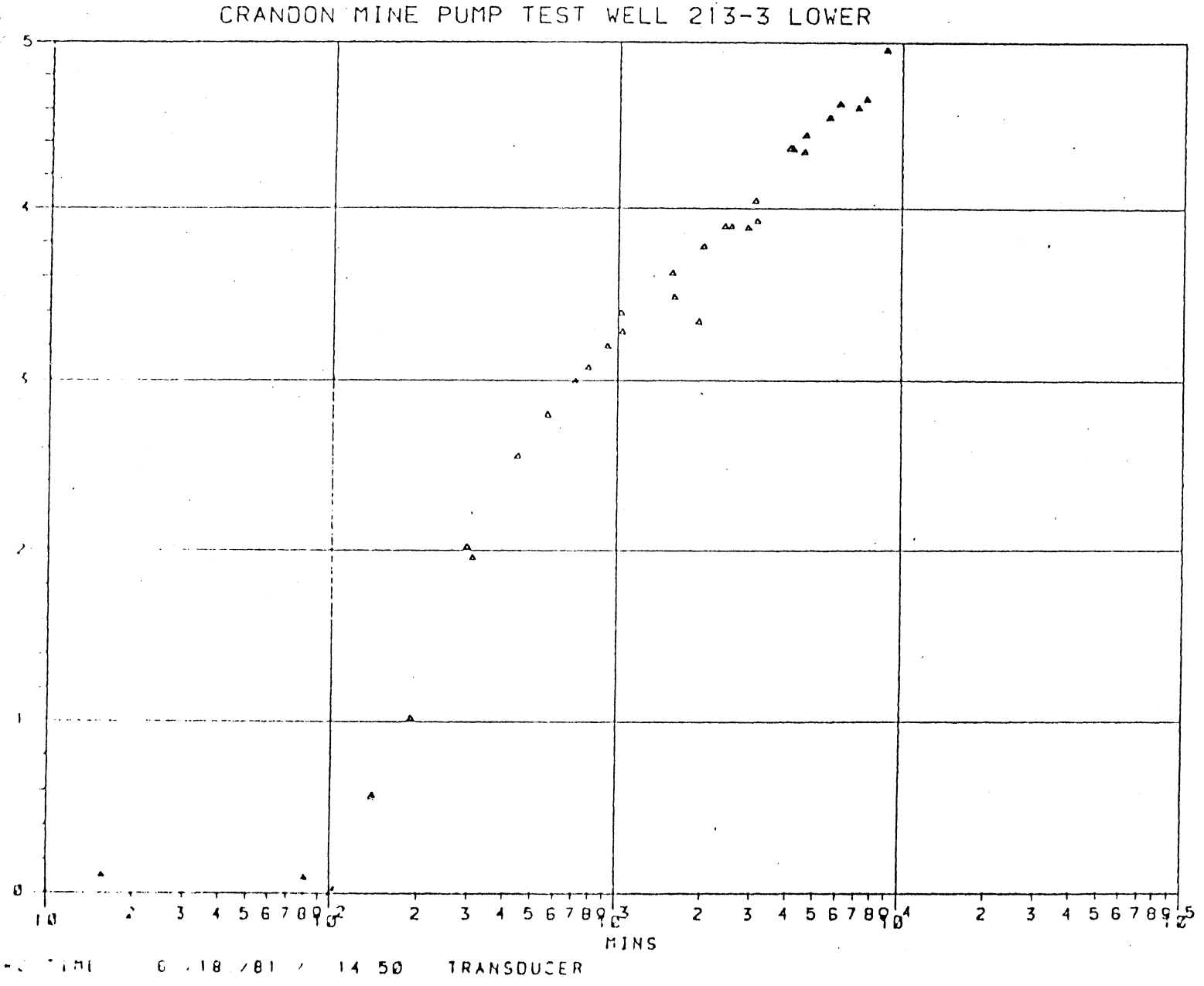


RECORD ZERO TIME : 6 /18./81./ 14.50 STEVENS

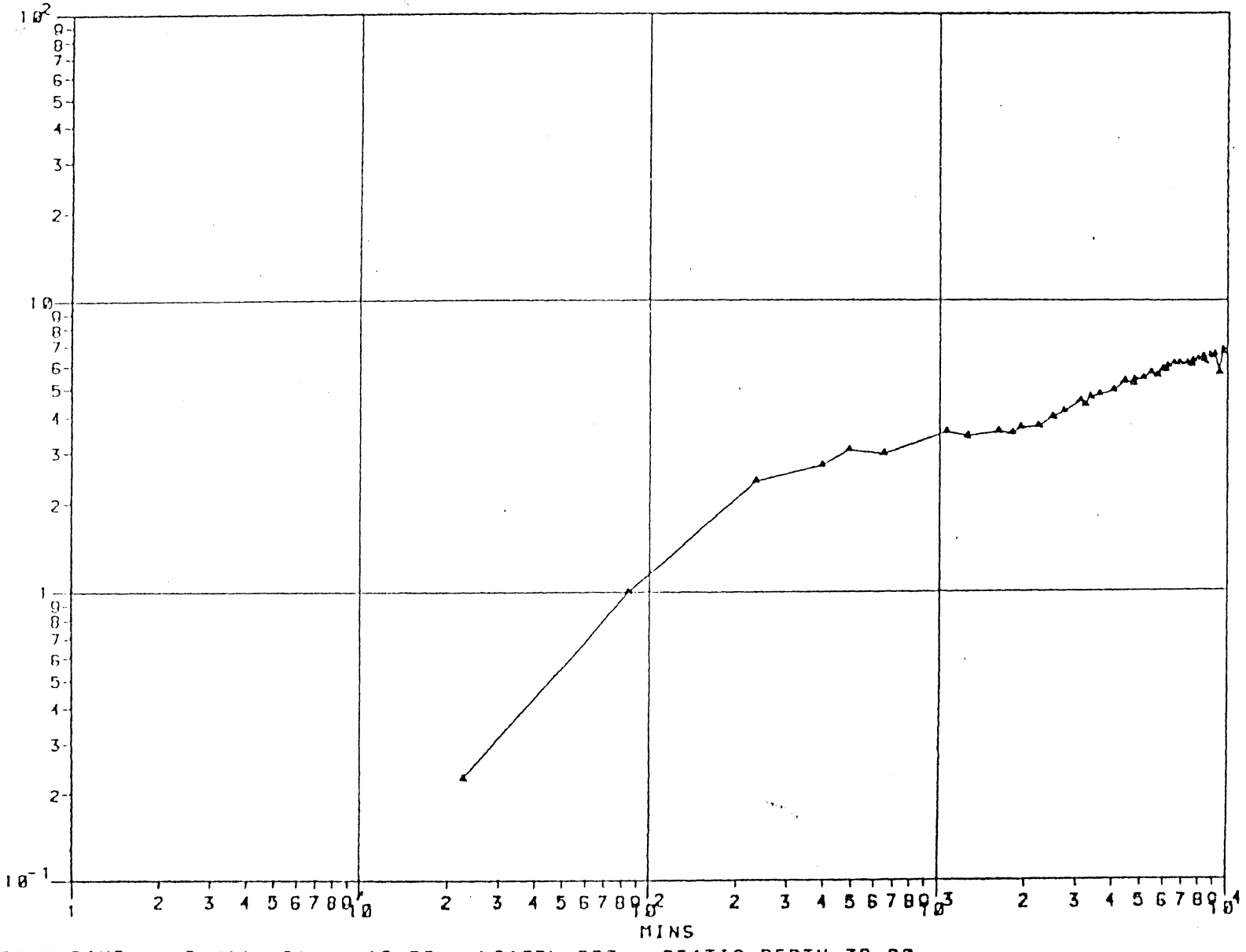


RECORD ZERO TIME : 6./18./81./ 14.50 STEVENS

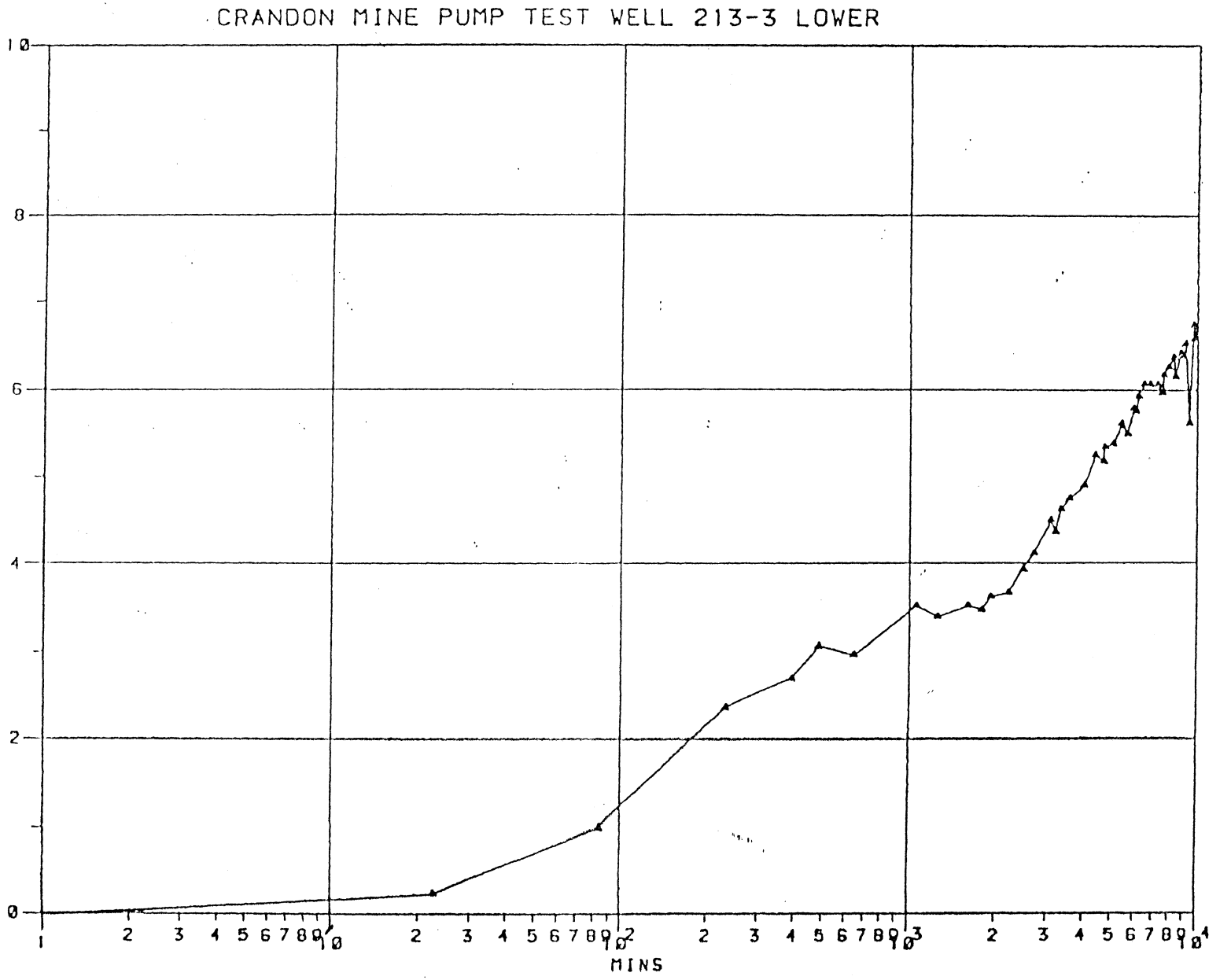

CRANDON MINE PUMP TEST WELL 213-3 LOWER
MINS
TRANSDUCER


CRANDON MINE PUMP TEST WELL 213-3 LOWER
5
4
3
2
1
0
10
2
3
4
5
6
7
8
9
0
2
2
3
4
5
6
7
8
9
0
3
2
3
4
5
6
7
8
9
0
4
2
3
4
5
6
7
8
9
5
MINS
TIME
0 18 81 14 50
TRANSDUCER

CRANDON MINE PUMP TEST WELL 213-3 LOWER

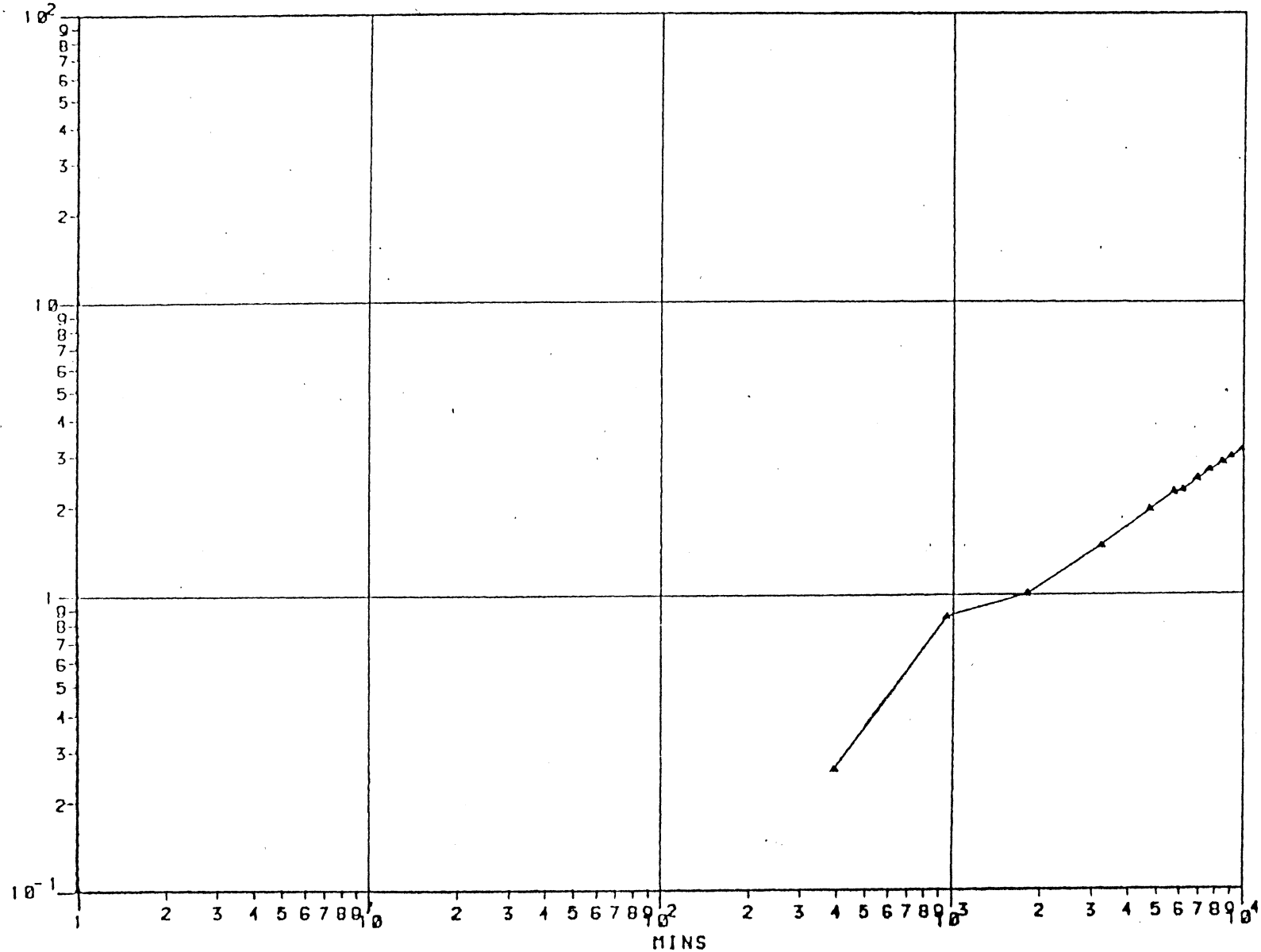


RECORD ZERO TIME : 6./11./81./ 12.50 W2133L.DD3 STATIC DEPTH 30.28

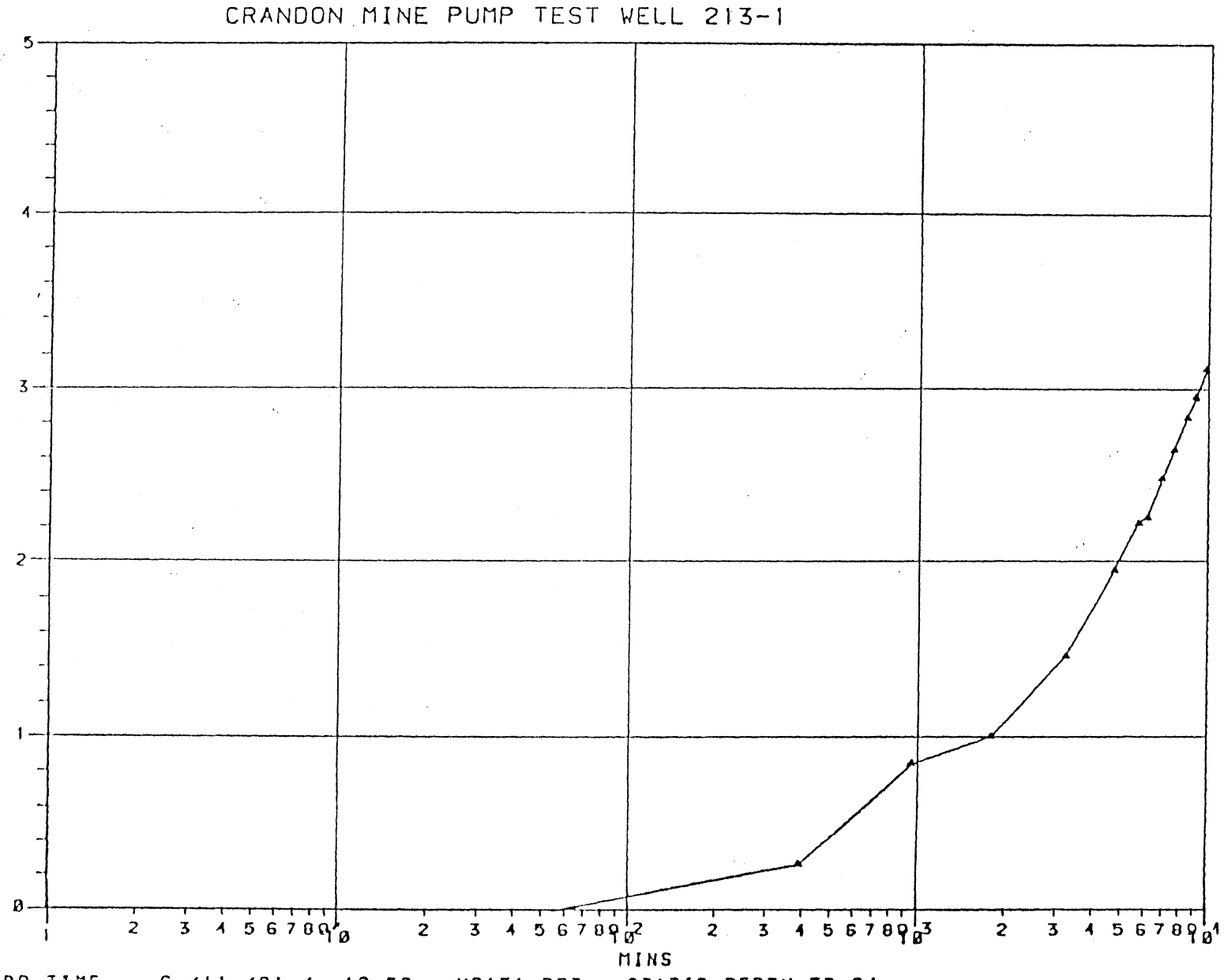


RECORD ZERO TIME : 6./11./81./ 12.50 W2133L.DD3 STATIC DEPTH 30.20

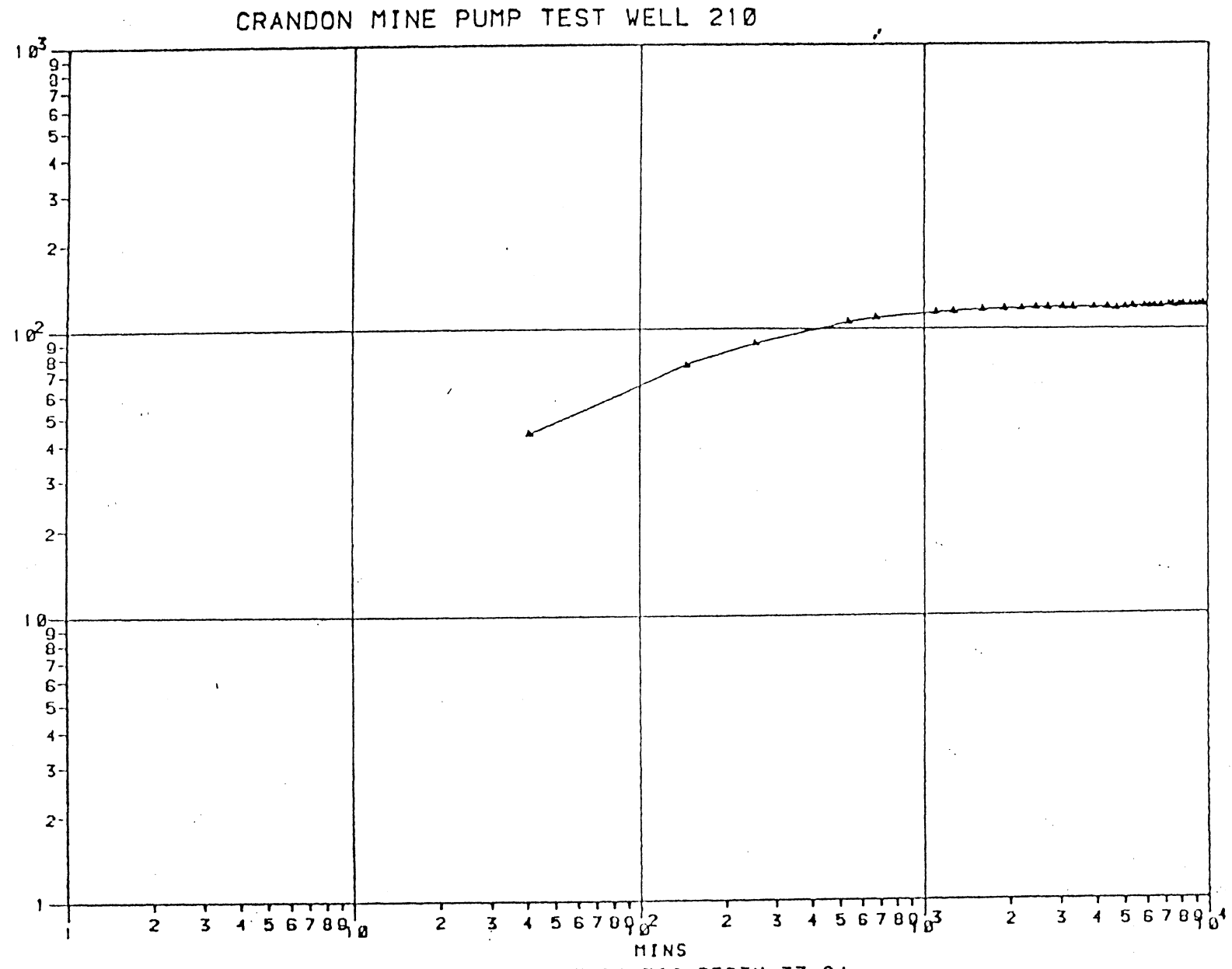
CRANDON MINE PUMP TEST WELL 213-1



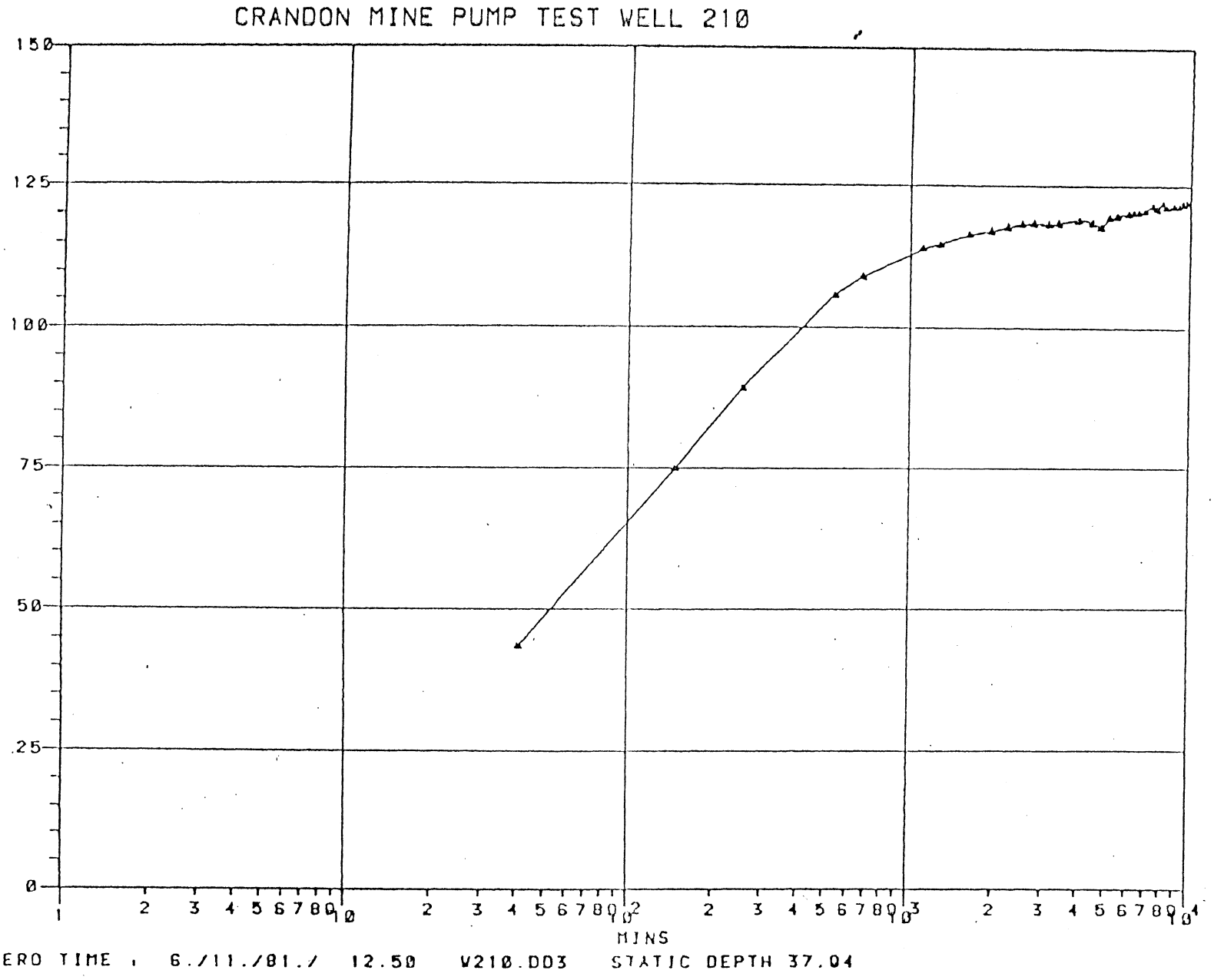
RECORD ZERO TIME : 6./11./81./ 12.50 W2131.DD3 STATIC DEPTH 35.64



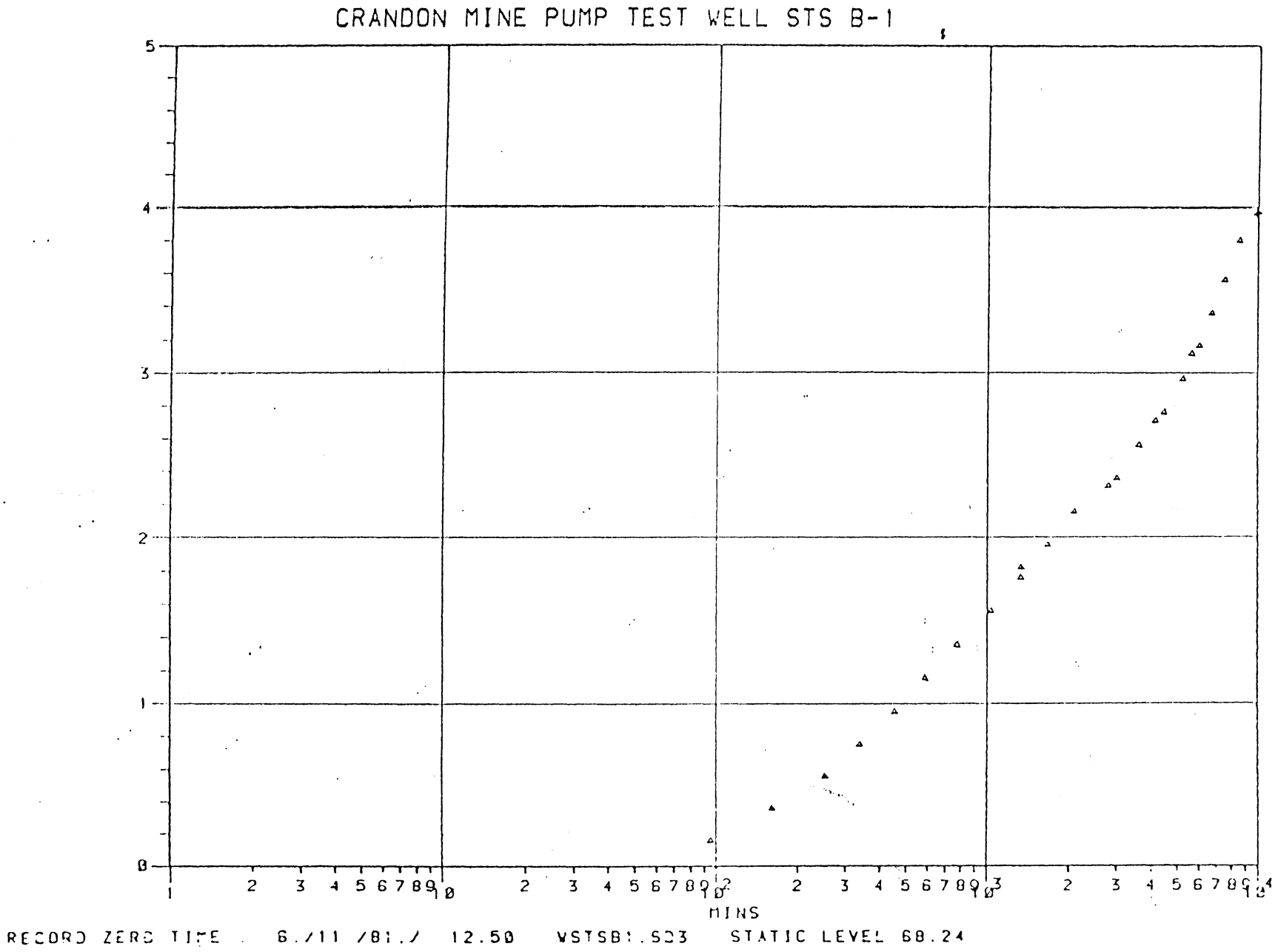
RECORD ZERO TIME : 6./11./81./ 12.50 W2131.DD3 STATIC DEPTH 35.64



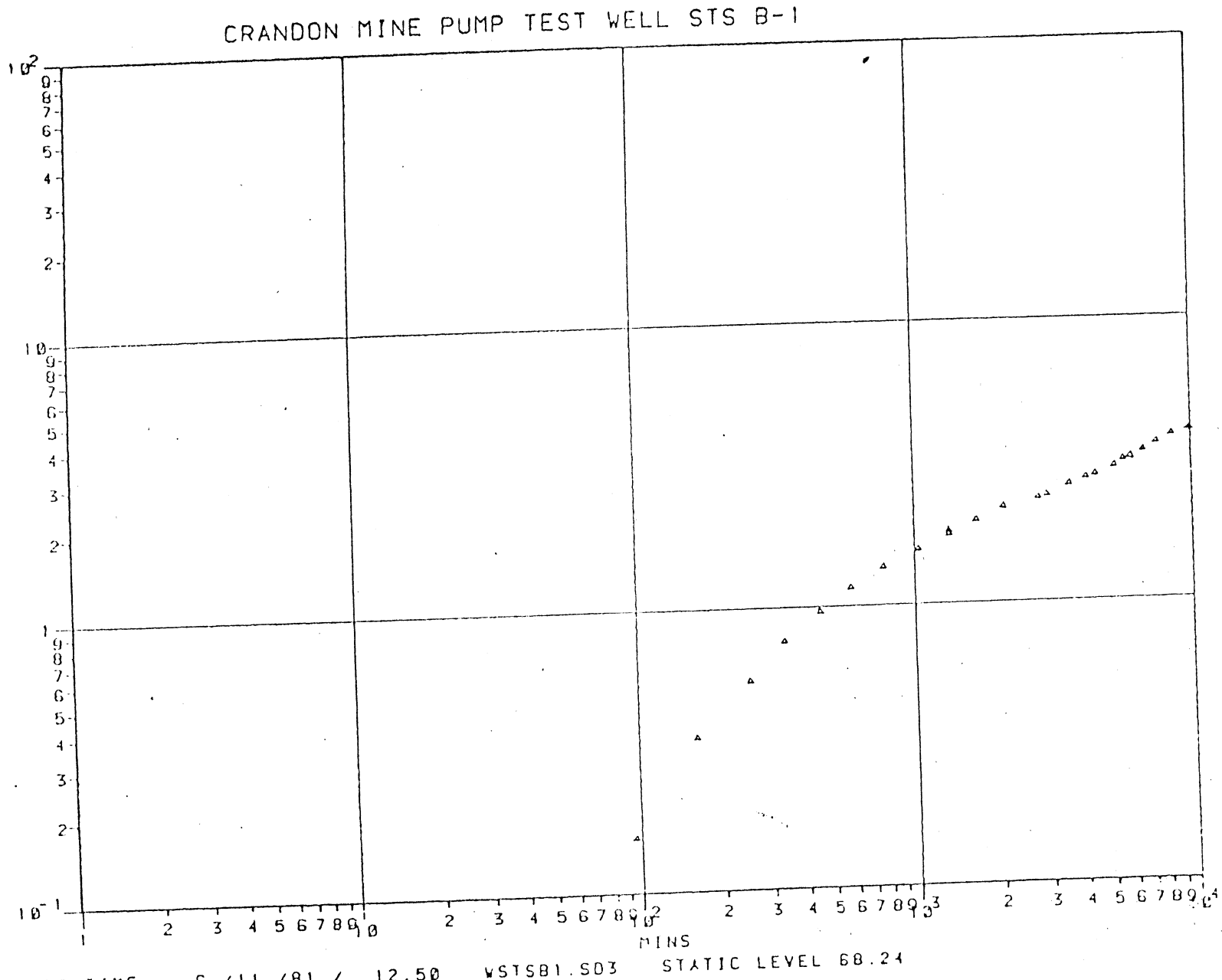
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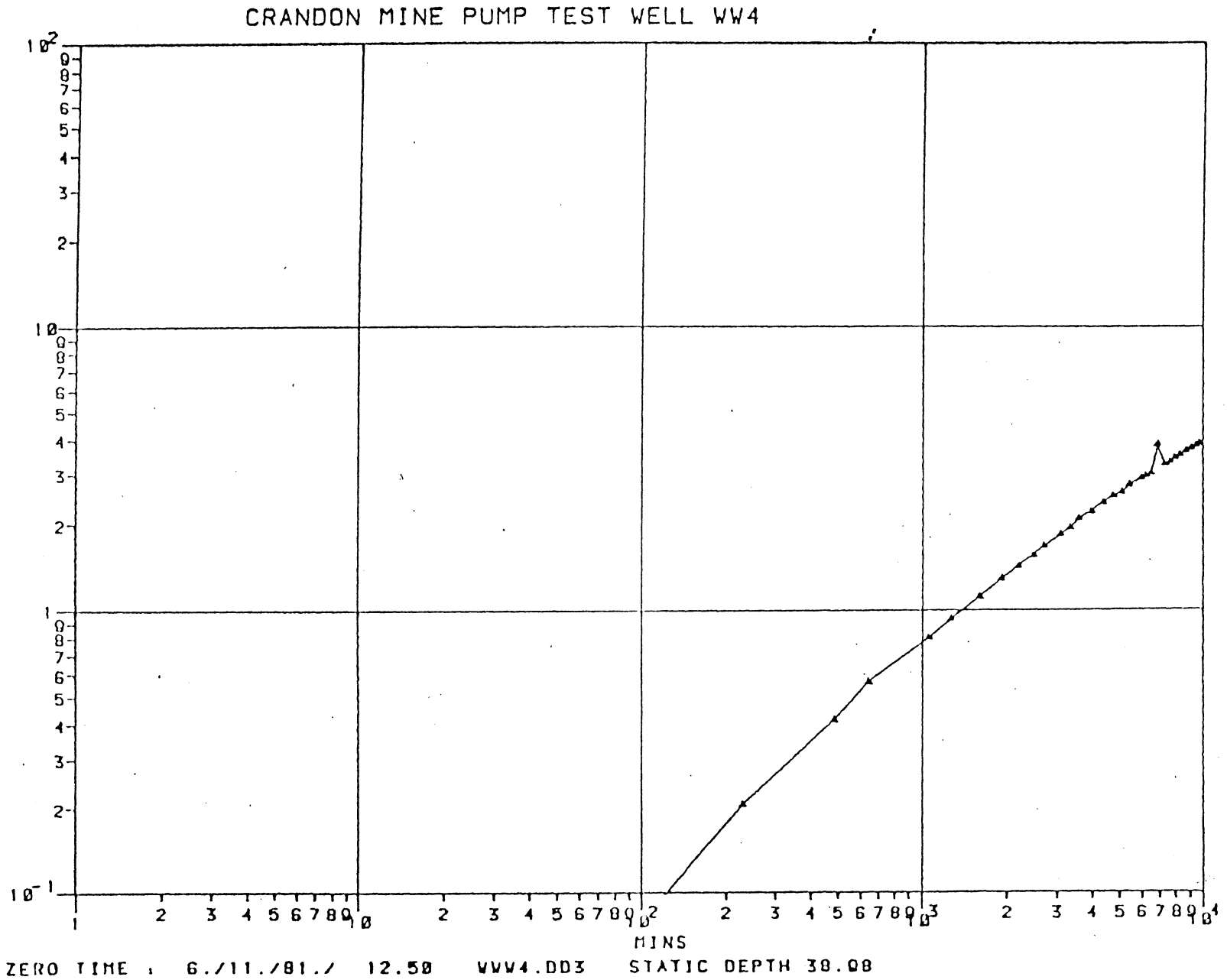
RECORD ZERO TIME : 6./11./81./ 12.50 V210.DD3 STATIC DEPTH 37.04



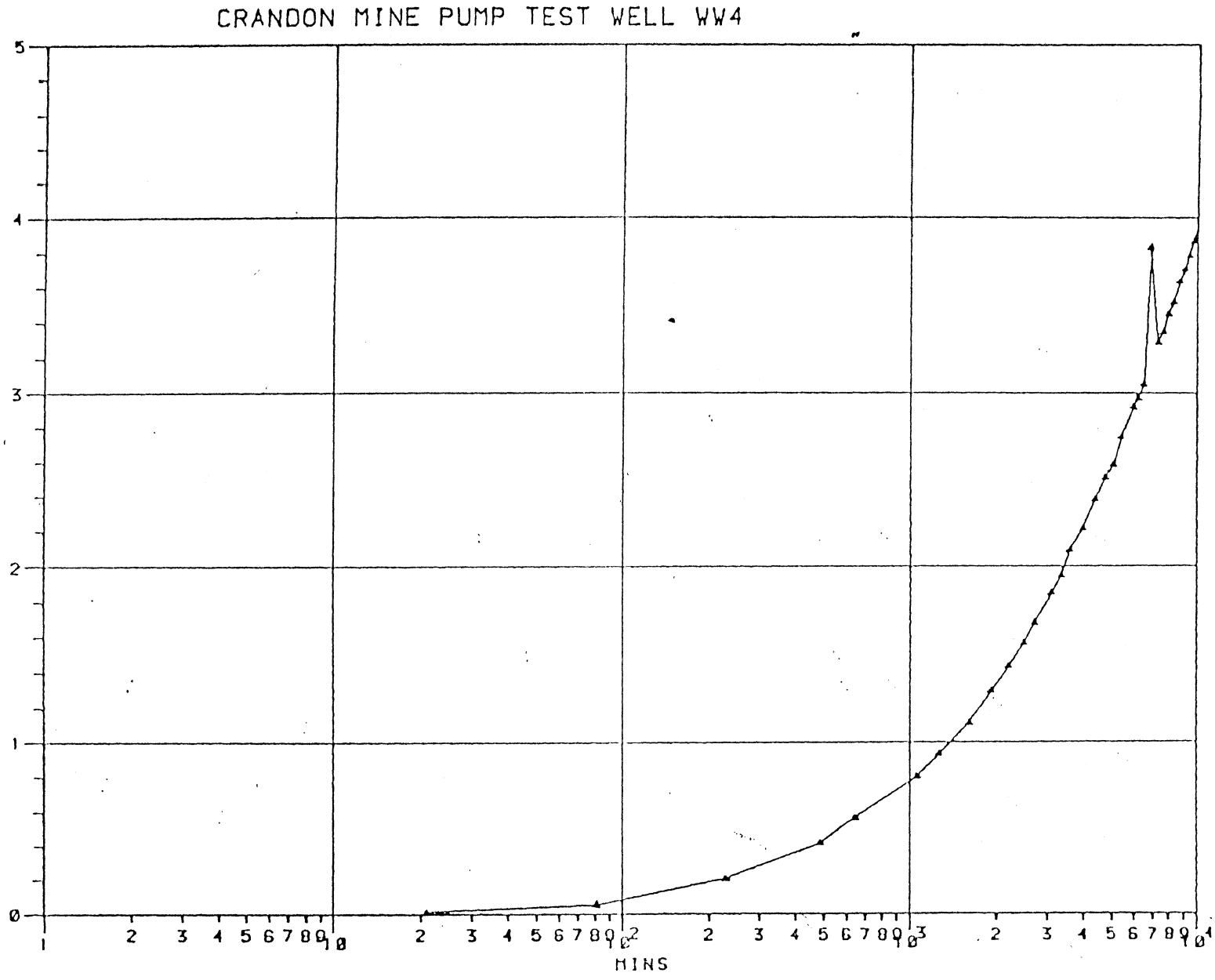
RECORD ZERO TIME . 6./11 /81./ 12.50 WSTSB1.S23 STATIC LEVEL 68.24



RECORD ZERO TIME : 6./11./81./ 12.50 WSTSB1.SD3 STATIC LEVEL 68.24

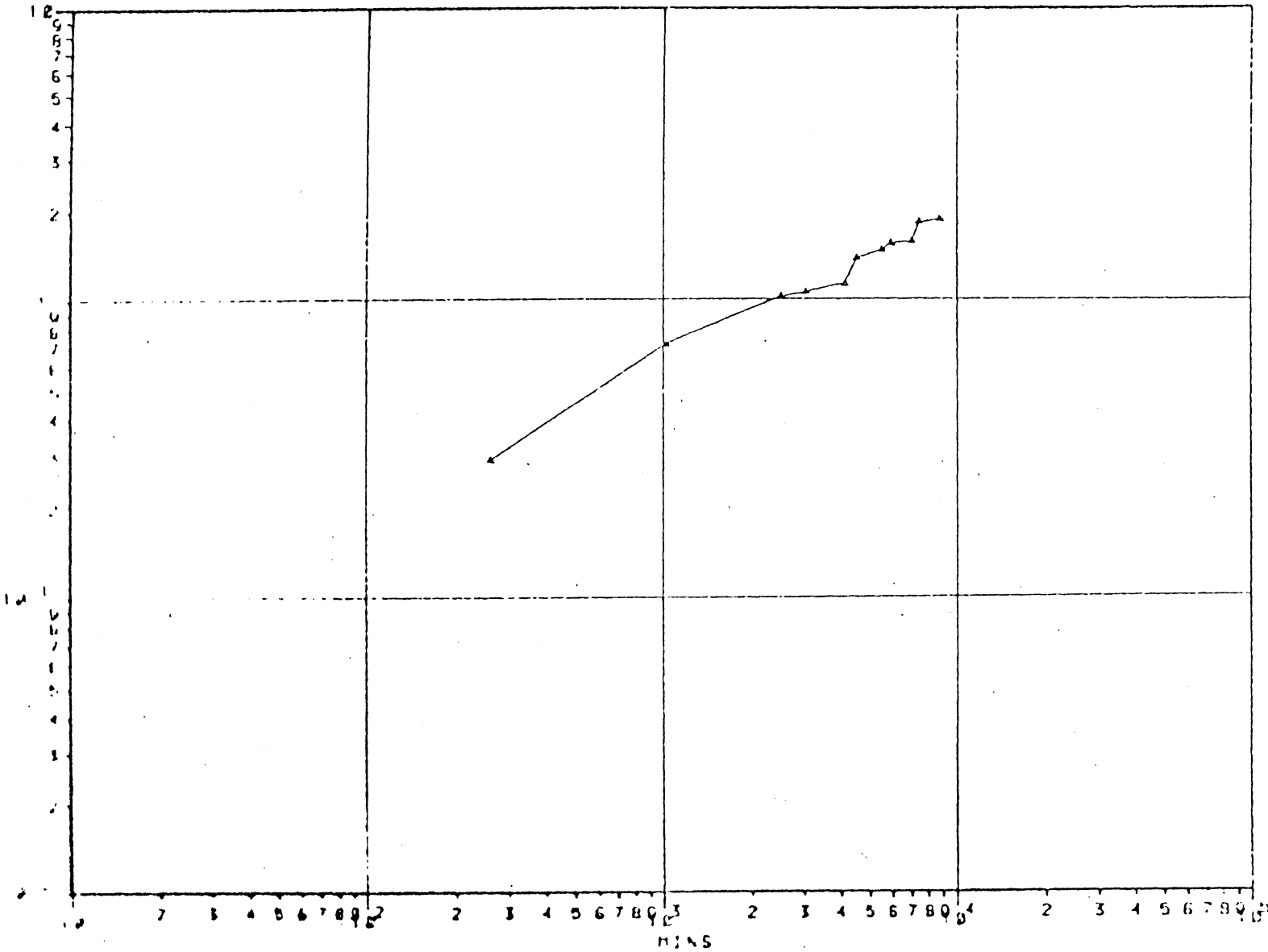


RECORD ZERO TIME : 6./11./81./ 12.50 WWW4.DD3 STATIC DEPTH 38.08

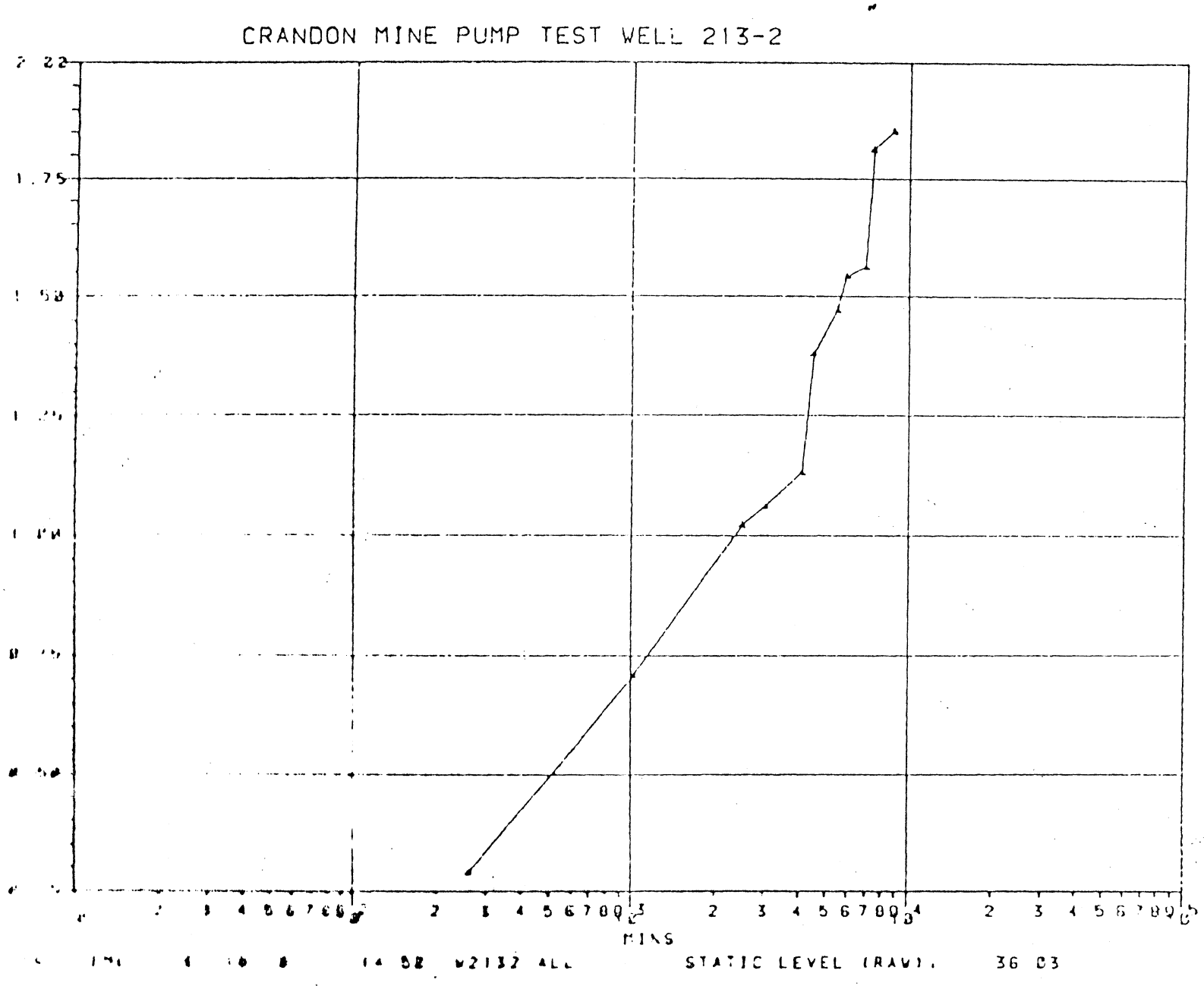


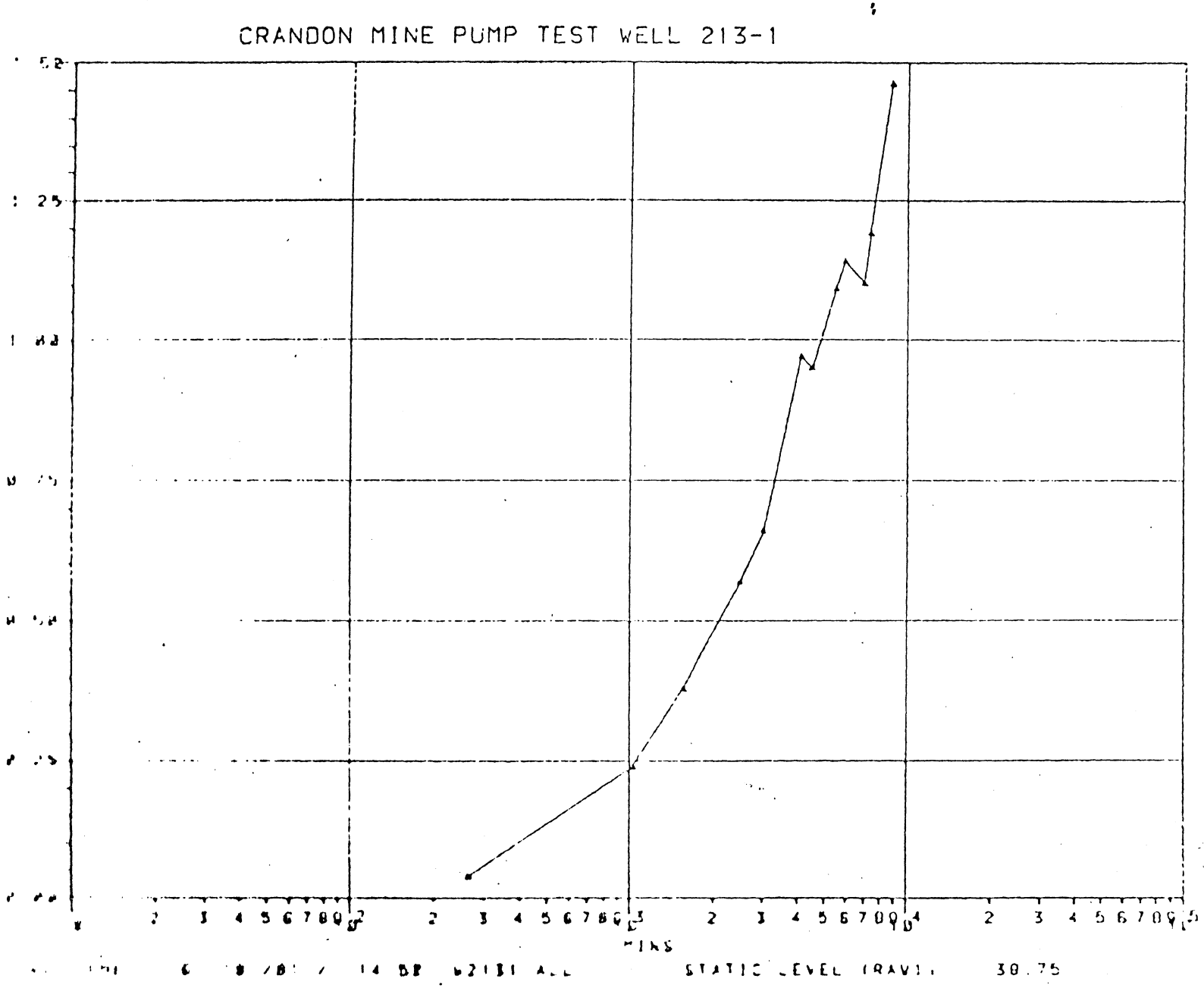
RECORD ZERO TIME : 6./11./81./ 12.50 WWW4.DD3 STATIC DEPTH 38.08

CRANDON MINE PUMP TEST WELL 213-2

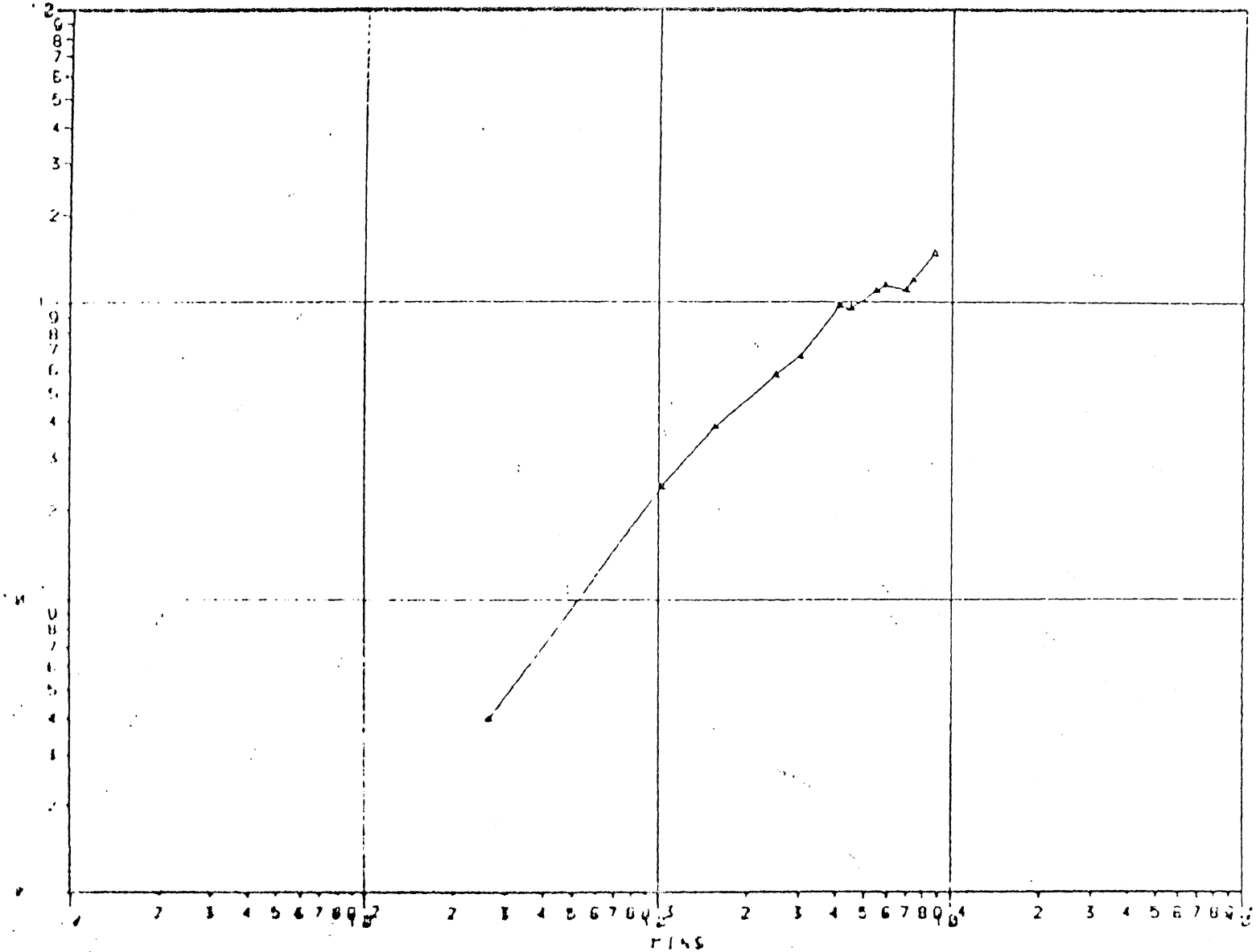


14 08 W2132.ALL STATIC LEVEL (RAW) 36.23


CRANDON MINE PUMP TEST WELL 213-2
1.75
MINS
STATIC LEVEL (RAW). 36 03

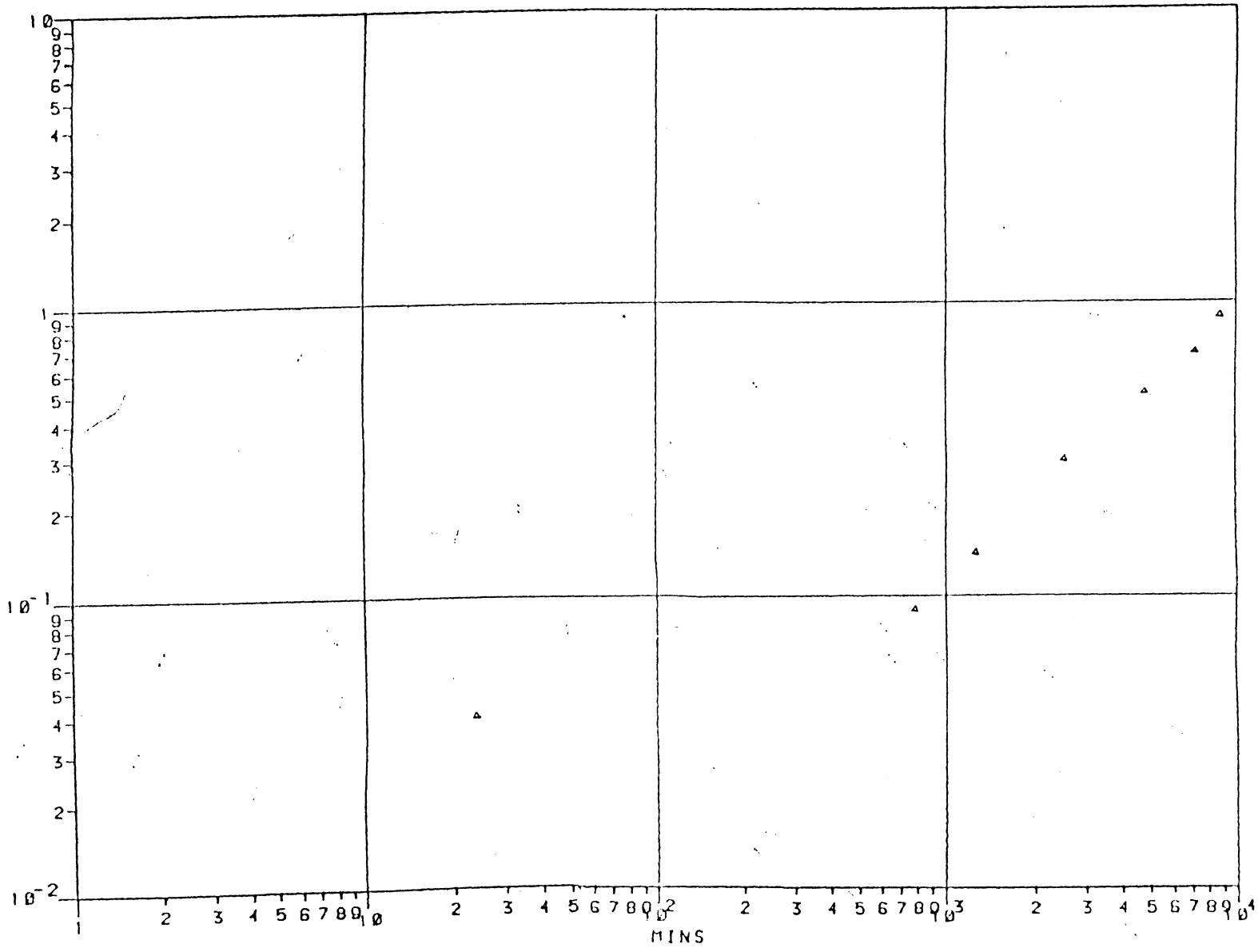

CRANDON MINE PUMP TEST WELL 213-1
MINS
STATIC LEVEL (RAV1: 38.75

CRANDON MINE PUMP TEST WELL 213-1

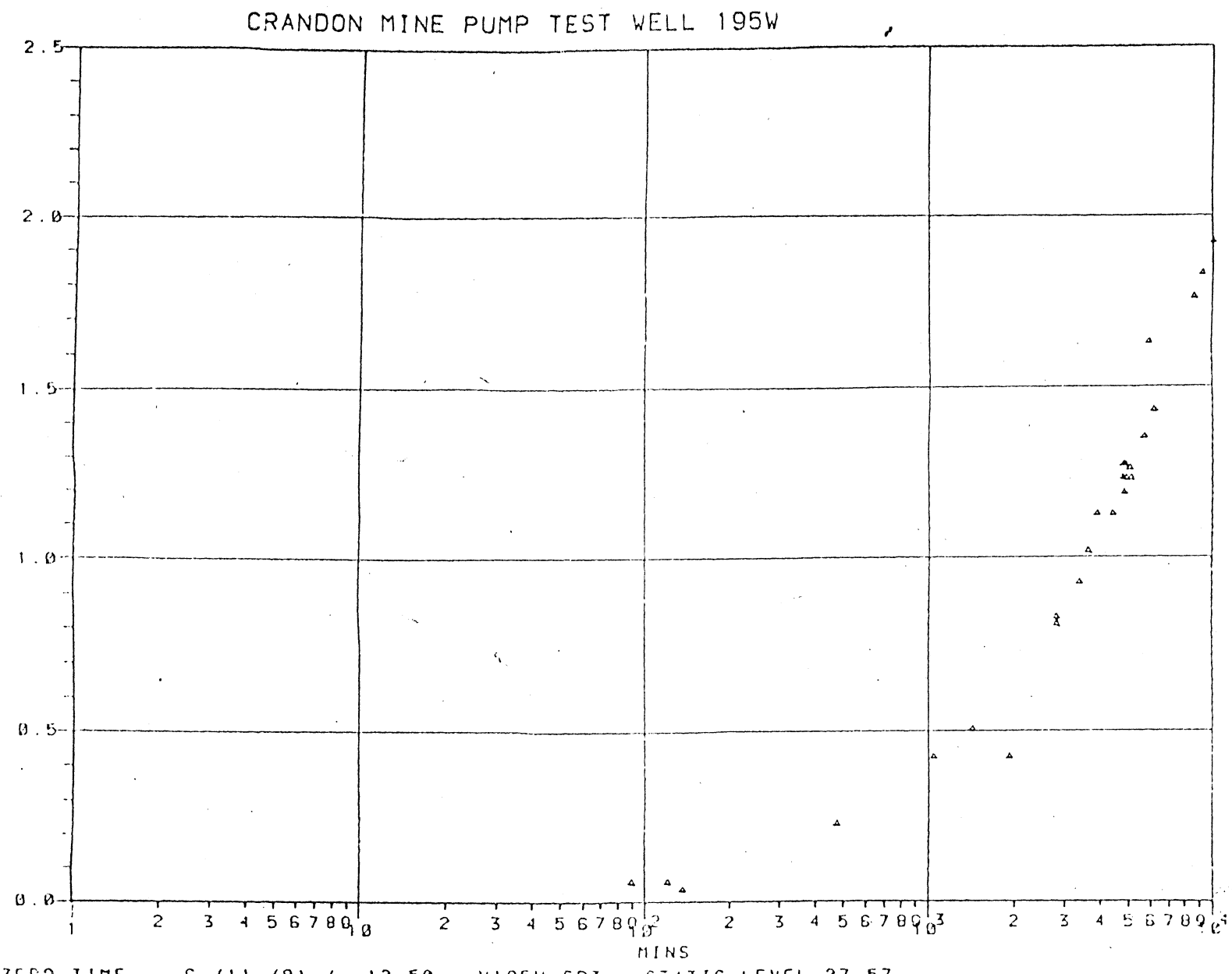


STATIC LEVEL (RAW): 38.75

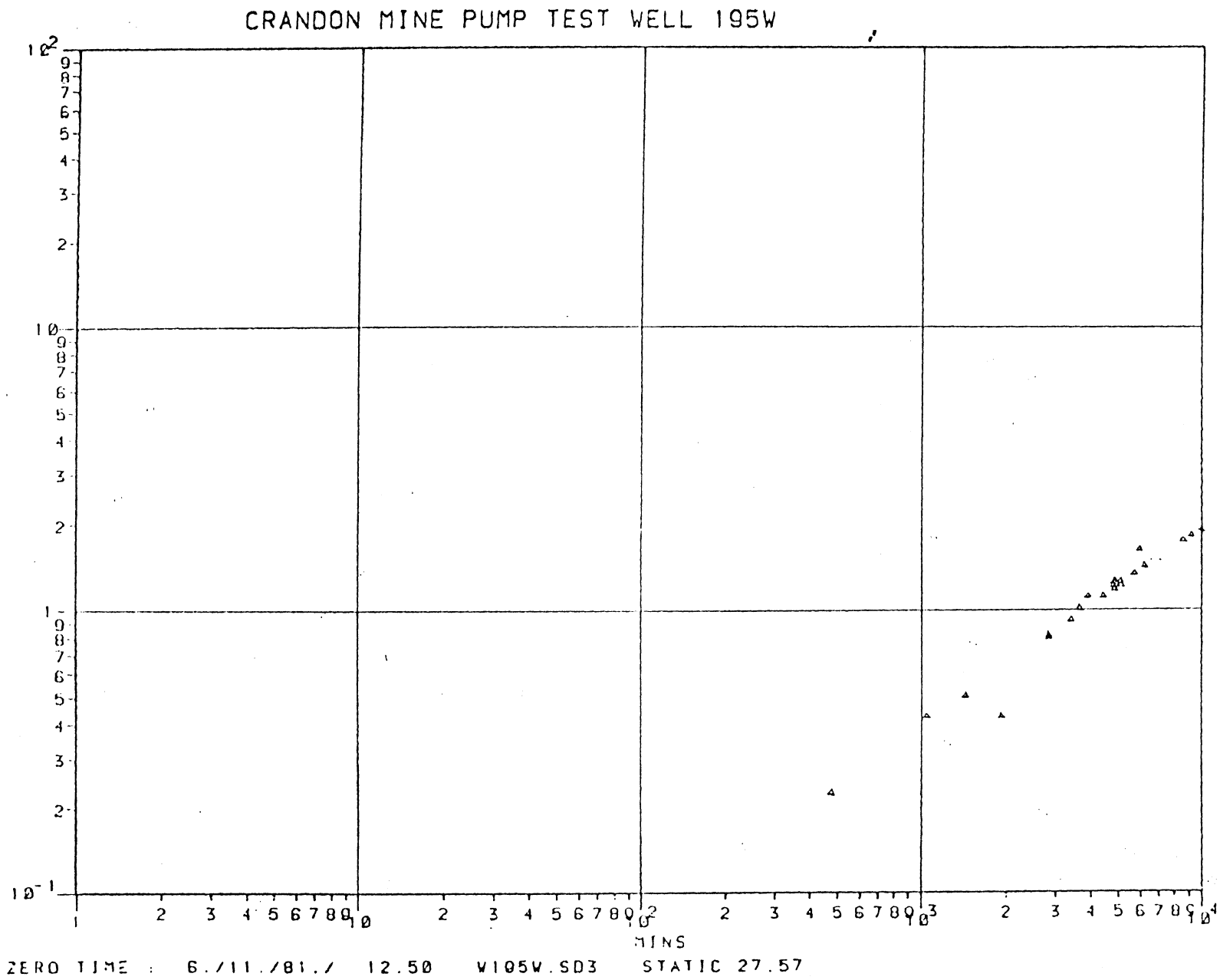
CRANDON MINE PUMP TEST WELL 195W



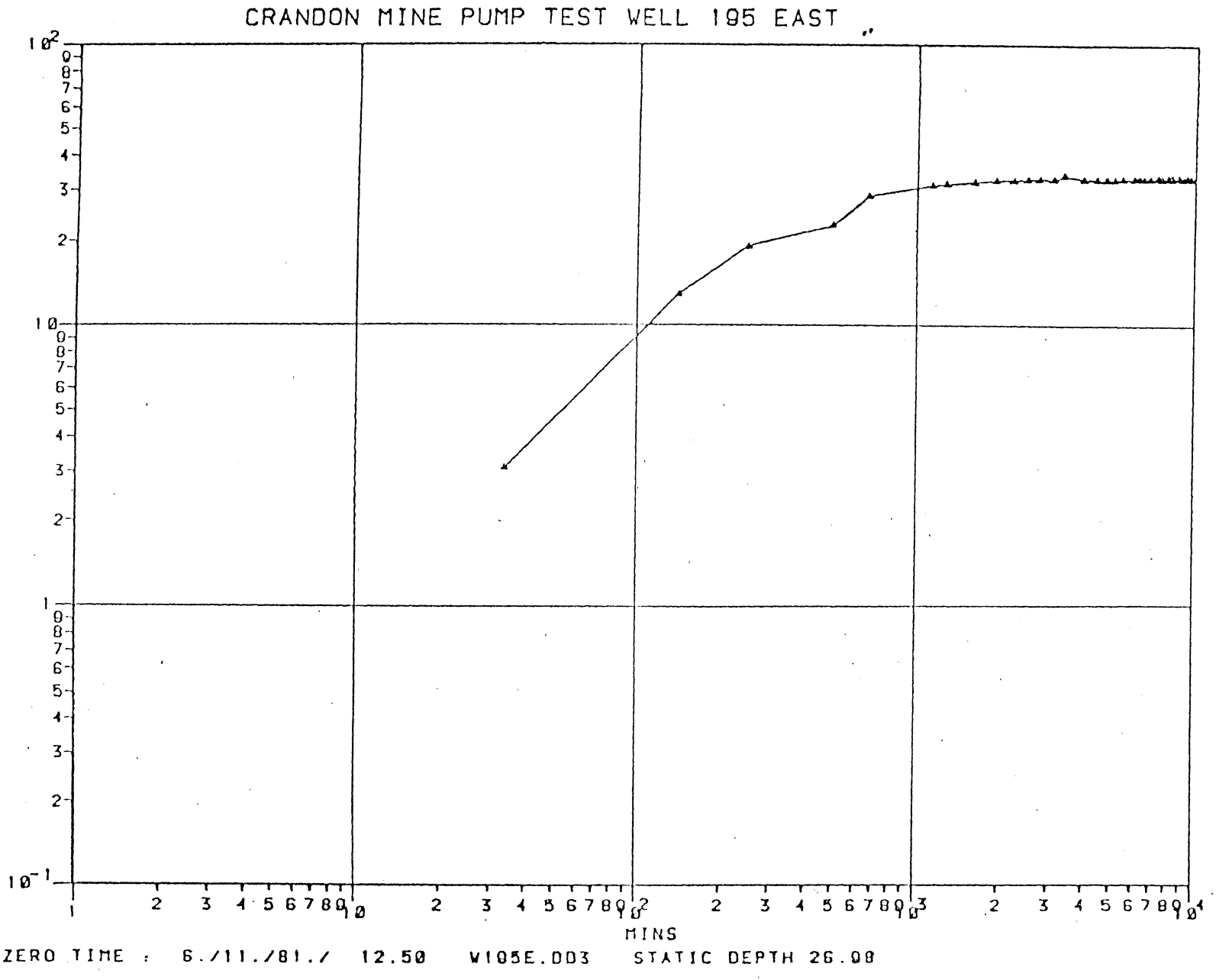
RECORD ZERO TIME : 6./18./81./ 14.50 STEVENS

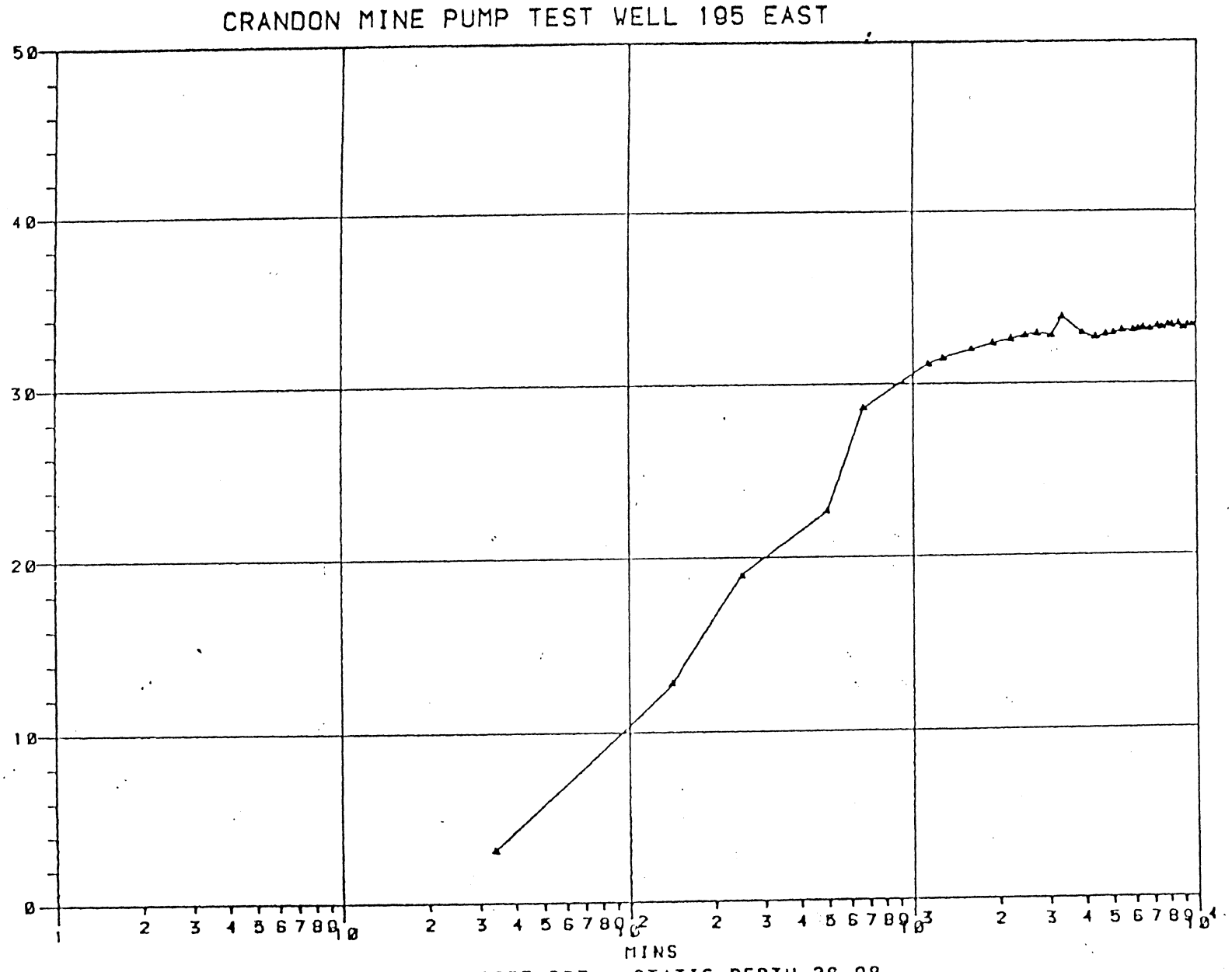


RECORD ZERO TIME - 6./11./81./ 12.50 W105W.SC3 STATIC LEVEL 27.57



RECORD ZERO TIME : 6./11./81./ 12.50 W105W.SD3 STATIC 27.57


CRANDON MINE PUMP TEST WELL 105 EAST
MINS
RECORD ZERO TIME : 6./11./81./ 12.50 W105E.DD3 STATIC DEPTH 26.08



RECORD ZERO TIME : 6./11./81./ 12.50 V105E.DD3 STATIC DEPTH 28.08

Appendix D

APPENDIX D

Initial Results of Predictive Modeling - The Thomas A. Prickett & Associates Letter Report (Oct., 81)

THOMAS A. PRICKETT & ASSOCIATES
CONSULTING WATER RESOURCES ENGINEERS
8 MONTCLAIR ROAD
URBANA ILLINOIS 61801 (217) 344-2277

October 30, 1981

Mr. Charles Govin
Project Director
Environmental Sciences Division
Camp Dresser & McKee, Inc.
6132 West Fond du Lac Avenue
Milwaukee, WI 53218

Dear Chuck:

This brief letter report is written for the purpose of summarizing the main findings of the orebody modeling effort at the Exxon/Crandon project. This summary is given in advance of the draft report such that Exxon will be informed of the major results, the key problem areas, the weaknesses and strengths of the simulations, and the obvious data needs and future studies necessary to improve the accuracy of the predictions.

In general the subject material herein is the same as discussed in the telephone discussion last week among you, myself, and Exxon. I have taken this opportunity to add some computer printout and graphics to the end of this report to indicate the type of final report figures. These figures are not in final form nor are they complete in their explanations. They do, however, contain some ideas that we can go over in more details in our upcomming meeting on November 5 in Rhinelander.

The subject material presented herein is grouped into 9 major areas of comment. The 9 comments cover the more broad subjects of the expected flow rates into the mine, the resulting impacts on surrounding groundwater resources, the model calibration process, its sensitivity, problems, and credibility evaluation, and the results of various control measures at the 95 meter level. Our comments will be numbered for reference purposes.

1) Estimated Flow Rates Into Mine (No contro of orebody permeability)

The following numbers are based upon the situation of mining according to the Mine Development Schedule - - 10,000 TPD Simultaneous Prospecting

Alternative plan (Exxon blackline print lettered B-MM-0071 and dated 1/22/81).

Significant amounts of water will begin to enter the mine works at the 185 meter level beginning at about the 20 month point of the mining schedule. Water flow rates into the 185 level will increase to about one million gallons per day (mgd) by the 21st month, to about 1.3 mgd by the 22nd month and then to about 1.5 mgd by the 23rd month.

Starting in the 24th month and shortly thereafter, the construction rate dramatically picks up as more and more drift crews become active. As a result, porous sections of the orebody and surrounding materials become exposed to a large number of drifts, cross cuts, and bulk sampling areas. The rate of water flowing into the mine therefore dramatically increases to about 2.2 mgd approximately at the 25-month point of the mining plan. Rapidly declining heads and pressures result from the intensive drainage scenario and large parts of the permeable materials above the 185 level convert to a gravity flow system that mearly transmits water from the overlying glacial materials to the points of drainage at the 140 and 185 levels.

As the pressure system above the 185 level is more or less dissipated after the 25-month point, the rate of water inflow to the mine workings is thereafter dependent upon the maximum rate at which water can "rain" down from the glacial deposits plus whatever needs to be drained within the orebody. The rate of glacial deposit supplied water to the mine works then begins to decline slowly as heads in the glacial deposits also decline due to continued drainage stress. By month 27, the mine flow rate should decline to about 2 mgd. By month 30, the rate should be about 1.95 mgd.. The rate of glacial aquifer supplied water to the mine reaches a near steady-state flow of about 1.9 mgd by the end of month 32.

The mine flow rate will be made up of three parts. First, and most important will be that water which will continually rain down from the glacial drift. Second, there will be that part of the water that is released due to artesian pressure decline within the orebody and associated materials. The third part is a contribution of water that will be obtained from drainage of the orebody itself. Presently there is no hard data on the orebody drainage characteristics. The above flow estimates are based upon an estimated gravity drainage coefficient being low. If future data shows a high coefficient, a rerun of the model will be necessary to evaluate that component of additional flow. That additional flow can be significant during the early part of the mining plan when gravity drainage takes place. It should be realized, however, that this drainage component is a nonrenewable source and once it is pumped out, it is gone.

2) Comments on Quick Depressurizing of Mine (No Control of Permeability)

The intense mining activities starting around months 23-24 of the plan results in rapid depressurizing of the orebody. The raining down of water from the glacial deposits continues after then, however. The flow rate to be contended with thereafter is a function of the more or less constant glacial flow plus that due to drainage of the ore body materials as mining gets deeper.

Our study thus indicates that the flow from the overlying glacial aquifer will no longer be a function of the mine plan once the orebody pressure falls below the top of the orebody subcrop. It may thus be appropriate to split the model into two parts thereafter for efficiency purposes. One submodel would handle the glacial response and the other would handle the remaining orebody drainage situation.

3) Credibility of Model and Calibration Evaluation.

Let us assume a model calibration acceptance scale of from 1 to 10 with 10 being the best comparison between field measured and computer simulated drawdowns from pumping test response. We believe that the calibration of the model is about at the 6 to 7 level. Based upon previous conversations with Exxon personnel, Exxon may rate that somewhat lower.

The main reasons why the calibration is not better than this are as follows. First, quick reporting time constraints have cut short the calibration process. Second, the model was constructed for the purpose of predicting mine inflow----not the response of the ore body due to pumping of single wells. In this sense, there will never by a perfect match between the model and the pumping test results. The model has grid points where the mining activities will take place. These points are not necessarily where observation wells were located for the pumping tests. Third, eight basic parameters of the model were permutated and the number of combinations of those parameters results in a very large number of simulations to cover the range of possible values and response. Simply stated, more work needs to be done in calibration to increase the model credibility.

4) Comments on Magnitudes of Calibrated Parameters.

The following parameters were varied in the model calibration process: a) The permeability of the weak weathered zone, b) the permeability of the low weathered zone, c) the permeability of the moderately weathered zone, d) the permeability of the strongly weathered zone, e) the storage coefficient for artesian conditions of the orebody materials taken as a total of all weathered zones, f) the storage coefficient of the overlying glacial materials, g) the leakance coefficient (resistive layer) of deposits which transfer water vertically downward from the permeable glacial materials into the ore body in the western part of the area and h) the leakance coefficient in the eastern part of the ore body area.

The primary results of the best calibration model runs are as follws. The permeabilities are P (weak) less than 0.01 gpd/ft^2, P (low) = 1 gpd/ft^2, P (medium) = 30 gpd/ft^2, and P (strong) = 50 gpd/ft^2. The storage coefficient of the orebody deposits are 10^{-4} and that of the glacial materials are a factor of 0.75 those of the Golder model (because of short-term response conditions of the pumping test). The results of the calibration effort indicates that the leakance of the resistive layer overlying the western part of the ore body area is greater than that of the eastern part.

5) Sensitivity of Mine Flow Rate to Parameter Variations.

Based upon parameter variations made during the calibration phase, the resistive layer between the ore body and overlying glacial deposits is a sensitive variable related to the mine flow rate. Our opinion at this time is that the maximum long-term mine inflow rate from the glacial source could be as high as 2.8 mgd. This rate would occur if we assumed worst case conditions, which by the way we do not consider highly likely. Still, it is apparent that the model flow rate is sensitive to this parameter..

Although we did not permutate the glacial permeability values and areal recharge rates, we can see that the ability of the glacial deposits to deliver water to the ore body site is directly related to the long-term mine flow rates. Anything that would maintain high heads in the glacial deposits (under the stress of orebody drainage) will increase mining flow rates. Larger permeability, greater thickness of those glacial deposits, higher storage coefficients, and higher groundwater recharge rates than those used from the Golder glacial model (September 4, 1981 version) will tend to increase the mine flow rate.

The permeability of the weak weathered zone is an extremely sensitive variable. If one gives this just a small value, water levels at large distances from the orebody drop rapidly and beyond anything measured during the pumping tests. This points directly to the fact that the weak weathering zone permeability is very low. Relative to the permeabilities of the other weathered zones, the weak zone is negligble. As a matter of fact, the weak weathered zone permeability was set to zero in the mine plan production model runs.

It was somewhat of a surprise that the permeability of the medium and strong weathered zones were so close to one another. The calibration results indicate that the medium value is a sensitive parameter. Having both the medium and strong zones being so alike at this time points possibly to a larger grouting scheme.

Again, virtually no information has been generated in past studies on the drainage storage coefficient of the orebody materials. We have estimated

that coefficient effect to be small. We have considered the fact that as drainage takes place, water flowing downward from the glacial materials is replacing it to the extent that the drainage coefficient does not totally effect the mine flow rate. However, if this coefficient is much larger than we have estimated then an additional flow rate into the mine will result. As mentioned earlier this is a temporary flow only.

6) Impacts in the Glacial Aquifer Due to Mine Flow Rates.

We have assumed Golder (September 4, 1981 model version) flow model coefficients in our mine model simulations. We have mapped impacts (changes in water levels or drawdowns) of the mine flow on lowering the glacial aquifer heads. The flow coming from the glacial deposits are variable with time as mining progresses. However, when the ore body looses its pressure and the water levels fall below the ore body subcrop, the rate of water flowing toward the orebody drain tends toward a steady state condition. Our modeling effort indicates that steady-state conditions will occur about at the 32-month point. At this point, groundwater recharge is replacing the glacial deposit at a rate equal to the rate at which water is draining downward into the ore body deposits. After this time water levels in the glacial deposits are no longer declining and the maximum impacts are established.

Based upon a printout of glacial deposit drawdown for this steady-state condition, Swamp Creek is effected in the north and the major effects (let us say 1 foot of drawdown) extend to the west, east, and south about 1, 1.1, and 1.3 miles respectively from the center of the ore body. Smaller impacts (out to about 0.01 feet of drawdown) extend out to about 2.7 miles in radius from the center of the orebody.

7) Controls on Permeability to Reduce Mine Flow Rates.

A study was done to determine the degree of permeability reduction that would be necessary at the 95 meter level to reduce the mine flow by various rates. The results of that study indicated that mine inflow can be reduced to 0.45 mgd with a reduction in permeability of the medium and strong weathered zones at the 95 meter level down to 0.20 gpd/ft^2. Permeability reductions down to 0.40 gpd/ft^2 would be required to reduce the mine flow to 1 mgd. The flow rates just mentioned are the long-term steady-state conditions that fit with the no control rate of 1.9 mgd where the medium and strong permeabilities were 30 and 50 gpd/ft^2 respectively.. Both of these permeability reductions are judged to be great and would require extensive and effective grouting.

The thickness of the permeability reduction zone is of question in this study. We have assumed that the zone of reduction of permeability

is in a region of 75 feet thickness just ending at the 95 meter level. If one wants to reduce this zone thickness, for example to 37.5 feet, then the permeability reduction must also be reduced proportionately to .1 and .2 gpd/ft^2 to have the same flow reduction effects of 0.45 and 1 mgd.

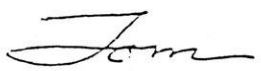
8) Sample Computer Printouts and Graphics Presentations.

We plan to present several types of figures for the final report. A selected sample of the type of figures is given within the remainder of this letter report. Title are given on each figure to partially explain the situation but further details are not given as yet. We should discuss again the number and type of figures necessary for the final report now that we have completed the major part of this modeling effort.

We are looking forward to discussing this entire matter in detail during our meeting with all concerned next week. I have talked to Dick Hite concerning the content of this letter report and we both understand that it is in the form of a draft---there may be changes as we go into the final report. If you have any questions, I'll see you soon to try and answer them.

Best regards to you and your staff.

Very truly yours,



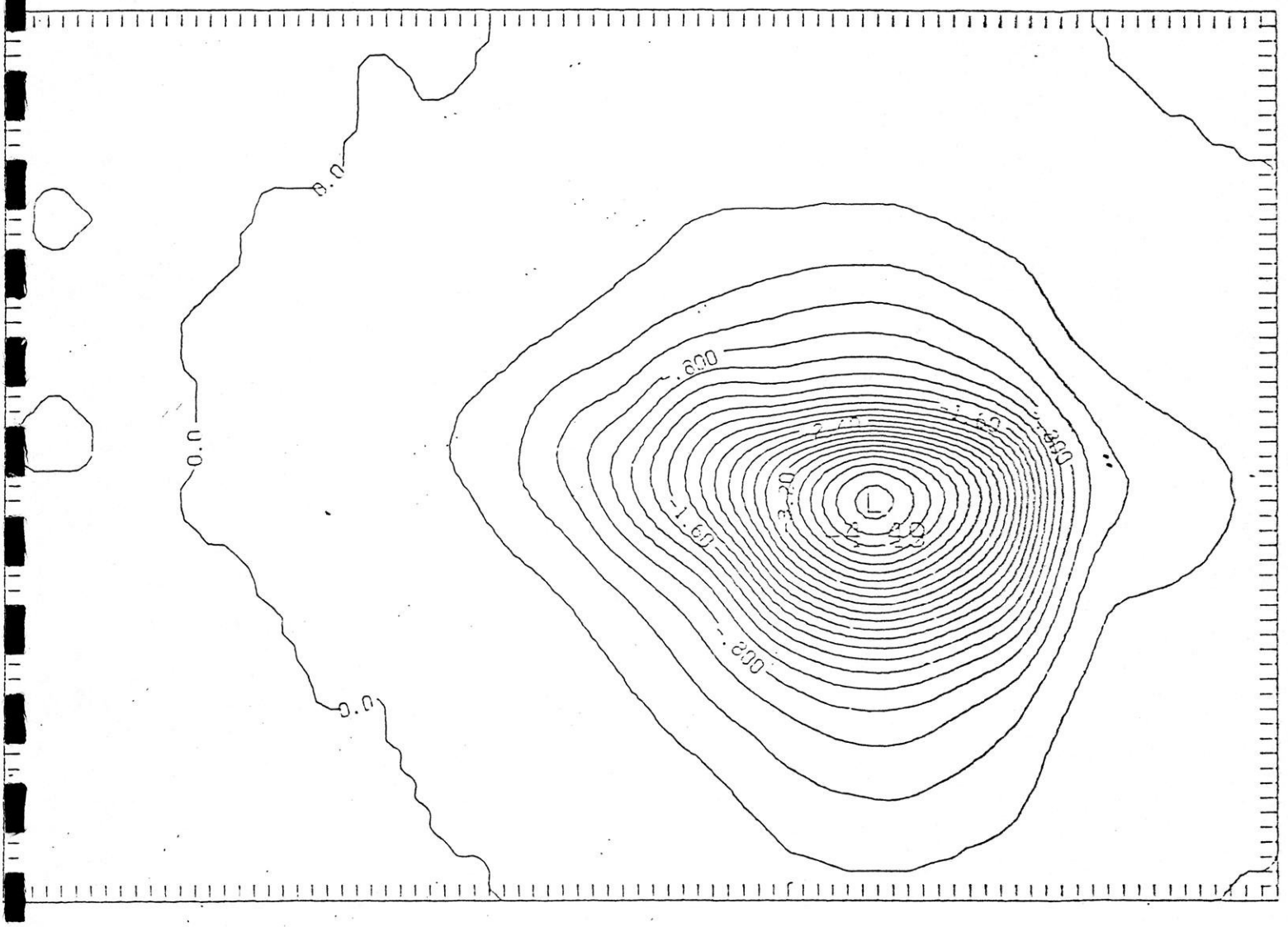
Thomas A. Prickett, P.E.
Thomas A. Prickett & Associates
Number 8 Montclair Road
Urbana, Illinois 61801

TAP/tp

cc: Rowe
Hite

FIGURE 1

Model Simulated Glacial Drift Drawdowns, at the 7 Day Point of Pumping Well 213



CONTOUR FROM -5.0000 TO 0. CONTOUR INTERVAL OF .20000 PT(3,3)= 0.

FIGURE. 2

Model Simulated Glacial Drift Drawdown, at the 7 Day Point of Pumping Well 213

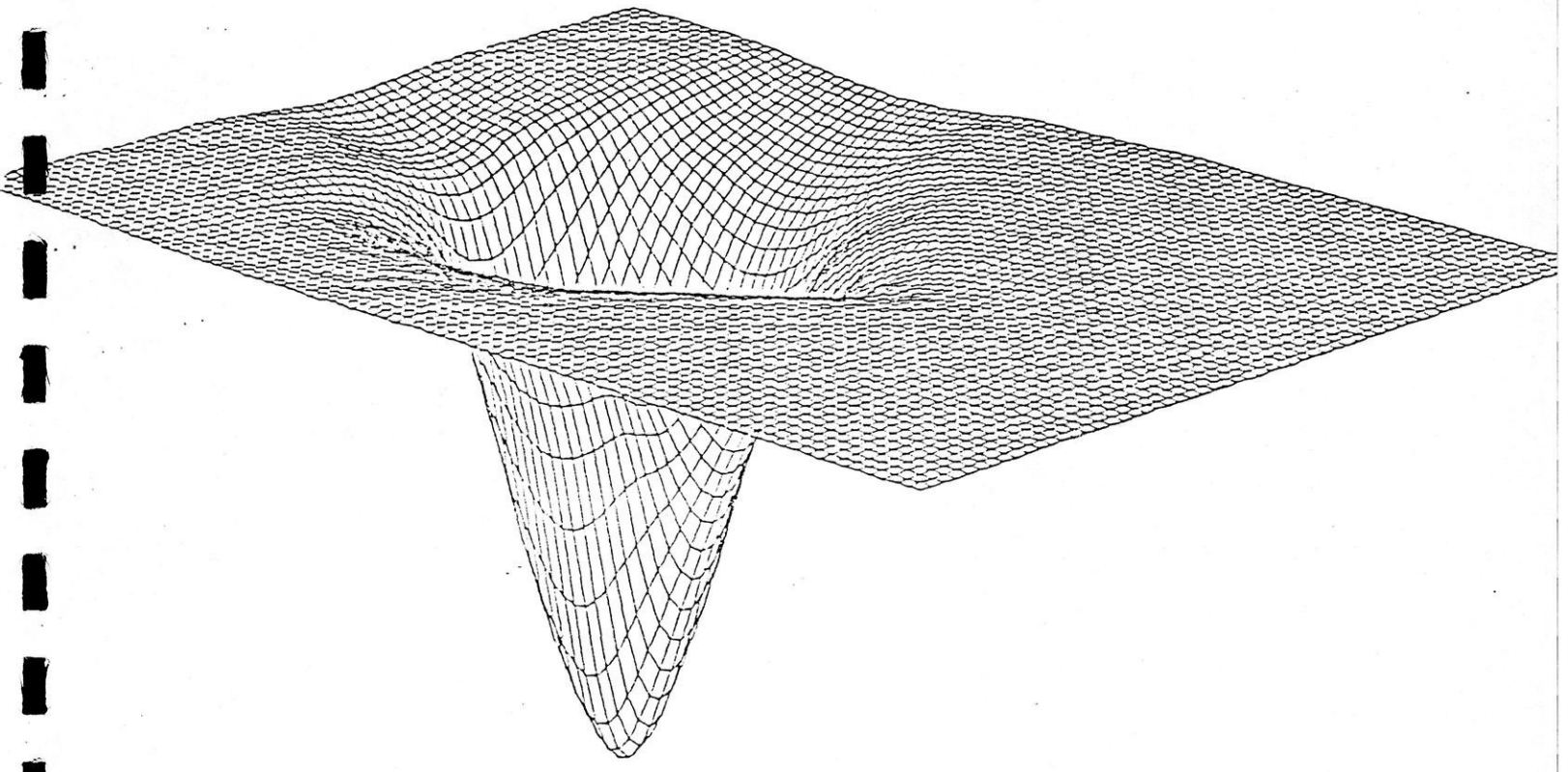
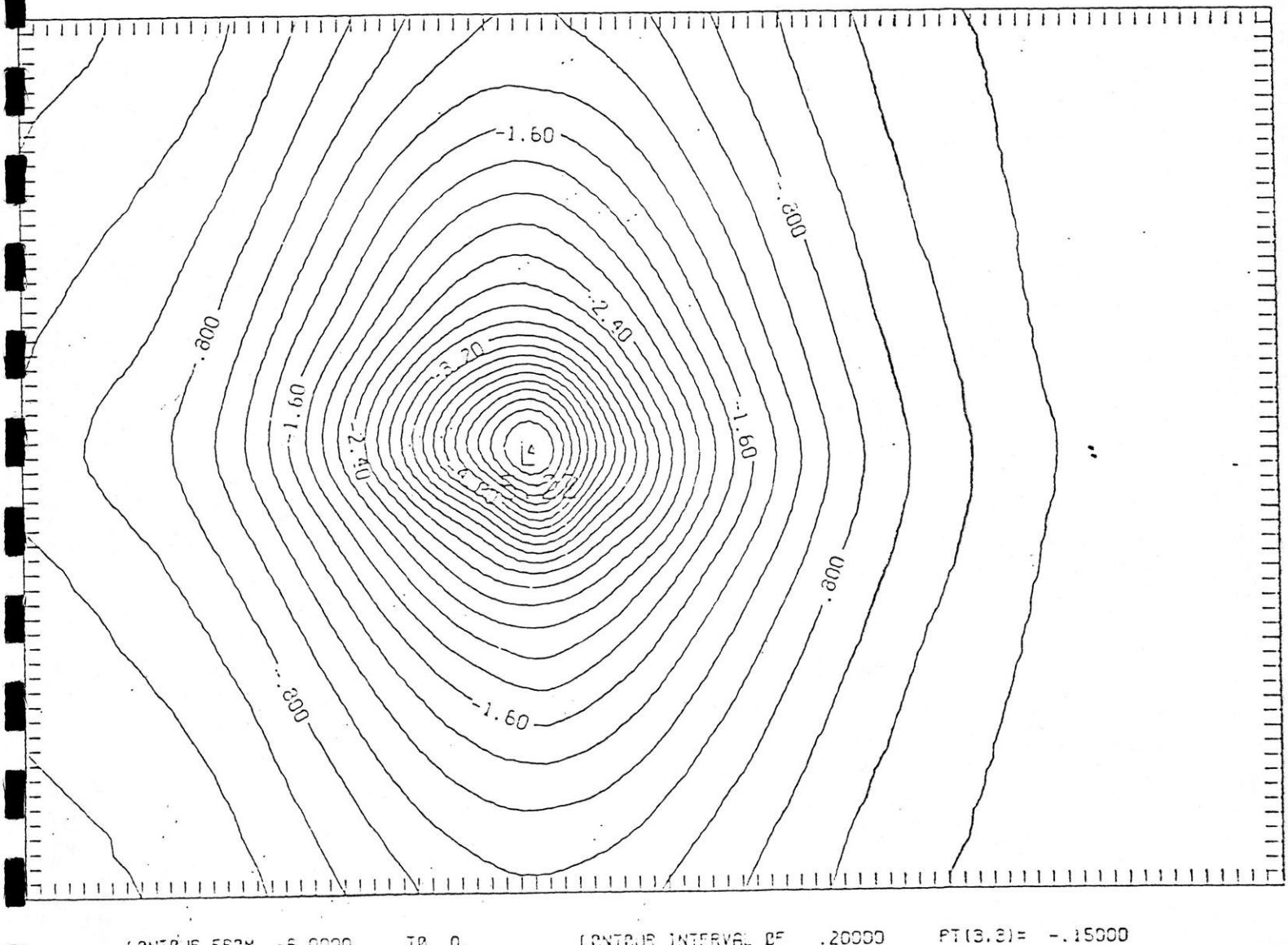


FIGURE 3

Model Simulated Glacial Drift Drawdown, at the 7 Day Point of Pumping Well 211



CONTOUR FROM -6.0000 TO 0. CONTOUR INTERVAL OF .20000 PT(3,3)= -.15000

FIGURE 4

Model Simulated Glacial Drift Drawdown, at the 7 Day Point of Pumping Well 211

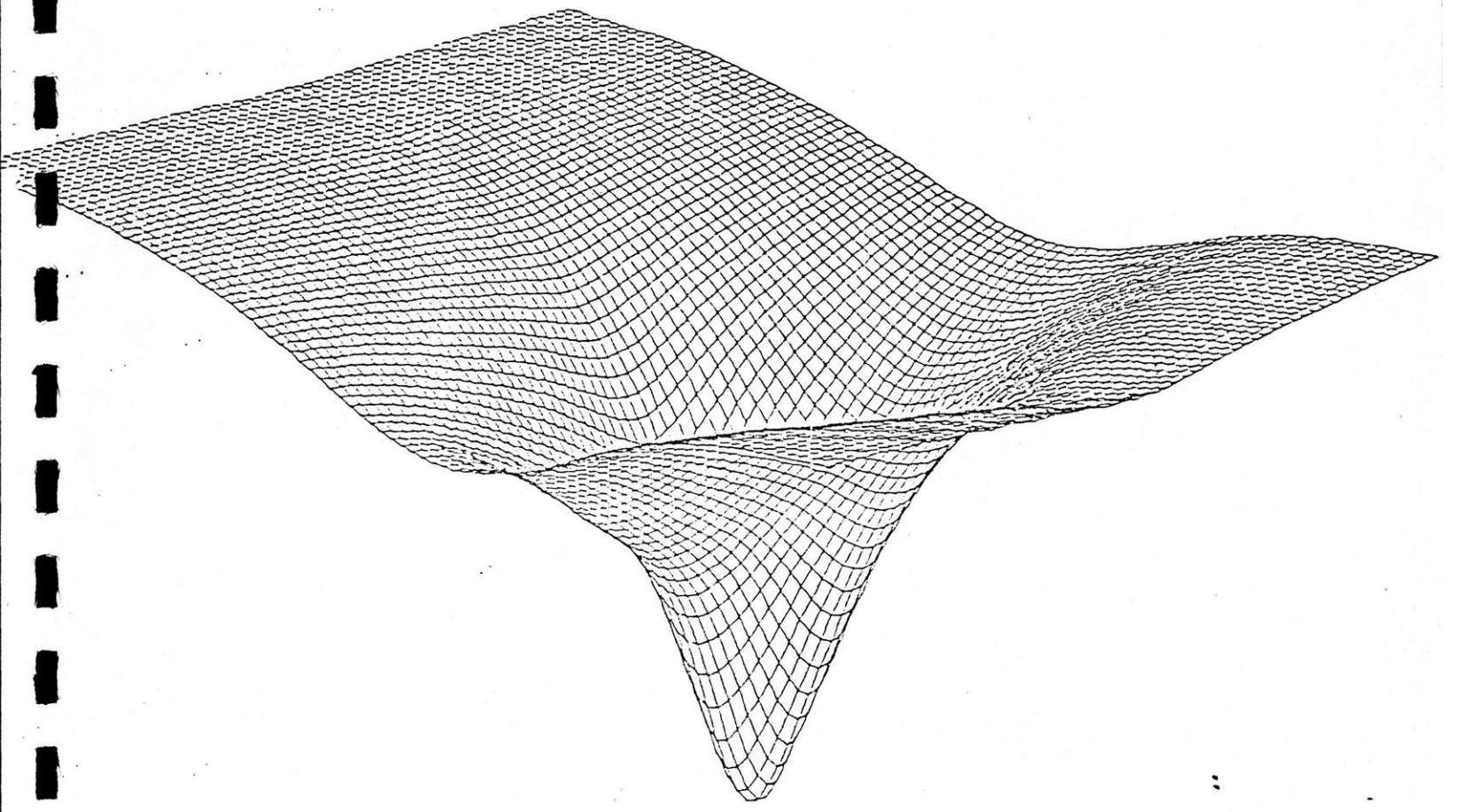
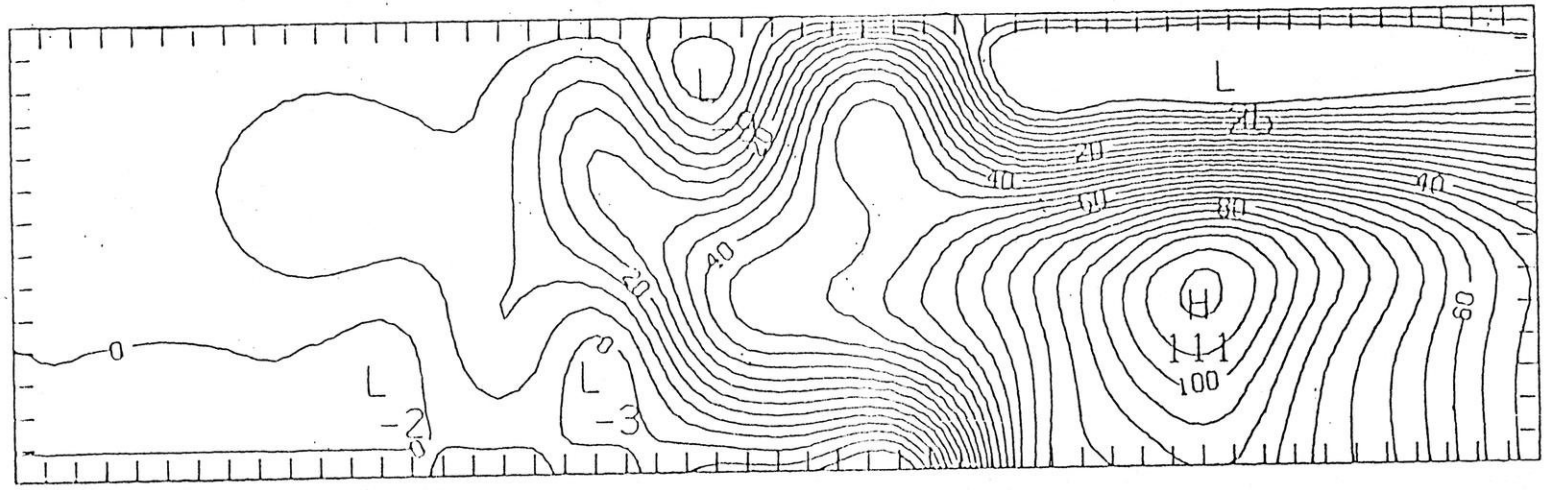


FIGURE 5

Discharge Distribution at the Subcrop Level for the 22.7 Month Point in the Mining Plan. Values in Gallons Per Day for the No Control Situation.

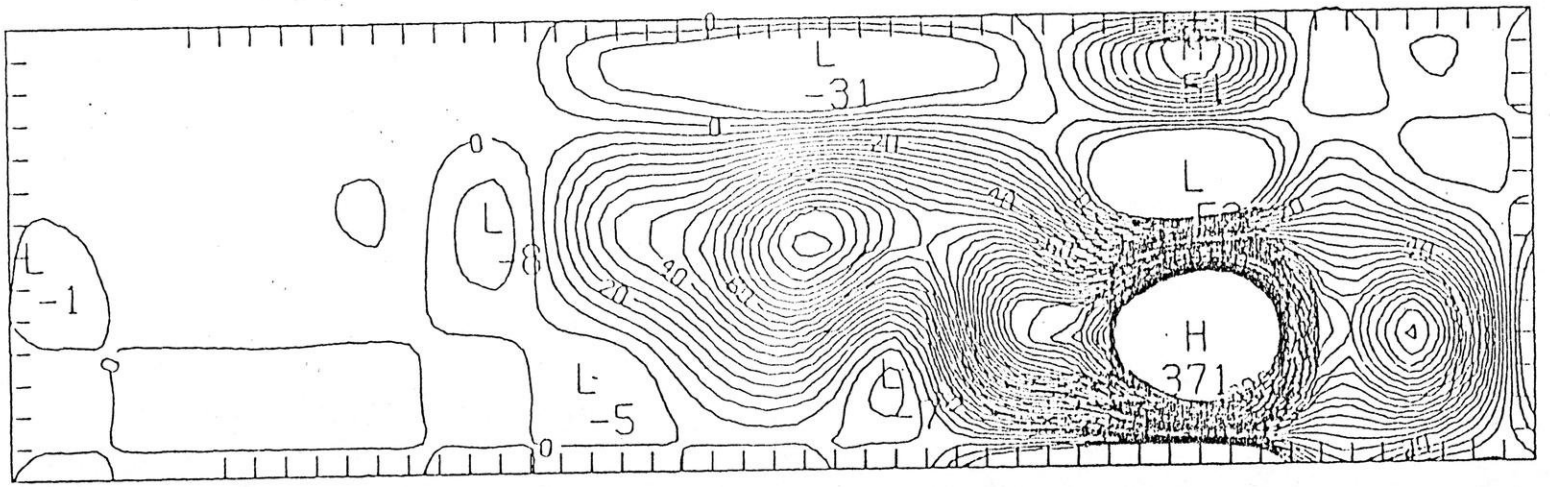


CONTOUR FROM -10000. TO .15000E+06 CONTOUR INTERVAL OF 5000.0 PT(3,3)= -168.71 LABELS SCALED BY .10000E-02

1901

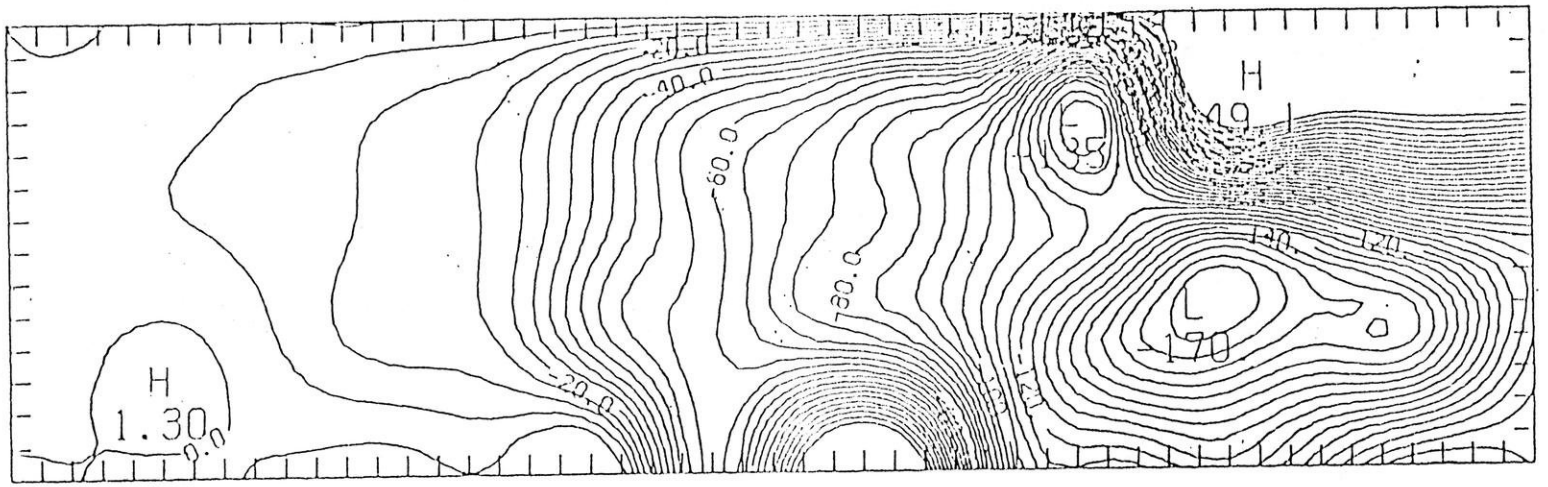
FIGURE 6

Discharge Distribution in Gallons Per Day at the 95 Meter Level With No Control and at the 22.7 Month Point in the Mining Plan.



CONTOUR FROM -10000. TO .18500E+06 CONTOUR INTERVAL OF 5000.0 PT(3,3)= 116.00 LABELS SCALED BY .10000E-02

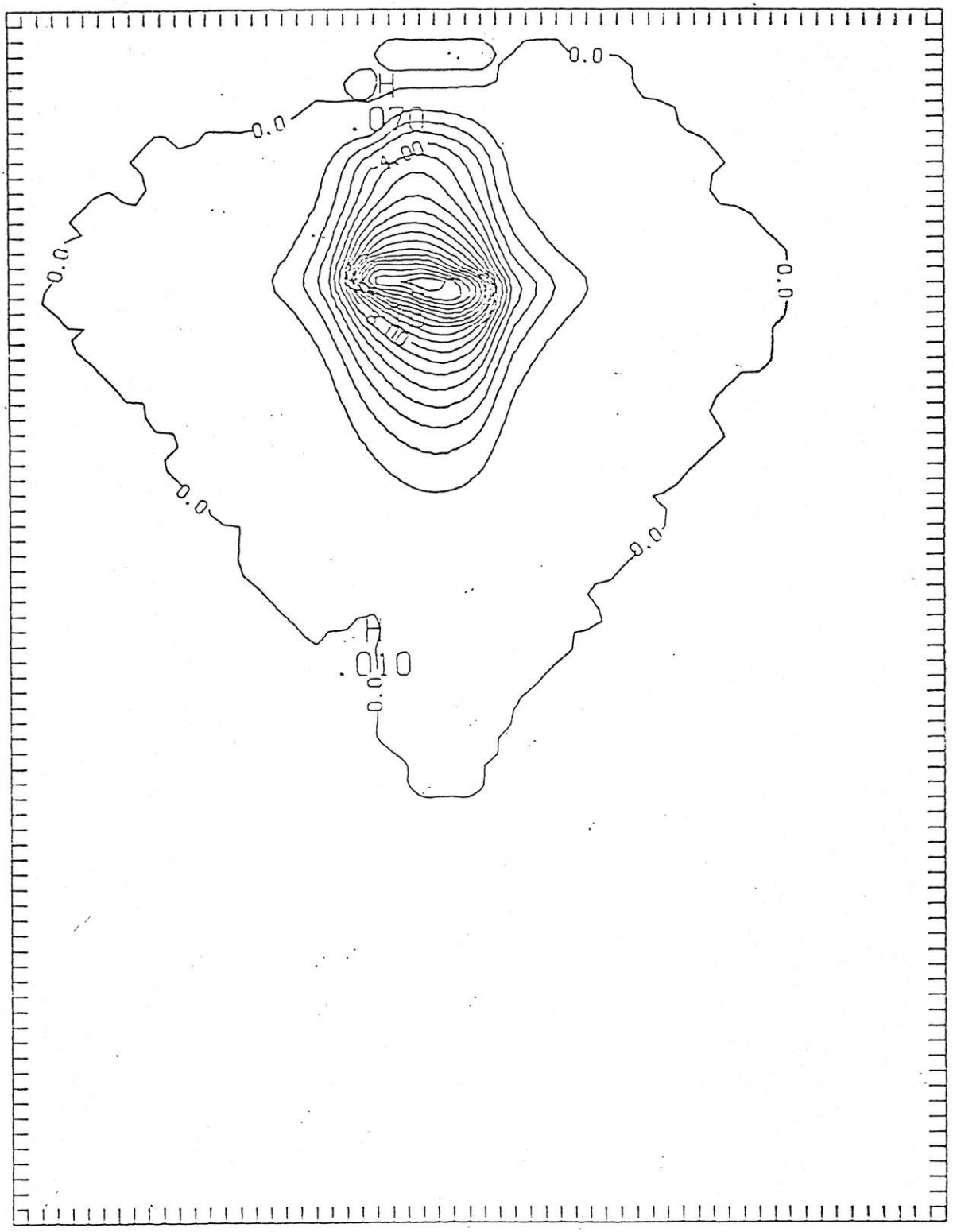
FIGURE 7



CONTOUR FROM -190.00 TO 0. CONTOUR INTERVAL OF 5.0000 PT(3,3)= -.30812

Drawdown Distribution at the 95 Meter Level with No Control at the 22.7 Month Point in the Mining Plan.

FIGURE 9



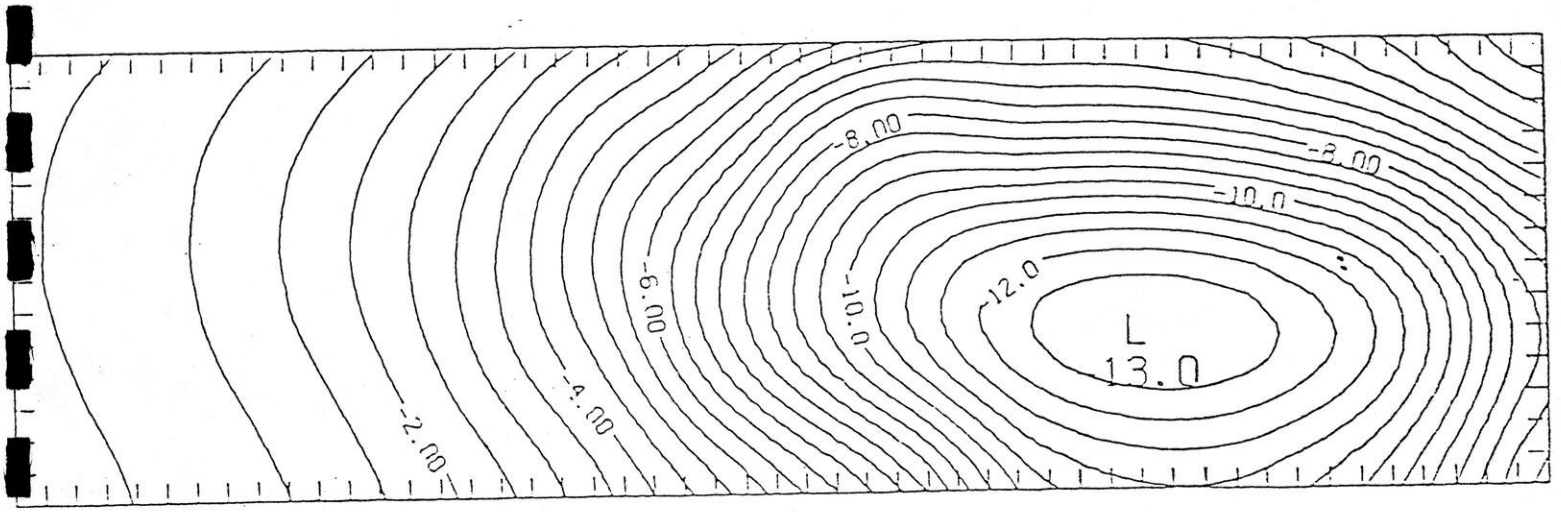
Each Tic is
500 feet

CONTOUR FROM -20.000 TO 0. CONTOUR INTERVAL OF 1.0000 PT(3,3)= 0.

Water Level Drawdowns in Glacial Drift Aquifer at Steady-State Conditions
About at Month 32 of the Mining Plan

FIGURE 8

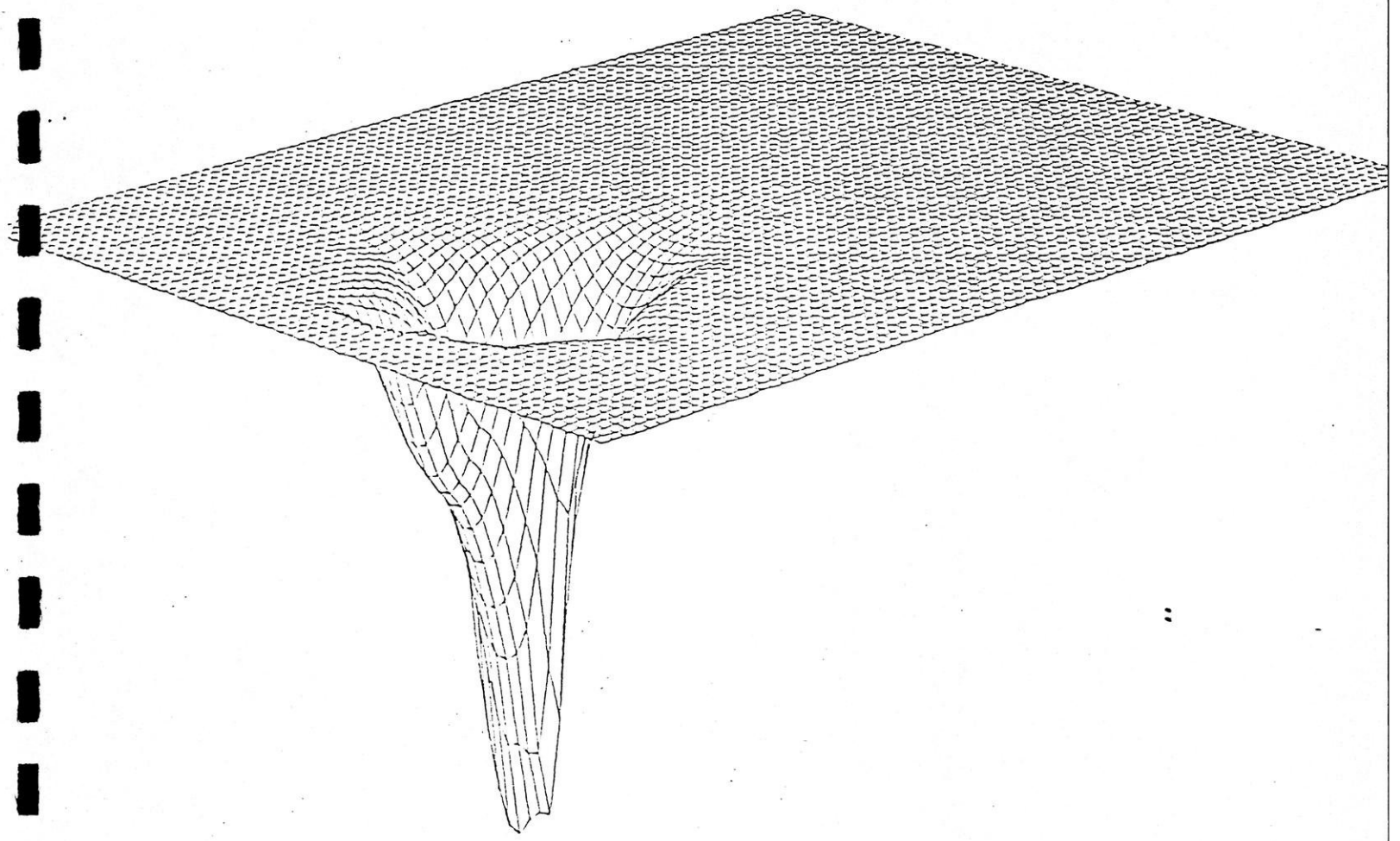
Water Level Drawdowns, in feet, at Approximately 22.7 Months Into Mining Plan..Glacial Aquifer Response Above Ore Body



CONTOUR FROM -20.000 TO -.50000 CONTOUR INTERVAL OF .50000 PT(3.3)= -.43000

FIGURE 10

Drawdown Distribution in the Glacial Aquifer at Steady-State Conditions About at the 32 Month Point of the Mining Plan. View is from the Northwest Corner of the Modeled Area.



```
NODE (14,4,6) ACTIVE FOR 219          H = -81.98353647331
OBS WELL = 210  OBSERVED =   -120.000 COMPUTED =    -81.984 AT ( 14,***,  6)
NODE (5,3,8) ACTIVE FOR 218         H = -2.060589157782
OBS WELL = 218  OBSERVED =     -1.700 COMPUTED =     -2.061 AT (  5,***,  8)
NODE (13,3,4) ACTIVE FOR 217          H = -123.4860264761
NODE (13,4,4) ACTIVE FOR 217          H = -127.5088909873
NODE (13,5,4) ACTIVE FOR 217          H = -110.0820601164
OBS WELL = 217  OBSERVED =   -119.000 COMPUTED =   -123.026 AT ( 13,***,  4)
NODE (10,2,3) ACTIVE FOR 229          H = -23.6838779076
NODE (10,3,3) ACTIVE FOR 229          H = -23.73050746073
NODE (10,4,3) ACTIVE FOR 229          H = -24.02323955366
OBS WELL = 229  OBSERVED =    -67.000 COMPUTED =    -23.613 AT ( 10,***,  3)
NODE (10,3,7) ACTIVE FOR 216          H = -31.53513860283
OBS WELL = 216  OBSERVED =    -26.500 COMPUTED =    -31.535 AT ( 10,***,  7)
NODE (10,3,6) ACTIVE FOR 226          H = -30.49107816129
OBS WELL = 226  OBSERVED =    -69.000 COMPUTED =    -30.491 AT ( 10,***,  6)
OBS WELL = WW4  OBSERVED =     -3.500 COMPUTED =     -3.660 AT ( 24, 13,***)
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
  DO YOU WANT TO TERMINATE THE SIMULATION
?

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
**********ENTERING 3D MODEL**********
          TIME  =  7.
     Q(13,3,5) = 264000.  .92278125 209.9316037736
     Q(13,4,5) = 264000.  314.207015625 294.1135458167
     Q(13,5,5) = 264000.  6.45946875 0.
  ITERATIONS =  1  ERROR  =  8.75986088399
  ITERATIONS =  2  ERROR  =  6.80568446154
  ITERATIONS =  3  ERROR  =  6.469330055341
  ITERATIONS =  4  ERROR  =  6.188702819223
  ITERATIONS =  5  ERROR  =  5.931170975534
  ITERATIONS =  6  ERROR  =  5.68764083811
  ITERATIONS =  7  ERROR  =  5.454995844704
  ITERATIONS =  8  ERROR  =  5.232001569795
  ITERATIONS =  9  ERROR  =  5.018076663081
  ITERATIONS =  10  ERROR  =  4.8128718392

 LEVEL =     RESIST(1)
< < < < < < < < < < < < < < < <
< < < < < < < < A A A A A A A <
< < < < < < < < A A A A A A A A
< < < < < < < < A A A A A A A A
< < < < < < < < A A A A A A A A

 LEVEL =     SUBCROP(2)
```

FIGURE 11A Lineprinter Output Used For Calibration Runs of Well 213

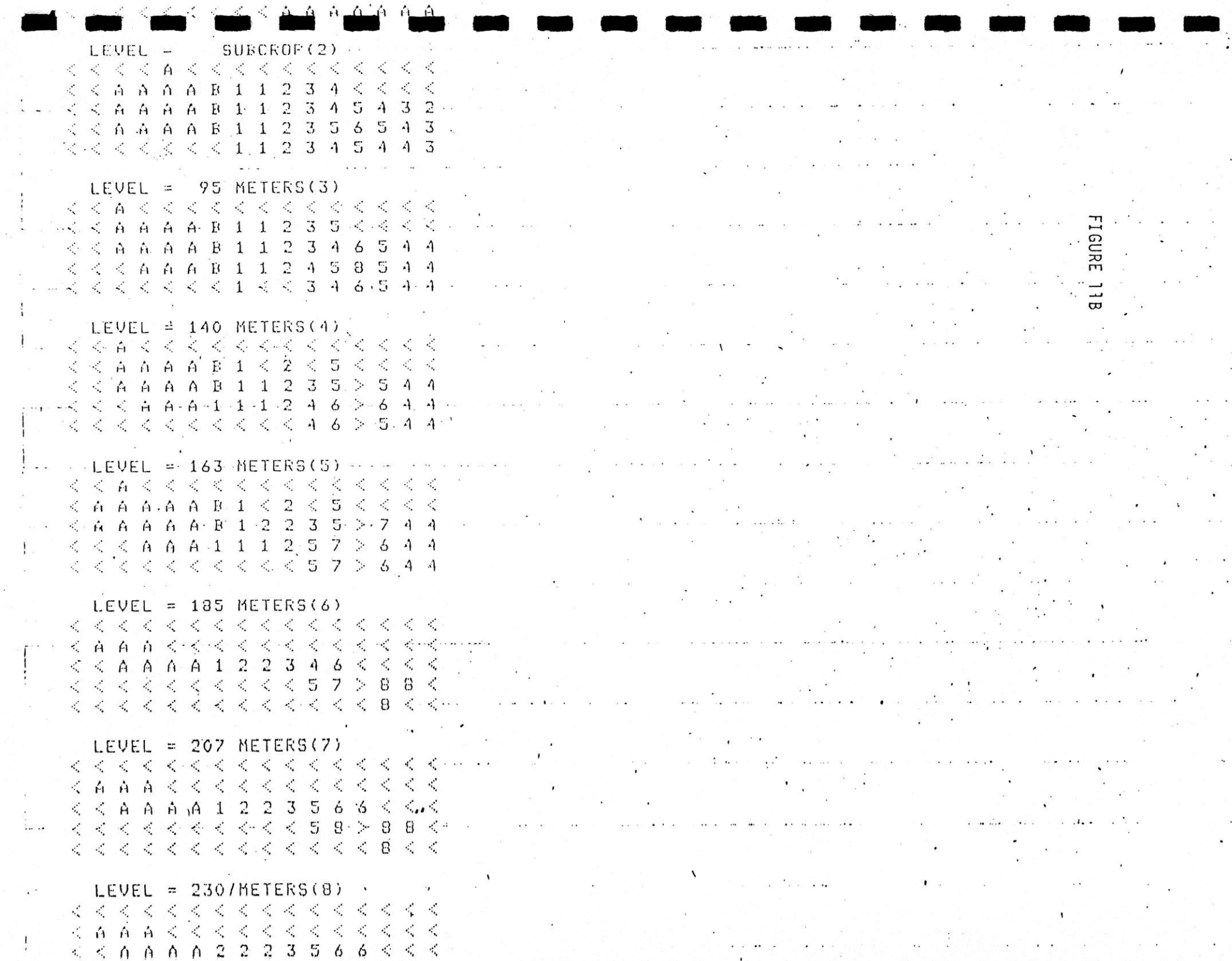

LEVEL = SUBCROP(2)
LEVEL = 95 METERS(3)
LEVEL = 140 METERS(4)
LEVEL = 163 METERS(5)
LEVEL = 185 METERS(6)
LEVEL = 207 METERS(7)
LEVEL = 230/METERS(8)

FIGURE 11B



FIGURE 11C

```
 VERTICAL WATER BALANCE FOR 3-D MODEL781047,1291501
781047,1291501 785006,4828177 786996,0457123 788864,8814147
-2570,503465255 -1576,09992055 -1269,370829594 -742,5386245689
-434,1387178208 -63,03766368977 0,
 WATER BALANCE FROM STORAGE FOR 3D MODELO 40,1930475625
72,00643682211 48,29866136097 32,29428848522 13,65508134519
15,95589011024 16,97612879606 21,90442646864 14,50928821252
13,32445313545 0,
**********ENTERING 2D MODEL**********
        ERROR = 14,00027359733
        ERROR = 1,17006987284
        ERROR = ,106448607001
```

```
NODE (13,3,3) ACTIVE FOR 223          H = -66.010499
NODE (13,4,3) ACTIVE FOR 223          H = -83.02111302655
NODE (13,5,3) ACTIVE FOR 223          H = -62.63091539907
OBS WELL = 223  OBSERVED =    -90.000 COMPUTED =     -70.731 AT ( 13,***,  3)
NODE (6,2,5) ACTIVE FOR 211           H = -3.460184705915
NODE (6,3,5) ACTIVE FOR 211           H = -3.575688674352
NODE (6,4,5) ACTIVE FOR 211           H = -3.74333254449
OBS WELL = 211  OBSERVED =     -3.500 COMPUTED =      -3.593 AT (  6,***,  5)
NODE (12,3,7) ACTIVE FOR 209          H = -63.9235628384
NODE (12,4,7) ACTIVE FOR 209          H = -80.89254684131
OBS WELL = 209  OBSERVED =   -125.000 COMPUTED =     -72.408 AT ( 12,***,  7)
NODE (10,2,5) ACTIVE FOR 228          H = -26.39758769644
NODE (10,3,5) ACTIVE FOR 228          H = -26.4157505842
NODE (10,4,5) ACTIVE FOR 228          H = -24.2103536227
OBS WELL = 228  OBSERVED =    -60.000 COMPUTED =     -25.675 AT ( 10,***,  5)
NODE (14,4,6) ACTIVE FOR 210          H = -82.30759927131
OBS WELL = 210  OBSERVED =   -120.000 COMPUTED =     -82.308 AT ( 14,***,  6)
NODE (5,3,8) ACTIVE FOR 218           H = -2.12118623882
OBS WELL = 218  OBSERVED =     -1.800 COMPUTED =      -2.121 AT (  5,***,  8)
NODE (13,3,4) ACTIVE FOR 217          H = -123.8101669509
NODE (13,4,4) ACTIVE FOR 217          H = -127.832680218
NODE (13,5,4) ACTIVE FOR 217          H = -118.4070118963
OBS WELL = 217  OBSERVED =   -120.000 COMPUTED =    -123.350 AT ( 13,***,  4)
NODE (10,2,3) ACTIVE FOR 229          H = -23.93120969377
NODE (10,3,3) ACTIVE FOR 229          H = -23.97772677381
NODE (10,4,3) ACTIVE FOR 229          H = -24.27152459527
OBS WELL = 229  OBSERVED =    -68.000 COMPUTED =     -24.060 AT ( 10,***,  3)
NODE (10,3,7) ACTIVE FOR 216          H = -31.79473577709
OBS WELL = 216  OBSERVED =    -27.000 COMPUTED =     -31.795 AT ( 10,***,  7)
NODE (10,3,6) ACTIVE FOR 226          H = -30.74896810667
OBS WELL = 226  OBSERVED =    -70.000 COMPUTED =     -30.749 AT ( 10,***,  6)
OBS WELL = WW4  OBSERVED =     -3.900 COMPUTED =      -3.993 AT ( 24, 13,***)
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
  DO YOU WANT TO TERMINATE THE SIMULATION
?
RETURN,DD2,DD3.
/TYPE,D3,D2,OUTP
STORAGE=6E-8,RECHARGE=650,ZIGOUT OK, AND SPLASM=.75
 16 5 12
  TIME =                 .100  LAYER =          1
  ROW =          1
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00

  ROW =          2
    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
    0.00    0.00    0.00    0.00    0.00    0.00
```

FIGURE 11D

```
ITERATIONS =  6   ERROR  =  121.764908711
ITERATIONS =  7   ERROR  =  114.989022469
ITERATIONS =  8   ERROR  =  107.787086795
ITERATIONS =  9   ERROR  =  101.489420401
ITERATIONS =  10  ERROR  =  95.3586424004
ITERATIONS =  11  ERROR  =  90.4448698094
ITERATIONS =  12  ERROR  =  85.5638600351
ITERATIONS =  13  ERROR  =  80.9586663241
ITERATIONS =  14  ERROR  =  76.2392136075
ITERATIONS =  15  ERROR  =  72.1710191325
ITERATIONS =  16  ERROR  =  68.3595927501
ITERATIONS =  17  ERROR  =  64.7647508851
ITERATIONS =  18  ERROR  =  61.3763916539
ITERATIONS =  19  ERROR  =  58.1809928694
ITERATIONS =  20  ERROR  =  55.1656488997
ITERATIONS =  21  ERROR  =  52.3185432390
ITERATIONS =  22  ERROR  =  49.6288973559
ITERATIONS =  23  ERROR  =  47.0868445634
ITERATIONS =  24  ERROR  =  44.6833106136
ITERATIONS =  25  ERROR  =  42.4099144004
ITERATIONS =  26  ERROR  =  40.2588877042
```

FIGURE 12A Example Lineprinter Output at the 22.7 Month Mining Plan Point No Permeability Control.

```
LEVEL =      RESIST(1)
< < < < < < < < < < < < < < < <
< < < < < < < < < < < < < < < <
< < < < < < < < < < < < < < < <
< < < < < < < < < < < < < < < <
< < < < < < < < < < < < < < < <

LEVEL =    SUBCROP(2)
< < < < < < < < < < < < < < < <
< < < < < < A A B B B 1 < < < <
< < < < < < A A B B B 1 1 1 B B
< < < < < < A B B B B 1 1 1 B B
< < < < < < < B B B B 1 1 1 B B

LEVEL =  95 METERS(3)
< < < < < < < < < < < < < < < <
< < < < < < A B B B B 1 < < < <
< < < < < < A B B B B 1 1 1 B B
< < < < < < A B B B 1 1 1 1 B B
< < < < < < < B B B 1 1 1 B B B

LEVEL = 140 METERS(4)
< < < < < < < < < < < < < < < <
< < < < < < A B < B < 1 < < < <
< < < < < < A B B B 1 1 2 1 1 B
< < < < < < B B B B 1 1 2 1 B B
< < < < < < < < < < 1 1 1 1 B B

LEVEL = 183 METERS(5)
< < < < < < < < < < < < < < < <
< < < < < < A B < B < 1 < < < <
< < < < < < A B B B 1 1 2 1 1 B
< < < < < < B B B B 1 1 2 1 1 B
< < < < < < < < < < 1 1 2 1 B B

LEVEL = 183 METERS(6)
< < < < < < < < < < < < < < < <
< < < < < < < < < < < < < < < <
< < < < < 3 D 1 1 1 1 < < < <
< < < < < < < 1 2 5 1 2 < < <
< < < < < < < < < < 1 < < < <
```

Letters and Numbers Indicated Magnitudes of Drawdowns. A = 25 and greater, B means greater than 50, 1 means greater than 100, 2 means greater than 200 feet, etc. The greater than sign means greater than 900 feet, the less than sign means less than 25 feet.

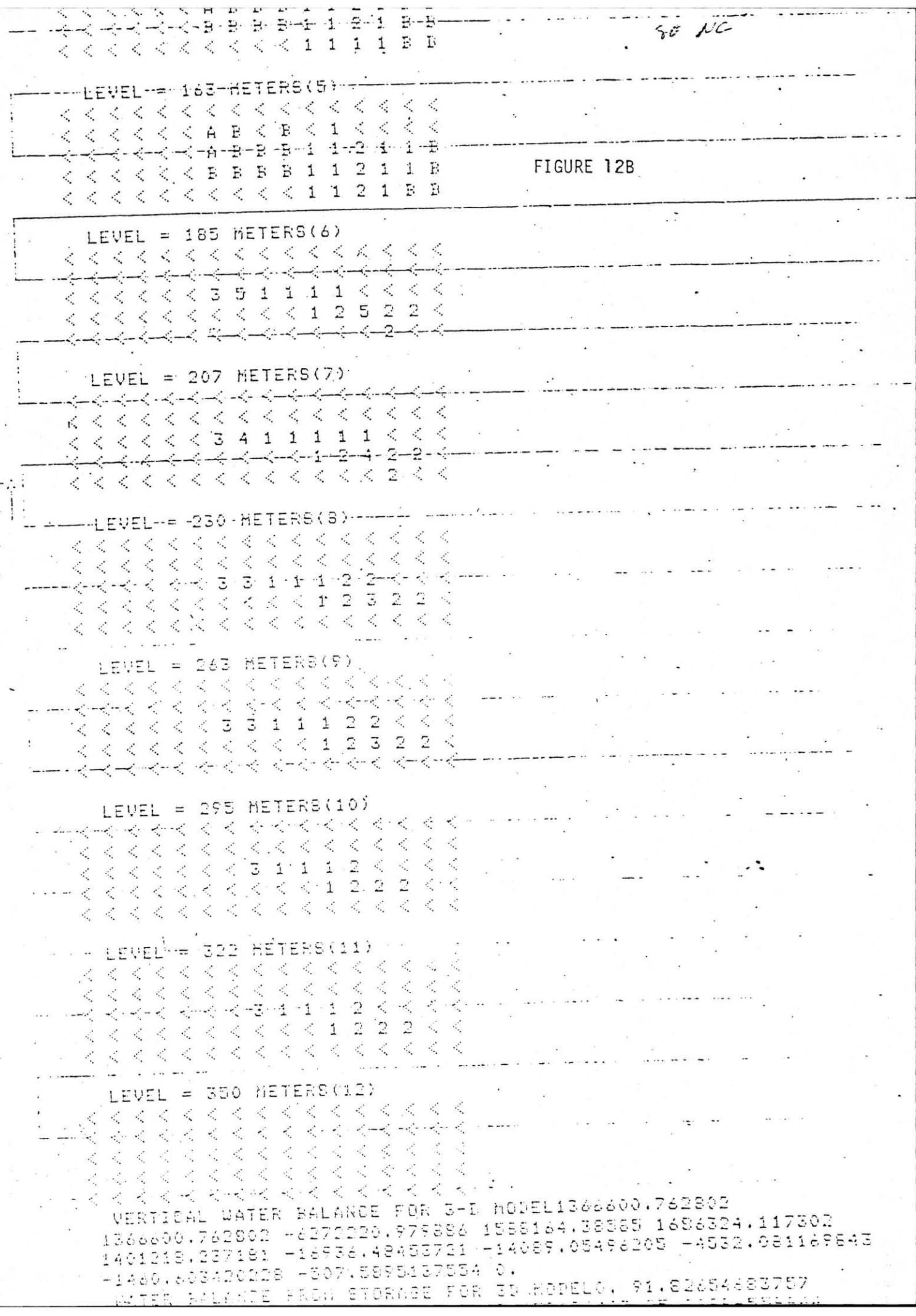


FIGURE 12B

VERTICAL WATER BALANCE FOR 3-D MODEL1366600.762802
1366600.762802 -6272220.979886 1558164.38385 1696324.117302
1401218.237181 -16936.484853721 -14085.05496205 -4532.081169643
-1460.603420228 -807.5895137534 0.
WATER BALANCE FROM STORAGE FOR 3D MODELS, 91.82654483757

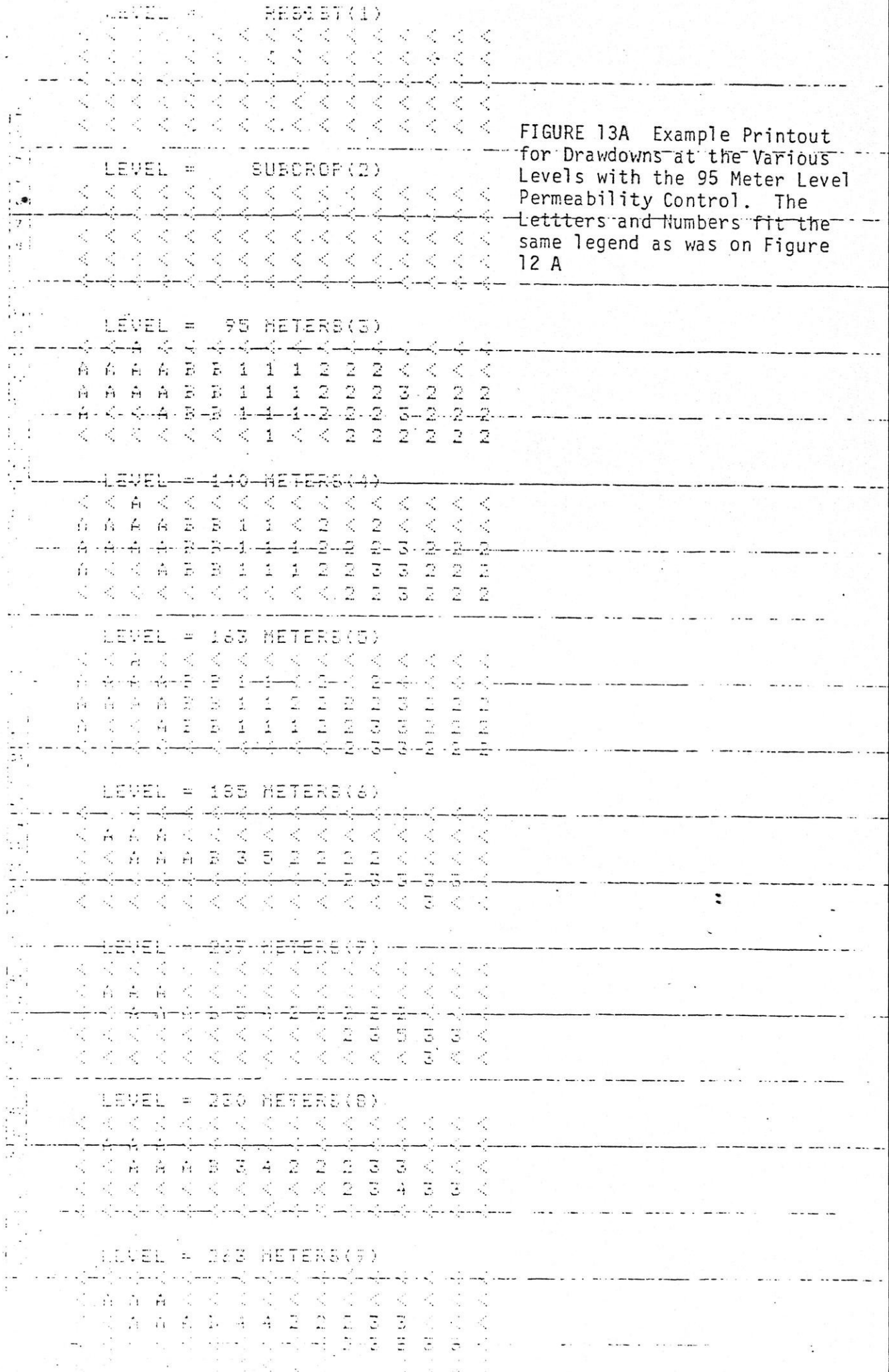
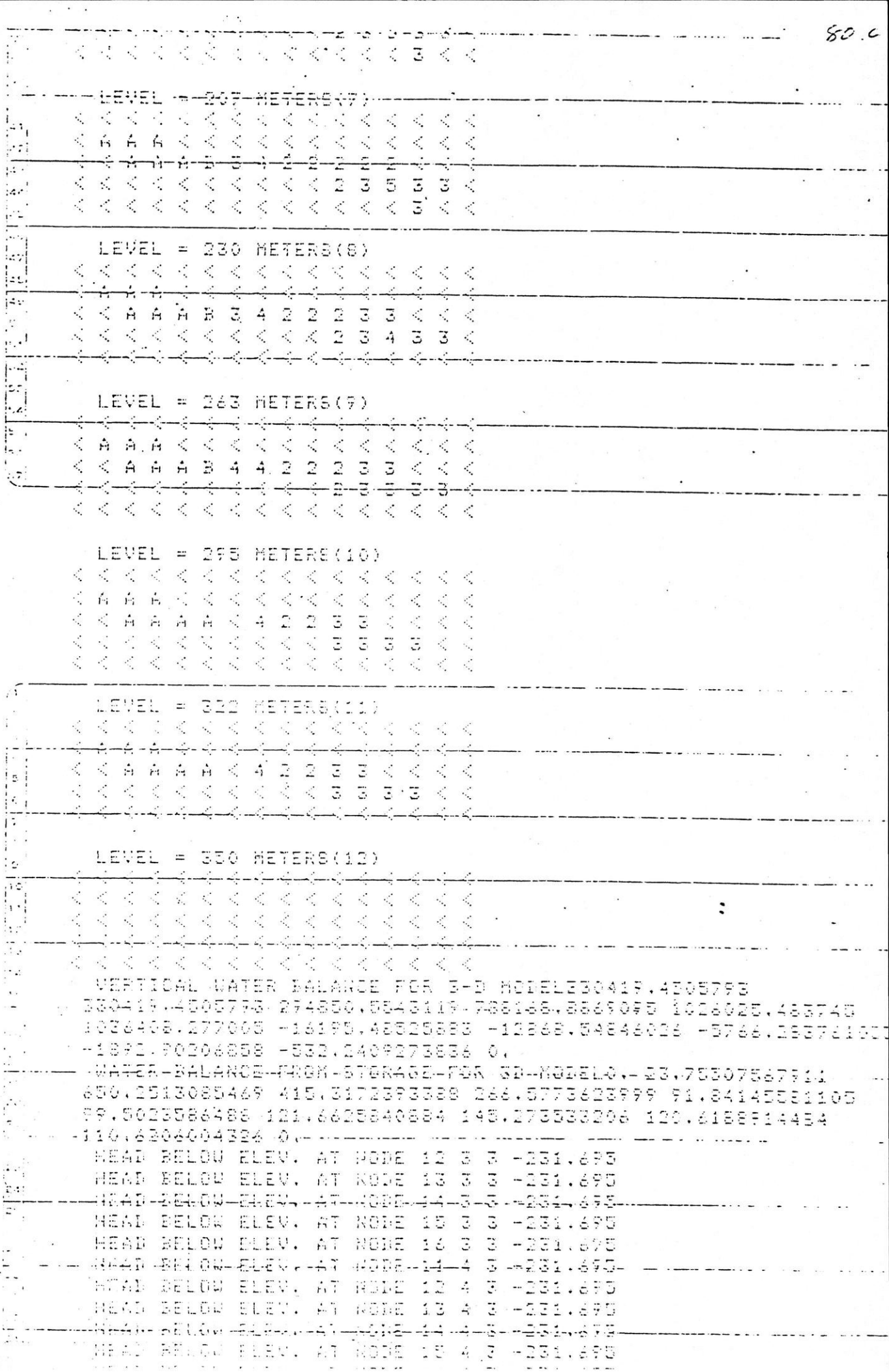


FIGURE 13A Example Printout for Drawdowns at the Various Levels with the 95 Meter Level Permeability Control. The Letters and Numbers fit the same legend as was on Figure 12 A



LEVEL = 207 METERS(7)

LEVEL = 230 METERS(8)

LEVEL = 263 METERS(9)

LEVEL = 295 METERS(10)

LEVEL = 322 METERS(11)

LEVEL = 330 METERS(12)

VERTICAL WATER BALANCE FOR 3-D MODEL(330419.4005793
330419.4005793 274850.0543119 -736168.8669095 1026025.483748
1036406.277005 -16195.48825883 -13868.04846026 -5768.283721007
-1892.90206858 -532.0409273636 0.
WATER-BALANCE-FROM-STORAGE-FOR 3D-MODEL= -23.75307567911
650.2513085469 415.3172393389 266.5773623999 91.84145231105
99.5023586488 121.6625840884 143.273533206 120.6188914484
-110.6304004326 0.

HEAD BELOW ELEV. AT NODE 12 3 3 -231.695
HEAD BELOW ELEV. AT NODE 13 3 3 -231.695
HEAD BELOW ELEV. AT NODE 14 3 3 -231.695
HEAD BELOW ELEV. AT NODE 15 3 3 -231.695
HEAD BELOW ELEV. AT NODE 16 3 3 -231.695
HEAD BELOW ELEV. AT NODE 11 4 3 -231.695
HEAD BELOW ELEV. AT NODE 12 4 3 -231.695
HEAD BELOW ELEV. AT NODE 13 4 3 -231.695
HEAD BELOW ELEV. AT NODE 14 4 3 -231.695
HEAD BELOW ELEV. AT NODE 15 4 3 -231.695

Appendix E

APPENDIX E

Summaries of Technical Meetings

	Item
Contract Delivery and work initiation (June 30, 1981).....	1
Dewatering Assumptions Associated with the Base Mine Plan (July 7, 1981).....	2
Review of Modelling Effort Prior to Calibration and Production Runs (October 8, 1981).....	3
Ground-water Concepts Status Meeting (November 5, 1981).....	4

ITEM 1

CAMP DRESSER & McKEE INC.
Environmental Sciences Division

July 6, 1981

MEETING SUMMARY
CONTRACT DELIVERY AND WORK INITIATION
MINE HYDROLOGY TEST DATA ANALYSIS
NO. 21572
MILWAUKEE, WISCONSIN
JUNE 30, 1981

The subject meeting was held on Tuesday, June 30, 1981, in CDM's Milwaukee office. Present at the meeting were:

Exxon Minerals Company	CDM
Ron Landers	Chuck Govin
Roger Rowe	Brendan Harley
	Tom Johnson
	Tom Prickett - Consultant

1. Mr. Rowe delivered two copies of the contract for Mine Hydrology Test Data Analysis for signature to Mr. Govin.

2. Mr. Johnson reviewed the status of calibration of the transducer system. Pending completion of all calibrations, it appeared likely that much of the transducer data could be validated.

3. Mr. Johnson reviewed the status of water level recovery in the pumping and observation wells as of June 25, 1981, and subsequent to the pumping test of hole 213. All levels appeared to be within one to two feet of the pre-test static levels.

4. Messrs. Landers and Rowe asked that with the last invoice for contract No. 21559, the pump test data collection program, CDM also transmit:

   - typed copy of Mr. Johnson's field notes
   - a brief but inclusive (approximately three pages) summary of the field program, and
   - a summary of the meeting of June 22, 1981, at which Exxon Minerals and CDM discussed the termination of the field program.

5. Mr. Rowe asked Mr. Govin for a unit price estimate for performing grain size analysis on selected overburden samples from the project. After reviewing the estimate, Mr. Rowe asked that it be included on a re-estimate of equipment and labor charges for contract 21559, to show additional monitoring efforts performed at Exxon Minerals request. Mr. Rowe asked that this re-estimate be forwarded to Ms. Schultz in Rhinelander during the week of July 6, 1981.

6. All participants in the meeting confirmed the target date of twelve weeks from CDM signing of contract 21572 for delivery of a draft report to Exxon Minerals. It was agreed that this was an extremely tight time frame, and that good communication should be maintained on the project regarding any items which might affect schedule.

7. Mr. Landers asked, and it was agreed that the draft report would contain a tabulation of raw data from the field program (time intervals as appropriate in CDM judgment) with corrections as applied and rationale for corrections. This information would be formatted as an appendix to the report.

8. Mr. Rowe brought the following documents and drawings for CDM use in the Test Data Analysis program:

   - Golder Associates - Geologic profiles
     - A-A (Drawing 050-1-80910)
     - B-B (Drawing 050-1-80909)
     - C-C (Drawing 050-1-80903)
   - Bedrock Contour Map (050-1-80905)
   - Superficial Geology Map (050-1-80902)
   - Boring Profile
     - A-A (050-1-81311)
     - B-B (050-1-81312)
     - C-C (050-1-81313)
     - D-D (050-1-81314)
     - E-E (050-1-81315)
     - F-F (050-1-81316)
     - G-G (050-1-81317)
   - Pumping Test Analysis - Report #4
   - Geotech Investigation - Vol. 2 & 3.
   - Dames & Moore - Investigation of feasbility of de-watering for open pit.

- o Dames & Moore - Results of Geologic investigations of proposed exploration ramp.
- o Exxon subcrop contour map.
- o Bore hole coordinate lists (3)
- o Staff gage reading (Sand Lake)
- o Miscellaneous boring logs
- o Longitudinal ore body section (C-GE-0979)
- o Cross sections (C-GE-0166 thru 0215)

9. Mr. Govin inquired about the base case for evaluation in the analysis. The base case being the mining plan assumptions which relate to de-watering with time. This base case could not be determined at the meeting. It was decided that Mr. Govin would meet in Rhinelander with Mr. Rowe and Exxon Minerals mining engineers to establish the base case assumptions to be used in modeling. The meeting was set to take place on Tuesday, July 7, 1981.

10. Mr. Govin was concerned that the base case assumptions be understood before a final commitment to schedule was made. He will discuss this with Mr. Landers on the latter's return to Houston on July 16, 1981.

11. It was also decided to meet in Rhinelander at the end of Task 2, Data Analysis, to status the project and confirm input assumptions to modeling.

12. In terms of the type of conclusions for the draft report, Mr. Landers indicated that water volumes could be expressed as conclusion information on as simple a relationship as time versus production rate to the mine. It was decided, though, that Mr. Govin should pursue this item with the mining engineers in the July 7 meeting.

13. The meeting was concluded with the first interim target date being the preparation of all data for analysis, and transmittal to Mr. Prickett within one month of contract signing.

CTG:as

ITEM 2

CDM
environmental engineers, scientists,
planners, & management consultants

CAMP DRESSER & McKEE INC.
Environmental Sciences Division

6132 West Fond du Lac Avenue
Milwaukee, Wisconsin 53218
414 461-9500

July 20, 1981

Mr. Roger Rowe
Geologist
Crandon Project
Exxon Minerals Company
P.O. Box 813
Rhinelander, Wisconsin 54501

Dear Mr. Rowe:

Mine Hydrology Test Data Analysis
Crandon Project
Contract No. 21572

During our meeting of June 29 regarding the subject work, it was decided that I should meet with you and Exxon mining engineers in Rhinelander on July 7 to establish the dewatering assumptions associated with the base mine plan that would be evaluated in our analysis. During that meeting Messrs. Jim Grimes, Dick Hite, you and I agreed on certain objectives for the predictive modelling work that we would do. I have now had a chance to discuss these objectives with Mr. Landers (telephone conversation of July 17, 1981) and he has agreed that they are appropriate to the evaluation as it has been scoped.

The objective of the predictive modelling as we have discussed it is to estimate the following:

1. Mine dewatering volume versus time (life of the mine) for pumping from the 350 meter level. Possible effect on this quantity of pumpage versus time if some level of dewatering could initially be accomplished at the 140 meter level in the subsurface excavations planned for that level.

2. Mine dewatering volume versus time for additional pumping from the 840 meter level to coincide with development of the mine between the 350 and 710 meter levels. Pumping would continue at the 350 meter level.

3. The probable effect on the glacial aquifer and local surface water systems of proposed dewatering operations as above during the life of the mine.

4. Additionally, the likely effect on pumpage volumes at the 350 and 840 meter levels (as above) if the overlying saturated glacial materials could be cut off as a source of recharge to the permeable ore body zones by 1) operating a shallow dewatering system in the glacial materials or 2) reducing the permeability of the contact between the overburden and ore body outcrop by cementing or grouting.

I have included this objective in our agreement for modelling work with Thomas A. Prickett & Associates.

Please verify by return letter the objective as stated herein.

I believe our meeting and efforts to establish this objective were time well spent at this stage of the evaluation. Thank you for your assistance.

Very truly yours,

CAMP DRESSER & McKEE INC.

Charles T. Govin, Jr.
Associate

CTG/jmw

xc: Messrs. Jim Grimes
Dick Hite
Ron Landers
Tom Prickett

ITEM 3

CAMP DRESSER & McKEE INC.
Environmental Planning and Sciences Division

October 12, 1981

MEETING SUMMARY
REVIEW OF MODELLING EFFORT
PRIOR TO CALIBRATION AND
PRODUCTION RUNS
MINE HYDROLOGY TEST DATA ANALYSIS
CONTRACT No. 21572
CHAMPAIGN, ILLINOIS
OCTOBER 8, 1981

The subject meeting was held on Thursday, October 8, 1981, in Tom Prickett's Champaign, Illinois office. Present at the meeting were:

Exxon Minerals Company	CDM
Jim Grimes	Chuck Govin
Dick Hite	Tom Johnson
Roger Rowe	
	T.A. Prickett & Associates
	Tom Prickett
	Mike Voorhes

1. Messrs. Johnson and Prickett presented and explained the combined outline sections of the summary report for mine hydrology test data analysis. It was agreed that combining the two outlines (copies attached) such that Mr. Prickett's outline would directly follow Mr. Johnson's would constitute a satisfactory report outline.

2. The schedule for the analysis work and report production was reviewed. It was confirmed that on or about October 19, 1981, Mr. Prickett would have completed elements of model calibration and would have results of production runs such that projected inflow to the mine could be quantified at that time.

3. It was agreed that when this information was available, it would still be appropriate to summarize same in a letter report to Exxon (in advance of the summary report).

4. In terms of deliverables from the modelling analysis (items to be included in the summary report) it was agreed that:

   - Three cases would be simulated. These are, 1) zero permeability control, and permeability control of 2) zero on the medium weathered materials and 50% on the strongly weathered materials, and 3) 50% on medium weathered materials and 100% on strongly weathered materials in the area of the ore body subcrop and overburden interface.

   - The following would be quantified on plots:

     - Total flow versus time into the mine for each of the above three cases,

     - Flow versus time at the 95, 140, 185, 230, and 285 meter levels of the proposed mine plan for each of the same three cases,

   - Quantification of the maximum change in head impact on the glacial aquifer for each of the three cases,

   - Cross-sectional plots showing pressure head elevations for each of the three cases, and

   - Plots of flow contours for each of the three cases at the subcrop, 95, 140 and 185 meter levels of the mine plan.

5. A draft of the summary report would be transmitted to Exxon after receipt and review of the letter report. This would take place in the late October/early November time frame.

6. Messrs. Grimes and Rowe asked that project financial status be reported as soon as possible with reference to anticipated costs which would exceed the present contract limits. Mr. Govin referenced previous monthly cost reporting and prepared and transmitted at the meeting a current estimate of projected costs including an exceedance of approximately $10,000. A copy of that transmittal is attached.

C. T. Govin

Copies to:
Messrs. Roger Rowe
Ron Landers / Charlie Downs

1214 - T. Johnson
#4 EP

1214-REP

10-8-81

EXXON MODELLING REPORT OUTLINE

Introduction and Background
- 1) Previous Studies
  - a) B & R Camp Dewatering Studies
  - b) Determination of high permeabilities during core drilling
  - c) Single well tests completed by Exxon
- 2) Need for detailed Quantitative Evaluation
  - a) Movement of water in the ore body
  - b) Connection between the ore body and glacial overburden
  - c) Water quantities and impacts

Purpose of Program
- 1) Obtain data for determining hydrogeologic parameters
- 2) Develop computer model utilizing these parameters

Design of Pump Test Program
- 1) Number of tests to be run
- 2) Observation well network
- 3) Types of tests to be run

General Pump Test Procedures
- 1) Set up of equipment
- 2) Preliminary tests
- 3) Main test
  - a) Pumping
  - b) Recovery

Equipment
- 1) Pumps
  - a) In well
  - b) Discharge to irrigation line
- 2) Flowmeters
- 3) Water level measurements
  - a) Transducer system
  - b) Continuous recorders
  - c) Manual measurements
- 4) Water quality sampling
  - a) Sampling procedures
  - b) Field tests
- 5) Miscellaneous data (Barometric Pressure, rainfall, etc.)

Pump Tests
- 1) 1000 Test
- 2) 211 Test
- 3) 217 Test

Data Reduction
1) Processing prior to computer entry
   a) Manual and transducer data
   b) Stevens data
2) Processing by computer
   a) Raw data input
   b) Corrections used
   c) Data output

Data Interpretation
1) Type curve analysis

T. A. Prickett

DRAFT OUTLINE OF THE REPORT ON THE GROUNDWATER MODEL FOR THE EXXON ORE BODY AT CRANDON, WISCONSIN

Abstract

Introduction

Data Input Base for the Model

- Maps supplied by Exxon
- Maps Produced by TAP & Associates
- Mining Plan
- Golder Associates Input on Glacial Deposits

The Design Phase of the Model

- Background on the Modeling method
- General Scheme for the Mine Flow Model and the Assumptions Used
  - Iterating between glacial and orebody model
  - Glacial aquifer and orebody grid intervals
  - Mining plan implementation and descretizing
  - Capability to predewater ore body
  - Permeability distribution dewcretizing
  - Calculations of mine inflow
  - Calculations of water balances
  - Discussions of model head distribution output form

The Calibration Phase of the Modeling Effort

- Procedures for the Calibration
- Pumping tests on the Ore Body
  - Well 213 test and estimates of flow parameters
  - Well 211 test and estimates of flow parameters
- Pumping Test on the Glacial Well WW 4
  - Estimates of flow parameters
- Discussion of connectivesness between ore body and glacial materials
  - Observed interactions during pumping tests
  - Implications oo the connection on the mine water flow rates
- Calibration of the Model
  - Comparisons with data from Test 213
  - Comparisons with data from Test 211
  - Comparisons with data from Test on WW 4

Discussion of Model Accuracy
Predictive Phase of the Mine Inflow Model
Mining Plan Used in the Analysis
Time Variability of Total Mine Inflow rates
Time Variability and Distribution of Flow at Mine Levels
Time Variability of Head Distributions in the Ore Body
Time Variability of Head Distributions in the Glacial Drift Aquifer
Summary and Conclusions
References
Appendix A - Documented Computer Code
Appendix B - Descretized Data Base for the Model Ore Body
Appendix C - Descretized Data Base for the Glacial Drift Aquifer
Appendix D - Brief Discussion of Model Operation Procedures

ITEM 4

SUMMARY

Ground-water Concepts Status Meeting
Rhinelander, Wisconsin
November 5, 1981

The subject meeting to discuss ground-water concepts associated with Exxon Minerals Company's Crandon Mine Project was initiated by Exxon and was conducted according to the agenda (Attachment A) prepared for the meeting.

Present at the meeting were:

Exxon Minerals	Golder Associates
Jim Grimes	Bill Brumund
Dick Hite	Ed Baker
Dick Herbst	
Charlie Downs	IEP, Inc (Normandeau)
Carlton Schroeder	Gary Hollands
Roger Rowe	
Joe Demart	
Howard Lewis	

Prickett Associates	Camp Dresser & McKee
Tom Prickett	Chuck Govin
Mike Voorhes	Tom Johnson

Discussion at the meeting was as follows:

1. Jim Grimes stated that an objective of the meeting was to ascertain whether or not there were discrepancies between various work elements. If so, were they serious, and what should be done.
2. Dick Hite put the meeting in the context of a "working meeting," from which all participants should walk away having learned something about their own and related work.

3. Bill Brumund described Golder's work related to:
   - Tailings disposal siting,
   - The Golder ground-water model for the glacial aquifer which looks at changes in the system that could be caused by leakage from tailings facilities,
   - Potentiometric surface map ("snap-shot") of September 1980
   - Assumptions or input for the model to include the "snap-shot", rock contours, a continuous zone of stratified drift, a constant thickness of stratified drift (this last assumption has since been undergoing modification)
4. Bill Brumund felt that from a data base standpoint, Golder had good information about:
   - the rock surface
   - the potentiometric surface in the glacial aquifer, and
   - stratified drift thickness
5. Ed Baker described the pump test conducted by Golder in the area of planned tailings desposal facility #41. He felt that the test established good values for permeability and storage in the upper till and coarse-grained stratified drift. He stated that the results of the work were applicable primarily to the Site 41 area, and that continuity of the glacial units and the nature of the subcrop were important variables outside the area.
6. Dick Hite asked Ed Baker about the variables of the model in the Site 41 area for the glacial aquifer. Ed indicated that:
   - permeability of the coarse-grained stratified drift
   - porosity
   - gradients, and
   - thickness of the stratified drift were all important variables in the model

7. In calibrating the glacial aquifer model, Ed Baker said that recharge boundaries were fixed, particularly with respect to Swamp Creek; and that a recharge rate of 12 inches per year into the coarse-grained stratified drift was used. Some discussion ensued without conclusion as to the advisability of using instead a 9 inch recharge rate.
8. Chuck Govin and Tom Johnson discussed CDM's pump test program in the area of the ore body as per the following:
   - one glacial and two ore body pump tests were completed
   - glacial test subject to some question due to location and construction of pumping well, and consistency of transducer recorded data. Good validity of results on two deep tests in ore body
   - connection between ore body and glacial zone evidenced in tests
   - area of drawdown impact is oblong and along strike of ore body
   - earth tide phenomonon in ore body zone discussed
   - area of response in the glacial materials to pumping the ore body and to precipitation noted to be significant in the area of well #216
   - over four hundred time/drawdown curves prepared and sent to Tom Prickett and Associates for analysis
9. Tom Prickett discussed his hydrologic analyses and interpretative modelling of the proposed mine plan and CDM pump test results. His findings included:
   - geologic x-sections and behavior of the pump test point to basal clay zone in glacial till as an important area between the glacial zone and ore body
   - time drawdown relationships indicate that recharge to the ore body is occurring
   - continued water level declines in the glacial zones were evidenced when pumping the ore body

10. Tom Prickett described his interpretive model as a two dimensional (top of a "T") in the glacial zone and a three dimensional (base of "T") in the ore body. Tom stated that he used the glacial parameters from the Golder modelling and that he constructed a grid scale interface between the Golder modelling and the mine plan grid.
11. Further findings from Tom Prickett's work were that:
    - the longer than actual distance between the recharge source and observation wells as evidenced in the pump test results indicated the presence of a resistive layer in the subsurface between the ore body and the glacial materials.
12. Tom Prickett discussed:
    - the difference between using the model to predict mine plan effects versus calibrating the model to pump test results.
    - model calibration could be improved if more time were available to get a closer match between mine plan activity simulation and pump test results.
13. Tom Prickett said that the results of the work to date indicated that whereas the ore body appeared to be more permeable in the east than in the western portion, the glacial material/ore body behavior showed less resistance to flow in the west than in the east.
14. Tom Prickett distributed and discussed a handout (Attachment B) which graphically shows time/drawdown relationships and preliminary results of the interpretive modelling.
15. Roger Rowe on several occasions augmented Tom Prickett's presentation with geologic and mine plan discussion.
16. Garry Hollands described Normandeau's and IEP, Inc's work on the wetlands project. He stated that:
    - his interpretation is that collapse stratigraphy is more evident than stratified drift in portions of the site, for example near Little Sand Lake

- stratigraphy beneath wetlands is poorly known as is the general nature of surface water/groundwater relationships at the site.

17. After lunch, a discussion of the morning's presentation ensued primarily directed toward identifying gaps or needs for effort in the data base and concepts associated with site hydrology. The following conclusions and recommendations were determined:
    - Another "snap-shot" is needed
    - Jim Wenner detailed need for determining range of mine inflow volumes under different scenarios of control in the context of water balance/water treatment activities.
    - Dick Hite described the July 1982 submittal date for an EIR as a gating item prior to which economic decisions had to be made regarding water treatment and flow mitigation costs.
    - Bill Brumund identified piezometric levels and all geotech information as well as an investigation of lake and wetlands hydrologic connections as items that had to be pulled together for the EIR
    - Chuck Govin and Dick Herbst amplified the concern about determinning surface and ground-water relationships particularly in the area of Little Sand Lake
    - Tom Prickett recommended that his model have the benefit of additional calibration and that input could be better detailed in the area of drainage characteristics of the ore body itself, exterior boundary elements, glacial aquifer thickness and recharge rate
    - Garry Hollands made a final recommendation that any surficial geologic map of the site should reflect the Simpson Mickelson work.

18. The meeting adjourned with Exxon personnel planning to discuss the work that should be done at an internal meeting the next day and asking Tom prickett to hold off on a finalization of his results until receiving further direction.

Attachment A

Agenda
Ground-water Concepts
Status Meeting
November 5, 1981

AGENDA

GROUND WATER CONCEPTS

STATUS MEETING

THURSDAY, NOVEMBER 5, 1981

OBJECTIVES

- Review the elements of ground water study programs to date.
- Develop a concensus statement of concepts, with appropriate qualification of data bases and computer modeling efforts.
- Discuss short-term field work and study effort required to assess the environmental impacts of proposed mining and waste disposal plans.

PROGRAM

8:00 - 8:15 a.m.

- Introduction of participants.

  Normandeau - Gary Hollands

  Golder Associates - Ed Baker

  Camp Dresser & McKee - Chuck Govin
  Tom Johnson

  Prickett Associates - Tom Prickett
  Mike Voorhes

  Exxon - Charles Downs (Houston)
  Jim Grimes
  Roger Rowe
  Dick Hite
  Jim Wennen
  Carlton Schroeder
  Joe DeMarte

8:15 - 8:30

- Review of meeting objectives.

8:30 - 9:30

- Golder Associates
  - -- Review of ground water related aspects of study program.
  - -- Discussion of high capacity well test results.
  - -- Development and calibration of the ground water model.
  - -- Model calibration and data sensitivities.
  - -- Localized drawdown effects on ground water system.
  - -- Conceptual understanding of the ground water system.

9:30 - 10:30

- Camp Dresser & McKee
  - -- Review of pump test program.
  - -- Review of data analysis and conceptual results, including qualifications.

10:30 - 11:30

- Prickett Associates
  - -- Review of given data base.
  - -- Model development and use techniques.
  - -- Model calibration with description of interface with Golder model.
  - -- Mining-related modeling results.
  - -- Concepts and use qualification.

11:30 - 12:00

- Normandeau
  - -- Review of study program and conceptual results.

12:00-12:30 p.m. Lunch

12:30 - 2:00	• Discussion of specific and related aspects of each study program, as required, to address identified Crandon Project team concerns.
2:00 - 3:00	• Discussion of the conceptual status of the related ground water studies -- what do we know and with what level of confidence?
3:00 - 5:00	• Discussion of future use of current information, concepts, and modeling tools for project design, planning, and permitting, including additional field work and study effort.

RGH:vam
10-30-81

Attachment B

Hydrologic Analysis - Some Interpretive Graphics

Pump Testing of the Crandon Ore Body

(Same as Attachment to Prickett Letter Report)

APPENDIX F

APPENDIX F

Results of Water Quality Analyses of Samples Collected from Production Wells WW4, Well 211, and Well 213 at the Start, Mid-way and Shutdown of Pumping Tests.

EXXON MINERALS COMPANY

RECEIVED
JUN 1 1981

P. O. Box 813, RHINELANDER, WISCONSIN 54501

CRANDON PROJECT

May 29, 1981

Laboratory Analyses Results
Water Sample WW4

Mr. R. A. Landers
Room 1127B

Enclosed for your information and record are the Aqualab water analyses results on samples from WW4. By quick review, I don't notice anything inordinate.

I will forward the data from hole #211 upon receipt from Aqualab.

L. N. Blair
Senior Environmental Engineer

/vam

Enclosure

xc: J. A. DeMarte
R. A. Ford

aqualab inc.
r[illegible] 20 at valley lane
s[illegible]eamwood, illinois 60103
3[illegible]2/289-3100

22 May 1981

analytical report

sample no. 91092

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

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MAY [illegible] 1981
EXXON MINERALS
BRANDON PROJECT

SAMPLE DESCRIPTION: WW4 Start 70 hour test

Filtered on-site

date taken: 4/29/81

date received: 5/3/81

Alkalinity (as $CaCO_3$)	152.	mg/L	Cadmium	<0.001	mg/L
Conductivity	260.	umhos	Calcium	37.2	mg/L
pH	7.19	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	151.	mg/L	Copper	<0.001	mg/L
Solids, tot. diss.	132.	mg/L	Iron, tot.	7.9	mg/L
Chloride	2.	mg/L	Iron, diss.	1.33	mg/L
Fluoride	0.16	mg/L	Lead	<0.01	mg/L
Nitrogen, nitrate	<0.01	mg/L	Magnesium	14.0	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.382	mg/L
Phosphorus	0.02	mg/L	Mercury	<0.0001	mg/L
Sulfate	8.	mg/L	Nickel	<0.01	mg/L
Selenium	<0.001	mg/L	Potassium	1.20	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	<0.001	mg/L	Sodium	2.02	mg/L
			Zinc	0.020	mg/L

Robert N. Bucaro

Robert N. Bucaro

aqualab inc.
r(20 at valley lane
reamwood, illinois 60103
2·289-3100

22 May 1981

nalytical report

sample no. 91093

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

RECEIVED
MAY 2 8 1981
EXXON MINERALS
GRANDON PROJE-

SAMPLE DESCRIPTION: WW4 30 Hr. Period

Filtered on-site

date taken: 4/30/81

date received: 5/3/81

Alkalinity (as $CaCO_3$)	162.	mg/L	Cadmium	<0.001	mg/L
Conductivity	260.	umhos	Calcium	39.0	mg/L
pH	7.28	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	157.	mg/L	Copper	<0.001	mg/L
Solids, tot. diss.	154.	mg/L	Iron, tot.	7.2	mg/L
Chloride	6.	mg/L	Iron, diss.	2.5	mg/L
Fluoride	<0.01	mg/L	Lead	<0.01	mg/L
Nitrogen, nitrate	0.10	mg/L	Magnesium	14.5	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.310	mg/L
Phosphorus	0.02	mg/L	Mercury	<0.0001	mg/L
Sulfate	14.	mg/L	Nickel	<0.01	mg/L
Selenium	<0.001	mg/L	Potassium	1.18	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	<0.001	mg/L	Sodium	1.95	mg/L
			Zinc	0.009	mg/L

Robert N. Bucaro

Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
eamwood, illinois 60103
2,289-3100

22 May 1981

analytical report

sample no. 91094-94A

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

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MAY 28 1981
EXXON
CPA DD

SAMPLE DESCRIPTION: WW4 prior to shutdown

date taken: 5/2/81 date received: 5/3/81

	FILTERED	UNFILTERED
pH, units	7.48	---
Alkalinity as $CaCO_3$, mg/L	---	136.
Conductivity, umhos	260.	---
Color, APHA	50.	---
Hardness, tot., mg/L	---	163.
Solids, tot. diss., mg/L	183.	---
Solids, tot. susp., mg/L	---	46.
Turbidity, NTU	8.0	---
Phenol, mg/L	<0.001	---
Silica	14.9	---
MBAS, mg/L	0.03	---
Boron, mg/L	<0.01	---
Carbonate, mg/L	<1.	---
Chloride, mg/L	4.	---
Cyanide, mg/L	<0.001	---
Phosphorus, tot., mg/L	---	0.05
Sulfate, mg/L	7.	---
Uranium, tot., mg/L	---	<1.
Zinc, mg/L	0.006	---
Sodium, mg/L	2.08	---
Fluoride, mg/L	0.02	---
Bicarbonate, mg/L	162.	---

CORRECTED = 0.18

Continued...

qualab inc.
rt 20 at valley lane
reamwood, illinois 60103
12/289-3100

22 May 1981

nalytical report

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

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EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: WW4 prior to shutdown

date taken: 5/2/81 date received: 5/3/81

	FILTERED	UNFILTERED
Molybdenum, mg/L	<0.01	---
Nitrogen, nitrate, mg/L	<0.01	---
Nitrogen, nitrite, mg/L	<0.01	---
Selenium, mg/L	<0.001	---
Vanadium, mg/L	<0.01	---
Aluminum, mg/L	<0.01	---
Arsenic, mg/L	<0.001	---
Barium, mg/L	0.04	---
Cadmium, mg/L	<0.001	---
Calcium, mg/L	37.4	---
Chromium, mg/L	<0.001	---
Cobalt, mg/L	<0.01	---
Copper, mg/L	<0.001	---
Iron, mg/L	0.60	6.8
Lead, mg/L	<0.01	---
Magnesium, mg/L	14.6	---
Manganese, mg/L	0.295	---
Mercury, mg/L	<0.0001	---
Nickel, mg/L	<0.01	---
Potassium, mg/L	1.16	---
Silver, mg/L	<0.001	---

Robert N. Bucaro
Robert N. Bucaro

Radiation results to follow

qualab inc.
rt 20 at valley lane
reamwood, illinois 60103
12/289-3100

22 May 1981

nalytical report

sample no. 91095-95A

RECEIVED
MAY 28 1981
EXXON MINERALS
BRANDON PROJECT

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

SAMPLE DESCRIPTION: WW4 prior to shutdown

ate taken: 5/2/81 date received: 5/3/81

	FILTERED	UNFILTERED
pH, units	7.24	---
Alkalinity as $CaCO_3$, mg/L	---	176.
Conductivity, umhos	265.	---
Color, APHA	80.	---
Hardness, tot., mg/L	---	156.
Solids, tot. diss., mg/L	173.	---
Solids, tot. susp., mg/L	---	44.
Turbidity, NTU	13.0	---
Phenol, mg/L	<0.001	---
Silica, mg/L	14.8	---
MBAS, mg/L	0.04	---
Bicarbonate, mg/L	140.	---
Boron, mg/L	0.02	---
Carbonate, mg/L	<1.	---
Chloride, mg/L	2.	---
Cyanide, mg/L	<0.001	---
Phosphorus, tot., mg/L	---	0.09
Sulfate, mg/L	10.	---
Uranium, tot., mg/L	---	<1.
Zinc, mg/L	0.003	---
Sodium, mg/L	2.03	---

CORR 0.2

Continued.....

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n 20 at valley lane
reamwood, illinois 60103
12/289-3100

22 May 1981

nalytical report sample no. 91095-95A page 2

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MAY 28 1981
EXXON MINERALS
BRANDON PROJECT

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

SAMPLE DESCRIPTION: WW4 prior to shutdown

date taken: 5/2/81 date received: 5/3/81

	FILTERED	UNFILTERED
Fluoride, mg/L	<0.01	---
Molybdenum, mg/L	<0.01	---
Nitrogen, nitrate, mg/L	<0.01	---
Nitrogen, nitrite, mg/L	<0.01	---
Selenium, mg/L	<0.001	---
Vanadium, mg/L	<0.1	---
Aluminum, mg/L	<0.01	---
Arsenic, mg/L	<0.001	---
Barium, mg/L	0.04	---
Cadmium, mg/L	<0.001	---
Calcium, mg/L	39.1	---
Chromium, mg/L	<0.001	---
Cobalt, mg/L	<0.01	---
Copper, mg/L	<0.001	---
Iron, mg/L	0.59	6.9
Lead, mg/L	<0.01	---
Magnesium, mg/L	14.3	---
Manganese, mg/L	0.290	---
Mercury, mg/L	<0.0001	---
Nickel, mg/L	<0.01	---
Potassium, mg/L	1.15	---
Silver, mg/L	<0.001	---

Radiation results to follow

Robert N. Bucaro
Robert N. Bucaro

RE'd 7/27/81 BHL

MEMORANDUM

TO: R. A. Landers

FROM: L. N. Blair

SUBJ: Radiation Analyses Results Water Sample WW-4

DATE: July 23, 1981

Enclosed are the Aqualab radiation analyses results on the water samples taken from WW-4 prior to shutdown. The results from holes #211 and #213 will follow.

Note the reporting change from total phosphorus to total phosphate and make the appropriate correction on the data sent to you on May 29, 1981.

/vam

enclosures

xc - with enclosures:

R. L. Russell
J. A. DeMarte
J. E. Grimes

qualab inc.
rt 20 at valley lane
reamwood, illinois 60103
2/289-3100

21 July 1981

halytical report

sample no. 91094-91095

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander WI 54501

RECEIVED
JUL 23 1981
EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: WW4 prior to shutdown

date taken: 5/2/81 date received: 5/3/81

	91094	91095
Gross Alpha, pCi/l	<1.1	<1.1
Gross Beta, pCi/l	6.9 ± 1.8	7.2 ± 1.8
Radium 226, pCi/l	0.12 ± 0.03	0.20 ± 0.03
Radium 228, pCi/l	3.1 ± 1.3	1.9 ± 1.9

The error given is the probable counting error at the 95% confidence level. Less than (<) values are based on 3 sigma counting error for background sample..

Results of samples for WW4 prior to shutdown were reported on 22 May 1981. Results for phosphorus, total, were given for unfiltered sample. These values should have been reported as phosphate, total. A factor of 3.067 needs to be applied to express the reported phosphorus results as phosphate. Please refer to the following:

	Reported Phosphorus, tot. mg/L	Corrected Phosphate, tot. mg/L
91094A	0.06	0.18
91095A	0.09	0.28

Robert N. Bucaro

Robert N. Bucaro

EXXON MINERALS COMPANY

P. O. Box 813, RHINELANDER, WISCONSIN 54501

RECEIVED
JUL 6 1981
MINERALS ENGINEERING
SUPPORT DIVISION

CRANDON PROJECT

June 29, 1981

Laboratory Analyses Results
Water Samples Hole #211

Mr. R. A. Landers
Room 522

Enclosed are the Aqualab water analyses results on samples of pumping test water from hole #211. You will note that the quality of this water is pretty good, but is not as good as that produced by water well No. 4. As might be expected, the heavy metal concentrations are higher than those detected in the glacial aquifer. The concentrations of selenium, arsenic, and cadmium are over the primary drinking water standard.

I will forward the data from hole #213 upon receipt from Aqualab.

L. N. Blair
Sr. Environmental Engineer

/vam

Enclosure

xc: J. A. DeMarte (w/encl)
R. A. Ford (")

aqualab inc.
r 20 at valley lane
reamwood, illinois 60103
12/289-3100

26 June 1981

nalytical report

sample no. 92028

RECEIVED
JUN 29 1981
EXXON MINERALS
CRANDON PROJECT

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

#211

SAMPLE DESCRIPTION: Start Up

Filtered on-site

date taken: 5/20/81 1545

date received: 5/21/81 1500

Alkalinity (as $CaCO_3$)	128.	mg/L	Cadmium	0.112	mg/L
Conductivity	260.	umhos	Calcium	34.6	mg/L
pH	7.08	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	155.	mg/L	Copper	0.317	mg/L
Solids, tot. diss.	144.	mg/L	Iron, tot.	0.86	mg/L
Chloride	2.	mg/L	Iron, diss.	0.63	mg/L
Fluoride	0.41	mg/L	Lead	0.04	mg/L
Nitrogen, nitrate	<0.01	mg/L	Magnesium	16.7	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.048	mg/L
Phoshporus	0.19	mg/L	Mercury	0.0016	mg/L
Sulfate	35.	mg/L	Nickel	<0.01	mg/L
Selenium	0.09	mg/L	Potassium	1.27	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	0.40	mg/L	Sodium	4.21	mg/L
			Zinc	1.23	mg/L

Robert N. Bucaro

Robert N. Bucaro

aqualab inc.
120 at valley lane
Streamwood, illinois 60103
312/289-3100

26 June 1981

analytical report

sample no. 92111

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

RECEIVED
JUN 29 1981
EXXON MINERALS
CRANDON PROJECT

#211

SAMPLE DESCRIPTION: Midway

Filtered on-site

date taken: 5/24/81 1315 date received: 5/25/81 1450

Alkalinity (as $CaCO_3$)	126.	mg/L	Cadmium	0.052	mg/L
Conductivity	215.	umhos	Calcium	32.7	mg/L
pH	7.01	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	148.	mg/L	Copper	0.205	mg/L
Solids, tot. diss.	155.	mg/L	Iron, tot.	0.82	mg/L
Chloride	2.	mg/L	Iron, diss.	0.67	mg/L
Fluoride	0.54	mg/L	Lead	0.05	mg/L
Nitrogen, nitrate	0.54	mg/L	Magnesium	16.1	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.047	mg/L
Phoshporus	0.02	mg/L	Mercury	0.0005	mg/L
Sulfate	17.	mg/L	Nickel	<0.01	mg/L
Selenium	0.016	mg/L	Potassium	1.17	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	0.72	mg/L	Sodium	4.10	mg/L
			Zinc	0.491	mg/L

Robert N. Bucaro

Robert N. Bucaro

quatab inc.
rt 20 at valley lane
reamwood, illinois 60103
2/289-3100

26 June 1981

halytical report

sample no. 92377-77A

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

RECEIVED
JUN 29 1981
EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: Well #211 - shutdown

ate taken: 5/27/81 date received: 5/28/81

	FILTERED	UNFILTERED
pH, Units	7.09	---
Alkalinity as $CaCO_3$, mg/L	---	138.
Conductivity, umhos	210.	---
Color, APHA	20.	---
Hardness, tot., mg/L	---	146.
Solids, tot. diss., mg/L	162.	---
Solids, tot. susp., mg/L	---	12.
Turbidity, NTU	2.0	---
Phenol, mg/L	<0.001	---
Silica, mg/L	8.20	---
MBAS, mg/L	0.08	---
Bicarbonate, mg/L	134.	---
Boron, mg/L	0.09	---
Carbonate, mg/L	<1.	---
Chloride, mg/L	12.	---
Cyanide, mg/L	<0.001	---
Phosphate, tot., mg/L	---	0.28
Sulfate, mg/L	15.	---
Uranium, tot., mg/L	---	<1.
Zinc, mg/L	0.443	---
Sodium, mg/L	4.72	---

Continued.....

aqualab inc.
rt 20 at valley lane
treamwood, illinois 60103
12/289-3100

26 June 1981

nalytical report

RECEIVED
JUN 29 1981
EXXON CO.

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

SAMPLE DESCRIPTION: Well #211 - shutdown

date taken: 5/27/81 date received: 5/28/81

	FILTERED	UNFILTERED
Fluoride, mg/L	0.48	---
Molybdenum, mg/L	<0.01	---
Nitrogen, nitrate, mg/L	0.45	---
Nitrogen, nitrite, mg/L	<0.01	---
Selenium, mg/L	0.018	---
Vanadium, mg/L	<0.1	---
Aluminum, mg/L	<0.01	---
Arsenic, mg/L	0.51	---
Barium, mg/L	<0.01	---
Cadmium, mg/L	0.039	---
Calcium, mg/L	27.5	---
Chromium, mg/L	<0.001	---
Cobalt, mg/L	0.06	---
Copper, mg/L	0.202	---
Iron, mg/L	0.71	0.82
Lead, mg/L	0.04	---
Magnesium, mg/L	16.0	---
Manganese, mg/L	0.045	---
Mercury, mg/L	<0.0001	---
Nickel, mg/L	<0.01	---
Potassium, mg/L	1.29	---
Silver, mg/L	<0.001	---

Robert N. Bucaro
Robert N. Bucaro

Radiation results to follow

aqualab inc.
n 20 at valley lane
reamwood, illinois 60103
2/289-3100

26 June 1981

nalytical report

sample no. 92378-78A

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

RECEIVED
JUN 29 1981
EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: Well #211 - shutdown

date taken: 5/27/81 date received: 5/28/81

	FILTERED	UNFILTERED
pH, units	6.83	---
Alkalinity as $CaCO_3$, mg/L	---	140.
Conductivity, umhos	215.	---
Color, APHA	15.	---
Hardness, tot., mg/L	---	140.
Solids, tot. diss., mg/L	159.	---
Solids, tot. susp., mg/L	---	12.
Turbidity, NTU	1.3	---
Phenol, mg/L	<0.001	---
Silica, mg/L	8.37	---
MBAS, mg/L	0.06	---
bicarbonate, mg/L	128.	---
Boron, mg/L	0.09	---
Carbonate, mg/L	<1.	---
Chloride, mg/L	6.	---
Cyanide, mg/L	<0.001	---
Phosphate, tot., mg/L	---	0.25
Sulfate, mg/L	12.	---
Uranium, tot., mg/L	---	<1.
Zinc, mg/L	0.441	---
Sodium, mg/L	4.71	---

aqualab inc.
rt 20 at valley lane
steamwood, illinois 60103
312/289-3100

26 June 1981

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sample no. 92378-78A page 2

• Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

RECEIVED
JUN 29 1981
EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: Well #211 - shutdown

date taken: 5/27/81 date received: 5/28/81

	FILTERED	UNFILTERED
Fluoride, mg/L	0.37	---
Molybdenum, mg/L	<0.01	---
Nitrogen, nitrate, mg/L	0.57	---
Nitrogen, nitrite, mg/L	<0.01	---
Selenium, mg/L	0.016	---
Vanadium, mg/L	<0.1	---
Aluminum, mg/L	<0.01	---
Arsenic, mg/L	0.51	---
Barium, mg/L	<0.01	---
Cadmium, mg/L	0.042	---
Calcium, mg/L	28.1	---
Chromium, mg/L	<0.001	---
cobalt, mg/L	0.06	---
Copper, mg/L	0.197	---
Iron, mg/L	0.71	0.80
Lead, mg/L	0.03	---
Magnesium, mg/L	15.9	---
Manganese, mg/L	0.045	---
Mercury, mg/L	<0.0001	---
Nickel, mg/L	<0.01	---
Potassium, mg/L	1.26	---
Silver, mg/L	<0.001	---

Radiation results to follow

Robert N. Bucaro.
Robert N. Bucaro

RECEIVED
JUL 14 1981
MINERALS ENGINEERING
SUPPORT DIVISION

July 10, 1981

MEMORANDUM

TO: R. A. Landers

FROM: L. N. Blair

SUBJ: Laboratory Analyses Results Water Samples Hole #213

Enclosed are the Aqualab water analyses results on samples of pumping test water from hole #213. The quality of this water appears to be considerably better than that from hole #211 and there appears to be nothing in excess of the primary or secondary drinking water standards.

I will forward the results of the radiation tests upon receipt.

/vam

Enclosures

xc: J. A. DeMarte (w/enc.)
J. E. Grimes (")

aqualab inc.
rt 20 at valley lane
s[illegible]eamwood, illinois 60103
3[illegible]2-289-3100

30 June 1981

analytical report

sample no. 93658-58A

RECEIVED
JUL - 9 1981
EXXON MINERALS
CRANDON PROJECT

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander WI 54501

SAMPLE DESCRIPTION: Well #213 Shut Down

date taken: 6/18/81 date received: 6/19/81

	FILTERED	UNFILTERED
pH, units	7.41	--
Alkalinity ($CaCO_3$), mg/L	--	156.
Conductivity, umhos	280.	--
Color, APHA	<1.	--
Hardness, tot., mg/L	--	130.
Solids, tot. diss., mg/L	215.	--
Solids, tot. susp., mg/L	--	4.
Turbidity, NTU	1.8	--
Phenol, mg/L	0.004	--
Silica, mg/L	9.53	--
M.B.A.S., mg/L	0.02	--
Bicarbonate, mg/L	144.	--
Boron, mg/L	0.07	--
Carbonate, mg/L	<1.	--
Chloride, mg/L	6.	--
Cyanide, mg/L	0.004	--
Phosphate, tot., mg/L	--	0.15
Sulfate, mg/L	9.	--
Uranium, tot., mg/L	--	<1.
Fluoride, mg/L	0.39	--
Molybdenum, mg/L	<0.01	--

Continued....

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rt 20 at valley lane
reamwood, illinois 60103
12 289-3100

30 June 1981

nalytical report

sample no. 93658-58A

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EXXON MINERALS
CRANDON PROJECT

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander WI 54501

SAMPLE DESCRIPTION: Well #213 Shut Down

date taken: 6/18/81 date received: 6/19/81

	FILTERED	UNFILTERED
Nitrogen, Nitrate, mg/L	2.43	--
Nitrogen, nitrite, mg/L	<0.01	--
Zinc, mg/L	0.181	--
Sodium, mg/L	4.20	--
Selenium, mg/L	<0.001	--
Vanadium, mg/L	<0.1	--
Aluminum, mg/L	<0.01	--
Arsenic, mg/L	0.024	--
Barium, mg/L	0.03	--
Cadmium, mg/L	<0.001	--
Calcium, mg/L	26.6	--
Chromium, mg/L	<0.001	--
Cobalt, mg/L	<0.01	--
Copper, mg/L	0.002	--
Iron, mg/L	<0.01	0.15
Lead, mg/L	<0.01	--
Magnesium, mg/L	15.0	--
Manganese, mg/L	0.020	--
Mercury, mg/L	<0.0001	--
Nickel, mg/L	<0.01	--
Potassium, mg/L	1.51	--
Silver, mg/L	<0.001	--

Robert N. Bucaro
Robert N. Bucaro

Radiation Results To Follow

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eamwood, illinois 60103
12-289-3100

30 June 1981

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sample no. 93185

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EXXON MINERALS
CRANDON PROJECT

•Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

#213

SAMPLE DESCRIPTION: Start Up Crandon Project Filtered on-site

date taken: 6/11/81 date received: 6/12/81

Alkalinity (as $CaCO_3$)	156.	mg/L	Cadmium	<0.001	mg/L
Conductivity	310.	umhos	Calcium	23.0	mg/L
pH	7.02	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	127.	mg/L	Copper	0.085	mg/L
Solids, tot. diss.	209.	mg/L	Iron, tot.	0.07	mg/L
Chloride	4.	mg/L	Iron, diss.	0.04	mg/L
Fluoride	0.11	mg/L	Lead	0.03	mg/L
Nitrogen, nitrate	2.31	mg/L	Magnesium	17.0	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.016	mg/L
Phoshporus	0.01	mg/L	Mercury	<0.0001	mg/L
Sulfate	16.	mg/L	Nickel	<0.01	mg/L
Selenium	<0.001	mg/L	Potassium	0.930	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	0.019	mg/L	Sodium	2.53	mg/L
			Zinc	2.04	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
Steamwood, Illinois 60103
312 289-3100

30 June 1981

analytical report sample no. 93473

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander, WI 54501

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JUL = 9 1981
EXXON MINERALS
CRANDON PROJECT

#213

SAMPLE DESCRIPTION: Mid Crandon Project Filtered on-site

date taken: 6/11/81 date received: 6/12/81

Alkalinity (as $CaCO_3$)	166.	mg/L	Cadmium	<0.001	mg/L
Conductivity	305.	umhos	Calcium	26.8	mg/L
pH	7.40	units	Chromium	<0.001	mg/L
Hardness (as $CaCO_3$)	129.	mg/L	Copper	0.002	mg/L
Solids, tot. diss.	230.	mg/L	Iron, tot.	0.07	mg/L
Chloride	2.	mg/L	Iron, diss.	0.06	mg/L
Fluoride	0.31	mg/L	Lead	<0.01	mg/L
Nitrogen, nitrate	7.86	mg/L	Magnesium	15.2	mg/L
Nitrogen, nitrite	<0.01	mg/L	Manganese	0.021	mg/L
Phoshporus	<0.01	mg/L	Mercury	<0.0001	mg/L
Sulfate	8.	mg/L	Nickel	<0.01	mg/L
Selenium	<0.001	mg/L	Potassium	1.53	mg/L
Aluminum	<0.01	mg/L	Silver	<0.001	mg/L
Arsenic	0.021	mg/L	Sodium	4.22	mg/L
			Zinc	0.268	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
n 20 at valley lane
eamwood, illinois 60103
2 289-3100

30 June 1981

analytical report

sample no. 93657 - 57A

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander WI 54501

RECEIVED
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EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: Well #213 Shut Down

date taken: 6/18/81 date received: 6/19/81

	FILTERED	UNFILTERED
pH, units	7.62	--
Alkalinity ($CaCO_3$), mg/L	--	156.
Conductivity, umhos	270.	--
Color, APHA	<1.	--
Hardness, tot., mg/L	--	131.
Solids, tot. diss., mg/L	149.	--
Solids, tot. susp., mg/L	--	8.
Turbidity, NTU	2.0	--
Phenol, mg/L	0.001	--
Silica, mg/L	9.70	--
M.B.A.S., mg/L	0.08	--
Bicarbonate, mg/L	138.	--
Boron, mg/L	0.07	--
Carbonate, mg/L	<1.	--
Chloride, mg/L	6.	--
Cyanide, mg/L	0.002	--
Phosphate, tot., mg/L	--	0.09
Sulfate, mg/L	6.	--
Uranium, tot., mg/L	--	<1.
Fluoride, mg/L	0.34	--
Molybdenum, mg/L	<0.01	--

Continued....

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100

30 June 1981

analytical report

sample no. 93657-57A
Page 2

Mr. Lou Blair
EXXON MINERALS
P.O. Box 813
Rhinelander WI 54501

RECEIVED
JUL - 9 1981
EXXON MINERALS
CRANDON PROJECT

SAMPLE DESCRIPTION: Well #213 Shut Down

date taken: 6/18/81 date received: 6/19/81

	FILTERED	UNFILTERED
Nitrogen, Nitrate, mg/L	0.31	--
Nitrogen, nitrite, mg/L	<0.01	--
Zinc, mg/L	0.182	--
Sodium, mg/L	4.22	--
Selenium, mg/L	<0.001	--
Vanadium, mg/L	<0.1	--
Aluminum, mg/L	<0.01	--
Arsenic, mg/L	0.026	--
Barium, mg/L	0.03	--
Cadmium, mg/L	<0.001	--
Calcium, mg/L	26.6	--
Chromium, mg/L	<0.001	--
Cobalt, mg/L	<0.01	--
Copper, mg/L	0.003	--
Iron, mg/L	0.02	0.15
Lead, mg/L	<0.01	--
Magnesium, mg/L	15.5	--
Manganese, mg/L	0.022	--
Mercury, mg/L	<0.0001	--
Nickel, mg/L	<0.01	--
Potassium, mg/L	1.51	--
Silver, mg/L	<0.001	--

Robert N. Bucaro
Robert N. Bucaro

Radiation Results to Follow

APPENDIX G

APPENDIX G

T.A. Prickett & Associates Letter Report of March 1, 1982

THOMAS A. PRICKETT & ASSOCIATES
CONSULTING WATER RESOURCES ENGINEERS
MONTCLAIR ROAD
URBANA ILLINOIS 61801 (217) 344-2277

February
~~January~~ 24, 1982

Mr. Roger G. Rowe
Senior Minerals Geologists
Exxon Minerals Company
P.O. Box 813
Rhinelander, Wisconsin 54501

Dear Roger:

This is our brief letter report that summarizes our main findings on the orebody modeling since our last effort in October/November of 1981. In actuality, this letter is an extension of the results explained in our October 30, 1981 letter report to Chuck Govin of Camp Dresser and McKee. We will follow the same format of that letter and update the numbers according to the new data gathered in the last 6 weeks.

I have grouped several figures and graphs of this letter at the end. I'll refer to them as appropriate. The figures will be finalyzed in the draft report to come at a later date.

1). Estimated Flow Rates Into Mine (No control of orebody or glacial drift permeability).

Based upon the new data since our last modeling effort, the flow into the mine is now estimated to be drastically higher than our previous estimates. We estimate that the maximum flow into the mine with no mitigation to be about 3,700 gallons per minute (gpm). This flow is estimated at about the 36-month point in the mine plan. Thereafter, flow will steadily reduce to about 3,300 gpm at steady-state conditions. Steady state-conditions will probably occur at about the 48-month point in the mine plan. A graph of variations in mine inflow is given in Figure 13 at the back of this letter.

The main reasons why this flow is much greater than previously reported are 1)The new Golder stratified drift permeabilities are now greater than before----particularily in the area north of the orebody where permeabilities were increased by Golder by factors of from 3 to 6 times the previous values. 2) The new Golder stratified drift model used a 12.5 inch infiltration rate as opposed to the previously used 9 inch rate. 3) The new

calibration runs have indicated that the resistive layer in the west is more permeable than before. and 4) The saturated thickness of the stratified drift is now averaging in excess of 100 feet whereas before it averaged 70 feet. The western area of the orebody is a particularily sensitive area to flow when mining approaches that region.--I should mention, however, that no new data were generated to suggest a higher storage coefficient for orebody drainage.

2) Comments on Quick Depressurizing of Mine (No control of orebody or drift permeabilities)

As before, the mine eventually depressurizes to a point where maximum hydraulic gradients are developed across the resistive layer and mine inflow is no longer a function of the mine plan. Now, we estimate that the depressurizing time to be about at the 36-month point in the mine plan rather than the previously estimated 25-month point.

3) Credibility of Model and Calibration Evaluation

We have spent considerable time and effort in recalibrating the parameters of the resistive layer and the orebody permeabilities. In our opinion, the results of this recalibrating has brought our acceptance scale up to about 8 to 8.5. We believe the main reason why it isn't higher is because of the model being designed to predict mine plan inflows and not pumping test results. The main results are as follows as it concerns permeabilities.

Material	Permeabilities (Hydraulic Conductivities in Gpd/ft Squared)	Leakance (gpd/ft^2/ft)	Remarks
Resistive Layer (See Figure 6)			
Highly Weathered	0.55	0.055	
Weather Bedrock	0.085	0.0085	
Stratified Drift	----	0.021	Effective Thickness Unknown
Glacial Till	0.005		
Orebody Weathered Zones			
Weak	less than 0.01		
Low	1		
Mild	30		
Strong	50		

The permeabilities of the orebody deposits remain unchanged from our previous calibration runs. However, sensitivity analysis indicates that the mild and strong zone permeabilities may be affected by the grid size. So, the relative 30 and 50 values could be interacting to the extent, for example, of a 20 and 60 combination.

4 and 5) Comments on Magnitudes of Calibrated Parameters and Sensitivity to Mine Inflow Rates

With the exception of the resistive layer comments----all previously discussed sensitivities are the same. Let us re-emphasize. The weakly weathered zone is expected to yield very little water to the mine and the orebody drainage coefficient is still estimated to be low.

The resistive layer parameters are very sensitive. In particular, the highly weathered bedrock zone and the stratified drift zone where it is in direct contact with the orebody are zones of high sensitivity.

6) Impacts in the Glacial Aquifer Due to Mine Flow Rates

We have assumed Golder (December 9, 1982 model version--modified to vary transmissivity as a function of depth of flow) model version flow coefficients modified by recent test drilling information. In general, the glacial aquiver is now much more transmissivie and prolific than before. As a result (see Figures 17, 18, 22, 23, 25, and 26) the impacts of the mine flows on the glacial aquifer are still large and extensive. Swamp Creek is affected in all presently tested model simulations.

7) Controls on Permeability of Resistive Layer and Depressurizing Schemes to Reduce Mine Inflow Rates

A model simulation was run to evaluate the impacts of reducing the permeability of the direct contact orebody/stratified drift zone in the so-called resistive layer. Those deposits (see Figure 6) were assumed to be reduced in permeability by 75% (25% permeability remaining). The results of that simulation can be evaluated by studying Figures 13 and 19 through 23.

In summary, mine flows can be reduced from a peak of about 3,700 gpm down to and estimated flow of about 2,800 gpm by that permeability reduction.

One observation can be made that most of the flow to the mine, contributing to the peak flow, is coming not only from the direct contact stratified drift zone, but also from the highly weathered bedrock area to the west. One may consider further simulation runs on the highly weathered bedrock zone.

Several stratified drift well depressurizing schemes were tested to evaluate the possibilities of reducing mine flows. The idea was to decrease the driving head in the drift aquifer. The following observation are made in this attempt.

We attempted to conceptually design and test well systems that would lower heads such that the mine inflow would be zero, 500 gpm, or at least something

significantly less than the maximum 3,700 gpm rate with no mitigation. The design considered only wells located above the orebody and within the stratified drift aquifer. Based upon these attempts, the following comments are made.

First, you can not reduce the mine flow to zero by this method because you would need an infinite number of wells. We are assuming that a practical scheme is being sought.. Second, the orebody is a much more efficient sink for water than individual wells----no matter how many wells are used less than an infinite number. The minute mining starts and induces any downward movement of water, the wells begin losing pumping capacity as the drift deposits dewaters. As mining progresses, this loss in well pumpage transfers to the mine and mine flow once again increases. Third, we attempted several "constant rate" well schemes. This scheme is only partially successful as once about one-half the stratified drift is dewatered, any further dewatering rapidly causes wells to run dry (at constant pumping rates). Fourth, depressurizing in advance of mining is necessary as it takes considerable time to lower heads in the stratified drift aquifer. Finally, and based upon our model experience here, one may be more successful in reducing mine inflows by examining "constant head" devices----as what you may actually be looking for are variable pumping rates in both time and space. Such constant head devices could be galleries or linear drains.

In all depressurizing schemes investigated, the total mine flow plus well flows were very high. Figures 24 through 26 are examples of one such scheme where dewatering pumpage was initiated one year in advance of the mine plan (starts at month 8) and wells were located just above the highly weathered bedrock and the direct contact drift/orebody zones. In this case, combined well pumpage and mine flows peaked out (at the 34-month point in the mine plan) at about 6 million gallons per day (mgd) when mine flow was about 3.5 mgd and well pumpage was down to 2.5 mgd (from a start of well pumpage of 3.5 mgd). Steady-state flows went thereafter to about 4.6 mgd. At steady state the wells were pumping only 1 mgd and the mine was producing 3.6 md. All in all that is not a very satisfactory scheme.

8) Sample model input data, results, and mine inflow rate maps

Attached are several figures showing the subject information. Also attached are the actual computer input data for the orebody and glacial aquifer permeability, leakance, saturated thickness data, and model node numbers. These data are particularily useful in conjunction with the geologic cross section and plan view maps to investigate likely areas for further mitigative schemes.

I am sure that there are many questions that you will have regarding this brief letter report. I'll see you in a couple of days to work out the

details. Please give me a call so that I can bring any missing printouts or data that may be helpful to us all in our trip to Vancouver.

Very truly yours,

Tom

Thomas A. Prickett, P.E.
President

Enclosures
TAP/tap

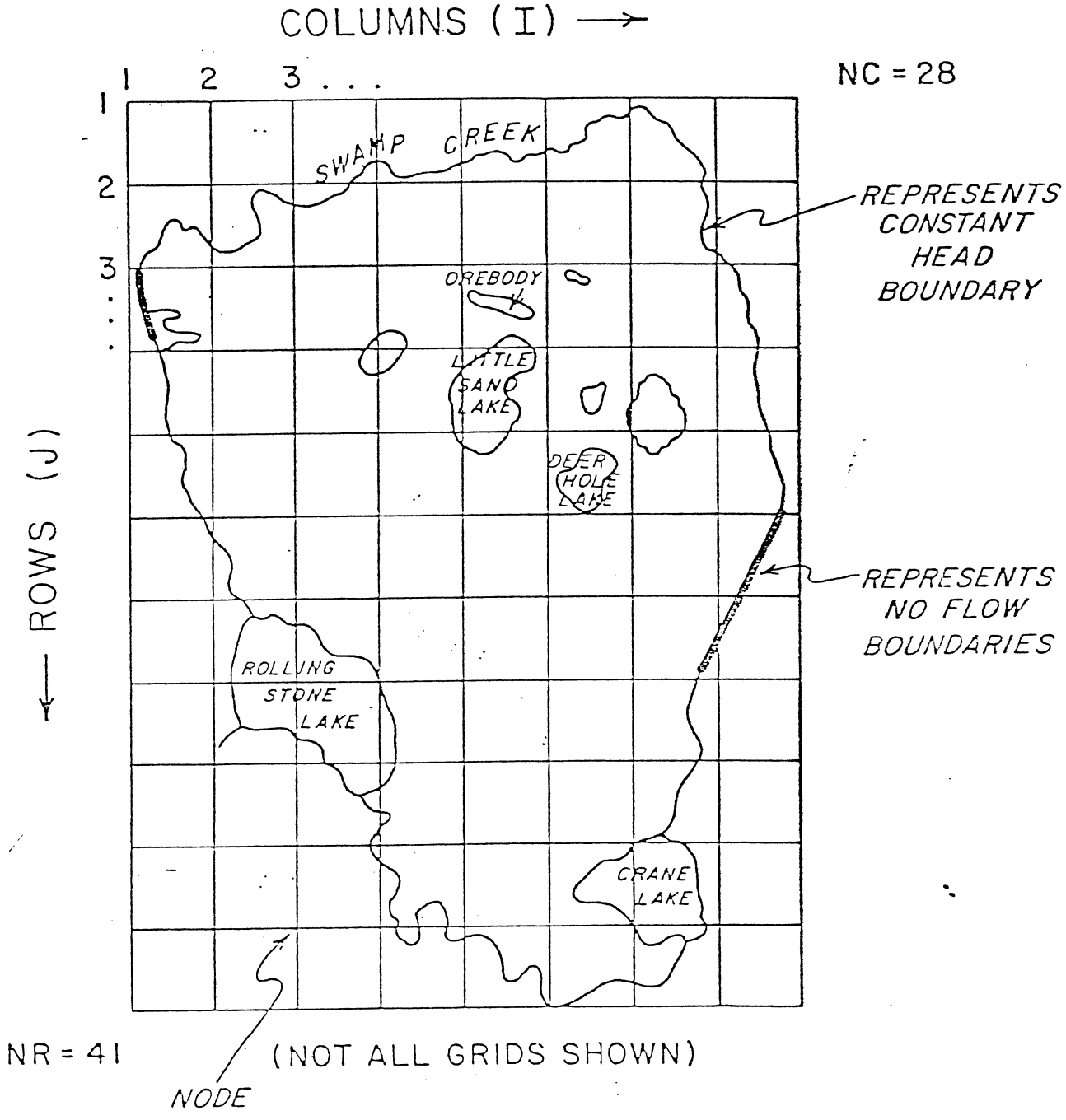


Figure 1. Representation of Finite Difference Grid for Golder Stratified Drift Aquifer

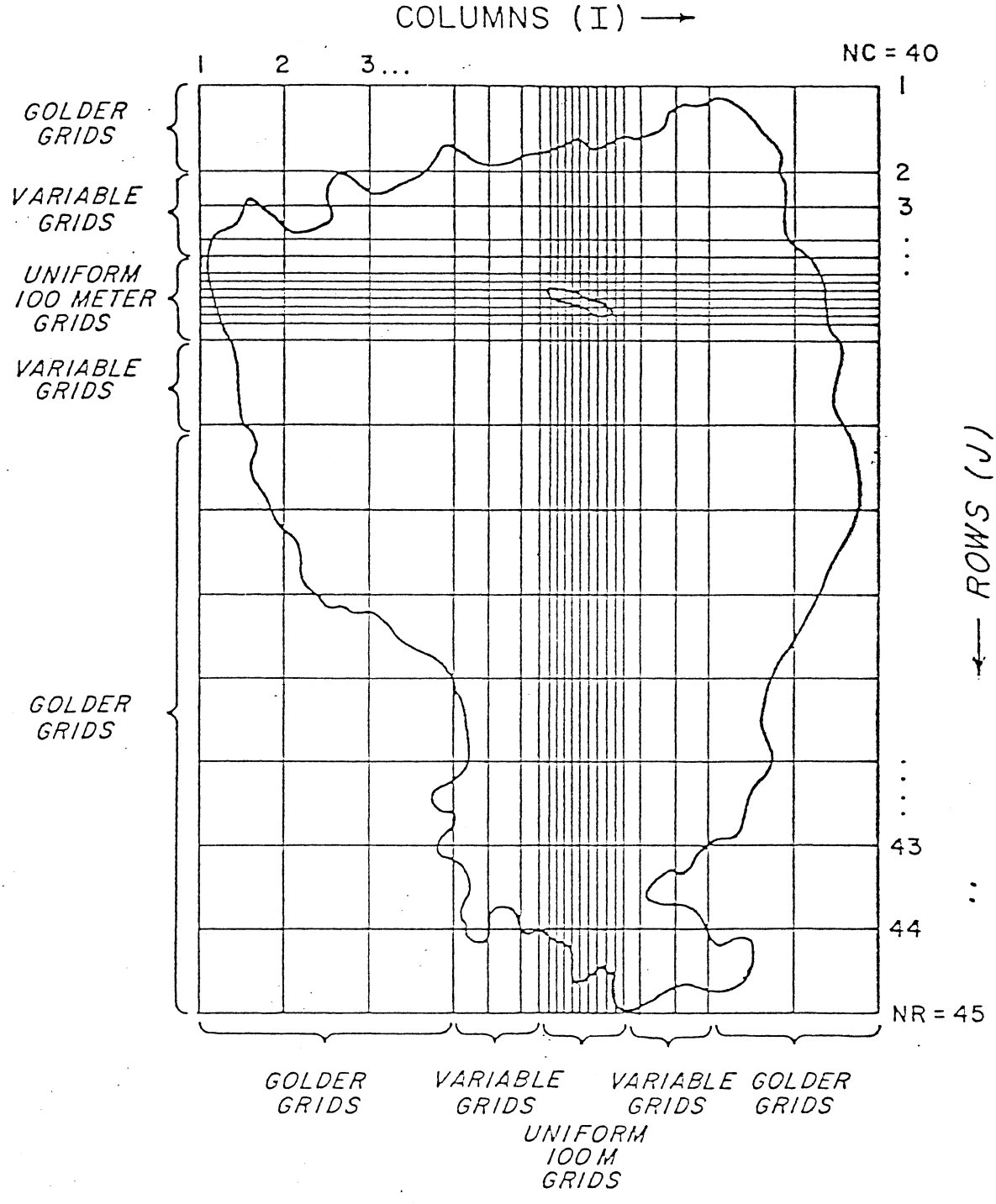
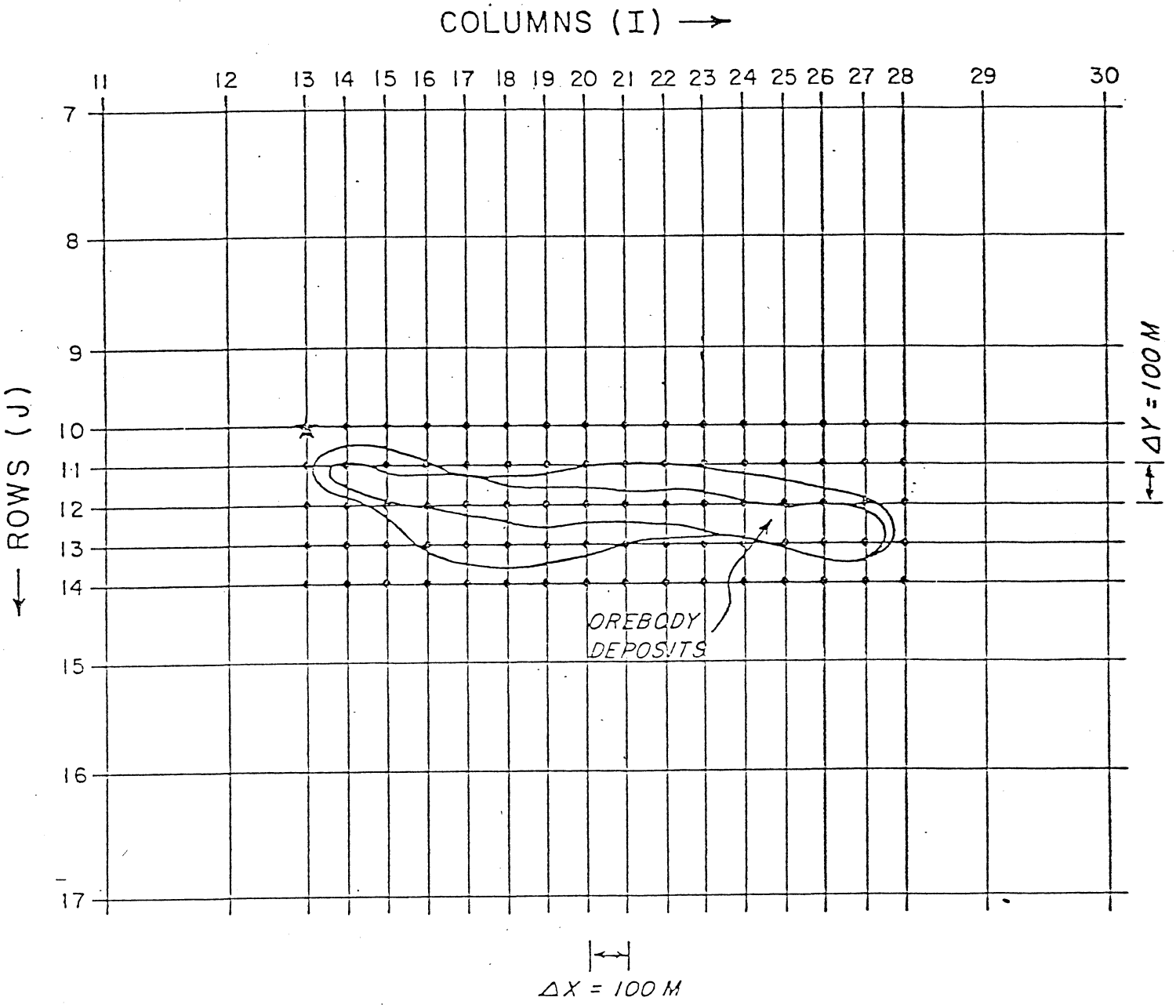


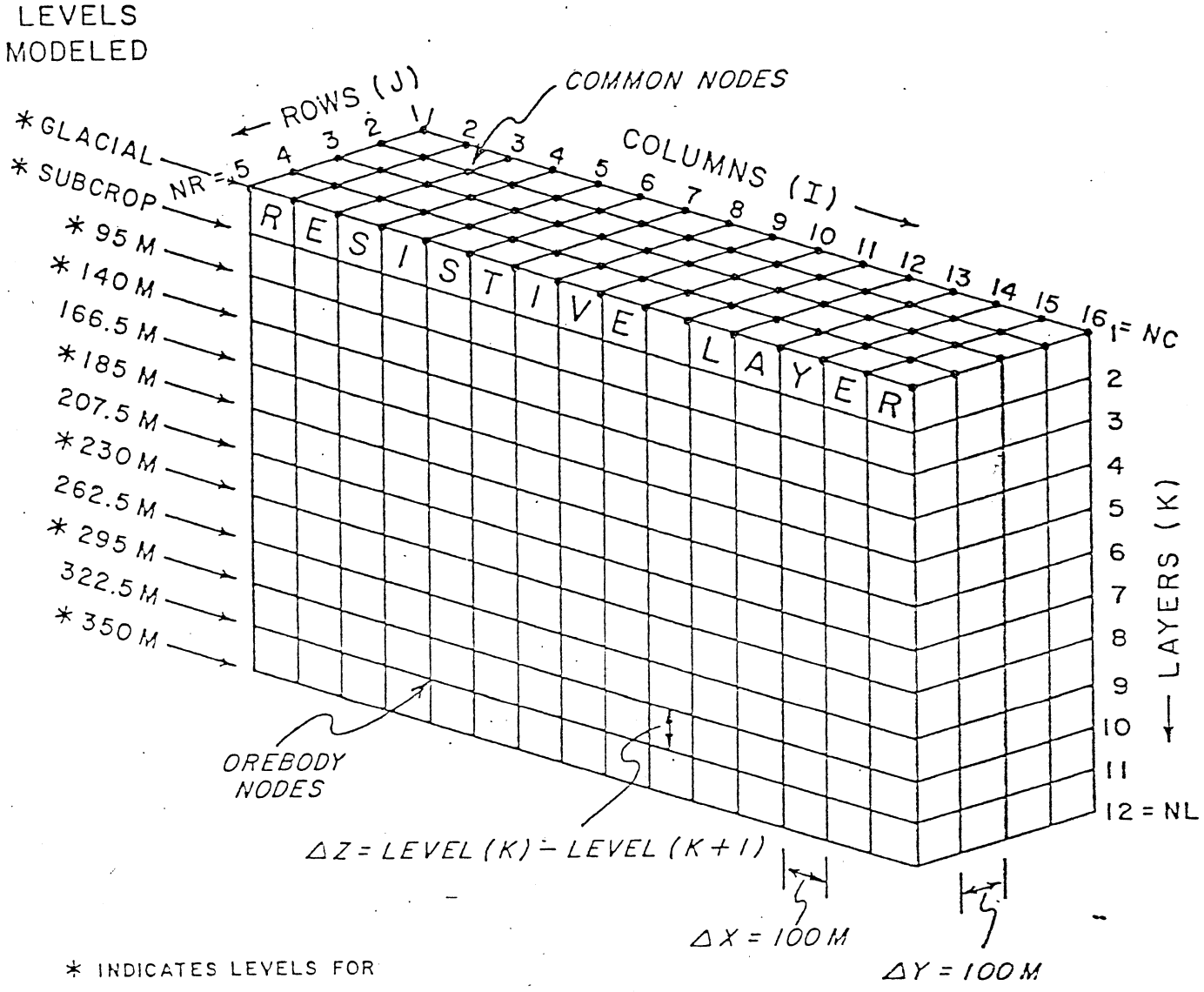
Figure 2. Representation of Refined Finite-Difference Grid of Stratified Drift Aquifer for Orebody Detail



• INDICATES NODES COMMON BETWEEN OREBODY AND GLACIAL MODEL

☆ INDICATES NODE I = 1, J = 1, AND K = 1 OF OREBODY MODEL

Figure 3. Representation of Finite-Difference Grids in Common Between Stratified Drift Aquifer and Orebody Models



* INDICATES LEVELS FOR WHICH PLAN VIEW MAPS ARE AVAILABLE.

• INDICATES NODES COMMON BETWEEN OREBODY AND GLACIAL MODEL

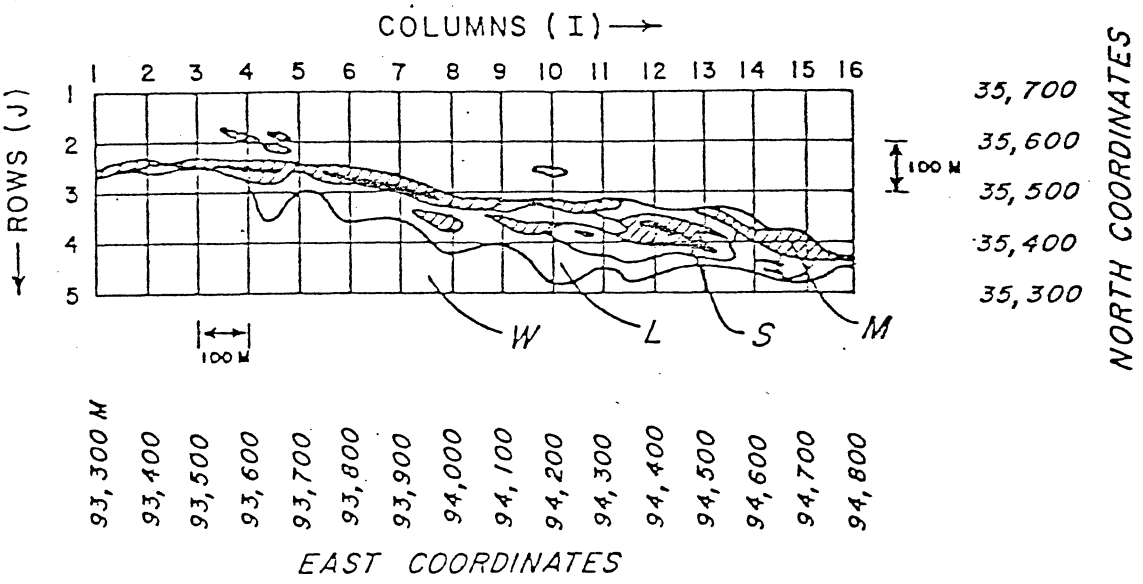
Figure 4. Definition of Orebody Finite-Difference Grid Configuration

A

EXAMPLE

PLAN VIEW OF

OREBODY (LEVEL 140M (K=4))



B

EXAMPLE

CROSS-SECTION VIEW OF

OREBODY (AT 94,000 EAST)

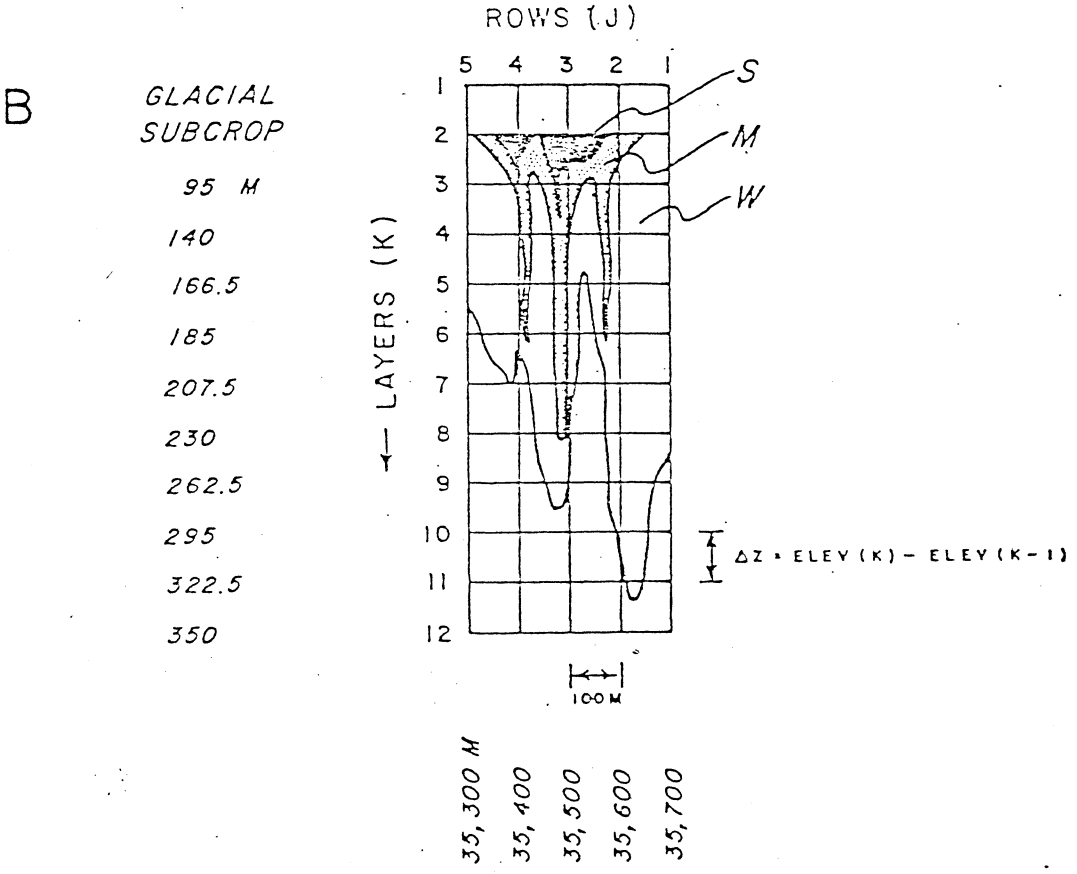
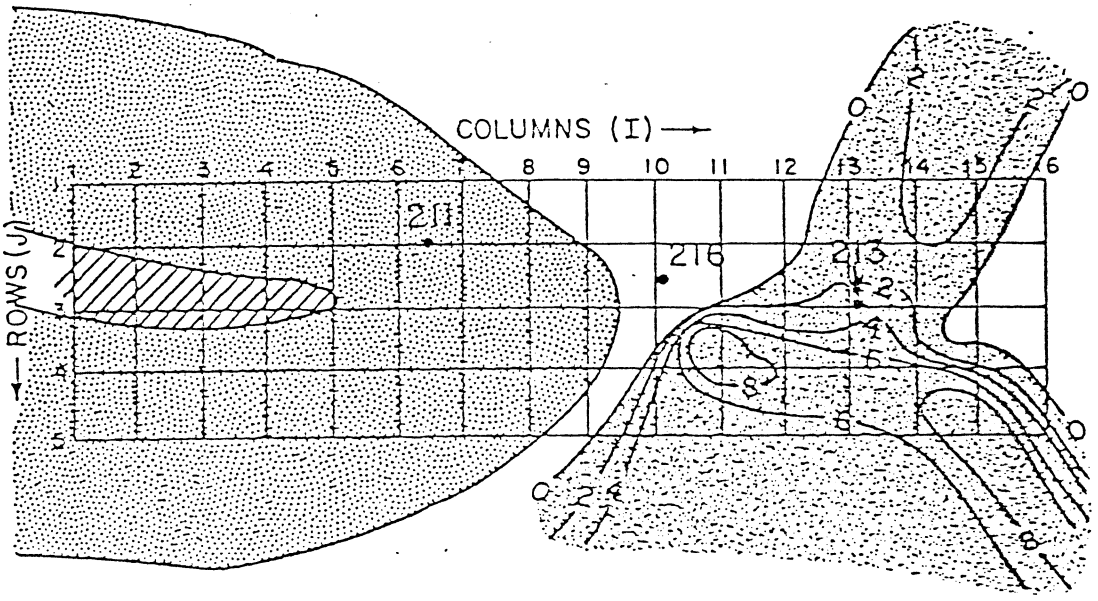


Figure 5. Example Finite-Difference Grids Overlying Orebody Maps



EXPLANATION

STRATIFIED DRIFT IN DIRECT CONTACT WITH OREBODY

HIGHLY WEATHERED BEDROCK

WEATHERED BEDROCK

GLACIAL TILL (CONTOUR INTERVAL = 2 FEET)

(AFTER CDM, 1981)

Figure 6. Orebody Model Finite-Difference Grid Overlying Resistive Layer Characteristics

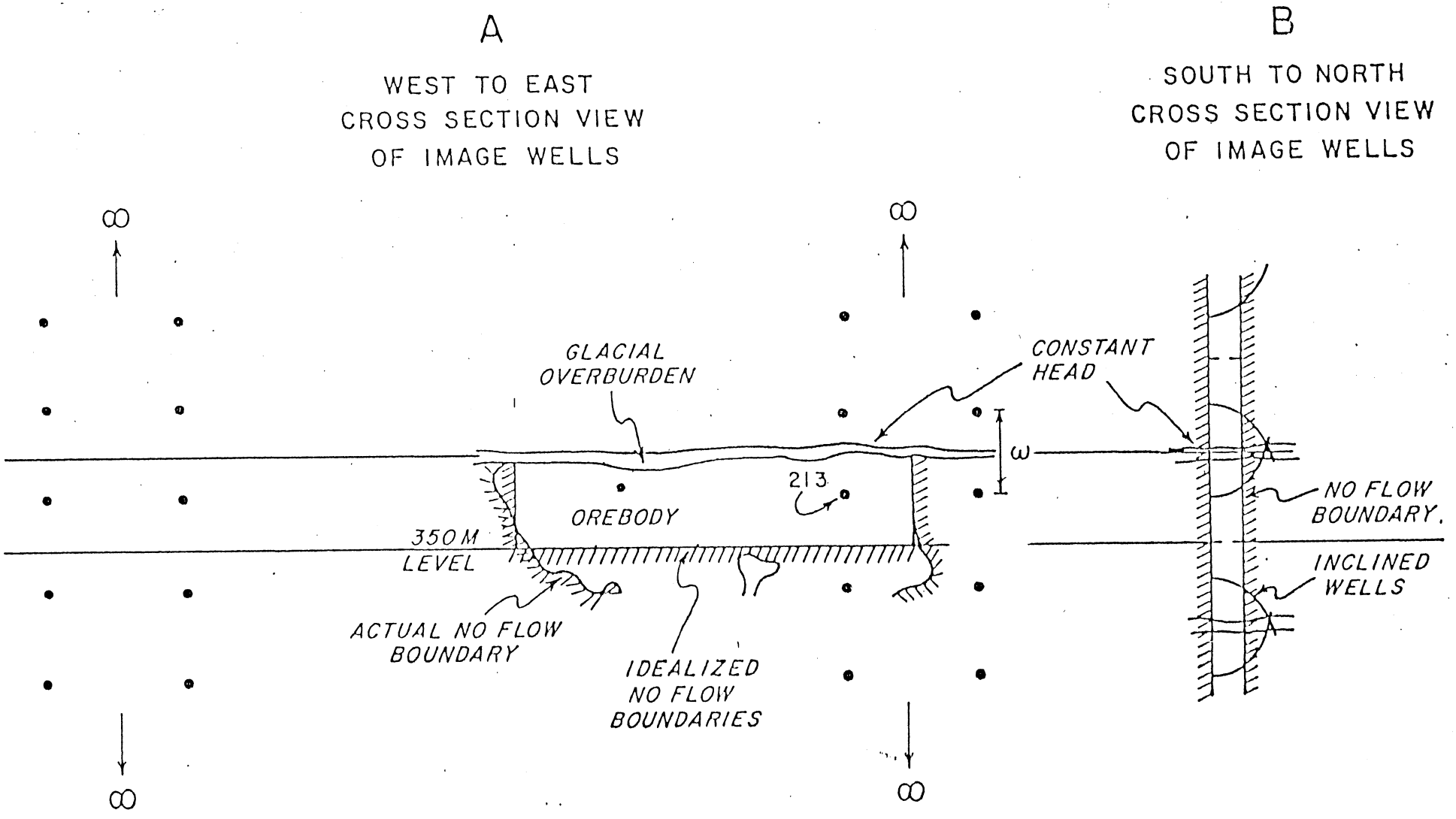


Figure 7. Idealization of Permeable Zones of Orebody and Image-Well Layouts Considered for Aquifer Test Analyses

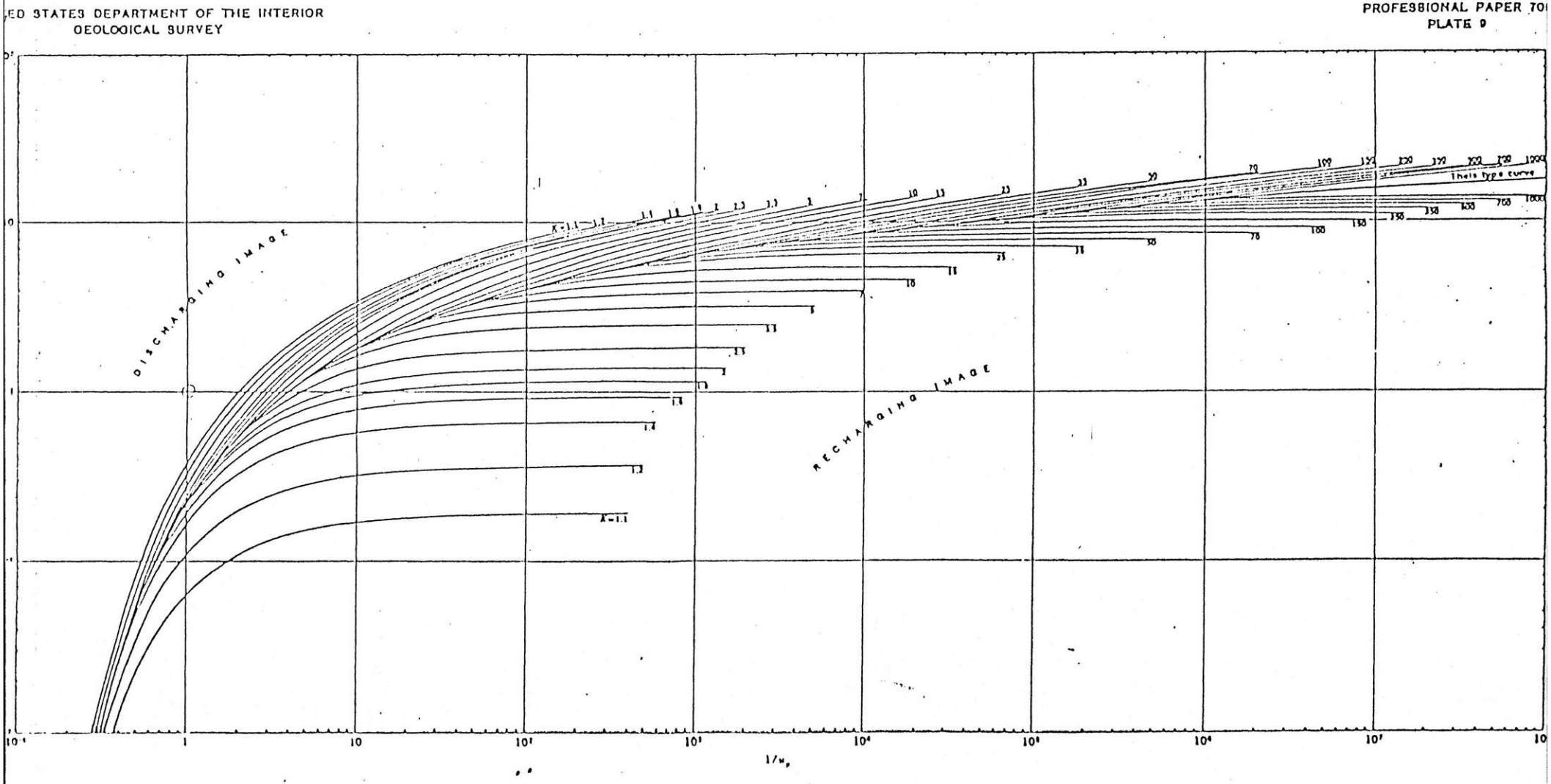


Figure 8. Basic Type-Curves Used for Well Test Analyses

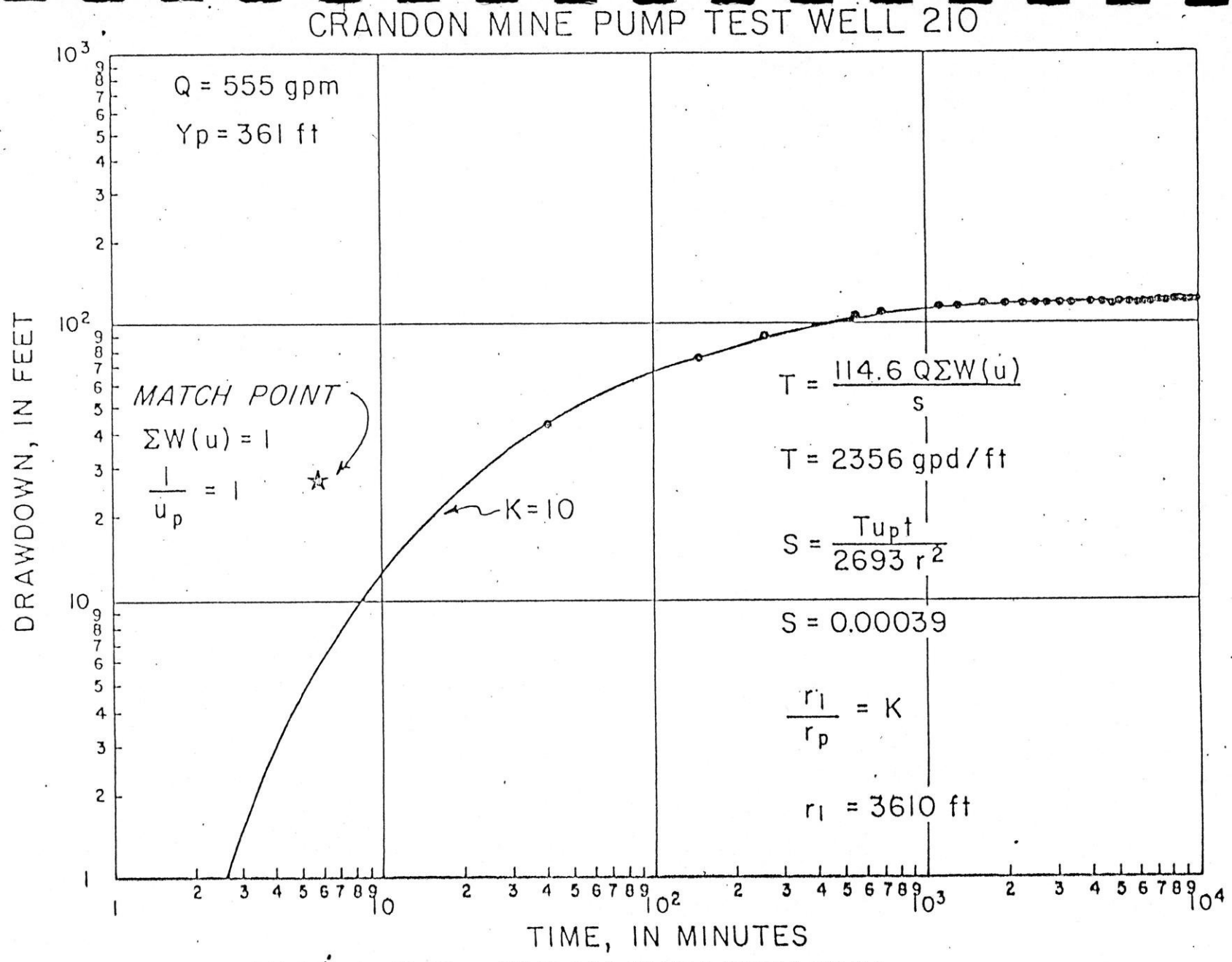


Figure 9. Example Well-Test Analysis for Observation Well 210 Response During Pumping of Well 213

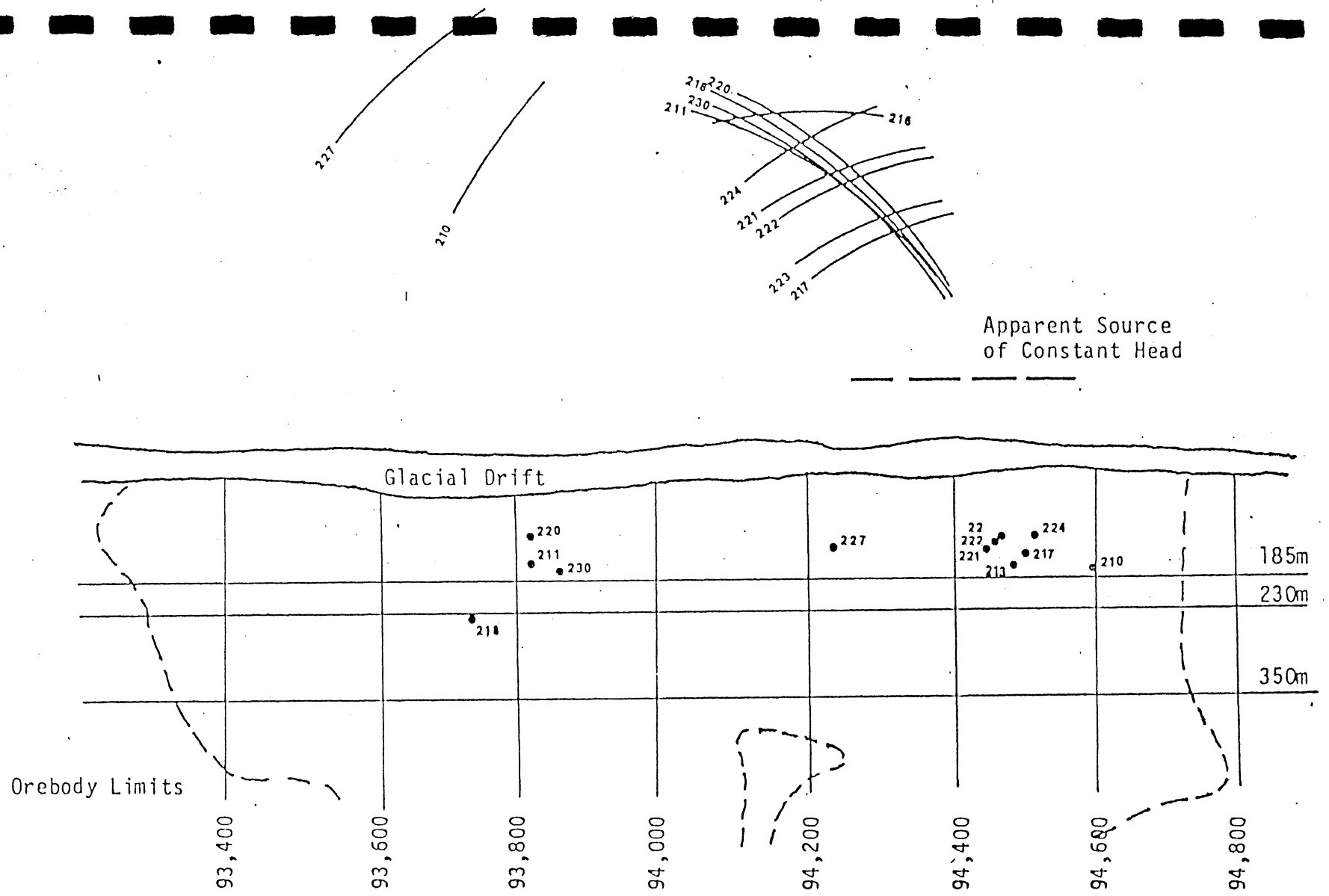


Figure 10. Triangulation Analysis Showing Location of Apparent Source of Water Recharging Orebody During Pumping of Well 213

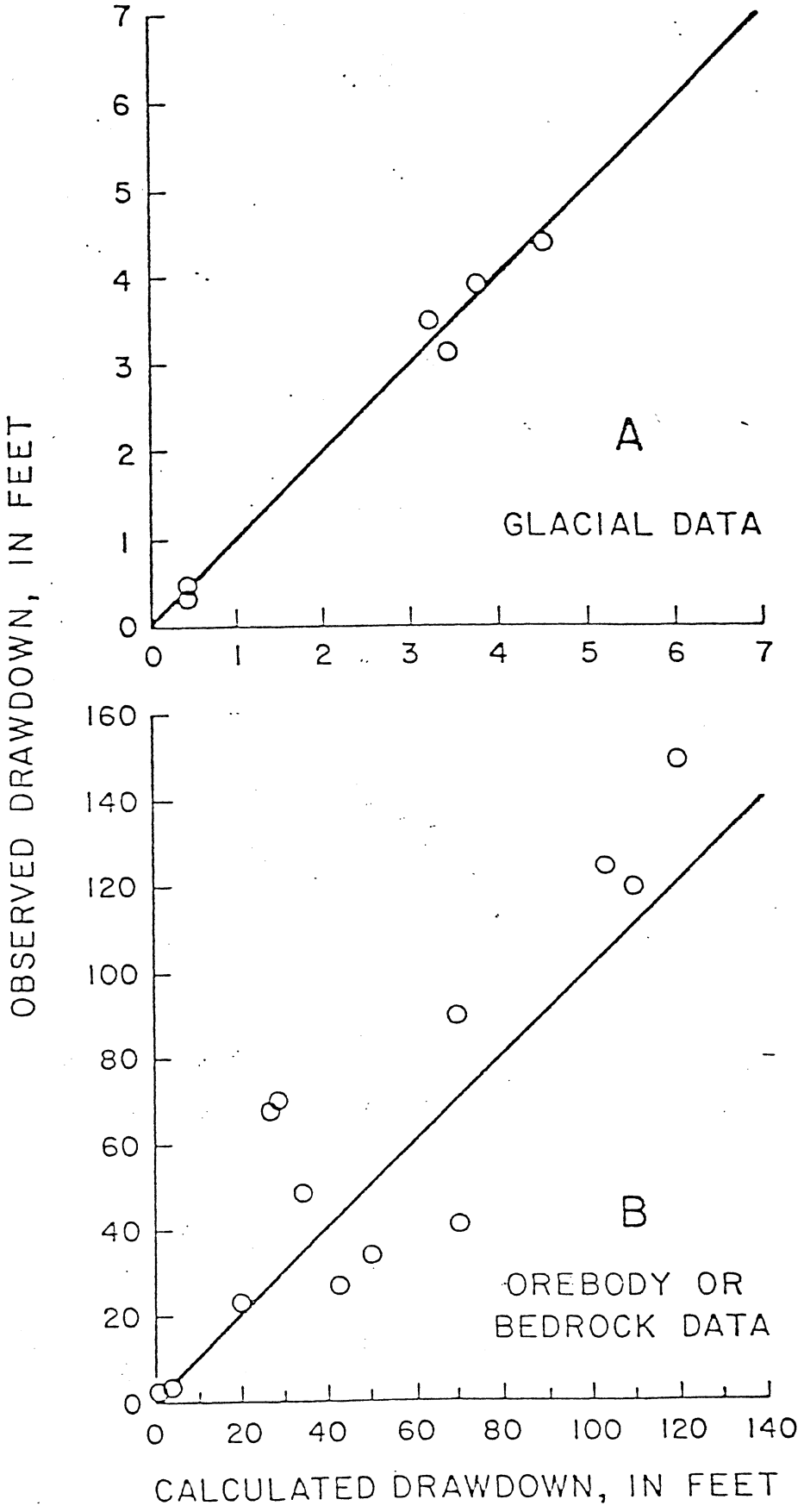
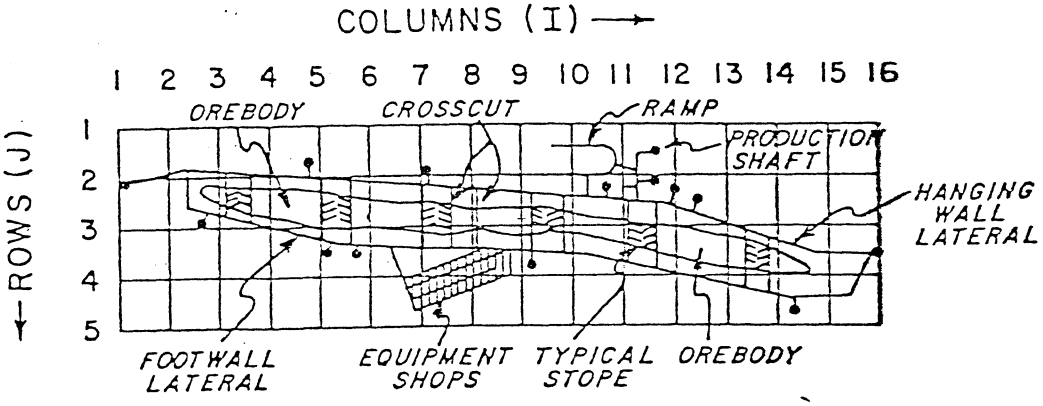


Figure 11. Example Orebody Calibration Results for Well 213 Pumping Test

A

MINE PLAN AT TYPICAL MINE LEVEL



• CONDUITS TO SURFACE

B

EAST-WEST CROSS SECTION

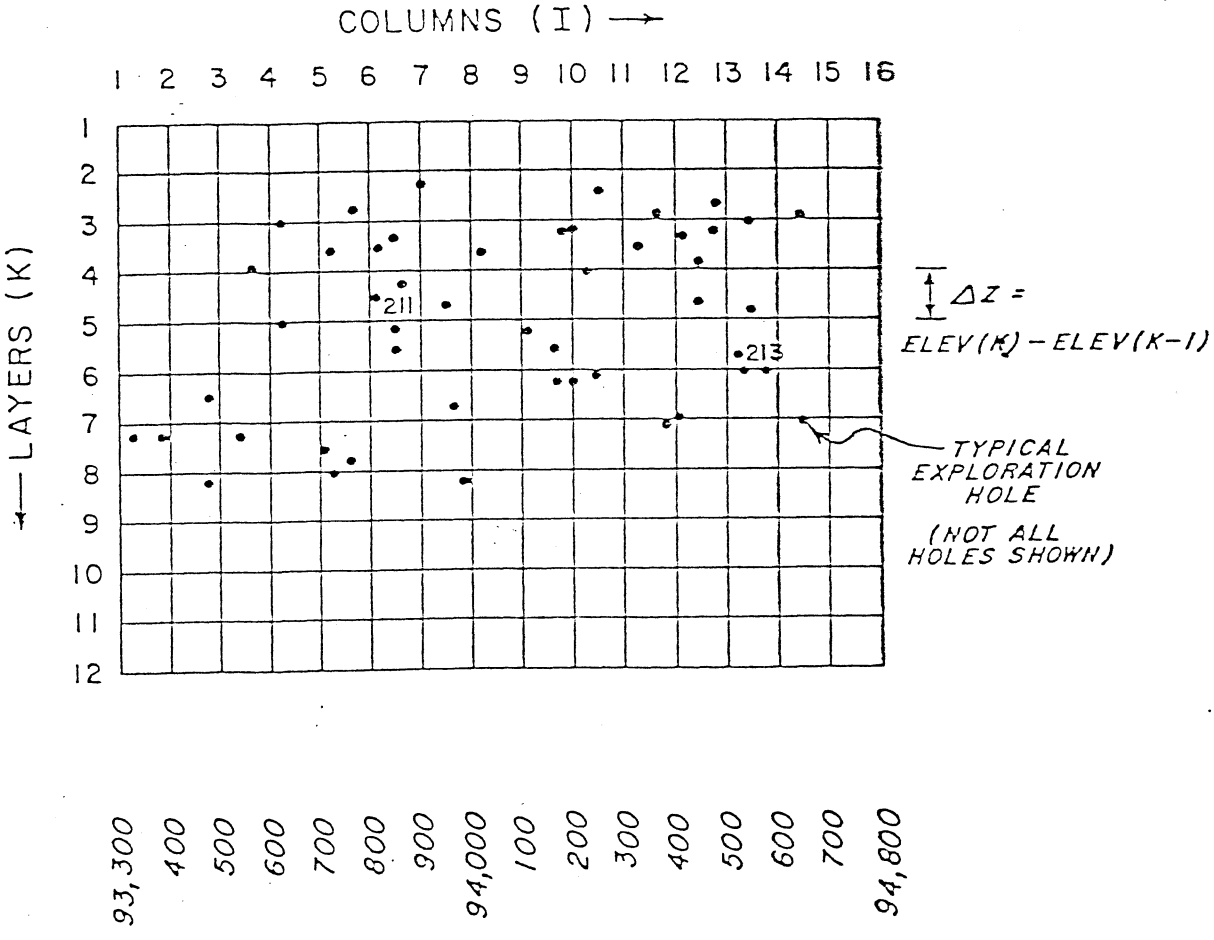


Figure 12. Finite-Difference Grid Overlying Typical Mine Plan Level (A) and Positions of Observation Wells (B)

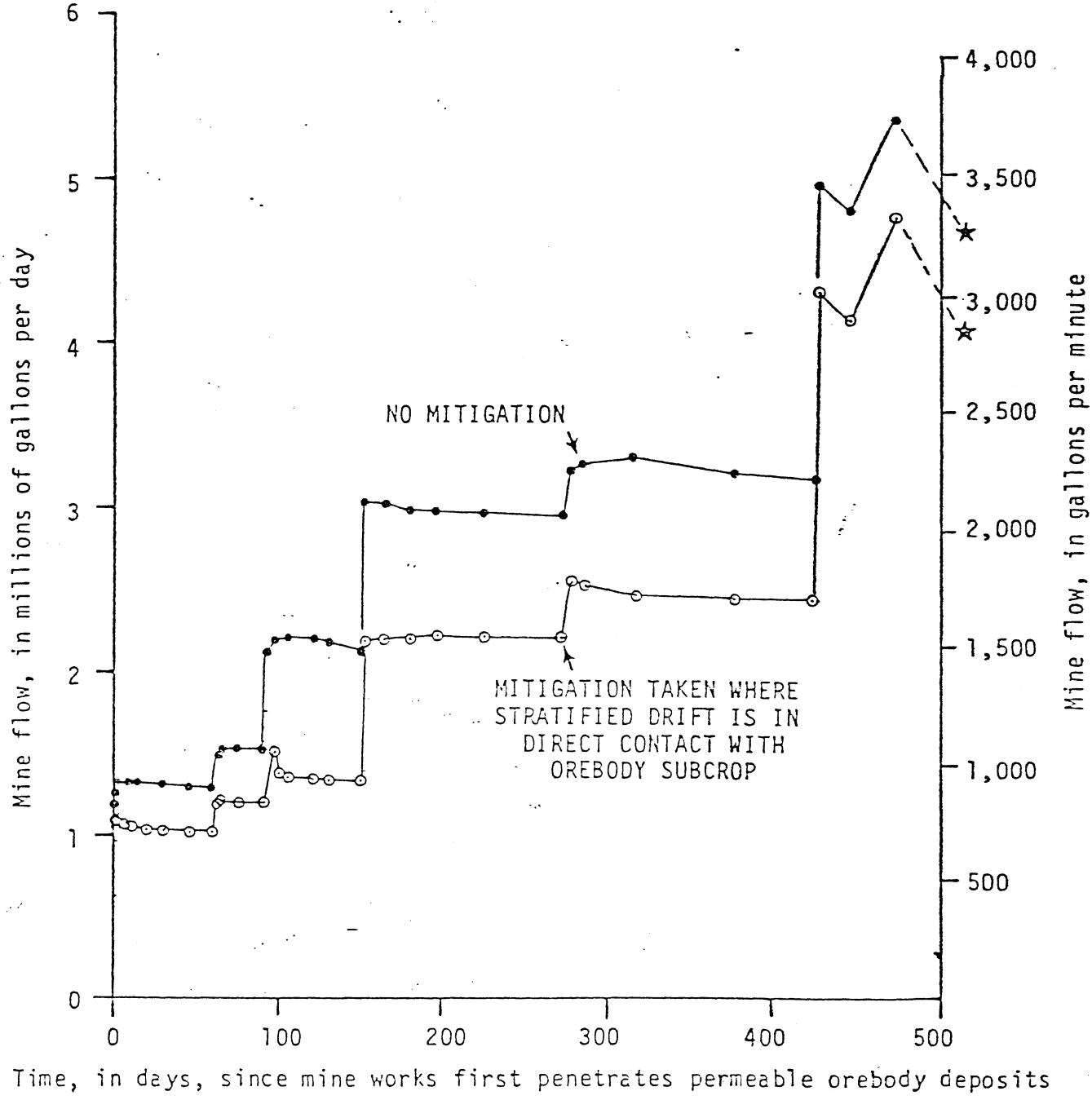
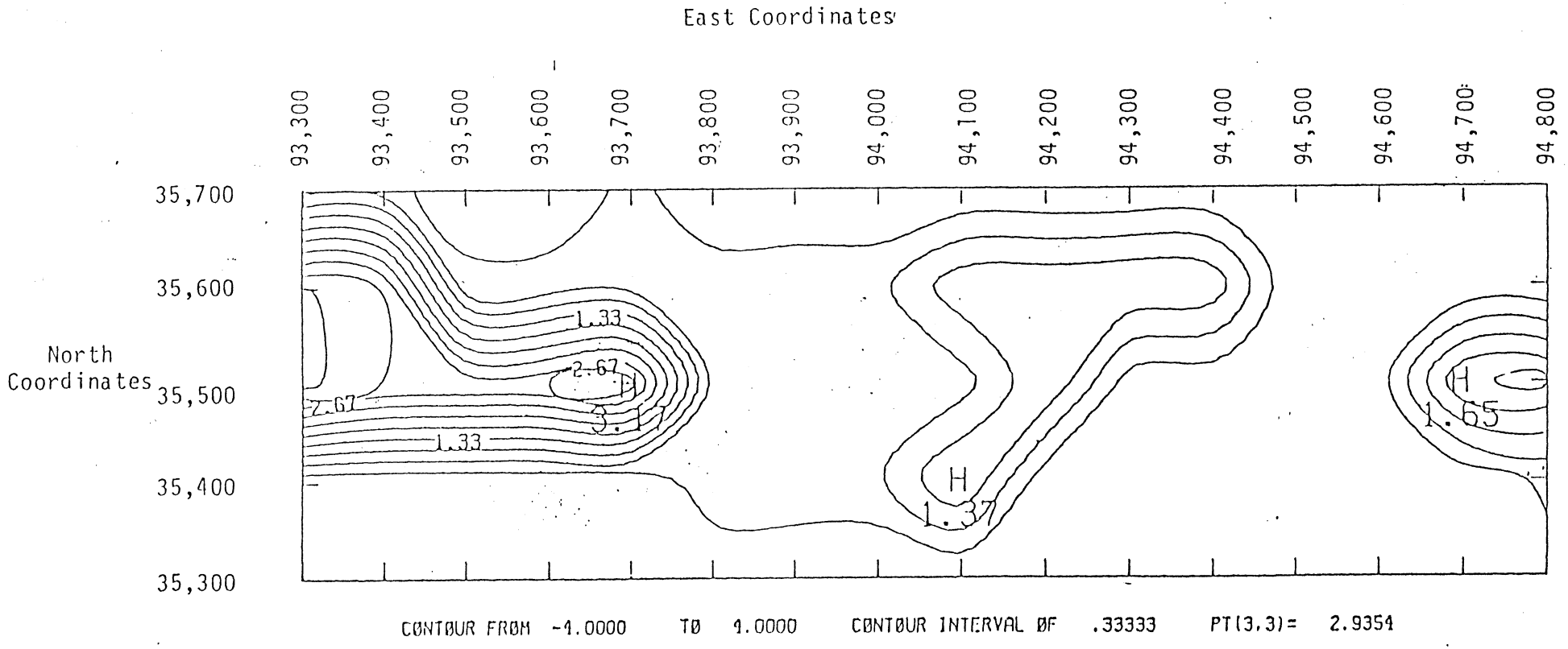
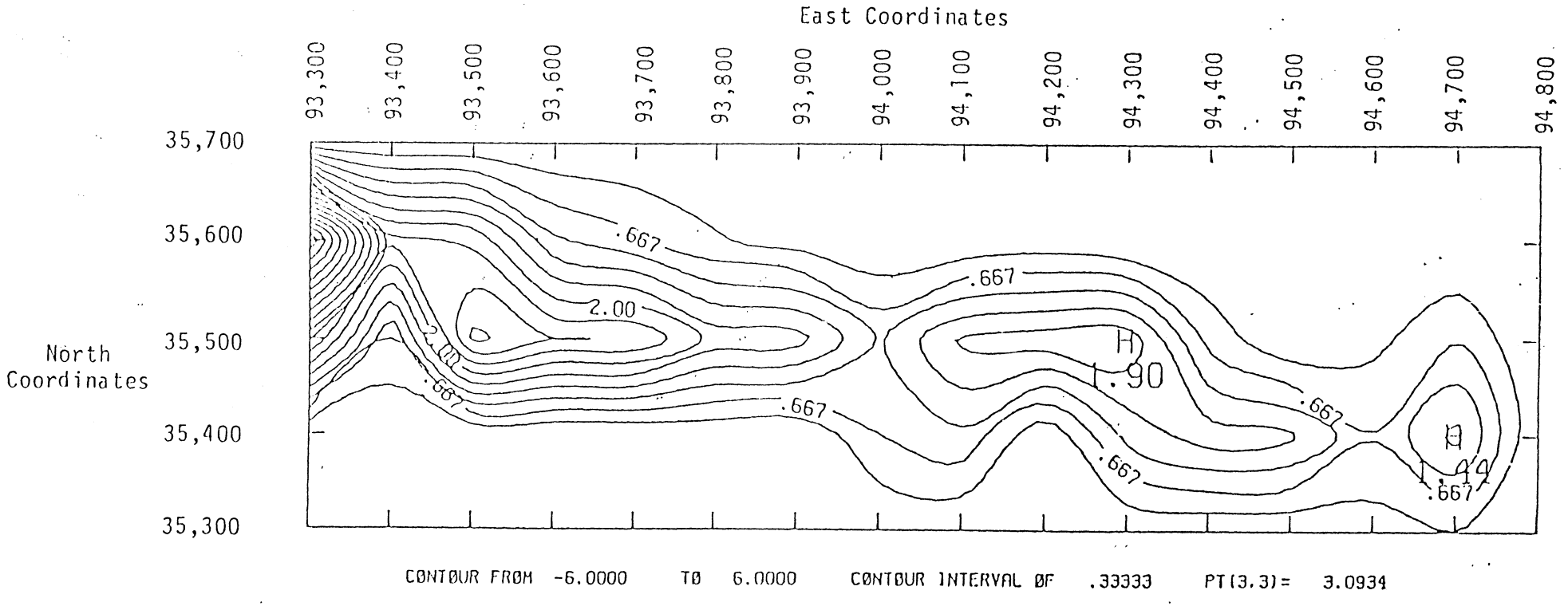


Figure 13. Estimated Mine Inflows For No Mitigative Measures and For Example Selected Stratified Drift Grouting Scheme



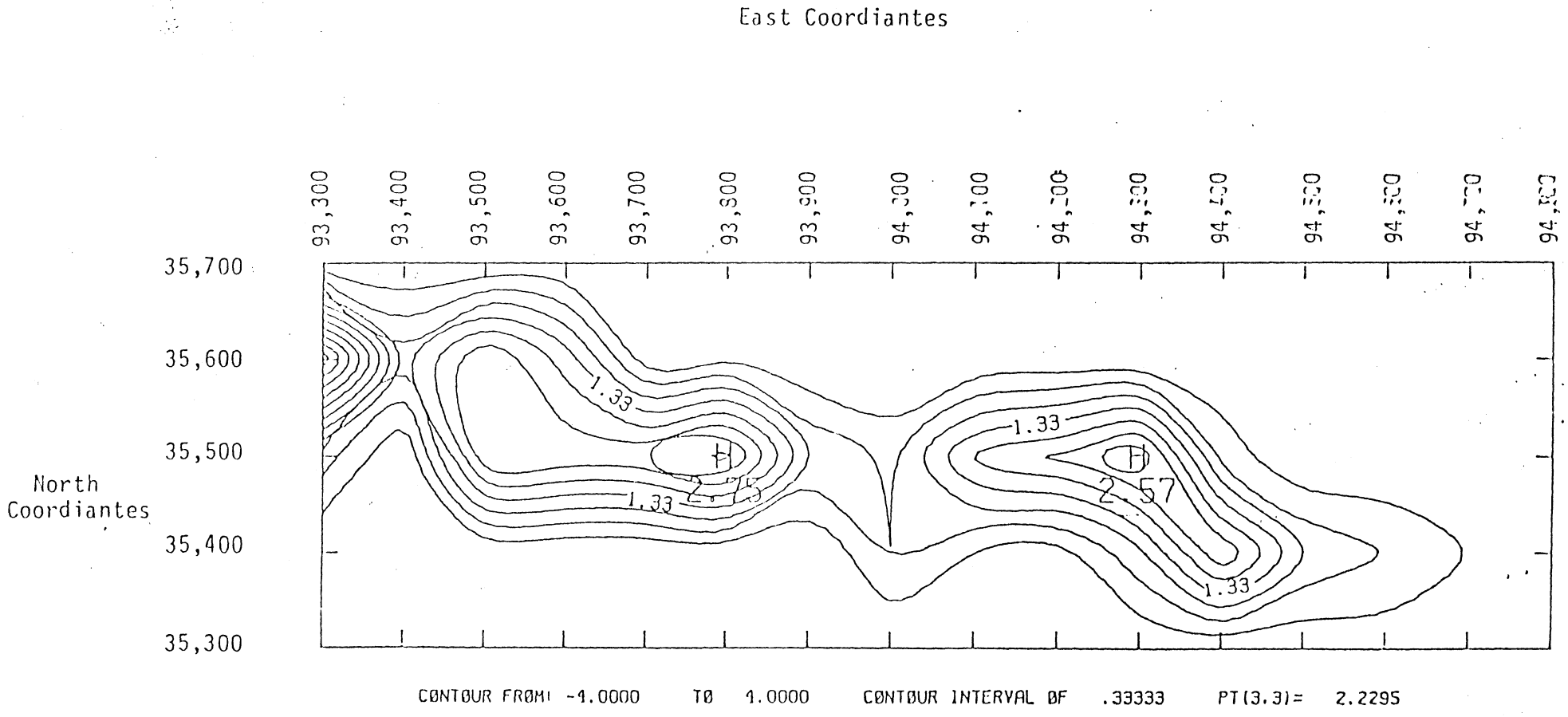
Flow Rate Values Toward Mine Works in gallons per day per square foot

Figure 14. Estimated Steady-State Water Inflow rates at Subcrop Level for Mining with NO MITIGATION



Flow Rate Values Toward Mine Works in gallons per day per square foot

Figure 15. Estimated Steady-State Water Inflow Rates at 95 Meter Level For Mining with NO MITIGATION



Flow Rates Toward Mine Works in gallons per day per square foot

Figure 16. Estimated Steady-State Water Inflow Rates at 140 Meter Level For Mining with NO MITIGATION

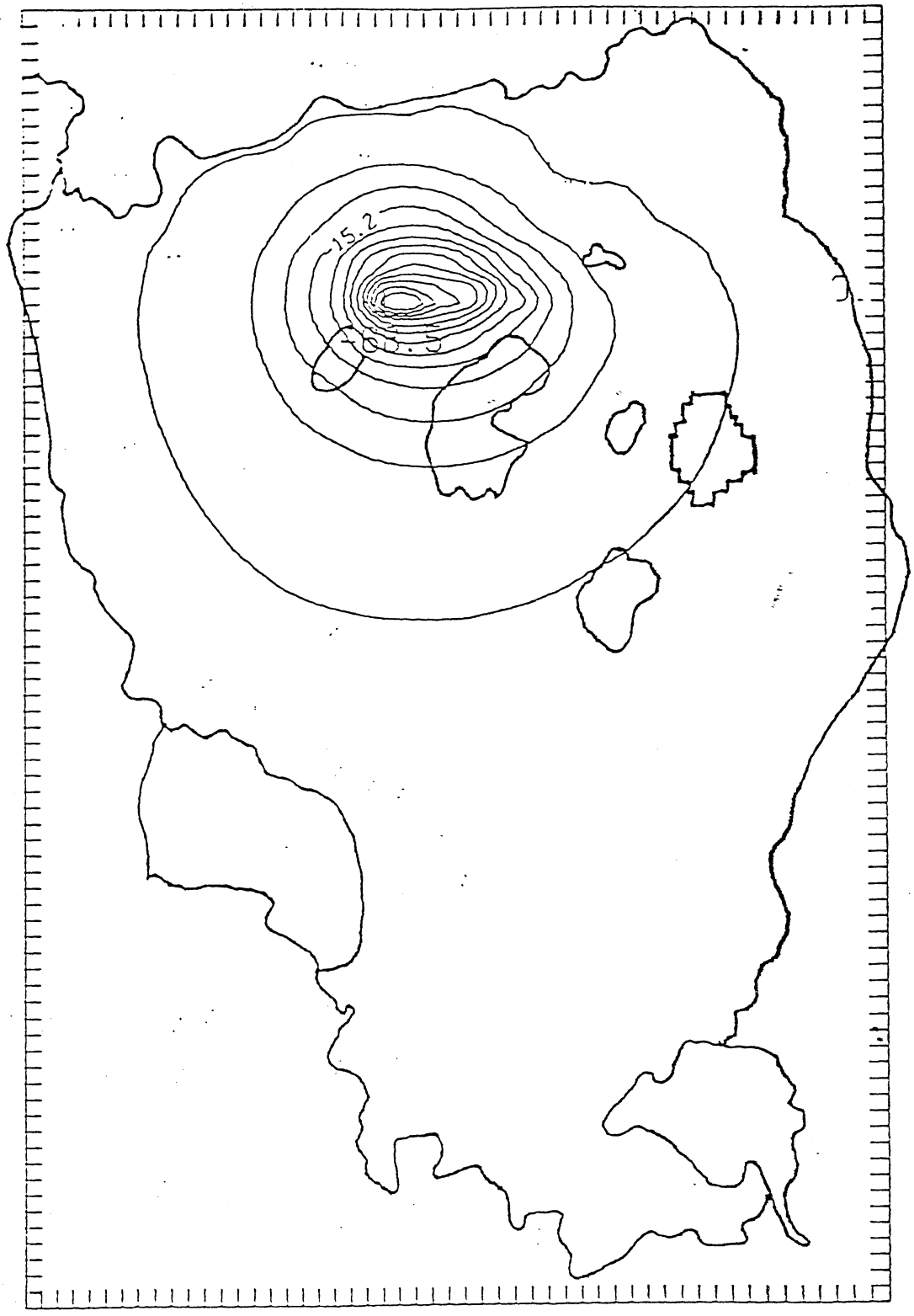
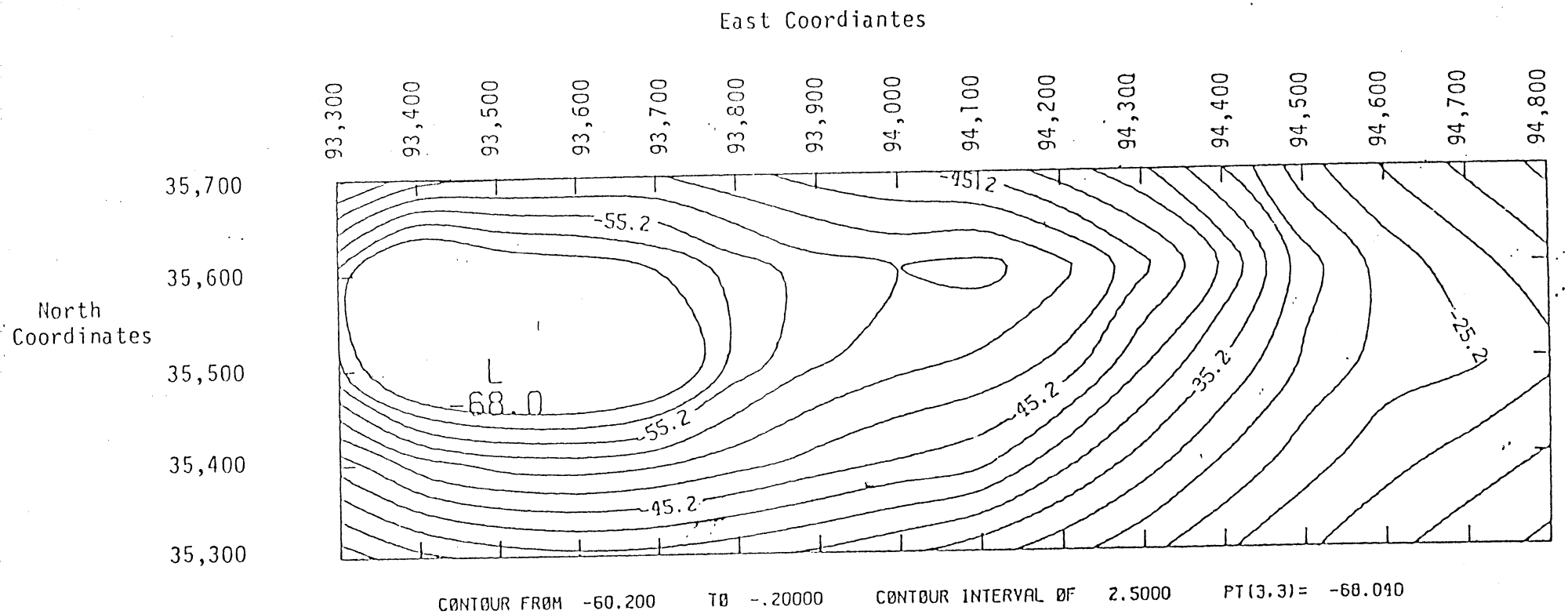
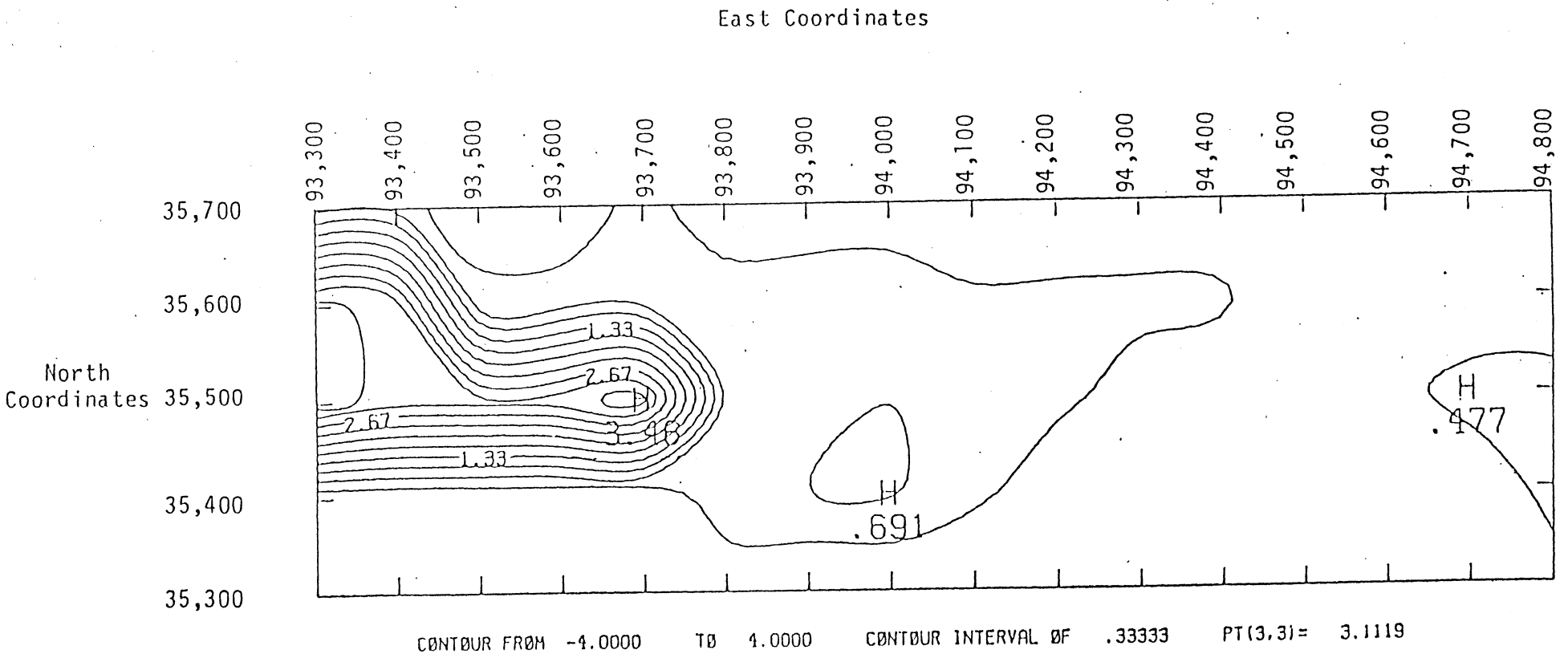


Figure 17. Estimated Basin-Wide Steady-State Stratified Drift Aquifer Drawdown Impacts for the NO MITIGATION Scheme



Values in Feet of Drawdown

Figure 18. Estimated Stratified Drift Aquifer Drawdown Impacts at Steady-State Conditions Directly Overyling Orebody for NO MITIGATION Scheme



Flow Rates Toward Mine Works in gallons per day per square foot

Figure 19. Estimated Steady-State Water Inflow Rates at Subcrop Level for Selected Stratified Drift Grouting Scheme to the Extent of 75% Permeability Reduction in the Direct Contact Stratified Drift/Orebody Zone

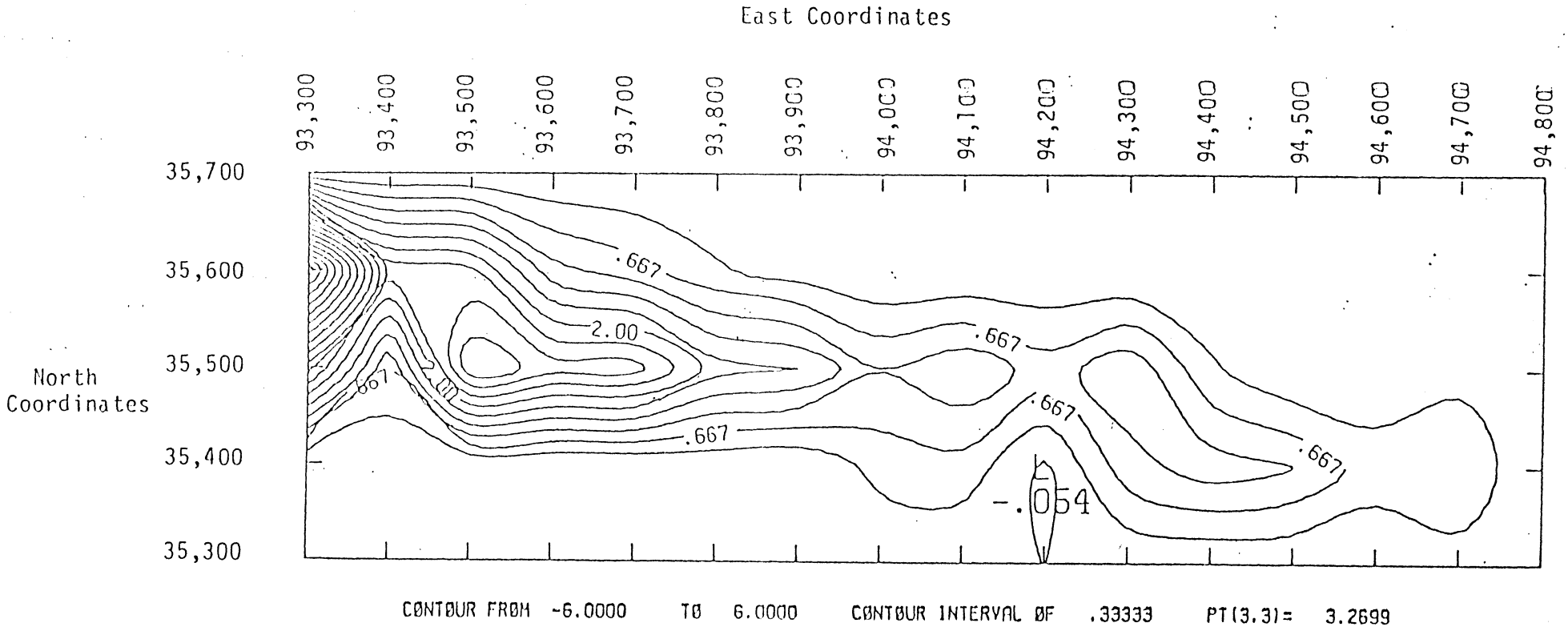


Figure 20. Estimated Steady-State Water Inflow Rates at 95 Meter Level for Selected Stratified Drift Grouting Scheme to the Extent of 75% Permeability Reduction in the Direct Contact Stratified Drift/Orebody Zone.

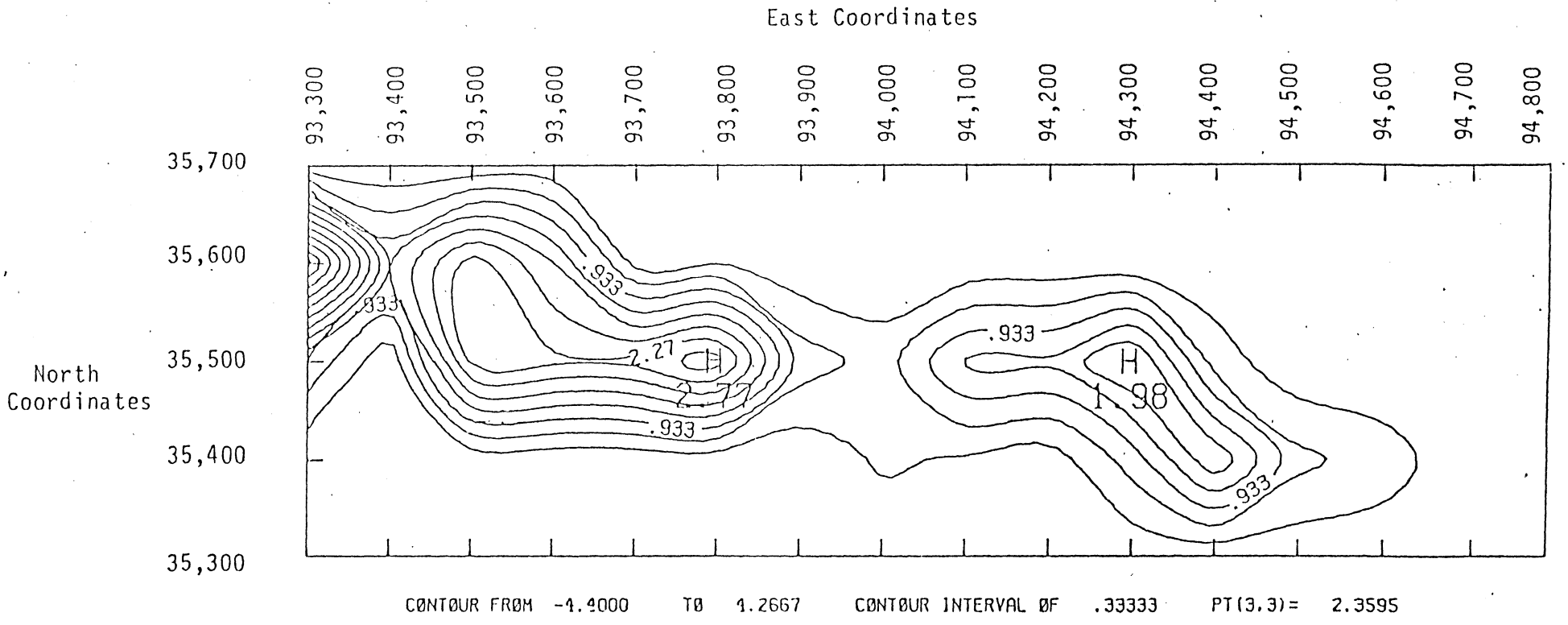
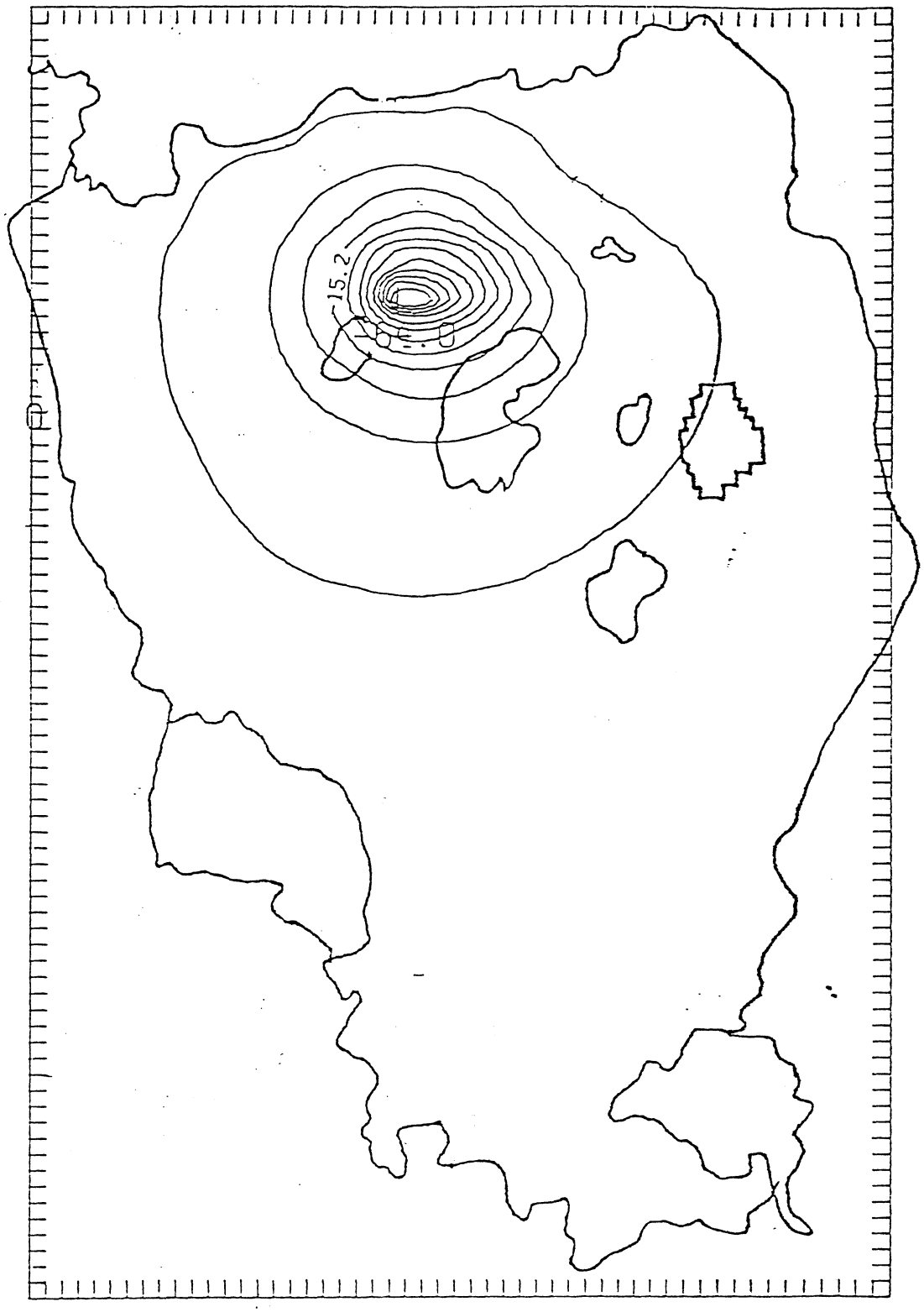


Figure 21. Estimated Steady-State Water Inflow Rates at 140 Meter Level for Selected Stratified Drift Grouting Scheme to the Extent of 75% Permeability Reduction in the Direct Contact Drift/Orebody Zone



Values in feet of drawdown

Figure 22. Estimated Basin-Wide Steady-State Stratified Drift Aquifer Drawdown Impacts for 75% Permeability Reduction Scheme in Stratified/Orebody Direct Contact Zone

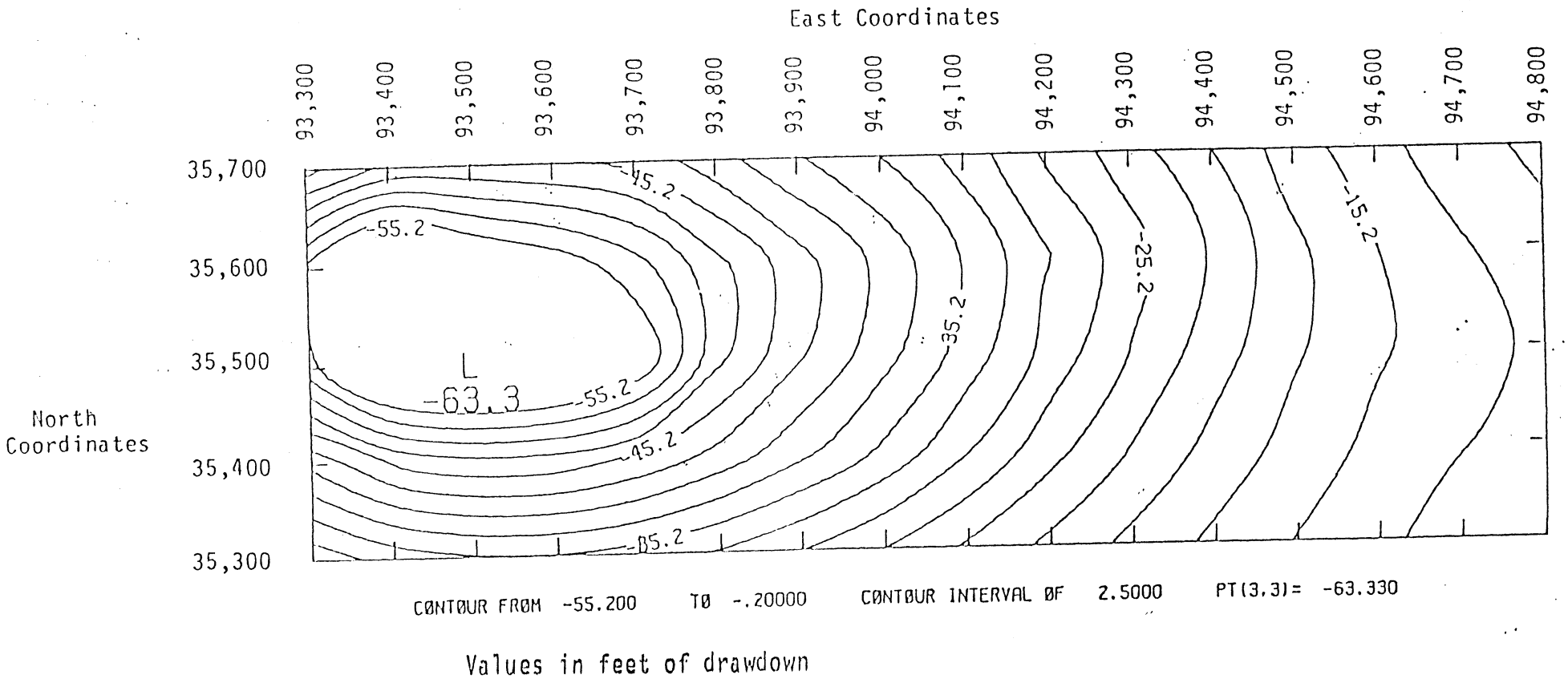


Figure 23. Estimated Stratified Drift Aquifer Drawdown Impacts at Steady-State Conditions Directly Overyling Orebody for the 75% Permeability Reduction Scheme in Stratified Drift/Orebody Direct Contact Zone

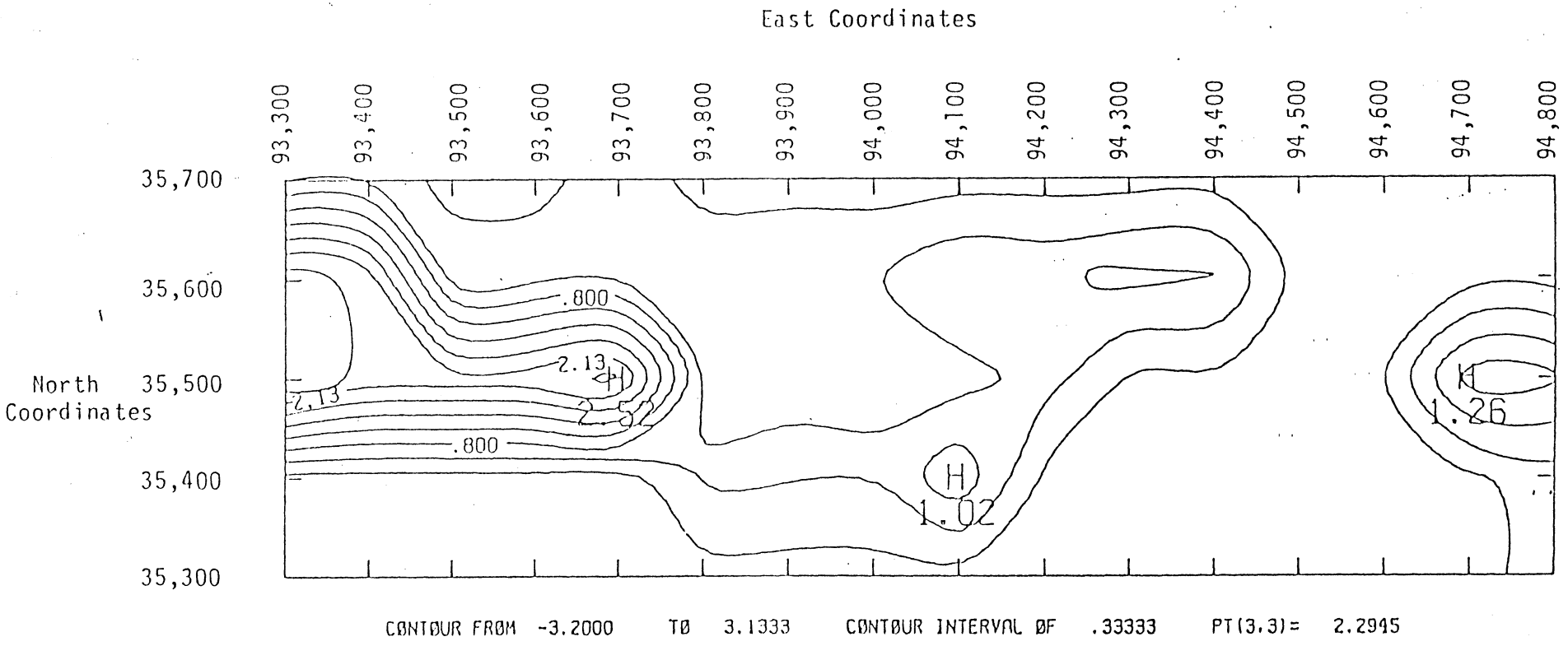
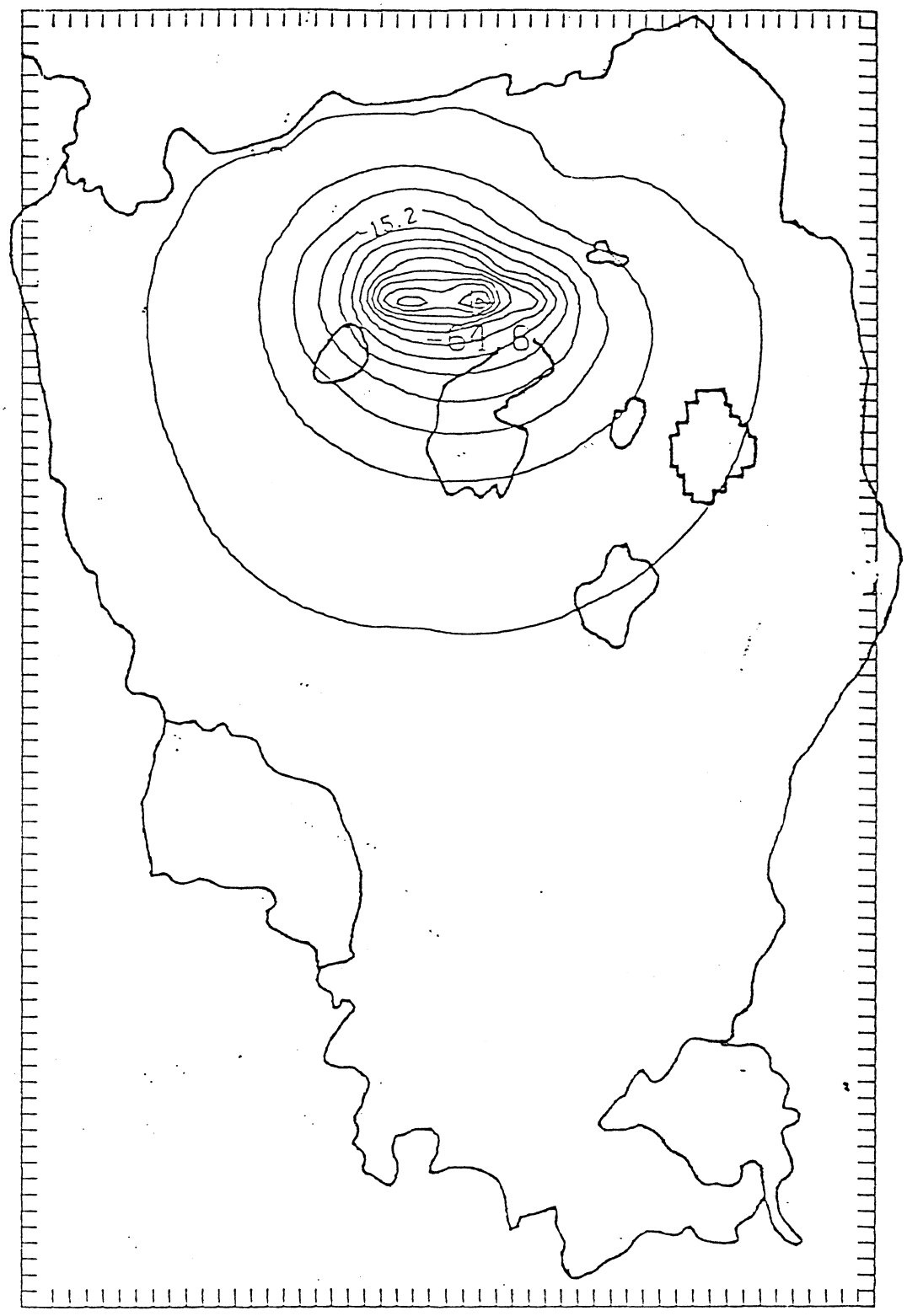


Figure 24. Estimated Steady-State Water Inflow Rates at Subcrop Level for Selected Depressurizing Well Scheme



CONTOUR FROM -60.200 TO -.20000 CONTOUR INTERVAL OF 5.0000

Values in feet of drawdown

Figure 25. Estimated Basin-Wide Steady-State Stratified Drift Aquifer Drawdown Impacts for Selected Well Depressurizing Scheme

UW-STEVENS POINT
3 1775 621773 7