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WIPP Salado Hydrology Program Data Report #1

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ABSTRACT

WIPP Salado Hydrology Program Data Report #1 presents hydrologic data collected during permeability tests of the Salado Formation performed from August 1988 through December 1989. Analysis and interpretation of the test data are presented in a separate report. The report presents the results of the drilling and testing of six boreholes drilled from the WIPP underground facility 655 m below ground surface in the Salado Formation. Permeability tests were conducted using multipacker test tools with inflatable packers to isolate borehole intervals to allow formation pore-pressure buildup and subsequent pulse-withdrawal tests. Test data include pressures and temperatures in brine-filled, packer-isolated test intervals and borehole-closure and axial test-tool-movement measurements. The test boreholes are 4.0-inch (10.2-cm) in diameter, and were cored in halite and associated anhydrite interbeds and clay seams. The boreholes are oriented vertically downward, angled downward, and horizontal. The boreholes were drilled and cored using compressed air to remove drill cuttings. Three boreholes were drilled in Room C2: C2H01, C2H02, and C2H03. Borehole C2H01 was initially drilled to a depth of 5.68 m below the floor of Room C2 and later deepened to 8.97 m to include Marker Bed 139 in the test interval. Borehole C2H02 was drilled to a depth of 10.86 m (7.68 m vertical

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projection from the floor of Room C2) at a 45° downward angle from the junction of the west wall and floor of Room C2. Marker Bed 139 was included in the test interval in borehole C2H02. Borehole C2H03 was drilled horizontally into the west wall of Room C2. Vertically downward boreholes were drilled from the floor in the North 1420 drift (borehole N4P50); the South 1300 drift (borehole S0P01); and in Room 7, Waste Panel 1 in the waste-storage area (borehole S1P71).

Permeability tests were performed after installing multipacker test tools in test boreholes, inflating the packers, and allowing pressures to build up in the isolated intervals. Pulse-withdrawal tests were performed after buildup pressures approached the apparent formation pore pressure. Pulse injections were sometimes performed to increase the fluid pressures in isolated intervals.

Compliance tests were conducted in lengths of steel and stainless-steel casing to evaluate the mechanical performance of the multipacker test tools. The stainless-steel compliance-test chamber was installed with externally mounted thermocouples in a downward-angled borehole in Experimental Room 4. Compliance tests included leak tests and simulated pulse-injection and pulse-withdrawal sequences.

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Foreword

WIPP Salado Hydrology Program Data Report #1 is the first in a series of reports which will make available hydrologic data collected from the Salado Formation at the Waste Isolation Pilot Plant (WIPP) site near Carlsbad, New Mexico. The data presented in this report were collected between August 1988 and December 1989. The purpose of this series of reports is to disseminate basic hydrologic data to interested parties in a timely manner, often before data interpretation. Analysis and interpretation of the test data presented in this report are found in Beauheim and others (1991). The underground testing described in this report was carried out by INTERA Inc., of Austin, Texas, under the direction of Sandia National Laboratories, Albuquerque, New Mexico.

WIPP Salado Hydrology Program Data Report #1 presents the results of the drilling and testing of six boreholes drilled from the WIPP underground facility under construction in the Salado Formation 655 m below ground surface. The boreholes were drilled in the experimental, operations, and waste-storage areas of the underground facility. The boreholes are oriented vertically downward, angled downward, and horizontal. The data presented include the pressures and temperatures in brine-filled isolated intervals of the test boreholes, and borehole-closure and test-tool-movement measurements collected during pressure-buildup periods and in response to pulse-withdrawal tests.

The pages in this report are numbered consecutively and the information is presented in the following order: text, figures, tables, appendices. The table of contents should be consulted for overall organizational details and content. The appendices contain tabulated data from drilling and testing.

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Summary

WIPP Salado Hydrology Program Data Report #1 contains data collected during the drilling and permeability testing of boreholes C2H01, C2H02, C2H03, N4P50, S0P01, and S1P71, and the drilling of boreholes P1P01 and P4P30. The test boreholes were drilled with 4.0-inch (10.2 cm) core and drill bits using compressed air to remove drilling cuttings. Core samples were recovered from over 95% of the sections drilled. Core samples were not recovered from drilled sections where moist clay seams prevented compressed-air evacuation of drill cuttings. Descriptions of the recovered core samples are presented in Appendix B.

Three permeability-testing boreholes were drilled and cored in Room C2. Borehole C2H01 was drilled vertically downward to a depth of 5.58 m from the floor. After testing argillaceous halite, C2H01 was deepened to 8.97 m from the room floor to allow testing of Marker Bed 139. Borehole C2H02 was drilled at a downward angle of 45° from the horizontal at the junction of the west wall and floor of the room. C2H02 was drilled to a depth of 10.86 m (a vertical distance of 7.68 m below the room floor) to allow testing of Marker Bed 139 beneath the rib (wall), rather than floor, of an excavation. Borehole C2H03 was drilled horizontally into the west wall of room C2 in a clear halite bed between anhydrite beds "a" and "b" to a depth of 9.14 m from the wall of the room.

Permeability-testing boreholes were also drilled in the North 1420 drift, in the South 1300 drift, and in Room 7, Waste Panel 1. Borehole N4P50 was drilled vertically downward from the floor of the North 1420 drift to a depth of 10.87 m to allow testing of anhydrite "c" and clay B. Borehole S0P01 was drilled vertically downward from the floor of the South 1300 drift to a depth of 5.17 m. Borehole S1P71 was drilled vertically downward from the floor of Room 7 in Waste Panel 1 to a depth of 4.56 m. Halite and clay D were tested in boreholes S0P01 and S1P71.

Two additional boreholes were drilled for use in test-tool-performance evaluation and compliance testing. Borehole P1P01 was drilled horizontally into the east wall of Room 1 to a depth of 6.06 m, and was used to evaluate the performance of borehole-closure measurement devices. Borehole P4P30 was drilled at a downward angle of 45° from the horizontal at the junction of the west wall and floor of Room 4 to a depth of 5.33 m (a

vertical depth of 3.77 m from the room floor). A length of sealed stainless-steel casing was installed in P4P30 and was used for compliance tests of the multipacker test tools.

Permeability testing was performed using multipacker test tools to isolate brine-filled sections of the boreholes for pressure buildup and pulse testing. The test tools utilized two 9.53-cm (3.75-inch) diameter packers with elements 92-cm (36.22-inch) long to isolate test and guard zones of various lengths. Guard zones are the isolated intervals between the two packers. Pressure monitoring in a guard zone helps to evaluate how well a bottom-hole test interval is isolated. The principal test zones were the bottom-hole zones, but testing was also performed in the guard zone between the two packers when a horizon of hydrologic interest was located there.

The test tools were equipped with pressure transducers to monitor fluid pressures in the test and guard zones and inflation pressures in each packer. Thermocouples were used to monitor temperatures in the test and guard zones. The test tools were also equipped with radially oriented linear variable-differential transformers (LVDTs) to measure borehole closure and an axially oriented LVDT to monitor test-tool movement in response to pressure changes in the isolated intervals and in the packers. Calibration data for the pressure transducers and LVDTs are presented in Appendix A.

In most permeability-testing sequences, pulse-withdrawal tests were performed after fluid pressures in the test zones had built up to relatively stable levels. Pulse-withdrawal tests were used because of the low permeability of the Salado Formation as indicated by other testing at the WIPP site. Pulse-withdrawal tests were performed in preference to pulse-injection tests to avoid potential hydro-fracturing of the formation, which could occur if a pulse injection were to exceed the formation's lithostatic pressure. Each pulse-withdrawal test was repeated to provide an indication of the reproducibility of the test results. Occasionally, pulse injections were performed to increase fluid pressure in isolated intervals after shut in when little or no fluid-pressure responses were observed. Permeability-testing results are presented in sequence plots of the parameters monitored versus time, and the tabulated data in Appendix C.

Pulse-withdrawal and/or pulse-injection tests were conducted in isolated test zones in argillaceous halite in borehole C2H01 during permeability-testing sequences C2H01-A and

C2H01-B; in borehole S0P01; and in borehole S1P71 during permeability-testing sequence S1P71-A. A pulse-withdrawal test was conducted in the isolated guard zone in borehole S0P01. The fluid-pressure response in the isolated guard zone in C2H01 during test-zone permeability-testing sequences C2H01-B emulated a pulse-withdrawal test. Pulse-withdrawal tests were conducted in intervals isolating Marker Bed 139 in test zones in borehole C2H01 during permeability-testing sequence C2H01-C, in borehole C2H02, and in the guard zone in borehole S0P01. A pulse-injection test of Marker Bed 139 was attempted in the guard zone of S1P71, but the test was unsuccessful because a sustained pressure pulse could not be maintained in this interval of the borehole.

Permeability tests were not conducted in boreholes C2H03 and N4P50. Testing was not attempted in borehole C2H03 because no post-shut-in pressure buildup was observed in either the test or guard zones. In borehole N4P50, fluid-pressure buildup was observed in a test section including anhydrite "c" and clay B, but the test tool had to be removed from the borehole before pulse testing could be performed because N4P50 had to be vacated to accommodate nearby construction activities.

Compliance testing of the multipacker test tools was performed before each testing sequence to characterize test-tool performance, to identify the non-formation-related responses due to test-tool movement, and to identify changes in the shape and size of the elastic packer elements caused by changes in packer and test-zone pressure. During a typical compliance-test sequence, the multipacker test tool was installed in a sealed steel (or stainless-steel) chamber and pressure checked to ensure that the tool's components were not leaking. Then, pulse injections were performed in the isolated test- and guard-zone intervals in the casing. The responses of the pressure transducers, thermocouples, and LVDTs were monitored over periods of several days. Compliance-testing results are presented in sequence plots of the parameters monitored versus time, and tabulated data are presented in Appendix D.

1.0 INTRODUCTION

The following data report describes the objectives, design, equipment, and results of permeability tests conducted in boreholes drilled into the Salado Formation from the Waste Isolation Pilot Plant (WIPP) underground facility. The WIPP facility is currently under construction 655 m below ground surface in southeastern New Mexico (Figure 1.1). The WIPP is a U.S. Department of Energy research and development facility designed to demonstrate safe disposal of transuranic radioactive wastes resulting from the United States' defense programs. The testing described in this data report was conducted by INTERA Inc., under contract to the Fluid Flow and Transport Division of Sandia National Laboratories (SNL), Albuquerque, New Mexico.

1.1 General Description

The permeability-testing program for the WIPP underground facility was designed to provide information on the permeability and formation pore pressure of the Salado Formation. These data are required for estimating brine seepage into the repository, a factor that will affect the condition of the backfill used to contain the waste, and the state and pressurization of the sealed waste panels after closure of the repository. Analysis of the data provided by the Salado Hydrology Program will reduce the level of uncertainty in permeability values used in performance-assessment calculations for the WIPP repository. The permeability-testing program is designed to provide information on the permeability and formation pore pressure of the Salado Formation both within the zone of influence of the WIPP excavations and in the undisturbed "far field" parts of the Salado. Additional data on formation-pore-pressure measurements and gas-flow testing of the Salado at and near the underground-facility horizon can be found in Peterson and others (1987), Stormont and others (1987), and Stormont (1990).

1.2 Objectives

The design of effective plugs and seals for the repository's waste panels, proper evaluation of backfill performance, and performance-assessment calculations for the WIPP underground facility require knowledge of the distribution of permeability and formation pore pressure within the geologic media surrounding the facility. The far-field

permeability may control the rate of brine seepage into the facility after closure. The amount of brine which enters the repository will affect the state of consolidation of the backfill and, therefore, the condition of the material in the sealed waste panels. To aid in the investigations relating to these concerns, the specific objectives of the permeability-testing program are:

- to provide technically defensible data to interpret the permeability characteristics of the different lithologies of the Salado Formation that could contribute to fluid flow to or from the WIPP underground facility;

- to delineate, if possible, the extent of hydrogeologic disturbance around the WIPP underground facility; and

- to provide estimates of the magnitude of the pore pressure of the Salado Formation near the WIPP underground facility, and where possible, establish a formation-pressure profile from the edge of the repository out to undisturbed conditions in the formation.

1.3 Test Design

The underground permeability tests discussed in this data report were conducted in six boreholes drilled in vertically downward, angled downward, and horizontal orientations at four test locations in the WIPP underground facility shown on Figure 1.2 and described in detail in Section 5.3. In the experimental area, boreholes C2H01, C2H02, and C2H03 were drilled in Room C2, and borehole N4P50 was drilled in the North 1420 drift. In the operations area, borehole S0P01 was drilled in the South 1300 drift. In the waste-storage area, borehole S1P71 was drilled in Waste Panel 1, Room 7. These (and future) test locations were chosen to provide an adequate representation of permeability in the Salado Formation and its interbeds at and near the repository horizon and to provide comparisons with previously tested areas. Additional boreholes may be drilled at each of these testing locations and at other locations selected for testing.

The general procedures used during the permeability testing program were as follows. After drilling, a test borehole was filled with 1.2-kg/l sodium-chloride brine. Within a period ranging from a few hours to two days, a multipacker test tool (see Section 2.1.1) was then installed in the borehole. The packers were used to isolate a bottom-hole test interval, or test zone, and a guard interval, or guard zone, between the two packers. The guard zone is used to detect pressure leakage from the test zone either through the test tool or through the formation. The guard zone also provides a means to measure and assess additional pressures, such as "squeeze pressures" due to test-tool compliance, applied to the test and guard zones during packer inflation and testing procedures. Guard zones can also be used for permeability testing. After packer inflation, the test and guard zones were shut in and the pressure buildup was monitored with pressure transducers and recorded on a computer-controlled data-acquisition system (DAS). After approaching relatively steady pressure conditions over periods ranging from weeks to months, pressure-pulse tests were performed on the isolated test zones, as well as on guard zones of selected boreholes.

Permeability-testing procedures are described in Section 4.0. The permeability tests were conducted in a manner similar to that used to measure permeability and formation pore pressure in the WIPP waste-handling shaft (Stensrud and others, 1988; Saulnier and Avis, 1988). For the Salado Hydrology Program, permeability tests were conducted in halite and argillaceous halite and in anhydrite and polyhalite interbeds at depths of 2 to 11 m from the walls and floor of the facility. The primary method of conducting the permeability testing was through pulse withdrawals although pulse injections were performed on five occasions. Pulse-withdrawal tests were generally performed in preference to pulse-injection tests for the following reasons:

1) pulse-withdrawal tests do not force fluids into the formation that are not in chemical equilibrium with the rock;

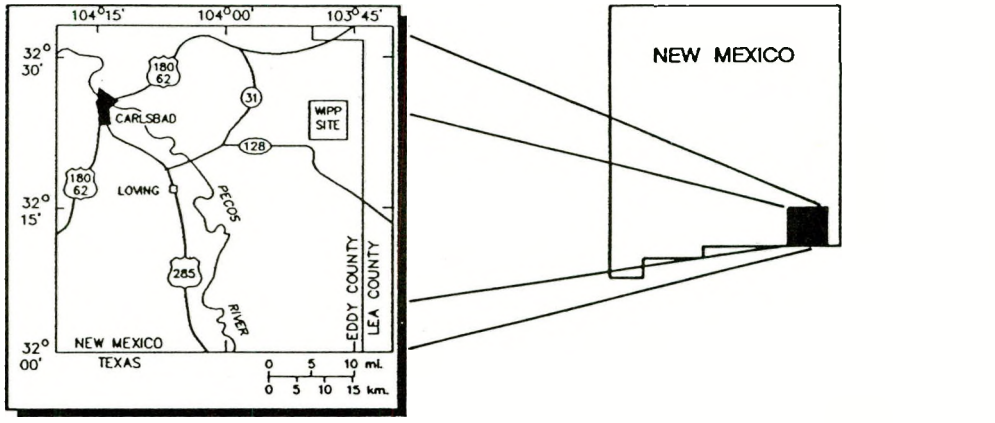
2) pulse-withdrawal tests would not overpressurize the formation and cause fractures to open;

3) pulse-withdrawal tests represent underpressured hydraulic conditions which more closely approximate the conditions that will be responsible for post-closure fluid inflow into the WIPP underground facility; and

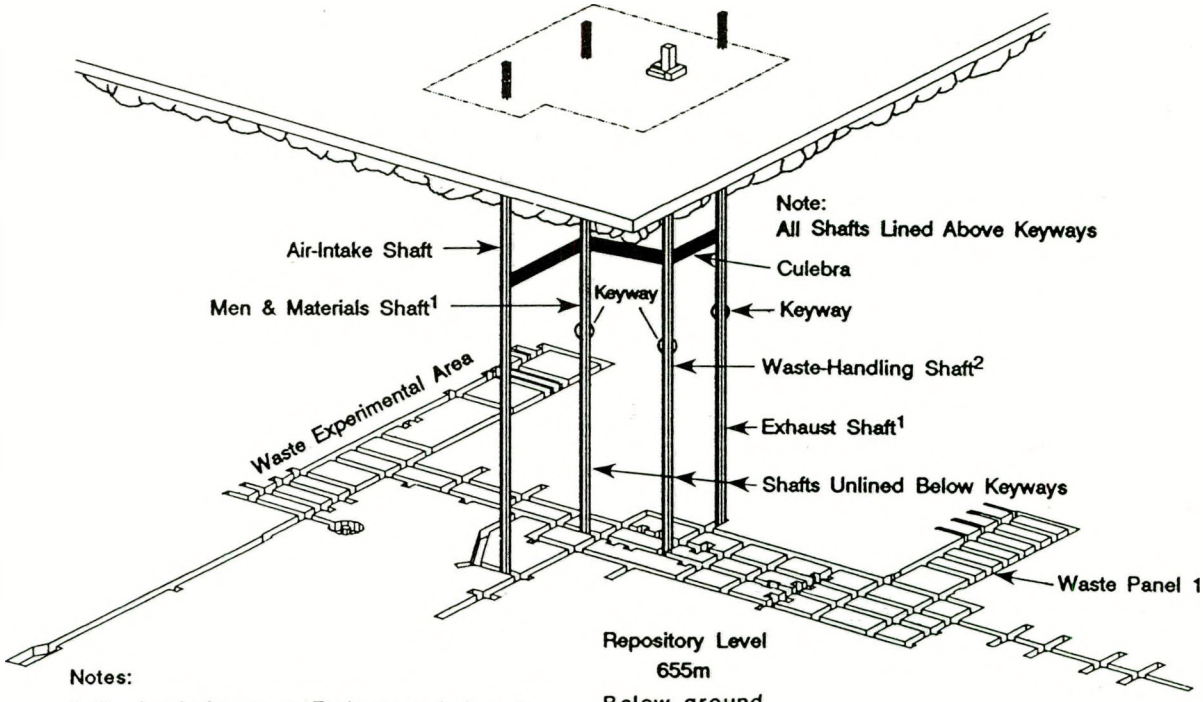
4) pulse-withdrawal tests are operationally safer to conduct than pulse-injection tests over similar pressure changes.

Five pulse injections were performed during the testing described in this report. During pulse injections, brine was injected into packer-isolated intervals through the test tools' injection ports. The fluid injections generally continued until achieving desired fluid-pressure increases. One pulse injection was used to increase test-zone fluid pressure after an accidental venting of the fluid-pressure buildup. Four pulse injections were performed in zones in which little or no fluid-pressure buildups were observed. Two of these pulse injections resulted in sustained fluid-pressure increases and two did not.

Table 1.1 summarizes the locations and orientations of the boreholes tested, the dates the boreholes were drilled, the lengths of the boreholes, and the dates when the borehole locations were excavated. Figure 1.3 illustrates the stratigraphic position of each of the test boreholes and shows which map units were included in the tested intervals.





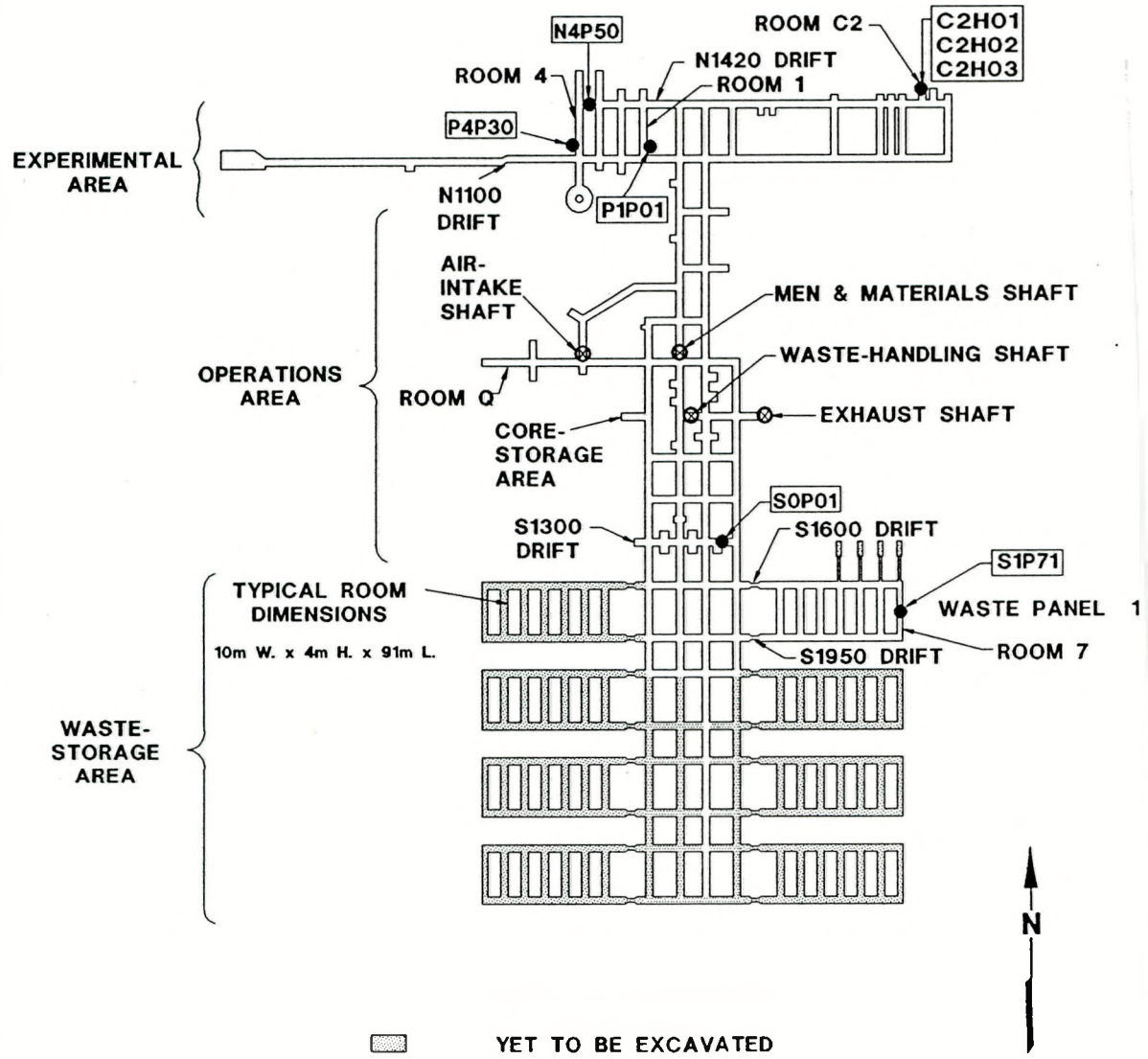


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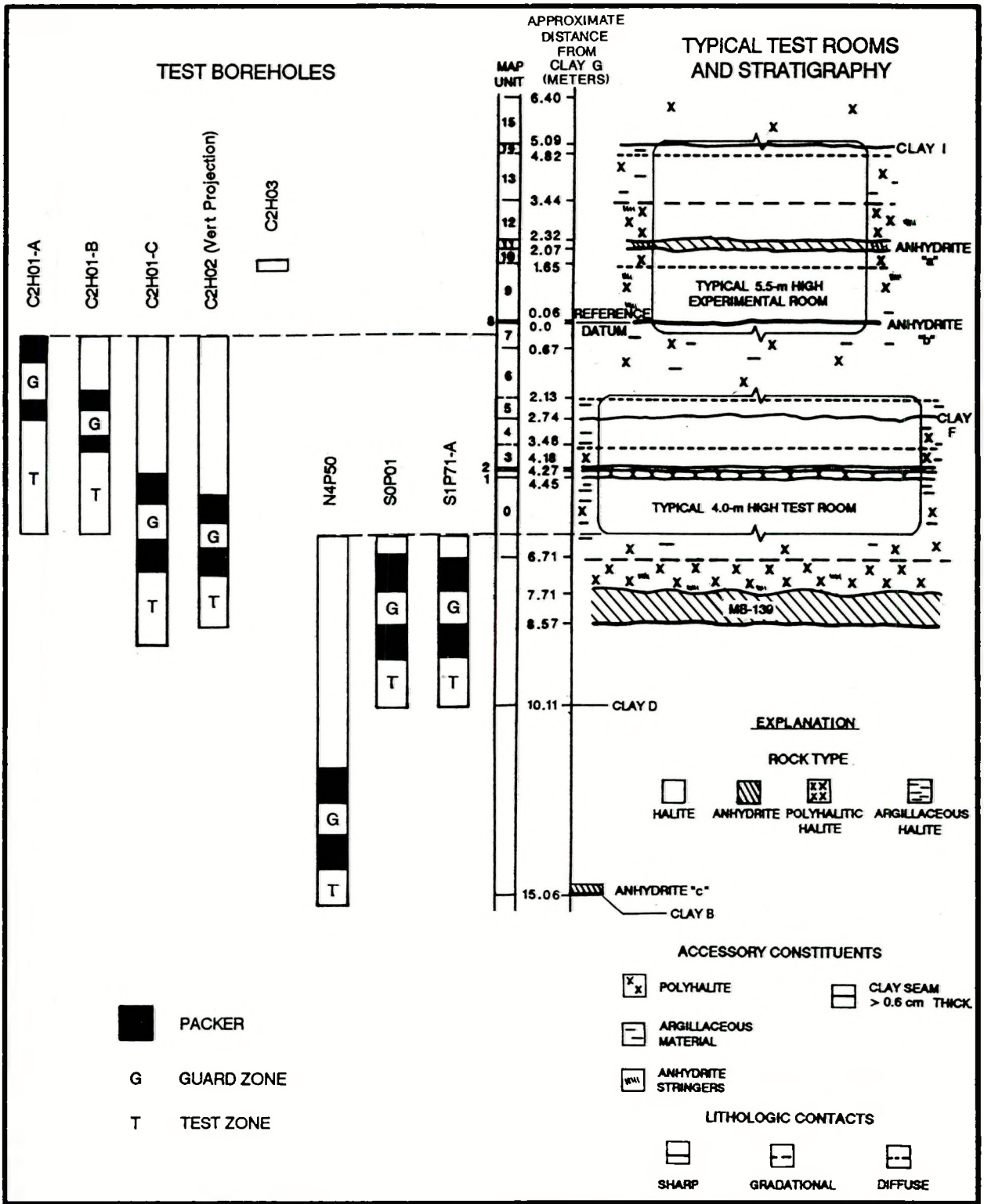
1. Previously known as Exploratory shaft and Construction and Salt Handling (C & SH) shaft.
2. Previously known as Ventilation shaft.

NOT TO SCALE

Drawn by ABW	Date 2/20/90	Location of the WIPP Site and Access Shafts	
Checked by G.S.	Date 2/21/90		
Revisions	Date		
#105400R062	2/21/90		
INTERA Technologies			Figure 1.1



Drawn by ABW	Date 2/14/91	Map of the WIPP Underground Facility and Test Locations
Checked by G.S.	Date 2/14/91	
Revisions G.S.	Date 2/20/91	
#105400R062	2/20/91	
INTERA Technologies		Figure 1.2



Drawn by	INTERA	Date 3/11/91	Stratigraphic Positions of Test Boreholes and Test and Guard Zones
Checked by		Date	
Revisions		Date	
#105400R062		3/11/91	

INTERA Technologies

Figure 1.3

BOREHOLE (ORIENTATION)	DATE DRILLED/ CORED (INTERVAL DRILLED/CORED)	LOCATION	DATE ROOM/DRIFT EXCAVATED
C2H01 (vertically down)	8/4/88 -8/5/88 (0 - 5.68 m)	Room C2	3/17/84 - 4/1/1984
C2H01 (vertically down)	2/10/89 - 2/11/89 (5.68 - 8.97 m)	Room C2	3/17/84 - 4/1/1984
C2H02 (angled down @ 45°)	4/14/89 - 4/17/89 (0 - 10.86 m)	Room C2	3/17/84 - 4/1/84
C2H03 (horizontal)	8/22/89 - 8/23/89 (0 - 9.14 m)	Room C2	3/17/84 - 4/1/84
N4P50 (vertically down)	12/15/88 - 12/16/88 (0 - 10.87 m)	North 1420 Drift	3/5/83
S0P01 (vertically down)	1/11/89 - 1/12/89 (0 - 5.17 m)	South 1300 Drift	7/1/84 - 7/2/84
S1P71 (vertically down)	11/10/88 (0 - 4.55 m)	Room 7, Waste Panel 1	3/88

DATE:	Summary of Borehole Locations and Orientations	
REF:		
#105400R062		
INTERA		Table 1.1

2.0 TEST EQUIPMENT

The following sections describe the equipment used in the permeability-testing program in the WIPP underground facility and the calibration methods for that equipment. The equipment includes the multipacker test tools, the data-acquisition system, pressure transducers, thermocouples, and linear variable-differential transformers (LVDTs). Permeability-testing sequences C2H01-A and C2H01-B in borehole C2H01 were performed with the multipacker test tool used for permeability tests in the waste-handling shaft as described in Stensrud and others (1988). This tool is in principle very similar to the multipacker test tool described in Section 2.1.1, but without LVDTs. All other permeability tests were conducted using the multipacker test tool described in Section 2.1.1.

2.1 Description of Equipment

2.1.1 Multipacker Test Tool

The multipacker test tool, shown on Figure 2.1, was designed and built specifically for the permeability-testing program by BASKI Inc. in conjunction with Sandia National Laboratories (SNL) and INTERA Inc. The tool has two sliding-end, 3.75-inch (9.53-cm) O.D. packers mounted on a 1.9-inch (4.83-cm) mandrel with the packers' fixed ends oriented toward the bottom-hole end of the test tool. Figure 2.2 shows the nominal dimensions of the tools' parts. When inflated, the packers provide isolation of a test zone and a guard zone between the packers. Modular sections of tubing with a variety of different lengths can be used with the test tool to accommodate boreholes and test intervals of varying lengths. Each packer has a 0.90-m long, inflatable synthetic-rubber element which has a seal length of 0.83 m in a 10.2-cm diameter borehole. The tool is equipped with an anchor plate with spacer disks to allow the test tool to be anchored to the surface of the underground room during testing. The test tool can also be secured using a cross made of 1-m lengths of square tubular steel that is attached to the mandrel or its extension. The ends of the cross can then be anchored to the floor or wall of a test room using rock bolts.

The multipacker test tool is equipped with pressure transducers and thermocouples capable of monitoring the pressures and temperatures in the test and guard zones and the inflation pressure in each packer. The test tool has injection and vent ports to both the test and guard zones which allow dissipation of squeeze pressure during packer inflation, and venting of entrapped air or formation-derived gas from the test and guard zones. The injection ports can also be used to apply an underpressure or overpressure to the isolated intervals. Underpressures and overpressures can be applied as pressure pulses or as constant-pressure brine injections or withdrawals.

The test-interval section of the test tool is equipped with linear variable-differential transformers (LVDTs) to measure borehole deformation and/or tool movement during the testing period. Three LVDTs are radially oriented 120° apart immediately below the test zone packer. One axially oriented LVDT is mounted at the bottom end of the test tool and is used to measure borehole elongation and test-tool movement during testing.

The downhole sections of the test tool have an outside diameter of about 9.5 cm to minimize the brine volume in a 10.2-cm diameter hole. Minimizing the brine volume contained within a test zone reduces the response times to applied pressure pulses and allows more rapid equilibration between borehole and formation pressures.

Two instrument panels (Figure 2.3) with pressure gages are used to monitor the progress of packer inflation and fluid injection or withdrawal directly. Packer inflation and fluid injection are controlled by positive-displacement intensifier pumps which are activated using compressed air or nitrogen. Because fresh water is used for inflating the packers and sodium-chloride brine is used to fill the test boreholes, two separate intensifier-pump systems are used for permeability testing.

2.1.2 Data-Acquisition System (DAS)

A computer-controlled data-acquisition system (DAS) was used to monitor the progress of tests and record data from the signal outputs of transducers, thermocouples, and LVDTs. The DAS utilized for permeability testing is illustrated schematically in Figure 2.4. The DASs used in the permeability-testing program are

housed in air-conditioned storage containers at each testing location. The basic DAS includes borehole sensors (pressure transducers, thermocouples, and LVDTs), a line conditioner, power supplies to activate the sensors, a digital voltmeter to read the sensors' return signals, and a microcomputer to control test progress and store and process the data. The DAS used for this permeability-testing program utilizes a Hewlett Packard-3497A Data-Acquisition/Control unit (HP-3497A) to send and receive signals from the test tool's sensors in the borehole or mounted at the surface. The HP-3497A contains power supplies, a signal scanner, a 5-1/2-digit digital voltmeter, and hardware compensation for the thermocouples. An IBM PS/2 Model 50 microcomputer is used to control tests and to store and interactively process the data. The data-acquisition software can sample the sensors' outputs at time intervals from 15 seconds to several hours. The data are stored both on hard disk and on 3.5-inch (8.9-cm) floppy disks. The DAS software was designed, written, and tested by SNL.

2.1.3 Pressure Transducers

The fluid pressures in the test and guard zones and in the packers are monitored with Druck PDCR-830 vented strain-gage pressure transducers rated from 0 to 14 MPa, with a manufacturer's stated accuracy of ±0.014 MPa. Each transducer is activated by a 10-volt direct-current input and produces a millivolt signal output. Each transducer is calibrated before and after each test installation according to procedures described in Section 2.2.2. The transducers are mounted outside the boreholes on the control panels mounted on the DAS trailers. The transducers are connected to the isolated zones and packers through 0.48-cm O.D. stainless-steel tubing which feeds into and through the packers (Figure 2.1).

2.1.4 Thermocouples

Pickens and others (1987) have shown that in low-permeability media, the positive or negative thermal expansion of water in an isolated test zone can have a significant effect on the measured fluid-pressure response during testing. The multipacker test tools are equipped with thermocouples to monitor temperature in the guard and test zones. The thermocouples used for the permeability-testing program are 15.3-m long, 4-wire Cromel-Constantan type E thermocouples which were prepared and calibrated

by SNL. The thermocouple's measurement accuracy is ±0.06 °C. The thermocouples are 0.3 cm in diameter and are equipped with weather-sealed connectors and junction boxes for protection from the saline environment of the WIPP underground facility.

2.1.5 Linear Variable-Differential Transformers (LVDTs)

Open boreholes in the underground facility have been observed to exhibit deformation and differential movement. Underground rooms and drifts exhibit considerable closure after excavation as described in Bechtel (1986). Appreciable borehole closure in a shut-in brine-filled test interval could raise the fluid pressure to higher levels than would occur without closure. Three Trans-Tek, Model 241 LVDTs are radially mounted, with 120° separation, on the test-interval part of the multipacker test tool to measure radial borehole closure (Figures 2.1 and 2.2). A Model 245 LVDT was axially mounted on the end of the test tool to measure test-tool movement relative to the bottom of the borehole (Figures 2.1 and 2.2). All of the LVDTs are directly accessed by the DAS. The LVDTs require a minimum 10-volt DC input and produce a variable-voltage DC output which is converted by the DAS software to distance from a known reference point. Over their working ranges, the LVDT responses are linear to within ±0.5%.

2.1.6 Compliance-Testing Equipment

Pickens and others (1987) show that test-tool movement in response to packer inflation and brine injection or withdrawal can affect fluid-pressure responses in isolated intervals in boreholes in low-permeability media. Figure 2.5 illustrates that packer movement due to packer inflation can cause the packer element to displace brine in isolated intervals. In low-permeability media, such displacement can cause changes in fluid pressure in the test zone. Changes in the shape, volume, or position of the test tool which affect fluid-pressure responses are referred to as compliance. Compliance may also affect the internal pressure of fluid-filled packers as the inflatable synthetic-rubber packer elements stretch or shrink in response to borehole or test-interval changes in pressure and temperature. To evaluate the magnitude of compliance for the multipacker test tools, pre-installation compliance tests were conducted in the underground facility on all test tools according to procedures outlined in Section 4.1. The compliance tests were conducted in sealed and pressure-tested

(to 14 MPa) sections of 4.5-inch (11.4 cm) O.D. steel and stainless-steel casing. From August 1988 through June 1989, compliance tests were conducted in the test rooms with the steel chamber mounted on a jackstand.

Diurnal temperature changes monitored during early compliance tests in the steel chambers appeared to cause non-tool-related fluid-pressure responses. Therefore, a steel chamber was placed in a borehole drilled into the Salado Formation from the underground facility to minimize these temperature-related effects and reduce the uncertainty of compliance-testing results. A 5.33-m long, 13.97-cm diameter borehole, P4P30, oriented 45° downward from the horizontal, was drilled in Room 4. The borehole entry was made at the junction of the west wall and the floor of the room. On July 7 and 10, 1989 (Calendar Days 188 and 191), a 4.5-inch (11.4-cm) O.D., sealed and pressure-tested chamber, made from a 5.1-m length of stainless-steel casing was installed in borehole P4P30 to serve as a test chamber for subsequent compliance tests. To provide additional temperature data, two thermocouples were mounted externally on the stainless-steel chamber to monitor temperature at the test-zone and guard-zone depths in the annulus between the stainless-steel chamber and the formation during compliance testing. These additional thermocouples were installed to detect any external temperature influences from the formation and/or the uncemented annulus around the compliance-testing chamber.

2.2 Equipment Calibration

2.2.1 Data-Acquisition System

The DAS equipment and associated software were tested before the start of the permeability-testing program to ensure proper operation. The procedure consisted of testing the response of the HP-3497A Data-Acquisition/Control Unit and the DAS software using known input signals to ensure proper signal conversion. The output software was designed and tested by SNL and INTERA Inc. The software is baselined and documented in accordance with the project quality assurance (QA) procedures. In addition, the HP-3497A Data-Acquisition/Control Unit was calibrated by SNL.

2.2.2 Transducers

All transducers in the permeability-testing program are calibrated before and after use for each testing sequence as illustrated in Figure 2.6. The transducers are immersed in a relatively stable temperature environment to minimize temperature-related changes in transducer response. The transducers are then connected to a Heise pressure-measurement gage and to a compressed-gas (nitrogen or compressed air) source of pressure. Pressure is applied to the transducers in stepwise increments, measured with the Heise gage, over the transducers' rated pressure ranges. The transducers' responses to the applied pressures are then analyzed by regression techniques to determine their sensitivity coefficients, which consist of the slopes expressed as pressure/mV, and the y-intercepts of their regression lines expressed as pressure. The sensitivity coefficients are used to convert the transducers' millivolt signals to pressure values. The Druck transducers used in the permeability-testing program are pressure rated by the manufacturer in pounds per square inch, gage pressure (psig). The Heise gage used to calibrate the transducers uses a psi scale. Because the transducers' ratings and the calibration gage's scale are in psi, the test-tool pressure transducers are calibrated in psi. The DAS software converts the transducers' psi/mV sensitivity coefficients to MegaPascals/mV (MPa/mV) using the conversion factor 0.006895 MPa/psi. Transducer-calibration data for the permeability-testing program are presented in Appendix A.

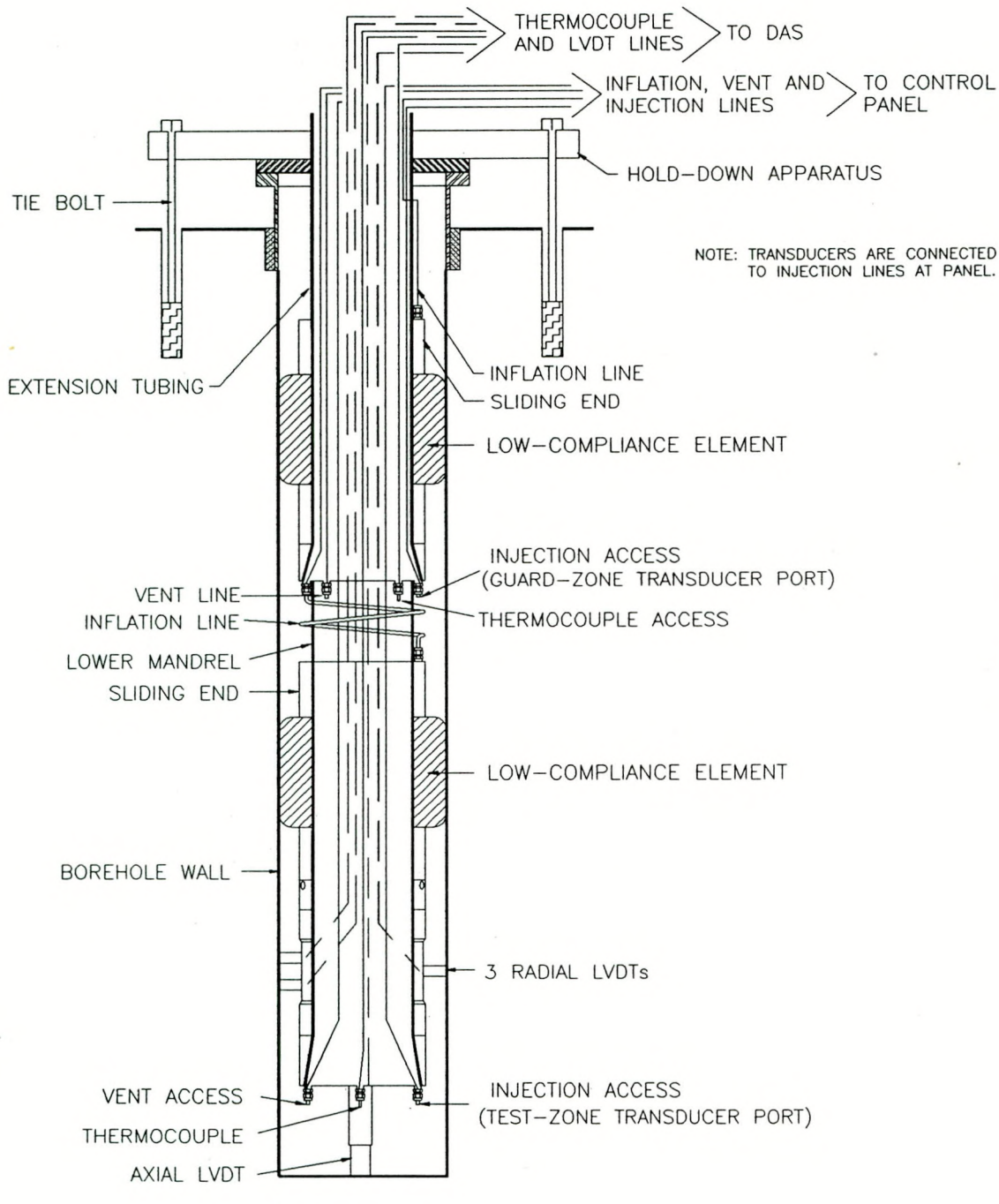
2.2.3 Thermocouples

The thermocouples used in the permeability-testing program were calibrated by SNL before delivery to the WIPP site. The thermocouples' voltages are read directly by the HP-3497A Data-Acquisition/Control Unit. The voltages are converted to temperatures based on equations generated by the National Bureau of Standards for type E thermocouples. Thermocouple-calibration data are stored at the Sandia/INTERA office at the WIPP site.

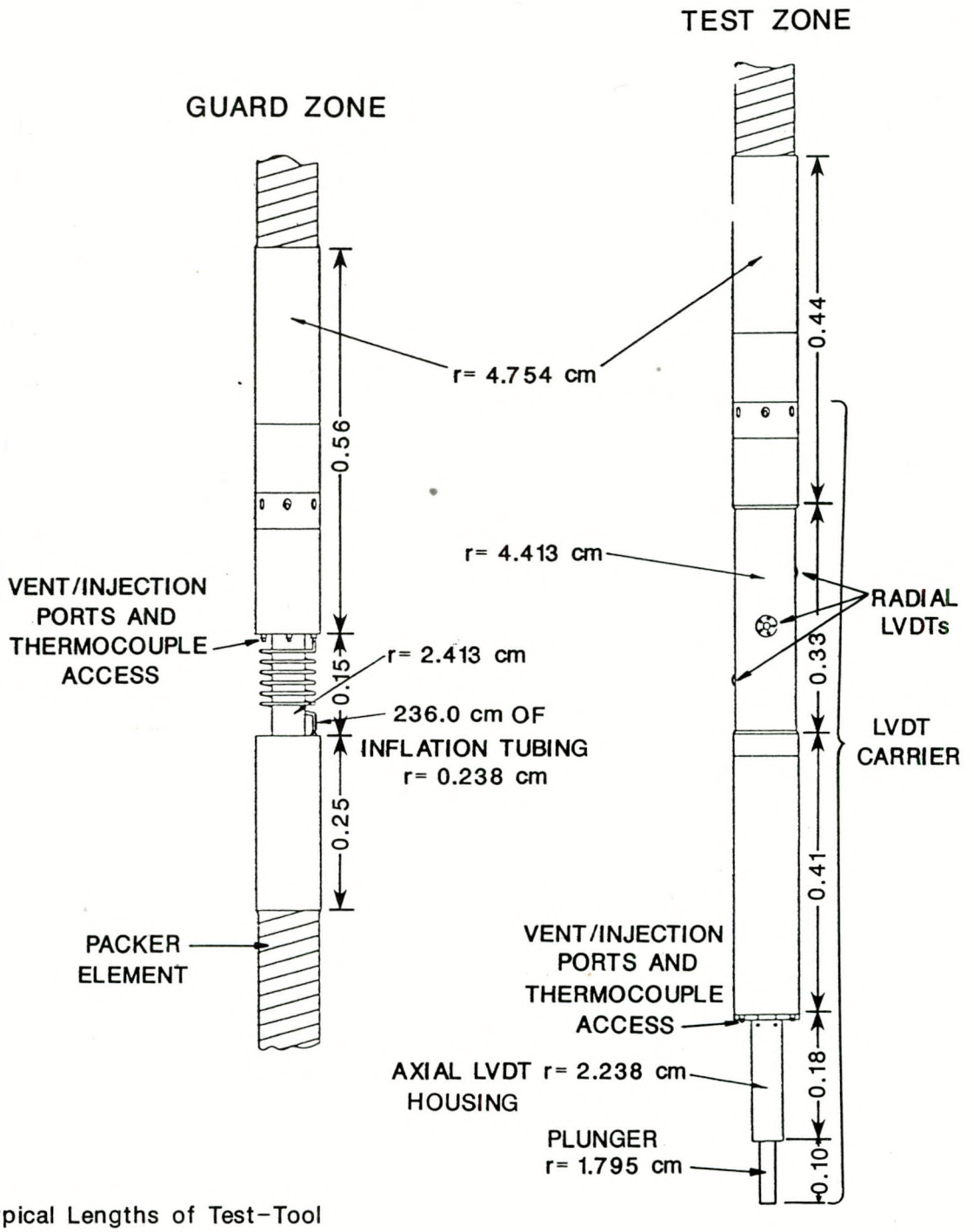
2.2.4 Linear Variable-Differential Transformers (LVDTs)

Each of the radially oriented LVDT plunger assemblies used to measure radial deformation (Section 2.1.5) is calibrated before each installation, and recalibrated when taken out of service and readied for compliance testing and leak checks per WIPP Procedure #204 by SNL. Linear-regression analysis of the calibration data provides slope (sensitivity) and offset (y-intercept) values that are used by the DAS software to convert the VDC output to a linear dimension (cm), starting at zero (0) when the plungers are fully extended and increasing in magnitude as the plungers are depressed. The data obtained from the individual motions of the three radial LVDTs during the calibration period of compliance testing are integrated to arrive at a value that represents an average LVDT displacement for known radius of the compliance-test chamber. The data from the three radial LVDTs collected during compliance-testing are averaged, yielding an average plunger-depression value for the known radius of the compliance-test chamber. The average plunger-depression value is used to establish the initial borehole radius after installation of the multipacker test tool. The average plunger-depression value and the initial borehole radius combined with the average changes in LVDT data collected during permeability testing to arrive at the borehole radius during the permeability-testing period.

The LVDT plunger assemblies used to measure axial test-tool movement (Section 2.1.5) are calibrated before each installation, and recalibrated when taken out of service and readied for compliance testing and leak checks per WIPP Procedure #205 by SNL. Linear-regression analysis of the calibration data provides slope (sensitivity) and offset (y-intercept) values that are used by the DAS software to convert the VDC output to a linear dimension (cm), starting at zero (0) when the plungers are fully extended and increasing in magnitude as the plungers are depressed. These measurements correspond directly to movements of the test tools in the boreholes. Axial LVDT values decrease as the test tools move away from the bottom of the borehole and increase if the test tools move down in the boreholes.

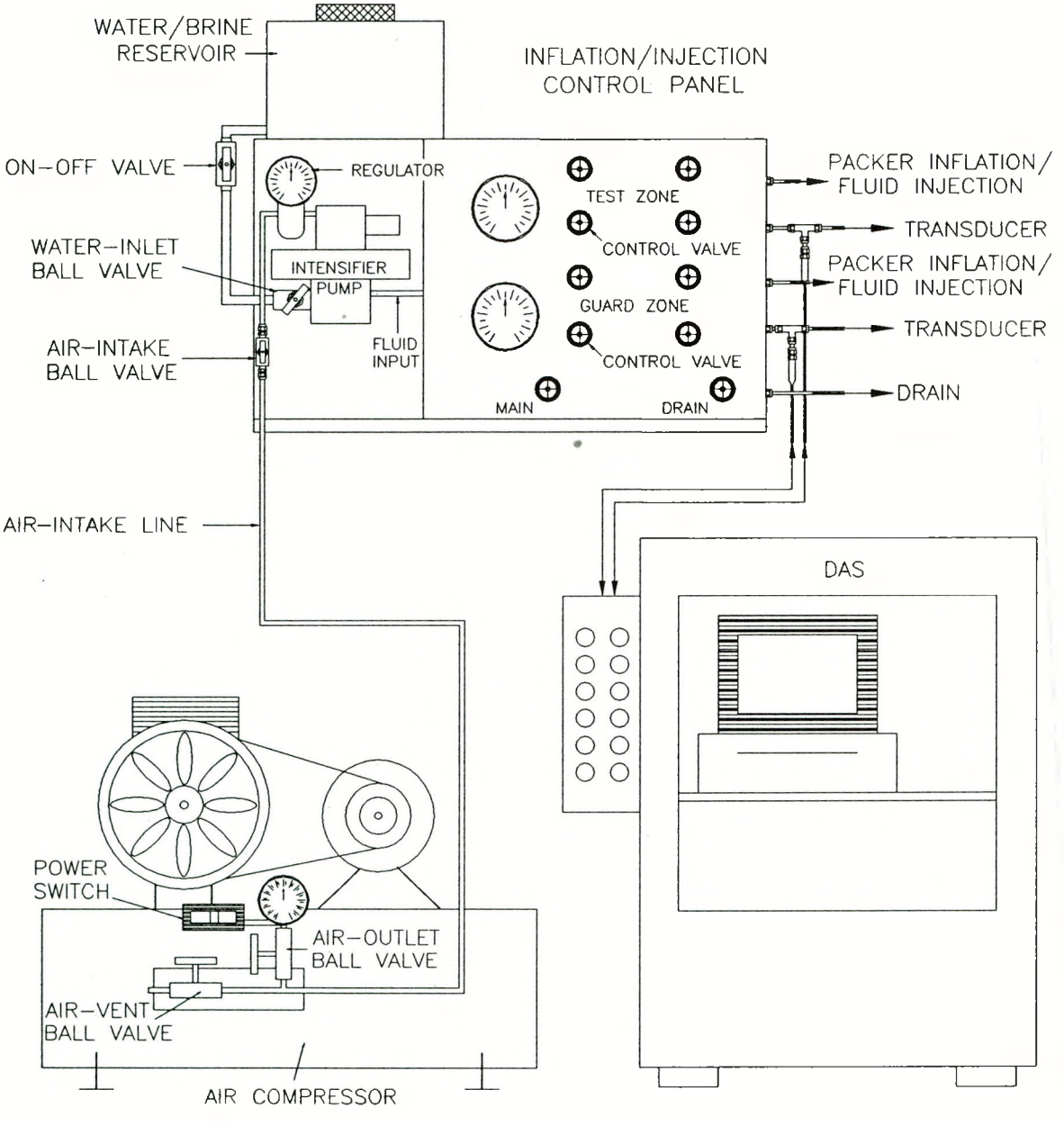


Drawn by JFP/INTERA	Date 2/28/91	Multipacker Test Tool
Checked by	Date	
Revisions	Date	
#105400R062	2/28/91	
INTERA Technologies		Figure 2.1

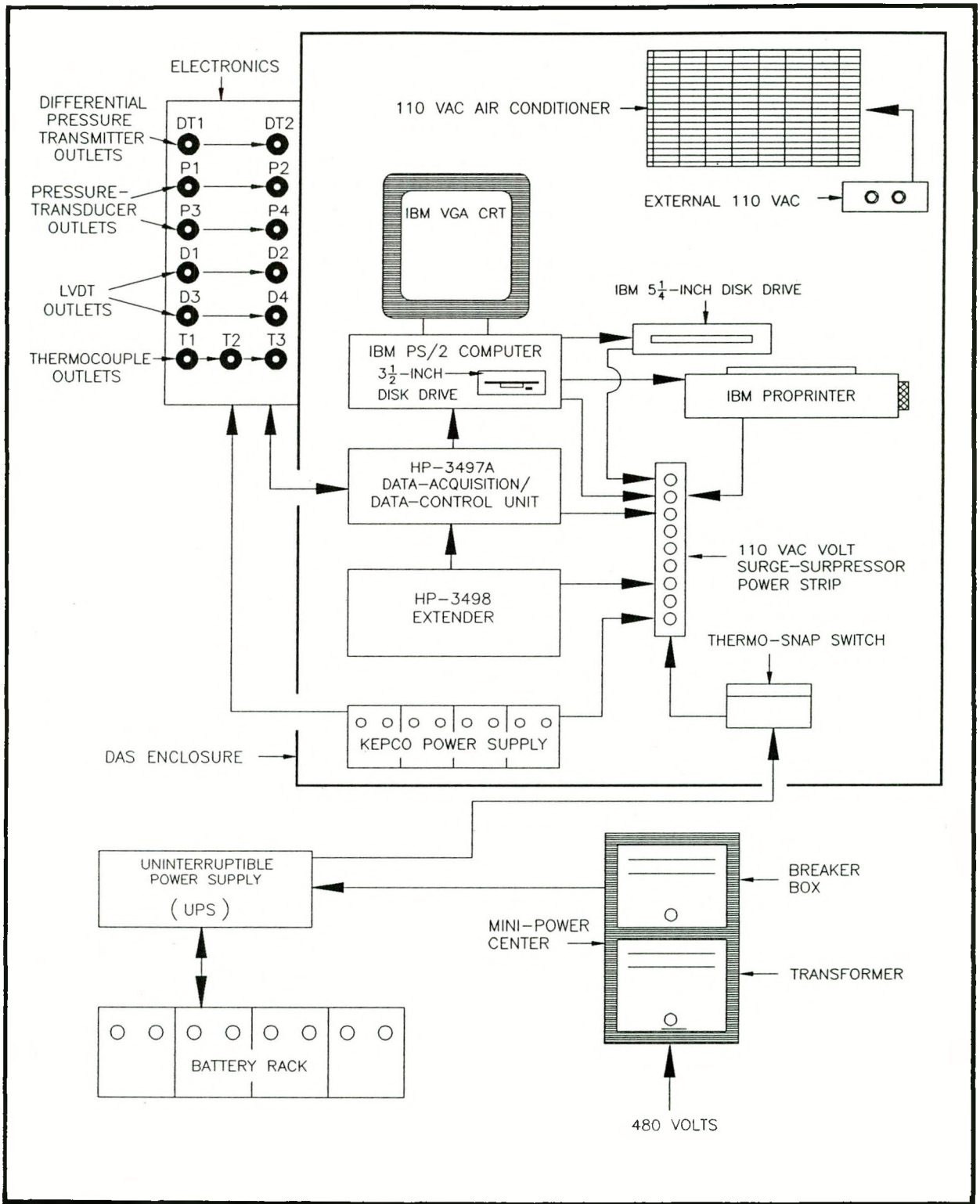


Typical Lengths of Test-Tool Segments Shown in Meters

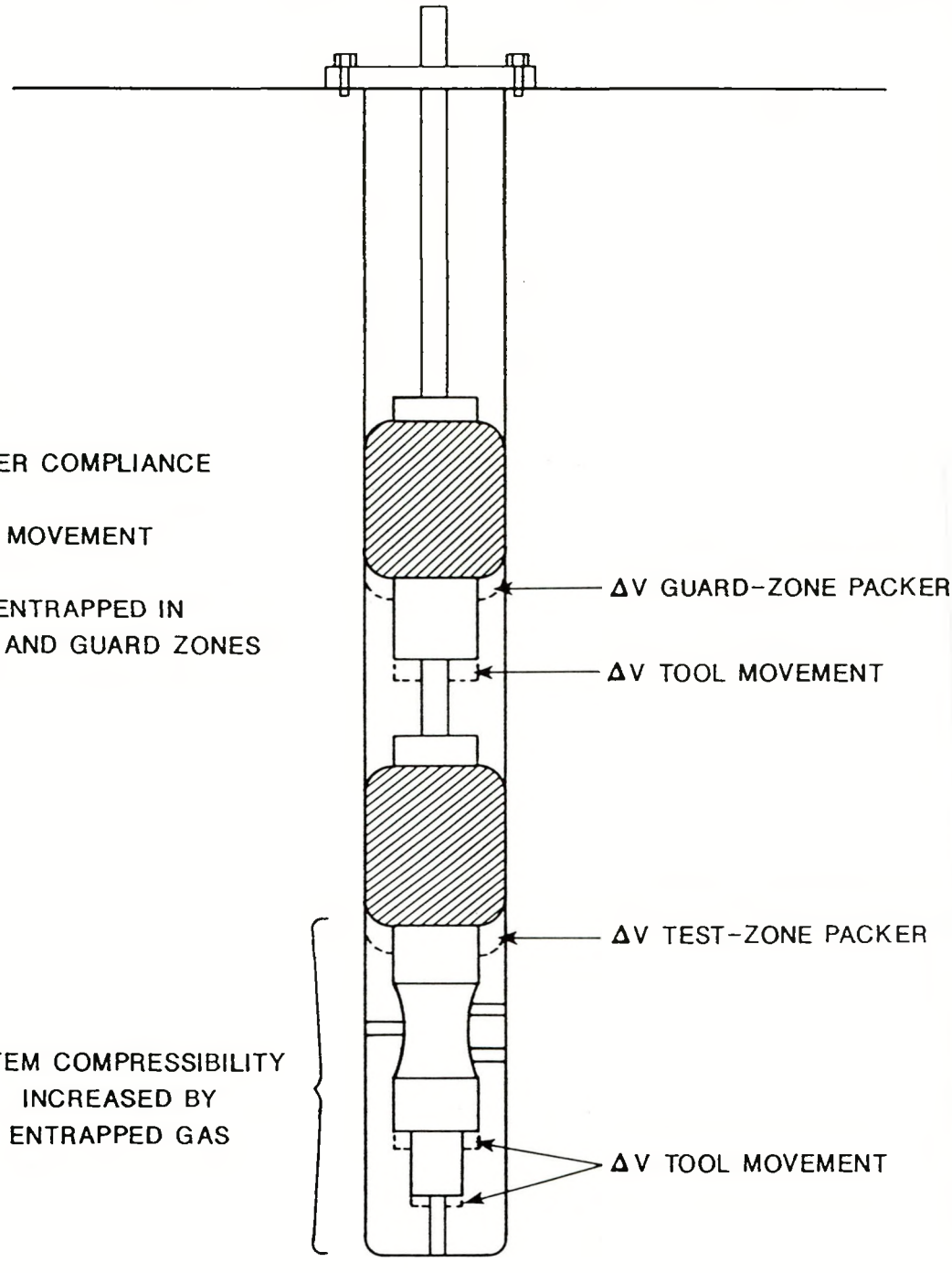
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Checked by G.S.	Date 11/29/89	
Revisions G.S.	Date 4/23/90	
#105400R062	11/29/89	
INTERA Technologies		Figure 2.2



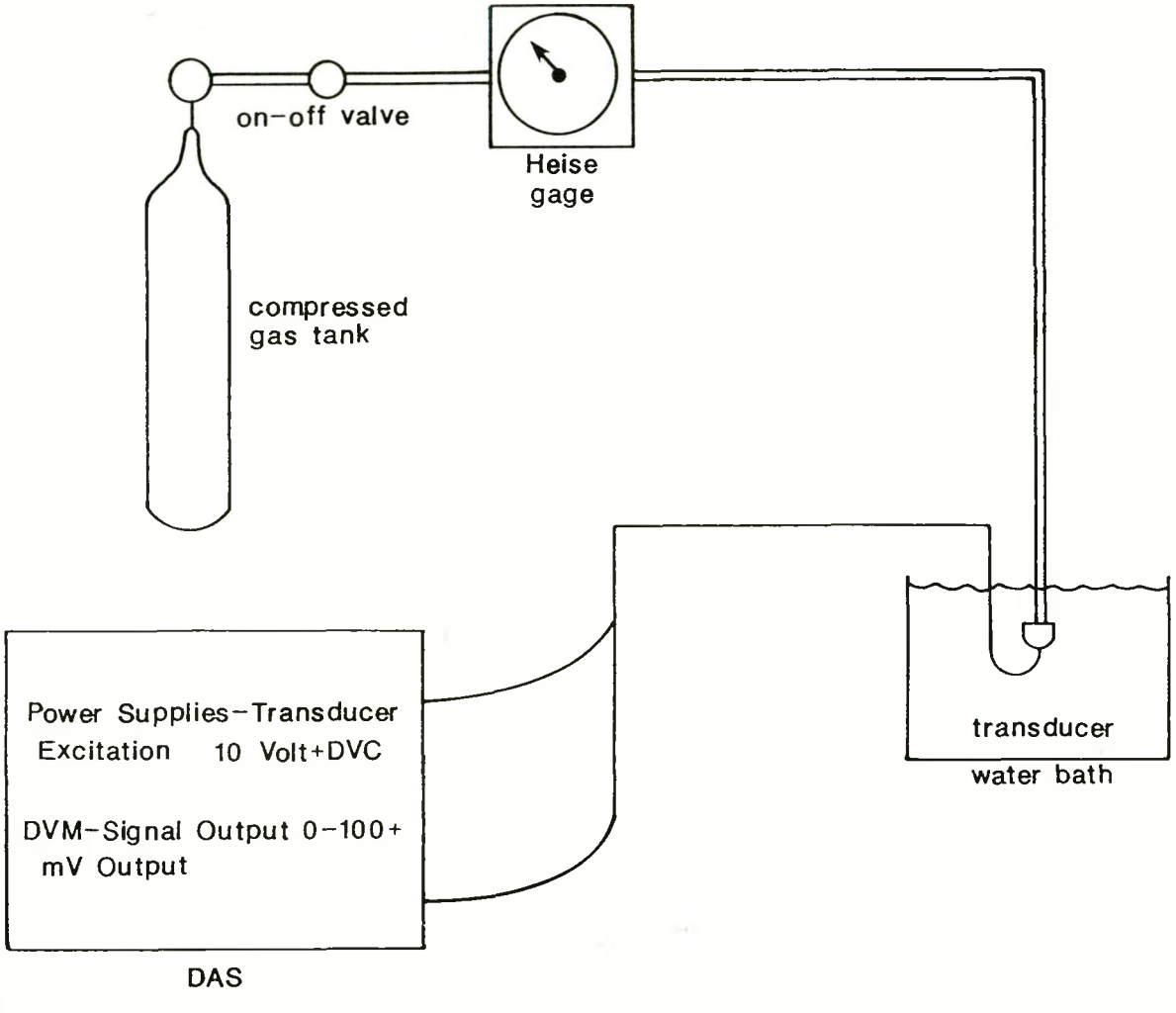
Drawn by JFP/INTERA	Date 2/28/91	Intensifier–Pump System for Packer Inflation and Fluid Injection
Checked by	Date	
Revisions	Date	
#105400R062	2/28/91	
INTERA Technologies		Figure 2.3



Drawn by JFP/INTERA	Date 2/28/91	Schematic Illustration of the Data-Acquisition System
Checked by	Date	
Revisions	Date	
#105400R062	2/28/91	
INTERA Technologies		Figure 2.4



Drawn by ABW	Date 10/12/89	Test-Tool Compliance	
Checked by G.S.	Date 12/1/89		
Revisions	Date		
#105400R062	12/1/89		
INTERA Technologies			Figure 2.5



Drawn by INTERA	Date 11/17/89	Transducer Calibration Using Heise Gage and DAS	
Checked by G.S.	Date 11/17/89		
Revisions	Date		
#105400R062	11/17/89		
INTERA Technologies			Figure 2.6

3.0 THE WIPP UNDERGROUND FACILITY

3.1 Construction

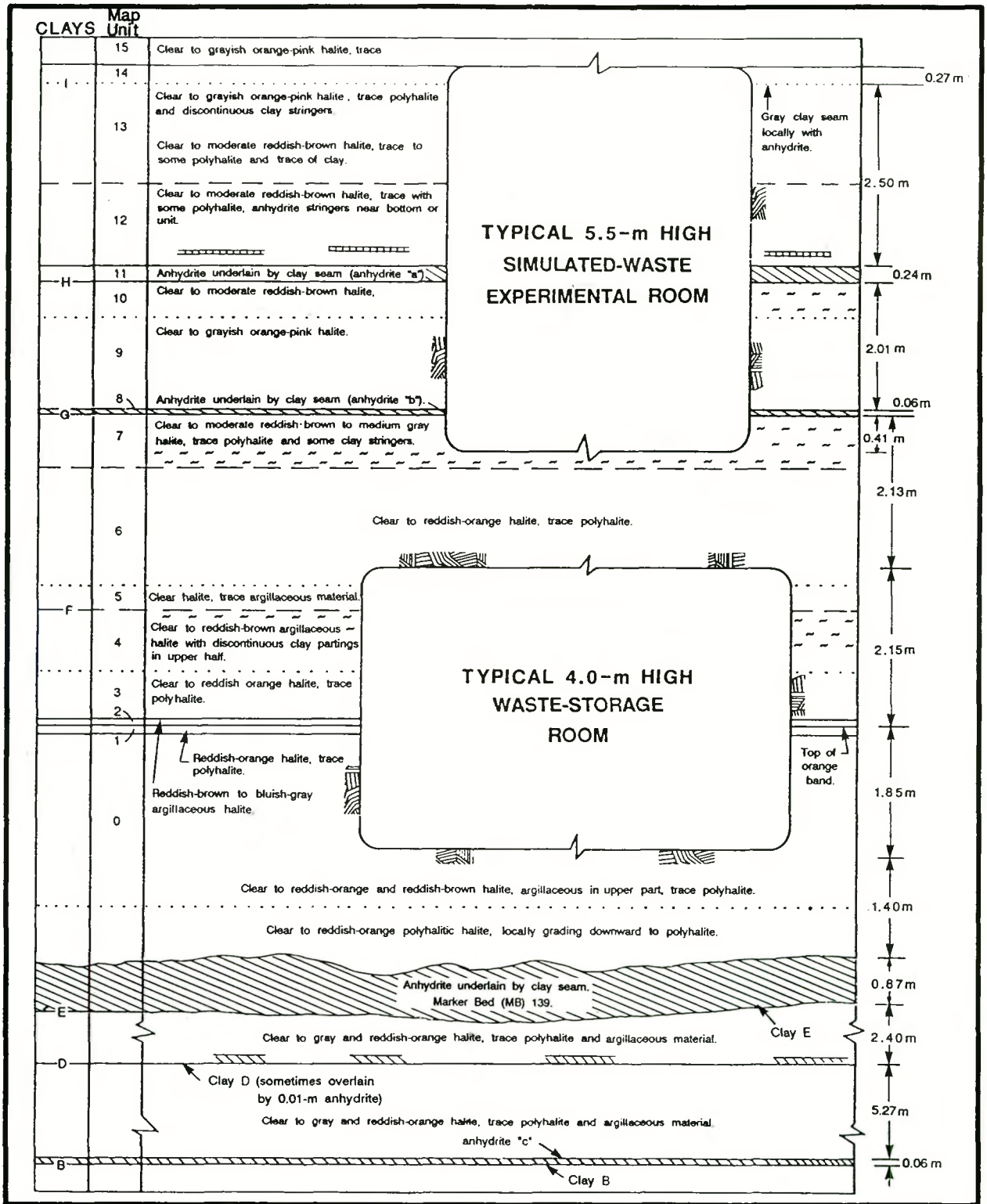
Figure 1.2 diagrammatically illustrates the WIPP underground facility currently under construction. The facility is being developed in the Salado Formation approximately 655 m below ground surface. The Salado Formation is a bedded-evaporite sequence consisting primarily of bedded halite with associated interbeds composed principally of anhydrite, polyhalite, clay, and siltstone. As shown on Figure 1.1, the underground facility is accessed by four vertical shafts.

The underground rooms and drifts of the WIPP underground facility were excavated by conventional continuous-mining techniques. The drifts in the underground excavations are numbered according to their north-south or east-west distance from the men and materials (M&M) shaft, and these designations are used to identify testing locations such as the South 1300 drift. The excavations were carried out using a continuous-mining machine to crush the salt and advance each room or drift. Blasting techniques were not employed in the WIPP underground. Figure 3.1 shows the geometry of typical rooms in the northern experimental area and in the southern waste-storage area, and the generalized local stratigraphy of the Salado Formation. The figure shows that the floor of the experimental area is stratigraphically about 1.8 m above the roof of the rooms in the waste-storage area. Bechtel (1986) provides construction details for the WIPP underground facility and the locations of geomechanical instrumentation stations in both the experimental and waste-storage areas.

3.2 Stratigraphy

Figure 3.1 illustrates the typical stratigraphic sequence encountered in the Salado Formation near the WIPP underground facility. Figure 3.1 shows that the Salado contains evaporite-mineral and clay-rich interbeds above and below the repository level. Anhydrite marker beds and their associated clay seams, as well as other clay seams, are of particular interest to the permeability-testing program. These stratigraphic discontinuities are often the locii for stress-relief fractures and salt efflorescence noted in 10- to 90-cm diameter boreholes drilled from the drifts and rooms in the underground

facility (Bechtel, 1986). Marker Bed 139 (MB-139), an anhydrite bed (see Borns, 1985), below the repository level, clay D, and anhydrite "c" with associated clay seam B have been tested during this reporting period. In addition, both relatively pure halite beds and argillaceous halite beds were tested during this reporting period. Section 5.0 indicates which stratigraphic sequences were included in the test intervals of particular permeability-testing boreholes.



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Typical WIPP Underground Rooms Including Detailed Lithology of the Salado Formation

INTERA Technologies

Figure 3.1

4.0 PROCEDURES FOR PERMEABILITY TESTING

4.1 Compliance Testing

Compliance tests were performed before installing each test tool into a test borehole. The purpose of compliance testing was to establish that the test tools were properly assembled and sealed, and to evaluate test-tool responses to packer inflation and applied pressure pulses. The results of the compliance tests are presented in Section 7.0. During compliance tests, the test tools were installed in the steel or stainless-steel test chambers and all monitoring instruments were connected to the DAS. The following procedures were applied. The test-tool's packers were sequentially inflated, guard-zone packer first, followed by the test-zone packer, to between 8 and 11 MPa. The packer-inflation pressures were monitored for 24 to 48 hours for evidence of leaks or improper performance. Packer pressures usually decrease during this period due to the elasticity of the packer-element material. After monitoring this pressure decline for the initial 24- to 48-hour period, packer pressures were usually increased to 8 to 11 MPa and monitored for an additional 24 to 48 hours.

After the leak-check/packer-pressure-adjustment periods, the test and guard zones were sequentially subjected to pressure-injection pulses of approximately 3.5 MPa. The zone's fluid-pressure responses were then monitored for evidence of leaks and the associated packer-pressure responses were also monitored. A typical compliance-test sequence is illustrated in Figure 4.1.

In some instances, the test and guard zones were given stepwise injection pulses and stepwise pressure releases to provide a range of test-zone and packer-pressure responses to pressure changes in neighboring zones. During the withdrawals, the volume of brine released during each pressure drop was measured to provide data with which to evaluate test-tool/system compressibility.

4.2 Test-Tool Installation Procedures

The following paragraphs describe a typical test-tool installation sequence. Multipacker test tools were installed in the test boreholes as soon after drilling as possible. The goal

was to have as little borehole history under non-shut-in conditions as possible. After drilling, the vertically downward boreholes C2H01 and S1P71 were filled with 1.2 kg/l sodium-chloride brine, one liter at a time. In borehole S1P71, the depth to water (brine) in the boreholes was measured after each liter was added. The volume versus depth data were used to calculate an average borehole diameter for comparison with the size of the core and drill bits. In borehole C2H01, the test tool was removed and lengthened after initial installation. Therefore, for the permeability-testing period, the test tool's test-zone section was installed in a brine-filled section of the borehole and the guard zone was refilled through the injection port after the guard-zone packer was inflated. Boreholes C2H01 (after deepening), C2H02, C2H03, N4P50, and S0P01 were filled by injecting brine through the injection lines after the packers were inflated. After the initial injection-port filling of the test and guard zones in borehole S0P01, the test-zone and guard-zone packers were deflated during attempts to reposition the test tool. Thus, the test tool's test and guard sections were essentially installed in a brine-filled borehole. In borehole N4P50, the test and guard zones of multipacker test tool #3 were filled through the injection ports. However, after removal of multipacker test tool #3, multipacker test tool #4 was installed in a brine-filled section of N4P50.

After the multipacker test tool was installed and the test and guard zones were filled with brine, the DAS was activated and the data-recording software was initialized by adding the sensitivity coefficients and intercepts for the transducers and LVDTs installed with the test tool. The pressures and temperatures were monitored for 15 to 30 minutes to ensure the transducers and thermocouples were fuctioning normally. The packers were then inflated to approximately 11 MPa, first the guard-zone packer and then the test-zone packer.

The packer-inflation pressures were monitored for 24 to 48 hours after inflation. If compliance-related pressure reductions of greater than 3 MPa were observed, the packer-inflation pressures were increased to 11 Mpa and observed for an additional 24 hours. After reaching a satisfactory packer-inflation-pressure response, the test and guard zones were shut in by closing the control valves on the vent lines. The pressure buildups in the isolated zones were monitored until the beginning of pulse testing.

4.3 Pulse-Testing Procedures

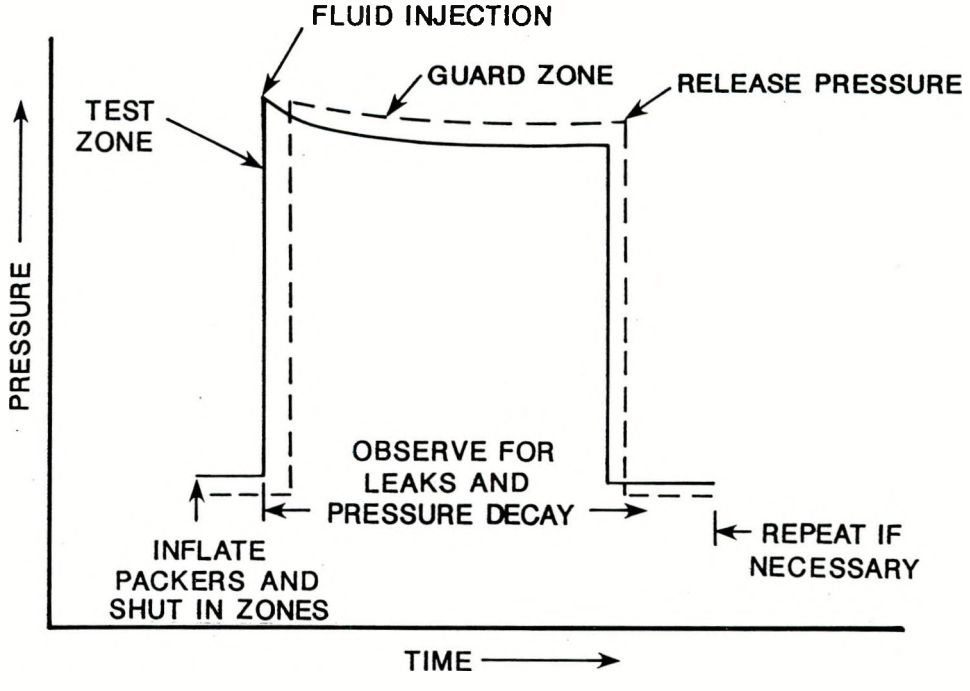
Pulse tests were conducted after monitoring formation-pore-pressure buildups in the test zones until the rates of pressure increase had decreased and the pressure-recovery curves appeared to be on asymptotic trends. For the majority of permeability-testing sequences, pulse-withdrawal tests were conducted in the bottom-hole test intervals after the fluid-pressure buildups in the zones had achieved relative stability. Pulse-withdrawal rather than pulse-injection tests were generally chosen for permeability testing because in some cases the pressure buildups in the test zones approached the lithostatic formation pore pressure. With zone pressures of this magnitude, pulse-injection pressures of sufficient magnitude to generate interpretable fluid-pressure responses would have been close to the hydrofracture pressure of the Salado Formation. In this case, the boreholes would have been artificially stimulated, resulting in an invalid representation of formation conditions. However, pulse injections were sometimes performed when little or no fluid-pressure buildup was observed in isolated zones, or to raise a zone's fluid pressure to a predetermined value. Figure 4.2 illustrates the elements of a typical pulse-testing sequence.

The following procedures were used to conduct most pulse-withdrawal tests. The DASs were set to scan the sensors' return signals at frequencies sufficient to monitor test responses adequately. Then the test-zone vent valves were opened and one-third to two-thirds of the shut-in pressures were allowed to dissipate before shutting in the test zones. The resulting test-zone fluid-pressure buildups and the packer and guard-zone pressures were monitored with the DASs according to prescribed frequencies. The volumes of brine released from the vent lines were measured and recorded for each pulse withdrawal.

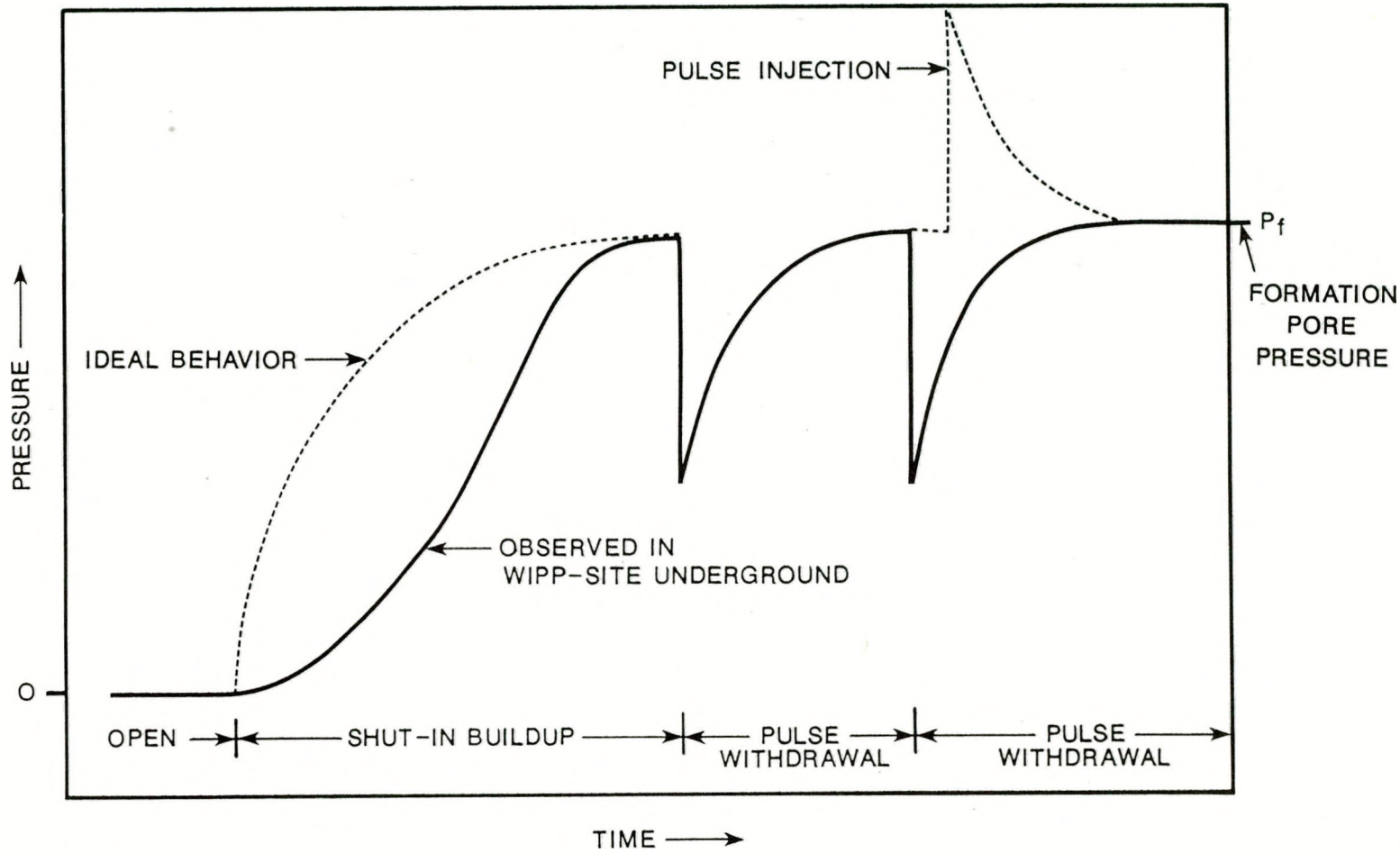
A typical pulse injection used procedures analogous to those used for a pulse-withdrawal test. The DAS was set to a scan frequency sufficient to monitor the tested zone's responses adequately. Then brine was injected into the isolated zone through the injection port of the multipacker test tool. The injection was continued until the visual gauge on the injection control panel indicated that the fluid pressure in the zone had reached and sustained the desired pressure. The tested zone's control valve was used

to shut in the zone, and the decrease in the zone's fluid pressure in response to the pulse injection was monitored by the DAS according to the same scan frequencies used for responses to pulse withdrawals.

Pulse-withdrawal and pulse-injection tests were repeated to ensure that the fluid-pressure responses were reproducible and would be representative of the actual formation responses. After a complete permeability-testing sequence in each borehole tested, the pressures in both guard and test zones were vented and the volumes of brine produced were measured before removing the test tools from the boreholes.



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INTERA Technologies			Figure 4.1



INTERA Technologies	Typical Pulse-Test Sequence	Figure 4.2

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#105400R062 11/17/89

5.0 TEST BOREHOLES

5.1 Borehole Locations

Figure 1.2 shows the locations of the boreholes drilled for the underground permeability-testing program. Note that three boreholes were drilled in Room C2 and one borehole at each of the other locations. In addition, borehole C2H01 in Room C2 was deepened after conducting two bottom-hole permeability-testing sequences in the initial borehole. The bottom-hole section of the deepened C2H01 borehole was also tested. To refer to permeability-testing sequences in which there were different test-tool configurations in an individual borehole, or the borehole was deepened for additional permeability testing, a letter designation is added to the borehole number to indicate these different testing sequences. Thus, the permeability-testing sequences in the original length of borehole C2H01 are referred to as C2H01-A and C2H01-B and the permeability-testing sequence in the deepened length of borehole C2H01 is referred to as C2H01-C.

Borehole locations in the underground experimental area were chosen to investigate three aspects of the Salado Formation. First, Room C2, excavated above the repository horizon (Figure 5.1), provided a location where the repository horizon in the Salado Formation could be tested in boreholes drilled downward from the room. Second, Marker Bed 139 could be tested under conditions where it lies about 7 m below an excavation instead of about 2 m below an excavation as it does throughout the majority of the repository. Third, the experimental area provides testing locations where the excavations are older than excavations in the waste-storage area, thus providing an area where a portion of the Salado Formation has been exposed to excavation effects for a longer period of time. In addition, excavations are still being undertaken in the experimental area and recently excavated rooms are scheduled for permeability testing.

One borehole was located in the operations area. The operations area was excavated before the waste-storage area at a time when a large part of the experimental area was being excavated. The operations-area borehole provided additional areal variability to the results of the underground permeability-testing program.

Borehole locations in the waste-storage area were chosen to provide permeability information for those portions of the Salado Formation directly affected by the excavations scheduled for waste disposal. These areas generally have been exposed to excavation effects for less time than excavations in the experimental area.

In addition to the boreholes drilled for permeability testing, two boreholes were drilled and cored for compliance testing. Borehole P1P01 is a horizontal borehole drilled into the wall in Room 1 and used to investigate the performance and behavior of the multipacker test tool equipped with LVDTs to measure borehole closure. Borehole P4P30 was cored in Room 4 at a 45° angle below the horizontal at the junction of the floor and the west wall of Room 4. After drilling, a sealed, stainless-steel casing with externally mounted thermocouples was placed in borehole P4P30 (See Section 2.1.6) and used for compliance testing as described in Section 4.1.

5.2 Borehole Drilling

The boreholes for the permeability-testing program were drilled according to the following procedures.

1. A compressed-air drilling apparatus was set in place at each borehole location and used to drill the test boreholes in the floors and walls of the test rooms. The boreholes were drilled primarily with a coring bit and core barrel for sample recovery. Compressed air was the principal means used to clean drilling cuttings from the boreholes as they were being drilled. In some situations, minor amounts of formation brine were encountered in association with clay layers, requiring the use of conventional, non-coring drag bits to complete the boreholes. This non-coring drilling procedure is necessary in strata of this type because formation fluid coupled with the clay usually associated with the marker beds causes the moistened clay to ball up and prevent evacuation of cuttings from the boreholes. When this lack of circulation occurs, the drill bit and drill rods become lodged in the boreholes and must be removed using methods that render the boreholes unsuitable for permeability testing.

2. Using 4.0-inch (10.2-cm) drill and core bits, the test boreholes were drilled and cored to depths up to 11 m from the excavations. The following data were recorded and included in the core logs presented in Appendix B:

   a. the time of start of drilling and interval times for every 1.0 m penetrated;
   b. the presence and depth of any brine produced by the formation;
   c. the presence and depth of any significant fracturing; and
   d. the time and depth when the bottom of the borehole was reached.

3. Core samples were recovered from over 95 percent of the sections drilled with a core bit and were marked, boxed, and described in detail. The core samples were marked to indicate their proper orientation relative to the bottom of the boreholes and each 0.1-m increment was also marked on each core sample.

4. The boreholes were reamed to 7-inch (17.8 cm) diameter to about a 50.8-cm depth. A 5-1/2-inch (14.0-cm) I.D. 50.8-cm long, steel borehole collar was then grouted to the rock. The multipacker test tool is bolted to the collar to help eliminate test-tool movement in response to packer inflation and pressure buildup. The use of the borehole collars was a modification added to the borehole-installation procedures following testing sequences C2H01-A and C2H01-B in borehole C2H01 and the testing sequences in boreholes N4P50, S0P01, and S1P71.

5.3 Borehole and Core Descriptions

5.3.1 Room C2

Figure 5.1 schematically shows the borehole array drilled for permeability testing in Room C2. Borehole C2H01 was initially used to test argillaceous halite of map unit 0 in that part of the Salado Formation below the orange marker band in the repository horizon (permeability-testing sequences C2H01-A and C2H01-B). Borehole C2H01 was then deepened to allow testing of Marker Bed 139 (permeability-testing sequence C2H01-C). Borehole C2H02 was drilled to test Marker Bed 139 in a location which was not below an existing excavation. Borehole C2H03 was drilled to test a clear halite bed (map unit 9) between anhydrites "a" and "b". All boreholes were drilled and

cored with a 4.0-inch (10.2-cm) core bit using compressed air to remove cuttings from the boreholes. Boreholes C2H01 (after deepening), C2H02, and C2H03 were configured with 5-1/2-inch (14.0-cm) I.D. 50.8-cm long, steel borehole collars grouted to the rock to allow the multipacker test tools to be bolted to the collars as described in Section 5.2.

Borehole C2H01 was drilled vertically downward to a depth of 5.68 m below the floor of Room C2 on August 4 and 5, 1988 (Calendar Days 217 and 218). Borehole C2H01 was deepened to a depth of 8.97 m below the floor of Room C2 from February 13 to 15, 1989 (Calendar Days 44 to 46). A description of the core samples recovered from borehole C2H01 during both drilling periods can be found in Table B1, Appendix B.

Borehole C2H02 was drilled westward, at a downward angle of 45° from the horizontal, to a depth of 10.86 m from the intersection of the west wall and floor of Room C2. The drilled depth corresponds to a vertical depth of 7.68 m from the floor of Room C2. Borehole C2H02 was drilled and cored from April 12 to 17, 1989 (Calendar Days 102 to 107). A description of the core samples recovered from borehole C2H02 can be found in Table B2, Appendix B.

Horizontal borehole C2H03 was drilled westward between anhydrites "a" and "b", 0.9 m below anhydrite "a", to a depth of 9.14 m from the west wall of Room C2. Borehole C2H03 was drilled on August 22 and 23, 1989 (Calendar Days 234 and 235). A description of the core samples recovered from borehole C2H03 during drilling can be found in Table B3, Appendix B.

5.3.2 North 1420 Drift

Figure 5.2 schematically shows the configuration of borehole N4P50 in the North 1420 drift. Borehole N4P50 was drilled using compressed air to remove drill cuttings from the borehole during the entire drilling period. Borehole N4P50 was drilled vertically downward to a depth of 10.87 m below the floor of the North 1420 drift on December 15 and 16, 1988 (Calendar Days 350 and 351). A description of the core samples recovered from borehole N4P50 during drilling can be found in Table B4, Appendix B. Borehole N4P50 was drilled to include anhydrite "c" and clay B in the

isolated test zone. Marker Bed 139 was encountered about 1.5 m below the floor of the North 1420 drift, but this zone was not included in the test or guard zones in this borehole. Unfortunately, shortly after the beginning of testing in borehole N4P50, excavation activities were rescheduled for the North 1420 drift in an area that conflicted with the DAS and test equipment being used in borehole N4P50. The borehole testing was therefore terminated and the permeability-testing equipment was removed.

5.3.3 South 1300 Drift

Figure 5.3 schematically shows the configuration of borehole S0P01 in the South 1300 drift. Borehole S0P01 was drilled to investigate halite and clay D beneath Marker Bed 139 in a location between the experimental area and the waste-storage area. Borehole S0P01 was drilled using compressed air to remove drill cuttings from the borehole during the entire drilling period. Borehole S0P01 was drilled vertically downward on January 11 and 12, 1989 (Calendar Days 11 and 12) to a depth of 5.17 m below the floor of the South 1300 drift, between the East 140 and East 300 drifts. A description of the core samples recovered from borehole S0P01 during drilling can be found in Table B5, Appendix B. Borehole S0P01 encountered Marker Bed 139 from 1.80 to 2.75 m below the floor of the drift. The borehole was drilled to include clay D in the test-zone interval. The multipacker test tool was configured to include Marker Bed 139 in the guard zone between the two packers.

Borehole S0P01 was the first borehole in the underground permeability-testing program to be equipped with a means to restrict test-tool movement during the testing period. The test-tool installation was modified after early axial LVDT data and visual inspection indicated that pressure buildup in the test zone appeared to be pushing the test tool out of the borehole. On March 13, 1989 (Calendar Day 74), 54 days after the beginning of the shut-in period, a length of 5.1-cm steel I-beam was attached to the test tool and anchored to the floor of the drift using two 0.61-m expansion-end rock bolts. The bar remained in place for the remainder of the testing period.

5.3.4 Waste Panel 1, Room 7

Figure 5.4 schematically shows the configuration of borehole S1P71 in Waste Panel 1, Room 7. Borehole S1P71 was drilled to investigate argillaceous halite and clay D beneath Marker Bed 139 in the waste-storage area (permeability-testing sequence S1P71-A). Borehole S1P71 was drilled using compressed air to remove drill cuttings from the borehole for the entire drilling period. Figure 5.4 shows Borehole S1P71 encountered Marker Bed 139 and clay E from 1.40 to 2.25 m below the floor of Room 7. Borehole S1P71 was drilled to include clay D in the test-zone interval. The multi-packer test tool was configured to isolate Marker Bed 139 in the guard zone between the two packers.

Borehole S1P71 was drilled vertically downward to a depth of 4.56 m below the floor of Room 7, Waste Panel 1 on November 10, 1988 (Calendar Day 315). A description of the core samples recovered from borehole S1P71 during drilling can be found in Table B6.1, Appendix B. The depths to water measured during filling of S1P71 are presented in Table B6.2, Appendix B.

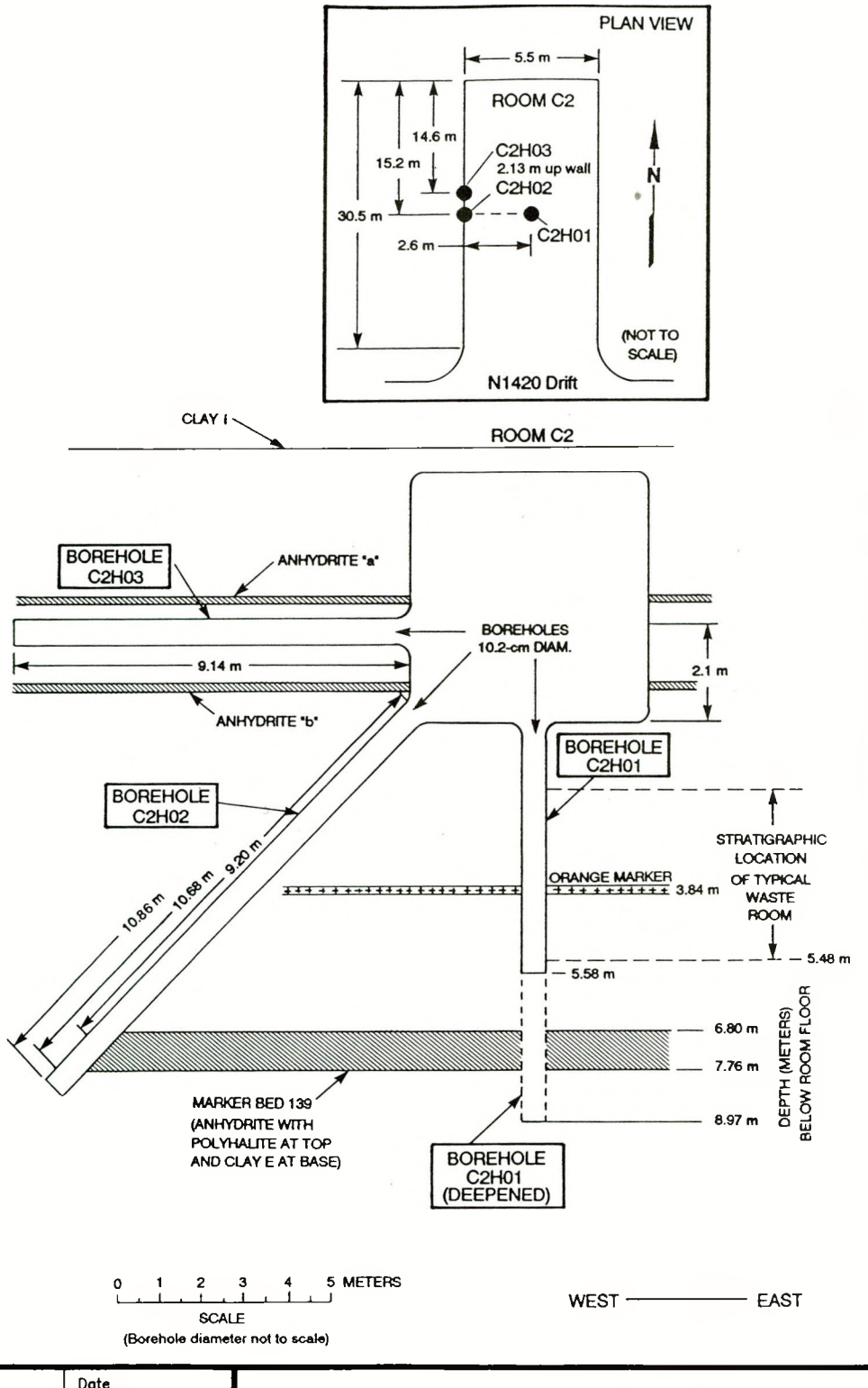
After performing the permeability-testing sequence S1P71-A reported in this data report, borehole S1P71 was deepened to a depth of 10.15 m to allow testing of anhydrite "c" and the associated clay B. The results from permeability-testing sequence S1P71-B will be presented in the WIPP Salado Hydrology Program Data Report #2.

5.3.5 Compliance-Testing Boreholes

Two 4-inch diameter boreholes were drilled for compliance testing during the reporting period for this data report. Borehole P1P01 has a 4.0-inch I.D. and was drilled in Room 1 (Figure 1.2) on February 2, 1989 (Calendar Day 33) using compressed air to remove drill cuttings from the borehole. The borehole was drilled to assess the effects of borehole closure in a horizontal borehole and to provide a location to verify that the radial LVDTs were operating properly and in accordance with these devices' calibrations. Borehole P1P01 was drilled horizontally eastward to a depth of 6.06 m from the east wall of Room 1. The borehole was drilled deep enough to accommodate

the test-zone interval of the multipacker test tool including the LVDT assembly. P1P01 was reamed to a 7-inch diameter to a depth of 50.8 cm to allow a 5-1/2-inch (14.0-cm) I.D. collar to be grouted to the rock so that the test tool could be bolted in place. A description of the core samples recovered from borehole P1P01 during drilling can be found in Table B7, Appendix B.

Borehole P4P30 was drilled to accommodate the stainless-steel chamber for compliance testing of the fully assembled multipacker test tool as described in Section 4.1. Compliance tests in the drifts of the underground facility indicated diurnal temperature changes great enough to affect the test results. Borehole P4P30 was installed in the Salado Formation to allow the compliance tests to be conducted in a stable thermal environment. Borehole P4P30 was drilled with a 4.0-inch O.D. core bit westward at a downward angle of 45° from the horizontal at the junction of the floor and the west wall of Room 4, just north of the North 1100 drift. Borehole P4P30 was drilled on March 15, 1989 (Calendar Day 78) to a depth of 3.63 m using compressed air to remove drill cuttings from the borehole. Formation brine associated with Marker Bed 139 was encountered from 3.35 to 3.63 m deep in P4P30. A 4.0-inch conventional "drag"-type drill bit was used to drill P4P30 from 3.63 m to the borehole's total depth of 5.33 m because formation brine was encountered over this interval. P4P30 was then reamed to a 14-cm diameter to allow installation of a 4-1/2-inch (11.4-cm) O.D. stainless-steel casing. The casing was not grouted in place. A description of the core samples recovered from borehole P4P30 during drilling can be found in Table B8, Appendix B.

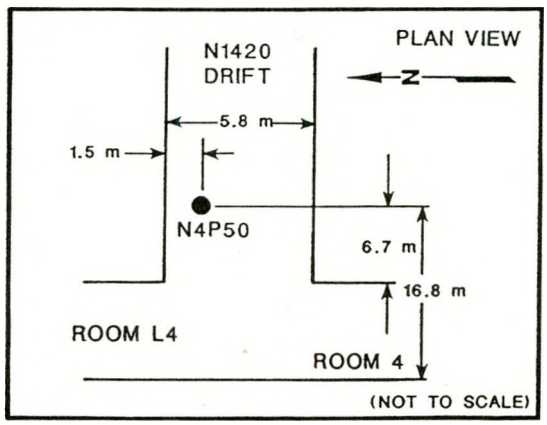


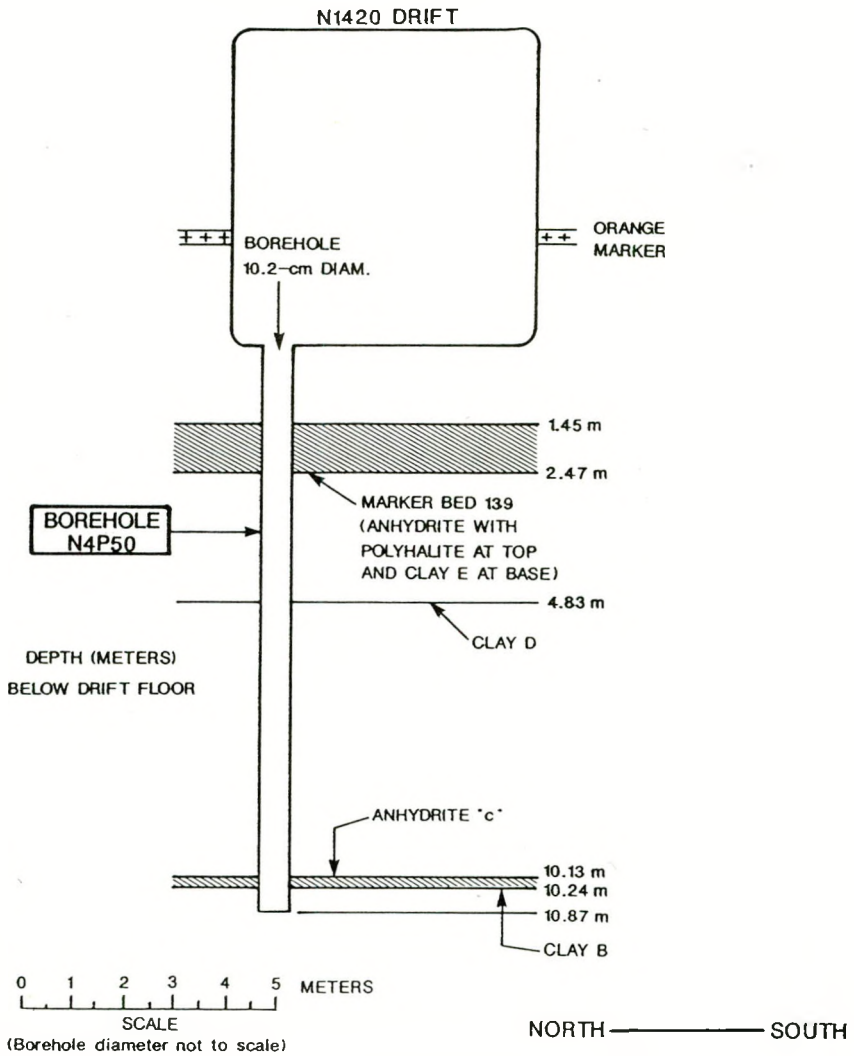
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Boreholes C2H01, C2H02, and C2H03 in Room C2

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Figure 5.1



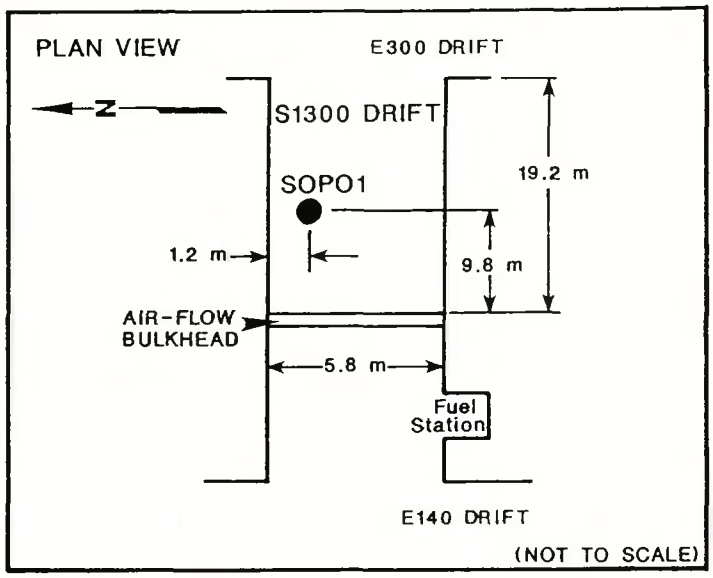


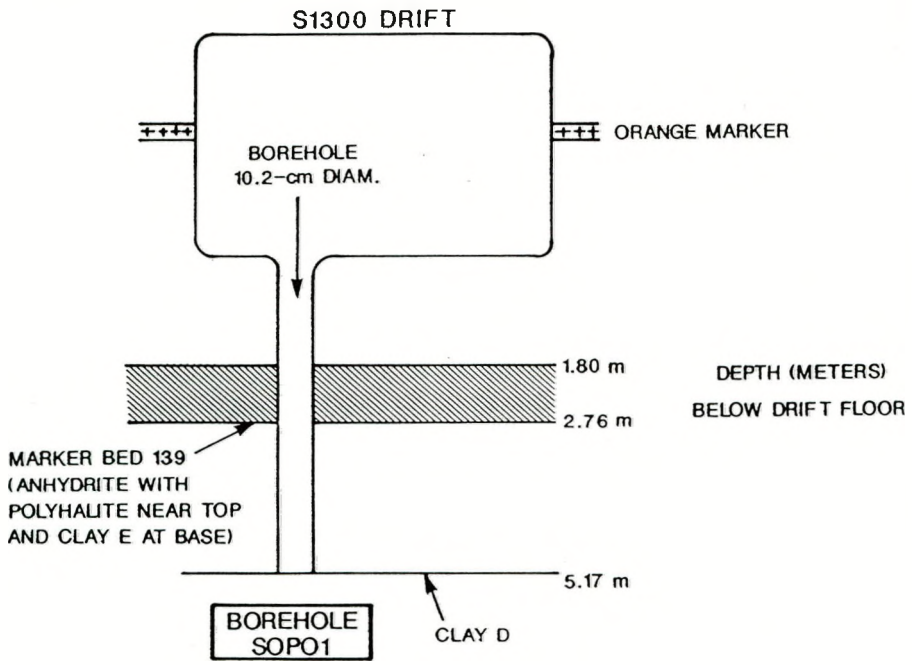
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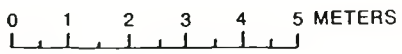
Borehole N4P50 in the North 1420 Drift

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Figure 5.2







(Borehole diameter not to scale)

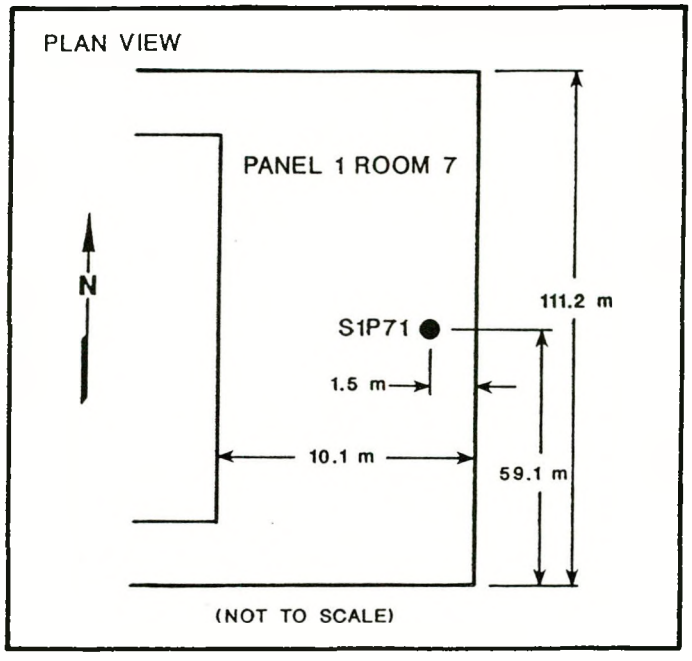
NORTH ——— SOUTH

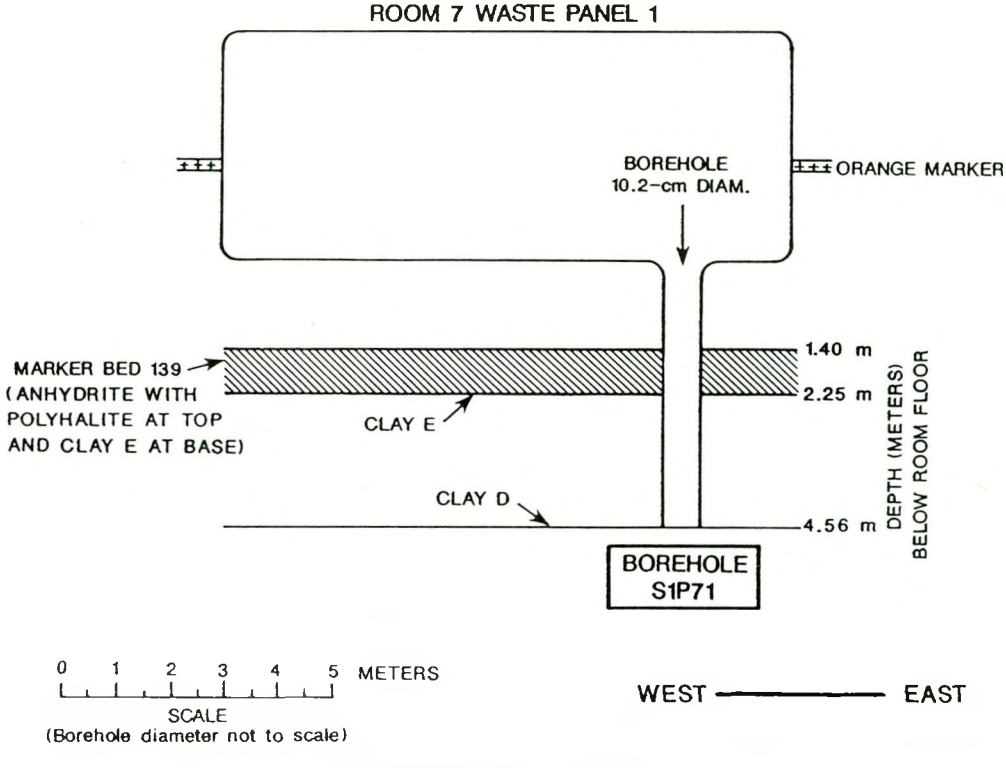
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Borehole S0P01 in the South 1300 Drift

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Figure 5.3





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Borehole S1P71 in Waste Panel 1, Room 7

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Figure 5.4

6.0 TEST RESULTS

The following section presents the results of permeability testing in six boreholes drilled during this reporting period. Five pulse-injection and twelve pulse-withdrawal tests were performed in these seven boreholes. One testing sequence was conducted in an isolated guard interval and the other tests were conducted in isolated test intervals. The following subsections describe each test in detail, including any factors relevant to subsequent interpretation of these tests. Table 6.1 summarizes the information relating to these tests. The table includes the initial and final pressures for the tests, the volumes of brine withdrawn during testing, the test-zone lengths and radii, and test-tool and test-zone volumes based on the test-tool and borehole dimensions.

6.1 Permeability Testing in Room C2

6.1.1 Borehole C2H01, Permeability-Testing Sequence C2H01-A

Figure 6.1 shows the configuration of Multipacker Test Tool #1 in borehole C2H01 during permeability-testing sequence C2H01-A, which began on August 6, 1988 (Calendar Day 219), the day after the borehole was drilled. Borehole C2H01 was filled with 1200 g/l sodium-chloride brine within 2 hours of drilling. For the initial test-tool configuration, a sealed length of 4-inch (10.2-cm) O.D. tubing was attached to the bottom of Multipacker Test Tool #1 to reduce the volume of the isolated test interval. During the time period when this device was in use and the test zone was shut in, the test-zone pressure did not increase, although two attempts were made to apply pressure to the zone by brine injection. Multipacker Test Tool #1 was removed from C2H01 on August 24, 1988 (Calendar Day 237). Inspection of the tool revealed that the 4-inch tubing attached to the bottom of Multipacker Test Tool #1 was not pressure tight and moisture had leaked into this tubing. The volume-reduction tubing was removed from Multipacker Test Tool #1 and the tool was reinstalled in C2H01 on August 24, 1988 (Calendar Day 237) in the same position used from Calendar Days 219 through 237.

Figure 6.2 is a sequence plot of the fluid pressure in the test and guard zones in borehole C2H01 during permeability-testing sequence C2H01-A. After determining that

Multipacker Test Tool #1 was not leaking, the test and guard zones were shut in on August 25, 1988 (Calendar Day 237). A pulse-injection was performed in the test zone on Calendar Day 238. The test-zone pressure was increased from 0.076 Mpa to 3.55 MPa and the test zone was shut in. Pulse-injection #1 of testing sequence C2H01-A decreased to 0.88 MPa on Calendar Day 239 and decreased slowly after that to Calendar Day 243 when the test-zone fluid pressure was observed to be 0.42 MPa. Pulse-injection #2 was initiated on August 30, 1988 (Calendar Day 243) when the test-zone fluid pressure was raised from 0.42 MPa to 3.79 MPa and the test zone was shut in. The test-zone pressure decreased to 0.48 MPa on September 1, 1988 (Calendar Day 245) when Multipacker Test Tool #1 was removed from C2H01 ending permeability-testing sequence C2H01-A.

Figures 6.2 to 6.4 are annotated plots of the data obtained during permeability-testing sequence C2H01-A. Figure 6.2 shows the fluid pressures in the test and guard zones; Figure 6.3 shows the inflation pressures in the test- and guard-zone packers; and Figure 6.4 shows the test- and guard-zone temperatures. An abridged tabulation of the data collected during permeability-testing sequence C2H01-A in borehole C2H01 is presented in Table C1, Appendix C. Note that Multipacker Test Tool #1 was not equipped with LVDTs to measure borehole closure or test-tool movement.

6.1.2 Borehole C2H01, Permeability-Testing Sequence C2H01-B

Figure 6.5 shows the configuration of Multipacker Test Tool #1 in borehole C2H01 during permeability-testing sequence C2H01-B. Permeability-testing sequence C2H01-B began on September 2, 1988 (Calendar Day 246), 27 days after the drilling of borehole C2H01. Multipacker Test Tool #1 was removed from borehole C2H01 on September 1, 1988 (Calendar Day 245) after completion of permeability-testing sequence C2H01-A. Permeability-testing sequence C2H01-B was to test a shorter length of borehole C2H01 than was included in the test zone during permeability-testing sequence C2H01-A. Therefore, an extension was added to the uphole section of Multipacker Test Tool #1 and the test tool was set deeper in borehole C2H01 as shown in Figure 6.5. No additional brine was added to borehole C2H01 before reinstalling the test tool.

Multipacker Test Tool #1 was installed on September 1 (Calendar Day 245) and the packers were inflated. The test and guard zones were shut in on September 2 (Calendar Day 246) after circulating brine through the test- and guard-zone injection and vent tubing to remove any trapped air bubbles. The test-zone pressure was allowed to build up until September 28, 1988 (Calendar Day 271). At this time, the slow rate of fluid-pressure buildup necessitated a brine-injection sequence to increase the rate of the approach of the test-zone pressure toward actual formation pore pressure. The test-zone pressure was increased from 0.60 to 4.19 MPa and then shut in. The test-zone pressure decreased to relative stability at 2.86 MPa on October 21, 1988 (Calendar Day 295). Figure 6.6 is a sequence plot of the fluid pressure in the test and guard zones in C2H01 during permeability testing. Figure 6.6 includes the fluid-pressure responses recorded during permeability-testing sequence C2H01-A (Section 6.2.1) because this test sequence contributed to the fluid-pressure history of the test zone included in permeability-testing configuration C2H01-B.

Two pulse-withdrawal tests were conducted after pulse-injection #1 during permeability-testing sequence C2H01-B. The first pulse-withdrawal test was performed after the test-zone fluid pressure had stabilized at about 2.86 MPa, about 24 days after the brine injection. A 1.30-MPa pulse withdrawal was initiated on October 21, 1988 (Calendar Day 295). After the first pulse withdrawal, the fluid pressure was allowed to build up to a relatively stable value of 2.84 MPa. A 2.05-MPa pulse withdrawal was applied to the test zone on December 14, 1988 (Calendar Day 349) as 14 ml of brine were removed from the test zone. The fluid-pressure buildup after the second pulse-withdrawal was monitored until it reached 2.83 MPa on February 9, 1989 (Calendar Day 40), when the test was terminated and the test tool was removed from the borehole.

Figures 6.6 to 6.8 are annotated plots of the data obtained during permeability-testing sequences C2H01-A and C2H01-B. Figure 6.6 shows the pressures in the test and guard zones; Figure 6.7 shows the pressures in the test- and guard-zone packers; and Figure 6.8 shows the temperatures in the test and guard zones. An abridged tabulation of the data collected during permeability-testing sequence C2H01-B is presented in Table C2, Appendix C. Note that Multipacker Test Tool #1 was not equipped with LVDTs to measure borehole closure or test-tool movement.

6.1.3 Borehole C2H01, Permeability-Testing Sequence C2H01-C

Figure 6.9 shows the configuration of Multipacker Test Tool #5 in borehole C2H01 during permeability-testing sequence C2H01-C. Drilling of the test zone began on February 13, 1989 (Calendar Day 44) and was completed at 1015 on February 15 (Calendar Day 45). The test and guard zones were filled with brine at 1015 on February 16 (Calendar Day 47). The brine was introduced into the test and guard zones after the packers were inflated at 1000 on February 16 (Calendar Day 47). The testing period began on February 16, 1989 (Calendar Day 47) when Multipacker Test Tool #5 was installed. The test and guard zones were shut in on February 17 (Calendar Day 48) and the fluid pressures in the isolated zones began building up. Figure 6.10 is a sequence plot of the fluid pressures in the test and guard zones in C2H01 during permeability-testing sequence C2H01-C.

On February 22, 1989 (Calendar Day 53), the test tool was removed to reset the length of the test zone. The tool was reinstalled on February 23 (Calendar Day 54) and the test and guard zones were shut in on February 24 (Calendar Day 55). The pressure buildup in the test zone achieved relative stability at 7.56 MPa in mid-March 1989.

A pulse-withdrawal was conducted in the test zone beginning on March 13, 1989 (Calendar Day 72). The test-zone pressure was reduced from 7.56 to 4.23 MPa as 50 ml of brine were removed from the test zone. During the first pulse-withdrawal test, the test-zone pressure built up from 4.23 to 7.71 MPa on March 23, 1989 (Calendar Day 82). A second pulse-withdrawal test was initiated in the test zone on March 23, 1989 (Calendar Day 82) when the test-zone pressure was reduced from 7.71 MPa to 4.18 MPa with the release of 71 ml of brine from the test zone. During the second pulse-withdrawal test, the test-zone pressure built up to 7.86 MPa on April 14, 1989 (Calendar Day 104) and remained at about that level until May 22, 1989 (Calendar Day 142) when the test tool was removed from the borehole.

Figures 6.10 to 6.14 are annotated plots of the data obtained during permeability-testing sequence C2H01-C. Figure 6.10 shows the pressures in the test and guard zones; Figure 6.11 shows the inflation pressures in the test- and guard-zone packers; Figure 6.12 shows the temperature in the guard and test zones; Figure 6.13

shows the relative displacements of the radial LVDTs and calculated radius changes; and Figure 6.14 shows the relative displacement of the axial LVDT. An abridged tabulation of the data collected during permeability-testing sequence C2H01-C is presented in Table C3, Appendix C.

6.1.4 Borehole C2H02

The test zone in borehole C2H02 was cored on April 17, 1989 (Calendar Day 107). Figure 6.15 shows the configuration of Multipacker Test Tool #4 in borehole C2H02 during permeability testing. The test tool was installed in C2H02 from April 19 to 21, 1989 (Calendar Days 109 to 111). The test and guard zones were filled with brine using the zone-injection tube. Brine was injected into the zone on April 21 (Calendar Day 111) after the packers were inflated. The test and guard zones were shut in on April 24, 1989 (Calendar Day 114).

Figure 6.16 is a sequence plot of the fluid pressure in the test and guard zones in C2H02 during the permeability-testing period. During the initial shut-in period, the pressure in the test zone built up to 8.41 MPa as of August 18, 1989 (Calendar Day 230). The first pulse-withdrawal test in C2H02 was initiated on August 18 (Calendar Day 230). The test-zone pressure was reduced from 8.41 to 4.80 MPa by removing 33 ml of brine. Three days after the pulse-withdrawal test was initiated, a drilling crew working in the vicinity of borehole C2H02 accidentally opened the test-zone and guard-zone valves, causing the test-zone pressure to decrease from 6.19 to 5.36 MPa on August 22 (Calendar Day 234). The test zone was again shut in on August 22 (Calendar Day 234), but this accidental release of pressure effectively ended the first pulse-withdrawal sequence. Brine was injected into the test zone on August 25, 1989 (Calendar Day 237), raising the pressure in the test zone to 8.04 MPa to accelerate pressure stabilization so that testing could continue.

The pressure in the test zone increased to 8.44 MPa as of September 15, 1989 (Calendar Day 258), when a second pulse-withdrawal test was begun. The test-zone pressure was decreased to 5.23 MPa with the release of 110 ml of brine from the test zone. The test-zone pressure buildup from the second pulse withdrawal in C2H02 continued until October 27, 1989 (Calendar Day 300), when the pressure had built up

to 8.49 MPa. To establish the reproducibility of the results of the second pulse-withdrawal test, a third pulse withdrawal was initiated on October 27, 1989 (Calendar Day 300). The test-zone pressure was reduced from 8.49 to 6.12 MPa with the release of 72 ml of brine from the test zone. The resultant pressure buildup to 8.81 MPa in the test zone in C2H02 was observed until December 12, 1989 (Calendar Day 346), when testing in C2H02 was completed. During the release of test-zone pressure at the end of testing, a sample of the brine released from the test zone was collected. The sample contained gas and water (brine) and was analyzed to determine the type of gas present in the test zone. The sample collected from C2H02 was analyzed by Sandia National Laboratories and found to contain 91 percent hydrogen, 6.5 percent nitrogen, and minor amounts of methane, oxygen, argon, and carbon dioxide. The results of the laboratory analysis are presented in Appendix E.

Multipacker test tool #4 was one of the four original multipacker test tools with anodized aluminum components, including the mandrels, swivels, inserts, and the axial LVDT housing. When removed from borehole C2H02, all aluminum surfaces on the test tool were severely corroded and pitted. An aluminum oxide precipitate on the aluminum surfaces indicated a potential metallically corrosive anaerobic reaction in the isolated test- and guard-zone intervals where the reactive brine was in contact with the aluminum components of the test tool. The precipitate and the large percentage of hydrogen in the gas-sample analysis from C2H02 are indicative of metallic corrosion.

Figures 6.16 to 6.20 are annotated plots of the data obtained during the permeability-testing sequence in borehole C2H02. Figure 6.16 shows the pressures in the test and guard zones; Figure 6.17 shows the pressures in the test- and guard-zone packers; Figure 6.18 shows the temperatures in the guard and test zones; Figure 6.19 shows the relative displacements of the radial LVDTs and calculated changes in borehole radius; and Figure 6.20 shows the relative displacement of the axial LVDT. Figure 6-20 shows that the axial LVDT functioned normally until Calendar Day 260. After Day 260, the axial LVDT data are very noisy indicating that there was a malfunction in the device. The axial LVDT data from Day 260 to the end of the C2H02 permeability-testing sequence is not considered to be representative. An abridged tabulation of the data collected during the permeability-testing period in borehole C2H02 is presented in Table C4, Appendix C.

6.1.5 Borehole C2H03

The test and guard zones in borehole C2H03 were drilled and cored on August 22 and 23, 1989 (Calendar Days 234 and 235). Figure 6.21 shows the configuration of Multi-packer Test Tool #5 in borehole C2H03 during the permeability-testing period. The test tool was installed in C2H03 from August 24 to 28, 1989 (Calendar Days 236 to 240). The vacuum-evacuated test and guard zones were filled with brine from 1300 to 1400 on August 28 (Calendar Day 240) after the packers were inflated. The test and guard zones were shut in on August 28, 1989 (Calendar Day 240). The installation procedure for C2H03, a horizontal borehole, was different from that used for the downward-oriented boreholes. To add brine to C2H03, the guard-zone packer was inflated and the guard and test zones were filled with brine using the fluid-injection line. After the brine was added, the test-zone packer was inflated with the vent lines open to allow excess pressure and brine to escape the test and guard zones.

Figure 6.22 is a sequence plot of the fluid pressures in the test and guard zones in C2H03 during the period when the test and guard zones were isolated. The fluid pressures were allowed to build up in the test and guard zones of C2H03 from August 28, 1989 (Calendar Day 240) until September 30, 1989 (Calendar Day 273). Borehole C2H03 was drilled in clear halite and no argillaceous or anhydrite material was observed in the core samples. Because no significant fluid-pressure buildup was observed during the 33-day observation period, and because similar fluid-pressure responses had been observed in other boreholes in clear halite in the WIPP underground facility (R.L. Beauheim, personal communication, September 28, 1989), testing in C2H03 was discontinued on September 30, 1989 (Calendar Day 273) and Multipacker Test Tool #5 was removed from the borehole.

Examination of the data collected by the axial LVDT in borehole C2H03 revealed that the electrical connection to the gage had been damaged during the testing period. The data collected were not representative of proper operation of the axial LVDT and are, therefore, not included in this data report.

Figures 6.22 to 6.25 are annotated plots of the data obtained during the buildup period in borehole C2H03. Figure 6.22 shows the pressures in the test and guard zones;

Figure 6.23 shows the inflation pressures in the test- and guard-zone packers; Figure 6.24 shows the temperatures in the guard and test zones; and Figure 6.25 shows the relative displacements of the radial LVDTs and calculated changes in borehole radius. An abridged tabulation of the data collected during the buildup period in borehole C2H03 is presented in Table C5, Appendix C.

6.2 Permeability Testing in Borehole N4P50 in the North 1420 Drift

The test zone in borehole N4P50 was drilled on December 16, 1988 (Calendar Day 351). The complete permeability testing period in N4P50 included the use of two multipacker test tools. Figure 6.26 shows the configurations of Multipacker Test Tools #3 and #4 in borehole N4P50 during permeability testing in this borehole. Multipacker Test Tool #3 was installed in N4P50 on December 19, 1988 (Calendar Day 354). After the packers were inflated, the test and guard zones were filled with brine through the injection lines while the vent lines were open to release air entrapped in the isolated intervals. The test and guard zones were shut in for the initial pressure buildup on December 22, 1988 (Calendar Day 357). The pressure in the test zone of N4P50 built up to 0.07 MPa from December 22, 1988 (Calendar Day 357) to January 3, 1989 (Calendar Day 3), when the test tool's radial LVDTs failed to respond properly and Multipacker Test Tool #3 had to be removed to repair a faulty electrical connector.

For the continuation of testing in N4P50, Multipacker Test Tool #4 was installed into brine-filled borehole N4P50 and the packers were inflated on January 6, 1989 (Calendar Day 6). After all systems were thoroughly tested, the test and guard zones were shut in on January 12, 1989 (Calendar Day 12). The fluid pressure in the test zone built up to 0.96 MPa by February 6, 1989 (Calendar Day 37). At that time, because of rescheduled construction activity in the area of N4P50, the testing had to be discontinued and the test tool was removed from the borehole.

Figures 6.27 to 6.31 are annotated plots of the data obtained during two buildup periods in borehole N4P50 using both Multipacker Test Tools #3 and #4. Figure 6.27 shows the pressures observed in the test and guard zones; Figure 6.28 shows the inflation pressures in the test- and guard-zone packers; Figure 6.29 shows the temperatures in the guard and test zones; Figure 6.30 shows the relative displacements of the radial

LVDTs and calculated changes in borehole radius; and Figure 6.31 shows the relative displacement of the axial LVDT. An abridged tabulation of the data collected in borehole N4P50 is presented in Table C6, Appendix C.

6.3 Permeability Testing in Borehole S0P01 in the South 1300 Drift

The test and guard zones in borehole S0P01 were cored on January 11 and 12, 1989 (Calendar Days 11 and 12). Figure 6.32 shows the configuration of Multipacker Test Tool #3 in borehole S0P01 during permeability testing. The test tool installation in S0P01 was undertaken from January 13 to 20, 1989 (Calendar Days 13 to 20). The test and guard zones were filled with brine after the first packer inflation. The zones were filled through the injection lines while the vent lines were open to release entrapped air. Because of difficulties in obtaining proper alignment and orientation of the LVDTs after the initial installation and shut in, the packers were deflated briefly, then reinflated, a procedure which resulted in more representative radial-LVDT readings. The test and guard zones were shut in for the initial pressure buildup on January 20, 1989 (Calendar Day 20).

Figure 6.33 is a sequence plot of the fluid pressures in the test and guard zones in S0P01 during the permeability-testing period. The initial buildup period in the test zone of borehole S0P01 was from January 20 to March 10, 1989 (Calendar Days 20 to 69) and the test-zone pressure increased to 2.33 MPa. On March 10 (Calendar Day 69), the first pulse-withdrawal test in S0P01 was initiated by removing 42 ml of brine from the test zone, thereby reducing the pressure from 2.33 to 1.54 MPa. The first pulse-withdrawal test continued until April 27, 1989 (Calendar Day 117) by which time the fluid pressure in the test zone had increased to 2.76 MPa. On April 27 (Calendar Day 117), a second pulse-withdrawal test was initiated. The test-zone pressure was decreased from 2.76 to 1.45 MPa as 92 ml of brine were removed from the test zone. The pressure buildup in the test zone continued until the pressure was 3.61 MPa on August 18, 1989 (Calendar Day 230). On August 18 (Calendar Day 230), a gas and brine sample was collected from the test zone. During sampling, the test-zone pressure decreased from 3.61 to 1.36 MPa. The fluid-pressure buildup in the S0P01 test zone following the sampling continued until the end of the testing period on August 29, 1989 (Calendar Day 241). The pressure at the end of the testing period was 1.79 MPa. The

gas-brine sample was sent to an analytical-chemistry laboratory for analysis but the laboratory was unable to analyze the sample.

The permeability-testing period in S0P01 also included a pulse-withdrawal test of the guard zone. The guard-zone interval in S0P01 included Marker Bed 139. The buildup pressure in the guard zone reached a relatively stable value of about 0.49 MPa in early June 1989 as shown on Figure 6.33. However, on June 3 (Calendar Day 154) the guard-zone pressure began a rapid decrease to a different stable value of about 0.46 MPa (Figure 6.33). The cause of this pressure decrease is not understood, but it is probably equipment related. For example, Figure 6.33 also shows a moderate degree of noise in the fluid-pressure responses observed in the guard zone. On June 14, 1989 (Calendar Day 165), a pulse-withdrawal test was initiated on the guard zone of S0P01 as 7.3 ml of brine were removed from the guard zone, reducing the pressure from 0.46 to 0.23 MPa. The fluid-pressure buildup in the guard zone in response to this test continued until the end of the testing period on Calendar Day 241 when the fluid pressure had built up to a value of nearly 0.46 MPa.

Figures 6.33 to 6.37 are annotated plots of the data obtained during the permeability-testing period in borehole S0P01. Figure 6.33 shows the pressures in the test and guard zones; Figure 6.34 shows the inflation pressures in the test- and guard-zone packers; Figure 6.35 shows the temperatures in the guard and test zones; Figure 6.36 shows the relative displacements of the radial LVDTs and the calculated changes in borehole radius; and Figure 6.37 shows the relative displacement of the axial LVDT. An abridged tabulation of the data collected from S0P01 during the permeability-testing period is presented in Table C7, Appendix C.

6.4 Borehole S1P71 in Waste Panel 1, Room 7, Permeability-Testing Sequence S1P71-A

The test and guard zones in borehole S1P71 were drilled and cored on November 10, 1988 (Calendar Day 315). Figure 6.38 shows the configuration of Multipacker Test Tool #2 in borehole S1P71 during permeability-testing sequence S1P71-A. The borehole was filled with brine on November 10, 1988 (Calendar Day 315), approximately 2 hours after drilling was completed. Borehole S1P71 was subsequently deepened to include anhydrite "c" and associated clay B. Results of testing in the deepened

borehole, permeability-testing sequence S1P71-B, will be presented in WIPP Salado Hydrology Program Data Report #2. The multipacker test tool was installed in S1P71 during the period from November 11 to November 23, 1988 (Calendar Days 316 to 328). The length of the installation period was due to equipment-related problems. During this time, the test and guard zones were shut in on November 12, 1988 (Calendar Day 317), and the test-zone pressure began to rise on November 15 (Calendar Day 320). The test-zone pressure rose to 0.06 MPa on November 19 (Calendar Day 324) but a leak in the multipacker test tool necessitated removal of the tool at that time. The test tool was reinstalled on November 22 (Calendar Day 327) and the test and guard zones were shut in on November 23, 1988 (Calendar Day 328) for the principal pressure-buildup period.

Figure 6.39 is a sequence plot of the test- and guard-zone fluid pressure for permeability-testing sequence S1P71-A, which included two pulse-withdrawal tests. The figure shows that the pressure buildup after the initial shut in, and after each pulse-withdrawal test, approached a relatively stable pressure that was lower than the stabilized pressure during the preceding test period. During the initial buildup period, the fluid pressure in the test zone rose to 1.60 MPa on January 4, 1989 (Calendar Day 4). At that time, the first pulse-withdrawal test was initiated by opening the test-zone vent line and releasing 80 ml of brine, which caused the test-zone pressure to decrease from 1.60 to 0.87 MPa. The pressure buildup after the first pulse withdrawal continued until March 10, 1989 (Calendar Day 69) when the test-zone pressure was relatively stable at 1.57 MPa.

The second pulse-withdrawal test in the test zone began on March 10 (Calendar Day 69) with the release of 156 ml of brine from the test-zone vent line. The test-zone pressure decreased from 1.57 to 0.78 MPa during the pulse withdrawal. After the second pulse withdrawal, the pressure buildup continued until the end of the testing period on May 3, 1989 (Calendar Day 123). The test-zone pressure at the end of the testing period was 1.32 MPa and appeared to be trending to a stable pressure less than that achieved at the end of the first pulse-withdrawal test as shown on Figure 6.39.

The guard-zone in S1P71 isolated Marker Bed 139. During the permeability-testing period, no pressure buildup was noted in the guard zone. Two attempts were made to

conduct pulse injections in the guard zone during permeability-testing sequence S1P71-A. On May 3, 1989 (Calendar Day 123), two liters of brine were injected into the guard zone but a pressure pulse could not be sustained. To investigate whether or not this result was due to equipment-related problems, the test tool was removed from S1P71 and leak tested to verify that all equipment was operating properly. Multipacker Test Tool #2 was reinstalled in borehole S1P71 on June 19, 1989 (Calendar Day 170) at the same depth as during permeability-testing sequence S1P71-A. The guard zone was shut in on June 21 (Calendar Day 172) and vented from June 23 to June 26 (Calendar Days 174 to 177) to remove trapped gas or air. The guard and test zones were shut in on June 26 (Calendar Day 177) and no guard-zone fluid pressure buildup was observed. On July 6 (Calendar Day 187), two liters of brine were injected into the guard zone and no sustained pressure buildup was observed.

Figures 6.39 to 6.43 are annotated plots of the data obtained during permeability-testing sequence S1P71-A. Figure 6.39 shows the pressures in the test and guard zones; Figure 6.40 shows the inflation pressures in the test- and guard-zone packers; Figure 6.41 shows the temperatures in the guard and test zones; Figure 6.42 shows the relative displacements of the radial LVDTs and calculated changes in borehole radius; and Figure 6.43 shows the relative displacement of the axial LVDT. An abridged tabulation of the data collected during permeability-testing sequence S1P71-A, including the attempted pulse-injection tests in the guard zone, is presented in Table C8, Appendix C.

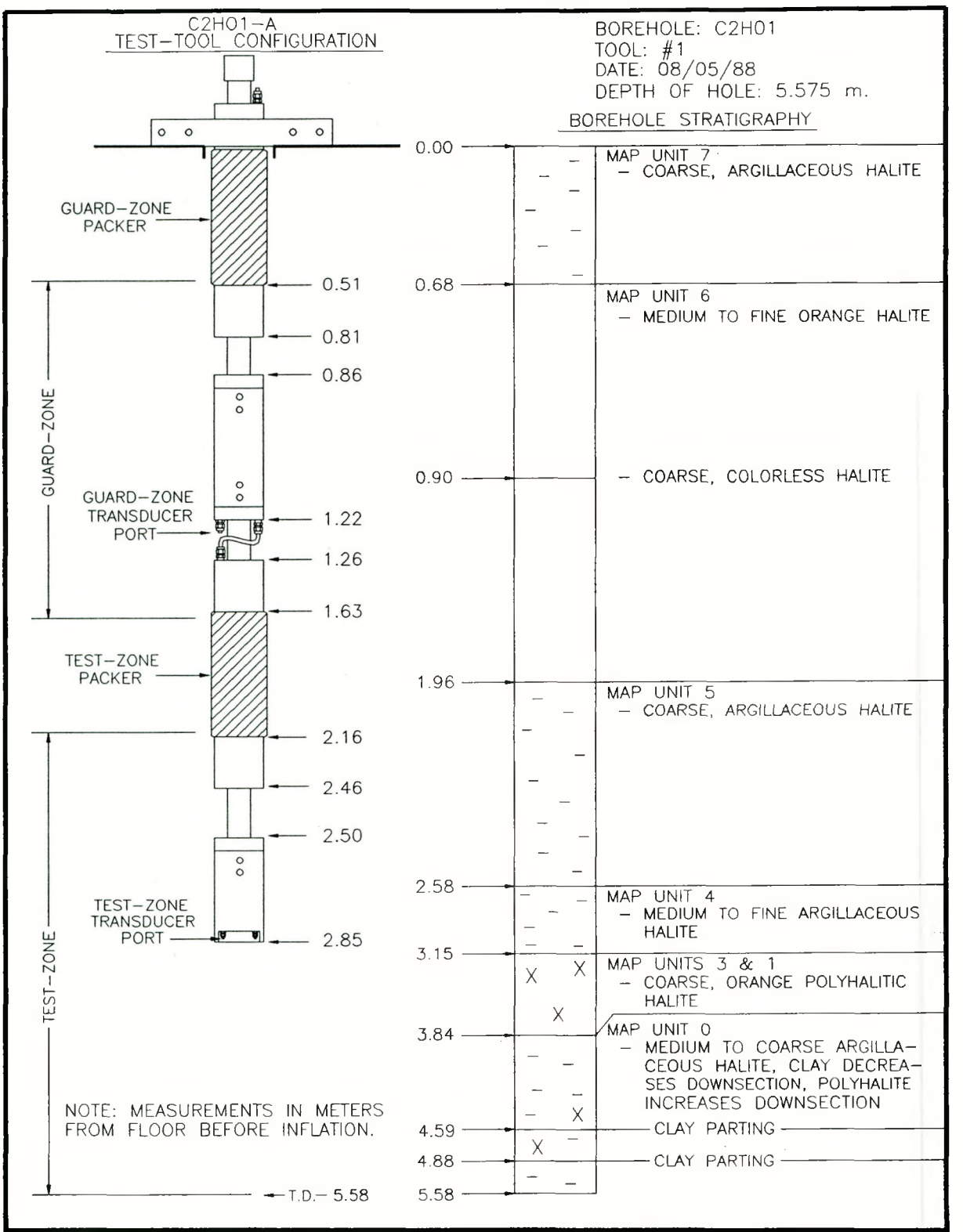
6.5 Summary of Observations Regarding Gas Production, Fluid Withdrawal, and Multipacker-Test-Tool Corrosion During the Permeability-Testing Program

During a typical permeability test, the vent-line valve of the zone being tested was opened to decrease the zone pressure and brine and/or gas was produced. The volumes of brine produced during testing were captured and measured as described in the individual test descriptions. The volumes of gas produced were not measured because gas production was unexpected. The volumes of gas produced during future tests will be measured and the measurements will appear in future data reports.

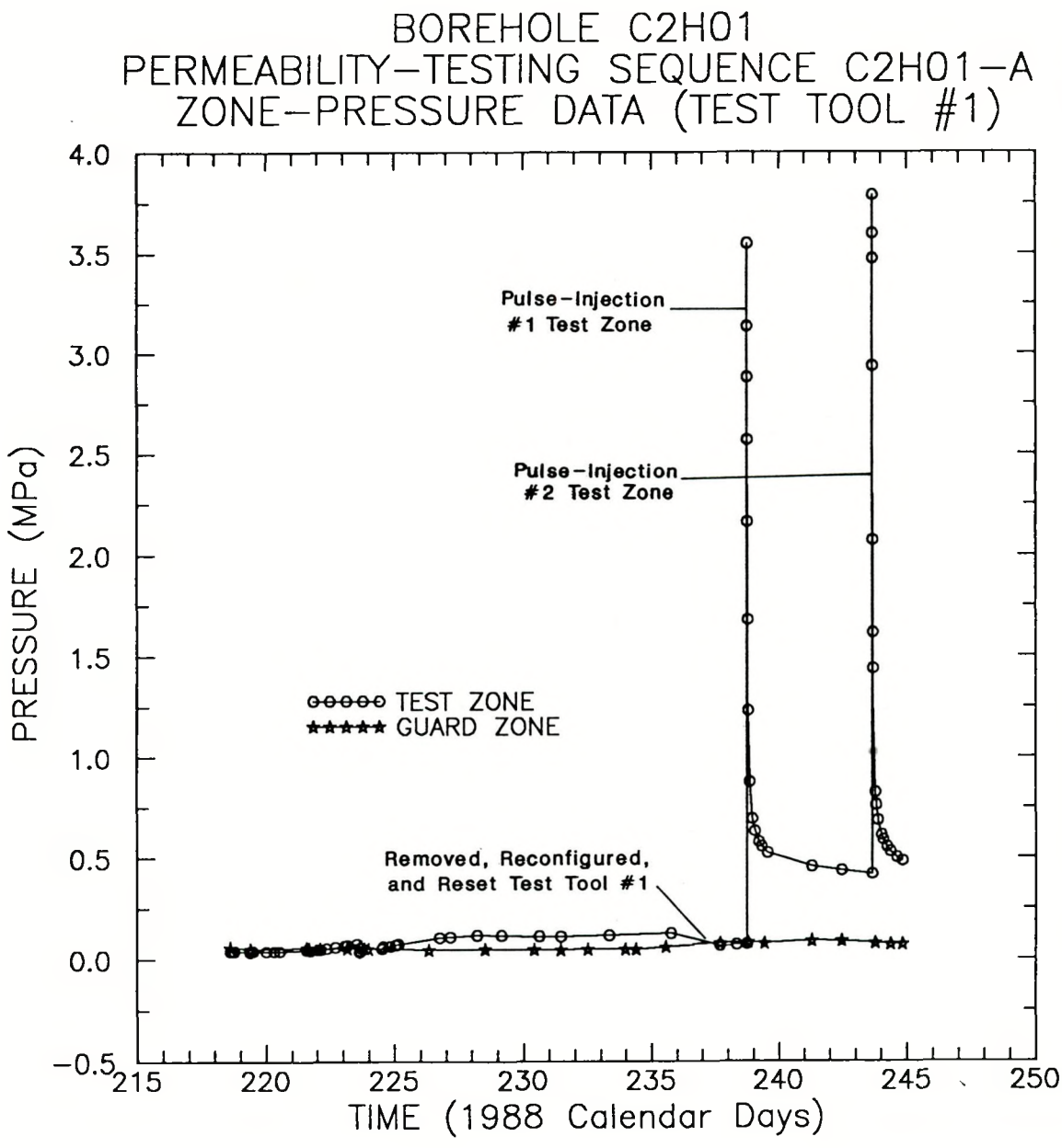
The brine produced during each pulse withdrawal contained gas bubbles and appeared foamy. Free gas was produced during some tests. Potential gas sources are: (1) gas produced by the formation; (2) gas produced by bacterial degradation of carbonaceous material introduced during drilling/coring or with the test tool; (3) gas/air trapped in the isolated zones during test-tool installation or brine filling of the isolated zones after packer inflation; and (4) gas produced by metallic corrosion of test-tool parts. Multipacker Test Tool #1 was an all-stainless-steel tool and did not exhibit metallic corrosion. Multipacker Test Tools #2 through #5 contained several parts made of aluminum. At the ends of the permeability-testing periods, the aluminum parts were moderately to severely corroded, indicating that some gas was probably produced by metallic corrosion during testing. The following summarizes the brine production and observations about gas production, and notes the severity of corrosion indicated in the post-test test-tool examinations for the permeability tests described in this report.

BOREHOLE/ TEST*	TEST TOOL NUMBER	TEST-TOOL MATERIALS*	CORROSION	BRINE VOLUME REMOVED (cm^3)	FREE GAS OBSERVED?
C2H01-A	1	SS	None		
PI-1					
PI-2					
C2H01-B	1	SS	None		
PW-1				--	
PW-2				14	No
C2H01-C	5	Al, SS	Minor Al pitting		
PW-1				50	No
PW-2				71	1 sec only
C2H02	4	Al, SS	Severe Al pitting		
PW-1				--	
PW-2				110	No
PW-3				72	No
C2H03	5	SS	None		
N4P50	3, 4	Al, SS	Minor Al pitting		
S0P01	3	Al, SS	Severe Al pitting		
Test zone					
PW-1				42	Yes
PW-2				92	Yes
Guard zone					
PW-1				7.3	Yes
S1P71-A	2	Al, SS	Al pitting		
PW-1				80	No
PW-2				156	No

* Key: PI = Pulse Injection; PW = Pulse Withdrawal; SS = Stainless Steel; Al = Aluminum.



Drawn by JFP/INTERA	Date 2/28/91	Configuration of Multipacker Test Tool # 1 in Borehole C2H01 for Permeability - Testing Sequence C2H01 - A
Checked by	Date	
Revisions	Date	
#105400R062	2/28/91	
INTERA Technologies		Figure 6.1

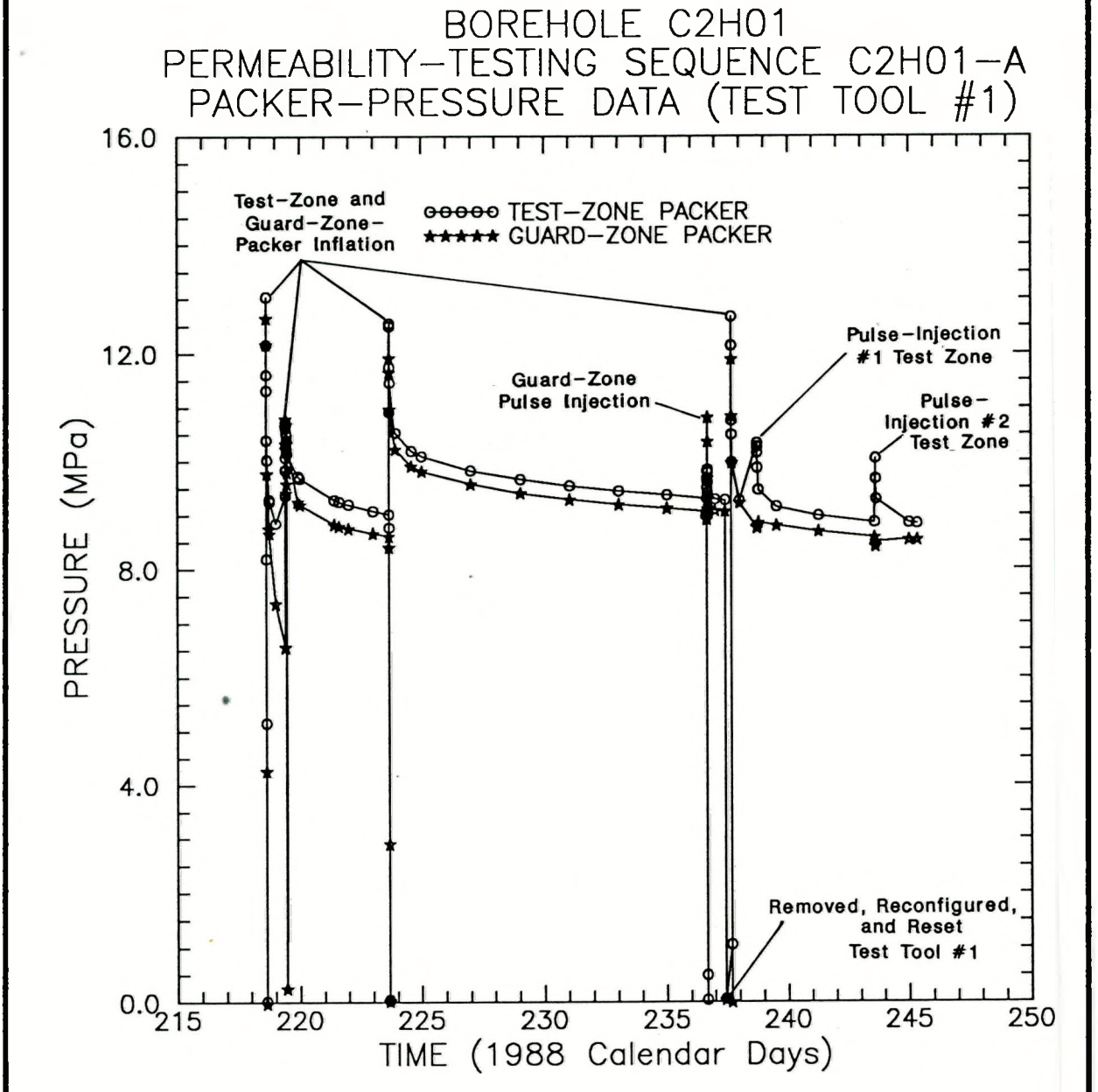


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Zone Pressures for Permeability-Testing Sequence C2H01-A, Multipacker Test Tool #1

INTERA Technologies

Figure 6.2

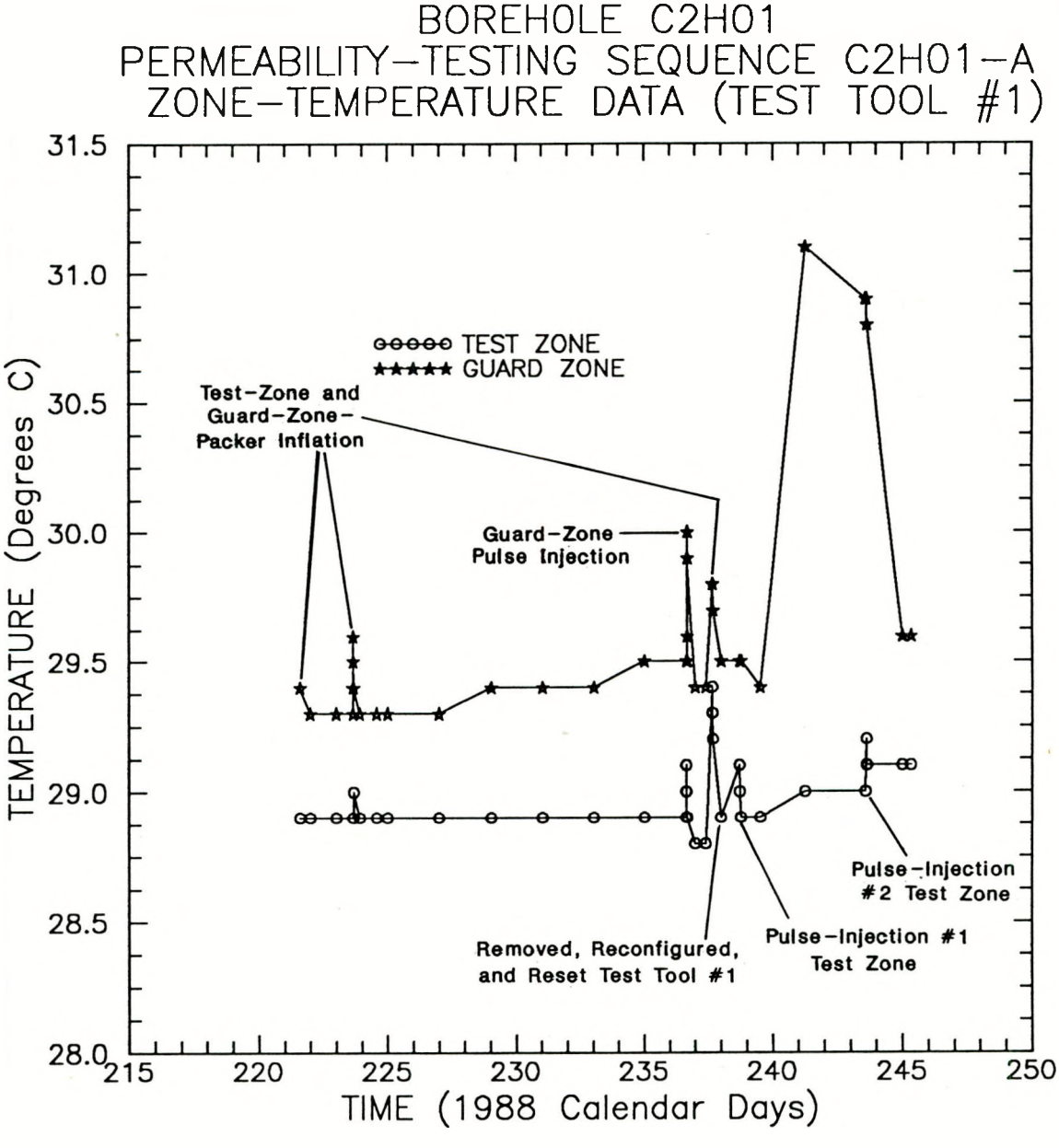


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Packer Pressures for Permeability–Testing Sequence C2H01–A, Multipacker Test Tool #1

INTERA Technologies

Figure 6.3

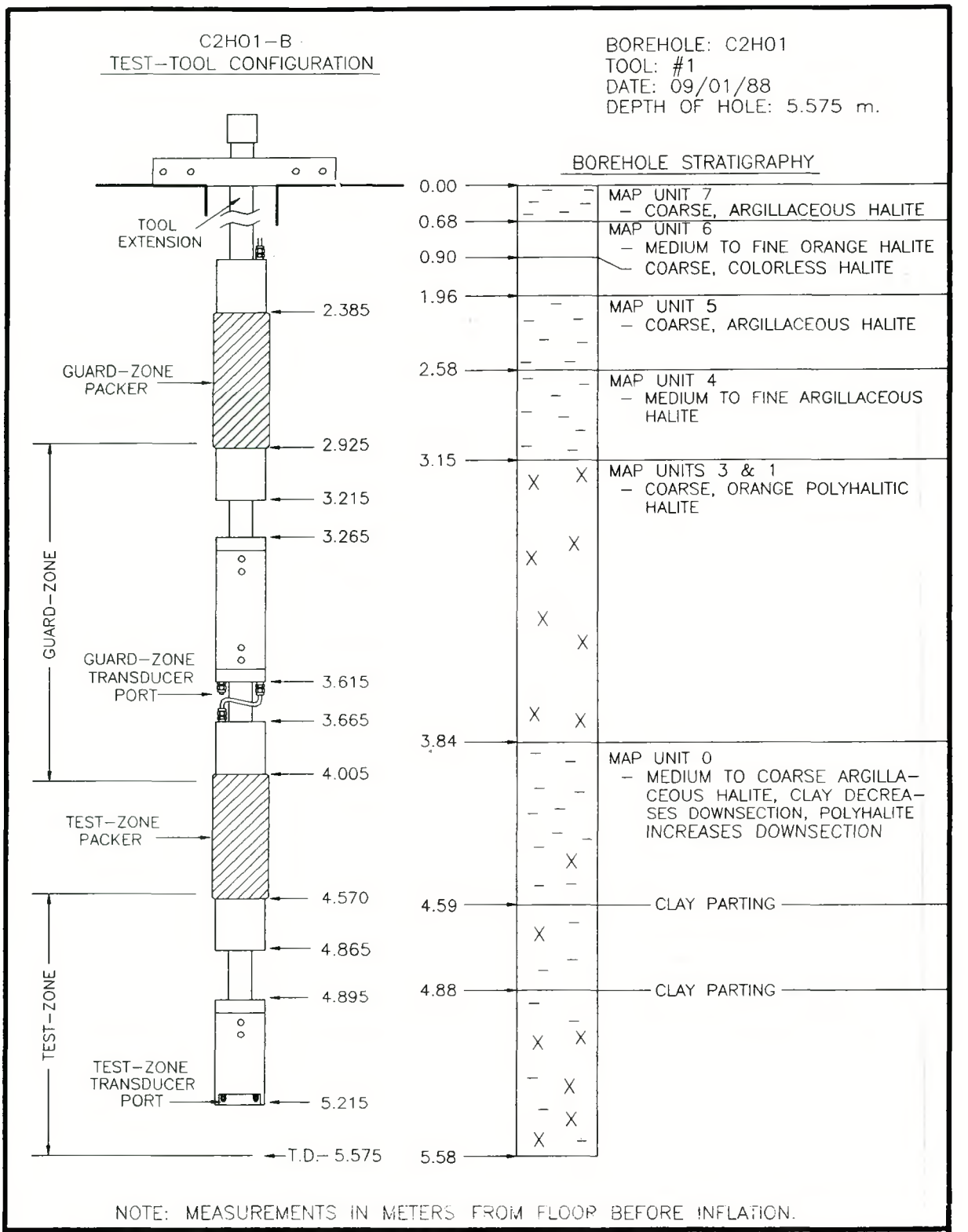


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Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Temperatures for Permeability-Testing Sequence C2H01-A, Multipacker Test Tool #1

INTERA Technologies

Figure 6.4

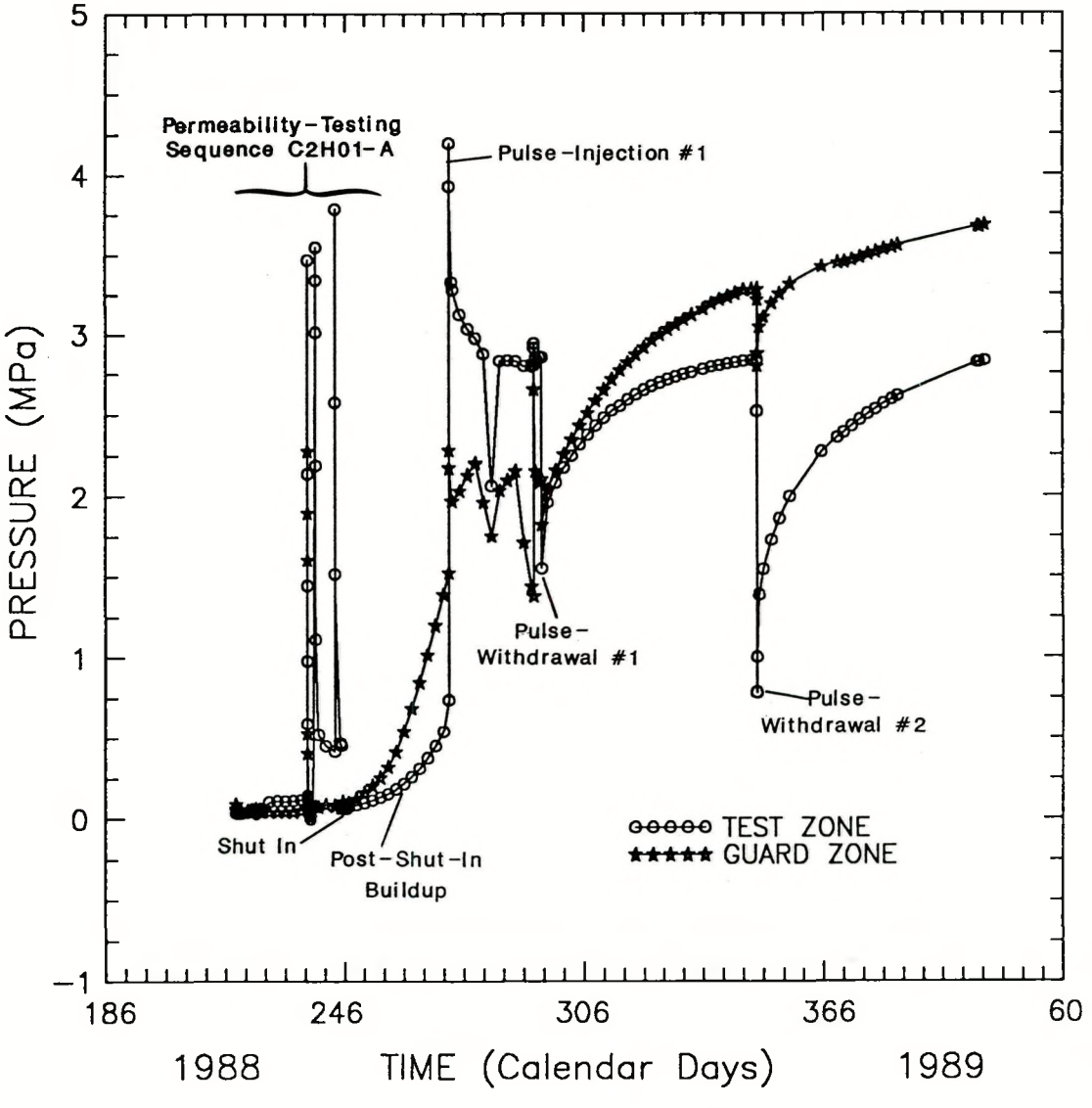


Drawn by JFP/INTERA	Date 2/28/91
Checked by	Date
Revisions	Date
#105400R062	2/28/91

Configuration of Multipacker Test Tool # 1 in Borehole C2H01 for Permeability - Testing Sequence C2H01-B

INTERA Technologies

Figure 6.5

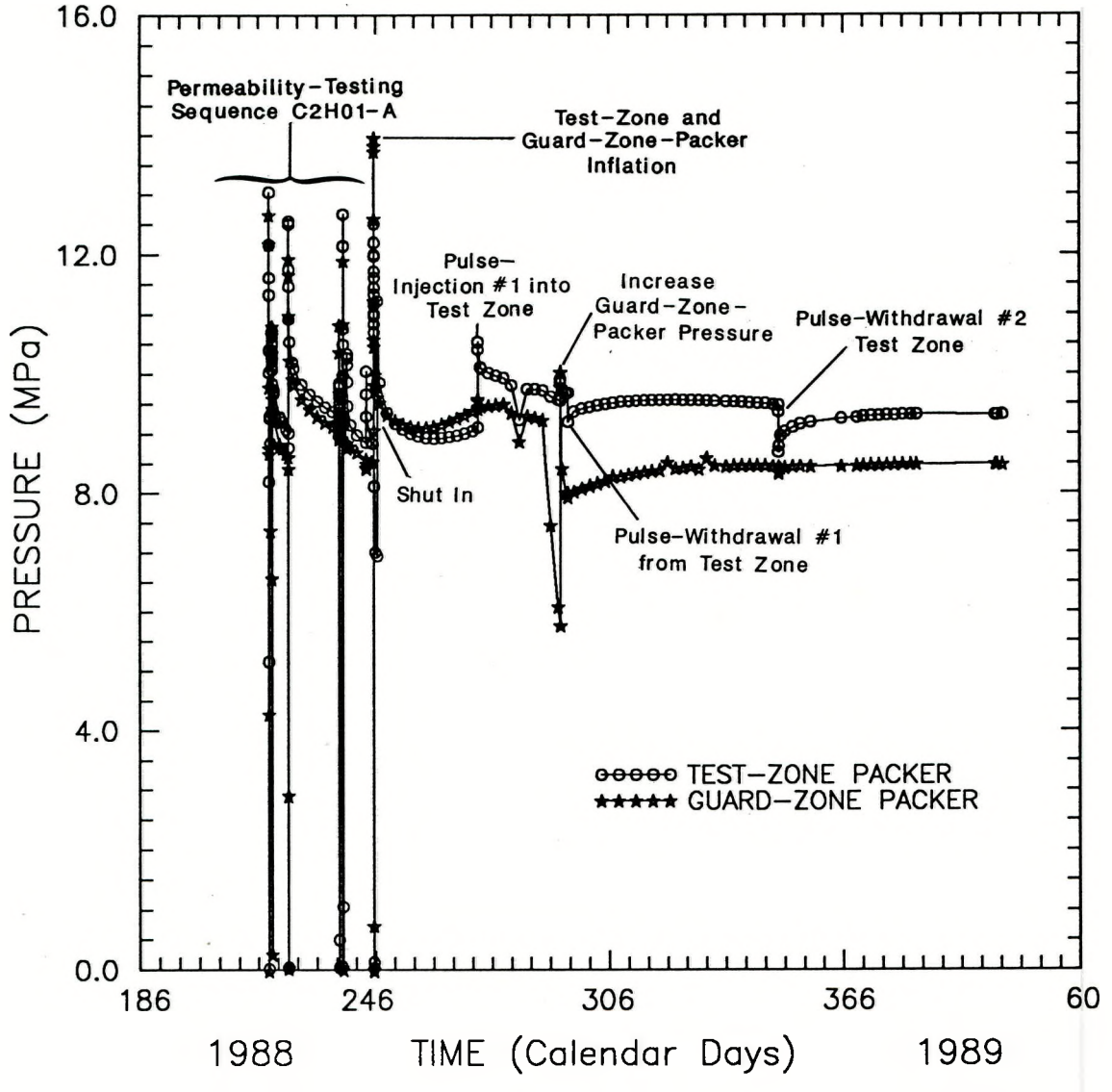


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Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Pressures for Permeability–Testing Sequence C2H01–B, Multipacker Test Tool #1

INTERA Technologies

Figure 6.6

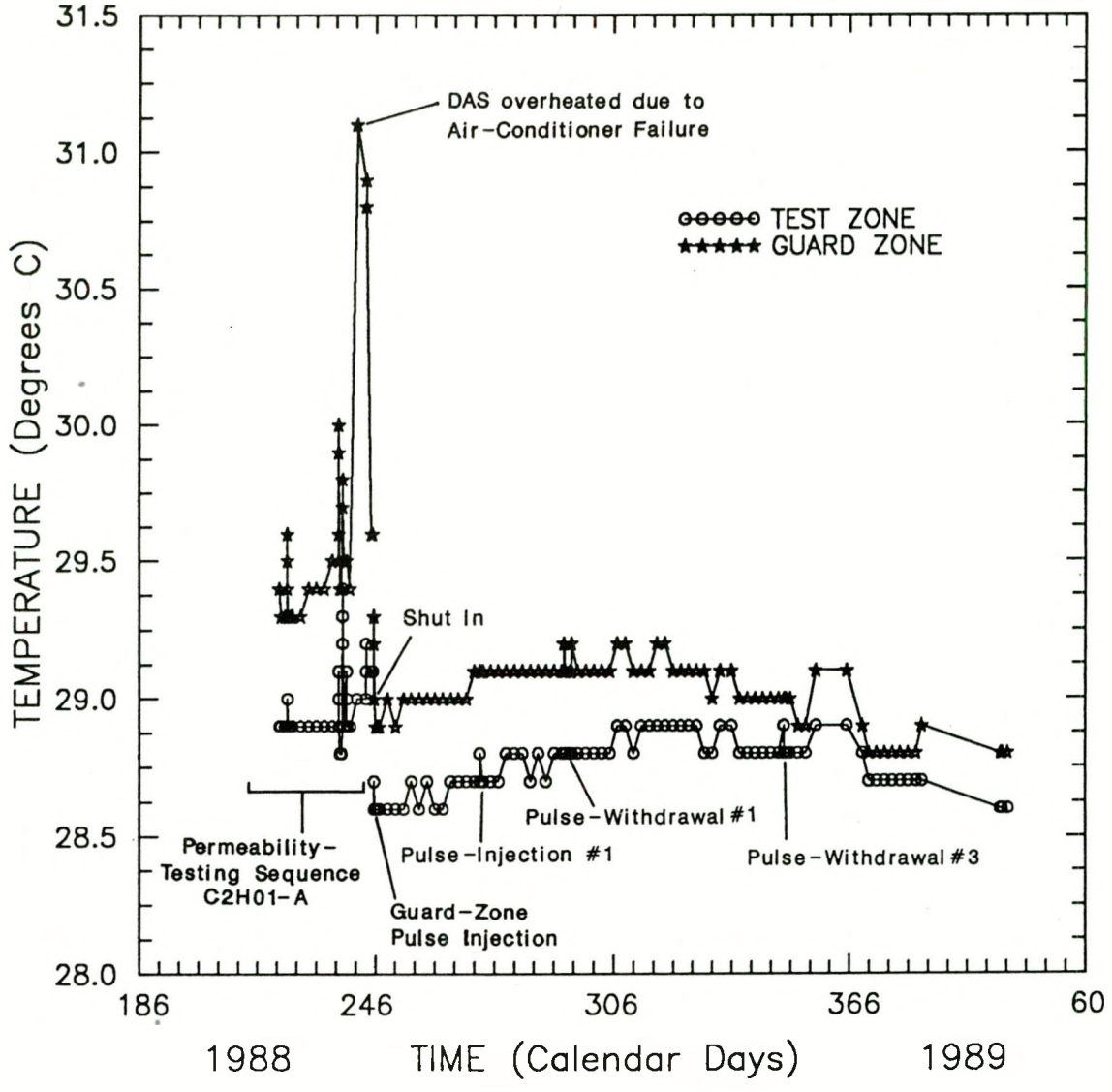


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Packer Pressures for Permeability–Testing Sequence C2H01–B, Multipacker Test Tool #1

INTERA Technologies

Figure 6.7

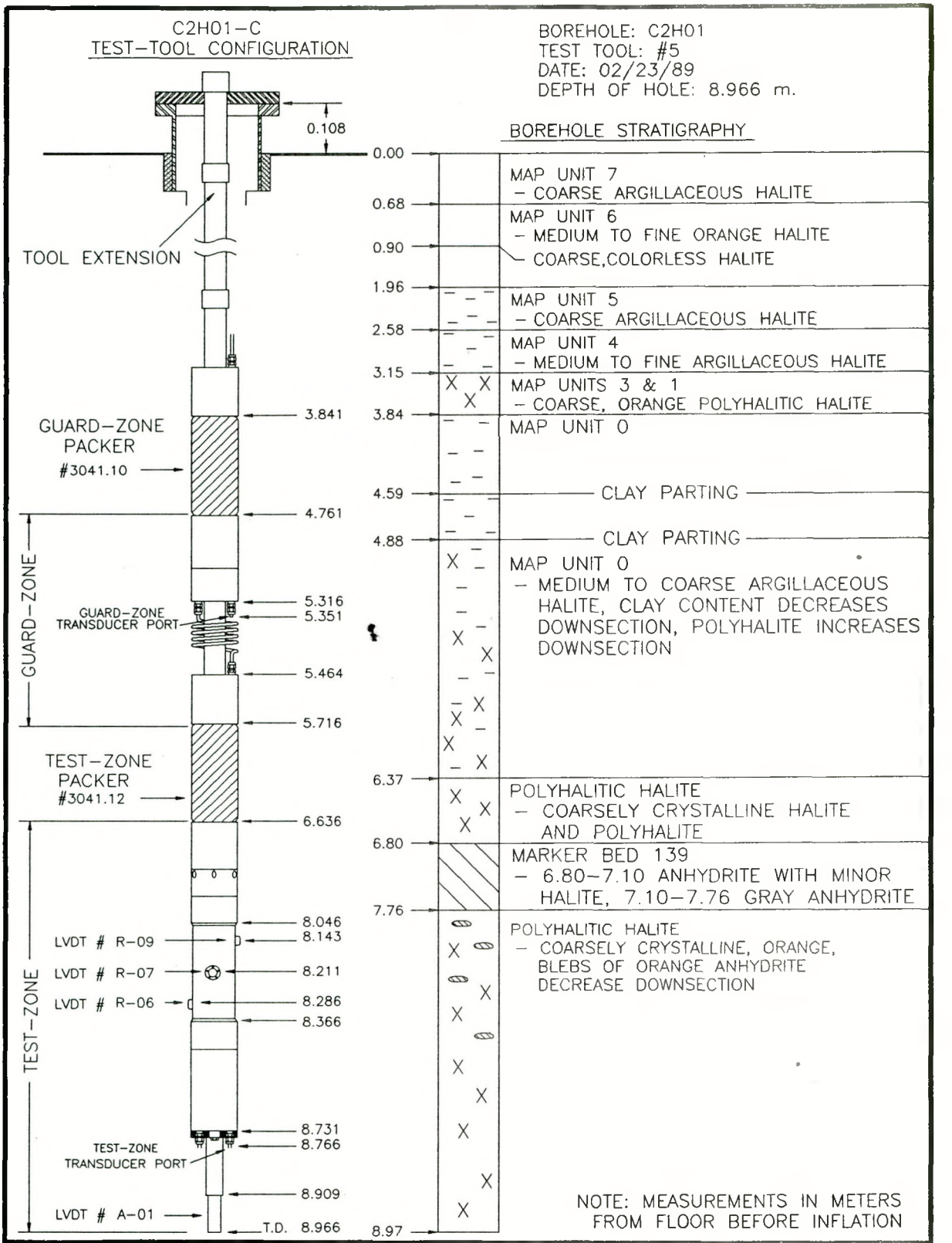


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Temperatures for Permeability-Testing Sequence C2H01-B, Multipacker Test Tool #1

INTERA Technologies

Figure 6.8

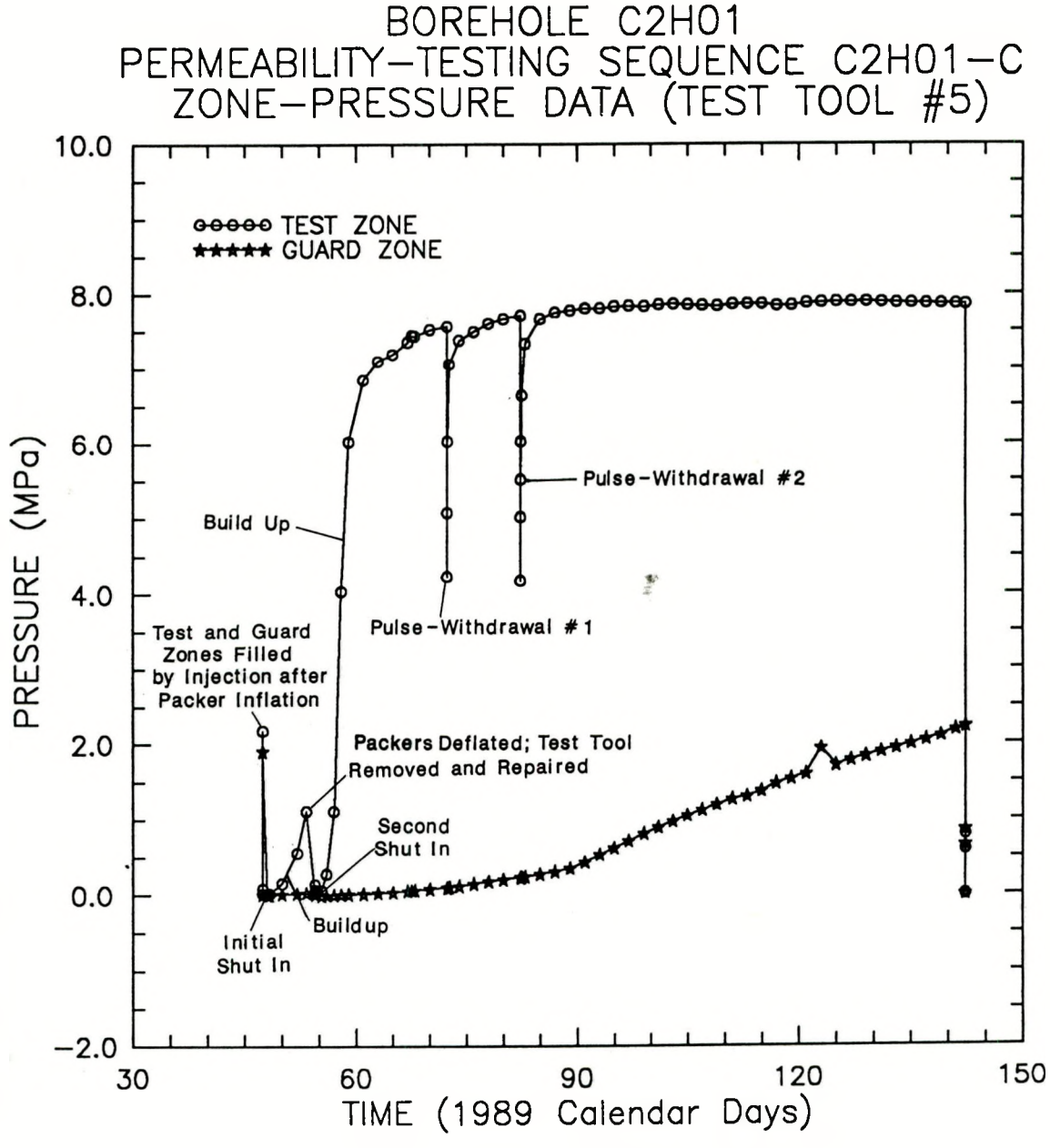


Drawn by JFP/INTERA	Date 8/09/90
Checked by	Date
Revisions	Date 2/28/91
#105400R062	3/11/91

Configuration of Multipacker Test Tool #5 in Borehole C2H01 for Permeability - Testing Sequence C2H01-C

INTERA Technologies

Figure 6.9

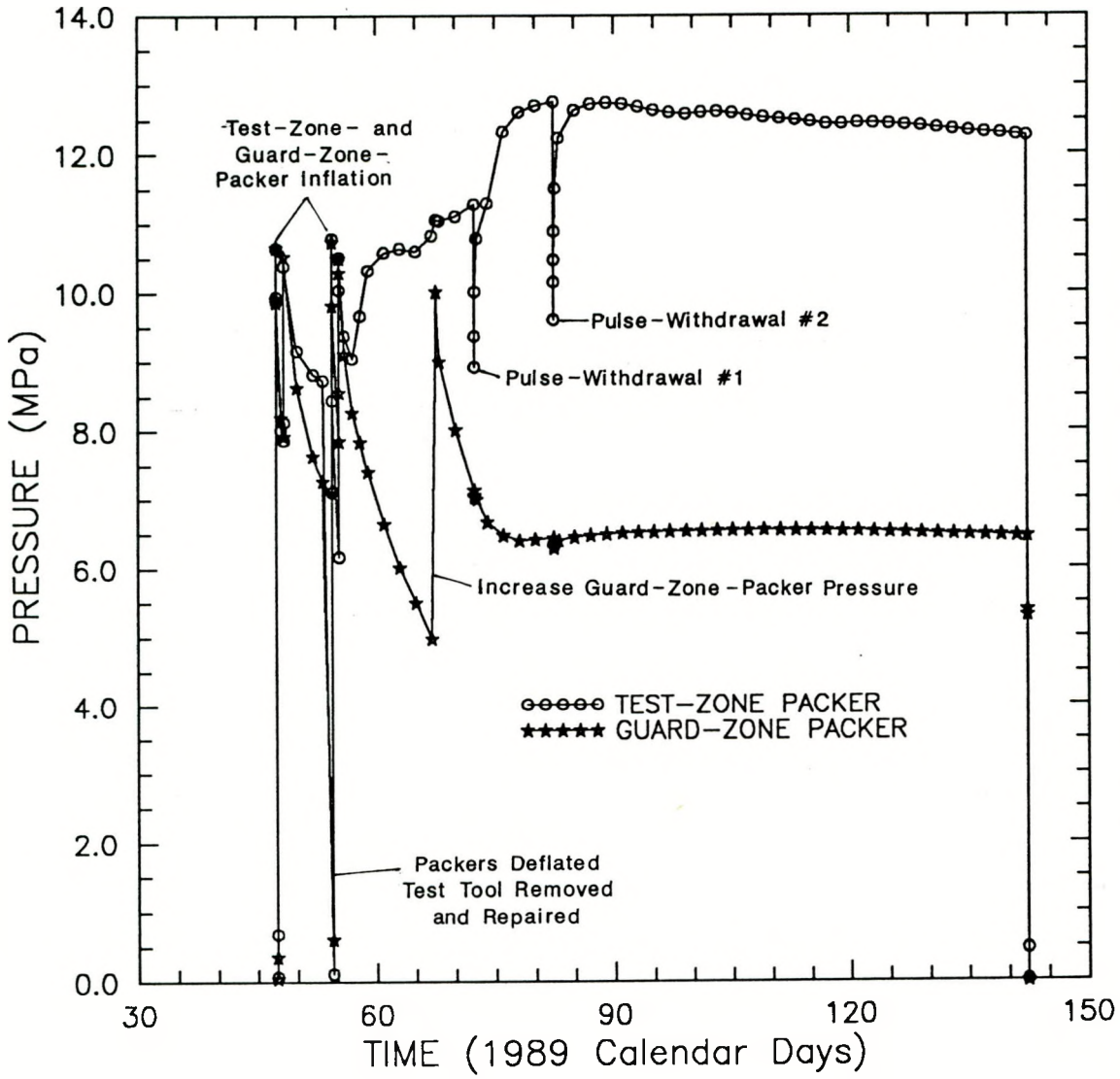


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Pressures in Borehole C2H01 for Permeability–Testing Sequence C2H01–C, Multipacker Test Tool #5

INTERA Technologies

Figure 6.10

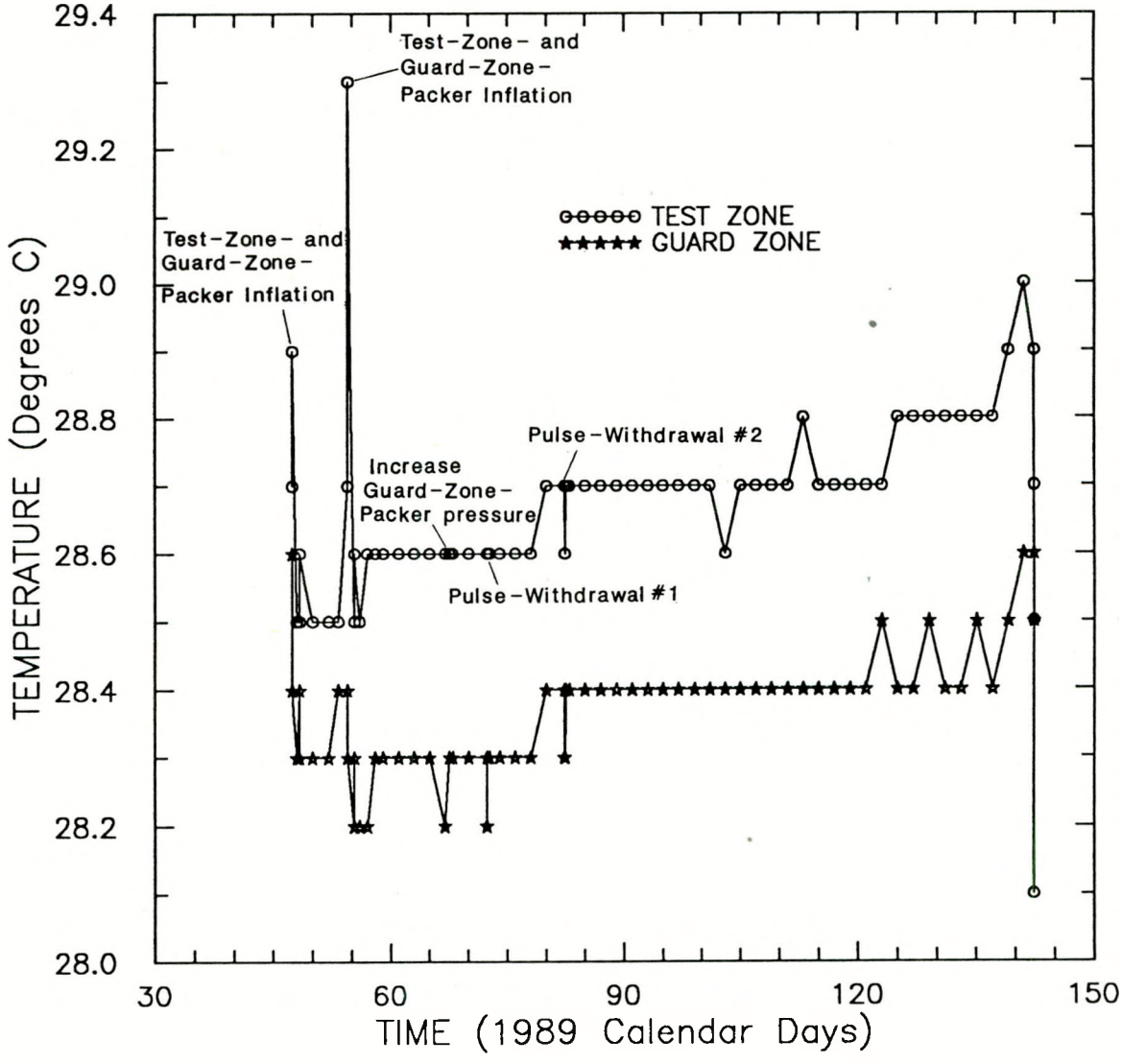


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Packer Pressures for Permeability-Testing Sequence C2H01-C, Multipacker Test Tool #5

INTERA Technologies

Figure 6.11

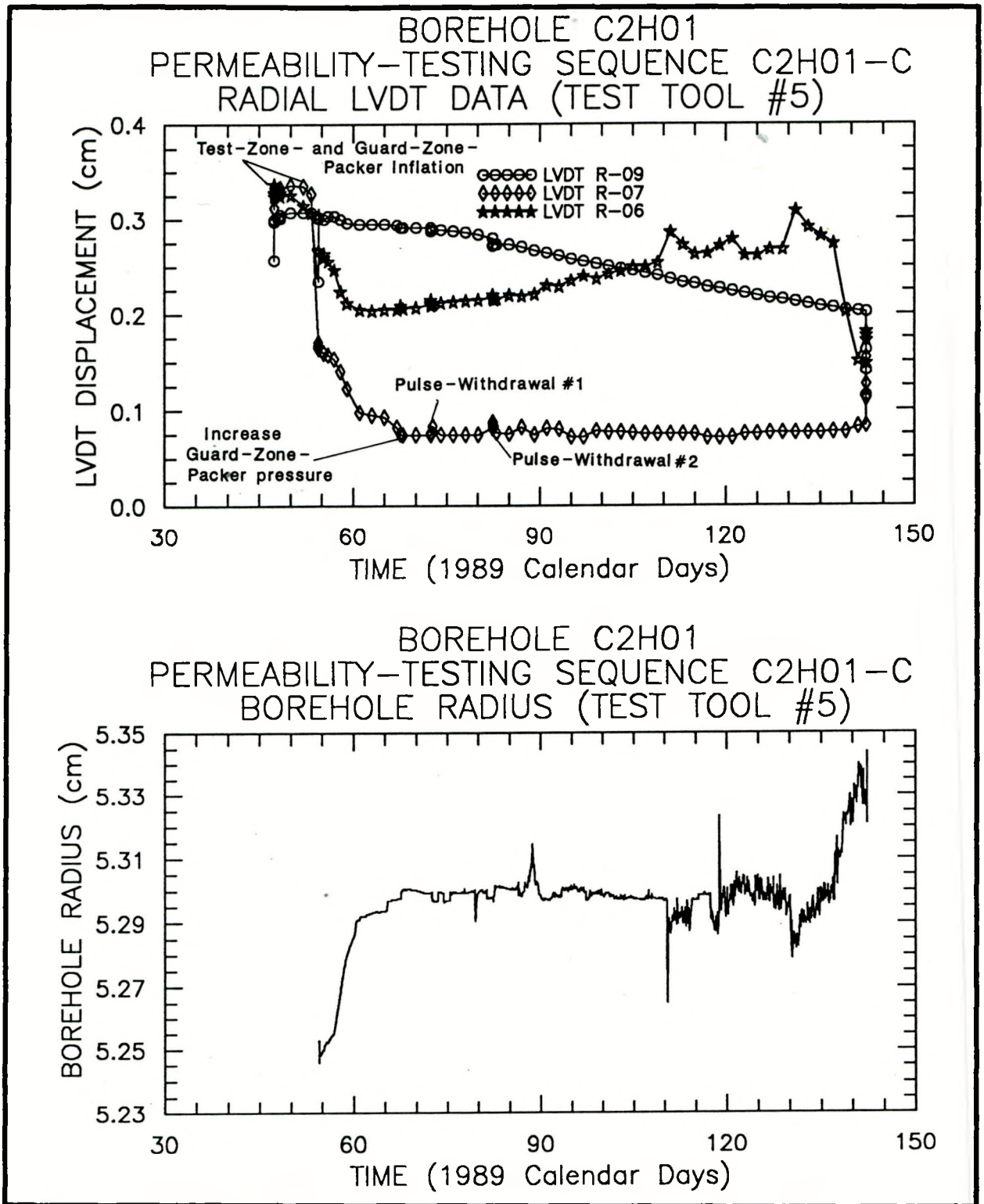


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Temperatures for Permeability-Testing Sequence C2H01-C, Multipacker Test Tool #5

INTERA Technologies

Figure 6.12

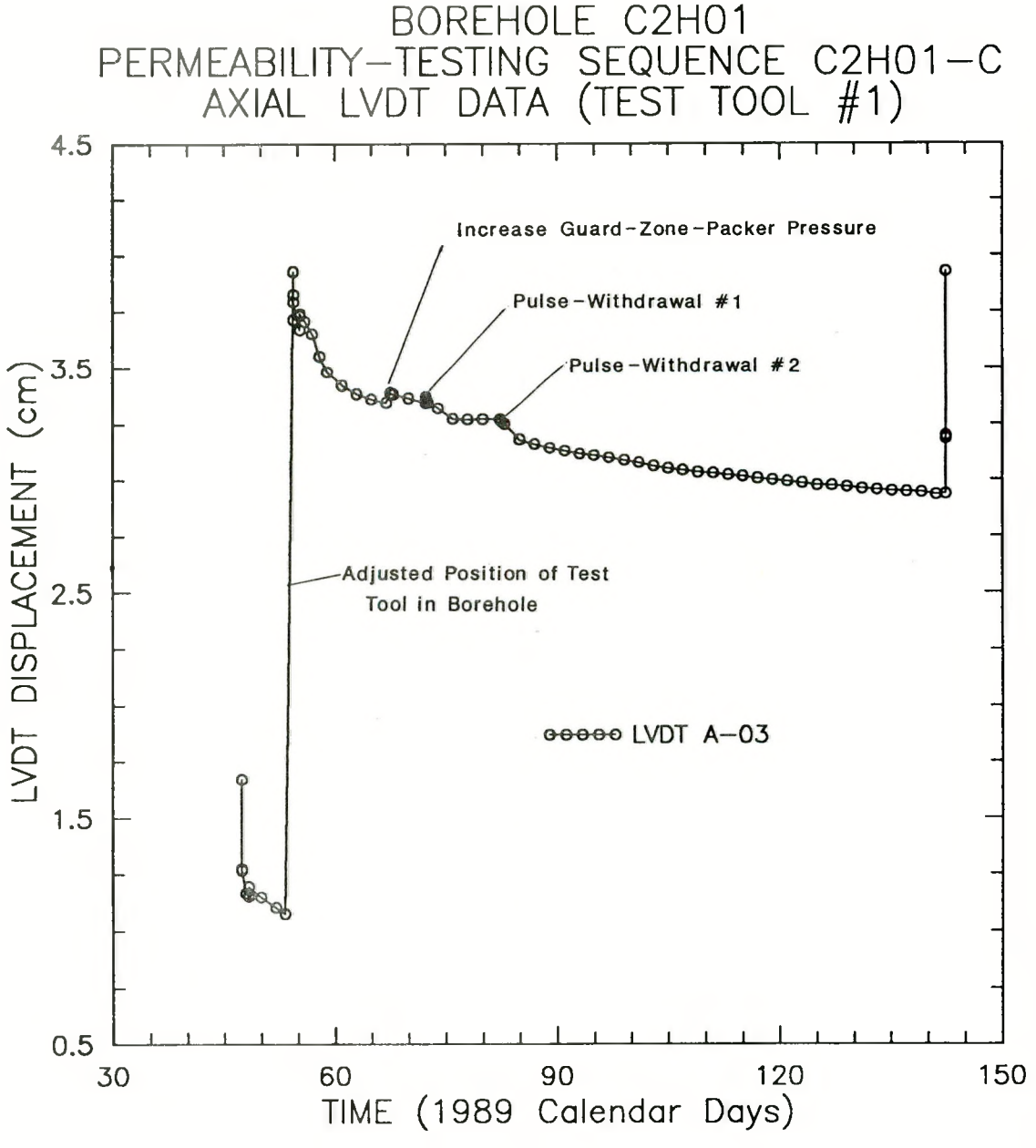


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Radial LVDT Data for Permeability-Testing Sequence C2H01-C, Multipacker Test Tool #5

INTERA Technologies

Figure 6.13

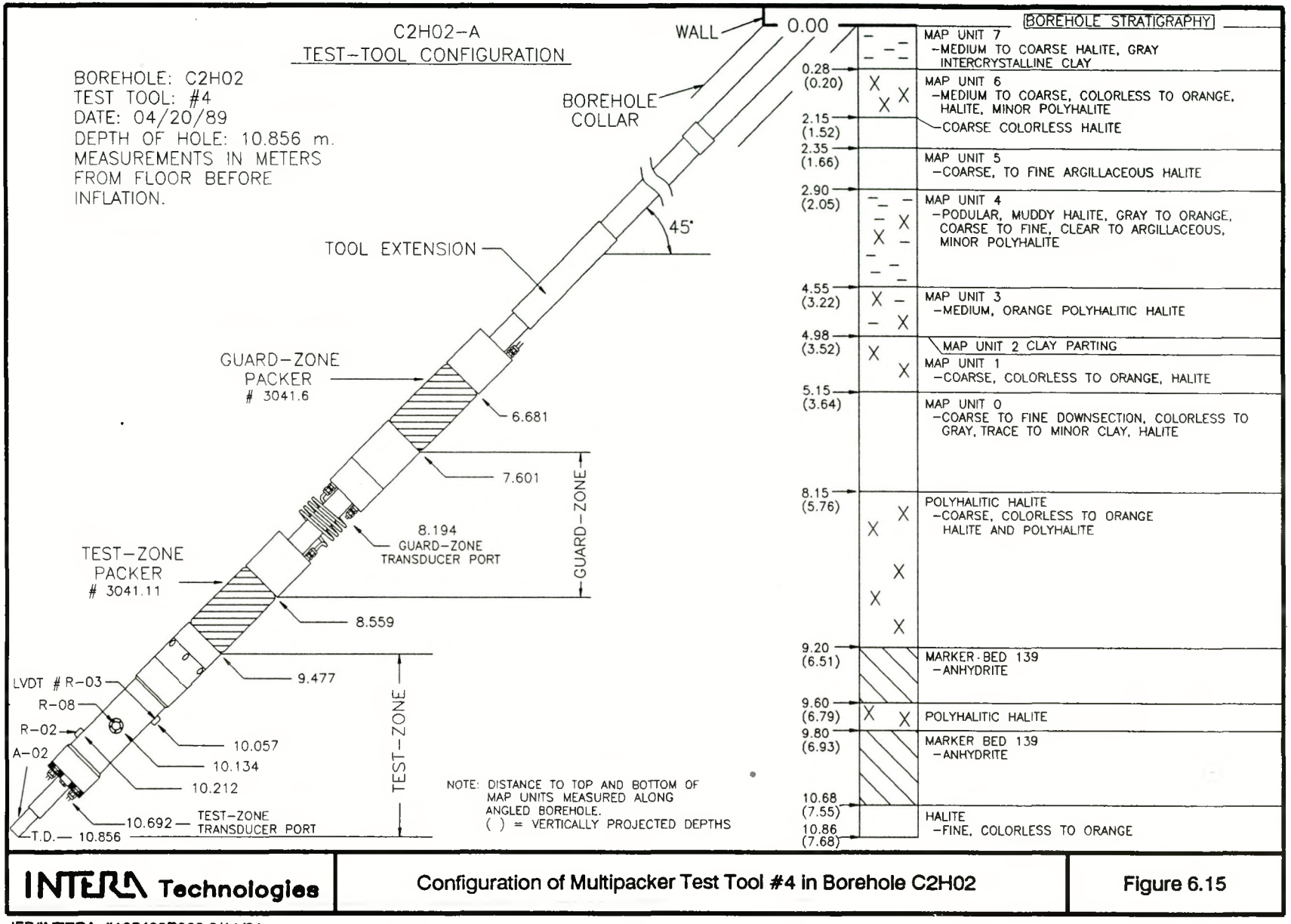


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Axial LVDT Data for Permeability-Testing Sequence C2H01-C, Multipacker Test Tool #5

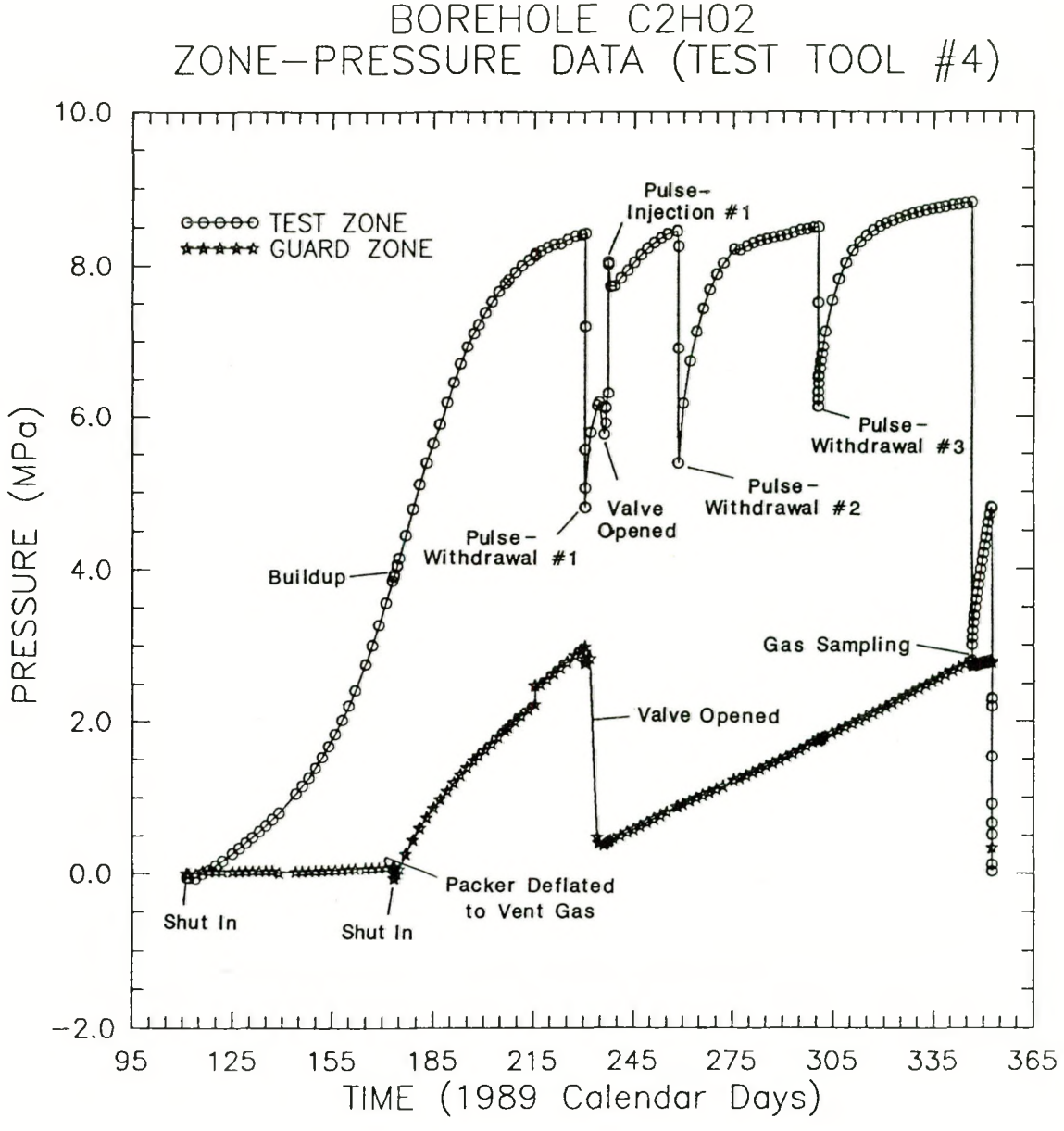
INTERA Technologies

Figure 6.14

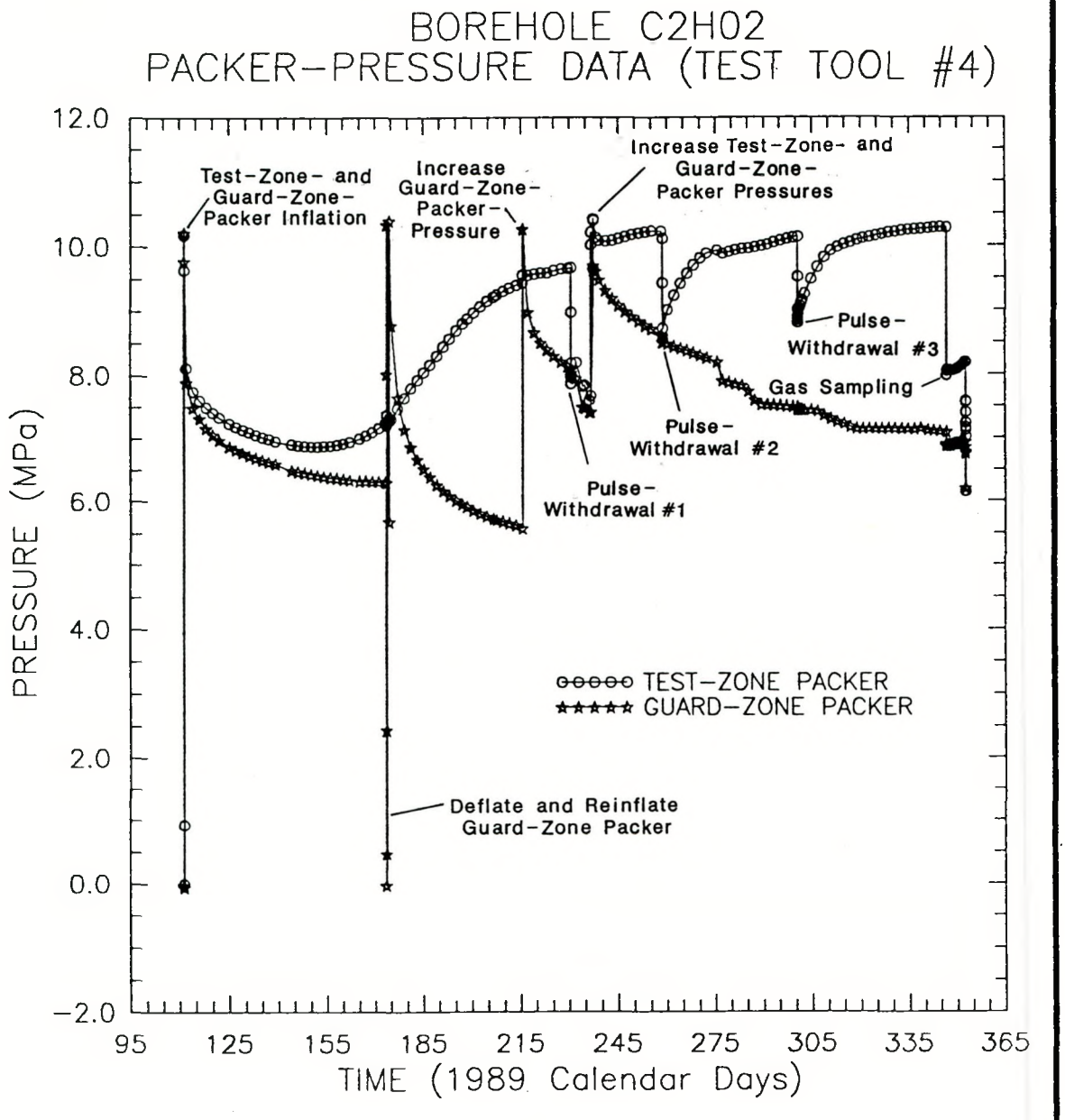


INTERA Technologies	Configuration of Multipacker Test Tool #4 in Borehole C2H02	Figure 6.15

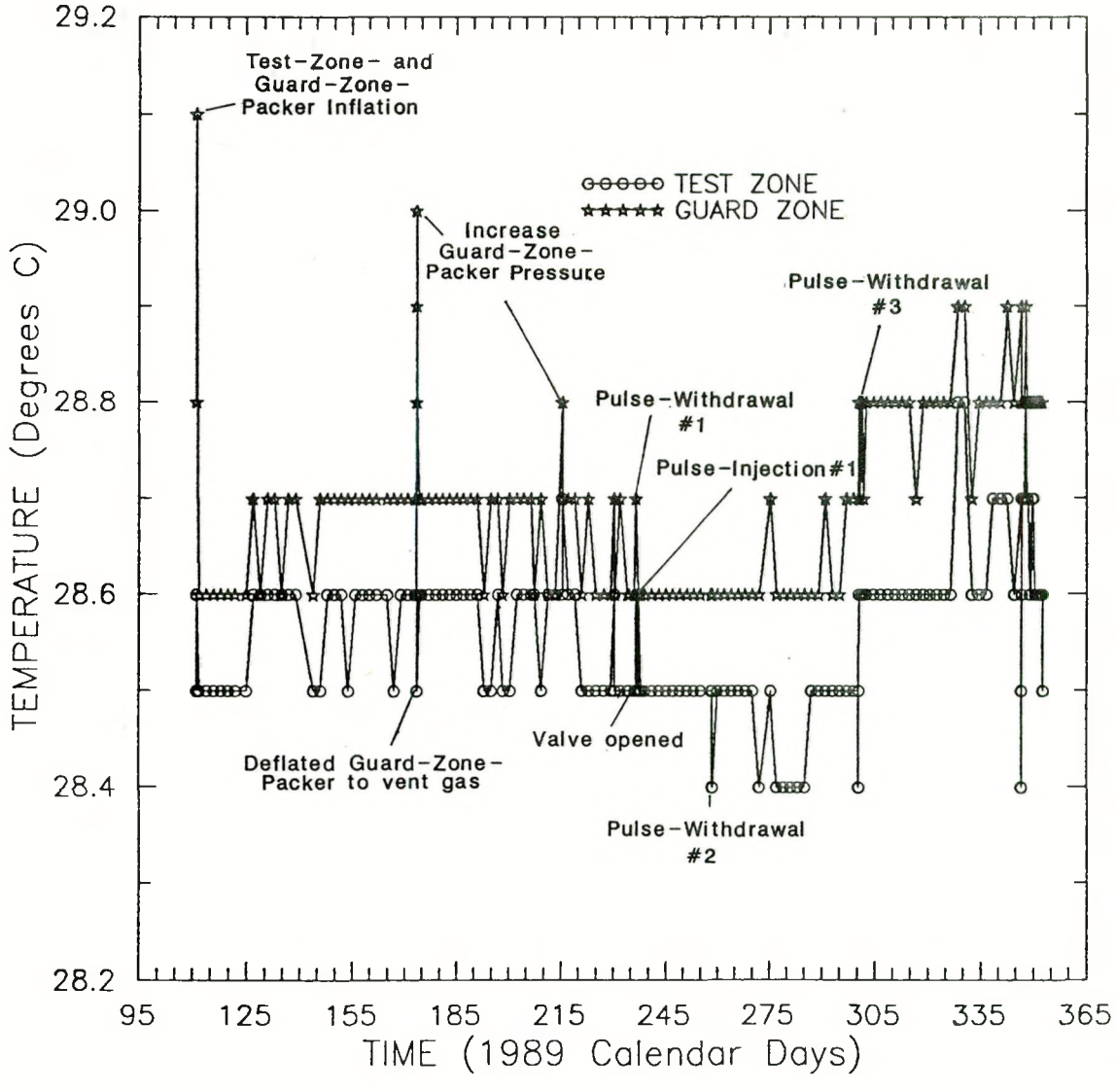
JFP/INTERA #105400R062 3/11/91



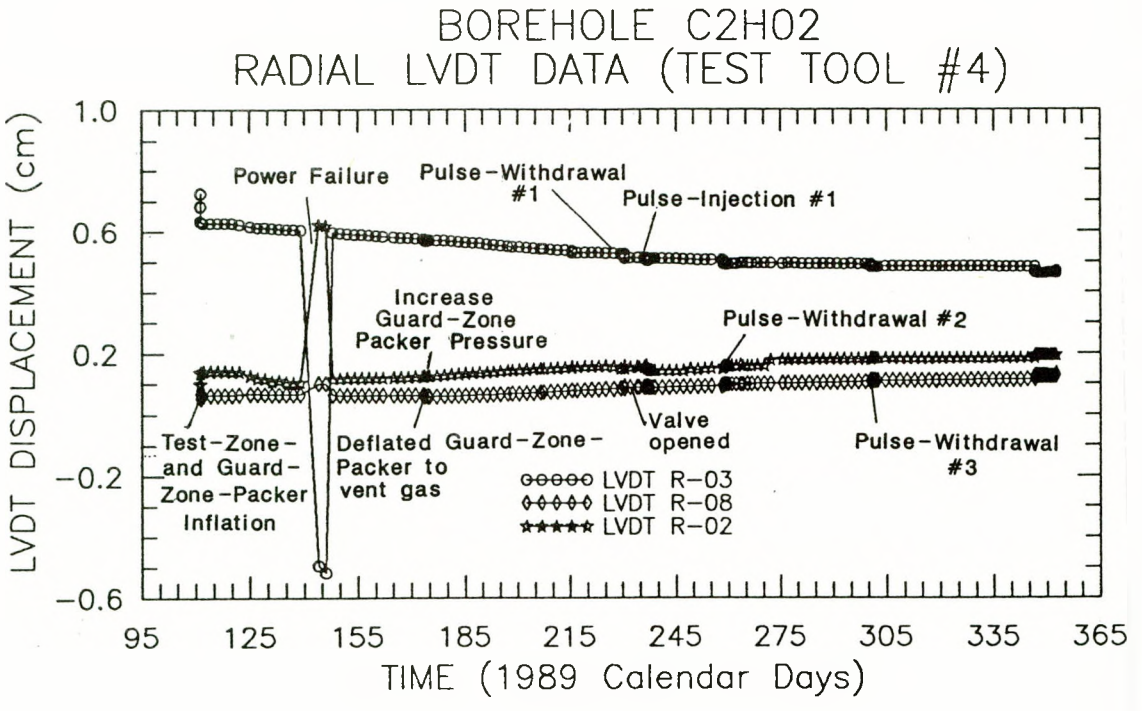
Drawn by	INTERA	Date 11/17/89	Zone Pressures in Borehole C2H02, Multipacker Test Tool #4
Checked by	G.S.	Date 3/30/90	
Revisions		Date	
#105400R062		3/30/90	
INTERA Technologies			Figure 6.16

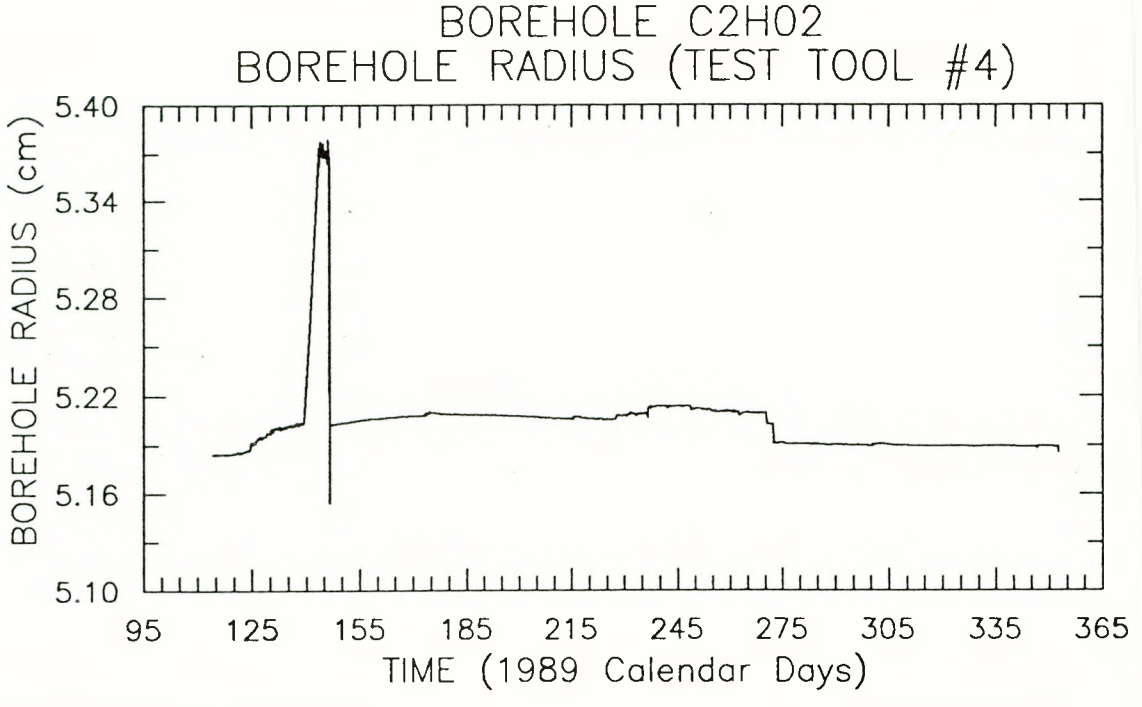


Drawn by INTERA	Date 11/17/89	Packer Pressures in Borehole C2H02, Multipacker Test Tool #4	
Checked by G.S.	Date 3/30/90		
Revisions	Date		
#105400R062	3/30/90		
INTERA Technologies			Figure 6.17



Drawn by INTERA	Date 11/17/89	Zone Temperatures in Borehole C2H02, Multipacker Test Tool #4
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.18



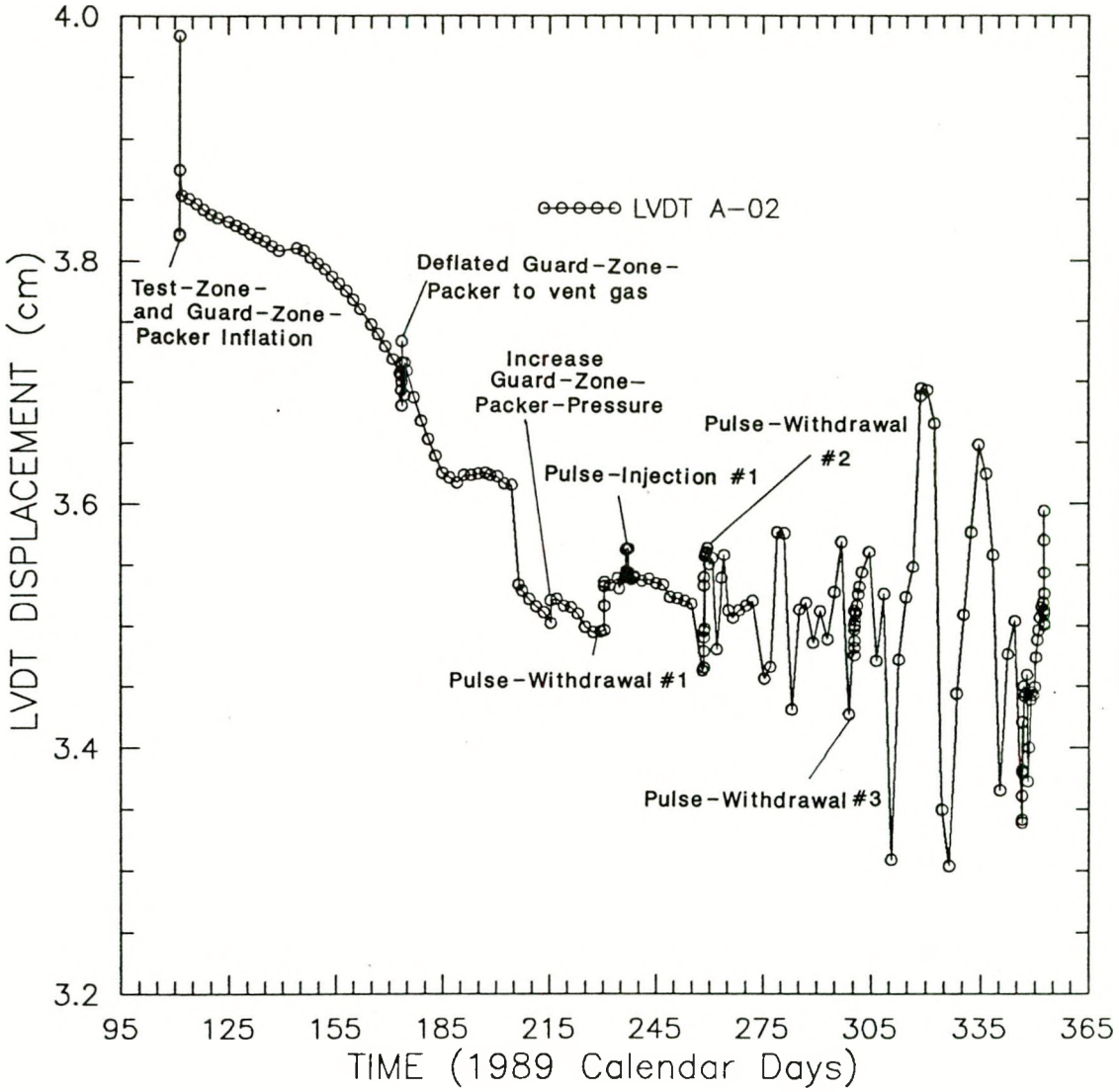


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Radial LVDT Data in Borehole C2HO2, Multipacker Test Tool #4

INTERA Technologies

Figure 6.19



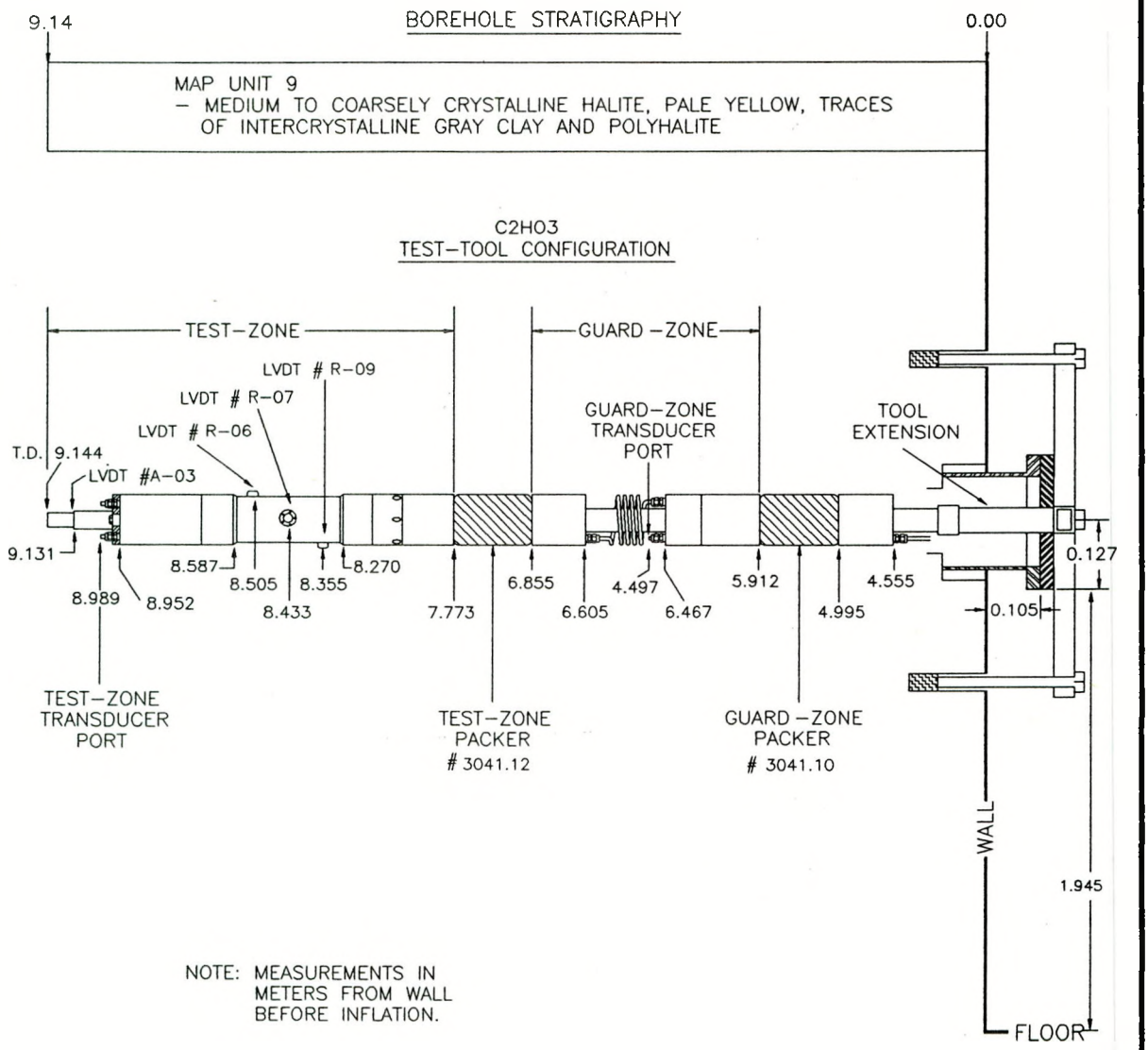
Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Axial LVDT Data in Borehole C2HO2, Multipacker Test Tool #4

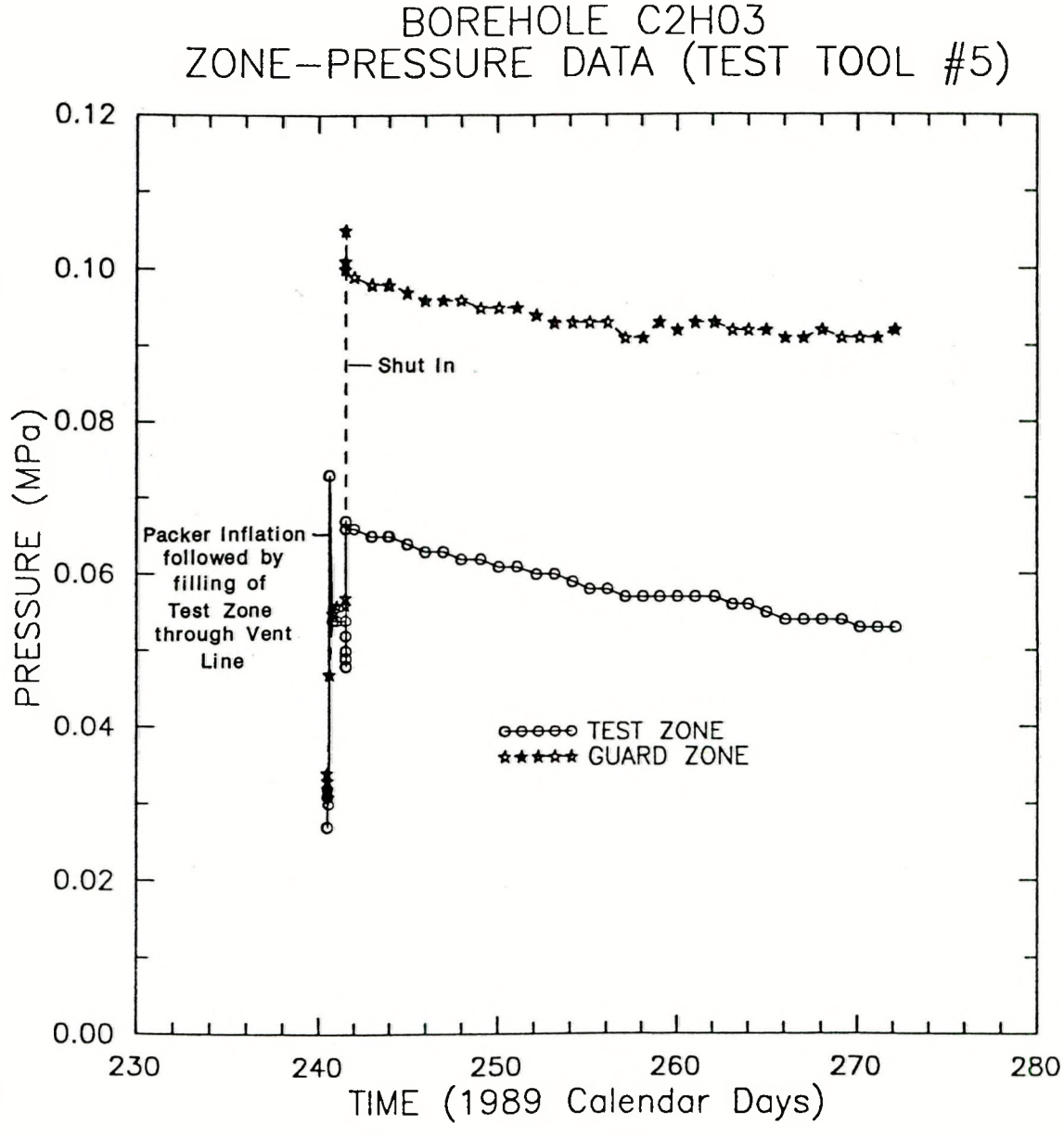
INTERA Technologies

Figure 6.20

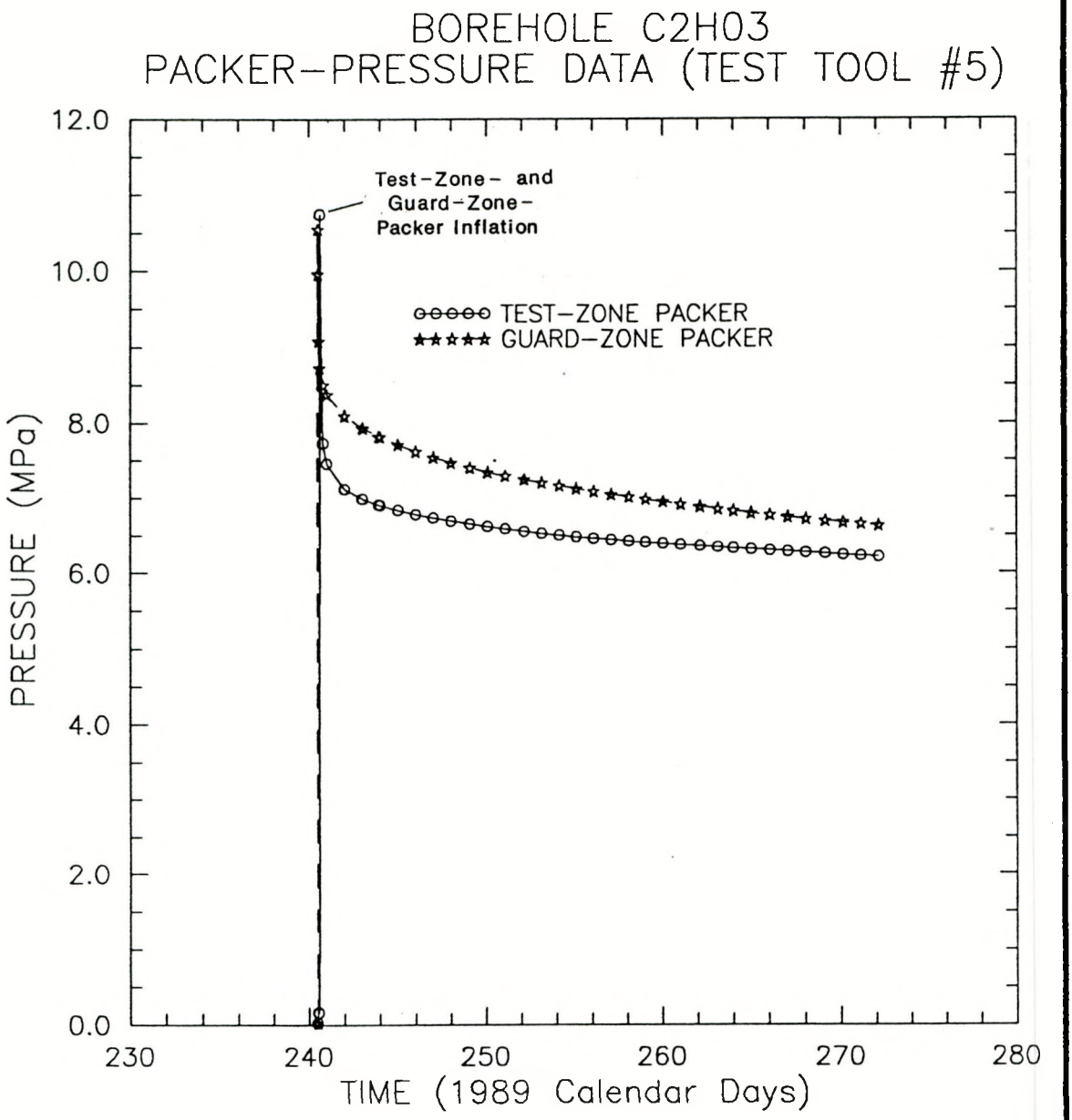
BOREHOLE: C2H03
TEST TOOL: #5
DATE: 08/28/89
DEPTH OF HOLE: 9.144 m.



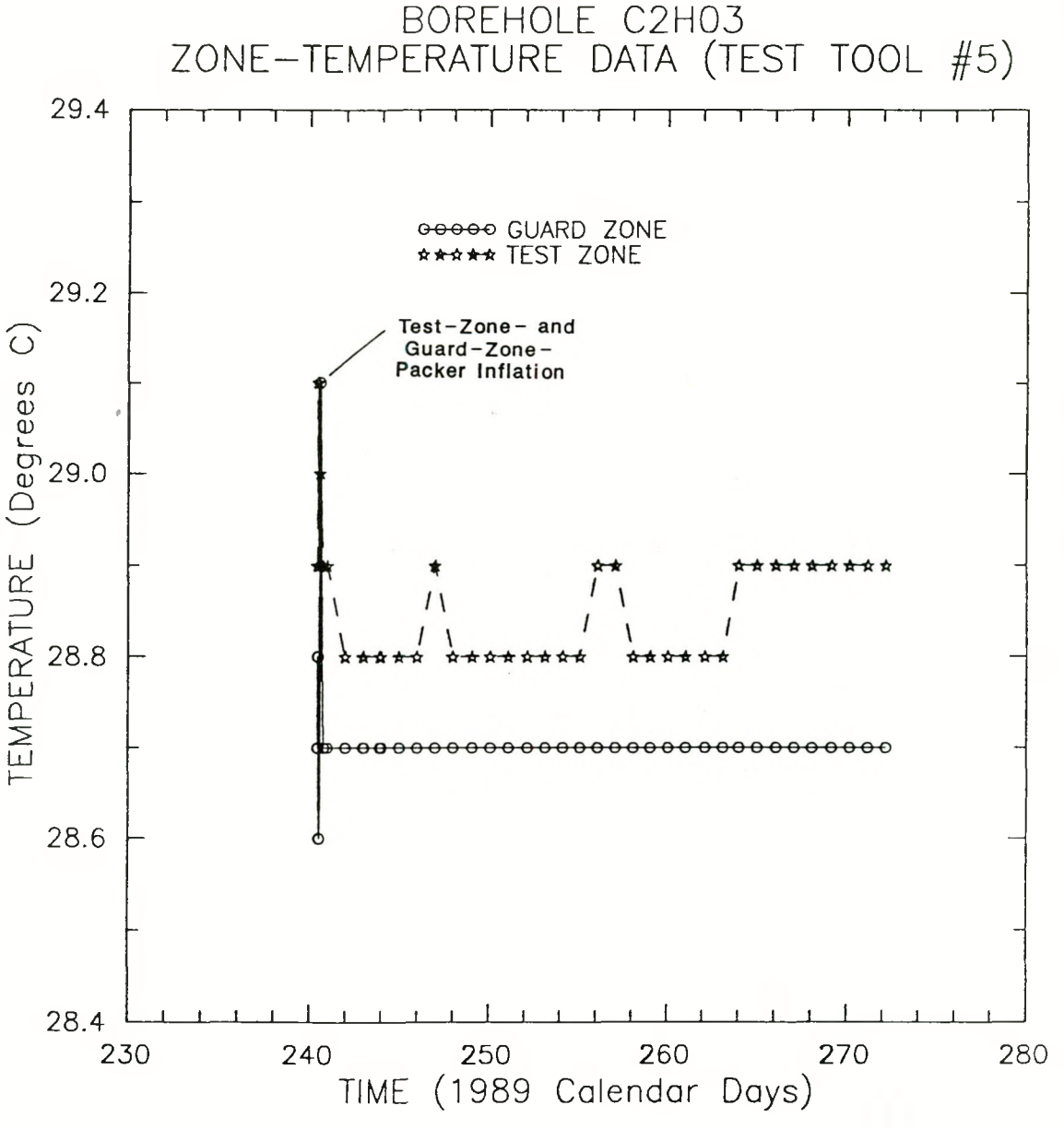
Drawn by JFP/INTERA	Date 3/11/91	Configuration of Multipacker Test Tool #5 in Borehole C2H03
Checked by	Date	
Revisions	Date	
#105400R062	3/11/91	
INTERA Technologies		Figure 6.21



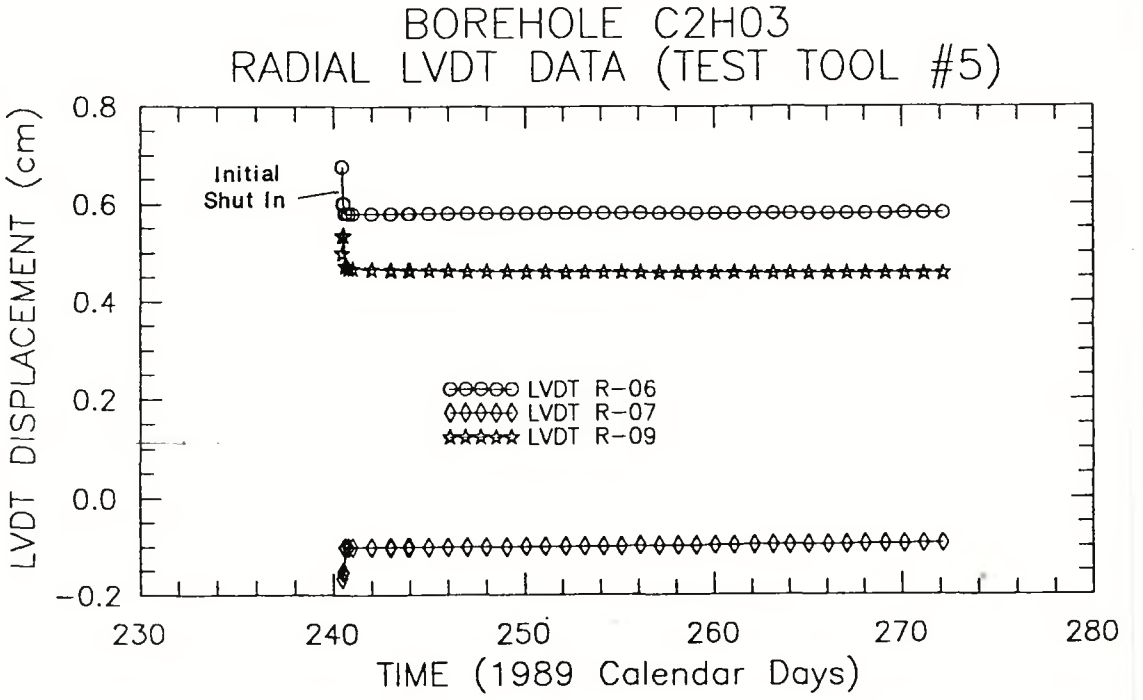
Drawn by INTERA	Date 11/17/89	Zone Pressures in Borehole C2H03, Multipacker Test Tool #5
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.22

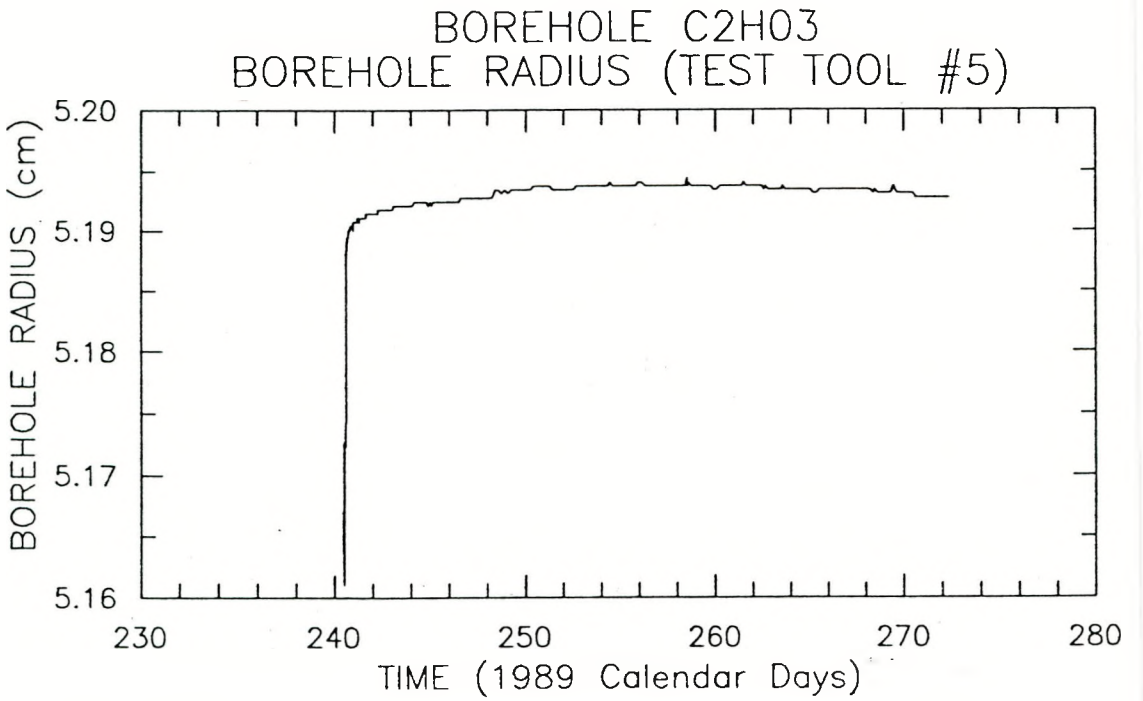


Drawn by INTERA	Date 11/17/89	Packer Pressures in Borehole C2H03, Multipacker Test Tool #5
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.23

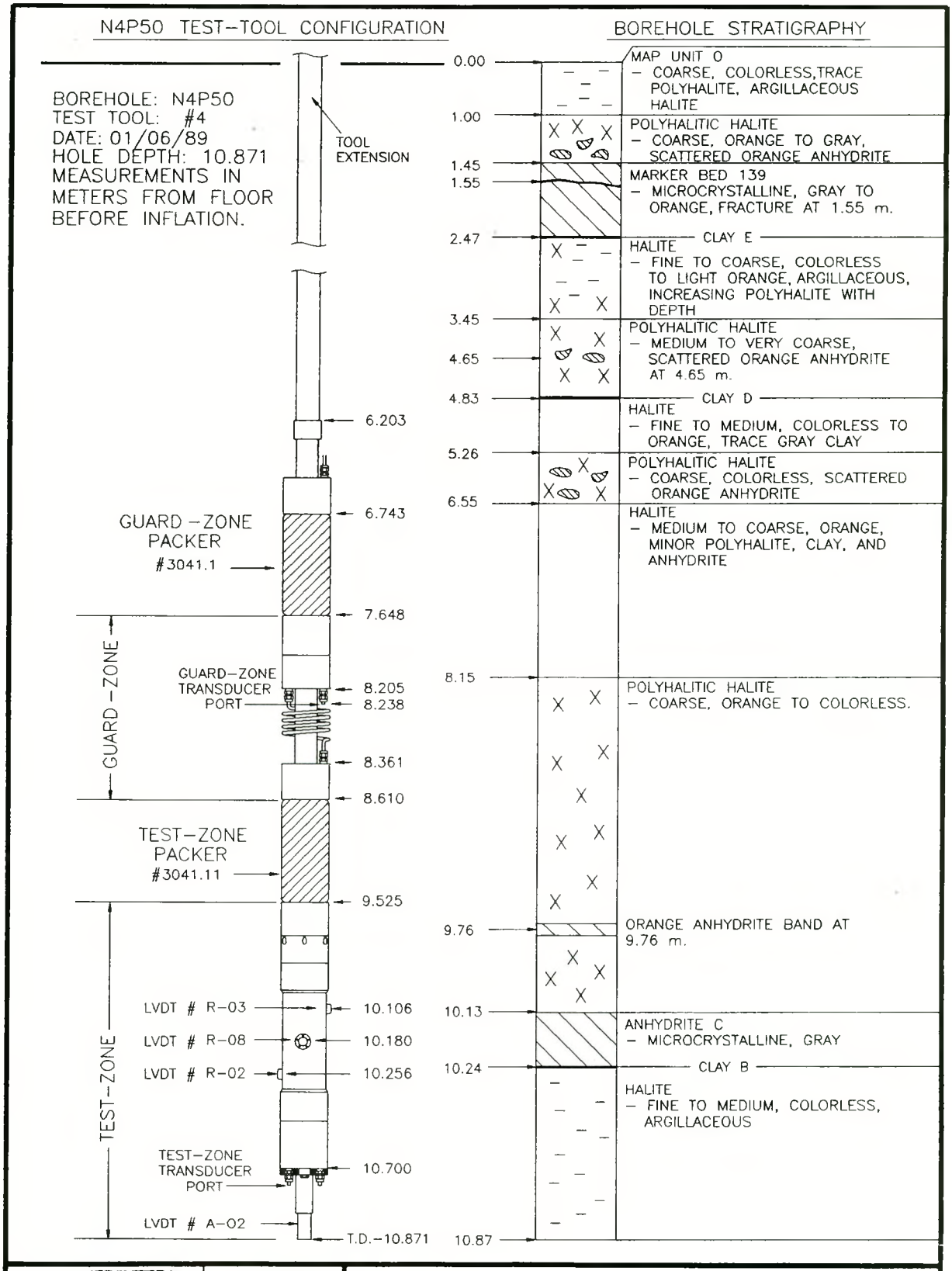


Drawn by INTERA	Date 11/17/89	Zone Temperatures in Borehole C2H03, Multipacker Test Tool #5	
Checked by G.S.	Date 3/30/90		
Revisions	Date		
#105400R062	3/30/90		
INTERA Technologies			Figure 6.24

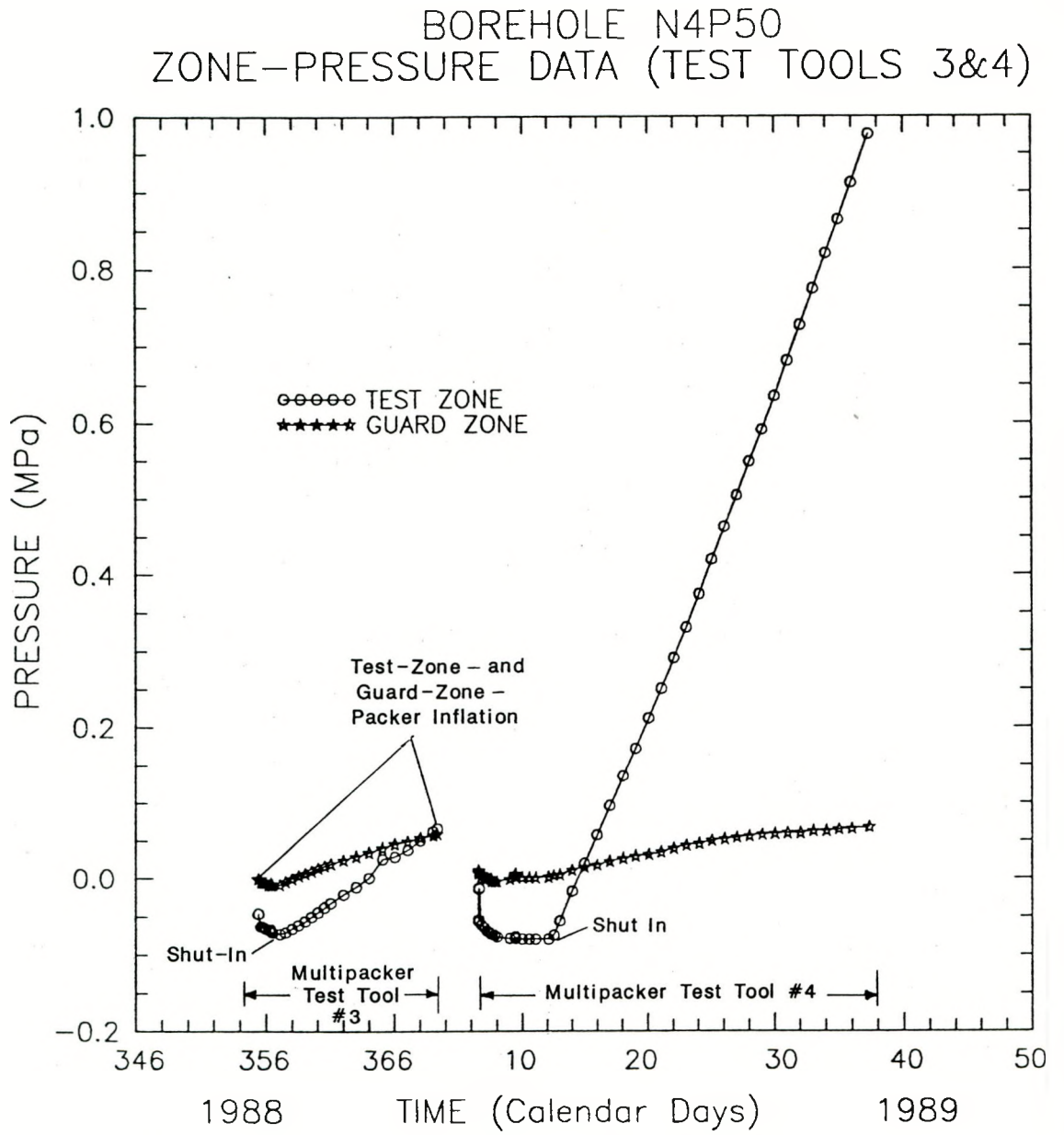




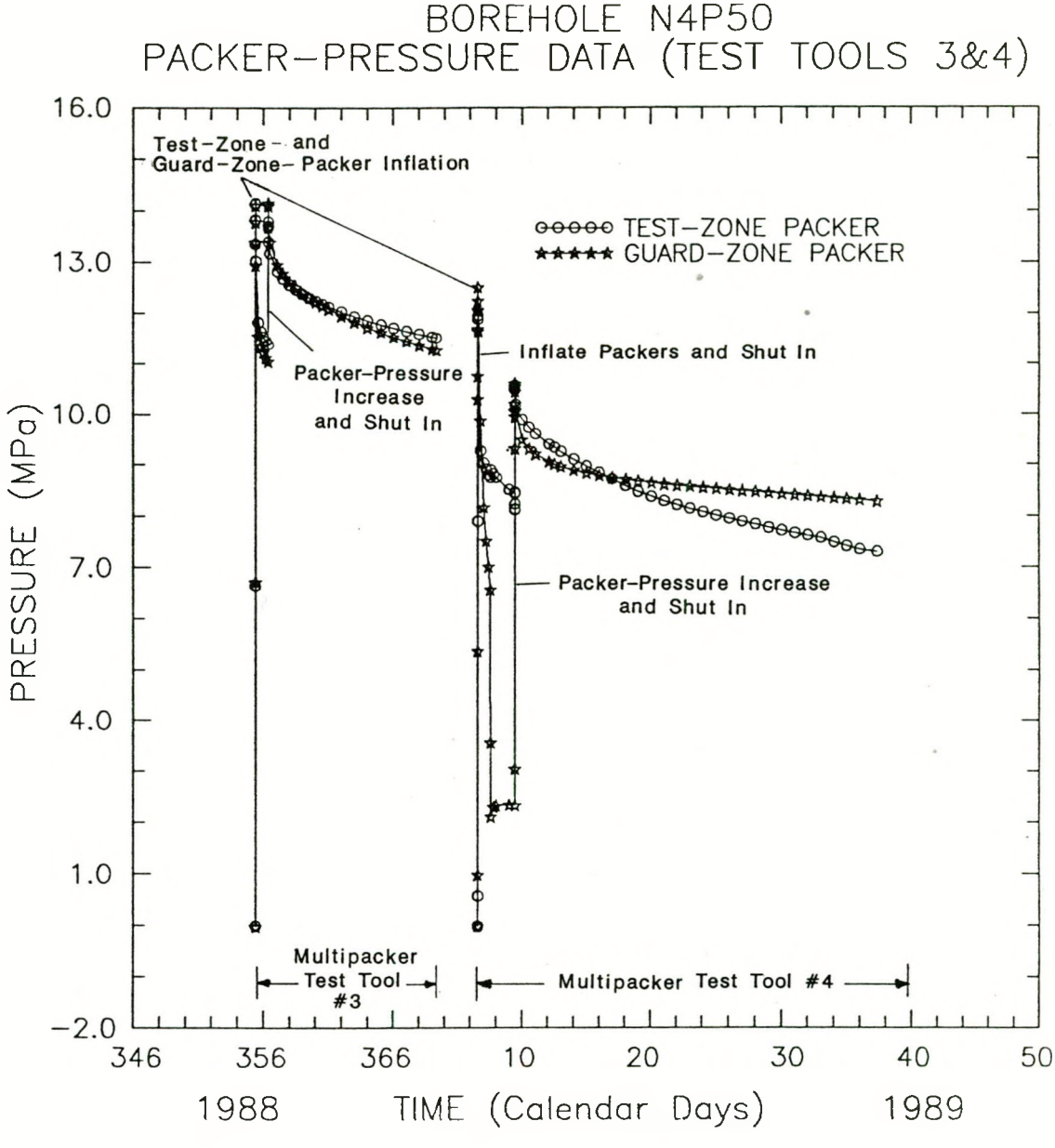
Drawn by INTERA	Date 11/17/89	Radial LVDT Data in Borehole C2H03 Multipacker Test Tool #5
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.25



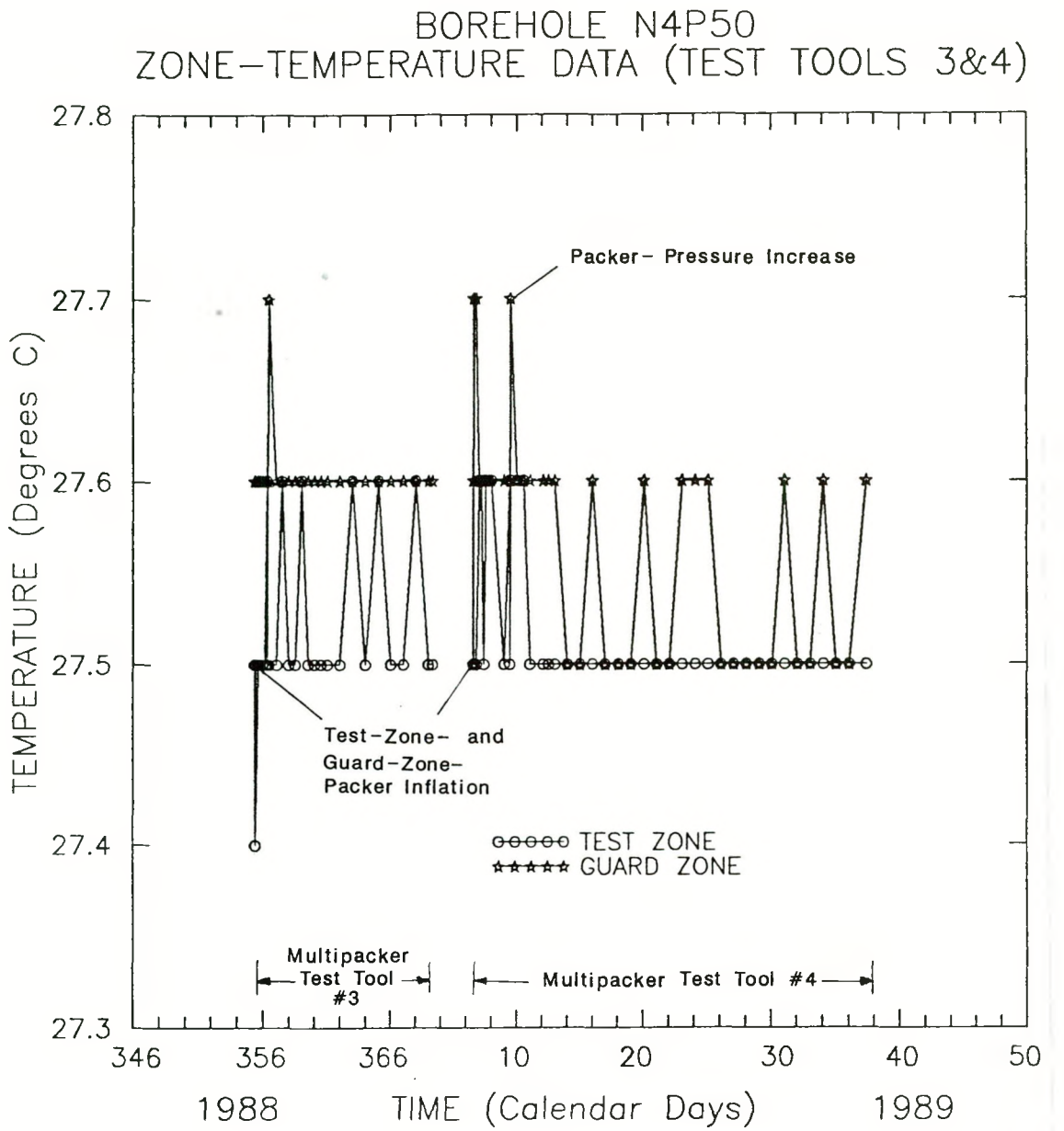
Drawn by JFP/INTERA	Date 11/02/90	Configuration of Multipacker Test Tools #3 and #4 in Borehole N4P50
Checked by	Date	
Revisions	Date 3/07/91	
#105400R062	3/11/91	
INTERA Technologies		Figure 6.26



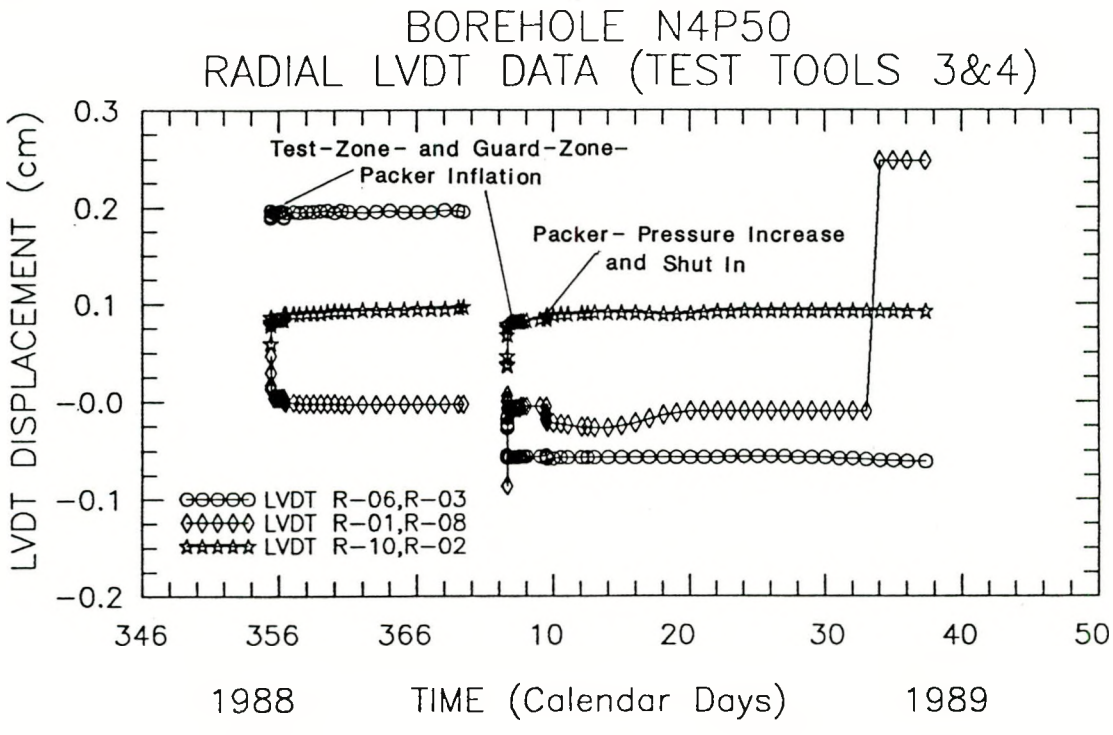
Drawn by INTERA	Date 11/17/89	Zone Pressures in Borehole N4P50, Multipacker Test Tools #3 and #4
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.27

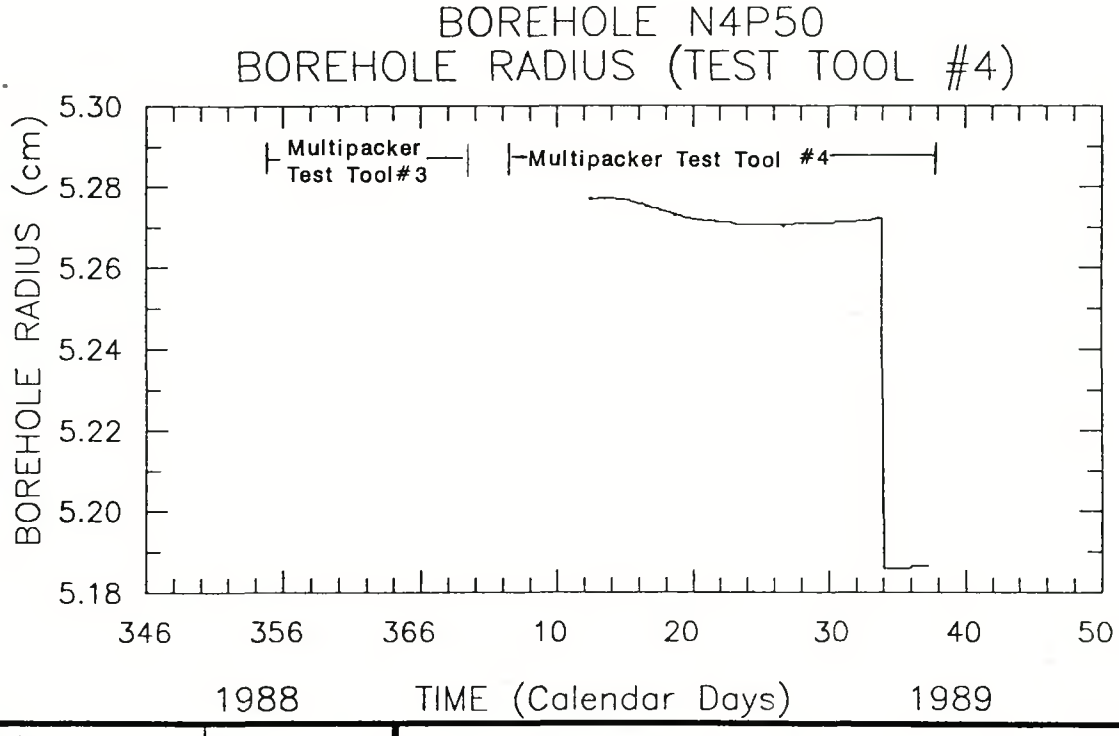


Drawn by INTERA	Date 11/17/89	Packer Pressures in Borehole N4P50, Multipacker Test Tools #3 and #4
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.28



Drawn by INTERA	Date 11/17/89	Zone Temperatures in Borehole N4P50, Multipacker Test Tools #3 and #4	
Checked by G.S.	Date 3/30/90		
Revisions	Date		
#105400R062	3/30/90		
INTERA Technologies			Figure 6.29



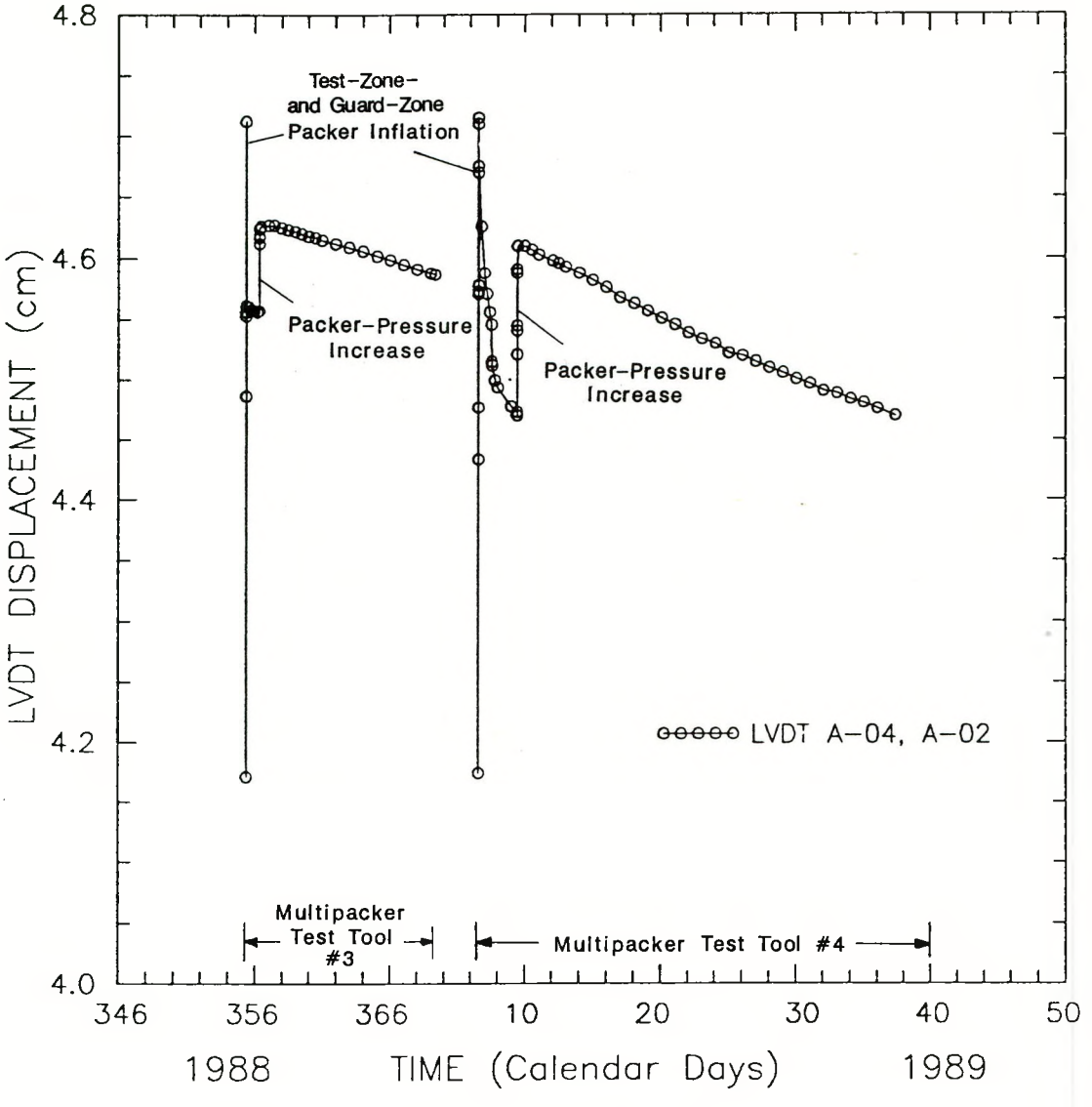


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

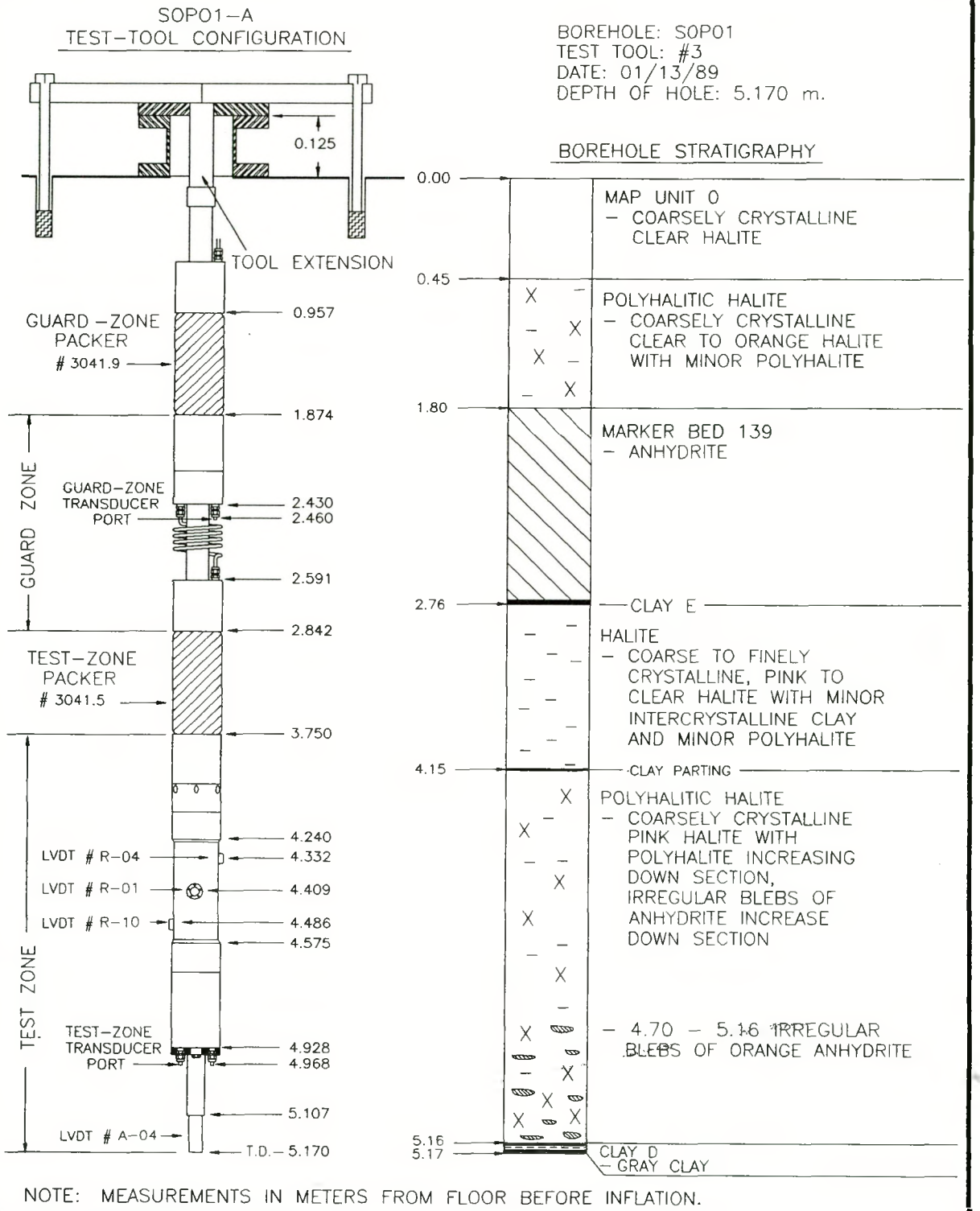
Radial LVDT Data in Borehole N4P50, Multipacker Test Tools #3 and #4

INTERA Technologies

Figure 6.30



Drawn by INTERA	Date 11/17/89	Axial LVDT Data in Borehole N4P50, Multipacker Test Tools #3 and #4	
Checked by G.S.	Date 3/30/90		
Revisions	Date		
#105400R062	3/30/90		
INTERA Technologies			Figure 6.31



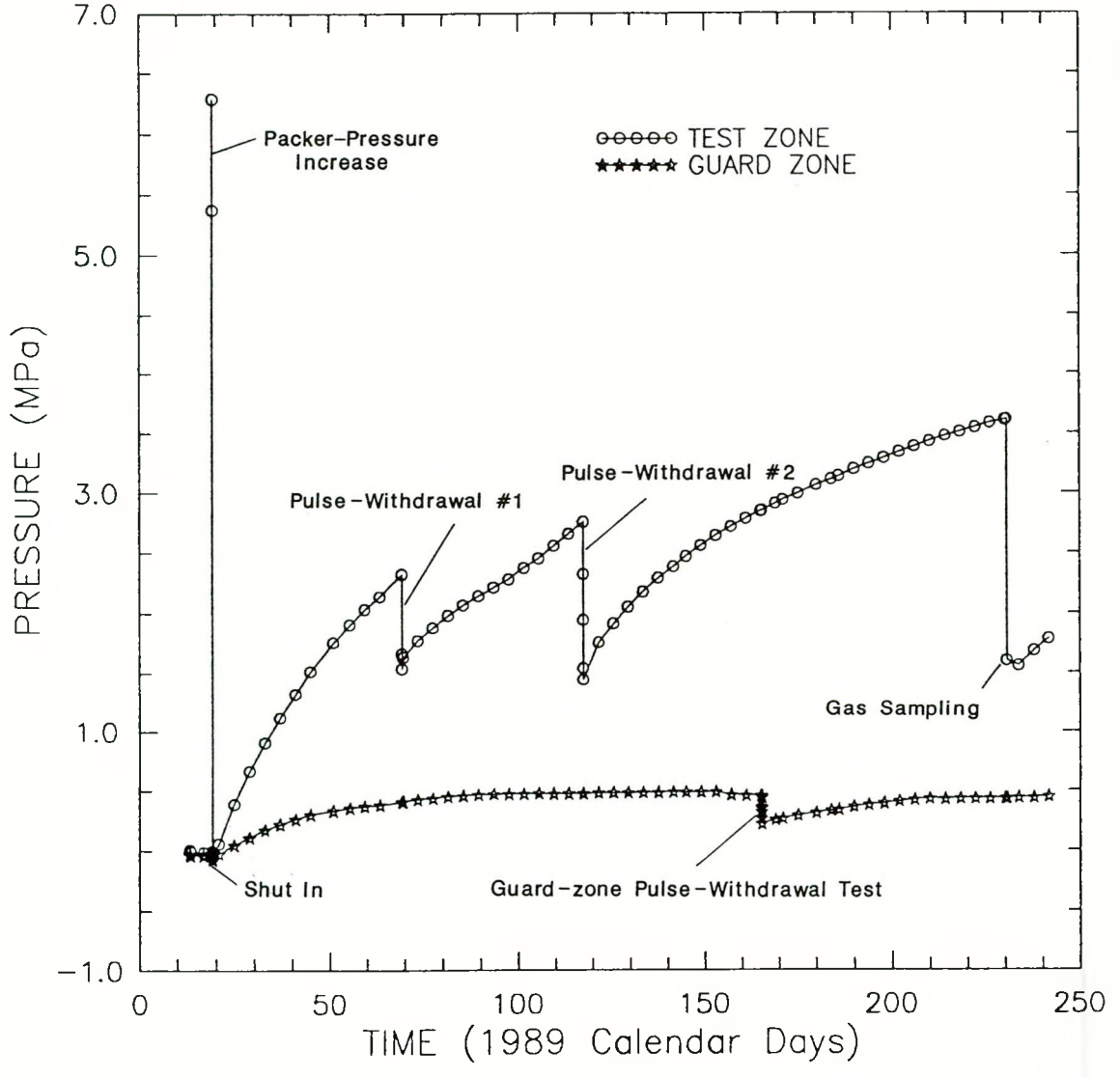
NOTE: MEASUREMENTS IN METERS FROM FLOOR BEFORE INFLATION.

Drawn by JFP/INTERA	Date 2/28/91
Checked by	Date
Revisions	Date
#105400R062	2/28/91

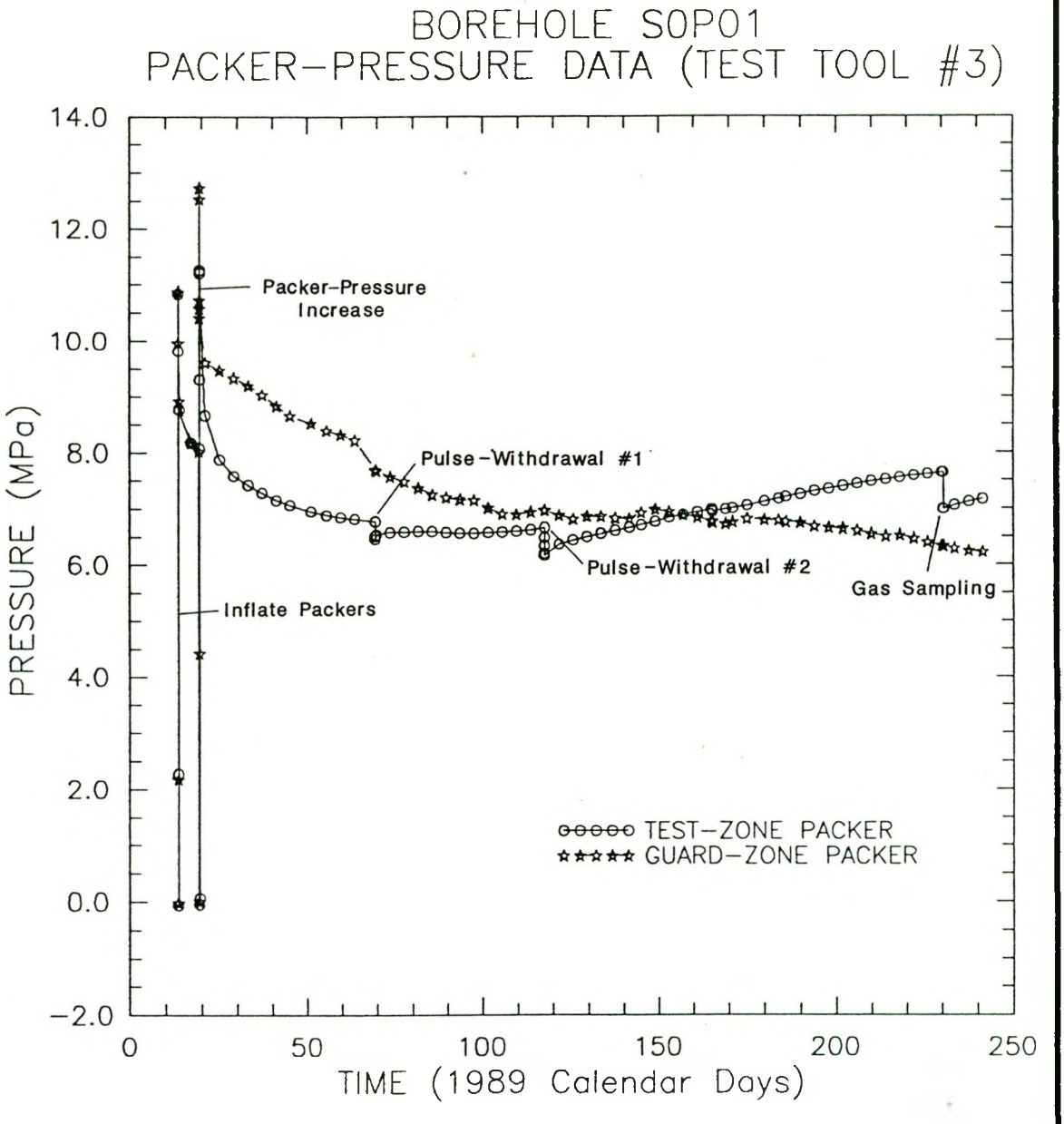
Configuration of Multipacker Test Tool # 3 in Borehole SOP01

INTERA Technologies

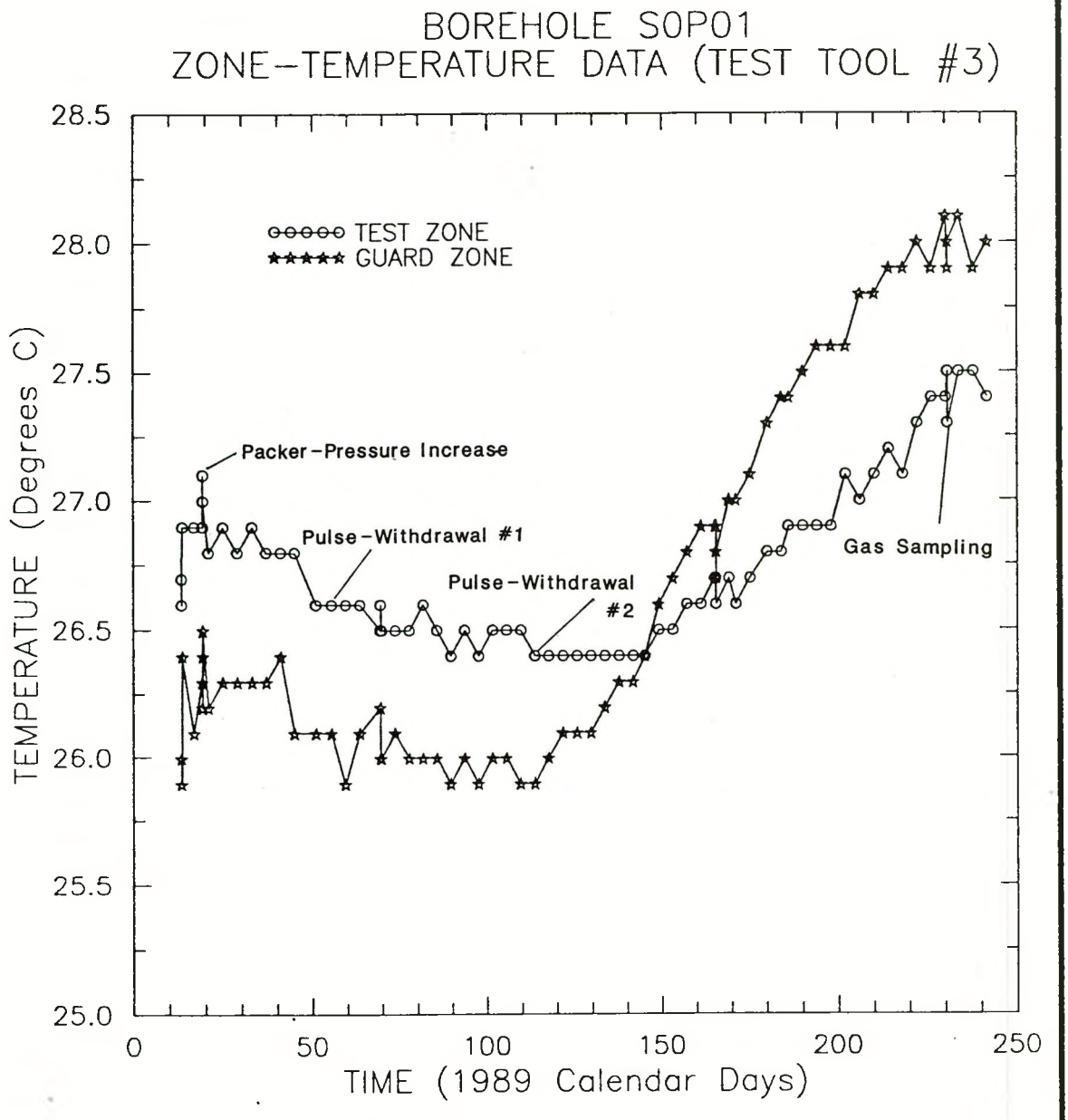
Figure 6.32



Drawn by INTERA	Date 11/17/89	Zone Pressures in Borehole S0P01, Multipacker Test Tool #3	
Checked by G.S.	Date 3/30/90		
Revisions	Date		
#105400R062	3/30/90		
INTERA Technologies			Figure 6.33



Drawn by INTERA	Date 11/17/89	Packer Pressures in Borehole S0P01, Multipacker Test Tool #3
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.34

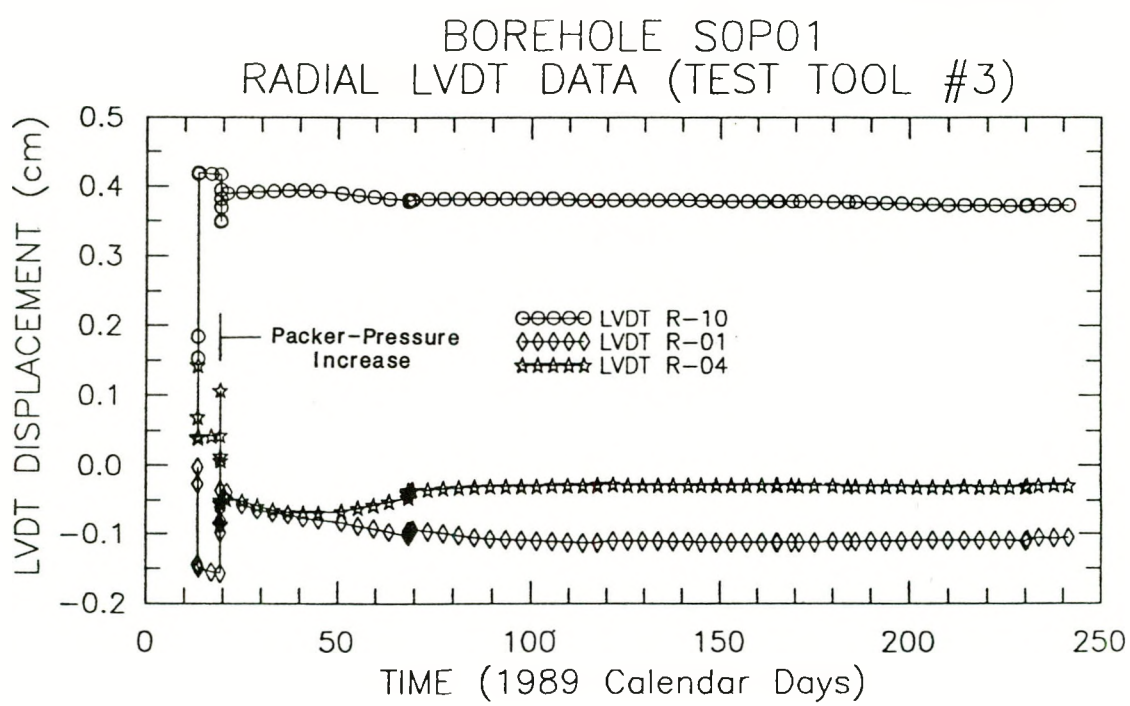


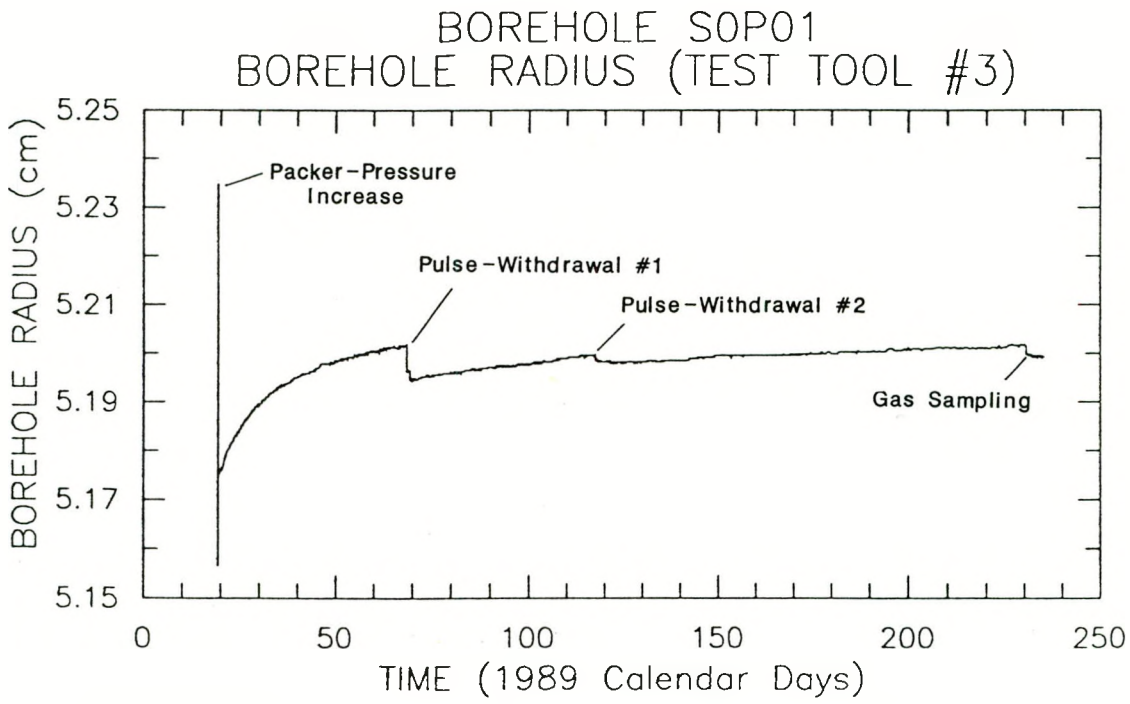
Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date 3/30/90
Revisions	Date
#105400R062	3/30/90

Zone Temperatures in Borehole S0P01, Multipacker Test Tool #3

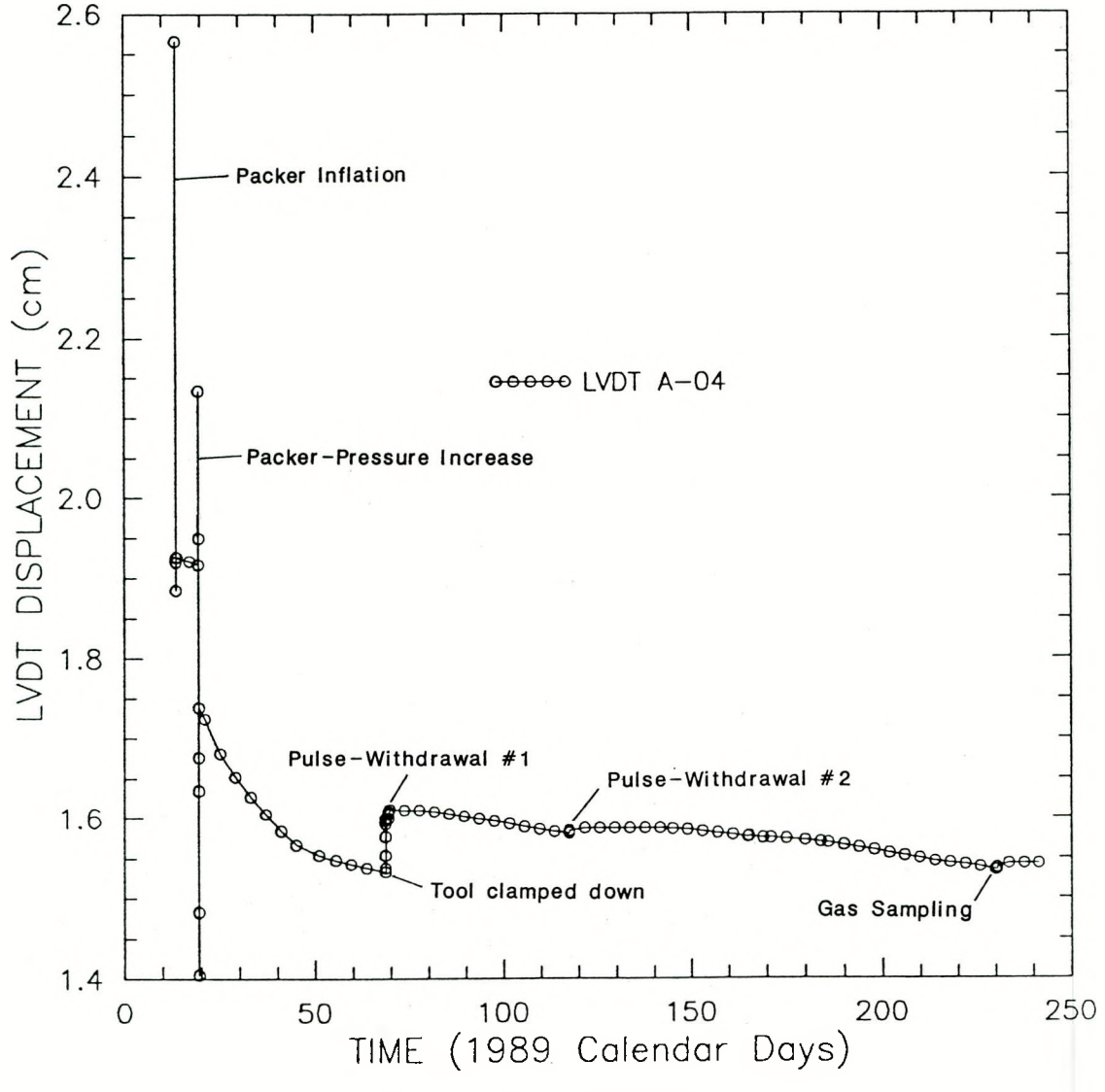
INTERA Technologies

Figure 6.35

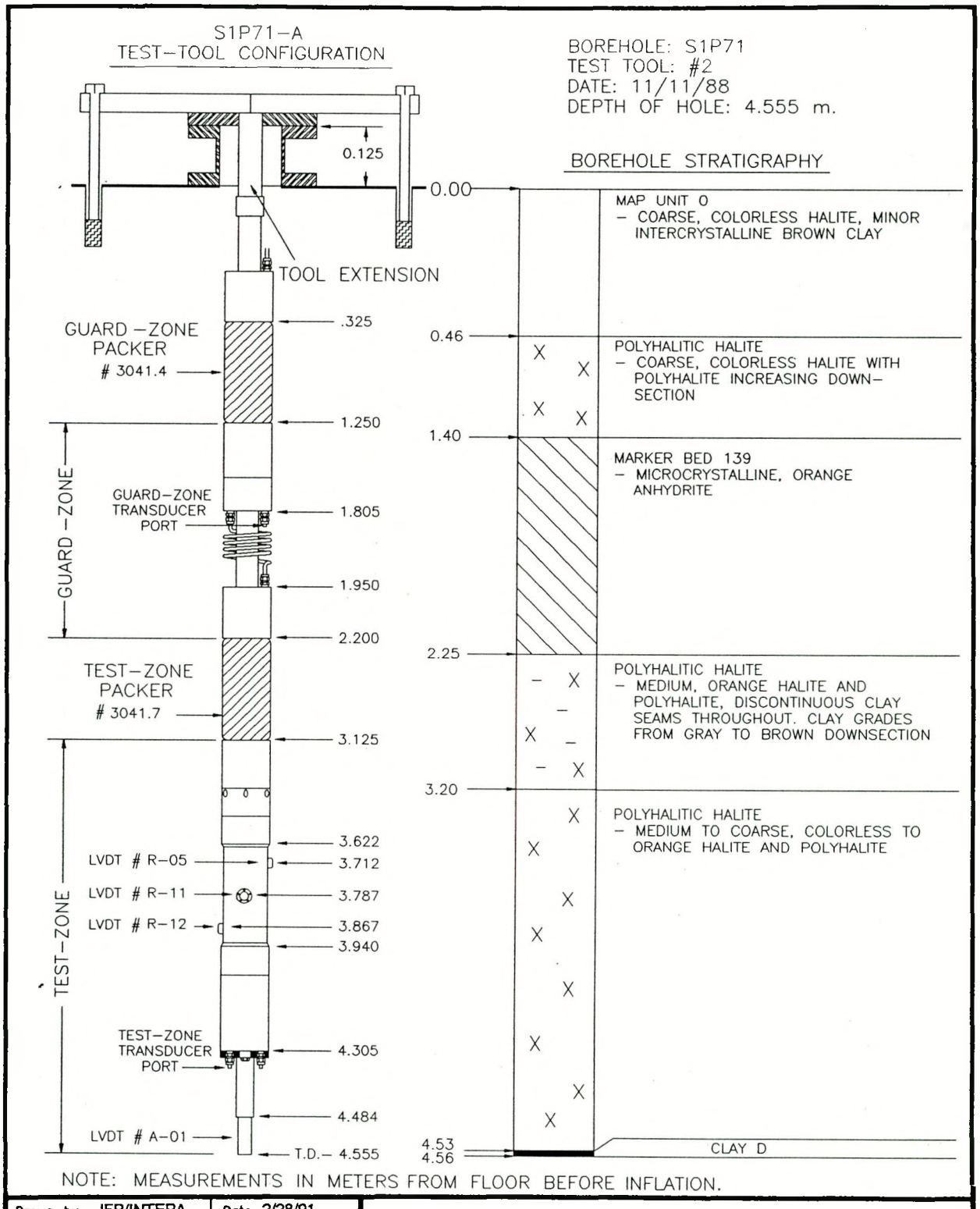




Drawn by INTERA	Date 11/17/89	Radial LVDT Data in Borehole S0P01, Multipacker Test Tool #3
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.36



Drawn by INTERA	Date 11/17/89	Axial LVDT Data in Borehole S0P01, Multipacker Test Tool #3
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 6.37

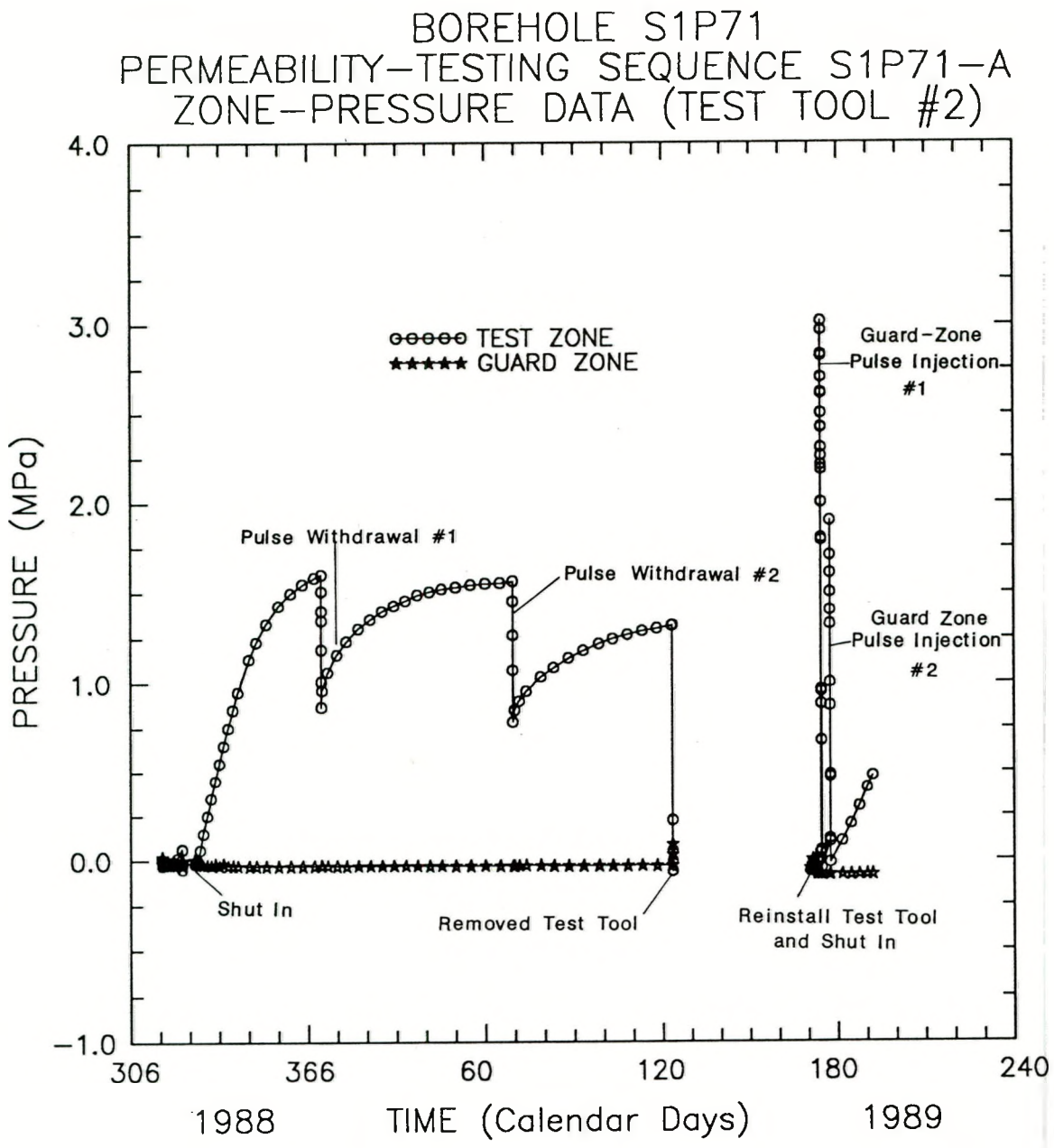


Drawn by JFP/INTERA	Date 2/28/91
Checked by	Date
Revisions	Date
#105400R062	2/28/91

Configuration of Multipacker Test Tool # 2 in Borehole S1P71 for Permeability - Testing Sequence S1P71 - A

INTERA Technologies

Figure 6.38

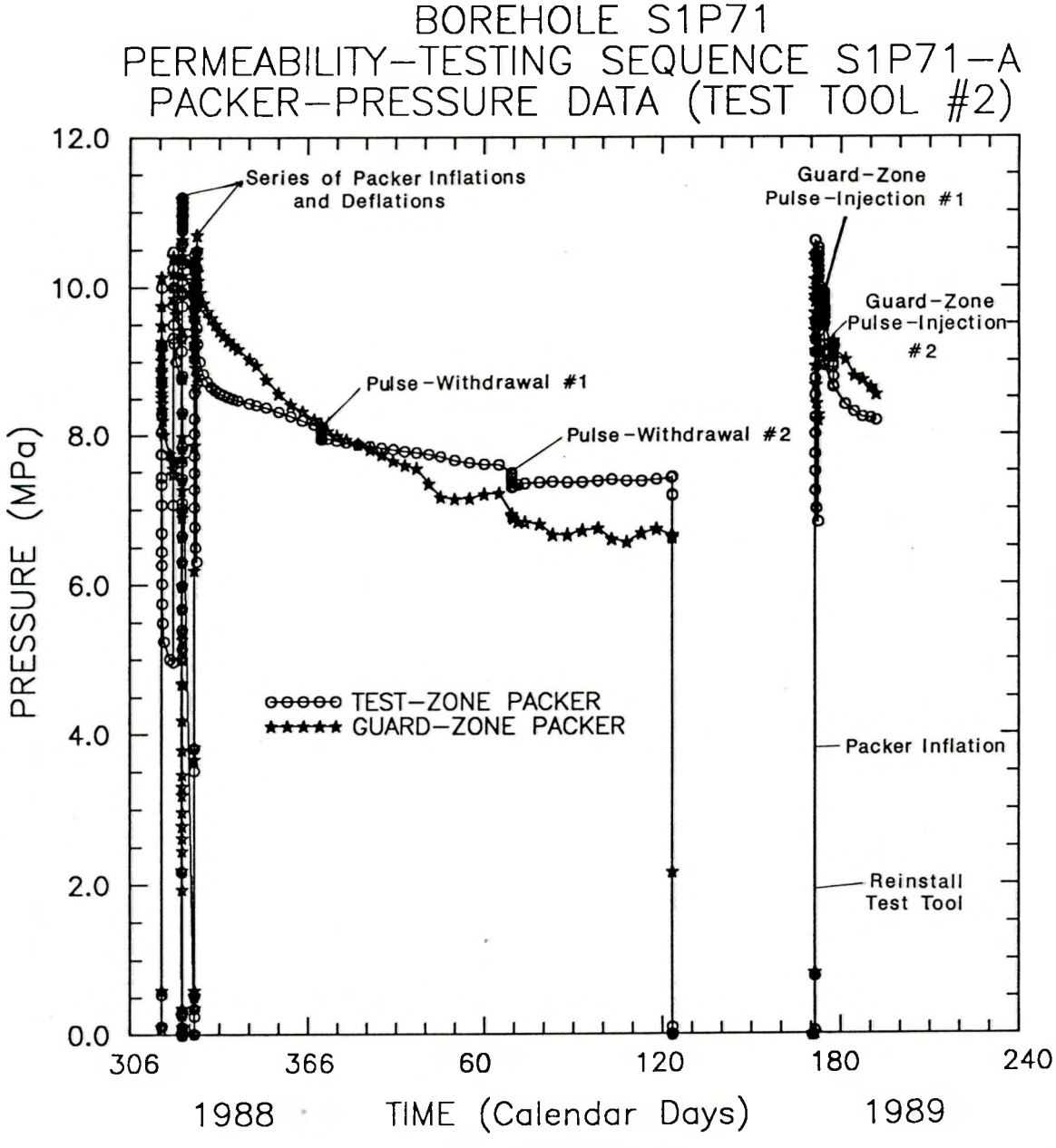


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Pressures in Borehole S1P71, Multipacker Test Tool #2

INTERA Technologies

Figure 6.39

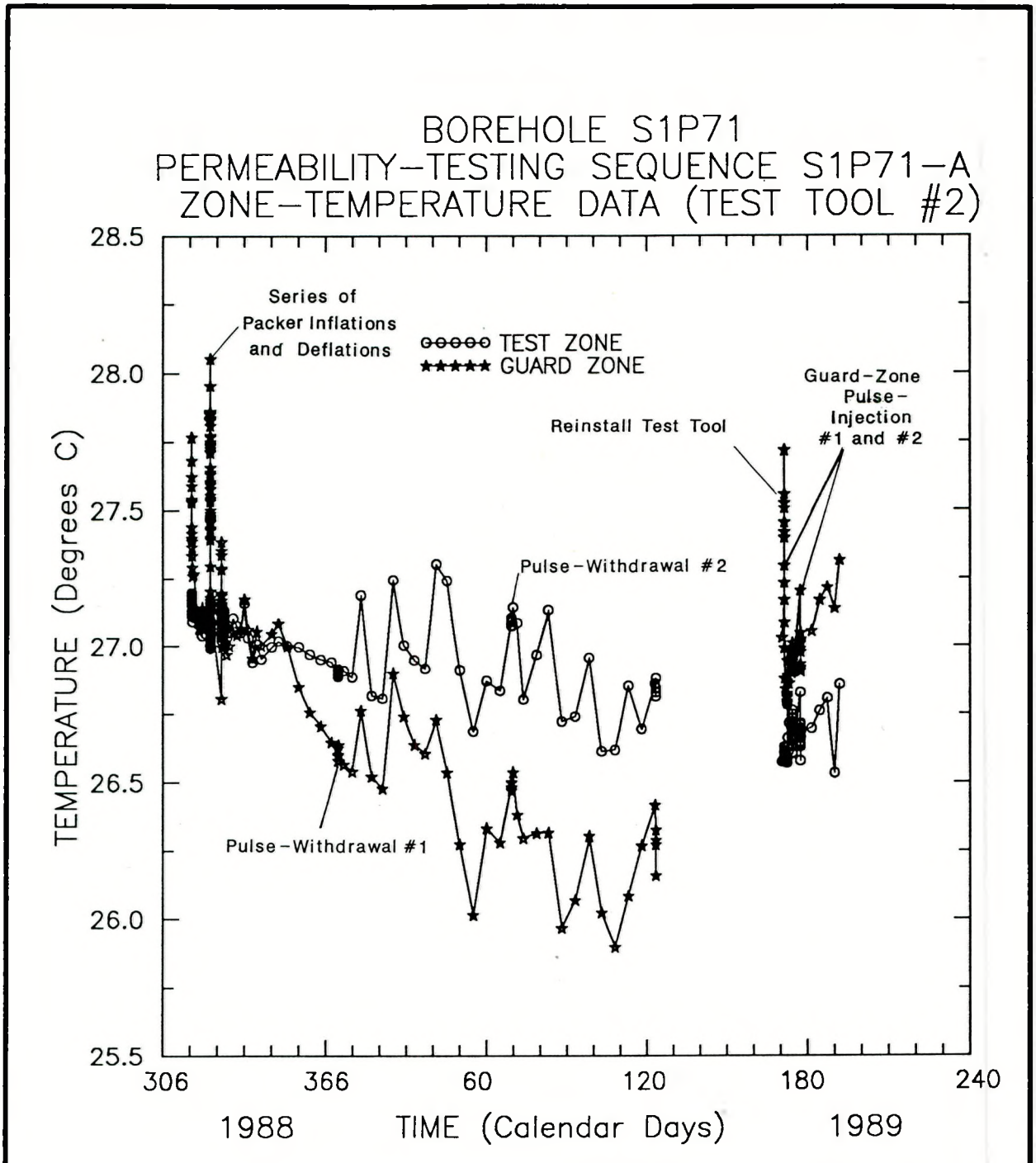


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Packer Pressures for Permeability–Testing Sequence S1P71–A, Multipacker Test Tool #2

INTERA Technologies

Figure 6.40

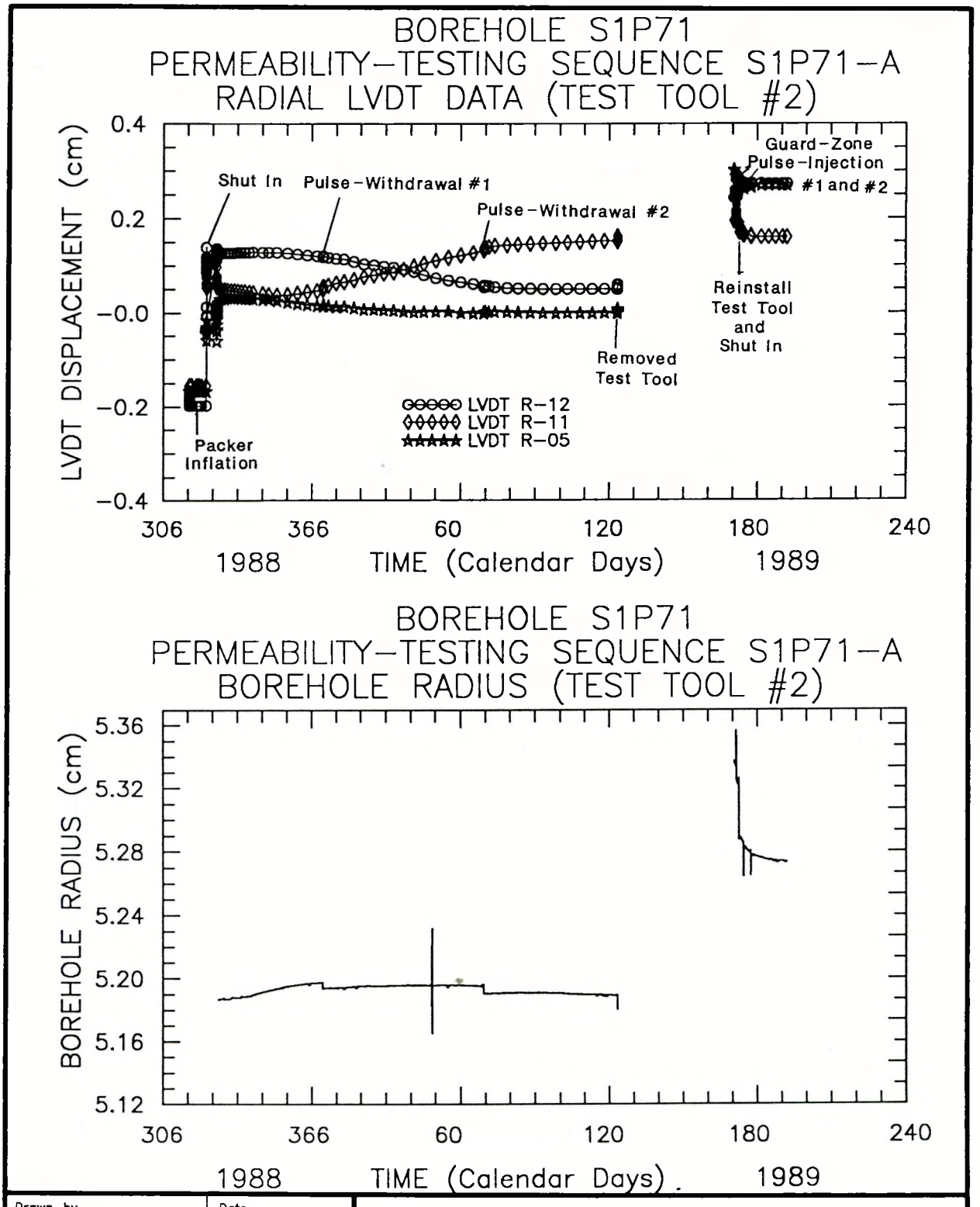


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Zone Temperatures for Permeability-Testing Sequence S1P71-A, Multipacker Test Tool #2

INTERA Technologies

Figure 6.41

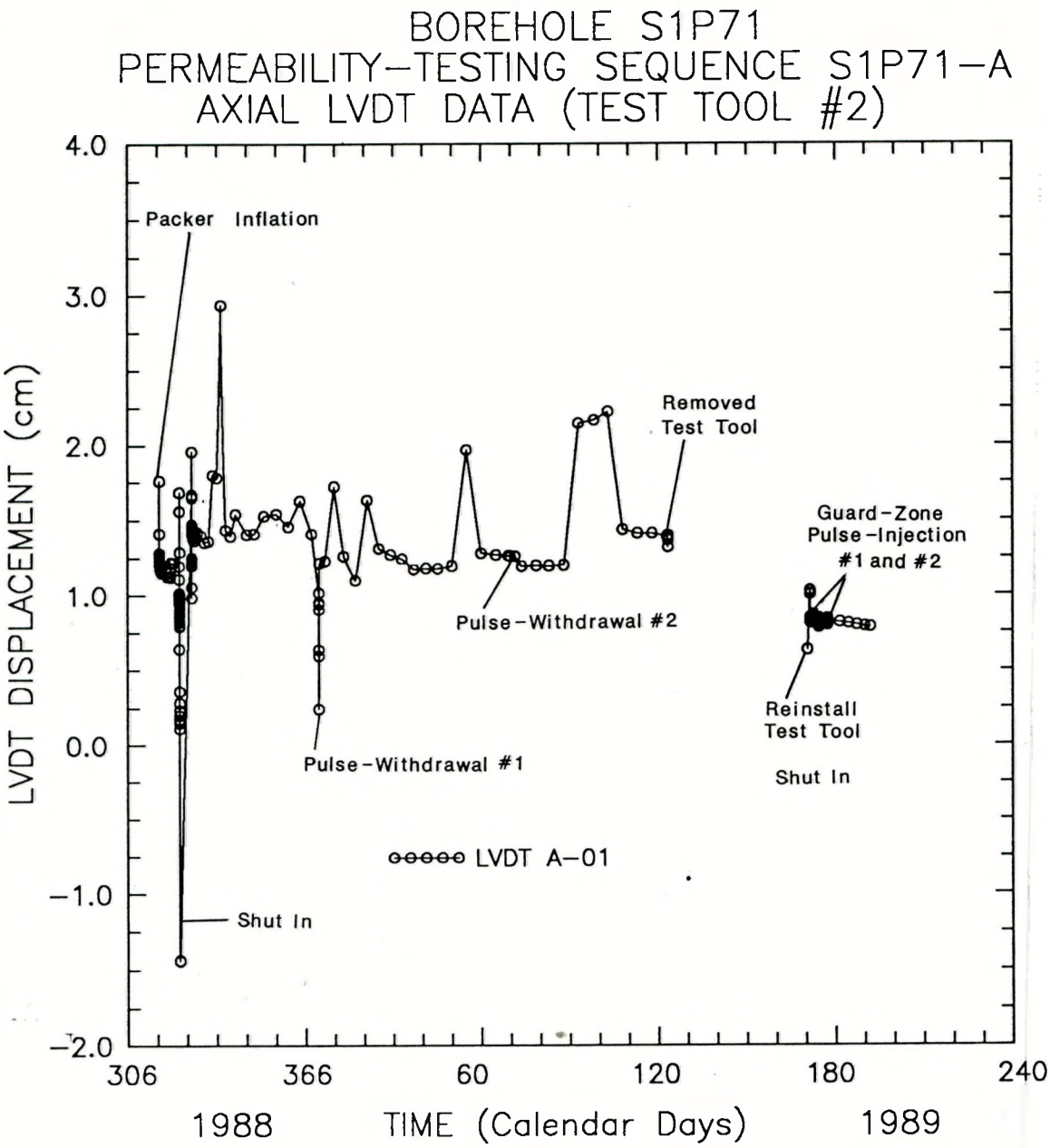


Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Radial LVDT Data for Permeability–Testing Sequence S1P71–A, Multipacker Test Tool #2

INTERA Technologies

Figure 6.42



Drawn by	Date
Checked by	Date
Revisions	Date
#105400R062	1/4/91

Axial LVDT Data for Permeability-Testing Sequence S1P71-A, Multipacker Test Tool #2

INTERA Technologies

Figure 6.43

BOREHOLE	TEST DATE YY:MM:DD	TEST TYPE *	UNIT TESTED **	PREPULSE PRESSURE (MPa)	INITIAL PRESSURE (MPa)	VOLUME REMOVED (mL)	TEST-ZONE LENGTH (cm)	TEST-ZONE RADIUS (cm)	TEST-TOOL VOLUME (cm^3)	TEST-ZONE FLUID (cm^3)
C2H01-A	88:08:24	PI	A_H	0.08	3.55	--	349	5.200	3526	25526
C2H01-A	88:08:30	PI	A_H	0.42	3.79	--	349	5.200	3526	25526
C2H01-B	88:09:28	PI	A_H	0.74	4.19	--	108	5.200	3526	5648
C2H01-B	88:10:21	PW	A_H	2.86	1.56	--	108	5.200	3526	5648
C2H01-B	88:12:14	PW	A_H	2.84	0.78	14	108	5.200	3526	5648
C2H01-C	89:03:13	PW	MB139	7.56	4.23	50	234	5.226	15037	5040
C2H01-C	89:03:23	PW	MB139	7.71	4.18	71	234	5.226	15037	5040
C2H02	89:08:18	PW	MB139	8.41	6.19	33	144	5.185	8528	3668
C2H02	89:09:15	PW	MB139	8.44	5.32	110	144	5.185	8528	3668
C2H02	89:10:28	PW	MB139	8.49	6.12	72	144	5.185	8528	3668
SOP01	89:03:10	PW	A_H	2.33	1.54	42	143	5.175	8511	3520
SOP01	89:04:27	PW	A_H	2.76	1.45	92	143	5.175	8511	3520
SOP01 (G)	89:06:14	PW	MB139	0.46	0.23	7.3	105	5.175	6566	2226
S1P71	89:01:04	PW	A_H	1.60	0.87	80	144	5.211	8542	3742
S1P71	89:03:10	PW	A_H	1.57	0.78	156	144	5.211	8542	3742

NOTE: * PW = Pulse-Withdrawal
** A_H = Argillaceous Halite
(G) = Guard
Test-Zone Fluid = Isolated Borehole Volume (-) Test-Tool Volume

Drawn by G.S.	Date 4/26/90	Summary of Permeability Tests Completed From August 1988 Through November 1989	
Checked by	Date		
Revisions	Date		
#105400R062	4/26/90		
INTERA Technologies			Table 6.1

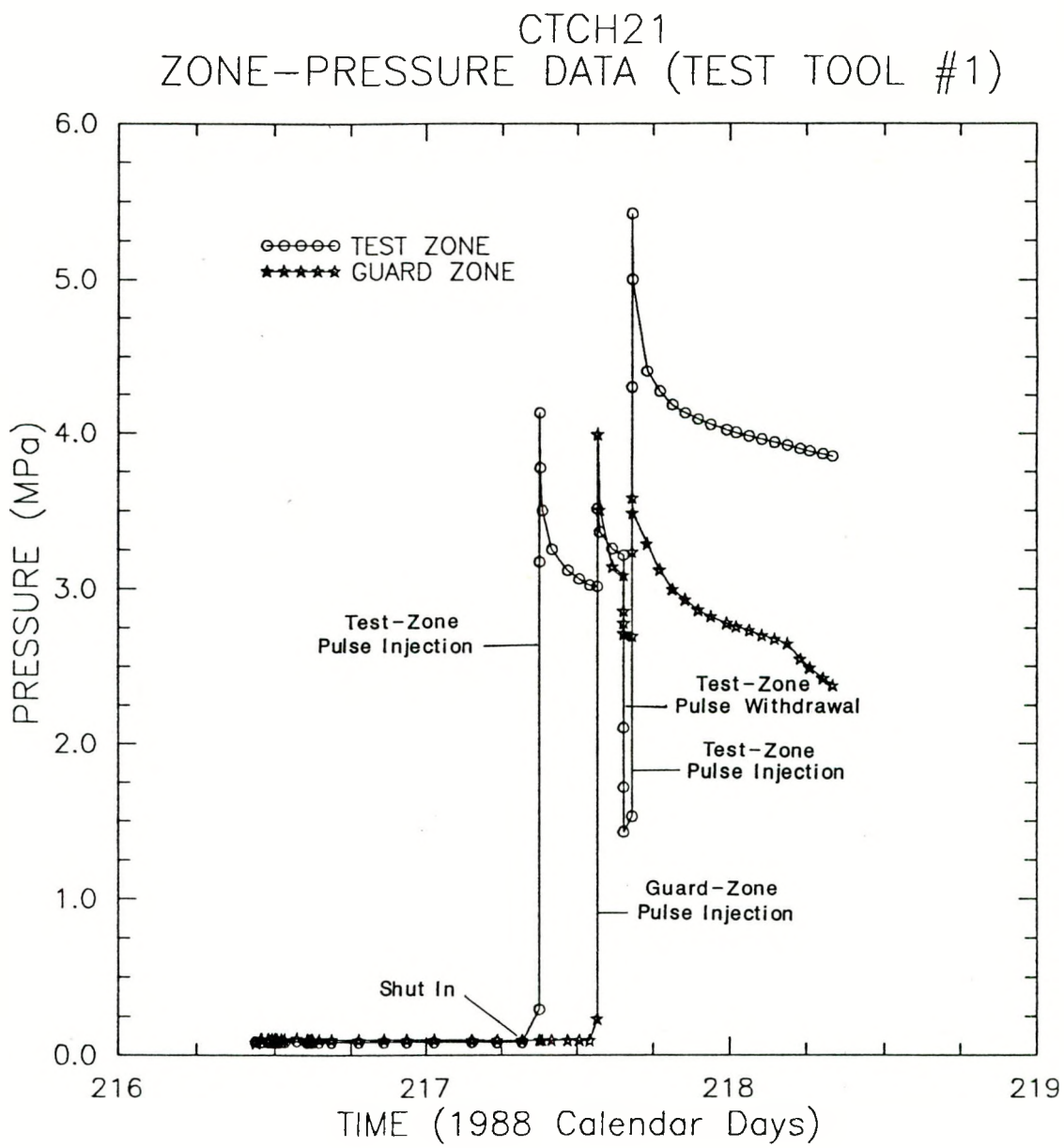
7.0 COMPLIANCE-TESTING RESULTS

Compliance testing was performed before each testing sequence according to the procedures described in Section 4.1. Five multipacker test tools were subject to compliance testing during the period covered by this data report. The first compliance test was performed on Multipacker Test Tool #1, the test tool used for testing sequences C2H01-A and C2H01-B in borehole C2H01, and the compliance test was labeled CTCH21. As described in Section 2.1, Multipacker Test Tool #1 was the tool used in the permeability testing in the WIPP site's waste-handling shaft. All subsequent compliance tests were performed on Multipacker Test Tools #2 to #5, the tools specifically designed for the underground permeability-testing program. These compliance tests were labelled COMP x, with x being a consecutive number starting with 1.

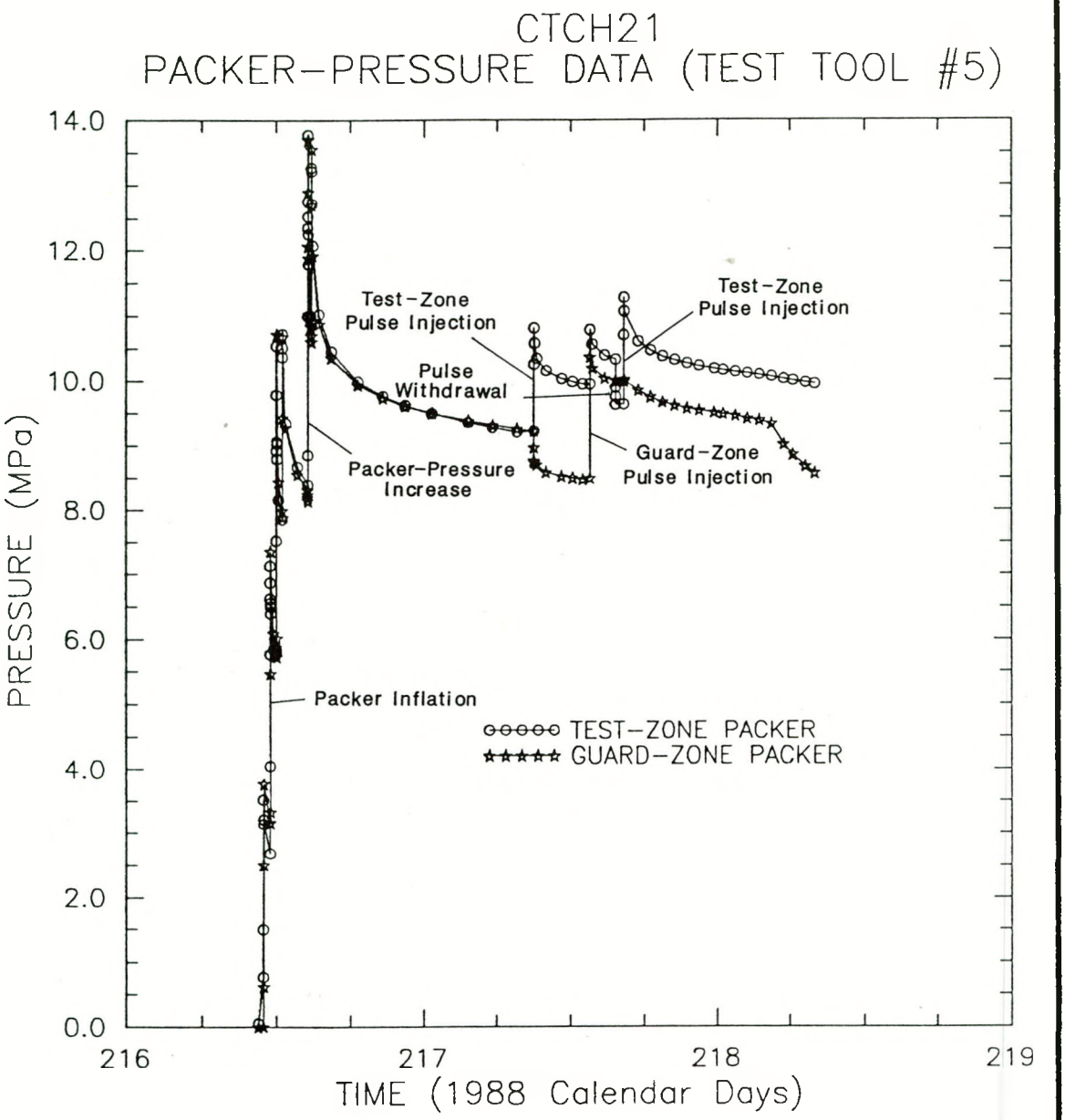
Figures 7.1 to 7.31 are plots of the compliance-testing data obtained before installing the multipacker test tools in the permeability-testing boreholes. Note that compliance test COMP 4, performed for Multipacker Test Tool #3 before installation into N4P50, is also referred to as the compliance-test file for Multipacker Test Tool #3 relative to testing in S0P01. Multipacker Test Tool #3 was removed from N4P50 to replace connectors on nonfunctioning LVDTs (Section 6.2.1), and because the basic test-tool configuration was not altered and the operational period in N4P50 was short with all other parts of the tool functioning normally, Multipacker Test Tool #3 was used for permeability testing in borehole S0P01 without additional compliance testing. The relationship between compliance-test number, multipacker test tool, and permeability-testing borehole is as follows:

COMP FILE NUMBER	MULTI-PACKER TEST TOOL NUMBER	APPENDIX TABLE	FIGURE NUMBER	PERMEABILITY-TESTING BOREHOLE/ SEQUENCE
CTCH21	1	D1	7.1 - 7.3	C2H01-A, C2H01-B
COMP 9	5	D2	7.4 - 7.8	C2H01-C
COMP 10	3	D3	7.9 - 7.13	C2H02
COMP 16	5	D4	7.14 - 7.28	C2H03
COMP 4/5/6	3, 4	D5, D6	7.19 - 7.23	N4P50
COMP 4	3	D6	7.24 - 7.28	S0P01
COMP 1/2	2	D7	7.29 - 7.33	S1P71-A

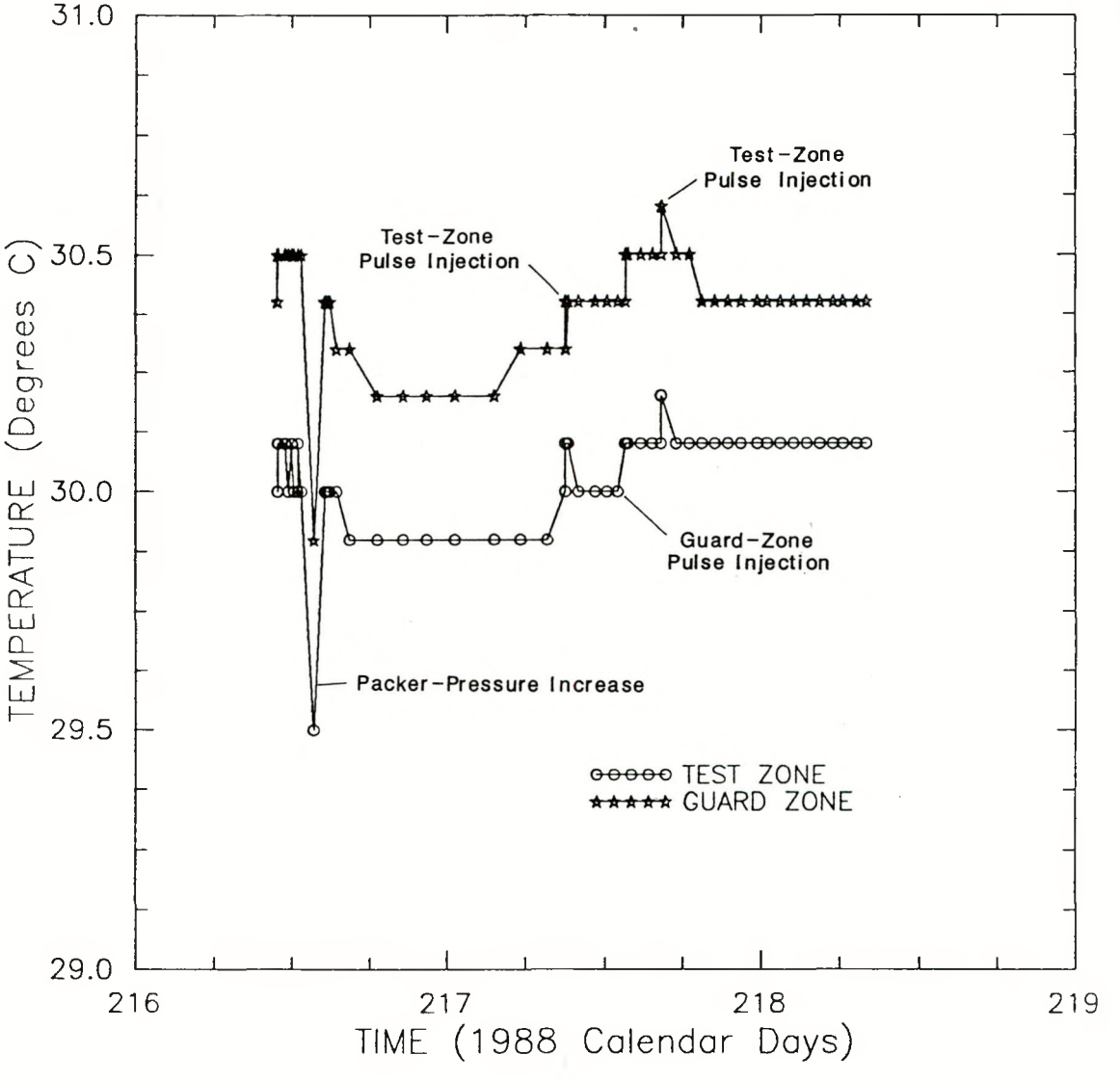
Tables D1 through D7, Appendix D, contain tabulations of the compliance-testing data obtained during the period covered by this basic data report. Each compliance-test data tabulation references which test tool was tested and the dates of the tests. To determine which transducers and LVDTs were used for the compliance-testing configurations, refer to the equipment-calibration procedures described in Section 2.2.2 and the equipment-calibration data presented in Appendix A. The comments column of the compliance-test-data tabulations should be consulted for information regarding each test sequence. Note that on Table D7, LVDT data are not included. Apparently, the diameter and length of the steel chamber were greater than the maximum extension of the LVDTs. Therefore, the data from LVDT positions beyond the instrument's calibration limits are not representative. The design of the radial LVDT plunger was altered after this installation and after the initial installation in borehole S1P71 which had a drilled diameter of about 5.36 cm. Longer plunger caps and/or spacers were added to the radial-LVDT assemblies to allow them to extend to the maximum borehole diameters anticipated in the permeability-testing program.



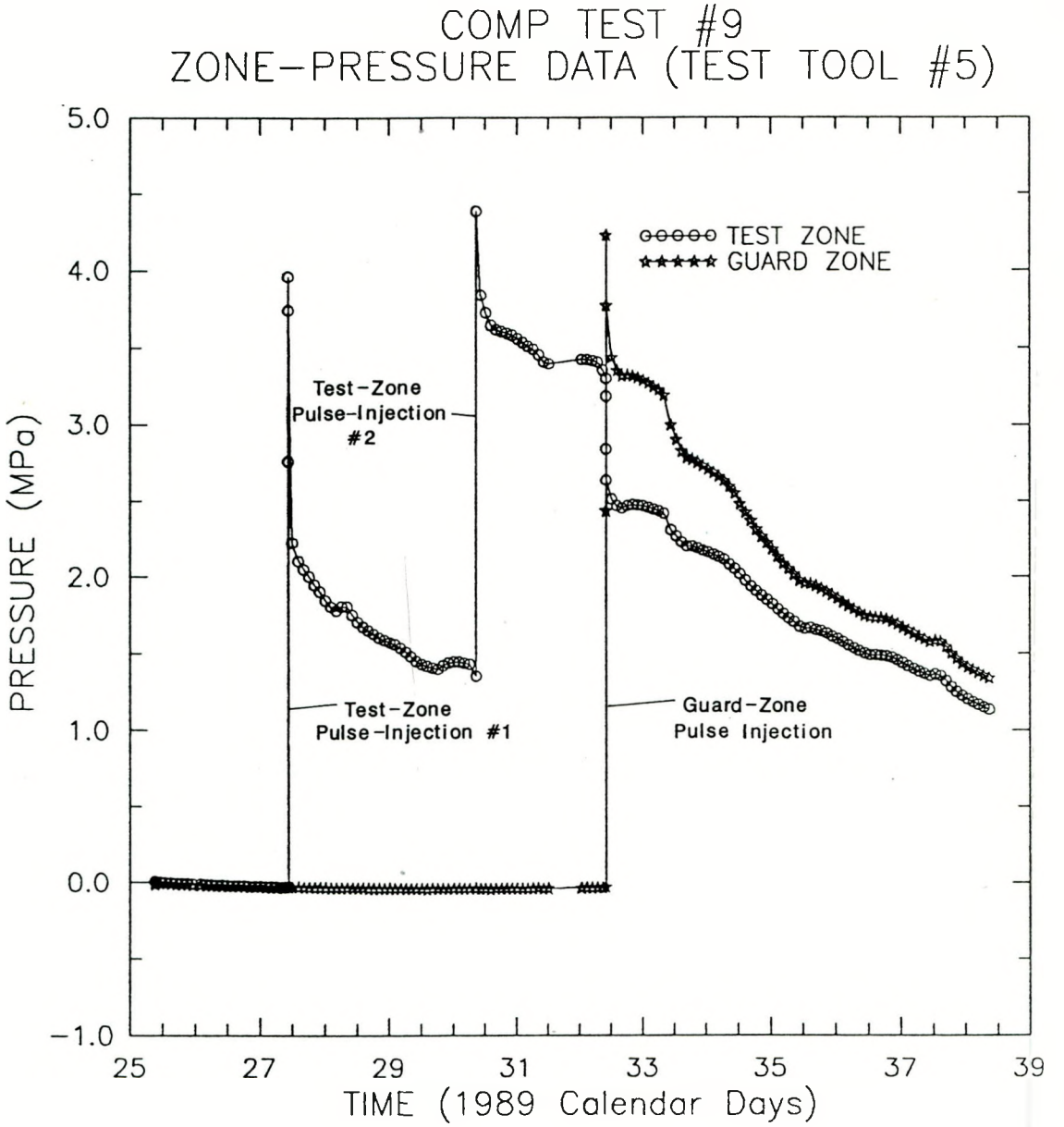
Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Test CTCH21, Multipacker Test Tool #1, Borehole C2H01, Permeability-Testing Sequences C2H01-A and C2H01-B
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.1



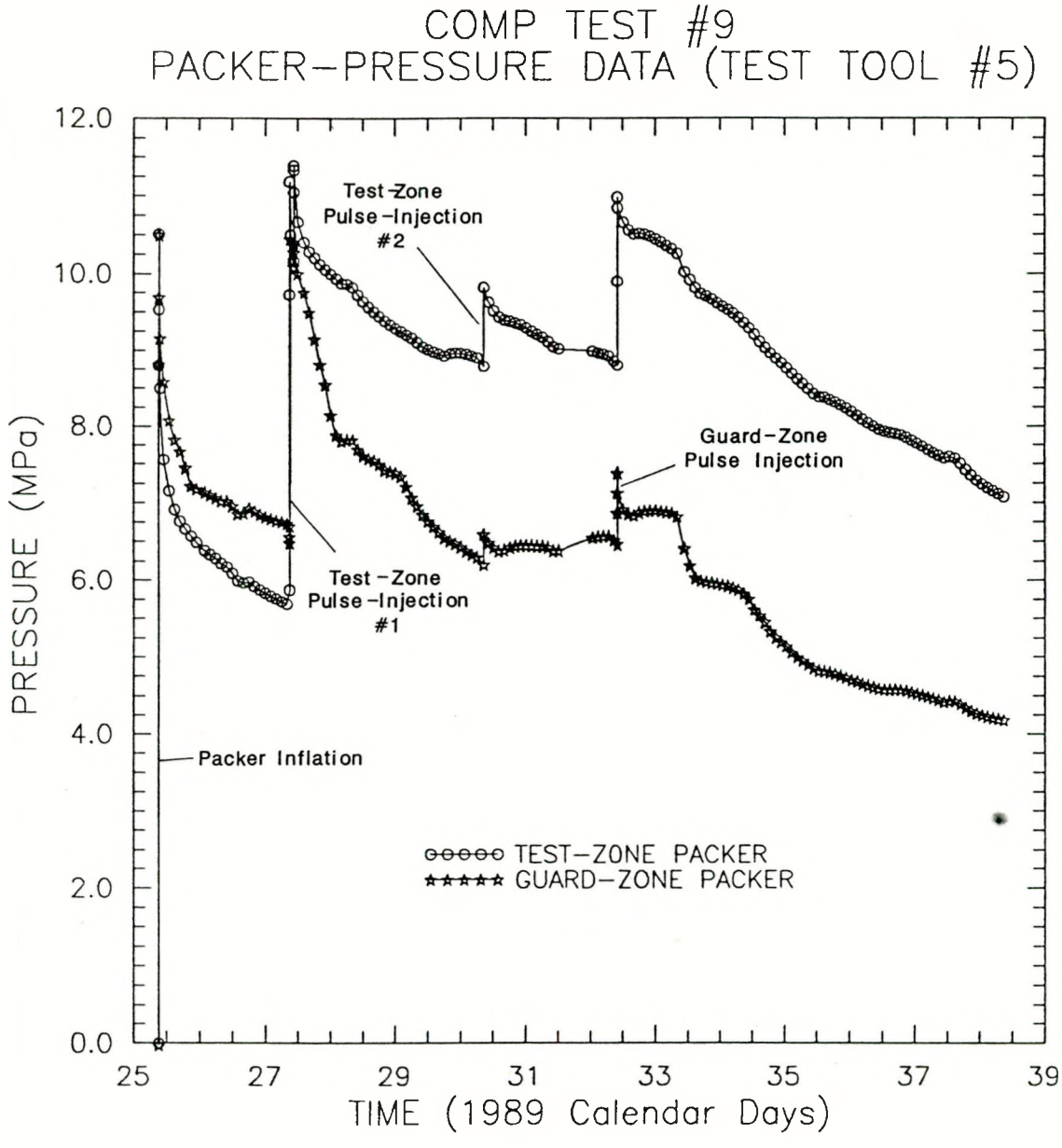
Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Test CTCH21, Multipacker Test Tool #1, Borehole C2H01, Permeability-Testing Sequences C2H01-A and C2H01-B
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.2



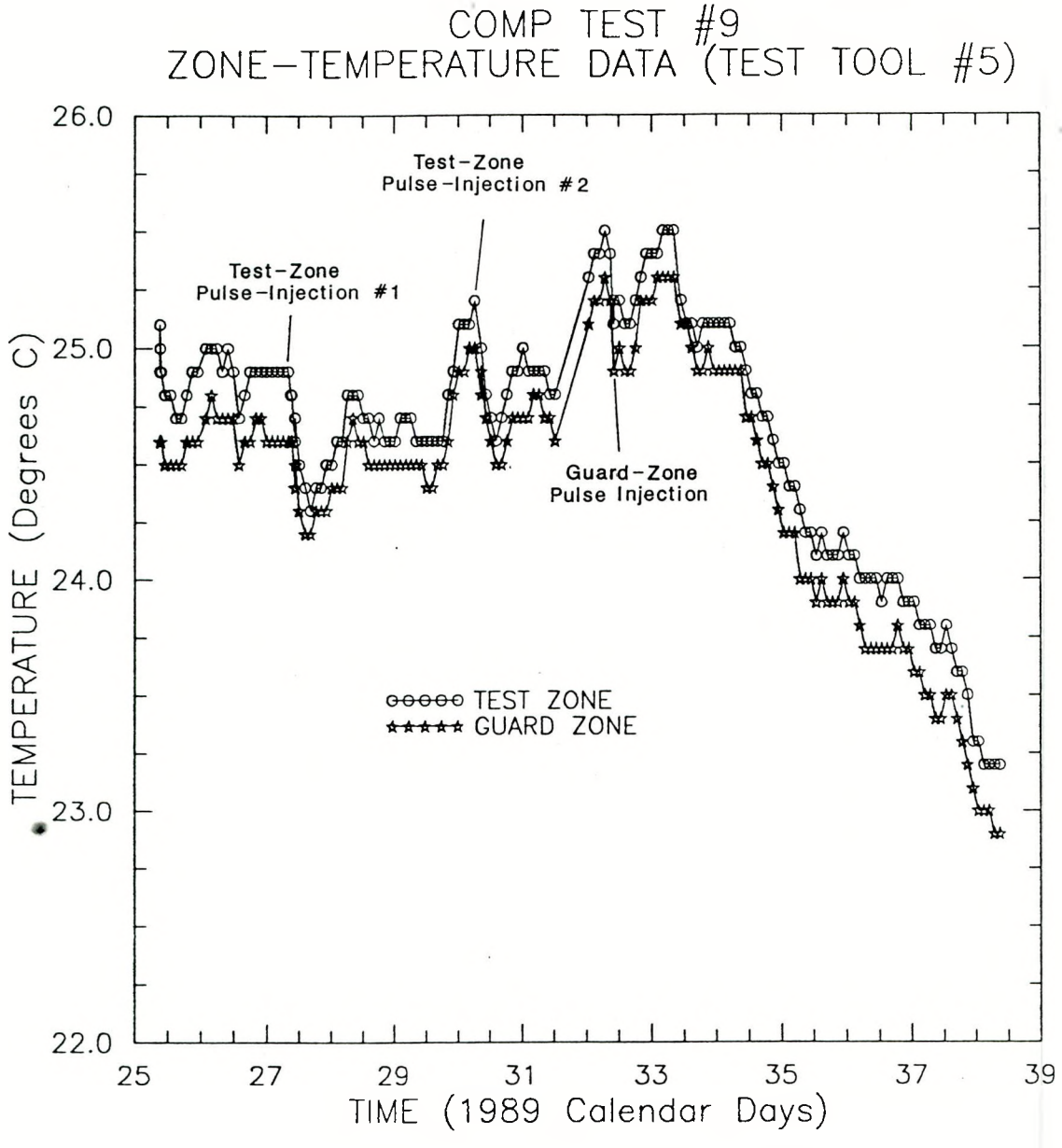
Drawn by INTERA	Date 11/17/89	Zone Temperatures for Compliance Test CTCH21, Multipacker Test Tool #1, Borehole C2H01, Permeability-Testing Sequences C2H01-A and C2H01-B
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.3



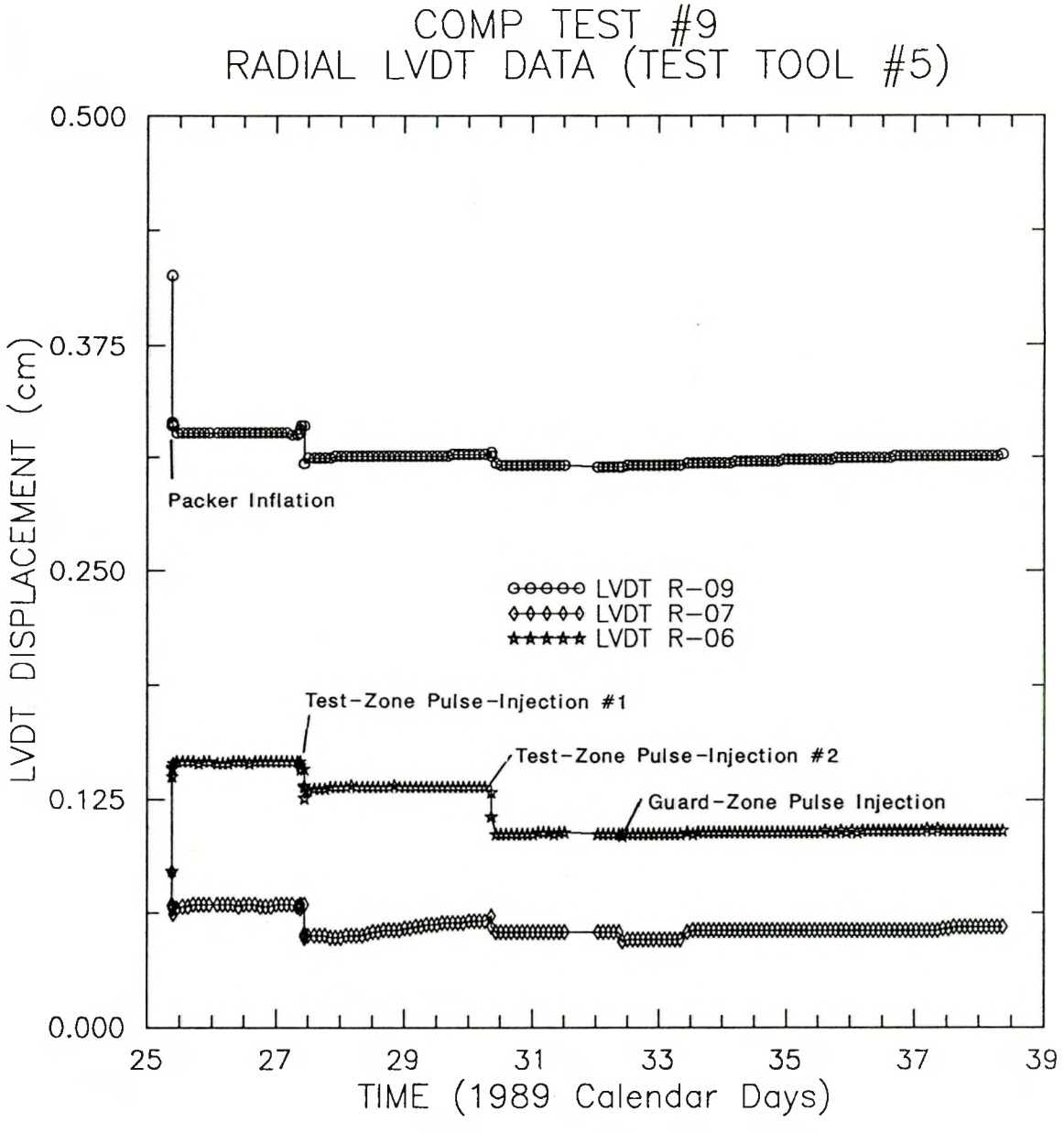
Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Test COMP 9, Multipacker Test Tool #5, Borehole C2H01, Permeability-Testing Sequence C2H01-C
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.4



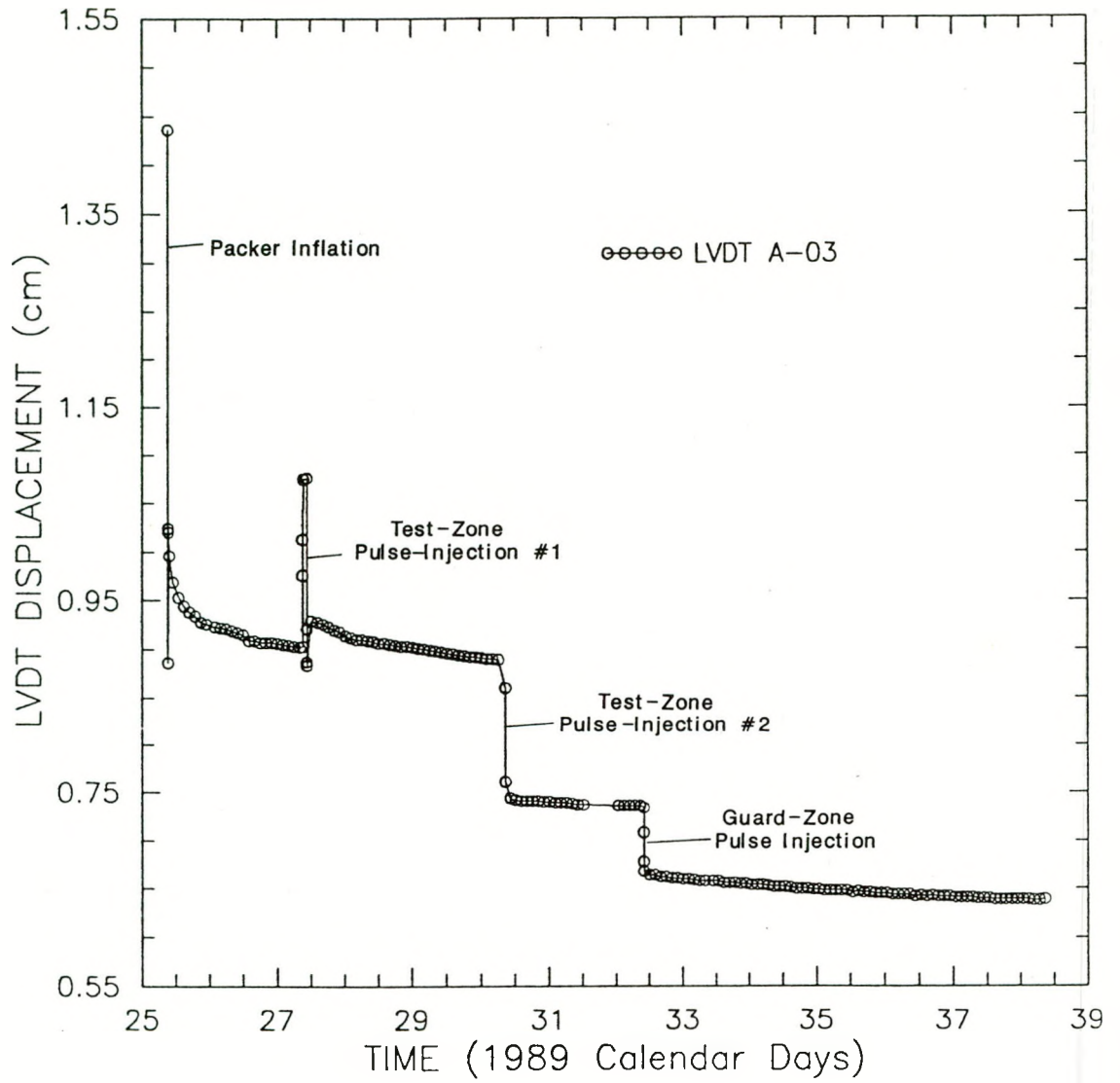
Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Test COMP 9, Multipacker Test Tool #5, Borehole C2H01, Permeability-Testing Sequence C2H01-C
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.5



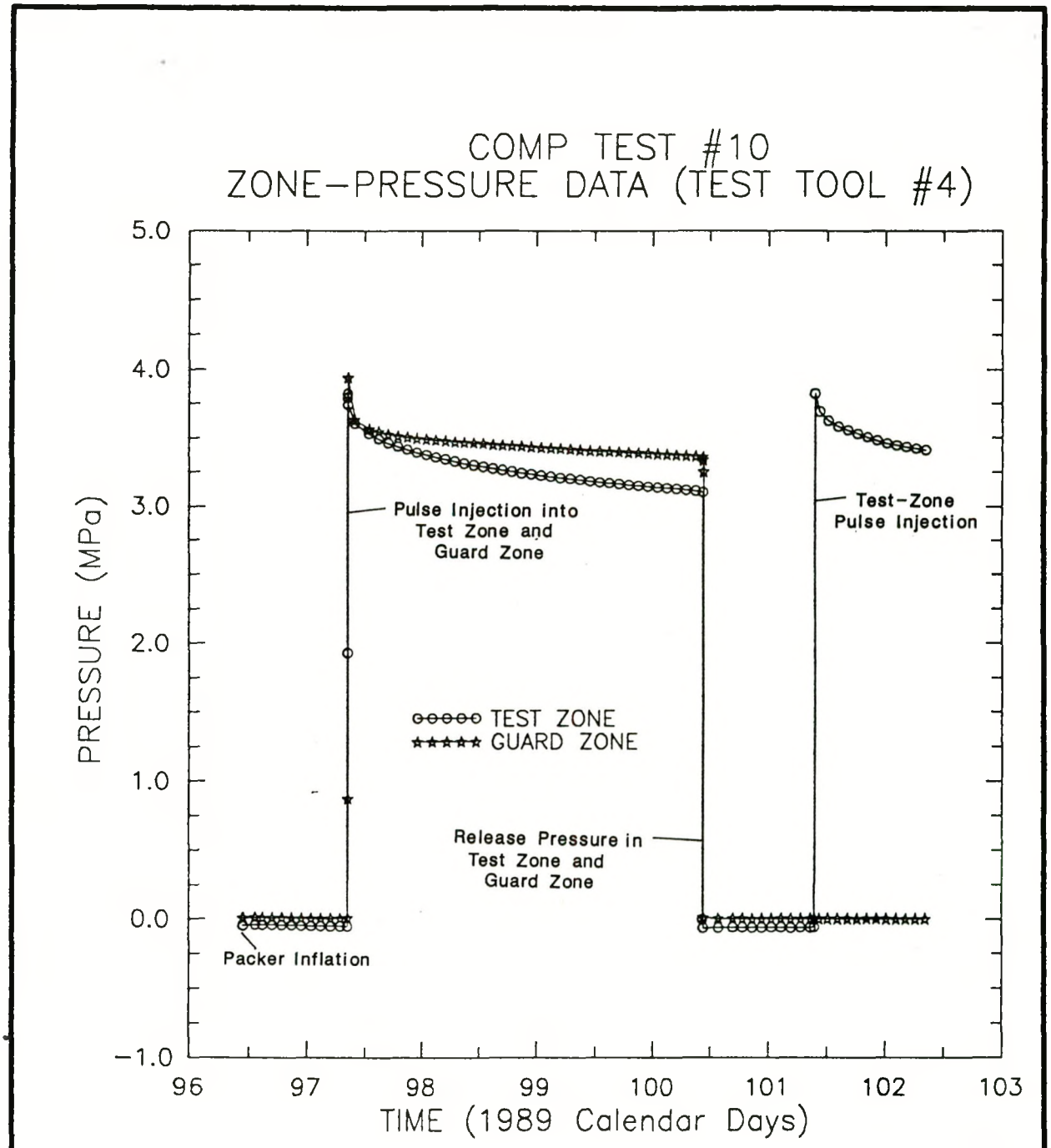
Drawn by INTERA	Date 11/17/89	Zone Temperatures for Compliance Test COMP 9, Multipacker Test Tool #5, Borehole C2H01, Permeability-Testing Sequence C2H01-C
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.6



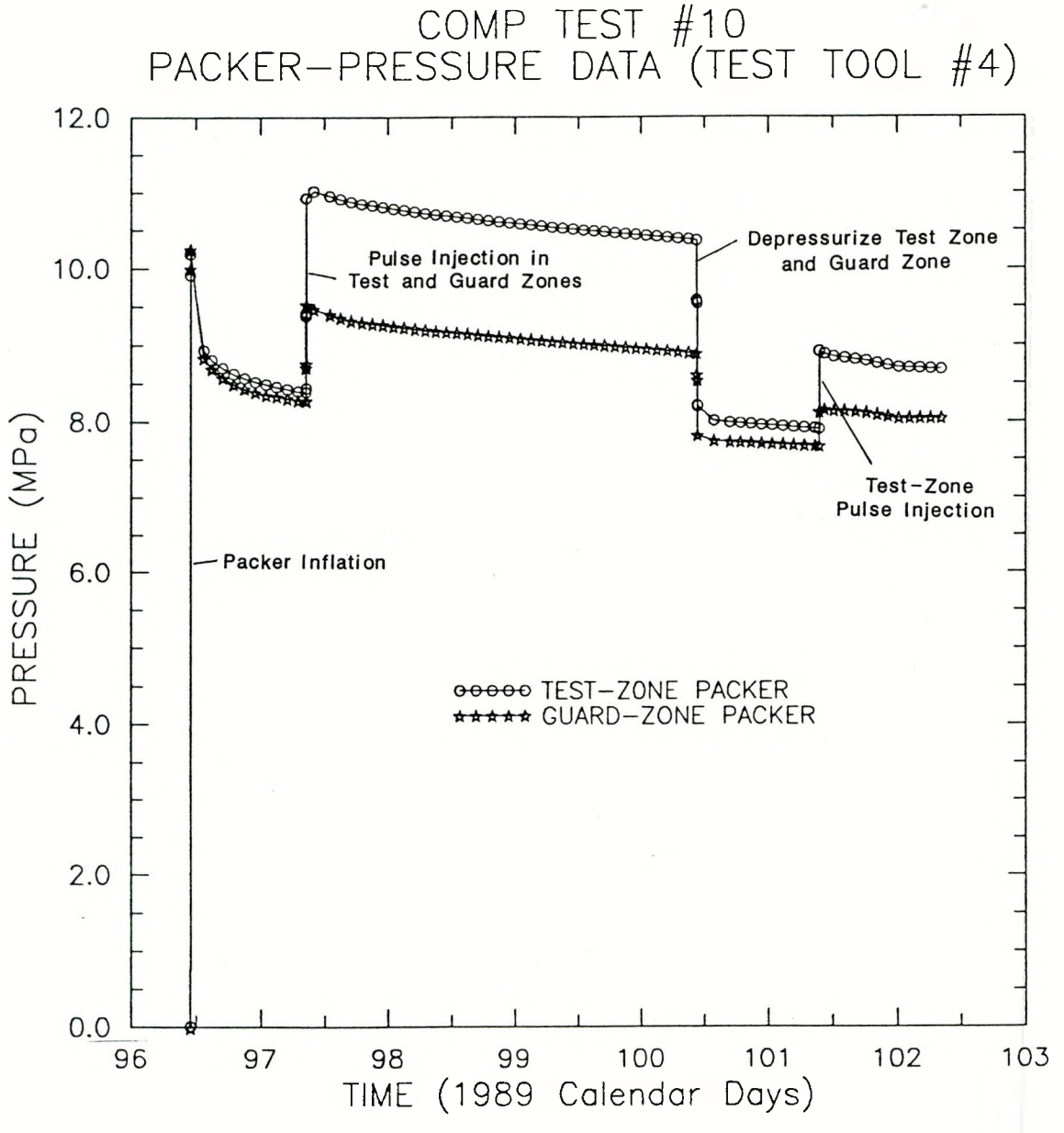
Drawn by INTERA	Date 4/27/90	Radial LVDT Data for Compliance Test COMP 9, Multipacker Test Tool #5, Borehole C2H01, Permeability-Testing Sequence C2H01-C
Checked by G.S.	Date 4/27/90	
Revisions	Date	
#105400R062	4/27/90	
INTERA Technologies		Figure 7.7



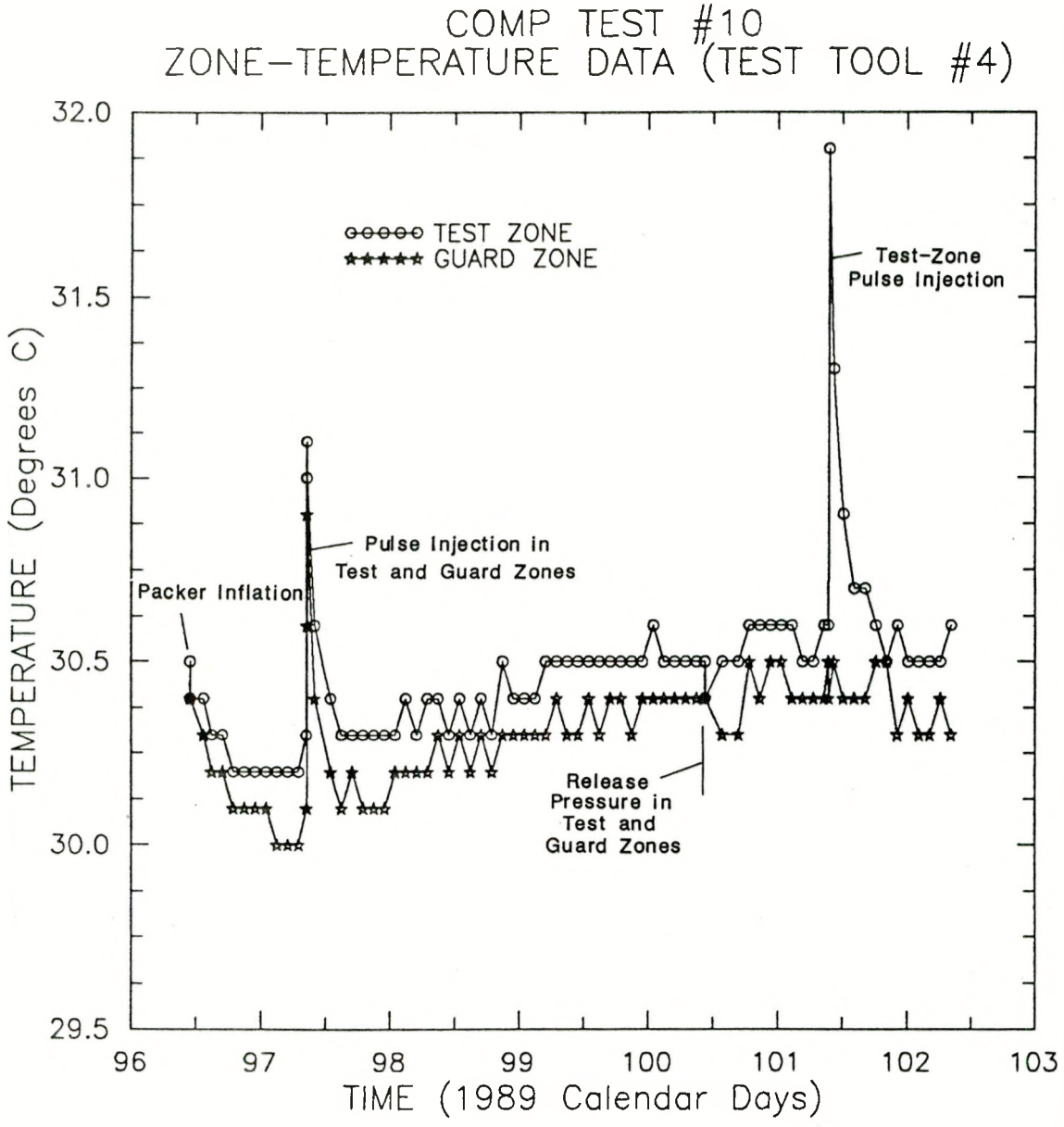
Drawn by INTERA	Date 11/17/89	Axial LVDT Data for Compliance Test COMP 9, Multipacker Test Tool #5, Borehole C2H01, Permeability-Testing Sequence C2H01-C
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.8



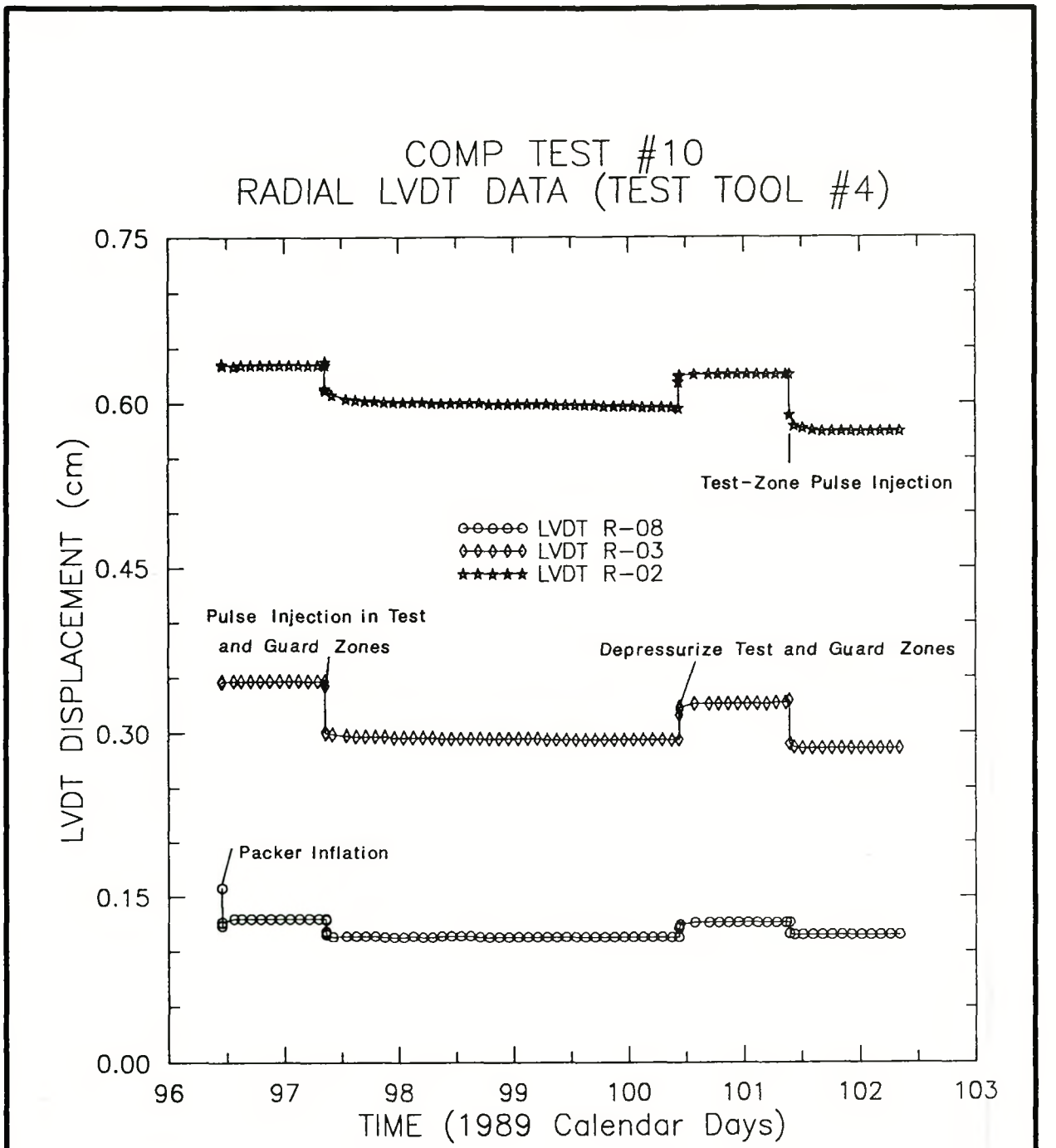
Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Test COMP 10, Multipacker Test Tool #4, Borehole C2H02
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.9



Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Test COMP 10, Multipacker Test Tool #4, Borehole C2H02
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.10



Drawn by INTERA	Date 11/17/89	Zone Temperatures for Compliance Test COMP 10, Multipacker Test Tool #4, Borehole C2H02
Checked by G.S.	Date 3/30/90	
Revisions	Date 3/30/90	
#105400R062		
INTERA Technologies		Figure 7.11

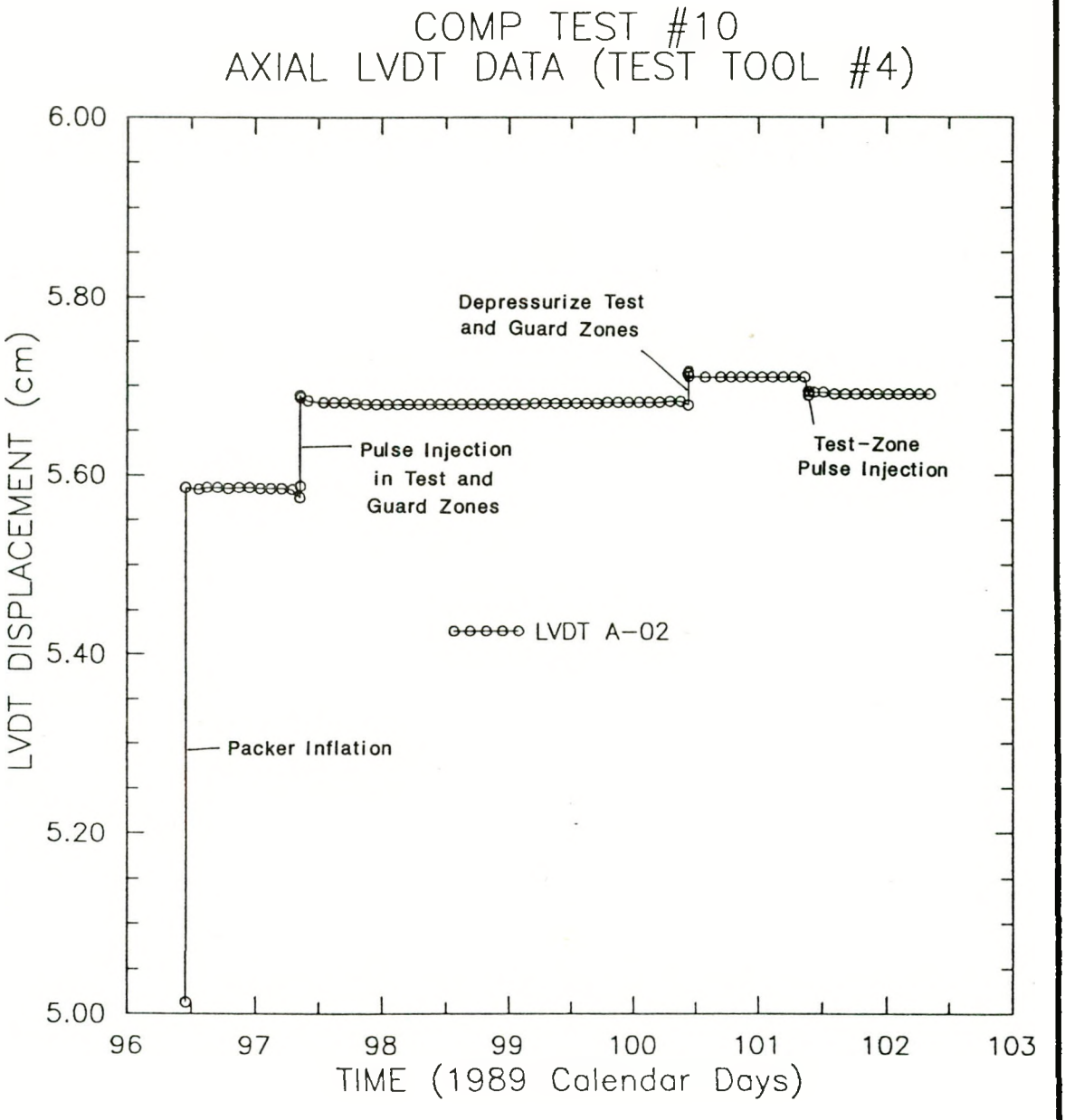


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Checked by G.S.	Date 4/27/90
Revisions	Date
#105400R062	4/27/90

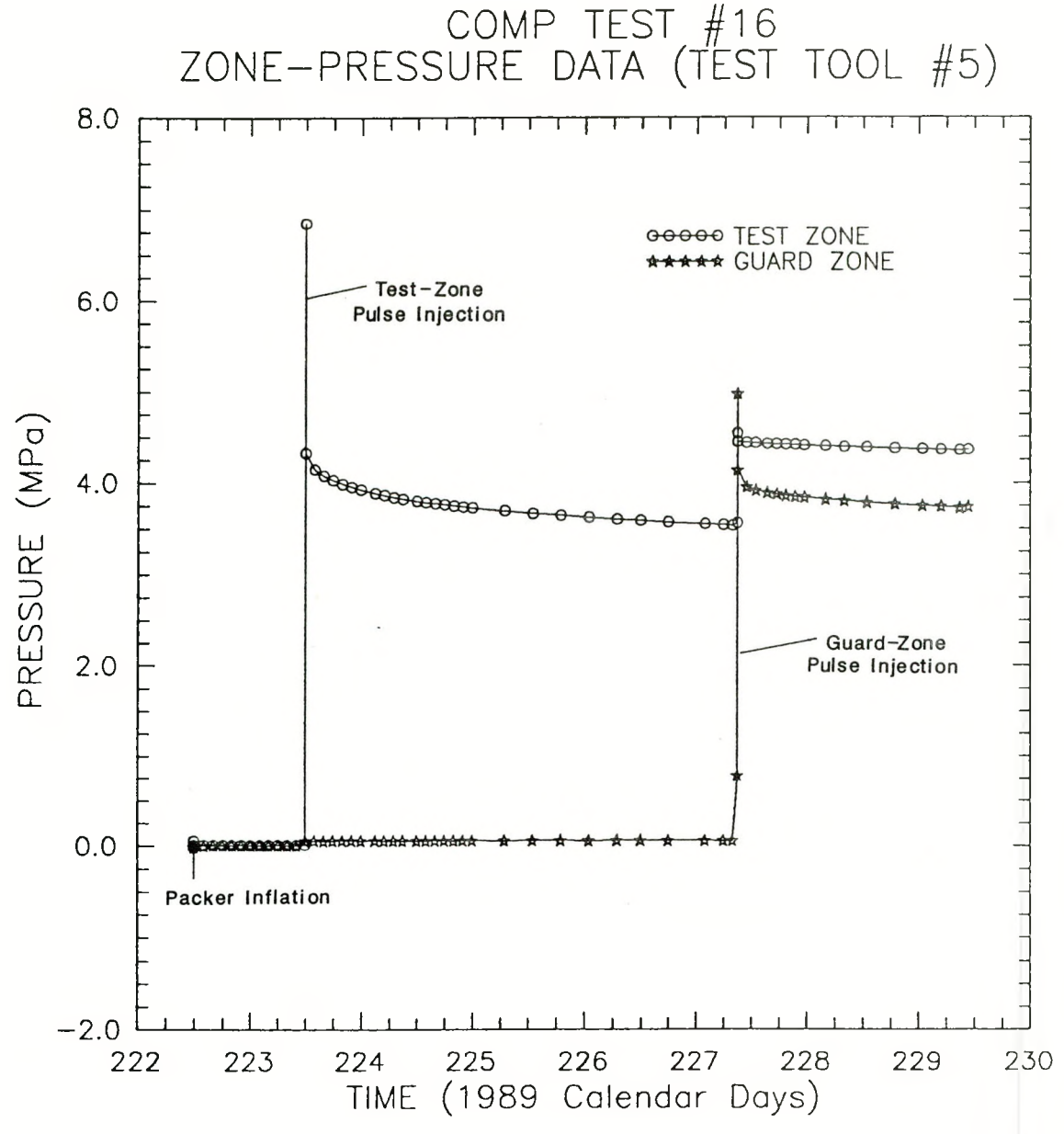
Radial LVDT Data for Compliance Test COMP 10, Multipacker Test Tool #4, Borehole C2H02

INTERA Technologies

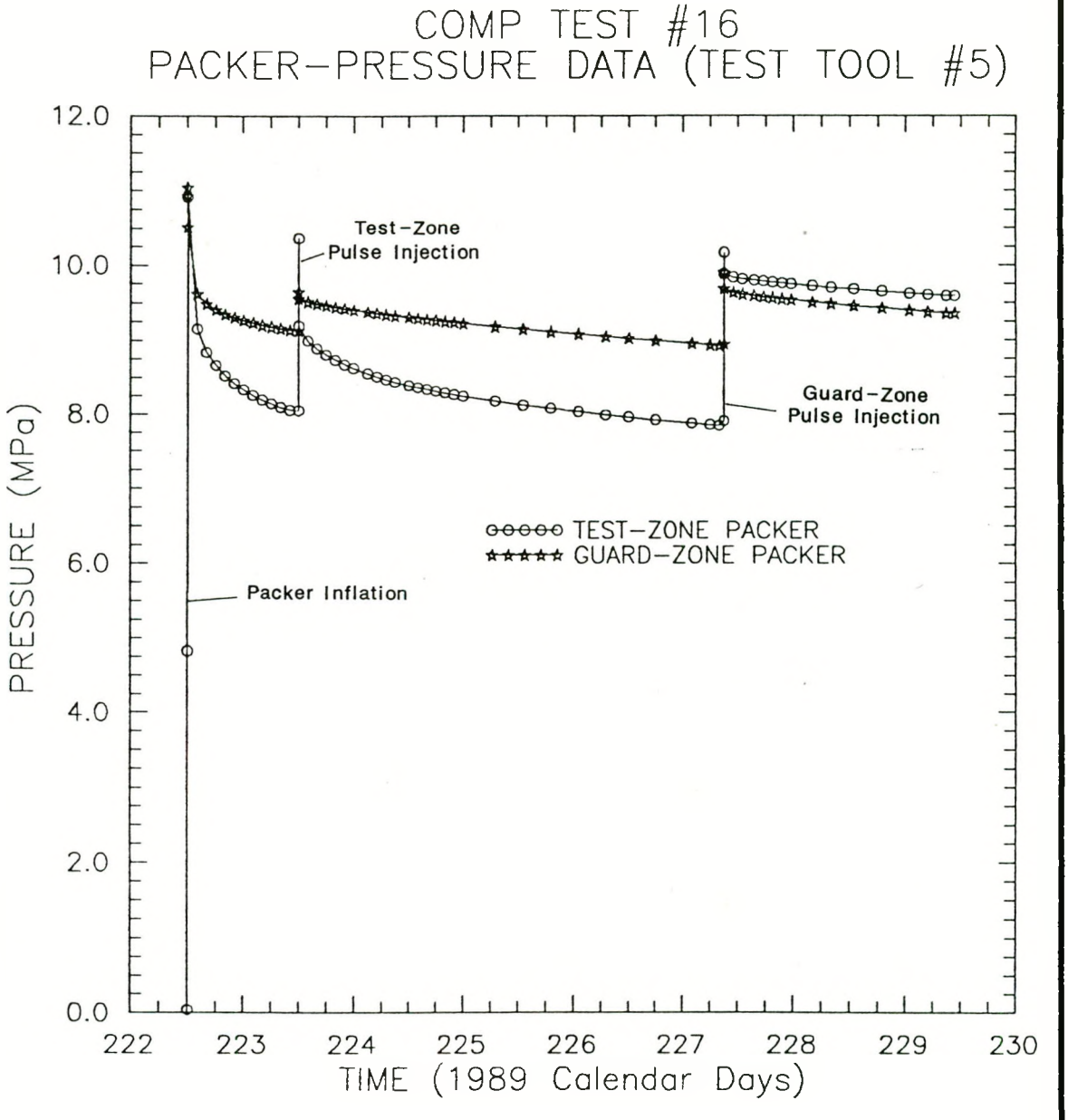
Figure 7.12



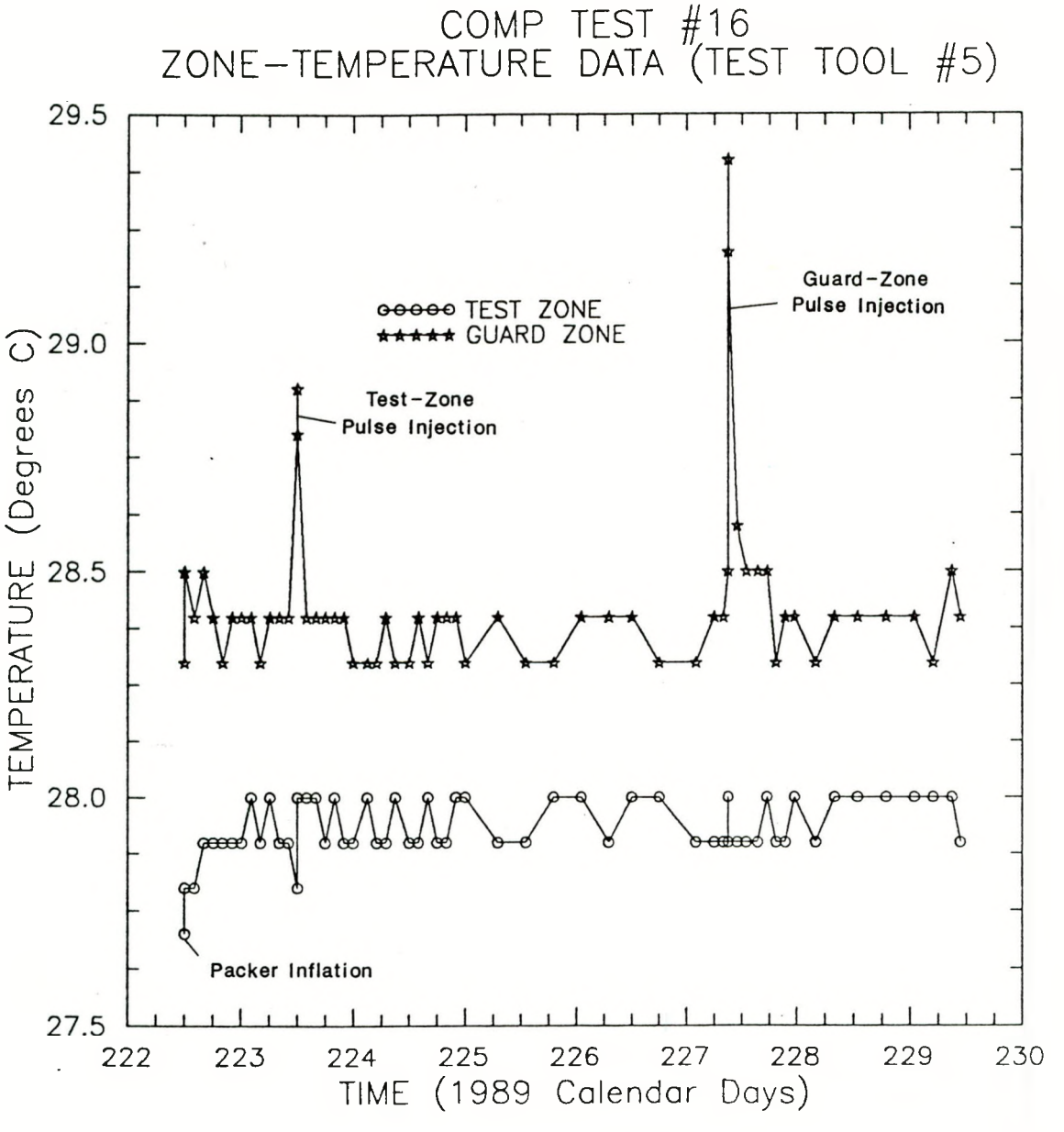
Drawn by INTERA	Date 11/17/89	Axial LVDT Data for Compliance Test COMP 10, Multipacker Test Tool #4, Borehole C2H02
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.13



Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Test COMP 16, Multipacker Test Tool #5, Borehole C2H03
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.14



Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Test COMP 16, Multipacker Test Tool #5, Borehole C2H03
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.15

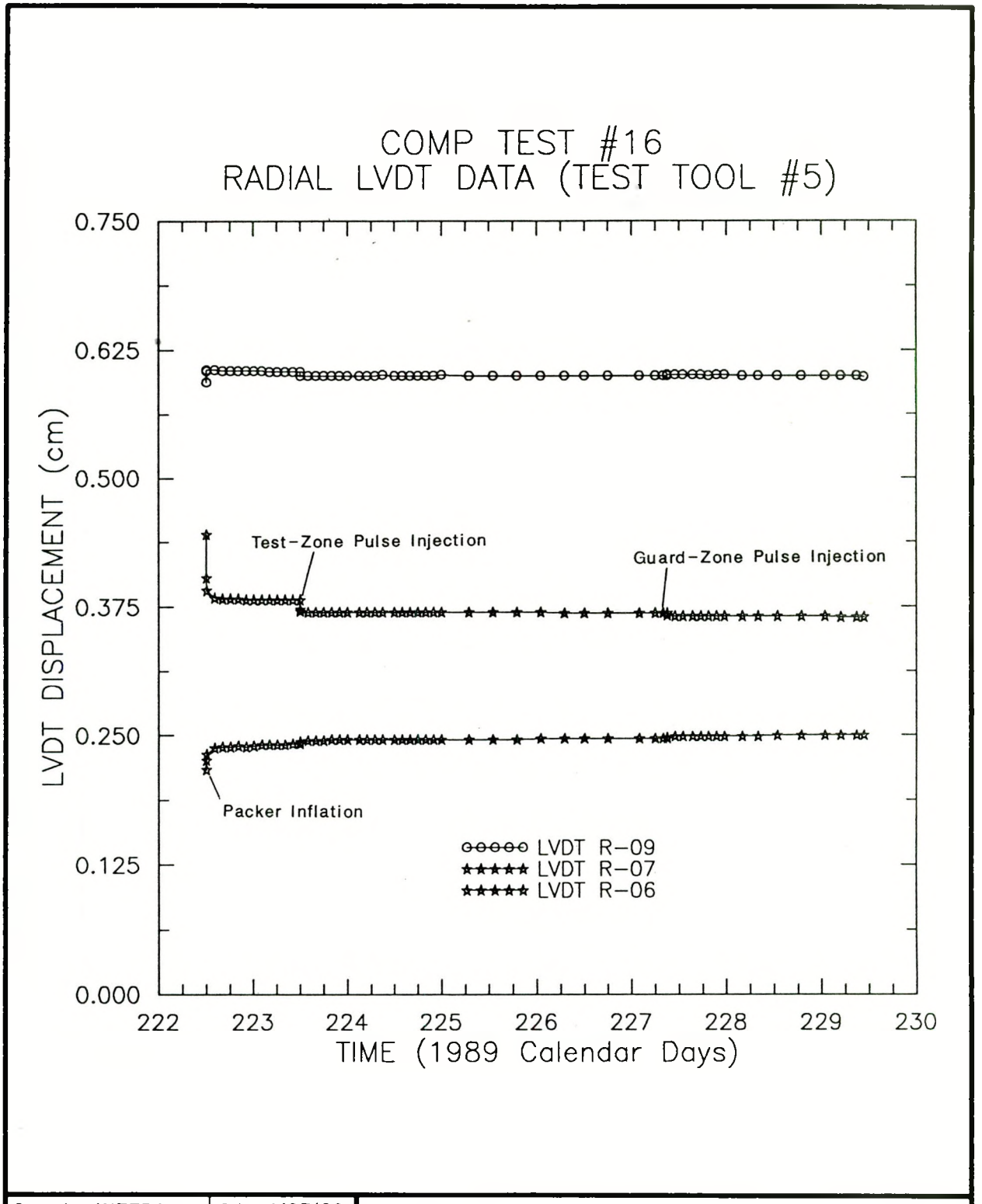


Drawn by INTERA	Date
Checked by G.S.	Date
Revisions	Date
#105400R062	1/4/91

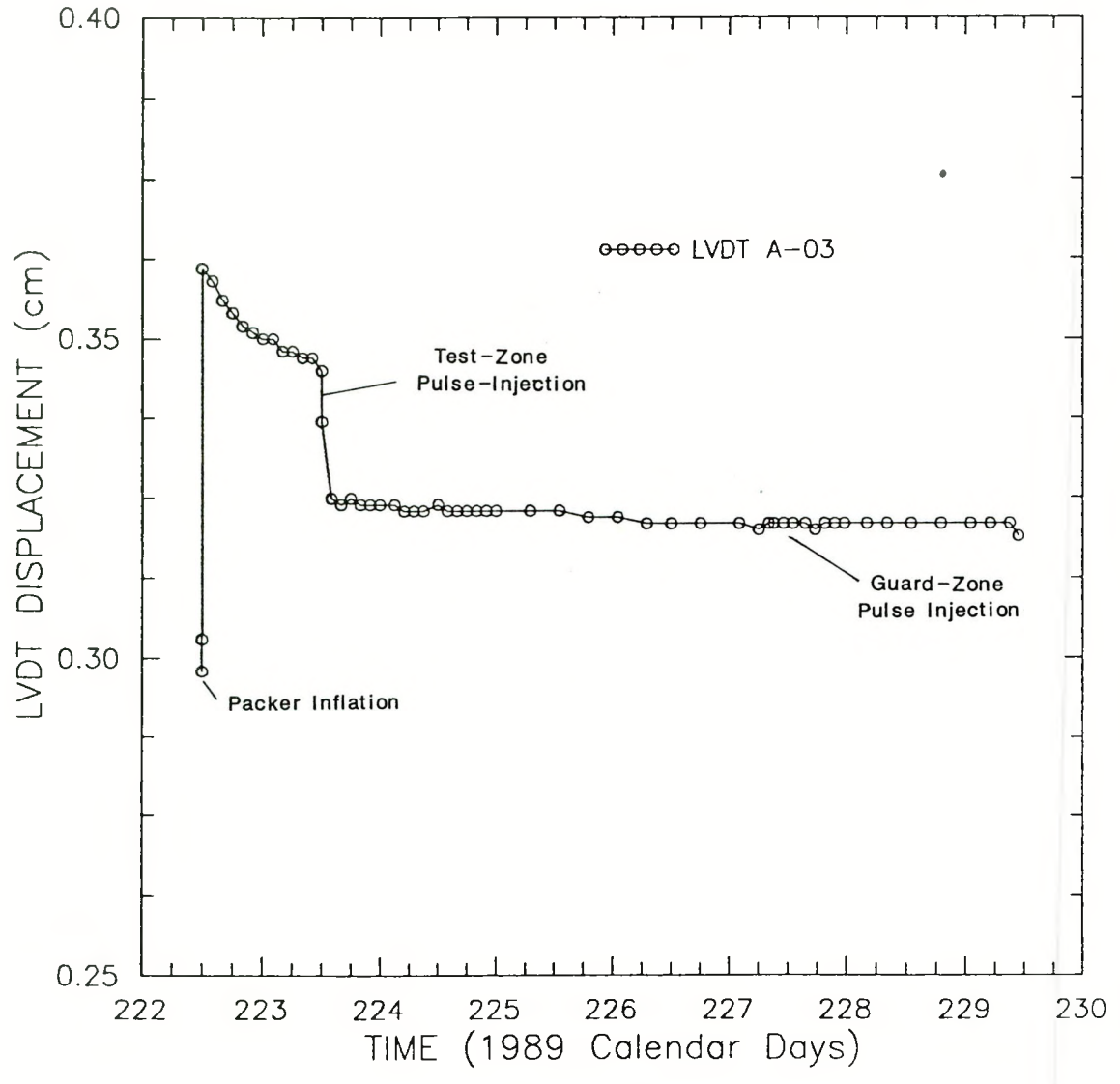
Zone Temperatures for Compliance Test COMP 16,
Multipacker Test Tool #5,
Borehole C2H03

INTERA Technologies

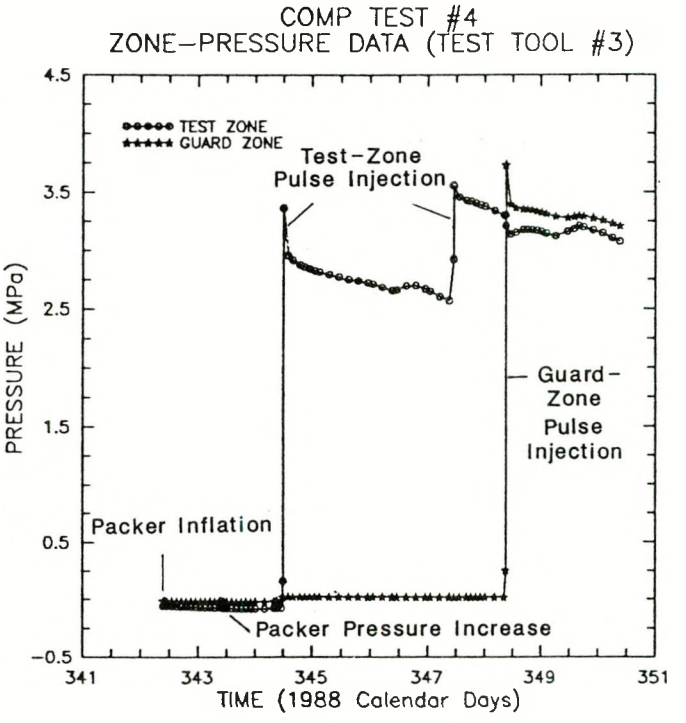
Figure 7.16

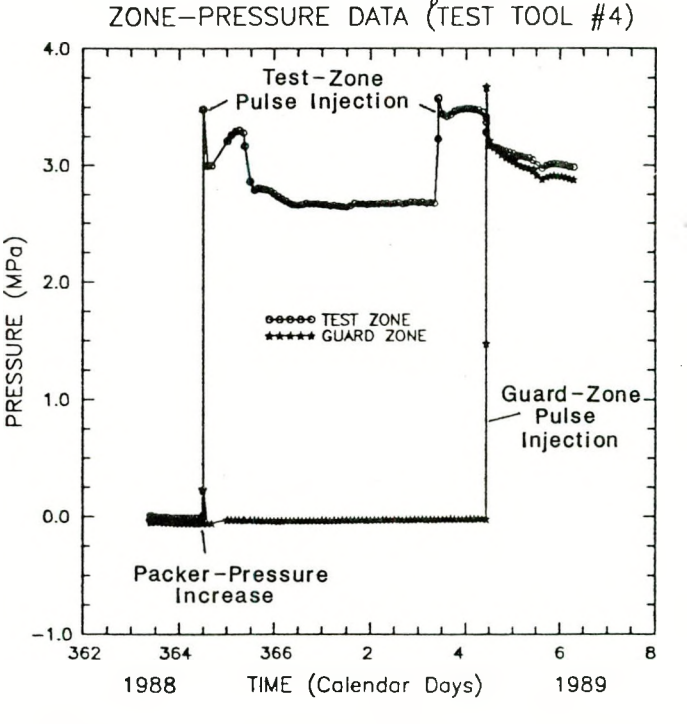


Drawn by INTERA	Date 4/27/90	Radial LVDT Data for Compliance Test COMP 16, Multipacker Test Tool #5, Borehole C2H03
Checked by G.S.	Date 4/27/90	
Revisions	Date	
#105400R062	4/27/90	
INTERA Technologies		Figure 7.17

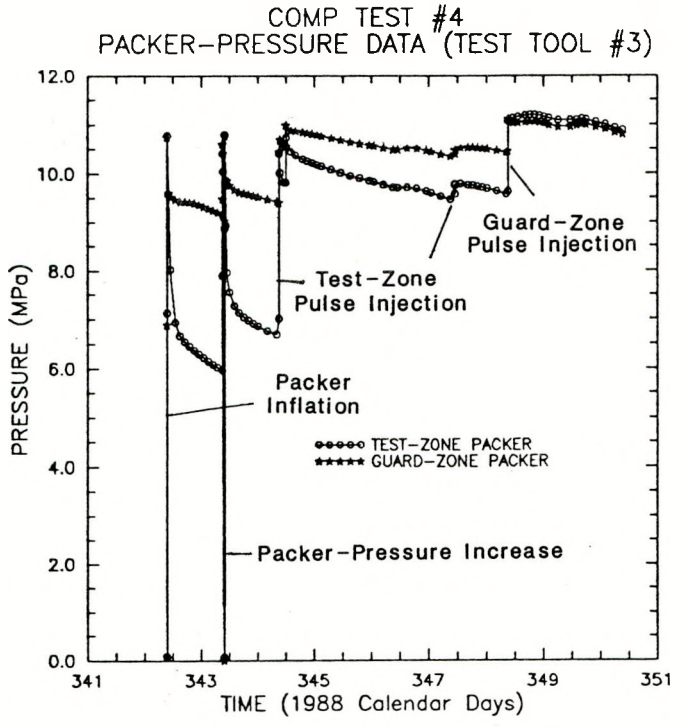


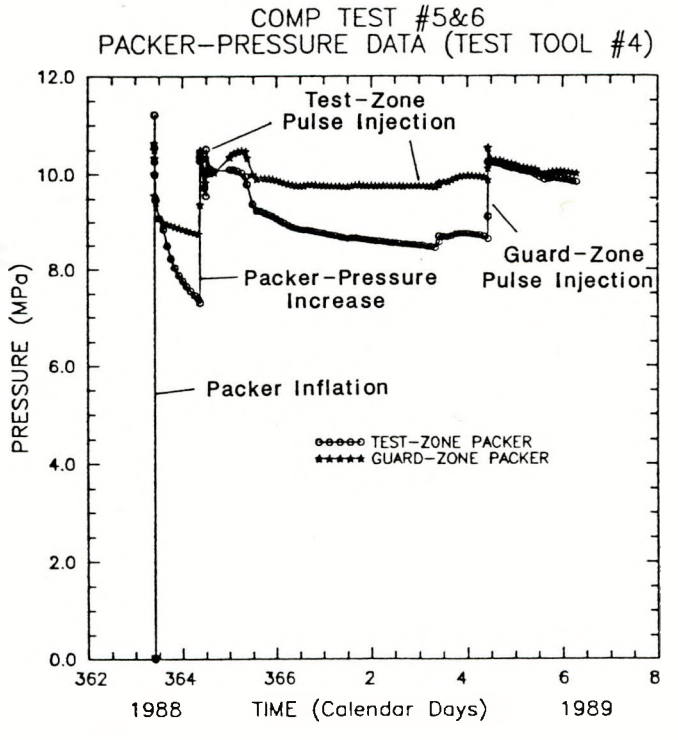
Drawn by INTERA	Date	Axial LVDT Data for Compliance Test COMP 16, Multipacker Test Tool #5, Borehole C2H03
Checked by G.S.	Date	
Revisions	Date	
#105400R062	1/4/91	
INTERA Technologies		Figure 7.18



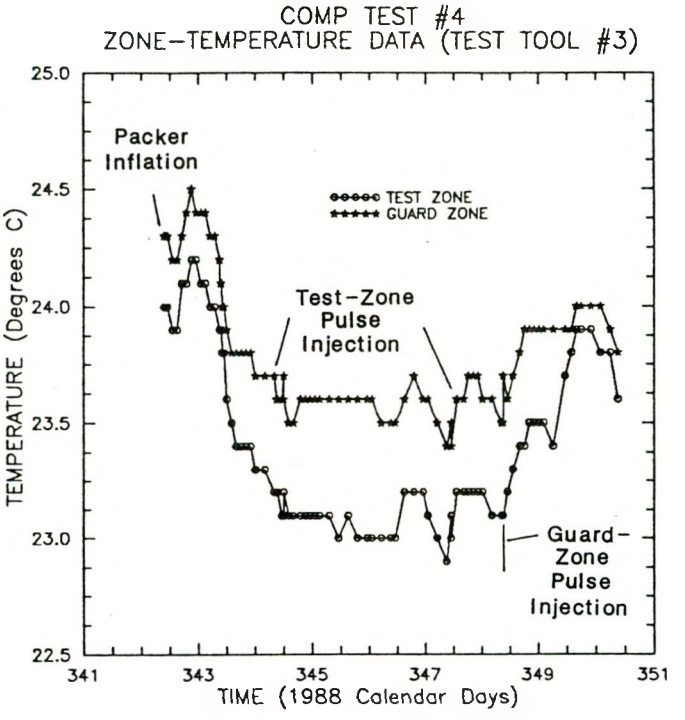


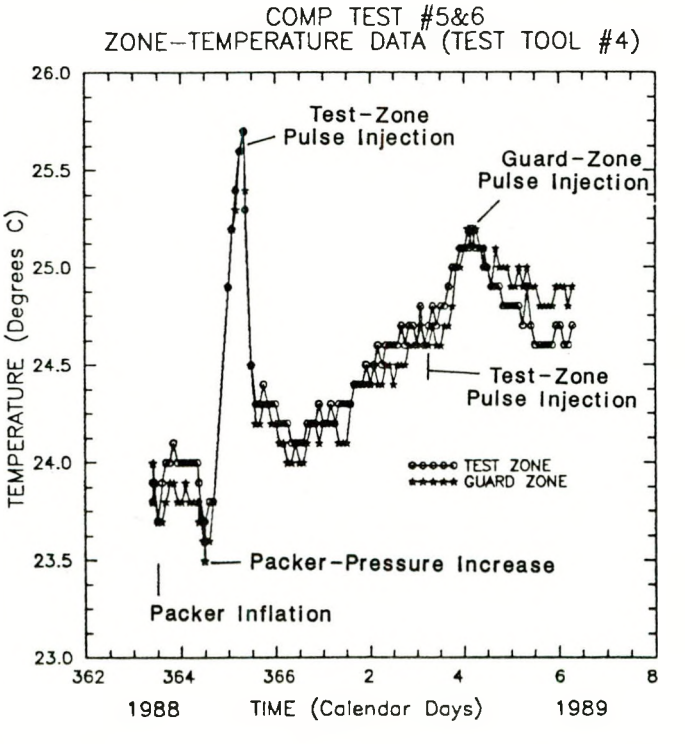
Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Tests COMP 4 and COMP 5 & 6, Multipacker Test Tools #3 and #4, Borehole N4P50
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.19





Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Tests COMP 4 and COMP 5 & 6, Multipacker Test Tools #3 and #4, Borehole N4P50
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.20



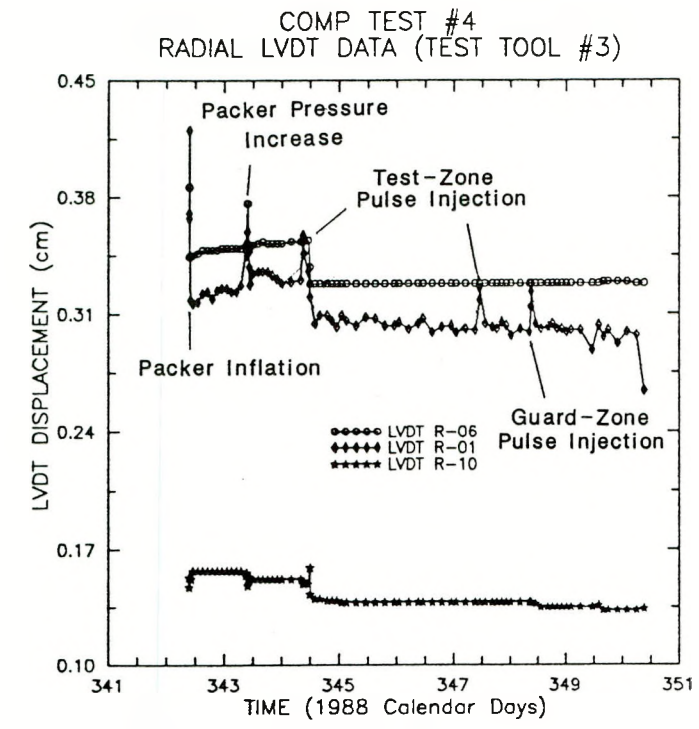


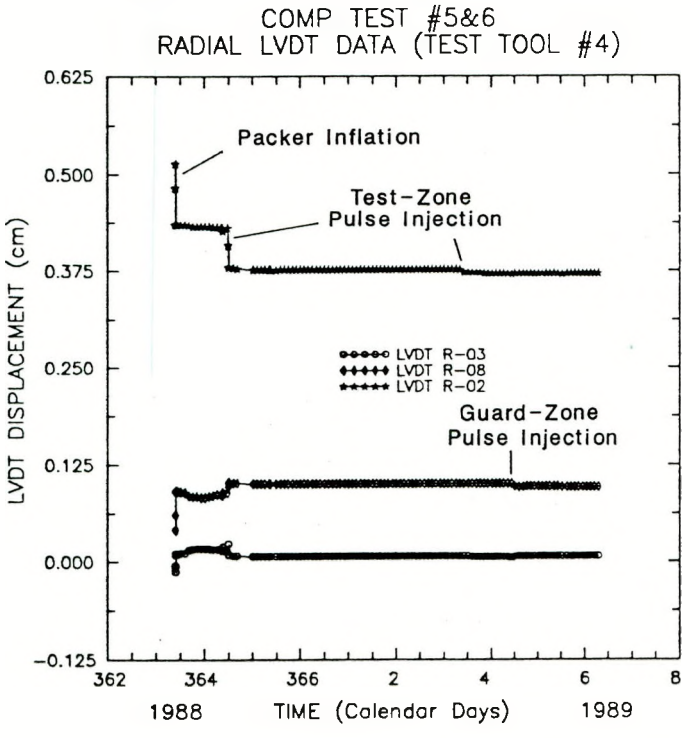
Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date 3/30/90
Revisions	Date
#105400R062	3/30/90

Zone Temperatures for Compliance Tests COMP 4 and COMP 5 & 6, Multipacker Test Tools #3 and #4, Borehole N4P50

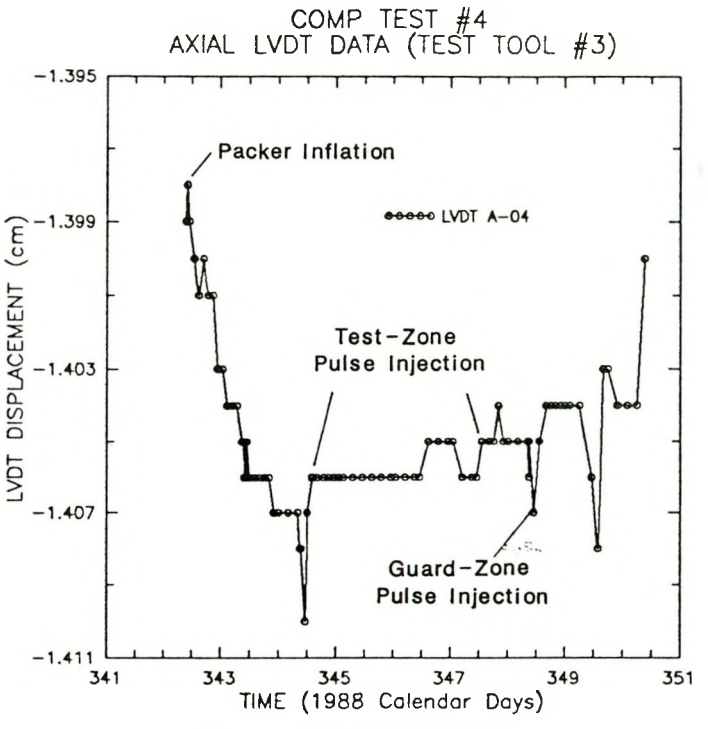
INTERA Technologies

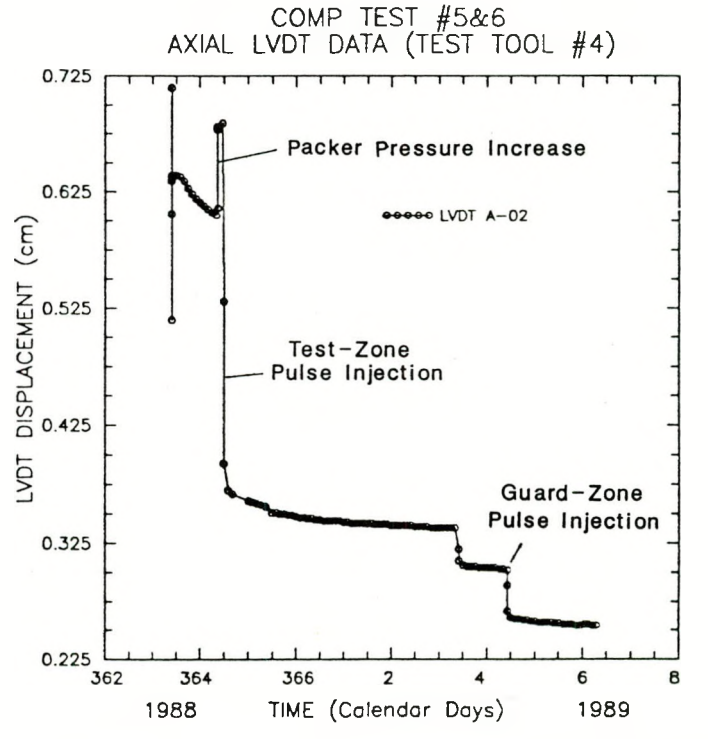
Figure 7.21





Drawn by INTERA	Date 11/17/89	Radial LVDT Data for Compliance Tests COMP 4 and COMP 5 & 6, Multipacker Test Tools #3 and #4, Borehole N4P50
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.22



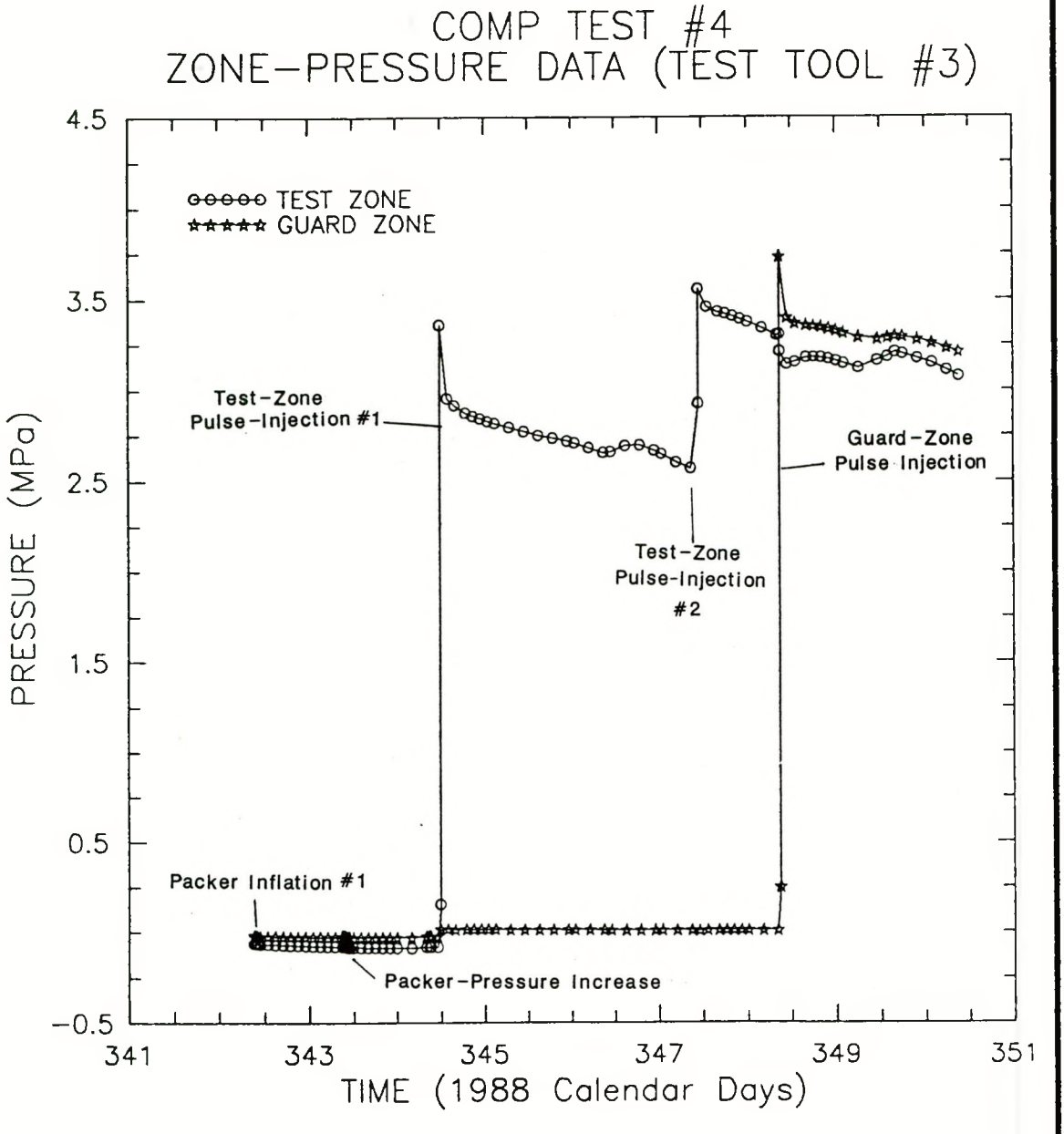


Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date 3/30/90
Revisions	Date
#105400R062	3/30/90

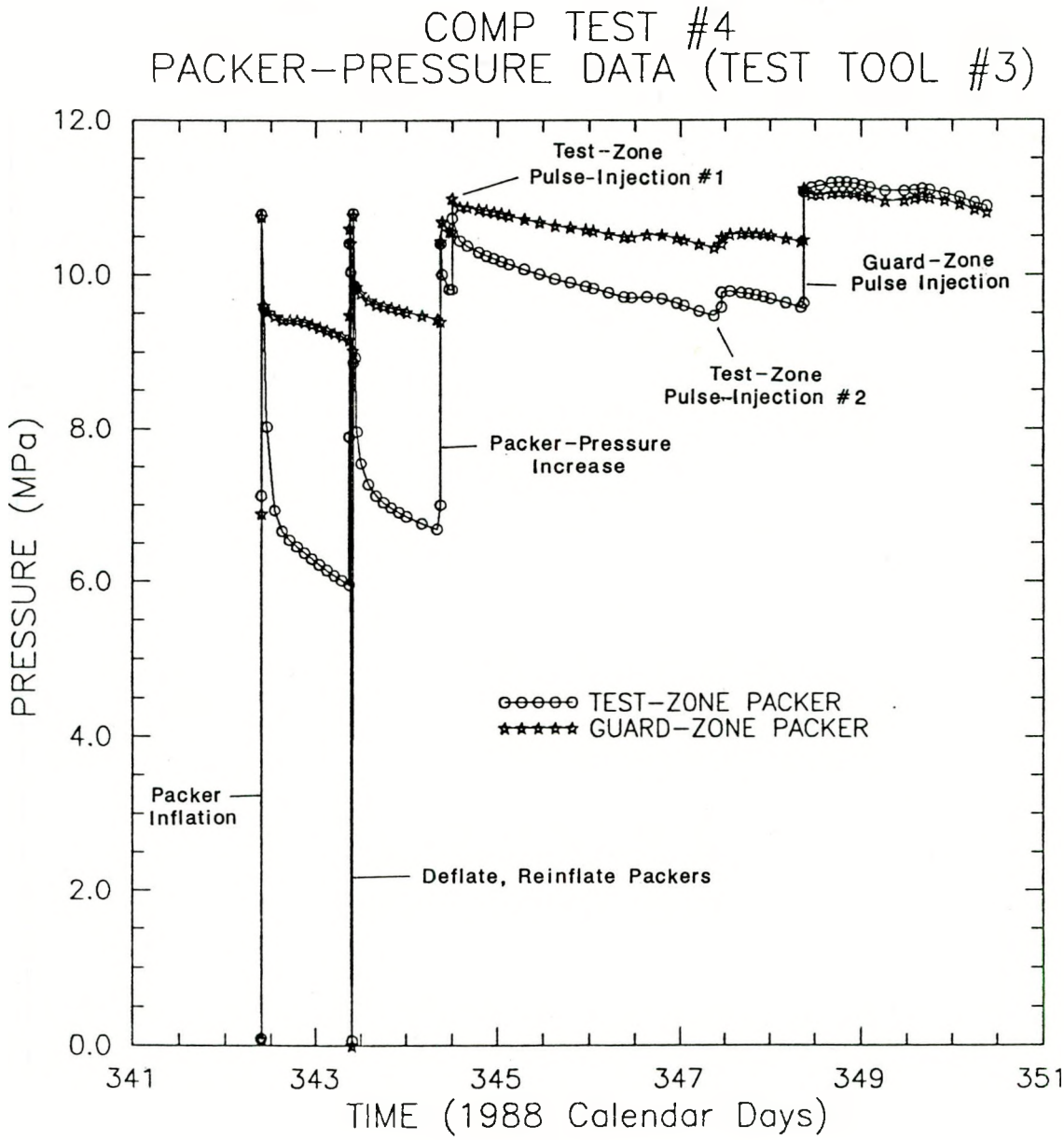
Axial LVDT Data for Compliance Tests COMP 4 and COMP 5 & 6, Multipacker Test Tools #3 and #4, Borehole N4P50

INTERA Technologies

Figure 7.23



Drawn by INTERA	Date 11/17/89	Zone Pressures for Compliance Test COMP 4, Multipacker Test Tool #3, Borehole S0P01
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.24

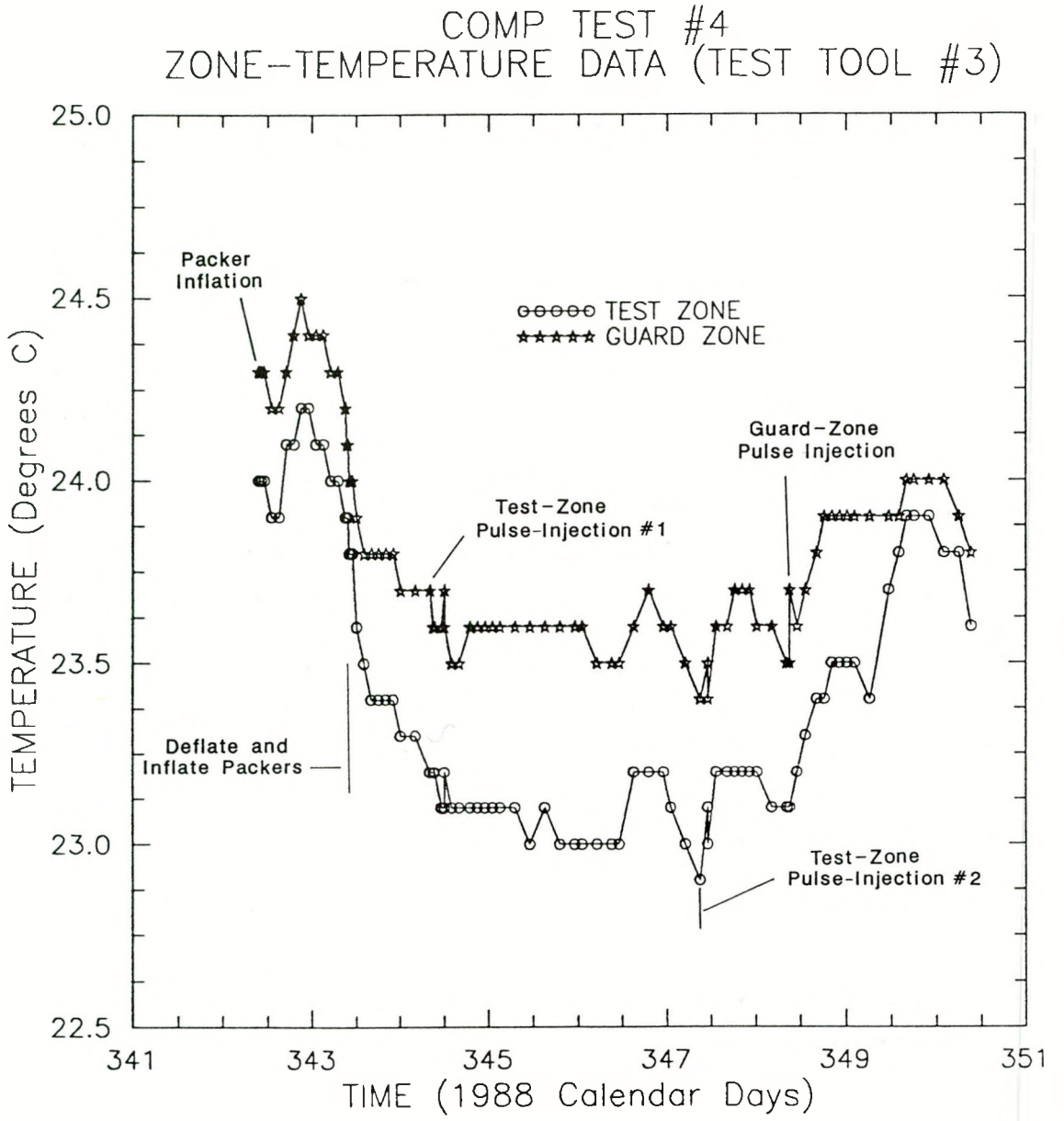


Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date 3/30/90
Revisions	Date
#105400R062	3/30/90

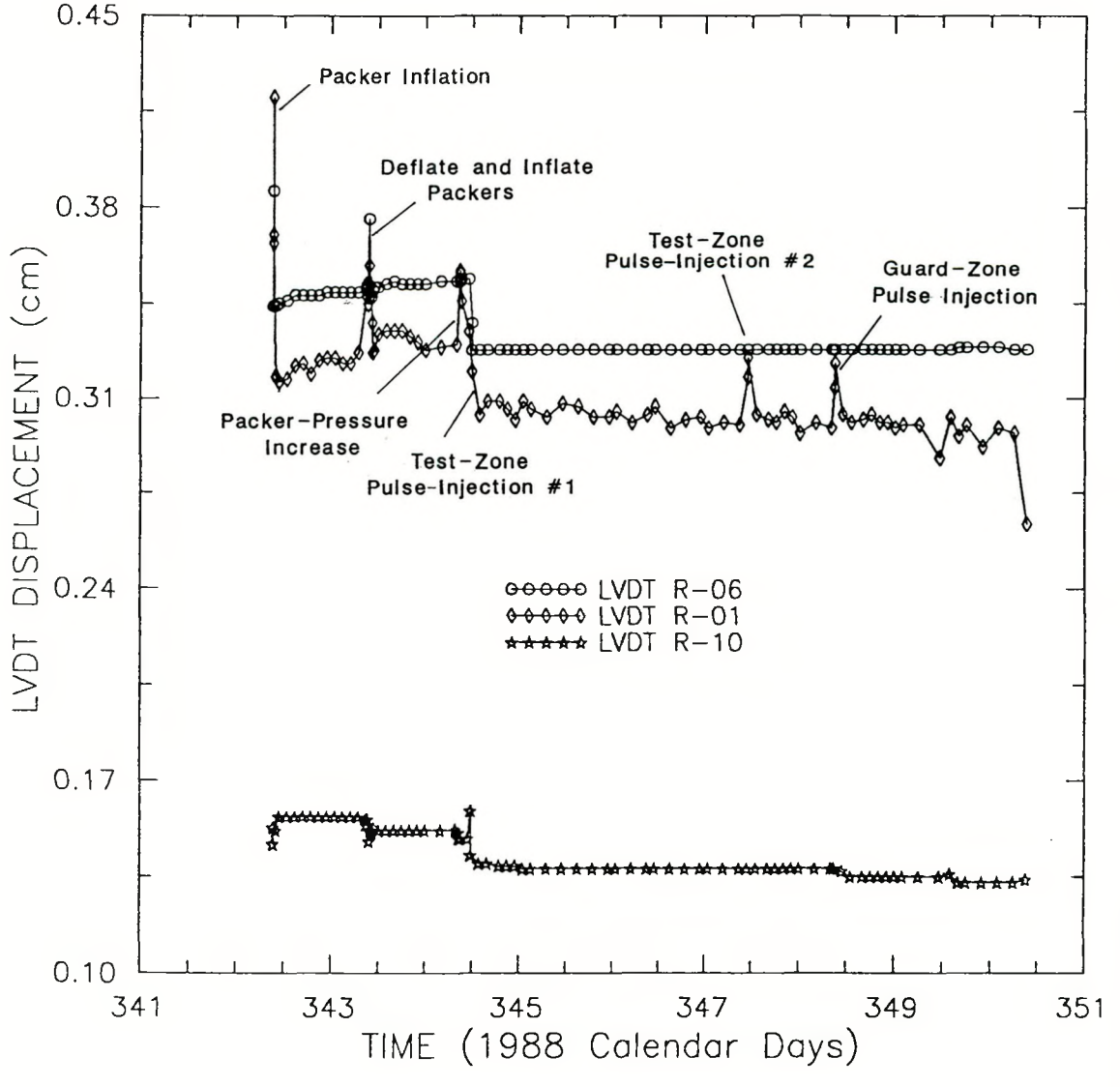
Packer Pressures for Compliance Test COMP 4, Multipacker Test Tool #3, Borehole S0P01

INTERA Technologies

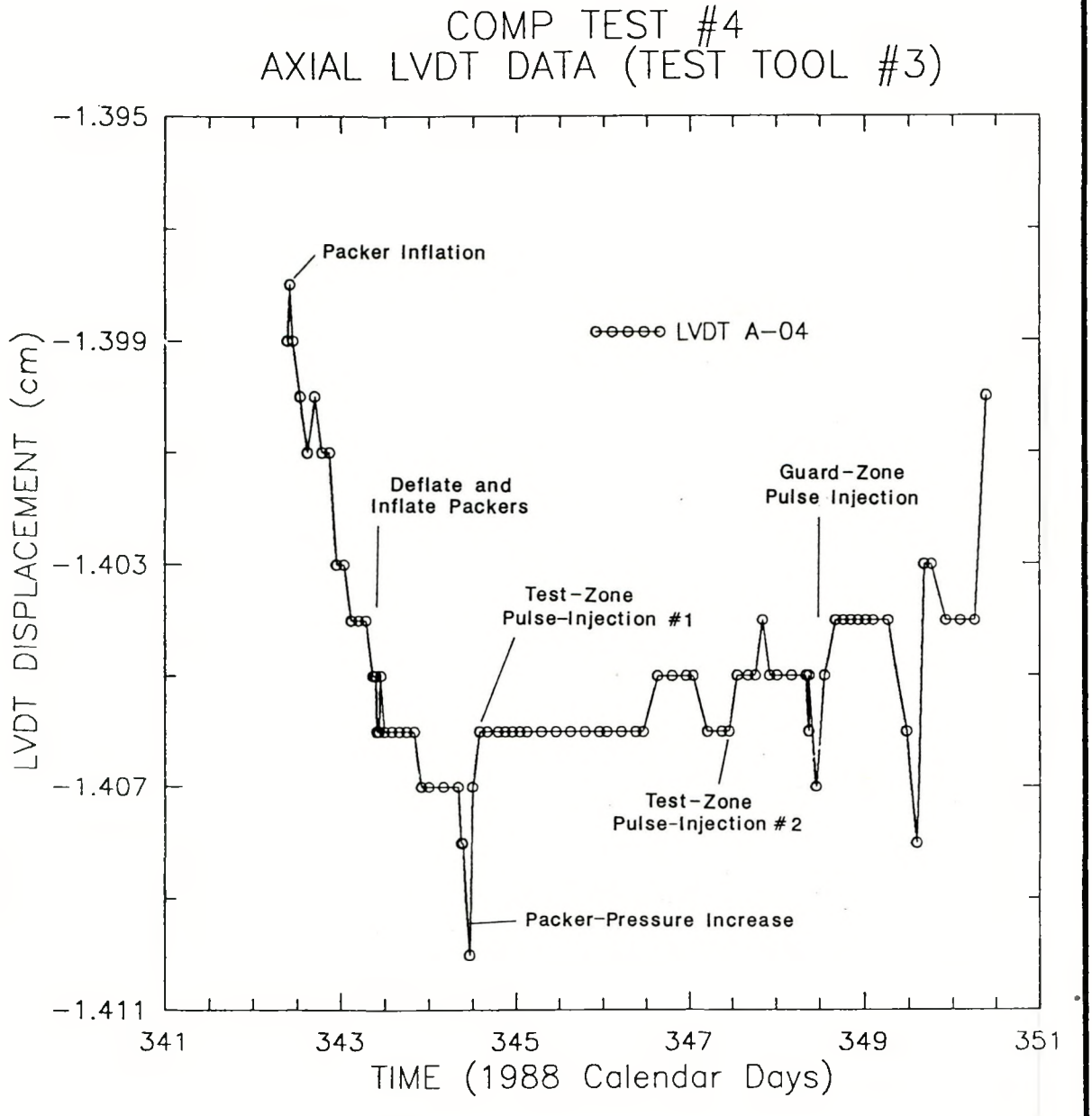
Figure 7.25



Drawn by INTERA	Date 11/17/89	Zone Temperatures for Compliance Test COMP 4, Multipacker Test Tool #3, Borehole S0P01
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.26



Drawn by INTERA	Date 11/17/89	Radial LVDT Data for Compliance Test COMP 4, Multipacker Test Tool #3, Borehole S0P01
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.27

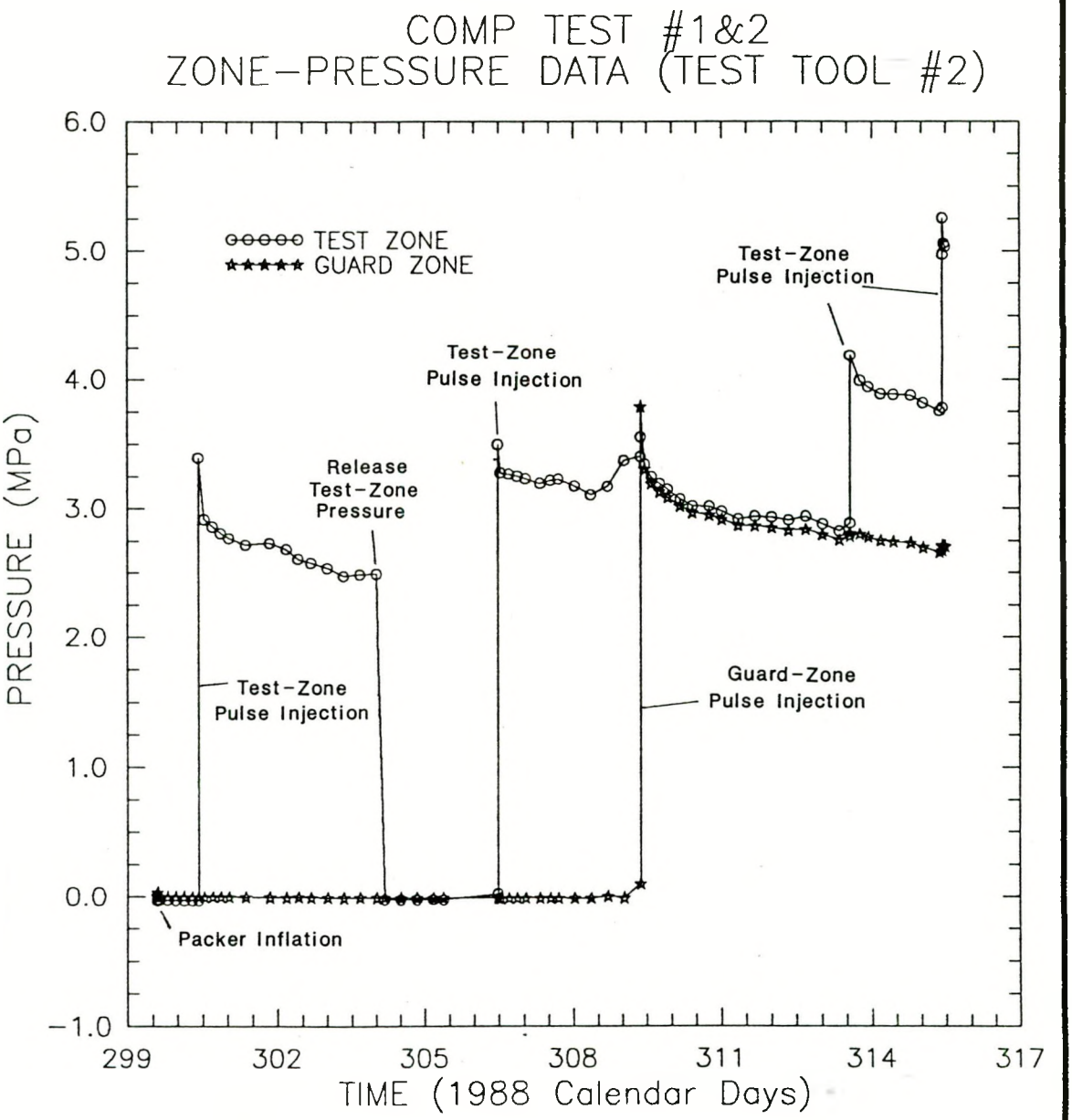


Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date
Revisions	Date 3/30/90
#105400R062	3/30/90

Axial LVDT Data for Compliance Test COMP 4,
Multipacker Test Tool #3,
Borehole S0P01

INTERA Technologies

Figure 7.28

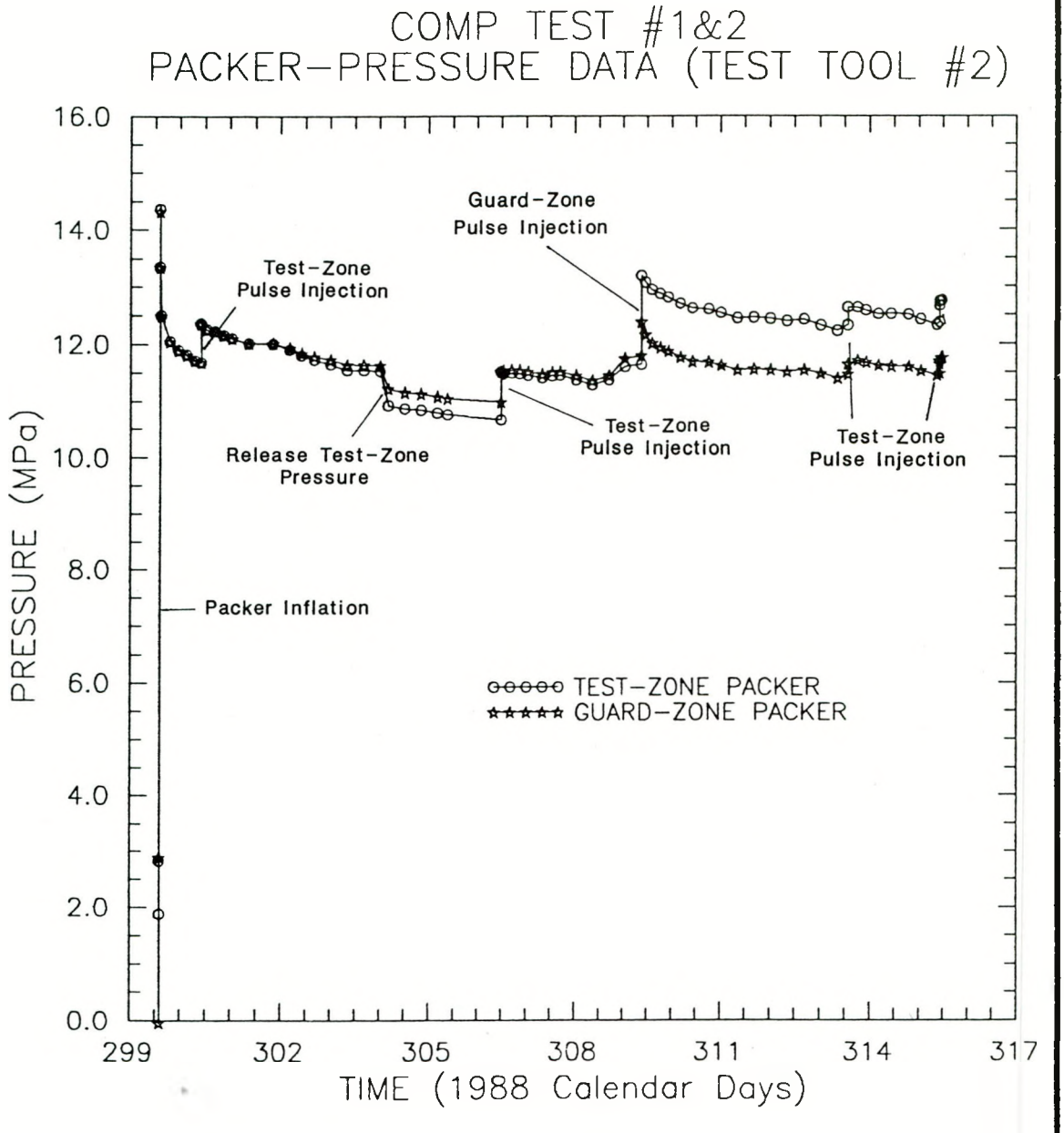


Drawn by INTERA	Date 11/17/89
Checked by G.S.	Date 3/30/90
Revisions	Date
#105400R062	3/30/90

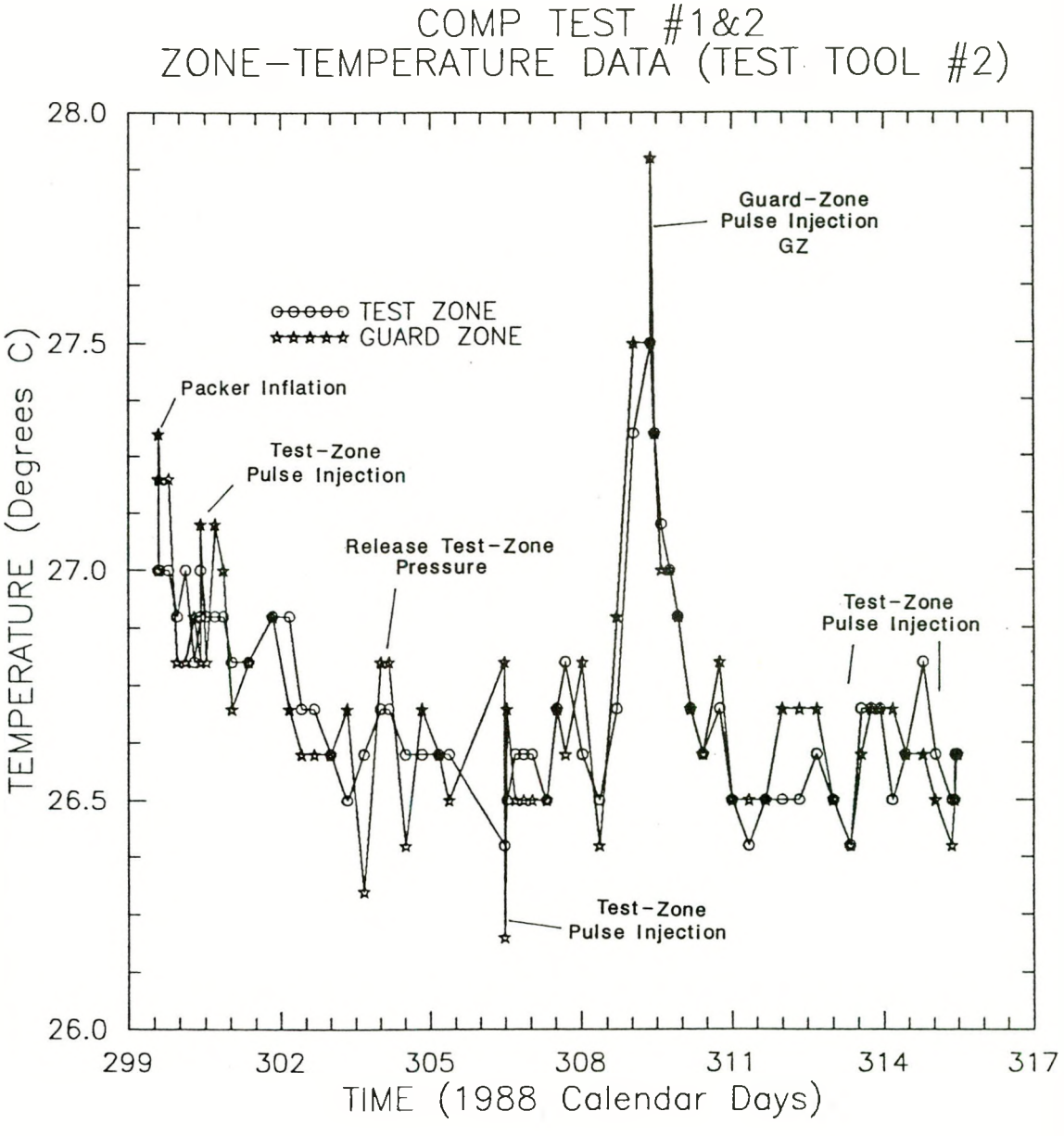
Zone Pressures for Compliance Test COMP 1 & 2, Multipacker Test Tool #2, Borehole S1P71, Permeability-Testing Sequence S1P71-A

INTERA Technologies

Figure 7.29



Drawn by INTERA	Date 11/17/89	Packer Pressures for Compliance Test COMP 1 & 2, Multipacker Test Tool #2, Borehole S1P71, Permeability–Testing Sequence S1P71–A
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.30



Drawn by INTERA	Date 11/17/89	Zone Temperatures for Compliance Test COMP 1 & 2, Multipacker Test Tool #2, Borehole S1P71, Permeability-Testing Sequence S1P71-A
Checked by G.S.	Date 3/30/90	
Revisions	Date	
#105400R062	3/30/90	
INTERA Technologies		Figure 7.31

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APPENDIX A. EQUIPMENT-CALIBRATION DATA

TABLE A1
CALIBRATION DATA FOR TRANSDUCERS FOR PERMEABILITY TESTING IN BOREHOLE C2H01, PERMEABILITY-TESTING SEQUENCES C2H01-A AND C2H01-B:

Multipacker Test Tool:	MPT#1
Unit Tested:	Argillaceous Halite
Test Data File Number:	C2H101,C2H011,C2H013, C2H014,C2H015,C2H016, C2H017,C2H018
Date of Installation:	08/05/88
Date of Removal:	02/09/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
211691	06/02/88	18.8356	8.2808	Test Interval
	03/15/89	18.7831	3.1419	
211690	06/02/88	18.8976	11.0701	Test Packer
	03/15/89	18.7897	12.1597	
211694	06/02/88	18.8981	4.1147	Guard Interval
	03/15/89	18.8524	-0.8624	
211692	06/02/88	19.2151	-2.2216	Guard Packer

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A2
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE C2H01, PERMEABILITY-TESTING SEQUENCE C2H01-C:

Multipacker Test Tool:	MPT#5
Unit Tested:	Marker Bed 139
Test Data File Number:	C2H019,C2H110,C2H111
Date of Installation:	02/16/89
Date of Removal:	05/22/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246911	12/02/88	8.4823	13.3609	Test Interval
	05/23/89	8.5227	10.1956	
211695	12/02/88	18.8876	1.4909	Test Packer
	05/23/89	18.8983	-5.3550	
246920	12/02/88	8.4582	6.0974	Guard Interval
	05/23/89	8.6235	3.9155	
246914	12/02/88	8.5049	3.6821	Guard Packer
	05/23/89	8.6009	1.8640	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-09	01/19/89	-0.0766	0.2546	R1
	05/23/89	-0.0605	0.2490	
R-07	10/27/88	-0.0652	0.2496	R2
	05/23/89	-0.0645	0.2515	
R-06	10/27/88	-0.0663	0.2521	R3
	05/23/89	-0.0646	0.2545	
A-03	12/27/88	-0.7657	2.5458	A1
	05/23/89	-0.7701	2.5509	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A3
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE C2H02:

Multipacker Test Tool:	MPT#4
Unit Tested:	Marker Bed 139
Test Data File Number:	C2H021,C2H022,C2H023, C2H024
Date of Installation:	04/21/89
Date of Removal:	12/18/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246912	11/30/88	8.5096	-3.9396	Test Interval
	01/18/90	8.9715	-10.4488	
246909	11/30/88	8.4923	7.3055	Test Packer
	01/18/90	8.9963	-4.1212	
246910	11/30/88	8.4962	4.0616	Guard Interval
	01/18/90	8.6792	0.5702	
246913	11/30/88	8.4582	-0.6892	Guard Packer
	01/18/90	8.9368	-0.9451	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-03	04/03/89	-0.0625	0.2532	R1
	01/03/90	-0.0646	0.3144	
R-08	10/27/88	-0.0761	0.2477	R2
	01/03/90	-0.0951	0.2478	
R-02	12/08/88	-0.0696	0.2531	R3
	01/03/90	-0.0719	0.2459	
A-02	04/20/89	-0.7723	2.5325	A1
	01/04/90	-0.7699	2.5419	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A4
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE C2H03:

Multipacker Test Tool:	MPT#5
Unit Tested:	Clear Halite
Test Data File Number:	C2H031
Date of Installation:	08/28/89
Date of Removal:	09/29/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
214466	05/31/89	8.5034	19.7761	Test Interval
	10/13/89	8.4728	19.7458	
214048	05/31/89	8.5236	8.0183	Test Packer
	10/13/89	8.5091	9.4858	
214470	05/31/89	8.4985	6.0618	Guard Interval
	10/13/89	8.4616	6.5036	
212358	05/31/89	8.4791	-0.2648	Guard Packer
	10/13/89	8.4734	-0.3746	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-09	07/20/89	-0.0635	0.2518	R1
	10/26/89	-0.0639	0.2515	
R-07	07/19/89	-0.0630	0.2525	R2
	10/26/89	-0.0654	0.2488	
R-06	07/19/89	-0.0648	0.2545	R3
	10/26/89	-0.0660	0.2506	
A-03	07/19/89	-0.7911	2.5476	A1
	10/26/89	-0.7869	2.5461	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A5
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE N4P50:

Multipacker Test Tool:	MPT#3
Unit Tested:	Anhydrite "c", Clay B
File Number:	N4P501
Date of Installation:	12/20/88
Date of Removal:	01/03/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246912	11/30/88	8.5096	-3.9396	Test Interval
	01/18/90	8.9715	-10.4488	
246909	11/30/88	8.4923	7.3055	Test Packer
	01/18/90	8.9963	-4.1212	
246910	11/30/88	8.4962	4.0616	Guard Interval
	01/18/90	8.6792	-0.5702	
246913	11/30/88	8.4582	-0.6892	Guard Packer
	01/18/90	8.9368	-0.9451	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-06	10/27/88	-0.0663	0.2521	R1
	05/23/89	-0.0646	0.2545	
R-01	10/27/88	-0.0831	0.2534	R2
	09/12/89	-0.0832	0.2548	
R-10	10/27/88	-0.0688	0.2542	R3
	09/12/89	-0.0689	0.2552	
A-04	10/28/88	-0.7648	2.6369	A1
	09/13/89	-0.7837	2.5457	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A6
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE N4P50:

Multipacker Test Tool:	MPT#4
Unit Tested:	Anhydrite "c", Clay B
Test Data File Number:	N4P502
Date of Installation:	01/06/89
Date of Removal:	02/06/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246912	11/30/88	8.5096	-3.9396	Test Interval
	01/18/90	8.9715	-10.4488	
246909	11/30/88	8.4923	7.3055	Test Packer
	01/18/90	8.9963	-4.1212	
246910	11/30/88	8.4962	4.0616	Guard Interval
	01/18/90	8.6792	0.5702	
246913	11/30/88	8.4582	-0.6892	Guard Packer
	01/18/90	8.9368	-0.9451	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-03	10/27/88	-0.0652	0.2523	R1
	04/03/89	-0.0625	0.2532	
R-08	10/27/88	-0.0761	0.2477	R2
	01/03/90	-0.0951	0.2478	
R-02	12/08/88	-0.0696	0.2531	R3
	01/03/90	-0.0719	0.2459	
A-02	10/28/88	-0.7606	2.5416	A1
	04/20/89	-0.7723	2.5325	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A7
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE S0P01:

Multipacker Test Tool:	MPT#3
Unit Tested:	Argillaceous Halite
Test Data File Number:	S0P011,S0P012,S0P013
Date of Installation:	01/13/89
Date of Removal:	08/29/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246916	12/02/88	8.5020	3.2494	Test Interval
	09/11/89	8.4886	2.4498	
246917	12/02/88	8.4864	1.4055	Test Packer
	09/11/89	8.9968	-18.3610	
246918	12/02/88	8.5086	10.2719	Guard Interval
	09/11/89	8.6139	6.3858	
246919	12/02/88	8.4701	9.6490	Guard Packer
	09/11/89	8.9801	-7.5226	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-04	10/27/88	-0.0725	0.2525	R1
	09/12/89	-0.0726	0.2552	
R-01	10/27/88	-0.0831	0.2534	R2
	09/12/89	-0.0832	0.2548	
R-10	10/27/88	-0.0688	0.2542	R3
	09/12/89	-0.0689	0.2552	
A-04	10/28/88	-0.7648	2.6369	A1
	09/13/89	-0.7837	2.5457	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A8
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE S1P71, PERMEABILITY-TESTING SEQUENCE S1P71-A:

Multipacker Test Tool:	MPT#2
Unit Tested:	Argillaceous Halite
Test Data File Number:	S1P711,S1P712,S1P713, S1P714
Date of Installation:	11/11/88
Date of Removal:	05/03/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
214466	10/05/88	8.4971	12.7134	Test Interval
	05/31/89	8.5034	19.7761	
214048	10/05/88	8.5390	2.4230	Test Packer
	05/31/89	8.5236	8.0183	
214470	10/05/88	8.4713	3.3937	Guard Interval
	05/31/89	8.4985	6.0618	
212358	10/05/88	8.4974	-4.5845	Guard Packer
	05/31/89	8.4791	-0.2648	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-05	10/10/88	-0.0646	0.2515	R1
	05/26/89	-0.0635	0.2524	
R-11	10/10/88	-0.0662	0.2530	R2
	05/31/89	-0.0658	0.2541	
R-12	10/10/88	-0.0838	0.2431	R3
	05/31/89	-0.0883	0.2435	
A-01	10/10/88	-0.7621	2.5652	A1
	05/09/89	-0.7580	2.5450	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

TABLE A9
CALIBRATION DATA FOR TRANSDUCERS AND LVDTs FOR PERMEABILITY TESTING IN BOREHOLE S1P71:

Multipacker Test Tool:	MPT#2
Unit Tested:	Argillaceous Halite
Test Data File Number:	S1P715
Date of Installation:	06/19/89
Date of Removal:	07/11/89

TRANSDUCERS

Serial ID No.	Calibration Date	Sensitivity (psi/mV)	Intercept (psi)	Zone Monitored
246911	05/23/89	8.5227	10.1956	Test Interval
	06/04/90	8.5063	15.3627	
211695	05/23/89	18.8983	-5.3550	Test Packer
	06/04/90	18.9173	1.7447	
246920	05/23/89	8.6235	3.9155	Guard Interval
	06/04/90	8.5341	11.1327	
246914	05/23/89	8.6009	1.8640	Guard Packer
	06/04/90	8.9569	-6.6214	

LVDT'S

Serial ID No.	Calibration Date	Sensitivity (cm/V)	Intercept (cm)	Guage
R-09	05/23/89	-0.0605	0.2490	R1
	07/20/89	-0.0635	0.2518	
R-07	05/23/89	-0.0645	0.2515	R2
	07/19/89	-0.0630	0.2525	
R-06	05/23/89	-0.0646	0.2545	R3
	07/19/89	-0.0648	0.2545	
A-03	05/23/89	-0.7701	2.5509	A1
	07/19/89	-0.7911	2.5476	

1. Calibration information shows pre-test and post-test calibration dates and calculated sensitivity coefficients for those calibrations.
2. Sensitivity and intercept values are rounded to four significant figures.
3. Multiply sensitivity coefficients and intercepts in psi/mV and psi by 0.006895 to obtain MPa/mV and MPa, respectively.

APPENDIX B. CORE DESCRIPTIONS FOR TEST BOREHOLES

TABLE B1
CORE DESCRIPTION FOR BOREHOLE C2H01

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WIPP CORE-LOG INVENTORY

LITERA FORM 1400

BOREHOLE: C2H01

LOCATION: Room C2

COORDINATES: N 11172.9560 E 8408.2326

ELEVATION: 1306.4351 ft

DIAMETER: 4-inch

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear D65

LOGGED BY: PSD & RMR

DATE: 7/23/90

DRILLING DATE: 8-4-88, 12-13-89, 12-15-89

DRILLING TIME: 4.5 hrs.

DRILLER: D. Parrish

DRILLING CO.: WIPP Exp Ops

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
09:00	#1	0.0	100			0.00-0.68m Halite, coarsely crystalline, colorless, argillaceous, intercrystalline gray clay	Map Unit 7
09:15		0.5		x x		0.68-0.90m Halite, medium to finely crystalline, orange, minor polyhalite	
09:25	#2	1.0	99			0.90-1.96m Halite, coarsely crystalline, colorless; minor intercrystalline gray clay and trace polyhalite.	Map Unit 6
09:40		1.5					
09:52	#3	2.0	100			1.96-2.58m Argillaceous halite, coarsely crystalline, trace polyhalite	Map Unit 5
10:10		2.5					

PAGE 2 OF 4

WIPP CORE-LOG INVENTORY

LITERA FORM 1400

BOREHOLE: C2H01
LOCATION: Room C2
COORDINATES: N11172.4560 ; E8408.2326
ELEVATION: 1306.4351 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/23/90
DRILLING DATE: 8-4-88, 12-13-89, 12-15-89
DRILLING TIME: 4.5 hrs
DRILLER: D. Parrish
DRILLING CO.: WIPP Exp. Ops.

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear D6S

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		2.5				See description previous page	Map Unit 5
10:25	#4	3.0	100			2.58 - 3.15 m Argillaceous halite, medium to finely crystalline, clay seam at 2.7 m; clay at 2.82 is not continuous.	Map Unit 4
10:40						3.15 - 3.84 m Polyhalitic halite, medium to coarsely crystalline, orange, clean.	Map Units 3 & 1
11:00	#5	3.5	100				
11:13		4.0				3.84 - 6.37 m Argillaceous halite, medium to coarsely crystalline; clay content decreases downsection, polyhalite increases down section.	
12:15	#6	4.5	100			Clay Parting 4.59 m	Map Unit Ø
		5.0				Clay Parting 4.88 m	

PAGE 3 OF 4

WIPP CORE-LOG INVENTORY

ITEM FORM 1400

BOREHOLE: C2H01
LOCATION: Room C2
COORDINATES: N11172.9560 E8408.2326
ELEVATION: 1306.4351 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/23/90
DRILLING DATE: 8-4-88, 12-13-89, 12-15-89
DRILLING TIME: 4.5 hrs
DRILLER: D. Parrish

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear D65

DRILLING CO.: WIPP Exp Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
12:40	#6	5.0	100				
13:03	#7	5.5	100			(see description previous page)	Map Unit
13:33						End Drilling 8/4/89	
08:30	#1	6.0	100			Begin Drilling 3/13/89 contact with below is gradational	∅
08:55							
09:00	#2	6.5	100			6.37 - 6.80m Polyhalitic halite, coarsely crystalline, orange, minor gray clay	Polyhalitic halite
09:20		7.0				6.80 - 7.76 m Anhydrite, transition zone of halite crystals mixed with anhydrite ends at 7.1 m. 7.1 - 7.76 m is gray anhydrite	MB-139
09:30	#3		100				
		7.5					

PAGE 4 OF 4

WIPP CORE-LOG INVENTORY

LITERA FORM 1400

BOREHOLE: C2H01
LOCATION: Room C2
COORDINATES: N11172.9560 E8408.2326
ELEVATION: 1306.4351 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/23/90
DRILLING DATE: 8-4-88, 12-13-89, 12-15-89
DRILLING TIME: 4.5 hrs
DRILLER: D. Parrish
DRILLING CO.: WIPP Exp Ops.

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear D6 S

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
10:45	#3	7.5	100			(see description previous page)	MB-139
2-15-89 09:45		8.0	∅			7.76-8.97m Polyhalitic halite, coarsely crystalline, orange, blebs of orange anhydrite decreasing downsection.	Hole was drilled with a drag bit from 7.6m to 8.97m, no core taken. Polyhalitic halite
		8.5					
		9.0					
		9.5					
		10.0					

TABLE B2
CORE DESCRIPTION FOR BOREHOLE C2H02

PAGE 1 OF 5

WIPP CORE-LOG INVENTORY

Litteiki FORM 1400

BOREHOLE: C2H07
LOCATION: Room C2
COORDINATES: N11172.7501 E8399.5096
ELEVATION: 1306.5310 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/24/90
DRILLING DATE: 4/12-13/89
DRILLING TIME: See below
DRILLER: R. Lewis
DRILLING CO.: WIPP Exp. Ops.

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear Db5

	TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
4/12/89	14:00	#1	0.0	100			0.00 - 0.28m Halite, medium to coarsely crystalline, gray intercrystalline clay.	Map Unit 7
4/13/89	14:40		0.5				0.28 - 2.15m Halite, medium to coarsely crystalline, colorless to orange, minor polyhalite. Polyhalite increases from 1.25m to 2.15m. Contact with below is gradational.	Map Unit 6
	08:35	#2	1.0	100	X			
	09:00							
	09:20	#3	1.5	64	X			
	10:05		2.0		X			
	10:15	#4		100			2.15 - 2.35m Halite, coarsely crystalline, colorless	
			2.5				2.35 - 2.90m (see next page)	Map Unit 5

PAGE 2 OF 5

WIPP CORE-LOG INVENTORY

LITTELFUSE FORM 1400

BOREHOLE: C2H02
LOCATION: Room C2
COORDINATES: N 11172.7501 E 8399.5096
ELEVATION: 1306.5310 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/24/90
DRILLING DATE: 4/12-13/89
DRILLING TIME: see below
DRILLER: R. Lewis

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear DbS

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
	#4	2.5	100			2.35-2.90m Argillaceous halite, fine to coarsely crystalline; clay parting at 2.35m	Map Unit 5
10:30		3.0				2.90-4.55m Podular, muddy halite, fine to coarsely crystalline, gray to orange, clean to argillaceous, minor polyhalite.	Map Unit 4
10:40	#5	3.5	100				
10:50							
10:55	#6	4.0	100				
		4.5					
11:05						4.55-4.98m Halite, medium crystalline, orange, polyhalitic	Map Unit 3 Map Unit 2 occurs as a clay parting at 4.98m
12:15	#7	5.0	100				

PAGE 3 OF 5

WIPP CORE-LOG INVENTORY

LITERA FORM 1400

BOREHOLE: C2HØ2
LOCATION: Room C2
COORDINATES: N 11172.3501 E 8399.5096
ELEVATION: 1306.5310 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/24/90
DRILLING DATE: 4/12-13/89
DRILLING TIME: See below
DRILLER: R. Lewis

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear Dbs

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		5.0				4.98 - 5.15 m Polyhalitic halite, coarsely crystalline, colorless to orange	Map Unit 1
12:30	#7	5.5	100			5.15 - 8.15 m Halite, coarse to medium to fine down section, colorless to gray, minor clay.	Map Unit Ø
12:35	#8,9,10	6.0	65			core loss 5.56 - 5.84 m	
13:20						core loss 6.35 - 6.40 m	
13:25	#11	6.5	93			6.40 - 6.55 m gradational occurance of polyhalite	
13:40		7.0					
13:50	#12		100				
		7.5					

PAGE 4 OF 5

WIPP CORE-LOG INVENTORY

LITERA FORM 1400

BOREHOLE: C2HØ2
LOCATION: Room C2
COORDINATES: N 11172.7501 E 8399.5096
ELEVATION: 1306.5310 ft
DIAMETER: 4-inch

LOGGED BY: PSD & RMR
DATE: 7/24/90
DRILLING DATE: 4/13-17/89
DRILLING TIME: See below
DRILLER: R. Lewis
DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear Db5
DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		7.5					
14:05	#12		100			5.15 - 8.15 m (see previous page)	Map Unit Ø
14:15		8.0					
	#13	8.5	100	x x x x x x		8.15 - 9.20 m Polyhalitic halite, coarsely crystalline, clear to orange, contact with above is sharp.	Polyhalitic halite
14:40							
4-17-89 08:55	#14	9.0	100	x x			
		9.5				9.20 - 9.60 m Anhydrite, microcrystalline, gray, contact with above is sharp.	MB-139
09:05							
09:20	#15		100	x x		9.60 - 9.80 m Polyhalitic halite, coarsely crystalline, colorless.	Polyhalitic halite
		10.0				9.80 - 10.20 m Anhydrite, gray to orange, minor halite	MB-139

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WIPP CORE-LOG INVENTORY

LITERAL FORM 1400

BOREHOLE: C2HØ2

LOCATION: Room C2

COORDINATES: N 11172.7501 E 8399.5096

ELEVATION: 1306.5310 ft

DIAMETER: 4-inch

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear Db5

LOGGED BY: PSD & RMR

DATE: 7/24/90

DRILLING DATE: 4/17/89

DRILLING TIME: see below

DRILLER: R. Lewis

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		10.0					
	#15		100			(see previous page)	MB-139
09:30						10.20-10.68m Anhydrite, microcrystalline, gray-brown. core loss - 10.48 - 10.60m coreloss - 10.67-10.68m	
09:45	#16	10.5	57				
09:55							
10:05	#17		89			10.68-10.86m Halite, finely crystalline, colorless to orange	Halite
10:20							
		11.0					
		11.5					

TABLE B3
CORE DESCRIPTION FOR BOREHOLE C2H03

PAGE 1 OF 4

CORE-LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: Room C2

COORDINATES: N 11176.1429 E 8399.4129

ROOM: C2

MINE: WIPP

BOREHOLE: C2H03

ELEVATION: 1313.1029 ft

DIAMETER: 4"

COLLAR:

CASING:

CORE LOGGED BY: RMR & PSD

DATE: 8/22/89 - 8/23/89

DRILLING TIME: 8 hrs

DRILLER: Dale Parrish

DRILLING METHOD(S): Air rotary

DRILLING APPARATUS: Longyear D-65

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
9:15	#1	0.0	100 %			0 - 1.05 m Halite, medium crystalline, pale yellow, trace intercrystalline gray clay.	The center point of C2H03 is 0.33 m below the bottom of anhydrite 'A' and ~1.5 m above the top of anhydrite 'B'. The borehole appears to be in map unit 9 as described in the GFDAR.
9:24		0.5					
9:30	#2	1.0	82 %			1.05 - 1.5 m Halite, thin clay seam divides core lengthwise. Half is medium crystalline, pale yellow; other half is very coarsely crystalline, clear, minor gray clay and trace polyhalite.	
9:45		1.5					
10:25	#3	2.0	100 %			1.5 - 3.85 m Halite, pale yellow, medium crystalline, minor intercrystalline gray clay.	Core loss: 1.22 - 1.37 m
		2.5					

PAGE 2 OF 4

CORE-LOG INVENTORY

LITERAL FORM 1400

PROJECT: WIPP

LOCATION: Room C2

COORDINATES: N 11176.429 E 8399.4129

ROOM: C2

MINE: WIPP

BOREHOLE: C2H03

ELEVATION: 1313.1029ft

DIAMETER: 4"

COLLAR:

CASING:

CORE LOGGED BY: RMR & PSD

DATE: 8/22/89 - 8/23/89

DRILLING TIME: 8 hrs.

DRILLER: Dale Parrish

DRILLING METHOD(S): Air rotary

DRILLING APPARATUS: Longyear D-65

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
10:35	#3	2.5				1.5 - 3.85 m (See description previous page)	
10:40	#4	3.0	100%				
10:56							
11:01	#5	3.5	100%			3.85 - 3.95 m	3.85 - 3.95 m Halite, clear, very coarsely crystalline, ~20% intercrystalline gray clay
		4.0				3.95 - 4.4 m Halite, pale yellow, medium crystalline, minor intercrystalline gray clay.	
11:13							
13:10	#6	4.5	100%			4.4 - 4.75 m Halite, clear, very coarsely crystalline, intercrystalline gray clay mixed with halite, medium crystalline pale yellow, minor clay	
						4.75 - 9.1 m (see description next page)	
		5.0					

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CORE–LOG INVENTORY

LITERAL FORM 1400

PROJECT: WIPP
LOCATION: RM C2
COORDINATES: N 11176.1429 E 8399.4129
ROOM: C2
MINE: WIPP

BOREHOLE: C2H#3
ELEVATION: 1313.1029ft
DIAMETER: 4"
COLLAR:
CASING:

CORE LOGGED BY: RMR & PSD
DATE: 8/22/89 - 8/23/89
DRILLING TIME: 8 hrs.
DRILLER: Dale Parrish

DRILLING METHOD(S): Air rotary
DRILLING APPARATUS: Longyear D-65

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
13:25	#6	5.0	100			4.75 - 9.14m Halite, pale yellow, medium crystalline, trace gray clay and polyhalite	
13:32	#7	5.5	95%				Core loss: 5.872-5.905m
13:45							
13:50	#8	6.0	100%				
14:10		6.5					
8/23/89	#9	7.0	100%				
		7.5					

PAGE 4 OF 4

CORE–LOG INVENTORY

WTEIA FORM 1400

PROJECT: WIPP

LOCATION: Room C2
N11176.1429

COORDINATES: E 8399.4129

ROOM: C2

MINE: WIPP

BOREHOLE: C2HØ3

ELEVATION: 1313.1029ft

DIAMETER: 4"

COLLAR:

CASING:

CORE LOGGED BY: RMR & PSD

DATE: 8/22/89 - 8/23/89

DRILLING TIME: 8 hrs

DRILLER: Dale Parrish

DRILLING METHOD(S): Air rotary

DRILLING APPARATUS: Longyear D-65

DRILLING CO.: WIPP Exp Ops

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		7.5				4.75 - 9.14m (see description previous page)	Borehole C2HØ3 was drilled to a depth of 22.21 feet on 8/22/89. The hole was then deepened to 30 feet on 8-23-89.
	#10	8.0					
			100 %				
	#11	8.5					
12:00		9.0					
		9.5					
		10.0					

TABLE B4
CORE DESCRIPTION FOR BOREHOLE N4P50

PAGE 1 OF 5

CORE-LOG INVENTORY

INTERIM FORM 1400

PROJECT: WIPP

LOCATION: 1420 drift
N 11121.0154

COORDINATES: E 6302.4122

ROOM: 1420 drift near Room 4

MINE: WIPP

BOREHOLE: N4PS Ø

ELEVATION: 1295.3670 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMR & PSD

DATE: 10/22/90

DRILLING DATE: 12.15.88 - 12.16.88

DRILLING TIME: 10 hrs

DRILLER: Dale Parrish

DRILLING CO.: WIPP Exp. Ops.

DRILLING METHOD(S): Air rotary

DRILLING APPARATUS: Longyear D65

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
10:00	#1	0.0	100	-		0.00 - 1.00m Halite, colorless, coarsely crystalline, argillaceous (brown clay), trace polyhalite, contact with below is gradational.	Map unit Ø
10:15		0.5		-			
10:20	#2	1.0	100	x x x x		1.00 - 1.45m Polyhalitic halite, orange/gray, coarsely crystalline, scattered orange anhydrite.	Polyhalitic halite
10:40		1.5					
10:45	#3	2.0	100			1.45 - 2.47m Anhydrite (MB139), gray to orange, microcrystalline; grades from gray to orange at 1.95m and back to gray at 2.28m. Scattered gypsum swallowtails. Possible fracture at 1.55m. Evidence of clay seam E at base of unit.	MB-139
11:00							
11:50	#4	2.5	95				Core loss from 2.415 to 2.455m

PAGE 2 OF 5

CORE-LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: 1420 drift
N 11121.0154
COORDINATES: E 6302.4122
1420 drift
ROOM: near Room 4
MINE: WIPP

BOREHOLE: N4PS0

ELEVATION: 1295.3670 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMR & PSD

DATE: 10/22/90

DRILLING DATE: 12.15.88 - 12.16.88

DRILLING TIME: 10 hrs

DRILLER: Dale Parrish

DRILLING CO.: WIPP Exp. Ops

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear DB5

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		2.5					
12:00	#4	3.0	95			2.47 – 3.45 m Halite, ~~for~~ colorless to light orange, fine to coarsely crystalline, argillaceous (gray clay), increasing polyhalite with depth, contact with above is sharp.	Halite
12:10	#5		100				
12:25		3.5					
12:45	#6		100	X X X		3.45 - 4.83 m Polyhalitic halite, orange, medium to coarsely crystalline; blebs of orange anhydrite occur at ~ 4.65 m; halite texture becomes very coarse from 4.65 - 4.83 m. Clay D occurs at the base of this unit and is ~ 2mm thick.	Polyhalitic Halite
13:05							
13:15	#7	4.0	100	X X X X X			
13:35		4.5					
13:45	#8	5.0	100			4.83 - 5.26 m see next page	Halite

PAGE 3 OF 5

CORE-LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: 1420 drift

COORDINATES: N111121.0154 E6302.4122

ROOM: 1420 drift near Room 4

MINE: WIPP

BOREHOLE: N4PS0

ELEVATION: 1295.3670 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMR & PSD

DATE: 10/22/90

DRILLING DATE: 12.15.88 - 12.16.88

DRILLING TIME: 10 hrs

DRILLER: Dale Parrish

DRILLING CO.: WIPP Exp. Ops.

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear DB5

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		5.0				4.83 - 5.26m Halite, colorless-orange, fine-medium crystalline, trace gray clay.	Halite
14:00	#8	5.5	100	X X X		5.26 - 6.55m Polyhalitic halite, colorless coarsely crystalline, scattered orange anhydrite increasing with depth.	Polyhalitic halite
14:10							retrieved no core from run #9 (14:10 - 14:30)
08:30	#10	6.0	100	X X X X			Began run #10 on 12/16/88 @ 08:30
08:45		6.5		X			
08:55	#11	7.0	100			6.55 - 8.15m Halite, orange, medium to coarsely crystalline; minor polyhalite, clay, and anhydrite.	Halite
09:10							
10:55	#12	7.5	100				

PAGE 4 OF 5

CORE–LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: N 1420 drift

COORDINATES: N 11121.0154 E 6302.4122

ROOM: 1420 drift near Room 4

MINE: WIPP

BOREHOLE: N4PS0

ELEVATION: 1295.3670ft

DIAMETER: 4"

COLLAR: _____

CASING: _____

LOGGED BY: RMR & PSD

DATE: 10/22/90 12.15.88–

DRILLING DATE: 12-16-88

DRILLING TIME: 10 hrs

DRILLER: Dale Parrish

DRILLING CO.: WIPP Exp Ops

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear D65

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		7.5				6.55–8.15 m	
11:15	#12		100			see previous page	Halite
12:20		8.0					
	#13		100	X		8.15–9.95 m Polyhalitic halite, orange grading to colorless at 9.55. Thin band of orange anhydrite at 9.76m.	
12:40		8.5		X			
12:45				X			Polyhalitic halite
	#14	9.0	100	X			
13:10				X			
13:20		9.5		X			
	#15		100	X			
13:55				X			
14:05	#16	10.0	81				Core loss: 9.95–10.13

PAGE 5 OF 5

CORE-LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: N 1420 drift

COORDINATES: N 11121.0154 E 6303.4122

ROOM: 1420 drift near Room 4

MINE: WIPP

BOREHOLE: N4PS0

ELEVATION: 1295.3670 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMR & PSD

DATE: 10/22/90

DRILLING DATE: 12.15.88 - 12.16.88

DRILLING TIME: 10 hrs

DRILLER: Dale Parrish

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear D65

DRILLING CO.: WIPP Exp Ops

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		10.0				9.95 - 10.13 m Core loss	
						10.13 - 10.24 m Anhydrite C, gray, microcrystalline, Anhydrite C clay B at base of unit.	Anhydrite C clay B
14:25	#16	10.5	81			10.24 - 10.87 m Halite, colorless, fine - medium crystalline, argillaceous, gray clay decreasing with depth.	Halite
		11.0					

TABLE B5
CORE DESCRIPTION FOR BOREHOLE S0P01

Page 1 of 3

CORE-LOG INVENTORY

INTERA Technologies
FORM I 400

PROJECT: WIPP
LOCATION: S 1300 drift N8391.9752
COORDINATES: E 7156.5519
ROOM: S 1300
MINE: WIPP

BOREHOLE: SDP01
ELEVATION: 1258.6284 ft
DIAMETER: 4"
COLLAR:
CASING:

CORE LOGGED BY: Re-logged by: PSD & RMR
DATE: 4/26/90
DRILLING TIME: 2.5 hrs
DRILLER: Ron Lewis

DRILLING METHOD(S): Air Rotary
DRILLING APPARATUS: Longyear D65

DRILLING COMPANY:
WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
						0.0-0.05 Road Fill	
12:15	1	0.5	100			0.05-0.45: Clear Coarse Crystalline Halite	Map Unit "O"
12:30							
12:35	2	1.0	100			0.45-1.52: Clear Coarse Crystalline Halite with minor Polyhalite; contact with below is sharp and non-planar	Polyhalitic Halite
12:55							
13:00	3	1.5	100			1.52-1.80: Orange Coarse Crystalline Halite with minor Polyhalite; Contact w/below: sharp-non-planar	
		2.0				1.80-2.755: Orange-Gray microcrystalline anhydrite, laminar to ~~~ convoluted. Contact with Below is irregular non-planar and ~~sharp~~ sharp. Contact marked w/ coating of gray clay; clay "E"	Anhydrite (MB-139)
13:15							
13:20	4	2.5	100				

Page 2 of 3

CORE-LOG INVENTORY

INTERA Technologies
FORM: I 400

PROJECT: WIPP
LOCATION: S 1300 drift
N 8391.9752
COORDINATES: E 7156.5519
ROOM: S-1300 drift
MINE: WIPP

BOREHOLE: SDP01
ELEVATION: 1258.6284ft
DIAMETER: 4"
COLLAR:
CASING:

CORE LOGGED BY: Re-logged by FSD RMR
DATE: 4/26/90
DRILLING TIME: 2.5 hrs
DRILLER: R. Lewis
DRILLING COMPANY: Ex. Ops

DRILLING METHOD(S): rotary/air
DRILLING APPARATUS: Longyear 06 5

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
	4		100			The thickness of clay "E" at the contact was not measurable	Anhydrite (MB-139)
13:35						2.755 - 2.84 Clear Coarse Halite	
13:40	5	3.0	100			2.84 - 3.70: Pink and Clear fine grained (finely crystalline) halite with non-planar irregular "veils" of gray clay interspersed throughout, no definite seams of clay. Contact with below is gradational	Halite
13:55		3.5					
14:00	6	4.0	100			3.70 - 4.15: Pink Coarse Crystalline Halite w/ veils of gray clay and minor-minor polyhalite	
14:15						4.15 - 4.70: Contact w/ above unit is sharp, non-planar defined by thin (<.2 cm) gray clay. Pink Coarse Crystalline halite and polyhalite increasing down section	Poly halitic Halite
14:20	7	4.5	100				
14:30							
14:35	8		100			4.70 - 5.16: Contact w/ above defined by pockets (.5x.5 cm) of anhydrite (see next page)	
14:45							
13:00							

PAGE 3 OF 3

CORE–LOG INVENTORY

LITERA FORM 1400

PROJECT: WIPP

LOCATION: S 1300 drift
N 8391.9752

COORDINATES: E 7156.5519

ROOM: S 1300 drift

MINE: WIPP

BOREHOLE: SDPO1

ELEVATION: 1258.6284 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: TSD & RMR

DATE: 4/26/90

DRILLING DATE: 1/11/89

DRILLING TIME: 2.5 hrs

DRILLER: Ron Lewis

DRILLING METHOD(S): Air Rotary

DRILLING APPARATUS: Longyear D65

DRILLING CO.: WIPP Exp Ops

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
13:05	9	5.0	100			Pink Coarse halite and polyhalite. Globular, discontinuous blebs of orange anhydrite increase down section. Base of core is angular "natural" break along Clay D. Clay D coats the base of the core and reaches a maximum thickness of 1 cm.	Polyhalitic Halite Clay D

TABLE B6.1
CORE DESCRIPTION FOR BOREHOLE S1P71

PAGE 1 OF 2

CORE-LOG INVENTORY

WTS-LW FORM 1400

PROJECT: WIPP

LOCATION: Panel 1, Rm 7
N 7915.6548
COORDINATES: E 8226.5159

ROOM: 7

MINE: WIPP

BOREHOLE: SIP71

ELEVATION: 1256.8647 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMR & PSD

DATE: 7/31/90
11/10/88

DRILLING DATE:

DRILLING TIME: 4hr 5min

DRILLER: Dale Parrish

DRILLING METHOD(S): Rotary Air

DRILLING APPARATUS: Longyear D65

DRILLING CO.: WIPP Exp. Ops.

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
11/10/88		0.0					
9:05	#1		100			0.0-0.46 Halite, coarsely crystalline, minor intercrystalline brown clay. Contact with below is gradational.	(Map Unit Ø)
9:20		0.5					
9:25	#2		100			0.46-0.96 Polyhalitic halite, clear, coarsely crystalline, minor intercrystalline clay. Polyhalite increases with depth.	(Polyhalitic halite)
9:35							
9:50	#3	1.0	100			0.96-1.40 Polyhalitic halite, red-orange, coarsely crystalline.	
10:05							
10:20	#4	1.5	100			1.40-2.25 Anhydrite, orange-red, microcrystalline. Contact with above is angular and sharp. Isolated halite crystals (1-2cm) occur from 1.7-1.9 m. Contact with halite below is broken up. No evidence of gray clay	(Marker bed 139)
10:35		2.0					
10:40	#5		100			2.25-3.20 (See next page)	(Halite)
		2.5					

PAGE 2 OF 2

CORE-LOG INVENTORY

LITERAL FORM 1400

PROJECT: WIPP

LOCATION: Panel 1, Rm 7
N 7915.6548

COORDINATES: E 8226.5159

ROOM: 7

MINE: WIPP

BOREHOLE: SIP7L

ELEVATION: 1256.8647 ft

DIAMETER: 4"

COLLAR:

CASING:

LOGGED BY: RMB, PSD

DATE: 7/31/90
11/10/88

DRILLING DATE

DRILLING TIME: 4hr 5min

DRILLER: Dale Parrish

DRILLING CO.: WIPP Exp. Ops.

DRILLING METHOD(S): Rotary Air

DRILLING APPARATUS: Longyear D65

TIME	CORE RUN	DEPTH (M)	%RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
11:00	#5	2.5	100			2.25-3.20 Polyhalitic halite and halite, orange, medium to coarsely crystalline, discontinuous clay seams up to 0.5 cm throughout this zone. Clay grades from gray to brown with depth.	
12:10	#6	3.0	100	X X X		3.25-4.53 Polyhalitic halite, clear to orange, trace of clay. Clay 'D' appears at the bottom of this unit from 4.53-4.56	→ 3.20-3.25 Halite, orange, finely crystalline, no clay. Core loss from 4.18-4.21 (polyhalitic halite) Clay D
12:40		3.5					
12:55	#7	4.0	96	X X X			
13:10		4.5		X			

TABLE B6.2
DEPTH TO WATER VERSUS VOLUME ADDED DURING FILLING OF S1P71

TABLE B6.2
DEPTH TO WATER VERSUS VOLUME ADDED DURING FILLING OF S1P71

LITERS ADDED	DEPTH TO WATER (m)	LITERS ADDED	DEPTH TO WATER (m)
1	4.43	17	2.61
2	4.35	18	2.49
3	4.225	19	2.37
4	4.11	20	2.25
5	4.00	21	2.135
6	3.89	22	2.02
7	3.77	23	1.90
8	3.65	24	1.79
9	3.53	25	1.67
10	3.415	26	1.56
11	3.30	27	1.445
12	3.185	28	1.335
13	3.07	29	1.22
14	2.96	30	1.10
15	2.84	31	0.98
16	2.725		

TABLE B7
CORE DESCRIPTION FOR BOREHOLE P1P01

Page 1 of 3

CORE-LOG INVENTORY

INTERA Technologies
FORM 1400

PROJECT: WIPP
LOCATION:
COORDINATES:
ROOM: 1
MINE:

BOREHOLE: PIPØ1
ELEVATION:
DIAMETER: 4"
COLLAR: 5"
CASING:

CORE LOGGED BY: MAB & JBP
DATE: 2-28-89
DRILLING TIME: 6 hours
DRILLER: Rick Ballew
DRILLING COMPANY: WIPP Experimental Operations

DRILLING METHOD(S): rotary / air
DRILLING APPARATUS: Long year D-65

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
08:25	#1	0.0	100	X		0.0 - 0.455 Halite: coarsely crystalline, colorless to Light orange	
08:45				X			
08:50	#2	0.5	100	X		0.455 - 1.185 Halite: Medium to coarsely crystalline, mainly gray in color with small amounts of orange, <5% intercrystalline gray clay	
09:15		1.0		X			
09:25	#3	1.5	100	X		1.185 - 1.980 Halite: coarsely crystalline, gray to Light gray with orange halite crystals dispersed on upper portion, < 5% intercrystalline gray clay	
09:45				X			
10:00	#4	2.0		X		1.980 - 3.0 Halite: Coarsely crystalline, clear to Light gray, < 5% intercrystalline gray clay	
		2.5		X			

Page 2 of 3	CORE-LOG INVENTORY	INTERA Technologies FORM 1400

PROJECT: WIPP	BOREHOLE: PIP#1	CORE LOGGED BY: MAB & JBP
LOCATION:	ELEVATION:	
COORDINATES:	DIAMETER: 4"	DATE: 2-28-89
ROOM: 1	COLLAR: 5"	DRILLING TIME: 6 hours
MINE: WIPP	CASING:	DRILLER: Rick Ballew
DRILLING METHOD(S): rotary/air		DRILLING COMPANY: WIPP
DRILLING APPARATUS: Longyear D-65		Experimental Operations

TIME	CORE RUN	DEPTH (m) 2.5	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
10:20	#4		100			(SEE Page 1)	
10:30	#5	3.0	100			3.0 – 3.52 Halite: Medium to finely crystalline, orange to gray, small areas of polyhalite crystals	
10:50		3.5					
12:15	#6	4.0	100			3.52 – 4.185 Halite: coarsely crystalline, orange to clear, large polyhalite crystals mixed throughout, <½% intercrystalline clay	
12:35						4.185 – 4.60 Halite: Medium to coarsely crystalline, gray. color, <5% intercrystalline gray clay	
12:40	#7	4.5					
		5.0				(SEE Page 3)	

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CORE-LOG INVENTORY

INTERA Technologies
FORM 1400

PROJECT: WIPP
LOCATION:
COORDINATES:
ROOM: 1
MINE: WIPP

BOREHOLE: PIPØ1
ELEVATION:
DIAMETER: 4"
COLLAR: 5"
CASING:

CORE LOGGED BY: MAB & JBP
DATE: 2-28-89
DRILLING TIME: 6 hours
DRILLER: Rick Ballew
DRILLING COMPANY: WIPP Experimental Operations

DRILLING METHOD(S): Rotary / air
DRILLING APPARATUS: Longyear D-65

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
		5.0					
13:10	#7		100	X		4.60 - 6.055 Halite: coarsely crystalline, colorless to light orange, small polyhalite crystals dispersed throughout, ~1½% intercrystalline gray clay overall	* 5.0 - 5.3 higher clay content - ≈ 5%
13:15	#8	5.5	100	X			* 5.4 - 5.65 increase in orange, medium sized halite crystals
13:35				X			
13:50	#9	6.0	100	X			
14:00		6.5					

TABLE B8
CORE DESCRIPTION FOR BOREHOLE P4P30

Page 1 of 2

CORE-LOG INVENTORY

INTERA Technologies
FORM 1400

PROJECT: WIPP
LOCATION:
COORDINATES: N10895.1952 E 6248.7431
ROOM: Room 4
MINE: WIPP

BOREHOLE: P4P30
ELEVATION: 1290.6052 ft
DIAMETER: 4"
COLLAR:
CASING: Schedule 40 4" SS, 4.5" OD

CORE LOGGED BY:
RWL & JBP
DATE: 7/7/89
DRILLING TIME: 2.5 hr
DRILLER: Dale Parrish
DRILLING COMPANY: WIPP Experimental Operations

DRILLING METHOD(S): rotary / air
DRILLING APPARATUS: Longyear D-65

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
9:40	#1	0.0	100			0.0-0.3 Halite: medium to coarse crystalline, colorless to light grey, < 1% polyhalite.	
9:45		0.5					
9:53	#2	1.0	100			0.3 - 1.6 Halite: coarse crystalline, colorless to light grey, some bands of darker grey. >2% polyhalite dispersed, increases to 5% at depth	
10:10							
10:19	#3	1.5	100			1.6 - 2.6 Halite: grades to Anhydrite, coarse crystalline, 1.6-1.8m light grey w/ mixed orange, orange in color to 2.6m 2.3 - 2.6m intermixed halite and Anhydrite. Fracture at 2.45m, sparse polyhalite.	
10:35		2.0					
10:46	#4	2.5					

Page 2 of 2

CORE-LOG INVENTORY

INTERA Technologies
FORM 1400

PROJECT: WIPP
LOCATION:
COORDINATES: N 10895.1952 E 6248.7431
ROOM: Room 4
MINE: WIPP

BOREHOLE: P4P30
ELEVATION: 1290.6052ft
DIAMETER: 4"
COLLAR:
CASING: schedule 40 4" SS, 4.5" OD

CORE LOGGED BY: RWL & JBP
DATE: 7/7/89
DRILLING TIME: 2.5 hr
DRILLER: Dale Parrish
DRILLING COMPANY: WIPP Experimental Operations

DRILLING METHOD(S): rotary / air
DRILLING APPARATUS: Longyear D-65

TIME	CORE RUN	DEPTH (m)	% RECOVERED	GEOLOGIC PROFILE	FRACTURES	DESCRIPTION	REMARKS
10:57			100			2.6-3.1 Halite: Anhydrite orange with interspersed streaks of grey. Fracture at 2.85m.	
12:05	#5	3.0				3.1-3.6 Anhydrite: mB 139 light to dark grey in color, streaks of white, fracture producing water at 3.35m, fracture at 3.4m.	fractures encountered. core chips lost.
12:20		3.5				TD core 3.63m TD hole 17'6" 5.33m	water encountered from 3.35m to 3.63m, remainder of hole drilled. hole complete: 14:30
		4.0					
		4.5					
		5.0					

APPENDIX C. TABULATED DATA FOR PERMEABILITY TESTING

TABLE C1
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
218.62990	15:07:03	0.044	0.018	0.064	-0.024	28.8	29.4	-created data
218.63059	15:08:03	0.043	0.019	0.063	-0.023	28.8	29.4	file - C2H101
218.63129	15:09:03	0.042	0.019	0.063	-0.022	28.8	29.4	
218.63210	15:10:13	0.041	0.019	0.062	-0.022	28.8	29.4	-inflated
218.63240	15:10:39	0.040	0.030	0.061	-0.021	28.8	29.4	packers
218.63252	15:10:50	0.041	0.037	0.061	-0.021	28.9	29.4	
218.63263	15:10:59	0.041	0.062	0.062	-0.021	28.9	29.4	
218.63275	15:11:10	0.041	0.079	0.062	-0.021	28.9	29.4	
218.63286	15:11:19	0.041	0.115	0.062	-0.021	28.9	29.5	
218.63298	15:11:29	0.040	0.210	0.062	-0.021	28.9	29.6	
218.63310	15:11:40	0.041	0.237	0.061	-0.021	28.9	29.7	
218.63321	15:11:49	0.040	0.288	0.061	-0.021	28.9	29.9	
218.63333	15:12:00	0.040	0.315	0.061	-0.020	28.9	30.0	
218.63344	15:12:09	0.040	0.334	0.061	-0.021	28.9	30.0	
218.63356	15:12:20	0.040	0.437	0.061	-0.020	28.9	30.0	
218.63367	15:12:29	0.040	0.399	0.060	-0.021	28.9	30.0	
218.63379	15:12:39	0.040	0.433	0.059	-0.020	28.9	30.0	
218.63391	15:12:50	0.040	0.468	0.060	-0.021	28.9	30.0	
218.63402	15:12:59	0.046	0.945	0.059	-0.020	28.9	29.7	
218.63414	15:13:10	0.051	5.156	0.059	-0.020	28.9	29.9	
218.63425	15:13:19	0.047	8.194	0.059	-0.020	28.9	29.9	
218.63437	15:13:30	0.048	10.398	0.060	-0.021	28.9	29.8	
218.63448	15:13:39	0.047	12.238	0.059	-0.020	28.9	29.8	
218.63460	15:13:49	0.044	12.217	0.059	-0.020	28.9	29.8	
218.63472	15:14:00	0.044	12.277	0.059	-0.020	28.9	29.8	
218.63483	15:14:09	0.044	12.560	0.059	-0.020	28.9	29.8	
218.63495	15:14:20	0.044	13.041	0.059	-0.020	28.9	29.8	
218.63506	15:14:29	0.043	12.923	0.059	-0.020	28.9	29.8	
218.63518	15:14:40	0.043	12.686	0.059	-0.020	28.9	29.8	
218.63529	15:14:49	0.043	12.522	0.059	-0.019	28.9	29.7	
218.63541	15:14:59	0.043	12.397	0.059	0.086	28.9	29.7	
218.63553	15:15:10	0.043	12.298	0.059	0.298	28.9	29.7	
218.63564	15:15:19	0.043	12.215	0.059	0.389	28.9	29.7	
218.63576	15:15:30	0.043	12.144	0.059	0.276	28.9	29.7	
218.63587	15:15:39	0.043	12.083	0.059	0.652	28.9	29.7	
218.63599	15:15:50	0.042	12.029	0.063	0.510	28.9	29.7	
218.63610	15:15:59	0.044	12.163	0.068	4.269	28.9	29.7	
218.63622	15:16:09	0.040	11.606	0.098	12.178	28.9	29.7	
218.63634	15:16:20	0.041	11.318	0.070	12.660	28.9	29.7	
218.63645	15:16:29	0.042	11.269	0.065	12.184	28.9	29.7	
218.63657	15:16:40	0.042	11.229	0.064	11.948	28.9	29.7	
218.63668	15:16:49	0.042	11.191	0.064	11.793	28.9	29.7	
218.63680	15:17:00	0.042	11.158	0.064	11.678	28.9	29.7	
218.63691	15:17:09	0.042	11.126	0.063	11.586	28.9	29.7	
218.63749	15:17:59	0.042	11.001	0.064	11.289	28.9	29.7	
218.64790	15:32:59	0.045	10.294	0.066	10.178	29.0	29.7	
218.65832	15:47:59	0.044	10.027	0.067	9.781	29.0	29.7	
218.66873	16:02:58	0.043	9.861	0.067	9.487	29.1	29.7	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
218.67914	16:17:58	0.043	9.739	0.065	9.307	29.1	29.8	
218.68956	16:32:58	0.042	9.643	0.068	9.191	29.1	29.8	
218.69997	16:47:57	0.042	9.564	0.066	9.090	29.1	29.8	
218.71038	17:02:57	0.042	9.495	0.065	9.007	29.2	29.8	
218.75203	18:02:55	0.042	9.296	0.063	8.749	29.2	29.8	
218.79369	19:02:55	0.041	9.160	0.062	8.430	29.2	29.8	
218.83534	20:02:53	0.040	9.071	0.061	8.116	29.2	29.8	
218.87699	21:02:52	0.040	9.006	0.059	7.861	29.2	29.8	
218.91864	22:02:50	0.040	8.955	0.059	7.645	29.2	29.9	
218.96029	23:02:49	0.039	8.911	0.058	7.539	29.3	29.8	
219.00195	00:02:48	0.040	8.870	0.058	7.426	29.3	29.9	
219.08525	02:02:46	0.039	8.803	0.058	7.218	29.3	29.9	
219.16855	04:02:43	0.038	8.755	0.058	7.053	29.3	29.9	-created data file - C2H011
219.25186	06:02:41	0.038	8.715	0.057	6.898	29.3	29.8	
219.33516	08:02:38	0.037	8.684	0.055	6.725	29.3	29.8	
219.41695	10:00:24	0.040	8.493	0.052	6.582			-packers' pressure increased
219.41765	10:01:25	0.040	8.493	0.051	6.581			
219.41834	10:02:25	0.040	8.494	0.052	6.580			
219.41903	10:03:24	0.040	8.494	0.051	6.580			
219.41973	10:04:25	0.040	8.494	0.052	6.579			
219.42056	10:05:36	0.040	8.493	0.051	6.578			
219.42126	10:06:37	0.040	8.494	0.051	6.578			
219.42172	10:07:17	0.040	9.369	0.051	6.571			
219.42218	10:07:56	0.040	10.048	0.052	6.551			
219.42288	10:08:57	0.040	9.839	0.056	10.275			
219.42334	10:09:37	0.040	10.721	0.056	10.789			
219.42357	10:09:56	0.039	10.685	0.056	10.734			
219.42404	10:10:37	0.040	10.642	0.056	10.674			
219.42450	10:11:17	0.040	10.611	0.057	10.629			
219.42519	10:12:16	0.040	10.577	0.056	10.577			
219.42593	10:13:20	0.040	10.550	0.056	10.530			
219.42663	10:14:21	0.040	10.530	0.056	10.492			
219.42732	10:15:20	0.040	10.513	0.056	10.457			
219.42802	10:16:21	0.040	10.499	0.056	10.427			
219.42871	10:17:21	0.040	10.487	0.055	10.395			
219.42940	10:18:20	0.040	10.477	0.055	10.365			
219.43010	10:19:21	0.041	10.467	0.056	10.337			
219.43079	10:20:20	0.041	10.458	0.054	10.309			
219.43218	10:22:20	0.041	10.443	0.055	10.256			
219.43357	10:24:20	0.041	10.430	0.054	10.209			
219.43496	10:26:21	0.041	10.418	0.054	10.170			
219.43635	10:28:21	0.041	10.407	0.055	10.137			
219.43774	10:30:21	0.040	10.397	0.054	10.104			
219.43912	10:32:20	0.040	10.387	0.054	10.071			
219.44051	10:34:20	0.041	10.379	0.055	10.041			
219.44190	10:36:20	0.041	10.371	0.055	10.013			
219.44329	10:38:20	0.040	10.363	0.054	9.988			
219.44468	10:40:20	0.040	10.356	0.054	9.966			

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
219.44607	10:42:20	0.040	10.349	0.054	9.944			
219.44745	10:44:20	0.041	10.343	0.054	9.920			
219.44884	10:46:20	0.040	10.337	0.054	9.893			
219.45023	10:48:20	0.040	10.333	0.054	9.661			
219.45162	10:50:20	0.041	10.330	0.053	9.425			-deflated
219.45231	10:51:20	0.041	10.539	0.048	0.265			guard-zone
219.45301	10:52:20	0.040	10.531	0.052	0.188			packer
219.45370	10:53:20	0.040	10.529	0.052	0.151			
219.45440	10:54:20	0.040	10.525	0.052	0.106			
219.45509	10:55:20	0.041	10.520	0.053	0.071			
219.45578	10:56:19	0.040	10.518	0.053	-0.012			
219.45648	10:57:20	0.040	10.515	0.053	-0.012			
219.45717	10:58:19	0.040	10.511	0.053	-0.013			
219.45787	10:59:20	0.040	10.508	0.053	-0.012			
219.45856	11:00:20	0.040	10.505	0.052	-0.010			
219.45926	11:01:20	0.040	10.502	0.054	-0.010			
219.45995	11:02:20	0.040	10.499	0.052	-0.010			
219.46064	11:03:19	0.040	10.496	0.052	-0.010			
219.46134	11:04:20	0.040	10.499	0.053	-0.010			
219.46203	11:05:19	0.040	10.492	0.053	-0.011			
219.46273	11:06:20	0.040	10.491	0.053	-0.010			
219.46342	11:07:19	0.040	10.488	0.052	-0.009			
219.46411	11:08:19	0.040	10.486	0.053	-0.009			
219.46481	11:09:20	0.040	10.482	0.052	0.258			
219.46550	11:10:19	0.040	10.393	0.068	9.595			-inflated
219.46620	11:11:20	0.040	10.293	0.061	10.024			guard-zone
219.46689	11:12:19	0.040	10.229	0.060	10.700			packer
219.46759	11:13:20	0.040	10.229	0.059	10.420			
219.46828	11:14:19	0.040	10.228	0.059	10.272			
219.46897	11:15:19	0.040	10.227	0.061	10.172			
219.46967	11:16:19	0.040	10.226	0.060	10.097			
219.47036	11:17:19	0.040	10.225	0.059	10.038			
219.47106	11:18:20	0.040	10.223	0.061	9.988			
219.47175	11:19:19	0.040	10.222	0.059	9.946			
219.47245	11:20:20	0.040	10.220	0.059	9.910			
219.47314	11:21:19	0.040	10.219	0.060	9.878			
219.47383	11:22:19	0.040	10.218	0.060	9.849			
219.47453	11:23:19	0.041	10.216	0.060	9.823			
219.47522	11:24:19	0.040	10.215	0.060	9.800			
219.47572	11:25:02	0.040	10.214	0.059	9.784			
219.48613	11:40:02	0.041	10.151	0.059	10.340			-guard-zone
219.49654	11:55:01	0.040	10.129	0.059	10.138			packer
219.53820	12:55:00	0.040	10.052	0.059	9.816			pressure
219.57985	13:54:59	0.040	9.997	0.059	9.668			increased
219.62150	14:54:58	0.040	9.950	0.058	9.572			
219.66315	15:54:56	0.040	9.910	0.057	9.502			
219.70480	16:54:55	0.040	9.874	0.056	9.446			
219.74645	17:54:53	0.039	9.842	0.057	9.399			

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
219.78811	18:54:53	0.039	9.812	0.055	9.358			
219.82976	19:54:51	0.039	9.784	0.056	9.323			
219.87141	20:54:50	0.039	9.759	0.055	9.292			
219.91306	21:54:48	0.039	9.734	0.054	9.263			
219.95471	22:54:47	0.039	9.711	0.054	9.238			
219.99637	23:54:46	0.039	9.690	0.054	9.214			
220.03802	00:54:45	0.039	9.670	0.053	9.193			
220.12132	02:54:42	0.039	9.632	0.053	9.153			
220.20462	04:54:39	0.039	9.598	0.053	9.117			
220.28793	06:54:37	0.039	9.567	0.053	9.085			
220.37123	08:54:34	0.039	9.538	0.054	9.056			
220.45454	10:54:32	0.039	9.511	0.052	9.030			
220.53784	12:54:29	0.040	9.486	0.052	9.005			
220.62114	14:54:26	0.040	9.463	0.052	8.980			
220.70445	16:54:24	0.040	9.440	0.052	8.956			
220.78775	18:54:22	0.040	9.421	0.053	8.934			
220.87105	20:54:19	0.041	9.400	0.054	8.916			
220.95436	22:54:17	0.041	9.380	0.052	8.903			
221.03766	00:54:14	0.041	9.361	0.054	8.891			
221.12097	02:54:12	0.041	9.344	0.053	8.878			
221.20427	04:54:09	0.041	9.327	0.054	8.865			
221.28757	06:54:06	0.041	9.312	0.053	8.852			
221.37088	08:54:04	0.041	9.296	0.053	8.838			
221.41725	10:00:50	0.042	9.288	0.053	8.830			
221.52133	12:30:43	0.042	9.271	0.053	8.815			
221.60555	14:32:00	0.042	9.258	0.054	8.800			
221.61458	14:45:00	0.045	9.254	0.058	8.796	28.9	29.4	-created data
221.62499	14:59:59	0.044	9.254	0.056	8.796	28.9	29.3	file - C2H013
221.62568	15:00:59	0.044	9.254	0.056	8.797	28.9	29.3	-shut in
221.66665	15:59:59	0.043	9.248	0.054	8.793	28.9	29.3	
221.70830	16:59:57	0.043	9.242	0.055	8.789	28.9	29.3	
221.79160	18:59:54	0.044	9.230	0.055	8.780	28.9	29.3	
222.00680	00:09:48	0.047	9.199	0.055	8.756	28.9	29.3	
222.25672	06:09:41	0.052	9.167	0.055	8.732	28.8	29.3	
222.51039	12:14:58	0.057	9.135	0.056	8.706	28.9	29.3	
223.01021	00:14:42	0.066	9.081	0.057	8.664	28.9	29.3	
223.26012	06:14:34	0.072	9.058	0.057	8.642	28.9	29.3	
223.51003	12:14:27	0.077	9.037	0.058	8.623	28.9	29.3	
223.66180	15:53:00	0.049	9.015	0.058	8.612	28.9	29.3	
223.66249	15:53:59	0.049	9.015	0.058	8.611	28.9	29.3	-deflated
223.66319	15:55:00	0.036	0.048	0.055	8.408	28.9	29.4	packers
223.66388	15:55:59	0.036	0.022	0.055	8.406	28.9	29.4	
223.66527	15:57:59	0.036	0.032	0.055	8.404	28.9	29.4	
223.66666	15:59:59	0.036	0.028	0.055	8.404	28.9	29.4	
223.66805	16:02:00	0.039	0.032	0.059	0.015	28.9	29.4	-filled bore-
223.66943	16:03:59	0.042	0.041	0.062	0.025	28.9	29.4	hole with
223.67082	16:05:59	0.042	0.044	0.062	0.033	28.9	29.4	brine
223.67152	16:06:59	0.042	0.046	0.062	0.036	28.9	29.3	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
223.67221	16:07:59	0.043	0.279	0.062	0.039	28.9	29.3	-inflated
223.67291	16:08:59	0.059	8.768	0.063	0.040	28.9	29.4	packers
223.67360	16:09:59	0.049	12.502	0.062	0.041	28.9	29.6	
223.67429	16:10:59	0.048	11.840	0.063	0.254	28.9	29.5	
223.67499	16:11:59	0.050	11.751	0.069	2.901	28.9	29.5	
223.67568	16:12:59	0.048	11.027	0.067	12.249	28.9	29.5	
223.67638	16:13:59	0.048	10.915	0.068	11.926	28.9	29.5	
223.67707	16:14:59	0.048	12.550	0.068	11.653	28.9	29.5	
223.67776	16:15:58	0.049	12.343	0.068	11.547	28.9	29.5	
223.67846	16:16:59	0.049	12.206	0.067	11.469	28.9	29.5	
223.67915	16:17:59	0.048	12.105	0.067	11.408	28.9	29.5	
223.67985	16:18:59	0.049	12.023	0.068	11.358	28.9	29.5	
223.68054	16:19:59	0.049	11.955	0.068	11.315	28.9	29.5	
223.68124	16:20:59	0.049	11.897	0.068	11.278	28.9	29.5	
223.68193	16:21:59	0.049	11.845	0.068	11.245	28.9	29.5	
223.68262	16:22:58	0.049	11.801	0.067	11.216	28.9	29.5	
223.68332	16:23:59	0.048	11.760	0.067	11.189	28.9	29.5	
223.68401	16:24:58	0.049	11.723	0.067	11.165	28.8	29.4	
223.68471	16:25:59	0.049	11.690	0.067	11.143	28.9	29.4	
223.68540	16:26:59	0.049	11.661	0.066	11.122	28.8	29.4	
223.68610	16:27:59	0.049	11.626	0.066	11.102	28.9	29.4	
223.68679	16:28:59	0.053	11.603	0.065	11.083	28.9	29.4	
223.68748	16:29:58	0.075	11.581	0.064	11.064	29.0	29.4	
223.68887	16:31:58	0.057	11.536	0.063	11.032	29.0	29.4	
223.69026	16:33:58	0.057	11.494	0.061	11.003	29.0	29.4	
223.69165	16:35:59	0.057	11.459	0.062	10.977	29.0	29.4	
223.69304	16:37:59	0.056	11.429	0.102	10.966	28.9	29.7	
223.69443	16:39:59	0.056	11.398	0.072	10.938	28.9	29.6	
223.69581	16:41:58	0.052	11.368	0.065	10.918	28.9	29.5	
223.69720	16:43:58	0.052	11.342	0.063	10.899	28.9	29.5	
223.69859	16:45:58	0.053	11.319	0.063	10.880	28.9	29.5	
223.69998	16:47:58	0.053	11.295	0.061	10.866	28.9	29.4	
223.70624	16:56:59	0.053	11.207	0.057	10.798	28.9	29.4	
223.70763	16:58:59	0.053	11.190	0.056	10.785	28.9	29.4	
223.70833	17:00:00	0.052	11.182	0.056	10.779	28.9	29.4	
223.71875	17:15:00	0.053	11.081	0.053	10.699	28.9	29.4	
223.72916	17:29:59	0.052	11.004	0.052	10.638	28.9	29.4	
223.73957	17:44:59	0.052	10.942	0.052	10.588	28.9	29.4	
223.74999	17:59:59	0.052	10.893	0.056	10.548	28.9	29.4	
223.76040	18:14:59	0.052	10.850	0.055	10.511	28.9	29.4	
223.80205	19:14:57	0.052	10.729	0.057	10.406	28.9	29.3	
223.84370	20:14:56	0.052	10.647	0.056	10.332	28.9	29.3	
223.88536	21:14:55	0.052	10.586	0.054	10.276	28.9	29.3	
223.92701	22:14:54	0.052	10.537	0.055	10.233	28.9	29.3	
223.96866	23:14:52	0.052	10.497	0.053	10.194	28.9	29.3	
224.01031	00:14:51	0.052	10.462	0.053	10.161	28.9	29.3	
224.09361	02:14:48	0.052	10.404	0.052	10.107	28.9	29.3	
224.17692	04:14:46	0.052	10.356	0.050	10.063	28.9	29.3	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
224.26022	06:14:43	0.052	10.316	0.049	10.026	28.9	29.3	
224.34353	08:14:41	0.052	10.280	0.049	9.994	28.9	29.3	
224.42683	10:14:38	0.052	10.248	0.048	9.965	28.9	29.3	
224.51013	12:14:35	0.053	10.220	0.049	9.939	28.9	29.3	
224.52083	12:30:00	0.052	10.214	0.047	9.935	28.9	29.3	-shut in
224.53124	12:44:59	0.052	10.211	0.048	9.931	28.9	29.3	
224.54165	12:59:59	0.053	10.209	0.047	9.929	28.9	29.3	
224.58332	13:59:59	0.060	10.196	0.051	9.914	28.9	29.3	
224.58471	14:01:59	0.059	10.196	0.050	9.914	28.9	29.3	
224.62512	15:00:10	0.056	10.185	0.047	9.903	28.9	29.3	
224.66677	16:00:09	0.057	10.175	0.048	9.894	28.9	29.3	
224.70842	17:00:07	0.059	10.164	0.049	9.884	28.9	29.3	
224.75007	18:00:06	0.061	10.154	0.046	9.875	28.9	29.3	
224.79172	19:00:05	0.061	10.144	0.047	9.865	28.9	29.3	
224.83337	20:00:03	0.063	10.134	0.047	9.855	28.9	29.3	
224.87503	21:00:03	0.065	10.125	0.047	9.847	28.9	29.3	
224.91668	22:00:01	0.066	10.116	0.047	9.838	28.9	29.3	
224.95833	23:00:00	0.067	10.107	0.047	9.829	28.9	29.3	
224.99998	23:59:58	0.069	10.098	0.048	9.821	28.9	29.3	
225.01040	00:14:59	0.069	10.096	0.047	9.819	28.9	29.3	
226.01366	00:19:40	0.095	9.938	0.047	9.678	28.9	29.3	
227.01330	00:19:09	0.109	9.826	0.048	9.582	28.9	29.3	
228.01295	00:18:39	0.117	9.740	0.048	9.488	28.9	29.3	
229.04148	00:59:44	0.116	9.664	0.047	9.410	28.9	29.4	
230.04113	00:59:14	0.114	9.600	0.048	9.347	28.9	29.4	
231.04077	00:58:43	0.113	9.543	0.048	9.292	28.9	29.4	
232.04041	00:58:11	0.114	9.493	0.049	9.241	28.9	29.4	
233.04006	00:57:41	0.116	9.448	0.049	9.198	28.9	29.4	
234.03970	00:57:10	0.119	9.407	0.050	9.158	28.9	29.4	
235.02070	00:29:48	0.123	9.370	0.057	9.125	28.9	29.5	
236.04142	00:59:39	0.125	9.334	0.064	9.090	28.8	29.3	
236.37464	08:59:29	0.125	9.322	0.066	9.078	28.8	29.3	
236.66657	15:59:52	0.125	9.305	0.057	9.058	28.9	29.5	
236.66669	16:00:02	0.125	9.305	0.056	9.058	28.9	29.5	-pulse
236.66680	16:00:12	3.468	0.498	0.061	8.910	29.1	29.5	injection
236.66738	16:01:02	2.139	0.042	0.059	8.923	29.0	29.5	(test zone)
236.66808	16:02:02	1.447	9.816	0.057	8.941	29.0	29.5	
236.66892	16:03:15	0.981	9.651	0.056	8.967	29.0	29.5	
236.66961	16:04:14	0.759	9.569	0.055	8.985	29.0	29.5	
236.67048	16:05:29	0.593	9.507	0.055	9.000	29.0	29.5	
236.67152	16:06:59	0.474	9.462	0.055	9.011	29.0	29.5	
236.67221	16:07:59	0.421	9.442	0.056	9.016	29.0	29.5	
236.67291	16:08:59	0.381	9.426	0.056	9.020	29.0	29.5	
236.67360	16:09:59	0.349	9.413	0.056	9.023	29.0	29.5	
236.67430	16:11:00	0.323	9.403	0.055	9.025	29.0	29.5	
236.67499	16:11:59	0.301	9.395	0.055	9.028	29.0	29.5	
236.67638	16:13:59	0.268	9.382	0.055	9.031	29.0	29.5	
236.67777	16:15:59	0.243	9.373	0.056	9.034	29.0	29.5	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
236.67916	16:17:59	0.225	9.366	0.056	9.036	29.0	29.5	
236.68055	16:20:00	0.210	9.359	0.056	9.038	29.0	29.5	
236.68194	16:22:00	0.197	9.355	0.056	9.040	29.0	29.5	
236.68332	16:23:59	0.187	9.351	0.057	9.041	29.0	29.5	
236.68471	16:25:59	0.177	9.348	0.056	9.042	29.0	29.5	
236.68610	16:27:59	0.169	9.346	0.057	9.044	29.0	29.5	
236.68749	16:29:59	0.162	9.343	0.057	9.044	28.9	29.5	
236.69096	16:34:59	0.147	9.338	0.057	9.045	28.9	29.5	
236.69512	16:40:58	0.133	9.333	0.057	9.047	28.9	29.4	
236.69768	16:44:40	0.127	9.329	0.058	9.047	28.9	29.5	
236.69779	16:44:49	0.126	9.328	0.057	9.048	28.9	29.4	
236.69791	16:44:59	0.126	9.329	0.094	9.048	28.9	29.4	-pulse
236.69803	16:45:10	0.126	9.353	0.534	9.108	28.9	29.5	injection
236.69814	16:45:19	0.136	9.620	1.609	9.681	28.9	29.6	(guard zone)
236.69826	16:45:30	0.146	9.842	2.279	28.900	29.9		
236.69837	16:45:39	0.147	9.793	1.900	28.900	30.0		
236.69849	16:45:50	0.133	9.456	0.580	9.367	28.9	30.0	
236.69860	16:45:59	0.131	9.415	0.412	9.275	28.9	29.9	
236.69884	16:46:20	0.129	9.387	0.296	9.210	28.9	29.7	
236.69895	16:46:29	0.129	9.379	0.267	9.194	28.9	29.7	
236.69918	16:46:49	0.128	9.369	0.228	9.173	28.9	29.7	
236.69930	16:47:00	0.127	9.369	0.215	9.168	28.9	29.7	
236.69999	16:47:59	0.125	9.354	0.170	9.142	28.9	29.6	
236.70069	16:49:00	0.123	9.347	0.148	9.130	28.9	29.6	
236.70155	16:50:14	0.120	9.342	0.132	9.120	28.9	29.6	
236.70277	16:51:59	0.118	9.337	0.118	9.113	28.9	29.6	
236.70312	16:52:30	0.118	9.337	0.116	9.111	28.9	29.6	
236.70346	16:52:59	0.117	9.336	0.113	9.111	28.9	29.5	
236.70381	16:53:29	0.116	9.335	0.110	9.109	28.9	29.5	
236.70416	16:53:59	0.115	9.334	0.109	9.109	28.9	29.5	
236.70451	16:54:30	0.115	9.334	0.107	9.108	28.9	29.5	
236.70520	16:55:29	0.114	9.332	0.104	9.106	28.9	29.5	
236.70555	16:56:00	0.113	9.332	0.102	9.105	28.9	29.5	
236.70624	16:56:59	0.112	9.331	0.100	9.104	28.9	29.5	
236.70694	16:58:00	0.111	9.330	0.098	9.103	28.9	29.5	
236.70763	16:58:59	0.110	9.329	0.096	9.102	28.9	29.5	
236.70833	17:00:00	0.109	9.328	0.094	9.102	28.9	29.5	
236.71111	17:04:00	0.104	9.321	0.089	9.095	28.9	29.5	
236.71874	17:14:59	0.098	9.321	0.084	9.096	28.9	29.5	
236.76039	18:14:58	0.070	9.313	0.077	9.092	28.8	29.4	
236.80205	19:14:57	0.058	9.308	0.075	9.089	28.8	29.4	
236.84370	20:14:56	0.054	9.303	0.074	9.086	28.8	29.4	
236.88535	21:14:54	0.051	9.300	0.073	9.084	28.8	29.4	
236.92700	22:14:53	0.049	9.297	0.073	9.082	28.8	29.4	
236.96865	23:14:51	0.047	9.294	0.072	9.080	28.8	29.4	
237.01030	00:14:50	0.046	9.292	0.072	9.079	28.8	29.4	
237.26022	06:14:43	0.041	9.280	0.072	9.069	28.8	29.4	
237.34352	08:14:40	0.041	9.277	0.071	9.065	28.8	29.4	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
237.38517	09:14:39	0.041	9.276	0.071	9.064	28.8	29.4	
237.41457	09:56:59	0.040	9.274	0.071	9.063	28.8	29.4	-deflated
237.41527	09:57:59	0.004	0.062	0.017	0.042	28.8	29.4	packers
237.41596	09:58:59	0.047	0.036	0.071	0.015	28.8	29.5	removed test
237.41666	09:59:59	0.047	0.024	0.071	0.003	28.8	29.4	tool
237.41735	10:00:59	0.047	0.024	0.071	0.002	28.9	29.5	
237.66736	16:01:00	0.069	0.030	0.082	-0.004	29.5	29.9	-installed
237.67361	16:10:00	0.065	0.031	0.078	-0.003	29.4	29.8	test tool
237.67430	16:11:00	0.067	1.053	0.079	-0.002	29.4	29.8	without
237.67477	16:11:40	0.080	12.669	0.078	-0.002	29.3	29.8	volume dis-
237.67500	16:12:00	0.080	12.143	0.078	-0.002	29.3	29.8	placement
237.67569	16:13:00	0.080	11.585	0.078	-0.002	29.3	29.8	device
237.67639	16:14:00	0.080	11.355	0.078	-0.002	29.3	29.8	-created data
237.67708	16:15:00	0.080	11.212	0.078	-0.002	29.3	29.8	file - C2H014
237.67778	16:16:00	0.080	11.109	0.078	0.624	29.3	29.8	-inflated
237.67824	16:16:40	0.074	10.755	0.106	11.891	29.3	29.8	packers
237.67847	16:17:00	0.073	10.630	0.094	11.725	29.3	29.8	
237.67916	16:17:59	0.074	10.554	0.092	11.078	29.3	29.8	
237.67986	16:19:00	0.074	10.494	0.090	10.840	29.3	29.8	
237.68055	16:20:00	0.074	10.446	0.088	10.695	29.3	29.8	
237.68194	16:22:00	0.074	10.366	0.085	10.517	29.3	29.8	
237.68333	16:24:00	0.074	10.303	0.084	10.402	29.3	29.8	
237.68472	16:26:00	0.074	10.252	0.083	10.320	29.3	29.8	
237.68611	16:28:00	0.074	10.208	0.082	10.255	29.2	29.8	
237.68749	16:29:59	0.074	10.171	0.083	10.202	29.2	29.8	
237.69097	16:35:00	0.073	10.093	0.083	10.101	29.2	29.7	
237.69444	16:40:00	0.073	10.030	0.083	10.026	29.2	29.7	
237.69792	16:45:00	0.073	9.979	0.084	9.967	29.2	29.7	
237.70833	17:00:00	0.073	9.864	0.087	9.842	29.1	29.7	
237.76039	18:14:58	0.071	9.586	0.084	9.557	29.0	29.5	
237.84370	20:14:56	0.070	9.415	0.083	9.378	28.9	29.5	
237.92700	22:14:53	0.071	9.328	0.083	9.285	28.9	29.5	
238.01030	00:14:50	0.071	9.271	0.083	9.221	28.9	29.5	
238.26022	06:14:43	0.072	9.164	0.082	9.105	28.9	29.5	
238.51013	12:14:35	0.074	9.096	0.082	9.030	29.0	29.5	
238.59343	14:14:32	0.075	9.080	0.081	9.012	29.0	29.5	
238.67673	16:14:29	0.075	9.064	0.081	8.992	29.0	29.5	
238.68727	16:29:40	0.076	9.062	0.081	8.989	29.0	29.5	
238.68750	16:30:00	0.076	9.063	0.082	8.988	29.0	29.5	-shut in
238.70833	17:00:00	0.076	9.057	0.080	8.982	29.0	29.5	
238.70902	17:00:59	0.076	9.056	0.080	8.982	29.0	29.5	
238.72917	17:30:00	0.076	9.051	0.080	8.975	28.9	29.5	-pulse
238.72940	17:30:20	3.547	10.337	0.086	8.761	29.1	29.5	injection #1
238.72963	17:30:40	3.338	10.268	0.085	8.762	29.1	29.5	(test zone)
238.72986	17:31:00	3.219	10.228	0.085	8.763	29.1	29.5	
238.73055	17:32:00	3.011	10.157	0.083	8.764	29.1	29.5	
238.73125	17:33:00	2.880	10.112	0.083	8.767	29.0	29.5	
238.73194	17:34:00	2.782	10.079	0.082	8.769	29.0	29.5	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
238.73264	17:35:00	2.701	10.051	0.082	8.770	29.0	29.5	
238.73333	17:36:00	2.630	10.026	0.082	8.772	29.0	29.5	
238.73403	17:37:00	2.566	10.004	0.082	8.773	29.0	29.5	
238.73472	17:38:00	2.508	9.983	0.082	8.775	29.0	29.5	
238.73542	17:39:00	2.455	9.965	0.081	8.776	29.0	29.5	
238.73611	17:40:00	2.405	9.947	0.081	8.778	29.0	29.5	
238.73750	17:42:00	2.319	9.917	0.081	8.781	29.0	29.5	
238.73889	17:44:00	2.250	9.892	0.081	8.783	29.0	29.5	
238.74027	17:45:59	2.190	9.871	0.081	8.785	29.0	29.5	
238.74166	17:47:59	2.137	9.852	0.081	8.788	29.0	29.5	
238.74305	17:50:00	2.088	9.834	0.080	8.790	29.0	29.5	
238.74444	17:52:00	2.042	9.817	0.080	8.792	29.0	29.5	
238.74583	17:54:00	1.998	9.802	0.081	8.794	29.0	29.5	
238.74722	17:56:00	1.950	9.784	0.080	8.796	29.0	29.5	
238.74861	17:58:00	1.913	9.771	0.081	8.798	29.0	29.5	
238.74999	17:59:59	1.877	9.757	0.081	8.800	29.0	29.5	
238.75346	18:04:59	1.771	9.718	0.080	8.807	29.0	29.5	
238.76388	18:19:59	1.506	9.617	0.080	8.825	28.9	29.5	
238.76735	18:24:59	1.428	9.587	0.081	8.831	28.9	29.5	
238.77083	18:30:00	1.360	9.561	0.080	8.835	28.9	29.5	
238.77917	18:42:00	1.230	9.506	0.085	8.839	29.0	29.5	
238.78958	18:57:00	1.116	9.465	0.082	8.851	28.9	29.5	
238.83123	19:56:58	0.876	9.369	0.080	8.865	28.9	29.5	
238.87288	20:56:57	0.772	9.324	0.080	8.866	28.9	29.5	
238.91453	21:56:55	0.715	9.296	0.080	8.865	28.9	29.5	
238.95619	22:56:55	0.677	9.276	0.080	8.862	28.9	29.5	
238.99784	23:56:53	0.652	9.260	0.080	8.858	28.9	29.5	
239.00825	00:11:53	0.646	9.256	0.081	8.857	28.9	29.4	
239.25816	06:11:45	0.565	9.193	0.075	8.827	28.9	29.4	
239.53540	12:50:59	0.524	9.150	0.080	8.798	28.9	29.4	
239.70201	16:50:54	0.509	9.126	0.081	8.788	29.2	29.7	
241.26571	06:22:37	0.456	8.980	0.092	8.689	29.0	31.1	
241.27163	06:31:09	0.451	8.980	0.088	8.692	29.0	31.2	
241.31329	07:31:08	0.449	8.983	0.087	8.703	29.2	31.5	
242.43244	10:22:43	0.436	8.908	0.090	8.617	29.0	30.9	
243.58611	14:04:00	0.422	8.857	0.088	8.577	29.0	30.9	
243.58680	14:05:00	0.421	8.857	0.087	8.578	29.0	30.9	
243.60416	14:29:59	0.418	8.860	0.083	8.586	29.0	30.9	
243.62500	15:00:00	0.419	8.861	0.083	8.589	29.1	30.8	-pulse
243.62523	15:00:20	3.785	10.046	0.089	8.414	29.2	30.9	injection #2
243.62569	15:01:00	3.471	9.949	0.087	8.416	29.2	30.9	(test zone)
243.62639	15:02:00	3.214	9.871	0.086	8.417	29.2	30.9	
243.62708	15:03:00	3.032	9.814	0.086	8.420	29.2	30.8	
243.62777	15:03:59	2.889	9.768	0.084	8.423	29.2	30.9	
243.62847	15:05:00	2.769	9.730	0.084	8.426	29.1	30.9	
243.62916	15:05:59	2.667	9.697	0.085	8.429	29.1	30.9	
243.62986	15:07:00	2.576	9.667	0.084	8.431	29.1	30.9	
243.63055	15:08:00	2.493	9.639	0.084	8.434	29.1	30.9	

TABLE C1 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-A

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
243.63125	15:09:00	2.419	9.613	0.084	8.437	29.1	30.9	
243.63194	15:10:00	2.349	9.589	0.084	8.440	29.1	30.8	
243.63333	15:12:00	2.223	9.547	0.085	8.445	29.1	30.8	
243.63472	15:14:00	2.119	9.510	0.084	8.451	29.1	30.8	
243.63611	15:16:00	2.028	9.479	0.084	8.456	29.1	30.8	
243.63749	15:17:59	1.950	9.451	0.084	8.461	29.1	30.8	
243.63888	15:19:59	1.880	9.426	0.083	8.466	29.1	30.8	
243.64027	15:21:59	1.817	9.403	0.083	8.470	29.1	30.8	
243.64166	15:23:59	1.761	9.382	0.084	8.475	29.1	30.8	
243.64305	15:26:00	1.708	9.363	0.083	8.479	29.1	30.8	
243.64444	15:28:00	1.659	9.345	0.084	8.483	29.1	30.9	
243.64583	15:30:00	1.615	9.328	0.083	8.486	29.1	30.8	
243.64652	15:30:59	1.593	9.320	0.083	8.488	29.1	30.8	
243.64721	15:31:59	1.573	9.313	0.083	8.489	29.1	30.8	
243.64791	15:32:59	1.554	9.306	0.084	8.491	29.1	30.8	
243.64931	15:35:00	1.518	9.292	0.084	8.494	29.1	30.8	
243.65278	15:40:00	1.438	9.262	0.084	8.500	29.1	30.8	
243.65625	15:45:00	1.370	9.236	0.082	8.505	29.0	30.8	
243.65972	15:50:00	1.311	9.214	0.083	8.510	29.0	30.8	
243.66319	15:55:00	1.260	9.195	0.082	8.516	29.1	30.8	
243.66667	16:00:00	1.215	9.178	0.082	8.519	29.1	30.8	
243.71526	17:09:58	0.902	9.058	0.079	8.547	29.0	31.1	
243.75691	18:09:57	0.794	9.015	0.079	8.555	29.0	31.2	
243.79856	19:09:56	0.734	8.990	0.077	8.559	29.1	31.2	
243.84021	20:09:54	0.692	8.973	0.077	8.562	29.1	31.3	
243.88187	21:09:54	0.661	8.960	0.076	8.563	29.1	31.3	
243.92352	22:09:52	0.637	8.950	0.076	8.564	29.1	31.3	
243.96517	23:09:51	0.619	8.941	0.076	8.564	29.1	31.3	
244.00682	00:09:49	0.603	8.933	0.075	8.563	29.1	31.2	
244.25673	06:09:41	0.540	8.901	0.075	8.556	29.1	31.1	
244.50205	12:02:57	0.507	8.880	0.076	8.547	29.1	31.2	
245.00187	00:02:42	0.471	8.849	0.073	8.537	29.1	29.6	
245.25179	06:02:35	0.461	8.838	0.073	8.535	29.1	29.6	
245.33509	08:02:32	0.457	8.833	0.073	8.534	29.1	29.6	-deflated packers, removed test tool

TABLE C2
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
245.60208	14:27:00	0.068	0.032	0.090	-0.012	28.6	29.0	-installed
245.60417	14:30:00	0.066	0.031	0.087	-0.012	28.6	29.0	test tool
245.60764	14:35:00	0.065	0.132	0.084	-0.015	28.6	29.0	-created data
245.60833	14:36:00	0.085	11.154	0.083	-0.015	28.6	29.2	file - C2H015
245.60903	14:37:00	0.078	11.970	0.082	-0.014	28.6	29.2	-inflated
245.60926	14:37:20	0.075	12.507	0.081	-0.014	28.6	29.2	packers
245.60949	14:37:40	0.075	12.200	0.081	13.952	28.6	29.3	
245.60972	14:38:00	0.076	12.000	0.082	13.812	28.6	29.3	
245.60995	14:38:20	0.075	11.844	0.081	13.758	28.6	29.3	
245.61018	14:38:40	0.075	11.713	0.081	13.724	28.6	29.3	
245.61041	14:38:59	0.075	11.611	0.080	0.002	28.6	29.3	
245.61064	14:39:19	0.074	11.517	0.080	0.278	28.6	29.3	
245.61088	14:39:40	0.076	11.437	0.080	0.729	28.6	29.3	
245.61111	14:40:00	0.072	11.331	0.113	9.058	28.6	29.2	
245.61134	14:40:20	0.070	11.012	0.090	11.213	28.6	29.3	
245.61157	14:40:40	0.070	10.971	0.090	10.579	28.6	29.2	
245.61180	14:41:00	0.070	10.925	0.090	10.236	28.7	29.2	
245.61203	14:41:19	0.070	10.881	0.089	9.994	28.7	29.3	
245.61226	14:41:39	0.070	10.839	0.088	9.817	28.6	29.2	
245.61250	14:42:00	0.067	10.699	0.092	12.589	28.7	29.2	
245.61273	14:42:20	0.068	10.630	0.090	12.470	28.7	29.2	
245.61319	14:43:00	0.068	10.546	0.089	12.042	28.6	29.2	
245.61389	14:44:00	0.069	10.432	0.089	11.772	28.6	29.2	
245.61458	14:45:00	0.069	10.326	0.089	11.611	28.6	29.2	
245.61527	14:45:59	0.069	10.232	0.088	11.497	28.6	29.2	
245.61597	14:47:00	0.070	10.146	0.088	11.409	28.7	29.2	
245.61666	14:47:59	0.070	10.065	0.088	11.339	28.7	29.2	
245.61811	14:50:05	0.070	9.914	0.088	11.227	28.6	29.2	
245.62852	15:05:04	0.072	9.203	0.088	10.856	28.6	29.1	
245.64935	15:35:04	0.070	8.523	0.088	10.588	28.6	29.0	
245.67017	16:05:03	0.069	8.117	0.088	10.457	28.6	29.0	
245.69100	16:35:02	0.069	7.823	0.089	10.369	28.6	28.9	
245.71182	17:05:01	0.068	7.599	0.089	10.313	28.6	28.9	
245.75348	18:05:01	0.067	7.292	0.090	10.237	28.6	28.9	
245.83678	20:04:58	0.067	7.071	0.092	10.128	28.6	28.9	
245.92008	22:04:55	0.066	7.026	0.091	10.050	28.6	28.9	
246.00339	00:04:53	0.066	7.004	0.091	9.991	28.6	28.9	
246.17000	04:04:48	0.066	6.978	0.091	9.905	28.6	28.9	
246.33660	08:04:42	0.065	6.959	0.091	9.841	28.6	28.9	
246.50321	12:04:37	0.065	6.944	0.090	9.793	28.6	28.9	
246.50555	12:08:00	0.065	6.943	0.090	9.792	28.6	28.9	
246.50972	12:14:00	0.070	11.216	0.090	9.612	28.6	28.9	-test-zone
246.51041	12:14:59	0.070	11.114	0.090	9.614	28.6	29.0	packer
246.51111	12:16:00	0.071	11.057	0.091	9.615	28.6	28.9	pressure
246.51180	12:17:00	0.071	11.016	0.091	9.615	28.6	29.0	increased
246.51250	12:18:00	0.071	10.984	0.091	9.616	28.6	29.0	
246.51319	12:19:00	0.071	10.957	0.091	9.616	28.6	29.0	
246.51389	12:20:00	0.071	10.934	0.091	9.616	28.6	29.0	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
246.51875	12:27:00	0.072	10.822	0.091	9.610	28.7	29.0	
246.51944	12:28:00	0.072	10.813	0.092	9.612	28.7	29.0	
246.52014	12:29:00	0.073	10.804	0.093	9.613	28.7	29.0	
246.52083	12:30:00	0.074	10.794	0.093	9.613	28.6	29.0	
246.52430	12:35:00	0.074	10.750	0.093	9.614	28.6	29.0	
246.52777	12:39:59	0.074	10.712	0.088	9.612	28.6	29.0	-shut in
246.53125	12:45:00	0.073	10.680	0.091	9.612	28.6	29.0	
246.53472	12:50:00	0.072	10.652	0.090	9.610	28.6	29.0	
246.53819	12:55:00	0.072	10.627	0.090	9.610	28.6	29.0	
246.54235	13:00:59	0.073	10.599	0.090	9.610	28.6	28.9	
246.58333	14:00:00	0.072	10.417	0.092	9.599	28.6	28.9	
246.66664	15:59:58	0.072	10.223	0.098	9.586	28.6	28.9	
246.79159	18:59:53	0.074	10.055	0.101	9.558	28.6	28.9	
246.91655	21:59:50	0.075	9.944	0.102	9.534	28.6	28.9	
247.04150	00:59:46	0.076	9.860	0.105	9.514	28.6	28.9	
247.54132	12:59:30	0.079	9.646	0.113	9.446	28.6	28.9	
248.04115	00:59:15	0.082	9.514	0.119	9.394	28.6	28.9	
249.01196	00:17:13	0.088	9.351	0.131	9.318	28.6	29.0	
250.01160	00:16:42	0.095	9.245	0.147	9.263	28.6	29.0	
251.07407	01:46:40	0.102	9.171	0.167	9.220	28.6	28.9	
252.02063	00:29:42	0.110	9.118	0.186	9.185	28.6	29.0	
253.06573	01:34:39	0.119	9.071	0.209	9.157	28.6	29.0	
254.06538	01:34:09	0.127	9.032	0.233	9.132	28.6	29.0	
255.06502	01:33:38	0.137	9.002	0.260	9.115	28.7	29.0	
256.01682	00:24:13	0.147	8.978	0.291	9.104	28.7	29.0	
257.04493	01:04:42	0.158	8.956	0.327	9.095	28.6	29.0	
259.04422	01:03:41	0.186	8.930	0.419	9.095	28.7	29.0	
260.04842	01:09:43	0.202	8.924	0.475	9.101	28.6	29.0	
261.04806	01:09:12	0.220	8.923	0.544	9.115	28.6	29.0	
262.04770	01:08:41	0.241	8.926	0.617	9.134	28.6	29.0	
263.00570	00:08:12	0.263	8.931	0.689	9.155	28.6	29.0	
264.01644	00:23:40	0.288	8.936	0.767	9.176	28.7	29.0	
265.01609	00:23:10	0.315	8.947	0.848	9.202	28.7	29.0	
266.01573	00:22:39	0.345	8.956	0.931	9.226	28.7	29.0	
267.01537	00:22:08	0.379	8.970	1.020	9.255	28.7	29.0	
268.01719	00:24:45	0.414	8.985	1.108	9.284	28.7	29.0	
269.01683	00:24:14	0.453	9.003	1.202	9.316	28.7	29.0	
270.01648	00:23:44	0.495	9.025	1.297	9.347	28.7	29.0	
271.04982	01:11:44	0.542	9.048	1.392	9.379	28.7	29.1	
272.04947	01:11:14	0.589	9.070	1.482	9.408	28.7	29.1	
272.35000	08:24:00	0.604	9.076	1.505	9.416	28.7	29.1	
272.35069	08:25:00	0.603	9.077	1.505	9.415	28.7	29.1	
272.35139	08:26:00	0.603	9.077	1.505	9.415	28.7	29.1	
272.35208	08:27:00	0.603	9.076	1.505	9.415	28.7	29.1	
272.35277	08:27:59	0.603	9.077	1.505	9.415	28.7	29.1	
272.35348	08:29:01	0.603	9.076	1.505	9.415	28.7	29.1	
272.35371	08:29:21	0.603	9.076	1.505	9.415	28.7	29.1	
272.35394	08:29:40	0.603	9.076	1.505	9.415	28.7	29.1	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
272.35417	08:30:00	0.739	9.108	1.526	9.418	28.7	29.1	-pulse
272.35441	08:30:21	4.191	10.534	2.283	9.584	28.8	29.1	injection
272.35464	08:30:41	4.132	10.508	2.260	9.578	28.8	29.1	(test zone)
272.35487	08:31:01	4.096	10.492	2.247	9.574	28.8	29.1	
272.35510	08:31:21	4.072	10.480	2.237	9.571	28.8	29.1	
272.35533	08:31:41	4.051	10.471	2.229	9.569	28.8	29.1	
272.35556	08:32:00	4.034	10.463	2.222	9.566	28.8	29.1	
272.35625	08:33:00	3.997	10.445	2.206	9.561	28.8	29.1	
272.35694	08:34:00	3.969	10.431	2.194	9.557	28.8	29.1	
272.35764	08:35:00	3.947	10.420	2.184	9.553	28.8	29.1	
272.35833	08:36:00	3.927	10.410	2.175	9.550	28.8	29.1	
272.35902	08:36:59	3.911	10.402	2.168	9.548	28.8	29.1	
272.35972	08:38:00	3.897	10.395	2.162	9.546	28.8	29.1	
272.36041	08:38:59	3.884	10.388	2.157	9.544	28.8	29.1	
272.36111	08:40:00	3.873	10.382	2.152	9.542	28.8	29.1	
272.36250	08:42:00	3.853	10.372	2.143	9.539	28.8	29.1	
272.36389	08:44:00	3.836	10.363	2.136	9.536	28.8	29.1	
272.36528	08:46:00	3.821	10.356	2.131	9.534	28.8	29.1	
272.36667	08:48:00	3.808	10.350	2.125	9.532	28.8	29.1	
272.36805	08:50:00	3.795	10.344	2.120	9.530	28.8	29.2	
272.36944	08:52:00	3.784	10.338	2.116	9.528	28.8	29.2	
272.37083	08:54:00	3.774	10.334	2.112	9.527	28.9	29.2	
272.37222	08:56:00	3.765	10.328	2.109	9.526	28.9	29.1	
272.37361	08:58:00	3.756	10.324	2.105	9.524	28.8	29.2	
272.37500	09:00:00	3.748	10.320	2.102	9.524	28.8	29.2	
272.38541	09:14:59	3.701	10.295	2.085	9.517	28.8	29.2	
272.39583	09:30:00	3.667	10.279	2.073	9.514	28.8	29.1	
272.40624	09:44:59	3.640	10.267	2.063	9.510	28.7	29.1	
272.40971	09:49:59	3.632	10.263	2.059	9.509	28.7	29.1	
272.42292	10:09:00	3.615	10.245	2.059	9.493	28.8	29.1	
272.44374	10:38:59	3.576	10.235	2.041	9.497	28.7	29.1	
272.46457	11:08:59	3.551	10.224	2.032	9.495	28.7	29.1	
272.47498	11:23:58	3.540	10.219	2.028	9.494	28.7	29.1	
272.50622	12:08:57	3.511	10.206	2.019	9.490	28.7	29.1	
272.54787	13:08:56	3.480	10.191	2.008	9.485	28.7	29.1	
272.58953	14:08:55	3.456	10.180	2.000	9.481	28.7	29.1	
272.63118	15:08:54	3.436	10.171	1.995	9.479	28.7	29.1	
272.67283	16:08:53	3.417	10.162	1.991	9.477	28.7	29.1	
272.75613	18:08:50	3.386	10.148	1.983	9.473	28.7	29.1	
272.83944	20:08:48	3.362	10.136	1.979	9.469	28.7	29.1	
272.92274	22:08:45	3.341	10.127	1.975	9.466	28.7	29.1	
273.00604	00:08:42	3.323	10.118	1.973	9.464	28.7	29.1	
273.25595	06:08:34	3.278	10.096	1.971	9.458	28.7	29.1	
273.50587	12:08:27	3.245	10.080	1.977	9.456	28.7	29.1	
274.03246	00:46:45	3.192	10.054	1.990	9.456	28.7	29.1	
275.05532	01:19:40	3.121	10.020	2.036	9.463	28.7	29.1	
276.05496	01:19:09	3.071	9.993	2.082	9.470	28.7	29.1	
277.05460	01:18:37	3.032	9.973	2.131	9.480	28.7	29.1	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
278.06573	01:34:39	3.002	9.956	2.180	9.493	28.7	29.1	
279.01190	00:17:08	2.973	9.935	2.205	9.494	28.8	29.1	
280.06920	01:39:39	2.914	9.860	2.055	9.413	28.8	29.1	
281.00483	00:06:57	2.877	9.812	1.965	9.356	28.8	29.1	
282.08239	01:58:38	2.857	9.789	1.962	9.336	28.8	29.1	
283.05055	01:12:48	2.066	9.230	1.756	8.871	28.8	29.1	
284.05019	01:12:16	2.407	8.684	1.756	8.871	28.8	29.1	
285.07710	01:51:01	2.833	9.750	2.039	9.294	28.7	29.1	
286.01867	00:26:53	2.835	9.750	2.070	9.280	28.8	29.1	
287.05436	01:18:17	2.835	9.744	2.101	9.268	28.8	29.1	
288.07886	01:53:34	2.835	9.739	2.133	9.260	28.8	29.1	
289.01715	00:24:42	2.833	9.731	2.156	9.229	28.7	29.1	
290.01680	00:24:12	2.820	9.681	1.950	8.442	28.8	29.1	
291.07586	01:49:14	2.800	9.623	1.719	7.462	28.8	29.1	
292.07551	01:48:44	2.793	9.589	1.582	6.763	28.8	29.1	
293.03799	00:54:42	2.798	9.566	1.442	6.074	28.8	29.1	
293.57291	13:44:59	2.803	9.559	1.386	5.769	28.8	29.1	
293.58333	14:00:00	2.805	9.560	1.386	5.763	28.8	29.1	
293.59235	14:12:59	2.943	9.920	2.829	10.035	28.8	29.2	
293.59374	14:14:59	2.934	9.900	2.777	9.959	28.8	29.2	
293.59443	14:15:59	2.930	9.895	2.760	9.934	28.8	29.2	
293.59513	14:16:59	2.928	9.890	2.747	9.914	28.8	29.2	
293.59582	14:17:59	2.926	9.886	2.736	9.898	28.8	29.2	
293.59651	14:18:58	2.925	9.883	2.727	9.883	28.8	29.2	
293.59721	14:19:59	2.923	9.880	2.718	9.870	28.8	29.2	
293.59790	14:20:59	2.922	9.877	2.713	9.858	28.8	29.2	
293.59860	14:21:59	2.921	9.875	2.705	9.847	28.8	29.2	
293.59929	14:22:59	2.920	9.873	2.699	9.838	28.8	29.2	
293.59999	14:23:59	2.919	9.871	2.693	9.829	28.8	29.2	
293.60068	14:24:59	2.918	9.870	2.688	9.820	28.8	29.2	
293.60137	14:25:58	2.917	9.868	2.683	9.811	28.9	29.2	
293.60207	14:26:59	2.917	9.866	2.678	9.804	28.8	29.2	
293.60276	14:27:58	2.916	9.865	2.674	9.796	28.8	29.2	
293.60346	14:28:59	2.915	9.863	2.669	9.789	28.8	29.2	
293.60485	14:30:59	2.914	9.860	2.661	9.775	28.8	29.2	
293.61526	14:45:58	2.905	9.844	2.614	9.694	28.8	29.2	
293.62567	15:00:58	2.901	9.834	2.582	9.631	28.8	29.1	
293.66732	16:00:56	2.889	9.809	2.499	9.428	28.8	29.1	
293.70897	17:00:55	2.882	9.790	2.432	9.246	28.8	29.1	
293.75063	18:00:54	2.875	9.773	2.372	9.077	28.8	29.1	
293.79228	19:00:53	2.870	9.759	2.322	8.929	28.8	29.1	
293.83393	20:00:52	2.865	9.747	2.280	8.803	28.8	29.1	
293.87558	21:00:50	2.860	9.736	2.243	8.686	28.8	29.1	
293.91723	22:00:49	2.857	9.727	2.209	8.581	28.8	29.1	
293.95889	23:00:48	2.853	9.719	2.181	8.491	28.8	29.1	
294.00054	00:00:47	2.851	9.712	2.156	8.413	28.8	29.1	
294.25045	06:00:39	2.841	9.684	2.057	8.076	28.8	29.1	
294.37059	08:53:39	2.899	9.734	2.053	7.510	28.8	29.1	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
294.37059	08:53:39	2.899	9.734	2.053	7.510	28.8	29.1	
294.53818	12:54:59	2.856	9.690	2.079	7.988	28.8	29.2	-leaky
295.00721	00:10:23	2.858	9.691	2.092	8.001	28.8	29.1	fittings
295.34042	08:10:12	2.859	9.690	2.105	8.007	28.8	29.1	replaced
295.47917	11:30:00	2.868	9.682	2.119	7.994	28.9	29.3	-created data
295.53125	12:45:00	2.858	9.687	2.111	8.007	28.8	29.1	file - C2H016
295.53819	12:55:00	2.856	9.687	2.109	8.007	28.8	29.1	
295.53888	12:55:59	2.856	9.687	2.110	8.007	28.8	29.1	
295.53958	12:57:00	2.856	9.687	2.109	8.007	28.8	29.2	
295.54028	12:58:00	2.856	9.687	2.111	8.007	28.8	29.1	
295.54062	12:58:30	2.857	9.687	2.110	8.007	28.8	29.1	
295.54097	12:59:00	2.856	9.687	2.111	8.007	28.8	29.2	
295.54132	12:59:30	2.856	9.687	2.110	8.007	28.8	29.2	
295.54166	12:59:59	2.626	9.605	2.062	7.998	28.8	29.2	
295.54201	13:00:30	1.553	9.199	1.829	7.934	28.8	29.2	-pulse with-
295.54236	13:01:00	1.573	9.208	1.837	7.936	28.8	29.1	drawal test#1
295.54305	13:02:00	1.594	9.217	1.846	7.939	28.8	29.2	(test-zone)
295.54375	13:03:00	1.606	9.222	1.851	7.941	28.8	29.2	
295.54444	13:04:00	1.615	9.226	1.855	7.943	28.8	29.2	
295.54514	13:05:00	1.623	9.230	1.858	7.944	28.8	29.2	
295.54583	13:06:00	1.629	9.232	1.861	7.945	28.8	29.2	
295.54653	13:07:00	1.634	9.235	1.863	7.946	28.8	29.2	
295.54722	13:08:00	1.639	9.237	1.865	7.947	28.8	29.2	
295.54791	13:08:59	1.643	9.239	1.866	7.947	28.8	29.2	
295.54861	13:10:00	1.647	9.240	1.869	7.948	28.8	29.2	
295.54930	13:11:00	1.650	9.241	1.870	7.948	28.8	29.2	
295.55000	13:12:00	1.653	9.243	1.871	7.949	28.8	29.2	
295.55069	13:13:00	1.657	9.244	1.872	7.949	28.8	29.2	
295.55138	13:13:59	1.659	9.246	1.873	7.950	28.8	29.2	
295.55208	13:15:00	1.662	9.247	1.875	7.950	28.9	29.2	
295.55555	13:20:00	1.673	9.252	1.880	7.952	28.9	29.2	
295.56249	13:29:59	1.690	9.259	1.887	7.955	28.9	29.2	
295.58370	14:00:32	1.721	9.273	1.900	7.960	28.8	29.1	
295.58787	14:06:32	1.725	9.275	1.902	7.961	28.8	29.2	
295.63540	15:14:59	1.759	9.290	1.919	7.967	28.8	29.1	
295.67706	16:14:58	1.778	9.298	1.928	7.970	28.8	29.1	
295.71871	17:14:57	1.793	9.305	1.936	7.973	28.8	29.1	
295.76036	18:14:55	1.805	9.310	1.942	7.976	28.8	29.1	
295.84366	20:14:52	1.825	9.318	1.953	7.979	28.8	29.1	
295.92697	22:14:50	1.842	9.324	1.961	7.983	28.8	29.1	
296.01027	00:14:47	1.856	9.331	1.970	7.987	28.8	29.1	
296.51009	12:14:32	1.918	9.355	2.010	8.004	28.8	29.1	
297.00992	00:14:17	1.962	9.372	2.045	8.020	28.8	29.1	
297.02033	00:29:17	1.963	9.373	2.045	8.020	28.8	29.1	
298.00956	00:13:46	2.030	9.396	2.104	8.047	28.8	29.1	
299.04886	01:10:22	2.087	9.418	2.161	8.073	28.8	29.1	
300.07273	01:44:44	2.135	9.433	2.211	8.096	28.8	29.1	
301.07238	01:44:14	2.177	9.449	2.259	8.120	28.8	29.1	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
302.04164	00:59:58	2.213	9.460	2.301	8.140	28.8	29.1	
303.05810	01:23:40	2.249	9.473	2.349	8.162	28.8	29.1	
304.05774	01:23:09	2.284	9.486	2.392	8.183	28.8	29.1	
305.05738	01:22:38	2.317	9.496	2.436	8.202	28.8	29.1	
306.05118	01:13:42	2.350	9.509	2.479	8.292	28.8	29.1	
307.01787	00:25:44	2.376	9.514	2.512	8.277	28.9	29.2	
308.07618	01:49:42	2.405	9.522	2.551	8.478	28.8	29.1	
309.01419	00:20:26	2.433	9.533	2.588	8.273	28.9	29.2	
310.05831	01:23:58	2.457	9.537	2.623	8.287	28.8	29.1	
311.05796	01:23:28	2.480	9.541	2.654	8.300	28.8	29.1	
312.05760	01:22:57	2.504	9.547	2.687	8.315	28.9	29.1	
313.00227	00:03:16	2.524	9.551	2.717	8.326	28.9	29.1	
314.03596	00:51:47	2.547	9.557	2.748	8.341	28.9	29.2	
315.03561	00:51:17	2.552	9.554	2.772	8.348	28.9	29.1	
316.01429	00:20:35	2.572	9.557	2.798	8.355	28.9	29.2	
317.01393	00:20:04	2.592	9.559	2.824	8.364	28.9	29.2	
318.01358	00:19:33	2.608	9.562	2.850	8.372	28.9	29.2	
319.01322	00:19:02	2.623	9.562	2.873	8.380	28.9	29.2	
320.04879	01:10:15	2.638	9.564	2.897	8.388	28.9	29.2	
321.03153	00:45:24	2.651	9.563	2.917	8.514	28.9	29.1	
322.05888	01:24:47	2.662	9.563	2.937	8.415	28.9	29.1	
323.05852	01:24:16	2.676	9.565	2.963	8.406	28.9	29.1	
324.05817	01:23:46	2.686	9.564	2.981	8.537	28.9	29.1	
325.05781	01:23:15	2.695	9.561	2.996	8.417	28.9	29.1	
326.05745	01:22:44	2.704	9.560	3.014	8.411	28.9	29.1	
327.05710	01:22:13	2.713	9.558	3.030	8.446	28.9	29.1	
328.00891	00:12:50	2.720	9.556	3.044	8.508	28.9	29.1	
329.07302	01:45:09	2.730	9.554	3.061	8.399	28.8	29.1	
330.07267	01:44:39	2.739	9.553	3.076	8.410	28.9	29.1	
331.07231	01:44:08	2.747	9.552	3.091	8.584	28.8	29.0	
332.07196	01:43:37	2.753	9.547	3.104	8.414	28.8	29.1	
333.07160	01:43:06	2.758	9.544	3.119	8.460	28.9	29.1	
333.60868	14:36:30	2.770	9.540	3.131	8.434	28.9	29.1	
334.03319	00:47:48	2.766	9.543	3.133	8.444	28.9	29.1	
336.00919	00:13:14	2.777	9.536	3.158	8.446	28.9	29.1	
337.01471	00:21:11	2.783	9.533	3.175	8.449	28.9	29.1	
338.06000	01:26:24	2.791	9.533	3.192	8.454	28.8	29.0	
339.05964	01:25:53	2.796	9.530	3.207	8.456	28.9	29.1	
340.05929	01:25:23	2.801	9.527	3.217	8.457	28.8	29.0	
341.02063	00:29:42	2.806	9.523	3.226	8.458	28.8	29.0	
342.02027	00:29:11	2.810	9.518	3.234	8.456	28.8	29.0	
343.07272	01:44:43	2.815	9.514	3.244	8.457	28.8	29.0	
344.02829	00:40:44	2.818	9.510	3.254	8.456	28.8	29.0	
345.02794	00:40:14	2.823	9.506	3.264	8.457	28.8	29.0	
346.02758	00:39:43	2.828	9.503	3.274	8.457	28.8	29.0	
347.02722	00:39:12	2.831	9.499	3.284	8.456	28.8	29.0	
348.04146	00:59:42	2.833	9.489	3.277	8.449	28.8	29.0	
349.38301	09:11:32	2.838	9.481	3.280	8.444	28.8	28.9	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
349.45141	10:50:02	2.838	9.478	3.280	8.440	28.9	29.0	
349.45558	10:56:02	2.836	9.478	3.280	8.440	28.9	29.0	
349.45627	10:57:02	2.836	9.478	3.280	8.440	28.9	29.0	
349.45696	10:58:01	2.836	9.478	3.280	8.440	28.9	29.0	
349.45764	10:59:00	2.836	9.478	3.281	8.440	28.9	29.0	
349.45833	11:00:00	2.517	9.364	3.215	8.428	28.8	29.0	-pulse with-
349.45851	11:00:15	0.783	8.685	2.797	8.332	28.8	29.0	drawal test#2
349.45868	11:00:30	0.819	8.700	2.806	8.335	28.8	29.0	(test zone)
349.45885	11:00:45	0.840	8.709	2.813	8.337	28.8	29.0	removed 14 ml
349.45903	11:01:00	0.854	8.716	2.817	8.339	28.8	29.0	fluid
349.45972	11:02:00	0.892	8.733	2.831	8.343	28.8	29.0	
349.46042	11:03:00	0.915	8.744	2.840	8.346	28.8	29.0	
349.46111	11:04:00	0.931	8.752	2.847	8.349	28.8	29.0	
349.46180	11:05:00	0.945	8.759	2.853	8.351	28.8	29.0	
349.46250	11:06:00	0.956	8.765	2.859	8.353	28.8	29.0	
349.46319	11:07:00	0.966	8.770	2.864	8.355	28.8	29.0	
349.46389	11:08:00	0.975	8.775	2.867	8.357	28.8	29.0	
349.46458	11:09:00	0.983	8.779	2.871	8.358	28.8	29.0	
349.46528	11:10:00	0.989	8.782	2.875	8.359	28.8	29.0	
349.46597	11:11:00	0.996	8.786	2.877	8.361	28.9	29.0	
349.46667	11:12:00	1.002	8.789	2.880	8.362	28.8	29.0	
349.46736	11:13:00	1.008	8.791	2.883	8.363	28.8	29.0	
349.46806	11:14:00	1.013	8.794	2.886	8.364	28.8	29.0	
349.46875	11:15:00	1.018	8.796	2.888	8.364	28.9	29.0	
349.46944	11:16:00	1.022	8.799	2.890	8.365	28.9	29.1	
349.47014	11:17:00	1.027	8.801	2.892	8.366	28.9	29.0	
349.47083	11:18:00	1.031	8.803	2.893	8.367	28.9	29.0	
349.47153	11:19:00	1.035	8.805	2.895	8.368	28.9	29.1	
349.47222	11:20:00	1.038	8.807	2.897	8.368	28.9	29.1	
349.47569	11:25:00	1.055	8.815	2.905	8.371	28.9	29.0	
349.47916	11:29:59	1.069	8.822	2.912	8.373	28.9	29.0	
349.49166	11:47:59	1.107	8.840	2.929	8.379	28.8	29.0	
349.49999	11:59:59	1.125	8.849	2.938	8.382	28.8	29.0	
349.54165	12:59:59	1.184	8.878	2.964	8.390	28.8	29.0	
349.58679	14:04:59	1.224	8.896	2.980	8.395	28.8	29.0	
349.62844	15:04:57	1.252	8.909	2.992	8.398	28.8	29.0	
349.66676	16:00:08	1.273	8.918	3.001	8.401	28.8	29.0	
349.70841	17:00:07	1.293	8.926	3.008	8.402	28.8	29.0	
349.75006	18:00:05	1.310	8.934	3.014	8.403	28.8	29.0	
349.79172	19:00:05	1.325	8.940	3.020	8.405	28.8	29.0	
349.83337	20:00:03	1.339	8.946	3.024	8.406	28.8	29.0	
349.87502	21:00:02	1.351	8.951	3.030	8.407	28.8	29.0	
349.91667	22:00:00	1.363	8.956	3.034	8.408	28.8	29.0	
349.95832	22:59:59	1.374	8.961	3.038	8.409	28.8	28.9	
350.01039	00:14:58	1.387	8.966	3.043	8.409	28.8	29.0	
350.02080	00:29:57	1.390	8.968	3.044	8.410	28.8	29.0	
350.26030	06:14:50	1.439	8.988	3.063	8.413	28.8	29.0	
350.51021	12:14:42	1.480	9.006	3.080	8.417	28.8	29.0	

TABLE C2 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #1, PERMEABILITY-TESTING SEQUENCE C2H01-B

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
350.76012	18:14:34	1.515	9.019	3.093	8.418	28.8	29.0	
351.01003	00:14:27	1.546	9.032	3.105	8.421	28.8	29.0	
351.50985	12:14:11	1.601	9.053	3.127	8.425	28.8	29.0	
352.68677	16:28:57	1.704	9.097	3.180	8.436	28.8	28.9	
353.01998	00:28:46	1.728	9.107	3.192	8.439	28.8	28.9	
354.01962	00:28:15	1.797	9.132	3.222	8.443	28.8	28.9	
355.01927	00:27:45	1.859	9.159	3.252	8.452	28.8	28.9	
356.01721	00:24:47	1.912	9.177	3.275	8.455	28.8	28.9	
357.58195	13:58:00	1.997	9.193	3.312	8.446	28.9	29.1	
365.46042	11:03:00	2.269	9.250	3.424	8.450	28.9	29.1	
3.48750	11:42:00	2.358	9.270	3.449	8.453	28.8	28.9	-created data
3.48958	11:45:00	2.356	9.271	3.447	8.454	28.8	28.9	file - C2H017
4.07271	01:44:42	2.364	9.279	3.442	8.460	28.7	28.8	
5.07235	01:44:11	2.389	9.289	3.454	8.460	28.7	28.8	
6.05228	01:15:17	2.408	9.291	3.459	8.460	28.7	28.8	
7.07914	01:53:58	2.428	9.295	3.466	8.463	28.7	28.8	
8.07879	01:53:27	2.449	9.299	3.475	8.467	28.7	28.8	
9.07843	01:52:56	2.465	9.299	3.482	8.466	28.7	28.8	
10.02563	00:36:54	2.483	9.303	3.494	8.468	28.7	28.8	
11.02528	00:36:24	2.501	9.307	3.503	8.473	28.7	28.8	
12.02690	00:38:44	2.514	9.305	3.506	8.472	28.7	28.8	
13.02707	00:38:59	2.531	9.308	3.516	8.474	28.7	28.8	
14.05539	01:19:46	2.548	9.311	3.523	8.477	28.7	28.8	
15.05504	01:19:15	2.565	9.315	3.533	8.481	28.7	28.8	
16.05468	01:18:44	2.577	9.314	3.539	8.479	28.7	28.8	
17.06702	01:36:31	2.592	9.316	3.546	8.479	28.7	28.8	
18.02799	00:40:18	2.608	9.320	3.556	8.482	28.7	28.9	
18.52781	12:40:03	2.613	9.319	3.558	8.480	28.7	28.9	
38.45833	11:00:00	2.826	9.302	3.680	8.467	28.2	28.4	-created data
38.50345	12:04:58	2.819	9.309	3.674	8.482	28.6	28.8	file - C2H018
39.00328	00:04:43	2.821	9.312	3.672	8.479	28.6	28.8	
40.00292	00:04:12	2.826	9.314	3.680	8.476	28.6	28.8	
40.33614	08:04:02	2.829	9.315	3.682	8.476	28.6	28.8	-end testing

TABLE C3
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
47.42083	10:06:00	0.019	0.077	0.011	0.053	0.257	0.312	0.337	1.673	28.7	28.4	-created data
47.42118	10:06:30	0.019	0.076	0.011	0.053	0.257	0.312	0.337	1.673	28.7	28.4	file - C2H019
47.42153	10:07:00	0.019	0.680	0.011	0.362	0.257	0.313	0.337	1.673	28.7	28.4	
47.42187	10:07:30	0.019	10.646	0.011	10.666	0.298	0.334	0.329	1.277	28.7	28.4	-inflated
47.42222	10:08:00	0.020	10.432	0.010	10.403	0.298	0.334	0.329	1.281	28.7	28.4	packers
47.42257	10:08:30	0.020	10.363	0.011	10.333	0.298	0.334	0.329	1.282	28.7	28.4	
47.42291	10:08:59	0.019	10.520	0.012	10.500	0.298	0.334	0.330	1.285	28.7	28.4	
47.42361	10:10:00	0.019	10.305	0.011	10.336	0.298	0.334	0.330	1.285	28.7	28.4	
47.42430	10:11:00	0.018	10.174	0.011	10.193	0.298	0.334	0.330	1.284	28.8	28.3	-filled bore-
47.42500	10:12:00	0.018	10.078	0.011	10.093	0.299	0.334	0.330	1.282	28.7	28.4	hole with
47.42569	10:13:00	0.018	10.003	0.011	10.017	0.299	0.334	0.330	1.282	28.8	28.4	brine
47.42639	10:14:00	1.691	9.945	0.011	9.956	0.299	0.334	0.330	1.280	28.7	29.1	
47.42708	10:15:00	2.179	9.937	0.011	9.908	0.299	0.333	0.328	1.275	28.7	28.6	
47.42777	10:15:59	0.083	9.878	1.910	9.865	0.299	0.334	0.325	1.271	28.9	28.4	
47.42847	10:17:00	0.045	9.872	0.037	9.839	0.299	0.333	0.326	1.270	28.5	28.4	
47.42916	10:17:59	0.014	9.814	0.006	9.796	0.299	0.333	0.326	1.269	28.5	28.3	
47.42986	10:19:00	0.013	9.774	0.006	9.760	0.303	0.331	0.326	1.267	28.4	28.2	
47.43055	10:20:00	0.014	9.736	0.005	9.729	0.303	0.332	0.326	1.267	28.3	28.2	
47.43125	10:21:00	0.013	9.708	0.005	9.701	0.303	0.332	0.326	1.265	28.3	28.2	
47.43194	10:22:00	0.013	9.680	0.005	9.676	0.303	0.332	0.326	1.264	28.2	28.2	
47.43263	10:22:59	0.013	9.653	0.004	9.652	0.303	0.332	0.326	1.264	28.2	28.2	
47.43333	10:24:00	0.012	9.629	0.005	9.628	0.303	0.332	0.326	1.262	28.2	28.2	
47.43402	10:24:59	0.012	9.605	0.004	9.608	0.303	0.331	0.326	1.261	28.2	28.2	
47.43472	10:26:00	0.012	9.583	0.004	9.587	0.303	0.331	0.326	1.260	28.2	28.2	
47.43541	10:26:59	0.010	9.563	0.003	9.568	0.299	0.333	0.326	1.260	28.2	28.2	
47.43610	10:27:59	0.011	9.541	0.003	9.551	0.299	0.333	0.326	1.259	28.2	28.2	
47.43680	10:29:00	0.011	9.524	0.004	9.532	0.299	0.333	0.326	1.258	28.2	28.2	
47.43749	10:29:59	0.011	9.505	0.003	9.516	0.299	0.333	0.326	1.257	28.2	28.2	
47.45901	11:00:58	0.010	9.137	0.002	9.208	0.299	0.333	0.327	1.240	28.4	28.2	
47.48471	11:37:59	0.011	8.899	0.001	9.022	0.299	0.332	0.327	1.229	28.4	28.2	
47.52636	12:37:58	0.012	8.670	0.000	8.865	0.299	0.332	0.327	1.216	28.4	28.3	
47.56802	13:37:57	0.014	8.527	0.000	8.760	0.300	0.332	0.327	1.208	28.5	28.3	
47.60967	14:37:55	0.012	8.424	-0.001	8.672	0.300	0.332	0.327	1.202	28.5	28.2	
47.65132	15:37:54	0.015	8.343	0.002	8.600	0.300	0.332	0.327	1.196	28.5	28.3	
47.69297	16:37:53	0.014	8.281	-0.001	8.538	0.300	0.332	0.327	1.191	28.5	28.3	
47.73462	17:37:51	0.014	8.227	0.000	8.482	0.300	0.332	0.327	1.187	28.5	28.3	
47.77628	18:37:51	0.014	8.181	0.000	8.425	0.300	0.332	0.327	1.184	28.5	28.3	
48.00536	00:07:43	0.015	8.017	-0.001	8.200	0.301	0.332	0.328	1.170	28.5	28.3	
48.33857	08:07:32	0.018	7.874	0.001	7.955	0.301	0.333	0.329	1.157	28.5	28.3	
48.34899	08:22:33	0.018	7.870	0.002	7.948	0.301	0.333	0.329	1.157	28.5	28.3	
48.36423	08:44:29	0.020	7.863	0.003	7.933	0.301	0.333	0.329	1.157	28.6	28.3	
48.36458	08:45:00	0.018	8.131	0.003	7.930	0.302	0.333	0.329	1.162	28.5	28.4	-packers'
48.36493	08:45:30	0.020	10.384	0.004	10.530	0.305	0.333	0.325	1.199	28.6	28.3	pressure
48.36527	08:45:59	0.020	10.343	0.003	10.441	0.305	0.333	0.325	1.199	28.5	28.4	increased
48.36562	08:46:30	0.020	10.318	0.004	10.402	0.305	0.333	0.325	1.199	28.6	28.3	
48.36597	08:47:00	0.020	10.299	0.004	10.374	0.306	0.333	0.325	1.199	28.6	28.3	
48.36632	08:47:30	0.020	10.284	0.003	10.355	0.306	0.333	0.325	1.199	28.6	28.3	
48.36666	08:47:59	0.021	10.271	0.003	10.339	0.306	0.333	0.326	1.199	28.6	28.4	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
48.36701	08:48:30	0.020	10.261	0.002	10.325	0.306	0.333	0.325	1.199	28.5	28.3	
48.36736	08:49:00	0.019	10.252	0.004	10.313	0.306	0.333	0.325	1.199	28.5	28.4	
48.36805	08:50:00	0.020	10.237	0.003	10.295	0.306	0.333	0.325	1.199	28.6	28.3	
48.36875	08:51:00	0.020	10.222	0.004	10.278	0.306	0.333	0.325	1.199	28.6	28.3	
48.36944	08:52:00	0.020	10.210	0.004	10.264	0.306	0.333	0.325	1.199	28.6	28.3	
48.37014	08:53:00	0.021	10.198	0.002	10.252	0.306	0.333	0.325	1.199	28.6	28.3	
48.37083	08:54:00	0.020	10.192	0.003	10.241	0.306	0.333	0.325	1.199	28.6	28.3	
48.37152	08:54:59	0.020	10.181	0.002	10.232	0.306	0.333	0.325	1.199	28.6	28.3	
48.37222	08:56:00	0.020	10.174	0.002	10.223	0.306	0.333	0.325	1.199	28.6	28.3	
48.37291	08:56:59	0.020	10.167	0.003	10.215	0.306	0.333	0.325	1.199	28.6	28.3	
48.37361	08:58:00	0.020	10.159	0.003	10.209	0.306	0.333	0.325	1.198	28.6	28.3	
48.37430	08:59:00	0.021	10.154	0.002	10.202	0.306	0.333	0.325	1.198	28.6	28.3	
48.37500	09:00:00	0.020	10.148	0.004	10.195	0.306	0.333	0.325	1.198	28.6	28.3	
48.43750	10:30:00	0.018	9.929	0.001	9.955	0.306	0.333	0.325	1.195	28.5	28.3	
48.44791	10:44:59	0.019	9.910	0.003	9.929	0.306	0.333	0.325	1.194	28.5	28.3	-shut in
48.45139	10:50:00	0.020	9.905	0.002	9.920	0.306	0.333	0.325	1.195	28.6	28.3	
48.45486	10:55:00	0.019	9.902	0.003	9.912	0.306	0.333	0.325	1.194	28.5	28.3	
48.45833	11:00:00	0.020	9.894	0.002	9.905	0.306	0.333	0.325	1.194	28.6	28.3	
48.50207	12:02:59	0.022	9.834	0.003	9.819	0.306	0.333	0.325	1.192	28.5	28.3	
48.54165	12:59:59	0.026	9.792	0.003	9.755	0.307	0.333	0.325	1.191	28.5	28.3	
48.58333	14:00:00	0.028	9.755	0.003	9.693	0.306	0.336	0.325	1.189	28.5	28.3	
48.66663	15:59:57	0.036	9.688	0.004	9.588	0.307	0.336	0.325	1.187	28.6	28.3	
48.74994	17:59:55	0.039	9.633	0.004	9.490	0.307	0.336	0.325	1.184	28.5	28.3	
48.83324	19:59:52	0.045	9.584	0.004	9.404	0.307	0.336	0.325	1.182	28.5	28.3	
48.91654	21:59:49	0.052	9.539	0.006	9.323	0.307	0.336	0.325	1.179	28.6	28.3	
49.02067	00:29:46	0.062	9.493	0.006	9.229	0.307	0.336	0.325	1.176	28.6	28.3	
49.52050	12:29:31	0.105	9.303	0.010	8.893	0.307	0.336	0.326	1.165	28.6	28.3	
50.02032	00:29:16	0.156	9.161	0.014	8.639	0.307	0.336	0.326	1.154	28.5	28.3	
51.01996	00:28:45	0.308	8.962	0.019	8.127	0.307	0.336	0.321	1.133	28.5	28.3	
52.05115	01:13:39	0.555	8.822	0.024	7.638	0.307	0.335	0.315	1.108	28.5	28.3	
53.05080	01:13:09	0.967	8.743	0.029	7.338	0.307	0.330	0.308	1.086	28.5	28.3	-deflated
53.30071	07:13:01	1.114	8.734	0.031	7.277	0.307	0.327	0.307	1.080	28.5	28.4	packers
54.46528	11:10:00	0.026	0.020	0.014	0.009	0.228	0.168	0.305	3.929	28.3	28.5	removed and
54.46597	11:11:00	0.027	0.018	0.015	0.005	0.228	0.168	0.306	3.928	28.3	28.4	adjusted
54.46736	11:13:00	0.026	0.176	0.014	0.050	0.228	0.168	0.305	3.928	28.3	28.5	test tool
54.46840	11:14:30	0.027	0.070	0.015	0.054	0.228	0.171	0.305	3.928	28.7	28.4	installed
54.46875	11:15:00	0.028	0.079	0.014	0.062	0.228	0.171	0.305	3.928	28.6	28.4	test tool
54.46909	11:15:29	0.027	0.119	0.015	0.613	0.234	0.171	0.305	3.927	28.7	28.4	-created data
54.46944	11:16:00	0.140	7.111	0.015	7.154	0.302	0.165	0.268	3.714	28.7	28.4	file - C2H110
54.46979	11:16:30	0.067	10.709	0.014	10.679	0.303	0.166	0.267	3.815	28.7	28.4	
54.47013	11:16:59	0.066	10.783	0.015	10.748	0.303	0.166	0.267	3.827	28.7	28.4	inflated
54.47048	11:17:29	0.065	10.617	0.015	10.585	0.303	0.166	0.267	3.827	28.8	28.4	packers
54.47083	11:18:00	0.064	10.772	0.014	10.741	0.303	0.166	0.267	3.836	28.8	28.4	
54.47118	11:18:30	0.065	10.816	0.015	10.640	0.303	0.166	0.267	3.838	28.8	28.4	
54.47152	11:18:59	0.065	10.734	0.015	10.530	0.303	0.166	0.267	3.838	28.8	28.4	
54.47222	11:20:00	0.064	10.618	0.014	10.369	0.303	0.166	0.267	3.837	28.7	28.4	-filled bore-
54.47291	11:20:59	0.064	10.530	0.016	10.255	0.303	0.166	0.267	3.836	28.6	28.4	hole with
54.47361	11:22:00	0.063	10.461	-0.003	10.166	0.303	0.166	0.267	3.836	29.8	28.4	brine

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
54.47430	11:23:00	0.065	10.402	0.000	10.095	0.303	0.166	0.267	3.835	30.4	28.4	
54.47500	11:24:00	0.064	10.348	0.234	10.032	0.303	0.166	0.267	3.834	30.1	28.3	
54.47639	11:26:00	0.063	10.276	0.009	9.938	0.303	0.166	0.267	3.833	30.7	28.3	
54.47708	11:27:00	0.064	10.233	0.010	9.894	0.303	0.166	0.267	3.832	30.3	28.4	
54.47777	11:27:59	0.065	10.191	0.010	9.855	0.303	0.167	0.267	3.831	30.0	28.4	
54.47916	11:29:59	0.064	10.118	0.010	9.783	0.303	0.167	0.266	3.830	29.6	28.3	
54.48055	11:32:00	0.064	9.998	0.007	9.714	0.303	0.167	0.266	3.830	29.3	28.4	
54.48194	11:34:00	0.065	7.980	0.006	9.835	0.301	0.168	0.268	3.780	29.2	28.3	
54.48333	11:36:00	0.065	7.977	0.006	9.782	0.301	0.168	0.268	3.777	29.1	28.3	
54.48472	11:38:00	0.064	7.953	0.005	9.737	0.301	0.168	0.268	3.775	29.0	28.3	
54.48610	11:39:59	0.064	7.929	0.004	9.696	0.301	0.168	0.268	3.774	29.0	28.3	
54.48749	11:41:59	0.064	7.906	0.003	9.659	0.301	0.168	0.268	3.772	28.9	28.3	
54.48888	11:43:59	0.065	7.885	0.005	9.621	0.301	0.168	0.268	3.771	28.8	28.3	
54.49097	11:47:00	0.065	7.848	0.004	9.576	0.301	0.167	0.268	3.769	28.8	28.3	
54.49166	11:47:59	0.065	9.647	0.005	9.513	0.299	0.168	0.265	3.786	28.8	28.3	-test-zone
54.49236	11:49:00	0.065	9.580	0.004	9.497	0.299	0.168	0.265	3.786	28.8	28.3	packer
54.49305	11:50:00	0.064	9.544	0.005	9.483	0.299	0.168	0.265	3.786	28.8	28.3	pressure
54.49375	11:51:00	0.065	9.512	0.004	9.467	0.299	0.168	0.265	3.785	28.8	28.3	increased
54.49791	11:56:59	0.065	9.394	0.003	9.393	0.299	0.168	0.264	3.783	28.7	28.3	
54.50208	12:03:00	0.064	9.313	0.003	9.330	0.299	0.168	0.264	3.781	28.7	28.2	
54.50625	12:09:00	0.065	9.248	0.004	9.277	0.299	0.168	0.264	3.779	28.6	28.3	
54.51041	12:14:59	0.065	9.193	0.004	9.230	0.299	0.168	0.264	3.777	28.6	28.2	
54.51458	12:21:00	0.065	9.145	0.002	9.187	0.299	0.168	0.264	3.775	28.6	28.2	
54.51874	12:26:59	0.064	9.098	0.002	9.149	0.298	0.168	0.264	3.774	28.6	28.2	
54.54166	12:59:59	0.064	8.905	0.002	8.981	0.299	0.167	0.264	3.767	28.6	28.2	
54.58333	14:00:00	0.064	8.655	0.000	8.793	0.299	0.167	0.264	3.758	28.5	28.2	
54.66663	15:59:57	0.062	8.197	-0.003	8.583	0.299	0.166	0.264	3.742	28.5	28.2	
54.74994	17:59:55	0.062	7.788	-0.004	8.452	0.299	0.165	0.265	3.727	28.5	28.2	
54.83324	19:59:52	0.061	7.411	-0.006	8.347	0.299	0.165	0.265	3.714	28.5	28.2	
54.91654	21:59:49	0.061	7.098	-0.007	8.260	0.299	0.164	0.264	3.703	28.5	28.3	
54.99985	23:59:47	0.060	6.847	-0.007	8.172	0.299	0.163	0.264	3.694	28.5	28.3	
55.02067	00:29:46	0.061	6.789	-0.006	8.150	0.299	0.163	0.264	3.692	28.5	28.2	
55.27059	06:29:39	0.060	6.237	-0.007	7.927	0.299	0.161	0.264	3.671	28.5	28.2	
55.35208	08:27:00	0.061	6.178	-0.007	7.859	0.299	0.160	0.264	3.667	28.5	28.3	
55.35278	08:28:00	0.061	6.174	-0.006	7.859	0.299	0.160	0.264	3.667	28.5	28.2	
55.35347	08:29:00	0.061	6.174	-0.007	7.858	0.299	0.160	0.264	3.667	28.5	28.2	
55.35382	08:29:30	0.062	6.173	-0.006	7.856	0.299	0.160	0.264	3.667	28.5	28.2	
55.35417	08:30:00	0.061	6.168	-0.007	8.565	0.299	0.160	0.264	3.669	28.5	28.3	-packers'
55.35452	08:30:31	0.062	10.039	-0.005	10.299	0.300	0.161	0.260	3.731	28.6	28.2	pressure
55.35486	08:31:00	0.061	10.398	-0.004	10.557	0.300	0.161	0.260	3.739	28.6	28.3	increased
55.35521	08:31:30	0.061	10.520	-0.004	10.505	0.300	0.161	0.260	3.741	28.6	28.2	
55.35556	08:32:00	0.061	10.471	-0.005	10.477	0.300	0.161	0.260	3.741	28.5	28.3	
55.35625	08:33:00	0.061	10.414	-0.004	10.438	0.300	0.161	0.260	3.741	28.5	28.3	
55.35694	08:34:00	0.060	10.378	-0.005	10.411	0.300	0.161	0.260	3.741	28.6	28.2	
55.35764	08:35:00	0.060	10.350	-0.004	10.389	0.300	0.161	0.259	3.741	28.6	28.2	
55.35833	08:36:00	0.060	10.329	-0.005	10.372	0.301	0.161	0.259	3.741	28.6	28.2	
55.35902	08:36:59	0.061	10.311	-0.004	10.357	0.301	0.161	0.259	3.741	28.6	28.3	
55.35972	08:38:00	0.060	10.296	-0.004	10.345	0.301	0.161	0.259	3.741	28.6	28.2	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
55.36041	08:38:59	0.061	10.283	-0.003	10.333	0.301	0.161	0.259	3.741	28.6	28.2	
55.36111	08:40:00	0.060	10.272	-0.003	10.322	0.301	0.161	0.259	3.741	28.6	28.2	
55.36458	08:45:00	0.060	10.225	-0.003	10.280	0.301	0.161	0.259	3.741	28.6	28.3	
55.36805	08:50:00	0.061	10.192	-0.004	10.249	0.301	0.161	0.259	3.741	28.6	28.3	
55.37152	08:54:59	0.060	10.166	-0.003	10.222	0.301	0.161	0.259	3.741	28.6	28.3	
55.37500	09:00:00	0.060	10.143	-0.004	10.200	0.301	0.161	0.259	3.741	28.6	28.3	
55.37916	09:05:59	0.061	10.120	-0.003	10.175	0.301	0.161	0.259	3.741	28.6	28.3	
55.39582	09:29:59	0.061	10.048	-0.003	10.092	0.301	0.160	0.259	3.740	28.6	28.3	
55.41666	09:59:59	0.061	9.982	-0.004	10.015	0.301	0.160	0.259	3.739	28.5	28.3	
55.43750	10:30:00	0.060	9.932	-0.003	9.954	0.301	0.160	0.259	3.739	28.6	28.3	-shut in
55.44791	10:44:59	0.061	9.915	-0.003	9.927	0.301	0.160	0.259	3.738	28.5	28.3	
55.45833	11:00:00	0.062	9.896	-0.003	9.902	0.301	0.160	0.259	3.738	28.5	28.3	
55.50001	12:00:01	0.068	9.829	-0.004	9.813	0.301	0.160	0.258	3.736	28.6	28.2	
55.54166	12:59:59	0.076	9.774	-0.002	9.732	0.301	0.159	0.258	3.733	28.5	28.2	
55.58333	14:00:00	0.085	9.726	-0.003	9.658	0.301	0.159	0.258	3.732	28.6	28.2	
55.66664	15:59:58	0.106	9.644	-0.002	9.534	0.301	0.158	0.258	3.726	28.5	28.3	
55.74994	17:59:55	0.135	9.572	-0.003	9.421	0.302	0.158	0.258	3.721	28.6	28.2	
55.83324	19:59:52	0.166	9.504	-0.002	9.322	0.302	0.158	0.257	3.716	28.5	28.2	
55.91655	21:59:50	0.231	9.451	-0.002	9.227	0.303	0.158	0.257	3.711	28.6	28.2	
56.02068	00:29:47	0.277	9.376	-0.002	9.112	0.304	0.158	0.256	3.706	28.5	28.2	
56.52050	12:29:31	0.552	9.124	0.000	8.641	0.304	0.157	0.252	3.679	28.5	28.2	
57.02032	00:29:16	1.112	9.046	0.001	8.273	0.304	0.154	0.247	3.650	28.6	28.2	
57.18693	04:29:11	1.406	9.065	0.002	8.175	0.304	0.151	0.244	3.638	28.6	28.3	
57.27023	06:29:08	1.583	9.085	0.002	8.129	0.304	0.149	0.242	3.631	28.5	28.2	
57.39519	09:29:04	1.890	9.131	0.003	8.067	0.304	0.147	0.239	3.617	28.8	28.5	
57.61443	14:44:47	2.575	9.292	0.016	7.991	0.303	0.145	0.233	3.598	28.7	28.3	
57.67691	16:14:45	2.797	9.328	0.012	7.967	0.303	0.145	0.231	3.589	28.6	28.3	
57.73939	17:44:43	3.027	9.384	0.010	7.944	0.302	0.145	0.230	3.582	28.5	28.3	
57.80187	19:14:42	3.266	9.447	0.010	7.921	0.302	0.144	0.228	3.574	28.6	28.3	
57.86434	20:44:39	3.502	9.513	0.009	7.898	0.301	0.143	0.227	3.567	28.5	28.2	
57.94765	22:44:37	3.814	9.603	0.009	7.872	0.300	0.142	0.225	3.558	28.6	28.3	
58.01013	00:14:35	4.038	9.670	0.009	7.847	0.300	0.141	0.224	3.552	28.6	28.3	
58.26004	06:14:27	4.805	9.916	0.009	7.744	0.298	0.136	0.219	3.527	28.6	28.3	
58.34334	08:14:25	5.009	9.984	0.010	7.710	0.298	0.135	0.218	3.520	28.6	28.2	
58.46525	11:09:58	5.264	10.070	0.010	7.662	0.297	0.132	0.217	3.511	28.6	28.3	
58.54855	13:09:55	5.412	10.121	0.010	7.628	0.297	0.131	0.216	3.507	28.6	28.3	
58.63185	15:09:52	5.546	10.166	0.010	7.593	0.297	0.129	0.215	3.502	28.5	28.2	
58.71516	17:09:50	5.664	10.205	0.011	7.556	0.297	0.127	0.214	3.498	28.6	28.3	
58.79846	19:09:47	5.769	10.239	0.011	7.520	0.297	0.126	0.214	3.493	28.6	28.2	
58.88176	21:09:44	5.864	10.270	0.012	7.485	0.296	0.125	0.213	3.489	28.6	28.3	
58.96507	23:09:42	5.949	10.298	0.012	7.449	0.296	0.124	0.213	3.485	28.6	28.3	
59.04837	01:09:39	6.025	10.324	0.012	7.413	0.296	0.123	0.212	3.481	28.6	28.3	
59.54819	13:09:24	6.373	10.450	0.013	7.208	0.296	0.118	0.209	3.464	28.6	28.3	
60.04802	01:09:09	6.582	10.515	0.015	7.010	0.296	0.113	0.207	3.449	28.6	28.3	
60.54784	13:08:53	6.725	10.550	0.017	6.828	0.296	0.099	0.206	3.436	28.6	28.3	
61.04766	01:08:38	6.851	10.585	0.020	6.653	0.295	0.098	0.205	3.421	28.6	28.3	
61.54748	13:08:22	6.947	10.612	0.022	6.489	0.295	0.098	0.205	3.410	28.6	28.3	
62.00559	00:08:03	7.014	10.641	0.029	6.342	0.295	0.097	0.204	3.401	28.6	28.3	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
63.02129	00:30:39	7.102	10.642	0.030	6.021	0.294	0.095	0.204	3.385	28.6	28.3	
64.02093	00:30:08	7.156	10.615	0.033	5.748	0.294	0.094	0.205	3.373	28.6	28.3	
65.02057	00:29:37	7.196	10.602	0.040	5.508	0.294	0.093	0.205	3.362	28.6	28.3	
66.03546	00:51:04	7.225	10.700	0.048	5.234	0.294	0.083	0.205	3.354	28.6	28.3	
67.03511	00:50:34	7.355	10.825	0.057	4.987	0.294	0.082	0.205	3.347	28.6	28.2	
67.36832	08:50:23	7.376	10.873	0.059	4.912	0.294	0.082	0.205	3.345	28.6	28.3	
67.59028	14:10:00	7.396	10.890	0.062	4.867	0.294	0.082	0.205	3.344	28.6	28.3	
67.59062	14:10:30	7.396	10.889	0.060	4.866	0.294	0.082	0.205	3.344	28.6	28.3	
67.59097	14:11:00	7.397	10.890	0.062	4.864	0.294	0.082	0.205	3.345	28.6	28.3	-guard-zone
67.59132	14:11:30	7.447	11.063	0.064	10.235	0.291	0.076	0.209	3.389	28.6	28.3	packer
67.59166	14:11:59	7.445	11.059	0.062	10.081	0.291	0.075	0.209	3.388	28.6	28.3	pressure
67.59201	14:12:30	7.443	11.054	0.062	10.016	0.291	0.075	0.209	3.388	28.6	28.3	increased
67.59236	14:13:00	7.442	11.056	0.064	9.972	0.291	0.075	0.209	3.389	28.6	28.3	
67.59306	14:14:00	7.442	11.052	0.062	9.914	0.291	0.075	0.209	3.388	28.6	28.3	
67.59375	14:15:00	7.441	11.049	0.062	9.872	0.291	0.075	0.209	3.388	28.6	28.3	
67.59722	14:20:00	7.436	11.045	0.062	9.763	0.291	0.075	0.208	3.388	28.6	28.3	
67.60069	14:25:00	7.432	11.043	0.062	9.701	0.291	0.075	0.208	3.388	28.6	28.3	
67.60416	14:29:59	7.430	11.041	0.062	9.661	0.291	0.075	0.208	3.388	28.6	28.3	
67.62915	15:05:59	7.419	11.033	0.064	9.507	0.291	0.075	0.207	3.387	28.7	28.4	
67.67080	16:05:57	7.416	11.033	0.064	9.372	0.291	0.075	0.207	3.386	28.6	28.3	
67.71245	17:05:56	7.418	11.032	0.064	9.279	0.291	0.074	0.207	3.385	28.6	28.2	
68.00401	00:05:46	7.436	11.038	0.065	9.010	0.291	0.074	0.206	3.383	28.6	28.3	
68.55836	13:24:02	7.464	11.044	0.069	8.701	0.291	0.074	0.206	3.379	28.6	28.3	
69.05818	01:23:47	7.490	11.066	0.073	8.459	0.291	0.074	0.206	3.376	28.6	28.3	
70.06504	01:33:39	7.523	11.103	0.081	8.022	0.291	0.074	0.207	3.366	28.6	28.3	
71.06468	01:33:08	7.556	11.155	0.090	7.567	0.291	0.074	0.209	3.357	28.6	28.3	
72.06433	01:32:38	7.571	11.239	0.099	7.256	0.291	0.074	0.210	3.347	28.6	28.3	
72.41319	09:55:00	7.565	11.278	0.103	7.145	0.291	0.074	0.210	3.344	28.6	28.3	
72.41389	09:56:00	7.564	11.276	0.102	7.144	0.291	0.074	0.210	3.344	28.6	28.3	
72.41458	09:57:00	7.565	11.279	0.103	7.143	0.291	0.074	0.210	3.344	28.6	28.3	
72.41527	09:57:59	7.563	11.277	0.102	7.145	0.291	0.074	0.210	3.344	28.6	28.3	
72.41562	09:58:30	7.564	11.278	0.102	7.144	0.291	0.074	0.210	3.344	28.6	28.2	
72.41597	09:59:00	7.563	11.276	0.102	7.143	0.291	0.074	0.210	3.344	28.6	28.3	
72.41632	09:59:30	7.563	11.277	0.102	7.143	0.291	0.074	0.210	3.344	28.6	28.3	
72.41667	10:00:00	7.563	11.278	0.102	7.145	0.291	0.074	0.210	3.344	28.6	28.3	-pulse with-
72.41701	10:00:30	4.232	8.925	0.099	7.036	0.288	0.076	0.215	3.372	28.6	28.2	drawal test#1
72.41736	10:01:00	4.450	9.029	0.100	7.038	0.288	0.076	0.214	3.372	28.6	28.2	(test zone)
72.41771	10:01:30	4.633	9.124	0.099	7.043	0.285	0.075	0.213	3.371	28.7	28.2	removed ~50
72.41805	10:02:00	4.774	9.202	0.101	7.048	0.287	0.078	0.213	3.370	28.6	28.2	ml fluid
72.41840	10:02:30	4.875	9.258	0.100	7.051	0.288	0.076	0.213	3.369	28.6	28.3	
72.41875	10:03:00	4.946	9.299	0.101	7.055	0.288	0.076	0.212	3.368	28.6	28.2	
72.41909	10:03:29	5.000	9.327	0.099	7.056	0.288	0.076	0.212	3.368	28.6	28.2	
72.41944	10:04:00	5.042	9.351	0.100	7.059	0.288	0.076	0.212	3.367	28.6	28.2	
72.42014	10:05:00	5.106	9.390	0.100	7.061	0.288	0.076	0.212	3.367	28.6	28.2	
72.42083	10:06:00	5.155	9.420	0.101	7.061	0.288	0.076	0.212	3.366	28.6	28.3	
72.42152	10:06:59	5.191	9.443	0.101	7.061	0.288	0.076	0.212	3.366	28.6	28.2	
72.42222	10:08:00	5.223	9.462	0.100	7.064	0.288	0.076	0.212	3.366	28.7	28.3	
72.42291	10:08:59	5.253	9.482	0.100	7.065	0.288	0.076	0.211	3.365	28.7	28.2	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
72.42361	10:10:00	5.278	9.498	0.100	7.065	0.288	0.076	0.211	3.365	28.6	28.3	
72.42431	10:11:00	5.305	9.516	0.101	7.064	0.288	0.076	0.211	3.365	28.6	28.3	
72.42500	10:12:00	5.330	9.530	0.100	7.067	0.288	0.076	0.211	3.365	28.6	28.3	
72.42570	10:13:00	5.351	9.545	0.100	7.067	0.288	0.076	0.211	3.364	28.6	28.3	
72.42639	10:14:00	5.374	9.560	0.102	7.066	0.288	0.076	0.211	3.364	28.6	28.3	
72.42709	10:15:01	5.394	9.574	0.102	7.068	0.288	0.076	0.211	3.364	28.7	28.2	
72.42778	10:16:00	5.413	9.586	0.102	7.067	0.288	0.076	0.211	3.363	28.6	28.3	
72.42847	10:17:00	5.432	9.596	0.100	7.068	0.288	0.076	0.211	3.363	28.6	28.3	
72.42917	10:18:00	5.449	9.609	0.100	7.069	0.288	0.076	0.211	3.363	28.6	28.3	
72.42986	10:19:00	5.468	9.622	0.101	7.069	0.288	0.076	0.211	3.363	28.7	28.3	
72.43056	10:20:00	5.484	9.632	0.101	7.070	0.288	0.076	0.211	3.363	28.7	28.3	
72.43125	10:21:00	5.502	9.644	0.102	7.069	0.288	0.076	0.211	3.363	28.6	28.3	
72.43194	10:22:00	5.516	9.653	0.100	7.071	0.288	0.076	0.211	3.363	28.6	28.3	
72.43264	10:23:00	5.531	9.664	0.100	7.071	0.288	0.076	0.210	3.362	28.6	28.3	
72.43333	10:24:00	5.548	9.675	0.102	7.070	0.288	0.076	0.210	3.362	28.7	28.3	
72.43403	10:25:00	5.563	9.686	0.102	7.070	0.288	0.076	0.210	3.362	28.7	28.3	
72.43472	10:26:00	5.577	9.694	0.100	7.072	0.288	0.076	0.210	3.362	28.6	28.3	
72.43542	10:27:00	5.590	9.706	0.102	7.072	0.288	0.076	0.210	3.362	28.7	28.3	
72.43611	10:28:00	5.604	9.714	0.102	7.073	0.288	0.076	0.210	3.361	28.6	28.3	
72.43680	10:29:00	5.617	9.721	0.101	7.072	0.288	0.076	0.210	3.361	28.7	28.3	
72.43750	10:30:00	5.630	9.731	0.102	7.071	0.288	0.076	0.210	3.361	28.6	28.3	
72.44583	10:42:00	5.771	9.828	0.102	7.074	0.288	0.076	0.210	3.360	28.7	28.3	
72.45416	10:53:59	5.887	9.910	0.102	7.075	0.288	0.076	0.210	3.358	28.6	28.3	
72.45832	10:59:59	5.939	9.947	0.102	7.074	0.288	0.076	0.209	3.358	28.6	28.2	
72.46665	11:11:59	6.031	10.014	0.102	7.074	0.288	0.076	0.209	3.357	28.6	28.3	
72.47082	11:17:59	6.072	10.042	0.101	7.075	0.288	0.076	0.209	3.357	28.6	28.2	
72.47915	11:29:59	6.150	10.100	0.101	7.074	0.288	0.076	0.209	3.356	28.6	28.2	
72.50000	12:00:00	6.310	10.218	0.102	7.069	0.288	0.076	0.209	3.354	28.6	28.3	
72.54167	13:00:00	6.547	10.399	0.105	7.061	0.288	0.084	0.209	3.353	28.6	28.3	
72.62497	14:59:57	6.845	10.622	0.106	7.038	0.289	0.083	0.209	3.350	28.6	28.3	
72.70827	16:59:55	7.027	10.759	0.107	7.013	0.289	0.083	0.209	3.347	28.6	28.3	
72.79158	18:59:53	7.147	10.850	0.108	6.986	0.289	0.083	0.210	3.346	28.6	28.3	
72.87488	20:59:50	7.230	10.912	0.107	6.958	0.289	0.083	0.210	3.344	28.6	28.3	
72.95819	22:59:48	7.294	10.959	0.107	6.929	0.289	0.082	0.210	3.343	28.6	28.3	
73.04149	00:59:45	7.340	10.992	0.109	6.902	0.289	0.082	0.211	3.342	28.6	28.3	
73.27057	06:29:37	7.406	11.055	0.110	6.833	0.289	0.082	0.211	3.339	28.6	28.3	
73.53208	12:46:12	7.425	11.140	0.114	6.769	0.289	0.074	0.211	3.323	28.6	28.3	
74.03190	00:45:56	7.379	11.292	0.121	6.675	0.289	0.074	0.212	3.322	28.6	28.3	
75.00514	00:07:24	7.397	11.953	0.136	6.556	0.288	0.081	0.212	3.290	28.6	28.3	
76.03101	00:44:39	7.495	12.325	0.152	6.483	0.288	0.074	0.213	3.273	28.6	28.3	
77.03065	00:44:08	7.562	12.498	0.165	6.433	0.287	0.074	0.213	3.271	28.6	28.3	
78.03030	00:43:38	7.603	12.613	0.179	6.408	0.286	0.074	0.214	3.271	28.6	28.3	
79.02994	00:43:07	7.650	12.663	0.192	6.409	0.285	0.074	0.213	3.272	28.6	28.3	
80.06712	01:36:39	7.664	12.704	0.204	6.421	0.283	0.074	0.215	3.272	28.7	28.4	
81.06677	01:36:09	7.688	12.715	0.218	6.424	0.281	0.074	0.216	3.272	28.7	28.4	
82.03587	00:51:39	7.696	12.750	0.231	6.438	0.280	0.081	0.216	3.272	28.6	28.3	
82.36667	08:48:00	7.709	12.762	0.237	6.444	0.279	0.081	0.217	3.271	28.7	28.4	
82.36736	08:49:00	7.709	12.763	0.237	6.442	0.279	0.081	0.217	3.271	28.6	28.4	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
82.37153	08:55:00	7.709	12.767	0.236	6.444	0.279	0.081	0.217	3.272	28.7	28.4	
82.37222	08:56:00	7.709	12.766	0.237	6.442	0.279	0.081	0.217	3.272	28.7	28.4	
82.37291	08:56:59	7.708	12.766	0.237	6.443	0.279	0.081	0.217	3.271	28.7	28.4	
82.37361	08:58:00	7.708	12.766	0.236	6.442	0.279	0.081	0.217	3.272	28.7	28.4	
82.37413	08:58:45	7.709	12.766	0.236	6.444	0.279	0.081	0.217	3.271	28.7	28.4	
82.37431	08:59:00	7.708	12.765	0.236	6.443	0.279	0.081	0.217	3.272	28.7	28.4	-pulse with-
82.37500	09:00:00	7.708	12.762	0.236	6.445	0.279	0.081	0.217	3.272	28.7	28.4	drawal test#2
82.37535	09:00:30	4.179	9.611	0.227	6.299	0.272	0.086	0.220	3.272	28.7	28.3	(test zone)
82.37552	09:00:45	4.256	9.659	0.227	6.298	0.272	0.086	0.220	3.272	28.7	28.3	removed ~71
82.37570	09:01:00	4.311	9.700	0.227	6.298	0.272	0.086	0.220	3.271	28.7	28.3	ml fluid
82.37604	09:01:30	4.411	9.763	0.227	6.300	0.272	0.086	0.220	3.271	28.7	28.3	
82.37639	09:02:00	4.494	9.825	0.227	6.302	0.271	0.087	0.220	3.271	28.7	28.3	
82.37673	09:02:29	4.563	9.873	0.228	6.305	0.271	0.087	0.219	3.272	28.7	28.3	
82.37708	09:03:00	4.622	9.904	0.228	6.306	0.271	0.087	0.219	3.271	28.7	28.3	
82.37778	09:04:00	4.701	9.963	0.228	6.309	0.271	0.087	0.219	3.272	28.7	28.4	
82.37847	09:05:00	4.761	10.006	0.227	6.309	0.271	0.087	0.218	3.271	28.7	28.3	
82.37916	09:05:59	4.817	10.036	0.227	6.310	0.272	0.087	0.218	3.271	28.7	28.3	
82.37986	09:07:00	4.860	10.062	0.227	6.314	0.272	0.087	0.218	3.271	28.7	28.4	
82.38055	09:08:00	4.898	10.083	0.227	6.313	0.272	0.087	0.218	3.271	28.7	28.4	
82.38125	09:09:00	4.931	10.104	0.227	6.315	0.272	0.087	0.218	3.271	28.7	28.4	
82.38194	09:10:00	4.963	10.123	0.227	6.316	0.272	0.087	0.217	3.271	28.8	28.4	
82.38264	09:11:00	4.991	10.138	0.227	6.316	0.272	0.087	0.217	3.271	28.7	28.4	
82.38333	09:12:00	5.017	10.155	0.228	6.316	0.272	0.087	0.217	3.271	28.7	28.4	
82.38403	09:13:00	5.044	10.170	0.227	6.319	0.272	0.087	0.217	3.271	28.7	28.4	
82.38472	09:14:00	5.068	10.184	0.227	6.320	0.272	0.087	0.217	3.271	28.8	28.4	
82.38541	09:14:59	5.091	10.199	0.227	6.320	0.272	0.087	0.217	3.271	28.8	28.4	
82.38611	09:16:00	5.113	10.212	0.228	6.320	0.272	0.087	0.217	3.271	28.7	28.4	
82.38680	09:17:00	5.136	10.225	0.228	6.321	0.272	0.087	0.217	3.270	28.7	28.5	
82.38750	09:18:00	5.162	10.242	0.228	6.321	0.272	0.087	0.217	3.270	28.8	28.4	
82.38819	09:19:00	5.181	10.253	0.228	6.323	0.272	0.087	0.217	3.271	28.7	28.5	
82.38888	09:19:59	5.201	10.265	0.228	6.323	0.272	0.087	0.217	3.271	28.7	28.5	
82.39027	09:21:59	5.237	10.287	0.227	6.324	0.272	0.086	0.217	3.270	28.7	28.5	
82.39166	09:23:59	5.271	10.308	0.228	6.326	0.272	0.086	0.217	3.270	28.8	28.5	
82.39305	09:26:00	5.303	10.330	0.228	6.328	0.272	0.086	0.217	3.270	28.7	28.4	
82.39444	09:28:00	5.333	10.349	0.228	6.327	0.272	0.086	0.216	3.270	28.8	28.4	
82.39583	09:30:00	5.364	10.369	0.229	6.330	0.272	0.086	0.216	3.270	28.7	28.5	
82.40000	09:36:00	5.446	10.426	0.229	6.333	0.272	0.086	0.216	3.269	28.8	28.5	
82.40416	09:41:59	5.518	10.477	0.229	6.335	0.272	0.086	0.216	3.269	28.7	28.4	
82.40833	09:48:00	5.584	10.524	0.229	6.338	0.272	0.086	0.216	3.268	28.7	28.4	
82.41249	09:53:59	5.646	10.570	0.229	6.341	0.272	0.086	0.216	3.268	28.7	28.4	
82.41666	09:59:59	5.702	10.614	0.229	6.344	0.272	0.086	0.216	3.268	28.7	28.4	
82.43761	10:30:10	5.938	10.802	0.230	6.353	0.273	0.085	0.216	3.266	28.7	28.4	
82.45843	11:00:08	6.116	10.966	0.230	6.360	0.273	0.084	0.216	3.265	28.6	28.3	
82.50009	12:00:08	6.374	11.224	0.231	6.371	0.273	0.084	0.216	3.264	28.7	28.4	
82.56248	13:29:58	6.640	11.508	0.232	6.380	0.274	0.083	0.215	3.263	28.7	28.4	
82.64721	15:31:59	6.886	11.762	0.235	6.390	0.274	0.076	0.215	3.261	28.7	28.4	
82.73051	17:31:56	7.051	11.934	0.238	6.396	0.274	0.076	0.216	3.259	28.9	28.6	
82.81382	19:31:54	7.169	12.059	0.237	6.400	0.274	0.076	0.216	3.257	28.7	28.4	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
82.89712	21:31:51	7.258	12.151	0.239	6.405	0.274	0.076	0.216	3.255	28.7	28.4	
82.98042	23:31:48	7.324	12.219	0.241	6.408	0.274	0.076	0.216	3.252	28.7	28.4	
83.00125	00:01:48	7.336	12.234	0.240	6.407	0.274	0.076	0.216	3.251	28.7	28.4	
83.25116	06:01:40	7.466	12.363	0.244	6.415	0.274	0.076	0.216	3.236	28.6	28.4	
83.50107	12:01:32	7.541	12.435	0.248	6.418	0.274	0.075	0.217	3.219	28.7	28.4	
84.00089	00:01:17	7.595	12.503	0.255	6.428	0.273	0.075	0.218	3.200	28.7	28.4	
85.00054	00:00:47	7.662	12.638	0.274	6.457	0.273	0.075	0.220	3.182	28.7	28.4	
86.00018	00:00:16	7.712	12.697	0.291	6.471	0.272	0.075	0.219	3.171	28.7	28.4	
87.09754	02:20:27	7.744	12.730	0.310	6.481	0.270	0.082	0.217	3.160	28.7	28.4	
88.05867	01:24:29	7.763	12.742	0.328	6.490	0.269	0.074	0.212	3.152	28.7	28.4	
89.05832	01:23:59	7.774	12.747	0.349	6.499	0.267	0.074	0.221	3.144	28.7	28.4	
90.05123	01:13:46	7.802	12.741	0.383	6.505	0.266	0.081	0.228	3.138	28.7	28.4	
91.05087	01:13:15	7.803	12.734	0.433	6.515	0.264	0.081	0.230	3.131	28.7	28.4	
92.05051	01:12:44	7.811	12.710	0.481	6.518	0.263	0.080	0.227	3.125	28.7	28.4	
93.05016	01:12:14	7.803	12.689	0.531	6.527	0.261	0.080	0.229	3.117	28.7	28.4	
94.00852	00:12:16	7.821	12.665	0.574	6.527	0.260	0.072	0.232	3.114	28.7	28.4	
95.00817	00:11:46	7.829	12.643	0.620	6.529	0.258	0.072	0.235	3.110	28.7	28.4	
96.00781	00:11:15	7.829	12.635	0.667	6.537	0.257	0.072	0.238	3.104	28.7	28.4	
97.00746	00:10:45	7.834	12.607	0.713	6.536	0.255	0.072	0.240	3.100	28.7	28.4	
98.08307	01:59:37	7.833	12.600	0.764	6.540	0.254	0.078	0.237	3.093	28.7	28.4	
99.08271	01:59:06	7.829	12.586	0.809	6.539	0.253	0.078	0.237	3.088	28.7	28.4	
100.08235	01:58:35	7.837	12.595	0.852	6.538	0.251	0.077	0.240	3.082	28.7	28.4	
101.06851	01:38:39	7.850	12.610	0.892	6.545	0.250	0.077	0.242	3.077	28.7	28.4	
102.06816	01:38:09	7.862	12.605	0.933	6.544	0.249	0.077	0.245	3.068	28.7	28.4	-created data
103.06780	01:37:38	7.859	12.620	0.973	6.549	0.247	0.077	0.245	3.062	28.6	28.4	file - C2H111
104.07621	01:49:45	7.851	12.596	1.012	6.549	0.246	0.076	0.248	3.058	28.7	28.4	
105.01018	00:14:40	7.850	12.600	1.049	6.554	0.246	0.076	0.250	3.051	28.7	28.4	
106.00982	00:14:08	7.848	12.571	1.088	6.551	0.244	0.076	0.251	3.047	28.7	28.4	
107.00947	00:13:38	7.842	12.566	1.126	6.554	0.244	0.075	0.250	3.043	28.7	28.4	
107.34791	08:20:59	7.842	12.557	1.139	6.556	0.243	0.070	0.254	3.041	28.7	28.4	
107.37500	09:00:00	7.841	12.559	1.138	6.557	0.243	0.070	0.253	3.041	28.7	28.4	
107.41666	09:59:59	7.841	12.553	1.140	6.557	0.243	0.070	0.251	3.041	28.7	28.4	
107.45833	11:00:00	7.839	12.553	1.143	6.555	0.243	0.075	0.252	3.041	28.8	28.5	
107.50000	12:00:00	7.839	12.552	1.145	6.556	0.243	0.075	0.252	3.041	28.8	28.5	
107.54165	12:59:59	7.840	12.550	1.145	6.555	0.243	0.075	0.252	3.041	28.7	28.4	
107.58330	13:59:57	7.842	12.552	1.147	6.555	0.243	0.075	0.251	3.040	28.7	28.4	
107.62495	14:59:56	7.841	12.550	1.148	6.555	0.243	0.075	0.252	3.040	28.7	28.4	
107.66661	15:59:55	7.842	12.548	1.148	6.554	0.243	0.075	0.252	3.040	28.7	28.4	
107.70826	16:59:54	7.842	12.548	1.150	6.554	0.243	0.075	0.252	3.040	28.7	28.4	
107.74991	17:59:52	7.840	12.548	1.152	6.555	0.243	0.075	0.252	3.040	28.7	28.4	
107.79156	18:59:51	7.841	12.545	1.153	6.553	0.242	0.075	0.251	3.039	28.7	28.4	
107.83321	19:59:49	7.841	12.545	1.155	6.553	0.242	0.075	0.253	3.039	28.7	28.4	
107.87486	20:59:48	7.839	12.545	1.156	6.555	0.242	0.075	0.253	3.039	28.7	28.4	
107.91652	21:59:47	7.840	12.543	1.157	6.554	0.242	0.075	0.249	3.039	28.7	28.4	
107.95817	22:59:46	7.841	12.541	1.159	6.552	0.242	0.075	0.252	3.039	28.7	28.4	
107.99982	23:59:44	7.840	12.543	1.161	6.554	0.242	0.075	0.253	3.039	28.7	28.4	
108.04147	00:59:43	7.842	12.541	1.162	6.552	0.242	0.075	0.253	3.039	28.7	28.4	
109.01018	00:14:40	7.833	12.534	1.198	6.558	0.241	0.075	0.254	3.034	28.7	28.4	

TABLE C3 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H01,
MULTIPACKER TEST TOOL #5, PERMEABILITY-TESTING SEQUENCE C2H01-C

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
110.00982	00:14:08	7.856	12.534	1.235	6.554	0.239	0.075	0.257	3.030	28.8	28.5	
111.07410	01:46:42	7.858	12.515	1.274	6.554	0.237	0.075	0.286	3.030	28.7	28.4	
112.07374	01:46:11	7.866	12.510	1.311	6.554	0.235	0.075	0.270	3.026	28.7	28.4	
113.07338	01:45:40	7.861	12.495	1.309	6.554	0.233	0.075	0.273	3.022	28.8	28.4	
114.07303	01:45:10	7.855	12.475	1.139	6.554	0.232	0.075	0.287	3.019	28.8	28.4	
115.01021	00:14:42	7.861	12.470	1.379	6.550	0.231	0.075	0.263	3.016	28.7	28.4	
116.02555	00:36:48	7.840	12.448	1.445	6.551	0.230	0.071	0.263	3.011	28.7	28.4	
117.02520	00:36:17	7.839	12.437	1.479	6.548	0.228	0.071	0.264	3.007	28.7	28.4	
118.02484	00:35:46	7.845	12.434	1.510	6.548	0.227	0.071	0.299	3.004	28.7	28.4	
119.02449	00:35:16	7.843	12.434	1.539	6.545	0.226	0.071	0.272	3.001	28.7	28.4	
120.02413	00:34:45	7.859	12.444	1.568	6.542	0.225	0.071	0.278	2.997	28.7	28.4	
121.02377	00:34:14	7.873	12.452	1.602	6.542	0.224	0.071	0.279	2.993	28.7	28.4	
122.02407	00:34:40	7.872	12.443	1.630	6.535	0.222	0.075	0.250	2.985	28.7	28.5	
124.02336	00:33:38	7.888	12.445	1.603	6.530	0.220	0.075	0.268	2.983	28.8	28.4	
125.02300	00:33:07	7.891	12.438	1.713	6.527	0.219	0.075	0.262	2.976	28.8	28.4	
126.02264	00:32:36	7.893	12.433	1.752	6.524	0.218	0.075	0.273	2.978	28.8	28.4	
127.02229	00:32:06	7.889	12.422	1.779	6.521	0.217	0.076	0.268	2.975	28.8	28.4	
128.02193	00:31:35	7.890	12.413	1.807	6.517	0.216	0.076	0.269	2.972	28.8	28.4	
130.03899	00:56:09	7.884	12.388	1.861	6.507	0.214	0.076	0.272	2.966	28.8	28.4	
131.07655	01:50:14	7.885	12.379	1.890	6.502	0.213	0.076	0.309	2.961	28.8	28.4	
132.07619	01:49:43	7.883	12.367	1.915	6.503	0.211	0.076	0.297	2.958	28.8	28.5	
133.07583	01:49:12	7.876	12.354	1.943	6.497	0.210	0.076	0.291	2.956	28.8	28.4	
134.07548	01:48:41	7.875	12.341	1.968	6.492	0.209	0.076	0.293	2.954	28.8	28.4	
135.07512	01:48:10	7.873	12.332	1.996	6.489	0.208	0.076	0.282	2.951	28.8	28.5	
136.07970	01:54:46	7.867	12.319	2.025	6.488	0.207	0.077	0.266	2.949	28.8	28.4	
137.07934	01:54:15	7.867	12.311	2.050	6.483	0.206	0.077	0.273	2.947	28.8	28.4	
138.07898	01:53:44	7.865	12.302	2.078	6.477	0.205	0.077	0.241	2.947	28.9	28.4	
139.07863	01:53:14	7.865	12.296	2.102	6.475	0.204	0.077	0.202	2.945	28.9	28.5	
140.04982	01:11:44	7.865	12.287	2.128	6.473	0.204	0.082	0.206	2.943	28.9	28.6	
141.04946	01:11:13	7.860	12.274	2.184	6.464	0.202	0.082	0.151	2.935	29.0	28.6	
142.33333	08:00:00	7.854	12.257	2.224	6.457	0.201	0.083	0.177	2.937	28.9	28.6	-end testing

TABLE C4
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
111.37500	09:00:00	-0.050	0.003	0.004	-0.051	0.707	0.054	0.103	3.997	28.6	28.8	-created data
111.38194	09:10:00	-0.049	0.008	0.004	-0.062	0.711	0.065	0.086	4.022	28.6	29.0	file - C2H021
111.38542	09:15:00	-0.050	0.087	0.003	-0.043	0.711	0.064	0.086	4.023	28.6	29.0	-inflated
111.38576	09:15:30	-0.049	0.801	0.003	0.393	0.711	0.064	0.086	4.022	28.6	29.0	packers
111.38611	09:16:00	-0.050	0.932	0.005	-0.015	0.667	0.072	0.104	3.833	28.6	29.1	
111.38646	09:16:30	-0.049	9.628	0.005	9.763	0.620	0.068	0.140	3.832	28.5	29.1	
111.38681	09:17:00	-0.049	10.163	0.004	10.200	0.619	0.067	0.141	3.869	28.6	29.1	
111.38785	09:18:30	-0.049	10.165	0.005	10.199	0.619	0.067	0.141	3.886	28.6	29.1	
111.38819	09:19:00	-0.050	10.072	0.005	10.104	0.619	0.067	0.141	3.885	28.6	29.1	
111.38889	09:20:00	-0.049	9.930	0.005	9.947	0.619	0.067	0.141	3.886	28.6	29.1	
111.38958	09:21:00	-0.050	9.829	0.005	9.834	0.619	0.067	0.141	3.885	28.6	29.1	
111.39028	09:22:00	-0.050	9.750	0.006	9.745	0.619	0.067	0.141	3.886	28.5	29.1	
111.39097	09:23:00	-0.050	9.686	0.005	9.672	0.619	0.067	0.141	3.886	28.6	29.1	
111.39166	09:23:59	-0.050	9.630	0.004	9.611	0.619	0.067	0.141	3.886	28.6	29.1	
111.39236	09:25:00	-0.050	9.582	0.005	9.560	0.619	0.066	0.141	3.886	28.6	29.1	
111.39305	09:26:00	-0.049	9.539	0.006	9.513	0.619	0.066	0.141	3.885	28.6	29.1	
111.39375	09:27:00	-0.050	9.498	0.005	9.472	0.619	0.066	0.141	3.886	28.6	29.1	
111.39444	09:28:00	-0.050	9.465	0.004	9.433	0.619	0.066	0.141	3.886	28.6	29.1	
111.39513	09:28:59	-0.049	9.434	0.004	9.396	0.619	0.066	0.141	3.885	28.6	29.0	
111.39583	09:30:00	-0.050	9.407	0.005	9.366	0.619	0.066	0.141	3.886	28.5	29.1	
111.39722	09:32:00	-0.050	9.355	0.004	9.308	0.619	0.066	0.141	3.885	28.5	29.1	
111.39861	09:34:00	-0.049	9.305	0.004	9.256	0.619	0.066	0.141	3.885	28.6	29.0	
111.39999	09:35:59	-0.049	9.268	0.005	9.211	0.619	0.066	0.141	3.885	28.6	29.0	
111.40138	09:37:59	-0.049	9.230	0.005	9.170	0.619	0.066	0.141	3.884	28.6	29.0	
111.40278	09:40:00	-0.050	9.198	0.005	9.134	0.619	0.066	0.141	3.884	28.6	29.1	
111.40416	09:41:59	-0.050	9.167	0.004	9.101	0.619	0.066	0.141	3.884	28.6	29.1	
111.40555	09:44:00	-0.049	9.138	0.004	9.069	0.619	0.066	0.141	3.883	28.6	29.1	
111.41041	09:50:59	-0.050	9.055	0.005	8.977	0.618	0.065	0.141	3.882	28.6	29.0	
111.41874	10:02:59	-0.049	8.947	0.004	8.853	0.618	0.065	0.142	3.881	28.5	28.9	
111.42291	10:08:59	-0.050	8.902	0.005	8.804	0.618	0.065	0.142	3.880	28.5	28.9	
111.42707	10:14:59	-0.049	8.863	0.005	8.762	0.618	0.065	0.142	3.880	28.6	28.9	
111.43124	10:20:59	-0.051	8.828	0.004	8.723	0.618	0.065	0.142	3.880	28.5	28.9	
111.43541	10:26:59	-0.050	8.798	0.003	8.686	0.618	0.065	0.142	3.879	28.6	28.9	
111.43957	10:32:59	-0.050	8.768	0.005	8.656	0.618	0.065	0.142	3.878	28.5	28.8	
111.44792	10:45:00	-0.050	8.717	0.005	8.598	0.618	0.064	0.142	3.877	28.5	28.9	-filled zone
111.45833	11:00:00	-0.054	8.688	0.006	8.548	0.613	0.064	0.143	3.875	29.8	28.8	intervals
111.47915	11:29:59	-0.054	8.640	-0.002	8.474	0.613	0.064	0.143	3.873	28.8	29.2	with brine
111.49998	11:59:58	-0.055	8.574	-0.002	8.402	0.613	0.064	0.143	3.871	28.7	28.9	
111.52081	12:29:58	-0.055	8.523	-0.001	8.346	0.613	0.064	0.143	3.870	28.6	28.8	
111.54167	13:00:00	-0.055	8.481	-0.001	8.298	0.613	0.064	0.144	3.868	28.6	28.8	
111.58332	13:59:59	-0.055	8.415	-0.001	8.226	0.613	0.064	0.144	3.867	28.6	28.7	
111.62497	14:59:57	-0.056	8.364	-0.001	8.169	0.613	0.064	0.144	3.868	28.5	28.7	
111.66662	15:59:56	-0.056	8.324	-0.001	8.123	0.613	0.064	0.144	3.867	28.6	28.7	
111.70827	16:59:55	-0.057	8.290	-0.001	8.085	0.613	0.064	0.144	3.866	28.5	28.7	
111.74992	17:59:53	-0.057	8.260	-0.001	8.051	0.613	0.064	0.144	3.866	28.5	28.7	
111.79158	18:59:53	-0.058	8.232	0.000	8.021	0.613	0.064	0.144	3.865	28.5	28.7	
111.83323	19:59:51	-0.058	8.207	0.000	7.993	0.613	0.064	0.144	3.866	28.5	28.6	
111.87488	20:59:50	-0.058	8.185	0.000	7.969	0.613	0.064	0.144	3.865	28.5	28.6	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
111.91653	21:59:48	-0.058	8.163	0.000	7.946	0.613	0.064	0.144	3.865	28.5	28.6	
111.95818	22:59:47	-0.058	8.144	-0.003	7.925	0.613	0.064	0.144	3.865	28.5	28.6	
111.99984	23:59:46	-0.058	8.126	-0.003	7.905	0.613	0.064	0.144	3.865	28.5	28.6	
112.04149	00:59:45	-0.058	8.109	-0.003	7.887	0.613	0.064	0.144	3.865	28.5	28.6	
112.54131	12:59:29	-0.060	7.964	-0.002	7.729	0.613	0.064	0.144	3.863	28.5	28.6	
113.04113	00:59:14	-0.061	7.870	-0.003	7.626	0.613	0.064	0.144	3.862	28.5	28.6	
114.04078	00:58:43	-0.061	7.740	0.000	7.482	0.614	0.064	0.144	3.861	28.5	28.6	
114.33234	07:58:34	-0.060	7.707	-0.004	7.447	0.614	0.064	0.144	3.861	28.6	28.7	
114.37500	09:00:00	-0.060	7.702	-0.004	7.442	0.614	0.064	0.144	3.860	28.6	28.7	-shut in
114.39583	09:30:00	-0.043	7.721	0.041	7.453	0.614	0.064	0.144	3.860	28.5	28.7	
114.41666	09:59:59	-0.043	7.719	0.041	7.451	0.614	0.064	0.144	3.860	28.5	28.7	
114.45142	10:50:03	-0.042	7.715	0.041	7.447	0.614	0.064	0.144	3.860	28.5	28.7	
114.46183	11:05:02	-0.041	7.714	0.041	7.445	0.614	0.064	0.144	3.860	28.5	28.6	
114.54513	13:04:59	-0.040	7.710	0.039	7.439	0.614	0.064	0.144	3.860	28.5	28.6	
114.67009	16:04:56	-0.038	7.699	0.040	7.427	0.614	0.064	0.144	3.860	28.5	28.6	
114.83670	20:04:51	-0.034	7.685	0.039	7.412	0.614	0.064	0.144	3.860	28.5	28.6	
115.00330	00:04:45	-0.030	7.670	0.039	7.397	0.614	0.064	0.144	3.859	28.6	28.7	
116.08310	01:59:40	-0.004	7.594	0.038	7.314	0.614	0.064	0.144	3.858	28.5	28.6	
117.08274	01:59:09	0.023	7.538	0.036	7.229	0.614	0.064	0.143	3.856	28.5	28.6	
118.08238	01:58:38	0.050	7.488	0.034	7.161	0.614	0.064	0.144	3.853	28.5	28.6	
119.08203	01:58:07	0.080	7.444	0.034	7.107	0.614	0.064	0.144	3.851	28.5	28.6	
120.08167	01:57:36	0.110	7.403	0.033	7.056	0.613	0.065	0.143	3.849	28.5	28.6	
121.08132	01:57:06	0.140	7.365	0.033	7.012	0.610	0.065	0.143	3.847	28.5	28.6	
122.05573	01:20:15	0.170	7.331	0.033	6.972	0.610	0.066	0.143	3.846	28.5	28.6	
123.05537	01:19:44	0.203	7.297	0.033	6.929	0.606	0.067	0.143	3.845	28.5	28.6	
124.05502	01:19:14	0.235	7.266	0.033	6.900	0.603	0.068	0.143	3.844	28.5	28.7	
125.05466	01:18:43	0.267	7.235	0.032	6.869	0.602	0.068	0.131	3.843	28.5	28.6	
126.05430	01:18:12	0.300	7.208	0.032	6.841	0.601	0.068	0.126	3.842	28.5	28.6	
127.05395	01:17:41	0.334	7.182	0.032	6.814	0.600	0.068	0.122	3.840	28.6	28.7	
128.05359	01:17:10	0.370	7.159	0.033	6.792	0.599	0.068	0.125	3.838	28.5	28.7	
129.08171	01:57:40	0.408	7.134	0.035	6.769	0.598	0.067	0.119	3.837	28.6	28.6	
130.08135	01:57:09	0.442	7.112	0.038	6.747	0.598	0.067	0.119	3.835	28.5	28.7	
131.08099	01:56:38	0.479	7.092	0.039	6.723	0.597	0.066	0.111	3.833	28.6	28.7	
132.08064	01:56:07	0.517	7.071	0.037	6.702	0.596	0.066	0.110	3.831	28.6	28.7	
133.08028	01:55:36	0.554	7.052	0.037	6.687	0.595	0.066	0.114	3.830	28.6	28.7	
134.07993	01:55:06	0.592	7.034	0.039	6.670	0.595	0.066	0.113	3.829	28.5	28.7	
135.07957	01:54:35	0.633	7.017	0.041	6.653	0.594	0.066	0.110	3.827	28.6	28.6	
136.03457	00:49:47	0.671	7.002	0.040	6.643	0.594	0.066	0.110	3.825	28.6	28.7	
137.03422	00:49:17	0.712	6.987	0.041	6.622	0.593	0.066	0.107	3.823	28.6	28.7	-leak in
137.36743	08:49:06	0.724	6.984	0.040	6.618	0.593	0.066	0.109	3.822	28.6	28.7	guard-zone
137.45000	10:48:00	0.729	6.980	0.025	6.617	0.593	0.066	0.109	3.822	28.6	28.7	line
137.45353	10:53:05	0.728	6.975	0.009	6.610	0.593	0.066	0.108	3.822	28.6	28.6	replaced
137.45417	10:54:00	0.728	6.974	0.011	6.615	0.593	0.066	0.105	3.822	28.5	28.6	tubing
138.03729	00:53:42	0.754	6.963	0.013	6.600	0.592	0.066	0.107	3.821	28.5	28.6	
139.03693	00:53:11	0.797	6.949	0.015	6.591	0.591	0.066	0.109	3.819	28.6	28.7	
144.04704	01:07:44	1.051	6.902	0.032	6.492	-0.463	0.102	0.624	3.821	28.5	28.6	
145.04669	01:07:14	1.092	6.895	0.031	6.475	-0.457	0.102	0.623	3.820	28.6	28.7	
146.03575	00:51:29	1.154	6.887	0.034	6.469	-0.485	0.102	0.622	3.819	28.5	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
147.02624	00:37:47	1.202	6.882	0.035	6.458	0.584	0.064	0.120	3.815	28.6	28.6	
148.02588	00:37:16	1.260	6.876	0.037	6.448	0.583	0.064	0.120	3.813	28.6	28.7	
149.02553	00:36:46	1.325	6.874	0.040	6.438	0.582	0.064	0.120	3.810	28.6	28.7	
150.02517	00:36:15	1.390	6.872	0.041	6.427	0.581	0.064	0.120	3.808	28.6	28.7	
151.02481	00:35:44	1.458	6.871	0.044	6.421	0.580	0.064	0.121	3.805	28.5	28.7	
152.02446	00:35:13	1.528	6.870	0.044	6.411	0.579	0.063	0.121	3.803	28.6	28.7	
153.02410	00:34:42	1.602	6.869	0.047	6.402	0.578	0.063	0.121	3.800	28.6	28.7	
154.00809	00:11:39	1.679	6.873	0.048	6.393	0.577	0.063	0.121	3.797	28.5	28.7	
155.00774	00:11:09	1.757	6.876	0.051	6.387	0.576	0.063	0.121	3.794	28.6	28.7	
156.00738	00:10:38	1.838	6.881	0.052	6.379	0.575	0.063	0.121	3.791	28.6	28.7	
157.04736	01:08:12	1.928	6.886	0.055	6.373	0.575	0.063	0.121	3.787	28.5	28.7	
158.04700	01:07:41	2.020	6.896	0.057	6.367	0.574	0.063	0.121	3.785	28.6	28.7	
159.04665	01:07:11	2.114	6.905	0.058	6.359	0.573	0.063	0.122	3.782	28.6	28.7	
160.04629	01:06:39	2.211	6.916	0.062	6.352	0.572	0.063	0.122	3.778	28.6	28.7	
161.01692	00:24:22	2.311	6.927	0.065	6.345	0.572	0.063	0.122	3.774	28.6	28.7	
162.01657	00:23:52	2.413	6.942	0.067	6.338	0.571	0.063	0.122	3.770	28.6	28.7	
163.01621	00:23:21	2.523	6.958	0.069	6.336	0.570	0.063	0.122	3.766	28.6	28.7	
163.09951	02:23:18	2.531	6.959	0.068	6.336	0.570	0.063	0.122	3.766	28.6	28.7	
165.04498	01:04:46	2.757	6.994	0.072	6.322	0.569	0.063	0.123	3.757	28.6	28.7	
166.00749	00:10:47	2.874	7.016	0.074	6.323	0.568	0.063	0.123	3.753	28.6	28.7	
167.00713	00:10:16	3.002	7.040	0.076	6.326	0.567	0.063	0.123	3.749	28.5	28.7	
168.03495	00:50:20	3.135	7.067	0.079	6.318	0.566	0.063	0.124	3.744	28.6	28.7	
169.03459	00:49:49	3.269	7.095	0.080	6.316	0.566	0.063	0.124	3.739	28.6	28.7	
170.03424	00:49:18	3.408	7.124	0.083	6.310	0.565	0.063	0.125	3.734	28.6	28.7	
171.07546	01:48:40	3.560	7.160	0.085	6.315	0.564	0.063	0.125	3.728	28.6	28.7	
172.07510	01:48:09	3.706	7.196	0.087	6.314	0.564	0.063	0.125	3.722	28.6	28.7	
173.07474	01:47:38	3.852	7.235	0.091	6.308	0.563	0.063	0.126	3.716	28.6	28.7	
173.40796	09:47:28	3.901	7.247	0.090	6.314	0.563	0.063	0.126	3.714	28.6	28.7	
173.43958	10:33:00	3.907	7.248	0.090	6.314	0.563	0.063	0.126	3.714	28.6	28.7	
173.44028	10:34:00	3.906	7.249	0.091	6.317	0.563	0.063	0.126	3.714	28.6	28.7	-vented
173.44097	10:35:00	3.907	7.248	0.090	6.312	0.563	0.063	0.126	3.714	28.6	28.7	guard zone
173.44167	10:36:00	3.907	7.248	0.089	6.313	0.563	0.063	0.126	3.714	28.6	28.7	
173.44236	10:37:00	3.907	7.249	0.085	6.312	0.563	0.063	0.126	3.714	28.6	28.7	
173.44444	10:40:00	3.907	7.247	0.078	6.313	0.563	0.063	0.126	3.714	28.5	28.7	
173.44791	10:44:59	3.907	7.246	0.068	6.317	0.563	0.063	0.126	3.714	28.6	28.7	
173.45138	10:49:59	3.908	7.240	0.037	6.306	0.563	0.063	0.126	3.714	28.6	28.7	
173.45485	10:54:59	3.907	7.219	-0.057	6.299	0.563	0.063	0.126	3.714	28.5	28.7	
173.45833	11:00:00	3.908	7.218	-0.055	6.295	0.563	0.063	0.126	3.713	28.5	28.7	
173.45902	11:00:59	3.909	7.218	-0.055	6.296	0.562	0.063	0.126	3.713	28.6	28.6	-deflated
173.45971	11:01:59	3.908	7.219	-0.055	6.302	0.563	0.063	0.126	3.713	28.6	28.7	guard-zone
173.46041	11:02:59	3.908	7.219	-0.055	6.295	0.563	0.063	0.126	3.714	28.6	28.6	packer
173.46110	11:03:59	3.903	7.249	-0.057	-0.015	0.560	0.062	0.126	3.702	28.6	28.7	
173.46180	11:05:00	3.903	7.249	-0.059	-0.031	0.560	0.062	0.126	3.701	28.6	28.7	
173.46457	11:08:59	3.903	7.248	-0.060	-0.032	0.560	0.062	0.126	3.700	28.5	28.7	
173.46527	11:09:59	3.902	7.250	-0.059	-0.032	0.560	0.062	0.126	3.700	28.6	28.7	
173.47221	11:19:59	3.903	7.248	-0.060	-0.029	0.560	0.062	0.126	3.699	28.6	28.7	
173.47915	11:29:59	3.903	7.249	-0.059	-0.028	0.560	0.062	0.126	3.699	28.6	28.7	
173.49998	11:59:58	3.906	7.250	-0.059	-0.028	0.560	0.062	0.126	3.699	28.6	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
173.54232	13:00:56	3.912	7.252	-0.058	-0.033	0.560	0.062	0.126	3.699	28.6	28.7	-filled
173.58398	14:00:56	3.919	7.256	-0.058	-0.038	0.560	0.062	0.126	3.709	28.6	29.2	guard-zone
173.59722	14:20:00	3.920	7.259	-0.058	-0.037	0.559	0.062	0.127	3.709	28.6	29.0	with brine
173.59757	14:20:30	3.920	7.259	-0.057	0.480	0.559	0.062	0.127	3.709	28.6	28.9	inflated
173.59792	14:21:00	3.908	7.366	0.105	2.442	0.560	0.063	0.128	3.689	28.6	29.0	guard-zone
173.59826	14:21:30	3.937	7.203	0.000	10.274	0.557	0.062	0.129	3.740	28.6	28.9	packer
173.59861	14:22:00	3.938	7.199	0.000	10.324	0.557	0.062	0.129	3.743	28.6	28.9	
173.59896	14:22:30	3.939	7.195	0.000	10.264	0.556	0.061	0.129	3.744	28.6	28.8	
173.59930	14:23:00	3.940	7.196	0.000	10.117	0.556	0.061	0.129	3.744	28.6	28.9	
173.60000	14:24:00	3.939	7.200	0.000	9.918	0.556	0.061	0.129	3.743	28.6	28.9	
173.60069	14:25:00	3.932	7.227	-0.001	8.517	0.559	0.060	0.128	3.728	28.5	28.9	
173.60139	14:26:00	3.931	7.229	-0.002	8.483	0.559	0.060	0.128	3.728	28.6	28.9	
173.60208	14:27:00	3.932	7.229	-0.001	8.446	0.559	0.060	0.128	3.728	28.6	28.9	
173.60277	14:27:59	3.931	7.230	-0.002	8.394	0.559	0.060	0.128	3.728	28.6	28.9	
173.60347	14:29:00	3.931	7.230	-0.001	8.355	0.559	0.060	0.128	3.727	28.6	28.9	
173.60416	14:29:59	3.931	7.231	-0.001	8.300	0.559	0.060	0.128	3.727	28.6	28.8	
173.60486	14:31:00	3.931	7.232	-0.001	8.255	0.559	0.060	0.128	3.727	28.6	28.8	
173.60555	14:32:00	3.931	7.232	-0.001	8.199	0.559	0.060	0.128	3.726	28.6	28.9	
173.60625	14:33:00	3.931	7.234	-0.001	8.154	0.559	0.060	0.128	3.726	28.6	28.9	
173.60694	14:34:00	3.931	7.234	-0.002	8.104	0.559	0.060	0.128	3.726	28.6	28.9	
173.60763	14:34:59	3.931	7.235	-0.002	8.054	0.559	0.060	0.128	3.725	28.6	28.8	
173.60833	14:36:00	3.931	7.236	-0.001	8.009	0.559	0.060	0.128	3.725	28.5	28.8	
173.60902	14:36:59	3.931	7.237	-0.002	7.945	0.559	0.060	0.128	3.725	28.6	28.8	
173.60972	14:38:00	3.930	7.241	-0.002	7.696	0.559	0.060	0.128	3.723	28.6	28.8	
173.61041	14:38:59	3.930	7.242	-0.002	7.683	0.559	0.060	0.128	3.723	28.6	28.8	
173.61111	14:40:00	3.930	7.243	-0.001	7.667	0.559	0.060	0.128	3.723	28.5	28.8	
173.61180	14:41:00	3.929	7.244	-0.001	7.658	0.559	0.060	0.128	3.723	28.6	28.8	
173.61249	14:41:59	3.930	7.243	-0.002	7.637	0.559	0.060	0.128	3.723	28.6	28.9	
173.61458	14:45:00	3.930	7.244	-0.001	7.597	0.559	0.060	0.128	3.722	28.6	28.8	
173.62153	14:55:00	3.931	7.246	-0.002	7.452	0.559	0.060	0.128	3.722	28.6	28.8	
173.62847	15:05:00	3.931	7.250	-0.001	7.309	0.559	0.061	0.128	3.720	28.6	28.8	
173.67012	16:04:58	3.934	7.261	-0.001	6.832	0.559	0.061	0.128	3.716	28.6	28.8	
173.71177	17:04:57	3.940	7.266	-0.001	6.619	0.559	0.061	0.128	3.713	28.6	28.7	
173.75342	18:04:55	3.945	7.272	-0.001	6.487	0.560	0.061	0.128	3.712	28.6	28.7	
173.79508	19:04:55	3.951	7.276	-0.001	6.386	0.560	0.061	0.128	3.711	28.6	28.7	
173.83673	20:04:53	3.957	7.280	-0.001	6.291	0.560	0.061	0.128	3.710	28.6	28.7	
173.87838	21:04:52	3.962	7.285	-0.001	6.209	0.560	0.061	0.128	3.709	28.6	28.7	
173.92003	22:04:51	3.968	7.288	0.000	6.146	0.560	0.061	0.128	3.708	28.6	28.7	
173.96168	23:04:49	3.974	7.291	-0.001	6.089	0.560	0.061	0.128	3.708	28.6	28.7	-end file
174.00333	00:04:48	3.980	7.295	-0.001	6.036	0.560	0.061	0.128	3.707	28.6	28.7	
174.03110	00:44:47	3.984	7.296	-0.001	6.002	0.560	0.061	0.128	3.707	28.6	28.7	-created data
174.43750	10:30:00	4.042	7.321	-0.001	5.677	0.560	0.061	0.128	3.698	28.6	28.7	file - C2H022
174.43819	10:31:00	4.058	7.258	-0.001	10.381	0.557	0.060	0.129	3.725	28.6	28.7	
174.43889	10:32:00	4.059	7.257	-0.001	10.311	0.557	0.060	0.129	3.726	28.6	28.7	-guard-zone
174.43958	10:33:00	4.059	7.255	-0.001	10.238	0.557	0.060	0.129	3.726	28.6	28.7	packer
174.44027	10:33:59	4.060	7.254	-0.001	10.187	0.557	0.060	0.129	3.726	28.6	28.7	pressure
174.44097	10:35:00	4.059	7.253	-0.001	10.149	0.557	0.060	0.129	3.726	28.6	28.7	increased
174.44166	10:35:59	4.059	7.254	-0.001	10.118	0.557	0.060	0.129	3.726	28.6	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
174.44236	10:37:00	4.060	7.253	-0.001	10.096	0.557	0.060	0.129	3.726	28.6	28.7	
174.44305	10:38:00	4.060	7.254	-0.002	10.068	0.557	0.059	0.129	3.726	28.6	28.7	
174.44375	10:39:00	4.060	7.254	-0.001	10.051	0.557	0.059	0.129	3.726	28.6	28.7	
174.44444	10:40:00	4.060	7.254	-0.001	10.029	0.557	0.059	0.129	3.726	28.6	28.7	
174.44513	10:40:59	4.061	7.253	-0.002	10.022	0.557	0.059	0.129	3.726	28.6	28.7	
174.44583	10:42:00	4.061	7.253	-0.001	10.008	0.557	0.059	0.129	3.726	28.6	28.7	
174.44652	10:42:59	4.061	7.254	-0.001	9.995	0.557	0.059	0.129	3.726	28.6	28.7	
174.44722	10:44:00	4.061	7.253	-0.001	9.985	0.557	0.059	0.128	3.726	28.6	28.7	
174.44791	10:44:59	4.061	7.254	-0.001	9.977	0.557	0.059	0.128	3.726	28.6	28.7	
174.44860	10:45:59	4.061	7.253	-0.001	9.955	0.557	0.059	0.128	3.726	28.6	28.7	
174.44930	10:47:00	4.061	7.254	-0.001	9.959	0.557	0.059	0.128	3.726	28.6	28.7	
174.44999	10:47:59	4.061	7.253	-0.001	9.941	0.557	0.059	0.128	3.726	28.6	28.7	
174.45069	10:49:00	4.061	7.254	-0.001	9.930	0.557	0.059	0.128	3.726	28.6	28.7	
174.45138	10:49:59	4.062	7.253	-0.002	9.924	0.557	0.059	0.128	3.726	28.6	28.7	
174.45208	10:51:00	4.061	7.254	-0.001	9.919	0.557	0.059	0.128	3.726	28.6	28.7	
174.45277	10:51:59	4.061	7.253	-0.001	9.918	0.557	0.059	0.128	3.726	28.6	28.7	
174.45346	10:52:59	4.062	7.253	-0.002	9.902	0.557	0.059	0.128	3.726	28.6	28.7	
174.45416	10:53:59	4.061	7.253	-0.001	9.895	0.557	0.059	0.128	3.726	28.6	28.7	
174.45485	10:54:59	4.062	7.253	-0.001	9.897	0.557	0.059	0.128	3.726	28.6	28.7	
174.45555	10:56:00	4.062	7.253	-0.002	9.884	0.557	0.059	0.128	3.726	28.6	28.7	
174.45624	10:56:59	4.062	7.253	-0.001	9.874	0.557	0.059	0.128	3.726	28.6	28.7	
174.45693	10:57:59	4.062	7.253	-0.001	9.860	0.557	0.059	0.128	3.726	28.6	28.7	
174.45763	10:58:59	4.063	7.253	-0.002	9.863	0.557	0.059	0.128	3.726	28.6	28.7	
174.45832	10:59:59	4.062	7.253	-0.001	9.861	0.557	0.059	0.128	3.726	28.6	28.7	
174.45902	11:00:59	4.062	7.254	-0.001	9.848	0.557	0.059	0.128	3.726	28.6	28.7	
174.49998	11:59:58	4.068	7.255	-0.001	9.650	0.558	0.059	0.128	3.726	28.6	28.7	-shut in
174.54235	13:00:59	4.074	7.258	0.002	9.529	0.558	0.059	0.128	3.726	28.6	28.7	guard zone
174.59167	14:12:00	4.081	7.262	0.007	9.413	0.558	0.059	0.128	3.725	28.6	28.7	
174.63332	15:11:59	4.087	7.265	0.012	9.316	0.558	0.059	0.128	3.725	28.6	28.7	
174.67497	16:11:57	4.092	7.270	0.019	9.232	0.558	0.059	0.128	3.724	28.6	28.7	
174.71662	17:11:56	4.098	7.274	0.023	9.160	0.558	0.059	0.128	3.723	28.6	28.7	
174.75827	18:11:55	4.105	7.277	0.028	9.095	0.558	0.059	0.128	3.722	28.6	28.7	
174.79993	19:11:54	4.110	7.280	0.032	9.039	0.558	0.059	0.128	3.722	28.6	28.7	
174.84158	20:11:53	4.116	7.284	0.038	8.982	0.559	0.059	0.128	3.721	28.6	28.7	
174.88323	21:11:51	4.122	7.287	0.042	8.936	0.559	0.059	0.128	3.720	28.6	28.7	
174.92488	22:11:50	4.128	7.291	0.047	8.882	0.559	0.059	0.128	3.720	28.6	28.7	
174.96653	23:11:48	4.132	7.294	0.052	8.840	0.559	0.059	0.128	3.719	28.6	28.7	
175.04984	01:11:46	4.144	7.302	0.062	8.759	0.559	0.059	0.128	3.718	28.6	28.7	
175.50801	12:11:32	4.214	7.340	0.113	8.386	0.559	0.059	0.128	3.713	28.6	28.7	
176.00783	00:11:17	4.288	7.381	0.164	8.070	0.559	0.060	0.129	3.708	28.6	28.7	
176.50765	12:11:01	4.362	7.422	0.215	7.829	0.559	0.060	0.129	3.701	28.6	28.7	
177.00747	00:10:45	4.441	7.463	0.263	7.640	0.559	0.061	0.129	3.696	28.6	28.7	
178.08657	02:04:40	4.617	7.551	0.362	7.340	0.558	0.061	0.130	3.685	28.6	28.7	
179.08621	02:04:09	4.779	7.629	0.447	7.135	0.558	0.061	0.131	3.676	28.6	28.7	
180.08585	02:03:37	4.941	7.705	0.527	6.978	0.557	0.061	0.131	3.667	28.6	28.7	
181.08550	02:03:07	5.099	7.779	0.601	6.856	0.556	0.061	0.132	3.660	28.6	28.7	
182.08805	02:06:48	5.246	7.847	0.674	6.749	0.556	0.061	0.133	3.653	28.6	28.7	
183.08769	02:06:16	5.383	7.907	0.741	6.660	0.554	0.062	0.134	3.647	28.6	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
184.08734	02:05:46	5.506	7.971	0.804	6.575	0.553	0.062	0.135	3.640	28.6	28.7	
185.08698	02:05:15	5.641	8.034	0.865	6.509	0.552	0.063	0.136	3.633	28.6	28.7	
186.08663	02:04:45	5.772	8.095	0.924	6.446	0.551	0.063	0.136	3.630	28.6	28.7	
187.05538	01:19:45	5.897	8.153	0.979	6.381	0.550	0.063	0.137	3.629	28.6	28.7	
188.12065	02:53:44	6.042	8.222	1.039	6.314	0.549	0.063	0.138	3.629	28.6	28.7	
189.12030	02:53:14	6.182	8.291	1.092	6.257	0.548	0.064	0.138	3.625	28.6	28.7	
190.11994	02:52:43	6.320	8.360	1.145	6.211	0.547	0.064	0.139	3.631	28.5	28.6	
191.11959	02:52:13	6.450	8.427	1.197	6.163	0.546	0.065	0.140	3.631	28.6	28.7	
192.06720	01:36:46	6.570	8.490	1.247	6.124	0.545	0.065	0.140	3.631	28.5	28.6	
193.06685	01:36:16	6.689	8.554	1.298	6.086	0.544	0.066	0.141	3.631	28.5	28.6	
194.06649	01:35:45	6.818	8.616	1.348	6.049	0.543	0.066	0.142	3.632	28.5	28.6	
195.07622	01:49:45	6.921	8.677	1.397	6.013	0.542	0.066	0.143	3.632	28.5	28.7	
196.07586	01:49:14	7.014	8.733	1.443	5.982	0.541	0.067	0.144	3.632	28.5	28.7	
197.07551	01:48:44	7.100	8.789	1.489	5.954	0.540	0.067	0.145	3.632	28.6	28.7	
198.07515	01:48:13	7.184	8.842	1.532	5.925	0.539	0.068	0.146	3.632	28.6	28.7	
198.45171	10:50:28	7.214	8.860	1.549	5.912	0.538	0.068	0.146	3.631	28.5	28.6	
199.45135	10:49:57	7.294	8.913	1.589	5.881	0.538	0.068	0.147	3.631	28.5	28.6	
200.45099	10:49:26	7.371	8.958	1.630	5.851	0.537	0.069	0.147	3.630	28.5	28.7	
201.45064	10:48:55	7.445	9.004	1.669	5.824	0.536	0.069	0.148	3.625	28.6	28.7	
202.45028	10:48:24	7.513	9.052	1.712	5.803	0.535	0.070	0.149	3.624	28.6	28.7	
203.44993	10:47:54	7.585	9.095	1.757	5.781	0.534	0.070	0.149	3.623	28.6	28.7	
204.44957	10:47:23	7.645	9.135	1.800	5.760	0.534	0.071	0.150	3.623	28.6	28.7	
205.44921	10:46:52	7.701	9.172	1.844	5.745	0.533	0.072	0.150	3.623	28.6	28.7	
206.44886	10:46:22	7.756	9.203	1.885	5.724	0.532	0.072	0.151	3.540	28.6	28.7	
207.41669	10:00:02	7.808	9.236	1.924	5.709	0.531	0.073	0.151	3.536	28.5	28.6	
207.41944	10:04:00	7.806	9.235	1.924	5.708	0.531	0.073	0.152	3.535	28.6	28.6	
208.39826	09:33:30	7.855	9.263	1.963	5.694	0.530	0.074	0.152	3.532	28.6	28.7	
209.37708	09:03:00	7.903	9.289	2.002	5.681	0.529	0.074	0.152	3.528	28.5	28.7	
210.35590	08:32:30	7.949	9.317	2.039	5.668	0.529	0.075	0.153	3.525	28.6	28.7	
211.33471	08:01:59	7.989	9.339	2.077	5.653	0.528	0.076	0.153	3.522	28.6	28.6	
212.31353	07:31:29	8.025	9.359	2.112	5.639	0.527	0.076	0.154	3.519	28.6	28.6	
212.47916	11:29:59	8.029	9.362	2.119	5.640	0.527	0.076	0.154	3.519	28.6	28.6	
213.47880	11:29:28	8.062	9.385	2.156	5.623	0.527	0.077	0.154	3.516	28.6	28.6	
214.65515	15:43:25	8.107	9.406	2.207	5.610	0.525	0.077	0.155	3.511	28.5	28.7	
215.45314	10:52:31	8.123	9.421	2.227	5.581	0.525	0.078	0.155	3.508	28.6	28.7	
215.45383	10:53:31	8.122	9.421	2.227	5.579	0.525	0.078	0.155	3.508	28.6	28.8	
215.45453	10:54:31	8.147	9.542	2.477	10.254	0.520	0.079	0.157	3.527	28.7	28.7	
215.45522	10:55:31	8.149	9.545	2.483	10.167	0.520	0.079	0.157	3.530	28.6	28.7	
215.45592	10:56:31	8.149	9.546	2.483	10.098	0.520	0.079	0.157	3.530	28.6	28.8	
215.45661	10:57:31	8.149	9.550	2.482	10.053	0.520	0.079	0.157	3.530	28.6	28.7	
215.45731	10:58:32	8.150	9.544	2.481	10.021	0.520	0.079	0.157	3.530	28.7	28.7	
215.45800	10:59:31	8.149	9.545	2.481	9.996	0.520	0.079	0.157	3.530	28.6	28.8	
215.45869	11:00:31	8.149	9.544	2.480	9.974	0.520	0.079	0.157	3.530	28.6	28.8	
215.45939	11:01:31	8.149	9.545	2.480	9.957	0.520	0.079	0.157	3.530	28.6	28.7	
215.46008	11:02:31	8.150	9.543	2.480	9.943	0.520	0.079	0.157	3.530	28.6	28.7	
215.46078	11:03:31	8.150	9.543	2.479	9.928	0.520	0.079	0.157	3.530	28.6	28.8	
215.46147	11:04:31	8.150	9.543	2.479	9.916	0.520	0.078	0.157	3.530	28.6	28.7	
215.46216	11:05:31	8.149	9.544	2.479	9.905	0.520	0.079	0.157	3.530	28.7	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
215.46286	11:06:31	8.149	9.543	2.478	9.895	0.520	0.078	0.157	3.530	28.6	28.7	
215.46355	11:07:31	8.149	9.543	2.478	9.885	0.520	0.079	0.157	3.530	28.7	28.8	
215.46425	11:08:31	8.150	9.543	2.479	9.878	0.520	0.078	0.157	3.530	28.7	28.8	
215.46494	11:09:31	8.149	9.543	2.479	9.869	0.520	0.078	0.157	3.530	28.7	28.8	
215.46564	11:10:31	8.149	9.543	2.478	9.860	0.520	0.078	0.157	3.530	28.6	28.7	
215.46633	11:11:31	8.150	9.542	2.478	9.854	0.520	0.078	0.157	3.530	28.6	28.7	
215.46702	11:12:31	8.150	9.542	2.478	9.847	0.520	0.078	0.157	3.530	28.6	28.7	
215.46772	11:13:31	8.149	9.543	2.478	9.840	0.520	0.078	0.157	3.530	28.6	28.8	
215.46841	11:14:31	8.150	9.542	2.478	9.834	0.520	0.078	0.157	3.530	28.7	28.8	
215.46911	11:15:31	8.150	9.542	2.477	9.827	0.520	0.078	0.157	3.530	28.6	28.7	
215.46980	11:16:31	8.149	9.542	2.477	9.822	0.520	0.078	0.157	3.530	28.6	28.8	
215.47050	11:17:31	8.150	9.541	2.477	9.817	0.520	0.078	0.157	3.530	28.7	28.8	
215.47119	11:18:31	8.150	9.541	2.477	9.811	0.520	0.078	0.157	3.530	28.6	28.7	
215.47188	11:19:30	8.149	9.543	2.477	9.807	0.520	0.078	0.157	3.530	28.6	28.7	
215.47258	11:20:31	8.150	9.541	2.476	9.801	0.520	0.078	0.157	3.530	28.6	28.7	
215.47327	11:21:31	8.150	9.541	2.476	9.797	0.520	0.078	0.157	3.530	28.6	28.8	
215.47397	11:22:31	8.150	9.541	2.476	9.793	0.520	0.078	0.157	3.530	28.6	28.7	
215.47466	11:23:31	8.150	9.541	2.475	9.789	0.520	0.078	0.157	3.530	28.7	28.8	
215.47535	11:24:30	8.150	9.541	2.477	9.785	0.520	0.078	0.157	3.529	28.6	28.7	
215.47605	11:25:31	8.150	9.541	2.476	9.781	0.520	0.078	0.157	3.529	28.7	28.7	
215.47674	11:26:30	8.149	9.541	2.476	9.775	0.520	0.078	0.157	3.529	28.7	28.7	
215.47744	11:27:31	8.149	9.541	2.476	9.773	0.520	0.078	0.157	3.529	28.6	28.7	
215.47813	11:28:30	8.150	9.540	2.475	9.768	0.520	0.078	0.157	3.529	28.6	28.8	
215.47883	11:29:31	8.149	9.541	2.475	9.764	0.520	0.078	0.157	3.529	28.7	28.7	
215.50035	12:00:30	8.149	9.539	2.473	9.682	0.520	0.078	0.157	3.528	28.6	28.7	
215.52117	12:30:29	8.149	9.539	2.470	9.630	0.520	0.078	0.156	3.529	28.6	28.7	
215.54200	13:00:29	8.149	9.538	2.469	9.590	0.520	0.078	0.156	3.529	28.6	28.7	
215.58365	14:00:27	8.151	9.535	2.468	9.531	0.520	0.078	0.156	3.529	28.6	28.7	
215.62530	15:00:26	8.151	9.535	2.467	9.486	0.520	0.078	0.156	3.529	28.6	28.8	
215.70860	17:00:23	8.152	9.534	2.467	9.419	0.520	0.078	0.156	3.529	28.7	28.8	
215.79191	19:00:21	8.152	9.533	2.467	9.370	0.520	0.078	0.156	3.535	28.6	28.7	
215.87521	21:00:18	8.155	9.533	2.467	9.326	0.520	0.078	0.156	3.529	28.6	28.7	
215.95852	23:00:16	8.155	9.533	2.467	9.287	0.520	0.078	0.156	3.529	28.6	28.7	-created data
216.00017	00:00:15	8.157	9.532	2.468	9.271	0.520	0.078	0.156	3.529	28.6	28.7	file - C2H023
216.22995	05:31:08	8.162	9.532	2.472	9.183	0.520	0.078	0.156	3.529	28.6	28.7	
216.48122	11:32:57	8.169	9.534	2.477	9.105	0.520	0.078	0.156	3.529	28.6	28.7	
217.06434	01:32:39	8.182	9.539	2.494	8.966	0.520	0.079	0.156	3.528	28.6	28.7	
218.06399	01:32:09	8.206	9.546	2.525	8.768	0.520	0.079	0.157	3.525	28.6	28.7	
219.06363	01:31:38	8.231	9.559	2.559	8.650	0.519	0.080	0.157	3.523	28.6	28.7	
220.06328	01:31:07	8.254	9.573	2.595	8.558	0.519	0.080	0.158	3.520	28.6	28.8	
221.07855	01:53:07	8.269	9.575	2.634	8.485	0.519	0.080	0.158	3.521	28.5	28.7	
222.00242	00:03:29	8.255	9.564	2.668	8.435	0.518	0.081	0.159	3.516	28.5	28.6	
223.03295	00:47:27	8.278	9.577	2.708	8.384	0.518	0.081	0.159	3.516	28.5	28.7	
224.03259	00:46:56	8.305	9.594	2.744	8.336	0.518	0.082	0.160	3.507	28.5	28.6	
225.03224	00:46:26	8.329	9.610	2.783	8.291	0.517	0.082	0.160	3.505	28.5	28.6	
226.03188	00:45:54	8.350	9.621	2.822	8.245	0.517	0.083	0.160	3.512	28.5	28.6	
227.36752	08:49:14	8.373	9.636	2.872	8.195	0.516	0.083	0.159	3.500	28.5	28.6	
228.34634	08:18:44	8.386	9.641	2.910	8.162	0.516	0.084	0.151	3.508	28.5	28.6	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
229.36007	08:38:30	8.393	9.645	2.947	8.127	0.516	0.084	0.152	3.501	28.5	28.6	
230.41010	09:50:33	8.408	9.658	2.982	8.092	0.516	0.085	0.151	3.502	28.5	28.6	
230.44444	10:40:00	8.410	9.658	2.983	8.092	0.516	0.085	0.151	3.502	28.6	28.6	-pulse with-
230.44479	10:40:30	7.189	8.963	2.915	8.075	0.511	0.087	0.154	3.502	28.6	28.6	drawal #1
230.44514	10:41:00	7.210	8.965	2.912	8.074	0.511	0.087	0.154	3.503	28.6	28.6	removed ~33
230.44548	10:41:29	7.203	8.961	2.909	8.073	0.510	0.087	0.154	3.502	28.6	28.6	ml fluid
230.44583	10:42:00	7.200	8.959	2.909	8.073	0.510	0.087	0.153	3.503	28.6	28.6	
230.44653	10:43:00	5.555	8.178	2.821	8.018	0.505	0.090	0.158	3.522	28.5	28.7	
230.44722	10:44:00	4.796	7.855	2.776	7.973	0.502	0.091	0.160	3.539	28.5	28.6	
230.44791	10:44:59	4.830	7.867	2.773	7.972	0.502	0.091	0.159	3.539	28.5	28.7	
230.44861	10:46:00	4.849	7.876	2.771	7.972	0.502	0.091	0.159	3.540	28.5	28.6	
230.44930	10:47:00	4.862	7.882	2.770	7.970	0.502	0.091	0.160	3.540	28.4	28.6	
230.45000	10:48:00	4.873	7.888	2.770	7.970	0.502	0.091	0.159	3.544	28.4	28.6	
230.45069	10:49:00	4.882	7.892	2.769	7.970	0.502	0.091	0.159	3.541	28.5	28.6	
230.45138	10:49:59	4.889	7.895	2.770	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45208	10:51:00	4.896	7.899	2.769	7.970	0.502	0.091	0.159	3.541	28.5	28.6	
230.45277	10:51:59	4.903	7.902	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45347	10:53:00	4.909	7.904	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45416	10:53:59	4.914	7.907	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45486	10:55:00	4.919	7.909	2.769	7.970	0.502	0.091	0.159	3.541	28.5	28.6	
230.45555	10:56:00	4.924	7.911	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45624	10:56:59	4.928	7.912	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45694	10:58:00	4.932	7.914	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45763	10:58:59	4.936	7.915	2.769	7.970	0.502	0.091	0.160	3.541	28.5	28.6	
230.45833	11:00:00	4.940	7.916	2.769	7.971	0.502	0.091	0.160	3.541	28.5	28.6	
230.47916	11:29:59	5.004	7.941	2.771	7.971	0.502	0.091	0.159	3.542	28.5	28.6	
230.50415	12:05:59	5.046	7.956	2.774	7.972	0.502	0.090	0.159	3.542	28.5	28.6	
230.54237	13:01:01	5.090	7.971	2.777	7.972	0.502	0.090	0.160	3.542	28.5	28.7	
230.58402	14:00:59	5.128	7.982	2.780	7.971	0.502	0.090	0.160	3.535	28.5	28.6	
230.62567	15:00:58	5.162	7.991	2.781	7.970	0.502	0.090	0.160	3.536	28.5	28.6	
230.67151	16:06:58	5.195	8.001	2.784	7.969	0.502	0.090	0.161	3.535	28.5	28.6	
230.71316	17:06:57	5.222	8.009	2.787	7.968	0.502	0.090	0.159	3.536	28.6	28.6	
230.75481	18:06:56	5.248	8.017	2.788	7.968	0.502	0.090	0.159	3.536	28.5	28.7	
230.79647	19:06:55	5.273	8.024	2.790	7.966	0.502	0.090	0.159	3.537	28.5	28.6	
230.83812	20:06:54	5.296	8.031	2.793	7.965	0.502	0.090	0.159	3.537	28.5	28.7	
230.87977	21:06:52	5.319	8.038	2.794	7.965	0.502	0.090	0.159	3.537	28.5	28.7	
230.92142	22:06:51	5.341	8.045	2.796	7.963	0.502	0.090	0.159	3.538	28.5	28.6	
230.96307	23:06:49	5.362	8.051	2.798	7.962	0.502	0.090	0.159	3.538	28.5	28.7	
231.00473	00:06:49	5.383	8.057	2.800	7.962	0.502	0.090	0.158	3.538	28.5	28.6	
231.50455	12:06:33	5.599	8.126	2.818	7.952	0.502	0.090	0.157	3.540	28.5	28.6	
232.00437	00:06:18	5.783	8.188	2.834	7.941	0.503	0.090	0.156	3.539	28.5	28.7	
233.00401	00:05:46	6.099	8.305	2.865	7.920	0.503	0.090	0.157	3.537	28.5	28.6	-leaky
234.08597	02:03:48	6.139	7.815	0.489	7.487	0.503	0.089	0.158	3.545	28.5	28.6	valves
234.42082	10:05:59	6.171	7.829	0.434	7.475	0.503	0.089	0.157	3.537	28.5	28.6	both zones
234.43123	10:20:58	6.173	7.829	0.433	7.476	0.503	0.089	0.157	3.536	28.5	28.6	
234.44165	10:35:59	6.173	7.830	0.432	7.476	0.503	0.089	0.157	3.536	28.5	28.6	
234.45206	10:50:58	6.174	7.828	0.418	7.474	0.503	0.089	0.156	3.537	28.5	28.6	
234.46247	11:05:57	6.175	7.830	0.416	7.474	0.503	0.089	0.157	3.537	28.5	28.6	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
234.47289	11:20:58	6.177	7.830	0.414	7.473	0.503	0.089	0.157	3.536	28.5	28.6	
234.48330	11:35:57	6.178	7.831	0.413	7.474	0.503	0.089	0.157	3.536	28.5	28.6	
234.49371	11:50:57	6.179	7.831	0.412	7.473	0.503	0.089	0.157	3.536	28.5	28.6	
234.50412	12:05:56	6.180	7.832	0.411	7.473	0.503	0.089	0.156	3.536	28.5	28.6	
234.58743	14:05:54	6.185	7.833	0.405	7.469	0.503	0.089	0.156	3.537	28.5	28.6	
234.59784	14:20:53	6.096	7.787	0.404	7.468	0.503	0.089	0.157	3.537	28.5	28.6	
234.60825	14:35:53	5.973	7.721	0.403	7.466	0.503	0.089	0.157	3.537	28.5	28.6	
234.61867	14:50:53	5.818	7.642	0.402	7.463	0.503	0.089	0.157	3.539	28.5	28.6	
234.62176	14:55:20	5.774	7.619	0.402	7.462	0.503	0.089	0.156	3.539	28.5	28.6	
234.78837	18:55:15	5.356	7.390	0.357	7.436	0.502	0.090	0.157	3.546	28.5	28.6	
234.95498	22:55:10	5.422	7.421	0.361	7.432	0.502	0.090	0.158	3.546	28.5	28.6	
235.12158	02:55:05	5.480	7.449	0.364	7.428	0.502	0.090	0.157	3.548	28.5	28.7	
235.28819	06:55:00	5.534	7.476	0.368	7.425	0.502	0.090	0.158	3.548	28.5	28.6	
235.43357	10:24:20	5.579	7.500	0.371	7.422	0.501	0.089	0.157	3.549	28.5	28.6	
235.56351	13:31:27	5.626	7.519	0.375	7.421	0.502	0.089	0.157	3.545	28.5	28.6	
235.73012	17:31:22	5.669	7.545	0.378	7.418	0.502	0.089	0.157	3.545	28.5	28.6	
235.89672	21:31:17	5.715	7.570	0.381	7.415	0.502	0.089	0.157	3.545	28.5	28.6	
236.06333	01:31:12	5.760	7.594	0.384	7.413	0.502	0.089	0.157	3.545	28.5	28.6	
236.22994	05:31:07	5.805	7.617	0.388	7.410	0.502	0.089	0.157	3.546	28.5	28.6	
236.31324	07:31:04	5.826	7.629	0.390	7.409	0.502	0.089	0.157	3.546	28.5	28.6	
236.56692	13:36:22	5.903	7.666	0.401	7.415	0.501	0.089	0.166	3.549	28.5	28.7	
236.58333	14:00:00	5.905	7.662	0.401	7.412	0.502	0.089	0.159	3.549	28.5	28.7	
236.58403	14:01:00	5.905	7.662	0.399	7.412	0.502	0.089	0.160	3.548	28.6	28.7	
236.58472	14:02:00	5.904	7.663	0.400	7.411	0.502	0.089	0.159	3.548	28.6	28.7	
236.58541	14:02:59	5.905	7.663	0.401	7.410	0.502	0.089	0.159	3.545	28.5	28.7	
236.58611	14:04:00	5.906	7.663	0.400	7.410	0.502	0.089	0.158	3.545	28.5	28.7	-packers'
236.58680	14:05:00	5.905	7.663	0.401	7.410	0.502	0.089	0.159	3.546	28.5	28.7	pressure
236.58750	14:06:00	6.106	10.011	0.407	7.414	0.498	0.091	0.161	3.550	28.6	28.7	increased
236.58819	14:07:00	6.122	10.204	0.408	7.414	0.497	0.091	0.162	3.551	28.6	28.7	
236.58889	14:08:00	6.149	10.106	0.412	10.224	0.496	0.091	0.162	3.570	28.6	28.7	
236.58958	14:09:00	6.150	10.078	0.413	10.160	0.496	0.091	0.163	3.570	28.6	28.7	
236.59027	14:09:59	6.150	10.057	0.413	10.122	0.496	0.091	0.162	3.574	28.6	28.7	
236.59097	14:11:00	6.150	10.042	0.413	10.101	0.496	0.091	0.162	3.573	28.6	28.7	
236.59166	14:11:59	6.150	10.029	0.412	10.092	0.496	0.091	0.162	3.574	28.6	28.7	
236.59236	14:13:00	6.150	10.018	0.413	10.064	0.496	0.091	0.162	3.574	28.6	28.7	
236.59305	14:14:00	6.151	10.009	0.416	10.056	0.496	0.091	0.162	3.574	28.6	28.7	
236.59374	14:14:59	6.149	10.000	0.414	10.048	0.496	0.091	0.162	3.574	28.6	28.7	
236.59444	14:16:00	6.150	9.991	0.413	10.038	0.496	0.091	0.162	3.571	28.6	28.7	
236.59513	14:16:59	6.150	9.984	0.414	10.031	0.496	0.091	0.154	3.574	28.6	28.7	
236.59583	14:18:00	6.150	9.978	0.413	10.024	0.496	0.091	0.155	3.573	28.5	28.7	
236.59652	14:18:59	6.149	9.965	0.413	10.018	0.496	0.091	0.154	3.574	28.5	28.7	
236.59722	14:20:00	6.150	9.966	0.414	10.010	0.496	0.091	0.154	3.572	28.6	28.7	
236.59791	14:20:59	6.151	9.960	0.413	10.004	0.496	0.091	0.155	3.573	28.6	28.7	
236.59860	14:21:59	6.150	9.956	0.413	10.000	0.496	0.091	0.156	3.572	28.6	28.7	
236.59930	14:23:00	6.150	9.950	0.414	9.994	0.496	0.091	0.154	3.572	28.6	28.7	
236.59999	14:23:59	6.150	9.946	0.414	9.990	0.496	0.091	0.154	3.572	28.5	28.7	
236.60069	14:25:00	6.150	9.942	0.413	9.985	0.496	0.091	0.154	3.574	28.6	28.7	
236.60138	14:25:59	6.151	9.938	0.413	9.981	0.496	0.091	0.154	3.575	28.6	28.7	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
236.60207	14:26:59	6.150	9.934	0.413	9.977	0.496	0.091	0.153	3.572	28.6	28.7	
236.60277	14:27:59	6.150	9.930	0.413	9.973	0.496	0.091	0.154	3.572	28.5	28.6	
236.60346	14:28:59	6.151	9.926	0.413	9.970	0.496	0.091	0.154	3.574	28.5	28.6	
236.60416	14:29:59	6.150	9.922	0.413	9.967	0.496	0.091	0.154	3.575	28.5	28.7	
236.60485	14:30:59	6.151	9.919	0.413	9.962	0.496	0.091	0.154	3.575	28.5	28.7	
236.62499	14:59:59	6.153	9.854	0.414	9.898	0.496	0.091	0.153	3.574	28.5	28.7	
236.66665	15:59:59	6.159	9.793	0.416	9.839	0.496	0.091	0.152	3.572	28.5	28.6	
236.70830	16:59:57	6.167	9.760	0.416	9.804	0.496	0.091	0.152	3.572	28.5	28.6	
236.74995	17:59:56	6.175	9.738	0.416	9.782	0.496	0.091	0.152	3.572	28.5	28.6	
236.79160	18:59:54	6.183	9.720	0.417	9.761	0.496	0.091	0.151	3.571	28.5	28.6	
236.83325	19:59:53	6.192	9.706	0.417	9.746	0.496	0.091	0.151	3.571	28.5	28.6	
236.87491	20:59:52	6.201	9.694	0.418	9.728	0.496	0.091	0.151	3.571	28.5	28.6	
236.91656	21:59:51	6.209	9.685	0.418	9.716	0.496	0.091	0.152	3.571	28.5	28.6	
236.95821	22:59:49	6.218	9.677	0.418	9.704	0.496	0.091	0.150	3.571	28.5	28.6	
236.99986	23:59:48	6.227	9.670	0.419	9.693	0.496	0.091	0.151	3.570	28.5	28.6	
237.01027	00:14:47	6.230	9.668	0.419	9.689	0.496	0.091	0.152	3.571	28.5	28.6	
237.33308	07:59:38	6.302	9.640	0.426	9.621	0.496	0.091	0.150	3.570	28.5	28.6	-injected
237.35069	08:25:00	6.305	9.639	0.426	9.617	0.496	0.091	0.150	3.570	28.5	28.6	into test-
237.35208	08:27:00	8.022	10.385	0.430	9.690	0.500	0.089	0.149	3.549	28.6	28.6	zone
237.35277	08:27:59	8.008	10.393	0.428	9.689	0.500	0.089	0.149	3.549	28.6	28.6	built
237.35347	08:29:00	8.001	10.387	0.428	9.691	0.500	0.089	0.149	3.549	28.6	28.6	pressure
237.35416	08:29:59	7.995	10.382	0.429	9.691	0.500	0.089	0.149	3.548	28.6	28.6	-8 MPa
237.35485	08:30:59	7.990	10.378	0.428	9.690	0.500	0.089	0.149	3.548	28.6	28.7	
237.35555	08:32:00	7.986	10.375	0.428	9.690	0.500	0.089	0.149	3.548	28.6	28.6	
237.35624	08:32:59	7.982	10.370	0.428	9.692	0.500	0.089	0.148	3.548	28.5	28.6	
237.35694	08:34:00	7.979	10.368	0.428	9.690	0.500	0.089	0.149	3.548	28.6	28.6	
237.35763	08:34:59	7.976	10.365	0.428	9.691	0.500	0.089	0.148	3.548	28.6	28.6	
237.35833	08:36:00	7.972	10.362	0.428	9.690	0.500	0.089	0.148	3.548	28.6	28.6	
237.35902	08:36:59	7.969	10.360	0.428	9.692	0.500	0.089	0.148	3.548	28.6	28.6	
237.35971	08:37:59	7.967	10.357	0.428	9.692	0.500	0.089	0.149	3.548	28.5	28.6	
237.36041	08:38:59	7.964	10.356	0.428	9.691	0.500	0.089	0.149	3.548	28.5	28.6	
237.36110	08:39:59	7.962	10.354	0.428	9.691	0.500	0.089	0.149	3.547	28.5	28.6	
237.36180	08:41:00	7.960	10.351	0.428	9.690	0.500	0.089	0.150	3.547	28.5	28.6	
237.36249	08:41:59	7.957	10.349	0.429	9.693	0.500	0.089	0.149	3.547	28.5	28.6	
237.36319	08:43:00	7.955	10.347	0.428	9.694	0.500	0.089	0.149	3.547	28.5	28.6	
237.36388	08:43:59	7.953	10.345	0.428	9.690	0.500	0.089	0.149	3.547	28.5	28.6	
237.36457	08:44:59	7.951	10.344	0.429	9.693	0.500	0.089	0.149	3.547	28.5	28.6	
237.36527	08:45:59	7.949	10.342	0.429	9.689	0.500	0.089	0.149	3.551	28.5	28.6	
237.36596	08:46:59	7.947	10.341	0.428	9.692	0.500	0.089	0.149	3.547	28.5	28.6	
237.36666	08:47:59	7.945	10.339	0.429	9.692	0.500	0.089	0.149	3.547	28.6	28.6	
237.36735	08:48:59	7.944	10.338	0.428	9.690	0.500	0.089	0.149	3.547	28.5	28.7	
237.36804	08:49:59	7.942	10.336	0.428	9.689	0.500	0.089	0.148	3.547	28.5	28.6	
237.36874	08:50:59	7.940	10.335	0.429	9.689	0.500	0.089	0.149	3.547	28.5	28.6	
237.36943	08:51:59	7.939	10.333	0.429	9.689	0.500	0.089	0.148	3.547	28.5	28.6	
237.37013	08:52:59	7.937	10.332	0.428	9.690	0.500	0.089	0.149	3.547	28.5	28.6	
237.37082	08:53:59	7.936	10.331	0.428	9.689	0.500	0.089	0.149	3.547	28.5	28.6	
237.37152	08:54:59	7.934	10.329	0.428	9.688	0.500	0.089	0.148	3.547	28.5	28.6	
237.37221	08:55:59	7.932	10.328	0.429	9.689	0.500	0.089	0.148	3.547	28.5	28.6	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
237.37290	08:56:59	7.931	10.326	0.429	9.689	0.500	0.089	0.148	3.547	28.5	28.6	
237.37360	08:57:59	7.929	10.325	0.429	9.689	0.500	0.089	0.149	3.547	28.5	28.6	
237.37429	08:58:59	7.928	10.324	0.429	9.689	0.500	0.089	0.149	3.547	28.5	28.6	
237.37499	08:59:59	7.926	10.323	0.429	9.691	0.500	0.089	0.149	3.546	28.5	28.6	
237.37568	09:00:59	7.925	10.322	0.429	9.688	0.500	0.089	0.149	3.547	28.5	28.6	
237.39651	09:30:58	7.895	10.297	0.428	9.687	0.500	0.089	0.148	3.546	28.5	28.6	
237.41733	10:00:57	7.872	10.278	0.428	9.682	0.500	0.089	0.148	3.545	28.5	28.6	
237.45963	11:01:52	7.840	10.250	0.429	9.676	0.500	0.089	0.149	3.545	28.5	28.6	
237.50128	12:01:51	7.817	10.232	0.430	9.669	0.500	0.089	0.147	3.545	28.5	28.6	
237.54293	13:01:49	7.800	10.215	0.431	9.663	0.500	0.089	0.147	3.545	28.5	28.6	
237.58458	14:01:48	7.785	10.199	0.432	9.657	0.500	0.089	0.147	3.545	28.5	28.6	
237.62500	15:00:00	7.774	10.189	0.433	9.647	0.500	0.089	0.147	3.544	28.5	28.6	
237.66665	15:59:59	7.763	10.178	0.434	9.641	0.500	0.089	0.147	3.544	28.5	28.6	
237.70830	16:59:57	7.754	10.170	0.435	9.633	0.500	0.089	0.148	3.545	28.5	28.6	
237.74995	17:59:56	7.747	10.162	0.436	9.626	0.500	0.089	0.147	3.544	28.5	28.6	
237.79161	18:59:55	7.741	10.155	0.437	9.620	0.501	0.089	0.147	3.546	28.5	28.7	
237.83326	19:59:54	7.736	10.149	0.438	9.617	0.501	0.089	0.147	3.545	28.5	28.7	
237.87491	20:59:52	7.731	10.143	0.438	9.609	0.501	0.089	0.147	3.544	28.5	28.6	
237.91656	21:59:51	7.728	10.137	0.439	9.601	0.501	0.089	0.147	3.544	28.5	28.6	
237.95821	22:59:49	7.724	10.133	0.440	9.597	0.501	0.089	0.147	3.544	28.5	28.6	
237.99987	23:59:49	7.721	10.129	0.441	9.599	0.501	0.089	0.147	3.544	28.5	28.6	
238.04152	00:59:47	7.718	10.124	0.442	9.586	0.501	0.089	0.146	3.544	28.5	28.6	
238.54134	12:59:32	7.710	10.090	0.452	9.525	0.501	0.089	0.146	3.545	28.5	28.6	
239.04116	00:59:16	7.725	10.075	0.463	9.471	0.501	0.089	0.146	3.547	28.5	28.6	
240.04080	00:58:45	7.779	10.067	0.484	9.380	0.501	0.089	0.145	3.546	28.5	28.6	
241.04152	00:59:47	7.831	10.068	0.505	9.304	0.500	0.089	0.145	3.543	28.5	28.6	
242.04116	00:59:16	7.878	10.070	0.525	9.236	0.500	0.090	0.145	3.544	28.5	28.6	
243.02760	00:39:45	7.928	10.078	0.545	9.178	0.500	0.090	0.145	3.544	28.5	28.6	
244.02724	00:39:14	7.981	10.094	0.565	9.122	0.500	0.090	0.145	3.545	28.5	28.6	
245.02689	00:38:43	8.034	10.108	0.584	9.070	0.500	0.090	0.145	3.541	28.5	28.6	
246.02653	00:38:12	8.085	10.122	0.604	9.024	0.499	0.091	0.145	3.541	28.5	28.6	
247.02617	00:37:41	8.132	10.135	0.626	8.976	0.499	0.091	0.145	3.540	28.5	28.6	
248.02582	00:37:11	8.176	10.150	0.648	8.936	0.499	0.091	0.145	3.540	28.5	28.6	
249.05532	01:19:40	8.219	10.165	0.672	8.894	0.498	0.092	0.152	3.530	28.5	28.6	
250.05496	01:19:09	8.257	10.175	0.694	8.857	0.498	0.092	0.150	3.532	28.5	28.6	
251.14073	03:22:39	8.293	10.185	0.719	8.817	0.498	0.092	0.149	3.529	28.5	28.6	
252.14038	03:22:09	8.321	10.186	0.742	8.785	0.498	0.092	0.151	3.529	28.5	28.6	
253.14002	03:21:38	8.352	10.198	0.765	8.750	0.497	0.093	0.152	3.526	28.5	28.6	
254.13967	03:21:07	8.378	10.207	0.788	8.720	0.497	0.093	0.151	3.524	28.5	28.6	
255.06921	01:39:40	8.401	10.213	0.808	8.697	0.497	0.093	0.154	3.524	28.5	28.6	
256.06885	01:39:09	8.416	10.209	0.831	8.660	0.497	0.094	0.155	3.509	28.5	28.6	
257.06849	01:38:38	8.426	10.209	0.853	8.630	0.496	0.094	0.154	3.478	28.5	28.6	
258.06814	01:38:07	8.438	10.211	0.876	8.602	0.496	0.094	0.154	3.468	28.5	28.6	
258.40135	09:37:57	8.441	10.212	0.884	8.594	0.496	0.095	0.154	3.514	28.5	28.6	
258.49930	11:59:00	8.442	10.212	0.886	8.593	0.496	0.095	0.155	3.470	28.5	28.6	
258.49965	11:59:30	8.442	10.211	0.886	8.586	0.496	0.095	0.154	3.471	28.5	28.6	
258.50000	12:00:00	8.442	10.211	0.886	8.589	0.496	0.095	0.154	3.473	28.5	28.6	-pulse with-
258.50035	12:00:30	8.247	10.103	0.886	8.589	0.495	0.095	0.154	3.471	28.5	28.6	drawal #2

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
258.50069	12:01:00	6.900	9.412	0.883	8.574	0.491	0.097	0.156	3.471	28.4	28.6	removed
258.50104	12:01:30	5.841	8.917	0.880	8.534	0.487	0.099	0.158	3.485	28.4	28.6	~110 ml
258.50139	12:02:00	5.226	8.650	0.879	8.494	0.486	0.099	0.160	3.496	28.4	28.6	fluid
258.50208	12:03:00	5.270	8.658	0.879	8.488	0.485	0.099	0.160	3.499	28.4	28.6	
258.50278	12:04:00	5.286	8.666	0.878	8.487	0.485	0.099	0.160	3.500	28.4	28.6	
258.50347	12:05:00	5.299	8.672	0.879	8.488	0.485	0.099	0.159	3.501	28.4	28.6	
258.50416	12:05:59	5.309	8.676	0.878	8.487	0.485	0.099	0.161	3.501	28.4	28.6	
258.50555	12:08:00	5.324	8.684	0.879	8.487	0.485	0.099	0.160	3.503	28.4	28.6	
258.50625	12:09:00	5.331	8.689	0.879	8.484	0.485	0.099	0.160	3.504	28.4	28.6	
258.50694	12:10:00	5.336	8.690	0.879	8.486	0.485	0.099	0.160	3.505	28.4	28.6	
258.50764	12:11:00	5.342	8.692	0.879	8.487	0.485	0.099	0.160	3.520	28.4	28.6	
258.50833	12:12:00	5.346	8.691	0.879	8.487	0.485	0.099	0.160	3.503	28.4	28.6	
258.50903	12:13:00	5.351	8.696	0.879	8.489	0.485	0.099	0.160	3.504	28.4	28.6	
258.50972	12:14:00	5.355	8.697	0.879	8.486	0.485	0.099	0.160	3.504	28.4	28.6	
258.51041	12:14:59	5.360	8.699	0.879	8.487	0.485	0.099	0.160	3.504	28.4	28.6	
258.51111	12:16:00	5.363	8.700	0.879	8.487	0.484	0.099	0.160	3.506	28.4	28.6	
258.51180	12:17:00	5.367	8.702	0.879	8.488	0.484	0.099	0.159	3.503	28.4	28.6	
258.51250	12:18:00	5.370	8.703	0.879	8.489	0.485	0.099	0.160	3.503	28.4	28.6	
258.51319	12:19:00	5.374	8.705	0.879	8.487	0.485	0.099	0.160	3.503	28.4	28.6	
258.51388	12:19:59	5.377	8.705	0.879	8.488	0.484	0.099	0.160	3.504	28.4	28.6	
258.51458	12:21:00	5.380	8.706	0.879	8.487	0.485	0.099	0.160	3.505	28.4	28.6	
258.51527	12:21:59	5.383	8.707	0.879	8.490	0.484	0.099	0.161	3.505	28.4	28.6	
258.51597	12:23:00	5.386	8.708	0.879	8.486	0.485	0.099	0.160	3.506	28.4	28.6	
258.51666	12:23:59	5.389	8.709	0.879	8.486	0.484	0.099	0.161	3.505	28.4	28.6	
258.51736	12:25:00	5.391	8.710	0.879	8.486	0.484	0.099	0.160	3.508	28.4	28.6	
258.51805	12:26:00	5.394	8.711	0.879	8.486	0.484	0.099	0.161	3.508	28.4	28.6	
258.51874	12:26:59	5.396	8.712	0.879	8.488	0.484	0.099	0.160	3.506	28.4	28.6	
258.51944	12:28:00	5.399	8.713	0.879	8.489	0.485	0.099	0.160	3.541	28.4	28.6	
258.52013	12:28:59	5.402	8.713	0.879	8.486	0.484	0.099	0.160	3.539	28.4	28.6	
258.52083	12:30:00	5.404	8.715	0.879	8.486	0.485	0.099	0.160	3.545	28.5	28.6	
258.54166	12:59:59	5.456	8.734	0.879	8.487	0.484	0.099	0.160	3.512	28.4	28.6	
258.54582	13:05:59	5.464	8.735	0.880	8.488	0.484	0.099	0.160	3.525	28.4	28.6	
258.58345	14:00:10	5.516	8.754	0.881	8.488	0.484	0.099	0.160	3.513	28.5	28.6	
258.62567	15:00:58	5.557	8.769	0.881	8.489	0.484	0.099	0.160	3.517	28.5	28.6	
258.66733	16:00:57	5.591	8.781	0.882	8.490	0.484	0.099	0.160	3.516	28.5	28.6	
258.70898	17:00:56	5.620	8.792	0.883	8.486	0.484	0.099	0.160	3.548	28.5	28.6	
258.75063	18:00:54	5.648	8.801	0.884	8.491	0.484	0.099	0.161	3.548	28.5	28.6	
258.79228	19:00:53	5.673	8.810	0.885	8.484	0.484	0.099	0.161	3.549	28.5	28.6	
258.83393	20:00:52	5.697	8.819	0.886	8.484	0.484	0.099	0.160	3.559	28.5	28.6	
258.87559	21:00:51	5.719	8.827	0.887	8.479	0.484	0.099	0.160	3.564	28.5	28.6	
258.91724	22:00:50	5.741	8.835	0.888	8.480	0.484	0.099	0.160	3.565	28.5	28.6	
258.95889	23:00:48	5.762	8.842	0.889	8.479	0.484	0.099	0.161	3.565	28.5	28.6	
259.00054	00:00:47	5.782	8.849	0.890	8.479	0.484	0.099	0.161	3.566	28.5	28.6	
259.50036	12:00:31	5.991	8.925	0.901	8.471	0.484	0.099	0.161	3.570	28.5	28.6	
260.00018	00:00:16	6.165	8.991	0.912	8.472	0.484	0.099	0.161	3.557	28.5	28.6	
261.01024	00:14:45	6.464	9.109	0.934	8.446	0.484	0.099	0.162	3.562	28.5	28.6	
262.05812	01:23:42	6.723	9.219	0.956	8.428	0.485	0.099	0.160	3.486	28.5	28.6	
263.05777	01:23:11	6.935	9.315	0.976	8.411	0.486	0.099	0.164	3.520	28.5	28.6	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
264.05676	01:21:44	7.121	9.403	0.996	8.395	0.486	0.099	0.161	3.556	28.5	28.6	
265.02554	00:36:47	7.280	9.481	1.015	8.380	0.486	0.099	0.160	3.548	28.5	28.6	
266.02519	00:36:16	7.424	9.555	1.032	8.362	0.486	0.100	0.161	3.516	28.5	28.6	
267.02483	00:35:45	7.554	9.623	1.050	8.344	0.486	0.100	0.160	3.516	28.5	28.6	
268.02448	00:35:15	7.671	9.686	1.070	8.327	0.486	0.100	0.162	3.518	28.5	28.6	
269.13379	03:12:39	7.784	9.749	1.091	8.310	0.486	0.100	0.161	3.521	28.5	28.6	
270.13343	03:12:08	7.874	9.798	1.109	8.286	0.486	0.100	0.161	3.522	28.5	28.6	
271.13308	03:11:38	7.953	9.839	1.127	8.272	0.486	0.101	0.180	3.524	28.5	28.6	
272.13272	03:11:07	8.023	9.873	1.145	8.247	0.486	0.101	0.180	3.526	28.4	28.6	
272.63608	15:15:57	8.057	9.885	1.156	8.255	0.487	0.101	0.180	3.484	28.7	28.8	
275.41568	09:58:35	8.207	9.919	1.227	8.187	0.485	0.101	0.181	3.461	28.5	28.7	
276.09560	02:17:40	8.211	9.909	1.227	7.899	0.486	0.102	0.181	3.419	28.4	28.6	
277.09524	02:17:09	8.197	9.869	1.246	7.896	0.486	0.102	0.181	3.471	28.4	28.6	
278.09488	02:16:38	8.226	9.889	1.266	7.875	0.486	0.102	0.181	3.582	28.4	28.5	
279.09453	02:16:07	8.245	9.896	1.285	7.867	0.486	0.102	0.181	3.584	28.4	28.6	
280.09417	02:15:36	8.272	9.918	1.305	7.854	0.486	0.102	0.181	3.584	28.4	28.5	
281.09382	02:15:06	8.287	9.923	1.324	7.840	0.486	0.102	0.182	3.583	28.4	28.6	
282.09346	02:14:35	8.296	9.921	1.346	7.829	0.485	0.102	0.182	3.582	28.4	28.6	
283.10948	02:37:39	8.317	9.939	1.367	7.820	0.485	0.103	0.182	3.436	28.4	28.6	
284.10913	02:37:09	8.334	9.954	1.388	7.808	0.485	0.103	0.182	3.521	28.4	28.5	
285.10877	02:36:38	8.336	9.952	1.409	7.730	0.485	0.103	0.182	3.514	28.4	28.6	
286.10841	02:36:07	8.354	9.971	1.428	7.642	0.485	0.103	0.182	3.521	28.4	28.6	
287.10806	02:35:36	8.358	9.969	1.450	7.590	0.485	0.103	0.182	3.525	28.5	28.6	
288.10770	02:35:05	8.363	9.972	1.471	7.547	0.485	0.104	0.182	3.554	28.5	28.6	
289.10735	02:34:35	8.378	9.988	1.492	7.522	0.484	0.104	0.182	3.492	28.5	28.6	
290.07703	01:50:55	8.387	9.998	1.513	7.515	0.484	0.104	0.182	3.497	28.5	28.6	
291.07667	01:50:24	8.396	10.010	1.536	7.516	0.484	0.104	0.182	3.518	28.5	28.7	
292.07632	01:49:54	8.411	10.028	1.559	7.513	0.484	0.105	0.182	3.484	28.5	28.6	
293.07596	01:49:23	8.426	10.043	1.583	7.510	0.483	0.105	0.182	3.495	28.5	28.6	
294.07560	01:48:52	8.440	10.055	1.608	7.504	0.484	0.105	0.182	3.521	28.5	28.6	
295.07525	01:48:22	8.451	10.069	1.631	7.502	0.484	0.105	0.182	3.534	28.5	28.6	
296.07489	01:47:50	8.458	10.079	1.656	7.499	0.484	0.106	0.182	3.541	28.5	28.7	
297.07454	01:47:20	8.466	10.093	1.681	7.491	0.483	0.106	0.183	3.576	28.5	28.7	
298.07418	01:46:49	8.474	10.105	1.708	7.496	0.483	0.106	0.183	3.528	28.5	28.7	
299.04452	01:04:07	8.484	10.116	1.732	7.486	0.483	0.106	0.183	3.432	28.5	28.7	
300.11101	02:39:51	8.490	10.126	1.758	7.485	0.483	0.107	0.183	3.474	28.5	28.7	-created data
300.51111	12:16:00	8.492	10.127	1.769	7.482	0.483	0.107	0.183	3.509	28.5	28.7	file - C2H024
300.51736	12:25:00	8.492	10.127	1.768	7.481	0.483	0.107	0.183	3.507	28.5	28.6	
300.51805	12:26:00	8.492	10.128	1.769	7.479	0.483	0.107	0.183	3.506	28.5	28.7	
300.51875	12:27:00	8.492	10.127	1.769	7.476	0.483	0.107	0.183	3.507	28.5	28.7	
300.51957	12:28:11	8.492	10.128	1.769	7.476	0.483	0.107	0.183	3.495	28.5	28.7	
300.52013	12:28:59	8.492	10.128	1.769	7.481	0.483	0.107	0.183	3.492	28.5	28.7	
300.52048	12:29:29	8.491	10.128	1.769	7.479	0.483	0.107	0.183	3.494	28.5	28.7	
300.52083	12:30:00	8.492	10.128	1.769	7.460	0.483	0.107	0.183	3.491	28.5	28.7	
300.52118	12:30:30	8.491	10.127	1.769	7.480	0.483	0.107	0.183	3.508	28.5	28.7	-pulse with-
300.52152	12:30:59	8.492	10.128	1.769	7.477	0.483	0.107	0.183	3.507	28.5	28.7	drawal #3
300.52187	12:31:30	7.499	9.511	1.762	7.468	0.481	0.108	0.183	3.493	28.5	28.7	removed 72
300.52222	12:32:00	6.523	8.997	1.754	7.449	0.479	0.110	0.184	3.481	28.4	28.7	ml fluid

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
300.52256	12:32:29	6.123	8.796	1.750	7.444	0.477	0.110	0.185	3.488	28.4	28.7	
300.52291	12:32:59	6.146	8.802	1.750	7.448	0.477	0.110	0.185	3.490	28.4	28.7	
300.52326	12:33:30	6.157	8.806	1.750	7.446	0.476	0.110	0.186	3.491	28.4	28.7	
300.52361	12:34:00	6.165	8.811	1.749	7.440	0.476	0.111	0.186	3.515	28.4	28.7	
300.52395	12:34:29	6.171	8.814	1.750	7.441	0.476	0.111	0.186	3.493	28.4	28.7	
300.52430	12:35:00	6.176	8.817	1.749	7.439	0.476	0.111	0.186	3.492	28.4	28.7	
300.52465	12:35:30	6.181	8.820	1.749	7.445	0.476	0.111	0.186	3.494	28.4	28.7	
300.52499	12:35:59	6.185	8.822	1.749	7.439	0.476	0.111	0.186	3.493	28.5	28.7	
300.52534	12:36:29	6.189	8.825	1.749	7.441	0.476	0.111	0.186	3.493	28.4	28.7	
300.52569	12:37:00	6.192	8.827	1.749	7.440	0.476	0.111	0.186	3.494	28.4	28.7	
300.52603	12:37:29	6.195	8.829	1.749	7.441	0.476	0.111	0.186	3.494	28.4	28.7	
300.52638	12:37:59	6.198	8.830	1.749	7.438	0.475	0.111	0.186	3.494	28.4	28.7	
300.52673	12:38:29	6.201	8.832	1.749	7.439	0.475	0.111	0.186	3.495	28.5	28.7	
300.52708	12:39:00	6.204	8.833	1.749	7.439	0.475	0.111	0.186	3.495	28.5	28.7	
300.52742	12:39:29	6.206	8.834	1.749	7.468	0.475	0.111	0.186	3.495	28.5	28.7	
300.52777	12:39:59	6.209	8.836	1.749	7.441	0.475	0.111	0.186	3.495	28.5	28.7	
300.52812	12:40:30	6.211	8.837	1.749	7.437	0.475	0.111	0.186	3.495	28.5	28.7	
300.52846	12:40:59	6.213	8.839	1.749	7.439	0.475	0.111	0.186	3.496	28.5	28.7	
300.52881	12:41:29	6.215	8.840	1.749	7.438	0.475	0.111	0.186	3.496	28.5	28.7	
300.52916	12:41:59	6.217	8.841	1.749	7.439	0.475	0.111	0.186	3.500	28.5	28.7	
300.52951	12:42:30	6.220	8.842	1.749	7.439	0.475	0.111	0.186	3.518	28.5	28.7	
300.52986	12:43:00	6.222	8.843	1.749	7.438	0.475	0.111	0.186	3.517	28.5	28.7	
300.53055	12:44:00	6.225	8.845	1.749	7.435	0.475	0.111	0.186	3.496	28.5	28.7	
300.53125	12:45:00	6.229	8.847	1.749	7.436	0.475	0.111	0.186	3.497	28.5	28.7	
300.53194	12:46:00	6.232	8.848	1.749	7.437	0.475	0.111	0.186	3.499	28.5	28.7	
300.53264	12:47:00	6.235	8.850	1.749	7.437	0.475	0.111	0.186	3.499	28.5	28.7	
300.53333	12:48:00	6.239	8.851	1.749	7.437	0.475	0.111	0.186	3.497	28.5	28.7	
300.53402	12:48:59	6.242	8.853	1.749	7.438	0.475	0.111	0.186	3.497	28.5	28.7	
300.53472	12:50:00	6.244	8.853	1.749	7.438	0.475	0.111	0.186	3.498	28.5	28.7	
300.53541	12:50:59	6.248	8.855	1.749	7.438	0.475	0.111	0.186	3.498	28.5	28.7	
300.53611	12:52:00	6.250	8.856	1.749	7.426	0.475	0.111	0.186	3.498	28.5	28.7	
300.53680	12:53:00	6.253	8.858	1.749	7.439	0.475	0.111	0.186	3.498	28.5	28.7	
300.53750	12:54:00	6.255	8.858	1.749	7.437	0.475	0.111	0.186	3.498	28.5	28.7	
300.53819	12:55:00	6.258	8.859	1.749	7.434	0.475	0.111	0.186	3.499	28.5	28.7	
300.53888	12:55:59	6.261	8.861	1.749	7.437	0.475	0.111	0.186	3.499	28.5	28.7	
300.53958	12:57:00	6.263	8.862	1.749	7.439	0.475	0.111	0.186	3.499	28.5	28.7	
300.54027	12:57:59	6.265	8.862	1.749	7.437	0.475	0.111	0.186	3.500	28.5	28.7	
300.54167	13:00:00	6.270	8.865	1.749	7.436	0.475	0.111	0.186	3.499	28.5	28.7	
300.58332	13:59:59	6.353	8.898	1.750	7.439	0.474	0.111	0.187	3.503	28.6	28.8	
300.63922	15:20:29	6.413	8.920	1.752	7.447	0.474	0.111	0.187	3.506	28.6	28.8	
300.68087	16:20:27	6.447	8.933	1.753	7.443	0.474	0.111	0.187	3.508	28.6	28.8	
300.72253	17:20:27	6.476	8.944	1.754	7.444	0.474	0.111	0.187	3.507	28.6	28.8	
300.76418	18:20:25	6.502	8.955	1.755	7.444	0.474	0.111	0.187	3.510	28.6	28.8	
300.80583	19:20:24	6.526	8.964	1.756	7.441	0.474	0.111	0.187	3.510	28.6	28.8	
300.84748	20:20:22	6.548	8.974	1.757	7.439	0.474	0.111	0.187	3.512	28.6	28.8	
300.88913	21:20:21	6.570	8.983	1.758	7.444	0.474	0.111	0.187	3.513	28.6	28.8	
300.93078	22:20:19	6.589	8.993	1.759	7.446	0.474	0.111	0.187	3.515	28.6	28.8	
300.97244	23:20:19	6.609	9.002	1.760	7.444	0.474	0.111	0.187	3.516	28.6	28.8	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
301.01409	00:20:17	6.628	9.010	1.761	7.442	0.474	0.111	0.187	3.517	28.6	28.8	
301.26400	06:20:10	6.729	9.057	1.767	7.441	0.474	0.111	0.187	3.524	28.6	28.8	
301.51391	12:20:02	6.818	9.098	1.773	7.445	0.474	0.111	0.187	3.530	28.6	28.8	
301.57639	13:50:00	6.838	9.108	1.775	7.439	0.474	0.111	0.187	3.532	28.6	28.7	
302.01373	00:19:46	6.972	9.171	1.784	7.439	0.474	0.110	0.187	3.542	28.6	28.8	
303.01338	00:19:16	7.222	9.298	1.806	7.431	0.475	0.110	0.186	3.550	28.6	28.8	
304.10555	02:32:00	7.441	9.421	1.830	7.426	0.475	0.110	0.186	3.531	28.6	28.8	
305.10519	02:31:28	7.609	9.523	1.853	7.426	0.475	0.110	0.186	3.578	28.6	28.8	
306.10484	02:30:58	7.749	9.613	1.873	7.424	0.477	0.110	0.185	3.445	28.6	28.8	
307.10448	02:30:27	7.872	9.698	1.896	7.398	0.477	0.110	0.185	3.528	28.6	28.8	
308.10413	02:29:57	7.978	9.773	1.918	7.371	0.477	0.110	0.185	3.498	28.6	28.8	
309.10377	02:29:26	8.070	9.838	1.940	7.341	0.477	0.110	0.185	3.553	28.6	28.8	
310.10341	02:28:55	8.149	9.890	1.961	7.319	0.477	0.111	0.185	3.547	28.6	28.7	
311.02551	00:36:44	8.210	9.925	1.981	7.298	0.477	0.111	0.185	3.345	28.6	28.8	
312.02516	00:36:14	8.263	9.952	2.004	7.267	0.477	0.111	0.185	3.435	28.6	28.8	
313.02480	00:35:43	8.311	9.977	2.026	7.247	0.477	0.111	0.185	3.498	28.6	28.8	
314.02445	00:35:12	8.354	9.997	2.049	7.238	0.477	0.111	0.185	3.608	28.6	28.8	
315.02409	00:34:41	8.393	10.015	2.073	7.217	0.477	0.111	0.186	3.509	28.6	28.7	
316.02373	00:34:10	8.425	10.029	2.097	7.187	0.477	0.111	0.186	3.543	28.6	28.7	
317.02338	00:33:40	8.458	10.053	2.120	7.167	0.477	0.111	0.186	3.563	28.6	28.7	
318.02302	00:33:09	8.485	10.070	2.143	7.156	0.477	0.111	0.186	3.635	28.6	28.8	
319.02267	00:32:39	8.510	10.086	2.167	7.149	0.477	0.111	0.186	3.708	28.6	28.8	
319.35588	08:32:28	8.517	10.090	2.173	7.141	0.477	0.112	0.186	3.710	28.6	28.8	
319.48056	11:32:00	8.518	10.091	2.177	7.142	0.476	0.111	0.186	3.691	28.6	28.8	
319.98038	23:31:45	8.530	10.097	2.188	7.139	0.477	0.112	0.186	3.706	28.6	28.8	
320.48020	11:31:29	8.541	10.106	2.200	7.139	0.477	0.112	0.186	3.702	28.6	28.8	
320.98002	23:31:14	8.552	10.114	2.213	7.140	0.477	0.112	0.186	3.693	28.6	28.8	
321.47984	11:30:58	8.560	10.116	2.225	7.143	0.477	0.112	0.186	3.625	28.6	28.8	
321.97967	23:30:43	8.567	10.117	2.237	7.141	0.476	0.112	0.186	3.681	28.6	28.8	
322.47949	11:30:28	8.575	10.122	2.248	7.143	0.477	0.112	0.186	3.674	28.6	28.8	
322.97931	23:30:12	8.584	10.129	2.261	7.141	0.477	0.112	0.186	3.411	28.6	28.8	
323.47913	11:29:57	8.592	10.134	2.272	7.144	0.476	0.112	0.186	3.299	28.6	28.8	
323.97895	23:29:41	8.601	10.140	2.284	7.141	0.476	0.112	0.186	3.352	28.6	28.7	
324.47878	11:29:27	8.608	10.146	2.297	7.140	0.476	0.112	0.186	3.353	28.6	28.8	
324.97860	23:29:11	8.617	10.152	2.308	7.140	0.476	0.112	0.186	3.367	28.6	28.8	
325.45237	10:51:25	8.624	10.159	2.321	7.140	0.476	0.112	0.186	3.269	28.6	28.8	
325.95219	22:51:09	8.633	10.163	2.332	7.138	0.476	0.112	0.186	3.329	28.6	28.8	
326.45201	10:50:54	8.638	10.167	2.343	7.138	0.476	0.112	0.186	3.307	28.6	28.8	
326.95183	22:50:38	8.644	10.172	2.354	7.126	0.476	0.112	0.186	3.353	28.6	28.8	
327.45166	10:50:23	8.651	10.177	2.366	7.141	0.476	0.113	0.186	3.401	28.8	28.9	
327.95148	22:50:08	8.658	10.183	2.379	7.137	0.476	0.112	0.186	3.449	28.6	28.8	
328.45130	10:49:52	8.664	10.188	2.391	7.140	0.476	0.113	0.186	3.449	28.8	28.9	
328.95112	22:49:37	8.672	10.192	2.403	7.137	0.476	0.113	0.186	3.461	28.6	28.8	
329.45094	10:49:21	8.677	10.195	2.415	7.141	0.476	0.113	0.186	3.485	28.8	28.9	
329.95077	22:49:07	8.682	10.196	2.427	7.138	0.476	0.113	0.186	3.503	28.6	28.8	
330.45059	10:48:51	8.686	10.195	2.440	7.139	0.476	0.113	0.186	3.515	28.8	28.9	
330.95041	22:48:35	8.693	10.201	2.452	7.136	0.476	0.113	0.186	3.539	28.6	28.8	
331.45023	10:48:20	8.698	10.206	2.463	7.136	0.476	0.113	0.186	3.552	28.6	28.8	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
331.95005	22:48:04	8.704	10.210	2.475	7.134	0.476	0.113	0.186	3.568	28.6	28.8	
332.44988	10:47:50	8.709	10.215	2.485	7.135	0.476	0.113	0.186	3.584	28.6	28.8	
332.75212	18:03:03	8.711	10.215	2.493	7.133	0.476	0.113	0.186	3.593	28.6	28.8	
333.25194	06:02:48	8.714	10.218	2.504	7.122	0.476	0.113	0.186	3.608	28.6	28.8	
333.75176	18:02:32	8.719	10.225	2.518	7.137	0.475	0.113	0.186	3.619	28.6	28.8	
334.25158	06:02:17	8.722	10.223	2.527	7.133	0.475	0.113	0.186	3.640	28.6	28.8	
334.75140	18:02:01	8.726	10.224	2.539	7.124	0.475	0.113	0.186	3.692	28.7	28.8	
335.25123	06:01:46	8.729	10.227	2.549	7.130	0.475	0.113	0.186	3.693	28.7	28.8	
335.75105	18:01:31	8.732	10.231	2.560	7.130	0.475	0.113	0.186	3.681	28.7	28.8	
336.00096	00:01:23	8.733	10.230	2.565	7.128	0.475	0.113	0.186	3.661	28.7	28.8	
336.50078	12:01:07	8.738	10.233	2.576	7.128	0.475	0.113	0.186	3.632	28.6	28.8	
337.00060	00:00:52	8.741	10.237	2.588	7.119	0.475	0.113	0.186	3.627	28.6	28.8	
337.50043	12:00:37	8.745	10.238	2.599	7.123	0.475	0.113	0.186	3.573	28.6	28.8	
338.00025	00:00:22	8.749	10.241	2.612	7.124	0.475	0.114	0.186	3.564	28.6	28.8	
338.50007	12:00:06	8.756	10.246	2.624	7.141	0.475	0.114	0.186	3.565	28.7	28.8	
339.36886	08:51:10	8.761	10.248	2.645	7.122	0.475	0.114	0.186	3.458	28.7	28.8	
339.86868	20:50:54	8.766	10.251	2.656	7.120	0.475	0.114	0.186	3.346	28.8	28.9	
340.11859	02:50:46	8.767	10.251	2.662	7.115	0.475	0.114	0.186	3.346	28.8	28.9	
340.66549	15:58:18	8.776	10.251	2.676	7.114	0.475	0.114	0.186	3.357	28.7	28.8	
341.16531	03:58:03	8.778	10.254	2.686	7.112	0.475	0.114	0.186	3.376	28.7	28.8	
341.50139	12:02:00	8.780	10.259	2.695	7.113	0.475	0.114	0.187	3.388	28.7	28.8	
342.00121	00:01:45	8.782	10.260	2.703	7.103	0.475	0.114	0.186	3.497	28.7	28.8	
342.50103	12:01:29	8.786	10.263	2.716	7.104	0.475	0.114	0.186	3.482	28.7	28.9	
343.00085	00:01:13	8.789	10.264	2.727	7.101	0.475	0.114	0.186	3.484	28.7	28.8	
343.50067	12:00:58	8.794	10.268	2.739	7.096	0.475	0.114	0.186	3.444	28.6	28.8	
344.00050	00:00:43	8.798	10.271	2.751	7.090	0.475	0.114	0.186	3.509	28.7	28.8	
344.50032	12:00:28	8.802	10.272	2.762	7.095	0.475	0.114	0.186	3.510	28.6	28.8	
345.00014	00:00:12	8.806	10.272	2.774	7.100	0.475	0.114	0.186	3.515	28.7	28.8	
345.49996	11:59:57	8.809	10.260	2.786	7.101	0.475	0.114	0.186	3.504	28.6	28.9	
345.99978	23:59:41	8.804	10.257	2.799	7.092	0.475	0.114	0.187	3.438	28.7	28.9	
346.24970	05:59:34	8.807	10.260	2.805	7.092	0.475	0.114	0.187	3.446	28.7	28.8	
346.52087	12:30:03	8.809	10.265	2.811	7.076	0.475	0.114	0.187	3.344	28.7	28.9	
346.52434	12:35:03	8.810	10.265	2.811	7.079	0.475	0.114	0.187	3.342	28.7	28.8	
346.52451	12:35:18	2.805	7.968	2.746	6.896	0.463	0.126	0.193	3.364	28.5	28.8	-collected gas
346.52503	12:36:03	3.064	7.988	2.741	6.875	0.460	0.126	0.194	3.402	28.4	28.8	sample
346.52573	12:37:03	3.079	8.003	2.740	6.869	0.459	0.127	0.195	3.411	28.4	28.8	fluid
346.52642	12:38:03	3.081	8.011	2.739	6.869	0.459	0.126	0.195	3.409	28.5	28.8	pressure
346.52712	12:39:03	3.081	8.017	2.739	6.865	0.459	0.126	0.195	3.386	28.5	28.8	decreased to
346.53055	12:44:00	3.080	8.028	2.739	6.862	0.458	0.126	0.196	3.425	28.5	28.9	~2.8 MPa
346.53125	12:45:00	3.080	8.028	2.738	6.863	0.458	0.126	0.196	3.416	28.6	28.8	
346.53194	12:46:00	3.081	8.029	2.738	6.862	0.458	0.126	0.196	3.393	28.6	28.8	
346.53264	12:47:00	3.081	8.030	2.738	6.862	0.458	0.126	0.196	3.409	28.6	28.8	
346.53333	12:48:00	3.081	8.031	2.738	6.859	0.458	0.126	0.196	3.420	28.6	28.8	
346.53403	12:49:00	3.081	8.032	2.738	6.860	0.458	0.126	0.196	3.392	28.6	28.9	
346.53472	12:50:00	3.082	8.034	2.738	6.860	0.458	0.126	0.196	3.384	28.6	28.8	
346.53541	12:50:59	3.082	8.034	2.738	6.857	0.458	0.126	0.196	3.385	28.6	28.8	
346.53611	12:52:00	3.083	8.035	2.738	6.861	0.458	0.126	0.196	3.385	28.6	28.8	
346.53680	12:53:00	3.083	8.036	2.737	6.861	0.458	0.127	0.196	3.385	28.6	28.8	

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
346.53750	12:54:00	3.084	8.036	2.738	6.861	0.458	0.126	0.196	3.385	28.6	28.8	
346.53819	12:55:00	3.084	8.037	2.738	6.858	0.458	0.127	0.196	3.385	28.6	28.8	
346.53888	12:55:59	3.085	8.037	2.738	6.859	0.457	0.126	0.196	3.387	28.6	28.8	
346.53958	12:57:00	3.085	8.038	2.737	6.859	0.457	0.126	0.196	3.386	28.6	28.8	
346.54027	12:57:59	3.086	8.038	2.737	6.857	0.457	0.127	0.196	3.386	28.6	28.8	
346.54097	12:59:00	3.087	8.039	2.737	6.857	0.457	0.127	0.196	3.387	28.6	28.8	
346.54166	12:59:59	3.087	8.039	2.737	6.858	0.457	0.127	0.196	3.386	28.6	28.8	
346.54513	13:04:59	3.090	8.040	2.737	6.855	0.457	0.127	0.196	3.386	28.6	28.9	
346.54860	13:09:59	3.094	8.041	2.737	6.856	0.457	0.127	0.196	3.387	28.6	28.8	
346.55207	13:14:59	3.097	8.042	2.737	6.858	0.457	0.127	0.197	3.387	28.6	28.8	
346.55555	13:20:00	3.101	8.042	2.737	6.859	0.457	0.127	0.197	3.387	28.6	28.8	
346.55902	13:24:59	3.105	8.043	2.737	6.857	0.457	0.127	0.197	3.386	28.7	28.8	
346.56249	13:29:59	3.109	8.043	2.737	6.858	0.457	0.127	0.197	3.386	28.7	28.8	
346.60415	14:29:59	3.146	8.049	2.738	6.862	0.456	0.127	0.197	3.381	28.7	28.8	
346.64581	15:29:58	3.176	8.052	2.738	6.866	0.456	0.127	0.197	3.384	28.6	28.8	
346.68746	16:29:57	3.201	8.054	2.739	6.868	0.456	0.127	0.197	3.384	28.7	28.8	
346.72911	17:29:55	3.224	8.055	2.739	6.871	0.456	0.127	0.197	3.384	28.7	28.8	
346.77076	18:29:54	3.245	8.056	2.740	6.870	0.456	0.127	0.197	3.385	28.7	28.8	
346.81241	19:29:52	3.265	8.056	2.741	6.869	0.456	0.127	0.197	3.383	28.7	28.8	
346.85407	20:29:52	3.284	8.057	2.741	6.878	0.456	0.127	0.197	3.455	28.6	28.8	
346.89572	21:29:50	3.302	8.057	2.742	6.871	0.455	0.127	0.197	3.455	28.7	28.8	
346.93737	22:29:49	3.320	8.057	2.743	6.874	0.455	0.126	0.197	3.436	28.6	28.8	
346.97902	23:29:47	3.337	8.057	2.744	6.874	0.455	0.127	0.197	3.424	28.7	28.8	
347.02067	00:29:46	3.353	8.057	2.744	6.873	0.455	0.126	0.197	3.457	28.7	28.8	
347.10398	02:29:44	3.384	8.057	2.745	6.875	0.455	0.126	0.197	3.378	28.7	28.8	
347.18728	04:29:41	3.415	8.057	2.746	6.882	0.455	0.126	0.197	3.453	28.7	28.8	
347.27058	06:29:38	3.444	8.057	2.748	6.881	0.455	0.126	0.197	3.420	28.7	28.8	
347.35389	08:29:36	3.472	8.056	2.748	6.877	0.455	0.126	0.197	3.452	28.7	28.8	
347.43719	10:29:33	3.500	8.055	2.749	6.877	0.454	0.126	0.197	3.449	28.7	28.8	
347.52050	12:29:31	3.528	8.055	2.750	6.879	0.454	0.126	0.197	3.455	28.6	28.8	
347.68710	16:29:25	3.581	8.054	2.753	6.879	0.454	0.126	0.198	3.456	28.7	28.8	
347.85371	20:29:21	3.632	8.052	2.755	6.885	0.454	0.126	0.197	3.451	28.8	28.9	
348.02032	00:29:16	3.683	8.051	2.757	6.885	0.454	0.126	0.197	3.470	28.7	28.8	
348.52014	12:29:00	3.828	8.051	2.763	6.879	0.454	0.126	0.198	3.385	28.6	28.8	
349.01996	00:28:45	3.968	8.055	2.769	6.893	0.455	0.125	0.198	3.446	28.6	28.8	
349.52219	12:31:57	4.104	8.064	2.773	6.897	0.455	0.125	0.197	3.446	28.7	28.8	
350.02202	00:31:43	4.237	8.078	2.778	6.916	0.455	0.125	0.197	3.467	28.6	28.8	
350.52184	12:31:27	4.367	8.095	2.784	6.914	0.456	0.125	0.197	3.488	28.6	28.8	
351.02166	00:31:11	4.494	8.116	2.789	6.919	0.456	0.125	0.197	3.501	28.6	28.8	
351.52148	12:30:56	4.620	8.138	2.794	6.918	0.457	0.125	0.197	3.514	28.6	28.8	
352.02130	00:30:40	4.744	8.164	2.798	6.925	0.457	0.125	0.197	3.523	28.6	28.8	
352.50030	12:00:26	4.861	8.189	2.802	6.931	0.457	0.125	0.196	3.529	28.6	28.8	
352.57986	13:55:00	4.881	8.194	2.803	6.920	0.457	0.125	0.196	3.470	28.6	28.8	
352.58003	13:55:15	4.787	8.175	2.803	6.918	0.457	0.125	0.196	3.507	28.6	28.8	
352.58021	13:55:30	2.201	7.569	2.792	6.851	0.456	0.128	0.197	3.519	28.5	28.8	-collected gas
352.58038	13:55:45	2.231	7.559	2.792	6.845	0.456	0.128	0.197	3.539	28.5	28.8	sample
352.58055	13:56:00	2.257	7.558	2.792	6.842	0.456	0.128	0.197	3.541	28.5	28.8	fluid
352.58073	13:56:15	2.272	7.558	2.791	6.840	0.455	0.128	0.197	3.515	28.5	28.8	pressure

TABLE C4 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H02,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
352.58090	13:56:30	2.282	7.558	2.791	6.838	0.455	0.128	0.197	3.497	28.5	28.8	decreased to
352.58107	13:56:44	2.289	7.558	2.791	6.839	0.455	0.128	0.197	3.493	28.5	28.8	~2.201 MPa
352.58125	13:57:00	2.294	7.558	2.791	6.839	0.455	0.128	0.197	3.505	28.5	28.8	
352.58142	13:57:15	2.298	7.559	2.791	6.836	0.455	0.128	0.197	3.499	28.5	28.8	
352.58160	13:57:30	2.301	7.558	2.791	6.840	0.455	0.128	0.197	3.518	28.5	28.8	
352.58177	13:57:45	2.304	7.558	2.791	6.839	0.455	0.128	0.197	3.512	28.5	28.8	
352.58194	13:58:00	2.306	7.559	2.791	6.837	0.455	0.128	0.197	3.521	28.5	28.8	
352.58212	13:58:15	2.307	7.559	2.791	6.839	0.455	0.128	0.197	3.516	28.5	28.8	
352.58229	13:58:30	2.309	7.559	2.791	6.838	0.455	0.128	0.197	3.506	28.5	28.8	
352.58246	13:58:45	1.537	7.395	2.788	6.836	0.455	0.129	0.197	3.508	28.5	28.8	
352.58264	13:59:00	0.918	7.229	2.784	6.776	0.455	0.130	0.197	3.516	28.5	28.8	
352.58281	13:59:15	0.661	7.156	2.782	6.768	0.456	0.130	0.197	3.532	28.5	28.8	
352.58298	13:59:29	0.516	7.113	2.780	6.757	0.457	0.130	0.197	3.550	28.5	28.8	
352.58316	13:59:45	0.129	7.014	2.778	6.739	0.460	0.130	0.196	3.577	28.5	28.8	
352.58333	14:00:00	0.057	6.986	2.777	6.730	0.461	0.131	0.196	3.591	28.5	28.8	
352.58403	14:01:00	0.018	6.961	2.776	6.745	0.461	0.131	0.196	3.597	28.5	28.8	
352.58472	14:02:00	0.032	6.373	0.900	6.295	0.461	0.131	0.196	3.581	28.5	28.6	
352.58541	14:02:59	0.038	6.148	0.344	6.177	0.461	0.132	0.195	3.595	28.5	28.6	
352.58593	14:03:44	0.040	6.140	0.346	6.191	0.461	0.132	0.195	3.601	28.5	28.6	-end testing

TABLE C5
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H03,
MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
240.50000	12:00:00	0.031	0.165	0.032	0.151	0.626	-0.166	0.549	4.373	28.8	29.1	-created data
240.50035	12:00:30	0.031	0.166	0.032	0.325	0.626	-0.166	0.549	4.331	28.8	29.1	file - C2H031
240.50069	12:01:00	0.031	0.165	0.032	0.983	0.625	-0.166	0.555	4.402	28.8	29.1	-inflated
240.50104	12:01:30	0.032	0.165	0.033	10.548	0.602	-0.153	0.537	5.225	28.8	29.1	guard-zone
240.50139	12:02:00	0.032	0.165	0.033	10.609	0.602	-0.153	0.537	4.515	28.8	29.1	packer
240.50173	12:02:29	0.032	0.165	0.033	10.511	0.602	-0.153	0.536	4.351	28.8	29.1	filled test-
240.50208	12:03:00	0.031	0.165	0.033	10.393	0.602	-0.153	0.536	4.303	28.8	29.1	and guard-
240.50243	12:03:30	0.031	0.165	0.032	10.300	0.602	-0.153	0.536	4.302	28.8	29.1	intervals
240.50277	12:03:59	0.031	0.165	0.032	10.227	0.602	-0.153	0.536	4.311	28.8	29.1	with brine
240.50312	12:04:30	0.031	0.164	0.032	10.168	0.602	-0.153	0.536	4.291	28.8	29.1	
240.50359	12:05:10	0.031	0.165	0.032	10.102	0.602	-0.153	0.536	4.305	28.8	29.1	
240.50428	12:06:10	0.031	0.165	0.032	10.022	0.602	-0.153	0.536	4.295	28.8	29.1	
240.50497	12:07:09	0.031	0.165	0.032	9.960	0.602	-0.153	0.536	4.289	28.8	29.1	
240.50567	12:08:10	0.031	0.165	0.032	9.905	0.602	-0.153	0.536	4.297	28.8	29.1	
240.50636	12:09:10	0.031	0.165	0.032	9.858	0.602	-0.153	0.536	4.293	28.8	29.1	
240.50706	12:10:10	0.031	0.165	0.032	9.816	0.602	-0.153	0.536	4.278	28.8	29.1	
240.50775	12:11:10	0.031	0.165	0.032	9.779	0.602	-0.153	0.536	4.298	28.8	29.1	
240.50844	12:12:09	0.031	0.165	0.032	9.746	0.602	-0.153	0.536	4.298	28.8	29.1	
240.50914	12:13:10	0.031	0.165	0.032	9.717	0.602	-0.153	0.536	4.326	28.8	29.1	
240.50983	12:14:09	0.031	0.165	0.032	9.688	0.602	-0.153	0.536	4.277	28.8	29.1	
240.51053	12:15:10	0.031	0.165	0.032	9.662	0.602	-0.153	0.536	4.288	28.8	29.1	
240.51122	12:16:09	0.030	0.166	0.032	9.638	0.602	-0.153	0.536	4.279	28.8	29.0	
240.51192	12:17:10	0.031	0.165	0.032	9.616	0.602	-0.153	0.536	4.277	28.8	29.0	
240.51261	12:18:10	0.031	0.166	0.031	9.594	0.602	-0.153	0.536	4.290	28.8	29.0	
240.51330	12:19:09	0.031	0.166	0.031	9.574	0.602	-0.153	0.536	4.278	28.8	29.0	
240.51400	12:20:10	0.031	0.165	0.031	9.555	0.602	-0.153	0.536	4.287	28.7	29.0	
240.51469	12:21:09	0.031	0.165	0.031	9.537	0.602	-0.153	0.536	4.270	28.7	29.0	
240.51539	12:22:10	0.031	0.166	0.032	9.519	0.602	-0.153	0.536	4.293	28.7	29.0	
240.51608	12:23:09	0.031	0.165	0.032	9.503	0.602	-0.153	0.536	4.290	28.7	29.0	
240.51678	12:24:10	0.031	0.166	0.032	9.487	0.602	-0.153	0.536	4.282	28.7	29.0	
240.51747	12:25:09	0.031	0.165	0.031	9.471	0.602	-0.153	0.536	4.286	28.7	29.0	
240.51816	12:26:09	0.030	0.165	0.032	9.457	0.602	-0.153	0.536	4.277	28.7	29.0	
240.51886	12:27:10	0.031	0.165	0.031	9.442	0.602	-0.153	0.536	4.283	28.7	29.0	
240.51955	12:28:09	0.031	0.165	0.031	9.428	0.602	-0.153	0.536	4.277	28.7	29.0	
240.52025	12:29:10	0.031	0.166	0.032	9.414	0.602	-0.153	0.536	4.284	28.7	29.0	
240.52094	12:30:09	0.030	0.166	0.032	9.401	0.602	-0.153	0.536	4.280	28.7	28.9	
240.52163	12:31:09	0.030	0.165	0.031	9.389	0.602	-0.153	0.536	4.294	28.7	29.0	
240.52233	12:32:09	0.031	0.165	0.032	9.376	0.602	-0.153	0.536	4.282	28.7	29.0	
240.52302	12:33:09	0.030	0.165	0.031	9.364	0.602	-0.153	0.536	4.270	28.7	28.9	
240.52372	12:34:09	0.030	0.165	0.032	9.353	0.602	-0.153	0.536	4.273	28.7	28.9	
240.52441	12:35:09	0.030	0.165	0.032	9.342	0.602	-0.153	0.536	4.285	28.7	28.9	
240.52511	12:36:10	0.030	0.166	0.032	9.332	0.602	-0.153	0.536	4.274	28.7	28.9	
240.52580	12:37:09	0.030	0.165	0.032	9.322	0.602	-0.153	0.536	4.261	28.7	28.9	
240.52649	12:38:09	0.030	0.165	0.031	9.310	0.602	-0.153	0.536	4.271	28.7	28.9	
240.52719	12:39:09	0.030	0.165	0.031	9.301	0.602	-0.153	0.536	4.291	28.7	28.9	
240.52788	12:40:09	0.030	0.165	0.031	9.290	0.602	-0.153	0.536	4.270	28.7	29.0	
240.52858	12:41:09	0.030	0.165	0.031	9.281	0.602	-0.153	0.536	4.290	28.7	28.9	
240.52927	12:42:09	0.030	0.165	0.031	9.273	0.602	-0.153	0.536	4.268	28.7	28.9	

TABLE C5 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H03,
MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
240.52996	12:43:09	0.030	0.165	0.031	9.263	0.602	-0.153	0.536	4.329	28.7	28.9	
240.53066	12:44:09	0.030	0.165	0.031	9.255	0.602	-0.153	0.536	4.270	28.7	28.9	
240.53135	12:45:09	0.030	0.165	0.031	9.245	0.602	-0.153	0.536	4.272	28.7	28.9	
240.53205	12:46:09	0.030	0.165	0.031	9.237	0.602	-0.153	0.536	4.270	28.7	28.9	
240.53274	12:47:09	0.030	0.165	0.031	9.229	0.602	-0.153	0.536	4.271	28.7	28.9	
240.53344	12:48:09	0.030	0.165	0.031	9.220	0.602	-0.153	0.536	4.287	28.7	28.9	
240.53413	12:49:09	0.030	0.165	0.031	9.213	0.602	-0.153	0.536	4.288	28.7	28.9	
240.53482	12:50:08	0.030	0.165	0.031	9.205	0.602	-0.153	0.536	4.271	28.7	28.9	
240.53552	12:51:09	0.030	0.165	0.031	9.197	0.602	-0.153	0.536	4.284	28.7	28.9	
240.53621	12:52:09	0.030	0.165	0.031	9.189	0.602	-0.153	0.536	4.287	28.7	28.9	
240.53691	12:53:09	0.030	0.165	0.032	9.181	0.602	-0.153	0.536	4.269	28.7	29.0	
240.53760	12:54:09	0.030	0.165	0.031	9.176	0.602	-0.153	0.536	4.278	28.7	28.9	
240.53830	12:55:09	0.030	0.165	0.031	9.168	0.602	-0.153	0.536	4.268	28.7	28.9	
240.53899	12:56:09	0.030	0.165	0.031	9.161	0.602	-0.153	0.536	4.261	28.7	28.9	
240.53968	12:57:08	0.030	0.165	0.032	9.154	0.602	-0.153	0.536	4.278	28.7	28.9	
240.54038	12:58:09	0.030	0.164	0.031	9.148	0.602	-0.153	0.536	4.278	28.7	28.9	
240.54107	12:59:08	0.030	0.164	0.031	9.142	0.602	-0.153	0.536	4.277	28.7	28.9	
240.54177	13:00:09	0.030	0.165	0.031	9.135	0.602	-0.153	0.536	4.271	28.7	28.9	
240.54246	13:01:09	0.030	0.165	0.032	9.128	0.602	-0.153	0.536	4.268	28.7	28.9	
240.54315	13:02:08	0.030	0.165	0.031	9.122	0.602	-0.153	0.536	4.277	28.7	28.9	
240.54385	13:03:09	0.030	0.165	0.031	9.116	0.602	-0.153	0.536	4.265	28.7	28.9	
240.54454	13:04:08	0.030	0.164	0.031	9.110	0.602	-0.153	0.536	4.276	28.7	28.9	
240.54524	13:05:09	0.030	0.164	0.031	9.105	0.602	-0.153	0.536	4.275	28.7	28.9	
240.54593	13:06:08	0.030	0.165	0.031	9.098	0.602	-0.153	0.536	4.264	28.7	28.9	
240.54663	13:07:09	0.030	0.165	0.031	9.092	0.602	-0.153	0.536	4.274	28.7	28.9	
240.54732	13:08:08	0.030	0.165	0.031	9.087	0.602	-0.153	0.536	4.234	28.7	28.9	
240.54801	13:09:08	0.030	0.165	0.031	9.082	0.602	-0.153	0.536	4.268	28.6	28.9	
240.54871	13:10:09	0.030	0.164	0.031	9.077	0.602	-0.153	0.536	4.267	28.7	28.9	
240.54940	13:11:08	0.030	0.164	0.031	9.072	0.602	-0.153	0.537	4.265	28.7	28.9	
240.55010	13:12:09	0.030	0.164	0.031	9.067	0.602	-0.153	0.536	4.277	28.7	28.9	
240.55079	13:13:08	0.030	0.164	0.031	9.062	0.602	-0.153	0.536	4.269	28.7	28.9	
240.55148	13:14:08	0.030	0.164	0.031	9.056	0.602	-0.153	0.536	4.269	28.7	28.9	
240.55218	13:15:08	0.030	0.165	0.031	9.050	0.602	-0.153	0.536	4.269	28.7	28.9	
240.55287	13:16:08	0.030	0.165	0.032	9.045	0.602	-0.153	0.536	4.268	28.7	28.9	
240.55357	13:17:08	0.030	0.164	0.031	9.042	0.602	-0.153	0.536	4.269	28.7	28.9	
240.55426	13:18:08	0.030	0.164	0.031	9.037	0.602	-0.153	0.536	4.273	28.7	28.9	
240.55496	13:19:09	0.030	0.165	0.032	9.032	0.602	-0.153	0.536	4.283	28.7	28.9	
240.55565	13:20:08	0.030	0.164	0.031	9.028	0.602	-0.153	0.536	4.281	28.7	28.9	
240.55634	13:21:08	0.030	0.164	0.032	9.023	0.602	-0.153	0.536	4.277	28.7	28.9	
240.55704	13:22:08	0.030	0.165	0.031	9.018	0.602	-0.153	0.536	4.265	28.7	28.9	
240.55773	13:23:08	0.030	0.164	0.032	9.014	0.602	-0.153	0.536	4.269	28.7	28.9	
240.55843	13:24:08	0.030	0.164	0.032	9.010	0.602	-0.153	0.536	4.276	28.7	28.9	
240.55912	13:25:08	0.030	0.164	0.031	9.005	0.602	-0.153	0.536	4.255	28.7	28.9	
240.55972	13:26:00	0.030	0.164	0.031	9.002	0.602	-0.153	0.536	4.276	28.7	28.9	
240.56389	13:32:00	0.023	0.157	0.023	8.977	0.602	-0.153	0.536	4.266	28.7	28.8	
240.56805	13:38:00	0.023	0.157	0.023	8.954	0.602	-0.153	0.536	4.277	28.6	28.9	
240.60139	14:26:00	0.056	0.177	0.056	8.844	0.598	-0.150	0.530	4.167	29.2	29.0	
240.60208	14:27:00	0.050	0.171	0.049	8.840	0.598	-0.150	0.530	4.076	29.2	29.0	

TABLE C5 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H03,
MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
240.60277	14:27:59	0.048	0.170	0.047	8.837	0.598	-0.150	0.530	4.125	29.2	29.0	
240.60312	14:28:30	0.047	0.169	0.047	8.836	0.598	-0.150	0.530	4.114	29.2	29.0	
240.60347	14:29:00	0.047	0.169	0.047	8.835	0.598	-0.150	0.530	4.102	29.2	29.0	
240.60382	14:29:30	0.046	0.169	0.046	8.833	0.598	-0.150	0.530	4.112	29.2	29.0	
240.60416	14:29:59	0.046	0.179	0.046	8.832	0.598	-0.150	0.530	4.116	29.2	29.0	
240.60451	14:30:30	0.048	0.193	0.048	8.830	0.598	-0.150	0.530	4.115	29.2	29.0	-inflated
240.60486	14:31:00	0.083	0.318	0.083	8.835	0.598	-0.150	0.530	4.145	29.2	29.0	test-zone
240.60521	14:31:30	0.078	0.966	0.078	8.834	0.598	-0.150	0.529	4.143	29.2	29.0	packer
240.60555	14:32:00	0.088	10.701	0.066	8.742	0.581	-0.101	0.475	4.186	29.1	29.0	
240.60590	14:32:30	0.073	10.745	0.047	8.727	0.582	-0.101	0.475	3.819	29.1	29.0	
240.60625	14:33:00	0.064	10.628	0.046	8.727	0.582	-0.101	0.475	3.814	29.1	29.0	
240.60659	14:33:29	0.059	10.505	0.046	8.725	0.582	-0.101	0.475	3.820	29.1	29.0	
240.60694	14:34:00	0.055	10.416	0.047	8.723	0.582	-0.101	0.475	3.794	29.1	29.0	
240.60729	14:34:30	0.053	10.344	0.047	8.723	0.582	-0.101	0.475	3.794	29.1	29.0	
240.60764	14:35:00	0.053	10.285	0.046	8.722	0.582	-0.101	0.475	3.814	29.1	29.0	
240.60833	14:36:00	0.054	10.187	0.046	8.722	0.582	-0.101	0.475	3.801	29.1	29.0	
240.60903	14:37:00	0.054	10.107	0.047	8.719	0.582	-0.101	0.475	3.772	29.1	29.0	
240.60972	14:38:00	0.054	10.039	0.047	8.718	0.582	-0.101	0.475	3.800	29.1	29.0	
240.61041	14:38:59	0.054	9.978	0.047	8.718	0.582	-0.101	0.475	3.948	29.0	29.0	
240.61111	14:40:00	0.053	9.834	0.047	8.715	0.582	-0.101	0.475	3.948	29.0	29.0	
240.61180	14:41:00	0.053	9.792	0.047	8.714	0.582	-0.101	0.475	3.957	29.0	29.0	
240.61250	14:42:00	0.053	9.753	0.048	8.712	0.582	-0.101	0.475	3.969	29.0	29.0	
240.61319	14:43:00	0.054	9.719	0.047	8.711	0.582	-0.101	0.475	3.994	29.0	29.0	
240.61389	14:44:00	0.053	9.688	0.047	8.709	0.582	-0.101	0.475	3.978	29.0	29.0	
240.61458	14:45:00	0.053	9.618	0.048	8.708	0.582	-0.101	0.475	3.968	29.0	29.0	
240.61527	14:45:59	0.054	9.586	0.048	8.706	0.582	-0.101	0.475	4.022	29.0	29.0	
240.61597	14:47:00	0.054	9.559	0.048	8.705	0.582	-0.101	0.475	4.015	29.0	29.0	
240.61666	14:47:59	0.054	9.534	0.048	8.703	0.582	-0.101	0.475	4.036	29.0	29.0	
240.61736	14:49:00	0.054	9.510	0.047	8.702	0.582	-0.101	0.475	4.038	29.0	29.0	
240.61805	14:50:00	0.054	9.488	0.047	8.700	0.582	-0.101	0.475	4.049	29.0	29.0	
240.61874	14:50:59	0.054	9.327	0.048	8.702	0.582	-0.101	0.474	4.055	29.0	29.0	
240.61944	14:52:00	0.054	9.307	0.048	8.700	0.582	-0.101	0.474	4.029	29.0	29.0	
240.62013	14:52:59	0.054	9.288	0.049	8.698	0.582	-0.101	0.474	4.031	29.0	29.0	
240.62083	14:54:00	0.054	9.270	0.049	8.697	0.582	-0.101	0.474	4.041	29.0	29.0	
240.62152	14:54:59	0.053	9.253	0.049	8.695	0.582	-0.101	0.474	4.044	29.0	29.0	
240.62222	14:56:00	0.053	9.235	0.049	8.694	0.582	-0.101	0.474	4.059	29.0	29.0	
240.62291	14:56:59	0.054	9.219	0.049	8.693	0.582	-0.101	0.474	4.033	29.0	29.0	
240.62360	14:57:59	0.054	9.203	0.049	8.691	0.582	-0.101	0.474	4.040	29.0	29.0	
240.62430	14:59:00	0.053	9.187	0.049	8.690	0.582	-0.101	0.474	4.020	29.0	29.0	
240.62503	15:00:03	0.053	9.172	0.049	8.688	0.582	-0.101	0.474	4.030	29.0	29.0	
240.63544	15:15:02	0.054	8.846	0.050	8.673	0.582	-0.101	0.473	4.078	28.9	28.9	
240.64585	15:30:01	0.053	8.696	0.050	8.655	0.581	-0.101	0.473	4.086	28.9	29.0	
240.65626	15:45:01	0.053	8.574	0.051	8.638	0.581	-0.101	0.473	4.111	28.9	28.9	
240.66668	16:00:01	0.054	8.442	0.051	8.624	0.581	-0.101	0.472	4.118	28.9	28.9	
240.67709	16:15:01	0.054	8.351	0.052	8.611	0.581	-0.101	0.472	4.100	28.8	28.9	
240.68750	16:30:00	0.054	8.245	0.052	8.599	0.581	-0.101	0.472	4.093	28.8	28.9	
240.69792	16:45:00	0.054	8.168	0.053	8.587	0.581	-0.101	0.471	4.125	28.8	28.9	
240.70833	17:00:00	0.054	8.088	0.053	8.577	0.581	-0.101	0.471	4.167	28.8	28.9	

TABLE C5 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H03,
MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
240.72915	17:29:59	0.054	7.924	0.054	8.558	0.581	-0.101	0.471	4.159	28.8	28.9	
240.74998	17:59:58	0.054	7.821	0.055	8.540	0.581	-0.101	0.470	4.164	28.8	28.9	
240.79163	18:59:57	0.054	7.733	0.055	8.504	0.581	-0.101	0.470	4.084	28.7	28.9	
240.83328	19:59:55	0.054	7.658	0.055	8.474	0.581	-0.101	0.470	4.068	28.7	28.9	
240.87494	20:59:55	0.054	7.604	0.055	8.447	0.581	-0.101	0.470	3.969	28.7	28.9	
240.91659	21:59:53	0.054	7.554	0.055	8.422	0.581	-0.101	0.469	3.977	28.7	28.8	
240.95824	22:59:52	0.055	7.507	0.055	8.401	0.581	-0.101	0.469	3.987	28.7	28.8	
240.99989	23:59:50	0.055	7.468	0.056	8.380	0.581	-0.101	0.469	3.897	28.7	28.9	
241.01030	00:14:50	0.054	7.458	0.056	8.376	0.581	-0.101	0.469	3.879	28.7	28.9	
241.09361	02:14:48	0.054	7.397	0.056	8.339	0.581	-0.101	0.469	3.973	28.7	28.8	
241.17691	04:14:45	0.054	7.337	0.056	8.307	0.581	-0.101	0.468	3.045	28.7	28.9	
241.26022	06:14:43	0.054	7.300	0.056	8.277	0.581	-0.101	0.468	2.915	28.7	28.8	
241.34352	08:14:40	0.054	7.267	0.056	8.250	0.581	-0.101	0.468	2.823	28.7	28.9	
241.42682	10:14:37	0.054	7.240	0.056	8.224	0.581	-0.101	0.468	2.835	28.7	28.8	
241.51013	12:14:35	0.054	7.207	0.056	8.202	0.581	-0.101	0.468	2.884	28.7	28.8	
241.51805	12:26:00	0.052	7.204	0.057	8.199	0.581	-0.101	0.468	2.884	28.7	28.8	
241.51875	12:27:00	0.050	7.203	0.057	8.199	0.581	-0.101	0.468	2.887	28.7	28.9	
241.51944	12:28:00	0.049	7.203	0.057	8.199	0.581	-0.101	0.468	2.883	28.7	28.9	
241.52013	12:28:59	0.048	7.203	0.057	8.199	0.581	-0.101	0.468	2.881	28.7	28.8	
241.52083	12:30:00	0.048	7.223	0.105	8.206	0.581	-0.101	0.468	2.868	28.7	28.9	-shut in
241.52152	12:30:59	0.185	7.223	0.101	8.209	0.581	-0.101	0.468	2.884	28.7	28.8	
241.52222	12:32:00	0.066	7.226	0.100	8.208	0.581	-0.101	0.468	2.867	28.7	28.8	
241.52291	12:32:59	0.067	7.226	0.100	8.208	0.581	-0.101	0.468	2.874	28.7	28.9	
241.52360	12:33:59	0.066	7.226	0.101	8.207	0.581	-0.101	0.468	2.876	28.7	28.9	
241.52430	12:35:00	0.067	7.226	0.101	8.207	0.581	-0.101	0.468	2.875	28.7	28.8	
241.52499	12:35:59	0.067	7.225	0.101	8.208	0.581	-0.101	0.468	2.886	28.7	28.8	
241.52569	12:37:00	0.067	7.225	0.101	8.208	0.581	-0.101	0.468	2.873	28.7	28.8	
241.52638	12:37:59	0.067	7.225	0.100	8.207	0.581	-0.101	0.468	2.877	28.7	28.8	
241.52708	12:39:00	0.067	7.225	0.100	8.207	0.581	-0.101	0.468	2.877	28.7	28.8	
241.52777	12:39:59	0.066	7.225	0.100	8.207	0.581	-0.101	0.468	2.865	28.7	28.8	
241.52846	12:40:59	0.066	7.225	0.101	8.207	0.581	-0.101	0.468	2.873	28.7	28.8	
241.52916	12:41:59	0.067	7.225	0.100	8.207	0.581	-0.101	0.468	2.877	28.7	28.8	
241.52985	12:42:59	0.066	7.225	0.100	8.206	0.581	-0.101	0.468	2.873	28.7	28.8	
241.53055	12:44:00	0.067	7.224	0.100	8.207	0.581	-0.101	0.468	2.881	28.7	28.8	
241.53124	12:44:59	0.066	7.224	0.100	8.207	0.581	-0.101	0.468	2.873	28.7	28.8	
241.53193	12:45:59	0.066	7.223	0.100	8.206	0.581	-0.101	0.468	2.883	28.7	28.9	
241.53263	12:46:59	0.066	7.223	0.100	8.206	0.581	-0.101	0.468	2.878	28.7	28.8	
241.53332	12:47:59	0.066	7.223	0.100	8.206	0.581	-0.101	0.468	2.882	28.7	28.8	
241.53402	12:48:59	0.066	7.223	0.100	8.205	0.581	-0.101	0.468	2.883	28.7	28.8	
241.53471	12:49:59	0.066	7.223	0.100	8.205	0.581	-0.101	0.468	2.883	28.7	28.8	
241.53541	12:50:59	0.067	7.223	0.100	8.205	0.581	-0.101	0.468	2.881	28.7	28.8	
241.53610	12:51:59	0.066	7.222	0.100	8.205	0.581	-0.101	0.468	2.872	28.7	28.9	
241.53679	12:52:59	0.066	7.222	0.100	8.205	0.581	-0.101	0.468	2.877	28.7	28.8	
241.53749	12:53:59	0.066	7.222	0.100	8.205	0.581	-0.101	0.468	2.874	28.7	28.9	
241.53818	12:54:59	0.066	7.222	0.099	8.204	0.581	-0.101	0.468	2.871	28.7	28.8	
241.53888	12:55:59	0.066	7.221	0.100	8.204	0.581	-0.101	0.468	2.874	28.7	28.8	
241.53957	12:56:59	0.066	7.221	0.100	8.204	0.581	-0.101	0.468	2.874	28.7	28.8	
241.54027	12:57:59	0.066	7.221	0.099	8.204	0.581	-0.101	0.468	2.876	28.7	28.8	

TABLE C5 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE C2H03,
MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
241.54096	12:58:59	0.066	7.220	0.100	8.204	0.581	-0.101	0.468	2.871	28.7	28.8	
241.54165	12:59:59	0.067	7.220	0.100	8.204	0.581	-0.101	0.468	2.873	28.7	28.9	
241.54235	13:00:59	0.066	7.220	0.100	8.203	0.581	-0.101	0.468	2.867	28.7	28.8	
241.56317	13:30:58	0.066	7.214	0.099	8.198	0.581	-0.101	0.468	2.920	28.7	28.9	
241.58400	14:00:58	0.066	7.209	0.099	8.192	0.581	-0.101	0.468	2.861	28.7	28.9	
241.60417	14:30:00	0.067	7.204	0.100	8.187	0.581	-0.101	0.467	2.876	28.7	28.9	
241.62499	14:59:59	0.066	7.198	0.099	8.182	0.581	-0.101	0.467	2.873	28.7	28.8	
241.66664	15:59:58	0.066	7.186	0.098	8.171	0.581	-0.101	0.467	2.851	28.7	28.9	
241.70830	16:59:57	0.066	7.176	0.099	8.162	0.581	-0.101	0.467	2.877	28.7	28.8	
241.74995	17:59:56	0.066	7.168	0.099	8.152	0.581	-0.101	0.467	2.834	28.7	28.8	
241.79160	18:59:54	0.066	7.160	0.099	8.143	0.581	-0.101	0.467	2.874	28.7	28.9	
241.83325	19:59:53	0.066	7.153	0.099	8.134	0.581	-0.101	0.467	2.874	28.7	28.8	
241.87490	20:59:51	0.066	7.146	0.099	8.124	0.581	-0.101	0.467	2.870	28.7	28.8	
241.91655	21:59:50	0.066	7.139	0.099	8.116	0.581	-0.101	0.467	2.933	28.7	28.9	
241.95821	22:59:49	0.066	7.130	0.099	8.107	0.581	-0.101	0.467	2.888	28.7	28.8	
241.99986	23:59:48	0.066	7.122	0.099	8.099	0.581	-0.101	0.467	2.852	28.7	28.8	
242.01027	00:14:47	0.066	7.120	0.099	8.097	0.581	-0.101	0.467	2.864	28.7	28.8	
243.03247	00:46:45	0.065	6.986	0.098	7.931	0.581	-0.101	0.466	2.815	28.7	28.8	
244.01021	00:14:42	0.065	6.901	0.098	7.810	0.581	-0.101	0.465	3.466	28.7	28.8	
245.00985	00:14:11	0.064	6.835	0.097	7.709	0.581	-0.101	0.465	3.543	28.7	28.8	
246.00950	00:13:41	0.063	6.780	0.096	7.620	0.581	-0.101	0.464	3.528	28.7	28.8	
247.00914	00:13:10	0.063	6.734	0.096	7.541	0.581	-0.101	0.463	3.520	28.7	28.9	
248.00878	00:12:39	0.062	6.693	0.096	7.469	0.581	-0.101	0.463	3.526	28.7	28.8	
249.08357	02:00:20	0.062	6.653	0.095	7.402	0.581	-0.101	0.463	3.512	28.7	28.8	
250.08321	01:59:49	0.061	6.618	0.095	7.345	0.581	-0.100	0.462	3.506	28.7	28.8	
251.08285	01:59:18	0.061	6.586	0.095	7.294	0.581	-0.100	0.462	3.444	28.7	28.8	
252.14282	03:25:40	0.060	6.553	0.094	7.246	0.581	-0.100	0.461	3.195	28.7	28.8	
253.14246	03:25:09	0.060	6.524	0.093	7.204	0.581	-0.100	0.461	3.058	28.7	28.8	
254.14210	03:24:37	0.059	6.500	0.093	7.165	0.581	-0.100	0.461	3.031	28.7	28.8	
255.09907	02:22:40	0.058	6.478	0.093	7.125	0.581	-0.100	0.461	4.093	28.7	28.8	
256.09871	02:22:09	0.058	6.458	0.093	7.085	0.581	-0.099	0.460	4.018	28.7	28.9	
257.09835	02:21:37	0.057	6.440	0.091	7.046	0.581	-0.099	0.460	4.043	28.7	28.9	
258.09800	02:21:07	0.057	6.421	0.091	7.010	0.581	-0.099	0.460	4.022	28.7	28.8	
259.04508	01:04:55	0.057	6.406	0.093	6.980	0.580	-0.099	0.460	5.079	28.7	28.8	
260.04473	01:04:25	0.057	6.390	0.092	6.947	0.580	-0.098	0.460	5.078	28.7	28.8	
261.04437	01:03:54	0.057	6.375	0.093	6.915	0.580	-0.098	0.460	5.085	28.7	28.8	
262.13448	03:13:39	0.057	6.358	0.093	6.881	0.580	-0.097	0.459	5.067	28.7	28.8	
263.13413	03:13:09	0.056	6.343	0.092	6.851	0.580	-0.097	0.459	5.089	28.7	28.8	
264.02000	00:28:48	0.056	6.329	0.092	6.826	0.580	-0.097	0.459	2.548	28.7	28.9	
265.01964	00:28:17	0.055	6.314	0.092	6.797	0.580	-0.096	0.459	2.548	28.7	28.9	
266.07065	01:41:44	0.054	6.298	0.091	6.768	0.580	-0.096	0.459	2.548	28.7	28.9	
267.07030	01:41:14	0.054	6.284	0.091	6.742	0.580	-0.096	0.459	2.548	28.7	28.9	
268.06994	01:40:43	0.054	6.270	0.092	6.718	0.580	-0.095	0.459	2.548	28.7	28.9	
269.14011	03:21:46	0.054	6.256	0.091	6.693	0.580	-0.095	0.459	2.548	28.7	28.9	
270.14004	03:21:39	0.053	6.238	0.091	6.671	0.581	-0.095	0.458	2.548	28.7	28.9	
271.13969	03:21:09	0.053	6.224	0.091	6.650	0.581	-0.094	0.458	2.576	28.7	28.9	
272.13933	03:20:38	0.053	6.212	0.092	6.630	0.581	-0.094	0.458	2.562	28.7	28.9	
272.30594	07:20:33	0.053	6.210	0.092	6.626	0.581	-0.094	0.458	2.863	28.7	28.9	-end testing

TABLE C6
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
355.41597	09:59:00	-0.046	-0.013	0.000	-0.022	-0.302	0.047	0.087	4.712	27.4	27.6	-created data
355.41683	10:00:14	-0.045	-0.012	0.000	-0.022	-0.329	0.047	0.087	4.712	27.4	27.6	file - N4P501
355.41717	10:00:43	-0.046	-0.011	0.000	-0.021	-0.303	0.047	0.087	4.712	27.4	27.6	installed
355.41752	10:01:14	-0.046	-0.011	0.000	-0.021	-0.348	0.047	0.087	4.712	27.4	27.6	test tool #3
355.41787	10:01:44	-0.045	-0.011	0.000	-0.021	-0.356	0.047	0.087	4.712	27.5	27.6	
355.41821	10:02:13	-0.046	0.101	0.000	0.076	-0.374	0.047	0.087	4.712	27.4	27.6	-inflated
355.41856	10:02:44	-0.046	0.092	0.000	0.689	-0.367	0.047	0.087	4.712	27.4	27.6	packers
355.41891	10:03:14	-0.046	6.642	0.000	6.721	-0.359	0.030	0.060	4.172	27.5	27.6	
355.41925	10:03:43	-0.046	13.348	0.000	13.379	-0.374	0.017	0.079	4.487	27.4	27.6	
355.41960	10:04:13	-0.046	14.127	0.000	14.098	-0.355	0.014	0.082	4.553	27.4	27.6	
355.41995	10:04:44	-0.046	13.818	0.000	13.775	-0.370	0.013	0.082	4.556	27.4	27.6	
355.42030	10:05:14	-0.046	13.644	0.000	13.592	-0.366	0.013	0.082	4.557	27.4	27.6	
355.42064	10:05:43	-0.046	13.524	0.000	13.466	-0.355	0.013	0.082	4.558	27.4	27.6	
355.42099	10:06:14	-0.046	13.432	0.000	13.370	-0.370	0.013	0.082	4.559	27.4	27.6	
355.42134	10:06:44	-0.046	13.358	0.000	13.294	-0.364	0.013	0.082	4.559	27.5	27.6	
355.42184	10:07:27	-0.046	13.272	0.000	13.204	-0.356	0.013	0.082	4.560	27.4	27.6	
355.42222	10:08:00	-0.046	13.217	0.000	13.147	-0.362	0.013	0.082	4.560	27.4	27.5	
355.42292	10:09:00	-0.046	13.136	0.000	13.061	-0.359	0.013	0.082	4.561	27.5	27.5	
355.42361	10:10:00	-0.046	13.070	0.000	12.993	-0.339	0.013	0.082	4.561	27.4	27.5	
355.42431	10:11:00	-0.046	13.015	0.000	12.935	-0.347	0.013	0.082	4.561	27.4	27.6	
355.42500	10:12:00	-0.046	12.968	0.000	12.884	-0.345	0.013	0.082	4.562	27.4	27.6	
355.42569	10:13:00	-0.046	12.926	0.000	12.839	-0.345	0.013	0.082	4.562	27.5	27.5	
355.42639	10:14:00	-0.046	12.888	0.000	12.798	-0.345	0.013	0.082	4.562	27.4	27.5	
355.42708	10:15:00	-0.046	12.854	0.000	12.762	-0.338	0.013	0.082	4.563	27.4	27.5	
355.42778	10:16:00	-0.055	12.824	0.000	12.730	-0.361	0.013	0.082	4.563	27.5	27.5	
355.42847	10:17:00	-0.054	12.795	0.004	12.699	-0.350	0.013	0.082	4.563	27.5	27.5	
355.42916	10:17:59	-0.118	12.770	0.002	12.671	-0.361	0.013	0.082	4.563	27.4	27.5	
355.42986	10:19:00	-0.052	12.745	0.002	12.646	-0.336	0.013	0.082	4.564	27.5	27.6	
355.43055	10:20:00	-0.099	12.723	0.002	12.623	-0.344	0.013	0.082	4.564	27.5	27.5	
355.43125	10:21:00	-0.069	12.704	0.002	12.602	-0.352	0.013	0.082	4.564	28.9	27.6	
355.43194	10:22:00	-0.066	12.691	0.002	12.582	-0.338	0.011	0.082	4.564	29.0	27.6	
355.43264	10:23:00	-0.001	12.682	0.002	12.564	-0.342	0.009	0.083	4.564	29.1	27.6	
355.43333	10:24:00	-0.029	12.676	0.002	12.548	-0.350	0.006	0.083	4.562	29.1	27.7	
355.43402	10:24:59	-0.052	12.660	0.002	12.531	-0.342	0.005	0.084	4.562	29.0	27.6	
355.43472	10:26:00	-0.060	12.643	0.001	12.516	-0.341	0.005	0.084	4.561	29.0	27.7	
355.43541	10:26:59	-0.061	12.629	-0.048	12.499	-0.352	0.005	0.084	4.562	28.9	27.7	
355.43611	10:28:00	-0.061	12.615	-0.028	12.485	-0.343	0.005	0.084	4.562	28.8	27.7	
355.43680	10:29:00	-0.061	12.603	-0.028	12.471	-0.343	0.005	0.084	4.562	28.8	27.7	
355.43749	10:29:59	-0.061	12.591	0.034	12.456	-0.356	0.005	0.084	4.561	28.7	27.8	
355.46041	11:02:59	-0.061	12.352	-0.004	12.166	-0.332	0.005	0.084	4.561	27.8	27.9	
355.48123	11:32:58	-0.061	12.215	-0.004	12.012	-0.312	0.005	0.084	4.561	27.7	27.8	
355.50206	12:02:58	-0.061	12.121	-0.004	11.902	-0.316	0.005	0.084	4.561	27.6	27.7	
355.54791	13:08:59	-0.061	11.982	-0.003	11.739	-0.306	0.005	0.084	4.561	27.6	27.7	
355.58956	14:08:58	-0.061	11.897	-0.003	11.639	-0.323	0.004	0.084	4.560	27.6	27.6	
355.63121	15:08:57	-0.062	11.832	-0.004	11.563	-0.317	0.004	0.084	4.560	27.6	27.6	
355.67286	16:08:55	-0.063	11.779	-0.004	11.501	-0.320	0.004	0.084	4.560	27.5	27.6	
355.71451	17:08:54	-0.064	11.735	-0.004	11.449	-0.320	0.004	0.084	4.559	27.5	27.6	
355.75617	18:08:53	-0.064	11.696	-0.005	11.404	-0.317	0.004	0.084	4.559	27.5	27.6	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
355.79782	19:08:52	-0.064	11.661	-0.005	11.364	-0.324	0.004	0.084	4.559	27.5	27.6	
355.83947	20:08:50	-0.065	11.631	-0.005	11.328	-0.318	0.004	0.084	4.558	27.5	27.6	
355.88112	21:08:49	-0.065	11.603	-0.005	11.296	-0.307	0.004	0.084	4.558	27.5	27.6	
355.92277	22:08:47	-0.065	11.577	-0.005	11.266	-0.316	0.004	0.084	4.558	27.5	27.6	
355.96442	23:08:46	-0.065	11.552	-0.005	11.239	-0.320	0.004	0.084	4.558	27.5	27.6	-filled zones
356.00608	00:08:45	-0.066	11.530	-0.005	11.214	-0.311	0.004	0.084	4.557	27.5	27.6	with brine
356.08938	02:08:42	-0.066	11.489	-0.005	11.168	-0.318	0.004	0.084	4.557	27.5	27.6	
356.17268	04:08:40	-0.067	11.452	-0.008	11.127	-0.320	0.004	0.084	4.556	27.5	27.6	
356.25599	06:08:38	-0.067	11.418	-0.008	11.090	-0.327	0.004	0.084	4.556	27.5	27.6	
356.33929	08:08:35	-0.067	11.387	-0.008	11.056	-0.315	0.004	0.084	4.556	27.5	27.6	
356.37778	09:04:00	-0.067	11.374	-0.007	11.039	-0.305	0.004	0.084	4.556	27.6	27.6	-packers'
356.37812	09:04:30	-0.067	11.373	-0.007	11.039	-0.348	0.004	0.084	4.555	27.6	27.6	pressure
356.37847	09:05:00	-0.067	11.373	-0.007	11.039	-0.369	0.004	0.084	4.557	27.6	27.6	increased
356.37882	09:05:30	-0.067	13.784	-0.006	14.097	-0.361	0.002	0.089	4.612	27.5	27.6	
356.37917	09:06:00	-0.068	13.700	-0.007	14.147	-0.370	0.002	0.089	4.617	27.6	27.6	
356.37951	09:06:30	-0.069	13.666	-0.007	14.083	-0.369	0.001	0.089	4.618	27.6	27.6	
356.37986	09:07:00	-0.069	13.642	-0.007	14.042	-0.369	0.001	0.089	4.618	27.5	27.6	
356.38055	09:08:00	-0.070	13.608	-0.007	13.988	-0.354	0.001	0.089	4.619	27.6	27.6	
356.38125	09:09:00	-0.070	13.583	-0.008	13.950	-0.346	0.001	0.089	4.619	27.5	27.6	
356.38194	09:10:00	-0.070	13.564	-0.008	13.921	-0.369	0.001	0.089	4.620	27.5	27.6	
356.38264	09:11:00	-0.070	13.549	-0.007	13.897	-0.353	0.001	0.090	4.621	27.5	27.6	
356.38333	09:12:00	-0.070	13.535	-0.007	13.877	-0.362	0.001	0.090	4.621	27.5	27.6	
356.38402	09:12:59	-0.070	13.524	-0.008	13.860	-0.359	0.001	0.090	4.621	27.5	27.6	
356.38472	09:14:00	-0.070	13.513	-0.008	13.845	-0.361	0.001	0.090	4.621	27.5	27.6	
356.38652	09:16:35	-0.070	13.491	-0.008	13.813	-0.344	0.001	0.090	4.622	27.5	27.6	
356.38680	09:17:00	-0.070	13.487	-0.008	13.808	-0.326	0.001	0.090	4.622	27.5	27.6	
356.38749	09:17:59	-0.070	13.480	-0.008	13.797	-0.363	0.001	0.090	4.621	27.5	27.6	
356.38819	09:19:00	-0.070	13.473	-0.008	13.788	-0.355	0.000	0.090	4.622	27.5	27.6	
356.38888	09:19:59	-0.070	13.466	-0.008	13.779	-0.348	0.000	0.090	4.622	27.5	27.6	
356.38958	09:21:00	-0.070	13.460	-0.007	13.771	-0.357	0.000	0.090	4.622	27.5	27.6	
356.39027	09:21:59	-0.070	13.454	-0.008	13.762	-0.347	0.000	0.090	4.622	27.5	27.6	
356.39097	09:23:00	-0.070	13.449	-0.008	13.755	-0.350	0.000	0.090	4.622	27.5	27.6	
356.39166	09:23:59	-0.070	13.444	-0.008	13.747	-0.358	0.000	0.090	4.622	27.5	27.6	
356.39235	09:24:59	-0.070	13.438	-0.008	13.741	-0.359	0.000	0.090	4.622	27.5	27.6	
356.39305	09:26:00	-0.070	13.433	-0.008	13.734	-0.350	0.000	0.090	4.623	27.5	27.6	
356.39374	09:26:59	-0.070	13.429	-0.008	13.728	-0.358	0.000	0.090	4.623	27.5	27.6	
356.39444	09:28:00	-0.070	13.425	-0.008	13.722	-0.349	0.000	0.090	4.623	27.5	27.6	
356.39513	09:28:59	-0.070	13.420	-0.008	13.716	-0.365	0.000	0.090	4.623	27.5	27.6	
356.39583	09:30:00	-0.070	13.416	-0.008	13.711	-0.362	0.000	0.090	4.623	27.5	27.6	
356.39930	09:35:00	-0.070	13.397	-0.008	13.685	-0.364	0.000	0.090	4.623	27.5	27.6	
356.40208	09:39:00	-0.070	13.384	-0.008	13.666	-0.355	0.000	0.090	4.624	27.5	27.6	
356.40625	09:45:00	-0.070	13.366	-0.008	13.643	-0.340	0.000	0.090	4.624	27.5	27.6	
356.41041	09:50:59	-0.070	13.350	-0.008	13.622	-0.334	0.000	0.090	4.624	27.5	27.6	
356.41874	10:02:59	-0.070	13.324	-0.008	13.587	-0.331	0.000	0.090	4.625	27.6	27.6	
356.42291	10:08:59	-0.070	13.312	-0.008	13.571	-0.328	0.000	0.090	4.625	27.5	27.6	
356.43957	10:32:59	-0.070	13.273	-0.008	13.518	-0.331	0.000	0.090	4.625	27.6	27.6	
356.46527	11:09:59	-0.070	13.225	-0.008	13.457	-0.330	0.000	0.090	4.626	27.6	27.6	
356.50692	12:09:58	-0.071	13.167	-0.008	13.383	-0.320	-0.001	0.090	4.626	27.5	27.7	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
356.54857	13:09:56	-0.071	13.123	-0.009	13.325	-0.296	-0.001	0.090	4.626	27.6	27.6	
356.58333	14:00:00	-0.071	13.091	-0.009	13.285	-0.332	-0.001	0.090	4.626	27.6	27.6	
356.74994	17:59:55	-0.072	12.974	-0.009	13.140	-0.302	-0.001	0.090	4.627	27.6	27.6	
356.91655	21:59:50	-0.072	12.887	-0.008	13.034	-0.313	-0.001	0.090	4.627	27.5	27.6	
357.08315	01:59:44	-0.073	12.818	-0.008	12.949	-0.313	-0.001	0.090	4.627	27.5	27.6	
357.24976	05:59:39	-0.072	12.758	-0.007	12.877	-0.304	-0.001	0.090	4.627	27.5	27.6	
357.38553	09:15:10	-0.072	12.715	-0.005	12.823	-0.318	-0.002	0.090	4.627	27.5	27.6	
357.39583	09:30:00	-0.072	12.712	-0.004	12.819	-0.363	-0.002	0.090	4.627	27.5	27.6	-shut in
357.39653	09:31:00	-0.072	12.712	-0.004	12.818	-0.360	-0.002	0.090	4.627	27.5	27.6	
357.39722	09:32:00	-0.072	12.712	-0.004	12.819	-0.373	-0.002	0.090	4.627	27.5	27.6	
357.39792	09:33:00	-0.072	12.712	-0.004	12.819	-0.374	-0.002	0.090	4.627	27.5	27.6	
357.39861	09:34:00	-0.072	12.712	-0.004	12.818	-0.372	-0.002	0.090	4.627	27.5	27.6	
357.39930	09:35:00	-0.072	12.712	-0.004	12.818	-0.353	-0.002	0.090	4.627	27.5	27.6	
357.40000	09:36:00	-0.072	12.711	-0.004	12.818	-0.347	-0.002	0.090	4.627	27.5	27.6	
357.40069	09:37:00	-0.072	12.711	-0.004	12.818	-0.361	-0.002	0.090	4.627	27.5	27.6	
357.40139	09:38:00	-0.072	12.711	-0.004	12.818	-0.349	-0.002	0.090	4.627	27.5	27.6	
357.40208	09:39:00	-0.072	12.711	-0.004	12.817	-0.356	-0.002	0.090	4.627	27.5	27.6	
357.40277	09:39:59	-0.072	12.711	-0.004	12.817	-0.348	-0.002	0.090	4.627	27.5	27.6	
357.40347	09:41:00	-0.072	12.710	-0.004	12.816	-0.347	-0.002	0.090	4.627	27.5	27.6	
357.40416	09:41:59	-0.072	12.710	-0.004	12.816	-0.348	-0.002	0.090	4.627	27.5	27.6	
357.40486	09:43:00	-0.072	12.710	-0.004	12.816	-0.362	-0.002	0.090	4.627	27.5	27.6	
357.40555	09:44:00	-0.072	12.710	-0.004	12.816	-0.357	-0.002	0.090	4.627	27.5	27.6	
357.40625	09:45:00	-0.072	12.709	-0.004	12.816	-0.354	-0.002	0.090	4.627	27.5	27.6	
357.41666	09:59:59	-0.072	12.706	-0.004	12.812	-0.340	-0.002	0.090	4.627	27.5	27.6	
357.43888	10:31:59	-0.072	12.700	-0.004	12.804	-0.322	-0.002	0.090	4.628	27.5	27.6	
357.45972	11:02:00	-0.071	12.694	-0.004	12.797	-0.313	-0.002	0.090	4.628	27.5	27.6	
357.50138	12:01:59	-0.071	12.682	-0.004	12.783	-0.320	-0.002	0.090	4.627	27.6	27.6	
357.54303	13:01:58	-0.071	12.671	-0.004	12.768	-0.319	-0.002	0.090	4.626	27.6	27.6	
357.58468	14:01:56	-0.070	12.660	-0.004	12.755	-0.319	-0.002	0.090	4.626	27.5	27.6	
357.60557	14:32:01	-0.070	12.654	-0.003	12.748	-0.316	-0.002	0.090	4.627	27.5	27.6	
357.68887	16:31:58	-0.070	12.634	-0.003	12.721	-0.311	-0.002	0.090	4.626	27.6	27.6	
357.77217	18:31:55	-0.069	12.614	-0.003	12.695	-0.316	-0.002	0.090	4.625	27.6	27.6	
357.85548	20:31:53	-0.068	12.594	-0.002	12.671	-0.323	-0.002	0.091	4.625	27.5	27.6	
357.93878	22:31:51	-0.067	12.575	-0.001	12.646	-0.311	-0.002	0.091	4.625	27.5	27.6	
358.02208	00:31:48	-0.066	12.557	0.000	12.623	-0.308	-0.002	0.091	4.625	27.5	27.6	
358.52191	12:31:33	-0.061	12.460	0.004	12.502	-0.309	-0.002	0.091	4.623	27.5	27.6	
359.02173	00:31:17	-0.056	12.374	0.007	12.396	-0.304	-0.002	0.091	4.622	27.6	27.6	
359.52155	12:31:02	-0.050	12.300	0.010	12.304	-0.299	-0.002	0.092	4.620	27.5	27.6	
360.02137	00:30:46	-0.044	12.234	0.014	12.221	-0.319	-0.002	0.093	4.618	27.5	27.6	
360.52119	12:30:31	-0.038	12.175	0.017	12.146	-0.296	-0.003	0.093	4.617	27.5	27.6	
361.02102	00:30:16	-0.032	12.121	0.020	12.076	-0.311	-0.003	0.093	4.615	27.5	27.6	
361.52084	12:30:01	-0.026	12.070	0.024	12.009	-0.309	-0.003	0.094	4.614	27.5	27.6	
362.02066	00:29:45	-0.021	12.022	0.025	11.947	-0.322	-0.003	0.094	4.612	27.5	27.6	
362.52048	12:29:29	-0.016	11.976	0.028	11.887	-0.317	-0.003	0.094	4.611	27.5	27.6	
363.02030	00:29:14	-0.011	11.933	0.030	11.830	-0.308	-0.003	0.094	4.609	27.6	27.6	
363.52013	12:28:59	-0.005	11.893	0.033	11.776	-0.301	-0.003	0.094	4.607	27.6	27.6	
364.01995	00:28:44	0.001	11.854	0.035	11.723	-0.299	-0.003	0.094	4.606	27.5	27.6	
364.51977	12:28:28	0.007	11.817	0.038	11.673	-0.301	-0.003	0.094	4.604	27.5	27.6	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
365.07008	01:40:55	0.026	11.772	0.041	11.624	-0.317	-0.003	0.094	4.602	27.6	27.6	
365.54163	12:59:57	0.027	11.744	0.043	11.577	-0.311	-0.003	0.095	4.601	27.5	27.6	
366.04146	00:59:42	0.029	11.711	0.046	11.531	-0.316	-0.003	0.095	4.599	27.5	27.6	
366.54128	12:59:27	0.033	11.678	0.048	11.487	-0.312	-0.003	0.095	4.597	27.5	27.6	
1.04110	00:59:11	0.038	11.647	0.049	11.445	-0.318	-0.003	0.095	4.595	27.5	27.6	
1.54092	12:58:55	0.044	11.617	0.052	11.403	-0.315	-0.003	0.095	4.593	27.5	27.6	
2.04074	00:58:40	0.050	11.587	0.054	11.363	-0.295	-0.003	0.095	4.591	27.6	27.6	
2.54057	12:58:25	0.056	11.558	0.056	11.323	-0.318	-0.003	0.096	4.590	27.5	27.6	
3.04039	00:58:10	0.062	11.530	0.057	11.284	-0.308	-0.003	0.096	4.588	27.5	27.6	
3.12369	02:58:07	0.063	11.525	0.058	11.277	-0.328	-0.003	0.097	4.588	27.5	27.6	
3.20700	04:58:05	0.064	11.520	0.058	11.271	-0.320	-0.003	0.097	4.587	27.5	27.6	
3.29030	06:58:02	0.064	11.515	0.058	11.265	-0.327	-0.003	0.097	4.587	27.5	27.6	
3.37360	08:57:59	0.066	11.511	0.059	11.258	-0.317	-0.003	0.097	4.587	27.5	27.6	-end testing with test-tool #3

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
6.59653	14:19:00	-0.056	-0.009	0.007	-0.013	-0.024	-0.086	0.078	4.715	27.5	27.5	-deflated
6.59653	14:19:00	-0.056	-0.009	0.007	-0.013	-0.024	-0.086	0.078	4.715	27.5	27.5	packers
6.59722	14:20:00	-0.057	-0.009	0.007	-0.013	-0.024	-0.086	0.077	4.715	27.6	27.5	removed test
6.59791	14:20:59	-0.057	-0.009	0.007	-0.013	-0.024	-0.086	0.078	4.713	27.6	27.5	tool #3
6.59861	14:22:00	-0.057	-0.009	0.007	-0.013	-0.024	-0.086	0.077	4.715	27.5	27.5	installed
6.59930	14:23:00	-0.056	-0.008	0.007	0.006	-0.024	-0.086	0.077	4.715	27.5	27.5	test tool #4
6.60000	14:24:00	-0.057	0.060	0.007	-0.050	-0.024	-0.086	0.077	4.715	27.5	27.5	created data
6.60069	14:25:00	-0.056	-0.022	0.008	-0.014	-0.024	-0.086	0.077	4.714	27.5	27.5	file - N4P502
6.60139	14:26:00	-0.056	-0.023	0.007	0.032	-0.024	-0.086	0.077	4.714	27.5	27.5	-packers'
6.60173	14:26:29	-0.056	-0.024	0.007	0.975	-0.024	-0.086	0.078	4.710	27.5	27.5	pressure
6.60208	14:27:00	-0.056	-0.023	0.009	5.362	-0.017	-0.001	0.046	4.175	27.5	27.5	increased
6.60243	14:27:30	-0.055	-0.022	0.010	10.289	-0.023	0.001	0.038	4.434	27.5	27.5	
6.60277	14:27:59	-0.056	-0.023	0.009	10.751	-0.025	0.001	0.037	4.477	27.5	27.5	
6.60347	14:29:00	-0.055	-0.022	0.010	12.509	-0.027	0.001	0.037	4.571	27.5	27.5	
6.60416	14:29:59	-0.055	-0.022	0.010	12.239	-0.027	0.001	0.037	4.572	27.5	27.5	
6.60451	14:30:30	-0.055	-0.023	0.010	12.157	-0.027	0.001	0.037	4.573	27.5	27.5	
6.60486	14:31:00	-0.055	0.039	0.010	12.094	-0.027	0.001	0.037	4.573	27.5	27.5	
6.60521	14:31:30	-0.054	0.572	0.011	12.042	-0.027	0.000	0.037	4.573	27.5	27.5	
6.60555	14:32:00	-0.013	7.895	0.011	12.063	-0.055	0.006	0.068	4.578	27.5	27.6	
6.60590	14:32:30	-0.014	11.947	0.009	11.687	-0.057	-0.007	0.075	4.670	27.5	27.7	
6.60625	14:33:00	-0.014	11.881	0.009	11.635	-0.057	-0.008	0.075	4.675	27.5	27.7	
6.60694	14:34:00	-0.014	11.544	0.009	11.572	-0.057	-0.009	0.075	4.675	27.5	27.7	
6.60764	14:35:00	0.098	11.368	0.009	11.534	-0.057	-0.009	0.076	4.673	27.5	27.7	
6.60833	14:36:00	-0.059	11.230	0.065	11.494	-0.058	-0.009	0.077	4.673	27.5	27.7	
6.60903	14:37:00	-0.059	11.148	0.282	11.471	-0.058	-0.009	0.077	4.673	27.5	28.9	
6.60972	14:38:00	-0.059	11.109	0.038	11.454	-0.058	-0.010	0.077	4.672	27.5	29.0	
6.61041	14:38:59	-0.059	11.025	0.007	11.422	-0.058	-0.010	0.077	4.671	27.5	28.9	
6.61111	14:40:00	-0.059	10.959	0.006	11.396	-0.058	-0.010	0.077	4.671	27.5	28.8	
6.61180	14:41:00	-0.059	10.905	0.006	11.373	-0.058	-0.010	0.077	4.671	27.5	28.7	
6.61250	14:42:00	-0.059	10.856	0.006	11.351	-0.058	-0.010	0.077	4.670	27.5	28.7	
6.61319	14:43:00	-0.059	10.812	0.006	11.333	-0.058	-0.010	0.077	4.670	27.5	28.6	
6.61389	14:44:00	-0.059	10.774	0.006	11.314	-0.058	-0.010	0.078	4.669	27.5	28.6	
6.61458	14:45:00	-0.059	10.736	0.007	11.294	-0.058	-0.010	0.078	4.669	27.5	28.5	
6.61527	14:45:59	-0.058	10.702	0.006	11.278	-0.058	-0.010	0.078	4.669	27.5	28.5	
6.61597	14:47:00	-0.059	10.671	0.007	11.261	-0.058	-0.010	0.078	4.668	27.5	28.4	
6.61666	14:47:59	-0.059	10.642	0.006	11.247	-0.058	-0.010	0.078	4.668	27.5	28.3	
6.61736	14:49:00	-0.058	10.614	0.007	11.232	-0.058	-0.010	0.078	4.667	27.5	28.4	
6.61805	14:50:00	-0.059	10.588	0.007	11.220	-0.058	-0.011	0.078	4.667	27.5	28.3	
6.61874	14:50:59	-0.059	10.563	0.007	11.207	-0.058	-0.011	0.078	4.667	27.5	28.3	
6.61944	14:52:00	-0.059	10.540	0.007	11.194	-0.058	-0.011	0.078	4.666	27.5	28.2	
6.62013	14:52:59	-0.058	10.517	0.007	11.183	-0.058	-0.011	0.078	4.666	27.5	28.2	
6.62083	14:54:00	-0.059	10.495	0.007	11.171	-0.058	-0.011	0.079	4.664	27.5	28.2	
6.62153	14:55:00	-0.058	10.474	0.007	11.161	-0.058	-0.011	0.078	4.665	27.5	28.2	
6.64235	15:24:59	-0.059	10.064	0.006	10.947	-0.058	-0.011	0.079	4.657	27.5	27.8	
6.66318	15:54:59	-0.059	9.838	0.006	10.821	-0.058	-0.011	0.079	4.652	27.6	27.7	
6.68400	16:24:58	-0.059	9.684	0.006	10.721	-0.058	-0.011	0.079	4.648	27.5	27.7	
6.70483	16:54:57	-0.059	9.572	0.006	10.620	-0.058	-0.011	0.079	4.644	27.5	27.7	
6.72565	17:24:56	-0.060	9.485	0.006	10.521	-0.058	-0.011	0.079	4.641	27.5	27.7	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
6.74648	17:54:56	-0.060	9.415	0.005	10.406	-0.058	-0.011	0.079	4.637	27.5	27.6	
6.76731	18:24:56	-0.061	9.358	0.005	10.263	-0.058	-0.010	0.080	4.634	27.5	27.6	
6.78813	18:54:54	-0.061	9.312	0.004	10.078	-0.058	-0.010	0.080	4.630	27.5	27.7	
6.80896	19:24:54	-0.061	9.273	0.004	9.877	-0.057	-0.009	0.080	4.626	27.5	27.7	
6.85061	20:24:53	-0.062	9.210	0.003	9.483	-0.057	-0.008	0.080	4.618	27.6	27.6	
6.89226	21:24:51	-0.063	9.158	0.003	9.125	-0.057	-0.008	0.080	4.610	27.5	27.6	
6.93391	22:24:50	-0.063	9.115	0.003	8.826	-0.057	-0.008	0.080	4.603	27.5	27.6	
6.97557	23:24:49	-0.064	9.078	0.003	8.553	-0.057	-0.008	0.080	4.597	27.6	27.6	
7.01722	00:24:48	-0.065	9.048	0.002	8.288	-0.057	-0.008	0.080	4.591	27.5	27.6	
7.03804	00:54:47	-0.065	9.034	0.002	8.165	-0.057	-0.008	0.081	4.588	27.6	27.6	
7.10052	02:24:45	-0.067	8.991	0.001	7.918	-0.057	-0.008	0.081	4.581	27.5	27.6	
7.18382	04:24:42	-0.068	8.942	0.001	7.643	-0.057	-0.008	0.081	4.574	27.6	27.6	
7.26713	06:24:40	-0.069	8.884	0.001	7.401	-0.057	-0.007	0.081	4.567	27.5	27.6	
7.35043	08:24:37	-0.071	8.837	0.000	7.173	-0.057	-0.007	0.081	4.561	27.5	27.6	
7.43374	10:24:35	-0.071	8.798	-0.001	6.962	-0.057	-0.007	0.081	4.555	27.5	27.6	
7.51704	12:24:32	-0.073	8.768	0.000	6.714	-0.056	-0.007	0.081	4.549	27.5	27.6	
7.53786	12:54:31	-0.073	8.762	0.000	6.640	-0.056	-0.007	0.081	4.548	27.5	27.6	
7.55869	13:24:31	-0.073	8.756	0.000	6.569	-0.056	-0.007	0.081	4.546	27.6	27.6	
7.57952	13:54:31	-0.073	8.901	-0.002	3.566	-0.056	-0.005	0.082	4.515	27.6	27.6	
7.60034	14:24:29	-0.073	8.898	-0.004	2.111	-0.056	-0.005	0.082	4.512	27.6	27.6	
7.68365	16:24:27	-0.074	8.864	-0.004	2.241	-0.056	-0.005	0.082	4.506	27.5	27.6	
7.76695	18:24:24	-0.075	8.835	-0.005	2.279	-0.056	-0.005	0.082	4.501	27.5	27.6	
7.85025	20:24:22	-0.075	8.805	-0.004	2.299	-0.056	-0.005	0.083	4.498	27.5	27.6	
7.93356	22:24:20	-0.076	8.776	-0.004	2.312	-0.056	-0.005	0.083	4.496	27.5	27.6	
8.01686	00:24:17	-0.077	8.750	-0.004	2.320	-0.056	-0.005	0.083	4.494	27.6	27.6	
8.10016	02:24:14	-0.077	8.724	-0.003	2.326	-0.056	-0.005	0.083	4.492	27.5	27.6	
8.18347	04:24:12	-0.077	8.700	-0.003	2.331	-0.056	-0.005	0.083	4.490	27.6	27.6	
8.26677	06:24:09	-0.078	8.677	-0.003	2.334	-0.056	-0.005	0.083	4.488	27.5	27.6	
8.35008	08:24:07	-0.078	8.656	-0.003	2.337	-0.056	-0.005	0.083	4.487	27.6	27.6	
8.51668	12:24:01	-0.078	8.616	-0.003	2.340	-0.056	-0.005	0.083	4.484	27.5	27.6	
8.68329	16:23:56	-0.079	8.578	-0.002	2.341	-0.056	-0.005	0.083	4.482	27.5	27.6	
8.84990	20:23:51	-0.079	8.544	-0.002	2.340	-0.056	-0.005	0.084	4.480	27.6	27.6	
9.01650	00:23:46	-0.079	8.512	-0.001	2.338	-0.056	-0.005	0.084	4.478	27.5	27.6	
9.18311	04:23:41	-0.079	8.483	-0.001	2.336	-0.056	-0.005	0.084	4.477	27.5	27.6	
9.34972	08:23:36	-0.079	8.456	0.000	2.334	-0.056	-0.005	0.084	4.475	27.5	27.6	
9.37055	08:53:36	-0.079	8.453	0.000	2.333	-0.056	-0.005	0.084	4.475	27.5	27.6	
9.39137	09:23:34	-0.079	8.450	0.000	2.333	-0.056	-0.005	0.084	4.475	27.6	27.6	
9.41220	09:53:34	-0.079	8.446	0.001	2.333	-0.056	-0.005	0.084	4.473	27.6	27.6	
9.43302	10:23:33	-0.078	8.443	0.001	2.332	-0.056	-0.005	0.084	4.474	27.5	27.6	
9.45625	10:57:00	-0.078	8.443	0.003	2.331	-0.055	-0.006	0.084	4.475	27.6	27.6	
9.45694	10:58:00	-0.078	8.443	0.003	2.331	-0.055	-0.006	0.084	4.475	27.5	27.6	
9.45717	10:58:19	-0.078	8.443	0.002	2.331	-0.055	-0.006	0.084	4.473	27.6	27.6	
9.45741	10:58:40	-0.078	8.443	0.002	2.331	-0.055	-0.006	0.084	4.473	27.6	27.6	
9.45764	10:59:00	-0.079	8.443	0.002	2.331	-0.055	-0.006	0.084	4.473	27.6	27.6	
9.45787	10:59:20	-0.079	8.443	0.003	2.331	-0.055	-0.006	0.084	4.473	27.5	27.6	
9.45810	10:59:40	-0.079	8.443	0.002	2.331	-0.055	-0.006	0.084	4.473	27.6	27.6	
9.45833	11:00:00	-0.078	8.458	0.003	3.050	-0.055	-0.005	0.084	4.470	27.6	27.6	
9.45856	11:00:20	-0.078	8.229	0.006	9.314	-0.057	-0.012	0.085	4.521	27.6	27.6	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
9.45879	11:00:39	-0.078	8.130	0.004	10.547	-0.057	-0.013	0.086	4.541	27.5	27.6	
9.45903	11:01:00	-0.078	8.116	0.003	10.607	-0.057	-0.014	0.086	4.545	27.5	27.6	
9.45926	11:01:20	-0.078	8.116	0.003	10.439	-0.057	-0.014	0.086	4.545	27.5	27.6	
9.45949	11:01:40	-0.077	10.476	0.004	10.190	-0.057	-0.018	0.087	4.588	27.5	27.6	
9.45972	11:02:00	-0.078	10.566	0.003	10.056	-0.057	-0.018	0.087	4.591	27.5	27.6	
9.46041	11:02:59	-0.078	10.500	0.003	9.762	-0.057	-0.019	0.087	4.591	27.5	27.6	
9.46111	11:04:00	-0.078	10.471	0.002	9.522	-0.057	-0.019	0.088	4.590	27.5	27.6	
9.46180	11:05:00	-0.079	10.454	0.003	9.310	-0.057	-0.020	0.088	4.589	27.5	27.6	
9.46250	11:06:00	-0.078	10.445	0.003	9.119	-0.057	-0.020	0.088	4.588	27.5	27.6	
9.46319	11:07:00	-0.078	10.440	0.002	8.954	-0.057	-0.020	0.088	4.586	27.5	27.6	
9.46389	11:08:00	-0.078	10.431	0.002	8.949	-0.057	-0.020	0.088	4.586	27.5	27.6	
9.46458	11:09:00	-0.078	10.424	0.003	8.936	-0.057	-0.020	0.088	4.586	27.5	27.6	
9.46528	11:10:00	-0.079	10.419	0.003	9.140	-0.058	-0.020	0.088	4.586	27.5	27.6	
9.46597	11:11:00	-0.078	10.312	0.003	10.733	-0.057	-0.020	0.088	4.606	27.5	27.6	
9.46667	11:12:00	-0.078	10.305	0.003	10.656	-0.057	-0.020	0.088	4.606	27.5	27.5	
9.46736	11:13:00	-0.078	10.299	0.003	10.602	-0.057	-0.020	0.088	4.607	27.5	27.6	
9.46805	11:14:00	-0.078	10.294	0.003	10.562	-0.057	-0.020	0.088	4.607	27.5	27.6	
9.46875	11:15:00	-0.078	10.289	0.002	10.532	-0.057	-0.020	0.088	4.607	27.5	27.6	
9.46944	11:16:00	-0.078	10.285	0.002	10.505	-0.057	-0.020	0.088	4.607	27.5	27.6	
9.47014	11:17:00	-0.078	10.280	0.002	10.483	-0.057	-0.021	0.088	4.608	27.5	27.5	
9.47083	11:18:00	-0.078	10.277	0.002	10.462	-0.058	-0.021	0.088	4.608	27.5	27.6	
9.47153	11:19:00	-0.078	10.273	0.003	10.444	-0.058	-0.021	0.088	4.608	27.5	27.6	
9.47222	11:20:00	-0.078	10.270	0.003	10.426	-0.058	-0.021	0.088	4.608	27.5	27.6	
9.47291	11:20:59	-0.078	10.266	0.002	10.411	-0.058	-0.021	0.088	4.607	27.5	27.6	
9.47361	11:22:00	-0.078	10.264	0.002	10.396	-0.058	-0.021	0.088	4.608	27.5	27.6	
9.47430	11:23:00	-0.078	10.248	0.002	10.383	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47500	11:24:00	-0.079	10.257	0.002	10.369	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47569	11:25:00	-0.078	10.255	0.002	10.357	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47639	11:26:00	-0.078	10.252	0.002	10.346	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47708	11:27:00	-0.078	10.250	0.002	10.335	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47777	11:27:59	-0.078	10.248	0.003	10.324	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47847	11:29:00	-0.078	10.246	0.002	10.314	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.47916	11:29:59	-0.078	10.243	0.002	10.304	-0.058	-0.021	0.088	4.609	27.5	27.6	
9.49861	11:58:00	-0.078	10.197	0.002	10.129	-0.058	-0.021	0.088	4.610	27.6	27.6	
9.54026	12:57:58	-0.079	10.143	0.001	9.953	-0.058	-0.021	0.089	4.608	27.6	27.6	
9.58191	13:57:57	-0.079	10.105	0.001	9.857	-0.058	-0.021	0.088	4.610	27.6	27.6	
9.62357	14:57:56	-0.080	10.076	0.001	9.788	-0.058	-0.021	0.089	4.608	27.6	27.6	
9.66522	15:57:55	-0.079	10.050	0.001	9.736	-0.058	-0.021	0.088	4.610	27.6	27.6	
9.70687	16:57:54	-0.080	10.028	0.000	9.693	-0.058	-0.021	0.088	4.610	27.5	27.6	
9.79017	18:57:51	-0.080	9.986	0.001	9.623	-0.058	-0.021	0.088	4.610	27.5	27.6	
9.83182	19:57:49	-0.080	9.967	0.001	9.595	-0.058	-0.021	0.088	4.610	27.5	27.6	
9.87348	20:57:49	-0.080	9.949	0.001	9.568	-0.058	-0.022	0.088	4.610	27.6	27.6	
9.91513	21:57:47	-0.080	9.932	0.001	9.544	-0.058	-0.022	0.088	4.610	27.6	27.6	
9.95678	22:57:46	-0.080	9.915	0.001	9.522	-0.058	-0.022	0.088	4.610	27.6	27.6	
9.99843	23:57:44	-0.079	9.900	0.001	9.501	-0.058	-0.022	0.088	4.609	27.6	27.6	
10.00884	00:12:44	-0.080	9.895	0.001	9.497	-0.058	-0.022	0.088	4.610	27.6	27.6	
10.25876	06:12:37	-0.080	9.816	0.001	9.397	-0.058	-0.022	0.089	4.609	27.6	27.6	
10.53840	12:55:18	-0.080	9.739	0.001	9.313	-0.057	-0.023	0.089	4.607	27.6	27.6	

TABLE C6 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE N4P50,
MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
11.04562	01:05:42	-0.080	9.613	0.001	9.207	-0.057	-0.024	0.089	4.603	27.5	27.6	
11.57850	13:53:02	-0.080	9.498	0.001	9.125	-0.057	-0.025	0.090	4.601	27.5	27.6	
12.36389	08:44:00	-0.080	9.355	0.003	9.026	-0.057	-0.026	0.091	4.596	27.5	27.6	
12.36467	08:45:07	-0.080	9.356	0.003	9.026	-0.057	-0.026	0.091	4.596	27.5	27.6	
12.37500	09:00:00	-0.080	9.370	0.004	9.031	-0.057	-0.026	0.090	4.596	27.5	27.5	-shut in
12.38610	09:15:59	-0.080	9.368	0.004	9.028	-0.057	-0.026	0.090	4.596	27.5	27.5	
12.39582	09:29:59	-0.079	9.365	0.004	9.027	-0.057	-0.026	0.090	4.596	27.5	27.5	
12.41666	09:59:59	-0.078	9.360	0.004	9.022	-0.057	-0.025	0.091	4.595	27.5	27.6	
12.45833	11:00:00	-0.076	9.351	0.004	9.017	-0.057	-0.025	0.090	4.595	27.6	27.6	
12.51040	12:14:59	-0.074	9.341	0.004	9.010	-0.057	-0.026	0.090	4.597	27.5	27.6	
12.59370	14:14:56	-0.071	9.324	0.004	9.001	-0.057	-0.026	0.091	4.595	27.5	27.6	
12.67700	16:14:53	-0.068	9.310	0.004	8.993	-0.057	-0.026	0.091	4.594	27.5	27.6	
12.76031	18:14:51	-0.066	9.298	0.003	8.985	-0.057	-0.026	0.091	4.594	27.5	27.6	
12.84361	20:14:48	-0.062	9.285	0.004	8.977	-0.057	-0.026	0.091	4.594	27.5	27.5	
12.92691	22:14:45	-0.059	9.272	0.004	8.970	-0.057	-0.026	0.091	4.593	27.5	27.6	
13.01022	00:14:43	-0.056	9.257	0.005	8.962	-0.057	-0.027	0.091	4.593	27.5	27.6	
14.00367	00:05:17	-0.017	9.107	0.011	8.892	-0.057	-0.027	0.091	4.588	27.5	27.5	
15.00332	00:04:47	0.020	8.972	0.015	8.837	-0.057	-0.025	0.091	4.582	27.5	27.5	
16.00296	00:04:16	0.057	8.846	0.018	8.789	-0.057	-0.022	0.091	4.576	27.5	27.6	
17.01079	00:15:32	0.096	8.723	0.023	8.747	-0.057	-0.018	0.090	4.568	27.5	27.5	
18.06252	01:30:02	0.136	8.587	0.027	8.712	-0.057	-0.014	0.089	4.563	27.5	27.5	
19.03222	00:46:24	0.172	8.474	0.030	8.679	-0.057	-0.012	0.089	4.557	27.5	27.5	
20.06320	01:31:00	0.212	8.376	0.032	8.649	-0.057	-0.010	0.090	4.551	27.5	27.6	
21.05606	01:20:44	0.250	8.291	0.035	8.621	-0.057	-0.010	0.091	4.546	27.5	27.5	
22.05570	01:20:12	0.291	8.215	0.040	8.596	-0.057	-0.010	0.092	4.539	27.5	27.5	
23.05534	01:19:41	0.331	8.140	0.044	8.575	-0.056	-0.010	0.092	4.534	27.5	27.6	
24.06871	01:38:57	0.375	8.075	0.046	8.551	-0.056	-0.010	0.093	4.530	27.5	27.6	
25.06157	01:28:40	0.420	8.004	0.050	8.529	-0.056	-0.010	0.093	4.522	27.5	27.6	
26.06121	01:28:09	0.463	7.945	0.052	8.507	-0.056	-0.010	0.093	4.520	27.5	27.5	
27.04285	01:01:42	0.504	7.889	0.054	8.488	-0.056	-0.010	0.093	4.515	27.5	27.5	
28.04249	01:01:11	0.549	7.834	0.056	8.469	-0.057	-0.010	0.093	4.510	27.5	27.5	
29.04214	01:00:41	0.591	7.769	0.058	8.448	-0.057	-0.010	0.093	4.506	27.5	27.5	
30.04178	01:00:10	0.635	7.714	0.059	8.427	-0.057	-0.010	0.093	4.501	27.5	27.5	
31.03754	00:54:03	0.681	7.662	0.060	8.406	-0.058	-0.010	0.093	4.497	27.5	27.6	
32.03718	00:53:32	0.727	7.617	0.060	8.386	-0.058	-0.010	0.093	4.491	27.5	27.5	
33.03682	00:53:01	0.774	7.572	0.063	8.367	-0.059	-0.010	0.093	4.489	27.5	27.5	
34.04629	01:06:39	0.820	7.486	0.063	8.348	-0.060	0.248	0.093	4.484	27.5	27.6	
35.01030	00:14:50	0.864	7.414	0.065	8.328	-0.060	0.248	0.093	4.481	27.5	27.5	
36.00994	00:14:19	0.912	7.349	0.066	8.310	-0.061	0.248	0.092	4.476	27.5	27.5	
37.00958	00:13:48	0.960	7.318	0.068	8.287	-0.061	0.248	0.092	4.471	27.5	27.5	-end testing

TABLE C7
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
13.50694	12:10:00	0.013	-0.060	-0.018	-0.011	0.153	-0.027	0.143	2.566	26.724	25.955	-created data
13.50972	12:14:00	0.009	-0.067	-0.018	-0.018	0.153	-0.027	0.143	2.566	26.725	25.857	file - SOP011
13.51007	12:14:30	0.011	-0.069	-0.021	-0.019	0.153	-0.027	0.143	2.566	26.608	25.855	
13.51041	12:14:59	0.012	-0.066	-0.020	-0.018	0.153	-0.027	0.143	2.566	26.623	25.837	
13.51076	12:15:30	0.008	0.011	-0.022	0.182	0.153	-0.027	0.143	2.566	26.687	25.836	
13.51111	12:16:00	0.012	0.069	-0.018	0.510	0.153	-0.024	0.143	2.569	26.748	25.947	-inflated
13.51146	12:16:30	0.013	2.276	-0.022	2.186	0.184	-0.003	0.069	1.885	26.680	25.927	packers
13.51180	12:17:00	0.008	10.231	-0.022	10.291	0.417	-0.143	0.036	1.878	26.709	25.858	
13.51215	12:17:30	0.009	10.831	-0.018	10.880	0.418	-0.143	0.039	1.920	26.641	25.855	
13.51250	12:18:00	0.008	10.711	-0.020	10.751	0.419	-0.144	0.040	1.926	26.703	25.885	
13.51284	12:18:29	0.012	10.536	-0.020	10.591	0.419	-0.144	0.040	1.926	26.652	25.850	
13.51354	12:19:30	0.010	10.314	-0.019	10.403	0.419	-0.144	0.040	1.926	26.793	26.007	
13.51389	12:20:00	0.011	10.241	-0.018	10.336	0.419	-0.144	0.041	1.926	26.707	25.922	
13.51458	12:21:00	0.011	10.126	-0.022	10.235	0.419	-0.145	0.041	1.926	26.769	25.984	
13.51528	12:22:00	0.010	10.037	-0.024	10.162	0.419	-0.145	0.041	1.926	26.828	25.977	
13.51666	12:23:59	0.010	9.905	-0.027	10.047	0.419	-0.145	0.040	1.926	26.700	25.898	
13.51805	12:26:00	0.009	9.813	-0.025	9.967	0.419	-0.145	0.041	1.926	26.748	25.929	
13.51944	12:28:00	0.011	9.739	-0.027	9.900	0.419	-0.145	0.041	1.926	26.776	25.990	
13.52049	12:29:30	0.012	9.695	-0.026	9.862	0.419	-0.145	0.041	1.926	26.874	26.040	
13.52084	12:30:01	0.010	9.680	-0.025	9.850	0.419	-0.145	0.041	1.926	26.787	26.001	-filled bore-
13.52361	12:34:00	0.004	9.599	-0.033	9.768	0.419	-0.149	0.041	1.926	26.486	26.028	hole with
13.52639	12:38:00	0.003	9.541	-0.023	9.705	0.419	-0.149	0.041	1.926	26.702	26.227	brine
13.53055	12:44:00	0.005	9.459	-0.026	9.629	0.419	-0.149	0.041	1.926	26.575	26.084	
13.57290	13:44:59	0.000	9.116	-0.025	9.279	0.419	-0.149	0.041	1.926	26.826	26.204	
13.61455	14:44:57	0.002	8.978	-0.029	9.130	0.419	-0.149	0.041	1.926	26.841	26.219	
13.65620	15:44:56	0.002	8.887	-0.026	9.037	0.419	-0.150	0.041	1.926	26.930	26.357	
13.69786	16:44:55	-0.003	8.826	-0.029	8.971	0.419	-0.150	0.042	1.926	27.000	26.362	
13.73951	17:44:54	-0.002	8.773	-0.032	8.914	0.419	-0.150	0.042	1.926	26.942	26.370	
13.78116	18:44:52	-0.001	8.731	-0.035	8.871	0.419	-0.150	0.041	1.926	26.892	26.303	
13.82281	19:44:51	-0.006	8.698	-0.034	8.833	0.419	-0.150	0.041	1.926	26.937	26.315	
13.86446	20:44:49	-0.004	8.663	-0.037	8.800	0.419	-0.150	0.042	1.926	26.915	26.293	
13.90611	21:44:48	-0.007	8.637	-0.034	8.770	0.419	-0.150	0.042	1.926	27.003	26.381	
13.94777	22:44:47	-0.006	8.614	-0.037	8.740	0.419	-0.151	0.042	1.926	26.928	26.306	
13.98942	23:44:46	-0.006	8.593	-0.038	8.716	0.419	-0.151	0.042	1.926	27.015	26.328	
14.03107	00:44:44	-0.011	8.576	-0.036	8.694	0.419	-0.151	0.042	1.926	26.938	26.317	
14.19768	04:44:40	-0.010	8.513	-0.036	8.618	0.419	-0.151	0.041	1.926	26.968	26.379	
14.36429	08:44:35	-0.015	8.465	-0.037	8.556	0.419	-0.151	0.042	1.926	27.024	26.354	
14.40594	09:44:33	-0.012	8.453	-0.036	8.547	0.419	-0.152	0.042	1.926	27.009	26.289	
14.53089	12:44:29	-0.012	8.423	-0.038	8.512	0.419	-0.152	0.041	1.926	26.893	26.223	
15.03071	00:44:13	-0.014	8.343	-0.038	8.404	0.419	-0.152	0.042	1.925	27.003	26.365	
16.03036	00:43:43	-0.010	8.239	-0.036	8.262	0.418	-0.154	0.042	1.924	26.858	26.204	
16.38126	09:09:01	-0.008	8.213	-0.039	8.233	0.418	-0.154	0.042	1.924	26.857	26.137	
16.39549	09:29:30	-0.013	8.221	-0.038	8.242	0.418	-0.155	0.042	1.922	26.864	26.160	
16.39583	09:30:00	-0.010	8.220	-0.040	8.243	0.418	-0.155	0.042	1.922	26.855	26.332	-shut in
16.40625	09:45:00	-0.012	8.221	-0.039	8.245	0.418	-0.155	0.042	1.922	26.891	26.318	
16.40972	09:50:00	-0.010	8.220	-0.041	8.243	0.418	-0.155	0.042	1.922	26.890	26.252	
16.41666	09:59:59	-0.009	8.220	-0.037	8.242	0.418	-0.155	0.042	1.922	26.978	26.193	
16.43750	10:30:00	-0.013	8.218	-0.036	8.238	0.418	-0.155	0.042	1.922	26.814	26.324	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
16.45832	10:59:59	-0.010	8.214	-0.039	8.234	0.418	-0.155	0.042	1.922	26.832	26.243	
16.50513	12:07:23	-0.008	8.215	-0.037	8.227	0.418	-0.155	0.042	1.922	26.872	26.299	
16.54679	13:07:23	-0.009	8.208	-0.037	8.222	0.418	-0.155	0.042	1.922	26.901	26.198	
16.58844	14:07:21	-0.010	8.200	-0.034	8.215	0.418	-0.155	0.043	1.922	26.896	26.340	
16.63009	15:07:20	-0.006	8.198	-0.034	8.210	0.418	-0.155	0.042	1.922	26.865	26.260	
16.67174	16:07:18	-0.006	8.197	-0.033	8.207	0.418	-0.155	0.042	1.922	26.851	26.344	
16.71339	17:07:17	-0.006	8.194	-0.034	8.201	0.418	-0.155	0.042	1.922	27.010	26.192	
16.75504	18:07:15	-0.007	8.188	-0.035	8.195	0.418	-0.155	0.042	1.922	26.907	26.187	
16.79670	19:07:15	-0.010	8.185	-0.032	8.190	0.418	-0.155	0.042	1.922	26.982	26.230	
16.83835	20:07:13	-0.006	8.187	-0.032	8.192	0.418	-0.155	0.042	1.922	26.817	26.245	
16.88000	21:07:12	-0.008	8.184	-0.032	8.187	0.418	-0.155	0.042	1.922	26.856	26.235	
16.92165	22:07:11	-0.010	8.183	-0.034	8.184	0.418	-0.155	0.042	1.922	26.849	26.227	
16.96330	23:07:09	-0.007	8.180	-0.033	8.181	0.418	-0.155	0.043	1.922	26.797	26.142	
17.00496	00:07:09	-0.006	8.177	-0.031	8.181	0.418	-0.155	0.042	1.921	26.934	26.149	
17.50478	12:06:53	-0.004	8.149	-0.025	8.133	0.418	-0.155	0.042	1.921	26.834	26.360	
19.03030	00:43:38	0.009	8.099	-0.009	8.047	0.417	-0.157	0.042	1.917	26.871	26.347	
19.11360	02:43:35	0.007	8.097	-0.008	8.040	0.417	-0.157	0.043	1.917	26.881	26.276	
19.19691	04:43:33	0.007	8.093	-0.005	8.035	0.417	-0.157	0.043	1.917	26.907	26.204	
19.28021	06:43:30	0.004	8.087	-0.006	8.029	0.417	-0.157	0.043	1.917	26.924	26.270	
19.36352	08:43:28	-0.016	-0.043	-0.029	0.014	0.349	-0.157	0.107	2.134	26.853	26.166	-deflated
19.37251	08:56:25	-0.056	-0.088	-0.070	-0.026	0.114	0.024	0.068	-1.379	26.860	26.222	packers
19.37639	09:02:00	-0.054	-0.080	-0.072	-0.022	0.147	-0.004	0.108	2.571	26.914	26.293	adjusted
19.39582	09:29:59	-0.050	-0.044	-0.070	0.015	0.275	-0.111	0.071	0.391	26.879	26.322	LVDT's
19.43752	10:30:02	-0.046	0.126	-0.067	0.187	0.190	0.048	-0.027	0.995	26.883	26.327	
19.44579	10:41:56	-0.049	0.059	-0.069	0.120	0.334	-0.127	-0.023	-0.405	26.792	26.465	
19.44585	10:42:01	-0.051	0.057	-0.068	0.123	0.334	-0.127	-0.023	-0.405	26.840	26.497	
19.44622	10:42:33	-0.052	0.059	-0.068	0.119	0.325	-0.123	-0.020	-0.460	26.989	26.318	
19.44655	10:43:02	-0.051	0.062	-0.071	0.123	0.317	-0.128	-0.004	0.165	26.859	26.434	
19.44694	10:43:36	-0.050	0.061	-0.070	0.126	0.334	-0.097	0.030	1.895	26.975	26.419	
19.44724	10:44:02	-0.047	0.063	-0.067	4.432	0.349	-0.098	0.007	1.635	26.911	26.420	
19.44759	10:44:32	-0.047	0.061	-0.069	10.580	0.351	-0.086	0.013	1.950	26.863	26.503	
19.44794	10:45:02	5.375	9.311	-0.054	12.535	0.370	-0.060	-0.087	1.483	27.012	26.456	-packers'
19.44820	10:45:24	6.289	11.200	-0.057	12.742	0.382	-0.079	-0.085	1.405	27.061	26.505	pressure
19.44828	10:45:31	6.238	11.111	-0.054	12.707	0.382	-0.079	-0.085	1.405	27.094	26.407	increased
19.44863	10:46:02	6.110	10.889	-0.054	12.598	0.382	-0.079	-0.085	1.404	27.047	26.474	
19.44898	10:46:32	6.039	10.767	-0.053	12.524	0.382	-0.079	-0.085	1.402	27.080	26.443	
19.44932	10:47:01	5.987	10.684	-0.054	12.470	0.382	-0.079	-0.085	1.402	27.114	26.444	
19.44967	10:47:31	5.948	10.616	-0.056	12.424	0.382	-0.079	-0.085	1.402	27.066	26.461	
19.45002	10:48:02	5.916	10.566	-0.055	12.387	0.382	-0.079	-0.085	1.401	27.034	26.462	
19.45037	10:48:32	5.890	10.520	-0.055	12.354	0.382	-0.079	-0.085	1.401	27.067	26.396	
19.45071	10:49:01	5.869	10.482	-0.055	12.326	0.382	-0.079	-0.085	1.401	27.101	26.447	
19.45106	10:49:32	5.846	10.449	-0.055	12.300	0.382	-0.079	-0.085	1.401	27.020	26.431	
19.45139	10:50:00	5.831	10.424	-0.055	12.279	0.382	-0.079	-0.085	1.401	27.038	26.433	
19.45208	10:51:00	5.800	10.373	-0.056	12.238	0.382	-0.079	-0.085	1.400	27.020	26.399	-test-zone
19.45277	10:51:59	-0.014	8.066	-0.055	10.726	0.395	-0.036	-0.054	1.676	26.890	26.498	packer
19.45347	10:53:00	-0.012	8.071	-0.054	10.681	0.395	-0.037	-0.054	1.684	26.858	26.400	pressure
19.45416	10:53:59	-0.014	8.066	-0.055	10.648	0.395	-0.037	-0.053	1.688	26.907	26.432	increased
19.45486	10:55:00	-0.011	8.059	-0.055	10.627	0.395	-0.037	-0.053	1.690	26.888	26.414	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
19.45555	10:56:00	-0.011	11.250	-0.053	10.417	0.395	-0.036	-0.050	1.739	26.952	26.461	
19.45625	10:57:00	-0.012	10.995	-0.054	10.394	0.395	-0.036	-0.050	1.743	26.911	26.404	
19.45694	10:58:00	-0.012	10.901	-0.055	10.382	0.395	-0.036	-0.050	1.744	26.861	26.321	
19.45763	10:58:59	-0.011	10.841	-0.055	10.370	0.395	-0.036	-0.050	1.745	26.873	26.382	
19.45833	11:00:00	-0.010	10.795	-0.055	10.354	0.395	-0.036	-0.050	1.746	26.819	26.377	
19.45902	11:00:59	-0.013	10.760	-0.053	10.344	0.395	-0.036	-0.050	1.746	26.963	26.423	
19.45972	11:02:00	-0.011	10.722	-0.055	10.313	0.392	-0.034	-0.048	1.749	26.947	26.473	
19.46041	11:02:59	-0.012	10.696	-0.055	10.306	0.392	-0.034	-0.048	1.749	26.892	26.401	
19.46110	11:03:59	-0.011	10.670	-0.056	10.296	0.392	-0.034	-0.048	1.749	26.984	26.428	
19.46180	11:05:00	-0.012	10.649	-0.056	10.291	0.392	-0.034	-0.048	1.749	26.831	26.389	
19.46249	11:05:59	-0.012	10.626	-0.056	10.281	0.392	-0.034	-0.048	1.749	26.987	26.398	
19.46319	11:07:00	-0.012	10.608	-0.054	10.273	0.392	-0.034	-0.048	1.749	26.897	26.439	
19.46388	11:07:59	-0.009	10.589	-0.055	10.264	0.392	-0.034	-0.048	1.749	26.840	26.382	
19.46458	11:09:00	-0.010	10.573	-0.055	10.261	0.392	-0.034	-0.048	1.749	26.881	26.391	
19.46527	11:09:59	-0.012	10.561	-0.056	10.251	0.392	-0.034	-0.048	1.749	26.938	26.414	
19.46596	11:10:59	-0.009	10.542	-0.057	10.247	0.392	-0.034	-0.048	1.749	26.896	26.454	
19.46666	11:11:59	-0.012	10.528	-0.055	10.241	0.392	-0.034	-0.048	1.749	26.903	26.363	
19.46805	11:14:00	-0.008	10.502	-0.054	10.229	0.392	-0.034	-0.048	1.749	26.996	26.423	
19.46943	11:15:59	-0.012	10.479	-0.057	10.214	0.392	-0.034	-0.048	1.749	26.911	26.453	
19.47082	11:17:59	-0.012	10.457	-0.052	10.201	0.392	-0.034	-0.048	1.749	26.922	26.398	
19.47222	11:20:00	-0.011	10.436	-0.052	10.192	0.392	-0.034	-0.048	1.749	26.851	26.376	
19.47639	11:26:00	-0.008	10.381	-0.052	10.162	0.392	-0.034	-0.047	1.749	26.860	26.320	
19.48055	11:32:00	-0.011	10.336	-0.052	10.139	0.392	-0.034	-0.048	1.749	26.905	26.332	
19.48354	11:36:18	-0.012	10.314	-0.054	10.130	0.391	-0.034	-0.047	1.749	26.853	26.346	
19.48770	11:42:17	-0.009	10.266	-0.054	10.100	0.392	-0.034	-0.047	1.749	26.949	26.426	
19.49187	11:48:18	-0.011	10.233	-0.055	10.082	0.391	-0.034	-0.048	1.749	26.864	26.307	
19.49603	11:54:17	-0.009	10.205	-0.053	10.066	0.392	-0.034	-0.047	1.749	26.827	26.337	
19.49882	11:58:18	-0.012	10.191	-0.052	10.060	0.391	-0.034	-0.047	1.749	26.860	26.271	
19.50075	12:01:05	-0.010	10.178	-0.053	10.054	0.391	-0.033	-0.047	1.748	26.882	26.375	
19.52090	12:30:06	-0.010	10.064	-0.053	9.989	0.391	-0.034	-0.047	1.749	26.897	26.291	
19.54860	13:09:59	-0.011	9.943	-0.069	9.935	0.391	-0.033	-0.047	1.749	26.844	26.255	
19.59025	14:09:58	-0.010	9.818	-0.067	9.885	0.391	-0.033	-0.048	1.749	26.880	26.308	
19.63190	15:09:56	-0.011	9.721	-0.069	9.847	0.390	-0.033	-0.048	1.749	26.879	26.241	
19.67356	16:09:56	-0.011	9.639	-0.068	9.821	0.390	-0.032	-0.048	1.748	26.889	26.267	
19.71521	17:09:54	-0.011	9.570	-0.070	9.802	0.390	-0.032	-0.048	1.747	26.870	26.249	
19.75686	18:09:53	-0.010	9.512	-0.068	9.784	0.390	-0.032	-0.048	1.747	26.903	26.232	
19.79851	19:09:51	-0.013	9.460	-0.068	9.768	0.390	-0.031	-0.049	1.746	26.908	26.270	
19.84016	20:09:50	-0.011	9.416	-0.070	9.755	0.390	-0.031	-0.049	1.746	26.858	26.204	
19.88182	21:09:49	-0.012	9.367	-0.068	9.745	0.390	-0.031	-0.049	1.745	26.850	26.229	
19.92347	22:09:48	-0.010	9.327	-0.070	9.734	0.390	-0.031	-0.049	1.744	26.887	26.232	
19.96512	23:09:46	-0.011	9.286	-0.071	9.720	0.390	-0.031	-0.049	1.743	26.898	26.244	
20.00677	00:09:45	-0.011	9.250	-0.070	9.716	0.390	-0.031	-0.049	1.743	26.882	26.244	-shut in
20.35972	08:38:00	-0.009	9.012	-0.023	9.666	0.390	-0.033	-0.049	1.737	26.800	26.211	
20.36041	08:38:59	-0.013	9.011	-0.025	9.670	0.390	-0.033	-0.049	1.737	26.919	26.248	
20.36111	08:40:00	-0.009	9.009	-0.028	9.670	0.390	-0.033	-0.049	1.737	26.956	26.302	
20.36180	08:41:00	-0.009	9.013	-0.027	9.669	0.390	-0.033	-0.049	1.737	26.846	26.257	
20.36250	08:42:00	-0.013	9.008	-0.028	9.670	0.390	-0.033	-0.049	1.737	26.883	26.212	
20.36319	08:43:00	-0.013	9.012	-0.025	9.670	0.390	-0.033	-0.049	1.737	26.966	26.246	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
20.36389	08:44:00	-0.013	9.007	-0.027	9.666	0.390	-0.033	-0.049	1.737	26.968	26.330	
20.36458	08:45:00	-0.011	9.007	-0.028	9.667	0.390	-0.033	-0.049	1.737	26.954	26.251	
20.36527	08:45:59	-0.011	9.009	-0.026	9.667	0.390	-0.033	-0.049	1.737	26.970	26.316	
20.36597	08:47:00	-0.009	9.009	-0.026	9.666	0.390	-0.033	-0.049	1.737	26.956	26.236	
20.36666	08:47:59	-0.011	9.009	-0.024	9.670	0.390	-0.033	-0.049	1.737	26.988	26.203	
20.36736	08:49:00	-0.009	9.005	-0.027	9.666	0.390	-0.033	-0.049	1.737	26.939	26.268	
20.36805	08:50:00	-0.013	9.008	-0.026	9.670	0.390	-0.033	-0.049	1.737	27.003	26.332	
20.36874	08:50:59	-0.008	9.005	-0.028	9.666	0.390	-0.033	-0.049	1.737	26.921	26.233	
20.36944	08:52:00	-0.008	9.004	-0.025	9.669	0.390	-0.033	-0.049	1.737	27.049	26.280	
20.37013	08:52:59	-0.010	9.005	-0.024	9.668	0.390	-0.033	-0.049	1.737	26.996	26.227	
20.37083	08:54:00	-0.009	9.006	-0.025	9.670	0.390	-0.033	-0.049	1.737	26.990	26.287	
20.37152	08:54:59	-0.010	9.006	-0.025	9.669	0.390	-0.033	-0.049	1.737	27.018	26.249	
20.37222	08:56:00	-0.009	9.004	-0.026	9.666	0.390	-0.033	-0.049	1.737	27.060	26.259	
20.37291	08:56:59	-0.012	9.002	-0.026	9.670	0.390	-0.033	-0.049	1.737	26.989	26.187	
20.37360	08:57:59	-0.009	9.003	-0.024	9.668	0.390	-0.033	-0.049	1.737	27.046	26.310	
20.37430	08:59:00	-0.010	9.005	-0.026	9.665	0.390	-0.033	-0.049	1.737	26.939	26.301	
20.37499	08:59:59	-0.009	9.003	-0.026	9.670	0.390	-0.033	-0.049	1.737	26.963	26.308	
20.39582	09:29:59	-0.005	8.990	-0.024	9.664	0.390	-0.033	-0.049	1.737	26.888	26.299	
20.41734	10:00:58	-0.006	8.978	-0.026	9.659	0.390	-0.033	-0.049	1.736	26.857	26.268	
20.43747	10:29:57	-0.002	8.967	-0.026	9.658	0.390	-0.033	-0.049	1.736	26.859	26.254	
20.45852	11:00:16	0.000	8.955	-0.026	9.658	0.390	-0.033	-0.049	1.735	26.773	26.233	
20.50017	12:00:15	0.007	8.930	-0.022	9.649	0.390	-0.033	-0.049	1.735	26.880	26.291	
20.54182	13:00:13	0.012	8.905	-0.022	9.644	0.390	-0.034	-0.049	1.734	26.871	26.299	
20.58347	14:00:12	0.015	8.882	-0.023	9.641	0.390	-0.034	-0.049	1.733	26.868	26.214	
20.62512	15:00:10	0.022	8.865	-0.022	9.634	0.390	-0.034	-0.049	1.732	26.950	26.296	
20.66678	16:00:10	0.025	8.848	-0.020	9.633	0.390	-0.035	-0.049	1.732	26.901	26.296	
20.70843	17:00:08	0.031	8.821	-0.023	9.626	0.390	-0.035	-0.048	1.731	26.931	26.358	
20.75008	18:00:07	0.035	8.790	-0.021	9.627	0.390	-0.036	-0.049	1.730	26.842	26.269	
20.79173	19:00:05	0.038	8.770	-0.019	9.624	0.390	-0.036	-0.049	1.729	26.800	26.228	
20.83338	20:00:04	0.040	8.753	-0.018	9.620	0.390	-0.037	-0.049	1.728	26.777	26.188	
20.87503	21:00:03	0.046	8.734	-0.021	9.621	0.390	-0.037	-0.049	1.728	26.774	26.251	
20.91669	22:00:02	0.048	8.716	-0.020	9.615	0.390	-0.037	-0.049	1.727	26.842	26.253	
20.95834	23:00:01	0.056	8.703	-0.016	9.615	0.390	-0.038	-0.049	1.726	26.860	26.254	
20.99999	23:59:59	0.059	8.686	-0.016	9.610	0.390	-0.038	-0.049	1.726	26.792	26.252	
21.04164	00:59:58	0.065	8.670	-0.017	9.607	0.390	-0.039	-0.049	1.725	26.841	26.203	
21.49981	11:59:44	0.108	8.509	-0.008	9.586	0.390	-0.042	-0.048	1.718	26.913	26.275	
22.01005	00:14:28	0.152	8.368	0.000	9.569	0.390	-0.046	-0.048	1.711	26.829	26.338	
23.00969	00:13:57	0.237	8.162	0.018	9.536	0.390	-0.050	-0.048	1.699	26.840	26.202	
24.03052	00:43:57	0.318	8.007	0.040	9.509	0.391	-0.054	-0.049	1.690	26.794	26.402	
25.03798	00:54:41	0.396	7.884	0.055	9.472	0.391	-0.056	-0.051	1.681	26.921	26.300	
26.03763	00:54:11	0.466	7.785	0.072	9.436	0.391	-0.059	-0.052	1.672	26.765	26.307	
27.03727	00:53:40	0.540	7.706	0.085	9.405	0.392	-0.061	-0.054	1.665	26.843	26.303	
28.03692	00:53:10	0.610	7.641	0.105	9.370	0.391	-0.062	-0.056	1.658	26.785	26.409	
29.03656	00:52:39	0.673	7.583	0.118	9.342	0.392	-0.064	-0.058	1.652	26.782	26.324	
30.03620	00:52:08	0.733	7.536	0.136	9.307	0.393	-0.065	-0.059	1.645	26.845	26.354	
31.00020	00:00:17	0.792	7.498	0.149	9.281	0.393	-0.066	-0.061	1.639	26.843	26.418	
32.08314	01:59:43	0.855	7.462	0.164	9.241	0.393	-0.067	-0.062	1.633	26.714	26.387	
33.08279	01:59:13	0.915	7.420	0.181	9.202	0.393	-0.068	-0.063	1.627	26.894	26.338	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
34.06018	01:26:40	0.963	7.386	0.191	9.176	0.393	-0.069	-0.064	1.622	26.744	26.384	
35.05753	01:22:51	1.020	7.347	0.204	9.133	0.394	-0.070	-0.065	1.616	26.869	26.526	
36.05717	01:22:19	1.072	7.321	0.215	9.077	0.394	-0.071	-0.066	1.611	26.877	26.387	
37.05681	01:21:48	1.123	7.283	0.227	9.035	0.394	-0.071	-0.067	1.605	26.842	26.319	
38.05646	01:21:18	1.178	7.243	0.240	9.007	0.394	-0.073	-0.067	1.600	26.898	26.457	
39.06890	01:39:13	1.230	7.204	0.250	8.970	0.394	-0.074	-0.068	1.595	26.663	26.254	
40.06855	01:38:43	1.280	7.168	0.261	8.914	0.394	-0.075	-0.068	1.590	26.693	26.251	
41.06261	01:30:10	1.334	7.152	0.271	8.838	0.394	-0.076	-0.068	1.584	26.821	26.379	
42.07060	01:41:40	1.381	7.125	0.281	8.766	0.394	-0.077	-0.068	1.578	26.686	26.195	
43.07024	01:41:09	1.430	7.111	0.292	8.710	0.394	-0.077	-0.068	1.573	26.646	26.139	
44.06988	01:40:38	1.479	7.087	0.298	8.679	0.394	-0.078	-0.068	1.569	26.814	26.225	
45.00468	00:06:44	1.522	7.063	0.309	8.668	0.393	-0.079	-0.068	1.567	26.826	26.138	
49.04840	01:09:42	1.688	6.981	0.330	8.567	0.391	-0.082	-0.066	1.557	26.660	26.120	
50.04805	01:09:12	1.726	6.965	0.335	8.541	0.391	-0.083	-0.066	1.555	26.630	26.025	
51.04769	01:08:40	1.764	6.950	0.341	8.530	0.390	-0.083	-0.065	1.554	26.584	26.126	-created data
51.44789	10:44:58	1.780	6.941	0.345	8.521	0.390	-0.084	-0.065	1.553	26.768	26.064	file - SOP012
53.44717	10:43:55	1.845	6.909	0.353	8.466	0.388	-0.086	-0.063	1.552	26.764	26.044	
54.44682	10:43:25	1.880	6.898	0.356	8.427	0.388	-0.087	-0.062	1.550	26.668	25.997	
55.47469	11:23:33	1.912	6.880	0.365	8.394	0.387	-0.088	-0.061	1.548	26.588	26.129	
56.46356	11:07:32	1.942	6.872	0.369	8.370	0.386	-0.089	-0.060	1.547	26.577	26.054	
57.29660	07:07:06	1.969	6.874	0.368	8.355	0.386	-0.090	-0.059	1.546	26.547	26.039	
58.97919	23:30:02	2.022	6.852	0.375	8.333	0.385	-0.092	-0.057	1.544	26.699	26.028	
59.47901	11:29:46	2.037	6.842	0.379	8.325	0.385	-0.092	-0.057	1.543	26.571	25.949	
60.47865	11:29:15	2.063	6.832	0.384	8.308	0.385	-0.093	-0.056	1.541	26.513	25.973	
61.53202	12:46:07	2.096	6.828	0.388	8.289	0.384	-0.095	-0.055	1.540	26.550	26.108	
62.47150	11:18:58	2.116	6.822	0.392	8.254	0.384	-0.096	-0.054	1.539	26.653	25.949	
63.55445	13:18:24	2.144	6.810	0.389	8.225	0.383	-0.097	-0.052	1.538	26.621	26.081	
64.55409	13:17:53	2.166	6.805	0.392	8.210	0.382	-0.098	-0.050	1.538	26.523	26.097	
66.52390	12:34:25	2.229	6.795	0.411	8.163	0.381	-0.100	-0.049	1.536	26.501	25.994	
67.52664	12:38:22	2.238	6.777	0.409	8.129	0.381	-0.101	-0.048	1.535	26.544	25.971	
68.54861	13:10:00	2.313	6.793	0.411	7.692	0.378	-0.095	-0.036	1.597	26.492	26.083	
69.38472	09:14:00	2.328	6.770	0.413	7.706	0.380	-0.096	-0.036	1.600	26.495	26.168	
69.38541	09:14:59	2.330	6.773	0.418	7.706	0.380	-0.096	-0.037	1.600	26.494	26.101	
69.38576	09:15:30	2.328	6.773	0.417	7.702	0.380	-0.096	-0.036	1.600	26.659	26.119	
69.38611	09:16:00	2.326	6.769	0.414	7.704	0.380	-0.096	-0.037	1.600	26.641	26.167	-pulse with-
69.38646	09:16:30	1.670	6.512	0.414	7.695	0.381	-0.095	-0.035	1.605	26.478	26.150	drawal test#1
69.38680	09:17:00	1.543	6.461	0.416	7.686	0.381	-0.094	-0.035	1.608	26.640	25.986	(test zone)
69.38715	09:17:30	1.546	6.467	0.417	7.684	0.381	-0.094	-0.035	1.609	26.574	26.165	removed 42 ml
69.38750	09:18:00	1.548	6.465	0.418	7.680	0.381	-0.094	-0.035	1.609	26.490	26.146	fluid
69.38819	09:19:00	1.558	6.468	0.418	7.680	0.381	-0.094	-0.035	1.609	26.635	26.112	
69.38889	09:20:00	1.563	6.474	0.417	7.681	0.381	-0.094	-0.035	1.609	26.549	26.172	
69.39028	09:22:00	1.565	6.476	0.417	7.682	0.381	-0.094	-0.035	1.610	26.528	25.988	
69.39167	09:24:00	1.572	6.476	0.414	7.681	0.381	-0.094	-0.035	1.610	26.658	26.003	
69.39306	09:26:00	1.574	6.479	0.414	7.680	0.381	-0.094	-0.035	1.610	26.498	26.171	
69.39445	09:28:00	1.577	6.482	0.418	7.681	0.381	-0.094	-0.035	1.610	26.489	26.129	
69.39583	09:30:00	1.575	6.479	0.416	7.677	0.381	-0.094	-0.035	1.610	26.659	26.119	
69.39722	09:32:00	1.577	6.481	0.415	7.681	0.381	-0.094	-0.035	1.611	26.637	26.048	
69.39861	09:34:00	1.580	6.481	0.415	7.682	0.381	-0.094	-0.035	1.611	26.554	25.997	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
69.40000	09:36:00	1.580	6.487	0.417	7.681	0.381	-0.094	-0.035	1.611	26.522	26.162	
69.40139	09:38:00	1.584	6.484	0.418	7.676	0.381	-0.094	-0.035	1.611	26.576	26.003	
69.40278	09:40:00	1.585	6.484	0.414	7.680	0.381	-0.094	-0.035	1.611	26.512	26.070	
69.40416	09:41:59	1.584	6.485	0.416	7.680	0.381	-0.094	-0.035	1.611	26.502	26.142	
69.40555	09:44:00	1.586	6.491	0.415	7.677	0.381	-0.094	-0.035	1.611	26.525	26.182	
69.40694	09:46:00	1.587	6.492	0.417	7.679	0.381	-0.094	-0.035	1.611	26.648	26.124	
69.40972	09:50:00	1.591	6.492	0.414	7.680	0.381	-0.094	-0.035	1.611	26.630	25.992	
69.41389	09:56:00	1.592	6.492	0.418	7.679	0.381	-0.094	-0.035	1.611	26.666	26.159	
69.42222	10:08:00	1.598	6.497	0.418	7.679	0.381	-0.094	-0.035	1.611	26.670	25.999	
69.43888	10:31:59	1.606	6.498	0.418	7.676	0.381	-0.094	-0.035	1.611	26.666	26.142	
69.44721	10:43:59	1.605	6.502	0.414	7.675	0.381	-0.094	-0.035	1.611	26.648	25.993	
69.45139	10:50:00	1.610	6.503	0.417	7.677	0.381	-0.094	-0.035	1.611	26.602	26.160	
69.48263	11:34:59	1.613	6.514	0.416	7.675	0.381	-0.094	-0.035	1.611	26.576	25.970	
69.49304	11:49:59	1.619	6.511	0.414	7.676	0.381	-0.094	-0.035	1.611	26.496	26.038	
69.53472	12:50:00	1.622	6.521	0.415	7.677	0.381	-0.093	-0.035	1.611	26.526	26.003	
69.57637	13:49:58	1.626	6.520	0.413	7.675	0.381	-0.093	-0.035	1.611	26.660	26.103	
69.61802	14:49:57	1.632	6.527	0.419	7.673	0.382	-0.093	-0.035	1.611	26.503	26.160	
69.65967	15:49:55	1.634	6.527	0.417	7.676	0.382	-0.093	-0.035	1.611	26.554	26.162	
69.70132	16:49:54	1.639	6.529	0.418	7.675	0.382	-0.094	-0.035	1.611	26.474	26.114	
69.74298	17:49:53	1.644	6.530	0.416	7.673	0.382	-0.093	-0.035	1.611	26.635	26.144	
69.78463	18:49:52	1.646	6.535	0.414	7.672	0.382	-0.093	-0.035	1.611	26.532	26.155	
69.86793	20:49:49	1.649	6.536	0.416	7.670	0.382	-0.094	-0.035	1.611	26.604	26.162	
69.95123	22:49:46	1.655	6.537	0.415	7.669	0.382	-0.093	-0.035	1.611	26.633	25.995	
70.03454	00:49:44	1.655	6.540	0.415	7.666	0.382	-0.094	-0.035	1.611	26.544	26.167	
70.11784	02:49:41	1.661	6.546	0.416	7.663	0.382	-0.094	-0.035	1.611	26.645	25.990	
70.20115	04:49:39	1.666	6.544	0.416	7.662	0.382	-0.094	-0.035	1.611	26.524	26.001	
70.28445	06:49:36	1.669	6.549	0.417	7.658	0.382	-0.094	-0.035	1.611	26.639	26.164	
70.36775	08:49:34	1.669	6.548	0.420	7.656	0.382	-0.094	-0.035	1.611	26.537	26.013	
70.45106	10:49:32	1.673	6.549	0.417	7.651	0.382	-0.094	-0.035	1.611	26.490	26.130	
70.53436	12:49:29	1.681	6.553	0.417	7.652	0.382	-0.094	-0.035	1.611	26.658	25.987	
71.03418	00:49:13	1.698	6.557	0.419	7.640	0.382	-0.094	-0.035	1.611	26.632	26.125	
71.53400	12:48:58	1.713	6.565	0.422	7.624	0.382	-0.095	-0.035	1.611	26.645	25.990	
72.56136	13:28:22	1.747	6.574	0.430	7.603	0.382	-0.096	-0.035	1.610	26.588	25.998	
73.56100	13:27:50	1.777	6.576	0.433	7.574	0.382	-0.096	-0.035	1.610	26.466	26.139	
74.56064	13:27:19	1.807	6.578	0.434	7.548	0.382	-0.097	-0.034	1.610	26.635	25.981	
75.55772	13:23:07	1.840	6.586	0.440	7.537	0.382	-0.097	-0.033	1.609	26.455	26.030	
76.55736	13:22:36	1.862	6.584	0.442	7.510	0.382	-0.098	-0.033	1.610	26.611	26.006	
77.55700	13:22:05	1.884	6.584	0.442	7.483	0.382	-0.099	-0.033	1.610	26.492	26.034	
78.55665	13:21:35	1.912	6.587	0.451	7.464	0.382	-0.100	-0.033	1.610	26.450	26.156	
79.51039	12:14:58	1.935	6.595	0.453	7.440	0.382	-0.101	-0.033	1.610	26.462	26.086	
80.51003	12:14:27	1.956	6.588	0.453	7.409	0.382	-0.101	-0.032	1.609	26.530	26.170	
81.53513	12:50:35	1.984	6.594	0.459	7.370	0.382	-0.102	-0.031	1.608	26.594	25.989	
82.54514	13:05:00	2.010	6.597	0.465	7.333	0.382	-0.102	-0.030	1.606	26.616	26.109	
83.54478	13:04:29	2.030	6.596	0.464	7.298	0.382	-0.104	-0.031	1.606	26.434	26.107	
84.54443	13:03:59	2.048	6.596	0.463	7.269	0.382	-0.104	-0.031	1.605	26.599	25.944	
85.54407	13:03:28	2.071	6.593	0.465	7.252	0.382	-0.105	-0.031	1.605	26.482	25.991	
86.54371	13:02:57	2.091	6.589	0.466	7.236	0.382	-0.105	-0.030	1.604	26.550	26.027	
87.54844	13:09:45	2.112	6.588	0.470	7.219	0.382	-0.105	-0.030	1.603	26.606	26.001	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
88.54808	13:09:14	2.130	6.580	0.471	7.210	0.382	-0.106	-0.030	1.602	26.522	25.884	
89.54773	13:08:44	2.146	6.573	0.474	7.199	0.382	-0.107	-0.030	1.602	26.449	25.925	
90.54737	13:08:13	2.161	6.569	0.471	7.189	0.382	-0.107	-0.029	1.601	26.483	25.861	
91.54702	13:07:43	2.179	6.566	0.478	7.181	0.382	-0.108	-0.030	1.600	26.526	25.871	
92.54666	13:07:11	2.197	6.563	0.476	7.172	0.382	-0.108	-0.029	1.599	26.456	25.867	
93.54893	13:10:28	2.218	6.561	0.479	7.169	0.382	-0.108	-0.029	1.599	26.474	26.016	
94.54858	13:09:57	2.234	6.556	0.481	7.165	0.382	-0.108	-0.029	1.598	26.485	25.896	
95.54822	13:09:26	2.248	6.556	0.480	7.159	0.382	-0.108	-0.030	1.597	26.500	25.911	
96.54786	13:08:55	2.263	6.556	0.480	7.156	0.382	-0.109	-0.030	1.597	26.374	25.900	
97.54751	13:08:25	2.284	6.554	0.480	7.150	0.382	-0.109	-0.030	1.596	26.405	25.947	
98.54715	13:07:54	2.300	6.552	0.484	7.134	0.382	-0.109	-0.029	1.595	26.489	26.047	
99.54680	13:07:24	2.318	6.555	0.483	7.115	0.382	-0.109	-0.029	1.595	26.550	26.108	
101.55549	13:19:54	2.378	6.570	0.480	7.011	0.382	-0.110	-0.029	1.593	26.474	26.032	
102.55514	13:19:24	2.407	6.578	0.481	6.966	0.382	-0.110	-0.029	1.592	26.510	25.953	
103.51869	12:26:55	2.427	6.579	0.482	6.948	0.382	-0.111	-0.029	1.591	26.394	26.034	
104.51833	12:26:24	2.441	6.577	0.482	6.930	0.382	-0.111	-0.029	1.590	26.541	25.985	
105.51798	12:25:53	2.458	6.579	0.484	6.898	0.382	-0.111	-0.029	1.589	26.457	25.966	
106.51762	12:25:22	2.479	6.586	0.487	6.876	0.382	-0.112	-0.029	1.588	26.539	25.852	
107.55199	13:14:52	2.506	6.586	0.485	6.870	0.382	-0.112	-0.029	1.588	26.429	25.922	
108.55164	13:14:22	2.530	6.589	0.485	6.883	0.382	-0.112	-0.029	1.587	26.386	25.846	
109.55128	13:13:51	2.560	6.592	0.482	6.890	0.381	-0.112	-0.029	1.586	26.525	25.870	
110.55092	13:13:19	2.582	6.598	0.485	6.897	0.381	-0.113	-0.029	1.585	26.455	25.800	
111.55057	13:12:49	2.608	6.606	0.483	6.903	0.381	-0.113	-0.029	1.585	26.399	25.859	
112.55021	13:12:18	2.634	6.614	0.483	6.916	0.381	-0.113	-0.028	1.584	26.421	25.864	
113.54986	13:11:48	2.660	6.617	0.483	6.936	0.381	-0.113	-0.029	1.583	26.426	25.885	
114.54716	13:07:55	2.686	6.627	0.483	6.961	0.380	-0.113	-0.028	1.583	26.362	25.936	
115.54681	13:07:24	2.710	6.634	0.483	6.974	0.380	-0.113	-0.028	1.582	26.396	25.954	
116.54645	13:06:53	2.735	6.643	0.483	6.973	0.380	-0.113	-0.028	1.582	26.402	26.010	
117.37949	09:06:28	2.757	6.653	0.484	6.971	0.380	-0.113	-0.029	1.581	26.450	25.975	
117.45625	10:57:00	2.759	6.653	0.484	6.971	0.380	-0.113	-0.028	1.581	26.345	26.067	
117.45694	10:58:00	2.760	6.654	0.484	6.970	0.380	-0.113	-0.028	1.581	26.408	26.031	
117.45764	10:59:00	2.758	6.654	0.485	6.969	0.380	-0.113	-0.028	1.581	26.372	26.045	
117.45839	11:00:05	2.760	6.655	0.484	6.971	0.380	-0.113	-0.028	1.581	26.419	25.977	-pulse with-
117.45874	11:00:35	2.327	6.484	0.484	6.969	0.380	-0.113	-0.028	1.581	26.354	26.010	drawal test#2
117.45908	11:01:05	1.947	6.342	0.484	6.967	0.380	-0.113	-0.028	1.582	26.356	26.012	(test zone)
117.45943	11:01:35	1.544	6.197	0.482	6.963	0.380	-0.112	-0.027	1.583	26.373	26.013	removed 92 ml
117.45972	11:02:00	1.449	6.162	0.484	6.961	0.380	-0.112	-0.027	1.584	26.375	25.999	fluid
117.46007	11:02:30	1.459	6.167	0.483	6.960	0.380	-0.112	-0.027	1.584	26.377	26.033	
117.46041	11:02:59	1.467	6.169	0.484	6.962	0.380	-0.112	-0.027	1.584	26.365	25.972	
117.46076	11:03:30	1.472	6.171	0.484	6.961	0.380	-0.112	-0.027	1.584	26.368	26.008	
117.46111	11:04:00	1.476	6.173	0.483	6.960	0.380	-0.112	-0.027	1.585	26.403	26.011	
117.46180	11:05:00	1.483	6.175	0.484	6.959	0.380	-0.112	-0.027	1.584	26.396	26.052	
117.46250	11:06:00	1.486	6.177	0.483	6.959	0.380	-0.112	-0.027	1.584	26.374	25.982	
117.46319	11:07:00	1.491	6.179	0.485	6.959	0.380	-0.112	-0.027	1.585	26.385	26.009	
117.46389	11:08:00	1.493	6.181	0.484	6.959	0.380	-0.112	-0.027	1.585	26.382	26.038	
117.46458	11:09:00	1.495	6.183	0.483	6.957	0.380	-0.112	-0.027	1.585	26.377	25.984	
117.46528	11:10:00	1.498	6.183	0.483	6.958	0.380	-0.112	-0.027	1.585	26.404	26.011	
117.46597	11:11:00	1.500	6.184	0.483	6.958	0.380	-0.112	-0.027	1.585	26.351	26.007	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
117.46666	11:11:59	1.501	6.186	0.482	6.958	0.380	-0.112	-0.027	1.585	26.329	26.018	
117.46736	11:13:00	1.503	6.186	0.482	6.957	0.380	-0.112	-0.027	1.585	26.390	25.965	
117.46805	11:14:00	1.503	6.186	0.483	6.957	0.380	-0.112	-0.027	1.585	26.337	26.026	
117.46875	11:15:00	1.506	6.188	0.484	6.957	0.380	-0.112	-0.027	1.585	26.414	26.038	
117.46944	11:16:00	1.507	6.189	0.483	6.957	0.380	-0.112	-0.027	1.585	26.379	25.970	
117.47013	11:16:59	1.508	6.189	0.483	6.957	0.380	-0.112	-0.027	1.585	26.410	26.050	
117.47083	11:18:00	1.509	6.189	0.484	6.958	0.380	-0.112	-0.027	1.585	26.407	26.014	
117.47152	11:18:59	1.511	6.190	0.484	6.957	0.380	-0.112	-0.027	1.585	26.407	26.014	
117.47222	11:20:00	1.511	6.191	0.484	6.957	0.380	-0.112	-0.027	1.585	26.456	26.014	
117.47361	11:22:00	1.513	6.192	0.483	6.956	0.380	-0.112	-0.027	1.585	26.453	26.011	
117.47499	11:23:59	1.515	6.193	0.483	6.954	0.380	-0.112	-0.027	1.585	26.403	26.027	
117.47638	11:25:59	1.516	6.194	0.483	6.955	0.380	-0.112	-0.027	1.586	26.405	25.979	
117.47777	11:27:59	1.517	6.195	0.482	6.955	0.380	-0.112	-0.027	1.586	26.371	25.995	
117.47916	11:29:59	1.519	6.196	0.484	6.955	0.380	-0.112	-0.027	1.586	26.388	25.995	
117.48055	11:32:00	1.520	6.196	0.484	6.955	0.380	-0.112	-0.027	1.585	26.437	26.060	
117.48194	11:34:00	1.520	6.197	0.484	6.955	0.380	-0.112	-0.027	1.586	26.404	26.011	
117.48333	11:36:00	1.522	6.197	0.484	6.955	0.380	-0.112	-0.027	1.586	26.384	25.959	
117.48750	11:42:00	1.525	6.200	0.483	6.955	0.380	-0.112	-0.027	1.586	26.366	25.957	
117.49166	11:47:59	1.527	6.201	0.484	6.954	0.380	-0.112	-0.027	1.586	26.443	26.001	
117.49583	11:54:00	1.529	6.203	0.482	6.954	0.380	-0.112	-0.027	1.586	26.405	26.044	
117.49999	11:59:59	1.531	6.204	0.484	6.954	0.380	-0.112	-0.027	1.586	26.334	26.007	
117.50416	12:05:59	1.533	6.206	0.484	6.954	0.380	-0.112	-0.027	1.586	26.389	25.996	
117.51249	12:17:59	1.536	6.208	0.485	6.953	0.380	-0.112	-0.027	1.586	26.416	26.056	
117.52083	12:30:00	1.538	6.210	0.485	6.952	0.380	-0.112	-0.027	1.586	26.382	25.989	
117.54166	12:59:59	1.543	6.216	0.483	6.951	0.380	-0.112	-0.027	1.586	26.354	25.929	
117.56249	13:29:59	1.548	6.217	0.484	6.951	0.380	-0.112	-0.027	1.587	26.350	25.990	
117.58331	13:59:58	1.551	6.222	0.483	6.949	0.380	-0.112	-0.027	1.587	26.372	25.996	
117.62496	14:59:57	1.556	6.227	0.484	6.950	0.380	-0.112	-0.027	1.587	26.386	26.009	
117.66661	15:59:55	1.562	6.232	0.486	6.949	0.380	-0.112	-0.027	1.587	26.353	25.993	
117.70827	16:59:55	1.566	6.237	0.485	6.949	0.380	-0.112	-0.027	1.587	26.396	25.970	
117.74992	17:59:53	1.570	6.240	0.484	6.948	0.380	-0.112	-0.027	1.587	26.307	25.963	
117.79157	18:59:52	1.573	6.244	0.484	6.946	0.380	-0.112	-0.027	1.587	26.414	26.054	
117.83322	19:59:50	1.576	6.246	0.485	6.948	0.380	-0.112	-0.027	1.587	26.397	26.070	
117.87487	20:59:49	1.581	6.249	0.484	6.945	0.380	-0.111	-0.027	1.587	26.375	25.966	
117.91653	21:59:48	1.582	6.250	0.484	6.945	0.380	-0.111	-0.027	1.587	26.392	26.048	
117.95818	22:59:47	1.586	6.254	0.484	6.945	0.380	-0.111	-0.027	1.587	26.456	26.014	
117.99983	23:59:45	1.587	6.256	0.483	6.943	0.380	-0.111	-0.027	1.587	26.377	26.033	
118.04148	00:59:44	1.589	6.259	0.483	6.943	0.380	-0.111	-0.027	1.589	26.505	26.129	
118.12479	02:59:42	1.594	6.263	0.484	6.942	0.380	-0.111	-0.027	1.592	26.520	26.177	
118.20809	04:59:39	1.600	6.268	0.483	6.942	0.380	-0.111	-0.027	1.593	26.515	26.138	
118.29139	06:59:36	1.605	6.271	0.482	6.940	0.380	-0.111	-0.027	1.593	26.505	26.161	
118.37470	08:59:34	1.610	6.274	0.484	6.939	0.380	-0.111	-0.027	1.593	26.461	26.133	
118.39861	09:34:00	1.611	6.275	0.484	6.939	0.380	-0.111	-0.027	1.589	26.374	26.014	
118.48191	11:33:57	1.617	6.279	0.485	6.938	0.380	-0.111	-0.027	1.587	26.358	25.982	
118.60628	14:33:03	1.623	6.285	0.484	6.937	0.380	-0.111	-0.027	1.587	26.312	26.017	
118.77289	18:32:58	1.632	6.292	0.483	6.936	0.380	-0.111	-0.027	1.588	26.487	26.111	
118.93949	22:32:52	1.640	6.298	0.484	6.935	0.380	-0.111	-0.027	1.592	26.523	26.147	
119.02280	00:32:50	1.646	6.300	0.483	6.933	0.380	-0.111	-0.027	1.592	26.486	26.126	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
119.52262	12:32:34	1.669	6.314	0.485	6.924	0.380	-0.111	-0.027	1.587	26.350	26.039	
120.52226	12:32:03	1.715	6.342	0.486	6.909	0.380	-0.111	-0.027	1.587	26.392	26.064	
121.57288	13:44:57	1.758	6.364	0.488	6.881	0.380	-0.111	-0.027	1.587	26.447	26.120	
122.57252	13:44:26	1.801	6.392	0.488	6.850	0.380	-0.110	-0.027	1.587	26.367	26.072	
123.57216	13:43:55	1.840	6.410	0.486	6.821	0.380	-0.110	-0.028	1.590	26.501	26.190	
124.57181	13:43:24	1.880	6.427	0.489	6.814	0.380	-0.110	-0.027	1.587	26.410	26.083	
125.57145	13:42:53	1.916	6.438	0.488	6.808	0.380	-0.110	-0.028	1.587	26.404	26.060	
126.57110	13:42:23	1.953	6.453	0.488	6.809	0.380	-0.110	-0.027	1.587	26.420	26.092	
127.57074	13:41:52	1.988	6.469	0.489	6.811	0.380	-0.110	-0.027	1.587	26.394	26.066	
128.52494	12:35:55	2.022	6.484	0.489	6.829	0.380	-0.110	-0.027	1.587	26.384	26.073	
129.52458	12:35:24	2.055	6.496	0.489	6.857	0.380	-0.110	-0.027	1.587	26.364	26.102	
130.52423	12:34:53	2.087	6.506	0.489	6.880	0.380	-0.110	-0.027	1.587	26.408	26.163	
131.52387	12:34:22	2.120	6.522	0.490	6.883	0.380	-0.111	-0.028	1.587	26.423	26.161	
132.53397	12:48:55	2.152	6.539	0.490	6.874	0.380	-0.111	-0.027	1.587	26.401	26.221	
133.53361	12:48:24	2.180	6.552	0.490	6.857	0.380	-0.111	-0.028	1.587	26.433	26.236	
134.53325	12:47:53	2.211	6.566	0.491	6.843	0.380	-0.110	-0.028	1.587	26.420	26.240	
135.53478	12:50:05	2.240	6.580	0.492	6.831	0.380	-0.111	-0.028	1.587	26.408	26.260	
136.56840	13:38:30	2.269	6.594	0.493	6.826	0.380	-0.111	-0.028	1.587	26.429	26.282	
137.56804	13:37:59	2.294	6.604	0.492	6.823	0.380	-0.111	-0.028	1.587	26.429	26.282	
138.56768	13:37:28	2.319	6.616	0.494	6.814	0.380	-0.111	-0.028	1.587	26.426	26.295	
139.56733	13:36:57	2.342	6.631	0.494	6.804	0.380	-0.111	-0.028	1.587	26.433	26.302	
140.56697	13:36:26	2.362	6.640	0.495	6.800	0.380	-0.111	-0.028	1.587	26.445	26.314	
141.56662	13:35:56	2.388	6.656	0.496	6.813	0.380	-0.111	-0.028	1.587	26.428	26.313	
142.56626	13:35:25	2.413	6.669	0.496	6.839	0.380	-0.111	-0.028	1.587	26.431	26.333	
143.56590	13:34:54	2.437	6.681	0.496	6.875	0.379	-0.111	-0.028	1.587	26.438	26.324	
143.58958	14:09:00	2.439	6.683	0.497	6.876	0.379	-0.111	-0.028	1.587	26.435	26.353	-created data
144.00610	00:08:47	2.448	6.688	0.496	6.891	0.379	-0.112	-0.028	1.587	26.431	26.333	file - SOP013
145.00574	00:08:16	2.472	6.701	0.495	6.922	0.379	-0.112	-0.028	1.586	26.429	26.396	
146.00572	00:08:14	2.500	6.718	0.498	6.943	0.379	-0.112	-0.028	1.586	26.430	26.462	
147.08866	02:07:40	2.521	6.729	0.495	6.967	0.379	-0.112	-0.028	1.585	26.468	26.517	
148.00500	00:07:12	2.542	6.746	0.494	6.978	0.379	-0.112	-0.028	1.585	26.463	26.561	
149.00465	00:06:42	2.563	6.761	0.494	6.980	0.379	-0.112	-0.028	1.585	26.471	26.585	
150.00429	00:06:11	2.586	6.780	0.495	6.979	0.379	-0.112	-0.028	1.584	26.472	26.652	
151.00394	00:05:40	2.607	6.795	0.495	6.966	0.378	-0.112	-0.028	1.584	26.476	26.673	
152.00358	00:05:09	2.627	6.813	0.495	6.951	0.378	-0.112	-0.028	1.584	26.500	26.713	
153.00322	00:04:38	2.646	6.832	0.496	6.939	0.378	-0.112	-0.028	1.583	26.514	26.743	
154.07265	01:44:37	2.667	6.847	0.496	6.930	0.378	-0.112	-0.028	1.583	26.544	26.773	
155.07229	01:44:06	2.685	6.861	0.492	6.918	0.378	-0.112	-0.028	1.582	26.545	26.807	
156.07194	01:43:36	2.701	6.872	0.478	6.900	0.378	-0.112	-0.028	1.582	26.572	26.817	
157.08310	01:59:40	2.720	6.885	0.471	6.881	0.378	-0.112	-0.028	1.581	26.572	26.850	
158.08274	01:59:09	2.738	6.898	0.466	6.865	0.378	-0.112	-0.028	1.581	26.594	26.839	
159.08238	01:58:38	2.754	6.911	0.463	6.854	0.378	-0.112	-0.028	1.581	26.586	26.864	
160.08203	01:58:07	2.772	6.922	0.464	6.850	0.378	-0.112	-0.028	1.580	26.565	26.875	
161.08167	01:57:36	2.788	6.933	0.464	6.837	0.378	-0.112	-0.028	1.579	26.603	26.897	
162.08132	01:57:06	2.803	6.946	0.463	6.823	0.378	-0.112	-0.028	1.579	26.622	26.916	
163.08096	01:56:35	2.821	6.960	0.462	6.804	0.378	-0.112	-0.028	1.578	26.640	26.902	
164.02684	00:38:39	2.835	6.971	0.463	6.787	0.378	-0.112	-0.028	1.577	26.650	26.912	
165.02486	00:35:48	2.850	6.980	0.464	6.774	0.378	-0.112	-0.028	1.576	26.669	26.931	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
165.31908	07:39:29	2.854	6.981	0.463	6.770	0.378	-0.112	-0.028	1.578	26.602	26.913	
165.32502	07:48:02	2.854	6.982	0.464	6.771	0.378	-0.112	-0.028	1.577	26.606	26.933	
165.32536	07:48:31	2.855	6.981	0.464	6.770	0.378	-0.112	-0.028	1.577	26.597	26.908	
165.32571	07:49:01	2.854	6.982	0.463	6.773	0.378	-0.112	-0.028	1.577	26.600	26.911	
165.32606	07:49:32	2.854	6.981	0.463	6.772	0.378	-0.112	-0.028	1.577	26.587	26.898	
165.32640	07:50:01	2.855	6.982	0.463	6.772	0.378	-0.112	-0.028	1.577	26.673	26.951	
165.32675	07:50:31	2.855	6.984	0.464	6.771	0.378	-0.112	-0.028	1.577	26.607	26.934	
165.32710	07:51:01	2.852	6.983	0.465	6.771	0.378	-0.112	-0.028	1.577	26.627	26.905	
165.32779	07:52:01	2.854	6.984	0.461	6.772	0.378	-0.112	-0.028	1.577	26.615	26.893	
165.32849	07:53:02	2.855	6.982	0.459	6.773	0.378	-0.112	-0.028	1.577	26.540	26.883	
165.32918	07:54:01	2.854	6.983	0.458	6.772	0.378	-0.112	-0.028	1.577	26.598	26.893	
165.32953	07:54:31	2.852	6.979	0.444	6.769	0.378	-0.112	-0.028	1.577	26.621	26.867	
165.32988	07:55:02	2.852	6.970	0.365	6.762	0.378	-0.112	-0.028	1.577	26.628	26.743	-pulse with-
165.33022	07:55:31	2.853	6.963	0.352	6.761	0.378	-0.112	-0.028	1.577	26.618	26.864	drawal test#1
165.33057	07:56:01	2.853	6.960	0.320	6.756	0.378	-0.112	-0.028	1.577	26.659	26.823	(guard zone)
165.33092	07:56:31	2.852	6.951	0.269	6.754	0.378	-0.112	-0.028	1.577	26.635	26.733	removed 7.3
165.33126	07:57:01	2.852	6.941	0.226	6.750	0.378	-0.112	-0.028	1.577	26.631	26.761	ml fluid
165.33161	07:57:31	2.850	6.941	0.229	6.749	0.378	-0.112	-0.028	1.577	26.622	26.802	
165.33196	07:58:01	2.852	6.941	0.229	6.747	0.378	-0.112	-0.028	1.577	26.633	26.845	
165.33265	07:59:01	2.850	6.940	0.230	6.747	0.378	-0.112	-0.028	1.577	26.589	26.851	
165.33335	08:00:01	2.852	6.939	0.230	6.748	0.378	-0.112	-0.028	1.577	26.612	26.923	
165.33403	08:01:00	2.851	6.939	0.232	6.748	0.378	-0.112	-0.028	1.577	26.608	26.886	
165.33472	08:02:00	2.851	6.940	0.231	6.747	0.378	-0.112	-0.028	1.577	26.562	26.873	
165.33541	08:02:59	2.852	6.940	0.229	6.749	0.378	-0.112	-0.028	1.577	26.606	26.884	
165.33611	08:04:00	2.853	6.938	0.229	6.746	0.378	-0.112	-0.028	1.577	26.634	26.879	
165.33680	08:05:00	2.863	6.939	0.231	6.746	0.378	-0.112	-0.028	1.577	26.617	26.879	
165.33750	08:06:00	2.852	6.938	0.229	6.749	0.378	-0.112	-0.028	1.577	26.617	26.879	
165.33819	08:07:00	2.853	6.937	0.231	6.747	0.378	-0.112	-0.028	1.577	26.619	26.930	
165.33888	08:07:59	2.850	6.940	0.231	6.748	0.378	-0.112	-0.028	1.577	26.575	26.885	
165.33958	08:09:00	2.851	6.938	0.230	6.749	0.378	-0.112	-0.028	1.577	26.568	26.878	
165.34027	08:09:59	2.851	6.937	0.232	6.747	0.378	-0.112	-0.028	1.577	26.660	26.938	
165.34166	08:11:59	2.851	6.938	0.233	6.750	0.378	-0.112	-0.028	1.577	26.605	26.899	
165.34305	08:14:00	2.852	6.940	0.232	6.749	0.378	-0.112	-0.028	1.577	26.642	26.871	
165.34444	08:16:00	2.851	6.937	0.232	6.746	0.378	-0.112	-0.028	1.577	26.657	26.935	
165.34583	08:18:00	2.853	6.937	0.232	6.747	0.378	-0.112	-0.028	1.577	26.604	26.898	
165.34721	08:19:59	2.852	6.937	0.232	6.746	0.378	-0.112	-0.028	1.577	26.596	26.907	
165.34860	08:21:59	2.851	6.939	0.232	6.747	0.378	-0.112	-0.028	1.577	26.687	26.981	
165.34999	08:23:59	2.852	6.937	0.232	6.747	0.378	-0.112	-0.028	1.577	26.617	26.928	
165.35138	08:25:59	2.851	6.937	0.233	6.747	0.378	-0.112	-0.028	1.577	26.678	26.939	
165.35277	08:27:59	2.852	6.938	0.232	6.747	0.378	-0.112	-0.028	1.577	26.657	26.935	
165.35416	08:29:59	2.851	6.938	0.232	6.747	0.378	-0.112	-0.028	1.577	26.735	27.030	
165.37222	08:56:00	2.852	6.937	0.235	6.747	0.378	-0.112	-0.028	1.578	26.761	26.958	
165.39721	09:31:59	2.852	6.937	0.235	6.747	0.378	-0.112	-0.028	1.577	26.615	26.942	
165.41804	10:01:59	2.852	6.939	0.234	6.748	0.378	-0.112	-0.028	1.576	26.647	26.942	
165.43886	10:31:58	2.855	6.937	0.232	6.747	0.378	-0.112	-0.028	1.576	26.678	26.956	
165.45969	11:01:57	2.855	6.936	0.235	6.747	0.378	-0.112	-0.028	1.576	26.677	26.955	
165.50134	12:01:56	2.853	6.939	0.234	6.745	0.378	-0.112	-0.028	1.576	26.677	26.972	
165.58888	14:07:59	2.856	6.940	0.236	6.746	0.378	-0.112	-0.028	1.576	26.700	26.994	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
165.67218	16:07:56	2.857	6.940	0.236	6.744	0.378	-0.112	-0.028	1.576	26.711	26.957	
165.75549	18:07:54	2.857	6.943	0.237	6.746	0.378	-0.112	-0.028	1.576	26.678	26.940	
165.83879	20:07:51	2.860	6.941	0.238	6.744	0.378	-0.112	-0.028	1.576	26.718	26.947	
165.92209	22:07:49	2.861	6.940	0.239	6.743	0.378	-0.112	-0.028	1.576	26.660	26.922	
166.00540	00:07:47	2.864	6.942	0.239	6.742	0.378	-0.112	-0.028	1.576	26.724	26.953	
166.25531	06:07:39	2.863	6.943	0.239	6.731	0.378	-0.112	-0.028	1.582	26.784	27.029	
166.50522	12:07:31	2.870	6.951	0.241	6.732	0.378	-0.112	-0.028	1.576	26.736	26.965	
167.05190	01:14:44	2.879	6.958	0.246	6.722	0.378	-0.112	-0.028	1.576	26.697	26.958	
167.51175	12:16:55	2.889	6.967	0.249	6.723	0.378	-0.112	-0.028	1.576	26.682	26.944	
168.01157	00:16:40	2.896	6.970	0.253	6.717	0.378	-0.112	-0.028	1.575	26.699	26.928	
169.01121	00:16:09	2.911	6.983	0.260	6.726	0.378	-0.112	-0.028	1.575	26.696	26.991	
170.01086	00:15:38	2.927	6.993	0.263	6.740	0.378	-0.112	-0.028	1.575	26.723	27.017	
171.00818	00:11:47	2.943	7.005	0.270	6.756	0.378	-0.112	-0.028	1.575	26.625	26.952	
172.00782	00:11:16	2.956	7.019	0.277	6.778	0.378	-0.112	-0.028	1.575	26.697	27.056	
173.00747	00:10:45	2.970	7.030	0.284	6.801	0.378	-0.112	-0.029	1.574	26.706	27.001	
174.07970	01:54:46	2.983	7.040	0.288	6.815	0.378	-0.112	-0.029	1.574	26.741	27.068	
175.04143	00:59:40	2.996	7.056	0.295	6.814	0.378	-0.112	-0.029	1.574	26.735	27.128	
176.04107	00:59:08	3.010	7.067	0.297	6.806	0.378	-0.112	-0.029	1.574	26.745	27.203	
177.04072	00:58:38	3.022	7.081	0.304	6.787	0.378	-0.112	-0.029	1.576	26.849	27.307	
177.91375	21:55:48	3.041	7.098	0.310	6.775	0.378	-0.112	-0.029	1.573	26.735	27.209	
178.91339	21:55:17	3.051	7.113	0.315	6.777	0.378	-0.112	-0.029	1.573	26.788	27.230	
179.91304	21:54:47	3.065	7.124	0.318	6.796	0.377	-0.111	-0.029	1.572	26.782	27.305	
180.91268	21:54:16	3.079	7.139	0.326	6.806	0.377	-0.111	-0.029	1.572	26.758	27.249	
181.91233	21:53:45	3.090	7.151	0.329	6.817	0.377	-0.111	-0.029	1.571	26.801	27.291	
182.91197	21:53:14	3.103	7.158	0.334	6.810	0.377	-0.111	-0.029	1.571	26.885	27.343	
183.91161	21:52:43	3.115	7.177	0.338	6.787	0.377	-0.111	-0.030	1.570	26.805	27.377	
184.91126	21:52:13	3.129	7.194	0.344	6.764	0.377	-0.111	-0.030	1.570	26.840	27.363	
185.91090	21:51:42	3.140	7.207	0.346	6.760	0.377	-0.111	-0.030	1.569	26.917	27.358	
186.97413	23:22:45	3.155	7.218	0.351	6.759	0.377	-0.111	-0.030	1.568	26.944	27.352	
187.97378	23:22:15	3.166	7.230	0.357	6.763	0.376	-0.110	-0.030	1.568	26.823	27.510	
188.97342	23:21:43	3.183	7.242	0.361	6.754	0.376	-0.110	-0.030	1.567	26.847	27.533	
189.97306	23:21:12	3.197	7.256	0.368	6.745	0.376	-0.110	-0.030	1.566	26.865	27.503	
190.97271	23:20:42	3.209	7.269	0.371	6.727	0.376	-0.110	-0.030	1.566	26.994	27.484	
191.88385	21:12:45	3.219	7.289	0.376	6.709	0.376	-0.110	-0.030	1.565	26.929	27.485	
192.88349	21:12:14	3.233	7.295	0.379	6.689	0.376	-0.110	-0.030	1.564	26.976	27.532	
193.88314	21:11:43	3.245	7.311	0.385	6.681	0.376	-0.110	-0.030	1.563	26.879	27.582	
194.88278	21:11:12	3.255	7.320	0.388	6.670	0.375	-0.110	-0.030	1.562	26.939	27.495	
195.88242	21:10:41	3.271	7.328	0.393	6.671	0.375	-0.110	-0.030	1.562	26.948	27.553	
196.88207	21:10:11	3.279	7.339	0.395	6.668	0.375	-0.110	-0.030	1.561	26.915	27.601	
197.88171	21:09:40	3.289	7.349	0.399	6.655	0.375	-0.110	-0.030	1.560	26.920	27.557	
198.90260	21:39:45	3.304	7.368	0.405	6.651	0.375	-0.110	-0.030	1.559	26.930	27.601	
199.90224	21:39:14	3.314	7.377	0.405	6.648	0.375	-0.110	-0.031	1.558	27.050	27.606	
200.87770	21:03:53	3.328	7.387	0.411	6.649	0.374	-0.110	-0.030	1.557	27.099	27.621	
201.87734	21:03:22	3.338	7.400	0.416	6.645	0.374	-0.109	-0.030	1.556	27.112	27.619	
202.87699	21:02:52	3.351	7.407	0.416	6.638	0.374	-0.109	-0.030	1.555	27.121	27.643	
203.87663	21:02:21	3.365	7.419	0.419	6.632	0.374	-0.109	-0.030	1.554	27.019	27.721	
204.87628	21:01:51	3.375	7.427	0.422	6.619	0.374	-0.109	-0.031	1.554	27.081	27.685	
205.87592	21:01:19	3.386	7.440	0.429	6.606	0.374	-0.109	-0.031	1.553	26.999	27.751	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
206.87556	21:00:48	3.399	7.453	0.429	6.590	0.374	-0.109	-0.030	1.552	27.114	27.752	
207.86510	20:45:45	3.410	7.460	0.435	6.576	0.374	-0.109	-0.031	1.551	27.155	27.841	
208.86474	20:45:14	3.422	7.470	0.433	6.562	0.373	-0.109	-0.030	1.551	27.068	27.738	
209.86439	20:44:43	3.429	7.482	0.437	6.549	0.373	-0.109	-0.030	1.550	27.124	27.793	
210.86403	20:44:12	3.439	7.492	0.434	6.537	0.373	-0.109	-0.030	1.550	27.230	27.818	
211.86368	20:43:42	3.451	7.497	0.436	6.521	0.373	-0.109	-0.030	1.549	27.210	27.880	
212.91702	22:00:31	3.459	7.508	0.435	6.514	0.373	-0.109	-0.030	1.548	27.253	27.759	
213.95716	22:58:19	3.474	7.514	0.435	6.507	0.373	-0.109	-0.030	1.546	27.220	27.922	
214.95680	22:57:48	3.481	7.524	0.439	6.513	0.373	-0.109	-0.030	1.546	27.177	27.766	
215.95645	22:57:17	3.492	7.531	0.439	6.516	0.373	-0.109	-0.030	1.545	27.241	27.796	
216.95609	22:56:46	3.502	7.537	0.437	6.520	0.373	-0.109	-0.030	1.545	27.146	27.849	
217.95574	22:56:16	3.508	7.550	0.438	6.528	0.373	-0.109	-0.031	1.544	27.137	27.856	
218.95538	22:55:45	3.516	7.556	0.439	6.528	0.373	-0.109	-0.030	1.543	27.211	28.011	
219.95502	22:55:14	3.525	7.562	0.438	6.513	0.373	-0.109	-0.030	1.543	27.189	27.891	
220.95467	22:54:43	3.533	7.573	0.438	6.495	0.373	-0.109	-0.030	1.542	27.269	28.004	
221.94496	22:40:45	3.544	7.584	0.438	6.465	0.373	-0.109	-0.031	1.542	27.287	28.005	
222.86093	20:39:44	3.556	7.588	0.435	6.452	0.373	-0.109	-0.030	1.541	27.284	28.085	
223.86057	20:39:13	3.564	7.596	0.440	6.433	0.373	-0.109	-0.030	1.540	27.290	28.074	
224.86022	20:38:43	3.570	7.603	0.435	6.416	0.373	-0.109	-0.031	1.539	27.407	28.011	
225.85986	20:38:12	3.582	7.611	0.438	6.398	0.373	-0.109	-0.030	1.539	27.419	27.925	
226.85951	20:37:42	3.585	7.617	0.439	6.381	0.373	-0.110	-0.031	1.538	27.409	27.932	
227.85915	20:37:11	3.597	7.626	0.436	6.368	0.372	-0.110	-0.030	1.537	27.321	27.990	
228.91649	21:59:45	3.602	7.632	0.438	6.350	0.372	-0.110	-0.030	1.536	27.403	27.909	
229.91989	22:04:38	3.608	7.637	0.440	6.336	0.372	-0.110	-0.031	1.535	27.373	28.059	
230.37844	09:04:57	3.612	7.640	0.441	6.330	0.372	-0.109	-0.030	1.535	27.475	27.948	
230.37913	09:05:57	3.614	7.641	0.437	6.332	0.372	-0.109	-0.031	1.535	27.442	27.997	
230.37983	09:06:57	3.611	7.639	0.440	6.334	0.372	-0.109	-0.030	1.534	27.478	27.952	
230.38052	09:07:57	3.508	7.606	0.441	6.331	0.372	-0.109	-0.031	1.534	27.382	28.051	-collected
230.38121	09:08:57	3.503	7.603	0.438	6.330	0.372	-0.109	-0.030	1.535	27.465	27.955	gas sample
230.38191	09:09:57	1.606	6.989	0.437	6.329	0.373	-0.108	-0.029	1.538	27.291	27.961	(test
230.38260	09:10:57	1.646	6.995	0.437	6.324	0.373	-0.108	-0.030	1.538	27.263	27.949	interval)
230.38330	09:11:57	1.536	6.968	0.437	6.327	0.373	-0.108	-0.029	1.538	27.450	27.956	
230.38399	09:12:57	1.359	6.918	0.441	6.325	0.373	-0.108	-0.029	1.539	27.326	27.946	
230.38469	09:13:57	1.374	6.922	0.438	6.322	0.373	-0.108	-0.029	1.539	27.320	27.973	
230.38538	09:14:57	1.380	6.924	0.437	6.322	0.373	-0.108	-0.029	1.539	27.379	27.950	
230.38607	09:15:56	1.382	6.926	0.440	6.322	0.373	-0.108	-0.029	1.539	27.423	28.109	
230.38677	09:16:57	1.390	6.928	0.437	6.321	0.373	-0.108	-0.029	1.540	27.384	27.955	
230.38746	09:17:57	1.393	6.931	0.437	6.322	0.373	-0.108	-0.029	1.539	27.297	28.000	
230.38816	09:18:57	1.395	6.933	0.437	6.322	0.373	-0.108	-0.029	1.540	27.455	28.076	
230.38885	09:19:57	1.396	6.934	0.439	6.324	0.373	-0.108	-0.029	1.540	27.319	28.037	
230.38955	09:20:57	1.398	6.933	0.437	6.322	0.373	-0.108	-0.029	1.540	27.354	27.942	
230.39024	09:21:57	1.401	6.935	0.438	6.324	0.373	-0.108	-0.029	1.540	27.391	27.946	
230.39163	09:23:57	1.404	6.934	0.437	6.320	0.373	-0.108	-0.029	1.540	27.313	27.967	
230.39302	09:25:57	1.406	6.933	0.437	6.321	0.373	-0.108	-0.029	1.540	27.463	27.936	
230.39440	09:27:56	1.407	6.937	0.438	6.323	0.373	-0.108	-0.029	1.540	27.384	28.087	
230.39579	09:29:56	1.410	6.935	0.437	6.320	0.373	-0.108	-0.029	1.540	27.321	27.975	
230.39718	09:31:56	1.407	6.936	0.441	6.323	0.373	-0.108	-0.029	1.540	27.303	28.070	
230.39857	09:33:56	1.409	6.935	0.439	6.320	0.373	-0.108	-0.029	1.540	27.324	28.059	

TABLE C7 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE SOP01,
MULTIPACKER TEST TOOL #3

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-04) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
230.39996	09:35:57	1.414	6.939	0.437	6.320	0.373	-0.108	-0.029	1.540	27.294	28.110	
230.40135	09:37:57	1.415	6.938	0.437	6.319	0.373	-0.108	-0.029	1.540	27.459	27.981	
230.40273	09:39:56	1.415	6.940	0.438	6.319	0.373	-0.108	-0.029	1.540	27.310	28.078	
230.40412	09:41:56	1.413	6.937	0.437	6.319	0.373	-0.107	-0.029	1.540	27.446	28.034	
230.40551	09:43:56	1.414	6.937	0.441	6.321	0.373	-0.108	-0.029	1.540	27.422	28.108	
230.40690	09:45:56	1.419	6.939	0.437	6.320	0.373	-0.108	-0.029	1.540	27.347	27.952	
230.40829	09:47:56	1.417	6.941	0.440	6.323	0.373	-0.108	-0.029	1.541	27.284	27.937	
230.40968	09:49:56	1.415	6.940	0.441	6.320	0.373	-0.108	-0.029	1.541	27.308	28.092	
230.41107	09:51:56	1.416	6.939	0.439	6.319	0.373	-0.108	-0.029	1.541	27.461	27.918	
230.41245	09:53:56	1.420	6.943	0.438	6.323	0.373	-0.108	-0.029	1.541	27.335	28.053	
230.41384	09:55:56	1.417	6.942	0.441	6.321	0.373	-0.108	-0.029	1.541	27.447	28.035	
230.41523	09:57:56	1.418	6.940	0.440	6.319	0.373	-0.107	-0.029	1.541	27.445	28.098	
230.41662	09:59:56	1.418	6.942	0.441	6.321	0.373	-0.107	-0.029	1.541	27.279	28.046	
230.43744	10:29:55	1.426	6.944	0.440	6.319	0.373	-0.107	-0.029	1.541	27.332	27.920	
230.45827	10:59:55	1.427	6.948	0.439	6.318	0.373	-0.107	-0.029	1.541	27.457	27.947	
230.49790	11:56:59	1.437	6.956	0.437	6.318	0.373	-0.107	-0.029	1.542	27.446	28.051	
230.58121	13:56:57	1.445	6.961	0.437	6.317	0.373	-0.107	-0.029	1.542	27.445	28.082	
230.62707	15:02:59	1.449	6.963	0.437	6.317	0.373	-0.107	-0.029	1.542	27.405	27.928	
230.71037	17:02:56	1.450	6.967	0.440	6.317	0.373	-0.107	-0.029	1.543	27.315	28.001	
230.79367	19:02:53	1.460	6.972	0.437	6.314	0.373	-0.107	-0.029	1.543	27.460	28.081	
230.87698	21:02:51	1.461	6.976	0.441	6.316	0.374	-0.106	-0.029	1.543	27.308	27.962	
230.96028	23:02:48	1.465	6.978	0.441	6.311	0.373	-0.107	-0.029	1.543	27.422	28.091	
231.04358	01:02:45	1.469	6.985	0.441	6.314	0.373	-0.107	-0.029	1.543	27.326	28.077	
231.12689	03:02:43	1.476	6.989	0.438	6.309	0.374	-0.106	-0.029	1.543	27.372	27.927	
231.21019	05:02:40	1.476	6.988	0.440	6.308	0.374	-0.106	-0.029	1.543	27.460	28.048	
231.29350	07:02:38	1.485	6.994	0.436	6.307	0.374	-0.106	-0.029	1.543	27.313	27.917	
231.37680	09:02:36	1.484	6.994	0.440	6.307	0.374	-0.106	-0.029	1.543	27.472	27.995	
231.46010	11:02:33	1.488	6.999	0.441	6.308	0.374	-0.106	-0.029	1.543	27.348	28.017	
232.00158	00:02:17	1.513	7.014	0.438	6.299	0.374	-0.106	-0.029	1.543	27.466	27.972	
232.50140	12:02:01	1.532	7.028	0.440	6.293	0.374	-0.106	-0.029	1.543	27.430	27.953	
233.50758	12:10:55	1.563	7.052	0.444	6.287	0.374	-0.105	-0.029	1.543	27.499	28.103	
234.52742	12:39:29	1.595	7.067	0.443	6.276	0.374	-0.105	-0.029	1.543	27.338	28.024	
235.52866	12:41:16	1.628	7.086	0.444	6.264	0.374	-0.105	-0.029	1.543	27.336	28.071	
236.52830	12:40:45	1.655	7.099	0.445	6.249	0.374	-0.105	-0.029	1.543	27.358	28.076	
237.52795	12:40:15	1.687	7.118	0.445	6.243	0.374	-0.106	-0.028	1.543	27.460	27.934	
238.52759	12:39:44	1.715	7.127	0.446	6.236	0.374	-0.105	-0.028	1.543	27.378	27.934	
239.52724	12:39:14	1.742	7.138	0.444	6.229	0.374	-0.105	-0.029	1.543	27.446	27.936	
240.53536	12:50:55	1.768	7.150	0.453	6.225	0.374	-0.106	-0.029	1.543	27.388	28.107	
241.36839	08:50:29	1.788	7.162	0.455	6.219	0.374	-0.105	-0.028	1.543	27.352	27.973	-end testing

TABLE C8
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
316.59722	14:20:00	-0.026	0.098	0.003	0.115	-0.198	-0.155	-0.166	1.759	27.2	27.4	-created data
316.59791	14:20:59	-0.001	0.536	0.022	0.596	-0.190	-0.155	-0.166	1.412	27.2	27.6	file - S1P711
316.59861	14:22:00	-0.018	9.998	0.010	10.141	-0.165	-0.155	-0.166	1.281	27.2	27.8	-inflated
316.59930	14:23:00	-0.018	9.222	0.010	9.756	-0.167	-0.155	-0.166	1.272	27.2	27.7	packers
316.59999	14:23:59	-0.019	8.921	0.008	9.598	-0.168	-0.155	-0.166	1.269	27.2	27.6	
316.60069	14:25:00	-0.018	8.731	0.007	9.497	-0.169	-0.155	-0.166	1.266	27.1	27.6	
316.60138	14:25:59	-0.018	8.589	0.007	9.422	-0.170	-0.155	-0.166	1.264	27.1	27.6	
316.60208	14:27:00	-0.018	8.476	0.009	9.366	-0.170	-0.155	-0.166	1.262	27.2	27.6	
316.60277	14:27:59	-0.020	8.379	0.007	9.318	-0.171	-0.155	-0.166	1.260	27.1	27.6	
316.60347	14:29:00	-0.018	8.295	0.008	9.278	-0.171	-0.155	-0.166	1.259	27.1	27.5	
316.60416	14:29:59	-0.018	8.220	0.007	9.243	-0.171	-0.155	-0.166	1.257	27.1	27.6	
316.60485	14:30:59	-0.018	8.156	0.008	9.210	-0.172	-0.155	-0.166	1.256	27.1	27.6	
316.60555	14:32:00	-0.018	8.098	0.008	9.183	-0.172	-0.155	-0.166	1.255	27.1	27.6	
316.60624	14:32:59	-0.019	8.041	0.006	9.158	-0.173	-0.155	-0.166	1.254	27.1	27.5	
316.60694	14:34:00	-0.018	7.990	0.007	9.136	-0.173	-0.155	-0.166	1.253	27.2	27.6	
316.60763	14:34:59	-0.020	7.944	0.008	9.113	-0.173	-0.155	-0.166	1.252	27.1	27.5	
316.60833	14:36:00	-0.018	7.901	0.007	9.092	-0.173	-0.155	-0.166	1.251	27.1	27.5	
316.60902	14:36:59	-0.020	7.858	0.007	9.074	-0.174	-0.155	-0.166	1.250	27.1	27.5	
316.60971	14:37:59	-0.020	7.819	0.007	9.058	-0.174	-0.155	-0.166	1.249	27.1	27.5	
316.61041	14:38:59	-0.020	7.782	0.007	9.044	-0.174	-0.155	-0.166	1.248	27.1	27.5	
316.61110	14:39:59	-0.019	7.746	0.005	9.028	-0.174	-0.155	-0.166	1.248	27.2	27.5	
316.61180	14:41:00	-0.018	7.711	0.004	9.012	-0.175	-0.155	-0.166	1.247	27.1	27.5	
316.61249	14:41:59	-0.018	7.680	0.005	8.999	-0.175	-0.155	-0.166	1.246	27.1	27.5	
316.61318	14:42:59	-0.020	7.651	0.007	8.985	-0.175	-0.155	-0.166	1.246	27.2	27.5	
316.61388	14:43:59	-0.019	7.620	0.007	8.973	-0.175	-0.155	-0.166	1.245	27.2	27.5	
316.61458	14:45:00	-0.018	7.590	0.005	8.961	-0.175	-0.155	-0.166	1.244	27.2	27.5	
316.61875	14:51:00	-0.029	7.432	0.005	8.903	-0.177	-0.155	-0.166	1.240	27.2	27.4	
316.61944	14:52:00	-0.030	7.410	0.004	8.893	-0.177	-0.155	-0.166	1.240	27.2	27.5	
316.62014	14:53:00	-0.030	7.386	0.006	8.884	-0.177	-0.155	-0.166	1.239	27.2	27.4	
316.62083	14:54:00	-0.030	7.365	0.005	8.875	-0.177	-0.155	-0.166	1.238	27.2	27.5	
316.62153	14:55:00	-0.029	7.343	0.001	8.866	-0.177	-0.155	-0.166	1.238	27.2	27.4	
316.63194	15:10:00	-0.029	7.068	-0.005	8.771	-0.179	-0.155	-0.166	1.230	27.2	27.4	
316.64235	15:24:59	-0.029	6.860	-0.007	8.703	-0.181	-0.155	-0.166	1.224	27.1	27.4	
316.65276	15:39:58	-0.027	6.693	-0.009	8.655	-0.183	-0.155	-0.166	1.219	27.2	27.4	
316.66318	15:54:59	-0.028	6.558	-0.011	8.614	-0.187	-0.155	-0.166	1.214	27.2	27.4	
316.67359	16:09:58	-0.027	6.447	-0.011	8.581	-0.184	-0.154	-0.166	1.210	27.2	27.4	
316.71524	17:09:57	-0.027	6.129	-0.013	8.482	-0.192	-0.154	-0.166	1.198	27.1	27.4	
316.75689	18:09:55	-0.025	5.927	-0.015	8.415	-0.196	-0.154	-0.166	1.190	27.1	27.3	
316.79855	19:09:55	-0.024	5.785	-0.015	8.365	-0.197	-0.154	-0.166	1.183	27.1	27.3	
316.84020	20:09:53	-0.023	5.687	-0.015	8.323	-0.198	-0.155	-0.166	1.179	27.1	27.3	
316.88185	21:09:52	-0.023	5.615	-0.017	8.284	-0.198	-0.155	-0.166	1.175	27.1	27.3	
316.92350	22:09:50	-0.022	5.556	-0.017	8.249	-0.198	-0.154	-0.166	1.172	27.1	27.3	
316.96515	23:09:49	-0.022	5.510	-0.019	8.218	-0.198	-0.155	-0.166	1.169	27.1	27.3	
317.00681	00:09:48	-0.021	5.467	-0.019	8.191	-0.198	-0.155	-0.166	1.166	27.1	27.3	
318.00645	00:09:17	-0.018	5.118	-0.024	7.883	-0.198	-0.155	-0.166	1.139	27.1	27.1	
319.00609	00:08:46	-0.016	5.024	-0.025	7.778	-0.198	-0.155	-0.166	1.128	27.1	27.1	
320.04013	00:57:47	-0.014	4.977	-0.023	7.714	-0.198	-0.155	-0.166	1.123	27.1	27.0	
320.42639	10:14:00	-0.014	4.965	-0.024	7.694	-0.198	-0.155	-0.166	1.120	27.1	27.1	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
320.42708	10:15:00	-0.015	4.967	-0.024	7.695	-0.198	-0.155	-0.166	1.120	27.0	27.1	-test-zone
320.42743	10:15:30	-0.014	7.064	-0.023	7.653	-0.197	-0.155	-0.166	1.133	27.1	27.1	packer
320.42778	10:16:00	-0.014	9.324	-0.022	7.554	-0.198	-0.155	-0.166	1.160	27.1	27.1	pressure
320.42812	10:16:30	-0.014	10.434	-0.021	7.491	-0.197	-0.155	-0.166	1.177	27.1	27.1	increased
320.42847	10:17:00	-0.015	10.396	-0.021	7.484	-0.197	-0.155	-0.166	1.179	27.1	27.1	
320.42882	10:17:30	-0.016	10.471	-0.022	7.477	-0.197	-0.155	-0.166	1.181	27.1	27.1	
320.42916	10:17:59	-0.015	10.395	-0.021	7.478	-0.197	-0.155	-0.166	1.181	27.1	27.1	
320.42951	10:18:30	-0.015	10.340	-0.022	7.478	-0.197	-0.155	-0.166	1.181	27.1	27.1	
320.42986	10:19:00	-0.015	10.297	-0.022	7.478	-0.197	-0.155	-0.166	1.181	27.1	27.1	
320.43021	10:19:30	-0.015	10.260	-0.021	7.479	-0.197	-0.155	-0.166	1.181	27.1	27.1	
320.43055	10:20:00	-0.015	10.230	-0.021	7.481	-0.197	-0.155	-0.166	1.181	27.1	27.1	-guard-zone
320.43125	10:21:00	-0.015	10.031	-0.022	10.492	-0.197	-0.155	-0.166	1.214	27.1	27.1	packer
320.43194	10:22:00	-0.015	9.984	-0.021	10.380	-0.197	-0.155	-0.166	1.216	27.1	27.1	pressure
320.43264	10:23:00	-0.016	9.949	-0.022	10.333	-0.197	-0.155	-0.166	1.216	27.1	27.2	increased
320.43334	10:24:01	-0.015	9.921	-0.022	10.302	-0.197	-0.155	-0.166	1.217	27.1	27.1	
320.43403	10:25:00	-0.015	9.897	-0.021	10.280	-0.197	-0.155	-0.166	1.217	27.1	27.1	
320.43472	10:26:00	-0.015	9.876	-0.021	10.263	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43542	10:27:00	-0.015	9.855	-0.022	10.247	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43611	10:28:00	-0.015	9.839	-0.021	10.234	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43681	10:29:00	-0.016	9.824	-0.022	10.224	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43750	10:30:00	-0.016	9.810	-0.022	10.213	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43820	10:31:00	-0.016	9.797	-0.022	10.204	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43889	10:32:00	-0.015	9.785	-0.022	10.195	-0.197	-0.155	-0.166	1.218	27.1	27.1	
320.43958	10:33:00	-0.016	9.773	-0.022	10.189	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.44028	10:34:00	-0.015	9.764	-0.021	10.181	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.44097	10:35:00	-0.015	9.754	-0.021	10.174	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.44444	10:40:00	-0.016	9.712	-0.022	10.148	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.44791	10:44:59	-0.015	9.680	-0.022	10.127	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.45139	10:50:00	-0.015	9.653	-0.022	10.110	-0.197	-0.155	-0.166	1.219	27.1	27.1	
320.45486	10:55:00	-0.014	9.630	-0.022	10.094	-0.197	-0.155	-0.166	1.220	27.1	27.1	
320.45833	11:00:00	-0.016	9.610	-0.022	10.081	-0.197	-0.155	-0.166	1.220	27.1	27.1	
320.47915	11:29:59	-0.015	9.523	-0.023	10.026	-0.197	-0.155	-0.166	1.220	27.1	27.1	
320.49998	11:59:58	-0.015	9.468	-0.022	9.990	-0.197	-0.155	-0.166	1.220	27.1	27.1	
320.54549	13:05:30	-0.010	9.397	0.001	9.945	-0.197	-0.155	-0.166	1.220	27.1	27.1	
320.58714	14:05:29	-0.010	9.344	-0.003	9.912	-0.198	-0.155	-0.166	1.220	27.1	27.1	
320.67044	16:05:26	-0.006	9.270	-0.008	9.864	-0.198	-0.155	-0.166	1.220	27.1	27.1	
320.75374	18:05:23	-0.005	9.216	-0.011	9.826	-0.198	-0.155	-0.166	1.219	27.1	27.1	
320.83705	20:05:21	-0.002	9.174	-0.013	9.793	-0.198	-0.155	-0.166	1.219	27.1	27.1	
320.92035	22:05:18	-0.001	9.139	-0.016	9.766	-0.197	-0.155	-0.166	1.219	27.1	27.0	
321.00366	00:05:16	0.002	9.109	-0.017	9.739	-0.198	-0.155	-0.166	1.218	27.1	27.1	
322.00564	00:08:07	0.029	8.896	-0.024	9.559	-0.197	-0.155	-0.166	1.209	27.1	27.0	
323.04143	00:59:40	0.060	8.787	-0.025	9.457	-0.197	-0.155	-0.166	1.199	27.1	27.1	
323.35903	08:37:00	0.069	8.759	-0.027	9.429	-0.197	-0.155	-0.166	1.198	27.1	27.1	
323.35972	08:38:00	0.062	9.145	-0.021	0.033	-0.197	-0.155	-0.166	1.113	27.1	27.1	-deflated
323.36041	08:38:59	0.061	9.155	-0.020	0.009	-0.197	-0.155	-0.166	1.110	27.1	27.1	packers
323.36111	08:40:00	-0.049	0.014	-0.028	0.022	-0.197	-0.155	-0.166	1.685	27.1	27.1	-removed
323.41666	09:59:59	-0.015	-0.003	0.006	0.007	0.087	0.095	-0.044	1.576	27.1	26.9	test tool
323.41736	10:01:00	-0.015	-0.003	0.006	0.008	0.087	0.095	-0.044	1.576	27.1	26.8	examined &

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
323.41805	10:02:00	-0.015	-0.003	0.006	0.008	0.087	0.095	-0.044	1.576	27.1	26.9	reinstalled
323.41875	10:03:00	-0.022	-0.002	0.000	0.008	0.087	0.095	-0.044	1.576	27.1	26.9	test tool
323.41944	10:04:00	-0.022	0.005	0.000	0.022	0.087	0.095	-0.044	1.577	27.1	26.9	reinflated
323.42013	10:04:59	-0.021	0.040	-0.001	0.004	0.087	0.095	-0.044	1.578	27.1	26.9	packers
323.42083	10:06:00	-0.021	0.133	-0.001	0.138	0.087	0.095	-0.044	1.578	27.1	27.0	tool leaks
323.42152	10:06:59	-0.022	0.129	0.000	0.059	0.087	0.095	-0.045	1.577	27.1	27.2	
323.42222	10:08:00	-0.020	0.269	-0.001	0.273	0.087	0.095	-0.045	1.561	27.1	28.0	
323.42291	10:08:59	-0.019	2.170	0.005	2.206	0.139	0.076	-0.042	0.643	27.0	27.9	
323.42361	10:10:00	-0.018	11.145	0.004	11.134	0.120	0.075	-0.042	1.007	27.0	28.0	
323.42378	10:10:15	-0.018	11.166	0.004	11.153	0.119	0.075	-0.042	1.013	27.0	27.9	
323.42395	10:10:29	-0.017	11.196	0.006	11.188	0.117	0.075	-0.041	1.017	27.1	27.9	
323.42413	10:10:45	-0.016	10.580	0.006	10.560	0.115	0.075	-0.041	1.007	27.0	27.8	
323.42430	10:11:00	-0.018	9.938	0.006	9.922	0.115	0.075	-0.040	0.991	27.1	27.9	
323.42448	10:11:15	-0.017	9.342	0.004	9.326	0.115	0.076	-0.040	0.974	27.1	27.8	
323.42465	10:11:30	-0.017	8.811	0.005	8.798	0.115	0.076	-0.039	0.958	27.1	27.8	
323.42482	10:11:44	-0.018	8.309	0.005	8.298	0.114	0.077	-0.039	0.942	27.0	27.8	
323.42500	10:12:00	-0.017	7.842	0.004	7.832	0.114	0.077	-0.039	0.926	27.0	27.7	
323.42517	10:12:15	-0.018	7.414	0.006	7.402	0.114	0.077	-0.038	0.911	27.1	27.7	
323.42534	10:12:29	-0.016	7.019	0.005	7.014	0.113	0.077	-0.038	0.897	27.0	27.7	
323.42552	10:12:45	-0.016	6.651	0.003	6.647	0.113	0.077	-0.038	0.883	27.0	27.7	
323.42569	10:13:00	-0.016	6.306	0.004	6.304	0.113	0.077	-0.037	0.870	27.1	27.6	
323.42586	10:13:14	-0.015	5.985	0.003	5.983	0.113	0.077	-0.037	0.857	27.1	27.6	
323.42604	10:13:30	-0.016	5.683	0.004	5.683	0.113	0.077	-0.037	0.844	27.1	27.6	
323.42621	10:13:45	-0.017	5.403	0.005	5.400	0.113	0.078	-0.037	0.832	27.0	27.6	
323.42638	10:13:59	-0.017	5.142	0.004	5.141	0.113	0.078	-0.037	0.821	27.1	27.6	
323.42656	10:14:15	-0.013	7.634	0.006	7.697	0.113	0.077	-0.038	0.886	27.0	27.6	
323.42673	10:14:29	-0.014	10.327	0.006	10.373	0.110	0.077	-0.038	0.974	27.1	27.6	
323.42691	10:14:45	-0.016	11.003	0.004	10.977	0.108	0.077	-0.039	0.997	27.1	27.6	
323.42708	10:15:00	-0.018	11.106	0.005	11.088	0.107	0.077	-0.038	1.004	27.0	27.5	
323.42725	10:15:14	-0.018	11.126	0.004	11.112	0.105	0.077	-0.038	1.007	27.0	27.6	
323.42743	10:15:30	-0.017	10.983	0.004	10.954	0.104	0.077	-0.038	1.006	27.0	27.5	
323.42760	10:15:45	-0.016	11.145	0.004	11.135	0.103	0.077	-0.037	1.007	27.0	27.5	
323.42777	10:15:59	-0.017	11.188	0.004	11.037	0.103	0.077	-0.037	1.010	27.0	27.5	
323.42795	10:16:15	-0.018	11.128	0.005	9.325	0.103	0.077	-0.037	1.000	27.0	27.5	
323.42812	10:16:30	-0.018	11.091	0.006	7.989	0.103	0.077	-0.037	0.988	27.1	27.5	
323.42829	10:16:44	-0.015	11.069	0.004	6.900	0.104	0.077	-0.037	0.976	27.0	27.5	
323.42847	10:17:00	-0.015	11.045	0.005	6.006	0.105	0.077	-0.037	0.964	27.0	27.5	
323.42864	10:17:14	-0.016	11.018	0.006	5.280	0.105	0.077	-0.036	0.955	27.0	27.5	
323.42881	10:17:29	-0.017	10.991	0.006	4.687	0.105	0.077	-0.036	0.948	27.1	27.5	
323.42899	10:17:45	-0.018	10.963	0.004	4.196	0.105	0.077	-0.036	0.941	27.1	27.4	
323.42916	10:17:59	-0.017	10.928	0.005	3.797	0.105	0.077	-0.036	0.936	27.1	27.5	
323.42933	10:18:14	-0.016	10.895	0.006	3.467	0.105	0.077	-0.036	0.932	27.0	27.4	
323.42951	10:18:30	-0.016	10.862	0.005	3.201	0.105	0.077	-0.035	0.928	27.1	27.5	
323.42968	10:18:44	-0.017	10.828	0.005	2.975	0.105	0.077	-0.035	0.925	27.0	27.5	
323.42986	10:19:00	-0.016	10.796	0.006	2.788	0.105	0.077	-0.035	0.923	27.0	27.4	
323.43003	10:19:15	-0.016	10.763	0.006	2.626	0.105	0.077	-0.035	0.921	27.0	27.4	
323.43020	10:19:29	-0.014	5.005	0.004	5.004	0.109	0.077	-0.033	0.792	27.0	27.4	
323.43038	10:19:45	-0.016	0.102	0.006	0.113	0.111	0.054	-0.035	1.289	27.1	27.2	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
323.43060	10:20:04	-0.015	0.073	0.005	0.080	0.104	0.054	-0.036	1.459	27.0	27.2	
323.43130	10:21:04	-0.017	0.006	0.005	0.019	0.104	0.055	-0.036	1.460	27.0	27.1	
323.43199	10:22:04	-0.016	-0.011	0.005	0.005	0.016	0.103	-0.037	-1.436	27.0	27.1	
323.43269	10:23:04	-0.016	-0.008	0.004	0.007	0.007	0.099	-0.029	-1.436	27.1	27.1	
323.43338	10:24:04	-0.016	-0.008	0.005	0.009	0.006	0.095	-0.034	-1.436	27.0	27.1	
323.43407	10:25:04	-0.016	-0.007	0.005	0.009	0.019	0.110	-0.041	-1.437	27.0	27.2	
323.43477	10:26:04	-0.016	-0.007	0.004	0.009	0.023	0.115	-0.039	-1.437	27.0	27.2	
323.43546	10:27:04	-0.016	-0.007	0.005	0.009	0.018	0.124	-0.038	-1.437	27.1	27.1	
323.43616	10:28:04	-0.017	-0.006	0.004	0.008	0.017	0.123	-0.042	-1.437	27.0	27.1	
323.43685	10:29:04	-0.016	-0.006	0.005	0.009	0.017	0.123	-0.045	-1.437	27.0	27.1	
323.43755	10:30:04	-0.016	-0.005	0.005	0.008	0.022	0.122	-0.046	-1.437	27.0	27.1	
323.43824	10:31:04	-0.016	-0.006	0.005	0.008	0.022	0.129	-0.049	-1.437	27.0	27.1	
323.43893	10:32:04	-0.016	-0.006	0.005	0.009	0.022	0.130	-0.048	-1.437	27.0	27.1	
323.43963	10:33:04	-0.016	-0.006	0.005	0.009	0.029	0.131	-0.048	-1.437	27.0	27.1	
323.44032	10:34:04	-0.016	-0.006	0.004	0.009	0.032	0.131	-0.048	-1.437	27.1	27.1	
323.44102	10:35:04	-0.016	-0.006	0.004	0.007	0.033	0.132	-0.047	-1.437	27.0	27.1	
323.44171	10:36:04	-0.015	-0.008	0.005	0.009	0.034	0.134	-0.047	-1.437	27.0	27.1	
323.44241	10:37:04	-0.016	-0.007	0.004	0.008	0.036	0.137	-0.047	-1.437	27.0	27.1	
323.44310	10:38:04	-0.015	-0.007	0.004	0.009	0.042	0.138	-0.047	-1.437	27.0	27.1	
323.44379	10:39:03	-0.017	-0.006	0.005	0.008	0.048	0.139	-0.047	-1.437	27.0	27.1	
323.44444	10:40:00	-0.016	-0.007	0.005	0.009	0.057	0.140	-0.047	-1.437	27.0	27.1	
323.45521	10:55:30	-0.014	-0.004	0.005	0.011	0.090	0.112	-0.040	0.761	27.1	27.1	
323.45555	10:56:00	-0.015	0.041	0.004	0.067	0.090	0.112	-0.040	0.761	27.0	27.0	
323.45590	10:56:30	-0.015	-0.025	0.004	0.043	0.090	0.112	-0.040	0.761	27.0	27.0	
323.45625	10:57:00	-0.016	0.175	0.004	0.238	0.090	0.111	-0.040	0.761	27.1	27.1	
323.45659	10:57:29	-0.014	0.223	0.004	0.246	0.089	0.111	-0.038	0.751	27.0	27.2	
323.45694	10:58:00	-0.013	0.315	0.007	0.359	0.094	0.102	-0.036	0.362	27.0	27.5	
323.45729	10:58:30	-0.022	7.091	0.002	7.267	0.110	0.064	-0.035	0.111	27.1	28.1	
323.45764	10:59:00	-0.020	11.064	0.002	11.051	0.104	0.071	-0.036	0.282	27.0	28.0	
323.45798	10:59:29	-0.022	11.005	0.002	10.640	0.100	0.073	-0.036	0.285	27.1	27.8	
323.45833	11:00:00	-0.019	10.590	0.004	6.953	0.098	0.078	-0.036	0.236	27.0	27.8	
323.45868	11:00:30	-0.017	10.317	0.004	4.699	0.098	0.078	-0.036	0.200	27.0	27.7	
323.45902	11:00:59	-0.017	10.093	0.004	3.308	0.098	0.078	-0.036	0.174	27.0	27.7	
323.45937	11:01:30	-0.017	9.907	0.004	2.452	0.098	0.078	-0.036	0.157	27.0	27.7	
323.45972	11:02:00	-0.017	9.751	0.004	1.945	0.098	0.078	-0.036	0.147	27.0	27.8	
323.46007	11:02:30	-0.017	9.624	0.004	1.624	0.098	0.078	-0.036	0.140	27.0	27.7	
323.46041	11:02:59	-0.014	0.095	0.006	0.101	0.107	0.060	-0.030	0.801	27.0	27.3	
323.46069	11:03:24	-0.017	0.052	0.003	0.060	0.106	0.060	-0.030	0.802	27.1	27.3	
323.47110	11:18:23	-0.014	-0.011	0.005	0.004	0.025	0.095	-0.028	-1.438	27.1	27.2	
323.48152	11:33:23	-0.015	-0.006	0.005	0.009	0.007	0.101	-0.007	-1.438	27.1	27.2	
323.48298	11:35:29	-0.014	-0.006	0.004	0.008	0.013	0.102	-0.016	-1.437	27.2	27.2	
323.48312	11:35:42	-0.015	-0.006	0.005	0.008	0.013	0.102	-0.016	-1.438	27.1	27.2	
327.53313	12:47:42	-0.022	0.005	0.010	0.023	0.112	0.116	0.132	1.649	26.9	26.7	-end testing
327.54236	13:01:00	-0.016	0.007	0.008	0.024	0.112	0.115	-0.025	1.651	27.0	26.8	removed
327.54305	13:02:00	-0.017	0.007	0.009	0.023	0.121	0.125	-0.052	1.854	27.0	26.9	test tool
327.54375	13:03:00	-0.018	0.006	0.008	0.024	0.121	0.125	-0.051	1.855	27.0	26.8	reinstalled
327.54444	13:04:00	-0.017	0.007	0.007	0.024	0.126	0.124	-0.057	1.904	27.0	26.8	test tool
327.54513	13:04:59	-0.017	-0.009	0.008	0.007	0.131	0.124	-0.060	1.961	27.1	26.9	created data

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
327.54583	13:06:00	-0.016	-0.003	0.008	0.014	0.129	0.124	-0.060	1.964	27.1	26.9	file - S1P712
327.54635	13:06:45	-0.017	0.176	0.009	0.181	0.130	0.124	-0.060	1.964	27.1	26.9	
327.54664	13:07:10	-0.017	0.216	0.008	0.222	0.129	0.124	-0.060	1.963	27.1	27.2	-inflated
327.54693	13:07:35	-0.017	0.248	0.008	0.591	0.128	0.125	-0.059	1.958	27.1	27.2	packers
327.54722	13:08:00	-0.018	0.336	0.008	0.360	0.134	0.121	-0.049	1.731	27.1	27.2	
327.54751	13:08:25	-0.018	0.521	0.009	0.534	0.137	0.109	-0.038	1.233	27.0	27.3	
327.54780	13:08:50	-0.018	3.809	0.009	3.839	0.135	0.062	0.003	0.985	27.0	27.2	
327.54809	13:09:15	-0.017	10.280	0.010	10.256	0.135	0.066	-0.003	1.232	27.0	27.2	
327.54838	13:09:40	-0.018	9.972	0.008	9.993	0.133	0.066	-0.002	1.240	27.0	27.1	
327.54867	13:10:05	-0.018	10.049	0.010	10.037	0.131	0.067	-0.001	1.246	27.1	27.1	
327.54896	13:10:30	-0.017	10.217	0.008	10.250	0.131	0.067	0.000	1.250	27.1	27.1	
327.54924	13:10:54	-0.018	9.974	0.008	9.982	0.130	0.067	0.001	1.249	27.1	27.1	
327.54953	13:11:19	-0.018	9.841	0.008	8.851	0.129	0.068	0.002	1.235	27.1	27.1	
327.54982	13:11:44	-0.018	9.742	0.008	7.866	0.129	0.069	0.003	1.223	27.1	27.1	
327.55011	13:12:10	-0.018	9.662	0.008	6.958	0.130	0.068	0.004	1.209	27.1	27.1	-deflated
327.55040	13:12:35	-0.017	10.440	0.007	6.200	0.130	0.068	0.004	1.207	27.0	27.1	packers
327.55069	13:13:00	-0.019	0.520	0.008	0.519	0.129	0.055	0.012	1.056	27.1	27.1	
327.55098	13:13:25	-0.018	0.188	0.007	0.205	0.129	0.085	-0.016	1.493	27.1	27.1	
327.55127	13:13:50	-0.019	0.173	0.008	0.186	0.129	0.089	-0.027	1.907	27.1	27.1	
327.55156	13:14:15	-0.018	0.147	0.007	0.160	0.129	0.089	-0.027	1.909	27.1	27.1	
327.55185	13:14:40	-0.018	0.120	0.008	0.133	0.129	0.089	-0.027	1.913	27.1	27.1	
327.55214	13:15:05	-0.019	0.138	0.008	0.085	0.129	0.089	-0.027	1.917	27.1	27.1	
327.55972	13:26:00	-0.018	0.067	0.006	0.071	0.129	0.090	-0.029	1.938	27.1	27.1	
327.56041	13:26:59	-0.018	0.188	0.005	0.165	0.129	0.090	-0.029	1.937	27.1	27.1	-inflated
327.56088	13:27:40	-0.019	0.272	0.006	0.327	0.128	0.090	-0.030	1.936	27.1	27.1	packers
327.56111	13:28:00	-0.019	0.347	0.005	0.367	0.134	0.098	-0.034	1.669	27.1	27.0	
327.56134	13:28:20	-0.018	3.512	0.006	3.674	0.136	0.065	0.000	1.199	27.1	27.2	
327.56157	13:28:40	-0.019	9.856	0.007	9.834	0.135	0.076	-0.013	1.436	27.1	27.3	
327.56180	13:29:00	-0.018	10.295	0.006	10.291	0.135	0.077	-0.014	1.466	27.1	27.4	
327.56203	13:29:19	-0.018	9.956	0.006	9.950	0.134	0.076	-0.014	1.464	27.1	27.4	
327.56226	13:29:39	-0.018	10.349	0.006	10.344	0.133	0.077	-0.012	1.473	27.1	27.3	
327.56250	13:30:00	-0.018	10.216	0.006	10.210	0.132	0.076	-0.012	1.471	27.1	27.4	
327.56273	13:30:20	-0.017	9.914	0.006	10.109	0.131	0.077	-0.011	1.466	27.1	27.4	
327.56296	13:30:40	-0.019	9.711	0.006	10.061	0.131	0.078	-0.011	1.463	27.1	27.4	
327.56319	13:31:00	-0.019	9.579	0.007	10.024	0.130	0.078	-0.011	1.461	27.1	27.4	
327.56342	13:31:19	-0.017	9.471	0.006	9.988	0.130	0.078	-0.011	1.460	27.0	27.3	
327.56365	13:31:39	-0.019	9.376	0.005	9.960	0.130	0.078	-0.010	1.458	27.1	27.3	
327.56388	13:31:59	-0.018	9.295	0.005	9.935	0.130	0.078	-0.010	1.457	27.1	27.3	
327.56435	13:32:40	-0.019	9.157	0.006	9.892	0.130	0.078	-0.009	1.454	27.1	27.3	
327.56458	13:33:00	-0.017	9.095	0.005	9.874	0.129	0.078	-0.009	1.454	27.0	27.3	
327.56527	13:33:59	-0.018	8.942	0.006	9.826	0.129	0.078	-0.007	1.450	27.1	27.2	
327.56597	13:35:00	-0.018	8.819	0.006	9.788	0.129	0.077	-0.006	1.448	27.1	27.2	
327.56643	13:35:40	-0.018	8.746	0.006	9.766	0.129	0.077	-0.006	1.447	27.1	27.2	
327.56666	13:35:59	-0.019	8.715	0.006	9.758	0.129	0.077	-0.005	1.446	27.1	27.2	
327.56712	13:36:39	-0.018	8.653	0.006	9.744	0.129	0.077	-0.005	1.446	27.1	27.2	
327.56736	13:37:00	-0.018	8.626	0.005	9.732	0.129	0.077	-0.005	1.445	27.1	27.2	
327.56805	13:38:00	-0.018	8.546	0.006	9.707	0.129	0.076	-0.004	1.443	27.1	27.1	
327.56874	13:38:59	-0.017	8.481	0.006	9.688	0.129	0.076	-0.003	1.442	27.1	27.2	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
327.56944	13:40:00	-0.018	8.420	0.006	9.668	0.129	0.075	-0.002	1.440	27.1	27.2	
327.57013	13:40:59	-0.017	8.352	0.006	9.650	0.129	0.075	-0.002	1.440	27.1	27.1	
327.57083	13:42:00	-0.017	8.312	0.006	9.635	0.129	0.075	-0.001	1.439	27.1	27.1	
327.57153	13:43:00	-0.018	8.267	0.006	9.619	0.129	0.074	0.000	1.439	27.1	27.1	
327.57222	13:44:00	-0.018	8.226	0.006	9.603	0.129	0.074	0.000	1.437	27.1	27.1	
327.57291	13:44:59	-0.019	8.187	0.004	9.595	0.129	0.074	0.001	1.436	27.1	27.2	
327.57361	13:46:00	-0.017	8.149	0.006	9.585	0.129	0.073	0.001	1.435	27.1	27.2	
327.57430	13:47:00	-0.018	8.117	0.005	9.574	0.129	0.073	0.002	1.434	27.1	27.1	
327.57500	13:48:00	-0.019	8.083	0.005	9.560	0.129	0.072	0.002	1.432	27.1	27.2	
327.57569	13:49:00	-0.019	8.053	0.005	9.547	0.129	0.073	0.002	1.431	27.1	27.1	
327.57639	13:50:00	-0.018	8.024	0.005	9.538	0.129	0.073	0.003	1.430	27.1	27.1	
327.57708	13:51:00	-0.017	7.997	0.005	9.527	0.129	0.073	0.003	1.432	27.1	27.1	
327.57777	13:51:59	-0.018	7.970	0.004	9.517	0.129	0.072	0.003	1.434	27.1	27.1	
327.57847	13:53:00	-0.018	7.946	0.004	9.509	0.129	0.072	0.003	1.430	27.1	27.1	
327.57916	13:53:59	-0.019	7.922	0.005	9.500	0.130	0.072	0.003	1.429	27.1	27.1	
327.57986	13:55:00	-0.019	7.900	0.005	9.493	0.130	0.072	0.004	1.427	27.1	27.1	
327.58055	13:56:00	-0.018	7.879	0.004	9.484	0.130	0.072	0.004	1.427	27.1	27.1	
327.58125	13:57:00	-0.019	7.859	0.004	9.476	0.130	0.072	0.004	1.432	27.1	27.1	
327.58194	13:58:00	-0.018	7.839	0.005	9.470	0.130	0.071	0.004	1.433	27.1	27.1	
327.58263	13:58:59	-0.019	7.821	0.004	9.470	0.130	0.071	0.004	1.432	27.1	27.1	
327.58333	14:00:00	-0.018	7.802	0.005	9.463	0.130	0.071	0.004	1.431	27.1	27.1	
327.58680	14:05:00	-0.019	7.721	0.004	9.431	0.130	0.071	0.005	1.428	27.1	27.1	
327.59027	14:09:59	-0.018	7.652	0.004	9.404	0.130	0.070	0.005	1.426	27.1	27.1	
327.59722	14:20:00	-0.020	7.540	0.005	9.360	0.130	0.070	0.007	1.423	27.1	27.0	
327.60416	14:29:59	-0.019	7.448	0.003	9.326	0.130	0.069	0.008	1.422	27.1	27.0	
327.63237	15:10:37	-0.018	7.200	0.003	9.229	0.130	0.068	0.011	1.416	27.1	27.0	
327.67402	16:10:35	-0.020	6.989	0.002	9.146	0.130	0.066	0.013	1.408	27.1	27.0	
327.71567	17:10:34	-0.019	6.849	0.001	9.090	0.130	0.064	0.015	1.403	27.1	27.1	
327.75732	18:10:32	-0.019	6.748	0.002	9.049	0.130	0.063	0.017	1.398	27.1	27.0	
327.79898	19:10:32	-0.018	6.670	0.002	9.014	0.131	0.063	0.018	1.390	27.1	27.0	
327.84063	20:10:30	-0.018	6.608	0.003	8.988	0.131	0.062	0.019	1.385	27.1	27.0	
327.88228	21:10:29	-0.018	6.559	0.003	8.964	0.131	0.062	0.020	1.382	27.1	27.1	
327.92393	22:10:28	-0.019	6.518	0.003	8.942	0.131	0.061	0.021	1.380	27.1	27.0	
327.96558	23:10:26	-0.018	6.485	0.001	8.923	0.131	0.061	0.021	1.378	27.1	27.0	
328.00723	00:10:25	-0.018	6.456	0.002	8.906	0.131	0.060	0.022	1.377	27.1	27.0	
328.01765	00:25:25	-0.018	6.448	0.002	8.901	0.131	0.060	0.022	1.375	27.1	27.1	
328.38210	09:10:13	-0.019	6.311	0.000	8.801	0.131	0.059	0.024	1.362	27.1	27.1	
328.38507	09:14:30	-0.021	6.312	-0.001	8.806	0.131	0.059	0.024	1.363	27.1	27.0	
328.38541	09:14:59	-0.022	6.311	-0.001	8.805	0.131	0.059	0.024	1.363	27.1	27.1	-packers'
328.38576	09:15:30	-0.021	10.483	0.002	8.665	0.131	0.059	0.022	1.410	27.1	27.1	pressure
328.38611	09:16:00	-0.021	10.253	0.000	10.696	0.131	0.058	0.023	1.431	27.0	27.0	increased
328.38680	09:17:00	-0.021	10.131	0.002	10.565	0.131	0.058	0.023	1.433	27.1	27.0	
328.38750	09:18:00	-0.023	10.069	0.000	10.529	0.130	0.058	0.023	1.434	27.1	27.0	
328.38819	09:19:00	-0.022	10.025	0.000	10.505	0.130	0.058	0.023	1.431	27.1	27.1	
328.38889	09:20:00	-0.022	9.991	0.000	10.489	0.130	0.058	0.023	1.434	27.1	27.1	
328.38958	09:21:00	-0.022	9.963	0.000	10.476	0.130	0.058	0.023	1.434	27.1	27.0	
328.39027	09:21:59	-0.022	9.940	0.001	10.464	0.130	0.058	0.023	1.434	27.1	27.0	
328.39097	09:23:00	-0.023	9.920	0.001	10.454	0.130	0.058	0.023	1.433	27.1	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
328.39166	09:23:59	-0.022	9.903	0.001	10.445	0.130	0.058	0.023	1.434	27.1	27.0	
328.39236	09:25:00	-0.022	9.888	0.001	10.438	0.130	0.058	0.023	1.434	27.1	27.1	
328.39305	09:26:00	-0.022	9.873	0.001	10.431	0.130	0.058	0.023	1.433	27.0	27.1	
328.39374	09:26:59	-0.022	9.861	0.001	10.426	0.130	0.058	0.023	1.434	27.1	27.0	
328.39444	09:28:00	-0.022	9.850	0.001	10.420	0.130	0.058	0.023	1.434	27.1	27.0	
328.39513	09:28:59	-0.022	9.838	0.001	10.416	0.130	0.058	0.023	1.434	27.1	27.0	
328.39583	09:30:00	-0.022	9.829	0.001	10.411	0.130	0.058	0.023	1.434	27.1	27.0	
328.39652	09:30:59	-0.023	9.820	0.001	10.406	0.130	0.057	0.023	1.434	27.1	27.0	
328.40625	09:45:00	-0.022	9.728	0.001	10.360	0.130	0.057	0.023	1.434	27.1	27.0	
328.41874	10:02:59	-0.022	9.655	0.000	10.323	0.130	0.057	0.023	1.434	27.1	27.0	
328.45833	11:00:00	-0.022	9.532	0.001	10.259	0.130	0.057	0.023	1.432	27.1	27.0	
328.50024	12:00:21	-0.021	9.456	0.001	10.212	0.130	0.056	0.023	1.432	27.1	27.1	
328.52083	12:30:00	-0.021	9.425	-0.002	10.199	0.127	0.050	0.030	1.428	27.0	27.1	-shut in
328.54166	12:59:59	-0.017	9.394	-0.010	10.183	0.127	0.050	0.030	1.428	27.1	27.0	
328.54583	13:06:00	-0.016	9.388	-0.011	10.181	0.127	0.050	0.030	1.428	27.1	27.0	
328.58333	14:00:00	-0.014	9.348	-0.013	10.151	0.127	0.050	0.030	1.427	27.1	27.0	
328.62498	14:59:58	-0.010	9.313	-0.013	10.131	0.127	0.050	0.030	1.428	27.1	27.0	
328.67705	16:14:57	-0.004	9.274	-0.015	10.110	0.127	0.050	0.030	1.429	27.1	27.0	
328.71870	17:14:56	-0.001	9.249	-0.015	10.093	0.127	0.050	0.030	1.427	27.1	27.0	
328.76035	18:14:54	0.003	9.226	-0.015	10.078	0.126	0.050	0.030	1.427	27.1	27.0	
328.80200	19:14:53	0.006	9.204	-0.016	10.065	0.126	0.050	0.030	1.426	27.1	27.0	
328.84365	20:14:51	0.009	9.185	-0.018	10.052	0.126	0.050	0.030	1.426	27.1	27.0	
328.88531	21:14:51	0.014	9.168	-0.018	10.038	0.126	0.050	0.031	1.424	27.0	27.0	
328.92696	22:14:49	0.017	9.150	-0.017	10.027	0.126	0.050	0.031	1.424	27.1	27.0	
328.96861	23:14:48	0.021	9.133	-0.018	10.017	0.126	0.050	0.031	1.425	27.1	27.0	
329.01026	00:14:46	0.024	9.119	-0.019	10.005	0.126	0.050	0.031	1.424	27.1	27.0	
330.00991	00:14:16	0.105	8.898	-0.022	9.852	0.126	0.049	0.031	1.404	27.1	27.0	
331.00955	00:13:45	0.185	8.788	-0.023	9.750	0.126	0.048	0.031	1.345	27.1	27.0	
332.00919	00:13:14	0.261	8.716	-0.025	9.670	0.126	0.048	0.032	1.359	27.1	27.0	
333.00884	00:12:44	0.335	8.662	-0.026	9.603	0.126	0.047	0.032	1.362	27.1	27.0	
334.33293	07:59:25	0.439	8.627	-0.013	9.528	0.126	0.045	0.032	2.384	27.0	27.0	
335.00471	00:06:47	0.479	8.593	-0.028	9.477	0.127	0.046	0.032	1.730	27.1	27.1	
336.02800	00:40:19	0.553	8.568	-0.029	9.418	0.127	0.045	0.033	1.779	27.1	27.2	
337.03821	00:55:01	0.623	8.548	-0.028	9.367	0.127	0.045	0.032	1.758	27.0	27.0	
338.04650	01:06:58	0.691	8.533	-0.028	9.329	0.128	0.044	0.031	1.448	26.9	27.0	
339.04615	01:06:27	0.756	8.514	-0.029	9.289	0.128	0.044	0.031	1.439	26.9	27.0	
340.04579	01:05:56	0.819	8.499	-0.028	9.254	0.128	0.043	0.031	1.434	26.9	27.0	
341.01346	00:19:23	0.878	8.488	-0.028	9.219	0.128	0.043	0.031	1.404	27.0	27.0	
342.00514	00:07:24	0.936	8.476	-0.028	9.184	0.128	0.042	0.030	1.606	27.0	27.0	
343.00478	00:06:53	0.990	8.465	-0.031	9.150	0.128	0.041	0.030	1.606	27.0	27.0	
344.04632	01:06:42	1.042	8.452	-0.031	9.113	0.128	0.041	0.029	1.359	27.0	27.0	
345.01021	00:14:42	1.089	8.443	-0.031	9.077	0.128	0.040	0.029	1.455	27.0	27.0	
346.00985	00:14:11	1.133	8.433	-0.031	9.042	0.128	0.040	0.029	1.421	27.0	27.0	
347.00950	00:13:41	1.173	8.422	-0.032	9.013	0.128	0.039	0.029	1.393	27.0	27.0	
348.01021	00:14:42	1.210	8.411	-0.031	8.975	0.128	0.038	0.029	1.573	27.0	27.1	
349.05113	01:13:38	1.248	8.401	-0.031	8.920	0.128	0.037	0.028	1.440	27.0	27.1	
350.02690	00:38:44	1.279	8.392	-0.032	8.856	0.128	0.037	0.028	1.504	27.0	27.1	
351.02654	00:38:13	1.308	8.382	-0.032	8.802	0.128	0.037	0.027	1.593	27.0	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
352.07621	01:49:45	1.337	8.370	-0.032	8.739	0.128	0.037	0.027	1.578	27.0	27.0	
353.07585	01:49:13	1.363	8.359	-0.032	8.682	0.128	0.037	0.026	1.425	27.0	26.9	
354.07550	01:48:43	1.388	8.347	-0.030	8.639	0.127	0.037	0.025	1.558	27.0	26.9	
355.03793	00:54:37	1.409	8.332	-0.031	8.608	0.127	0.037	0.024	1.442	27.0	26.9	
356.07413	01:46:45	1.430	8.315	-0.032	8.568	0.126	0.038	0.023	1.543	27.0	26.9	
357.06718	01:36:44	1.449	8.301	-0.031	8.521	0.126	0.039	0.023	1.488	27.0	26.8	
358.06232	01:29:44	1.466	8.286	-0.031	8.485	0.125	0.039	0.022	1.567	27.0	26.8	
359.06197	01:29:14	1.482	8.271	-0.032	8.454	0.125	0.040	0.022	1.543	27.0	26.8	
360.06161	01:28:43	1.496	8.255	-0.031	8.425	0.124	0.041	0.021	1.450	27.0	26.8	
361.06126	01:28:13	1.511	8.241	-0.031	8.399	0.124	0.041	0.020	1.376	27.0	26.7	
362.06090	01:27:42	1.524	8.225	-0.031	8.375	0.123	0.042	0.019	0.992	27.0	26.7	
363.06054	01:27:11	1.535	8.210	-0.032	8.349	0.122	0.043	0.019	1.268	27.0	26.7	
364.06019	01:26:40	1.547	8.196	-0.031	8.322	0.122	0.044	0.018	1.441	27.0	26.7	
365.08310	01:59:40	1.558	8.182	-0.031	8.301	0.122	0.044	0.020	1.343	27.3	27.0	
366.01024	00:14:45	1.566	8.169	-0.031	8.266	0.121	0.045	0.017	1.349	27.0	26.7	
1.00988	00:14:14	1.576	8.159	-0.031	8.237	0.121	0.045	0.017	1.633	26.9	26.6	
2.00952	00:13:43	1.584	8.142	-0.031	8.212	0.121	0.046	0.016	1.277	26.9	26.6	
3.00917	00:13:12	1.591	8.129	-0.031	8.186	0.120	0.047	0.016	1.278	26.9	26.6	
3.56247	13:29:57	1.595	8.121	-0.031	8.175	0.119	0.048	0.015	1.534	26.9	26.6	-created data
4.06229	01:29:42	1.598	8.116	-0.031	8.167	0.119	0.048	0.015	1.516	26.9	26.6	file - S1P71
4.54167	13:00:00	1.602	8.111	-0.030	8.152	0.118	0.049	0.015	1.164	26.9	26.6	
4.54190	13:00:20	1.602	8.110	-0.030	8.152	0.118	0.049	0.015	0.423	26.9	26.6	
4.54213	13:00:40	1.602	8.110	-0.030	8.152	0.118	0.049	0.015	0.995	26.9	26.6	
4.54236	13:01:00	1.602	8.110	-0.030	8.152	0.118	0.049	0.015	0.611	26.9	26.6	
4.54259	13:01:20	1.602	8.110	-0.030	8.152	0.118	0.049	0.015	1.107	26.9	26.6	
4.54282	13:01:40	1.602	8.110	-0.029	8.152	0.118	0.049	0.015	0.393	26.9	26.6	
4.54305	13:02:00	1.602	8.110	-0.029	8.152	0.118	0.049	0.015	1.018	26.9	26.6	-pulse with-
4.54375	13:03:00	1.602	8.111	-0.028	8.152	0.118	0.049	0.015	0.401	26.9	26.6	drawal #1
4.54444	13:04:00	1.534	8.096	-0.028	8.151	0.118	0.049	0.015	0.430	26.9	26.6	(test zone)
4.54514	13:05:00	1.402	8.068	-0.029	8.148	0.118	0.049	0.015	0.904	26.9	26.6	removed 80
4.54560	13:05:40	1.189	8.018	-0.028	8.143	0.119	0.051	0.015	0.951	26.9	26.6	ml fluid
4.54583	13:06:00	1.012	7.977	-0.028	8.132	0.119	0.053	0.016	0.941	26.9	26.6	
4.54606	13:06:20	0.868	7.937	-0.028	8.120	0.120	0.055	0.017	0.243	26.9	26.6	
4.54652	13:06:59	0.879	7.937	-0.028	8.120	0.120	0.055	0.017	0.562	26.9	26.6	
4.54722	13:08:00	0.893	7.940	-0.028	8.118	0.120	0.055	0.017	0.708	26.9	26.6	
4.54791	13:08:59	0.900	7.940	-0.029	8.118	0.120	0.055	0.017	0.778	26.9	26.6	
4.54861	13:10:00	0.903	7.941	-0.028	8.119	0.120	0.055	0.017	0.964	26.9	26.6	
4.54930	13:11:00	0.905	7.941	-0.028	8.119	0.120	0.055	0.017	0.731	26.9	26.6	
4.55000	13:12:00	0.907	7.942	-0.028	8.119	0.120	0.055	0.017	0.641	26.9	26.6	
4.55069	13:13:00	0.909	7.942	-0.028	8.119	0.120	0.055	0.017	0.767	26.9	26.6	
4.55139	13:14:00	0.910	7.942	-0.028	8.118	0.120	0.055	0.017	0.613	26.9	26.6	
4.55278	13:16:00	0.912	7.943	-0.028	8.119	0.120	0.055	0.017	0.824	26.9	26.6	
4.55347	13:17:00	0.913	7.943	-0.028	8.119	0.120	0.055	0.017	0.785	26.9	26.6	
4.55417	13:18:00	0.914	7.943	-0.028	8.119	0.120	0.055	0.017	0.902	26.9	26.6	
4.55486	13:19:00	0.915	7.943	-0.028	8.118	0.120	0.055	0.017	0.930	26.9	26.6	
4.55556	13:20:00	0.916	7.943	-0.029	8.119	0.120	0.055	0.017	1.115	26.9	26.6	
4.55903	13:25:00	0.920	7.945	-0.028	8.119	0.120	0.055	0.017	0.880	26.9	26.6	
4.56250	13:30:00	0.923	7.944	-0.028	8.119	0.120	0.055	0.017	0.852	26.9	26.6	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
4.58351	14:00:15	0.932	7.946	-0.028	8.119	0.120	0.054	0.017	1.277	26.9	26.6	
4.60434	14:30:15	0.938	7.947	-0.028	8.118	0.120	0.054	0.017	1.372	26.9	26.6	
4.62500	15:00:00	0.942	7.948	-0.029	8.118	0.120	0.054	0.017	1.147	26.9	26.6	
4.66665	15:59:59	0.949	7.949	-0.028	8.117	0.120	0.054	0.017	1.140	26.9	26.6	
4.70830	16:59:57	0.954	7.950	-0.028	8.115	0.120	0.054	0.017	1.205	26.9	26.6	
4.74995	17:59:56	0.958	7.950	-0.028	8.114	0.120	0.054	0.017	1.257	26.9	26.6	
4.79161	18:59:55	0.962	7.950	-0.029	8.112	0.120	0.054	0.017	1.088	26.9	26.6	
4.83326	19:59:54	0.965	7.950	-0.029	8.111	0.119	0.054	0.017	1.141	26.9	26.6	
4.87491	20:59:52	0.968	7.950	-0.029	8.109	0.119	0.054	0.017	1.691	26.9	26.6	
4.91656	21:59:51	0.972	7.950	-0.029	8.108	0.119	0.054	0.017	1.200	26.9	26.6	
4.92698	22:14:51	0.972	7.950	-0.029	8.107	0.119	0.054	0.017	1.248	26.9	26.6	
4.93739	22:29:50	0.973	7.951	-0.029	8.107	0.119	0.054	0.017	1.223	26.9	26.6	
4.97904	23:29:49	0.976	7.951	-0.029	8.106	0.119	0.054	0.017	1.189	26.9	26.6	
5.01028	00:14:48	0.978	7.951	-0.029	8.104	0.119	0.054	0.017	1.220	26.9	26.6	
6.06510	01:33:45	1.036	7.949	-0.030	8.073	0.118	0.056	0.016	1.096	26.9	26.6	
7.00344	00:04:57	1.075	7.943	-0.029	8.046	0.117	0.058	0.015	1.210	26.9	26.6	
8.00309	00:04:27	1.108	7.933	-0.031	8.014	0.116	0.060	0.014	1.196	26.9	26.6	
9.00273	00:03:56	1.137	7.927	-0.032	8.000	0.115	0.061	0.013	1.228	26.9	26.5	
10.04143	00:59:40	1.167	7.919	-0.031	7.993	0.114	0.063	0.013	1.705	26.9	26.5	
11.04107	00:59:08	1.193	7.909	-0.031	7.964	0.114	0.064	0.012	1.714	26.9	26.6	
12.05118	01:13:42	1.215	7.906	-0.031	7.935	0.113	0.064	0.012	1.121	26.8	26.5	
13.03243	00:46:42	1.234	7.896	-0.032	7.938	0.113	0.065	0.013	1.260	27.2	26.8	
14.06030	01:26:50	1.255	7.888	-0.031	7.923	0.112	0.066	0.011	1.331	26.9	26.5	
15.05995	01:26:20	1.273	7.883	-0.030	7.895	0.111	0.067	0.011	1.632	26.9	26.5	
16.05959	01:25:49	1.288	7.874	-0.031	7.879	0.109	0.068	0.011	1.089	26.9	26.5	
17.04340	01:02:30	1.304	7.870	-0.030	7.879	0.108	0.069	0.011	1.100	26.8	26.5	
18.03454	00:49:44	1.319	7.861	-0.030	7.857	0.107	0.070	0.012	1.179	27.1	26.8	
19.01050	00:15:07	1.331	7.856	-0.030	7.828	0.106	0.072	0.010	1.337	26.8	26.5	
20.01721	00:24:47	1.343	7.852	-0.031	7.815	0.104	0.075	0.009	1.580	26.8	26.5	
21.01550	00:22:19	1.354	7.846	-0.030	7.807	0.103	0.076	0.008	1.707	26.8	26.5	
22.05606	01:20:44	1.367	7.839	-0.029	7.785	0.102	0.077	0.008	1.338	27.0	26.7	
23.05570	01:20:12	1.379	7.833	-0.029	7.787	0.101	0.078	0.007	1.300	27.0	26.7	
24.08309	01:59:39	1.390	7.825	-0.029	7.770	0.101	0.079	0.008	1.319	26.9	26.6	
25.03173	00:45:41	1.399	7.820	-0.029	7.736	0.101	0.079	0.007	1.290	27.3	27.0	
26.03138	00:45:11	1.406	7.818	-0.030	7.709	0.100	0.080	0.007	1.293	27.0	26.8	
27.03102	00:44:40	1.414	7.811	-0.030	7.702	0.100	0.081	0.007	1.288	27.0	26.7	
28.03067	00:44:10	1.423	7.803	-0.029	7.674	0.099	0.082	0.006	1.260	27.0	26.7	
29.03031	00:43:39	1.429	7.801	-0.029	7.648	0.098	0.083	0.006	1.271	27.0	26.7	
30.02995	00:43:08	1.436	7.795	-0.029	7.635	0.098	0.084	0.006	1.240	27.0	26.7	
31.07107	01:42:20	1.443	7.789	-0.029	7.624	0.097	0.084	0.006	1.250	27.0	26.7	
32.07071	01:41:49	1.450	7.781	-0.028	7.607	0.097	0.085	0.005	1.262	27.0	26.7	
33.07036	01:41:19	1.458	7.775	-0.029	7.589	0.096	0.086	0.005	1.242	26.9	26.6	
34.07118	01:42:30	1.466	7.773	-0.030	7.567	0.095	0.087	0.005	1.174	27.0	26.7	
35.07082	01:41:59	1.476	7.766	-0.031	7.543	0.095	0.088	0.005	1.191	27.2	26.9	
36.07046	01:41:28	1.485	7.765	-0.029	7.534	0.093	0.089	0.004	1.189	26.9	26.6	
37.07011	01:40:58	1.490	7.759	-0.030	7.548	0.092	0.091	0.003	1.174	26.9	26.6	
38.06975	01:40:26	1.494	7.749	-0.031	7.501	0.090	0.093	0.003	1.172	27.3	26.9	
39.05885	01:24:45	1.498	7.747	-0.031	7.409	0.089	0.095	0.002	1.206	27.3	26.8	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
40.05850	01:24:14	1.501	7.747	-0.031	7.359	0.088	0.097	0.002	1.157	26.9	26.5	
41.05814	01:23:43	1.506	7.737	-0.031	7.355	0.087	0.098	0.002	1.174	27.3	26.8	
42.05254	01:15:39	1.510	7.734	-0.030	7.308	0.084	0.100	0.002	1.166	26.9	26.5	
43.05218	01:15:08	1.516	7.723	-0.029	7.275	0.083	0.101	0.002	1.177	27.3	26.6	
44.05183	01:14:38	1.519	7.717	-0.029	7.219	0.082	0.102	0.002	1.186	27.3	26.6	
45.06229	01:29:42	1.522	7.708	-0.030	7.169	0.080	0.104	0.002	1.170	27.2	26.5	
46.06193	01:29:11	1.524	7.697	-0.030	7.168	0.078	0.106	0.002	1.174	26.9	26.2	
47.06158	01:28:41	1.525	7.681	-0.031	7.172	0.077	0.107	0.003	1.075	26.9	26.3	
48.03476	00:50:03	1.527	7.672	-0.031	7.178	0.075	0.108	0.003	1.136	26.9	26.3	
49.04635	01:06:45	1.530	7.658	-0.031	7.168	0.074	0.109	0.003	1.197	27.2	26.5	
50.04599	01:06:14	1.532	7.654	-0.031	7.137	0.073	0.111	0.003	1.195	26.9	26.3	
51.04564	01:05:43	1.536	7.645	-0.030	7.176	0.072	0.112	0.003	1.189	26.9	26.2	
52.03796	00:54:40	1.537	7.635	-0.031	7.184	0.071	0.112	0.003	1.208	26.9	26.2	
53.03760	00:54:09	1.538	7.627	-0.032	7.170	0.070	0.114	0.003	1.166	26.9	26.2	
54.03724	00:53:38	1.540	7.622	-0.032	7.158	0.069	0.115	0.002	1.179	26.9	26.2	
54.55347	13:17:00	1.546	7.624	-0.026	7.158	0.251	0.253	0.243	2.565	26.3	25.7	-created data
55.06440	01:32:44	1.544	7.620	-0.031	7.147	0.068	0.116	0.003	1.966	26.7	26.0	file - S1P714
56.06229	01:29:42	1.545	7.616	-0.031	7.136	0.067	0.118	0.001	1.353	26.9	26.3	
57.06194	01:29:12	1.548	7.612	-0.030	7.162	0.066	0.119	0.001	1.362	26.9	26.3	
58.40735	09:46:35	1.555	7.610	-0.018	7.205	0.065	0.121	0.001	1.843	27.0	26.3	
59.07378	01:46:15	1.551	7.602	-0.031	7.198	0.065	0.121	0.000	1.336	26.8	26.1	
60.07343	01:45:44	1.552	7.601	-0.030	7.204	0.064	0.122	0.000	1.279	26.9	26.3	
61.00942	00:13:34	1.554	7.598	-0.030	7.200	0.064	0.122	0.000	1.267	26.8	26.2	
62.37222	08:56:00	1.562	7.606	-0.016	7.172	0.063	0.124	0.000	1.305	26.9	26.3	
63.03865	00:55:39	1.554	7.598	-0.031	7.162	0.063	0.124	-0.001	1.276	26.9	26.3	
64.03829	00:55:08	1.554	7.596	-0.032	7.191	0.062	0.125	-0.001	1.270	26.8	26.2	
65.03794	00:54:38	1.555	7.594	-0.031	7.215	0.061	0.127	-0.001	1.267	26.8	26.3	
66.00025	00:00:22	1.555	7.593	-0.031	7.209	0.060	0.128	-0.001	1.263	26.8	26.2	
68.38420	09:13:15	1.559	7.603	-0.019	7.168	0.059	0.130	0.000	1.303	26.9	26.3	
69.05676	01:21:44	1.565	7.484	-0.032	6.953	0.054	0.132	-0.001	1.262	27.1	26.5	
69.36111	08:40:00	1.567	7.486	-0.030	6.937	0.054	0.132	-0.001	1.261	27.1	26.5	
69.36458	08:45:00	1.565	7.484	-0.031	6.937	0.054	0.132	-0.001	1.261	27.1	26.5	-pulse with-
69.36493	08:45:30	1.455	7.460	-0.032	6.934	0.054	0.132	-0.001	1.261	27.1	26.5	drawal #2
69.36528	08:46:00	1.267	7.415	-0.032	6.928	0.055	0.132	0.000	1.261	27.1	26.5	(test zone)
69.36562	08:46:30	1.073	7.367	-0.032	6.921	0.056	0.134	0.001	1.261	27.1	26.5	removed 156
69.36597	08:47:00	0.784	7.293	-0.032	6.910	0.058	0.137	0.002	1.262	27.1	26.5	ml fluid
69.36632	08:47:30	0.787	7.291	-0.032	6.908	0.058	0.137	0.002	1.262	27.1	26.5	
69.36666	08:47:59	0.793	7.291	-0.032	6.908	0.058	0.137	0.002	1.262	27.1	26.5	
69.36701	08:48:30	0.797	7.293	-0.032	6.908	0.058	0.137	0.002	1.262	27.1	26.5	
69.36736	08:49:00	0.799	7.293	-0.032	6.908	0.058	0.137	0.003	1.262	27.1	26.5	
69.36771	08:49:30	0.801	7.292	-0.032	6.908	0.058	0.137	0.003	1.262	27.1	26.5	
69.36805	08:50:00	0.802	7.292	-0.032	6.909	0.058	0.137	0.003	1.261	27.1	26.5	
69.36875	08:51:00	0.803	7.293	-0.032	6.908	0.058	0.137	0.003	1.261	27.1	26.5	
69.36944	08:52:00	0.805	7.293	-0.032	6.908	0.058	0.138	0.003	1.261	27.1	26.5	
69.37014	08:53:00	0.806	7.293	-0.032	6.908	0.058	0.138	0.003	0.812	27.1	26.5	
69.37083	08:54:00	0.807	7.293	-0.032	6.908	0.058	0.138	0.003	0.904	27.0	26.5	
69.37152	08:54:59	0.807	7.293	-0.032	6.908	0.058	0.138	0.003	0.882	27.0	26.5	
69.37222	08:56:00	0.808	7.292	-0.032	6.908	0.058	0.138	0.003	0.884	27.0	26.5	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
69.37291	08:56:59	0.809	7.292	-0.032	6.908	0.058	0.138	0.003	1.261	27.0	26.4	
69.37361	08:58:00	0.809	7.292	-0.032	6.908	0.058	0.138	0.003	1.261	27.0	26.4	
69.37430	08:59:00	0.810	7.292	-0.032	6.907	0.057	0.138	0.003	1.261	27.0	26.4	
69.37500	09:00:00	0.810	7.293	-0.032	6.907	0.058	0.138	0.003	1.261	27.0	26.4	
69.38542	09:15:00	0.815	7.294	-0.032	6.907	0.057	0.138	0.003	1.260	27.1	26.5	
69.39791	09:32:59	0.818	7.295	-0.033	6.906	0.057	0.138	0.003	1.259	27.1	26.5	
69.41874	10:02:59	0.821	7.295	-0.032	6.903	0.057	0.138	0.003	1.259	27.1	26.5	
69.43750	10:30:00	0.824	7.295	-0.033	6.902	0.057	0.138	0.003	1.259	27.1	26.5	
69.46874	11:14:59	0.826	7.296	-0.032	6.901	0.057	0.138	0.003	1.259	27.1	26.6	
69.51041	12:14:59	0.830	7.297	-0.032	6.898	0.057	0.138	0.003	1.259	27.1	26.5	
69.59371	14:14:57	0.836	7.300	-0.032	6.895	0.057	0.138	0.003	1.258	27.1	26.5	
69.67702	16:14:55	0.840	7.302	-0.032	6.893	0.057	0.138	0.003	1.259	27.1	26.5	
69.76032	18:14:52	0.844	7.303	-0.032	6.890	0.057	0.138	0.003	1.258	27.2	26.5	
69.84362	20:14:49	0.848	7.305	-0.032	6.886	0.057	0.138	0.003	1.258	27.2	26.5	
69.92693	22:14:47	0.851	7.306	-0.032	6.882	0.057	0.138	0.003	1.257	27.1	26.5	
70.01023	00:14:44	0.855	7.308	-0.032	6.877	0.057	0.138	0.003	1.258	27.1	26.5	
70.51005	12:14:28	0.872	7.316	-0.031	6.855	0.057	0.138	0.003	1.260	27.1	26.4	
71.00987	00:14:13	0.888	7.323	-0.031	6.847	0.056	0.139	0.003	1.259	27.2	26.5	
72.00952	00:13:43	0.914	7.332	-0.030	6.824	0.056	0.140	0.003	1.246	27.1	26.5	
73.06591	01:34:55	0.938	7.339	-0.030	6.823	0.054	0.141	0.003	1.195	27.1	26.4	
74.06556	01:34:24	0.956	7.341	-0.030	6.827	0.053	0.142	0.003	1.193	27.1	26.4	
75.06520	01:33:53	0.975	7.344	-0.030	6.814	0.053	0.143	0.003	1.192	27.1	26.4	
76.06484	01:33:22	0.993	7.349	-0.029	6.809	0.053	0.143	0.003	1.197	26.8	26.2	
77.01504	00:21:39	1.006	7.351	-0.030	6.806	0.052	0.143	0.002	1.198	26.9	26.3	
78.01469	00:21:09	1.022	7.354	-0.031	6.802	0.052	0.143	0.002	1.199	26.9	26.3	
79.01433	00:20:38	1.039	7.355	-0.032	6.797	0.051	0.143	0.002	1.198	27.0	26.3	
80.00132	00:01:54	1.048	7.357	-0.033	6.781	0.051	0.144	0.002	1.205	26.9	26.3	
81.34930	08:23:00	1.071	7.366	-0.022	6.745	0.051	0.144	0.001	1.203	27.0	26.3	
82.01573	00:22:39	1.076	7.363	-0.031	6.703	0.051	0.144	0.001	1.195	27.1	26.4	
83.03254	00:46:51	1.087	7.366	-0.031	6.662	0.051	0.145	0.001	1.195	27.1	26.3	
84.03218	00:46:20	1.098	7.367	-0.033	6.639	0.051	0.145	0.001	1.193	27.2	26.3	
85.03183	00:45:50	1.110	7.366	-0.030	6.628	0.051	0.145	0.000	1.191	27.1	26.2	
86.03147	00:45:19	1.120	7.362	-0.033	6.624	0.051	0.146	0.000	1.195	27.2	26.3	
87.02976	00:42:51	1.130	7.361	-0.033	6.634	0.051	0.146	0.000	1.200	26.7	25.9	
88.03900	00:56:10	1.140	7.357	-0.031	6.662	0.051	0.146	0.000	1.201	26.7	26.0	
89.03864	00:55:38	1.151	7.357	-0.029	6.679	0.051	0.146	0.000	1.202	26.7	25.9	
90.03829	00:55:08	1.157	7.353	-0.032	6.696	0.050	0.147	0.000	1.191	26.7	25.9	
91.03793	00:54:37	1.166	7.354	-0.032	6.707	0.050	0.147	0.000	1.368	26.8	26.0	
92.03758	00:54:07	1.175	7.356	-0.032	6.711	0.050	0.147	0.000	1.443	26.7	26.1	
93.03722	00:53:36	1.182	7.360	-0.031	6.718	0.050	0.147	0.000	2.144	26.7	26.1	
94.03796	00:54:40	1.189	7.363	-0.031	6.736	0.050	0.147	0.000	1.442	26.7	26.0	
95.03760	00:54:09	1.195	7.364	-0.032	6.741	0.050	0.147	0.000	2.070	27.0	26.3	
96.03724	00:53:38	1.203	7.368	-0.031	6.739	0.050	0.147	0.000	2.105	26.9	26.3	
97.03689	00:53:07	1.210	7.373	-0.032	6.742	0.050	0.147	0.000	2.146	26.9	26.2	
98.03653	00:52:36	1.217	7.377	-0.031	6.745	0.050	0.147	-0.001	2.171	27.0	26.2	
99.03618	00:52:06	1.223	7.380	-0.031	6.737	0.050	0.148	-0.001	2.159	26.8	26.1	
100.03582	00:51:35	1.228	7.382	-0.033	6.710	0.050	0.148	0.000	1.371	26.8	26.1	
101.08309	01:59:39	1.234	7.385	-0.033	6.653	0.050	0.148	-0.001	2.175	26.7	26.1	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
102.04490	01:04:39	1.240	7.390	-0.032	6.615	0.050	0.148	0.000	1.370	26.9	26.2	
103.04454	01:04:08	1.246	7.393	-0.031	6.605	0.050	0.149	0.000	2.223	26.6	26.0	
104.02337	00:33:39	1.250	7.388	-0.032	6.579	0.050	0.149	0.000	1.793	26.9	26.2	
105.02301	00:33:08	1.256	7.386	-0.031	6.551	0.050	0.149	0.000	1.670	26.9	26.1	
106.02266	00:32:38	1.260	7.384	-0.030	6.538	0.050	0.149	0.000	1.454	26.9	26.1	
107.02230	00:32:07	1.265	7.381	-0.030	6.548	0.050	0.149	0.000	1.786	26.9	26.1	
108.05737	01:22:37	1.269	7.377	-0.031	6.566	0.050	0.150	-0.001	1.436	26.6	25.9	
109.04143	00:59:40	1.271	7.373	-0.033	6.599	0.050	0.150	0.000	1.431	26.6	25.9	
110.04107	00:59:08	1.276	7.370	-0.030	6.624	0.050	0.150	0.000	1.417	26.9	26.1	
111.04072	00:58:38	1.280	7.372	-0.030	6.635	0.050	0.150	0.000	1.419	26.9	26.1	
112.04036	00:58:07	1.284	7.373	-0.030	6.645	0.050	0.150	-0.001	1.421	26.9	26.1	
113.04000	00:57:36	1.289	7.374	-0.029	6.680	0.050	0.151	-0.001	1.411	26.9	26.1	
114.03965	00:57:06	1.291	7.377	-0.030	6.713	0.050	0.151	-0.001	1.419	26.8	26.2	
115.03518	00:50:40	1.293	7.378	-0.031	6.725	0.050	0.151	0.001	1.413	26.7	26.2	
116.03482	00:50:08	1.297	7.383	-0.030	6.726	0.050	0.151	-0.001	1.406	26.8	26.2	
117.03447	00:49:38	1.302	7.390	-0.031	6.734	0.050	0.151	-0.001	1.405	26.8	26.3	
118.03411	00:49:07	1.303	7.394	-0.031	6.734	0.050	0.152	0.000	1.410	26.7	26.3	
119.03375	00:48:36	1.306	7.399	-0.031	6.735	0.050	0.152	0.001	1.413	26.6	26.2	
120.03340	00:48:06	1.309	7.403	-0.031	6.721	0.049	0.152	-0.001	1.280	26.9	26.3	
121.03304	00:47:35	1.313	7.409	-0.031	6.707	0.049	0.152	-0.001	1.713	26.8	26.3	
123.35069	08:25:00	1.320	7.417	-0.032	6.650	0.049	0.153	-0.001	1.326	26.8	26.3	
123.35104	08:25:30	1.320	7.418	-0.030	6.651	0.049	0.153	-0.001	1.338	26.9	26.3	
123.35139	08:26:00	1.319	7.418	-0.030	6.651	0.049	0.153	-0.001	1.330	26.8	26.3	
123.35173	08:26:29	1.320	7.417	-0.031	6.650	0.049	0.153	-0.001	1.333	26.8	26.3	
123.35208	08:27:00	1.321	7.417	-0.030	6.652	0.049	0.153	-0.001	1.341	26.8	26.2	
123.35243	08:27:30	1.319	7.418	-0.031	6.650	0.049	0.153	-0.001	1.359	26.8	26.3	
123.35278	08:28:00	1.320	7.418	-0.030	6.650	0.049	0.153	-0.001	1.337	26.8	26.3	
123.35312	08:28:30	1.320	7.417	-0.032	6.652	0.049	0.153	-0.001	1.338	26.8	26.3	
123.35347	08:29:00	1.321	7.417	-0.032	6.650	0.049	0.153	-0.001	1.271	26.8	26.3	
123.35382	08:29:30	1.320	7.418	-0.030	6.649	0.049	0.153	-0.001	1.285	26.8	26.3	
123.35416	08:29:59	1.321	7.418	-0.031	6.651	0.049	0.153	-0.001	1.304	26.8	26.3	-pulse
123.35451	08:30:30	1.320	7.418	0.174	6.651	0.049	0.153	-0.001	1.297	26.8	26.3	injection
123.35486	08:31:00	1.319	7.418	0.388	6.651	0.049	0.153	-0.001	1.288	26.8	26.3	(guard zone)
123.35521	08:31:30	1.320	7.422	0.034	6.651	0.049	0.153	-0.001	1.290	26.7	26.4	
123.35555	08:32:00	1.319	7.422	0.097	6.657	0.049	0.153	-0.001	1.307	26.7	26.3	
123.35590	08:32:30	1.318	7.430	0.589	6.662	0.049	0.153	-0.001	1.318	26.7	26.3	
123.35625	08:33:00	1.319	7.429	0.055	6.661	0.049	0.153	-0.001	1.351	26.7	26.2	
123.35659	08:33:29	1.320	7.428	0.053	6.661	0.049	0.153	-0.001	1.322	26.6	26.3	
123.35694	08:34:00	1.319	7.429	0.052	6.660	0.049	0.153	-0.001	1.356	26.6	26.3	
123.35729	08:34:30	1.320	7.428	0.050	6.661	0.049	0.153	-0.001	1.349	26.6	26.2	
123.35764	08:35:00	1.319	7.428	0.049	6.660	0.049	0.153	-0.001	1.347	26.6	26.3	
123.35833	08:36:00	1.319	7.429	0.047	6.661	0.049	0.153	-0.001	1.358	26.6	26.3	
123.35903	08:37:00	1.320	7.428	0.046	6.661	0.049	0.153	-0.001	1.369	26.6	26.2	
123.35972	08:38:00	1.319	7.429	0.044	6.661	0.049	0.153	-0.001	1.683	26.6	26.2	
123.36041	08:38:59	1.319	7.428	0.043	6.660	0.049	0.153	-0.001	1.742	26.5	26.2	
123.36111	08:40:00	1.319	7.429	0.042	6.661	0.049	0.153	-0.001	1.650	26.5	26.2	
123.36180	08:41:00	1.319	7.429	0.041	6.661	0.049	0.153	-0.001	1.643	26.6	26.2	
123.36250	08:42:00	1.318	7.429	0.041	6.661	0.049	0.153	-0.001	1.321	26.7	26.3	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-05) (cm)	RADIAL LVDT (R-11) (cm)	RADIAL LVDT (R-12) (cm)	AXIAL LVDT (A-01) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
123.36319	08:43:00	1.319	7.428	0.040	6.661	0.049	0.153	-0.001	1.315	26.7	26.3	
123.36388	08:43:59	1.320	7.429	0.040	6.661	0.049	0.153	-0.001	1.301	26.7	26.3	
123.36458	08:45:00	1.319	7.429	0.039	6.661	0.049	0.153	-0.001	1.325	26.8	26.3	
123.36527	08:45:59	1.319	7.429	0.039	6.660	0.049	0.153	-0.001	1.313	26.7	26.3	
123.36597	08:47:00	1.320	7.428	0.038	6.660	0.049	0.153	-0.001	1.305	26.8	26.3	
123.36666	08:47:59	1.319	7.428	0.038	6.661	0.049	0.153	-0.001	1.327	26.7	26.3	
123.36736	08:49:00	1.320	7.427	0.037	6.659	0.049	0.153	-0.001	1.321	26.7	26.3	
123.36805	08:50:00	1.319	7.428	0.037	6.660	0.049	0.153	-0.001	1.322	26.8	26.3	
123.36874	08:50:59	1.320	7.428	0.037	6.660	0.049	0.153	-0.001	1.310	26.8	26.3	
123.37013	08:52:59	1.321	7.429	0.036	6.660	0.049	0.153	-0.001	1.322	26.9	26.4	
123.37152	08:54:59	1.320	7.429	0.035	6.660	0.049	0.152	-0.001	1.332	26.9	26.3	
123.37291	08:56:59	1.320	7.427	0.034	6.660	0.049	0.153	-0.001	1.333	26.9	26.3	
123.37499	08:59:59	1.321	7.427	0.033	6.661	0.049	0.153	-0.001	1.330	26.9	26.3	
123.38194	09:10:00	1.321	7.427	0.030	6.658	0.049	0.153	-0.001	1.369	26.9	26.3	
123.38472	09:14:00	-0.064	-0.008	-0.030	0.011	0.057	0.153	0.008	1.379	26.8	26.2	
123.38541	09:14:59	-0.062	-0.002	-0.030	0.012	0.059	0.151	0.007	1.397	26.8	26.3	
123.38611	09:16:00	-0.062	0.003	-0.029	0.017	0.060	0.151	0.007	1.386	26.8	26.3	-removed test
170.59375	14:15:00	-0.065	-0.020	-0.046	-0.003	-0.038	0.158	-0.251	6.278	26.6	27.0	tool

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
171.39930	09:35:00	-0.063	-0.020	-0.043	-0.006	0.240	0.208	0.303	0.992	26.5	26.8	-installed
171.45764	10:59:00	-0.062	0.006	-0.040	0.015	0.259	0.217	0.259	1.025	26.6	27.2	test tool
171.45833	11:00:00	-0.062	0.042	-0.040	0.009	0.259	0.217	0.259	1.026	26.6	27.2	-created data
171.45903	11:01:00	-0.014	0.771	0.003	0.819	0.260	0.214	0.260	1.003	26.6	27.7	file - S1P715
171.45972	11:02:00	-0.051	10.607	-0.031	10.419	0.290	0.212	0.238	0.841	26.6	27.5	-inflated
171.46041	11:02:59	-0.052	10.424	-0.031	10.336	0.289	0.212	0.238	0.845	26.6	27.6	packers
171.46111	11:04:00	-0.052	9.842	-0.031	10.094	0.289	0.209	0.238	0.839	26.6	27.5	
171.46180	11:05:00	-0.052	9.517	-0.031	9.958	0.289	0.207	0.239	0.836	26.6	27.5	
171.46250	11:06:00	-0.052	9.287	-0.031	9.867	0.288	0.204	0.241	0.833	26.6	27.4	
171.46319	11:07:00	-0.051	9.112	-0.031	9.797	0.288	0.202	0.243	0.831	26.6	27.4	
171.46389	11:08:00	-0.051	8.971	-0.032	9.739	0.287	0.201	0.245	0.829	26.6	27.4	
171.46458	11:09:00	-0.051	8.856	-0.032	9.691	0.287	0.200	0.247	0.828	26.6	27.4	
171.46527	11:09:59	-0.051	8.758	-0.032	9.649	0.286	0.199	0.248	0.827	26.6	27.4	
171.46597	11:11:00	-0.051	8.674	-0.032	9.612	0.285	0.198	0.250	0.826	26.6	27.3	
171.46666	11:11:59	-0.051	8.601	-0.033	9.579	0.285	0.197	0.251	0.825	26.6	27.3	
171.46736	11:13:00	-0.051	8.534	-0.033	9.549	0.285	0.197	0.251	0.824	26.6	27.3	
171.46805	11:14:00	-0.051	8.474	-0.033	9.522	0.285	0.197	0.251	0.824	26.6	27.3	
171.46875	11:15:00	-0.051	8.417	-0.033	9.497	0.285	0.196	0.252	0.823	26.6	27.3	
171.46944	11:16:00	-0.051	8.363	-0.033	9.474	0.285	0.196	0.252	0.822	26.6	27.2	
171.47013	11:16:59	-0.051	8.316	-0.034	9.451	0.284	0.196	0.252	0.822	26.6	27.2	
171.47083	11:18:00	-0.051	8.272	-0.034	9.432	0.284	0.196	0.253	0.821	26.6	27.2	
171.47152	11:18:59	-0.051	8.230	-0.034	9.412	0.284	0.196	0.253	0.820	26.6	27.2	
171.47222	11:20:00	-0.051	8.192	-0.034	9.394	0.284	0.196	0.253	0.820	26.6	27.2	
171.47291	11:20:59	-0.051	8.156	-0.034	9.378	0.284	0.195	0.253	0.820	26.6	27.2	
171.47360	11:21:59	-0.051	8.123	-0.034	9.361	0.284	0.195	0.253	0.819	26.6	27.2	
171.47430	11:23:00	-0.051	8.092	-0.034	9.346	0.284	0.195	0.254	0.819	26.6	27.2	
171.47499	11:23:59	-0.051	8.063	-0.034	9.331	0.284	0.195	0.254	0.818	26.6	27.2	
171.47569	11:25:00	-0.051	8.035	-0.035	9.317	0.284	0.195	0.254	0.818	26.6	27.2	
171.47638	11:25:59	-0.051	8.009	-0.035	9.304	0.284	0.195	0.254	0.818	26.6	27.2	
171.47708	11:27:00	-0.051	7.985	-0.035	9.291	0.284	0.195	0.254	0.817	26.6	27.2	
171.47777	11:27:59	-0.051	7.959	-0.035	9.276	0.284	0.195	0.254	0.817	26.6	27.1	
171.47846	11:28:59	-0.051	7.941	-0.035	9.267	0.284	0.195	0.254	0.816	26.6	27.2	
171.47917	11:30:00	-0.051	7.920	-0.035	9.255	0.284	0.194	0.255	0.816	26.6	27.2	
171.48333	11:36:00	-0.051	7.817	-0.037	9.191	0.282	0.194	0.256	0.815	26.6	27.1	
171.48750	11:42:00	-0.051	7.739	-0.037	9.139	0.282	0.194	0.256	0.814	26.6	27.1	
171.49166	11:47:59	-0.050	7.680	-0.037	9.094	0.282	0.193	0.256	0.813	26.6	27.1	
171.49583	11:54:00	-0.050	7.630	-0.038	9.055	0.282	0.193	0.257	0.813	26.6	27.0	
171.49999	11:59:59	-0.050	7.589	-0.038	9.020	0.282	0.193	0.257	0.812	26.6	27.1	
171.50416	12:05:59	-0.050	7.556	-0.039	8.990	0.282	0.193	0.257	0.812	26.6	27.0	
171.50832	12:11:59	-0.050	7.527	-0.039	8.962	0.282	0.193	0.257	0.812	26.6	27.0	
171.55207	13:14:59	-0.050	7.347	-0.041	8.776	0.282	0.192	0.258	0.811	26.6	26.9	
171.59372	14:14:57	-0.050	7.257	-0.042	8.680	0.281	0.192	0.258	0.810	26.6	26.9	
171.63537	15:14:56	-0.049	7.196	-0.043	8.615	0.281	0.192	0.258	0.810	26.6	26.9	
171.67703	16:14:55	-0.049	7.149	-0.044	8.567	0.281	0.192	0.259	0.809	26.6	26.9	
171.71868	17:14:54	-0.049	7.113	-0.044	8.528	0.281	0.192	0.259	0.809	26.6	26.8	
171.76033	18:14:53	-0.049	7.081	-0.045	8.498	0.280	0.191	0.259	0.810	26.6	26.8	
171.80198	19:14:51	-0.049	7.053	-0.046	8.471	0.280	0.191	0.259	0.809	26.6	26.9	
171.84363	20:14:50	-0.048	7.028	-0.046	8.448	0.280	0.191	0.259	0.810	26.6	26.9	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
171.88529	21:14:49	-0.048	7.007	-0.047	8.430	0.280	0.191	0.259	0.810	26.6	26.8	
171.92694	22.14:48	-0.048	6.987	-0.047	8.414	0.280	0.191	0.259	0.810	26.6	26.8	
171.96859	23:14:46	-0.047	6.968	-0.046	8.394	0.280	0.191	0.259	0.809	26.6	26.8	
172.01024	00:14:45	-0.046	6.950	-0.047	8.379	0.280	0.191	0.259	0.809	26.7	26.9	
172.45694	10:58:00	-0.043	6.822	-0.048	8.270	0.280	0.191	0.259	0.806	26.6	26.8	
172.45763	10:58:59	-0.043	6.822	-0.048	8.270	0.280	0.191	0.259	0.806	26.6	26.8	
172.45833	11:00:00	-0.043	6.821	-0.048	8.269	0.280	0.191	0.259	0.806	26.6	26.8	-packers'
172.45902	11:00:59	-0.043	10.451	-0.048	8.195	0.280	0.190	0.261	0.841	26.6	26.8	pressure
172.45972	11:02:00	-0.043	10.515	-0.048	8.189	0.280	0.190	0.260	0.844	26.6	26.8	increased
172.46041	11:02:59	-0.044	10.341	-0.048	10.396	0.280	0.190	0.261	0.863	26.6	26.8	
172.46110	11:03:59	-0.043	10.294	-0.048	10.330	0.280	0.190	0.261	0.865	26.6	26.8	
172.46180	11:05:00	-0.043	10.260	-0.048	10.297	0.280	0.190	0.261	0.865	26.6	26.8	
172.46249	11:05:59	-0.044	10.235	-0.048	10.275	0.280	0.190	0.261	0.865	26.6	26.8	
172.46319	11:07:00	-0.044	10.213	-0.048	10.257	0.280	0.190	0.261	0.866	26.6	26.8	
172.46388	11:07:59	-0.043	10.195	-0.048	10.243	0.280	0.190	0.261	0.866	26.6	26.8	
172.46458	11:09:00	-0.043	10.179	-0.048	10.230	0.280	0.190	0.261	0.866	26.6	26.8	
172.46527	11:09:59	-0.044	10.165	-0.048	10.221	0.280	0.190	0.261	0.866	26.6	26.8	
172.46596	11:10:59	-0.044	10.152	-0.047	10.212	0.280	0.190	0.261	0.866	26.6	26.8	
172.46666	11:11:59	-0.043	10.140	-0.048	10.203	0.280	0.190	0.261	0.866	26.6	26.8	
172.46735	11:12:59	-0.043	10.128	-0.048	10.196	0.280	0.190	0.261	0.866	26.6	26.8	
172.46805	11:14:00	-0.043	10.118	-0.048	10.189	0.280	0.190	0.261	0.866	26.6	26.8	
172.46874	11:14:59	-0.043	10.110	-0.048	10.183	0.280	0.190	0.261	0.866	26.6	26.8	
172.46943	11:15:59	-0.043	10.101	-0.048	10.177	0.280	0.190	0.261	0.867	26.6	26.8	
172.47013	11:16:59	-0.043	10.091	-0.048	10.172	0.280	0.190	0.261	0.867	26.6	26.8	
172.47082	11:17:59	-0.044	10.085	-0.048	10.167	0.280	0.190	0.261	0.867	26.6	26.8	
172.47152	11:18:59	-0.043	10.077	-0.048	10.161	0.280	0.190	0.261	0.867	26.6	26.8	
172.47221	11:19:59	-0.043	10.070	-0.048	10.157	0.280	0.190	0.261	0.867	26.6	26.8	
172.47291	11:20:59	-0.044	10.063	-0.048	10.153	0.280	0.190	0.261	0.867	26.6	26.8	
172.47360	11:21:59	-0.044	10.056	-0.048	10.149	0.280	0.190	0.261	0.867	26.6	26.8	
172.47429	11:22:59	-0.043	10.051	-0.048	10.144	0.280	0.190	0.261	0.867	26.6	26.8	
172.47499	11:23:59	-0.043	10.045	-0.048	10.141	0.280	0.190	0.261	0.867	26.6	26.8	
172.47568	11:24:59	-0.043	10.039	-0.048	10.137	0.280	0.190	0.261	0.867	26.6	26.8	
172.47638	11:25:59	-0.044	10.034	-0.048	10.134	0.280	0.190	0.261	0.867	26.6	26.8	
172.47866	11:29:16	-0.043	10.017	-0.048	10.124	0.280	0.190	0.261	0.867	26.6	26.9	
172.47917	11:30:00	-0.043	10.015	-0.048	10.121	0.280	0.190	0.261	0.867	26.6	26.9	-shut in
172.49999	11:59:59	-0.043	9.916	-0.049	10.057	0.280	0.190	0.261	0.868	26.6	26.9	
172.54167	13:00:00	-0.043	9.808	-0.045	9.989	0.280	0.190	0.261	0.868	26.6	26.8	
172.58400	14:00:58	-0.054	9.529	-0.068	9.929	0.274	0.171	0.265	0.858	26.7	26.9	
172.60417	14:30:00	-0.051	9.506	-0.071	9.911	0.274	0.171	0.265	0.857	26.7	26.9	
172.64582	15:29:59	-0.047	9.463	-0.074	9.878	0.274	0.171	0.265	0.858	26.7	26.9	
172.68747	16:29:57	-0.044	9.430	-0.076	9.854	0.274	0.171	0.266	0.858	26.6	26.8	
172.72912	17:29:56	-0.041	9.401	-0.077	9.833	0.274	0.171	0.265	0.857	26.7	26.9	
172.77077	18:29:55	-0.038	9.376	-0.078	9.817	0.274	0.171	0.266	0.856	26.6	26.9	
172.81242	19:29:53	-0.036	9.354	-0.079	9.801	0.274	0.171	0.266	0.856	26.6	26.8	
172.85408	20:29:53	-0.033	9.332	-0.078	9.785	0.274	0.171	0.266	0.855	26.7	26.9	
172.89573	21:29:51	-0.030	9.311	-0.079	9.770	0.274	0.171	0.266	0.854	26.7	26.9	
172.93738	22:29:50	-0.027	9.293	-0.078	9.756	0.274	0.171	0.266	0.854	26.7	26.9	
172.97903	23:29:48	-0.025	9.275	-0.079	9.743	0.274	0.171	0.266	0.852	26.7	26.8	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
173.02068	00:29:47	-0.022	9.259	-0.079	9.731	0.274	0.171	0.266	0.853	26.7	26.8	
174.02893	00:41:40	0.034	9.006	-0.080	9.535	0.273	0.170	0.266	0.843	26.7	26.9	
174.36214	08:41:29	0.051	8.951	-0.081	9.484	0.273	0.170	0.266	0.842	26.7	26.9	
174.38125	09:09:00	0.053	8.947	-0.079	9.481	0.273	0.170	0.266	0.842	26.7	27.0	
174.39548	09:29:29	0.053	8.948	-0.079	9.480	0.273	0.170	0.266	0.841	26.7	27.0	
174.39583	09:30:00	0.053	8.947	-0.078	9.480	0.273	0.170	0.266	0.842	26.7	27.0	-pulse
174.39618	09:30:30	2.186	9.610	-0.079	9.605	0.270	0.166	0.263	0.804	26.7	27.0	injection
174.39653	09:31:00	2.832	9.848	-0.078	9.678	0.271	0.165	0.263	0.788	26.8	27.0	(test-zone
174.39687	09:31:30	2.701	9.810	-0.078	9.675	0.270	0.165	0.263	0.789	26.7	27.0	interval)
174.39722	09:32:00	2.616	9.784	-0.078	9.672	0.270	0.165	0.263	0.789	26.7	27.0	
174.39792	09:33:00	2.501	9.747	-0.079	9.669	0.270	0.165	0.263	0.790	26.7	27.0	
174.39861	09:34:00	2.422	9.721	-0.079	9.666	0.270	0.165	0.263	0.790	26.7	27.0	
174.39930	09:35:00	2.359	9.700	-0.079	9.665	0.270	0.165	0.263	0.790	26.7	27.0	
174.40000	09:36:00	2.306	9.683	-0.079	9.662	0.270	0.165	0.263	0.791	26.7	27.0	
174.40069	09:37:00	2.261	9.668	-0.079	9.661	0.270	0.165	0.263	0.792	26.7	27.0	
174.40104	09:37:30	2.967	9.892	-0.078	9.691	0.271	0.164	0.263	0.783	26.7	27.0	
174.40139	09:38:00	2.934	9.887	-0.079	9.694	0.271	0.164	0.263	0.782	26.7	27.0	-test-zone
174.40173	09:38:29	3.017	9.915	-0.078	9.700	0.271	0.164	0.263	0.781	26.7	27.0	packer
174.40208	09:39:00	2.963	9.902	-0.079	9.700	0.271	0.164	0.263	0.781	26.7	27.0	pressure
174.40277	09:39:59	2.885	9.879	-0.078	9.698	0.271	0.164	0.263	0.781	26.7	27.0	increased
174.40347	09:41:00	2.824	9.860	-0.079	9.696	0.271	0.164	0.263	0.781	26.7	27.0	
174.40416	09:41:59	2.771	9.842	-0.079	9.695	0.271	0.164	0.263	0.781	26.7	27.0	
174.40486	09:43:00	2.725	9.827	-0.079	9.694	0.271	0.164	0.263	0.782	26.7	27.0	
174.40555	09:44:00	2.683	9.813	-0.079	9.693	0.271	0.164	0.263	0.782	26.7	27.0	
174.40625	09:45:00	2.645	9.802	-0.079	9.691	0.270	0.164	0.263	0.782	26.7	26.9	
174.40694	09:46:00	2.609	9.789	-0.079	9.690	0.270	0.164	0.264	0.783	26.7	26.9	
174.40763	09:46:59	2.576	9.777	-0.079	9.689	0.270	0.164	0.264	0.783	26.7	26.9	
174.40833	09:48:00	2.546	9.767	-0.079	9.688	0.270	0.164	0.264	0.783	26.7	26.9	
174.40902	09:48:59	2.517	9.757	-0.079	9.687	0.270	0.164	0.264	0.784	26.7	26.9	
174.40972	09:50:00	2.491	9.748	-0.079	9.686	0.270	0.164	0.264	0.784	26.7	26.9	
174.41041	09:50:59	2.465	9.739	-0.079	9.685	0.270	0.164	0.264	0.784	26.7	26.9	
174.41111	09:52:00	2.442	9.730	-0.079	9.684	0.270	0.164	0.264	0.784	26.7	26.9	
174.41180	09:53:00	2.418	9.724	-0.079	9.683	0.270	0.164	0.264	0.785	26.7	26.9	
174.41249	09:53:59	2.397	9.715	-0.080	9.682	0.270	0.164	0.264	0.785	26.7	27.0	
174.41319	09:55:00	2.377	9.709	-0.080	9.682	0.270	0.164	0.264	0.785	26.7	26.9	
174.41388	09:55:59	2.357	9.702	-0.080	9.681	0.270	0.164	0.264	0.786	26.7	26.9	
174.41458	09:57:00	2.338	9.695	-0.079	9.680	0.270	0.164	0.264	0.786	26.7	26.9	
174.41527	09:57:59	2.320	9.688	-0.079	9.679	0.270	0.164	0.264	0.786	26.7	26.9	
174.41597	09:59:00	2.303	9.683	-0.079	9.679	0.270	0.164	0.264	0.786	26.7	26.9	
174.41666	09:59:59	2.286	9.677	-0.080	9.678	0.270	0.164	0.264	0.787	26.7	27.0	
174.42707	10:14:59	2.092	9.608	-0.079	9.668	0.270	0.164	0.264	0.789	26.7	26.9	
174.43749	10:29:59	1.962	9.560	-0.079	9.658	0.270	0.164	0.264	0.791	26.7	27.0	
174.44790	10:44:59	1.865	9.524	-0.079	9.650	0.270	0.164	0.264	0.793	26.7	27.0	
174.45833	11:00:00	1.790	9.495	-0.078	9.639	0.270	0.164	0.264	0.794	26.7	27.0	
174.45902	11:00:59	0.882	9.208	-0.079	9.583	0.271	0.164	0.265	0.810	26.6	27.0	
174.45972	11:02:00	0.902	9.209	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	27.0	
174.46041	11:02:59	0.912	9.211	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	27.0	
174.46111	11:04:00	0.919	9.211	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
174.46180	11:05:00	0.923	9.213	-0.078	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46250	11:06:00	0.928	9.213	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	27.0	
174.46319	11:07:00	0.931	9.214	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46388	11:07:59	0.934	9.215	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46458	11:09:00	0.937	9.215	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46527	11:09:59	0.939	9.215	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46597	11:11:00	0.941	9.215	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46666	11:11:59	0.943	9.215	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46735	11:12:59	0.945	9.217	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46805	11:14:00	0.946	9.217	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46874	11:14:59	0.947	9.217	-0.079	9.573	0.271	0.164	0.265	0.811	26.6	26.9	
174.46944	11:16:00	0.949	9.216	-0.079	9.572	0.271	0.164	0.265	0.811	26.6	26.9	
174.47013	11:16:59	0.950	9.216	-0.079	9.572	0.271	0.164	0.265	0.811	26.6	26.9	
174.47083	11:18:00	0.951	9.216	-0.079	9.572	0.271	0.164	0.265	0.811	26.6	26.9	
174.47152	11:18:59	0.952	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47221	11:19:59	0.953	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47291	11:20:59	0.954	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47360	11:21:59	0.954	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47430	11:23:00	0.955	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47499	11:23:59	0.955	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47569	11:25:00	0.956	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47638	11:25:59	0.957	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47707	11:26:59	0.957	9.216	-0.079	9.571	0.271	0.164	0.265	0.811	26.6	26.9	
174.47777	11:27:59	0.958	9.215	-0.079	9.571	0.271	0.164	0.265	0.811	26.7	26.9	
174.47846	11:28:59	0.959	9.215	-0.079	9.570	0.271	0.164	0.265	0.811	26.6	26.9	
174.47916	11:29:59	0.959	9.214	-0.079	9.570	0.271	0.164	0.265	0.811	26.6	26.9	
174.47985	11:30:59	0.959	9.215	-0.079	9.570	0.271	0.164	0.265	0.811	26.7	26.9	
174.48332	11:35:59	0.961	9.215	-0.079	9.570	0.271	0.164	0.265	0.811	26.7	26.9	
174.48679	11:40:59	0.963	9.214	-0.079	9.570	0.271	0.164	0.265	0.811	26.7	26.9	
174.49026	11:45:58	0.963	9.213	-0.079	9.569	0.271	0.164	0.265	0.811	26.7	26.9	
174.49373	11:50:58	0.963	9.213	-0.079	9.568	0.271	0.164	0.265	0.811	26.7	26.9	
174.49721	11:55:59	0.964	9.213	-0.079	9.568	0.271	0.164	0.265	0.811	26.6	26.9	
174.50000	12:00:00	0.677	9.131	-0.079	9.545	0.272	0.164	0.266	0.819	26.6	26.9	-released
174.50035	12:00:30	-0.046	8.933	-0.079	9.488	0.274	0.164	0.268	0.832	26.6	26.9	pressure
174.50069	12:01:00	-0.045	8.928	-0.079	9.483	0.274	0.164	0.269	0.833	26.5	26.9	(test zone)
174.54165	12:59:59	-0.033	8.918	-0.079	9.470	0.274	0.164	0.269	0.836	26.7	26.9	removed ~22
174.54235	13:00:59	-0.033	8.918	-0.079	9.470	0.274	0.164	0.269	0.836	26.7	26.9	ml fluid
174.59928	14:22:58	-0.027	8.913	-0.079	9.467	0.274	0.164	0.269	0.836	26.6	26.9	shut-in
174.64582	15:29:59	-0.023	8.907	-0.079	9.460	0.274	0.164	0.269	0.836	26.6	27.0	
174.72912	17:29:56	-0.018	8.897	-0.080	9.450	0.274	0.164	0.269	0.836	26.6	26.9	
174.81243	19:29:54	-0.013	8.885	-0.080	9.439	0.274	0.164	0.269	0.836	26.7	26.9	
174.89573	21:29:51	-0.008	8.874	-0.079	9.427	0.274	0.164	0.269	0.836	26.5	26.8	
174.97903	23:29:48	-0.004	8.863	-0.080	9.415	0.274	0.164	0.269	0.836	26.5	26.8	
175.02068	00:29:47	-0.002	8.859	-0.080	9.409	0.274	0.164	0.269	0.835	26.5	26.8	
175.52051	12:29:32	0.021	8.802	-0.081	9.351	0.274	0.164	0.269	0.834	26.4	26.8	
176.02033	00:29:17	0.043	8.754	-0.081	9.286	0.273	0.164	0.269	0.832	26.4	26.8	
177.01997	00:28:45	0.086	8.674	-0.082	9.175	0.272	0.164	0.269	0.829	26.5	26.9	
177.39549	09:29:30	0.104	8.658	-0.080	9.141	0.272	0.164	0.269	0.830	26.5	26.9	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
177.39583	09:30:00	0.118	8.657	-0.080	9.140	0.272	0.164	0.269	0.830	26.6	26.9	-pulse
177.39618	09:30:30	1.899	9.219	-0.079	9.264	0.270	0.161	0.266	0.799	26.6	26.9	injection
177.39653	09:31:00	1.864	9.223	-0.079	9.269	0.270	0.161	0.266	0.798	26.7	26.9	(test-zone
177.39687	09:31:30	1.872	9.231	-0.079	9.273	0.270	0.161	0.266	0.797	26.6	26.9	interval)
177.39722	09:32:00	1.832	9.221	-0.079	9.271	0.270	0.161	0.266	0.797	26.6	26.9	
177.39792	09:33:00	1.777	9.206	-0.079	9.270	0.270	0.161	0.266	0.797	26.6	26.9	
177.39861	09:34:00	1.737	9.195	-0.079	9.269	0.270	0.161	0.266	0.797	26.6	26.9	
177.39930	09:35:00	1.706	9.186	-0.079	9.268	0.270	0.161	0.266	0.798	26.6	26.9	
177.40000	09:36:00	1.680	9.178	-0.079	9.267	0.270	0.161	0.266	0.797	26.6	27.0	
177.40069	09:37:00	1.658	9.172	-0.079	9.267	0.270	0.161	0.266	0.797	26.6	26.9	
177.40139	09:38:00	1.640	9.165	-0.079	9.267	0.270	0.161	0.266	0.797	26.6	26.9	
177.40208	09:39:00	1.623	9.160	-0.079	9.267	0.270	0.161	0.266	0.797	26.6	26.9	
177.40277	09:39:59	1.608	9.156	-0.079	9.266	0.270	0.161	0.266	0.796	26.6	26.9	
177.40347	09:41:00	1.593	9.152	-0.079	9.265	0.270	0.161	0.266	0.797	26.6	27.0	
177.40416	09:41:59	1.580	9.148	-0.079	9.265	0.270	0.161	0.266	0.796	26.6	26.9	
177.40486	09:43:00	1.568	9.144	-0.079	9.265	0.270	0.161	0.266	0.797	26.6	26.9	
177.40555	09:44:00	1.557	9.140	-0.079	9.265	0.270	0.161	0.266	0.797	26.6	27.0	
177.40625	09:45:00	1.546	9.137	-0.080	9.264	0.270	0.161	0.266	0.797	26.6	27.0	
177.40694	09:46:00	1.536	9.134	-0.079	9.264	0.270	0.161	0.266	0.796	26.6	27.0	
177.40763	09:46:59	1.527	9.131	-0.079	9.264	0.270	0.161	0.266	0.797	26.6	27.0	
177.40833	09:48:00	1.518	9.128	-0.080	9.263	0.270	0.161	0.266	0.797	26.6	27.0	
177.40902	09:48:59	1.509	9.124	-0.079	9.263	0.270	0.161	0.266	0.797	26.6	27.0	
177.40972	09:50:00	1.502	9.122	-0.079	9.263	0.270	0.161	0.266	0.797	26.6	27.0	
177.41041	09:50:59	1.494	9.120	-0.079	9.262	0.270	0.161	0.266	0.797	26.6	27.0	
177.41111	09:52:00	1.486	9.117	-0.079	9.262	0.270	0.161	0.266	0.797	26.7	27.0	
177.41180	09:53:00	1.480	9.115	-0.079	9.262	0.270	0.161	0.266	0.797	26.7	27.0	
177.41249	09:53:59	1.473	9.112	-0.079	9.262	0.270	0.161	0.266	0.797	26.7	27.0	
177.41319	09:55:00	1.466	9.110	-0.079	9.261	0.270	0.161	0.266	0.797	26.7	27.0	
177.41388	09:55:59	1.460	9.107	-0.079	9.261	0.270	0.161	0.266	0.797	26.7	27.0	
177.41458	09:57:00	1.454	9.106	-0.079	9.261	0.270	0.161	0.266	0.798	26.7	27.0	
177.41527	09:57:59	1.448	9.104	-0.079	9.261	0.270	0.161	0.266	0.798	26.7	27.0	
177.41596	09:58:59	1.442	9.103	-0.079	9.260	0.270	0.161	0.266	0.798	26.7	27.0	
177.41666	09:59:59	1.437	9.100	-0.079	9.260	0.270	0.161	0.266	0.798	26.7	27.0	
177.41735	10:00:59	1.432	9.099	-0.079	9.260	0.270	0.161	0.266	0.798	26.7	27.0	
177.41805	10:02:00	1.427	9.096	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.41874	10:02:59	1.422	9.094	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.41944	10:04:00	1.417	9.093	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.42013	10:04:59	1.412	9.092	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.1	
177.42082	10:05:59	1.407	9.091	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.42152	10:06:59	1.403	9.089	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.42221	10:07:59	1.399	9.087	-0.079	9.259	0.270	0.161	0.266	0.798	26.7	27.0	
177.42291	10:08:59	1.395	9.086	-0.079	9.258	0.270	0.161	0.266	0.798	26.7	27.0	
177.42360	10:09:59	1.391	9.084	-0.079	9.258	0.270	0.161	0.266	0.798	26.7	27.0	
177.42429	10:10:59	1.387	9.084	-0.079	9.258	0.271	0.161	0.266	0.798	26.7	27.0	
177.42499	10:11:59	1.383	9.083	-0.079	9.258	0.270	0.161	0.266	0.798	26.7	27.0	
177.42568	10:12:59	1.379	9.081	-0.079	9.258	0.270	0.161	0.266	0.798	26.7	27.0	
177.42638	10:13:59	1.375	9.081	-0.079	9.258	0.271	0.161	0.266	0.798	26.7	27.0	
177.42707	10:14:59	1.372	9.078	-0.079	9.258	0.271	0.161	0.266	0.799	26.7	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
177.42777	10:15:59	1.368	9.077	-0.079	9.257	0.271	0.161	0.266	0.799	26.7	27.0	
177.42846	10:16:59	1.364	9.076	-0.079	9.257	0.271	0.161	0.266	0.798	26.7	27.0	
177.42915	10:17:59	1.361	9.075	-0.079	9.257	0.271	0.161	0.266	0.798	26.7	27.0	
177.42985	10:18:59	1.358	9.073	-0.079	9.256	0.271	0.161	0.266	0.799	26.7	27.0	
177.43054	10:19:59	1.355	9.073	-0.079	9.256	0.271	0.161	0.266	0.799	26.7	27.0	
177.43124	10:20:59	1.352	9.071	-0.080	9.256	0.271	0.161	0.266	0.798	26.7	27.0	
177.43193	10:21:59	1.349	9.070	-0.079	9.256	0.271	0.161	0.266	0.799	26.7	27.0	
177.43263	10:22:59	1.346	9.069	-0.079	9.256	0.271	0.161	0.266	0.799	26.7	27.0	
177.43332	10:23:59	1.343	9.068	-0.079	9.256	0.271	0.161	0.266	0.798	26.7	27.0	
177.43401	10:24:58	1.340	9.067	-0.079	9.256	0.271	0.161	0.266	0.799	26.7	27.0	
177.43471	10:25:59	1.337	9.066	-0.079	9.256	0.271	0.161	0.266	0.798	26.7	27.0	
177.43540	10:26:59	1.334	9.065	-0.079	9.255	0.271	0.161	0.266	0.799	26.7	27.0	
177.43610	10:27:59	1.331	9.064	-0.079	9.255	0.271	0.161	0.266	0.799	26.7	27.0	
177.43681	10:29:00	1.329	9.063	-0.080	9.255	0.271	0.161	0.266	0.799	26.7	27.0	
177.43716	10:29:31	1.327	9.063	-0.079	9.255	0.271	0.161	0.266	0.799	26.7	27.0	
177.43750	10:30:00	1.326	9.063	-0.079	9.255	0.271	0.161	0.266	0.799	26.7	27.0	-released
177.43785	10:30:30	1.002	8.968	-0.079	9.244	0.271	0.161	0.266	0.803	26.7	27.0	pressure
177.43820	10:31:00	0.872	8.924	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	(test zone)
177.43854	10:31:30	0.876	8.924	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	shut in
177.43889	10:32:00	0.877	8.923	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	
177.43924	10:32:30	0.879	8.923	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.1	
177.43959	10:33:01	0.880	8.923	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	
177.43993	10:33:30	0.881	8.922	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	
177.44028	10:34:00	0.883	8.924	-0.079	9.234	0.271	0.161	0.267	0.806	26.7	27.0	
177.44097	10:35:00	0.884	8.922	-0.079	9.233	0.271	0.161	0.267	0.806	26.7	27.0	
177.44166	10:35:59	0.885	8.922	-0.079	9.233	0.271	0.161	0.267	0.807	26.7	27.0	
177.44236	10:37:00	0.885	8.921	-0.079	9.233	0.271	0.161	0.267	0.807	26.7	27.0	
177.44305	10:38:00	0.885	8.921	-0.080	9.234	0.271	0.161	0.267	0.807	26.7	27.0	
177.44375	10:39:00	0.886	8.921	-0.080	9.233	0.271	0.161	0.267	0.806	26.7	27.0	
177.44444	10:40:00	0.887	8.921	-0.080	9.233	0.271	0.161	0.267	0.806	26.7	27.0	
177.44514	10:41:00	0.887	8.921	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.44583	10:42:00	0.887	8.921	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.44652	10:42:59	0.887	8.921	-0.080	9.233	0.271	0.161	0.267	0.807	26.7	27.0	
177.44722	10:44:00	0.887	8.920	-0.080	9.233	0.271	0.161	0.267	0.807	26.7	27.0	
177.44791	10:44:59	0.887	8.920	-0.080	9.233	0.271	0.161	0.267	0.807	26.7	27.0	
177.44861	10:46:00	0.888	8.920	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.44930	10:47:00	0.888	8.921	-0.080	9.233	0.271	0.161	0.267	0.806	26.6	27.0	
177.44999	10:47:59	0.888	8.920	-0.080	9.233	0.271	0.161	0.267	0.806	26.7	27.0	
177.45069	10:49:00	0.887	8.920	-0.080	9.233	0.271	0.161	0.267	0.806	26.7	27.0	
177.45138	10:49:59	0.888	8.920	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45208	10:51:00	0.888	8.920	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45277	10:51:59	0.887	8.919	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45347	10:53:00	0.887	8.919	-0.079	9.232	0.271	0.161	0.267	0.806	26.7	27.0	
177.45416	10:53:59	0.888	8.920	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45485	10:54:59	0.887	8.918	-0.079	9.232	0.271	0.161	0.267	0.806	26.7	27.0	
177.45555	10:56:00	0.887	8.919	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45624	10:56:59	0.887	8.919	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45694	10:58:00	0.887	8.918	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
177.45763	10:58:59	0.886	8.919	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45833	11:00:00	0.886	8.919	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.45902	11:00:59	0.886	8.918	-0.079	9.232	0.271	0.161	0.267	0.806	26.7	27.0	
177.45971	11:01:59	0.886	8.918	-0.079	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.46041	11:02:59	0.885	8.918	-0.079	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.46110	11:03:59	0.885	8.918	-0.080	9.232	0.271	0.161	0.267	0.806	26.7	27.0	
177.46180	11:05:00	0.885	8.918	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.46318	11:06:59	0.885	8.917	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.46457	11:08:59	0.884	8.916	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.46527	11:09:59	0.883	8.916	-0.080	9.231	0.271	0.161	0.267	0.806	26.7	27.0	
177.46596	11:10:59	0.883	8.916	-0.080	9.232	0.271	0.161	0.267	0.807	26.7	27.0	
177.46666	11:11:59	0.883	8.917	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.46735	11:12:59	0.883	8.917	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.46804	11:13:59	0.882	8.915	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.46874	11:14:59	0.883	8.916	-0.079	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.46943	11:15:59	0.882	8.915	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.47013	11:16:59	0.882	8.916	-0.080	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47082	11:17:59	0.882	8.916	-0.079	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.47151	11:18:58	0.882	8.915	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.47221	11:19:59	0.881	8.914	-0.079	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47290	11:20:59	0.880	8.914	-0.080	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47360	11:21:59	0.880	8.914	-0.080	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47429	11:22:59	0.880	8.915	-0.080	9.231	0.271	0.161	0.267	0.806	26.7	27.0	
177.47499	11:23:59	0.880	8.914	-0.080	9.231	0.271	0.161	0.267	0.807	26.7	27.0	
177.47568	11:24:59	0.880	8.915	-0.080	9.231	0.271	0.161	0.267	0.806	26.7	27.0	
177.47637	11:25:58	0.879	8.913	-0.080	9.230	0.271	0.161	0.267	0.806	26.7	27.0	
177.47707	11:26:59	0.880	8.914	-0.079	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47776	11:27:58	0.879	8.914	-0.079	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47812	11:28:30	0.879	8.913	-0.080	9.231	0.271	0.161	0.267	0.806	26.7	27.0	
177.47847	11:29:00	0.878	8.914	-0.080	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47882	11:29:30	0.879	8.915	-0.080	9.230	0.271	0.161	0.267	0.806	26.7	27.0	
177.47917	11:30:00	0.879	8.914	-0.079	9.230	0.271	0.161	0.267	0.807	26.7	27.0	
177.47951	11:30:30	0.681	8.858	-0.079	9.219	0.272	0.161	0.267	0.810	26.7	27.0	
177.47986	11:31:00	0.532	8.812	-0.079	9.208	0.272	0.161	0.267	0.812	26.7	27.0	
177.48021	11:31:30	0.458	8.789	-0.080	9.202	0.272	0.161	0.267	0.814	26.7	27.0	
177.48055	11:32:00	0.459	8.787	-0.079	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48090	11:32:30	0.462	8.786	-0.080	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48133	11:33:07	0.462	8.785	-0.079	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48194	11:34:00	0.464	8.786	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.48264	11:35:00	0.465	8.786	-0.080	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48333	11:36:00	0.466	8.785	-0.080	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48403	11:37:00	0.468	8.785	-0.080	9.201	0.272	0.161	0.267	0.814	26.7	27.0	
177.48472	11:38:00	0.468	8.784	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.48542	11:39:00	0.468	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.6	27.0	
177.48611	11:40:00	0.470	8.786	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.48680	11:41:00	0.470	8.785	-0.079	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.48750	11:42:00	0.471	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.48819	11:43:00	0.471	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
177.48889	11:44:00	0.472	8.784	-0.079	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.48958	11:45:00	0.472	8.784	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49027	11:45:59	0.473	8.784	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49097	11:47:00	0.474	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49166	11:47:59	0.474	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49236	11:49:00	0.474	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49305	11:50:00	0.475	8.785	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49375	11:51:00	0.475	8.784	-0.080	9.200	0.272	0.161	0.267	0.814	26.7	27.0	
177.49444	11:52:00	0.475	8.784	-0.079	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49513	11:52:59	0.476	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49583	11:54:00	0.476	8.785	-0.079	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49652	11:54:59	0.477	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49722	11:56:00	0.477	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49791	11:56:59	0.477	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49861	11:58:00	0.477	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49930	11:59:00	0.478	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.49999	11:59:59	0.477	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50069	12:01:00	0.478	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50138	12:01:59	0.478	8.783	-0.079	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50208	12:03:00	0.478	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50277	12:03:59	0.479	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50346	12:04:59	0.479	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50416	12:05:59	0.479	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50485	12:06:59	0.480	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50555	12:08:00	0.480	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50624	12:08:59	0.480	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50694	12:10:00	0.480	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50763	12:10:59	0.481	8.783	-0.079	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50832	12:11:59	0.480	8.782	-0.079	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.50902	12:12:59	0.481	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.50971	12:13:59	0.482	8.784	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.51041	12:14:59	0.482	8.784	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51110	12:15:59	0.481	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.51179	12:16:59	0.482	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51249	12:17:59	0.482	8.783	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.51318	12:18:59	0.482	8.783	-0.079	9.197	0.272	0.161	0.267	0.814	26.7	27.0	
177.51388	12:19:59	0.482	8.782	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51457	12:20:59	0.483	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51527	12:21:59	0.483	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51596	12:22:59	0.483	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51665	12:23:59	0.483	8.782	-0.080	9.199	0.272	0.161	0.267	0.814	26.7	27.0	
177.51735	12:24:59	0.483	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.51804	12:25:59	0.483	8.783	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.0	
177.51874	12:26:59	0.483	8.784	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.0	
177.51943	12:27:59	0.484	8.784	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.52013	12:28:59	0.484	8.783	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.0	
177.52082	12:29:59	0.484	8.783	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.52151	12:30:58	0.484	8.782	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.0	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
177.52221	12:31:59	0.484	8.782	-0.080	9.198	0.272	0.161	0.267	0.814	26.7	27.0	
177.52257	12:32:30	0.484	8.782	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.1	
177.52291	12:32:59	0.484	8.782	-0.080	9.197	0.272	0.161	0.267	0.814	26.7	27.0	
177.52326	12:33:30	-0.014	8.640	-0.080	9.166	0.273	0.161	0.269	0.823	26.7	27.1	
177.52361	12:34:00	-0.033	8.630	-0.080	9.160	0.273	0.161	0.270	0.824	26.7	27.1	
177.52396	12:34:30	-0.033	8.630	-0.080	9.160	0.273	0.161	0.270	0.824	26.7	27.1	
177.52430	12:35:00	-0.032	8.629	-0.080	9.159	0.273	0.161	0.270	0.824	26.7	27.1	
177.52465	12:35:30	-0.032	8.629	-0.080	9.159	0.273	0.161	0.270	0.824	26.7	27.1	
177.52500	12:36:00	-0.032	8.628	-0.080	9.158	0.273	0.161	0.270	0.824	26.7	27.1	
177.52569	12:37:00	-0.032	8.627	-0.080	9.158	0.273	0.161	0.270	0.824	26.7	27.0	
177.52639	12:38:00	-0.031	8.627	-0.080	9.158	0.273	0.161	0.270	0.825	26.6	27.0	
177.52708	12:39:00	-0.032	8.626	-0.080	9.158	0.273	0.161	0.270	0.824	26.7	27.0	
177.52777	12:39:59	-0.031	8.626	-0.080	9.158	0.273	0.161	0.270	0.825	26.7	27.0	
177.54235	13:00:59	-0.029	8.627	-0.080	9.157	0.273	0.161	0.270	0.826	26.7	27.0	
177.63193	15:09:59	-0.021	8.619	-0.081	9.151	0.273	0.161	0.270	0.826	26.7	27.0	
177.71523	17:09:56	-0.017	8.615	-0.082	9.145	0.273	0.161	0.270	0.825	26.5	26.9	
177.79854	19:09:54	-0.013	8.610	-0.082	9.140	0.273	0.161	0.270	0.826	26.6	26.9	
177.88184	21:09:51	-0.010	8.605	-0.082	9.136	0.273	0.161	0.270	0.825	26.7	27.0	
178.00679	00:09:47	-0.005	8.596	-0.082	9.130	0.273	0.161	0.270	0.826	26.7	27.0	
178.55966	13:25:55	0.013	8.560	-0.082	9.110	0.273	0.161	0.270	0.823	26.7	27.0	
179.55931	13:25:24	0.045	8.498	-0.083	9.088	0.273	0.161	0.270	0.822	26.7	27.0	
180.55895	13:24:53	0.075	8.450	-0.083	9.043	0.273	0.161	0.270	0.818	26.7	27.0	
181.55341	13:16:55	0.105	8.406	-0.082	9.024	0.273	0.161	0.270	0.815	26.7	27.1	
182.55306	13:16:24	0.136	8.367	-0.083	8.954	0.272	0.161	0.270	0.812	26.6	27.0	
183.55270	13:15:53	0.168	8.334	-0.083	8.861	0.272	0.161	0.270	0.808	26.6	27.1	
184.55235	13:15:23	0.201	8.308	-0.083	8.795	0.272	0.161	0.270	0.806	26.8	27.2	
185.55199	13:14:52	0.236	8.280	-0.082	8.773	0.272	0.161	0.270	0.803	26.7	27.2	
186.50799	12:11:30	0.271	8.258	-0.078	8.766	0.272	0.161	0.270	0.803	26.6	27.1	
187.36250	08:42:00	0.302	8.233	-0.081	8.742	0.272	0.161	0.270	0.796	26.7	27.2	
187.36319	08:43:00	0.302	8.233	-0.081	8.741	0.272	0.161	0.270	0.796	26.7	27.2	
187.36389	08:44:00	0.302	8.233	-0.081	8.741	0.272	0.161	0.270	0.796	26.6	27.2	
187.36423	08:44:29	0.302	8.233	-0.081	8.741	0.272	0.161	0.270	0.796	26.6	27.2	
187.36458	08:45:00	0.302	8.233	-0.081	8.741	0.272	0.161	0.270	0.796	26.6	27.1	-pulse
187.36493	08:45:30	0.301	8.237	0.001	8.744	0.272	0.161	0.270	0.796	26.6	27.4	injection
187.36527	08:45:59	0.302	8.249	-0.014	8.756	0.272	0.161	0.270	0.796	26.6	27.9	(guard-zone
187.36562	08:46:30	0.302	8.319	0.209	8.805	0.272	0.161	0.270	0.795	26.6	28.2	interval)
187.36597	08:47:00	0.302	8.383	1.223	8.827	0.272	0.161	0.270	0.793	26.6	28.4	
187.36632	08:47:30	0.302	8.342	0.998	8.799	0.272	0.161	0.270	0.794	26.6	28.5	
187.36666	08:47:59	0.302	8.350	0.677	8.804	0.272	0.161	0.270	0.794	26.6	28.7	
187.36701	08:48:30	0.303	8.324	0.001	8.784	0.272	0.161	0.270	0.795	26.6	28.7	
187.36736	08:49:00	0.303	8.319	-0.028	8.781	0.272	0.161	0.270	0.795	26.6	28.7	
187.36770	08:49:29	0.303	8.317	-0.039	8.778	0.272	0.161	0.270	0.795	26.6	28.6	
187.36805	08:50:00	0.302	8.318	-0.040	8.778	0.272	0.161	0.270	0.795	26.6	28.6	
187.36840	08:50:30	0.302	8.318	-0.038	8.779	0.272	0.161	0.270	0.795	26.6	28.4	
187.36875	08:51:00	0.303	8.317	-0.039	8.779	0.272	0.161	0.270	0.795	26.6	28.5	
187.36909	08:51:29	0.303	8.317	-0.041	8.780	0.272	0.161	0.270	0.794	26.6	28.4	
187.36979	08:52:30	0.303	8.317	-0.044	8.779	0.272	0.161	0.270	0.795	26.6	28.4	
187.37072	08:53:50	0.303	8.317	-0.045	8.780	0.272	0.161	0.270	0.795	26.6	28.1	

TABLE C8 (Continued)
TABULATED DATA FOR PERMEABILITY TESTING IN BOREHOLE S1P71,
MULTIPACKER TEST TOOL #2, PERMEABILITY-TESTING SEQUENCE S1P71-A

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
187.37153	08:55:00	0.303	8.318	-0.045	8.780	0.272	0.161	0.270	0.795	26.6	28.0	
187.37222	08:56:00	0.304	8.317	-0.046	8.780	0.272	0.161	0.270	0.795	26.6	27.9	
187.37291	08:56:59	0.303	8.317	-0.048	8.780	0.272	0.161	0.270	0.795	26.6	27.8	
187.37361	08:58:00	0.303	8.319	-0.048	8.779	0.272	0.161	0.270	0.795	26.6	27.8	
187.37430	08:59:00	0.303	8.317	-0.047	8.780	0.272	0.161	0.270	0.795	26.6	27.8	
187.37500	09:00:00	0.303	8.319	-0.048	8.780	0.272	0.161	0.270	0.795	26.6	27.8	
187.39791	09:32:59	0.304	8.321	-0.052	8.780	0.272	0.161	0.270	0.795	26.7	27.5	
188.90260	21:39:45	0.361	8.250	-0.079	8.699	0.272	0.161	0.270	0.791	26.8	27.2	
189.06921	01:39:40	0.367	8.246	-0.081	8.691	0.272	0.161	0.270	0.793	26.8	27.2	
190.06885	01:39:09	0.407	8.222	-0.081	8.634	0.272	0.161	0.270	0.788	26.5	27.1	
191.06850	01:38:38	0.445	8.202	-0.081	8.578	0.272	0.160	0.270	0.788	26.6	27.1	-end testing

APPENDIX D. TABULATED DATA FOR COMPLIANCE TESTING

TABLE D1
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
216.45485	10:54:59	0.082	0.302	0.104	0.008	30.0	30.4	-installed
216.45508	10:55:19	0.082	0.434	0.103	0.008	30.0	30.6	test tool
216.45532	10:55:40	0.082	0.766	0.104	0.008	30.0	30.5	created data
216.45555	10:56:00	0.083	1.497	0.103	0.008	30.0	30.4	file - CTCH21
216.45578	10:56:19	0.083	3.519	0.103	0.008	30.0	30.5	inflated
216.45601	10:56:39	0.082	3.393	0.104	0.008	30.0	30.5	packers
216.45636	10:57:10	0.083	3.318	0.104	0.008	30.0	30.5	
216.45694	10:58:00	0.082	3.251	0.103	0.203	30.1	30.5	
216.45775	10:59:10	0.082	3.214	0.103	2.504	30.1	30.5	
216.45844	11:00:09	0.082	3.024	0.102	3.561	30.1	30.5	
216.45914	11:01:10	0.082	2.960	0.102	3.487	30.1	30.5	
216.45983	11:02:09	0.082	2.919	0.103	3.444	30.1	30.5	
216.46052	11:03:09	0.082	2.888	0.103	3.413	30.1	30.5	
216.46122	11:04:09	0.082	2.863	0.103	3.390	30.1	30.5	
216.46191	11:05:09	0.082	2.842	0.103	3.368	30.1	30.5	
216.46261	11:06:10	0.083	2.825	0.102	3.352	30.1	30.5	
216.46330	11:07:09	0.082	2.809	0.103	3.337	30.1	30.5	
216.46399	11:08:09	0.082	2.794	0.103	3.324	30.1	30.5	
216.46469	11:09:09	0.082	2.782	0.102	3.311	30.1	30.5	
216.46538	11:10:09	0.082	2.770	0.102	3.300	30.1	30.5	
216.46677	11:12:09	0.082	2.749	0.103	3.281	30.1	30.5	
216.46816	11:14:09	0.082	2.732	0.102	3.264	30.1	30.5	
216.46955	11:16:09	0.083	2.716	0.103	3.248	30.1	30.5	
216.47094	11:18:09	0.082	2.702	0.104	3.235	30.1	30.5	
216.47232	11:20:08	0.082	2.689	0.103	3.222	30.1	30.5	
216.47371	11:22:09	0.083	2.677	0.103	3.210	30.1	30.5	
216.47510	11:24:09	0.082	2.666	0.104	3.199	30.1	30.5	
216.47638	11:25:59	0.082	2.657	0.103	3.189	30.1	30.5	
216.47777	11:27:59	0.083	2.647	0.103	3.180	30.0	30.5	
216.47904	11:29:49	0.083	2.639	0.104	3.171	30.1	30.5	
216.47916	11:29:59	0.083	2.685	0.104	3.171	30.1	30.5	-test-zone
216.47974	11:30:50	0.082	7.134	0.103	3.155	30.1	30.5	packer
216.47985	11:30:59	0.082	6.968	0.103	3.152	30.1	30.5	pressure
216.47997	11:31:09	0.082	6.870	0.103	3.150	30.1	30.5	increased
216.48008	11:31:19	0.082	6.799	0.104	3.148	30.1	30.5	
216.48020	11:31:29	0.082	6.742	0.103	3.146	30.1	30.5	
216.48055	11:32:00	0.082	6.620	0.103	3.142	30.1	30.5	-guard-zone
216.48066	11:32:09	0.082	6.589	0.103	3.140	30.1	30.5	packer
216.48078	11:32:19	0.082	6.562	0.103	3.334	30.1	30.5	pressure
216.48089	11:32:29	0.083	6.505	0.103	5.473	30.1	30.5	increased
216.48101	11:32:39	0.083	6.401	0.103	7.354	30.1	30.5	
216.48113	11:32:50	0.082	6.370	0.102	7.204	30.1	30.5	
216.48124	11:32:59	0.082	6.349	0.103	7.055	30.1	30.5	

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
216.48136	11:33:10	0.082	6.330	0.102	6.960	30.1	30.5	
216.48147	11:33:19	0.082	6.312	0.102	6.889	30.1	30.5	
216.48159	11:33:29	0.082	6.296	0.103	6.832	30.1	30.5	
216.48170	11:33:39	0.082	6.280	0.103	6.786	30.1	30.5	
216.48182	11:33:49	0.082	6.265	0.103	6.745	30.1	30.5	
216.48194	11:34:00	0.082	6.251	0.103	6.710	30.1	30.5	
216.48263	11:34:59	0.083	6.180	0.104	6.561	30.1	30.5	
216.48402	11:36:59	0.083	6.077	0.103	6.392	30.1	30.5	
216.48471	11:37:59	0.083	6.038	0.104	6.337	30.0	30.5	
216.48541	11:38:59	0.083	6.004	0.104	6.290	30.1	30.5	
216.48610	11:39:59	0.082	5.973	0.103	6.251	30.0	30.5	
216.48680	11:41:00	0.083	5.946	0.104	6.216	30.1	30.5	
216.48818	11:42:59	0.083	5.899	0.104	6.158	30.0	30.5	
216.48957	11:44:59	0.083	5.858	0.104	6.110	30.0	30.5	
216.49096	11:46:59	0.083	5.823	0.103	6.069	30.1	30.5	
216.49235	11:48:59	0.083	5.791	0.104	6.033	30.1	30.5	
216.49374	11:50:59	0.083	5.763	0.104	6.002	30.0	30.5	
216.49686	11:55:29	0.082	5.709	0.103	5.941	30.0	30.5	
216.50011	12:00:10	0.082	5.854	0.103	5.886	30.1	30.5	-test-zone
216.50022	12:00:19	0.082	7.520	0.104	5.839	30.1	30.5	packer
216.50034	12:00:29	0.083	8.688	0.104	5.808	30.1	30.5	pressure
216.50045	12:00:39	0.082	8.926	0.103	5.798	30.1	30.5	increased
216.50057	12:00:49	0.082	9.787	0.104	5.774	30.1	30.5	
216.50069	12:01:00	0.082	10.542	0.103	5.743	30.1	30.5	
216.50138	12:01:59	0.082	9.347	0.103	5.737	30.1	30.5	
216.50207	12:02:59	0.082	9.063	0.103	5.727	30.1	30.5	
216.50219	12:03:09	0.082	9.028	0.102	6.020	30.1	30.5	-guard-zone
216.50231	12:03:20	0.082	8.792	0.102	10.713	30.1	30.5	packer
216.50242	12:03:29	0.082	8.741	0.102	10.206	30.1	30.5	pressure
216.50254	12:03:39	0.083	8.715	0.103	9.908	30.1	30.5	increased
216.50265	12:03:49	0.082	8.690	0.102	9.730	30.1	30.5	
216.50277	12:03:59	0.082	8.667	0.103	9.604	30.1	30.5	
216.50346	12:04:59	0.083	8.552	0.102	9.200	30.1	30.5	
216.50416	12:05:59	0.082	8.467	0.102	8.993	30.1	30.5	
216.50485	12:06:59	0.083	8.398	0.103	8.850	30.0	30.5	
216.50555	12:08:00	0.083	8.341	0.103	8.742	30.0	30.5	
216.50624	12:08:59	0.082	8.293	0.103	8.653	30.0	30.5	
216.50694	12:10:00	0.082	8.251	0.103	8.581	30.0	30.5	
216.50763	12:10:59	0.082	8.214	0.103	8.521	30.1	30.5	
216.50832	12:11:59	0.083	8.179	0.103	8.467	30.1	30.5	
216.50902	12:12:59	0.082	8.149	0.103	8.417	30.0	30.5	
216.50971	12:13:59	0.082	8.121	0.103	8.374	30.1	30.5	
216.51041	12:14:59	0.082	8.095	0.104	8.334	30.0	30.5	

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
216.51181	12:17:00	0.082	8.050	0.104	8.261	30.1	30.5	
216.51320	12:19:00	0.082	8.011	0.105	8.201	30.0	30.5	
216.51389	12:20:00	0.083	7.993	0.104	8.175	30.0	30.5	
216.51736	12:25:00	0.083	7.915	0.103	8.071	30.0	30.5	
216.52083	12:30:00	0.082	8.496	0.103	7.977	30.0	30.5	-packers'
216.52094	12:30:09	0.083	10.716	0.102	7.891	30.0	30.5	pressure
216.52106	12:30:20	0.083	10.513	0.102	9.439	30.1	30.5	increased
216.52117	12:30:29	0.082	10.366	0.103	10.679	30.1	30.5	
216.52129	12:30:39	0.082	10.310	0.102	10.543	30.1	30.5	
216.52140	12:30:49	0.082	10.263	0.102	10.454	30.1	30.5	
216.52152	12:30:59	0.083	10.223	0.102	10.386	30.1	30.5	
216.52164	12:31:10	0.082	10.187	0.102	10.330	30.1	30.5	
216.52175	12:31:19	0.082	10.154	0.103	10.281	30.1	30.5	
216.52187	12:31:30	0.082	10.125	0.102	10.238	30.1	30.5	
216.52198	12:31:39	0.082	10.097	0.102	10.199	30.1	30.5	
216.52210	12:31:49	0.082	10.073	0.103	10.164	30.1	30.5	
216.52221	12:31:59	0.082	10.048	0.103	10.131	30.1	30.5	
216.52848	12:41:01	0.082	9.476	0.104	9.423	30.1	30.5	
216.52917	12:42:00	0.082	9.441	0.104	9.383	30.0	30.5	
216.52987	12:43:01	0.083	9.410	0.103	9.347	30.0	30.5	
216.53056	12:44:00	0.082	9.380	0.103	9.314	30.0	30.5	
216.53144	12:45:16	0.082	9.347	0.103	9.275	30.0	30.5	
216.53214	12:46:17	0.083	9.320	0.103	9.246	30.0	30.5	
216.53283	12:47:17	0.083	9.295	0.103	9.218	30.0	30.5	
216.53353	12:48:17	0.082	9.272	0.103	9.193	30.0	30.5	
216.53422	12:49:17	0.083	9.251	0.103	9.168	30.0	30.5	
216.53491	12:50:16	0.083	9.230	0.104	9.145	30.0	30.5	
216.53630	12:52:16	0.083	9.191	0.103	9.102	30.0	30.5	
216.53769	12:54:16	0.083	9.155	0.104	9.063	30.0	30.5	
216.53908	12:56:17	0.083	9.121	0.103	9.027	30.0	30.5	
216.54047	12:58:17	0.083	9.090	0.103	8.994	30.0	30.4	
216.54186	13:00:17	0.083	9.061	0.103	8.963	30.0	30.4	
216.55943	13:25:35	0.083	8.800	0.102	8.688	30.0	30.4	
216.58282	13:59:16	0.080	8.589	0.100	8.470	29.8	30.2	
216.60284	14:28:05	0.090	8.461	0.108	8.333	30.0	30.4	
216.60687	14:33:54	0.082	8.856	0.100	8.310	30.0	30.4	-packers'
216.60698	14:34:03	0.081	10.995	0.100	8.244	30.0	30.4	pressure
216.60710	14:34:13	0.081	12.348	0.099	8.200	30.0	30.4	increased
216.60722	14:34:24	0.081	13.774	0.099	8.150	30.0	30.4	
216.60733	14:34:33	0.081	13.351	0.099	8.149	30.0	30.4	
216.60745	14:34:44	0.081	13.096	0.098	8.512	30.0	30.4	
216.60756	14:34:53	0.081	12.757	0.098	12.065	30.0	30.4	
216.60768	14:35:04	0.081	12.530	0.098	13.707	30.0	30.4	

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
216.60837	14:36:03	0.080	12.077	0.098	12.440	30.0	30.4	
216.60907	14:37:04	0.080	11.842	0.097	11.977	30.0	30.4	
216.60976	14:38:03	0.080	11.679	0.097	11.711	30.0	30.4	
216.61045	14:39:03	0.079	11.555	0.097	11.527	30.0	30.4	
216.61115	14:40:03	0.080	11.454	0.098	11.388	30.0	30.4	
216.61177	14:40:57	0.080	11.378	0.097	11.287	30.0	30.4	
216.61246	14:41:57	0.080	11.303	0.098	11.193	30.0	30.4	
216.61335	14:43:13	0.080	11.221	0.098	11.092	30.0	30.4	
216.61410	14:44:18	0.080	11.160	0.098	11.020	30.0	30.4	
216.61480	14:45:19	0.080	11.109	0.098	10.961	30.0	30.4	
216.61549	14:46:18	0.080	11.062	0.098	10.907	30.0	30.4	
216.61630	14:47:28	0.081	11.013	0.098	10.852	30.0	30.4	
216.61676	14:48:08	0.080	10.987	0.099	10.822	30.0	30.4	
216.61722	14:48:48	0.080	10.962	0.098	10.793	30.0	30.4	
216.61768	14:49:28	0.080	10.938	0.098	10.767	30.0	30.4	
216.61815	14:50:08	0.081	10.916	0.099	10.740	30.0	30.4	-packers'
216.61953	14:52:07	0.080	13.043	0.099	13.178	30.0	30.4	pressure
216.62145	14:54:53	0.081	12.398	0.100	12.297	30.0	30.4	increased
216.62377	14:58:14	0.081	12.031	0.100	11.881	30.0	30.4	
216.64460	15:28:13	0.082	11.019	0.100	10.870	30.0	30.3	
216.66542	15:58:12	0.082	10.667	0.099	10.548	29.9	30.3	
216.67237	16:08:13	0.082	10.587	0.099	10.475	29.9	30.3	
216.68625	16:28:12	0.082	10.456	0.100	10.357	29.9	30.3	
216.70708	16:58:12	0.083	10.305	0.100	10.221	29.9	30.3	
216.74873	17:58:10	0.083	10.093	0.100	10.032	29.9	30.3	
216.79038	18:58:09	0.083	9.946	0.099	9.900	29.9	30.2	
216.83203	19:58:07	0.082	9.830	0.099	9.798	29.9	30.2	
216.87368	20:58:06	0.082	9.737	0.099	9.715	29.9	30.2	
216.91534	21:58:05	0.082	9.660	0.098	9.647	29.9	30.2	
216.95699	22:58:04	0.082	9.593	0.099	9.587	29.9	30.2	
216.99864	23:58:02	0.083	9.533	0.098	9.534	29.9	30.2	
217.04029	00:58:01	0.083	9.479	0.098	9.488	29.9	30.2	
217.08194	01:58:00	0.083	9.430	0.099	9.445	29.9	30.2	
217.12360	02:57:59	0.082	9.384	0.098	9.407	29.9	30.2	
217.16525	03:57:58	0.082	9.343	0.098	9.372	29.9	30.2	
217.20690	04:57:56	0.082	9.306	0.097	9.339	29.9	30.2	
217.24855	05:57:55	0.082	9.269	0.098	9.308	29.9	30.3	
217.29020	06:57:53	0.082	9.234	0.098	9.279	29.9	30.3	
217.33185	07:57:52	0.082	9.198	0.097	9.252	29.9	30.3	
217.37290	08:56:59	0.082	9.166	0.097	9.234	30.0	30.3	-shut in
217.37499	08:59:59	0.082	9.170	0.097	9.233	30.0	30.3	
217.37511	09:00:10	0.127	9.183	0.097	9.234	30.0	30.3	-injected
217.37522	09:00:19	0.294	9.224	0.097	9.224	30.0	30.3	600 psi into

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
217.37534	09:00:29	3.175	10.253	0.097	8.969	30.0	30.4	test zone
217.37545	09:00:39	4.134	10.809	0.097	8.766	30.1	30.3	
217.37557	09:00:49	4.034	10.756	0.097	8.760	30.1	30.3	
217.37568	09:00:59	3.980	10.720	0.097	8.757	30.1	30.3	
217.37638	09:01:59	3.829	10.619	0.097	8.746	30.1	30.3	
217.37707	09:02:59	3.754	10.560	0.097	8.740	30.1	30.4	
217.37777	09:03:59	3.706	10.522	0.097	8.739	30.1	30.4	
217.37846	09:04:59	3.670	10.490	0.096	8.737	30.1	30.4	
217.37917	09:06:00	3.641	10.468	0.096	8.735	30.1	30.4	
217.37986	09:07:00	3.619	10.448	0.097	8.735	30.1	30.4	
217.38056	09:08:00	3.598	10.432	0.097	8.734	30.1	30.4	
217.38125	09:09:00	3.580	10.412	0.097	8.732	30.1	30.4	
217.38195	09:10:00	3.562	10.396	0.097	8.729	30.1	30.4	
217.38263	09:10:59	3.545	10.382	0.097	8.724	30.1	30.4	
217.38332	09:11:59	3.528	10.370	0.096	8.715	30.1	30.4	
217.38402	09:12:59	3.510	10.354	0.097	8.705	30.1	30.4	
217.38471	09:13:59	3.493	10.339	0.096	8.697	30.1	30.4	
217.38541	09:14:59	3.478	10.323	0.097	8.688	30.1	30.4	
217.38610	09:15:59	3.465	10.312	0.097	8.681	30.1	30.4	
217.38680	09:17:00	3.453	10.300	0.097	8.674	30.1	30.4	
217.38749	09:17:59	3.442	10.292	0.097	8.667	30.1	30.4	
217.38818	09:18:59	3.431	10.285	0.097	8.661	30.1	30.4	
217.38888	09:19:59	3.422	10.279	0.097	8.656	30.1	30.4	
217.39235	09:24:59	3.384	10.245	0.097	8.643	30.1	30.4	
217.39582	09:29:59	3.356	10.223	0.097	8.633	30.1	30.4	
217.40624	09:44:59	3.297	10.186	0.097	8.607	30.1	30.4	
217.41665	09:59:59	3.253	10.154	0.097	8.586	30.0	30.4	
217.43749	10:29:59	3.194	10.103	0.096	8.558	30.0	30.4	
217.45880	11:00:40	3.140	10.052	0.098	8.533	30.1	30.4	
217.49999	11:59:59	3.074	9.991	0.097	8.502	30.0	30.4	
217.54165	12:59:59	3.026	9.947	0.096	8.474	30.0	30.4	
217.56596	13:34:59	3.001	9.920	0.095	8.458	30.1	30.4	
217.56608	13:35:09	3.018	9.949	0.233	8.493	30.1	30.4	-injected
217.56620	13:35:20	3.542	10.767	3.810	10.196	30.1	30.5	600 psi into
217.56631	13:35:29	3.513	10.779	3.994	10.372	30.1	30.5	guard zone
217.56643	13:35:40	3.493	10.753	3.944	10.357	30.1	30.5	
217.56654	13:35:49	3.481	10.740	3.915	10.348	30.1	30.5	
217.56666	13:35:59	3.472	10.728	3.893	10.339	30.1	30.5	
217.56735	13:36:59	3.441	10.686	3.803	10.309	30.1	30.5	
217.56805	13:38:00	3.422	10.661	3.745	10.287	30.1	30.5	
217.56874	13:38:59	3.410	10.643	3.702	10.270	30.1	30.5	
217.56944	13:40:00	3.400	10.628	3.665	10.258	30.1	30.5	
217.57013	13:40:59	3.393	10.615	3.634	10.246	30.1	30.5	

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
217.57083	13:42:00	3.387	10.603	3.607	10.236	30.1	30.5	
217.57152	13:42:59	3.381	10.593	3.582	10.226	30.1	30.5	
217.57222	13:44:00	3.376	10.584	3.557	10.217	30.1	30.5	
217.57291	13:44:59	3.370	10.574	3.535	10.208	30.1	30.5	
217.57360	13:45:59	3.365	10.566	3.515	10.199	30.1	30.5	
217.57395	13:46:29	3.363	10.562	3.506	10.196	30.1	30.5	
217.57430	13:47:00	3.361	10.558	3.497	10.191	30.0	30.5	
217.57499	13:47:59	3.358	10.552	3.482	10.184	30.1	30.5	
217.57569	13:49:00	3.353	10.545	3.467	10.179	30.1	30.5	
217.57638	13:49:59	3.350	10.541	3.454	10.172	30.1	30.5	
217.57985	13:54:59	3.335	10.516	3.396	10.151	30.1	30.5	
217.58333	14:00:00	3.324	10.496	3.352	10.132	30.1	30.5	
217.59374	14:14:59	3.296	10.450	3.257	10.092	30.1	30.5	
217.60415	14:29:59	3.274	10.420	3.188	10.061	30.1	30.5	
217.61456	14:44:58	3.259	10.395	3.149	10.042	30.1	30.5	
217.62499	14:59:59	3.247	10.374	3.123	10.030	30.1	30.5	
217.64929	15:34:59	3.220	10.334	3.092	10.010	30.1	30.5	
217.65254	15:39:39	3.217	10.333	3.091	10.008	30.1	30.5	
217.65265	15:39:49	3.217	10.333	3.092	10.008	30.1	30.5	
217.65277	15:39:59	2.104	9.900	2.864	9.998	30.1	30.5	
217.65289	15:40:10	1.720	9.757	2.785	10.000	30.1	30.5	-pulse with-
217.65300	15:40:19	1.430	9.637	2.716	10.000	30.1	30.5	drawal test#1
217.65312	15:40:30	1.441	9.643	2.717	9.998	30.0	30.5	(test zone)
217.65323	15:40:39	1.448	9.645	2.717	9.999	30.1	30.5	removed ~10
217.65335	15:40:49	1.453	9.646	2.717	9.998	30.1	30.5	ml fluid
217.65346	15:40:59	1.456	9.646	2.717	9.999	30.0	30.5	
217.65416	15:41:59	1.469	9.648	2.717	9.997	30.0	30.5	
217.65485	15:42:59	1.477	9.650	2.716	9.997	30.1	30.5	
217.65555	15:44:00	1.482	9.650	2.715	9.996	30.0	30.5	
217.65624	15:44:59	1.487	9.653	2.715	9.995	30.1	30.5	
217.65694	15:46:00	1.491	9.651	2.715	9.995	30.1	30.5	
217.65751	15:46:49	1.493	9.653	2.713	9.994	30.1	30.5	
217.65836	15:48:02	1.496	9.650	2.714	9.994	30.0	30.5	
217.65902	15:48:59	1.499	9.651	2.712	9.994	30.1	30.5	
217.65971	15:49:59	1.501	9.650	2.712	9.993	30.1	30.5	
217.66041	15:50:59	1.502	9.648	2.712	9.992	30.1	30.5	
217.66110	15:51:59	1.504	9.651	2.710	9.991	30.1	30.5	
217.66180	15:53:00	1.506	9.648	2.710	9.991	30.1	30.5	
217.66319	15:55:00	1.510	9.648	2.709	9.990	30.1	30.5	
217.66666	15:59:59	1.517	9.647	2.707	9.989	30.1	30.5	
217.68055	16:20:00	1.530	9.639	2.701	9.987	30.1	30.5	-injected
217.68066	16:20:09	4.299	10.704	3.239	10.008	30.2	30.5	800 psi into
217.68078	16:20:19	5.423	11.274	3.584	10.026	30.2	30.6	test zone

TABLE D1 (Continued)
TABULATED DATA FOR COMPLIANCE TEST CTCH21, MULTIPACKER TEST TOOL #1

CALENDAR DAY (1988-1989)	TIME HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
217.68090	16:20:30	5.257	11.202	3.546	10.020	30.2	30.6	
217.68101	16:20:39	5.189	11.169	3.531	10.017	30.2	30.6	
217.68113	16:20:50	5.145	11.147	3.522	10.014	30.2	30.6	
217.68124	16:20:59	5.113	11.129	3.514	10.012	30.2	30.6	
217.68194	16:22:00	5.000	11.063	3.488	10.002	30.2	30.6	
217.68263	16:22:59	4.937	11.022	3.473	9.996	30.2	30.6	
217.68333	16:24:00	4.892	10.991	3.463	9.990	30.2	30.6	
217.68402	16:24:59	4.857	10.966	3.456	9.986	30.2	30.6	
217.68472	16:26:00	4.829	10.946	3.449	9.982	30.2	30.6	
217.68610	16:27:59	4.785	10.913	3.440	9.977	30.2	30.6	
217.68749	16:29:59	4.751	10.888	3.434	9.973	30.2	30.6	
217.69096	16:34:59	4.685	10.836	3.419	9.959	30.2	30.6	
217.69444	16:40:00	4.637	10.802	3.404	9.947	30.2	30.6	
217.69791	16:44:59	4.599	10.770	3.390	9.936	30.2	30.5	
217.70832	16:59:59	4.514	10.702	3.357	9.906	30.1	30.5	
217.71874	17:14:59	4.454	10.652	3.325	9.879	30.1	30.5	
217.76039	18:14:58	4.301	10.503	3.168	9.776	30.1	30.5	
217.80204	19:14:56	4.205	10.398	3.027	9.688	30.1	30.5	
217.84369	20:14:55	4.145	10.332	2.949	9.633	30.1	30.4	
217.88534	21:14:53	4.102	10.283	2.887	9.589	30.1	30.4	
217.92699	22:14:52	4.063	10.238	2.836	9.551	30.1	30.4	
217.96865	23:14:51	4.036	10.206	2.805	9.523	30.1	30.4	
218.01030	00:14:50	4.009	10.173	2.767	9.495	30.1	30.4	
218.05195	01:14:48	3.986	10.145	2.741	9.469	30.1	30.4	
218.09360	02:14:47	3.966	10.120	2.712	9.420	30.1	30.4	
218.13525	03:14:46	3.947	10.095	2.688	9.397	30.1	30.4	
218.17691	04:14:45	3.928	10.072	2.667	9.376	30.1	30.4	
218.21856	05:14:44	3.906	10.036	2.573	9.084	30.1	30.4	
218.26021	06:14:42	3.885	10.001	2.492	8.856	30.1	30.4	
218.30186	07:14:41	3.866	9.969	2.423	8.675	30.1	30.4	-end testing

TABLE D2
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
25.38333	09:12:00	0.003	-0.005	-0.010	-0.024	0.460	0.085	0.086	1.436	24.9	24.6	-installed
25.38402	09:12:59	0.004	0.072	-0.010	0.053	0.460	0.085	0.086	1.437	24.9	24.7	test tool
25.38472	09:14:00	0.003	0.156	-0.009	0.127	0.460	0.085	0.086	1.436	24.9	24.7	created data
25.38541	09:14:59	0.005	0.360	-0.008	0.263	0.456	0.090	0.088	1.381	25.0	24.7	file - COMP9
25.38611	09:16:00	0.007	8.793	-0.001	8.811	0.358	0.067	0.138	0.886	25.1	24.6	inflated
25.38680	09:17:00	0.005	10.501	-0.003	10.492	0.356	0.066	0.142	1.024	25.0	24.6	packers
25.38749	09:17:59	0.005	10.062	-0.003	10.055	0.356	0.066	0.142	1.024	25.0	24.6	
25.38819	09:19:00	0.005	9.853	-0.003	9.845	0.356	0.066	0.142	1.024	25.0	24.6	
25.38888	09:19:59	0.005	9.694	-0.003	9.687	0.355	0.065	0.143	1.022	25.0	24.6	
25.38958	09:21:00	0.005	9.581	-0.004	9.574	0.355	0.065	0.143	1.020	25.0	24.6	
25.39027	09:21:59	0.005	9.522	-0.004	9.685	0.355	0.065	0.143	1.020	25.0	24.6	
25.39097	09:23:00	0.005	9.422	-0.004	9.624	0.355	0.065	0.143	1.019	25.0	24.6	
25.39166	09:23:59	0.005	9.333	-0.004	9.572	0.355	0.064	0.143	1.018	25.0	24.6	
25.39235	09:24:59	0.005	9.254	-0.004	9.529	0.355	0.064	0.143	1.016	25.0	24.6	
25.39305	09:26:00	0.005	9.184	-0.004	9.490	0.355	0.064	0.143	1.014	25.0	24.6	
25.39374	09:26:59	0.005	9.117	-0.004	9.458	0.355	0.064	0.143	1.012	25.0	24.6	
25.39444	09:28:00	0.005	9.055	-0.004	9.430	0.355	0.064	0.143	1.011	24.9	24.6	
25.39513	09:28:59	0.005	8.997	-0.003	9.404	0.355	0.063	0.144	1.010	24.9	24.6	
25.39583	09:30:00	0.005	8.943	-0.004	9.378	0.355	0.063	0.144	1.008	24.9	24.6	
25.39721	09:31:59	0.005	8.822	-0.004	9.333	0.355	0.063	0.144	1.005	24.9	24.6	
25.39999	09:35:59	0.005	8.649	-0.004	9.255	0.355	0.062	0.144	1.001	24.9	24.6	
25.40277	09:39:59	0.005	8.489	-0.004	9.153	0.355	0.062	0.145	0.996	24.9	24.6	
25.40554	09:43:59	0.005	8.405	-0.003	9.089	0.355	0.062	0.145	0.994	24.9	24.6	
25.40832	09:47:59	0.004	8.285	-0.003	9.039	0.355	0.062	0.145	0.991	24.9	24.6	
25.41110	09:51:59	0.004	8.200	-0.003	8.996	0.354	0.063	0.145	0.988	24.9	24.6	
25.41387	09:55:58	0.004	8.123	-0.003	8.960	0.353	0.064	0.144	0.986	24.9	24.6	
25.41665	09:59:59	0.004	8.056	-0.004	8.928	0.353	0.064	0.145	0.985	24.9	24.6	
25.42359	10:09:58	0.004	7.924	-0.003	8.855	0.352	0.065	0.145	0.981	24.8	24.6	
25.43054	10:19:59	0.004	7.824	-0.003	8.796	0.352	0.066	0.145	0.978	24.8	24.5	
25.43817	10:30:58	0.004	7.735	-0.003	8.738	0.352	0.066	0.145	0.975	24.8	24.5	
25.45998	11:02:22	0.003	7.551	-0.004	8.574	0.351	0.065	0.146	0.969	24.8	24.5	
25.50163	12:02:21	0.002	7.316	-0.004	8.362	0.351	0.065	0.146	0.961	24.8	24.5	
25.53287	12:47:20	0.001	7.185	-0.005	8.129	0.350	0.066	0.146	0.955	24.8	24.5	
25.58493	14:02:18	0.001	7.012	-0.007	7.955	0.350	0.066	0.146	0.948	24.7	24.5	
25.62658	15:02:17	-0.002	6.905	-0.007	7.819	0.350	0.066	0.146	0.944	24.7	24.5	
25.66824	16:02:16	-0.003	6.823	-0.008	7.701	0.350	0.066	0.146	0.941	24.7	24.5	
25.70989	17:02:14	-0.004	6.755	-0.010	7.665	0.350	0.067	0.146	0.938	24.7	24.5	
25.75154	18:02:13	-0.004	6.697	-0.011	7.590	0.350	0.067	0.146	0.936	24.8	24.5	
25.79319	19:02:12	-0.005	6.651	-0.011	7.450	0.350	0.067	0.145	0.934	24.8	24.6	
25.83484	20:02:10	-0.006	6.611	-0.013	7.321	0.350	0.067	0.146	0.931	24.8	24.6	
25.87649	21:02:09	-0.006	6.565	-0.013	7.216	0.350	0.067	0.146	0.928	24.9	24.6	
25.91815	22:02:08	-0.008	6.520	-0.014	7.199	0.350	0.067	0.145	0.927	24.9	24.6	
25.95980	23:02:07	-0.009	6.480	-0.015	7.179	0.350	0.067	0.145	0.926	24.9	24.6	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
26.00145	00:02:05	-0.010	6.441	-0.016	7.162	0.350	0.067	0.145	0.925	24.9	24.6	
26.08475	02:02:02	-0.010	6.374	-0.017	7.132	0.350	0.067	0.145	0.923	25.0	24.7	
26.16806	04:02:00	-0.013	6.325	-0.018	7.097	0.350	0.067	0.145	0.922	25.0	24.8	
26.25136	06:01:58	-0.014	6.279	-0.020	7.060	0.350	0.067	0.145	0.921	25.0	24.7	
26.33466	08:01:55	-0.016	6.213	-0.021	7.023	0.350	0.067	0.146	0.919	24.9	24.7	
26.41797	10:01:53	-0.017	6.171	-0.022	7.019	0.351	0.066	0.146	0.917	25.0	24.7	
26.50127	12:01:50	-0.019	6.093	-0.022	6.958	0.350	0.067	0.146	0.915	24.9	24.7	
26.58458	14:01:48	-0.019	5.989	-0.024	6.858	0.350	0.067	0.145	0.910	24.7	24.5	
26.66788	16:01:45	-0.020	5.961	-0.025	6.862	0.350	0.067	0.146	0.909	24.8	24.6	
26.75118	18:01:42	-0.022	5.976	-0.026	6.927	0.351	0.066	0.146	0.907	24.9	24.6	
26.83449	20:01:40	-0.023	5.916	-0.027	6.886	0.351	0.066	0.146	0.907	24.9	24.7	
26.91779	22:01:37	-0.025	5.869	-0.028	6.846	0.350	0.066	0.146	0.907	24.9	24.7	
27.00109	00:01:34	-0.026	5.829	-0.029	6.818	0.350	0.066	0.146	0.906	24.9	24.6	
27.08440	02:01:32	-0.027	5.794	-0.030	6.793	0.350	0.067	0.146	0.905	24.9	24.6	
27.16770	04:01:29	-0.028	5.757	-0.030	6.772	0.350	0.067	0.146	0.904	24.9	24.6	
27.25100	06:01:26	-0.029	5.725	-0.031	6.753	0.350	0.066	0.146	0.903	24.9	24.6	
27.33431	08:01:24	-0.030	5.693	-0.031	6.732	0.350	0.066	0.146	0.902	24.9	24.6	
27.37430	08:59:00	-0.030	5.664	-0.031	6.701	0.349	0.066	0.146	0.900	24.8	24.6	
27.37500	09:00:00	-0.030	5.873	-0.031	6.699	0.351	0.065	0.146	0.903	24.8	24.6	-packers'
27.37569	09:01:00	-0.032	9.715	-0.032	6.558	0.353	0.065	0.144	0.976	24.8	24.6	pressure
27.37639	09:02:00	-0.032	11.176	-0.032	6.479	0.353	0.067	0.144	1.013	24.8	24.6	increased
27.37708	09:03:00	-0.032	10.816	-0.032	10.921	0.355	0.067	0.143	1.067	24.8	24.6	
27.37778	09:04:00	-0.032	10.758	-0.032	10.783	0.355	0.067	0.143	1.069	24.8	24.6	
27.37847	09:05:00	-0.032	10.719	-0.032	10.711	0.355	0.067	0.143	1.070	24.8	24.6	-shut in
27.37916	09:05:59	-0.032	10.687	-0.032	10.664	0.356	0.067	0.142	1.072	24.8	24.6	
27.37986	09:07:00	-0.032	10.664	-0.032	10.630	0.356	0.067	0.143	1.072	24.8	24.6	
27.38055	09:08:00	-0.032	10.643	-0.032	10.593	0.356	0.067	0.142	1.073	24.8	24.6	
27.38125	09:09:00	-0.032	10.623	-0.032	10.569	0.356	0.067	0.142	1.073	24.8	24.6	
27.38194	09:10:00	-0.032	10.606	-0.032	10.548	0.356	0.067	0.142	1.073	24.8	24.6	
27.38333	09:12:00	-0.032	10.578	-0.032	10.512	0.356	0.067	0.142	1.074	24.8	24.6	
27.38472	09:14:00	-0.032	10.552	-0.032	10.482	0.356	0.067	0.141	1.075	24.8	24.6	
27.38611	09:16:00	-0.032	10.531	-0.032	10.459	0.356	0.067	0.142	1.075	24.8	24.6	
27.38749	09:17:59	-0.032	10.490	-0.032	10.439	0.356	0.067	0.142	1.075	24.8	24.6	
27.38888	09:19:59	-0.032	10.470	-0.032	10.421	0.356	0.067	0.142	1.075	24.8	24.6	
27.39027	09:21:59	-0.032	10.454	-0.032	10.403	0.356	0.067	0.143	1.075	24.8	24.6	
27.39166	09:23:59	-0.032	10.439	-0.032	10.387	0.356	0.067	0.143	1.075	24.8	24.6	
27.39305	09:26:00	-0.032	10.425	-0.032	10.372	0.356	0.067	0.142	1.075	24.8	24.5	
27.39444	09:28:00	-0.032	10.411	-0.033	10.358	0.356	0.067	0.142	1.075	24.8	24.6	
27.39582	09:29:59	-0.032	10.398	-0.033	10.345	0.356	0.067	0.143	1.076	24.8	24.6	
27.39930	09:35:00	-0.032	10.370	-0.032	10.312	0.356	0.067	0.143	1.076	24.7	24.6	
27.40277	09:39:59	-0.032	10.344	-0.032	10.282	0.356	0.067	0.142	1.075	24.7	24.5	
27.40624	09:44:59	-0.032	10.322	-0.032	10.256	0.356	0.067	0.142	1.075	24.7	24.6	
27.41734	10:00:58	-0.033	10.253	-0.033	10.185	0.356	0.067	0.142	1.076	24.7	24.5	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
27.43750	10:30:00	-0.029	10.156	-0.027	10.085	0.356	0.067	0.142	1.076	24.6	24.4	-injected
27.43819	10:31:00	3.901	11.355	-0.029	10.417	0.329	0.051	0.136	0.901	24.6	24.5	550 psi into
27.43889	10:32:00	3.960	11.383	-0.029	10.403	0.329	0.050	0.132	0.887	24.7	24.5	test zone
27.43921	10:32:28	3.485	11.260	-0.029	10.358	0.328	0.050	0.130	0.898	24.7	24.5	
27.43956	10:32:58	3.189	11.173	-0.029	10.325	0.329	0.050	0.130	0.907	24.7	24.5	
27.43991	10:33:28	2.999	11.115	-0.029	10.299	0.329	0.051	0.131	0.913	24.7	24.5	
27.44025	10:33:58	2.869	11.075	-0.029	10.282	0.329	0.051	0.131	0.917	24.7	24.5	
27.44095	10:34:58	2.761	11.037	-0.030	10.266	0.329	0.051	0.133	0.921	24.6	24.5	
27.44164	10:35:58	3.740	11.328	-0.030	10.368	0.329	0.049	0.126	0.883	24.7	24.5	
27.44234	10:36:58	2.999	11.114	-0.030	10.281	0.329	0.049	0.128	0.905	24.7	24.5	
27.44303	10:37:58	2.692	11.022	-0.030	10.241	0.331	0.049	0.129	0.916	24.6	24.4	
27.44372	10:38:57	2.544	10.972	-0.029	10.221	0.333	0.049	0.130	0.921	24.6	24.4	
27.44442	10:39:58	2.470	10.946	-0.029	10.207	0.333	0.050	0.130	0.924	24.6	24.4	
27.44511	10:40:58	2.442	10.934	-0.029	10.203	0.333	0.050	0.130	0.925	24.6	24.5	
27.44581	10:41:58	2.423	10.926	-0.029	10.197	0.333	0.050	0.130	0.925	24.6	24.4	
27.44653	10:43:00	2.403	10.916	-0.030	10.191	0.333	0.050	0.130	0.926	24.6	24.4	
27.44722	10:44:00	2.388	10.907	-0.029	10.186	0.333	0.050	0.130	0.927	24.6	24.5	
27.44791	10:44:59	2.376	10.901	-0.029	10.183	0.333	0.050	0.130	0.927	24.6	24.5	
27.44861	10:46:00	2.367	10.895	-0.029	10.179	0.333	0.050	0.130	0.928	24.6	24.4	
27.44930	10:47:00	2.357	10.889	-0.029	10.174	0.333	0.050	0.130	0.928	24.6	24.4	
27.45000	10:48:00	2.345	10.883	-0.030	10.173	0.333	0.050	0.130	0.928	24.6	24.4	
27.45069	10:49:00	2.339	10.879	-0.029	10.169	0.333	0.050	0.131	0.929	24.6	24.4	
27.45139	10:50:00	2.331	10.874	-0.029	10.165	0.333	0.050	0.131	0.928	24.6	24.4	
27.45277	10:51:59	2.321	10.863	-0.029	10.158	0.333	0.050	0.130	0.929	24.6	24.4	
27.45416	10:53:59	2.313	10.854	-0.029	10.152	0.333	0.050	0.130	0.929	24.6	24.4	
27.45555	10:56:00	2.321	10.844	-0.029	10.144	0.332	0.050	0.130	0.930	24.6	24.4	
27.45694	10:58:00	2.315	10.838	-0.029	10.136	0.332	0.050	0.129	0.930	24.6	24.4	
27.45833	11:00:00	2.312	10.832	-0.029	10.132	0.332	0.050	0.129	0.930	24.6	24.4	
27.48126	11:33:01	2.264	10.728	-0.030	10.052	0.332	0.050	0.130	0.930	24.6	24.4	
27.50000	12:00:00	2.229	10.656	-0.029	9.993	0.332	0.050	0.130	0.929	24.5	24.3	
27.55206	13:14:58	2.156	10.496	-0.030	9.855	0.332	0.050	0.130	0.928	24.4	24.3	
27.59371	14:14:57	2.106	10.391	-0.030	9.749	0.332	0.050	0.131	0.928	24.4	24.2	
27.63537	15:14:56	2.076	10.315	-0.030	9.675	0.332	0.050	0.132	0.927	24.3	24.2	
27.67702	16:14:55	2.051	10.270	-0.031	9.492	0.332	0.050	0.131	0.926	24.3	24.2	
27.71867	17:14:53	2.027	10.230	-0.031	9.315	0.332	0.050	0.131	0.925	24.3	24.2	
27.76032	18:14:52	2.003	10.191	-0.033	9.146	0.333	0.050	0.131	0.923	24.4	24.3	
27.80197	19:14:50	1.973	10.144	-0.032	8.962	0.333	0.049	0.131	0.921	24.4	24.3	
27.84363	20:14:50	1.948	10.108	-0.033	8.813	0.333	0.049	0.132	0.920	24.4	24.3	
27.88528	21:14:48	1.927	10.071	-0.033	8.694	0.333	0.049	0.132	0.919	24.4	24.3	
27.92693	22:14:47	1.905	10.041	-0.033	8.541	0.334	0.049	0.132	0.918	24.5	24.3	
27.96858	23:14:45	1.877	10.009	-0.034	8.339	0.334	0.049	0.132	0.916	24.5	24.3	
28.01023	00:14:44	1.847	9.983	-0.034	8.147	0.334	0.049	0.132	0.914	24.5	24.4	
28.09354	02:14:42	1.806	9.924	-0.035	7.885	0.334	0.050	0.132	0.912	24.6	24.4	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
28.17684	04:14:39	1.781	9.859	-0.035	7.801	0.334	0.050	0.133	0.910	24.6	24.4	
28.26014	06:14:36	1.807	9.854	-0.035	7.825	0.334	0.050	0.132	0.910	24.8	24.6	
28.34345	08:14:34	1.807	9.811	-0.035	7.821	0.334	0.050	0.132	0.909	24.8	24.7	
28.42675	10:14:31	1.751	9.716	-0.036	7.698	0.334	0.051	0.132	0.908	24.8	24.6	
28.51005	12:14:28	1.706	9.629	-0.036	7.613	0.334	0.052	0.132	0.907	24.7	24.6	
28.59336	14:14:26	1.674	9.557	-0.036	7.570	0.334	0.052	0.132	0.906	24.7	24.5	
28.67666	16:14:23	1.650	9.493	-0.037	7.543	0.334	0.053	0.132	0.905	24.6	24.5	
28.68708	16:29:24	1.647	9.486	-0.037	7.534	0.334	0.053	0.132	0.905	24.6	24.5	
28.75997	18:14:21	1.629	9.434	-0.037	7.503	0.334	0.053	0.132	0.904	24.7	24.5	
28.84327	20:14:19	1.603	9.377	-0.038	7.426	0.334	0.053	0.133	0.903	24.6	24.5	
28.92657	22:14:16	1.587	9.327	-0.039	7.402	0.334	0.053	0.132	0.903	24.6	24.5	
29.00988	00:14:14	1.574	9.281	-0.038	7.386	0.334	0.054	0.132	0.902	24.6	24.5	
29.09318	02:14:11	1.560	9.240	-0.039	7.343	0.334	0.054	0.132	0.901	24.7	24.5	
29.17648	04:14:08	1.537	9.199	-0.039	7.214	0.334	0.055	0.132	0.900	24.7	24.5	
29.25979	06:14:06	1.511	9.155	-0.040	7.063	0.334	0.055	0.132	0.899	24.7	24.5	
29.34309	08:14:03	1.481	9.100	-0.040	6.962	0.334	0.056	0.132	0.898	24.6	24.5	
29.42640	10:14:01	1.449	9.040	-0.039	6.850	0.334	0.056	0.132	0.897	24.6	24.5	
29.50970	12:13:58	1.431	9.004	-0.040	6.762	0.334	0.056	0.132	0.896	24.6	24.4	
29.59300	14:13:55	1.419	8.974	-0.041	6.693	0.334	0.057	0.132	0.895	24.6	24.4	
29.67631	16:13:53	1.408	8.949	-0.039	6.618	0.334	0.057	0.132	0.894	24.6	24.5	
29.75961	18:13:50	1.398	8.921	-0.040	6.542	0.335	0.057	0.132	0.893	24.6	24.5	
29.84291	20:13:47	1.424	8.949	-0.040	6.508	0.335	0.057	0.132	0.892	24.8	24.6	
29.92622	22:13:45	1.439	8.957	-0.040	6.473	0.335	0.057	0.132	0.892	24.9	24.8	
30.00952	00:13:43	1.446	8.954	-0.039	6.427	0.335	0.058	0.132	0.891	25.1	24.9	
30.09282	02:13:40	1.445	8.941	-0.039	6.377	0.335	0.058	0.132	0.890	25.1	24.9	
30.17613	04:13:38	1.439	8.922	-0.039	6.338	0.335	0.058	0.132	0.890	25.1	25.0	
30.25943	06:13:35	1.432	8.898	-0.039	6.302	0.335	0.058	0.132	0.889	25.2	25.0	
30.34274	08:13:33	1.376	8.800	-0.040	6.223	0.335	0.058	0.132	0.889	25.0	24.9	
30.35417	08:30:00	1.362	8.787	-0.035	6.211	0.335	0.062	0.132	0.886	25.1	24.8	
30.36111	08:40:00	1.354	8.778	-0.037	6.207	0.336	0.061	0.129	0.860	25.0	24.8	-injection
30.36146	08:40:30	4.385	9.810	-0.039	6.588	0.333	0.055	0.116	0.761	25.0	24.9	pressure
30.36180	08:41:00	4.284	9.802	-0.039	6.590	0.333	0.054	0.116	0.757	25.0	24.9	increased to
30.36215	08:41:30	4.241	9.796	-0.039	6.589	0.333	0.054	0.115	0.756	25.0	24.9	600 psi in
30.36250	08:42:00	4.214	9.791	-0.039	6.589	0.333	0.054	0.115	0.755	25.0	24.9	test zone
30.36285	08:42:30	4.195	9.788	-0.039	6.589	0.333	0.054	0.114	0.754	25.0	24.9	
30.36319	08:43:00	4.179	9.785	-0.039	6.588	0.333	0.054	0.114	0.754	25.0	24.8	
30.36354	08:43:30	4.166	9.782	-0.039	6.587	0.332	0.054	0.114	0.753	25.0	24.9	
30.36389	08:44:00	4.155	9.780	-0.039	6.587	0.332	0.054	0.114	0.753	25.0	24.8	
30.36458	08:45:00	4.137	9.775	-0.039	6.586	0.332	0.054	0.114	0.752	25.0	24.8	
30.36528	08:46:00	4.123	9.773	-0.039	6.585	0.332	0.054	0.113	0.751	25.0	24.8	
30.36597	08:47:00	4.110	9.769	-0.039	6.584	0.332	0.054	0.113	0.751	25.0	24.8	
30.36667	08:48:00	4.100	9.767	-0.039	6.583	0.332	0.054	0.112	0.750	25.0	24.8	
30.36736	08:49:00	4.090	9.765	-0.039	6.582	0.332	0.053	0.112	0.750	25.0	24.8	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
30.36805	08:50:00	4.082	9.763	-0.039	6.580	0.332	0.053	0.112	0.750	25.0	24.8	
30.36875	08:51:00	4.073	9.760	-0.039	6.579	0.332	0.053	0.112	0.750	25.0	24.8	
30.36944	08:52:00	4.067	9.756	-0.039	6.578	0.332	0.053	0.112	0.750	25.0	24.8	
30.37014	08:53:00	4.059	9.754	-0.039	6.576	0.332	0.053	0.111	0.750	25.0	24.8	
30.37083	08:54:00	4.053	9.753	-0.039	6.575	0.332	0.053	0.111	0.749	25.0	24.8	
30.37152	08:54:59	4.047	9.750	-0.039	6.573	0.332	0.053	0.110	0.749	25.0	24.8	
30.37222	08:56:00	4.042	9.749	-0.039	6.572	0.332	0.053	0.110	0.749	25.0	24.8	
30.37291	08:56:59	4.037	9.747	-0.039	6.571	0.331	0.053	0.110	0.749	25.0	24.8	
30.38089	09:08:29	3.990	9.728	-0.040	6.562	0.331	0.053	0.107	0.747	25.0	24.8	
30.38194	09:10:00	3.985	9.723	-0.039	6.559	0.331	0.053	0.107	0.747	25.0	24.8	
30.39027	09:21:59	3.954	9.709	-0.040	6.548	0.331	0.053	0.106	0.747	24.9	24.8	
30.39860	09:33:59	3.927	9.693	-0.040	6.536	0.330	0.053	0.106	0.746	24.9	24.8	
30.40693	09:45:59	3.905	9.679	-0.040	6.524	0.330	0.053	0.106	0.745	24.9	24.8	
30.41943	10:03:59	3.876	9.656	-0.040	6.507	0.330	0.053	0.106	0.745	24.9	24.7	
30.43750	10:30:00	3.838	9.622	-0.040	6.481	0.329	0.052	0.106	0.744	24.8	24.7	
30.45833	11:00:00	3.802	9.587	-0.040	6.459	0.328	0.052	0.106	0.744	24.8	24.7	
30.51040	12:14:59	3.724	9.510	-0.040	6.418	0.328	0.052	0.106	0.742	24.7	24.6	
30.55205	13:14:57	3.682	9.465	-0.040	6.397	0.328	0.052	0.106	0.741	24.7	24.5	
30.59370	14:14:56	3.644	9.429	-0.041	6.379	0.328	0.052	0.106	0.741	24.6	24.5	
30.63535	15:14:54	3.623	9.402	-0.040	6.373	0.328	0.052	0.106	0.741	24.7	24.6	
30.67700	16:14:53	3.615	9.390	-0.040	6.388	0.328	0.052	0.106	0.741	24.7	24.5	
30.71865	17:14:51	3.610	9.383	-0.040	6.402	0.328	0.052	0.106	0.741	24.7	24.6	
30.76031	18:14:51	3.604	9.373	-0.040	6.416	0.328	0.052	0.106	0.741	24.8	24.6	
30.80196	19:14:49	3.602	9.363	-0.040	6.425	0.328	0.052	0.106	0.741	24.8	24.7	
30.84361	20:14:48	3.594	9.351	-0.040	6.434	0.328	0.052	0.106	0.741	24.9	24.7	
30.88526	21:14:46	3.589	9.340	-0.040	6.441	0.328	0.052	0.106	0.740	24.9	24.7	
30.92691	22:14:45	3.580	9.325	-0.039	6.444	0.328	0.052	0.106	0.740	24.9	24.7	
30.96857	23:14:44	3.569	9.306	-0.038	6.446	0.328	0.052	0.106	0.740	24.9	24.8	
31.01022	00:14:43	3.558	9.285	-0.039	6.445	0.327	0.052	0.106	0.740	25.0	24.7	
31.09352	02:14:40	3.534	9.240	-0.040	6.444	0.327	0.052	0.107	0.739	24.9	24.7	
31.17682	04:14:37	3.510	9.201	-0.039	6.438	0.327	0.052	0.107	0.739	24.9	24.8	
31.26013	06:14:35	3.490	9.163	-0.037	6.435	0.327	0.052	0.107	0.739	24.9	24.8	
31.34343	08:14:32	3.455	9.110	-0.036	6.419	0.327	0.052	0.107	0.738	24.9	24.7	
31.42674	10:14:30	3.407	9.039	-0.039	6.384	0.327	0.052	0.107	0.737	24.8	24.7	
31.51004	12:14:27	3.395	9.013	-0.037	6.381	0.327	0.052	0.107	0.737	24.8	24.6	
32.03316	00:47:45	3.424	8.983	-0.035	6.540	0.326	0.052	0.106	0.736	25.3	25.1	
32.11646	02:47:42	3.422	8.963	-0.033	6.552	0.326	0.052	0.106	0.736	25.4	25.2	
32.19977	04:47:40	3.416	8.943	-0.034	6.559	0.326	0.052	0.106	0.736	25.4	25.2	
32.28307	06:47:37	3.407	8.920	-0.033	6.561	0.327	0.052	0.106	0.736	25.5	25.3	
32.36638	08:47:35	3.353	8.849	-0.033	6.510	0.327	0.052	0.106	0.736	25.4	25.2	
32.41597	09:59:00	3.301	8.795	-0.028	6.459	0.326	0.047	0.106	0.733	25.1	24.9	
32.41667	10:00:00	3.300	8.794	-0.029	6.459	0.326	0.047	0.105	0.734	25.1	24.9	-injected
32.41701	10:00:30	3.184	9.889	2.438	6.867	0.326	0.047	0.106	0.708	25.2	24.9	600 psi into

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
32.41736	10:01:00	2.839	10.969	4.229	7.385	0.326	0.047	0.106	0.678	25.2	24.9	guard zone
32.41771	10:01:30	2.753	10.915	4.028	7.290	0.326	0.047	0.106	0.673	25.2	24.9	
32.41805	10:02:00	2.710	10.887	3.938	7.238	0.326	0.047	0.106	0.671	25.2	24.9	
32.41840	10:02:30	2.683	10.869	3.880	7.202	0.326	0.047	0.106	0.670	25.2	24.9	
32.41875	10:03:00	2.664	10.854	3.836	7.171	0.326	0.047	0.106	0.669	25.2	24.9	
32.41945	10:04:00	2.638	10.833	3.772	7.127	0.326	0.047	0.106	0.668	25.2	24.9	
32.42014	10:05:00	2.621	10.818	3.730	7.096	0.326	0.047	0.106	0.667	25.2	24.9	
32.42084	10:06:01	2.605	10.804	3.688	7.060	0.326	0.047	0.106	0.666	25.2	24.9	
32.42153	10:07:00	2.592	10.792	3.660	7.040	0.326	0.047	0.106	0.666	25.2	24.9	
32.42223	10:08:01	2.586	10.785	3.643	7.028	0.326	0.047	0.106	0.665	25.2	24.9	
32.42292	10:09:00	2.581	10.781	3.631	7.021	0.326	0.047	0.106	0.665	25.2	24.9	
32.42362	10:10:01	2.577	10.777	3.622	7.015	0.326	0.047	0.106	0.665	25.2	24.9	
32.42431	10:11:00	2.575	10.773	3.614	7.011	0.326	0.047	0.106	0.665	25.2	25.0	
32.42500	10:12:00	2.573	10.770	3.608	7.008	0.326	0.047	0.106	0.665	25.2	25.0	
32.42570	10:13:00	2.571	10.768	3.602	7.005	0.326	0.048	0.106	0.665	25.2	24.9	
32.42639	10:14:00	2.570	10.766	3.597	7.002	0.326	0.048	0.106	0.665	25.2	25.0	
32.42709	10:15:01	2.568	10.764	3.592	6.999	0.326	0.048	0.106	0.664	25.2	25.0	
32.42778	10:16:00	2.567	10.761	3.587	6.997	0.326	0.047	0.106	0.665	25.2	25.0	
32.42847	10:17:00	2.565	10.759	3.583	6.994	0.326	0.048	0.106	0.665	25.2	25.0	
32.42917	10:18:00	2.564	10.757	3.579	6.992	0.326	0.048	0.106	0.665	25.2	25.0	
32.42986	10:19:00	2.563	10.755	3.575	6.990	0.326	0.048	0.106	0.665	25.2	25.0	
32.43056	10:20:00	2.562	10.753	3.571	6.988	0.326	0.048	0.106	0.665	25.2	25.0	
32.43195	10:22:00	2.559	10.748	3.564	6.984	0.326	0.048	0.106	0.665	25.2	25.0	
32.43333	10:24:00	2.557	10.745	3.558	6.980	0.327	0.048	0.106	0.665	25.2	25.0	
32.43472	10:26:00	2.556	10.742	3.553	6.977	0.327	0.048	0.106	0.665	25.2	25.0	
32.43611	10:28:00	2.554	10.739	3.548	6.974	0.327	0.048	0.106	0.665	25.2	25.0	
32.43750	10:30:00	2.552	10.737	3.543	6.971	0.327	0.048	0.106	0.665	25.2	25.0	
32.44097	10:35:00	2.549	10.729	3.532	6.963	0.327	0.048	0.106	0.665	25.2	25.0	
32.44629	10:42:39	2.543	10.717	3.517	6.954	0.327	0.048	0.106	0.664	25.2	25.0	
32.45462	10:54:39	2.536	10.703	3.498	6.942	0.327	0.048	0.106	0.664	25.2	25.0	
32.45879	11:00:39	2.532	10.695	3.489	6.936	0.327	0.048	0.106	0.664	25.2	25.0	
32.48303	11:35:34	2.523	10.675	3.462	6.925	0.327	0.048	0.107	0.664	25.1	25.0	
32.50385	12:05:33	2.514	10.652	3.439	6.909	0.327	0.048	0.106	0.664	25.2	25.0	
32.54550	13:05:31	2.489	10.597	3.392	6.874	0.327	0.048	0.106	0.664	25.1	24.9	
32.58716	14:05:31	2.470	10.551	3.355	6.849	0.327	0.048	0.106	0.664	25.1	24.9	
32.62881	15:05:29	2.450	10.502	3.323	6.821	0.327	0.048	0.106	0.663	25.0	24.9	
32.67046	16:05:28	2.455	10.498	3.319	6.831	0.327	0.048	0.106	0.662	25.1	24.9	
32.71211	17:05:26	2.462	10.504	3.321	6.850	0.327	0.048	0.106	0.662	25.1	24.9	
32.75376	18:05:25	2.469	10.506	3.323	6.867	0.327	0.048	0.106	0.662	25.2	25.0	
32.79542	19:05:24	2.474	10.502	3.323	6.879	0.328	0.048	0.106	0.661	25.3	25.1	
32.83707	20:05:23	2.477	10.496	3.319	6.889	0.328	0.048	0.106	0.661	25.3	25.2	
32.87872	21:05:21	2.476	10.485	3.316	6.892	0.328	0.048	0.106	0.661	25.4	25.2	
32.92037	22:05:20	2.474	10.469	3.307	6.894	0.328	0.048	0.106	0.661	25.4	25.2	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
32.96202	23:05:19	2.474	10.453	3.300	6.895	0.328	0.048	0.106	0.660	25.4	25.2	
33.00367	00:05:17	2.470	10.434	3.291	6.894	0.328	0.048	0.106	0.660	25.4	25.2	
33.08698	02:05:15	2.459	10.392	3.271	6.886	0.328	0.048	0.106	0.660	25.4	25.3	
33.17028	04:05:12	2.448	10.348	3.249	6.877	0.328	0.048	0.106	0.659	25.5	25.3	
33.25359	06:05:10	2.437	10.305	3.229	6.865	0.328	0.048	0.106	0.658	25.5	25.3	
33.33689	08:05:07	2.420	10.246	3.192	6.814	0.328	0.048	0.106	0.658	25.5	25.3	
33.36806	08:50:00	2.389	10.185	3.137	6.699	0.328	0.053	0.107	0.657	25.4	25.2	
33.45136	10:49:58	2.312	10.013	3.000	6.412	0.329	0.052	0.107	0.658	25.2	25.1	
33.53466	12:49:55	2.272	9.909	2.903	6.188	0.329	0.052	0.107	0.658	25.2	25.1	
33.61797	14:49:53	2.233	9.803	2.826	6.028	0.329	0.052	0.107	0.656	25.1	25.0	
33.70127	16:49:50	2.204	9.726	2.787	5.996	0.329	0.053	0.107	0.656	25.0	24.9	
33.78457	18:49:47	2.205	9.698	2.774	5.977	0.329	0.053	0.107	0.656	25.1	24.9	
33.86788	20:49:45	2.192	9.659	2.755	5.966	0.329	0.053	0.107	0.655	25.1	25.0	
33.95118	22:49:42	2.177	9.611	2.733	5.953	0.329	0.053	0.107	0.655	25.1	24.9	
34.03448	00:49:39	2.164	9.565	2.710	5.941	0.329	0.053	0.107	0.655	25.1	24.9	
34.11779	02:49:37	2.150	9.524	2.689	5.925	0.329	0.053	0.107	0.654	25.1	24.9	
34.20109	04:49:34	2.133	9.475	2.665	5.901	0.329	0.053	0.107	0.654	25.1	24.9	
34.28440	06:49:32	2.116	9.424	2.637	5.875	0.330	0.053	0.107	0.653	25.0	24.9	
34.36770	08:49:29	2.082	9.353	2.596	5.828	0.330	0.053	0.107	0.653	25.0	24.9	
34.45100	10:49:26	2.054	9.285	2.552	5.756	0.330	0.053	0.107	0.652	24.9	24.7	
34.53431	12:49:24	2.018	9.201	2.484	5.615	0.330	0.053	0.107	0.652	24.8	24.7	
34.61761	14:49:22	1.976	9.110	2.427	5.536	0.330	0.053	0.107	0.651	24.8	24.6	
34.70091	16:49:19	1.939	9.027	2.373	5.450	0.330	0.053	0.107	0.650	24.7	24.5	
34.78422	18:49:17	1.908	8.954	2.316	5.336	0.330	0.053	0.107	0.650	24.7	24.5	
34.86752	20:49:14	1.878	8.889	2.269	5.252	0.331	0.053	0.107	0.650	24.6	24.4	
34.95083	22:49:12	1.850	8.825	2.228	5.196	0.331	0.053	0.107	0.649	24.5	24.3	
35.03413	00:49:09	1.822	8.754	2.185	5.137	0.331	0.053	0.107	0.649	24.5	24.2	
35.11743	02:49:06	1.788	8.680	2.135	5.053	0.331	0.053	0.107	0.648	24.4	24.2	
35.20074	04:49:04	1.758	8.610	2.091	4.992	0.331	0.053	0.107	0.648	24.4	24.2	
35.28404	06:49:01	1.730	8.548	2.054	4.940	0.331	0.053	0.107	0.648	24.3	24.0	
35.36734	08:48:58	1.705	8.484	2.018	4.895	0.331	0.053	0.107	0.648	24.2	24.0	
35.45065	10:48:56	1.675	8.417	1.979	4.846	0.332	0.053	0.107	0.648	24.2	24.0	
35.53395	12:48:53	1.663	8.381	1.961	4.818	0.332	0.053	0.107	0.646	24.1	23.9	
35.61725	14:48:50	1.666	8.370	1.956	4.812	0.332	0.053	0.108	0.647	24.2	24.0	
35.70056	16:48:48	1.655	8.339	1.943	4.796	0.332	0.053	0.107	0.646	24.1	23.9	
35.78386	18:48:46	1.646	8.308	1.926	4.777	0.332	0.053	0.107	0.646	24.1	23.9	
35.86717	20:48:43	1.633	8.271	1.906	4.757	0.332	0.053	0.108	0.645	24.1	23.9	
35.95047	22:48:41	1.612	8.229	1.884	4.727	0.332	0.053	0.107	0.645	24.2	24.0	
36.03377	00:48:38	1.596	8.180	1.862	4.703	0.332	0.053	0.108	0.645	24.1	23.9	
36.11708	02:48:36	1.576	8.131	1.836	4.680	0.332	0.053	0.107	0.645	24.1	23.9	
36.20038	04:48:33	1.553	8.082	1.813	4.653	0.333	0.053	0.108	0.644	24.0	23.8	
36.28368	06:48:30	1.535	8.034	1.791	4.630	0.333	0.053	0.108	0.644	24.0	23.7	
36.36699	08:48:28	1.516	7.992	1.769	4.608	0.333	0.053	0.108	0.644	24.0	23.7	

TABLE D2 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP9, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
36.45029	10:48:25	1.502	7.950	1.751	4.589	0.333	0.053	0.108	0.642	24.0	23.7	
36.53359	12:48:22	1.490	7.926	1.740	4.578	0.333	0.053	0.108	0.643	23.9	23.7	
36.61690	14:48:20	1.489	7.909	1.735	4.577	0.333	0.053	0.108	0.642	24.0	23.7	
36.70020	16:48:17	1.487	7.897	1.733	4.579	0.333	0.053	0.108	0.643	24.0	23.7	
36.78351	18:48:15	1.484	7.880	1.726	4.575	0.333	0.053	0.108	0.642	24.0	23.8	
36.86681	20:48:12	1.473	7.847	1.711	4.564	0.333	0.053	0.108	0.642	23.9	23.7	
36.95011	22:48:10	1.457	7.809	1.693	4.546	0.333	0.053	0.108	0.642	23.9	23.7	
37.03342	00:48:07	1.438	7.766	1.672	4.525	0.333	0.053	0.108	0.641	23.9	23.6	
37.11672	02:48:05	1.418	7.724	1.654	4.507	0.334	0.053	0.108	0.641	23.8	23.6	
37.20002	04:48:02	1.401	7.683	1.634	4.487	0.334	0.053	0.109	0.641	23.8	23.5	
37.28333	06:48:00	1.383	7.638	1.613	4.465	0.334	0.053	0.108	0.641	23.8	23.5	
37.36663	08:47:57	1.370	7.603	1.595	4.444	0.334	0.053	0.109	0.640	23.7	23.4	
37.44994	10:47:55	1.355	7.570	1.576	4.415	0.334	0.054	0.108	0.640	23.7	23.4	
37.53324	12:47:52	1.366	7.588	1.586	4.429	0.334	0.054	0.108	0.640	23.8	23.5	
37.61654	14:47:49	1.355	7.567	1.581	4.422	0.334	0.055	0.108	0.639	23.7	23.5	
37.69985	16:47:47	1.322	7.501	1.544	4.385	0.334	0.055	0.108	0.639	23.6	23.4	
37.78315	18:47:44	1.283	7.420	1.503	4.335	0.334	0.055	0.108	0.639	23.6	23.3	
37.86645	20:47:41	1.250	7.348	1.466	4.296	0.334	0.055	0.108	0.639	23.5	23.2	
37.94976	22:47:39	1.226	7.286	1.437	4.265	0.334	0.055	0.108	0.639	23.3	23.1	
38.03306	00:47:36	1.203	7.236	1.413	4.243	0.334	0.055	0.108	0.639	23.3	23.0	
38.11636	02:47:34	1.186	7.189	1.395	4.226	0.334	0.055	0.108	0.639	23.2	23.0	
38.19967	04:47:31	1.169	7.148	1.377	4.208	0.334	0.055	0.108	0.639	23.2	23.0	
38.28297	06:47:29	1.151	7.107	1.358	4.194	0.334	0.055	0.108	0.638	23.2	22.9	
38.36628	08:47:27	1.136	7.075	1.341	4.179	0.335	0.055	0.108	0.639	23.2	22.9	-end testing

TABLE D3
TABULATED DATA FOR COMPLIANCE TEST COMP10, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
96.45833	11:00:00	-0.038	0.010	0.014	-0.015	0.158	0.346	0.638	5.042	30.4	30.4	-installed
96.45868	11:00:30	-0.038	0.491	0.014	-0.056	0.157	0.357	0.642	4.884	30.4	30.3	test tool
96.45903	11:01:00	-0.038	0.742	0.013	0.715	0.097	0.344	0.647	5.595	30.5	30.4	created data
96.45937	11:01:30	-0.037	9.915	0.015	9.996	0.123	0.346	0.637	5.624	30.5	30.4	file - COMP10
96.45972	11:02:00	-0.038	10.186	0.014	10.245	0.127	0.347	0.637	5.624	30.4	30.4	inflated
96.46007	11:02:30	-0.039	10.156	0.015	10.206	0.128	0.347	0.637	5.624	30.4	30.3	packers
96.46043	11:03:01	-0.039	10.291	0.014	10.340	0.128	0.347	0.637	5.623	30.4	30.4	
96.46111	11:04:00	-0.037	10.094	0.014	10.109	0.129	0.347	0.637	5.624	30.5	30.4	
96.46180	11:05:00	-0.037	9.978	0.014	9.963	0.129	0.347	0.637	5.624	30.4	30.3	
96.46250	11:06:00	-0.037	9.895	0.015	9.867	0.129	0.347	0.637	5.624	30.4	30.4	
96.46319	11:07:00	-0.038	9.833	0.014	9.795	0.129	0.347	0.637	5.624	30.4	30.4	
96.46389	11:08:00	-0.038	9.782	0.014	9.736	0.129	0.347	0.637	5.624	30.4	30.4	
96.46458	11:09:00	-0.038	9.739	0.014	9.689	0.129	0.347	0.637	5.624	30.4	30.4	
96.46528	11:10:00	-0.038	9.702	0.014	9.648	0.129	0.347	0.637	5.624	30.4	30.4	
96.46597	11:11:00	-0.038	9.669	0.014	9.612	0.129	0.347	0.637	5.624	30.4	30.4	
96.46666	11:11:59	-0.038	9.642	0.014	9.580	0.129	0.347	0.637	5.624	30.4	30.4	
96.46736	11:13:00	-0.038	9.615	0.015	9.552	0.129	0.347	0.637	5.624	30.4	30.4	
96.46805	11:14:00	-0.038	9.591	0.013	9.526	0.129	0.347	0.637	5.624	30.4	30.4	
96.46875	11:15:00	-0.038	9.570	0.014	9.500	0.129	0.347	0.637	5.624	30.5	30.4	
96.46944	11:16:00	-0.037	9.549	0.014	9.478	0.129	0.347	0.637	5.624	30.4	30.4	
96.47013	11:16:59	-0.037	9.530	0.013	9.458	0.129	0.347	0.637	5.624	30.4	30.4	
96.47083	11:18:00	-0.038	9.514	0.012	9.440	0.129	0.347	0.637	5.624	30.4	30.4	
96.47152	11:18:59	-0.038	9.498	0.012	9.422	0.129	0.347	0.637	5.624	30.4	30.4	
96.47187	11:19:30	-0.038	9.489	0.013	9.415	0.129	0.347	0.637	5.624	30.5	30.4	
96.47222	11:20:00	-0.037	9.482	0.014	9.406	0.129	0.347	0.637	5.624	30.4	30.4	
96.47371	11:22:09	-0.025	9.452	0.022	9.372	0.129	0.347	0.637	5.624	30.4	30.4	
96.47500	11:24:00	0.026	9.430	0.037	9.348	0.129	0.347	0.637	5.624	30.6	30.4	-shut in
96.47639	11:26:00	-0.028	9.408	0.021	9.325	0.129	0.347	0.637	5.624	30.4	30.2	
96.47777	11:27:59	-0.031	9.387	0.020	9.301	0.129	0.347	0.637	5.624	30.4	30.2	
96.47917	11:30:00	-0.031	9.367	0.020	9.279	0.129	0.347	0.637	5.624	30.4	30.2	
96.48750	11:42:00	-0.031	9.275	0.020	9.184	0.129	0.347	0.637	5.624	30.4	30.3	
96.50416	12:05:59	-0.030	9.159	0.021	9.065	0.129	0.347	0.637	5.624	30.4	30.3	
96.52083	12:30:00	-0.029	9.083	0.021	8.984	0.129	0.347	0.637	5.624	30.5	30.4	
96.56250	13:30:00	-0.032	8.935	0.018	8.832	0.129	0.347	0.636	5.621	30.4	30.3	
96.58332	13:59:59	-0.031	8.885	0.017	8.776	0.129	0.347	0.637	5.624	30.2	30.3	
96.62498	14:59:58	-0.034	8.808	0.017	8.693	0.129	0.347	0.637	5.624	30.3	30.2	
96.66663	15:59:57	-0.034	8.751	0.016	8.627	0.129	0.347	0.637	5.624	30.3	30.2	
96.70828	16:59:55	-0.034	8.703	0.015	8.574	0.129	0.347	0.637	5.623	30.3	30.2	
96.74993	17:59:54	-0.036	8.663	0.016	8.529	0.129	0.347	0.637	5.623	30.2	30.1	
96.79158	18:59:53	-0.036	8.626	0.016	8.491	0.129	0.347	0.637	5.623	30.2	30.1	
96.83323	19:59:51	-0.035	8.595	0.015	8.458	0.129	0.347	0.637	5.624	30.3	30.0	
96.87489	20:59:50	-0.036	8.569	0.013	8.431	0.129	0.347	0.637	5.623	30.2	30.1	
96.91654	21:59:49	-0.037	8.544	0.014	8.405	0.129	0.347	0.637	5.623	30.2	30.0	

TABLE D3 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP10, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
96.95819	22:59:48	-0.038	8.523	0.013	8.385	0.129	0.347	0.637	5.623	30.2	30.1	
96.99984	23:59:46	-0.039	8.504	0.012	8.363	0.129	0.347	0.637	5.623	30.2	30.1	
97.04149	00:59:45	-0.041	8.487	0.012	8.349	0.129	0.347	0.637	5.623	30.2	30.1	
97.12480	02:59:43	-0.042	8.455	0.011	8.330	0.129	0.347	0.637	5.623	30.2	30.0	
97.20810	04:59:40	-0.043	8.425	0.011	8.303	0.129	0.347	0.637	5.622	30.2	30.0	
97.29141	06:59:38	-0.043	8.398	0.012	8.278	0.130	0.347	0.637	5.622	30.2	30.0	
97.35382	08:29:30	-0.045	8.387	0.014	8.266	0.130	0.347	0.637	5.613	30.3	30.1	
97.35416	08:29:59	-0.044	8.386	0.014	8.264	0.130	0.347	0.637	5.613	30.3	30.1	-injected
97.35451	08:30:30	0.026	8.386	0.013	8.265	0.130	0.347	0.637	5.613	30.3	30.1	500 psi into
97.35486	08:31:00	0.974	8.394	0.013	8.263	0.129	0.347	0.637	5.608	30.7	30.2	test zone
97.35521	08:31:30	1.933	8.437	0.013	8.278	0.129	0.343	0.640	5.625	31.0	30.1	
97.35555	08:32:00	3.767	9.365	0.013	8.683	0.119	0.302	0.616	5.728	31.1	30.1	
97.35590	08:32:30	3.824	9.384	0.014	8.710	0.119	0.301	0.616	5.728	31.1	30.1	
97.35625	08:33:00	3.834	9.392	0.014	8.720	0.119	0.301	0.615	5.728	31.1	30.1	
97.35659	08:33:29	3.823	9.392	0.013	8.725	0.118	0.301	0.615	5.728	31.1	30.1	
97.35694	08:34:00	3.814	9.390	0.013	8.728	0.118	0.301	0.615	5.728	31.1	30.1	
97.35729	08:34:30	3.807	9.387	0.013	8.730	0.118	0.300	0.615	5.728	31.1	30.1	
97.35764	08:35:00	3.802	9.387	0.309	8.732	0.118	0.300	0.614	5.728	31.1	30.1	-injected
97.35798	08:35:29	3.795	9.426	0.879	8.758	0.118	0.300	0.614	5.728	31.1	30.6	500 psi into
97.35833	08:36:00	3.743	10.931	3.942	9.527	0.116	0.300	0.614	5.727	31.0	30.9	guard zone
97.35868	08:36:30	3.729	10.965	3.873	9.523	0.115	0.300	0.614	5.726	31.1	30.9	
97.35902	08:36:59	3.722	10.978	3.845	9.518	0.115	0.300	0.614	5.726	31.0	30.8	
97.35972	08:38:00	3.712	10.987	3.813	9.520	0.115	0.300	0.614	5.725	31.1	30.8	
97.36041	08:38:59	3.703	10.996	3.793	9.515	0.115	0.300	0.614	5.726	31.1	30.8	
97.36111	08:40:00	3.698	10.996	3.779	9.515	0.115	0.300	0.614	5.726	31.1	30.8	
97.36180	08:41:00	3.693	11.004	3.768	9.510	0.115	0.300	0.614	5.725	31.1	30.7	
97.36250	08:42:00	3.689	11.004	3.760	9.509	0.115	0.300	0.614	5.725	31.0	30.7	
97.36319	08:43:00	3.687	11.006	3.749	9.507	0.115	0.300	0.614	5.725	31.0	30.7	
97.36389	08:44:00	3.684	11.006	3.744	9.506	0.115	0.300	0.614	5.725	31.0	30.7	
97.36458	08:45:00	3.682	11.009	3.738	9.506	0.115	0.300	0.614	5.725	31.1	30.7	
97.36527	08:45:59	3.679	11.012	3.733	9.503	0.115	0.300	0.613	5.725	31.0	30.6	
97.36597	08:47:00	3.675	11.013	3.729	9.500	0.115	0.300	0.613	5.725	31.0	30.6	
97.36666	08:47:59	3.674	11.011	3.723	9.500	0.115	0.300	0.613	5.725	31.0	30.6	
97.36736	08:49:00	3.670	11.013	3.723	9.499	0.115	0.300	0.613	5.725	31.0	30.7	
97.36805	08:50:00	3.670	11.015	3.718	9.496	0.115	0.300	0.613	5.725	31.1	30.6	
97.36944	08:52:00	3.666	11.015	3.709	9.496	0.114	0.300	0.613	5.725	31.0	30.6	
97.37083	08:54:00	3.663	11.015	3.704	9.495	0.114	0.300	0.613	5.725	31.0	30.6	
97.37222	08:56:00	3.659	11.017	3.701	9.492	0.114	0.300	0.613	5.724	31.0	30.6	
97.37361	08:58:00	3.654	11.016	3.695	9.492	0.114	0.300	0.613	5.724	31.0	30.6	
97.37500	09:00:00	3.649	11.019	3.693	9.486	0.114	0.300	0.612	5.724	30.9	30.5	
97.39583	09:30:00	3.624	11.025	3.655	9.477	0.114	0.299	0.611	5.723	30.7	30.4	
97.41667	10:00:00	3.608	11.023	3.635	9.472	0.114	0.299	0.610	5.723	30.6	30.4	
97.43750	10:30:00	3.590	11.016	3.620	9.465	0.114	0.298	0.609	5.717	30.6	30.4	

TABLE D3 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP10, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
97.45833	11:00:00	3.577	11.008	3.608	9.458	0.114	0.298	0.608	5.719	30.6	30.4	
97.54164	12:59:58	3.533	10.960	3.570	9.402	0.114	0.298	0.606	5.720	30.4	30.2	
97.58329	13:59:56	3.512	10.937	3.559	9.380	0.113	0.297	0.606	5.720	30.4	30.2	
97.62494	14:59:55	3.494	10.917	3.549	9.357	0.113	0.297	0.605	5.720	30.3	30.1	
97.66659	15:59:53	3.480	10.899	3.538	9.336	0.113	0.297	0.605	5.720	30.3	30.2	
97.70824	16:59:52	3.463	10.880	3.530	9.322	0.113	0.297	0.604	5.720	30.3	30.2	
97.74989	17:59:50	3.451	10.868	3.522	9.309	0.113	0.297	0.604	5.720	30.3	30.2	
97.79155	18:59:50	3.439	10.853	3.519	9.299	0.113	0.297	0.604	5.719	30.3	30.1	
97.83320	19:59:48	3.425	10.842	3.513	9.290	0.113	0.297	0.604	5.718	30.3	30.1	
97.87485	20:59:47	3.415	10.833	3.509	9.283	0.113	0.297	0.604	5.718	30.3	30.1	
97.91650	21:59:46	3.404	10.820	3.505	9.273	0.113	0.296	0.603	5.718	30.3	30.2	
97.95815	22:59:44	3.392	10.809	3.500	9.267	0.113	0.296	0.603	5.718	30.3	30.1	
97.99981	23:59:44	3.383	10.798	3.497	9.258	0.113	0.296	0.603	5.718	30.3	30.2	
98.04146	00:59:42	3.374	10.787	3.493	9.247	0.113	0.296	0.603	5.718	30.3	30.2	
98.12476	02:59:39	3.356	10.767	3.486	9.231	0.113	0.296	0.603	5.718	30.4	30.2	
98.20806	04:59:36	3.341	10.747	3.480	9.214	0.113	0.296	0.603	5.718	30.3	30.2	
98.29137	06:59:34	3.325	10.726	3.472	9.198	0.113	0.296	0.603	5.718	30.4	30.2	
98.37467	08:58:31	3.310	10.707	3.468	9.182	0.113	0.295	0.602	5.718	30.4	30.3	
98.45798	10:59:29	3.298	10.692	3.463	9.170	0.113	0.295	0.602	5.718	30.3	30.2	
98.54128	12:59:27	3.288	10.676	3.459	9.160	0.113	0.295	0.602	5.718	30.4	30.3	
98.62458	14:59:24	3.276	10.660	3.452	9.148	0.113	0.295	0.602	5.718	30.3	30.2	
98.70789	16:59:22	3.265	10.644	3.448	9.134	0.113	0.295	0.602	5.718	30.4	30.3	
98.79119	18:59:19	3.256	10.628	3.444	9.120	0.113	0.295	0.602	5.718	30.3	30.2	
98.87449	20:59:16	3.244	10.613	3.440	9.109	0.113	0.295	0.601	5.718	30.5	30.3	
98.95780	22:59:14	3.237	10.597	3.433	9.097	0.113	0.295	0.601	5.718	30.4	30.3	
99.04110	00:59:11	3.226	10.581	3.428	9.083	0.113	0.295	0.601	5.719	30.4	30.3	
99.12440	02:59:08	3.218	10.567	3.424	9.070	0.113	0.295	0.601	5.719	30.4	30.3	
99.20771	04:59:06	3.209	10.553	3.421	9.058	0.113	0.295	0.601	5.719	30.5	30.3	
99.29101	06:59:03	3.203	10.538	3.415	9.047	0.113	0.294	0.601	5.719	30.5	30.4	
99.37432	08:59:01	3.195	10.524	3.410	9.035	0.113	0.294	0.600	5.719	30.5	30.3	
99.45762	10:58:58	3.186	10.513	3.406	9.023	0.113	0.294	0.600	5.720	30.5	30.3	
99.54092	12:58:55	3.178	10.499	3.403	9.014	0.113	0.294	0.600	5.719	30.5	30.4	
99.62423	14:58:53	3.171	10.487	3.401	9.003	0.113	0.294	0.600	5.720	30.5	30.3	
99.70753	16:58:51	3.165	10.477	3.396	8.993	0.113	0.294	0.600	5.720	30.5	30.4	
99.79083	18:58:48	3.157	10.462	3.391	8.983	0.113	0.294	0.599	5.720	30.5	30.4	
99.87414	20:58:46	3.151	10.450	3.388	8.971	0.113	0.294	0.599	5.720	30.5	30.3	
99.95744	22:58:43	3.143	10.438	3.383	8.959	0.113	0.294	0.599	5.720	30.5	30.4	
100.04075	00:58:41	3.136	10.425	3.378	8.949	0.113	0.294	0.599	5.720	30.6	30.4	
100.12405	02:58:38	3.131	10.415	3.374	8.936	0.113	0.294	0.599	5.721	30.5	30.4	
100.20735	04:58:35	3.126	10.401	3.370	8.925	0.113	0.294	0.598	5.720	30.5	30.4	
100.29066	06:58:33	3.119	10.389	3.367	8.911	0.113	0.294	0.598	5.721	30.5	30.4	
100.37396	08:58:30	3.113	10.378	3.363	8.900	0.113	0.294	0.598	5.721	30.5	30.4	
100.43680	10:29:00	3.104	10.362	3.358	8.888	0.113	0.294	0.597	5.717	30.5	30.4	

TABLE D3 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP10, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
100.43750	10:30:00	2.913	10.327	3.354	8.874	0.113	0.291	0.597	5.720	30.5	30.4	-released
100.43819	10:31:00	0.003	9.586	3.336	8.605	0.121	0.316	0.621	5.753	30.4	30.4	pressure
100.43889	10:32:00	-0.041	9.567	3.336	8.591	0.121	0.319	0.624	5.753	30.3	30.4	test zone
100.43958	10:33:00	-0.055	9.562	3.335	8.584	0.121	0.320	0.625	5.754	30.3	30.4	
100.44027	10:33:59	-0.057	9.559	3.334	8.580	0.122	0.320	0.625	5.754	30.5	30.4	
100.44097	10:35:00	-0.057	9.555	3.332	8.573	0.122	0.321	0.626	5.754	30.4	30.5	
100.44166	10:35:59	-0.056	9.553	3.332	8.572	0.122	0.321	0.626	5.754	30.5	30.5	
100.44236	10:37:00	-0.056	9.552	3.332	8.569	0.122	0.321	0.626	5.754	30.4	30.4	
100.44305	10:38:00	-0.056	9.546	3.254	8.532	0.122	0.321	0.626	5.754	30.5	30.4	-released
100.44375	10:39:00	-0.056	8.203	0.020	7.816	0.123	0.323	0.627	5.750	30.4	30.4	pressure
100.44444	10:40:00	-0.056	8.171	0.010	7.808	0.124	0.323	0.627	5.750	30.4	30.4	guard zone
100.48957	11:44:59	-0.056	8.043	0.008	7.763	0.125	0.325	0.628	5.749	30.5	30.4	
100.57287	13:44:56	-0.055	8.012	0.011	7.744	0.125	0.326	0.628	5.749	30.5	30.3	
100.61452	14:44:55	-0.056	8.006	0.010	7.739	0.125	0.326	0.628	5.749	30.5	30.4	
100.69783	16:44:53	-0.053	7.988	0.011	7.729	0.126	0.326	0.628	5.749	30.5	30.3	
100.78113	18:44:50	-0.053	7.980	0.010	7.723	0.126	0.326	0.628	5.749	30.6	30.5	
100.86443	20:44:47	-0.055	7.969	0.008	7.718	0.126	0.326	0.628	5.749	30.6	30.4	
100.94774	22:44:45	-0.055	7.957	0.009	7.711	0.126	0.326	0.628	5.748	30.6	30.5	
101.03104	00:44:42	-0.053	7.951	0.009	7.704	0.126	0.326	0.628	5.748	30.6	30.5	
101.11434	02:44:39	-0.053	7.939	0.011	7.699	0.126	0.326	0.628	5.748	30.6	30.4	
101.19765	04:44:37	-0.055	7.928	0.010	7.690	0.126	0.326	0.628	5.749	30.5	30.4	
101.28095	06:44:34	-0.052	7.920	0.009	7.685	0.126	0.326	0.628	5.748	30.5	30.4	
101.36426	08:44:32	-0.054	7.913	0.010	7.680	0.126	0.326	0.628	5.748	30.6	30.4	
101.39583	09:30:00	-0.051	7.903	0.011	7.673	0.126	0.329	0.628	5.728	30.6	30.5	-shut in
101.39618	09:30:30	-0.023	7.906	0.007	7.670	0.126	0.329	0.628	5.728	30.9	30.5	test zone
101.39653	09:31:00	0.002	7.915	0.007	7.672	0.126	0.329	0.628	5.729	31.4	30.5	injected
101.39687	09:31:30	0.119	7.990	0.010	7.701	0.125	0.321	0.627	5.698	31.9	30.4	500 psi into
101.39722	09:32:00	3.803	8.900	0.008	8.094	0.117	0.290	0.594	5.733	31.9	30.5	test zone
101.39791	09:32:59	3.825	8.919	0.009	8.121	0.116	0.290	0.591	5.733	31.9	30.4	
101.39861	09:34:00	3.809	8.917	0.009	8.126	0.116	0.289	0.590	5.732	31.8	30.4	
101.39930	09:35:00	3.799	8.916	0.011	8.132	0.116	0.289	0.589	5.732	31.9	30.4	
101.40000	09:36:00	3.790	8.915	0.011	8.135	0.115	0.289	0.588	5.732	31.8	30.4	
101.40069	09:37:00	3.783	8.914	0.010	8.137	0.115	0.289	0.588	5.732	31.8	30.5	
101.40139	09:38:00	3.778	8.914	0.008	8.140	0.115	0.289	0.587	5.732	31.9	30.5	
101.40208	09:39:00	3.772	8.912	0.008	8.140	0.115	0.288	0.587	5.732	31.8	30.4	
101.40277	09:39:59	3.769	8.911	0.010	8.141	0.115	0.288	0.586	5.732	31.8	30.4	
101.40347	09:41:00	3.767	8.911	0.009	8.142	0.115	0.288	0.586	5.732	31.8	30.4	
101.40416	09:41:59	3.762	8.911	0.010	8.146	0.115	0.288	0.585	5.732	31.8	30.5	
101.40486	09:43:00	3.759	8.911	0.009	8.144	0.115	0.288	0.585	5.732	31.8	30.4	
101.40555	09:44:00	3.756	8.910	0.009	8.145	0.115	0.288	0.585	5.732	31.8	30.5	
101.40624	09:44:59	3.753	8.908	0.009	8.146	0.115	0.288	0.585	5.733	31.7	30.4	
101.40694	09:46:00	3.751	8.908	0.011	8.146	0.115	0.288	0.584	5.732	31.7	30.4	
101.40763	09:46:59	3.750	8.908	0.009	8.147	0.115	0.288	0.584	5.732	31.8	30.5	

TABLE D3 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP10, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
101.40833	09:48:00	3.748	8.907	0.008	8.147	0.115	0.288	0.584	5.732	31.8	30.5	
101.40902	09:48:59	3.745	8.908	0.008	8.147	0.115	0.288	0.584	5.732	31.7	30.5	
101.40972	09:50:00	3.743	8.906	0.009	8.148	0.115	0.288	0.584	5.732	31.7	30.5	
101.41110	09:51:59	3.737	8.905	0.009	8.150	0.115	0.288	0.583	5.732	31.6	30.4	
101.41249	09:53:59	3.734	8.904	0.011	8.151	0.115	0.288	0.583	5.732	31.6	30.4	
101.41388	09:55:59	3.732	8.903	0.010	8.150	0.115	0.288	0.583	5.732	31.6	30.4	
101.41527	09:57:59	3.728	8.902	0.009	8.152	0.115	0.288	0.583	5.732	31.6	30.4	
101.41666	09:59:59	3.727	8.902	0.008	8.151	0.115	0.288	0.583	5.732	31.6	30.5	
101.42707	10:14:59	3.707	8.894	0.010	8.151	0.115	0.287	0.582	5.732	31.4	30.5	
101.43750	10:30:00	3.694	8.886	0.010	8.150	0.115	0.287	0.581	5.731	31.3	30.5	
101.45833	11:00:00	3.667	8.871	0.009	8.141	0.115	0.287	0.580	5.731	31.1	30.4	
101.51040	12:14:59	3.628	8.848	0.010	8.134	0.115	0.286	0.579	5.731	30.9	30.4	
101.55205	13:14:57	3.606	8.841	0.010	8.134	0.115	0.286	0.578	5.731	30.8	30.5	
101.59370	14:14:56	3.585	8.833	0.010	8.136	0.114	0.286	0.577	5.730	30.7	30.4	
101.63535	15:14:54	3.571	8.824	0.010	8.132	0.114	0.286	0.577	5.729	30.6	30.4	
101.67700	16:14:53	3.557	8.815	0.010	8.127	0.114	0.286	0.577	5.730	30.7	30.4	
101.71866	17:14:52	3.543	8.806	0.011	8.123	0.114	0.286	0.576	5.730	30.7	30.5	
101.76031	18:14:51	3.530	8.795	0.009	8.115	0.114	0.286	0.576	5.729	30.6	30.5	
101.80196	19:14:49	3.516	8.780	0.011	8.104	0.114	0.286	0.576	5.730	30.6	30.4	
101.84361	20:14:48	3.505	8.763	0.011	8.090	0.114	0.286	0.576	5.729	30.5	30.5	
101.88526	21:14:46	3.493	8.748	0.010	8.075	0.114	0.286	0.576	5.730	30.5	30.4	
101.92691	22:14:45	3.482	8.734	0.011	8.062	0.114	0.286	0.576	5.730	30.6	30.3	
101.96857	23:14:44	3.471	8.720	0.012	8.048	0.114	0.286	0.576	5.729	30.5	30.4	
102.01022	00:14:43	3.459	8.710	0.010	8.040	0.114	0.286	0.576	5.729	30.5	30.4	
102.09352	02:14:40	3.444	8.703	0.009	8.042	0.114	0.286	0.576	5.729	30.6	30.3	
102.17683	04:14:38	3.431	8.699	0.008	8.042	0.114	0.286	0.576	5.730	30.5	30.3	
102.26013	06:14:35	3.418	8.691	0.009	8.044	0.114	0.286	0.576	5.730	30.5	30.4	
102.34343	08:14:32	3.408	8.684	0.009	8.039	0.114	0.286	0.576	5.730	30.6	30.3	-end testing

TABLE D4
TABULATED DATA FOR COMPLIANCE TEST COMP16, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
222.50261	12:03:46	-0.011	0.040	-0.008	11.046	0.588	0.435	0.234	0.207	27.7	28.3	-installed
222.50296	12:04:16	-0.011	0.040	-0.007	10.934	0.588	0.435	0.234	0.208	27.8	28.4	test tool
222.50330	12:04:45	0.060	4.821	0.005	10.926	0.600	0.395	0.241	0.202	27.8	28.5	created data
222.50365	12:05:15	0.010	10.839	0.011	10.586	0.600	0.385	0.245	0.266	27.8	28.5	file - COMP16
222.50400	12:05:46	0.013	10.909	0.008	10.517	0.600	0.384	0.246	0.268	27.8	28.5	inflated
222.50434	12:06:15	0.011	10.883	0.010	10.467	0.600	0.384	0.246	0.270	27.7	28.5	packers
222.50469	12:06:45	0.011	10.774	0.010	10.427	0.600	0.384	0.246	0.269	27.8	28.4	
222.50504	12:07:15	0.012	10.701	0.012	10.392	0.600	0.384	0.246	0.270	27.8	28.4	
222.50539	12:07:46	0.011	10.642	0.009	10.359	0.600	0.384	0.246	0.269	27.8	28.4	
222.50558	12:08:02	0.012	10.618	0.010	10.346	0.600	0.384	0.246	0.270	27.8	28.4	
222.50627	12:09:02	0.010	10.540	0.011	10.295	0.600	0.384	0.246	0.270	27.8	28.4	
222.50696	12:10:01	0.010	10.482	0.010	10.254	0.600	0.384	0.246	0.270	27.8	28.4	
222.50766	12:11:02	0.012	10.435	0.011	10.219	0.600	0.384	0.246	0.270	27.8	28.5	
222.50835	12:12:01	0.012	10.392	0.010	10.186	0.600	0.384	0.246	0.269	27.8	28.4	
222.50905	12:13:02	0.011	10.359	0.011	10.160	0.600	0.384	0.246	0.269	27.8	28.4	
222.50974	12:14:02	0.010	10.326	0.010	10.135	0.600	0.384	0.247	0.270	27.8	28.5	
222.51043	12:15:01	0.011	10.297	0.008	10.114	0.600	0.384	0.247	0.270	27.8	28.6	
222.51113	12:16:02	0.011	10.270	0.009	10.096	0.600	0.384	0.247	0.269	27.9	28.5	
222.51182	12:17:01	0.010	10.249	0.011	10.077	0.600	0.383	0.247	0.269	27.8	28.4	
222.51252	12:18:02	0.011	10.226	0.011	10.060	0.600	0.383	0.247	0.270	27.8	28.4	
222.51321	12:19:01	0.012	10.208	0.011	10.044	0.600	0.383	0.247	0.269	27.8	28.5	
222.51391	12:20:02	0.013	10.188	0.009	10.028	0.600	0.383	0.247	0.270	27.9	28.5	
222.51460	12:21:01	0.013	10.170	0.010	10.014	0.600	0.383	0.247	0.270	27.9	28.6	
222.51529	12:22:01	0.010	10.155	0.012	10.002	0.600	0.383	0.247	0.270	27.9	28.5	
222.51599	12:23:02	0.013	10.138	0.009	9.989	0.600	0.383	0.247	0.270	27.8	28.4	
222.51668	12:24:01	0.013	10.125	0.011	9.979	0.600	0.383	0.247	0.269	27.9	28.5	
222.52085	12:30:01	0.012	10.049	0.008	9.923	0.600	0.383	0.247	0.269	27.9	28.5	
222.52501	12:36:01	0.010	9.891	0.012	9.880	0.600	0.382	0.247	0.269	27.8	28.5	
222.53888	12:55:59	0.012	9.740	0.009	9.782	0.600	0.381	0.247	0.269	27.9	28.5	
222.54305	13:02:00	0.010	9.659	0.011	9.761	0.600	0.380	0.248	0.269	27.9	28.4	
222.56387	13:31:58	0.013	9.491	0.010	9.682	0.600	0.379	0.249	0.269	27.8	28.4	
222.58889	14:08:00	0.013	9.156	0.010	9.624	0.600	0.377	0.250	0.266	27.9	28.4	
222.63054	15:07:59	0.012	9.037	0.013	9.550	0.600	0.377	0.251	0.265	27.9	28.4	
222.67219	16:07:57	0.013	8.837	0.012	9.495	0.600	0.376	0.251	0.263	27.9	28.5	
222.71384	17:07:56	0.011	8.748	0.013	9.449	0.599	0.376	0.251	0.262	27.9	28.4	
222.75549	18:07:54	0.011	8.661	0.014	9.413	0.599	0.376	0.251	0.261	27.9	28.4	
222.79714	19:07:53	0.012	8.584	0.012	9.383	0.599	0.376	0.252	0.260	27.9	28.4	
222.83880	20:07:52	0.011	8.522	0.012	9.354	0.599	0.376	0.252	0.259	27.9	28.3	
222.88045	21:07:51	0.012	8.463	0.011	9.331	0.599	0.376	0.252	0.259	27.9	28.4	
222.92210	22:07:49	0.013	8.417	0.013	9.309	0.599	0.376	0.252	0.258	27.9	28.4	
222.96375	23:07:48	0.013	8.371	0.011	9.288	0.599	0.376	0.252	0.257	27.9	28.4	
223.00540	00:07:47	0.012	8.329	0.012	9.271	0.599	0.376	0.252	0.257	27.9	28.4	
223.08871	02:07:45	0.011	8.250	0.012	9.237	0.599	0.376	0.253	0.256	28.0	28.4	

TABLE D4 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP16, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
223.17201	04:07:42	0.012	8.187	0.012	9.207	0.599	0.375	0.253	0.255	27.9	28.3	
223.25531	06:07:39	0.013	8.135	0.013	9.182	0.599	0.375	0.253	0.254	28.0	28.4	
223.33862	08:07:37	0.012	8.087	0.011	9.159	0.598	0.375	0.253	0.254	27.9	28.4	
223.42192	10:07:34	0.011	8.048	0.012	9.139	0.598	0.375	0.253	0.253	27.9	28.4	
223.43233	10:22:33	0.013	8.042	0.011	9.138	0.598	0.375	0.253	0.253	27.9	28.3	
223.44275	10:37:34	0.011	8.038	0.012	9.136	0.598	0.375	0.253	0.253	27.9	28.3	
223.45316	10:52:33	0.010	8.033	0.011	9.132	0.598	0.375	0.253	0.253	27.9	28.3	
223.46357	11:07:32	0.012	8.028	0.011	9.129	0.598	0.375	0.253	0.253	28.0	28.3	
223.49931	11:59:00	0.016	8.043	0.060	9.133	0.598	0.375	0.253	0.252	27.8	28.9	-shut in
223.50001	12:00:01	0.015	8.042	0.060	9.133	0.598	0.375	0.253	0.252	27.9	28.9	
223.50035	12:00:30	0.016	8.042	0.059	9.134	0.598	0.375	0.253	0.252	27.9	28.8	
223.50069	12:01:00	0.017	8.042	0.058	9.134	0.598	0.375	0.253	0.252	27.8	28.8	-injected
223.50104	12:01:30	6.846	10.359	0.064	9.652	0.595	0.367	0.254	0.243	28.0	28.9	test zone
223.50139	12:02:00	4.331	9.197	0.060	9.563	0.594	0.365	0.255	0.243	28.0	28.8	valve stuck
223.50173	12:02:29	4.331	9.188	0.060	9.560	0.595	0.365	0.255	0.242	28.0	28.8	pressure went
223.50208	12:03:00	4.326	9.183	0.063	9.559	0.594	0.365	0.255	0.241	28.0	28.8	to ~950 psi -
223.50278	12:04:00	4.313	9.172	0.059	9.558	0.594	0.365	0.255	0.241	28.0	28.8	pressure
223.50347	12:05:00	4.305	9.167	0.063	9.558	0.595	0.365	0.255	0.239	27.9	28.7	released to
223.50416	12:05:59	4.298	9.158	0.061	9.556	0.594	0.365	0.255	0.239	28.0	28.8	600 psi
223.50486	12:07:00	4.292	9.153	0.062	9.554	0.595	0.365	0.255	0.237	28.0	28.7	
223.50555	12:08:00	4.285	9.149	0.060	9.555	0.595	0.365	0.255	0.237	27.9	28.7	
223.50625	12:09:00	4.281	9.145	0.060	9.552	0.595	0.365	0.255	0.236	28.0	28.7	
223.50694	12:10:00	4.279	9.143	0.062	9.551	0.594	0.365	0.255	0.236	27.9	28.7	
223.50763	12:10:59	4.276	9.140	0.062	9.552	0.594	0.365	0.255	0.236	27.9	28.7	
223.50833	12:12:00	4.273	9.136	0.061	9.551	0.594	0.365	0.255	0.236	27.9	28.7	
223.50902	12:12:59	4.270	9.134	0.059	9.550	0.595	0.365	0.255	0.235	28.0	28.8	
223.50972	12:14:00	4.265	9.130	0.060	9.550	0.594	0.365	0.255	0.235	28.0	28.7	
223.51041	12:14:59	4.262	9.130	0.060	9.550	0.595	0.365	0.255	0.235	27.9	28.7	
223.51111	12:16:00	4.261	9.126	0.059	9.549	0.595	0.365	0.255	0.234	27.9	28.7	
223.51180	12:17:00	4.258	9.125	0.062	9.551	0.595	0.365	0.255	0.234	27.9	28.7	
223.51249	12:17:59	4.254	9.121	0.060	9.549	0.594	0.364	0.255	0.234	28.0	28.6	
223.51319	12:19:00	4.252	9.121	0.063	9.547	0.594	0.364	0.255	0.234	27.9	28.7	
223.51388	12:19:59	4.252	9.119	0.061	9.550	0.594	0.364	0.255	0.233	28.0	28.7	
223.51458	12:21:00	4.249	9.117	0.062	9.547	0.595	0.364	0.255	0.234	28.0	28.7	
223.51527	12:21:59	4.246	9.115	0.062	9.549	0.594	0.364	0.255	0.233	28.0	28.7	
223.51597	12:23:00	4.246	9.111	0.061	9.547	0.594	0.364	0.255	0.233	27.9	28.7	
223.51666	12:23:59	4.241	9.109	0.060	9.545	0.594	0.364	0.255	0.233	27.9	28.7	
223.51735	12:24:59	4.242	9.108	0.063	9.545	0.595	0.364	0.255	0.233	28.0	28.7	
223.51805	12:26:00	4.238	9.108	0.063	9.545	0.594	0.364	0.256	0.233	28.0	28.6	
223.51874	12:26:59	4.236	9.105	0.061	9.544	0.594	0.364	0.256	0.232	28.0	28.6	
223.51944	12:28:00	4.235	9.105	0.062	9.547	0.595	0.364	0.256	0.233	28.0	28.7	
223.52013	12:28:59	4.235	9.103	0.061	9.546	0.594	0.364	0.256	0.233	27.9	28.6	
223.52083	12:30:00	4.233	9.100	0.060	9.546	0.595	0.364	0.256	0.232	27.9	28.6	

TABLE D4 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP16, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
223.52500	12:36:00	4.221	9.090	0.060	9.543	0.595	0.364	0.256	0.232	28.0	28.7	
223.52916	12:41:59	4.215	9.080	0.062	9.539	0.595	0.364	0.256	0.231	28.0	28.6	
223.53333	12:48:00	4.207	9.073	0.061	9.539	0.594	0.364	0.256	0.232	27.9	28.7	
223.53749	12:53:59	4.200	9.067	0.062	9.535	0.595	0.364	0.256	0.232	28.0	28.6	
223.54166	12:59:59	4.196	9.057	0.063	9.534	0.595	0.364	0.256	0.231	27.9	28.6	
223.54582	13:05:59	4.189	9.051	0.064	9.533	0.595	0.364	0.256	0.231	28.0	28.5	
223.55832	13:23:59	4.175	9.031	0.063	9.527	0.595	0.364	0.256	0.230	27.9	28.5	
223.58333	14:00:00	4.149	8.993	0.063	9.519	0.595	0.364	0.256	0.230	28.0	28.4	
223.62500	15:00:00	4.111	8.939	0.062	9.502	0.594	0.364	0.256	0.230	28.0	28.4	
223.64583	15:30:00	4.097	8.913	0.064	9.498	0.595	0.364	0.256	0.230	28.0	28.4	
223.66665	15:59:59	4.078	8.885	0.061	9.489	0.594	0.364	0.256	0.230	28.0	28.4	
223.70830	16:59:57	4.052	8.843	0.063	9.477	0.594	0.364	0.256	0.230	28.0	28.4	
223.74996	17:59:57	4.030	8.804	0.064	9.467	0.595	0.364	0.256	0.230	27.9	28.4	
223.79161	18:59:55	4.011	8.764	0.062	9.454	0.595	0.364	0.256	0.229	28.0	28.4	
223.83326	19:59:54	3.988	8.731	0.065	9.446	0.595	0.364	0.256	0.230	28.0	28.4	
223.87491	20:59:52	3.970	8.698	0.062	9.436	0.595	0.364	0.257	0.230	28.0	28.3	
223.91656	21:59:51	3.957	8.669	0.065	9.426	0.595	0.364	0.257	0.230	27.9	28.4	
223.95822	22:59:50	3.941	8.640	0.063	9.417	0.594	0.364	0.257	0.229	27.9	28.3	
223.99987	23:59:49	3.927	8.618	0.063	9.406	0.594	0.364	0.257	0.229	27.9	28.4	
224.04152	00:59:47	3.915	8.591	0.062	9.397	0.594	0.364	0.257	0.230	28.0	28.3	
224.12482	02:59:44	3.888	8.548	0.065	9.380	0.595	0.364	0.257	0.230	28.0	28.3	
224.20813	04:59:42	3.868	8.506	0.063	9.364	0.594	0.364	0.257	0.229	27.9	28.3	
224.29143	06:59:40	3.844	8.463	0.063	9.346	0.594	0.364	0.257	0.229	27.9	28.4	
224.37473	08:59:37	3.826	8.429	0.064	9.329	0.595	0.364	0.257	0.229	28.0	28.3	
224.41639	09:59:36	3.817	8.411	0.063	9.325	0.594	0.364	0.257	0.229	27.9	28.3	
224.45804	10:59:35	3.811	8.395	0.065	9.316	0.595	0.364	0.257	0.229	27.9	28.4	
224.49969	11:59:33	3.803	8.383	0.064	9.310	0.595	0.364	0.257	0.229	27.9	28.3	
224.54134	12:59:32	3.795	8.369	0.062	9.301	0.594	0.364	0.257	0.229	27.9	28.4	
224.58299	13:59:30	3.788	8.356	0.063	9.296	0.594	0.364	0.257	0.228	27.9	28.4	
224.62464	14:59:29	3.782	8.342	0.065	9.287	0.595	0.364	0.257	0.228	27.9	28.4	
224.66630	15:59:28	3.779	8.329	0.065	9.280	0.594	0.364	0.257	0.229	28.0	28.3	
224.70795	16:59:27	3.773	8.316	0.065	9.272	0.595	0.364	0.257	0.228	28.0	28.3	
224.74960	17:59:25	3.767	8.303	0.065	9.267	0.595	0.364	0.257	0.229	27.9	28.4	
224.79125	18:59:24	3.758	8.292	0.065	9.259	0.595	0.364	0.257	0.229	28.0	28.3	
224.83290	19:59:23	3.753	8.281	0.064	9.252	0.595	0.364	0.257	0.228	27.9	28.4	
224.87456	20:59:22	3.746	8.269	0.064	9.245	0.595	0.364	0.257	0.228	28.0	28.3	
224.91621	21:59:21	3.742	8.258	0.065	9.239	0.595	0.364	0.257	0.228	28.0	28.4	
224.95786	22:59:19	3.739	8.248	0.065	9.232	0.595	0.364	0.257	0.228	28.0	28.3	
224.99951	23:59:18	3.732	8.235	0.065	9.226	0.595	0.364	0.257	0.228	28.0	28.3	
225.02034	00:29:17	3.730	8.232	0.062	9.225	0.595	0.364	0.257	0.228	27.9	28.3	
225.29107	06:59:08	3.699	8.168	0.063	9.183	0.595	0.363	0.257	0.228	27.9	28.4	
225.54098	12:59:01	3.669	8.113	0.065	9.146	0.595	0.363	0.257	0.228	27.9	28.3	
225.79090	18:58:54	3.648	8.067	0.066	9.110	0.595	0.363	0.257	0.227	28.0	28.3	

TABLE D4 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP16, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
226.04081	00:58:46	3.627	8.025	0.063	9.078	0.595	0.363	0.257	0.227	28.0	28.4	
226.29072	06:58:38	3.605	7.980	0.066	9.043	0.595	0.363	0.257	0.227	27.9	28.4	
226.50000	12:00:00	3.592	7.951	0.066	9.020	0.595	0.363	0.257	0.226	28.0	28.4	
226.74991	17:59:52	3.575	7.915	0.065	8.990	0.595	0.363	0.257	0.227	28.0	28.3	
227.08312	01:59:42	3.554	7.870	0.065	8.949	0.595	0.363	0.257	0.226	27.9	28.3	
227.24973	05:59:37	3.543	7.851	0.063	8.931	0.595	0.363	0.257	0.226	27.9	28.4	
227.33304	07:59:35	3.535	7.838	0.064	8.920	0.595	0.363	0.257	0.226	27.9	28.4	
227.37465	08:59:30	3.537	7.835	0.065	8.917	0.595	0.363	0.257	0.226	28.0	28.3	
227.37500	09:00:00	3.537	7.834	0.065	8.919	0.595	0.363	0.257	0.226	27.9	28.4	-injected
227.37534	09:00:29	3.563	7.903	0.786	8.942	0.595	0.363	0.257	0.226	27.9	28.5	guard-zone
227.37569	09:01:00	4.543	10.163	4.975	9.895	0.595	0.361	0.258	0.226	28.0	29.4	pressure
227.37604	09:01:30	4.448	9.881	4.139	9.691	0.595	0.361	0.259	0.227	27.9	29.2	increased to
227.37639	09:02:00	4.443	9.871	4.133	9.685	0.595	0.361	0.259	0.227	28.0	29.3	750 psi -
227.37708	09:03:00	4.441	9.861	4.120	9.682	0.595	0.361	0.259	0.226	28.0	29.2	pressure
227.37778	09:04:00	4.440	9.857	4.104	9.677	0.595	0.361	0.259	0.227	27.9	29.2	released to
227.37847	09:05:00	4.440	9.854	4.092	9.674	0.595	0.361	0.259	0.226	28.0	29.2	600 psi
227.37916	09:05:59	4.438	9.850	4.085	9.673	0.595	0.361	0.259	0.226	28.0	29.1	
227.37986	09:07:00	4.438	9.849	4.080	9.672	0.595	0.361	0.259	0.227	28.0	29.0	
227.38055	09:08:00	4.440	9.850	4.072	9.671	0.595	0.361	0.259	0.227	28.0	29.1	
227.38125	09:09:00	4.440	9.846	4.071	9.672	0.595	0.361	0.259	0.227	27.9	29.1	
227.38194	09:10:00	4.438	9.849	4.063	9.669	0.595	0.361	0.259	0.227	27.9	29.0	
227.38264	09:11:00	4.439	9.846	4.062	9.671	0.595	0.361	0.259	0.227	28.0	29.1	
227.38333	09:12:00	4.438	9.845	4.057	9.668	0.595	0.361	0.259	0.227	28.0	29.1	
227.38402	09:12:59	4.441	9.844	4.053	9.666	0.595	0.361	0.259	0.226	27.9	29.0	
227.38472	09:14:00	4.441	9.847	4.049	9.666	0.595	0.361	0.259	0.226	27.9	29.0	
227.38541	09:14:59	4.442	9.847	4.046	9.666	0.595	0.361	0.259	0.227	28.0	29.0	
227.38611	09:16:00	4.441	9.846	4.046	9.669	0.595	0.361	0.259	0.227	28.0	28.9	
227.38680	09:17:00	4.439	9.846	4.044	9.667	0.595	0.361	0.259	0.227	28.0	29.0	
227.38749	09:17:59	4.441	9.847	4.039	9.667	0.595	0.361	0.259	0.227	28.0	28.9	
227.38819	09:19:00	4.442	9.847	4.039	9.667	0.595	0.361	0.259	0.227	28.0	29.0	
227.38888	09:19:59	4.440	9.843	4.037	9.666	0.595	0.361	0.259	0.226	28.0	29.0	
227.38958	09:21:00	4.440	9.847	4.031	9.664	0.595	0.361	0.259	0.227	27.9	28.9	
227.39027	09:21:59	4.442	9.844	4.033	9.662	0.595	0.361	0.259	0.226	28.0	29.0	
227.39097	09:23:00	4.441	9.844	4.031	9.662	0.595	0.361	0.259	0.227	28.0	28.9	
227.39166	09:23:59	4.439	9.845	4.029	9.662	0.595	0.361	0.259	0.227	27.9	29.0	
227.39235	09:24:59	4.443	9.847	4.025	9.665	0.595	0.361	0.259	0.227	27.9	28.9	
227.39305	09:26:00	4.442	9.843	4.026	9.664	0.595	0.361	0.259	0.226	28.0	28.9	
227.39374	09:26:59	4.441	9.843	4.024	9.661	0.595	0.361	0.259	0.227	28.0	28.9	
227.39444	09:28:00	4.443	9.843	4.020	9.661	0.595	0.361	0.259	0.226	27.9	28.8	
227.39513	09:28:59	4.443	9.846	4.018	9.661	0.595	0.361	0.259	0.227	27.9	28.9	
227.39583	09:30:00	4.440	9.844	4.016	9.663	0.595	0.361	0.259	0.227	28.0	29.0	
227.40000	09:36:00	4.442	9.844	4.010	9.659	0.595	0.361	0.259	0.227	27.9	28.8	
227.40416	09:41:59	4.443	9.843	4.003	9.658	0.595	0.360	0.259	0.226	27.9	28.8	

TABLE D4 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP16, MULTIPACKER TEST TOOL #5

CALENDAR DAY (1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-09) (cm)	RADIAL LVDT (R-07) (cm)	RADIAL LVDT (R-06) (cm)	AXIAL LVDT (A-03) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
227.40833	09:48:00	4.443	9.840	3.999	9.653	0.595	0.360	0.259	0.226	27.9	28.8	
227.41249	09:53:59	4.442	9.842	3.991	9.655	0.595	0.360	0.259	0.227	28.0	28.7	
227.41666	09:59:59	4.441	9.841	3.988	9.652	0.595	0.360	0.259	0.226	27.9	28.7	
227.42082	10:05:59	4.442	9.841	3.983	9.651	0.595	0.360	0.259	0.227	27.9	28.8	
227.42499	10:11:59	4.440	9.838	3.980	9.649	0.595	0.360	0.259	0.227	27.9	28.8	
227.43750	10:30:00	4.441	9.834	3.969	9.642	0.595	0.360	0.259	0.226	27.9	28.7	
227.45832	10:59:59	4.440	9.833	3.953	9.639	0.595	0.360	0.259	0.227	27.9	28.6	
227.49998	11:59:58	4.436	9.822	3.934	9.624	0.595	0.360	0.259	0.227	27.9	28.5	
227.54163	12:59:57	4.435	9.814	3.919	9.614	0.595	0.360	0.259	0.226	27.9	28.5	
227.58333	14:00:00	4.431	9.808	3.905	9.606	0.595	0.360	0.259	0.226	27.9	28.5	
227.64581	15:29:58	4.429	9.799	3.891	9.594	0.595	0.360	0.259	0.226	27.9	28.5	
227.68746	16:29:57	4.426	9.793	3.883	9.585	0.595	0.360	0.259	0.226	27.9	28.4	
227.72911	17:29:55	4.425	9.786	3.875	9.577	0.595	0.360	0.259	0.226	28.0	28.5	
227.77076	18:29:54	4.423	9.778	3.869	9.571	0.595	0.360	0.259	0.226	28.0	28.5	
227.81242	19:29:53	4.421	9.769	3.858	9.566	0.595	0.360	0.259	0.226	27.9	28.3	
227.85407	20:29:52	4.416	9.768	3.856	9.557	0.595	0.360	0.259	0.226	28.0	28.4	
227.89572	21:29:50	4.418	9.760	3.849	9.551	0.595	0.360	0.259	0.226	27.9	28.4	
227.93737	22:29:49	4.414	9.752	3.843	9.546	0.595	0.360	0.259	0.226	28.0	28.4	
227.97902	23:29:47	4.410	9.749	3.841	9.539	0.595	0.360	0.259	0.226	28.0	28.4	
228.02067	00:29:46	4.411	9.742	3.836	9.530	0.595	0.360	0.259	0.226	28.0	28.5	
228.16646	03:59:42	4.404	9.725	3.820	9.509	0.595	0.360	0.259	0.226	27.9	28.3	
228.33306	07:59:36	4.393	9.702	3.806	9.487	0.595	0.360	0.259	0.226	28.0	28.4	
228.53640	12:52:25	4.390	9.683	3.787	9.459	0.595	0.360	0.259	0.227	28.0	28.4	
228.78631	18:52:17	4.379	9.654	3.770	9.431	0.595	0.360	0.260	0.226	28.0	28.4	
229.03622	00:52:09	4.370	9.627	3.752	9.399	0.595	0.360	0.260	0.226	28.0	28.4	
229.20283	04:52:05	4.364	9.610	3.744	9.378	0.595	0.360	0.260	0.227	28.0	28.3	
229.36943	08:51:59	4.357	9.593	3.730	9.359	0.594	0.360	0.260	0.226	28.0	28.5	
229.44505	10:40:52	4.364	9.594	3.742	9.359	0.594	0.359	0.260	0.224	27.9	28.4	-end testing

TABLE D5
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
342.39583	09:30:00	-0.060	0.086	-0.015	0.079	0.386	0.420	0.147	-1.399	24.003	24.283	-installed
342.39618	09:30:30	-0.060	0.216	-0.015	0.168	0.388	0.417	0.147	-1.399	24.017	24.313	test tool
342.39653	09:31:00	-0.058	0.345	-0.014	0.315	0.393	0.431	0.163	-1.399	23.999	24.294	created data
342.39687	09:31:30	-0.060	7.120	-0.015	6.888	0.344	0.370	0.153	-1.399	24.014	24.276	file - COMP4
342.39722	09:32:00	-0.060	10.781	-0.016	10.753	0.344	0.368	0.153	-1.399	23.995	24.274	inflated
342.39791	09:32:59	-0.061	10.360	-0.016	10.336	0.344	0.345	0.153	-1.399	24.008	24.303	packers
342.39861	09:34:00	-0.060	10.221	-0.016	10.197	0.344	0.356	0.153	-1.399	23.989	24.301	
342.39930	09:35:00	-0.060	10.133	-0.016	10.109	0.344	0.346	0.153	-1.399	23.999	24.311	
342.40000	09:36:00	-0.060	10.071	-0.016	10.047	0.344	0.353	0.153	-1.399	24.011	24.290	
342.40069	09:37:00	-0.060	10.023	-0.016	10.001	0.344	0.348	0.153	-1.399	23.991	24.303	
342.40139	09:38:00	-0.060	9.984	-0.017	9.963	0.344	0.348	0.153	-1.399	24.003	24.315	
342.40208	09:39:00	-0.060	9.951	-0.016	9.932	0.344	0.337	0.153	-1.399	24.017	24.296	
342.40277	09:39:59	-0.061	9.923	-0.017	9.906	0.344	0.342	0.153	-1.399	24.013	24.308	
342.40416	09:41:59	-0.060	9.877	-0.016	9.863	0.344	0.321	0.153	-1.399	23.987	24.299	
342.40555	09:44:00	-0.061	9.838	-0.017	9.828	0.344	0.332	0.153	-1.399	23.979	24.291	
342.40694	09:46:00	-0.060	9.806	-0.017	9.799	0.344	0.330	0.153	-1.399	24.002	24.281	
342.40833	09:48:00	-0.060	9.778	-0.017	9.775	0.344	0.327	0.153	-1.399	23.991	24.303	
342.40972	09:50:00	-0.060	9.753	-0.017	9.753	0.344	0.326	0.153	-1.399	23.996	24.275	
342.41110	09:51:59	-0.060	9.730	-0.017	9.734	0.344	0.323	0.153	-1.399	23.984	24.296	
342.41249	09:53:59	-0.060	9.709	-0.017	9.714	0.344	0.323	0.153	-1.399	23.986	24.281	
342.41388	09:55:59	-0.061	9.690	-0.017	9.698	0.344	0.332	0.153	-1.399	23.988	24.267	
342.41527	09:57:59	-0.061	9.672	-0.017	9.683	0.344	0.328	0.153	-1.399	23.989	24.284	
342.41667	10:00:00	-0.061	9.655	-0.017	9.669	0.344	0.328	0.153	-1.399	24.004	24.283	
342.42083	10:06:00	-0.060	9.609	-0.017	9.634	0.344	0.319	0.153	-1.398	23.975	24.287	
342.42500	10:12:00	-0.060	9.569	-0.017	9.605	0.344	0.318	0.153	-1.398	23.978	24.323	
342.42916	10:17:59	-0.060	9.530	-0.017	9.576	0.344	0.321	0.153	-1.398	23.955	24.267	
342.43333	10:24:00	-0.060	9.464	-0.017	9.538	0.344	0.328	0.153	-1.399	23.962	24.273	
342.43749	10:29:59	-0.060	8.893	-0.017	9.533	1.157	1.295	0.154	-1.399	23.967	24.279	
342.44166	10:35:59	-0.065	8.641	-0.022	9.532	0.345	0.338	0.155	-1.399	23.970	24.282	
342.44582	10:41:59	-0.064	8.472	-0.021	9.529	0.345	0.346	0.156	-1.399	23.949	24.277	
342.44999	10:47:59	-0.064	8.321	-0.021	9.526	0.345	0.328	0.156	-1.399	23.915	24.260	
342.45415	10:53:59	-0.064	8.166	-0.021	9.525	0.345	0.320	0.157	-1.399	23.930	24.258	
342.45833	11:00:00	-0.064	8.024	-0.022	9.526	0.345	0.316	0.157	-1.399	23.954	24.283	
342.47916	11:29:59	-0.064	7.523	-0.022	9.519	0.346	0.319	0.157	-1.399	23.942	24.237	
342.49998	11:59:58	-0.064	7.263	-0.021	9.500	0.346	0.322	0.157	-1.399	23.927	24.206	
342.54163	12:59:57	-0.064	6.928	-0.020	9.467	0.346	0.317	0.157	-1.400	23.899	24.228	
342.58329	13:59:56	-0.065	6.764	-0.020	9.444	0.348	0.318	0.157	-1.401	23.934	24.197	
342.62494	14:59:55	-0.066	6.657	-0.021	9.421	0.348	0.322	0.157	-1.401	23.936	24.215	
342.70824	16:59:52	-0.067	6.540	-0.022	9.420	0.348	0.323	0.157	-1.400	24.067	24.313	
342.79155	18:59:50	-0.069	6.452	-0.023	9.412	0.348	0.319	0.157	-1.401	24.136	24.415	
342.87485	20:59:47	-0.070	6.371	-0.023	9.394	0.348	0.324	0.157	-1.401	24.181	24.460	
342.95815	22:59:44	-0.071	6.294	-0.023	9.361	0.349	0.326	0.157	-1.403	24.154	24.450	
343.04146	00:59:42	-0.073	6.219	-0.024	9.322	0.349	0.325	0.157	-1.403	24.127	24.406	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
343.12476	02:59:39	-0.074	6.148	-0.024	9.285	0.349	0.323	0.157	-1.404	24.082	24.393	
343.20806	04:59:36	-0.075	6.080	-0.024	9.248	0.349	0.323	0.157	-1.404	24.047	24.343	
343.29137	06:59:34	-0.077	6.016	-0.025	9.209	0.349	0.327	0.157	-1.404	23.979	24.274	
343.37430	08:59:00	-0.075	5.959	-0.019	9.161	0.350	0.334	0.157	-1.405	23.866	24.178	
343.37465	08:59:30	-0.076	5.959	-0.019	9.160	0.350	0.348	0.157	-1.405	23.880	24.192	
343.37500	09:00:00	-0.074	7.897	-0.019	9.482	0.350	0.353	0.154	-1.405	23.880	24.176	-packers'
343.37535	09:00:30	-0.072	10.313	-0.019	10.469	0.351	0.355	0.156	-1.405	23.894	24.174	pressure
343.37569	09:01:00	-0.072	10.230	-0.019	10.513	0.351	0.351	0.156	-1.405	23.876	24.172	increased
343.37604	09:01:30	-0.072	10.411	-0.019	10.606	0.351	0.351	0.156	-1.405	23.874	24.153	
343.37639	09:02:00	-0.072	10.369	-0.019	10.583	0.351	0.350	0.156	-1.405	23.855	24.183	
343.37673	09:02:29	-0.072	10.338	-0.019	10.568	0.351	0.351	0.156	-1.405	23.870	24.166	
343.37743	09:03:30	-0.072	10.294	-0.019	10.546	0.351	0.337	0.156	-1.405	23.867	24.179	
343.37778	09:04:00	-0.072	10.277	-0.019	10.538	0.351	0.347	0.156	-1.405	23.867	24.163	
343.37847	09:05:00	-0.072	10.249	-0.019	10.524	0.351	0.337	0.156	-1.405	23.863	24.158	
343.37916	09:05:59	-0.073	10.226	-0.019	10.513	0.351	0.335	0.156	-1.405	23.859	24.154	
343.37986	09:07:00	-0.072	10.207	-0.019	10.503	0.351	0.335	0.156	-1.405	23.855	24.167	
343.38055	09:08:00	-0.072	10.191	-0.019	10.495	0.351	0.339	0.156	-1.405	23.868	24.147	
343.38125	09:09:00	-0.072	10.176	-0.019	10.488	0.351	0.340	0.156	-1.405	23.863	24.159	
343.38194	09:10:00	-0.072	10.163	-0.019	10.482	0.351	0.339	0.156	-1.405	23.858	24.187	
343.38333	09:12:00	-0.073	10.126	-0.019	10.470	0.351	0.341	0.156	-1.405	23.882	24.178	
343.38472	09:14:00	-0.072	10.114	-0.019	10.459	0.351	0.337	0.156	-1.405	23.854	24.167	
343.38611	09:16:00	-0.073	10.098	-0.019	10.450	0.351	0.339	0.156	-1.405	23.846	24.142	
343.38749	09:17:59	-0.073	10.076	-0.019	10.442	0.351	0.337	0.156	-1.405	23.836	24.148	
343.38888	09:19:59	-0.072	10.068	-0.019	10.435	0.351	0.341	0.156	-1.405	23.827	24.156	
343.39027	09:21:59	-0.073	10.056	-0.019	10.428	0.351	0.341	0.156	-1.405	23.851	24.147	
343.39166	09:23:59	-0.072	10.044	-0.019	10.421	0.351	0.337	0.156	-1.405	23.823	24.151	
343.39235	09:24:59	-0.073	10.038	-0.019	10.418	0.351	0.345	0.156	-1.405	23.869	24.148	-deflated
343.40694	09:46:00	-0.072	0.064	-0.018	0.004	0.376	0.359	0.149	-1.405	23.853	24.100	packers
343.41666	09:59:59	-0.073	0.047	-0.018	0.027	0.376	0.380	0.148	-1.406	23.798	24.028	
343.41701	10:00:30	-0.073	0.207	-0.018	0.129	0.381	0.390	0.149	-1.406	23.813	24.027	
343.41736	10:01:00	-0.072	0.325	-0.017	0.054	0.383	0.383	0.169	-1.406	23.809	24.023	-inflated
343.41771	10:01:30	-0.079	8.869	-0.022	9.027	0.347	0.352	0.152	-1.406	23.841	24.006	packers
343.41805	10:02:00	-0.080	10.796	-0.024	10.774	0.347	0.348	0.152	-1.406	23.823	24.003	
343.41840	10:02:30	-0.081	10.613	-0.024	10.589	0.347	0.348	0.152	-1.406	23.804	24.001	
343.41875	10:03:00	-0.081	10.506	-0.024	10.479	0.347	0.350	0.152	-1.406	23.786	23.999	
343.41944	10:04:00	-0.081	10.377	-0.024	10.341	0.347	0.336	0.152	-1.406	23.815	24.012	
343.42014	10:05:00	-0.081	10.303	-0.024	10.261	0.348	0.337	0.152	-1.406	23.812	24.042	
343.42083	10:06:00	-0.081	10.248	-0.024	10.203	0.348	0.340	0.152	-1.406	23.808	24.038	
343.42153	10:07:00	-0.081	10.195	-0.024	10.160	0.347	0.335	0.152	-1.406	23.787	24.017	
343.42222	10:08:00	-0.081	10.162	-0.024	10.125	0.347	0.341	0.152	-1.406	23.801	24.014	
343.42291	10:08:59	-0.081	10.141	-0.025	10.097	0.347	0.338	0.152	-1.406	23.813	24.043	
343.42361	10:10:00	-0.081	10.117	-0.024	10.074	0.347	0.337	0.152	-1.406	23.778	23.975	
343.42500	10:12:00	-0.081	10.077	-0.025	10.035	0.348	0.340	0.152	-1.406	23.789	24.002	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
343.42638	10:13:59	-0.081	10.041	-0.025	10.004	0.348	0.334	0.151	-1.406	23.800	24.014	
343.42777	10:15:59	-0.081	10.019	-0.025	9.978	0.348	0.339	0.151	-1.406	23.779	24.025	
343.42916	10:17:59	-0.081	9.996	-0.025	9.956	0.348	0.335	0.151	-1.406	23.790	24.020	
343.43055	10:20:00	-0.081	9.975	-0.025	9.936	0.348	0.334	0.151	-1.406	23.783	23.996	
343.43194	10:22:00	-0.081	9.956	-0.025	9.919	0.348	0.338	0.151	-1.406	23.795	24.009	
343.43333	10:24:00	-0.081	9.939	-0.025	9.904	0.348	0.340	0.151	-1.406	23.790	24.020	
343.43471	10:25:59	-0.081	9.922	-0.025	9.888	0.348	0.337	0.151	-1.406	23.769	24.015	
343.43611	10:28:00	-0.081	9.903	-0.025	9.872	0.348	0.335	0.151	-1.406	23.780	24.010	
343.43750	10:30:00	-0.081	9.862	-0.025	9.847	0.348	0.338	0.151	-1.406	23.793	24.006	
343.44166	10:35:59	-0.081	8.932	-0.025	9.851	0.350	0.327	0.152	-1.406	23.784	24.014	
343.44583	10:42:00	-0.081	8.380	-0.025	9.874	0.351	0.331	0.153	-1.406	23.762	24.025	
343.44999	10:47:59	-0.081	8.167	-0.025	9.873	0.351	0.328	0.153	-1.406	23.798	24.011	
343.45416	10:53:59	-0.081	8.051	-0.025	9.865	0.351	0.331	0.153	-1.406	23.759	24.005	
343.45832	10:59:59	-0.081	7.961	-0.025	9.855	0.351	0.328	0.153	-1.405	23.759	24.006	
343.47917	11:30:00	-0.081	7.716	-0.025	9.808	0.351	0.333	0.152	-1.406	23.723	23.986	
343.50416	12:05:59	-0.082	7.545	-0.025	9.761	0.351	0.334	0.153	-1.406	23.627	23.940	
343.54582	13:05:59	-0.082	7.377	-0.025	9.709	0.351	0.334	0.152	-1.406	23.568	23.897	
343.58747	14:05:57	-0.082	7.268	-0.026	9.671	0.352	0.335	0.152	-1.406	23.523	23.819	
343.67077	16:05:55	-0.083	7.122	-0.027	9.621	0.352	0.335	0.152	-1.406	23.437	23.782	
343.75407	18:05:52	-0.083	7.033	-0.027	9.597	0.352	0.335	0.152	-1.406	23.440	23.801	
343.83738	20:05:50	-0.084	6.963	-0.026	9.573	0.352	0.333	0.152	-1.406	23.373	23.801	
343.92068	22:05:47	-0.084	6.901	-0.027	9.546	0.352	0.331	0.152	-1.407	23.355	23.782	
344.00399	00:05:45	-0.084	6.846	-0.026	9.519	0.352	0.328	0.152	-1.407	23.299	23.743	
344.17059	04:05:39	-0.085	6.757	-0.026	9.475	0.353	0.329	0.152	-1.407	23.260	23.720	
344.33720	08:05:34	-0.079	6.681	-0.021	9.425	0.353	0.330	0.152	-1.407	23.206	23.699	
344.37430	08:59:00	-0.079	6.658	-0.020	9.401	0.353	0.346	0.151	-1.408	23.192	23.586	
344.37465	08:59:30	-0.079	6.658	-0.020	9.401	0.353	0.352	0.151	-1.408	23.173	23.601	
344.37500	09:00:00	-0.079	6.999	-0.020	9.397	0.353	0.356	0.151	-1.408	23.172	23.583	-packers'
344.37535	09:00:30	-0.078	10.407	-0.018	10.445	0.354	0.357	0.149	-1.408	23.172	23.600	pressure
344.37569	09:01:00	-0.078	10.311	-0.019	10.918	0.354	0.355	0.149	-1.408	23.155	23.582	increased
344.37639	09:02:00	-0.079	10.241	-0.019	10.849	0.354	0.353	0.149	-1.408	23.152	23.596	
344.37708	09:03:00	-0.079	10.202	-0.019	10.821	0.354	0.348	0.149	-1.408	23.165	23.593	
344.37778	09:04:00	-0.079	10.175	-0.019	10.803	0.354	0.345	0.149	-1.408	23.212	23.606	
344.37847	09:05:00	-0.079	10.154	-0.019	10.789	0.354	0.338	0.149	-1.408	23.158	23.586	
344.37916	09:05:59	-0.078	10.137	-0.019	10.778	0.354	0.346	0.149	-1.408	23.155	23.566	
344.37986	09:07:00	-0.078	10.123	-0.019	10.769	0.354	0.349	0.149	-1.408	23.184	23.579	
344.38055	09:08:00	-0.079	10.111	-0.019	10.761	0.354	0.345	0.149	-1.408	23.179	23.574	
344.38125	09:09:00	-0.079	10.100	-0.019	10.753	0.354	0.338	0.149	-1.408	23.143	23.571	
344.38194	09:10:00	-0.079	10.090	-0.019	10.748	0.354	0.342	0.149	-1.408	23.171	23.566	
344.38333	09:12:00	-0.079	10.073	-0.019	10.736	0.354	0.341	0.149	-1.408	23.162	23.573	
344.38472	09:14:00	-0.079	10.059	-0.019	10.727	0.354	0.341	0.149	-1.408	23.136	23.564	
344.38611	09:16:00	-0.078	10.046	-0.019	10.718	0.354	0.341	0.149	-1.408	23.176	23.554	
344.38749	09:17:59	-0.078	10.034	-0.019	10.711	0.354	0.346	0.149	-1.408	23.166	23.577	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
344.38888	09:19:59	-0.079	10.024	-0.019	10.704	0.354	0.347	0.149	-1.408	23.187	23.549	
344.39027	09:21:59	-0.079	10.015	-0.019	10.699	0.354	0.339	0.149	-1.408	23.144	23.555	
344.39166	09:23:59	-0.078	10.007	-0.019	10.693	0.354	0.346	0.149	-1.408	23.168	23.563	
344.39305	09:26:00	-0.079	9.998	-0.019	10.687	0.354	0.341	0.149	-1.408	23.192	23.587	
344.39444	09:28:00	-0.078	9.990	-0.018	10.683	0.354	0.341	0.149	-1.408	23.168	23.562	
344.39583	09:30:00	-0.079	9.983	-0.018	10.678	0.354	0.339	0.149	-1.408	23.144	23.539	
344.41666	09:59:59	-0.079	9.906	-0.019	10.629	0.354	0.334	0.149	-1.408	23.137	23.515	
344.42082	10:05:59	-0.078	9.894	-0.019	10.622	0.354	0.330	0.149	-1.408	23.115	23.542	
344.46875	11:15:00	-0.079	9.812	-0.020	10.570	0.354	0.335	0.149	-1.410	23.135	23.562	
344.49930	11:59:00	0.021	9.782	0.018	10.551	0.342	0.328	0.151	-1.407	23.115	23.624	-shut in
344.50000	12:00:00	0.159	9.811	0.018	10.560	0.338	0.320	0.159	-1.407	23.128	23.654	-injected
344.50034	12:00:29	3.359	10.731	0.018	10.988	0.328	0.321	0.143	-1.407	23.156	23.600	500 psi into
344.50069	12:01:00	3.304	10.718	0.018	10.986	0.328	0.320	0.143	-1.407	23.171	23.581	test zone
344.50104	12:01:30	3.276	10.710	0.018	10.985	0.328	0.319	0.143	-1.407	23.153	23.597	
344.50139	12:02:00	3.256	10.704	0.018	10.983	0.328	0.317	0.143	-1.407	23.151	23.595	
344.50208	12:03:00	3.228	10.694	0.018	10.981	0.328	0.315	0.142	-1.407	23.164	23.625	
344.50278	12:04:00	3.209	10.686	0.018	10.978	0.328	0.308	0.142	-1.407	23.145	23.605	
344.50347	12:05:00	3.194	10.679	0.018	10.977	0.328	0.314	0.142	-1.407	23.125	23.618	
344.50416	12:05:59	3.181	10.673	0.018	10.976	0.328	0.314	0.142	-1.407	23.138	23.631	
344.50486	12:07:00	3.170	10.667	0.018	10.975	0.328	0.312	0.142	-1.407	23.118	23.627	
344.50555	12:08:00	3.159	10.661	0.018	10.974	0.328	0.318	0.142	-1.407	23.165	23.609	
344.50625	12:09:00	3.151	10.655	0.018	10.974	0.328	0.316	0.142	-1.407	23.130	23.607	
344.50694	12:10:00	3.143	10.651	0.018	10.973	0.328	0.318	0.142	-1.407	23.159	23.603	
344.50833	12:12:00	3.130	10.643	0.018	10.971	0.328	0.313	0.142	-1.407	23.138	23.599	
344.50972	12:14:00	3.119	10.635	0.018	10.969	0.328	0.315	0.142	-1.407	23.134	23.627	
344.51111	12:16:00	3.109	10.628	0.018	10.967	0.328	0.317	0.142	-1.407	23.147	23.607	
344.51249	12:17:59	3.101	10.621	0.018	10.965	0.328	0.317	0.142	-1.407	23.178	23.605	
344.51388	12:19:59	3.093	10.615	0.018	10.964	0.328	0.313	0.141	-1.407	23.177	23.620	
344.51666	12:23:59	3.081	10.604	0.018	10.961	0.328	0.316	0.141	-1.407	23.177	23.620	
344.51805	12:26:00	3.075	10.599	0.018	10.959	0.328	0.313	0.141	-1.407	23.176	23.603	
344.51944	12:28:00	3.070	10.594	0.018	10.958	0.328	0.316	0.141	-1.407	23.162	23.589	
344.52083	12:30:00	3.066	10.590	0.018	10.957	0.328	0.315	0.141	-1.407	23.163	23.623	
344.53125	12:45:00	3.037	10.558	0.018	10.948	0.328	0.307	0.141	-1.407	23.141	23.601	
344.54166	12:59:59	3.016	10.531	0.018	10.937	0.328	0.305	0.141	-1.407	23.158	23.585	
344.58333	14:00:00	2.956	10.445	0.019	10.880	0.328	0.304	0.140	-1.406	23.113	23.508	
344.66664	15:59:58	2.917	10.375	0.017	10.872	0.328	0.309	0.140	-1.406	23.088	23.548	
344.70829	16:59:56	2.900	10.344	0.017	10.864	0.328	0.311	0.139	-1.406	23.109	23.569	
344.79160	18:59:54	2.875	10.292	0.018	10.847	0.328	0.309	0.139	-1.406	23.052	23.579	
344.87490	20:59:51	2.857	10.247	0.018	10.828	0.328	0.306	0.139	-1.406	23.058	23.601	
344.95821	22:59:49	2.843	10.210	0.018	10.810	0.328	0.302	0.139	-1.406	23.062	23.621	
345.04151	00:59:46	2.828	10.171	0.018	10.788	0.328	0.309	0.138	-1.406	23.053	23.612	
345.12481	02:59:44	2.816	10.135	0.018	10.765	0.328	0.306	0.138	-1.406	23.054	23.629	
345.29142	06:59:39	2.793	10.069	0.017	10.723	0.328	0.303	0.138	-1.406	23.066	23.608	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
345.45803	10:59:34	2.772	10.007	0.017	10.682	0.328	0.308	0.138	-1.406	23.042	23.568	
345.62464	14:59:29	2.750	9.945	0.017	10.641	0.328	0.307	0.138	-1.406	23.054	23.580	
345.79124	18:59:23	2.736	9.897	0.016	10.613	0.328	0.303	0.138	-1.406	23.046	23.572	
345.95785	22:59:18	2.720	9.849	0.015	10.584	0.328	0.303	0.138	-1.406	23.036	23.562	
346.04115	00:59:15	2.709	9.822	0.016	10.567	0.328	0.305	0.138	-1.406	23.037	23.596	
346.20776	04:59:10	2.682	9.766	0.016	10.530	0.328	0.301	0.138	-1.406	22.995	23.505	
346.37437	08:59:06	2.656	9.710	0.015	10.492	0.328	0.304	0.138	-1.406	22.962	23.505	
346.45767	10:59:03	2.660	9.700	0.014	10.489	0.328	0.307	0.138	-1.406	22.996	23.489	
346.62428	14:58:58	2.693	9.710	0.014	10.520	0.328	0.300	0.138	-1.405	23.169	23.645	
346.79089	18:58:53	2.697	9.690	0.014	10.518	0.328	0.302	0.138	-1.405	23.233	23.676	
346.95749	22:58:47	2.668	9.633	0.014	10.474	0.328	0.303	0.138	-1.405	23.169	23.629	
347.04080	00:58:45	2.648	9.601	0.014	10.450	0.328	0.300	0.138	-1.405	23.115	23.591	
347.20740	04:58:39	2.602	9.529	0.013	10.394	0.328	0.301	0.138	-1.406	23.007	23.516	
347.37401	08:58:34	2.568	9.468	0.013	10.347	0.328	0.300	0.138	-1.406	22.936	23.446	
347.45764	10:59:00	2.594	9.480	0.010	10.360	0.328	0.311	0.138	-1.406	23.010	23.470	
347.45798	10:59:29	2.593	9.481	0.010	10.361	0.328	0.318	0.138	-1.406	23.042	23.486	
347.45833	11:00:00	2.924	9.578	0.010	10.395	0.328	0.318	0.138	-1.406	23.056	23.467	-test-zone
347.45868	11:00:30	3.554	9.766	0.010	10.482	0.328	0.325	0.138	-1.406	23.039	23.434	packer
347.45903	11:01:00	3.538	9.766	0.011	10.484	0.328	0.318	0.138	-1.406	23.071	23.449	pressure
347.45972	11:02:00	3.524	9.766	0.010	10.487	0.328	0.322	0.138	-1.407	23.051	23.462	increased
347.46041	11:02:59	3.515	9.766	0.010	10.488	0.328	0.307	0.138	-1.406	23.048	23.459	
347.46111	11:04:00	3.509	9.766	0.011	10.488	0.328	0.320	0.138	-1.406	23.061	23.472	
347.46180	11:05:00	3.504	9.766	0.011	10.489	0.328	0.311	0.138	-1.406	23.040	23.468	
347.46250	11:06:00	3.500	9.766	0.010	10.490	0.328	0.306	0.138	-1.406	23.053	23.480	
347.46319	11:07:00	3.497	9.766	0.011	10.490	0.328	0.314	0.138	-1.407	23.049	23.493	
347.46389	11:08:00	3.494	9.766	0.010	10.490	0.328	0.310	0.138	-1.406	23.044	23.471	
347.46458	11:09:00	3.492	9.767	0.011	10.490	0.328	0.313	0.138	-1.407	23.055	23.483	
347.46527	11:09:59	3.490	9.767	0.010	10.491	0.328	0.315	0.138	-1.406	23.067	23.495	
347.46666	11:11:59	3.487	9.768	0.011	10.492	0.328	0.312	0.138	-1.407	23.074	23.468	
347.46805	11:14:00	3.484	9.768	0.011	10.493	0.328	0.310	0.138	-1.407	23.030	23.474	
347.46944	11:16:00	3.481	9.769	0.011	10.493	0.328	0.311	0.138	-1.406	23.035	23.479	
347.47083	11:18:00	3.479	9.769	0.011	10.494	0.328	0.312	0.138	-1.407	23.075	23.486	
347.47222	11:20:00	3.478	9.770	0.011	10.495	0.328	0.315	0.138	-1.407	23.048	23.492	
347.47360	11:21:59	3.476	9.771	0.011	10.496	0.328	0.310	0.138	-1.407	23.085	23.480	
347.47499	11:23:59	3.475	9.771	0.011	10.497	0.328	0.313	0.138	-1.406	23.072	23.483	
347.47639	11:26:00	3.473	9.772	0.010	10.498	0.328	0.308	0.138	-1.407	23.078	23.505	
347.47777	11:27:59	3.472	9.772	0.011	10.498	0.328	0.307	0.138	-1.407	23.081	23.475	
347.47923	11:30:05	3.471	9.773	0.011	10.499	0.328	0.313	0.138	-1.406	23.085	23.496	
347.50416	12:05:59	3.464	9.781	0.011	10.513	0.328	0.305	0.138	-1.406	23.121	23.515	
347.55207	13:14:59	3.456	9.782	0.013	10.523	0.328	0.304	0.138	-1.405	23.199	23.610	
347.59372	14:14:57	3.448	9.779	0.013	10.528	0.328	0.302	0.138	-1.405	23.188	23.616	
347.67702	16:14:55	3.428	9.763	0.013	10.533	0.328	0.302	0.138	-1.405	23.207	23.618	
347.76033	18:14:53	3.418	9.752	0.013	10.535	0.328	0.301	0.138	-1.405	23.230	23.674	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
347.84363	20:14:50	3.404	9.732	0.013	10.528	0.328	0.305	0.138	-1.404	23.176	23.653	
347.92693	22:14:47	3.389	9.711	0.013	10.517	0.328	0.303	0.138	-1.405	23.179	23.689	
348.01024	00:14:45	3.373	9.686	0.013	10.502	0.328	0.297	0.138	-1.405	23.166	23.643	
348.17684	04:14:39	3.339	9.634	0.013	10.468	0.328	0.301	0.138	-1.405	23.117	23.593	
348.34345	08:14:34	3.300	9.575	0.013	10.425	0.328	0.299	0.138	-1.405	23.063	23.523	
348.37430	08:59:00	3.308	9.580	0.012	10.422	0.328	0.311	0.138	-1.405	23.094	23.555	
348.37465	08:59:30	3.308	9.581	0.012	10.422	0.328	0.315	0.138	-1.406	23.076	23.553	
348.37500	09:00:00	3.308	9.581	0.049	10.422	0.328	0.322	0.138	-1.406	23.075	23.535	-injected
348.37535	09:00:30	3.304	9.631	0.252	10.452	0.328	0.314	0.138	-1.406	23.054	23.515	500 psi into
348.37569	09:01:00	3.230	11.003	3.717	11.104	0.328	0.321	0.138	-1.405	23.086	23.629	guard zone
348.37604	09:01:30	3.212	11.064	3.731	11.109	0.328	0.323	0.138	-1.405	23.100	23.658	
348.37639	09:02:00	3.202	11.079	3.710	11.104	0.328	0.324	0.138	-1.405	23.082	23.657	
348.37708	09:03:00	3.193	11.083	3.660	11.093	0.328	0.311	0.138	-1.405	23.059	23.650	
348.37778	09:04:00	3.186	11.085	3.630	11.085	0.328	0.307	0.138	-1.405	23.102	23.644	
348.37847	09:05:00	3.182	11.086	3.609	11.080	0.328	0.307	0.138	-1.405	23.109	23.635	
348.37916	09:05:59	3.178	11.087	3.592	11.076	0.328	0.313	0.138	-1.405	23.069	23.612	
348.37986	09:07:00	3.175	11.088	3.579	11.073	0.328	0.314	0.138	-1.405	23.078	23.587	
348.38055	09:08:00	3.173	11.089	3.568	11.070	0.328	0.308	0.138	-1.406	23.070	23.612	
348.38125	09:09:00	3.170	11.090	3.557	11.068	0.328	0.312	0.138	-1.405	23.094	23.620	
348.38194	09:10:00	3.168	11.091	3.549	11.066	0.328	0.305	0.138	-1.405	23.103	23.596	
348.38333	09:12:00	3.165	11.093	3.536	11.063	0.328	0.312	0.138	-1.405	23.087	23.629	
348.38472	09:14:00	3.162	11.094	3.525	11.061	0.328	0.310	0.138	-1.405	23.088	23.581	
348.38611	09:16:00	3.160	11.095	3.516	11.059	0.328	0.307	0.138	-1.405	23.094	23.619	
348.38749	09:17:59	3.158	11.095	3.508	11.057	0.328	0.310	0.138	-1.406	23.097	23.590	
348.38888	09:19:59	3.156	11.097	3.502	11.055	0.328	0.312	0.138	-1.405	23.102	23.562	
348.39028	09:22:00	3.154	11.098	3.495	11.054	0.328	0.315	0.138	-1.405	23.093	23.603	
348.39166	09:23:59	3.154	11.098	3.490	11.052	0.328	0.311	0.138	-1.405	23.085	23.595	
348.39305	09:26:00	3.153	11.100	3.484	11.050	0.328	0.315	0.138	-1.405	23.093	23.603	
348.39444	09:28:00	3.152	11.100	3.480	11.049	0.328	0.313	0.138	-1.405	23.084	23.594	
348.39583	09:30:00	3.150	11.101	3.475	11.047	0.328	0.311	0.138	-1.405	23.107	23.617	
348.41666	09:59:59	3.142	11.111	3.433	11.036	0.328	0.298	0.137	-1.405	23.115	23.592	
348.43750	10:30:00	3.141	11.117	3.412	11.032	0.328	0.298	0.137	-1.405	23.143	23.570	
348.45836	11:00:02	3.139	11.123	3.397	11.032	0.328	0.304	0.137	-1.407	23.159	23.586	
348.51040	12:14:59	3.136	11.133	3.373	11.027	0.328	0.303	0.135	-1.406	23.201	23.662	
348.55205	13:14:57	3.152	11.150	3.365	11.030	0.328	0.301	0.135	-1.405	23.262	23.706	
348.59370	14:14:56	3.167	11.165	3.360	11.036	0.328	0.304	0.135	-1.405	23.353	23.715	
348.67701	16:14:54	3.177	11.183	3.354	11.048	0.328	0.302	0.135	-1.405	23.415	23.792	
348.76031	18:14:51	3.178	11.192	3.351	11.056	0.328	0.304	0.135	-1.404	23.437	23.864	
348.84361	20:14:48	3.176	11.189	3.345	11.055	0.328	0.301	0.135	-1.404	23.471	23.898	
348.92692	22:14:46	3.169	11.177	3.336	11.044	0.328	0.301	0.135	-1.404	23.463	23.923	
349.01022	00:14:43	3.158	11.158	3.325	11.026	0.328	0.299	0.135	-1.404	23.470	23.913	
349.09352	02:14:40	3.144	11.131	3.312	10.999	0.328	0.300	0.135	-1.404	23.457	23.901	
349.26013	06:14:35	3.120	11.084	3.289	10.955	0.328	0.300	0.135	-1.404	23.436	23.864	

TABLE D5 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP4, MULTIPACKER TEST TOOL #3

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-06) (cm)	RADIAL LVDT (R-01) (cm)	RADIAL LVDT (R-10) (cm)	AXIAL LVDT (A-04) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
349.46936	11:15:53	3.161	11.083	3.278	10.958	0.328	0.288	0.135	-1.406	23.690	23.904	
349.58333	14:00:00	3.181	11.094	3.287	10.984	0.328	0.303	0.136	-1.408	23.826	23.909	
349.66664	15:59:58	3.207	11.112	3.295	11.003	0.328	0.296	0.133	-1.403	23.933	24.032	
349.74994	17:59:55	3.197	11.097	3.291	10.994	0.328	0.300	0.133	-1.403	23.941	24.023	
349.91655	21:59:50	3.172	11.053	3.276	10.958	0.328	0.292	0.133	-1.404	23.879	24.027	
350.08315	01:59:44	3.147	11.003	3.256	10.912	0.328	0.299	0.133	-1.404	23.842	23.990	
350.24976	05:59:39	3.106	10.934	3.228	10.852	0.328	0.297	0.133	-1.404	23.781	23.896	
350.38310	09:11:40	3.073	10.888	3.206	10.811	0.328	0.264	0.134	-1.400	23.603	23.817	-end testing

TABLE D6
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
363.40625	09:45:00	0.003	0.009	-0.043	0.058	-0.005	0.061	0.483	0.715	23.824	23.758	-installed
363.40660	09:45:30	0.005	0.010	-0.041	0.525	-0.005	0.061	0.483	0.714	23.817	23.784	test tool
363.40694	09:46:00	0.008	0.008	-0.038	10.516	-0.012	0.041	0.514	0.515	23.908	23.760	created data
363.40729	09:46:30	0.053	0.945	0.010	10.207	-0.012	0.054	0.501	0.498	23.834	23.752	file - COMP5
363.40764	09:47:00	0.007	11.223	-0.038	9.574	0.010	0.092	0.436	0.606	23.942	23.778	inflated
363.40798	09:47:29	0.008	10.733	-0.036	10.839	0.010	0.092	0.435	0.631	23.887	23.838	packers
363.40833	09:48:00	0.008	10.565	-0.039	10.648	0.010	0.092	0.435	0.634	23.816	23.980	
363.40903	09:49:00	0.008	10.377	-0.036	10.460	0.010	0.092	0.435	0.636	23.822	23.986	
363.40972	09:50:00	0.005	10.275	-0.040	10.345	0.010	0.092	0.435	0.637	23.845	23.992	
363.41042	09:51:00	0.008	10.193	-0.036	10.244	0.010	0.092	0.435	0.638	23.818	23.917	
363.41111	09:52:00	0.005	10.132	-0.039	10.174	0.010	0.092	0.435	0.638	23.844	23.959	
363.41180	09:53:00	0.005	10.083	-0.036	10.115	0.010	0.092	0.435	0.638	23.869	23.968	
363.41250	09:54:00	0.005	10.041	-0.040	10.063	0.010	0.092	0.435	0.638	23.944	23.928	
363.41319	09:55:00	0.007	10.007	-0.037	10.020	0.010	0.092	0.435	0.638	23.938	23.954	
363.41389	09:56:00	0.004	9.972	-0.040	9.983	0.010	0.092	0.435	0.638	23.832	23.865	
363.41458	09:57:00	0.007	9.943	-0.039	9.948	0.010	0.092	0.435	0.639	23.940	23.842	
363.41527	09:57:59	0.006	9.920	-0.036	9.917	0.010	0.092	0.435	0.639	23.901	23.950	
363.41597	09:59:00	0.005	9.894	-0.037	9.890	0.010	0.092	0.435	0.639	23.940	23.858	
363.41666	09:59:59	0.007	9.873	-0.039	9.865	0.010	0.092	0.435	0.639	23.848	23.963	
363.41736	10:01:00	0.006	9.855	-0.036	9.839	0.010	0.092	0.435	0.639	23.885	23.950	
363.42361	10:10:00	0.006	9.705	-0.037	9.676	0.010	0.092	0.435	0.639	23.915	23.898	
363.43125	10:21:00	0.005	9.585	-0.040	9.545	0.010	0.092	0.435	0.639	23.862	23.845	
363.43958	10:33:00	0.006	9.494	-0.039	9.437	0.010	0.092	0.435	0.639	23.854	23.886	
363.45833	11:00:00	0.005	9.344	-0.039	9.295	0.010	0.092	0.435	0.639	23.804	23.771	
363.51040	12:14:59	0.001	9.102	-0.042	9.108	0.011	0.091	0.435	0.639	23.718	23.735	
363.55205	13:14:57	0.000	8.967	-0.045	9.030	0.011	0.091	0.435	0.638	23.742	23.643	
363.59370	14:14:56	-0.002	8.848	-0.046	9.008	0.011	0.090	0.435	0.638	23.875	23.694	
363.63535	15:14:54	-0.002	8.663	-0.046	8.991	0.013	0.088	0.434	0.636	23.964	23.800	
363.67700	16:14:53	-0.003	8.492	-0.050	8.971	0.015	0.086	0.434	0.634	23.973	23.825	
363.71866	17:14:52	-0.004	8.352	-0.049	8.958	0.016	0.085	0.434	0.630	23.983	23.884	
363.76031	18:14:51	-0.006	8.235	-0.051	8.944	0.016	0.085	0.433	0.628	23.979	23.897	
363.80196	19:14:49	-0.009	8.134	-0.052	8.929	0.017	0.085	0.433	0.625	24.001	23.903	
363.84361	20:14:48	-0.009	8.046	-0.052	8.911	0.017	0.085	0.433	0.623	24.057	23.876	
363.88526	21:14:46	-0.007	7.963	-0.054	8.896	0.017	0.085	0.433	0.621	24.022	23.842	
363.92692	22:14:46	-0.010	7.890	-0.054	8.883	0.017	0.084	0.433	0.619	24.033	23.820	
363.96857	23:14:44	-0.009	7.825	-0.054	8.867	0.017	0.084	0.433	0.618	24.017	23.869	
364.01022	00:14:43	-0.008	7.767	-0.053	8.852	0.017	0.084	0.433	0.616	24.000	23.836	
364.09352	02:14:40	-0.010	7.655	-0.055	8.822	0.017	0.085	0.433	0.613	24.013	23.882	
364.17683	04:14:38	-0.010	7.560	-0.054	8.799	0.017	0.086	0.432	0.610	23.997	23.833	
364.26013	06:14:35	-0.010	7.472	-0.054	8.774	0.016	0.088	0.432	0.607	23.972	23.807	
364.34343	08:14:32	-0.011	7.391	-0.055	8.751	0.016	0.088	0.431	0.605	23.969	23.837	
364.37430	08:59:00	-0.012	7.339	-0.054	8.721	0.016	0.088	0.431	0.603	23.856	23.708	
364.37465	08:59:30	-0.012	7.338	-0.054	8.720	0.016	0.088	0.431	0.603	23.895	23.748	-increased

TABLE D6 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
364.37500	09:00:00	-0.012	7.309	-0.055	9.387	0.019	0.086	0.427	0.611	23.884	23.753	packer
364.37534	09:00:29	-0.012	10.387	-0.055	10.499	0.015	0.090	0.431	0.679	23.874	23.742	pressures
364.37569	09:01:00	-0.012	10.325	-0.055	10.460	0.015	0.090	0.431	0.680	23.864	23.733	
364.37604	09:01:30	-0.011	10.289	-0.054	10.437	0.015	0.090	0.431	0.681	23.903	23.772	
364.37639	09:02:00	-0.012	10.264	-0.056	10.421	0.015	0.090	0.431	0.681	23.861	23.729	
364.37708	09:03:00	-0.011	10.227	-0.054	10.397	0.015	0.090	0.431	0.682	23.910	23.762	
364.37777	09:03:59	-0.012	10.200	-0.056	10.381	0.015	0.090	0.431	0.683	23.844	23.712	
364.37847	09:05:00	-0.012	10.177	-0.055	10.366	0.015	0.090	0.431	0.683	23.844	23.746	
364.37916	09:05:59	-0.012	10.164	-0.054	10.356	0.015	0.090	0.431	0.683	23.894	23.730	
364.37986	09:07:00	-0.011	10.149	-0.054	10.346	0.015	0.090	0.431	0.683	23.897	23.749	
364.38055	09:08:00	-0.012	10.135	-0.054	10.338	0.015	0.090	0.431	0.683	23.849	23.718	
364.38125	09:09:00	-0.013	10.124	-0.055	10.332	0.015	0.090	0.431	0.684	23.851	23.752	
364.38194	09:10:00	-0.013	10.114	-0.055	10.324	0.015	0.090	0.431	0.684	23.853	23.722	
364.38333	09:12:00	-0.012	10.098	-0.054	10.311	0.015	0.090	0.431	0.684	23.870	23.722	
364.38472	09:14:00	-0.012	10.080	-0.055	10.299	0.015	0.090	0.431	0.684	23.834	23.703	
364.38611	09:16:00	-0.012	10.068	-0.054	10.288	0.015	0.090	0.431	0.684	23.845	23.681	
364.38749	09:17:59	-0.012	10.054	-0.056	10.278	0.015	0.090	0.431	0.684	23.835	23.704	
364.38888	09:19:59	-0.011	10.043	-0.055	10.269	0.015	0.090	0.431	0.684	23.837	23.672	
364.39027	09:21:59	-0.012	10.032	-0.055	10.261	0.015	0.090	0.431	0.684	23.851	23.703	
364.39166	09:23:59	-0.012	10.022	-0.055	10.253	0.015	0.090	0.431	0.684	23.830	23.649	
364.39305	09:26:00	-0.011	10.011	-0.056	10.245	0.015	0.090	0.431	0.684	23.825	23.661	
364.39444	09:28:00	-0.013	10.003	-0.054	10.238	0.015	0.090	0.431	0.684	23.856	23.708	
364.39583	09:30:00	-0.011	9.994	-0.056	10.232	0.015	0.090	0.431	0.684	23.808	23.677	
364.43750	10:30:00	-0.012	9.824	-0.054	10.100	0.015	0.090	0.431	0.685	23.725	23.610	
364.45832	10:59:59	-0.012	9.772	-0.055	10.068	0.015	0.090	0.431	0.684	23.693	23.561	
364.47915	11:29:59	-0.011	9.734	-0.055	10.051	0.015	0.090	0.431	0.684	23.698	23.583	
364.49931	11:59:00	0.011	9.565	0.235	9.848	0.023	0.098	0.408	0.532	23.694	23.579	
364.49965	11:59:30	0.012	9.564	0.235	9.843	0.023	0.098	0.408	0.531	23.662	23.514	-shut in
364.50000	12:00:00	0.011	9.561	0.237	9.839	0.023	0.098	0.408	0.531	23.647	23.548	-injected
364.50035	12:00:30	3.485	10.522	0.228	10.342	0.009	0.103	0.380	0.393	23.747	23.567	507 psi into
364.50069	12:01:00	3.406	10.507	0.229	10.335	0.009	0.103	0.380	0.391	23.782	23.519	test zone
364.50139	12:02:00	3.324	10.488	0.224	10.319	0.009	0.103	0.380	0.388	23.738	23.607	
364.50208	12:03:00	3.288	10.478	0.223	10.301	0.009	0.103	0.380	0.387	23.779	23.549	
364.50278	12:04:00	3.264	10.469	0.223	10.281	0.009	0.103	0.380	0.385	23.739	23.607	-released
364.50347	12:05:00	3.246	10.463	0.221	10.265	0.009	0.103	0.380	0.385	23.665	23.583	guard-zone
364.50416	12:05:59	3.229	10.459	0.219	10.249	0.009	0.103	0.380	0.384	23.744	23.514	pressure
364.50486	12:07:00	3.216	10.360	-0.058	10.199	0.008	0.102	0.379	0.385	23.739	23.607	
364.50555	12:08:00	3.208	10.349	-0.059	10.182	0.008	0.102	0.379	0.384	23.734	23.619	
364.50625	12:09:00	3.196	10.344	-0.058	10.172	0.008	0.102	0.379	0.384	23.746	23.549	
364.50694	12:10:00	3.184	10.336	-0.059	10.160	0.009	0.102	0.379	0.383	23.729	23.597	
364.50833	12:12:00	3.171	10.327	-0.058	10.145	0.008	0.102	0.379	0.382	23.709	23.578	
364.50972	12:14:00	3.159	10.319	-0.059	10.135	0.008	0.102	0.379	0.381	23.691	23.625	
364.51111	12:16:00	3.148	10.309	-0.057	10.128	0.008	0.102	0.379	0.381	23.723	23.625	

TABLE D6 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
364.51249	12:17:59	3.139	10.302	-0.058	10.121	0.008	0.102	0.379	0.381	23.709	23.545	
364.51388	12:19:59	3.129	10.297	-0.057	10.119	0.008	0.102	0.379	0.380	23.775	23.578	
364.51527	12:21:59	3.125	10.293	-0.057	10.113	0.008	0.102	0.379	0.380	23.688	23.606	
364.51666	12:23:59	3.118	10.286	-0.057	10.107	0.008	0.102	0.379	0.380	23.765	23.585	
364.51805	12:26:00	3.112	10.281	-0.058	10.103	0.008	0.102	0.379	0.379	23.789	23.592	
364.51944	12:28:00	3.107	10.277	-0.056	10.102	0.008	0.102	0.379	0.379	23.763	23.615	
364.52083	12:30:00	3.103	10.275	-0.058	10.100	0.008	0.102	0.379	0.378	23.737	23.556	
364.54167	13:00:00	3.058	10.220	-0.059	10.074	0.008	0.102	0.379	0.375	23.769	23.654	
364.55208	13:15:00	3.041	10.192	-0.056	10.062	0.008	0.102	0.379	0.374	23.779	23.647	
364.59373	14:14:58	2.999	10.122	-0.056	10.021	0.008	0.102	0.379	0.370	23.769	23.556	
364.63538	15:14:57	2.997	10.096	-0.056	10.026	0.008	0.102	0.378	0.368	23.772	23.706	
364.67703	16:14:55	3.001	10.073	-0.055	10.037	0.008	0.102	0.378	0.367	23.833	23.784	
365.00833	00:12:00	3.211	10.099	-0.028	10.364	0.008	0.101	0.378	0.361	24.946	24.896	
365.09163	02:11:57	3.266	10.093	-0.029	10.435	0.007	0.101	0.377	0.360	25.158	25.190	
365.17494	04:11:55	3.294	10.067	-0.029	10.473	0.007	0.101	0.377	0.359	25.408	25.326	
365.25824	06:11:52	3.308	10.029	-0.028	10.494	0.007	0.101	0.377	0.358	25.593	25.593	
365.34155	08:11:50	3.287	9.959	-0.028	10.475	0.007	0.101	0.377	0.357	25.667	25.699	
365.37500	09:00:00	3.170	9.796	-0.030	10.347	0.007	0.101	0.377	0.356	25.337	25.419	
365.48958	11:45:00	2.865	9.390	-0.030	10.002	0.007	0.101	0.376	0.351	24.500	24.451	
365.58330	13:59:57	2.791	9.254	-0.032	9.902	0.007	0.101	0.377	0.351	24.296	24.181	
365.66661	15:59:55	2.809	9.244	-0.031	9.922	0.007	0.101	0.377	0.350	24.294	24.212	
365.74991	17:59:52	2.801	9.206	-0.036	9.917	0.007	0.101	0.377	0.349	24.352	24.303	
365.83321	19:59:49	2.794	9.172	-0.034	9.909	0.007	0.101	0.377	0.349	24.300	24.267	
365.91652	21:59:47	2.785	9.134	-0.035	9.897	0.007	0.101	0.377	0.349	24.341	24.177	
365.99982	23:59:44	2.762	9.085	-0.037	9.877	0.007	0.101	0.377	0.348	24.259	24.210	
366.08313	01:59:42	2.737	9.037	-0.037	9.851	0.007	0.101	0.377	0.347	24.222	24.090	
366.16643	03:59:40	2.715	8.987	-0.037	9.827	0.007	0.101	0.377	0.347	24.161	24.096	
366.24973	05:59:37	2.694	8.944	-0.035	9.803	0.007	0.101	0.377	0.346	24.161	24.013	
366.33304	07:59:35	2.673	8.903	-0.035	9.782	0.007	0.101	0.377	0.346	24.066	23.984	
366.41634	09:59:32	2.662	8.870	-0.035	9.768	0.007	0.101	0.377	0.345	24.146	24.063	
366.49964	11:59:29	2.657	8.849	-0.035	9.763	0.007	0.101	0.377	0.345	24.115	23.950	
366.58295	13:59:27	2.662	8.832	-0.036	9.765	0.007	0.101	0.377	0.344	24.128	23.980	
366.66625	15:59:24	2.672	8.832	-0.036	9.784	0.007	0.101	0.377	0.344	24.153	24.103	
366.74955	17:59:21	2.671	8.817	-0.035	9.784	0.007	0.101	0.377	0.344	24.233	24.167	
366.83286	19:59:19	2.671	8.799	-0.033	9.778	0.007	0.101	0.377	0.344	24.190	24.157	
366.91616	21:59:16	2.668	8.777	-0.035	9.773	0.007	0.101	0.377	0.344	24.265	24.085	
366.99947	23:59:14	2.666	8.761	-0.032	9.768	0.007	0.101	0.377	0.343	24.217	24.201	
1.08277	01:59:11	2.661	8.739	-0.032	9.760	0.007	0.101	0.377	0.343	24.218	24.168	
1.16607	03:59:08	2.653	8.720	-0.033	9.758	0.007	0.101	0.377	0.342	24.316	24.184	
1.24938	05:59:06	2.655	8.709	-0.032	9.761	0.007	0.101	0.377	0.342	24.236	24.236	
1.33268	07:59:04	2.651	8.688	-0.033	9.755	0.007	0.101	0.377	0.342	24.344	24.131	
1.41598	09:59:01	2.645	8.669	-0.030	9.747	0.007	0.101	0.377	0.342	24.293	24.146	
1.49929	11:58:59	2.643	8.649	-0.030	9.742	0.007	0.101	0.377	0.342	24.348	24.134	

TABLE D6 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
1.58259	13:58:56	2.653	8.653	-0.030	9.755	0.007	0.101	0.377	0.342	24.304	24.304	
1.66589	15:58:53	2.672	8.663	-0.032	9.774	0.007	0.101	0.377	0.341	24.366	24.382	
1.74920	17:58:51	2.670	8.648	-0.028	9.777	0.007	0.101	0.377	0.341	24.393	24.393	
1.83250	19:58:48	2.668	8.629	-0.029	9.768	0.007	0.101	0.377	0.341	24.407	24.358	
1.91581	21:58:46	2.665	8.618	-0.031	9.763	0.007	0.101	0.377	0.341	24.526	24.378	
1.99911	23:58:43	2.671	8.610	-0.030	9.764	0.007	0.101	0.377	0.340	24.423	24.390	
2.08241	01:58:40	2.670	8.598	-0.029	9.762	0.007	0.101	0.377	0.340	24.488	24.456	
2.16572	03:58:38	2.670	8.588	-0.028	9.760	0.007	0.101	0.377	0.340	24.556	24.359	
2.24902	05:58:35	2.674	8.580	-0.027	9.765	0.007	0.101	0.377	0.340	24.534	24.403	
2.33232	07:58:32	2.672	8.570	-0.026	9.764	0.007	0.101	0.377	0.340	24.596	24.514	
2.41563	09:58:30	2.670	8.556	-0.029	9.757	0.007	0.101	0.377	0.340	24.602	24.536	
2.49893	11:58:28	2.672	8.546	-0.025	9.758	0.007	0.101	0.377	0.339	24.622	24.441	
2.58223	13:58:25	2.680	8.544	-0.025	9.762	0.007	0.101	0.377	0.339	24.558	24.460	
2.66554	15:58:23	2.671	8.524	-0.028	9.752	0.007	0.101	0.377	0.339	24.689	24.492	
2.74884	17:58:20	2.677	8.524	-0.027	9.763	0.007	0.101	0.377	0.339	24.600	24.486	
2.83215	19:58:18	2.683	8.517	-0.027	9.762	0.007	0.101	0.377	0.338	24.721	24.639	
2.91545	21:58:15	2.683	8.507	-0.026	9.762	0.007	0.101	0.377	0.338	24.738	24.639	
2.99875	23:58:12	2.681	8.497	-0.024	9.759	0.007	0.101	0.377	0.338	24.640	24.558	
3.08206	01:58:10	2.683	8.492	-0.024	9.761	0.007	0.101	0.377	0.338	24.765	24.683	-created data
3.16536	03:58:07	2.677	8.472	-0.026	9.748	0.007	0.101	0.377	0.338	24.640	24.574	file - COMP6
3.24866	05:58:04	2.679	8.466	-0.024	9.754	0.007	0.101	0.377	0.338	24.689	24.623	
3.39375	09:27:00	2.655	8.423	-0.024	9.721	0.007	0.101	0.376	0.336	24.688	24.656	
3.41527	09:57:59	2.652	8.420	-0.024	9.716	0.007	0.101	0.377	0.337	24.648	24.582	
3.41597	09:59:00	2.649	8.420	-0.024	9.719	0.007	0.101	0.377	0.337	24.647	24.597	
3.41667	10:00:00	3.230	8.567	-0.024	9.771	0.007	0.101	0.374	0.320	24.651	24.602	-test-zone
3.41701	10:00:30	3.578	8.695	-0.025	9.828	0.007	0.101	0.373	0.310	24.692	24.610	pressure
3.41736	10:01:00	3.562	8.695	-0.025	9.829	0.007	0.101	0.373	0.310	24.783	24.718	increased
3.41771	10:01:30	3.550	8.690	-0.024	9.831	0.007	0.101	0.373	0.309	24.677	24.694	
3.41806	10:02:00	3.545	8.690	-0.022	9.831	0.007	0.101	0.373	0.309	24.686	24.637	
3.41875	10:03:00	3.533	8.690	-0.021	9.834	0.007	0.101	0.373	0.309	24.656	24.591	
3.41945	10:04:00	3.523	8.695	-0.024	9.828	0.007	0.101	0.373	0.308	24.646	24.597	
3.42014	10:05:00	3.523	8.694	-0.024	9.831	0.007	0.101	0.373	0.308	24.758	24.610	
3.42083	10:06:00	3.516	8.694	-0.025	9.834	0.007	0.101	0.373	0.308	24.784	24.734	
3.42153	10:07:00	3.516	8.694	-0.025	9.834	0.007	0.101	0.373	0.308	24.669	24.604	
3.42222	10:08:00	3.514	8.693	-0.023	9.832	0.007	0.101	0.373	0.308	24.668	24.602	
3.42292	10:09:00	3.508	8.695	-0.025	9.833	0.007	0.101	0.373	0.308	24.683	24.634	
3.42361	10:10:00	3.508	8.692	-0.021	9.835	0.007	0.101	0.373	0.308	24.720	24.670	
3.42500	10:12:00	3.502	8.694	-0.024	9.836	0.007	0.101	0.373	0.308	24.670	24.620	
3.42639	10:14:00	3.498	8.691	-0.021	9.836	0.007	0.101	0.373	0.308	24.767	24.734	
3.42708	10:15:00	3.496	8.692	-0.021	9.836	0.007	0.101	0.373	0.308	24.778	24.728	
3.43055	10:20:00	3.493	8.695	-0.024	9.838	0.007	0.101	0.373	0.308	24.779	24.713	-injected
3.43402	10:24:59	3.488	8.694	-0.023	9.838	0.007	0.101	0.373	0.307	24.780	24.698	500 psi into
3.43750	10:30:00	3.483	8.690	-0.023	9.835	0.007	0.101	0.373	0.307	24.762	24.680	guard zone

TABLE D6 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
3.44791	10:44:59	3.470	8.687	-0.021	9.835	0.007	0.101	0.373	0.307	24.636	24.587	
3.45832	10:59:59	3.459	8.683	-0.023	9.834	0.007	0.101	0.373	0.307	24.642	24.592	
3.46179	11:04:59	3.457	8.684	-0.024	9.835	0.007	0.101	0.373	0.307	24.630	24.581	
3.51041	12:14:59	3.446	8.681	-0.022	9.842	0.007	0.101	0.373	0.306	24.794	24.614	
3.55206	13:14:58	3.433	8.675	-0.022	9.842	0.007	0.101	0.373	0.306	24.669	24.734	
3.59371	14:14:57	3.424	8.671	-0.023	9.837	0.007	0.101	0.373	0.305	24.790	24.675	
3.63536	15:14:55	3.419	8.665	-0.023	9.838	0.007	0.101	0.373	0.305	24.775	24.595	
3.67702	16:14:55	3.443	8.697	-0.022	9.876	0.007	0.101	0.373	0.305	24.885	24.738	
3.71867	17:14:53	3.456	8.716	-0.021	9.897	0.006	0.101	0.373	0.305	24.815	24.897	
3.76032	18:14:52	3.468	8.732	-0.022	9.917	0.006	0.101	0.373	0.305	24.961	24.847	
3.80197	19:14:50	3.477	8.750	-0.023	9.935	0.006	0.101	0.372	0.304	24.936	24.986	
3.82280	19:44:50	3.483	8.753	-0.023	9.943	0.006	0.101	0.372	0.304	25.040	24.958	
3.84362	20:14:49	3.482	8.751	-0.023	9.945	0.006	0.101	0.372	0.304	24.955	25.037	
3.86445	20:44:48	3.485	8.753	-0.023	9.951	0.006	0.101	0.372	0.304	25.065	25.016	
3.88527	21:14:47	3.486	8.753	-0.023	9.953	0.006	0.101	0.372	0.304	25.095	24.964	
3.92693	22:14:47	3.486	8.755	-0.023	9.958	0.006	0.101	0.372	0.304	25.109	24.978	
3.96858	23:14:45	3.497	8.762	-0.023	9.968	0.006	0.101	0.372	0.304	25.164	25.066	
3.98940	23:44:44	3.495	8.760	-0.022	9.970	0.006	0.101	0.372	0.304	25.183	25.019	
4.01023	00:14:44	3.493	8.755	-0.022	9.969	0.006	0.101	0.372	0.304	25.060	25.142	
4.09353	02:14:41	3.491	8.741	-0.021	9.965	0.006	0.101	0.372	0.304	25.068	25.183	
4.17684	04:14:39	3.487	8.729	-0.020	9.961	0.006	0.101	0.372	0.304	25.205	25.057	
4.26014	06:14:36	3.482	8.722	-0.018	9.959	0.006	0.101	0.372	0.303	25.112	25.178	
4.34345	08:14:34	3.464	8.694	-0.018	9.939	0.006	0.101	0.372	0.303	25.101	25.069	
4.38510	09:14:33	3.433	8.651	-0.018	9.905	0.006	0.101	0.372	0.303	25.051	25.100	
4.43125	10:21:00	3.419	8.637	-0.021	9.886	0.005	0.101	0.371	0.302	24.991	24.974	
4.43148	10:21:20	3.374	9.130	1.476	10.123	0.005	0.101	0.371	0.289	24.991	25.106	
4.43171	10:21:40	3.305	10.127	3.540	10.519	0.005	0.101	0.371	0.270	25.025	25.025	
4.43194	10:22:00	3.290	10.253	3.676	10.542	0.005	0.101	0.371	0.267	25.057	25.025	
4.43217	10:22:19	3.282	10.292	3.701	10.544	0.005	0.101	0.371	0.266	24.960	25.075	
4.43240	10:22:39	3.275	10.296	3.664	10.532	0.005	0.101	0.371	0.266	24.962	25.093	
4.43264	10:23:00	3.274	10.296	3.630	10.525	0.005	0.101	0.371	0.265	25.028	25.142	
4.43333	10:24:00	3.262	10.293	3.570	10.496	0.005	0.101	0.371	0.265	24.983	25.131	
4.43402	10:24:59	3.257	10.290	3.533	10.476	0.005	0.101	0.371	0.264	25.073	25.024	
4.43472	10:26:00	3.250	10.287	3.505	10.460	0.006	0.100	0.371	0.264	24.967	25.114	
4.43541	10:26:59	3.245	10.282	3.486	10.448	0.006	0.100	0.371	0.264	25.042	24.993	
4.43611	10:28:00	3.242	10.280	3.467	10.439	0.006	0.100	0.371	0.264	24.973	25.006	
4.43680	10:29:00	3.241	10.277	3.454	10.429	0.006	0.100	0.371	0.264	24.955	25.005	
4.43750	10:30:00	3.235	10.277	3.440	10.422	0.006	0.100	0.372	0.264	24.962	25.011	
4.44097	10:35:00	3.226	10.271	3.397	10.392	0.006	0.100	0.372	0.263	24.988	25.103	
4.44444	10:40:00	3.219	10.268	3.365	10.374	0.006	0.100	0.372	0.263	25.059	25.125	
4.44791	10:44:59	3.214	10.263	3.344	10.365	0.006	0.100	0.372	0.263	25.073	25.040	
4.45138	10:49:59	3.210	10.262	3.326	10.353	0.006	0.100	0.372	0.262	24.947	24.980	
4.45485	10:54:59	3.208	10.260	3.310	10.349	0.006	0.100	0.372	0.262	25.047	25.014	

TABLE D6 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP5&6, MULTIPACKER TEST TOOL #4

CALENDAR DAY (1988-1989)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	RADIAL LVDT (R-08) (cm)	RADIAL LVDT (R-03) (cm)	RADIAL LVDT (R-02) (cm)	AXIAL LVDT (A-02) (cm)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
4.45694	10:58:00	3.205	10.258	3.302	10.345	0.006	0.100	0.372	0.262	24.917	25.081	
4.46111	11:04:00	3.198	10.254	3.291	10.336	0.006	0.100	0.372	0.262	24.930	24.963	
4.48193	11:33:59	3.184	10.251	3.241	10.320	0.006	0.100	0.370	0.261	24.999	24.949	
4.50000	12:00:00	3.175	10.247	3.214	10.308	0.007	0.098	0.372	0.261	24.992	24.992	
4.51041	12:14:59	3.170	10.242	3.204	10.304	0.007	0.098	0.372	0.261	24.993	24.976	
4.55206	13:14:58	3.158	10.226	3.173	10.287	0.007	0.097	0.372	0.260	24.818	25.048	
4.59372	14:14:57	3.160	10.228	3.156	10.288	0.007	0.097	0.372	0.260	24.911	24.944	
4.63537	15:14:56	3.161	10.231	3.149	10.300	0.007	0.097	0.372	0.260	24.889	25.118	
4.67702	16:14:55	3.153	10.214	3.131	10.288	0.007	0.097	0.372	0.260	24.856	25.053	
4.71867	17:14:53	3.146	10.199	3.113	10.276	0.007	0.097	0.372	0.259	24.927	24.960	
4.76032	18:14:52	3.136	10.183	3.096	10.261	0.007	0.097	0.372	0.259	24.906	24.972	
4.80197	19:14:50	3.130	10.165	3.081	10.250	0.007	0.097	0.372	0.259	24.766	25.045	
4.84363	20:14:50	3.123	10.152	3.068	10.240	0.007	0.097	0.372	0.259	24.768	25.030	
4.88528	21:14:48	3.115	10.137	3.061	10.234	0.007	0.097	0.372	0.259	24.739	25.050	
4.92693	22:14:47	3.111	10.127	3.051	10.226	0.007	0.097	0.372	0.258	24.807	24.987	
4.96858	23:14:45	3.106	10.120	3.044	10.220	0.007	0.097	0.372	0.259	24.773	25.052	
5.01023	00:14:44	3.100	10.110	3.035	10.202	0.007	0.097	0.372	0.258	24.822	24.937	
5.09354	02:14:42	3.087	10.087	3.013	10.162	0.007	0.097	0.372	0.257	24.753	24.917	
5.17684	04:14:39	3.078	10.067	2.997	10.142	0.007	0.097	0.372	0.257	24.808	25.021	
5.26014	06:14:36	3.071	10.046	2.987	10.131	0.007	0.097	0.372	0.257	24.732	24.896	
5.34345	08:14:34	3.065	10.032	2.976	10.120	0.007	0.097	0.372	0.257	24.863	25.026	
5.42675	10:14:31	3.045	9.994	2.957	10.101	0.007	0.097	0.372	0.256	24.712	24.859	
5.51767	12:25:27	3.004	9.936	2.916	10.045	0.007	0.097	0.371	0.256	24.591	24.870	
5.62429	14:58:59	2.977	9.884	2.882	10.009	0.007	0.097	0.372	0.255	24.603	24.751	
5.70760	16:58:57	2.997	9.903	2.901	10.037	0.007	0.096	0.372	0.255	24.594	24.758	
5.79090	18:58:54	3.007	9.909	2.910	10.051	0.007	0.097	0.372	0.255	24.615	24.812	
5.87420	20:58:51	3.011	9.909	2.914	10.057	0.007	0.097	0.372	0.254	24.603	24.849	
5.95751	22:58:49	3.011	9.904	2.912	10.059	0.007	0.097	0.372	0.254	24.686	24.899	
6.04081	00:58:46	3.008	9.890	2.908	10.051	0.007	0.097	0.372	0.255	24.750	24.897	
6.12412	02:58:44	3.001	9.873	2.899	10.041	0.007	0.097	0.372	0.255	24.620	24.866	
6.20742	04:58:41	2.989	9.852	2.889	10.027	0.007	0.097	0.372	0.254	24.610	24.840	
6.29072	06:58:38	2.984	9.834	2.880	10.013	0.007	0.097	0.372	0.254	24.719	24.932	-end testing

TABLE D7
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
299.59305	14:14:00	-0.034	-0.005	-0.004	0.014	27.0	27.1	-installed
299.59340	14:14:30	-0.032	-0.004	-0.003	0.015	27.0	26.8	test tool
299.59357	14:14:44	-0.032	-0.006	-0.005	0.015	26.9	27.2	created data
299.59375	14:15:00	-0.033	0.005	-0.005	0.155	27.0	27.0	file - COMP1
299.59444	14:16:00	-0.021	14.363	0.008	14.320	27.0	27.0	-inflated
299.59462	14:16:15	-0.027	13.740	0.003	13.728	27.0	27.0	packers
299.59479	14:16:30	-0.027	13.547	0.002	13.537	27.0	26.9	
299.59496	14:16:45	-0.027	13.433	0.002	13.424	27.0	26.8	
299.59514	14:17:00	-0.027	13.351	0.003	13.343	27.0	27.3	
299.59583	14:18:00	-0.027	13.158	0.002	13.150	26.9	27.3	
299.59653	14:19:00	-0.027	13.050	0.002	13.042	27.0	27.1	
299.59722	14:20:00	-0.028	12.977	0.002	12.969	26.9	26.9	
299.59861	14:22:00	-0.027	12.880	0.002	12.872	27.0	27.1	
299.60057	14:24:49	-0.028	12.792	0.001	12.785	27.0	26.9	
299.60087	14:25:15	-0.028	12.782	0.001	12.774	27.0	27.3	
299.60141	14:26:02	-0.028	12.763	0.002	12.756	27.0	27.2	
299.60278	14:28:00	-0.028	12.724	0.001	12.718	27.0	27.2	
299.60417	14:30:00	-0.028	12.692	0.001	12.684	27.0	26.9	-shut in
299.60486	14:31:00	-0.028	12.676	0.002	12.669	27.0	27.2	
299.60625	14:33:00	-0.028	12.648	0.002	12.641	27.0	26.7	
299.60764	14:35:00	-0.027	12.625	0.001	12.619	27.0	27.1	
299.61111	14:40:00	-0.028	12.576	0.001	12.570	27.0	26.8	
299.61458	14:45:00	-0.027	12.536	0.001	12.530	27.0	27.1	
299.61805	14:50:00	-0.028	12.503	0.001	12.495	27.0	27.2	
299.62500	15:00:00	-0.027	12.449	0.001	12.442	27.0	26.9	
299.66665	15:59:59	-0.028	12.267	0.000	12.261	27.0	26.8	
299.74995	17:59:56	-0.028	12.106	-0.001	12.102	27.0	26.8	
299.83326	19:59:54	-0.029	12.012	-0.001	12.007	27.0	27.1	
299.91656	21:59:51	-0.029	11.929	-0.001	11.925	26.9	26.8	
299.99986	23:59:48	-0.029	11.877	-0.001	11.873	26.9	27.0	
300.04152	00:59:47	-0.030	11.859	-0.001	11.855	26.9	26.8	
300.12482	02:59:44	-0.030	11.818	-0.001	11.814	27.0	26.8	
300.20812	04:59:42	-0.030	11.768	-0.002	11.763	26.9	27.1	
300.29143	06:59:40	-0.031	11.716	-0.002	11.712	26.8	26.9	
300.37473	08:59:37	-0.031	11.673	-0.003	11.669	26.8	26.7	
300.41529	09:58:01	-0.030	11.682	-0.001	11.679	26.9	26.9	
300.41599	09:59:02	-0.030	11.682	-0.001	11.678	26.9	27.1	
300.41668	10:00:01	-0.030	11.681	-0.001	11.679	26.9	26.8	-injected 500
300.41738	10:01:02	3.394	12.362	-0.001	12.359	27.0	27.1	psi into
300.41807	10:02:01	3.271	12.345	-0.001	12.341	26.9	27.0	test zone
300.41877	10:03:02	3.219	12.337	-0.002	12.334	26.9	26.6	
300.41946	10:04:01	3.188	12.333	-0.001	12.330	26.9	26.8	
300.42015	10:05:01	3.168	12.330	-0.001	12.326	27.0	26.7	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
300.42085	10:06:01	3.153	12.328	-0.001	12.324	27.0	26.9	
300.42154	10:07:01	3.139	12.326	-0.002	12.322	27.0	26.9	
300.42224	10:08:02	3.128	12.324	-0.002	12.320	26.9	27.0	
300.42293	10:09:01	3.119	12.323	-0.002	12.319	26.9	27.1	
300.42362	10:10:01	3.111	12.321	-0.002	12.318	26.9	27.0	
300.42501	10:12:01	3.099	12.319	-0.001	12.315	26.9	26.7	
300.42640	10:14:01	3.087	12.317	-0.002	12.314	26.9	26.9	
300.42779	10:16:01	3.076	12.315	-0.002	12.312	26.9	27.0	
300.42918	10:18:01	3.068	12.314	-0.002	12.309	26.9	27.1	
300.43057	10:20:01	3.060	12.313	-0.002	12.308	26.9	27.1	
300.43196	10:22:01	3.055	12.313	-0.002	12.307	27.0	27.1	
300.43334	10:24:01	3.050	12.311	-0.001	12.306	26.9	26.8	
300.43473	10:26:01	3.043	12.310	-0.001	12.305	26.9	27.1	
300.43612	10:28:01	3.038	12.308	-0.002	12.303	26.9	27.0	
300.43751	10:30:01	3.033	12.306	-0.002	12.302	27.0	27.0	
300.44098	10:35:01	3.021	12.304	-0.002	12.298	26.9	27.0	
300.44445	10:40:00	3.010	12.298	-0.002	12.295	26.9	27.0	
300.44792	10:45:00	3.002	12.294	-0.002	12.290	26.9	26.9	
300.45139	10:50:00	2.993	12.292	-0.002	12.287	26.9	26.9	
300.45486	10:55:00	2.987	12.288	-0.003	12.284	26.9	26.6	
300.45833	11:00:00	2.980	12.286	-0.002	12.281	26.9	27.0	
300.46875	11:15:00	2.966	12.286	-0.001	12.282	26.9	26.9	
300.47916	11:29:59	2.957	12.286	-0.002	12.282	26.9	26.7	
300.48958	11:45:00	2.946	12.282	-0.002	12.277	26.9	26.9	
300.57289	13:44:58	2.907	12.270	-0.002	12.266	27.0	26.7	
300.65619	15:44:55	2.879	12.248	-0.002	12.243	26.9	26.8	
300.73949	17:44:52	2.849	12.214	-0.002	12.208	26.9	26.9	
300.82280	19:44:50	2.825	12.183	-0.002	12.179	26.9	26.9	
300.90610	21:44:47	2.801	12.151	-0.002	12.147	26.9	27.0	
300.98940	23:44:44	2.779	12.120	-0.003	12.116	26.9	26.7	
301.03106	00:44:44	2.772	12.108	-0.002	12.104	26.8	26.7	
301.11436	02:44:41	2.757	12.084	-0.002	12.079	26.9	27.0	
301.19766	04:44:38	2.747	12.064	-0.003	12.058	26.8	26.9	
301.28097	06:44:36	2.741	12.048	-0.003	12.044	26.9	26.7	
301.36427	08:44:33	2.721	12.019	-0.004	12.015	26.8	26.8	
301.44757	10:44:30	2.708	11.998	-0.003	11.995	26.8	26.7	
301.48923	11:44:29	2.710	11.999	-0.004	11.995	26.8	26.6	
301.53088	12:44:28	2.711	11.999	-0.004	11.995	26.8	26.6	
301.59271	14:13:30	2.725	12.021	-0.002	12.033	26.9	26.9	
301.67601	16:13:27	2.734	12.026	-0.004	12.038	26.9	27.0	
301.75932	18:13:25	2.740	12.025	-0.004	12.036	27.0	27.1	
301.84262	20:13:22	2.734	12.007	-0.005	12.021	26.9	26.9	
301.92592	22:13:19	2.722	11.981	-0.004	11.999	26.9	26.8	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
302.00923	00:13:17	2.713	11.959	-0.005	11.980	26.9	26.9	
302.09253	02:13:15	2.702	11.938	-0.006	11.962	26.9	27.0	
302.17583	04:13:12	2.685	11.908	-0.006	11.938	26.9	26.7	
302.25914	06:13:10	2.664	11.876	-0.007	11.909	26.9	26.8	
302.34244	08:13:07	2.645	11.845	-0.007	11.881	26.8	26.8	
302.41735	10:00:59	2.608	11.802	-0.004	11.843	26.7	26.6	
302.45835	11:00:01	2.589	11.779	-0.002	11.827	26.7	26.8	
302.50623	12:08:58	2.586	11.759	-0.008	11.811	26.7	26.7	
302.58954	14:08:56	2.584	11.743	-0.007	11.800	26.7	26.9	
302.67284	16:08:53	2.578	11.727	-0.007	11.789	26.7	26.6	
302.75614	18:08:50	2.574	11.712	-0.007	11.783	26.7	26.5	
302.83945	20:08:48	2.564	11.693	-0.008	11.770	26.7	26.5	
302.92275	22:08:46	2.551	11.670	-0.007	11.751	26.7	26.7	
303.00606	00:08:44	2.537	11.645	-0.008	11.730	26.6	26.6	
303.08936	02:08:41	2.521	11.620	-0.008	11.708	26.6	26.8	
303.17266	04:08:38	2.506	11.595	-0.008	11.686	26.6	26.4	
303.25597	06:08:36	2.492	11.571	-0.008	11.664	26.5	26.4	
303.33927	08:08:33	2.474	11.545	-0.009	11.640	26.5	26.7	
303.42257	10:08:30	2.463	11.524	-0.009	11.621	26.5	26.5	
303.50588	12:08:28	2.464	11.521	-0.008	11.617	26.5	26.3	
303.58918	14:08:25	2.474	11.530	-0.008	11.624	26.5	26.4	
303.67248	16:08:22	2.487	11.543	-0.008	11.637	26.6	26.3	
303.75579	18:08:20	2.497	11.556	-0.008	11.650	26.6	26.7	
303.83909	20:08:17	2.501	11.555	-0.009	11.653	26.6	26.5	
303.92240	22:08:15	2.495	11.540	-0.009	11.641	26.6	26.4	
304.00570	00:08:12	2.492	11.528	-0.009	11.633	26.7	26.8	
304.08900	02:08:10	2.479	11.519	-0.009	11.625	26.7	26.5	
304.17231	04:08:08	-0.025	10.925	-0.008	11.218	26.7	26.8	
304.25561	06:08:05	-0.025	10.914	-0.008	11.201	26.6	26.5	
304.33891	08:08:02	-0.024	10.901	-0.011	11.185	26.7	26.4	
304.42222	10:08:00	-0.024	10.884	-0.009	11.171	26.6	26.4	
304.50552	12:07:57	-0.026	10.869	-0.011	11.155	26.6	26.4	
304.67213	16:07:52	-0.024	10.857	-0.008	11.142	26.7	26.6	
304.83874	20:07:47	-0.026	10.845	-0.010	11.132	26.6	26.7	
305.00534	00:07:41	-0.024	10.823	-0.011	11.110	26.6	26.5	
305.17195	04:07:36	-0.024	10.794	-0.012	11.080	26.6	26.6	
305.33856	08:07:32	-0.026	10.771	-0.011	11.054	26.6	26.4	
306.45868	11:00:30	-0.008	10.668	-0.007	11.002	26.5	26.3	-released
306.47881	11:29:29	0.019	10.668	-0.012	10.984	26.4	26.8	pressure
306.47950	11:30:29	3.497	11.516	-0.012	11.514	26.4	26.2	test zone
306.48020	11:31:29	3.418	11.500	-0.012	11.519	26.5	26.7	injected 500
306.48089	11:32:29	3.389	11.493	-0.012	11.520	26.5	26.7	psi into
306.48159	11:33:29	3.373	11.488	-0.012	11.521	26.4	26.8	test zone

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
306.48228	11:34:29	3.361	11.486	-0.012	11.521	26.4	26.7	
306.48297	11:35:29	3.351	11.485	-0.013	11.521	26.5	26.2	
306.48367	11:36:29	3.346	11.484	-0.012	11.522	26.4	26.5	
306.48436	11:37:29	3.340	11.483	-0.012	11.523	26.4	26.2	
306.48506	11:38:29	3.335	11.482	-0.012	11.522	26.4	26.4	
306.48575	11:39:29	3.330	11.481	-0.012	11.523	26.5	26.3	
306.48645	11:40:29	3.326	11.482	-0.012	11.523	26.4	26.7	
306.48714	11:41:29	3.323	11.481	-0.012	11.523	26.4	26.8	
306.48783	11:42:29	3.321	11.480	-0.012	11.524	26.5	26.3	
306.48853	11:43:29	3.318	11.480	-0.012	11.525	26.5	26.2	
306.48958	11:45:00	3.315	11.480	-0.012	11.525	26.5	26.2	
306.53123	12:44:58	3.277	11.478	-0.014	11.533	26.5	26.7	
306.57288	13:44:57	3.268	11.480	-0.012	11.536	26.5	26.4	
306.61454	14:44:56	3.269	11.487	-0.012	11.541	26.6	26.4	
306.69784	16:44:53	3.267	11.493	-0.012	11.545	26.6	26.5	
306.78114	18:44:50	3.263	11.491	-0.011	11.546	26.6	26.5	
306.86445	20:44:48	3.251	11.480	-0.012	11.538	26.6	26.5	
306.94775	22:44:46	3.242	11.467	-0.012	11.526	26.7	26.7	
307.03106	00:44:44	3.230	11.454	-0.012	11.514	26.6	26.5	
307.11436	02:44:41	3.214	11.438	-0.012	11.496	26.6	26.7	
307.19766	04:44:38	3.204	11.425	-0.012	11.483	26.6	26.4	
307.28097	06:44:36	3.196	11.414	-0.013	11.475	26.6	26.7	
307.44308	10:38:02	3.211	11.445	-0.003	11.501	26.6	26.7	
307.52845	12:40:58	3.216	11.442	-0.012	11.504	26.7	26.7	
307.61176	14:40:56	3.221	11.444	-0.012	11.505	26.7	26.8	
307.69506	16:40:53	3.226	11.447	-0.012	11.513	26.8	26.6	
307.77837	18:40:51	3.221	11.439	-0.012	11.507	26.8	27.0	
307.86167	20:40:48	3.207	11.416	-0.013	11.489	26.7	26.6	
307.94497	22:40:45	3.191	11.395	-0.013	11.468	26.7	26.7	
308.02828	00:40:43	3.173	11.371	-0.013	11.445	26.6	26.8	
308.11158	02:40:41	3.155	11.348	-0.011	11.422	26.5	26.8	
308.19488	04:40:38	3.138	11.325	-0.013	11.399	26.6	26.5	
308.27819	06:40:36	3.117	11.297	-0.011	11.375	26.5	26.5	
308.36149	08:40:33	3.104	11.279	-0.013	11.354	26.5	26.4	
308.40314	09:40:31	3.103	11.277	-0.011	11.352	26.5	26.5	
308.44480	10:40:31	3.104	11.278	-0.012	11.353	26.5	26.5	
308.48645	11:40:29	3.108	11.282	-0.010	11.358	26.5	26.5	
308.53403	12:49:00	3.108	11.290	-0.003	11.367	26.5	26.6	
308.70494	16:55:07	3.170	11.369	0.002	11.439	26.7	26.9	
308.78674	18:52:54	3.230	11.437	-0.012	11.532	26.9	27.0	
308.87004	20:52:51	3.296	11.513	-0.011	11.632	27.1	27.1	
308.95335	22:52:49	3.344	11.567	-0.010	11.699	27.2	27.3	
309.03665	00:52:47	3.372	11.601	-0.011	11.743	27.3	27.5	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
309.11996	02:52:45	3.392	11.622	-0.010	11.771	27.4	27.5	
309.20326	04:52:42	3.404	11.637	-0.011	11.790	27.4	27.6	
309.28656	06:52:39	3.415	11.646	-0.011	11.802	27.5	27.6	
309.37465	08:59:30	3.400	11.630	-0.008	11.790	27.5	27.8	
309.37500	09:00:00	3.402	11.628	-0.007	11.788	27.5	27.6	-injected 500
309.37534	09:00:29	3.402	11.643	0.099	11.794	27.5	27.5	psi into
309.37569	09:01:00	3.553	13.192	3.793	12.381	27.5	27.9	guard zone
309.37604	09:01:30	3.536	13.206	3.703	12.371	27.5	27.6	
309.37639	09:02:00	3.527	13.211	3.667	12.366	27.5	27.9	
309.37708	09:03:00	3.515	13.212	3.625	12.359	27.5	27.8	
309.37778	09:04:00	3.508	13.213	3.598	12.353	27.5	27.8	
309.37847	09:05:00	3.502	13.212	3.578	12.349	27.5	27.8	
309.37917	09:06:00	3.498	13.211	3.562	12.345	27.5	27.9	
309.37986	09:07:00	3.494	13.209	3.549	12.342	27.5	27.7	
309.38055	09:08:00	3.489	13.209	3.539	12.339	27.5	27.7	
309.38125	09:09:00	3.485	13.208	3.530	12.336	27.5	27.8	
309.38194	09:10:00	3.484	13.206	3.523	12.335	27.5	27.6	
309.38333	09:12:00	3.479	13.206	3.509	12.328	27.5	27.7	
309.38472	09:14:00	3.472	13.203	3.498	12.324	27.5	27.8	
309.38611	09:16:00	3.471	13.201	3.486	12.319	27.4	27.6	
309.38750	09:18:00	3.465	13.197	3.475	12.315	27.4	27.6	
309.38888	09:19:59	3.461	13.194	3.465	12.311	27.4	27.6	
309.39027	09:21:59	3.457	13.191	3.457	12.307	27.5	27.7	
309.39166	09:23:59	3.453	13.188	3.450	12.303	27.4	27.6	
309.39305	09:26:00	3.449	13.186	3.444	12.300	27.4	27.7	
309.39444	09:28:00	3.447	13.183	3.439	12.296	27.4	27.6	
309.39583	09:30:00	3.443	13.181	3.433	12.292	27.4	27.8	
309.40000	09:36:00	3.435	13.172	3.418	12.281	27.4	27.5	
309.40416	09:41:59	3.425	13.165	3.406	12.270	27.4	27.6	
309.40833	09:48:00	3.417	13.157	3.394	12.261	27.4	27.5	
309.41249	09:53:59	3.409	13.149	3.384	12.250	27.4	27.7	
309.41666	09:59:59	3.403	13.140	3.374	12.240	27.4	27.6	
309.42082	10:05:59	3.397	13.134	3.366	12.232	27.4	27.4	
309.43750	10:30:00	3.372	13.108	3.335	12.199	27.3	27.4	
309.44792	10:45:00	3.358	13.096	3.323	12.181	27.3	27.5	
309.45833	11:00:00	3.344	13.074	3.304	12.163	27.3	27.3	
309.51039	12:14:58	3.294	13.013	3.248	12.090	27.2	27.4	
309.55204	13:14:56	3.266	12.973	3.216	12.045	27.1	27.3	
309.59370	14:14:56	3.245	12.944	3.192	12.012	27.1	27.0	
309.63535	15:14:54	3.227	12.923	3.173	11.988	27.1	27.1	
309.67700	16:14:53	3.213	12.903	3.157	11.966	27.0	26.9	
309.71865	17:14:51	3.205	12.892	3.144	11.952	27.1	27.1	
309.76030	18:14:50	3.193	12.875	3.130	11.936	27.0	27.0	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
309.84361	20:14:48	3.169	12.843	3.107	11.903	26.9	27.1	
309.92691	22:14:45	3.147	12.810	3.084	11.872	26.9	26.9	
310.01021	00:14:42	3.127	12.782	3.064	11.843	26.8	26.9	
310.09352	02:14:40	3.101	12.745	3.042	11.808	26.8	26.9	
310.24971	05:59:35	3.051	12.671	3.003	11.738	26.7	26.7	
310.33302	07:59:33	3.029	12.634	2.982	11.706	26.6	26.6	
310.34343	08:14:32	3.026	12.632	2.981	11.703	26.6	26.8	
310.42673	10:14:29	3.018	12.617	2.969	11.689	26.6	26.6	
310.51004	12:14:27	3.020	12.617	2.967	11.686	26.6	26.7	
310.59334	14:14:25	3.025	12.617	2.963	11.691	26.7	26.7	
310.67664	16:14:22	3.024	12.616	2.959	11.688	26.6	26.6	
310.75995	18:14:20	3.016	12.601	2.950	11.678	26.7	26.8	
310.84325	20:14:17	3.005	12.585	2.941	11.661	26.6	26.8	
310.92655	22:14:14	2.989	12.562	2.930	11.641	26.6	26.7	
311.00986	00:14:12	2.976	12.537	2.917	11.620	26.5	26.5	
311.09316	02:14:09	2.957	12.511	2.904	11.597	26.5	26.7	
311.17647	04:14:07	2.944	12.489	2.892	11.574	26.5	26.5	
311.25977	06:14:04	2.928	12.462	2.879	11.552	26.5	26.4	
311.34307	08:14:01	2.918	12.445	2.870	11.535	26.4	26.5	
311.42638	10:13:59	2.914	12.436	2.864	11.528	26.4	26.3	
311.50968	12:13:56	2.918	12.437	2.863	11.529	26.4	26.4	
311.59298	14:13:53	2.927	12.445	2.864	11.539	26.5	26.4	
311.67629	16:13:51	2.938	12.458	2.868	11.553	26.5	26.5	
311.75959	18:13:49	2.945	12.466	2.871	11.561	26.5	26.5	
311.84290	20:13:47	2.942	12.461	2.866	11.556	26.6	26.7	
311.92620	22:13:44	2.936	12.449	2.862	11.547	26.6	26.6	
312.00950	00:13:41	2.932	12.438	2.855	11.540	26.5	26.7	
312.09281	02:13:39	2.931	12.431	2.852	11.535	26.5	26.5	
312.17611	04:13:36	2.927	12.426	2.848	11.528	26.5	26.5	
312.25941	06:13:33	2.922	12.415	2.842	11.519	26.5	26.4	
312.34272	08:13:31	2.910	12.395	2.833	11.503	26.5	26.7	
312.41667	10:00:00	2.901	12.393	2.836	11.502	26.5	26.4	
312.51934	12:27:51	2.927	12.419	2.838	11.518	26.6	26.6	
312.60264	14:27:48	2.935	12.422	2.839	11.525	26.7	26.6	
312.68594	16:27:45	2.937	12.420	2.840	11.539	26.6	26.7	
312.76925	18:27:43	2.922	12.394	2.830	11.531	26.7	26.6	
312.85255	20:27:40	2.907	12.369	2.821	11.516	26.6	26.6	
312.93585	22:27:37	2.892	12.344	2.810	11.495	26.6	26.6	
313.01916	00:27:35	2.880	12.321	2.800	11.475	26.5	26.5	
313.10246	02:27:33	2.865	12.296	2.789	11.451	26.5	26.6	
313.18577	04:27:31	2.854	12.276	2.780	11.432	26.5	26.5	
313.26907	06:27:28	2.835	12.247	2.766	11.404	26.5	26.5	
313.35237	08:27:25	2.825	12.227	2.757	11.389	26.4	26.4	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
313.43568	10:27:23	2.840	12.247	2.762	11.405	26.5	26.5	
313.56215	13:29:30	2.888	12.321	2.786	11.457	26.6	26.7	
313.56250	13:30:00	2.887	12.322	2.786	11.458	26.7	26.6	-test-zone
313.56285	13:30:30	4.186	12.633	2.813	11.640	26.7	26.6	pressure
313.56319	13:31:00	4.162	12.632	2.811	11.642	26.6	26.6	increased to
313.56389	13:32:00	4.140	12.632	2.810	11.646	26.7	26.6	550 psi
313.56458	13:33:00	4.128	12.629	2.809	11.649	26.6	26.7	
313.56528	13:34:00	4.118	12.629	2.810	11.649	26.6	26.6	
313.56597	13:35:00	4.112	12.629	2.809	11.651	26.6	26.6	
313.56666	13:35:59	4.106	12.630	2.808	11.653	26.6	26.6	
313.56736	13:37:00	4.102	12.629	2.808	11.653	26.6	26.6	
313.56805	13:38:00	4.096	12.631	2.809	11.655	26.6	26.6	
313.56875	13:39:00	4.094	12.631	2.808	11.656	26.6	26.6	
313.56944	13:40:00	4.093	12.629	2.808	11.656	26.6	26.6	
313.57083	13:42:00	4.087	12.629	2.808	11.658	26.7	26.6	
313.57222	13:44:00	4.081	12.631	2.807	11.659	26.6	26.7	
313.57361	13:46:00	4.078	12.629	2.807	11.659	26.7	26.6	
313.57499	13:47:59	4.074	12.631	2.806	11.662	26.7	26.7	
313.57638	13:49:59	4.073	12.630	2.807	11.663	26.7	26.6	
313.57777	13:51:59	4.070	12.631	2.807	11.664	26.7	26.6	
313.57847	13:53:00	4.069	12.631	2.807	11.665	26.7	26.7	
313.57916	13:53:59	4.067	12.632	2.806	11.665	26.7	26.7	
313.57985	13:54:59	4.066	12.633	2.807	11.666	26.7	26.7	
313.58055	13:56:00	4.065	12.633	2.806	11.667	26.7	26.7	
313.58124	13:56:59	4.064	12.632	2.808	11.667	26.7	26.7	
313.58194	13:58:00	4.063	12.633	2.808	11.667	26.7	26.7	
313.58263	13:58:59	4.061	12.633	2.807	11.668	26.7	26.7	
313.58333	14:00:00	4.062	12.633	2.806	11.669	26.6	26.7	
313.60416	14:29:59	4.043	12.636	2.806	11.678	26.7	26.7	
313.62500	15:00:00	4.030	12.635	2.804	11.683	26.6	26.7	
313.66665	15:59:59	4.009	12.629	2.801	11.684	26.7	26.7	
313.70830	16:59:57	4.011	12.643	2.805	11.705	26.7	26.7	
313.74995	17:59:56	3.996	12.634	2.803	11.702	26.7	26.7	
313.79161	18:59:55	3.978	12.616	2.796	11.693	26.7	26.8	
313.83326	19:59:54	3.963	12.602	2.790	11.686	26.6	26.7	
313.87491	20:59:52	3.952	12.589	2.784	11.677	26.6	26.7	
313.91656	21:59:51	3.942	12.582	2.780	11.670	26.6	26.7	
313.95821	22:59:49	3.936	12.576	2.777	11.667	26.7	26.7	
313.99987	23:59:49	3.925	12.563	2.772	11.658	26.7	26.6	
314.08317	01:59:46	3.906	12.541	2.762	11.640	26.6	26.7	
314.16647	03:59:43	3.885	12.518	2.752	11.621	26.6	26.6	
314.24978	05:59:41	3.871	12.498	2.742	11.602	26.5	26.6	
314.33308	07:59:38	3.854	12.475	2.732	11.583	26.6	26.6	

TABLE D7 (Continued)
TABULATED DATA FOR COMPLIANCE TEST COMP1&2, MULTIPACKER TEST TOOL #2

CALENDAR DAY (1988)	TIME (HH:MM:SS)	TEST-ZONE INTERVAL PRESSURE (MPa)	TEST-ZONE PACKER PRESSURE (MPa)	GUARD-ZONE INTERVAL PRESSURE (MPa)	GUARD-ZONE PACKER PRESSURE (MPa)	TEST-ZONE TEMP (Deg.C)	GUARD-ZONE TEMP (Deg.C)	COMMENTS
314.39269	09:25:28	3.884	12.517	2.750	11.602	26.6	26.6	-created data
314.53679	12:52:59	3.887	12.524	2.746	11.611	26.7	26.7	file - COMP2
314.62009	14:52:56	3.889	12.527	2.746	11.620	26.7	26.7	
314.70340	16:52:54	3.887	12.523	2.745	11.613	26.8	26.6	
314.78670	18:52:51	3.877	12.508	2.736	11.599	26.8	26.6	
314.87000	20:52:48	3.862	12.485	2.726	11.581	26.7	26.7	
314.95331	22:52:46	3.843	12.459	2.716	11.557	26.7	26.6	
315.03661	00:52:43	3.818	12.424	2.700	11.526	26.6	26.5	
315.11991	02:52:40	3.802	12.398	2.691	11.501	26.6	26.5	
315.20322	04:52:38	3.787	12.378	2.681	11.484	26.5	26.5	
315.28652	06:52:35	3.774	12.357	2.672	11.463	26.5	26.5	
315.36982	08:52:32	3.756	12.331	2.661	11.441	26.5	26.4	
315.41666	09:59:59	3.779	12.369	2.678	11.469	26.6	26.5	
315.42893	10:17:40	3.783	12.375	2.676	11.477	26.5	26.5	
315.42916	10:17:59	4.974	12.662	2.705	11.638	26.6	26.5	-test-zone
315.42939	10:18:19	5.255	12.738	2.715	11.691	26.6	26.5	pressure
315.42986	10:19:00	5.220	12.745	2.715	11.708	26.6	26.5	increased to
315.43055	10:20:00	5.184	12.742	2.713	11.714	26.6	26.5	650 psi
315.43125	10:21:00	5.166	12.739	2.713	11.716	26.5	26.6	
315.43194	10:22:00	5.153	12.739	2.712	11.718	26.6	26.5	
315.43263	10:22:59	5.145	12.738	2.712	11.720	26.6	26.5	
315.43333	10:24:00	5.137	12.738	2.711	11.721	26.5	26.5	
315.43403	10:25:00	5.131	12.738	2.711	11.723	26.5	26.6	
315.43472	10:26:00	5.125	12.738	2.710	11.725	26.5	26.6	
315.43541	10:26:59	5.120	12.738	2.711	11.725	26.6	26.5	
315.43611	10:28:00	5.114	12.739	2.710	11.727	26.6	26.5	
315.43697	10:29:14	5.109	12.739	2.709	11.728	26.6	26.5	
315.43819	10:31:00	5.105	12.739	2.710	11.729	26.6	26.5	
315.43889	10:32:00	5.103	12.740	2.710	11.729	26.5	26.5	
315.44027	10:33:59	5.096	12.742	2.709	11.731	26.6	26.6	
315.44166	10:35:59	5.092	12.740	2.710	11.732	26.6	26.5	
315.44236	10:37:00	5.090	12.743	2.709	11.735	26.6	26.5	
315.44375	10:39:00	5.086	12.742	2.710	11.734	26.6	26.5	
315.44444	10:40:00	5.084	12.742	2.710	11.736	26.6	26.5	
315.44861	10:46:00	5.076	12.746	2.709	11.740	26.6	26.5	
315.45208	10:51:00	5.069	12.748	2.709	11.742	26.6	26.5	
315.45555	10:56:00	5.065	12.749	2.710	11.745	26.6	26.6	
315.45902	11:00:59	5.060	12.751	2.711	11.748	26.6	26.6	
315.46943	11:15:59	5.049	12.756	2.709	11.755	26.7	26.6	
315.47915	11:29:59	5.041	12.757	2.710	11.759	26.6	26.6	-end testing

APPENDIX E. GAS-SAMPLE ANALYSIS FROM BOREHOLE C2H02

Control Number: 0118		Description: Permeability gas sample			Page 1
Requester: A. Lee Jensen	Division 6344	Ext. 6-0190	Date Received 12/21/89	Date Needed ASAP	Case No. 0395.410
Requested For:	Division	Ext.	MC No./Weapon System/Project		Approval
Analyst: N. Bess Campbell-Domme	Division 1821	Ext. 4-7951	Date Completed 12/21/89	Report Date Verbal: 12/21/89 Written: 01/09/90	
Sample Disposition: To be returned to requester.					

MATERIALS DESCRIPTION:

Under ground permeability testing gas sample.

SAMPLE HISTORY:

The gas was collected from an under ground test hole at the WIPP site. The fill gas used for the test was analyzed by Global Geochemistry Corporation and described as N_2 (80%-97%), O_2 (<0.01%-17%), CH_4 (2%-4%) and CO_2 (<0.005%-0.08%). Several large areas of decomposition in Al parts submerged in the test hole brine indicate that there is a significant amount of H_2 present.

WORK REQUESTED:

Determine the amount of H_2 and other gases present.

RESULTS:

The samples were analyzed on a Finnigan MAT271 magnetic sector gas mass spectrometer. Water content cannot be quantified by this technique, however, a major portion of this gas was water vapor.

H_2	CH_4	N_2	O_2	Ar	CO_2
91	0.8	6.5	1	0.5	0.05

Results reported as volume percent, excluding water.

If you have any questions, or if you need further assistance, please call me at 4-7951.

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